



GANNON & ASSOCIATES
LANDSCAPE ARCHITECTURE

L A N D S C A P E D E S I G N R A T I O N A L E

**PROPOSED DEVELOPMENT AT
ARDSHANAVOOLY, KILLARNEY,
CO. KERRY**

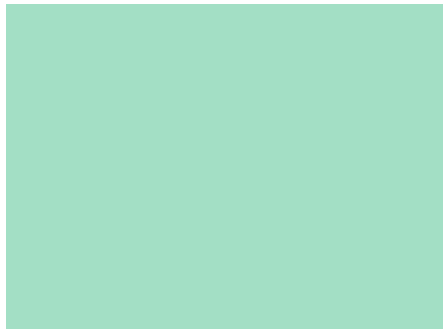
on behalf of

WRIGHTWOOD DEVELOPMENT LTD

g+a

JULY 2026

CONTENTS



01

SITE CONTEXT

- 1.1 SITE LOCATION
- 1.2 SITE PHOTOS



02

SITE ANALYSIS

- 2.1 HISTORY
- 2.2 TREE SURVEY



03

LANDSCAPE CONCEPT

- 3.1 CONCEPT
- 3.2 MASTERPLAN
- 3.3 SECTIONS
- 3.4 MASTERPLAN DETAILS
- 3.5 MASTERPLAN ANALYSIS



04

SOFT LANDSCAPE DETAILS

- 4.1 SOFT LANDSCAPE PLAN
- 4.2 SOFT LANDSCAPE REFERENCES
- 4.3 SOFT LANDSCAPE SPECIFICATIONS



05

HARD LANDSCAPE DETAILS

- 5.1 MATERIALS
- 5.2 BOUNDARY DETAILS



06

OPEN SPACE MANAGEMENT

- 6.1 OPEN SPACE MANAGEMENT

DEVELOPMENT DESCRIPTION

Wrightwood Development Ltd, intend to apply for planning permission for a Large Scale Residential Development (LRD) for development at a 2.23 hectare site at lands at Ardshanavooly, Killarney, Co. Kerry.

The proposed development comprises of:

1. Construction of a 123 no. dwellings in a mix of duplex, maisonette and apartment typologies comprising 16 no. 1 bed apartments, 6 no. 2 bed apartments, 11 no. 1 bed duplex apartments, 11 no. 2 bed duplex maisonettes, 28 no. 2 bed duplex apartments, 28 no. 3 bed duplex maisonettes and 23 no. 3 bed terrace houses, all in building heights ranging from 2 to 4 storeys. The development includes 20 no. townhouses designed to comply with requirements for affordable housing units and will be offered as affordable housing units.
2. A total of 139 no. surface car parking spaces, including 4 no. car-share parking spaces, 6 no. visitor spaces, and 5 no. assigned Part M/accessible spaces.
3. Bicycle parking comprising of 272 no spaces in total, comprising 124 no. spaces within the private open space of ground floor residential units and 96 no. spaces within secure sheltered structures and designated secure bicycle parking areas, and 52 no. short stay/visitor spaces.
4. 3,600 sq.m of public open space, including arrival pocket park, central pocket park and amenity landscape areas (including 117 sq.m of play), grass lawns, kickabout areas, picnic areas and seating areas;
5. 916 sq.m of communal external open space, including seating areas, nature trails, and amenity grass lawns.
6. Additional environmental open space of 1,837 sq.m, including landscape buffers, protection and enhancement of existing hedgerows and trees.
7. A new vehicular, pedestrian and cyclist access from the existing estate road adjoining the site to the south.
8. Infrastructure works to serve the proposed development to include the internal road and footpath network, ESB cabinets/substations/switchrooms, site and external building lighting, site drainage works, hard and soft landscaping, boundary treatments, communal bin stores, and all ancillary site services and development works above and below ground.



01

SITE CONTEXT

1.1 SITE LOCATION

The site is located in Ardshanavooly, Killarney, Co. Kerry. It is bounded to the north by open green fields, to the west by residential housing, and to the south by a local road providing access to the surrounding residential areas. To the east, the site adjoins Deerpark Retail Park.

The site benefits from excellent connectivity, with direct access to the N22, offering convenient links to Tralee and Cork. Its close proximity to Killarney town centre ensures strong integration with the local urban fabric, making it highly suitable for various development opportunities.





CLUAIN
FHIONNAIN

N22

1 km

500 m

ST FINAN'S
HOSPITAL

Dr Crokes GAA Club

Fitzgerald Stadium

Columbanus
Community Hospital

ELMCOURT
HOLIDAY
VILLAGE

N22

DEERPARK
RETAIL PARK

Killarney Sports
& Leisure Centre

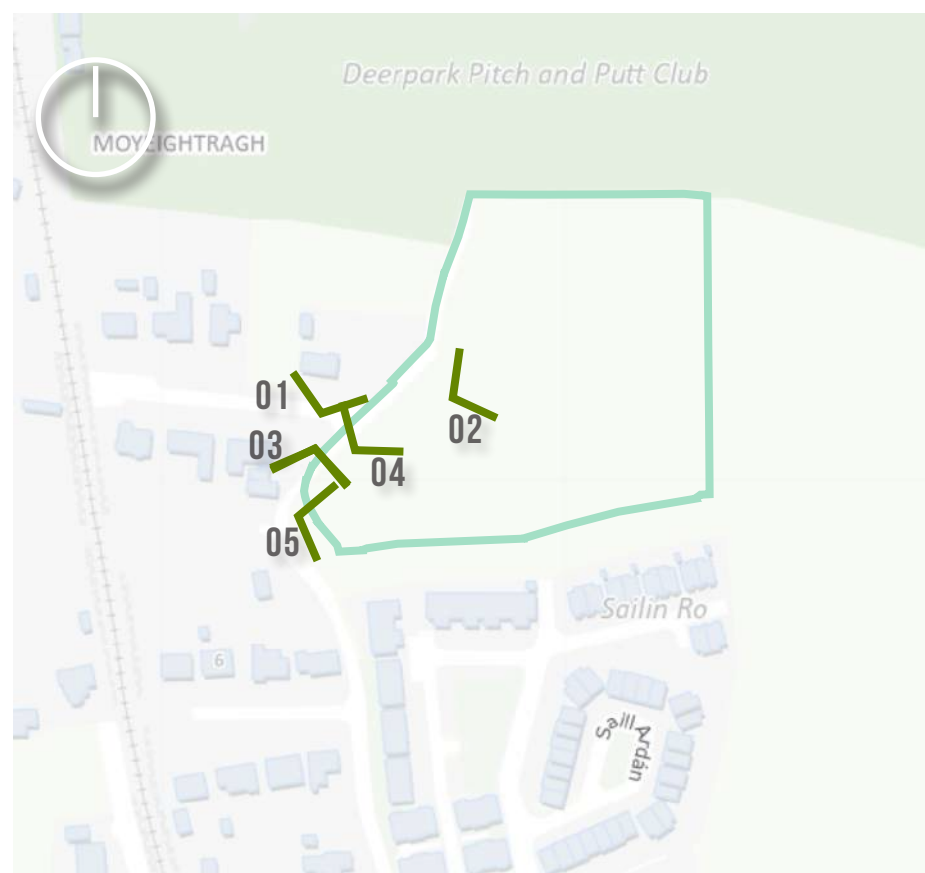
Pike Wood

Killarney

Killarney House
& Gardens

Activate

1.2 SITE PHOTOS



01

View of the existing hedgerow on the southwest boundary to be retained and protected.

02

View of the site from the existing grass area and the northern boundary.

03

View of the existing hedgerow on the southwest boundary to be retained and protected.

04

View of the existing trees on the western boundary to be retained and protected.

05

View of the site towards the existing block wall on the southern boundary



02

SITE ANALYSIS

2.1 HISTORY

1850



1900



1995



2000



2012



2024



1850:

The site in Ardshanavooly was part of a rural landscape on the outskirts of Killarney, mainly used for agriculture. Few roads and buildings were present in the area.

1900:

Killarney continued to grow as a tourist destination, leading to improved roads and infrastructure. The site remained rural but became more connected to the town.

1995:

Urban expansion reached the area, with residential and commercial developments nearby. The site was surrounded by infrastructure, marking its transition towards an urban setting.

2000:

Housing developments increased around the site, and road networks improved. The site remained undeveloped but was now more integrated into the urban fabric.

2012:

Further residential growth surrounded the site, with new roads and services strengthening its connection to Killarney.

2024:

The site is now within a fully developed area, with housing and infrastructure on all sides. It remains one of the last undeveloped plots in this part of Killarney.

03

LANDSCAPE PROPOSAL

3.1 CONCEPT

The concept for these residential units focuses on providing a safe and comfortable environment, incorporating principles of modern design and sustainability. The design begins at the building entrances and extends into communal outdoor spaces, fostering a sense of community and enhancing the quality of life in the area. The outdoor areas are designed to create an integrated and cohesive environment, with open spaces that encourage socialisation and interaction among residents.

Key features include seating areas made from natural materials, such as concrete and timber, which provide comfort and a rustic touch to the environment. The design also includes natural play spaces, such as stepping stones, logs, and large boulders, offering opportunities for children to play in a playful and nature-connected manner. These elements are integrated into the landscaping, creating a space for learning and exploration for children.

Additionally, there are landscaped areas with ornamental planting, which enhance the visual appeal of the space and attract local wildlife. These variations in topography contribute to the creation of microenvironments that support different species of plants and animals. These spaces have been designed to establish a strong connection with the surrounding landscape, promoting sustainability and the use of local materials.



3.2 MASTERPLAN

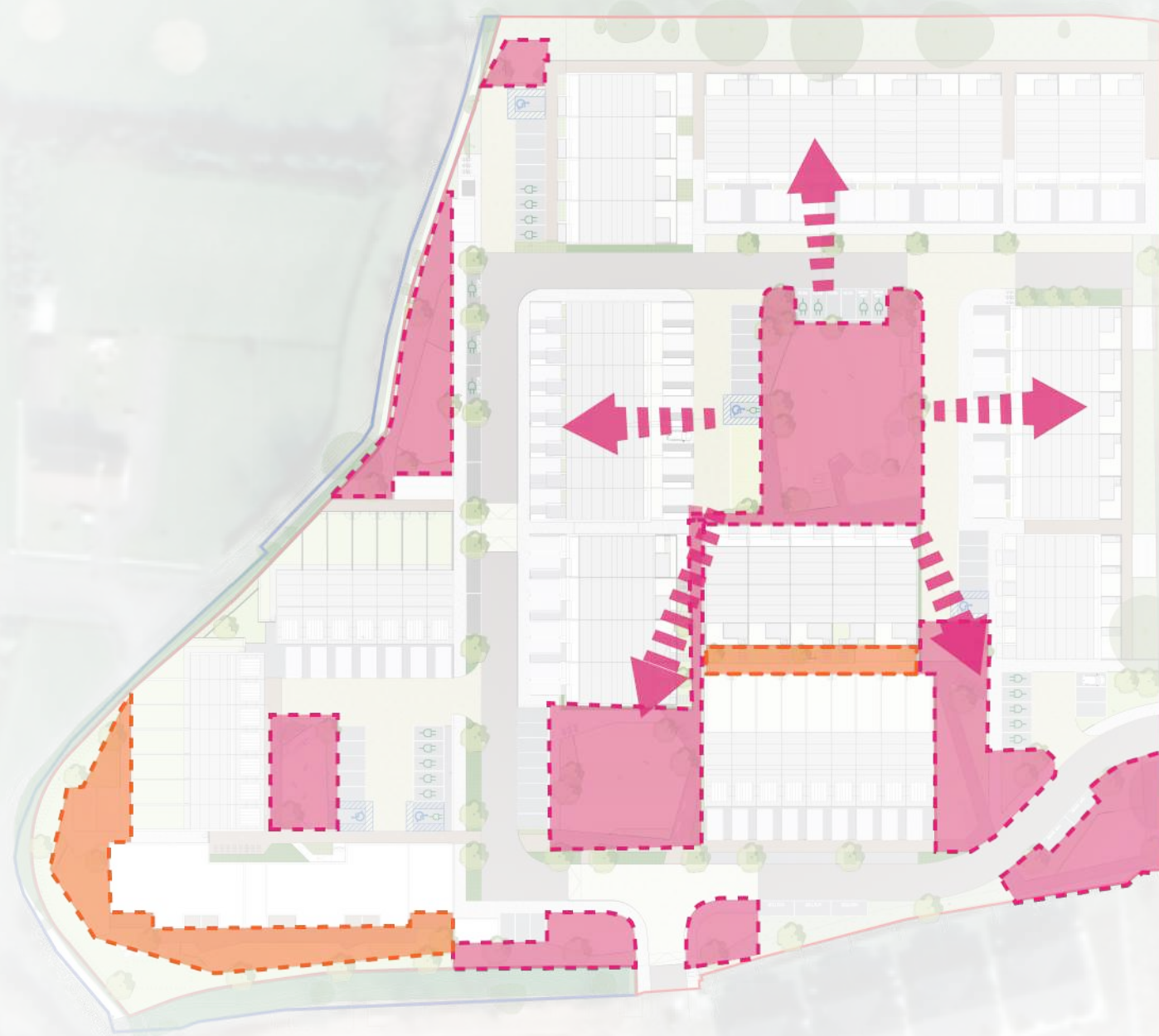
Initial Development at Ardshanavooly, Killarney, Co. Kerry



Legend

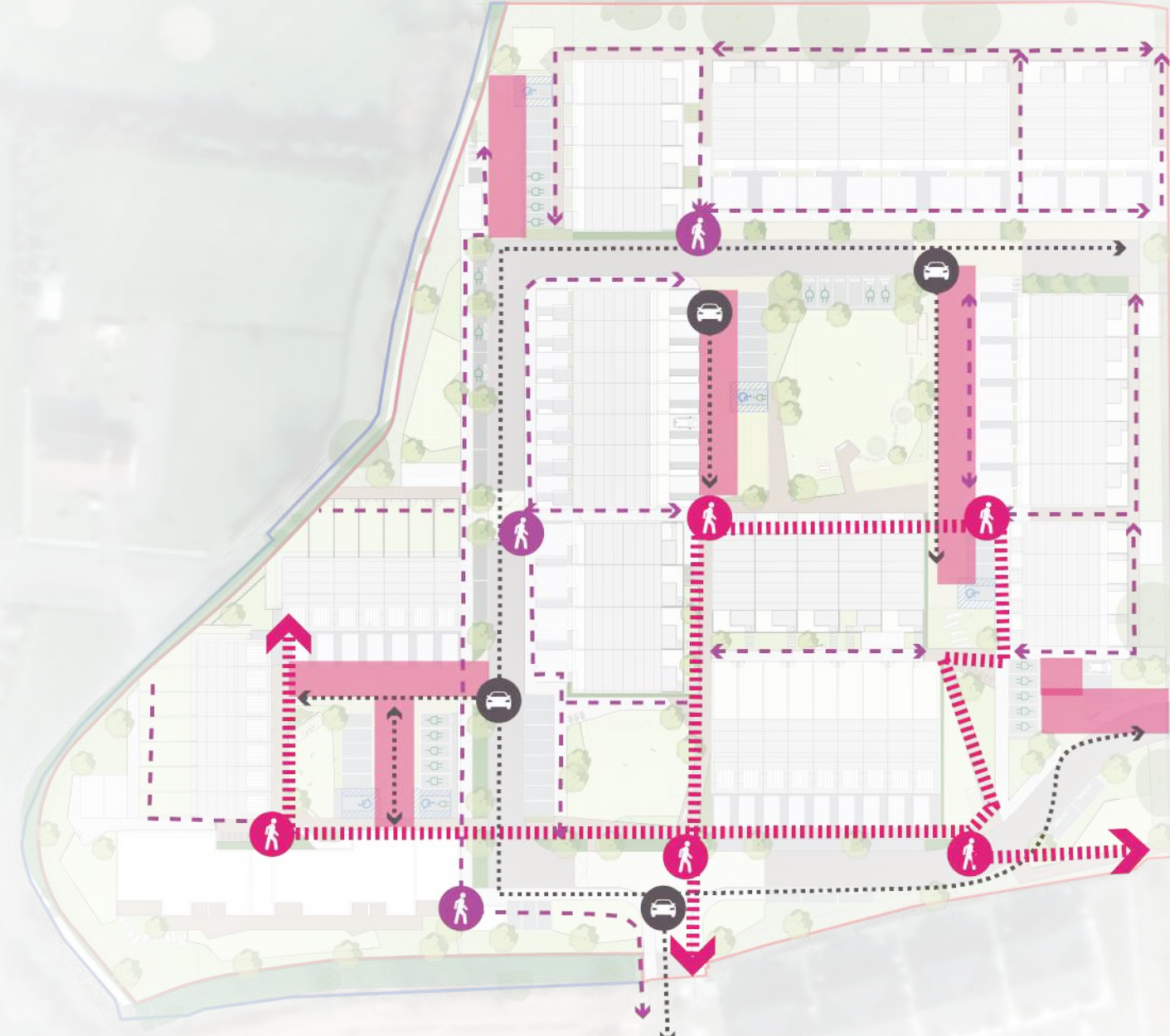
- Red line site boundary
- SOFT LANDSCAPE**
 - Existing trees and hedgerows**
to be retained and protected (Refer to Landscape and Arbicultural reports)
 - Proposed Trees, Multi-Stem Trees and Ornamental Shrubs**
including, Street trees, Rain Garden trees, Parkland trees, Fruit Trees, Boundary Screening trees and Ornamental Shrubs (Refer to planting schedule)
 - Native Boundary Woodland mix**
@c/g 2L 80-100 cm ht
Buffer woodland planting mix (refer to soft landscape plan)
 - Ornamental Planting Mix**
150mm topsoil depth
Mix of ornamental grasses to provide all year round flow and texture in planting beds, including: Coneflowers, Sea Holly, Foxgloves, Russian Sage, Golden Oats, Tufted Hair Grasses, Terracotta Yarrow, etc.
 - Rain Gardens Planting Mix**
Ornamental adapted planting mix, including: Yellow Yris, Chinese Silver grass, Adderwort, Gold Dew tufted Hair Grass, Reed grasses, etc.
 - Amenity Grass Areas**
150mm topsoil depth
 - Native Ecological Habitat Seed Mix**
These mixtures contain 70% grasses with 30% long lasting perennial wildflowers. They are specifically designed for habitat restoration projects with the aim of providing maximum benefit to biodiversity. Each mix contains over 15 native species.
- HARD LANDSCAPING**
 - Asphalt Roadway**
with in-situ concrete kerbs (to Engineer's specification)
 - Car Parking Spaces**
Permeable paving
 - HomeZone & Raised Table**
Buffed asphalt and flushed concrete kerb and footpath
 - Public Footpaths**
In-situ concrete, Brushed Finish, concrete slabs
 - Footpaths - Main Paths**
Exposed aggregate concrete
 - Seating areas**
Ballylusk dust
 - Furniture and Features**
(All furniture to be concrete/ steel and anchored to ground)
 - Nature Play**
Concrete stepping stones and mounding
 - s71 Cycle Stand**
supplied by Omos.ie
 - Feature Benches**
Bespoke concrete benches with steel back support
 - Steel Café Chairs**
Individual seats anchored to ground
 - s96w Picnic Set**
Steel table, supplied by Omos.ie or similar approved
 - Lighting**
Refer to lighting plan and report

3.3 MASTERPLAN ANALYSIS

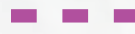


OPEN SPACES

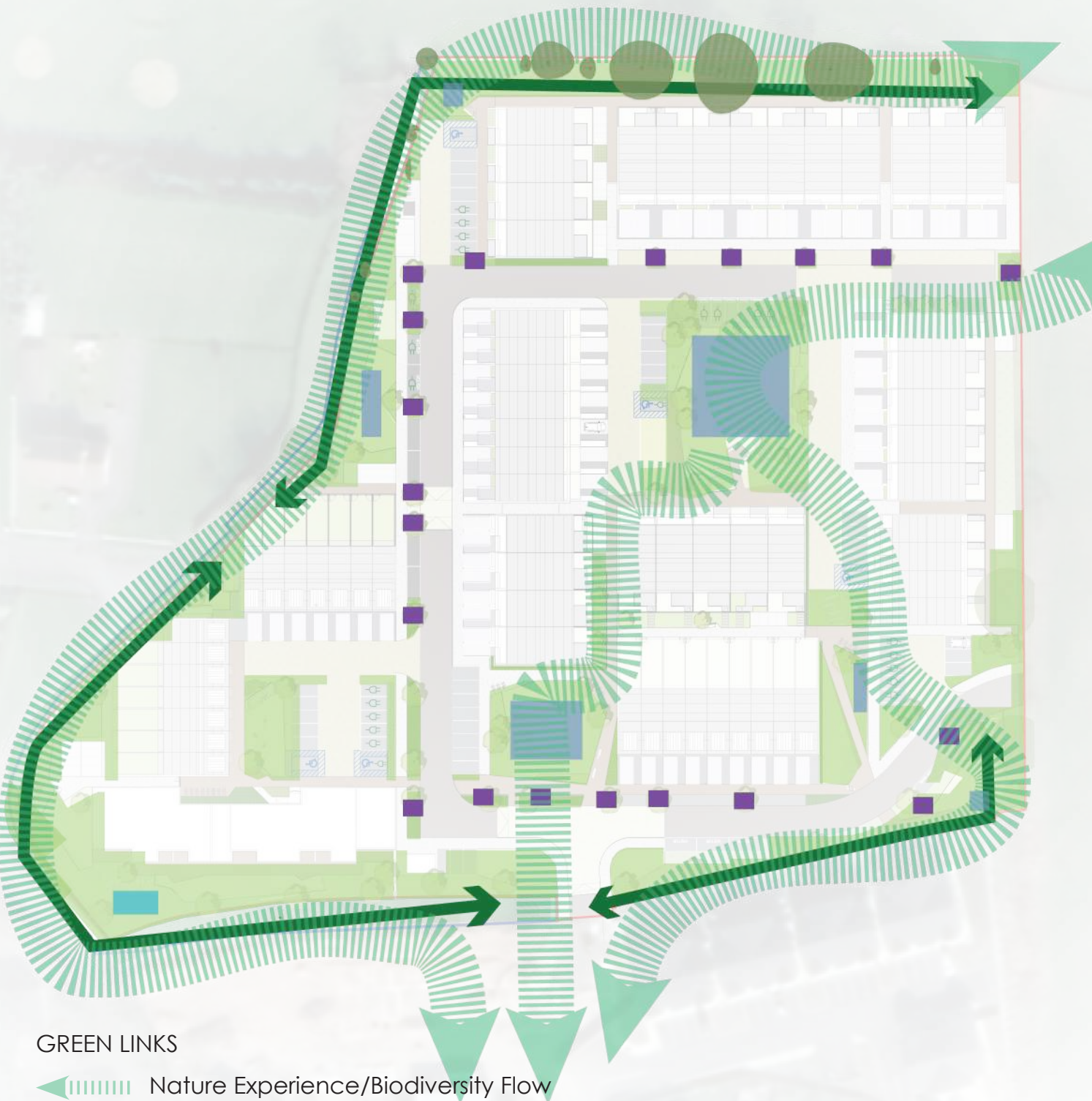
	Public Open Spaces - 3600sq.m.	16.1%
	Communal Open Spaces - 916sq.m.	4.1%



CONNECTIVITY

	Main Pedestrian Link
	Pedestrian Access
	Vehicle Access
	Shared Surface

3.3 MASTERPLAN ANALYSIS



- GREEN LINKS**
- Nature Experience/Biodiversity Flow
 - Green Spaces
 - Boundary green link
 - Tree pits



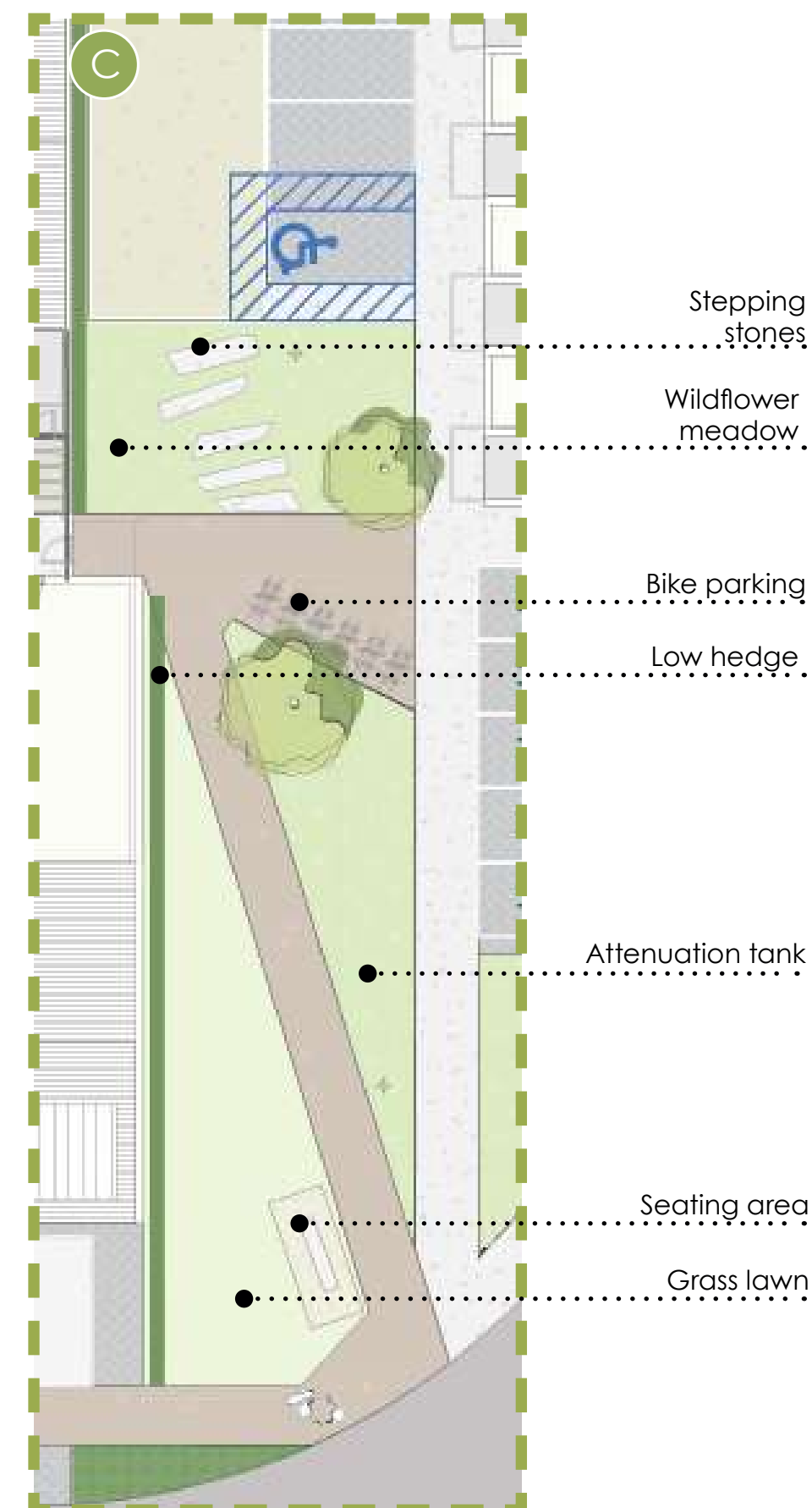
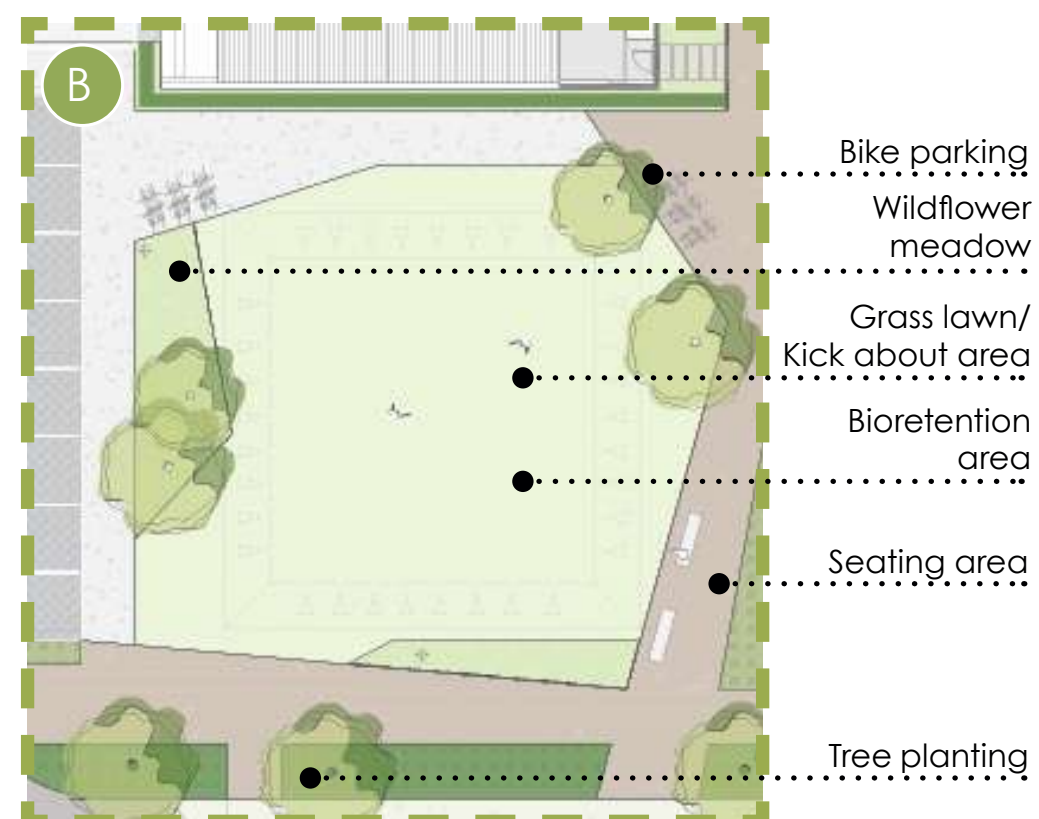
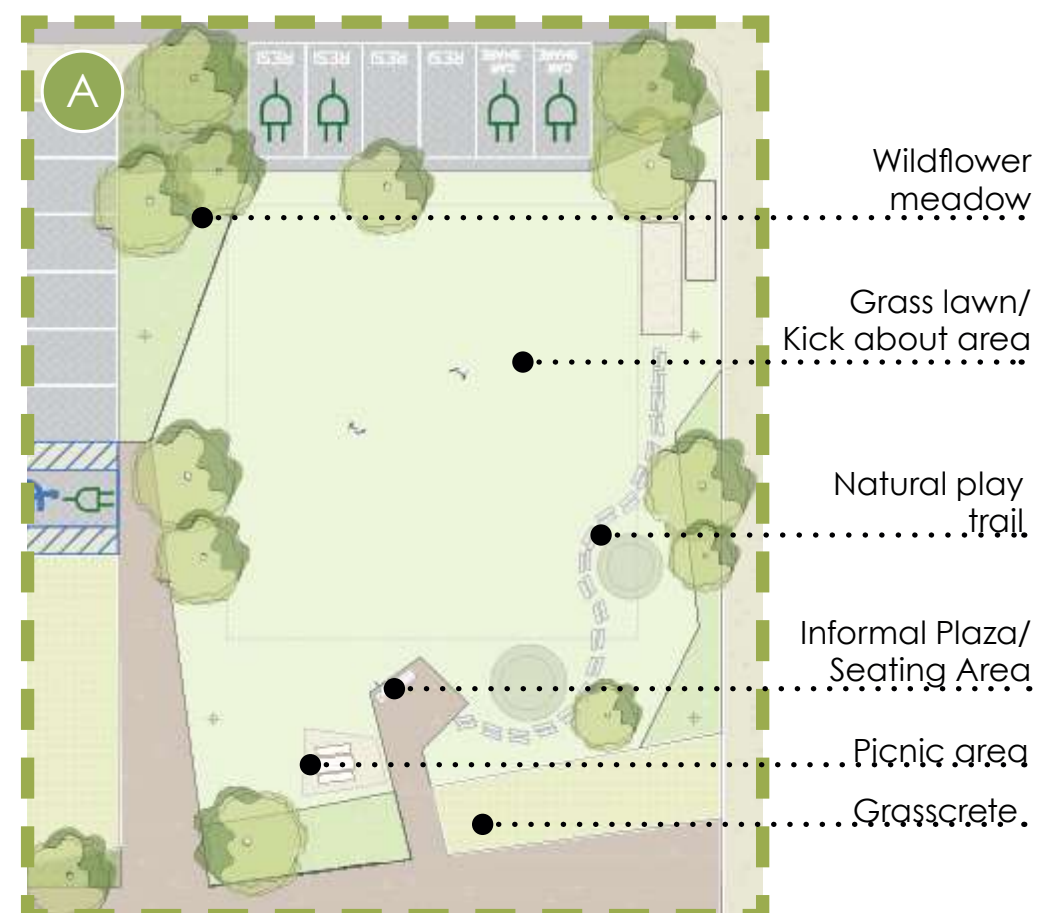
- SUDS STRATEGIES**
- Tree pits
 - Rain gardens
 - Shared Surface
 - Permeable Paving

3.4 MASTERPLAN DETAILS

PUBLIC OPEN SPACES



The public open space is designed to harmonise with the natural landscape, featuring native vegetation, wildflower meadows, and permeable surfaces. Organic pathways meander through the area, linking seating spaces thoughtfully positioned to encourage quiet reflection as well as social interaction. Stone benches are integrated into the surroundings, offering comfort while maintaining a connection to nature.



3.4 MASTERPLAN DETAILS

PUBLIC OPEN SPACES

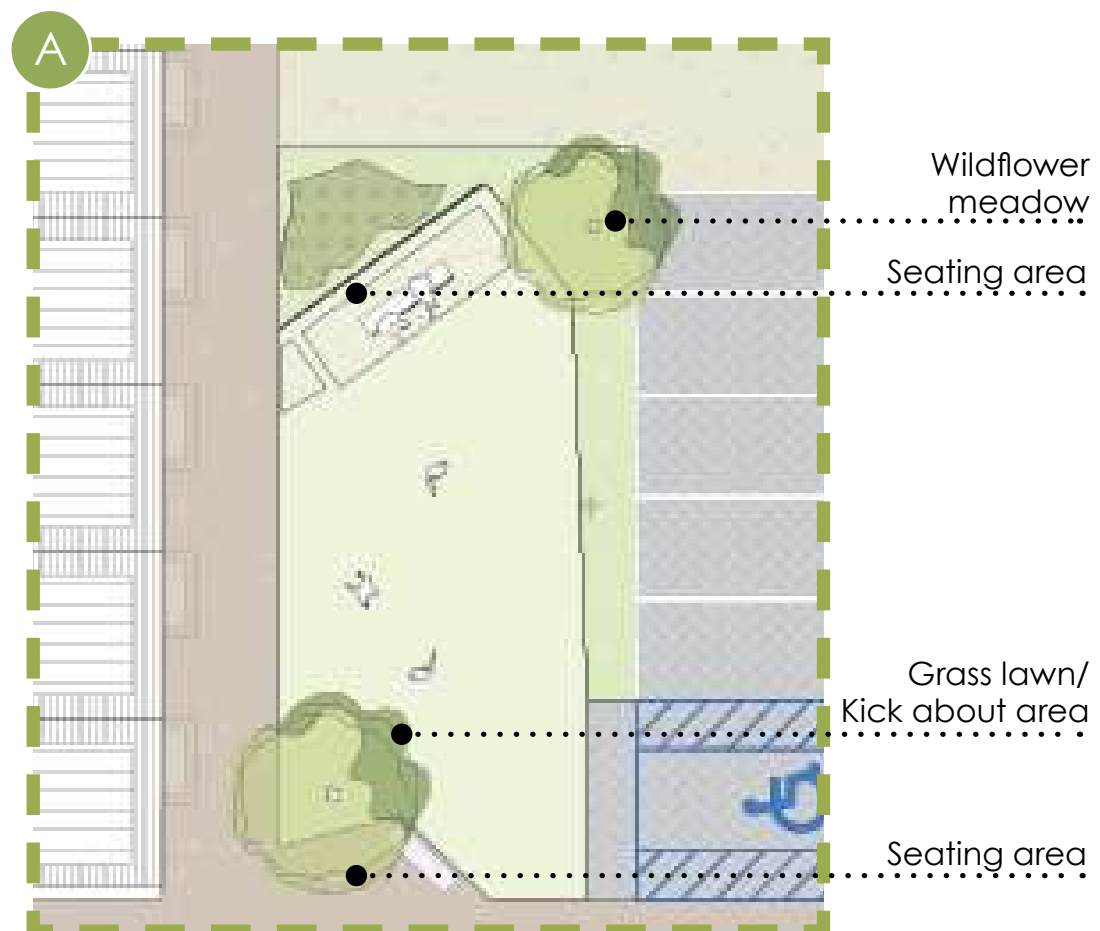
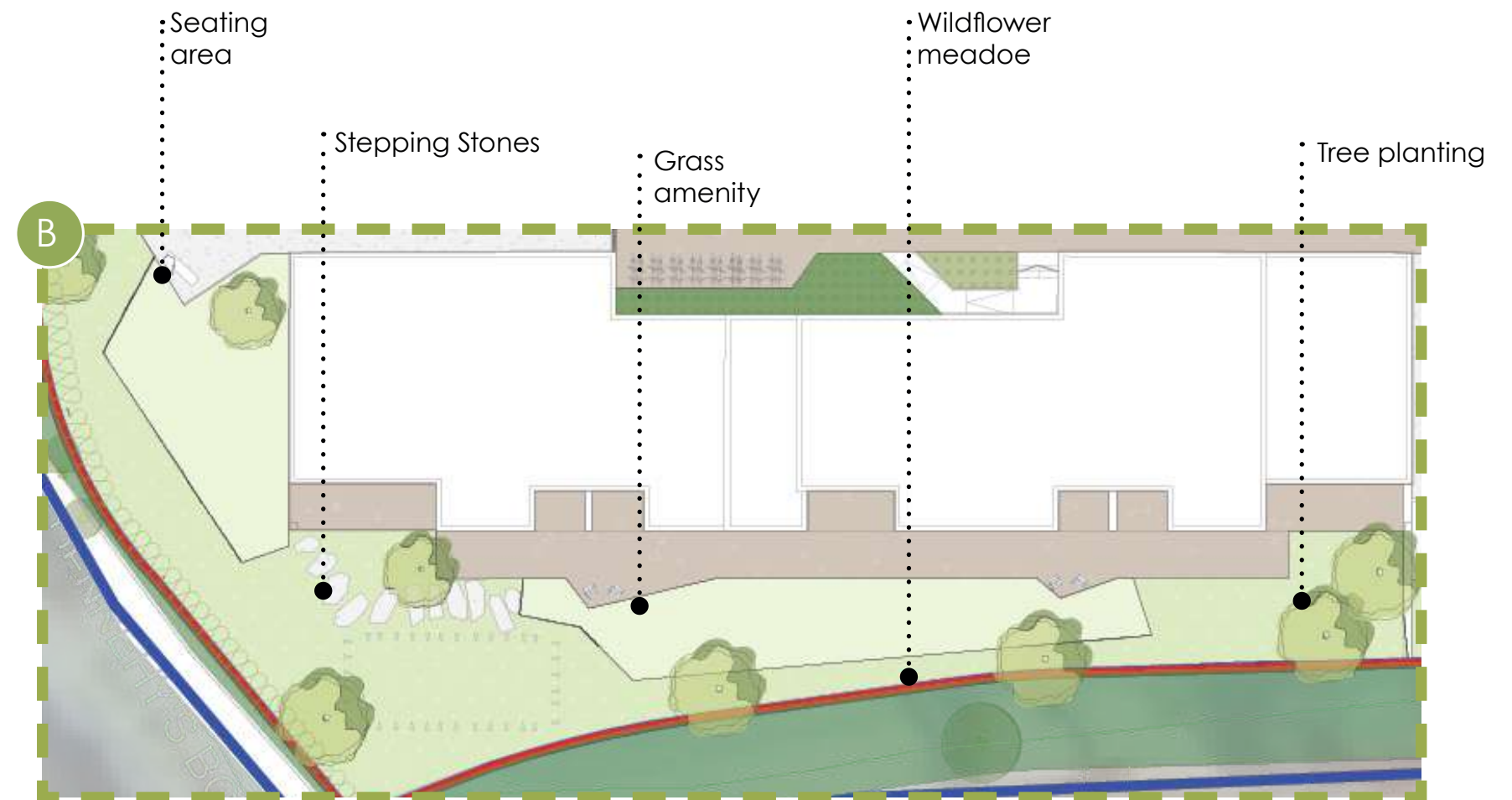
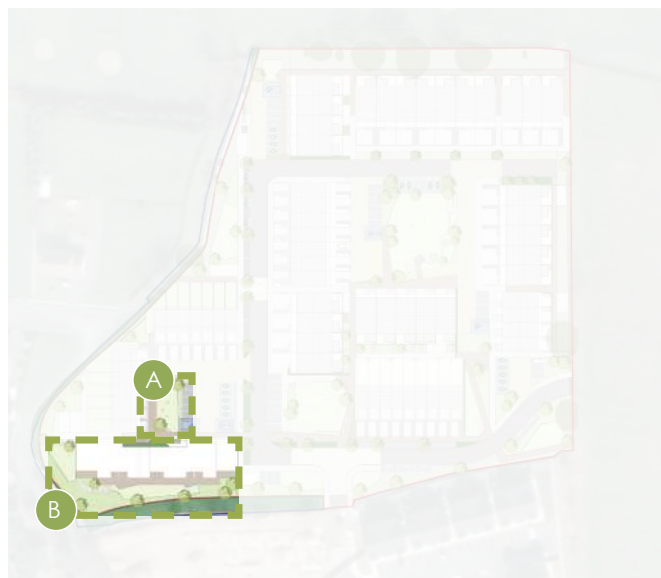


Natural elements create opportunities for exploratory play, fostering a deeper engagement with the environment. A diverse range of planting ensures a smooth transition between different areas, preserving the open and accessible nature of the space. The design strikes a balance between providing a peaceful refuge and promoting social interaction, creating an inclusive environment suitable for all ages.



3.4 MASTERPLAN DETAILS

COMMUNAL OPEN SPACES



The design of the communal open spaces embraces a natural approach, integrating native vegetation and landscape elements that foster a harmonious and sustainable environment. The green areas have been planned to encourage biodiversity, featuring wildflower meadows and a mix of native tree species that create a seamless transition between the development and the surrounding landscape.



3.4 MASTERPLAN DETAILS

COMMUNAL OPEN SPACES



Pathways and features such as stepping stones provide an organic connection between spaces, inviting residents to engage with nature in a spontaneous and meaningful way. The layout fosters social interaction in a tranquil setting, with grassed areas and seating strategically placed for relaxation and community engagement. Native woodland planting enhances immersion in the landscape while subtly defining private and communal spaces.



3.5 OPINION RESPONSE

A Open Space Strategy Issues Raised: • Provision, distribution and accessibility of open spaces • Passive overlooking of communal and environmental open spaces	Response: The proposed development provides a clear hierarchy of open spaces, comprising Public Open Space, Communal Open Space and Environmental Open Space, distributed throughout the site to ensure accessibility, usability and passive surveillance. All principal open spaces are overlooked by adjacent residential units and internal streets, contributing to safety and placemaking. Environmental Open Spaces are strategically located along site boundaries, functioning as transitional areas that provide ecological protection, visual filtering and landscape integration with the surrounding context. The overall open space strategy is illustrated and discussed within Chapter 3.3 – Masterplan Analysis (page 10) and Chapter 3.4 – Masterplan Details (page 12), with the quantum and compliance of open space demonstrated in Chapter 5.3 – Open Space Calculation (page 25).
B Boundary Treatments Issues Raised: • Boundary treatments to houses should be child-proof and maintenance free • Provision of 1.8m high weldmesh fencing along retained ditches • Assessment and upgrade of existing site boundaries • Appropriate boundary treatment along the northern boundary adjacent to the Pitch & Putt • No timber components on boundaries fronting communal open spaces	Response: The boundary treatment strategy accords with the LRD stage approach and is reflected in the proposed development. Boundary treatments prioritise child safety, durability and long term performance, incorporating concrete post and panel systems, galvanised or powder coated steel railings and weldmesh fencing, with no timber components proposed. A 1.8 m high weldmesh fence is provided along retained ditches, and existing boundaries have been reviewed and supplemented where required to ensure appropriate height, stability and visual screening. Regarding the boundary with the Pitch and Putt, it is noted on the drawings that the provision of any netting fence is to be agreed with the Pitch and Putt, with the northern boundary formed by an existing hedgerow and any proposed fencing to be provided from the Pitch and Putt side. Boundary treatments are illustrated on the Boundary Treatment Plan, with construction details provided in Chapter 5.4 – Boundary Details (page 26), confirming that the matters raised at LRD stage have been addressed.
C Communal Areas, Furniture and Taking in Charge Issues Raised: • Suitability of communal areas for Taking in Charge • Avoidance of large stones and timber elements • Provision of heavy-duty, bolted-down seating	Response: The approach to communal areas follows that presented at LRD stage and has been carried through into the current proposal. To ensure suitability for Taking in Charge, the material specification for seating within communal areas has been clarified, with seating to be of concrete or steel construction, providing durability, safety and low maintenance. Elements such as large loose stones or timber features are not proposed within communal areas. The layout and treatment of communal areas are illustrated in Chapter 3.4 – Masterplan Details (page 12), with material specifications clarified on the relevant drawings.

04

SOFT LANDSCAPE DETAILS

4.1 SOFT LANDSCAPE PLAN

The proposed soft landscape plan combines different types of vegetation to balance aesthetics, biodiversity, and functionality. It includes trees of various sizes, such as those for parks, streets, and orchards, providing shade and habitat. Ornamental and native hedges create natural barriers against wind and ensure privacy. The shrub and herbaceous mixes include options for drainage and colourful flowers. Additionally, there are seeds for ecological habitats and native woodlands, promoting natural regeneration and attracting pollinators. Grass areas ensure spaces for recreation and social interaction.

Key features



Comes back
every year



Fragrant



Attractive to
wildlife



Loved by
pollinators



Low
maintenance



Thrives well
in full sun



Fully hardy



Rodent
resistant



TREES

Street / Trees pits / Rain Gardens

Code	Scientific name	Common name	Size
Bp	Betula pubescens * ^	Downy Birch	r/b, 4x trpt 20-25cm girth
Bpe	Betula pendula *^	Birch	r/b, 3x trpt 14-18cm girth
Gb	Ginkgo biloba	Maidenhair tree	r/b, 4x trpt 20-25cm girth
Pc	Pyrus calleryana 'Chanticleer'	Ornamental Pear	r/b, 4x trpt 20-25cm girth
Tc	Tilia Cordata 'Greenspire'^^	Small leaved lime	r/b, 4x trpt 20-25cm girth

Parkland / Ornamental Trees

Code	Scientific name	Common name	Size
Au	Arbutus unedo *^	Strawberry tree	m/s, c/g 50L, 3.5m tall
Bpe	Betula pendula *	Silver Birch	r/b, 3x trpt 14-18cm girth
Bp	Betula pubescens	Downy Birch	r/b, 3x trpt 14-18cm girth
Ca	Corylus avellana^	Hazel	r/b, 3x trpt 14-18cm girth
Cm	Crataegus monogyna *^	Hawthorn	m/s, c/g 50L, 3.5m tall
Ia	Ilex aquifolium *^	Holly	r/b, 3x trpt 14-18cm girth
Pa	Prunus avium*^	Cherry	r/b, 4x trpt 20-25cm girth
Qp	Quercus petraea *	Sessile Oak	r/b, 4x trpt 20-25cm girth
Qr	Quercus robur *	Oak	r/b, 4x trpt 20-25cm girth
Sa	Sorbus aria majestica*^	Whitebeam	r/b, 4x trpt 20-25cm girth
Me	Malus 'Evereste'	Flowering Crabapple	r/b 2-2.5m height
Ps	Pinus sylvestris	Scots Pine	r/b, 3x trpt 14-18cm girth



Native Woodland Mixture (450mm topsoil depth) density: 0.5 /sq.m

Scientific name	Common name	Size	
Crataegus monogyna *^	Hawthorn	100-150cm (bare root)	(40%)
Prunus spinosa *^	Blackthorn	100-150cm (bare root)	(20%)
Ilex aquifolium *^	Holly	100-150cm (bare root)	(10%)
Betula pendula^	Birch	100-150cm (bare root)	(20%)



Residential Hedge (450mm topsoil depth) - Each specimen per cluster

Scientific name	Common name	Size
Carpinus betulus *^	Hornbeam	c/g 2L 80-100cm ht.
Crataegus monogyna *^	Hawthorn	c/g 2L 80-100cm ht.



Native Hedgerow Woodland Mixture (450mm topsoil depth) (one or two rows, as indicated)

Scientific name	Common name	Size
Crataegus monogyna *^	Hawthorn	c/g 5L 80-100 cm ht.
Sorbus aucuparia *^	Rowan	c/g 5L 80-100 cm ht.
Ilex aquifolium *^	Holly	c/g 5L 80-100 cm ht.
Ligustrum vulgare *^	Native Privet	c/g 5L 80-100 cm ht.



Ornamental Planting Mix / Screening

Scientific name	Common name	Size
Aster 'Little Carlow'^	Michaelmas Daisy	c/g 2L
Filipendula ulmaria *^	Meadowsweet	c/g 2L
Primula vulgaris *^	Primrose	c/g 1L
Geranium pratense *^	Meadow Cranesbill	c/g 2L
Lythrum salicaria^	Purple Loosestrife	c/g 2L
Eupatorium cannabinum*^	Hemp Agrimony	c/g 2L
Ajuga reptans*^	Bugleherb	c/g 1L
Asclepias incarnata ^	Swamp Milkweed	c/g 2L
Deschampsia cespitosa 'Goldtau'^^	Tufted Hair Grass 'Goldtau'	c/g 2L

Shrubs - Focal points, strategically to create structure and evergreen interest

Ilex crenata	Japanese Holly	c/g 3L
Viburnum opulus	Guelder rose	c/g 5L
Myrtle	Myrtus communis *^	c/g 5L



Wildflower Biodiversity Meadow

M An appropriate dry meadow type with wildflowers for these areas would simulate NVC type MG5. Appropriate herbs for this type of meadow include:
Agrostis capillaris, anthoxanthum odoratu, centaurea nigra, cynosurus cristatus, pestuca rubra, galium verum, leontodon autumnalis, leontodon hispidus, leucanthemum vulgare, lotus corniculatus, pimpinella saxifraga, plantago lanceolata, poa pratensis, primula veris, trifolium pratense, ranunculus acris, ranunculus bulbosus, rhinanthus minor, rumex acetosa



Rain Gardens

Ornamental Grasses: Deschampsia cespitosa, Molinia caerulea 'Transparent', Carex pendula (Weeping Sedge), Calamagrostis * acutiflora 'Karl Foerster'
Herbaceous Perennials: Geum rivale, Geranium 'Rozanne', Persicaria bistorta 'Superba', Aстранtia major (Masterwort)



Amenity Grass Lawn

Coburn's Low Maintenance seed at 300mm topsoil depth

4.1 SOFT LANDSCAPE PLAN

Pocket native woodland planting mix to enhance with existing vegetation, including 1-1.2m high b/r Hawthorn, Blackthorn, Holly and Birch

Existing vegetation to be retained and protected (refer to arboricultural report)

Pocket native woodland planting mix including 1-1.2m high b/r Hawthorn, Blackthorn, Holly and Birch

Existing grassland and hedge to be retained and protected

Proposed native hedge

Proposed native hedge

Existing vegetation to be retained and protected (refer to arboricultural report)

Pocket native woodland planting mix, including 1-1.2m high b/r Hawthorn, Blackthorn, Holly and Birch

* Species Native to Ireland
^ Plants for Pollinators
These plants will provide

4.1 PLANTING REFERENCES



SHRUBS

Ornamental Planting Mix

Michaelmas Daisy
Meadowsweet
Meadow Cranesbill
Purple Loosestrife
Hemp Agrimony
Bugleherb
Swamp Milkweed
Tufted Hair Grass

Rain Gardens Planting Mix

Deschampsia cespitosa, Molinia caerulea 'Transparent', Carex pendula, Calamagrostis × acutiflora 'Karl Foerster', Geum rivale, Geranium 'Rozanne', Persicaria bistorta 'Superba', Astrantia major.

Wildflower Meadow

Agrostis capillaris, Anthoxanthum odoratum, Centaurea nigra, Cynosurus cristatus, Festuca rubra, Galium verum, Leontodon autumnalis, Leontodon hispidus, Leucanthemum vulgare, Lotus corniculatus, Pimpinella saxifraga, Plantago lanceolata, Poa pratensis, Primula veris, Trifolium pratense, Ranunculus acris, Ranunculus bulbosus, Rhinanthus minor, Rumex acetosa.

Amenity Grass Areas

The amenity grass areas are planted with a 150mm depth of topsoil to ensure healthy growth. These areas offer functional, low-maintenance green spaces, ideal for recreational and community use

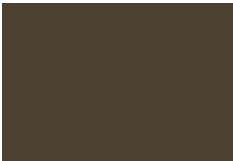


TREES

- Downy Birch
- Silver Birch
- Maidenhair Tree
- Ornamental Pear
- Small leaved lime
- Strawberry tree
- Hazel
- Hornbeam
- Holly
- Pine
- Sessile Oak
- Oak
- Whitebeam
- Flowering Crabapple
- Scots Pine

HEDGEROWS

- Irish Native Screening Hedgerow Mix**
- Hawthorn
 - Rowan
 - Holly
 - Wild Privet



4.5 PLANTING SPECIFICATIONS

TREE PLANTING

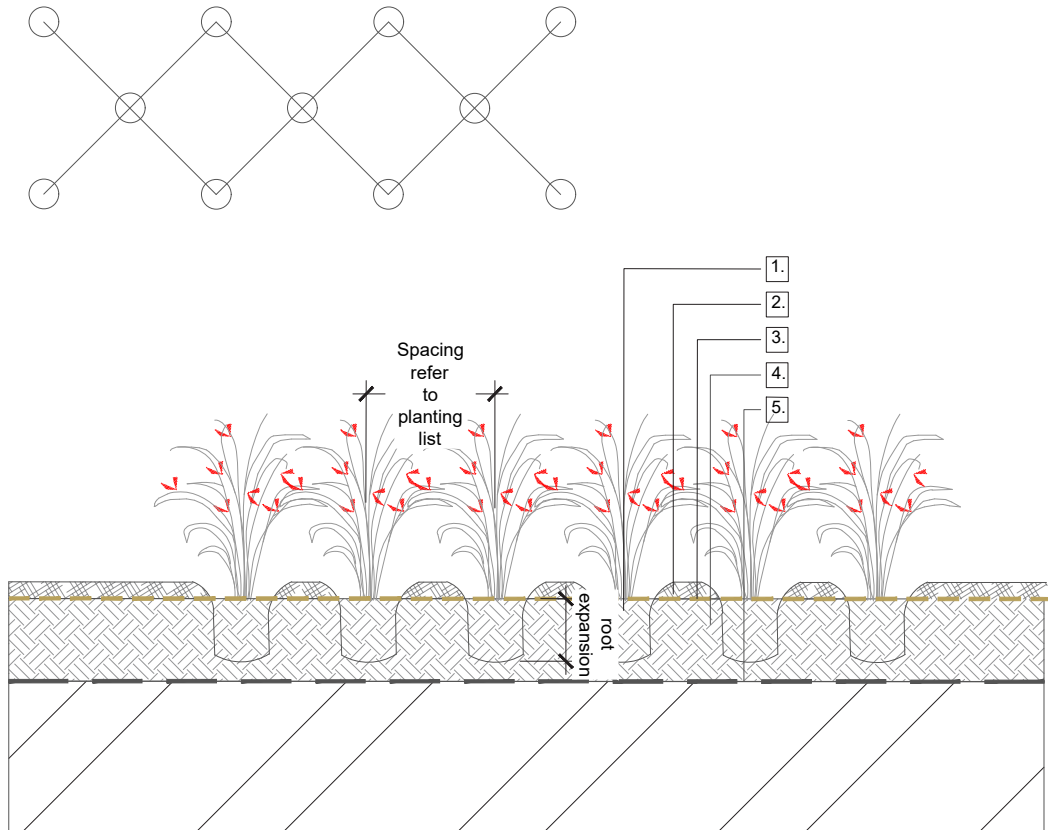
Tree planting throughout the scheme has been selected to blend the development in to its surrounding environs and create focal points within the development. The tree species selected will maximise food and nectar sources for birds and invertebrates. Trees will be planted as Standard and Heavy Standard to provide a reasonable degree of instant maturity to the development. All trees shall be planted between the months of Nov and March. The trees shall be purchased from a reputable nursery as rootball specimens and final order to be agreed by Landscape Architect; The trees shall be planted on delivery. If this is not possible due to weather conditions (wet or frosty), the plants must be healed in. Maintenance Watering is essential during the first 2 growing seasons regardless of the weather conditions - 1000Lt / Tree/ Month.

Methodology and Guidance notes:

The tree pit should have a diameter at least 100mm greater than that of the root system, with the depth not exceeding the rootball. Any glazed or smeared sides caused by digging shall be scarified with the use of a fork. The tree will be positioned in the centre of the planting pit at the correct depth, taking into account the root flare and finished level. Prior to backfilling the hessian twine/ wire cage supporting the rootball shall be loosened or removed. Backfilling shall be carried out in layers of 150mm, ensuring the tree is held upright. At each stage the fill will be carefully firmed in to eliminate air pockets under and around the root system.

The final layer of backfill will not be consolidated, but should be of a sufficient depth to allow for settlement and mulching. Formative pruning should be carried out if required, removing dead, damaged, crossing or diseased branches. Refer to Tree planting specification for tree anchoring system. All trees planting operation will be carried in accordance with BS8545:2014 Trees: from nursery to independence in the landscape recommendations.

PLANTING MIX



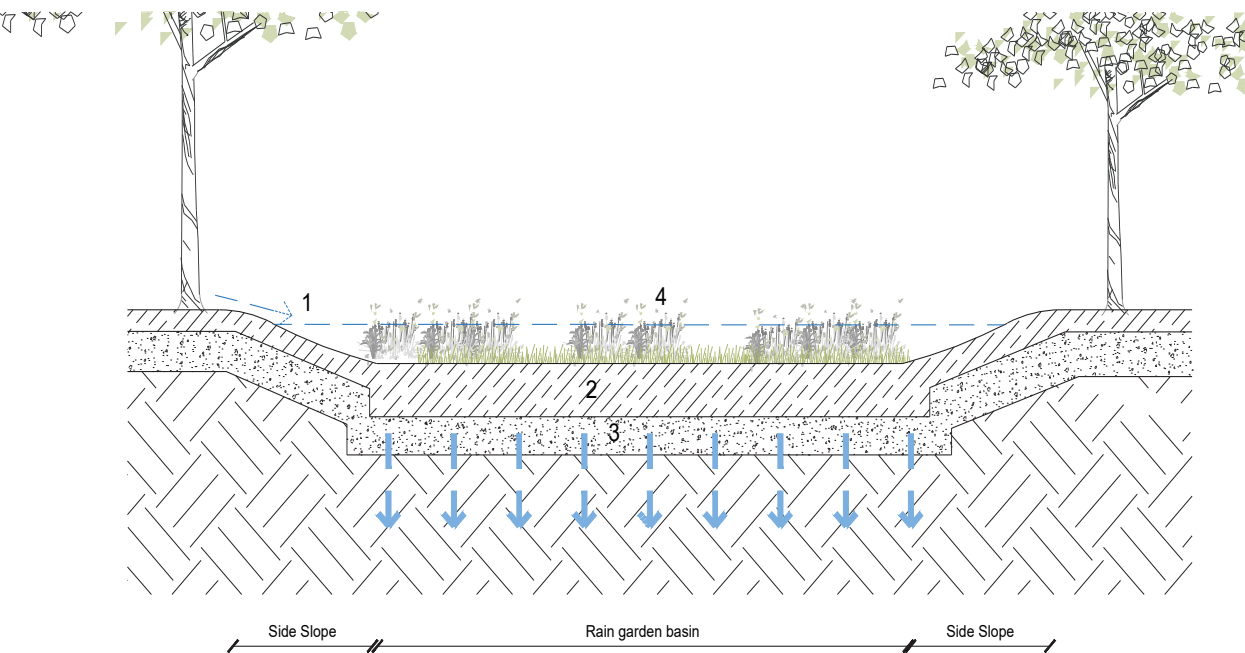
Evergreen Planting Mix

1. Selected plants- refer to planting list - cut 8-10cm opening for root expansion below grade
2. Fine grade compost layer to be spread over the planting bed (50mm)
3. Biodegradable weed barrier to be approved by town staff prior to installation
4. Good quality topsoil to BS 3882 and slow release fertiliser (e.g. Sierrablen Flora or similar and approved)
5. Water proof layout

Note:

- a. Plant in diagonal planting pattern, refer to plant list for spacing requirements
- b. Refer to plant list for groundcover/ perennial or grass type.

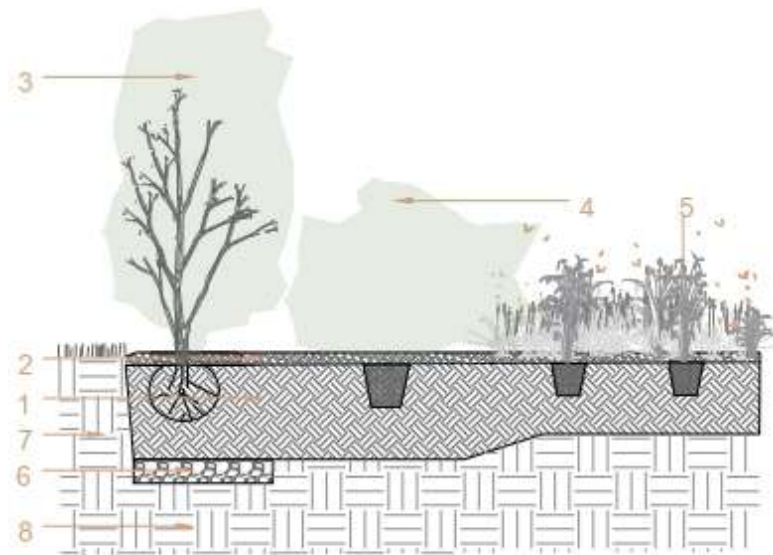
RAIN GARDEN



- 1 - Gentle slope to collect water from the surface
- 2 - 450mm improved topsoil up to 20% coarse compost
- 3 - Free-drainage soil, under-drain optional
- 4 - Adapted vegetation, tolerant to wet soil and submersion

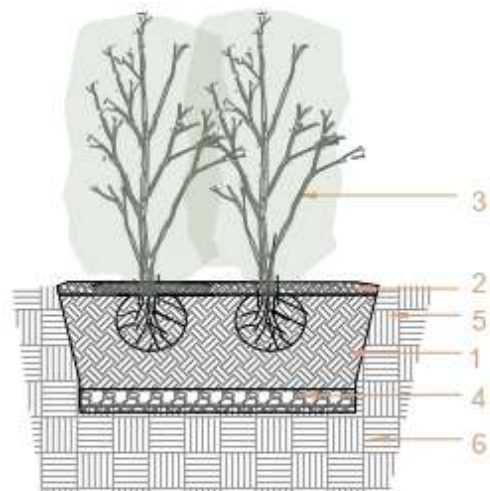
4.5 PLANTING SPECIFICATIONS

ORNAMENTAL PLANTING



1. Good quality multi-purpose topsoil to depths as shown and in accordance with BS 3882 (perennials min.300mm, shrubs min.450mm); top of soil level to be 75mm below top of kerb to contain bark mulch (e.g. Sierrablen Flora or similiar and approved)
2. Bark mulch to 75mm
3. Root Ball Yew Hedge - *Taxus baccata*, r/b 80-100cm, at 450mm centres
4. Shrub planting
5. Perennial planting
6. Gravel drainage layer
7. Loosened subsoil, base and sides broken up
8. Subsoil

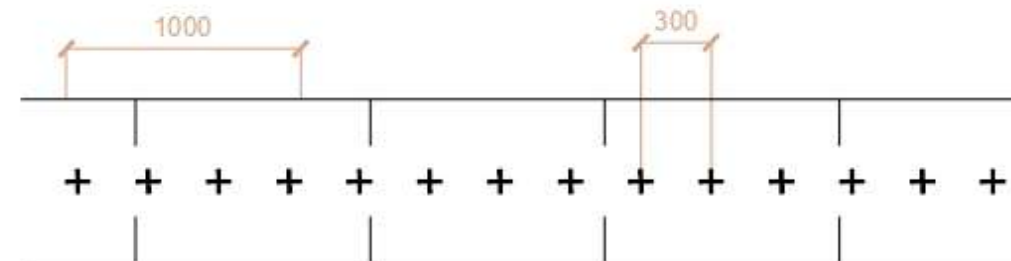
LOW PRIVACY HEDGE/TRADITIONAL IRISH NATIVE HEDGEROW



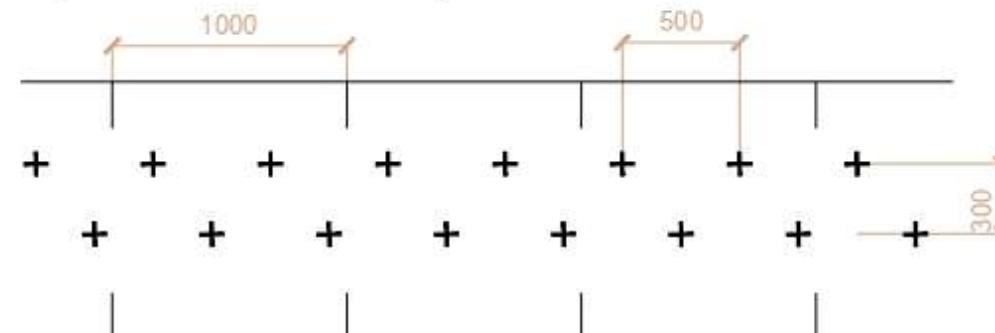
1. Good quality multi-purpose topsoil to depths as shown and in accordance with BS 3882 (shrubs min.450mm); top of soil level to be 75mm below top of kerb to contain bark mulch (e.g. Sierrablen Flora or similiar and approved)
2. Bark mulch to 75mm
3. Selected Hedge Plants - Root Ball r/b 80-100cm, at 500mm centres
4. Gravel drainage layer
5. Loosened subsoil, base and sides broken up
6. Subsoil

Plan

Single row (300 mm centres)



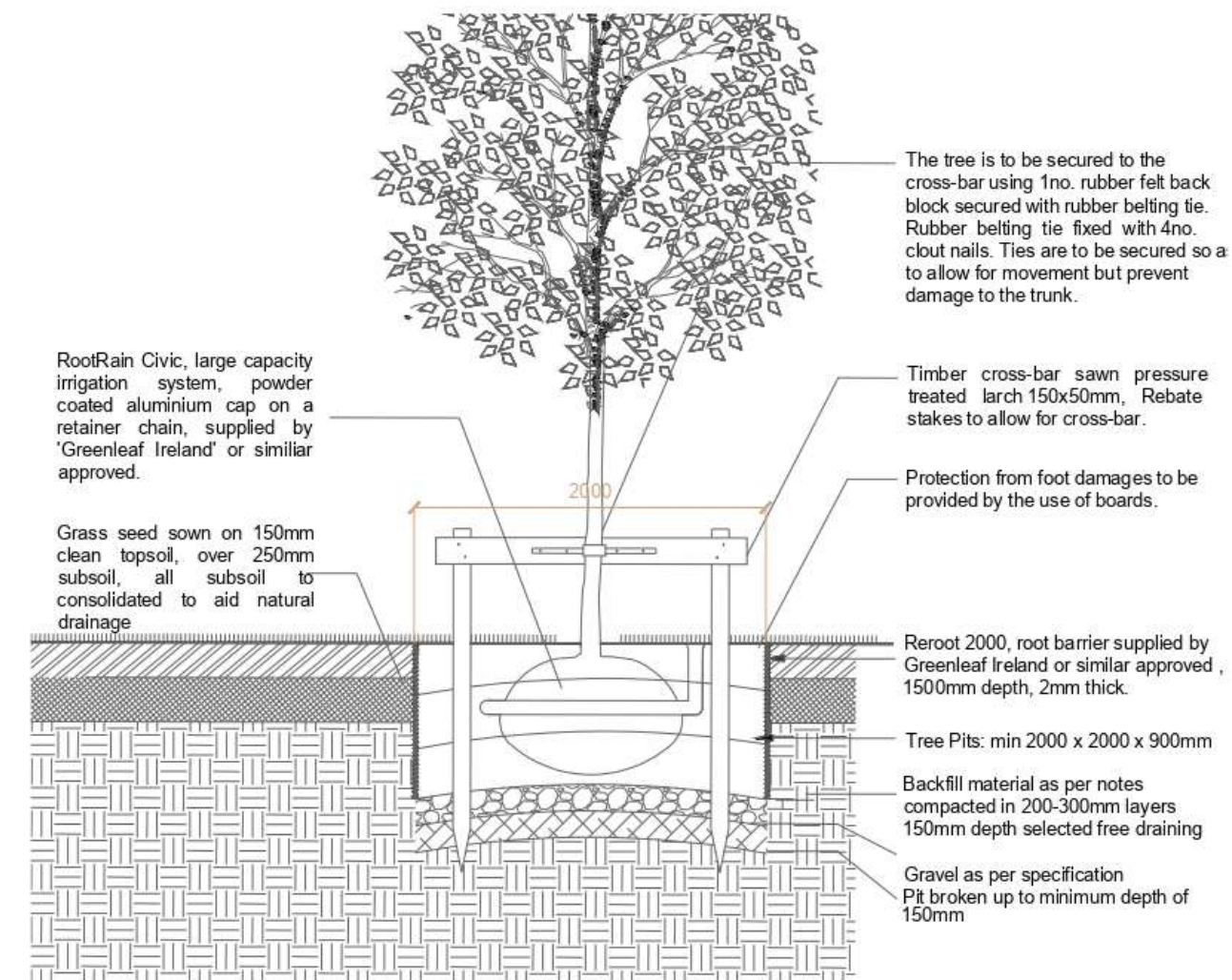
Double staggered row (500mm centres and 300 offset)



4.5 PLANTING SPECIFICATIONS

Detail 01 - Standard tree planting detail

sc 1/50

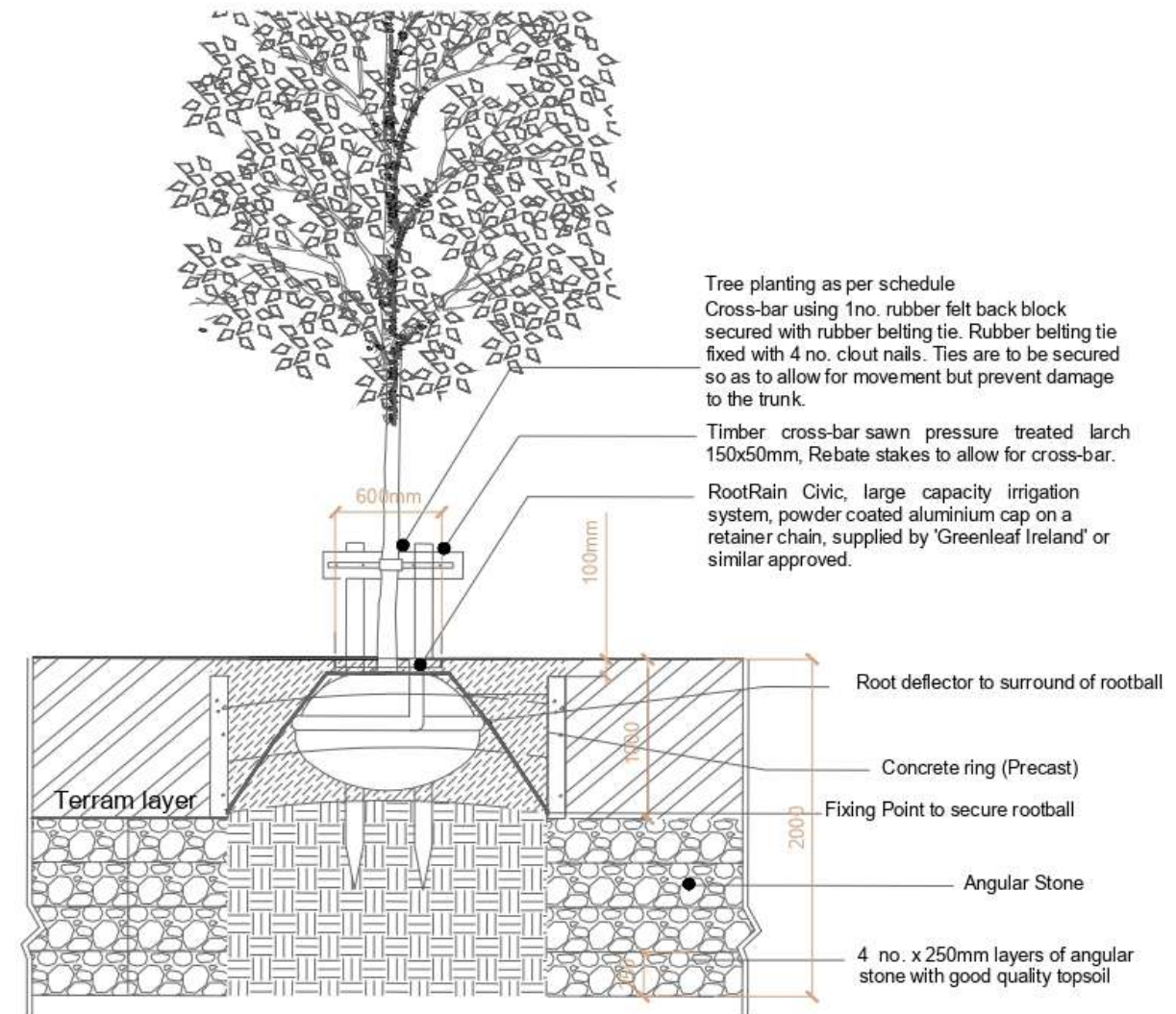


STANDARD ROOTBALL TREE

- 1 - Specified tree
- 2 - Triple stake with cross bars. Stake 75mm O, 2400mm long min., machined and rounded. All timber to be pressure treated. All nails to be galvanised. Cross bar set at min. 15o angle to ground. Tree stem strapped to staked with 3no. 'Holdfast Rubber Block; HB3 90x75x40mm and 50mm wide 'Holdfast Natural Tree Belting'. Available from www.greentech.co.uk or similar approved.
- 3 - 75mm medium grade bark chip supplied by Enrich.ie or similar approved, no splinters or fines
- 4 - 900mm of depth rich, friable, sandy loam topsoil and compost mix 3:1 provided supplied by Enrich.ie or similar approved
- 5 - 100mm gravel drainage layer. Ground condition finely ripped substrate at 600mm depth below drainage layer to ensure no standing water.
- 6- Subsoil

Detail 02 - Tree pit detail

sc 1/50



MULTI-STEM TREE

- 1 - Specified tree
- 2 - Triple stake with cross bars. Stake 75mm O, 1200mm long min., machined and rounded. All timber to be pressure treated. All nails to be galvanised. Cross bar set at min. 15o angle to ground. Tree stem strapped to staked with 3no. 'Holdfast Rubber Block; HB3 90x75x40mm and 50mm wide 'Holdfast Natural Tree Belting'. Available from www.greentech.co.uk or similar approved.
- 3 - 75mm medium grade bark chip supplied by Enrich.ie or similar approved, no splinters or fines
- 4 - 900mm of depth rich, friable, sandy loam topsoil and compost mix 3:1 provided supplied by Enrich.ie or similar approved
- 5 - 100mm gravel drainage layer. Ground condition finely ripped substrate at 600mm depth below drainage layer to ensure no standing water.
- 6- Subsoil

05

HARD LANDSCAPE DETAILS

5.1 MATERIALS

Concrete



Exposed aggregate concrete



Buff asphalt



Ballylusk Dust



PAVING & KERBS

FOOTPATHS

General: Public footpaths, roadways, kerbs etc. shall be constructed in accordance with the requirements of the Roads Maintenance Meath 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 rebuild 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.

5.3 OPEN SPACE CALCULATION



Site Area	22340 sq.m.	2.23ha	
Public Open Space	3,600 sq.m.	0.36ha	16.1% POS provision
Communal Open Space	916 sq.m.		
Environmental Open Space	1,837 sq.m.		

Public open space is accessible to everyone and aims to encourage recreation, social interaction, and community wellbeing.

Communal open space is shared by residents of a housing development, with the objective of fostering a sense of belonging, safety, and neighbourly interaction.

Environmental open space remains publicly accessible but is primarily designed to protect and enhance ecological value. These areas integrate ecological buffers and biodiversity-enhancing landscapes, focusing on habitat protection, natural resource conservation, and opportunities for education and passive enjoyment of nature.

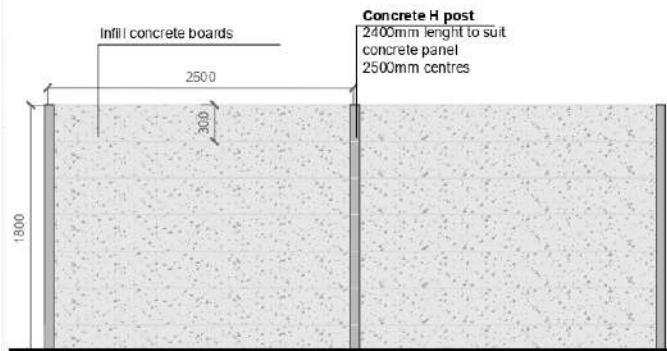
5.4 BOUNDARY DETAILS



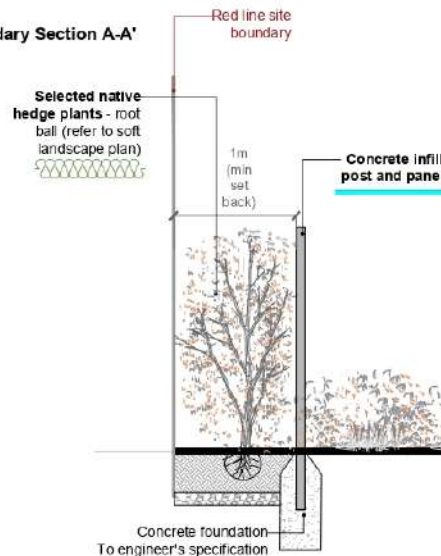
Boundary Details

sc 1/50

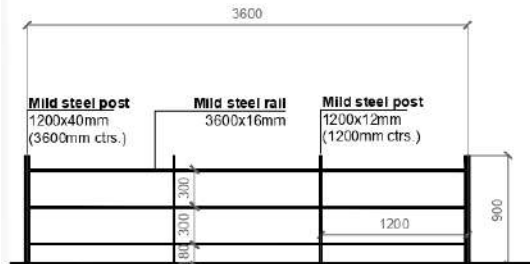
Boundary type 3 1.8m high concrete post and panel



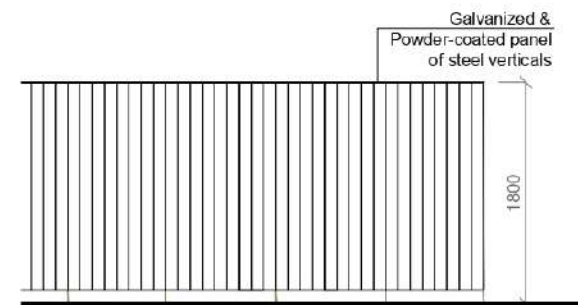
Boundary Section A-A'



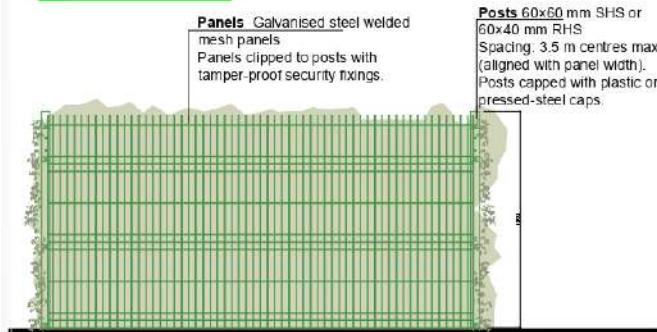
Boundary type 1 900mm high estate railing



Boundary type 2 1.8m high steel bar railing



Boundary type 4 1800mm high weldmesh fence



06 OPEN SPACE MANAGEMENT

6.1 OPEN SPACE MANAGEMENT

INTRODUCTION

This document sets out the proposed maintenance and management plans for the establishment and ongoing maintenance of the landscape element of the proposed development. There will be a minimum 18 months defects period on all soft landscape works implemented. Thereafter the landscaping will be maintained in perpetuity consecutive 12 months periods.

1.0 SOFT LANDSCAPE WORKS SPECIFICATIONS

1.1 Site Clearance Generally

- General: Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.
- Stones: Remove those with any dimension exceeding 25mm.
- Contamination: Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life. In accordance with current Health and safety legislation.
- Vegetation: remove all weed growth.
- Large roots: Grub up and dispose of without undue disturbance of soil and adjacent areas.

1.2 Weed Control

Remove all noxious and undesirable weeds from the sit. Weeds shall include: Ragwort, Himalayan Balsam, Giant hog weed & Japanese knot weed, Thistle, Dock, Common Barberry, Male Wild Hop and Spring Wild Oat, or any other noxious species identified by the Department of Environment. For the removal of certain species such as Japanese Knot weed a method statement is to be prepared and submitted to the Department of Environment.

1.3 Standards In preparing the landscaping, supplying plants and maintaining the landscaping the following standards are to be adhere to:

- BS 3882 Specification for topsoil and requirements for use
- BS 3936-1 to 10 Specification for the supply of nursery stock
- NPS National Plant Specification
- BS 3998 Tree Works: Recommendations
- BS 4428 Code of Practice for general Landscape Operations
- BS 5837 Tree in relation to Construction
- BS 7370-1 to 5 Grounds Maintenance
- BS 8545 Trees: from nursery to independence in the landscape recommendations
- BS 8601 Specification for subsoil and required use
- BS EN 1722-9 Fences Specification for mild steel - low carbon steel - fences with round or square verticals and flat horizontals

6.1 OPEN SPACE MANAGEMENT

- RoSPA Standards for safety for play and exercise equipment.

The latest publications for each document are to be used.

1.4 Soil Conditions

- Soil for cultivating and planting: Moist, friable and do not plant if waterlogged.
- Frozen or snow covered soil: Give notice before planting. Provide additional root protection.

Prevent planting pit sides and bases and backfill materials from freezing.

1.5 Climatic Conditions

- General: Carry out the work while soil and weather conditions are suitable.
- Strong winds: Do not plant.

1.6 Times of year for planting

- Deciduous trees and shrubs: Late October to early March.
- Evergreens/Conifers: October/November or Feb/ March.
- Container Grown plants: Any time of years.

1.7 Mechanical Tools

Restrictions: Do not use within 100mm of tree and plant stems.

1.8 Watering

- Quantity: Wet full depth of topsoil.
- Application: Even and without damaging or displacing plants or soil.
- Frequency: As necessary to ensure establishment and continued thriving of planting.

1.9 Preparation, Planting and Mulching Materials

General: Free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life.

1.10 Plants/ Trees - General

- Condition: Materially undamaged, sturdy, healthy and vigorous.
- Appearance: Of good shape and without elongated shoots.
- Hardiness: Grown in a suitable environment and hardened off.
- Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
- Budded or grafted plants: Bottom worked.
- Root system and condition: Balanced with branch system.
- Species: True to name.

1.11 Container Grown Plants/ Trees

- Growing medium: With adequate nutrients for plants to thrive until permanently planted.
- Plants: Centred in containers, firmed and well watered.
- Root growth: Substantially filling containers, but not root bound, and in a condition conducive to successful transplanting.
- Hardiness: Grown in the open for at least two months before being supplied.
- Containers: With holes adequate for drainage when placed on any substrate commonly used under irrigation systems.

1.12 Labelling And Information General: Provide each plant/ tree or group of plants/ trees of a single species or cultivar with supplier's labelling for delivery to site, showing:

- Full botanical name.
- Total number.
- Number of bundles.
- Part bundles.
- Supplier's name.
- Employer's name and project reference.
- Plant specification, in accordance with scheduled National Plant Specification categories and BS 3936.

1.13 Plant/ Tree Substitution

Plants/ trees unobtainable or known to be likely to be unobtainable at time of ordering. Submit alternatives, stating the price and difference from specified plants/ trees. Obtain approval before making any substitution.

1.14 Plant Handling, Storage Transport and Planting

- Standard: To HTA 'Handling and Establishing Landscape Plants'.
- Frost: Protect plants from frost.
- Handling: Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
- Planting: Upright or well balanced with best side to front.

1.15 Treatment of Tree Wounds

Cutting: Keep wounds as small as possible.

- Cut cleanly back to sound wood using sharp, clean tools.
- Leave branch collars. Do not cut flush with stem or trunk.
- Set cuts so that water will not collect on cut area.
- Fungicide/ Sealant: Do not apply unless instructed.

1.16 Protection of Existing Grass

- General: Protect areas affected by planting operations using boards/ tarpaulins.
- Excavated or imported material: Do not place directly on grass.

Duration: Minimum period.

1.17 Surplus Material

Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, pruning's and other arising's: Remove.

1.18 General Planting/Seeding

- Planting shall be carried out within the contract period but not during periods of frost, drought, cold drying winds or when the soil is waterlogged, or when the moisture of the soil exceeds field capacity.
- All containers and protective coverings including biodegradable coverings to root systems shall be removed prior to planting. Roots, except for emergent vegetation, shall be teased out from the root-ball, spread evenly and not twisted.

6.1 OPEN SPACE MANAGEMENT

- All plant material shall be planted upright or placed so as to be well-balanced. Extreme care is to be taken to avoid damage to the root system, stem and branches when planting. The plant shall be positioned such that after planting the original soil mark on the stem is at finished ground level.
- Following completion of planting, grass seeding and turf laying, the soil over the whole of the planted, seeded or turfed area shall be sufficiently watered to achieve its field capacity.
- On completion of planting, watering and mulching, all areas shall be left tidy and weed-free and shall be maintained in a tidy and weed-free state until completion of the works.
- For shrub and transplant pit planting, notch planting and ordinary planting, the plant positions shall be set at equal centres in order to obtain a natural dense cover when mature. For notch and pit planting plants shall be planted in parallel lines. Planting positions in each row shall be staggered with the previous row.
- Finely-broken backfill material shall be carefully spread around roots and root trainers of all plants and the plants given slight shake to ensure that all interstices/ gaps are filled with soil, which shall then be consolidated by heeling. Careful filling and heeling shall continue as necessary at 150mm layers.

1.18.1 Mulching

Newly planted shrub areas shall be mulched immediately after planting to a depth of 50mm or in accordance with the details indicated on the drawing. Mulch shall be coarse chipped tree bark, composted for 2-4 months. Particle size 25-75mm diameter. No Fines.

1.18.2 After Planting & Mulching

- Watering: Immediately after planting, thoroughly and without damaging or displacing plants or soil.
- Firming: Lightly firm soil around plants and fork and/ or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows.
- All areas shall be left tidy and weed-free and shall be maintained in a tidy and weed-free state until completion of the works.

1.19 Tree Planting Attached in the appendix are typical tree planting details for this site.

1.19.1 Tree Pits

- Sizes: at least 300mm greater than rootball in all directions.
- Sloping ground: Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
- Pit bottoms: With slightly raised centre. Break up to a depth of 100mm.
- Pit sides: Scarify.

1.19.2 Semi-Mature Trees

- Standard: Prepare roots and transplant to BS 8545.
- Planting shall be carried out by positioning the tree in the centre of the pit closely against the tree stake and spreading the tree roots to their fullest extent.
- Backfilling material: Previously prepared mixture of topsoil excavated from pit and additional compost as required.
- Immediately following planting, trees with stakes shall be secured with tree ties. Tree ties shall be fixed so that movement of the tree shall not cause damage or abrasion to the bark, top tie to be 50mm below top stake.

1.19.3 Staking Generally Softwood, peeled chestnut, larch or pine, straight, free from projections and large or edge knots and with pointed lower end. Adjustable rubber ties to be fixed to all trees and at the correct size for the tree.

1.19.4 Mulch Circles/Squares All existing trees/newly planted trees within open grass areas or grass verges shall have 50mm depth mulch circle/square of a maximum 1m diameter or as allowed by verge width.

1.20 Shrub Planting

- All shrubs are to be pit planted. General pit dimensions are to be wide enough to accommodate roots when fully spread and 75mm deeper than root system.
- Break up base of pit to a depth of 150 mm, incorporating soil ameliorant/ conditioner at 50 g/m².
- Pits to be backfilled with previously excavated material. Backfilling to be done in layers of 150mm depth; at each stage the filling to be firmly consolidated.
- Soil ameliorants can be premixed with the soil applied or mixed in during planting.
- Soil ameliorants to consist of an approved compost at 10L per m²; and 150g/m² of 10:10:10 NPK slow release fertilizer, or as approved.
- All shrub areas to be finished, with 75mm of medium grade bark mulch.

1.21 Hedgerow Planting

- Preparation: Dig trench to 500mm width for single staggered row, ensuing pit base is broken up 100mm deeper than plant rootball.
- Ameliorants: Compost at 10lt/m² and 10:10:10 NPK slow release fertiliser at 150g/m².
- Planting: Mix in soil ameliorants with excavated topsoil, or if there is poor topsoil then mix in with imported new topsoil. Firm down topsoil lightly in layers of 150mm by treading.
- Additional Requirements: If there is no existing fencing or barrier, install a protective fence to stop people walking through it until hedge is established. If there is livestock adjoining hedge install a stockproof fence or electrical fence 1m from hedge line until hedge is established.
- Prior to new growth cut the hedge back by 300mm to encourage new growth from base.

1.23 Removing Trees and Shrubs

- Identification: Clearly mark trees and hedges to be removed.
- Work near retained trees: Where canopies overlap, take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained.

1.24 Failures of Planting

6.1 OPEN SPACE MANAGEMENT

- Defects due to materials or workmanship not in accordance with the Contract: Plants/ trees/ shrubs that have failed to thrive.
- Exclusions: Theft or malicious damage after completion.
- Rectification: Replace with equivalent plants/ trees/ shrubs.
- Replacements: To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater.
- Defects Period: 5 years.

1.25 Green Roofs Due care is to be taken when planting in gardens to ensure no damage occurs to the waterproof membranes. All planting is to be laid over a green-roof system that complies with EEuropean Federation of Green Roof Associations, (EFB), or equivalent, and in accordance with the drawings provided.

1.26.1 Cultivation

- Compacted topsoil: Break up to full depth.
- Soil ameliorant/ Conditioner/ Fertilizer are to be used to boost late seeding only. Type to be used is to be agreed with the administrating body depending on the time of year and the condition of the soil.
- Tilth: Reduce topsoil to a tilth suitable for blade grading.
- Depth: 75 mm.
- Particle size (maximum): 20 mm.
- Material brought to the surface: Remove stones and clay balls larger than 50 mm in any dimension, roots, tufts of grass, rubbish and debris.

1.26.4 Topsoiling

- Areas to be reinstated shall be top-soiled to a min. depth of 150mm.
- Quantity: Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
- General: Do not use topsoil contaminated with subsoil, rubbish or other materials that are:
 - Corrosive, explosive or flammable;
 - Hazardous to human or animal life;
 - Detrimental to healthy plant growth.

1.26.5 Grading

- General appearance to be achieved: A fine graded finish to bring the ground to a uniform and even grade at the correct finished levels with smooth, flowing contours.
- Topsoil condition: Reasonably dry and workable.
- Contours: Smooth and flowing, with falls for adequate drainage.
- Hollows and ridges: Not permitted.
- Finished levels after settlement: 25 mm above adjoining paving, kerbs, manholes etc.
- Blade grading: May be used to adjust topsoil levels provided depth of topsoil is nowhere less than 150mm.
- Give notice: If required levels cannot be achieved by movement of existing soil.'

1.26.6 Fertilizer for Seeded Areas

- Types: Apply both:
 - Superphosphate with a minimum of 18% water-soluble phosphoric acid.
 - A sulphate of ammonia with a minimum of 20% nitrogen.
- Application: Before final cultivation and three to five days before seeding/turfing.
- Coverage: Spread evenly, each type at 70 g/m², in transverse directions.

1.26.7 Final Cultivation

- Timing: After grading and fertilizing.
- Seed bed: Reduce to fine, firm tilth with good crumb structure.
- Depth: 50-100mm.
- Surface preparation: Rake to a true, even surface, friable and lightly firmed but not over compacted.
- Remove surface stones/earth clods exceeding:
 - Pastoral areas: 50mm.
 - Fine lawn areas: 10mm.
- Adjacent levels: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.

1.26.8 Grass Seed

- All seeds shall carry appropriate certificates.
- Seed shall be purchased fresh for each growing season and seed purchased impervious sowing seasons is not to be used.
- Seed shall be stored under non-transparent wrapping, off the ground, in a dry, shaded place, in well ventilated conditions under cover and shall be protected from vermin and contamination until required for use.
- No seeding shall take place until the seedbed is completed. All seeding shall be carried out within the sowing season.

1.26.9 Sowing

- General: Establish good seed contact with the root zone.
- Method: To suit soil type, proposed usage, location and weather conditions during and after sowing.
- Distribution: 2 equal sowings at right angles to each other.
- Protection: fence off areas with suitable fencing to stop people or animals from trampling new growth.

1.26.10 Grass sowing season

Grass seed generally: April to June or August to November.

1.27 Cleanliness

After completion of all works remove all debris and waste material from site.

- Soil and arisings: Remove from hard surfaces and grassed areas.
- General: Leave the works in a clean tidy condition at completion and after any

6.1 OPEN SPACE MANAGEMENT

maintenance operations.

2.0 MAINTENANCE

The maintenance programme will be organised on the basis of specific performance standards which must be met by the contractor at all times and will be the basis on which this contract will be assessed. Along with these performance standards a monthly report sheet shall be filled out and returned each month. Details of the performance standards are outlined below.

Remove all noxious and undesirable weeds from the sit. Weeds shall include: Ragwort, Himalayan Balsam, Giant hogweed & Japanese knotweed, Thistle, Dock, Common Barberry, Male Wild Hop and Spring Wild Oat, or any other noxious species identified by the Department of Environment. For the removal of certain species such as Japanese Knotweed a method statement is to be prepared and submitted to the Department of Environment. Performance Standards and Maintenance Operations

2.1 Grassed Areas

2.1.1 Fine-Cut Grass Areas

Fine cut grass areas shall achieve an even cover of vegetation of uniform height and colour comprising predominantly of grass species. No more than 5% of the grass areas shall contain dicotyledonous (dicots) weeds, except clover. Grass cutting shall not be carried out during excessively wet or waterlogged conditions. Contractor to inform administrative authority if conditions are unsuitable.

Fine-Cut Mowing

Where practical fine grass areas shall be cut using a cylinder mower, otherwise a rotary mower shall be used. All grass clippings shall be collected and removed off-site after each cut. Lawn grass cutting shall be carried out every 10-14 days during the growing season, (throughout the period of March to October), but will need to be adjusted according to season's weather conditions. Grass shall be kept at a maximum height of 50mm and minimum height of 35mm. A minimum of 24 cuts shall be carried out annually.

Fertilizer

Approved fertilizer shall be applied 2no. times per year to lawn areas if required due to poor grass growth / establishment or yellowing. Spring fertilizer application of NPK ratio 9:7:7 shall be applied in May of each year and Autumn/Winter fertiliser of NPK ratio 3:12:12 shall be applied in October of each year to all fine cut grass areas.

2.1.2 Amenity Grass Areas

Amenity grass areas shall achieve an even cover of vegetation of uniform height and colour comprising predominantly of grass species. Unless otherwise agreed with the landscape architect no more than 15% of the grass areas shall contain dicotyledonous (dicots) weeds, except clover. Grass cutting shall not be carried out during excessively wet or waterlogged conditions. Contractor to inform administrative authority if conditions are unsuitable.

Amenity Grass Mowing

Where practical grass areas shall be cut using a cylinder mower, otherwise a rotary mower shall be used. Unless excessive or unsightly, or likely to cause a nuisance or damage to the sward, arisings shall be spread evenly over sward areas collected.

Lawn grass cutting shall be carried out every 10-14 days during the growing season, (throughout the period of March to October), but will need to be adjusted according to season's weather conditions. Grass shall be kept at a maximum height of 75mm and minimum height of 35mm. A minimum of 24 cuts shall be carried out annually.

Weed Control

Areas of invasive and noxious species in lawns, shall be spot sprayed.

Weed infestations shall be reviewed in the context of the aesthetic and amenity functioning of the grass and if necessary controlled or eradicated.

Fertilizer

Approved fertilizer shall be applied 2no. times per year to lawn areas if required due to poor grass growth / establishment or yellowing. Spring fertilizer application of NPK ratio 9:7:7 shall be applied in May of each year and Autumn/Winter fertiliser of NPK ratio 3:12:12 shall be applied in October of each year to all fine cut grass areas.

2.1.4 Edging and Strimming

Grass edges along pathways, planting borders, roadways, trees, lampposts, signs and any other obstacle shall be kept neat and tidy at all times.

Between the months of March and October inclusive edging shall be carried out to all areas of grass abutting isolated/ specimen trees or shrub borders or mulch circles. These areas shall be maintained using a half moon tool or similar to maintain straight or curved defined line and shall be carried out a minimum of 2 - 3 times per year.

Mowing strips against permanent obstacles shall be a max. width of 150mm and shall be maintained using a hand trimmer. Large areas of desiccated/ burnt off grass are not permitted. Strimming shall be carried out a min. of 12 times per year.

Grass clipping and all arisings shall be swept up and removed off site.

2.1.5 Spring Bulbs in Grassed Areas

6.1 OPEN SPACE MANAGEMENT

Only cut grassed areas populated by spring bulbs after the leaves of the bulbs have died down and/or yellowed completely. Initially reduce height by one third, followed by a 2-3 stage further reduction over two weeks to achieve desired grass height.

2.2 Shrub Planting

Shrub areas shall be kept litter and weed free, particularly of perennial weeds. Healthy growth shall be maintained to cover as much as possible of the planting area and allowing the individual plants to achieve as near as possible their natural form. With the exception of hedges, boxing or pruning to shapes is prohibited. Plants shall be contained with designed planting areas and pruned to avoid obstructing pathways or sightlines. Climbers are to be pruned and tied into trellises as required, with two main inspections annually to check trellis system is intact and anchor points are secure.

2.3 Pruning

In general pruning shall be done only to enhance natural growth. Dead, damaged and diseased portions of the plant will be removed. All cuts shall be flush and clean, leaving no stubs or tearing of bark. All major pruning shall be done following flowering or during plant's dormant season. Emergency or minor pruning shall be done when needed.

Pruning shall be carried out to maintain proper size in relationship to adjacent plantings and intended function. Remedial attention and repair to shrubs shall be provided as appropriate by season or in response to incidental damage.

Groundcover plants shall be pruned as required to restrain perimeter growth to within planting bed areas where adjacent to walks and curbs. Tip prune selected branches of low growing shrub or groundcover masses to maintain even overall heights and promote fullness.

Certain plants, such as Cornus spp. will require heavy annual pruning in order to maintain healthy colourful stems and healthy leaves. All arising's from pruning shall be removed of site.

2.4 Weed Control

Planting beds shall be maintained relatively weed free (no more than 10% of weed cover at maximum) by hand weeding or spot spraying any emergent weeds during the growing season with Glyphosate or approved equivalent. Saplings shall be removed from all planting areas on emergence or immediately after to prevent establishment.

Specific weed control operations shall be carried out a min of 9no. times per year, however it will be the contractor's duty to control weeds by hand weeding or other if weed cover

exceeds 10% of the planting area.

2.5 Mulching

Shrub beds shall contain a min. depth of 50mm bark mulch throughout the year. Contractor to top-up as 2 times per year or as appropriate to maintain depth. Mulch is not required in areas where plant foliage completely covers the soil surface, such that the soil is not visible through the foliage. The contractor shall spot treat to remove emergent weeds as specified above but do not cultivate or incorporate the mulch into the soil. Any mulch outside of designated planting areas shall be returned to the planter on a weekly basis.

Mulch shall be uniform in colour and appearance, and free of leaves, sticks, or trash. Mulch may be chipped or shredded wood, bark. When replacing existing mulch, use a mulch product that is similar in appearance to that already at the site.

2.6 Tree Planting Care

Trees shall be maintained in a healthy, vigorous growing condition with a well-shaped framework for future growth.

2.7 New Tree Planting

Spring and autumn of each year during the maintenance period the trees, double-stakes, rabbit guards and ties shall be checked and adjusted, the soil firmed, any dead wood removed back to healthy tissue and mulch adjusted to original levels. Any broken stakes or ties evident throughout the maintenance period shall be replaced.

A 1m-diameter mulch circle/square shall be maintained at the base of each tree located in open grass areas or grass verges. Top up bark mulch to 75mm where required and make good any mulch mats.

During the first growing season all standard trees / semi-mature trees shall be watered at least five times during the growing season - in April, May, June, July and August unless otherwise directed by the Landscape Architect. During the second growing season trees will be kept well watered, particularly during June, July and August.

The edge of the mulch circle shall be maintained in a neat and tidy condition as above. The surface of all planting pits is to be kept free of weeds during the maintenance period by hand weeding of annual weeds, for perennial weeds to be carried out on three visits during the growing season.

2.9. Tree Stakes and Ties

Check tree stakes and ties on each maintenance visit. Repair, strengthen and adjust (loosen / tighten) to ensure optimum functioning and trees not being damaged by poor

6.1 OPEN SPACE MANAGEMENT

fixings. If trees no longer require stake / tie remove. Prior to handover, check all tree stakes and ties and remove those no longer required.

2.8 Woodland/Scrub Area Management

Woodland areas specified shall be maintained in a healthy, vigorous condition and free from litter and noxious weeds throughout the year.

Certain areas of woodland may require thinning over the 5-year period. These areas shall be thinned by no more than 10%, removing only the weaker tree specimens. Thinning shall be carried out as directed onsite by administrative authority.

Areas of natural scrub as indicated on the maintenance plans shall be contained by trimming back once per year. This shall be carried out 2no. times per annum.

All clearance operations within woodland and scrub areas shall be carried out outside of the birdnesting season to preserve the bird life in the area. This season extends from the 1st March to 31st August.

2.09 Litter Clearance/Pick-up

The contractor shall maintain all areas free from litter. This shall mean the removal of all extraneous litter, rubbish and any other debris from all areas, which will include grass areas, planted areas, carparks, footpaths as well as woodlands and tree canopies.

Notwithstanding the above it is expected that the contractor and his staff shall take sufficient pride in the appearance of the site and that they would pick up all visible litter during every site visit.

In addition to removal of litter from footpaths, planted areas, etc., the contractor shall make provision for the immediate (within 1 days of notification) arrangement for collection and removal of all extraneous matter which has been deliberately been deposited on site by persons known or unknown (fly-tipping).

2.10 Replacements

Any tree, hedge or shrub that is removed, uprooted, destroyed or becomes seriously damaged, defective, diseased, or dead shall be replaced in the same location with another plant of the same species and size as that originally planted within 5 years after planting. All such replacements shall be carried out in the first available planting season after the requirement to do so is recognised.

- BS 3998 Tree Works: Recommendations

- BS 4428 Code of Practice for general Landscape Operations
- BS 5837 Tree in relation to Construction
- BS 7370-1 to 5 Grounds Maintenance
- BS 8545 Trees: from nursery to independence in the landscape recommendations
- BS 8601 Specification for subsoil and required use
- BS EN 1722-9 Fences Specification for mild steel - low carbon steel - fences with round or square verticals and flat horizontals
- RoSPA Standards for safety for play and exercise equipment.

6.1 OPEN SPACE MANAGEMENT

Maintenance Programme

This programme is a guideline only and times of operations may vary on approval by landscape architect.

ONGOING REQUIREMENTS:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Lawn grass cutting (Min 24 cuts)		*	**	**	***	***	***	***	***	**	**	
Edging to lawn grass areas				*			*			*		
Rough Grass							*					
Fertiliser application to lawn grass areas							*					
Hedge pruning/cutting										*		
Shrubs pruning and feeding							*					
Weed control of hedge and shrub planting areas				*			*			*		
Tree pruning											*	
Removal of tree stakes (3-5yr)				*								
Mulch top-up to tree circles/ squares				*			*					
Watering of new trees (or after 3 weeks of no rain)				*	*	*	*	*	*	*		
Trimming of scrub areas											*	
Weed control of scrub areas				*							*	
Application of residual weed killer to footpaths, cycle paths.				*								
Litter Clearance/pick up	***	***	***	***	***	***	***	***	***	***	***	***



gannon + associates

121 Baggot Street Lower
Dublin 2, D02FD45

☎ +353 1 442 8187

🌐 www.gannonandassociates.ie

✉ info@gannonandassociates.ie