NMP | Landscape Architecture

City Block 2, Spencer Dock, Landscape Design Proposals

Shared Accommodation + Residential Development
Spencer Dock
Dublin 1

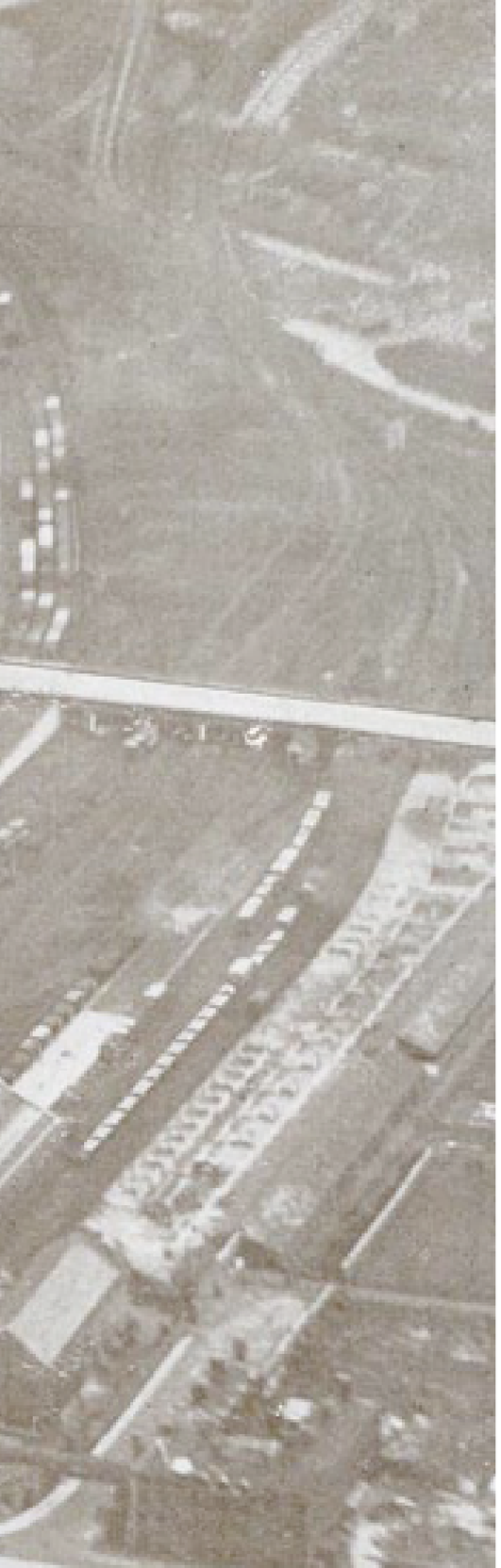
July 2019

RONAN GROUP

HENRY J LYONS ARCHITECTS

Contents

01 Introduction



Introduction

Niall Montgomery and partners have been appointed by Ronan Group Real Estate to provide landscape design proposals for the proposed residences at Spencer Docks.

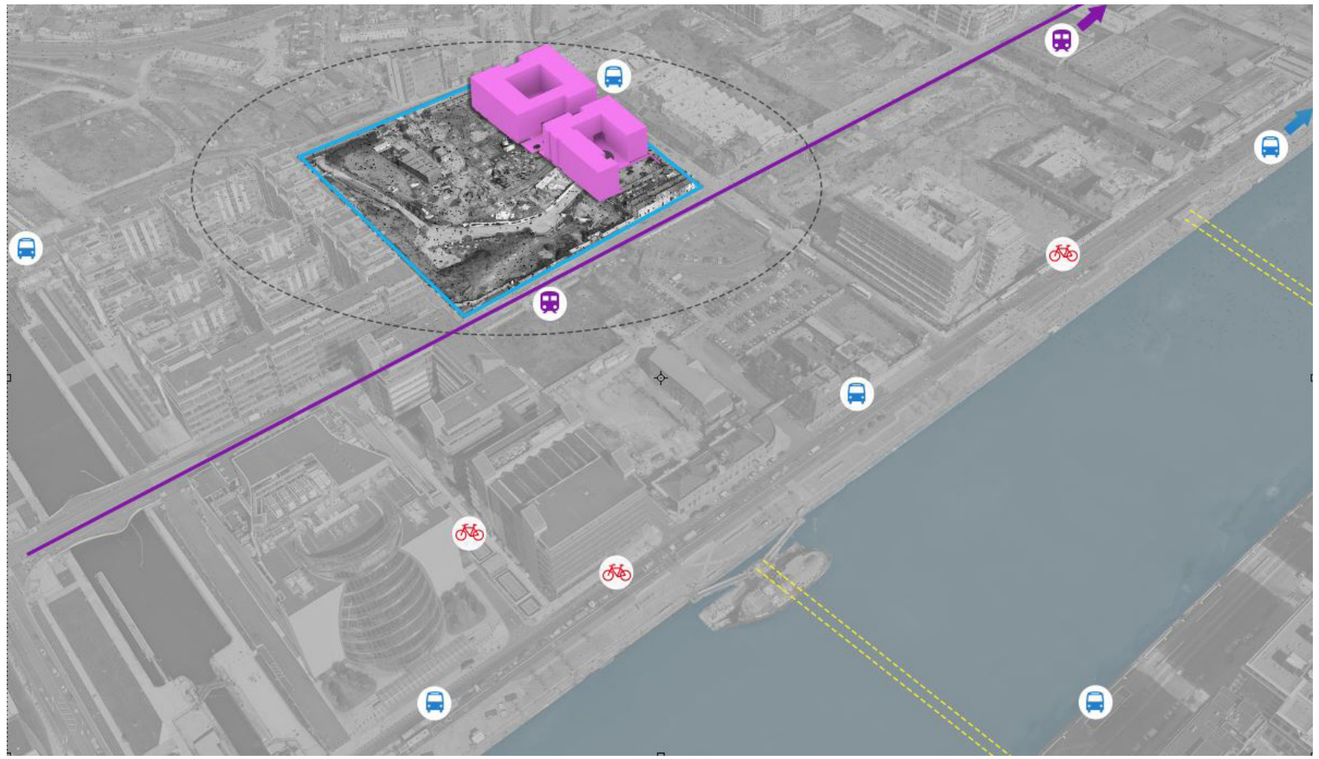
In collaboration with Henry J Lyons Architects and Sutton Cronin Engineers, NMP have developed a landscape design which responds to a dynamic building programme and complex infrastructure.

Proposals have been developed in line with the Vision + Ambition as detailed in the Public Realm Masterplan for the North Lotts + Grand Canal Dock SDZ Planning Scheme. The design draws on the Hard + Soft 'Tool Boxes' which endeavor to shape and integrate the spaces and connective tissue of the north lotts.

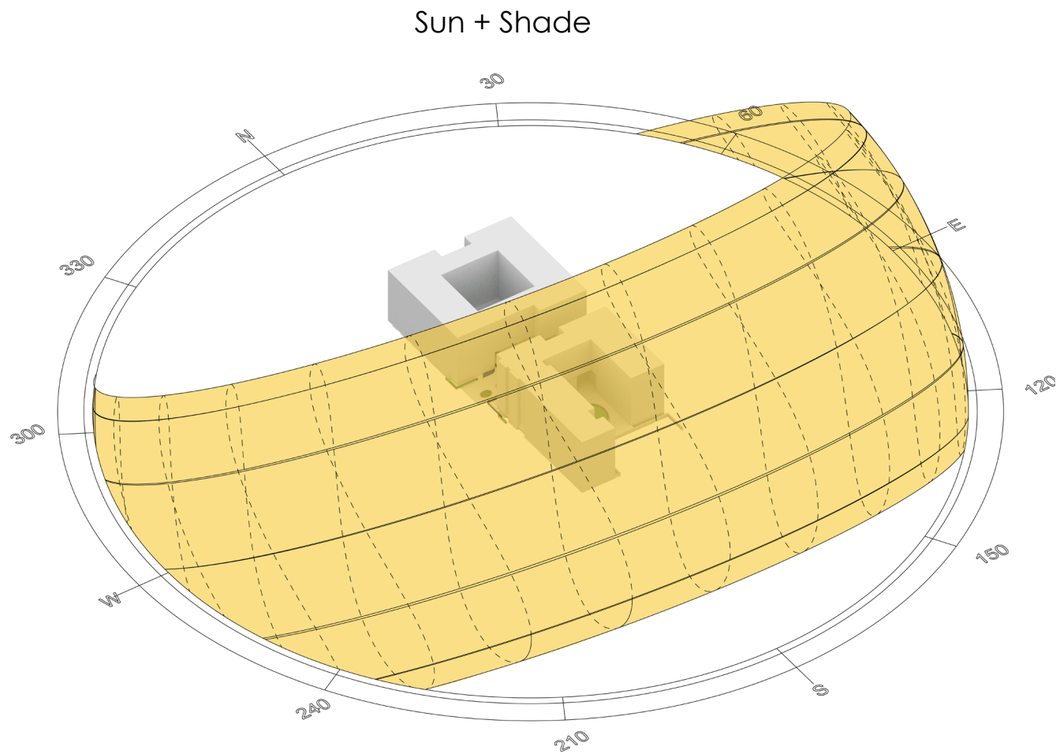
The design approach is driven by the need for defined but flexible space which provides a variety of programmatic uses including a space for respite, art, heritage, recreation all promoting health, biodiversity underpinned by sustainable principles.

This report should be read in conjunction with drawing numbers AaP1, AaP2, AaP3, AaP4, AaP5 and Aa1E1.

02 Analysis

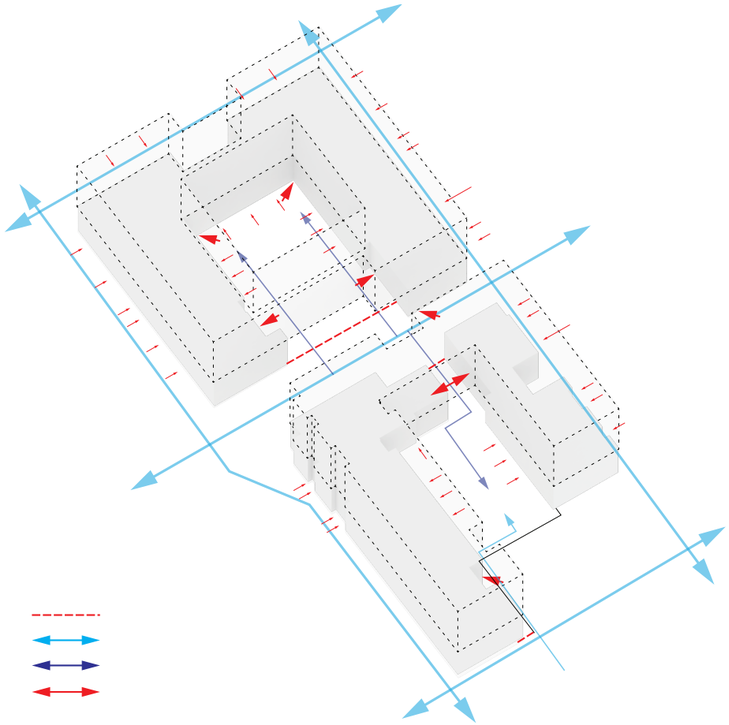


Understanding the context of site can be important in determining how to design and provision space. A city center site by its nature will be well connected to transport interchanges and surrounded by a thriving public realm. Offering a respite from this environment and understanding the experiences of the journey home provide a back drop for the residential space to become a place of escape from the urban metropolis.



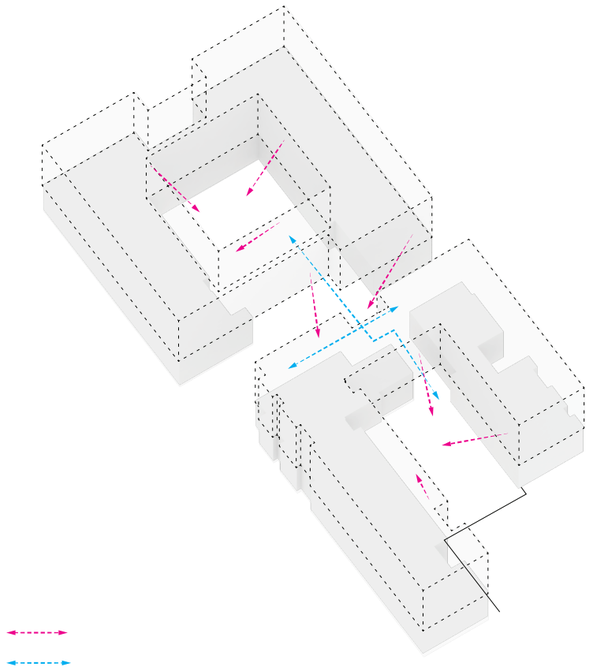
The very nature of the perimeter block design can pose challenges for central courtyards, particularly in the Irish climate. Whilst designing to encourage natural daylight this is not achievable during short periods of the year. Providing for seating in spaces which are more likely to receive sunlight will be a key driver in the design. Also, the choice of warm materials and balance with soft scape will assist in diluting a darker feel to the space.

Circulation + Thresholds



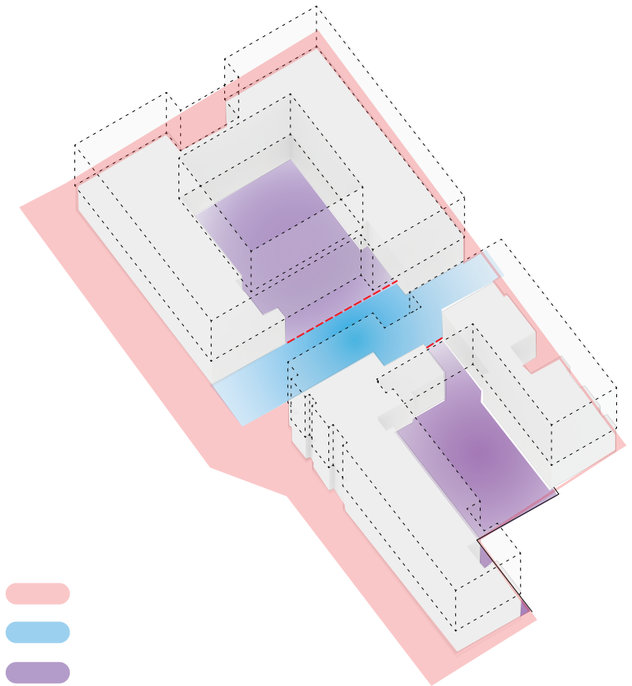
Determining the scale of planting and spatial design including defensible space requires an understanding of how residents and guests will enter, circulate around and through shared spaces of the public realm.

Key Views



Views into the site are predominantly internalized but those captured form above will form an important part of the narrative in terms of its positive effect as a space to be looked at.

Spatial Definition



The key spaces to be studied with regards to landscape design will be the streetscape and its defensible interface with the groundfloor apartments. The courtyard spaces will be semi private, controlled with a gate. The pedestrian route cutting through the site will be safe and well lit as a transitional space through which seating will be provided.

03 Vision

Landscape Vision + Design Proposals

The vision has emerged from the sites formative riverine landscape and celebrates its historical transformation as an industrial hub to its proposed future as residences.

In doing so a historical reference to the Earl of Spencer and His Great Great Grand-daughter Diana, has been drawn between the memorial in Hyde Park London and the design form developed throughout the open space.

The landscape framework utilises the idea of traditional open spaces surrounded by Terraced Houses. By focusing the core of each courtyard space on a lawn, the impact of the landscape can be far greater given their confined and shaded nature. The spaces can respond to a need for respite or social gatherings, encouraging an opportunity for engagement amongst residence whilst integrating the need for privacy at ground floor level by utilising low screening.

The public realm linking New Wapping Street to the proposed North South Street has been arranged to facilitate the maintenance of utilities. In any case, a more formal design response has been developed here to screen back of house facilities and create an inviting and safe transitional space or pedestrian route which offers seating opportunities and a rich landscape contained within seating pods. The streetscape is a simple response to tree planting with bands of paving delineating the public realm and coordinated with the building façade and mullions.

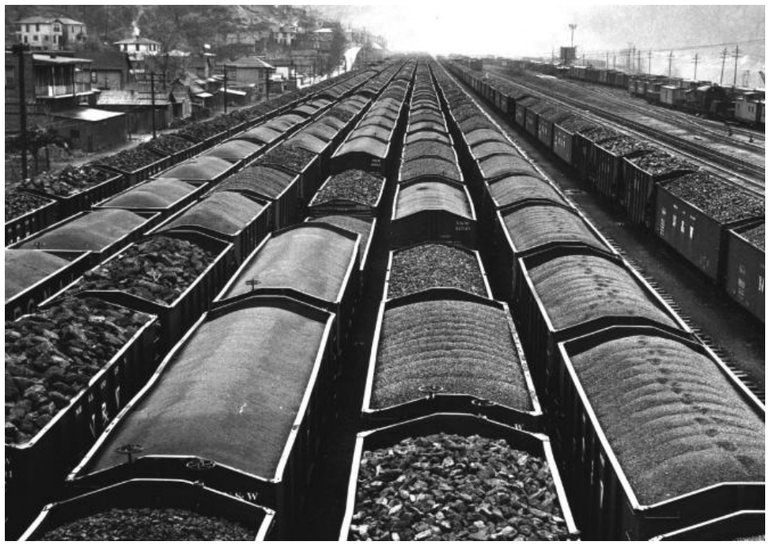
The streetscape itself aligns trees and light columns on the perimeter and specifies a typical paver to match its context with the aim of integrating the site.

The round year use of open space should be promoted particularly extending the use of space in the colder shoulder months of winter. Understanding shade studies suggests that particularly the north block will succumb to 0% natural sunlight according to the Sunlight & Daylight Report from ARC. The orientation of the landscape design in the courtyards caters for seating in the north east of the courtyard to optimize the design of the space. In addition, warmer tones and textures have been proposed for use in the material palette along with designing the space with one central lawn increasing the are of ‘green’ which is of visual benefit to residents.

03 Landscape Vision

Formative Landscape

In celebrating the historical and cultural change the landscape framework plots the sinuous form of a meandering river, creating large and small spaces which tell its story over time.



Iron Horses, Black Diamonds

The historical development of the site recalls huge coal depots with screening machinery and trains used to transport coal to and from the site. The concept looks to celebrate this former use.

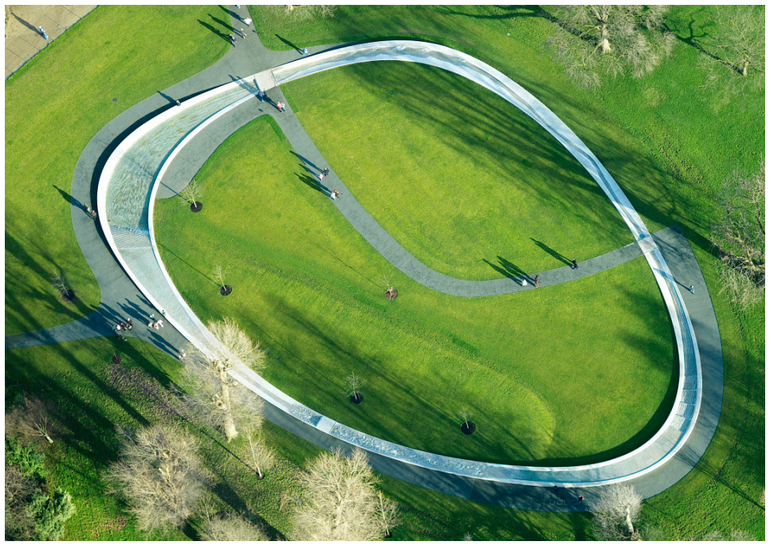
Revealing Layers of Time

Revealing layers of time and culture carved out by the excavation of coal in the public realm can be explored in its third dimension, offering opportunities to celebrate colour and sculpture for a more permanent and stark contrast to the dynamic nature of plant life.

03 Landscape Vision

Seeing Green

A central lawn provides a splash of green which when viewed from above can have a very positive impact. The need to touch and feel grass is a great gift to have in a city center area and one which will draw residence together.



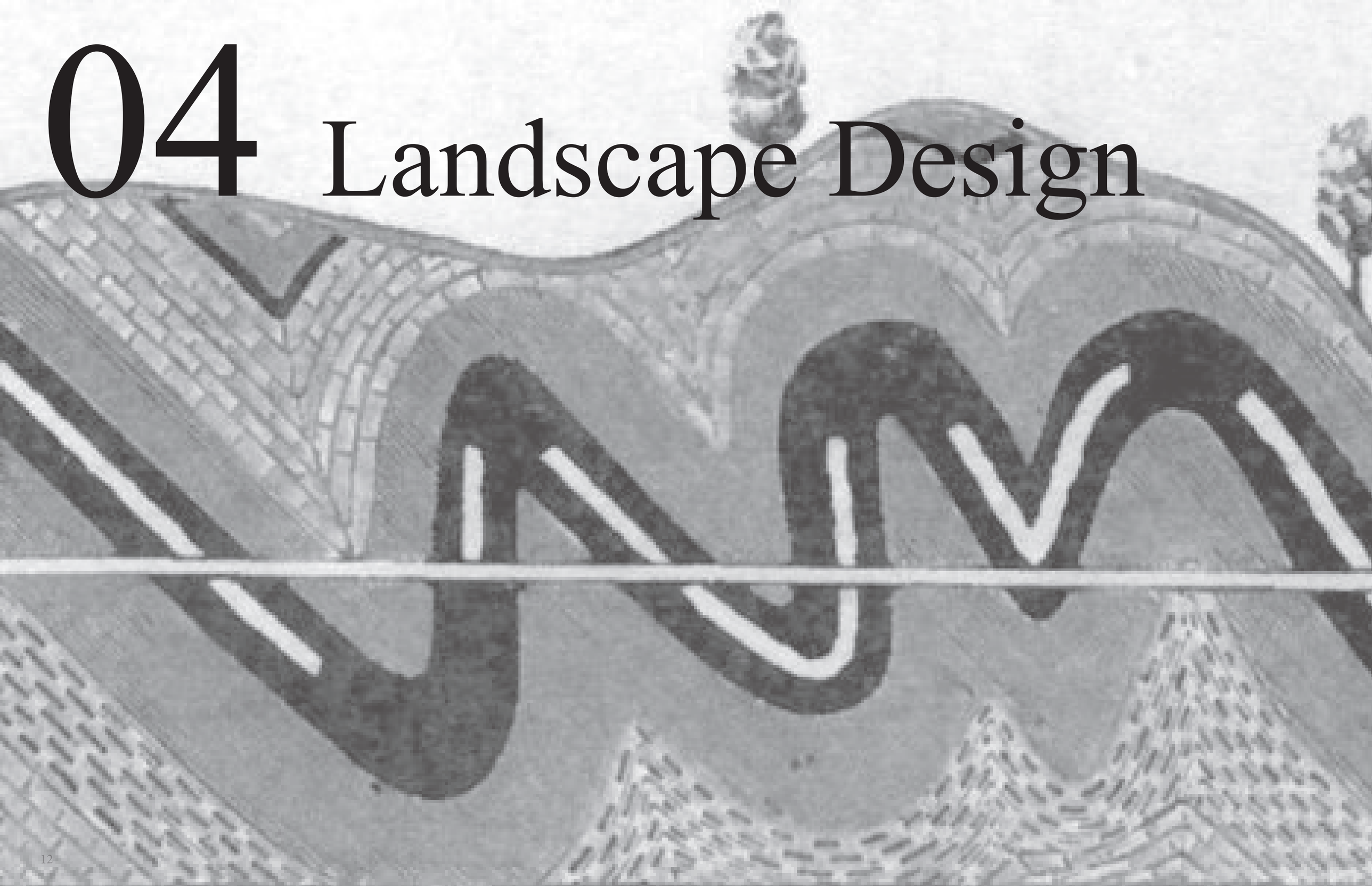
The Spencer Connection

Named after the Earl of Spencer, Diana's Great Great Grandfather, there is a synergy which is offered between the Diana memorial in London and Spencer Dock to celebrate those memories.

Celebrating the Traditional

An courtyard space focused on lawns makes the best use of an otherwise confined space.

04 Landscape Design



The following pages illustrate the design principles applied to the development area. They have been broken down to show the overall masterplan, residential courtyards, streetscape, defensible space and pedestrian street.

The landscape masterplan has been designed in line with the PUBLIC REALM MASTERPLAN for the NORTH LOTTS & GRAND CANAL DOCK SDZ PLANNING SCHEME 2014.

Streetscape

The streetscape has been designed to ensure maximum integration with the surrounding context and existing public realm. Coordination between tree planting, utilities, light columns and street furniture has been considered and will require further coordination in the later stages.

Courtyards

Residential spaces have been design to be intimate, encourage social integration, mitigate against shade and planned to capture as much sunlight as possible. They are spaces to be viewed from above as well as at eye level. Flexible spaces, designed to be elegant with a degree of simplicity.

Public Realm / Pedestrian Street

The East West pedestrian street is a transitional space which is inviting for pedestrian passing through or accessing apartments. Provision is also made to screen the utilities building on the north of the street as well as provide maintenance vehicle access. Small pods of tree planting with integrated seating have also been provided whilst the 2m level difference has been addressed through the use of a wheelchair ramp and steps. Boundary treatment to the pump station will be agreed with Irish water prior to commencement of development. In addition to this the detail and arrangement of raised planters on the east west pedestrian street will also be agreed with Irish Water in prior to commencement of development.

04 Landscape Design - Masterplan

Legend

1. Private Residences

2. Shared Accommodation

3. Residential Courtyard

4. Raised Lawn

5. Informal Play + Seating

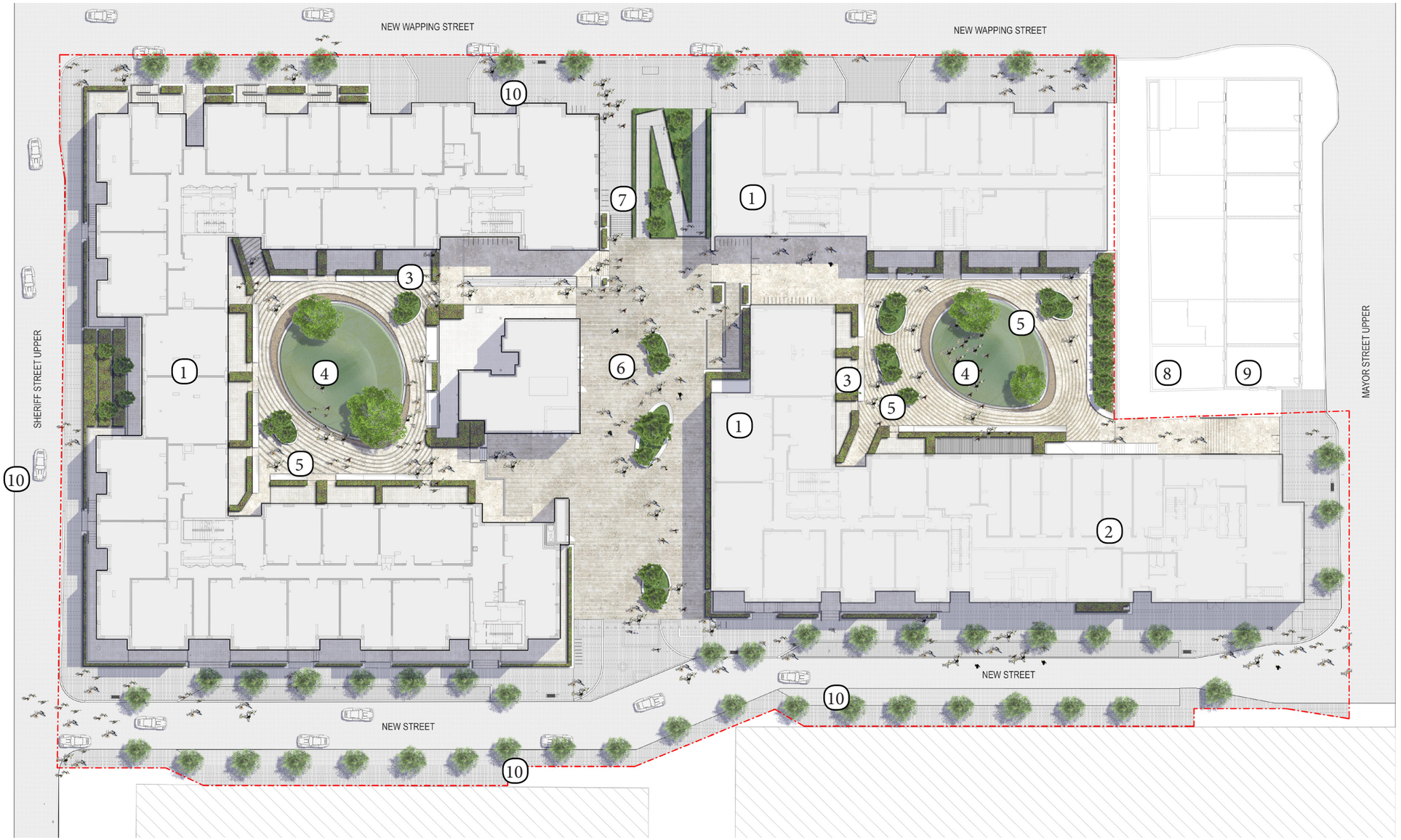
6. Public Realm

7. Wheel Chair Ramp + Steps

8. Private Gardens

9. Terrace Houses

10. Streetscape



04 Landscape Design - Residential Courtyards

Legend

1. Private Residences

2. Private Amenity Space

3. Raised Concave Lawn

4. Streetscape

5. Specimen Tree

6. Informal Play / Seating

7. Bike Parking

8. Formal Yew Hedge

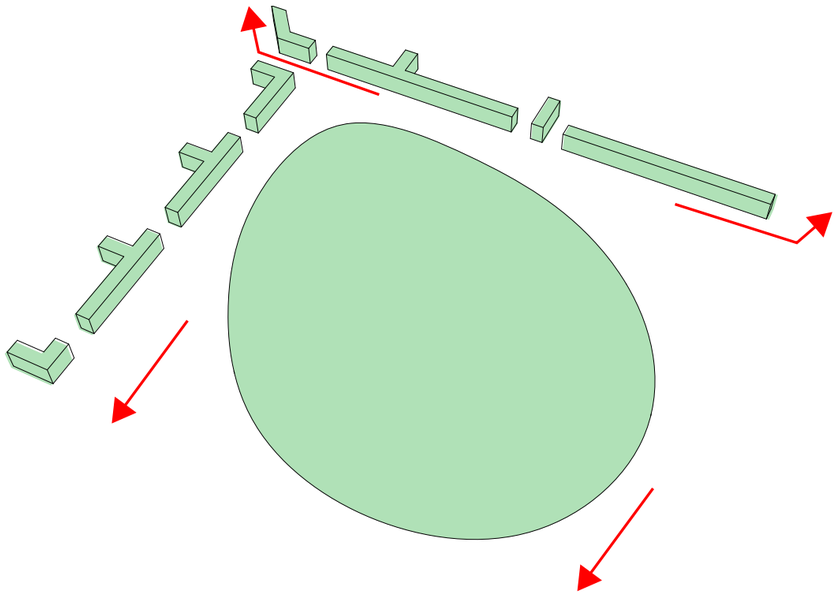
9. Feature Paving

10. Indicative Vent Location

11. Streetscape Bench

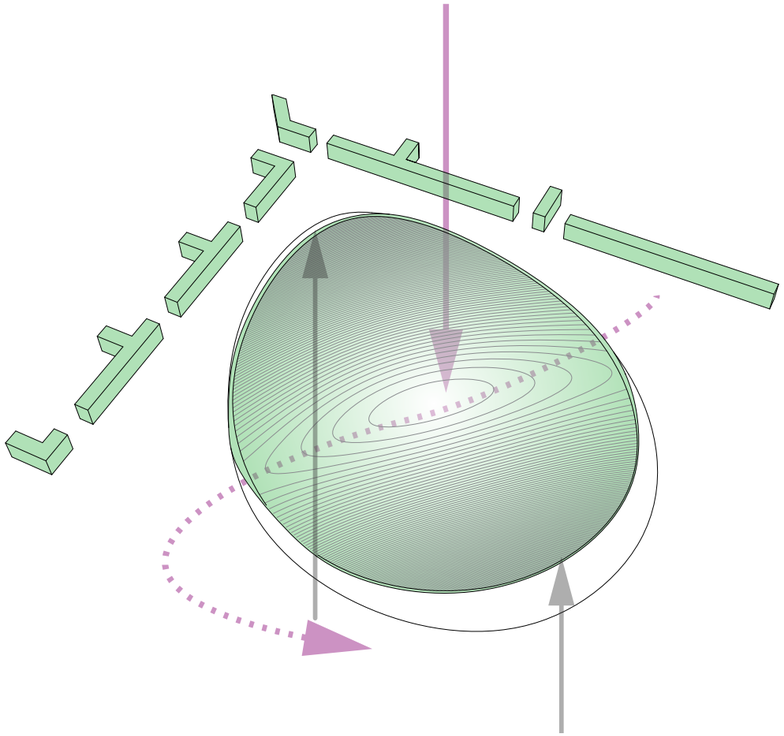
04 Landscape - Residential Courtyard Design Diagrams

Seeing Green



Central green space accommodates flexibility for community events whilst avoiding a fragmented design approach and allowing for circulation around the edges and own door access to ground floor apartments. Semi private space is then created in ground floor apartments with an evergreen hedge planted at the perimeter.

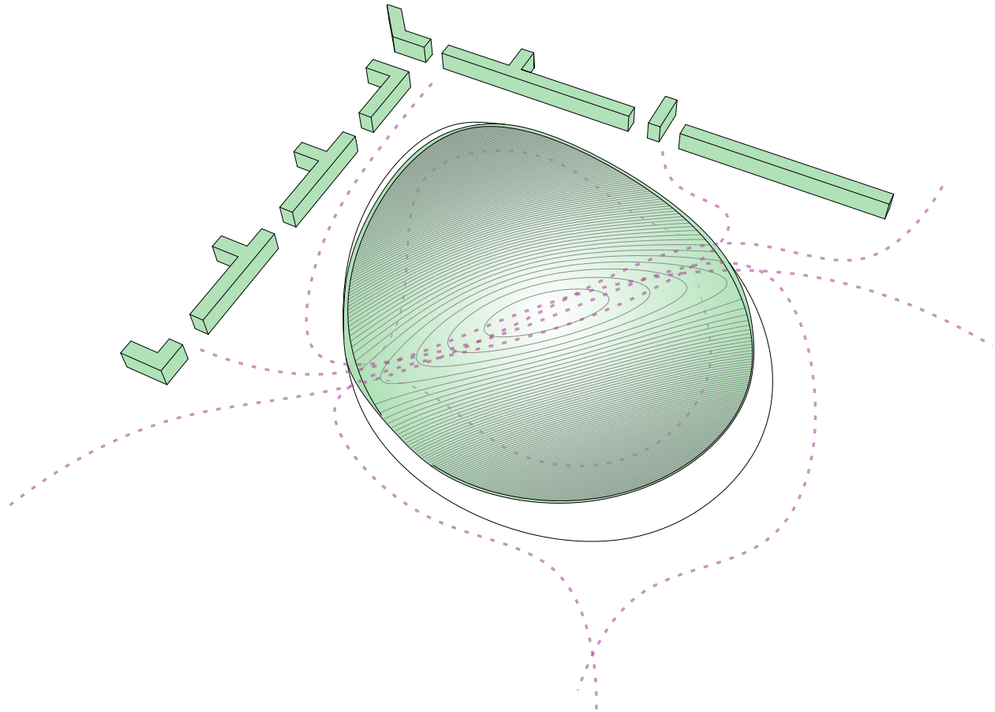
Revealing Seams



Pushing the center of the core space down and peeling the edges up provides a metaphor for revealing seams of time, a reference to the coal industry of past.

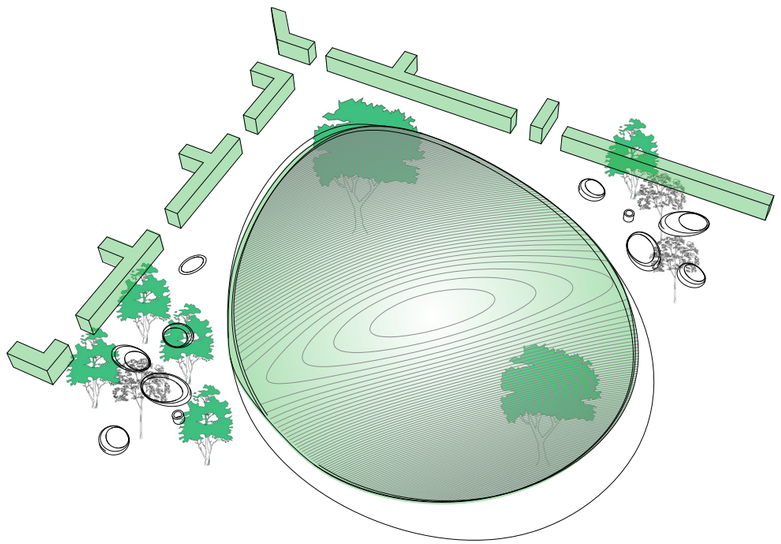
04 Landscape - Residential Courtyard Design Diagrams

Movement



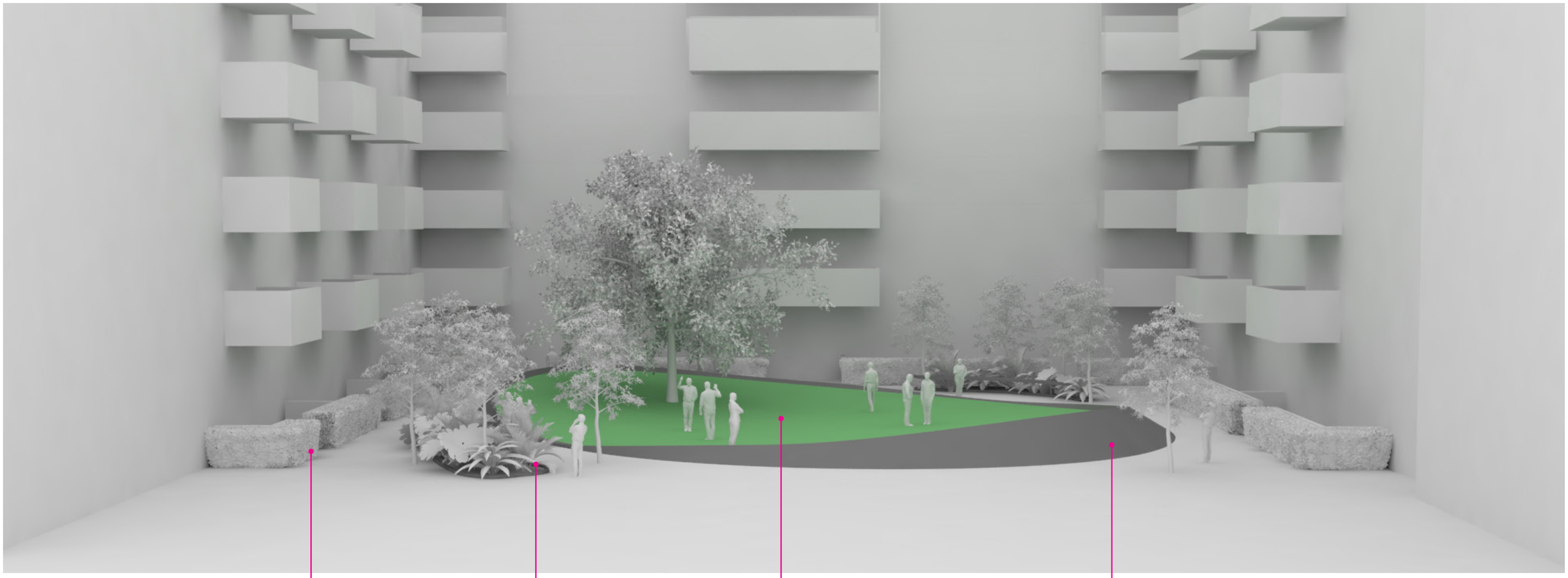
Circulation around the tilted lawn is flexible and encourages choice.

Seeing Green



Informal play integrated with seating under tree groves positioned to capture morning and evening sun provide a flexible element of play.

04 Landscape Design - Residential Courtyard Indicative View



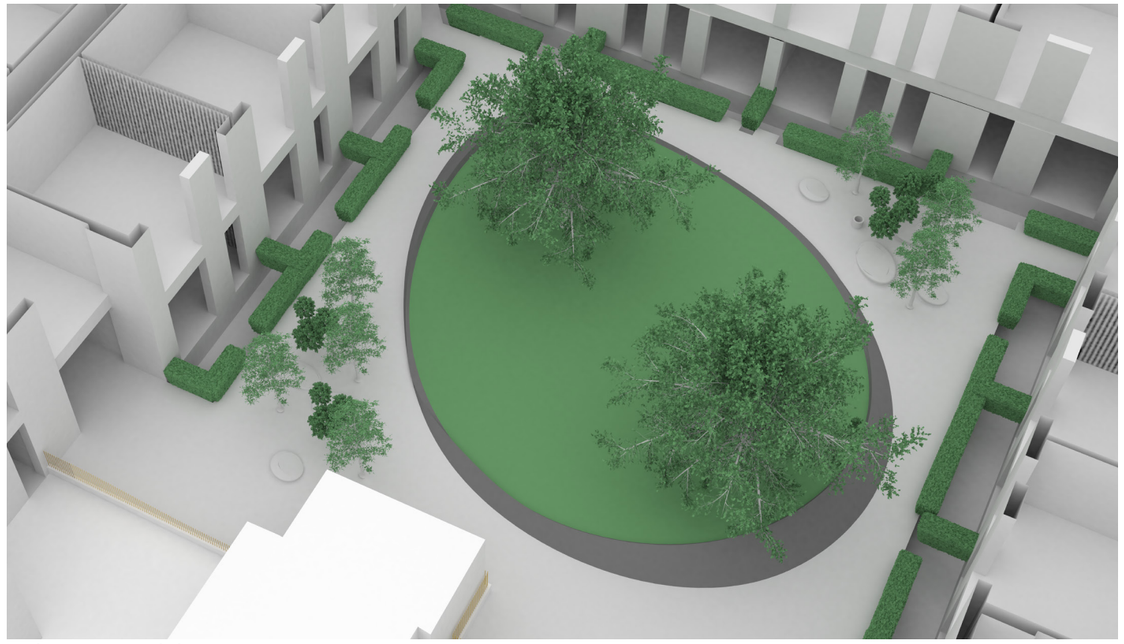
Hedge to create privacy between semi private and private space

Tree grove with seating and informal play

Concave Lawn

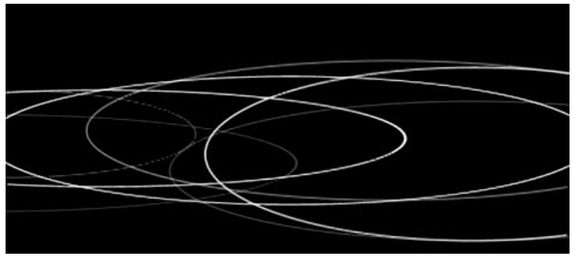
Battered wall

04 Landscape Design - Residential Courtyards Character Images

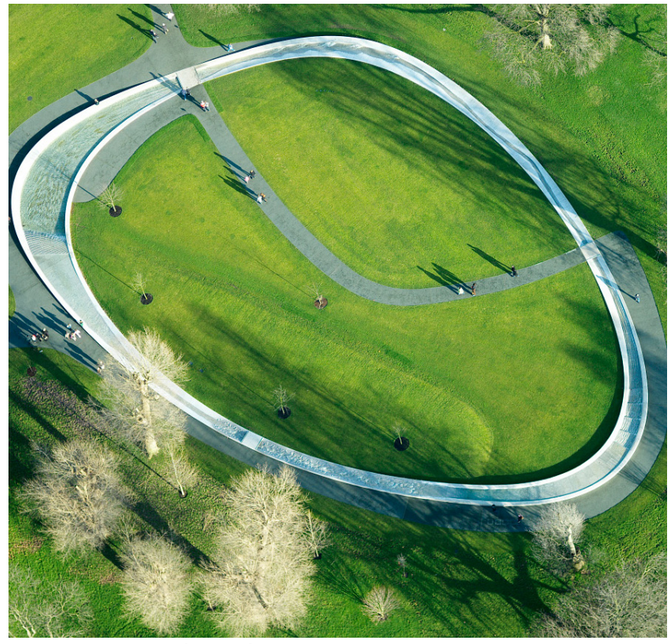


Indicative model view

Use of lawn and simplified planting palette

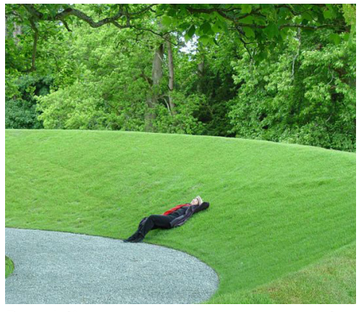


Concept Sketch



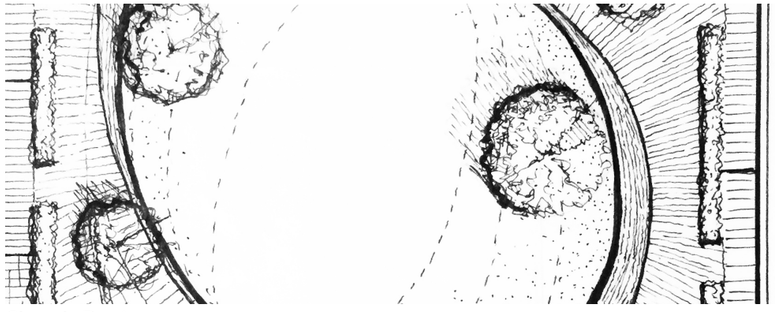
Dianan Memorial, London

Novartis campus, walls revealing layers of geological deposition and bring a layer of texture to the space



Providing access to engage with grass in its simplest format

Exposed stone walls as features in Ter Drop Park new York



Sketch Design

04 Landscape Design - Residential Courtyard Indicative View

04 Landscape Design - Residential Courtyards Character Images

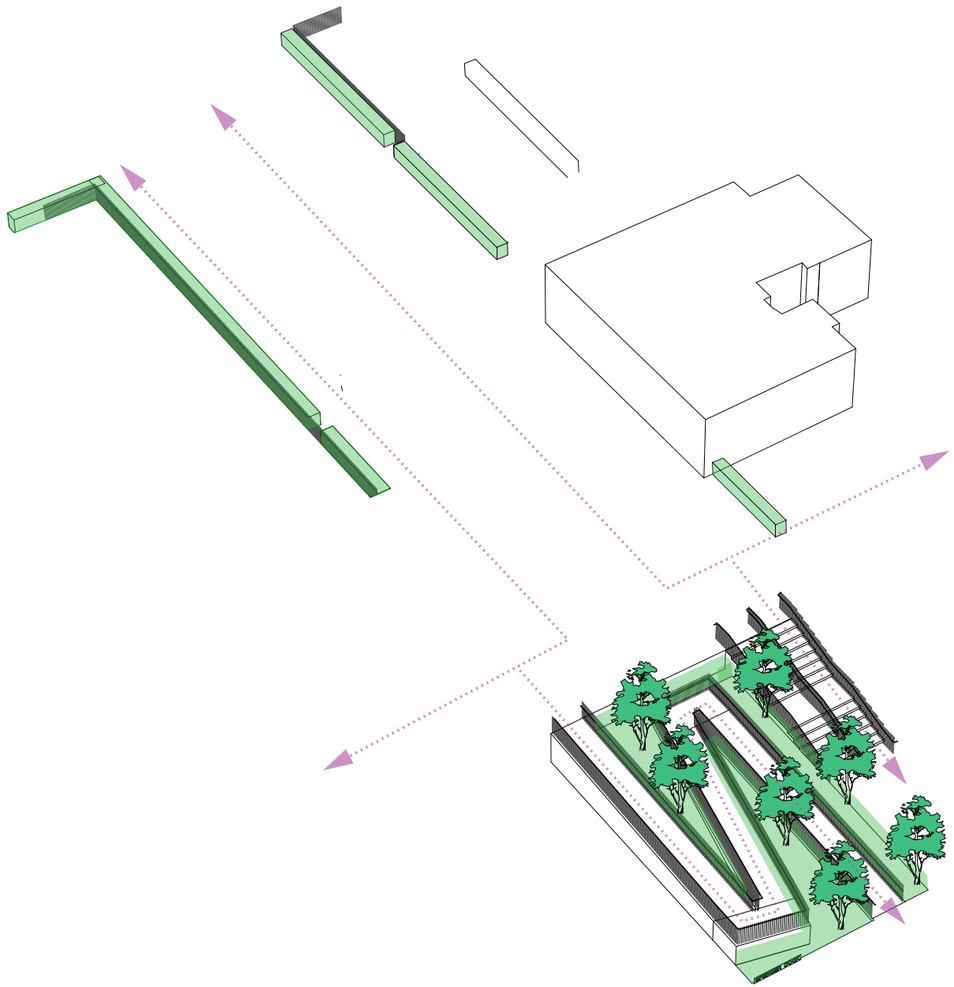
Indicative model view

Indicative model view

Indicative model view

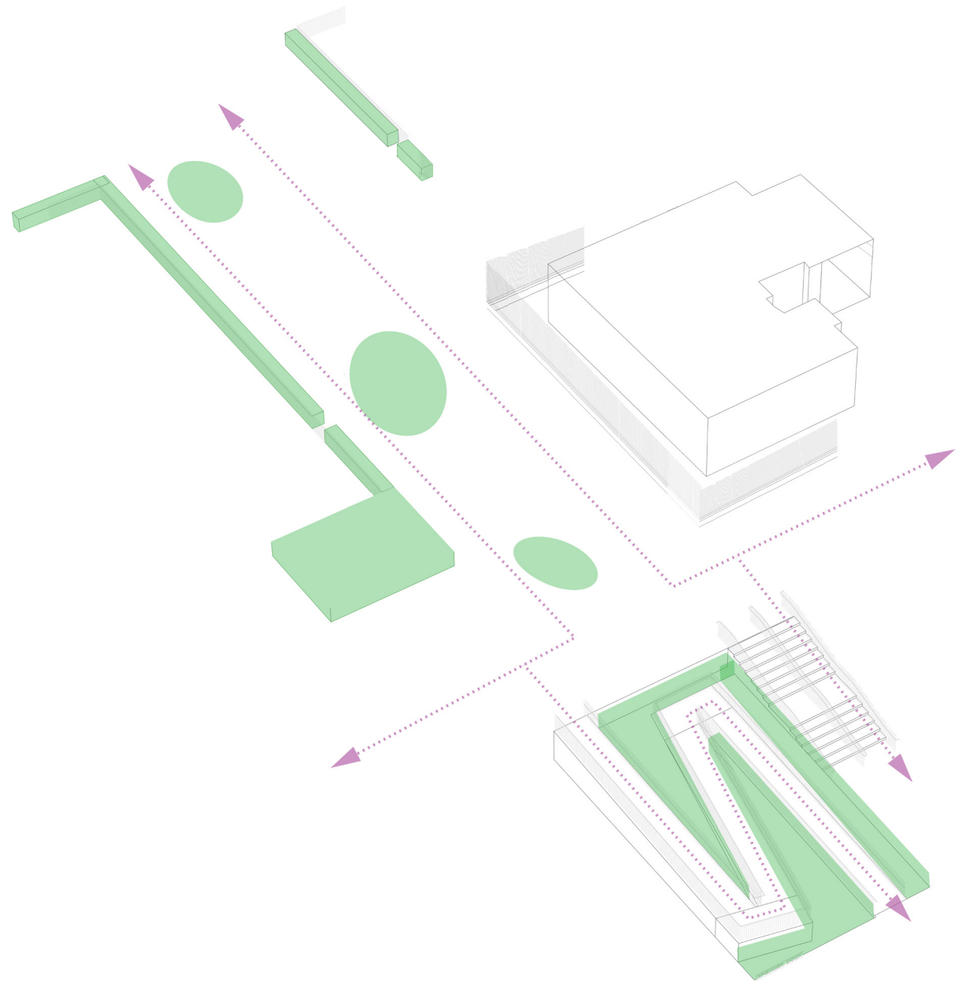
04 Landscape Design - Public Realm Design Diagrams

Access



Ensure safe direct access through the space at all times of the day. Provision of wheel chair ramp at 1:20 and stepped access to make meet the grade difference of almost 2 meters.

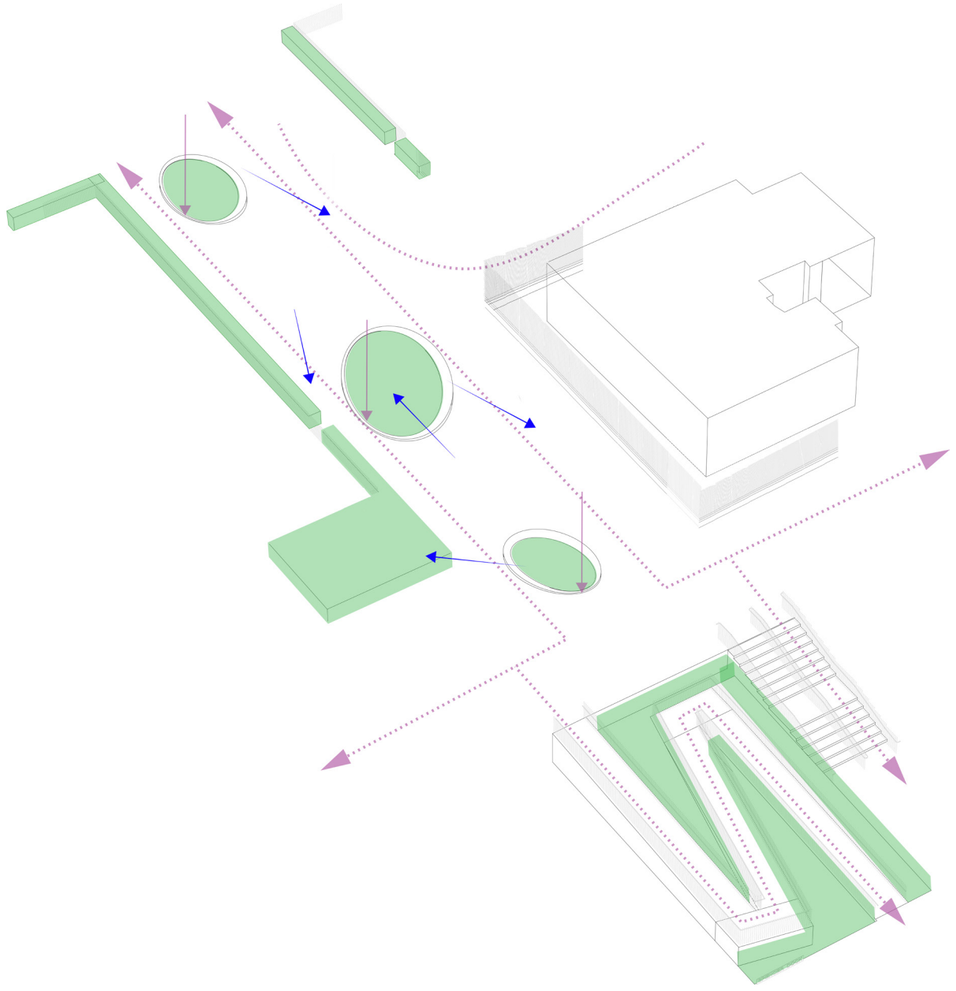
Breaking the Space



Breaking up the pedestrian realm and providing opportunities for planting and art at key points.

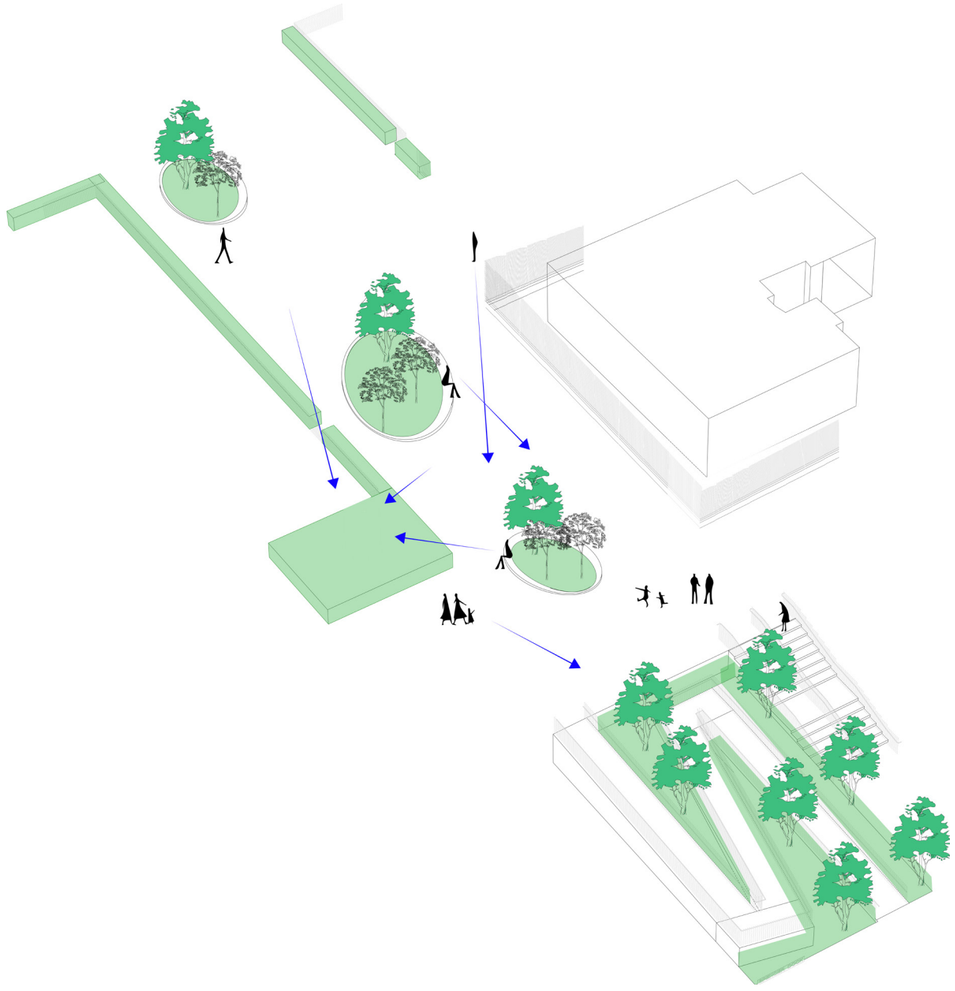
04 Landscape Design - Public Realm Design Diagrams

Lifting



Raising planters to provide seating opportunities and more depth for tree planting and generally providing more animation.

Activate



An animated safe place people choose to pass transition through on a day to day basis. Creating a memorable and pleasant experience.

04 Landscape Design - Public Realm

Legend

1. Seating Pod

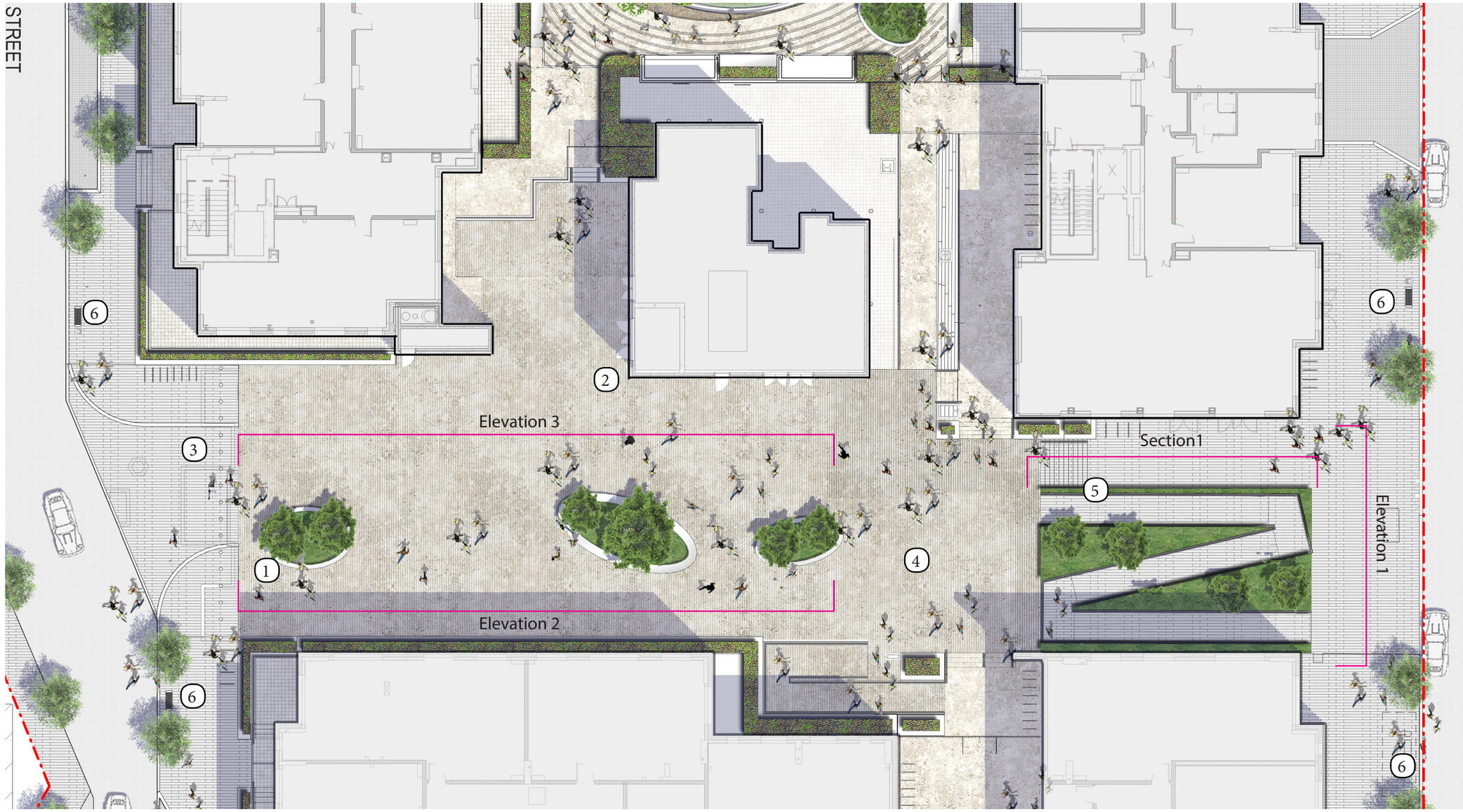
2. Screen Railing

3. 3.5m Access Route

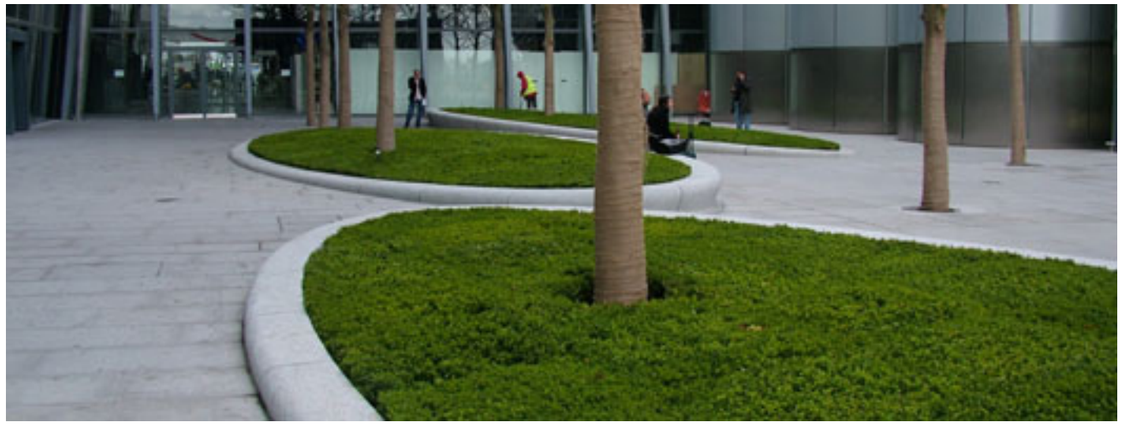
4. Paving

5. Steps + Ramp

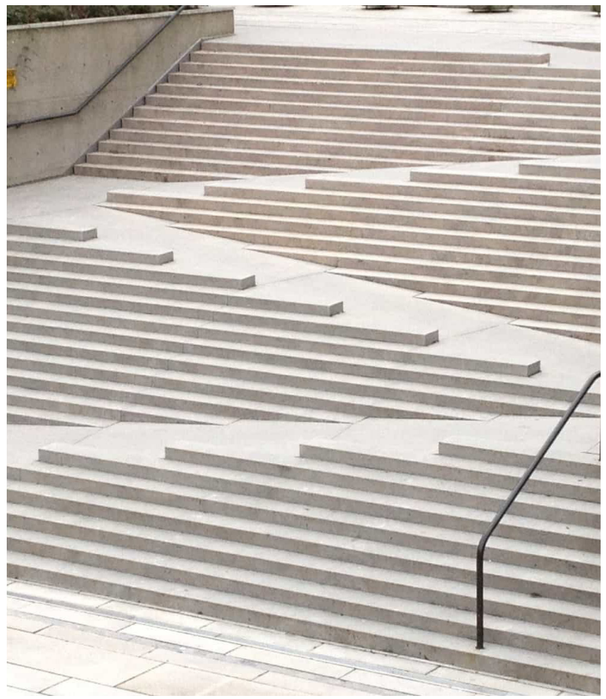
6. Steetscape Bench



04 Landscape Design - Public Realm

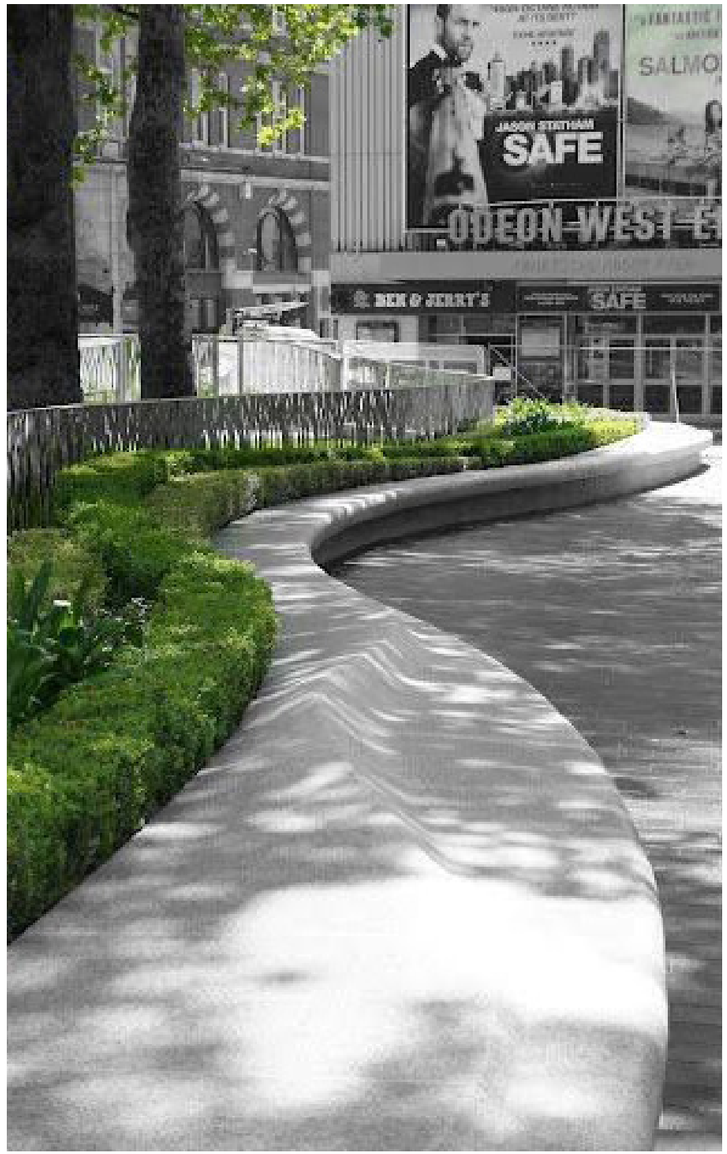


Seating Pods - T5 London

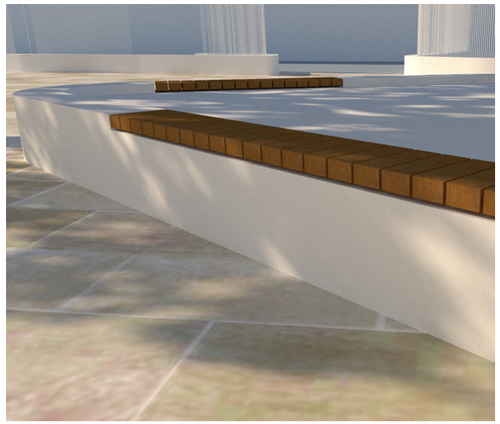


Step and Ramp Access

Step and Ramp Access



Bench and integrated planter

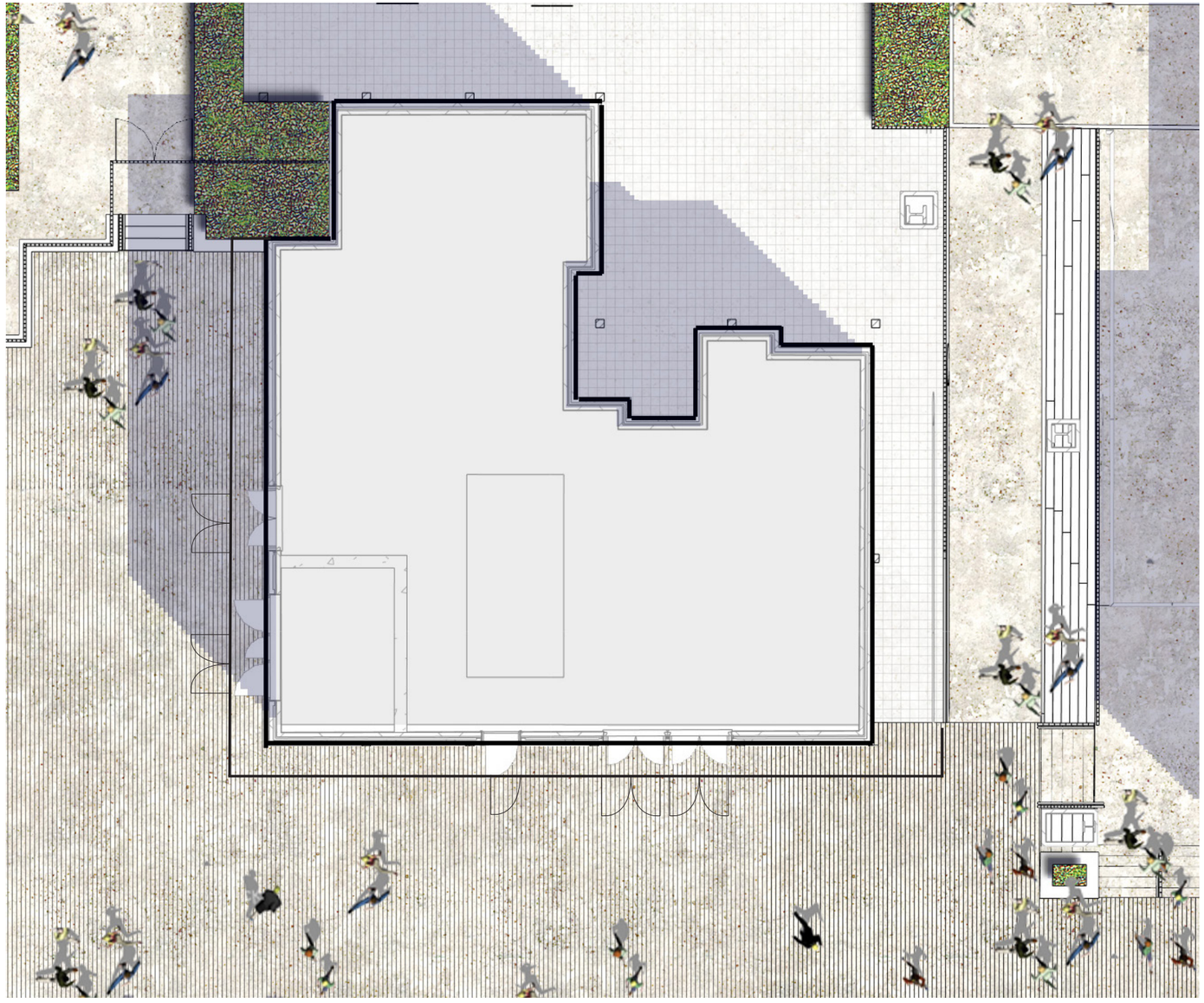


Seating

Railings

04 Landscape Design - Public Realm Pedestiran Street Indicative View

04 Landscape Design - Irish Water Station Indicative View



04 Landscape Design - Public Realm Pedestiran Street Indicative Elevations

Elevation 2: Screen to Pump Station

Tilted planters with integrated seating height 450mm

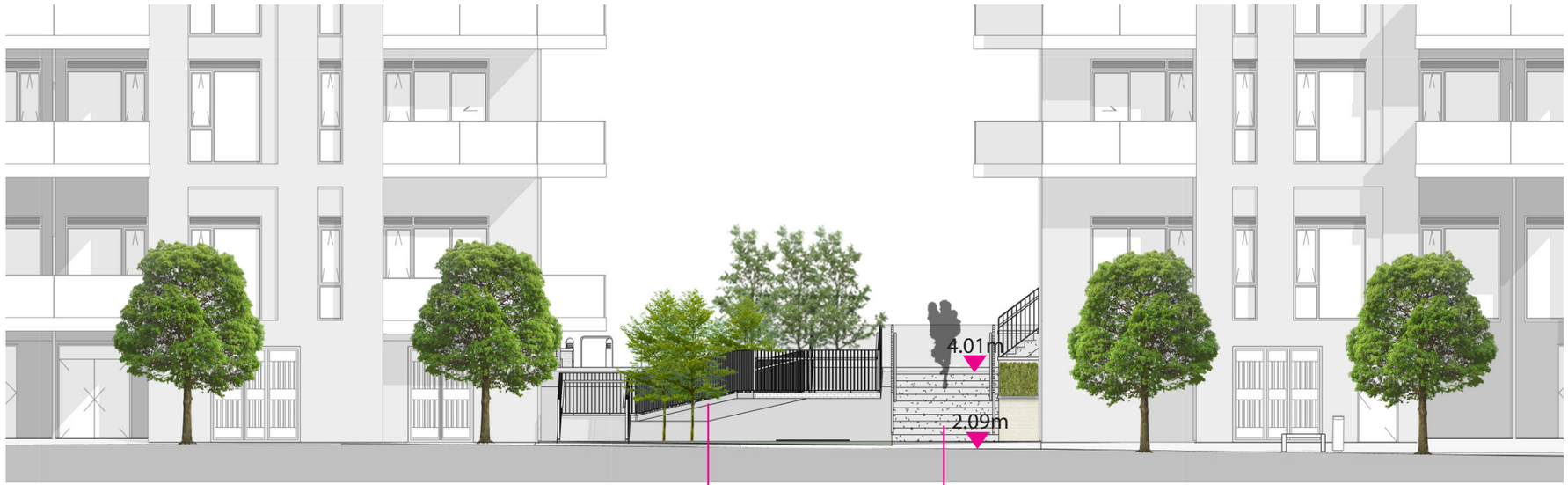
3.5m tall Railings to Pump Station

Elevation 3: Public Realm to South Block

Tilted planters with integrated seating height 450mm

Formal evergreen hedge planting to defensible space

04 Landscape Design - Public Realm - Steps + Ramp



Elevation 1

1:21 wheelchair ramp

Step access

Cross Section 1

1:21 wheelchair ramp

Step access

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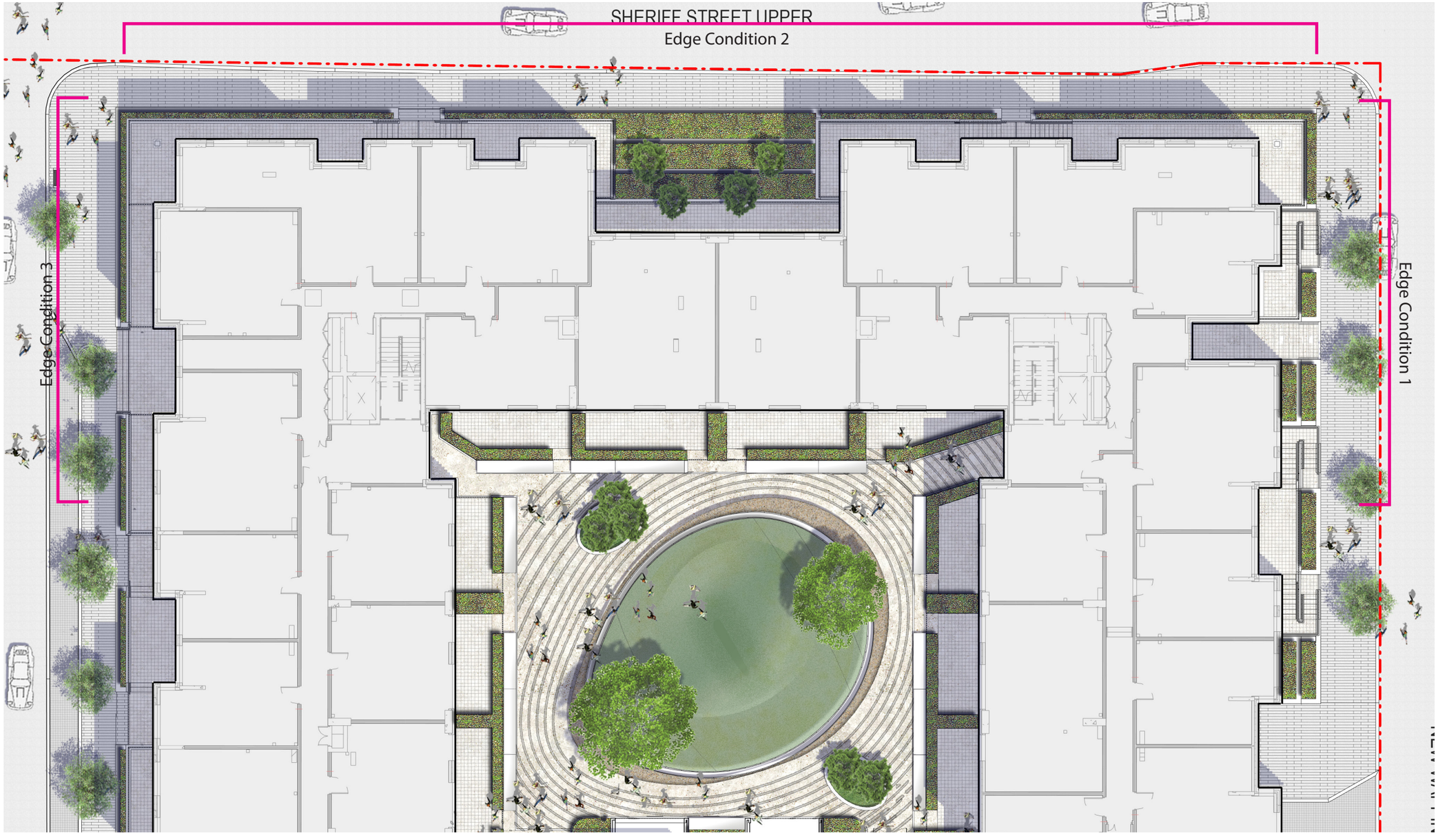
04 Landscape Concept - Streetscape



04 Landscape Concept - Streetscape Edge Conditions

Edge Condition 1: 2m + level Change

Low Planter Wall 1m Height

Formal evergreen hedge planting to defensible space

1.1m Railings to PAS

Edge Condition 2.2: 4.7m-Grade

Planter Wall Height Varies

Formal evergreen hedge planting to defensible space

Gated Access

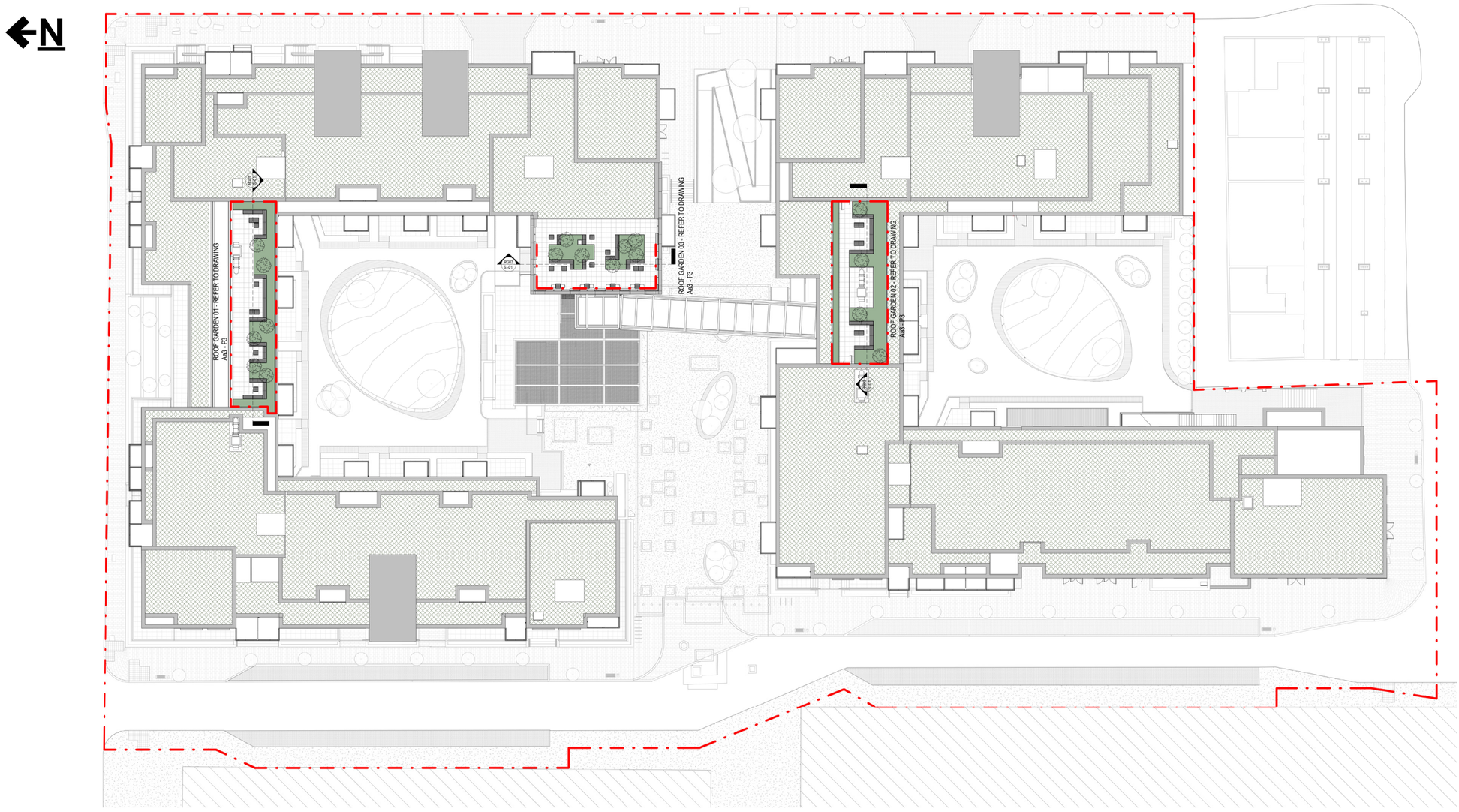
Edge Condition 3: At Grade

Gated Access

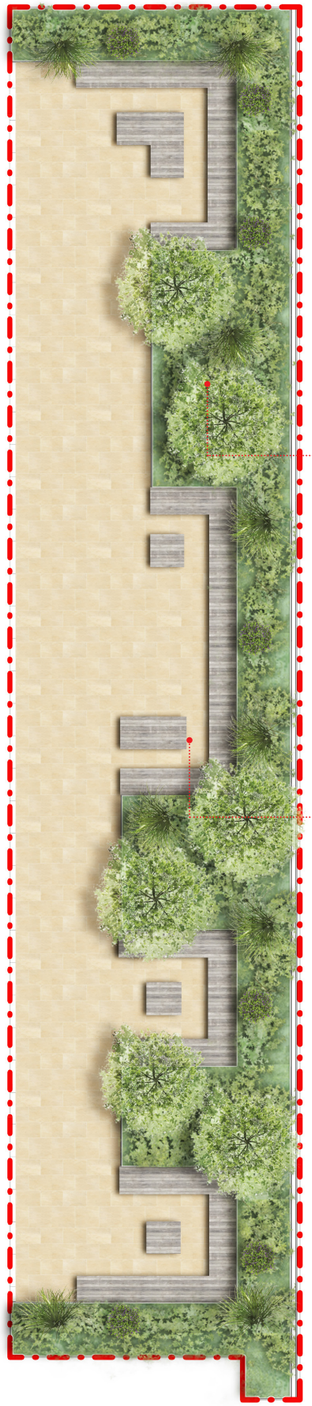
Formal evergreen hedge planting to defensible space

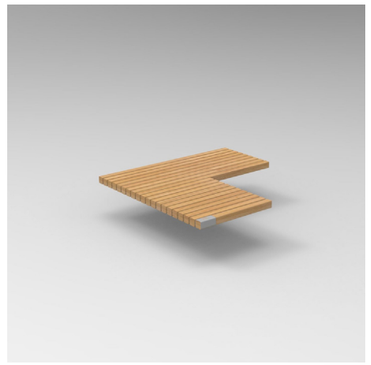
1.1m Railings to PAS

04 Landscape Concept - Roof Garden



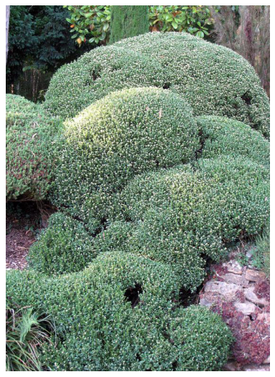
04 Landscape Concept - Roof Garden 9th Floor Block 1

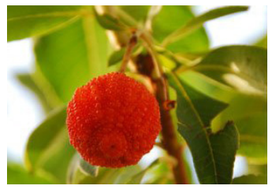


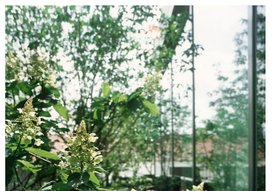


Durable outdoor furniture

Outdoor dining facilities

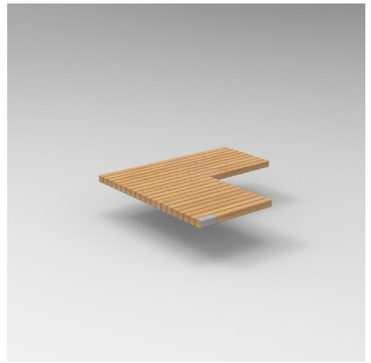






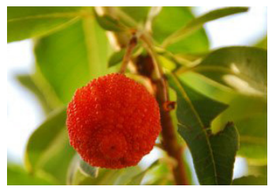
Wind Tolerant Planting

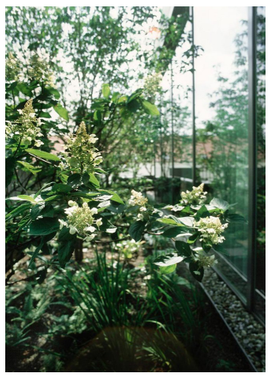
04 Landscape Concept - Roof Gardens 10th Floor - Block 1



Durable outdoor furniture

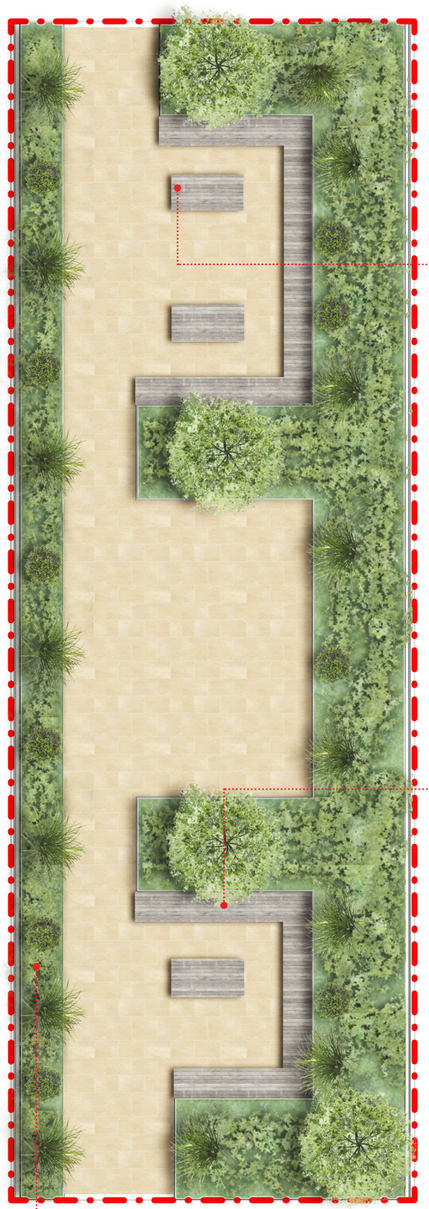
Outdoor dining facilities





Wind Tolerant Planting

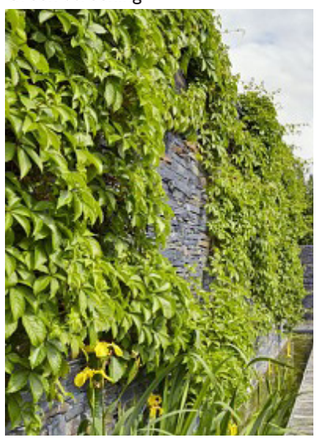
04 Landscape Concept - Roof Gardens 7th Floor Block 2



Garden Rooms

Outdoor seating

Green screening



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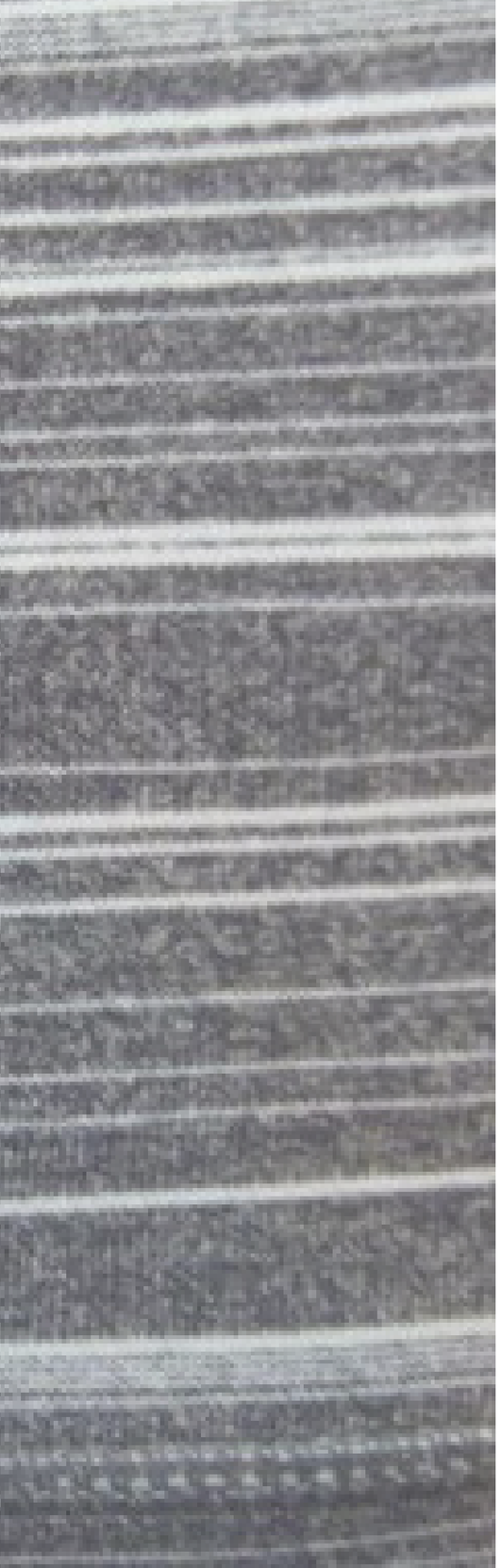
05 Materials Palette



The hard and soft materials strategy have been determined in line with the PUBLIC REALM MASTERPLAN for the NORTH LOTTS & GRAND CANAL DOCK SDZ PLANNING SCHEME 2014.

Tree Planting will be robust and vary in scale, typical street planting species such as Quercus Palustris. Smaller trees such as Betula, Multistem. Shrubs, for the most part will be evergreen formal hedges such as Yew, to create defensible space. Shrubs will be planted for the most part in raised planters. Turf areas and planted ares should have a provision for irrigation made particularly in the establishment stages.

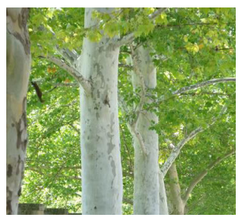
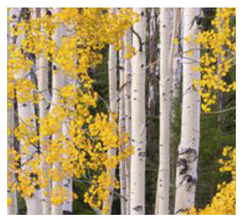
Hard landscape on the surrounding streets will integrate in colour and type with the surrounding streets but may vary in finish and size in order to create some variation in the public realm.

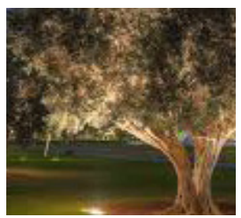
Other street furniture such as benches, bins, bike racks, tree rings and lighting will be further detailed at a later stage.

05 Indicative Materials Palette - Softscape

Trees

Species Name	Size	Density / No.
Acer Freemanii	150-175cm, 20lt pot	N/A
Betula Utilis Multistem	200-250cm rb	N/A
Metasequoia Glypto	200-250cm rb.	N/A
Prunus Serrula Multistem	200-250cm rb.	N/A
Pinus Nigra	200- 250cm 2 litre pot	N/A
Quercus Palustris	200- 250cm 2 litre pot	N/A
Quercus Robur	200- 250cm 2 litre pot	N/A

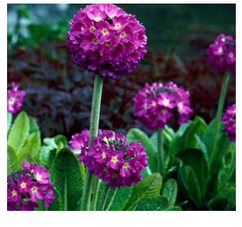



Hedge / Screen Planting

Species Name	Size	Density / No.
Taxus baccata	1.2m Ht, br	5no./ lin.m

Shrubs

Species Name	Size	Density / No.
Fastigiata aureomarginata	100- 110 cm 15 litre pot	4no./ sq.m
Primula denticulata	20- 30cm 1,5 litre pot	4no./ sq.m
Fatsia japonica	20- 25cm 1,5 litre pot	1no./ sq.m


Grasses + Ground Covers

Species Name	Size	Density / No.
Pennisetum rubrum	3 litre pot	3no./ lin.m
Turf		

05 Indicative Materials Palette - Hardscape

Set Down + Parking Entrances

Material/Colour	Size	Finish
Natural Granite Paving/Dark Grey	200mm x 100mm x 80mm	TBC

Residential Courtyards

Material/Colour	Size	Finish
Inish Paving/ Curragh Gold	200mm x 50mm x 60mm	TBC

Streetscape

Material/Colour	Size	Finish
Natural Granite Paving/Silver	600mm x 400mm x 80mm	TBC
Kerbs to match	900mm x 300mm x 300mm	TBC

Pedestrian Street

Material/Colour	Size	Finish
Exposed Aggregate Concrete	200mm x 100mm x 50mm	TBC

Railing

Material/Colour	Size	Finish
Galvanized Steel/ Stainless Satin Finish	60mm-08mm dia.	TBC

Tree Ring

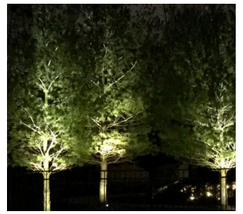
Cast Iron + Bound Gravel

Bench

Granite top

Lighting

3m tall pedestrian street light,
Tree uplighters, strip lights

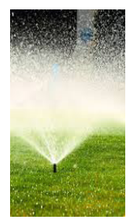


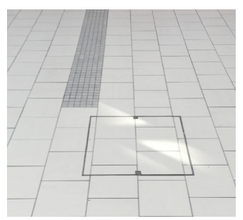
Informal Play

Provision of rocks, contrasting
colour and shapes in landscape

Manhole Covers, Drainage + Irrigation

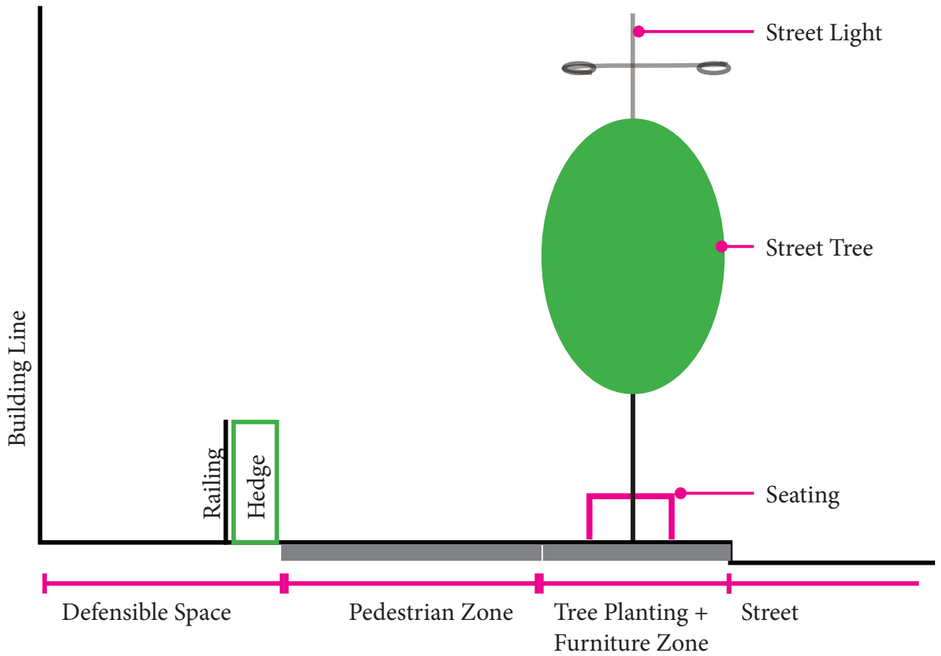
Drainage to be integrated where possible as slot drains. Sprinkle Irrigation to be prvided for lawns + Trees planted areas as drip irrigation. Recessed manhole covers to be provided and paved to match adjacent material - as agreed with utilities providers.





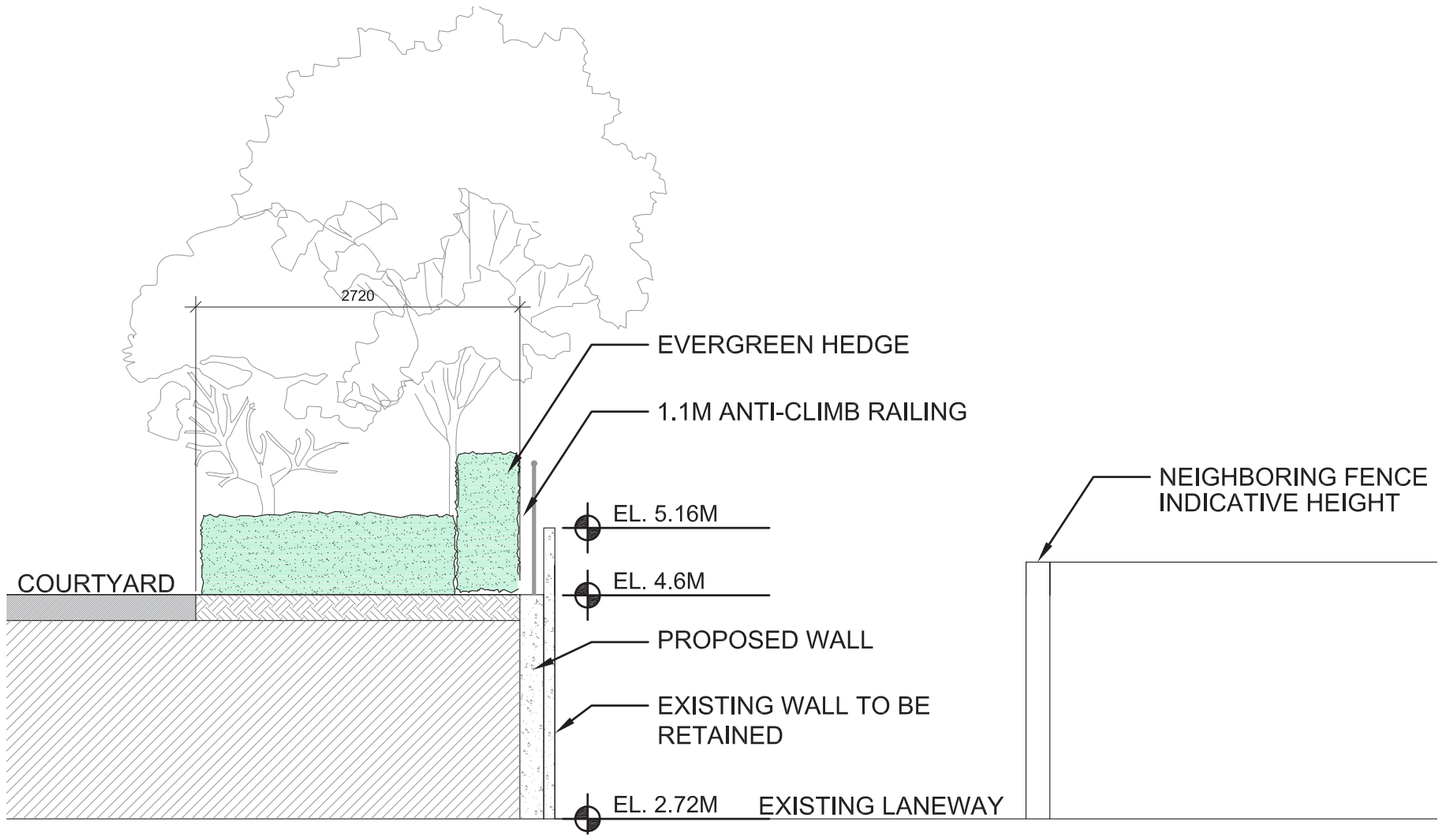
Apendix

Typical Tree Pit Detail



Typical Street Cross Section (Diagrammatic) NTS

Southern Wall Boundary Treatment With Residential Access Laneway



Southern Boundary Wall Treatment - 1:50

Appendix - Raised Tree Pitt Detail

Appendix - 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 labelled. 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”

B.S. No. 3936: 1967 entitled “Specification for Nursery Stock”

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 labelled.

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 labelled from the time of lifting until planting to conserve moisture.

Appendix - Soft Landscape Outline Specification

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 labelled 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 labelled 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 labelled. 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 labelled 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 labelled. Plants shall not be pot bound, or with deformed or restricted roots.

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.

Appendix - Soft Landscape Outline Specification

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.

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 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 with excavated topsoil, and remove all stones and debris, firming plant into position

4.7.1.Select Standards/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 faecal 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 faecal 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 faecal 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 faecal 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 - 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 augering 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 dia. 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 augering 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.

Appendix - Soft Landscape Outline Specification

d 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.

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Appendix - 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 Division of Dublin City 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/

Appendix - Hard Landscape Outline Specification

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 - 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 to the Board Of Management of the school. 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.

Appendix - Programme For Implementation, Maintenance + Defects Period

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 by the school for any part of the schools grounds 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.

The pitches and other high profile grassed areas, eg. the schools entrance 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 Department Of Education and Science. 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, in between the pitches and any grassed area hidden from the main road by the school.

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 Board Of Management.

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 Supertox (Intrepid 1997), 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 Clovertox herbicide to kill off clover in the grass areas shall be applied in April.

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