Landscape Rationale

Residential Development at Kilnahue Lands, Gorey, Co. Wexford

All-Ireland Pollinator Plan
www.pollinators.ie

RMDA
LANDSCAPE ARCHITECTS + CONSULTANTS

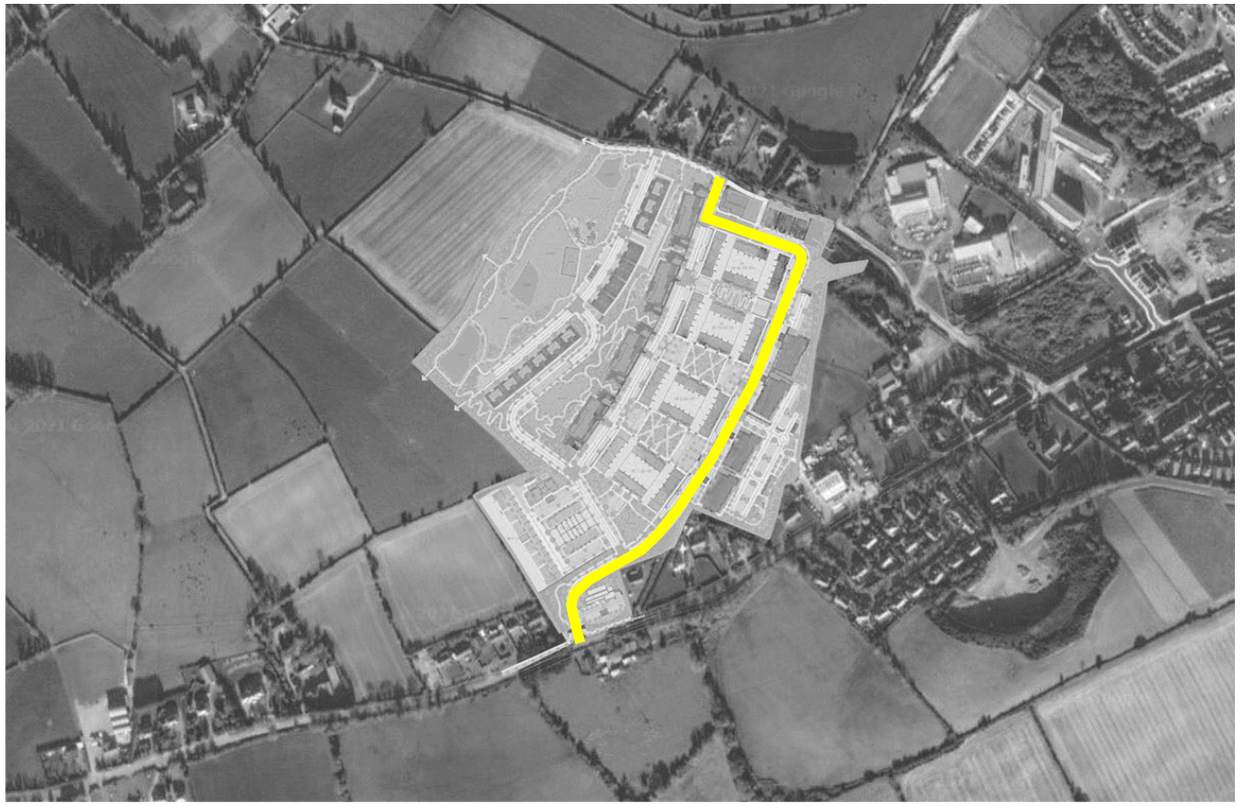
Contents

1. Wider Context & Site Location

1.1. Development Location

A proposed Strategic Housing Development consisting of the demolition of the dilapidated structures on site and the construction of 421 no. residential units comprising duplex units, apartment units, and houses, all with associated car parking; a creche facility with outdoor play areas, 2 no. retail units and 2 no. community rooms, all with associated car parking; a new vehicular access onto Carnew Road (R725) and associated road upgrade works, new vehicular accesses onto Kilnahue Lane (L10112) and associated road upgrade works; landscaping including neighbourhood park, pocket parks, a playground and multi-purpose sports court; boundary treatments; public lighting; and all associated engineering and site works necessary to facilitate the development including proposed upgrade works to existing engineering infrastructure on Carnew Road, Kilnahue Lane, Main Street and Esmonde Street.

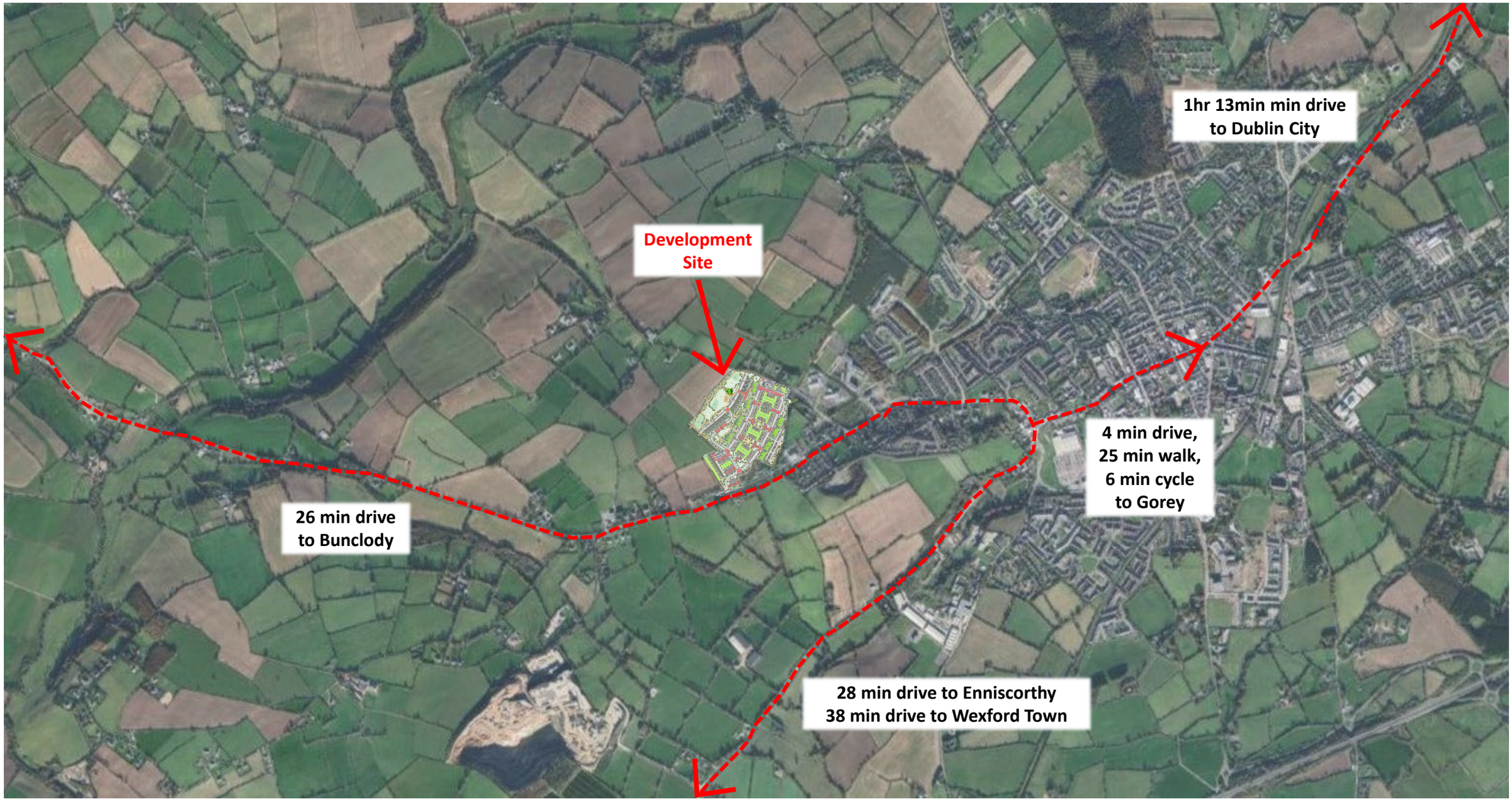
1.2. Landscape Layers



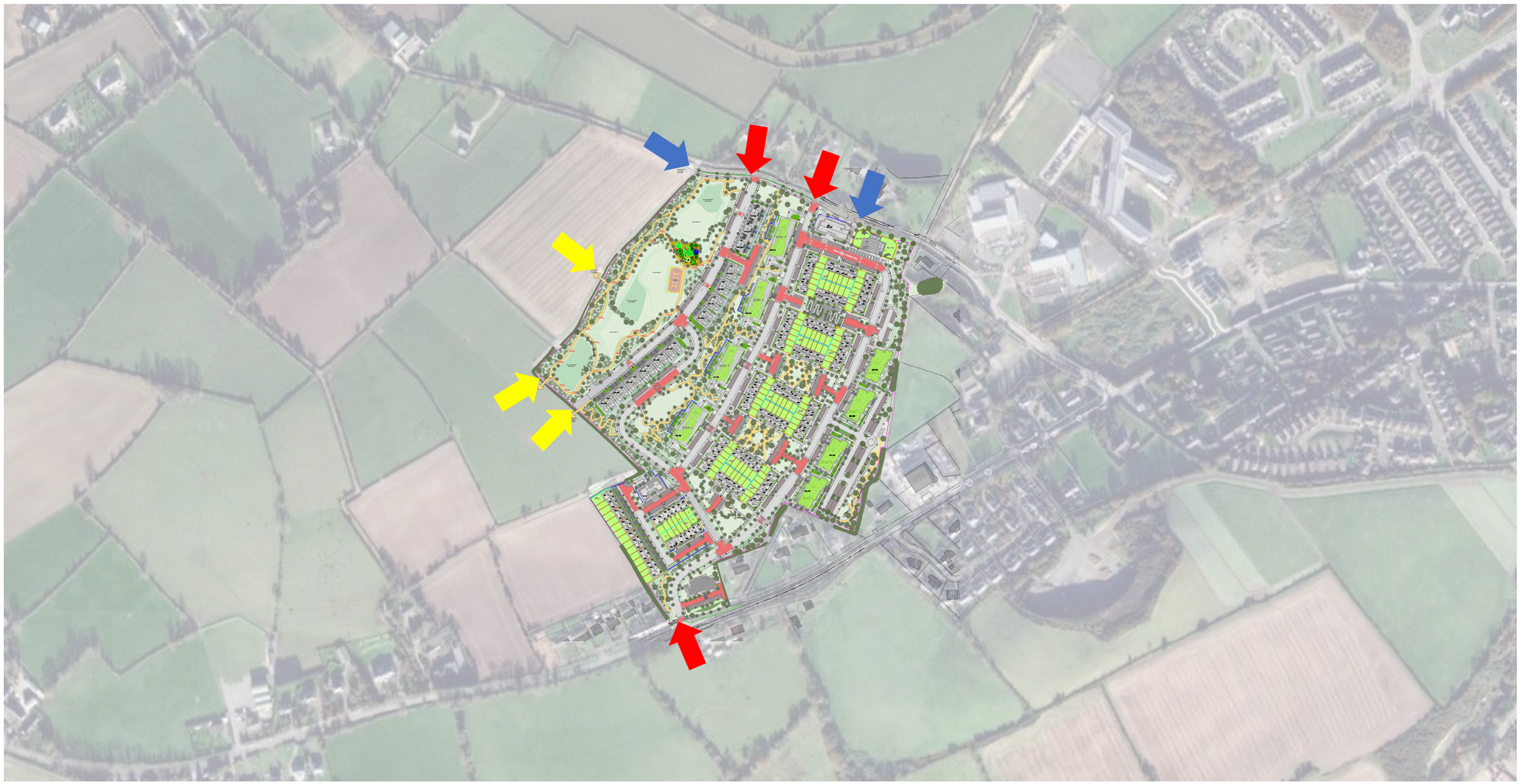
Proposed future development

A disused rural lane highlighted in green crossed through the lands in the past but it has since become overgrown. It hasn't been accessible for 20+ years. We are proposing to incorporate a new road highlighted in yellow as a nod to the lost element of the site. This lower avenue is tree lined on both sides and has substantial planting at areas where open space or communal parking is adjacent.

2. Connections



3. Inclusivity



Vehicle, Pedestrian & Cycle access

Pedestrian & Cycle access only

Potential Future Pedestrian access

4. Variety


Large Play Area
Parkland
Open Space for kickabout
Network of Circulation Paths
Pocket Parks
Tree lined Link Road
Tree lined Link Road
Existing Hedgerow retained
Urban Ramps & Steps
Pocket Parks
Active Street Frontage
Communal Open Space

5. Efficiency

5.1 Existing Trees & Hedgerows

Existing Tree Line
500.3 sq.m

Existing Hedge Line
2,444.1 m

Existing Scrub and Thicket
5,332.8 sq.m

Tree Line

Hedges

Scrub and Thicket

Colour Coding of Tree Categories

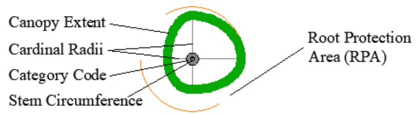
Category "A" Trees (Green Button)
Excellent Trees

Category "B" Trees (Blue Button)
Good Trees

Category "C" Trees (Gray Button)
Mediocre to Poor Trees

Category "U" Trees (Red Button)
Dead, Dying or Otherwise Compromised
Trees that are Unsustainable.

Graphic Representation of Tree Form,
Balance and Protection Zone



Canopy is drawn to account for any natural asymetry or imbalance. Crown Representation is scaled to account for north, east, west and south radii.

Root Protection Area (RPA)
This area relates the "RPA" radius as defined in the Tree Survey Table and is measured from the tree centre.
This area defines the preliminary Construction Exclusion Zone (CEZ) that must be protected by fencing from the potentially damaging affects of construction activity.

5.2 Tree Survey

31no. **Category U**- Those trees in such a condition that any xisting value would be lost within 10 years.

32no. **Category B**- Trees of moderate quality/value with a inimum of 20 years life expectancy.

125no. **Category C**- Trees of low quality/ value with a minimum of 10 years life expectancy.

5.3 Arboricultural Impact

EXISTING TREES

188no. (including groups)

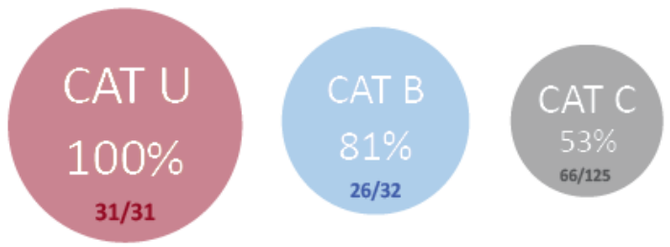
A total of 159 trees and 9 groups of trees were identified and assessed. The condition of the trees is generally moderate to poor.

% of the total number of the existing trees

REMOVAL TREES

123no.

A total of 123 trees will be removed at the site, highlighted for removal due to poor condition, or to facilitate the proposed works

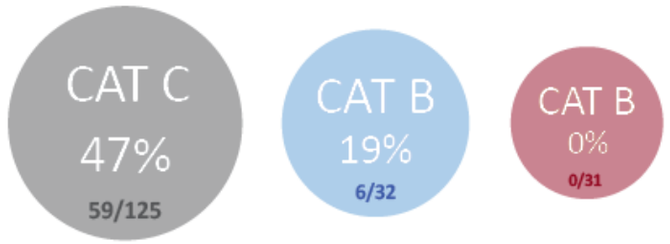


% of the total in category

RETAINED TREES

65no.

A total of 65 trees will be retained at the site. Tree protection and enhancement are a key tenet of the proposed design. The main concentration of re-tained trees are located along the eastern boundary.



% of the total in category

5.4 Trees & Hedgerows Retained

Existing Hedgerow to be retained, augment where necessary with native species

Existing Tree to be retained on site
34.6% of existing trees retained
(65/188)

RPA - Root Protection Areas

5.5 Trees & Hedgerows Removal

Existing Hedgerow to be removed

8617.5m² of existing hedge removed

Existing Tree to be removed on site

65.4% of existing trees removed (123/188)

65.4% of the 188No. individually tagged trees/grouped tree included within this assessment area along with 8617.5m2 of existing hedge. Hedge sections vary in size, and will need to be removed to facilitate the proposed development works on this site area or as part of management.

5.6 Habitat Renewal

New Woodland Planting
12,957 sq. m

Wildflower Meadows
3242.3 sq. m

Heavily Planted Pocket Parks
4619.2 sq. m

5.7 Proposed Trees, Hedgerow & Woodland Planting

Proposed Tree Planting
871no.

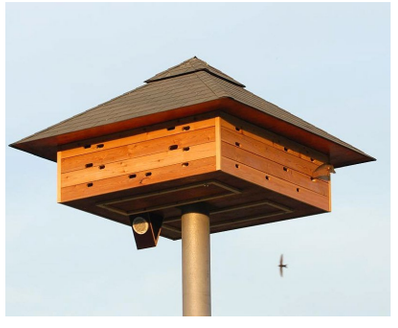
Proposed Large Shrub/Small Tree Planting
116no.

Proposed Native Woodland Whip Mix
12,957 sq.m

5.8 Habitat Creation - Bat Boxes & Swift Tower

Box Boxes

Swift Tower

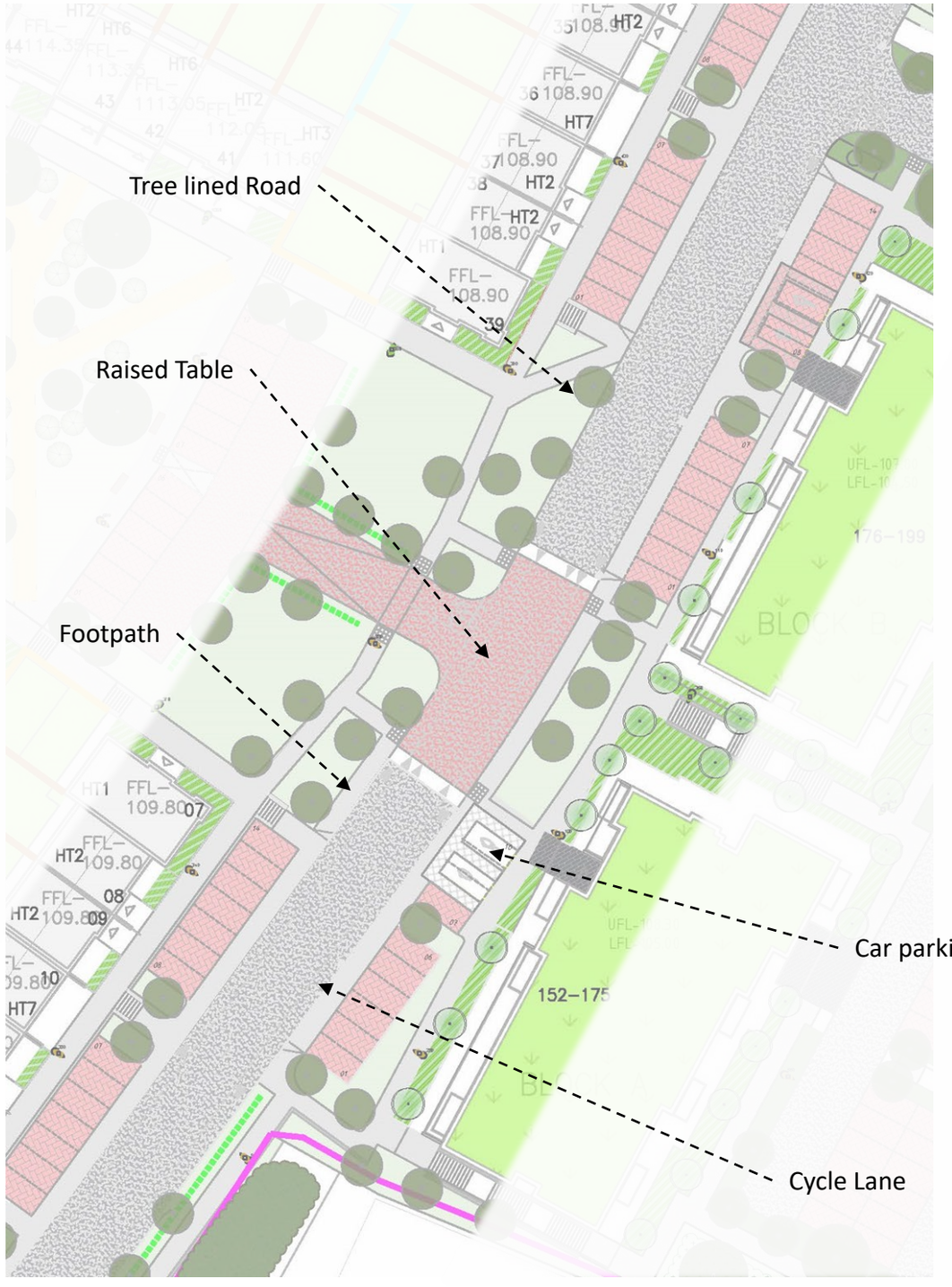


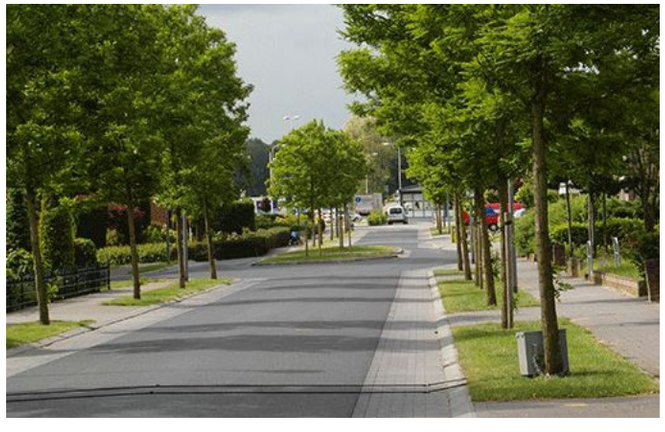
6. Distinctiveness

This development is a situated in a very unique setting which adds to the distinctiveness of it. This in turn contributes to the creation of a sense of place within the scheme and the wider area of Gorey. There are a range of open space categories such as Parkland, Pocket parks, Communal and Habitat spaces that amplify the design and create a environment in which the users will feel comfortable and want to experience. The variety of streetscapes help the pedestrian and cycle users progress through the development both in a safe and pleasant manner with the vehicles playing a secondary role. A true sense of place will be felt by the new residents once they have lived here and become used to their new surroundings. As designers we give them the means in order to make their own observations and benefit from their environment in which they live.

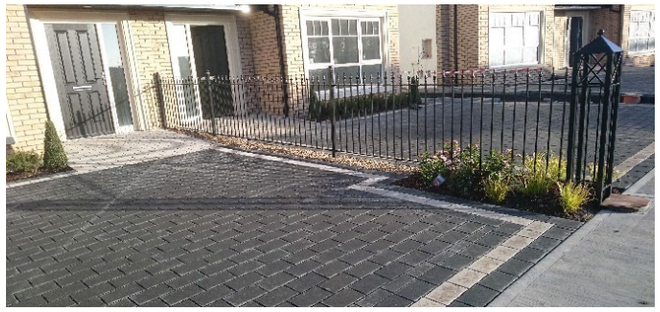
7. Layout – Road Hierarchy

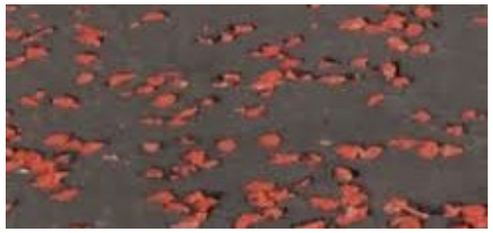
Road Hierarchy - Primary Road - Main access





Road Hierarchy - Secondary Road

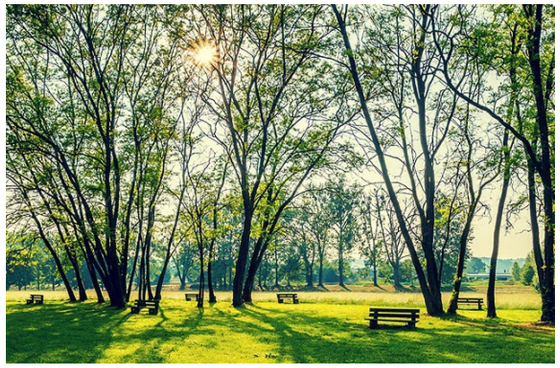




Road Hierarchy - Tertiary Road - Communal Parking

8. Public Realm - Open Space Categories

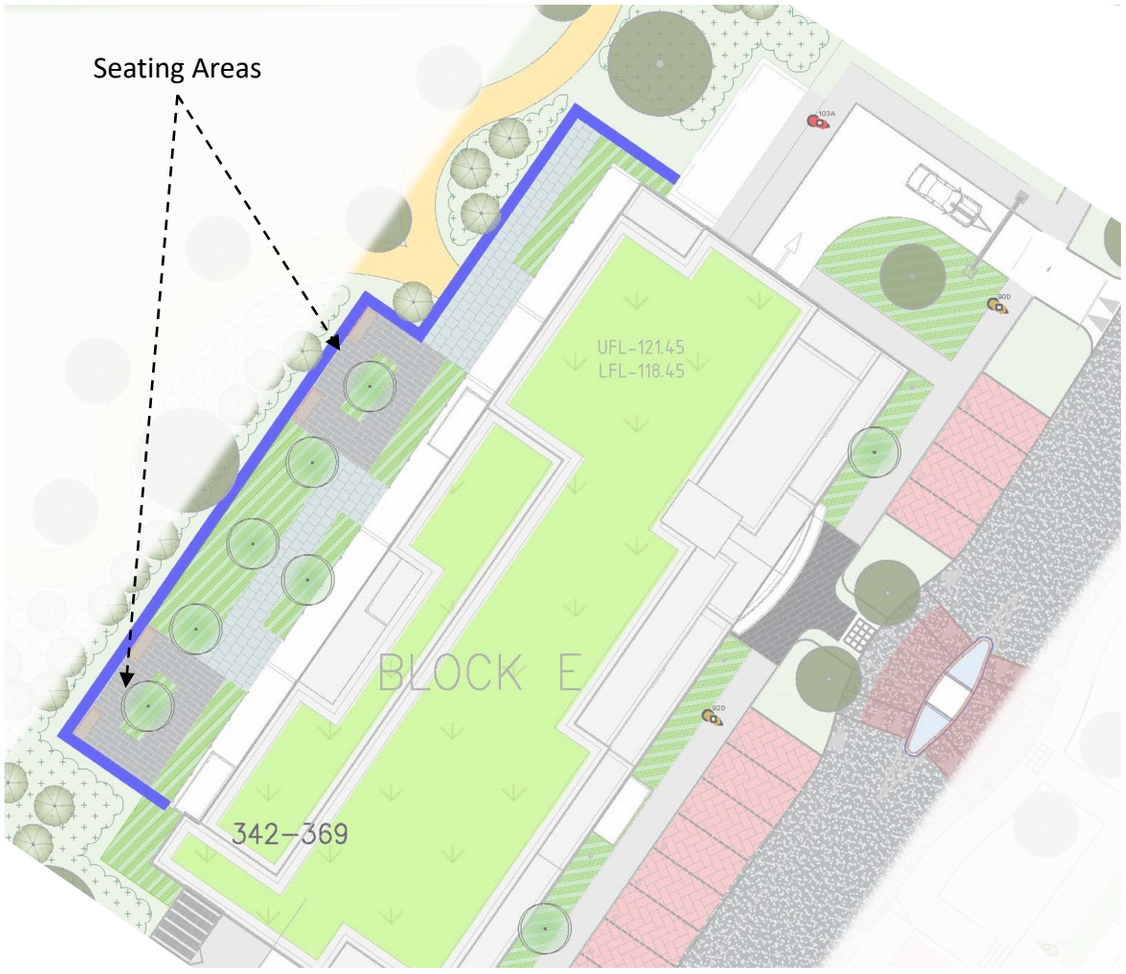
Public Realm - Parkland

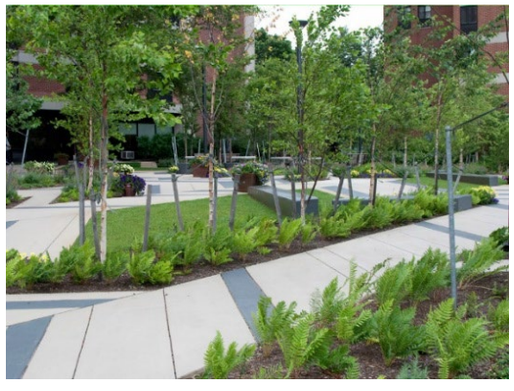


Public Realm – Pocket Parks

Public Realm – Habitat Areas

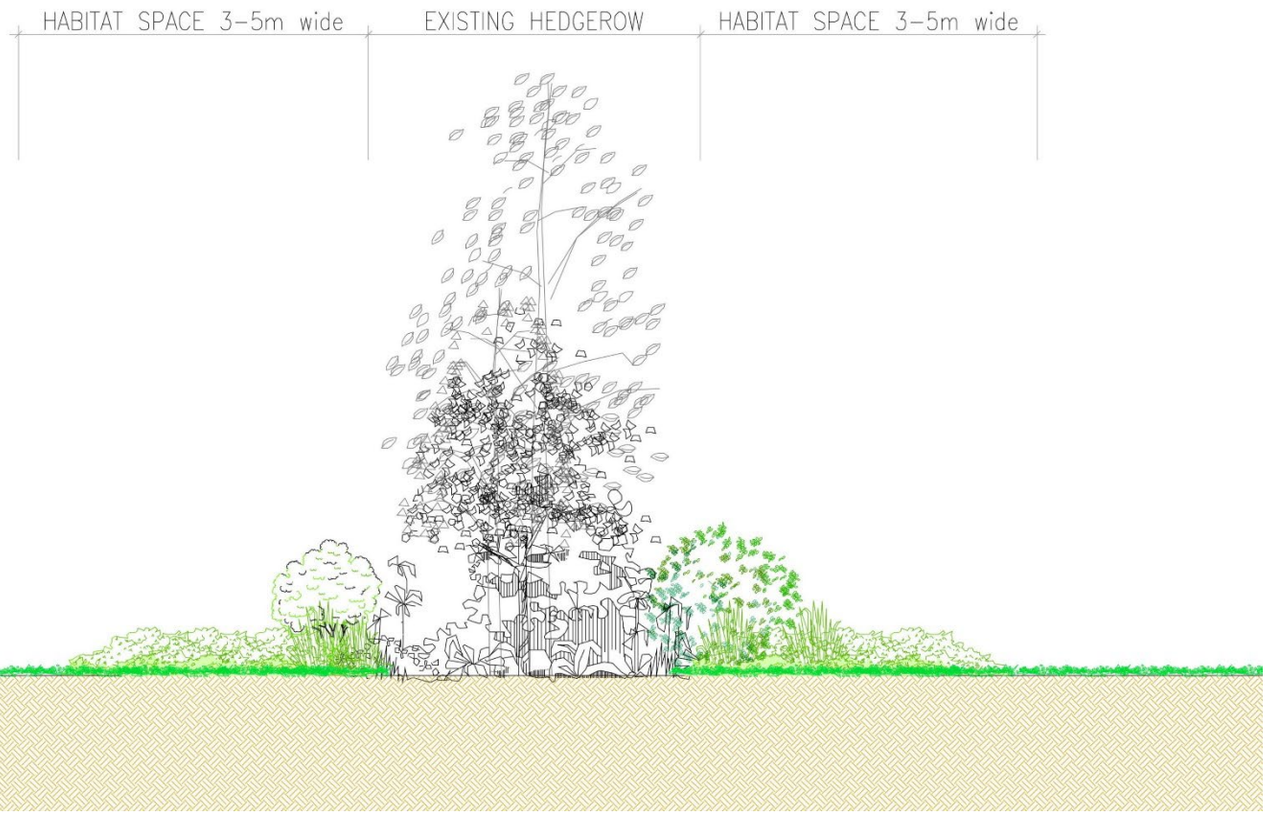
Public Realm – Communal Open Space





9. Adaptability - SUDs & landscape strategy

Proposed new integrated SUDS using the landscape network.



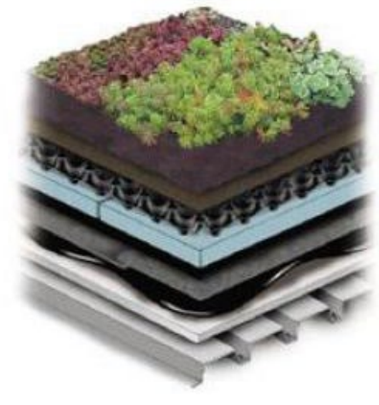
The creation of Habitat spaces along the retained hedgerows for birds, insects, badgers & bats is a vital element to the Green Infrastructure in this development. These areas will not be mown or sprayed so that wildlife can thrive uninterrupted by humans and create a stronger biodiversity within the development.

9.1. Adaptability - Green/sedum roofs

- The root system: Sedum has very shallow roots, a key requirement for an extensive green roof, considering the modest depth of the substrate layer.
- Sedum is also drought-resistant
- Sedum needs relatively little nutrients and maintenance compared to other types of plant
- Sedum is very resilient to diseases and insects
- Sedum is also very adaptable: due to its capacity to adapt its metabolic system in periods of drought, it can survive in extremely dry conditions where other types of plants would die. And furthermore, Sedum recovers remarkably quickly as soon as water becomes available again.

Extensive Vegetation (Sedums, etc.)
Growing Media
Filter Fabric
Moisture Retention / Drainage Panel
Insulation
Root Barrier
Protection Course and Capillary Break
Waterproofing Membrane (hot rubberized asphalt depicted)
Substrate (concrete deck depicted)

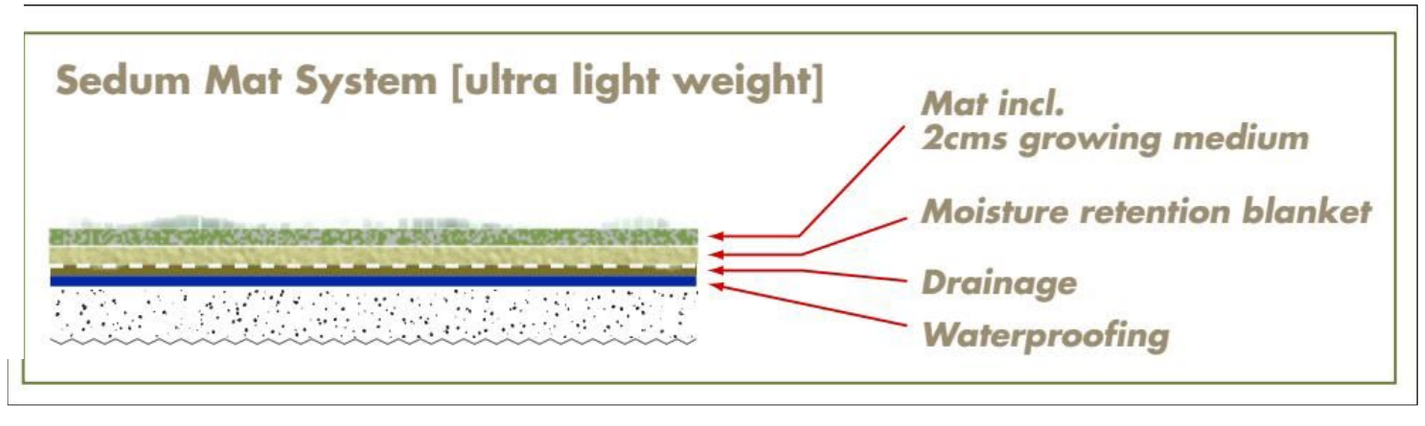
Option 1.



Extensive Vegetation (Sedums, etc.)
Growing Media
Filter Fabric
Moisture Retention / Drainage Panel
Insulation
Root Barrier
Protection Course and Capillary Break
Waterproofing Membrane (hot rubberized asphalt depicted)
Substrate (metal deck with gypsum board depicted)

Option 2.

Green Roof/Sedum Roof



9.2. Adaptability - Proposed Planting

Proposed Tree Planting

Quercus robur ‘Koster’

Tilia cordata ‘Greenspire’

Prunus avium ‘Plena’

Betula pendula

Acer griseum

Sorbus aucuparia

Amelanchier lamarckii

Ginkgo biloba

Malus 'John Downie’

Note: Planting shown throughout rationale are mature and are not indictive of size that shall be planted first.

Proposed Tree Planting

Acer campestre 'Elsrijk'
Acer campestre 'Queen Elizabeth'
Acer globosum
Acer griseum
Acer platanoides 'Crimson King'
Aesculus hippocastanum
Amelanchier lamarckii
Arbutus unedo
Betula papyrifera
Betula pendula
Betula pendula 'Multi-stem'
Carpinus betulus 'Fastigata'
Corylus colurna
Fagus sylvatica 'Dawyck'
Ginkgo biloba
Ilex aquifolium
Juglens regia
Laurus nobilis - Cone Shaped
Malus 'John Downie'
Malus 'sylvestris'
Pinus sylvestris
Pyrus chanticleer
Prunus avium 'Plena'
Prunus cerasifera
Prunus padus
Quercus ilex
Quercus palustris
Quercus robur 'Fastigiata'
Quercus rubra
Quercus robur
Rhus typhinia
Salix alba
Sorbus aria
Tilia cordata 'Greenspire'
Tilia x euchlora
Tilia europaea
Tilia platyphyllos
Ulmus 'Lobel'
Ulmus x hollandica
Liriodendron tulipifera
Platanus acerfolia
Magnolia stellata
Magnolia x soulangeana

9.3. Adaptability - Proposed Planting

Proposed Planting

Helleborus niger

Bergenia cordifolia

Sedum spectabile

Verbena grandiflora

Perovskia atriplicifolia

Prunus laurocerasus

Elaeagnus x ebbingei

Hedera helix Hibernica

Lavandula angustifolia

Proposed Ground Cover Planting

No.	Name.	Size.
G1	Bergenia cordifolia	1L
G2	Persicaria affinis	1L
G3	Geranium 'Rozanne' (Jolly bee)	1L
G4	Hedera helix 'Hibernica'	1L
G5	Salvianemorosa	1L
G6	Helleborus niger	1L
G7	Paeonia suffruticosa	1L
G8	Ceanothus repens	1L
G9	Rubus idaeus	1L
G10	Rubus tricolor	1L

Proposed Small Shrub Planting

No.	Name.	Size.
S1	Lavandula angustifolia	3L
S2	Verbena grandiflora	2L
S3	Cistus corbariensis	3L
S4	Hebe spp.	3L
S5	Ribes spp.	3L
S6	Cornus alba	2L
S7	Rosmarinus	1L
S8	Hypericum hidcote	2L

Proposed Climber Planting

No.	Name.	Size.
C1	Clematis Montana	3L
C2	Hedera	2L
C3	Hydrangea petiolaris	3L
C4	Parthenocissus quinquefolia	3L

Note: Planting shown throughout rationale are mature and are not indictive of size that shall be planted first.

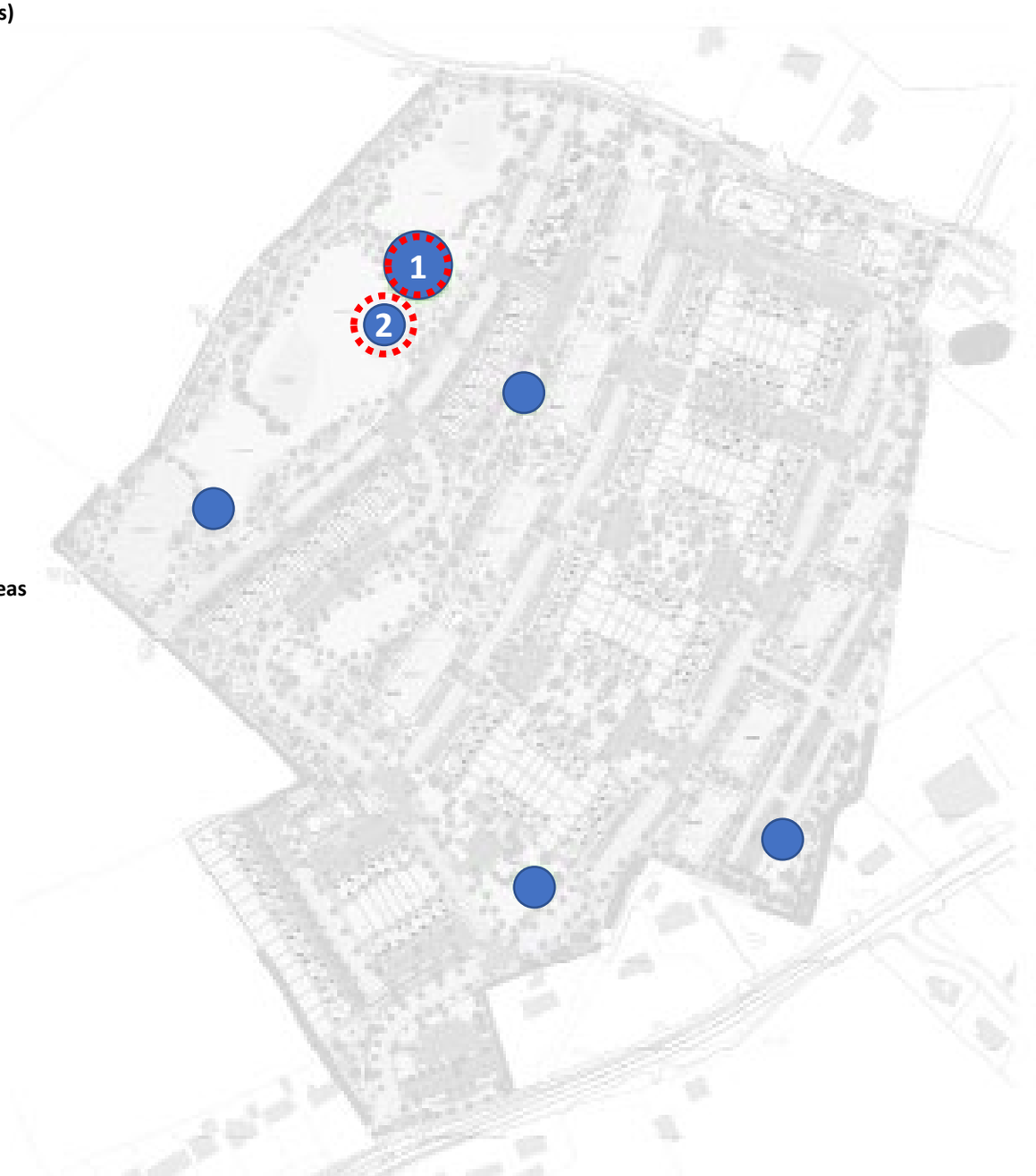
10. Privacy & Amenity - Proposed Play Locations

1. Large size play area (2+ years)
- **Embankment Slide**
- **Swings**
- **Wheelchair Carousel**
- **Play House**
- **Spinner**
- **Springer**
- **Twisted Net**
- **Inclusive Jumper**
- **Seesaw**
- **Balancing Beam**
- **Springer**
- **Large Play Structure**

2. MUGA

3 – 6. Natural Play Area
- **Tree Logs**
- **Boulders**
- **Mounding**

There are several kickabout areas across the development



Proposed Playground Locations

Movement
Tree planting and gentle grass mounding are ideal places to hide. These changes in levels are suitable for jumping and running down gentle hills.
Proposed playgrounds will accommodate climbing.

Stimulation of the five senses
Natural elements throughout open space provide quiet places, dark and bright areas that appeals to a child senses. Sensory and textured plants planted throughout the space will appeal to the senses.

Experiencing change in the natural and built environment.
Experiencing the seasons
The contrast between open space and paving provides opportunities to learn and play.
Natural elements in open space such as trees will allow children to experience changes in seasons.

Social interactions
Meeting points and a number of seating areas will encourage social interaction.
Kick about spaces also encourage interaction

Playing with identity
Role play, Places to hide in the natural elements

Experiencing a range of emotions
This bespoke designed open space will appeal and evoke children's emotions.

Capabilities of play such as tumble ,chase game.
Extensive grass areas throughout the open space are ideal for kickabout and chasing games.

Varied and interesting physical environment.
A bespoke designed space that has gentle grass mounding thus providing a change in levels. This provides a varied and interesting physical play environment.

10.1. Privacy & Amenity - Proposed Play Space

Proposed Playground Location

10.2. Privacy & Amenity - Proposed Play Equipment

Equipment Palette

Junior Play - Under 5 years of age

All surfaces manufactured and installed to EN 1176 and all play equipment manufactured and installed to EN1177

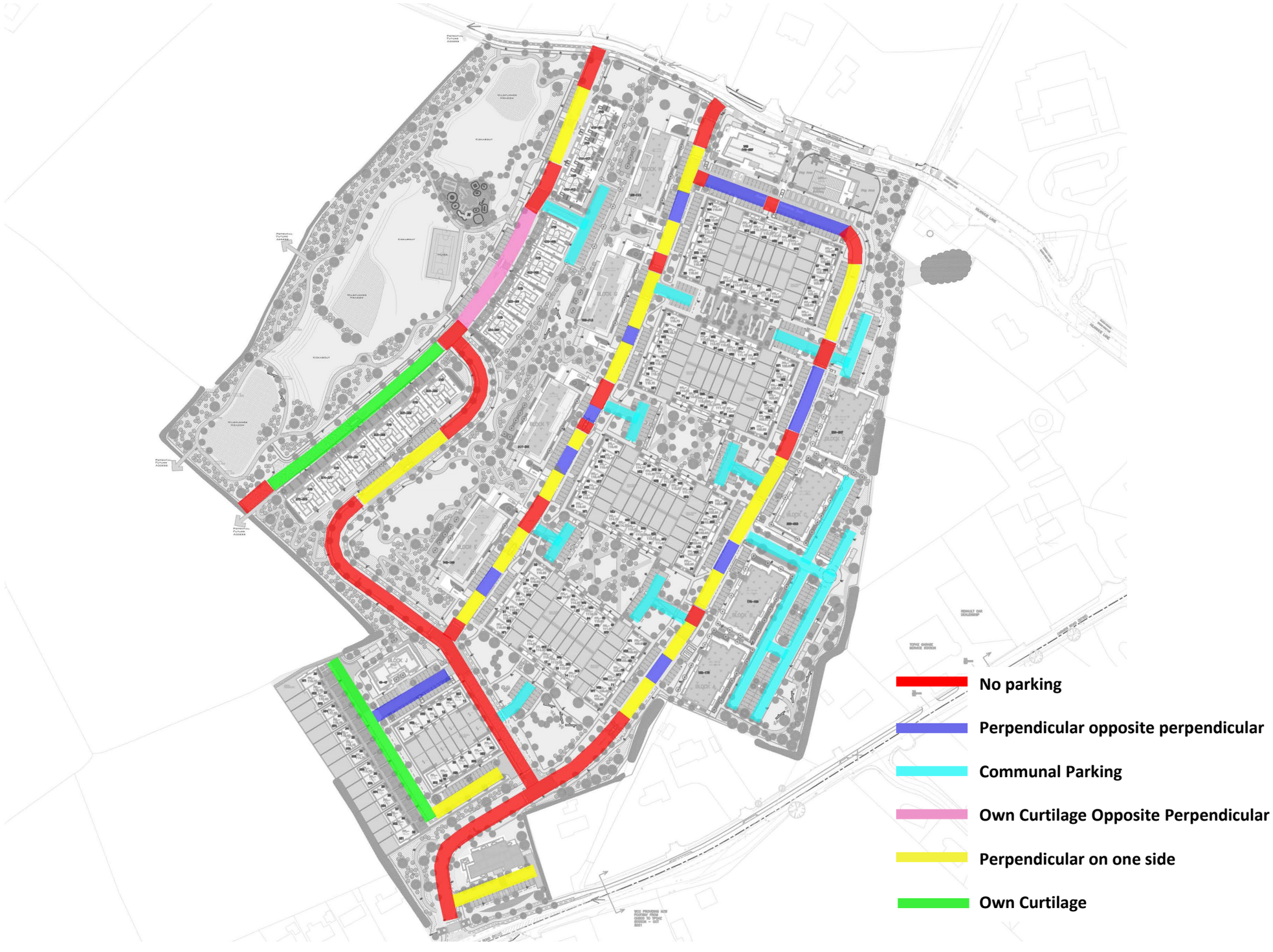
Junior Play - Over 6 years of age

All surfaces manufactured and installed to EN 1176 and all play equipment manufactured and installed to EN1177.

Natural Play Equipment

Natural playgrounds help children to develop other beneficial behaviors in addition to physical skills. These behaviors include social skills, cooperation, and the ability to solve problems.

11. Parking


No parking
Perpendicular opposite perpendicular
Communal Parking
Own Curtilage Opposite Perpendicular
Perpendicular on one side
Own Curtilage

12. Detailed Design - Proposed Landscape Masterplan

12.1. Detailed Design - Suggested Boundary Details

Concrete Post & Wooden Panel Fence

Parkland Railing & Hedge

Double Sided Treated Wooden Panel Fence
With internal concrete post & Gravel Board

Suggested Dash & Brick Pier

Suggested Dash & Rendered Pier

Double Sided Treated Wooden Panel Fence
to Boundary & Existing Hedge

Suggested Stone
Feature walls

12.2. Detailed Design - Suggested Surface Materials

Charcoal 175x140x50mm & 140x140x50mm

Heather Retro 190x50x60mm

Dust Path

Granite 200x100

Paving Flag 600x400 grey with cobble edge

Bracken 200x100x50mm

Silver 208x173x50mm & 173x173x50mm

Graphite 300x200x60mm

Silver surface drain

Permeable Paving for Car Parking 200x100x60 Rustic with charcoal border

Charcoal 200x100x50mm

Bracken 175x140x50 & 140x140x50mm

Beige tarmac

Brushed Concrete with trowel edge finish (streets)

12.3. Detailed Design - Suggested Street Funiture

Seating

Bollards

Litter Bins

Bike Stands

Tree Grille

Planter Walls

12.4. Detailed Design - Landscape Details

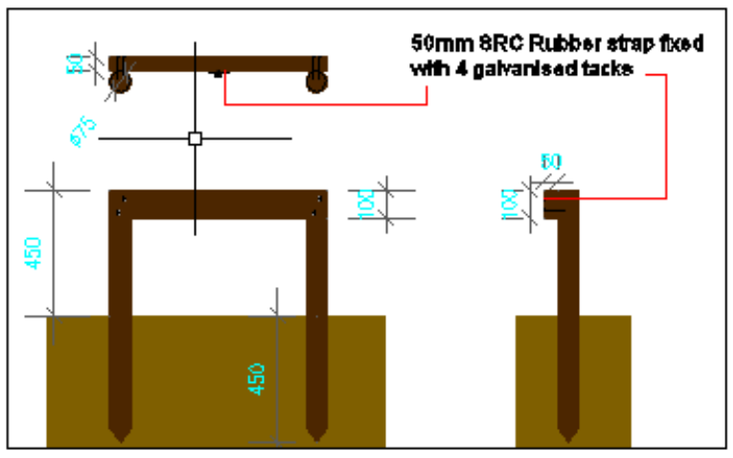
SCHEDULE OF IMPLEMENTATION:

1. ALL TREE AND HEDGEROW PLANTING IS TO BE CARRIED OUT DURING THE FIRST WINTER SEASON, I.E. NOVEMBER TO FEBRUARY INCLUSIVE.
2. ALL LAWN AREAS ARE TO BE PREPARED AND SEEDED DURING THE GROWING SEASON, I.E. APRIL TO OCTOBER INCLUSIVE.
3. ALL CONTAINERISED SHRUB PLANTING MAY BE CARRIED OUT AT ANY TIME OF WHEN SOIL IS NOT FROZEN, WATERLOGGED OR EXCESSIVELY DRY.

PLANTING NOTES:
ALL TREES, SHRUBS AND HEDGEROW PLANTS SHALL COMPLY WITH BS 3936, SPECIFICATION FOR NURSERY STOCK. ALL PRE-PLANTING SITE PREPARATION, PLANTING AND POST PLANTING MAINTENANCE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF BS 4428 (1989) CODE OF PRACTICE FOR GENERAL LANDSCAPE OPERATIONS (EXCLUDING HARD SURFACES).

ALL NEW TREE PLANTING SHALL BE POSITIONED IN ACCORDANCE WITH THE REQUIREMENTS OF TABLE 3 OF BS 5837: 2005 TREE IN RELATION TO CONSTRUCTION: RECOMMENDATIONS, WHICH SPECIFIES MINIMUM DISTANCES BETWEEN NEW PLANTING AND STRUCTURES.

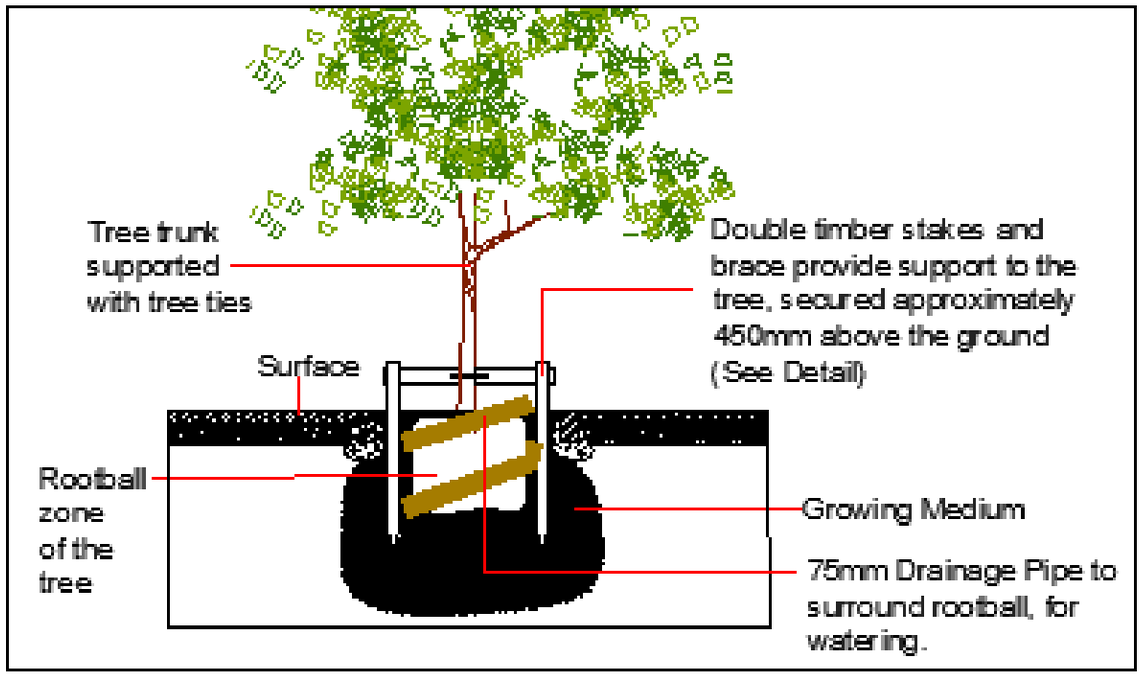
Typical double Tree staking detail



Tree Planting

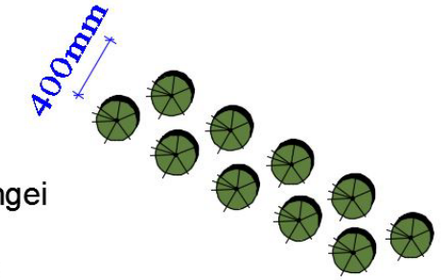
Tree Planting

Tree Planting Detail



12.4. Detailed Design - Landscape Details

H1 - Hedgerow Planting Detail



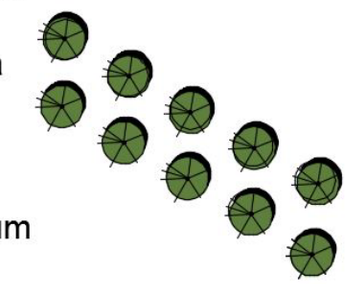
Hedge mix
60-90mm

100% Elaeagnus x ebbingei

50 x 50 stake tied with a
single rubber gut tie.
2 rows @ 500mm centres -400mm
apart,

H2 Proposed Native Hedgerow Planting Mix

Boundary detail - Hedge mix
Whips, 60 - 90cm
50% Craetagus monogyna
35% Prunus spinosa
5% Ilex aquifolium
5% Rosa canina
5% Lonicera periclymenum 'Graham Thomas'



50 x 50 stake tied with a
single rubber gut tie.
2 rows 400mm apart,
600mm centres