

Soft Landscape Palette

The planting concept for the scheme has been designed to enhance the qualities that each of the different spaces provides. Together with a number of proposed trees, the majority of the planting is based on a shade tolerant mix, offering a mixture of shrub and herbaceous species that offer year round interest.

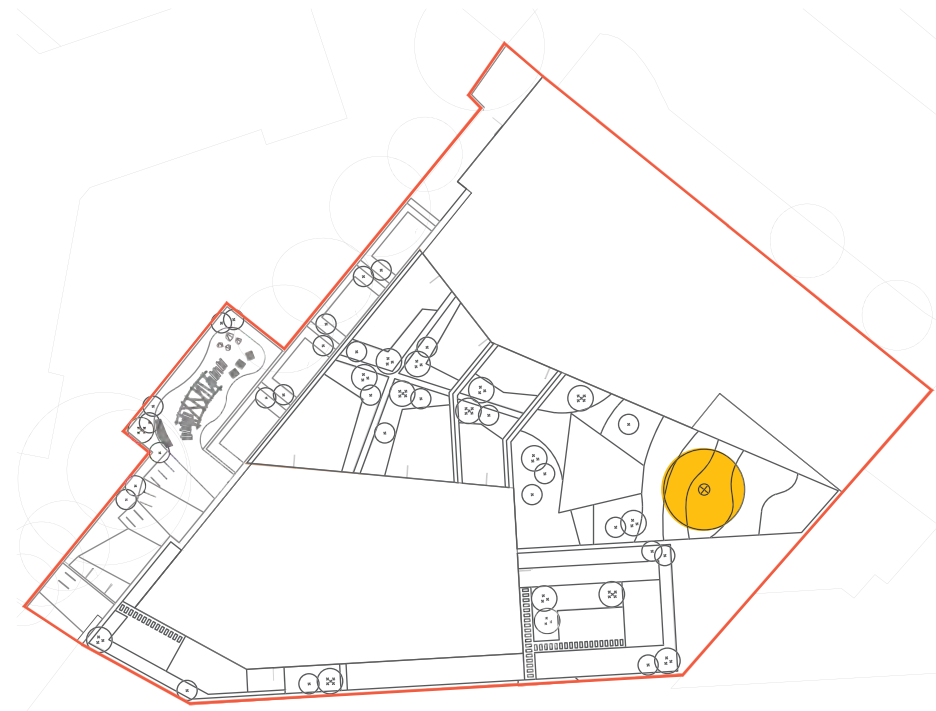
Each mix has been chosen to enhance visual character but also reinforce and promote biodiversity, strengthen the onsite SUDS system and be low maintenance.

Following are each of the main planting themes with palettes of species catered for each zone:

Feature Tree:

Liquidambar styraciflua 'Worplesdon' – Sweet Gum
 'Worplesdon'
 25-30cm girth, 550-600cm high, rootballed, 4x transplanted, semi-mature, clear stem minimum 200cm

This Sweet Gum is a somewhat 'exotic' looking tree with maple-like alternate, deeply-lobed green leaves which provide a striking display of crimson and purple in autumn. Inconspicuous greenish-yellow flowers are produced in May followed by spiky green seed cases in autumn. Reaches a height of 15-20m with a 10-12m spread.



Established in growing season



Established in Autumn



Established in Winter



Spring leaves



Summer leaves

Secondary Trees:

Amelanchier Canadensis - Shadbush
Multi-stem, 200-250cm high, rootballed, 3x transplanted, 5 stems minimum, bushy

Betula pendula – Silver Birch
10-12cm girth, 300-350cm high, rootballed, 2x transplanted, selected standard, clear stem 175-200cm, 4 breaks

Betula utilis jacquemontii – West Himalayan Birch
Multi-stem, 250-300cm high, rootballed, 3x transplanted, 3 stems minimum, bushy

Prunus serrula 'Tibetica' – Tibetan Cherry
Multi-stem, 250-300cm high, rootballed, 3x transplanted, 3 stems minimum, bushy

Crataegus monogyna - Common Hawthorn

Prunus avium - Wild Cherry



Amelanchier Canadensis

Betula pendula

Betula utilis jacquemontii

Prunus serrula 'Tibetica'

Crataegus monogyna

Prunus avium



Soft Landscape Palette

Garden Boundary Hedge:

Escallonia rubra 'Crimson Spire'
15L pots, 60-80cm high, Bushy habit, 7 breaks

Terrace Edge Hedge:

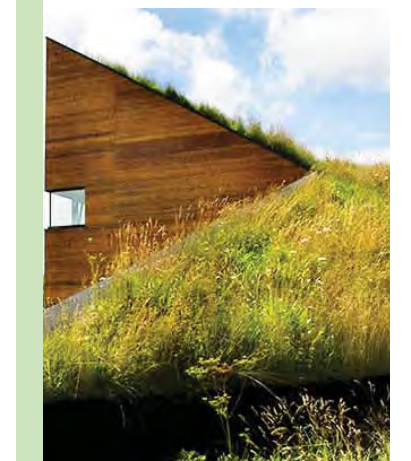
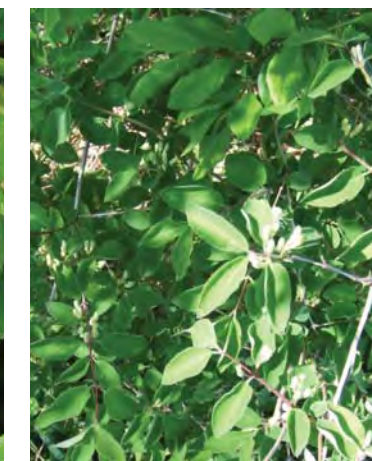
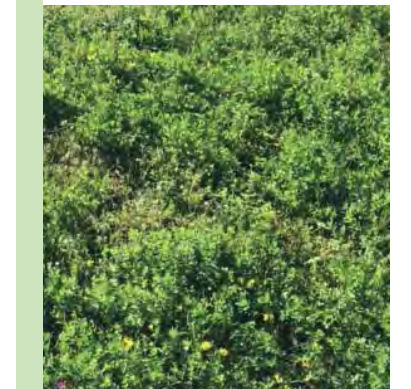
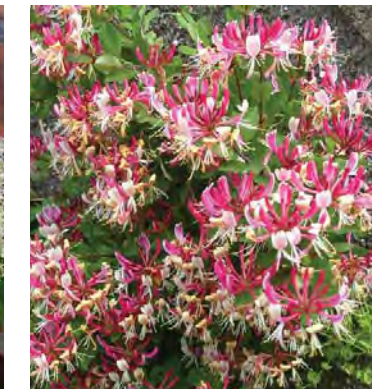
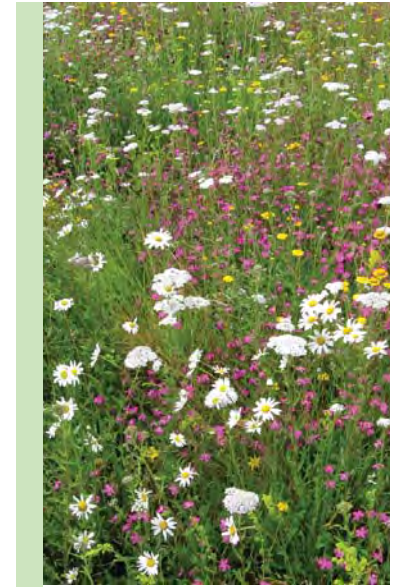
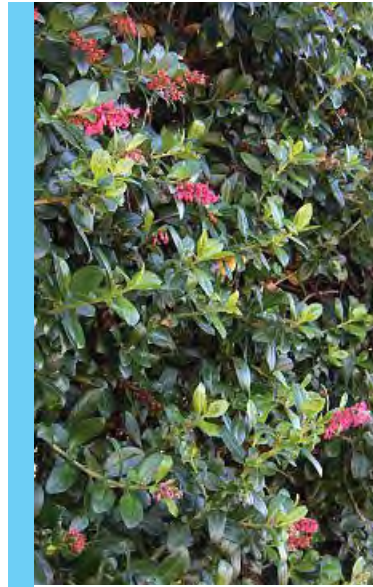
Deschampsia cespitosa
'Bronzeschleier'
5L pots, Full pot

Green Wall Climbers:

Hydrangea anomala subsp. *petiolaris*
Lonicera periclymenum

Roof Garden

(see page 29 for details)
Wildflower & Perennial Mat by Lindum Turf Ltd.



Escallonia rubra 'Crimson Spire'

Deschampsia cespitosa 'Bronzeschleier'

Hydrangea anomala subsp. *petiolaris*

Lonicera periclymenum

Wildflower & Perennial Mat by Lindum Turf Ltd

Level 1 Courtyard:

Long Grasses Mix

Swathes of long grasses in large same species bands:

- Carex testacea
- Cortaderia selloana 'Aureolineata'
- Deschampsia cespitosa
- 'Bronzeschleier'
- Stipa tenuifolia

Shady Fern & Stone Mix

Ferns and ground cover plants planted amongst varying sizes of stone cobbles and boulders:

- Asarum europaeum
- Asplenium scolopendrium
- Dryopteris filix-mas
- Dryopteris wallichiana
- Polystichum setiferum

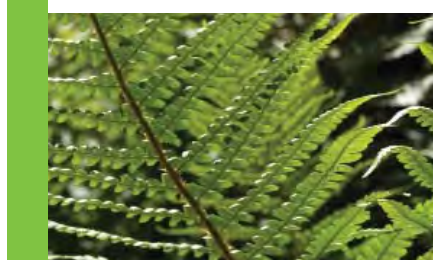
Shady Ornamental Mix

Groups of ornamental and native shrub and herbaceous planting suitable for shady environments:

- Carex morrowii 'Ice Dance'
- Erythronium californicum 'White Beauty'
- Geranium macrorrhizum 'Spessart'
- Hedera helix 'Hibernica'
- Helleborus x hybridus
- Liriope muscari
- Luzula sylvatica
- Milium effusum 'Aureum'
- Stipa tenuifolia
- Vinca minor alba



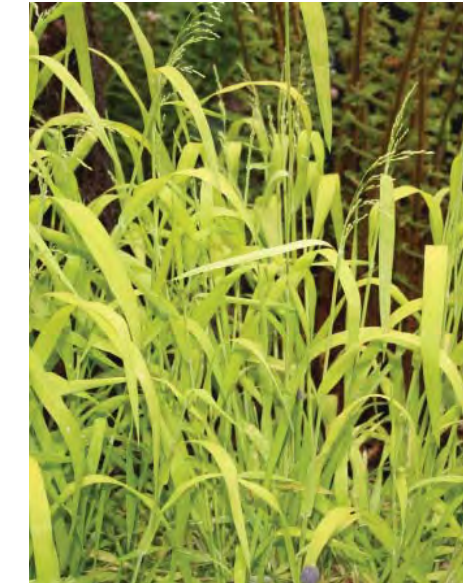
Long Grasses Mix



Shady Fern & Stone Mix



Shady Ornamental Mix



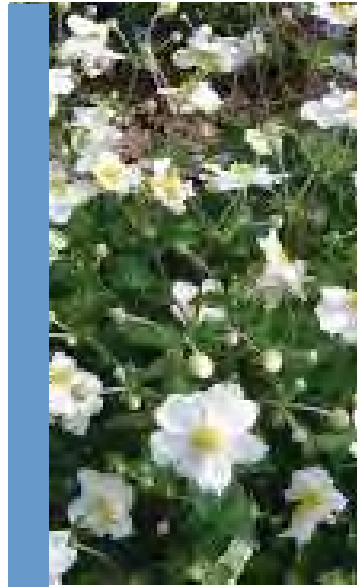
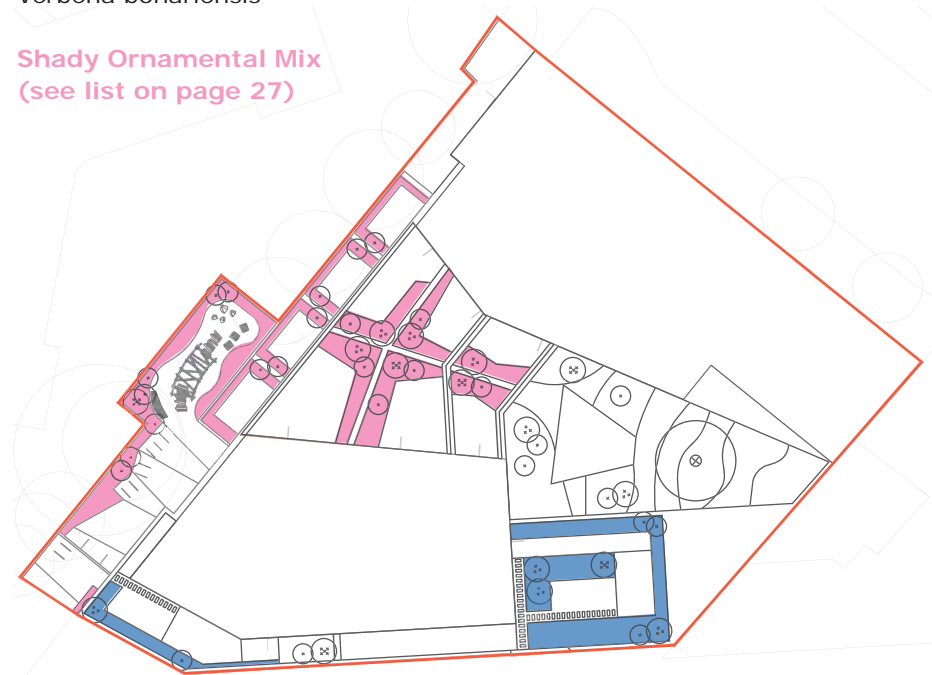
Soft Landscape Palette

Sunny Ornamental Mix:

Groups of ornamental and native shrub and herbaceous planting suitable for sunny environments:

- Allium spp.
- Anemone × hybrida 'Honorine Jobert'
- Carex morrowii 'Ice Dance'
- Cornus alba siberica
- Deschampsia cespitosa
- 'Bronzeschleier'
- Geranium macrorrhizum 'Spessart'
- Hedera helix 'Hibernica'
- Liriope muscari
- Luzula sylvatica
- Miscanthus sinensis 'Kleine Silberspinne'
- Scabiosa spp.
- Polystichum setiferum
- Rosmarinus officinalis
- Sarcococca hookeriana var. humilis
- Stipa gigantea
- Viburnum tinus
- Vinca minor alba
- Verbena bonariensis

Shady Ornamental Mix (see list on page 27)



Sunny Ornamental Mix

Groundcover/lawn:

Thymus vulgaris

Roof Garden

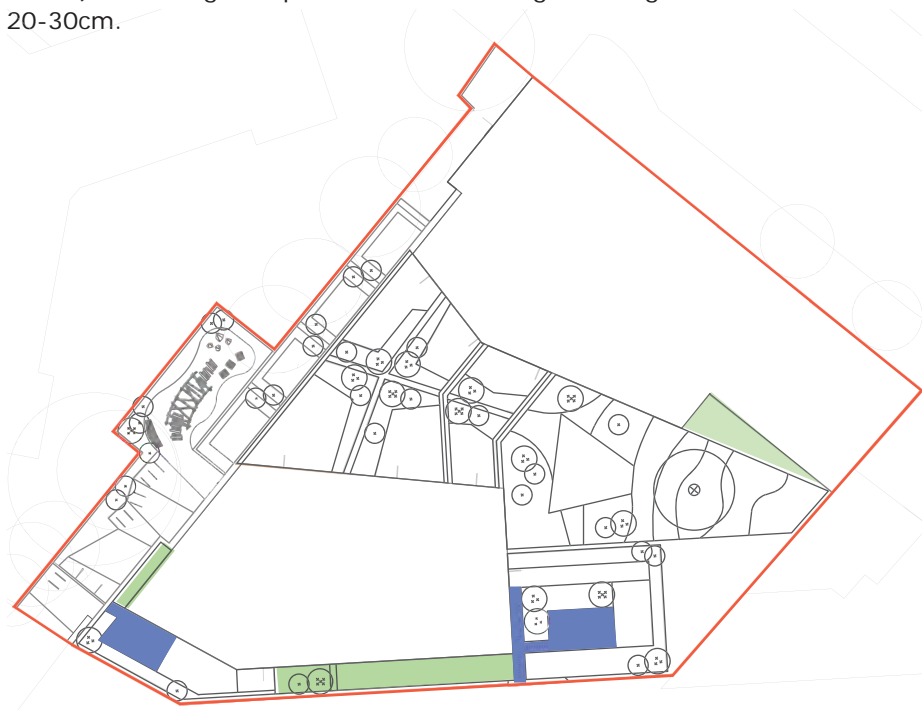
Extensive Wildflower Mix:

Wildflower & Perennial Mat by Lindum Turf Ltd.

<http://www.lindumgreenroofs.co.uk/lindum-green-roof-mats/lindum-wildflower-and-perennial-mat/>

Specifically developed product as an alternative to pure Sedum and includes a ready established mixture of drought tolerant wildflowers, sedum, herbs and flowering perennials, all of which are suited to the growing conditions created on a green roof. The mixture includes a range of plants that flower from April to September, including Oxeye Daisy, Lady's Bedstraw, Cats Ear and Yellow Camomile, three native sedum varieties, and herbs such as Wild Marjoram and Thyme, and flowering perennials such as Dianthus.

The mats require 100mm depth of substrate (deeper if possible which helps encourage better growth and colour), with height of plants when flowering reaching 20-30cm.



Thymus vulgaris

VEGETATION MAT

PRODUCT REFERENCE	Lindum Wildflower & Perennial Mat
PLANTING MIX	Lindum Wildflower & Perennial mix
MATERIAL	450gsm felt with scrim
THICKNESS	25mm
VEGETATION COVERAGE	75% (minimum)
ROLL SIZE	1.2m ² (0.6m x 2.0m) or 2.4m ² (1.2m x 2.0m)
SATURATED WEIGHT	25kg per square metre
MAXIMUM M ² PER PALLET	35 - 40 square metres depending on time of year and maturity
DELIVERY OPTIONS	Pallet delivery service for small orders Flat-bed artic wagon Rigid with tail-lift offload facilities for crane uplift Rigid with Hiab offload Artic with mounted forklift

EXTENSIVE GROWING MEDIUM

PRODUCT REFERENCE	Lindum Green Roof Substrate
MATERIAL	Lightweight aggregate blended with green waste compost UK sourced and manufactured
DEPTH	75mm (minimum) – 100mm (preferable)
SATURATED WEIGHT	At 75mm settled depth = 75kg per square metre At 100mm settled depth = 100kg per square metre
BAG SIZES	1m ³ tote bags 20 litre heat sealed bags Bulk loose
MAXIMUM VOLUME PER PALLET	1m ³ as 1 x 1m ³ tote bag 1m ³ as 50 x 20 litre bags
DELIVERY OPTIONS	Pallet delivery service for small orders Flat-bed artic wagon for crane uplift Rigid with tail-lift offload facilities Rigid with Hiab offload Artic with mounted forklift Bulk tipper or Bulk blower

AREA COVERED	Bag size	Depth(settled)	m ² covered*
	1m ³ tote	75mm	12.50m ²
	1m ³ tote	100mm	9.50m ²
	20 litre	75mm	0.25m ²
	20 litre	100mm	0.19m ²

*Please allow for 5% settlement when ordering



Typical living roof images (Shown once established with Lindum Wildflower & Perennial Mat)



Spring



Summer



Autumn



Winter



Biodiversity

Provision of Bird boxes:

3no. erected at Level 0 near the play

3No. in the inaccessible courtyard space on level 1



Small bird and large bird boxes - Nestbox Company

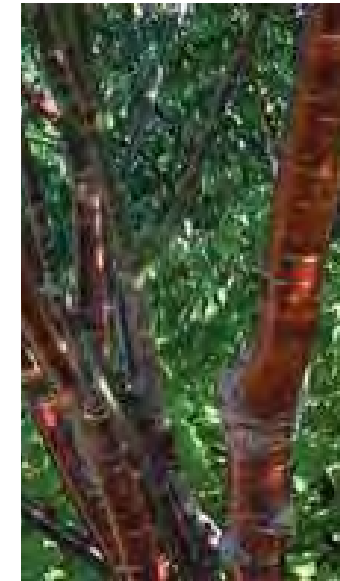
Biodiversity

Within the proposed planting palettes certain species have been chosen with year round benefits for bees these are as follows:

Prunus serrula 'Tibetica'
 Crataegus monogyna
 Prunus avium
 Prunus spinosa

Lonicera periclymenum

Allium spp.
 Geranium macrorrhizum 'Spessart'
 Hedera helix 'Hibernica'
 Lavandula angustifolia
 Scabiosa sp.
 Symphytum officinale
 Thymus vulgaris
 Verbena bonariensis
 Viburnum tinus



Topsoiling

A single type of topsoil is specified for the entire scheme and would be suitable dry, shady environments. The topsoil layer would provide a good rooting medium giving the necessary resources for healthy growth to all trees, hedges, shrubs and herbaceous plants.

A class 5B/2 multi-purpose loam/sandy loam topsoil has been selected as this is best at providing a balance between good water-holding capacity and allowing sufficient drainage. Organic matter would be mixed in to improve the nutrient retention and to supply essential soil microbes. All planting areas have a water-absorbent polymer gel mixed in to help maintain moisture within the soil during times of hot dry weather.

All imported topsoil would conform to BS 3882:2007 - Specification for topsoil and requirements for use.

Mix for Wildflower Extensive Roof:

100mm depth imported topsoil mix, using class 5B/2 multi-purpose loam/sandy loam topsoil.

Mix for Groundcover lawn:

200mm depth imported topsoil mix, using class 5B/2 multi-purpose loam/sandy loam topsoil.

Mix for planting areas:

500mm depth imported topsoil mix, using class 5B/2 multi-purpose loam/sandy loam topsoil. Ameliorants, water polymer gel and slow release fertiliser mixed in.

Feature Tree Pit

2.5m diameter tree pit for large feature tree, backfilled with 'Amsterdam Tree Sand' by Heicom, or similar. 1m maximum depth (5m³), laid in 250-300mm layers before being compacted with a whacker plate. Ameliorants, water polymer gel and slow release fertiliser mixed in. 200mm depth of landscape general purpose subsoil to base of pit.

Maintenance

The planting on all levels in both public and private spaces have been designed to need little or no maintenance. The specific species mix has been carefully selected to suit the conditions of the local climate.

Most planting in the external landscaping relies solely on precipitation, during all seasons of the year, this with exception to the Level 1 courtyard where there will be drip-fed subsurface irrigation incorporating soil moisture sensors. The irrigation control will be zoned to permit variable irrigation to different planting assemblages.



Further information:

For further information please refer to LUC detailed drawings:

- 6755-LD-PLN-001 - Landscape Masterplan
- 6755-LD-PLN-002 - Rendered Landscape Masterplan
- 6755-LD-PLN-201 - Landscape Proposals - Ground Floor
- 6755-LD-PLN-202 - Landscape Proposals - Level 1
- 6755-LD-PLN-203 - Landscape Proposals - Level 3,4 & 5
- 6755-LD-PLN-204 - Landscape Proposals - Level 6

- 6755-LD-PLN-501 - Overall Colour Masterplan
- 6755-LD-PLN-601 - Section A & B Ground Floor Gardens
- 6755-LD-PLN-602 - Section C Level 1, 4 & 5