

Strategic Housing Development,  
Lissywollen, Athlone, Co. Westmeath

Ronan Mac Diarmada & Associates

Landscape Architects & Consultants



LANDSCAPE RATIONALE

February 2021





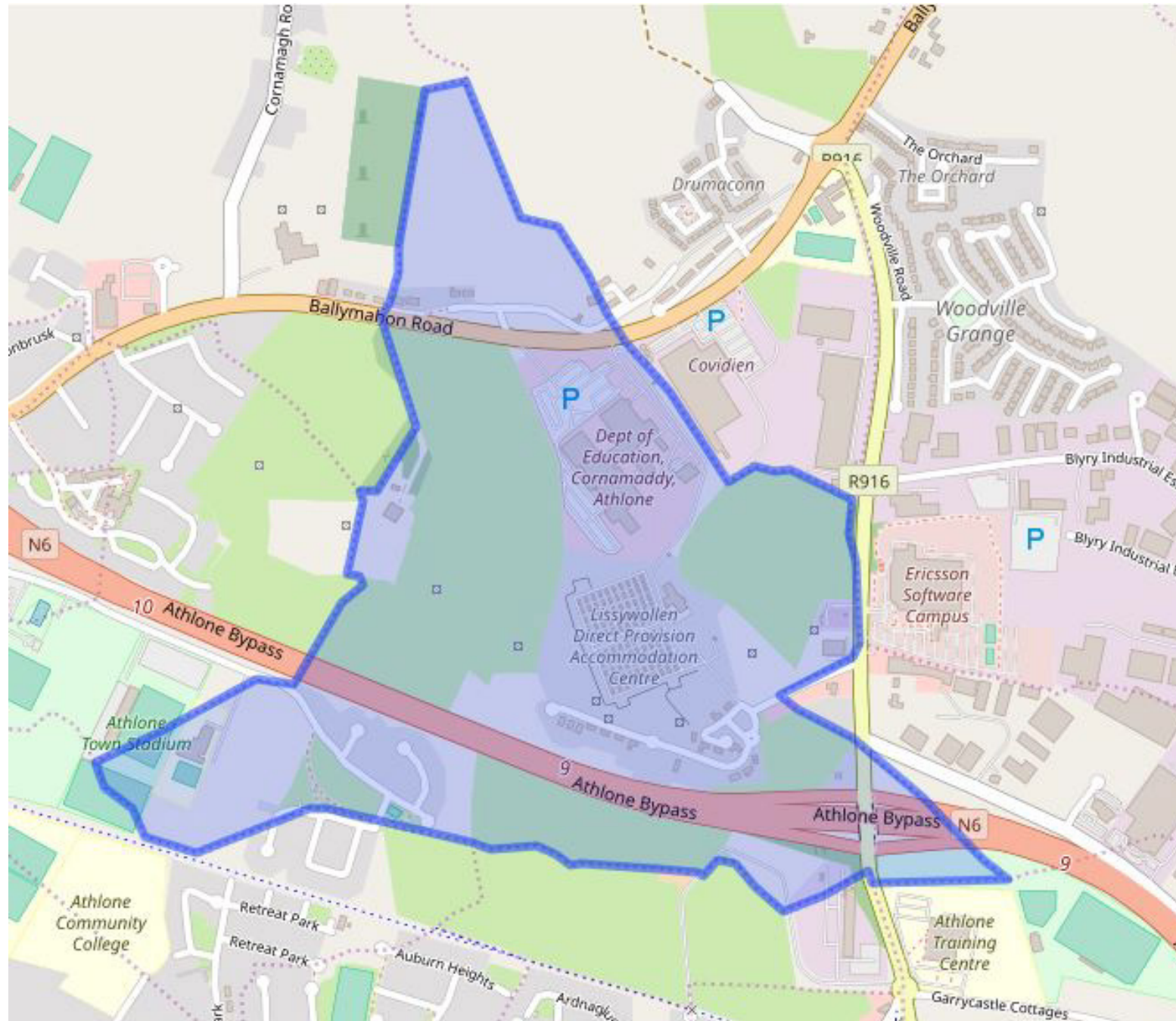
Where possible, existing natural and landscape heritage elements to be protected – key hedgerows and field drainage features.

Hedgerows to be retained where possible while enhancing biodiversity.

■ ■ Development Location







The proposed development site is located in the townland of Lissywollen, while also extending into neighbouring townlands of Kilnafaddoge and Retreat.

Lissywollen is in the Electoral Division of Athlone East Rural, in Civil Parish of St Mary's, in the Barony of Brawny, in the County of Westmeath.

The Irish name for Lissywollen is Lios Uí Mhulláin.





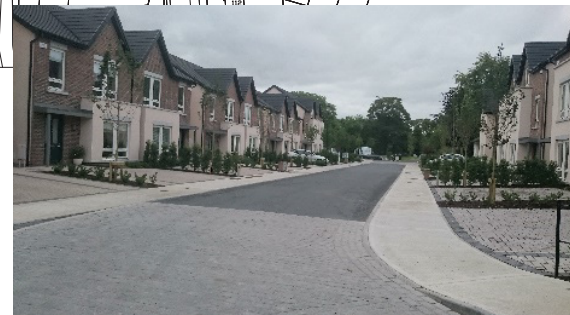


The development proposal has strived to create a sense of identity through a network of open spaces that provide a positive quality of life for residents, while maintaining and enhancing the natural environment.

The design is composed of several multi-use community areas, where chance meetings, markets, relaxation, and play can occur. The proposed network of open spaces protect and integrate key environmental and landscape features that currently contribute to the uniqueness of the site and will play a key role in defining legibility and creating variety within the proposed development.

The scheme has distinctive public and communal spaces:

- Public Spaces:
  - Central Urban Plaza
  - Parkland
  - Pocket Parks
  - Play Areas
  - Habitat Buffer
- Communal Spaces:
  - Open Spaces
  - Courtyards
  - Structured Play Areas






## Greenway & Cycle Network

Connection to Athlone Town Centre

Existing Link At Site



-  Stone Pillar / Connection Point
-  Existing Greenway
-  Cycle Way

### Connectivity

The increased permeability of the development to the it's context is important to connect residents to surrounding opportunities.

A key objective of the scheme to reduce car dependency by providing high quality pedestrian and cycle networks. The enhancement and provision of green infrastructure integrates the new development the existing greenway.










# Development Character Areas



The proposed development of 576 no. residential dwellings, is categorized into 5 no. character areas, each with their own distinctive features and distinguished landscape treatments.

-  1. Lissywollen Crossings - Family Houses Shared Surfaces/ Open Spaces, Trees in Public Realm
-  2. Lissywollen Callows - Family Houses, Private Car Spaces, Habitat Renewal
-  3. Lissywollen Village - Urban Blocks, Communal space
-  4. Lissywollen Berths - Family Houses Shared Surfaces, Trees in Public Realm
-  5. Lissywollen Station - Urban Edge, Communal Spaces, Public Park, High Density





# Character Area 1 - Lissywollen Crossings

Existing hedgerows are to be retained within the primary open space area around which pedestrian linkages, passive and active open space areas are arranged.



Streetscape character defined by specific tree species, creating a sense of identity.



Where detention basins are required and located within the central open space areas, the south facing aspects will be terraced while the north facing aspects will be sloped with a 1:3 gradient. Side slopes will receive a Parkland grass mix, requiring a less intensive maintenance regime.



Low level hedgerow planting define front private space areas.



Typical Play Items





# Character Area 2 - Lissywollen Callows

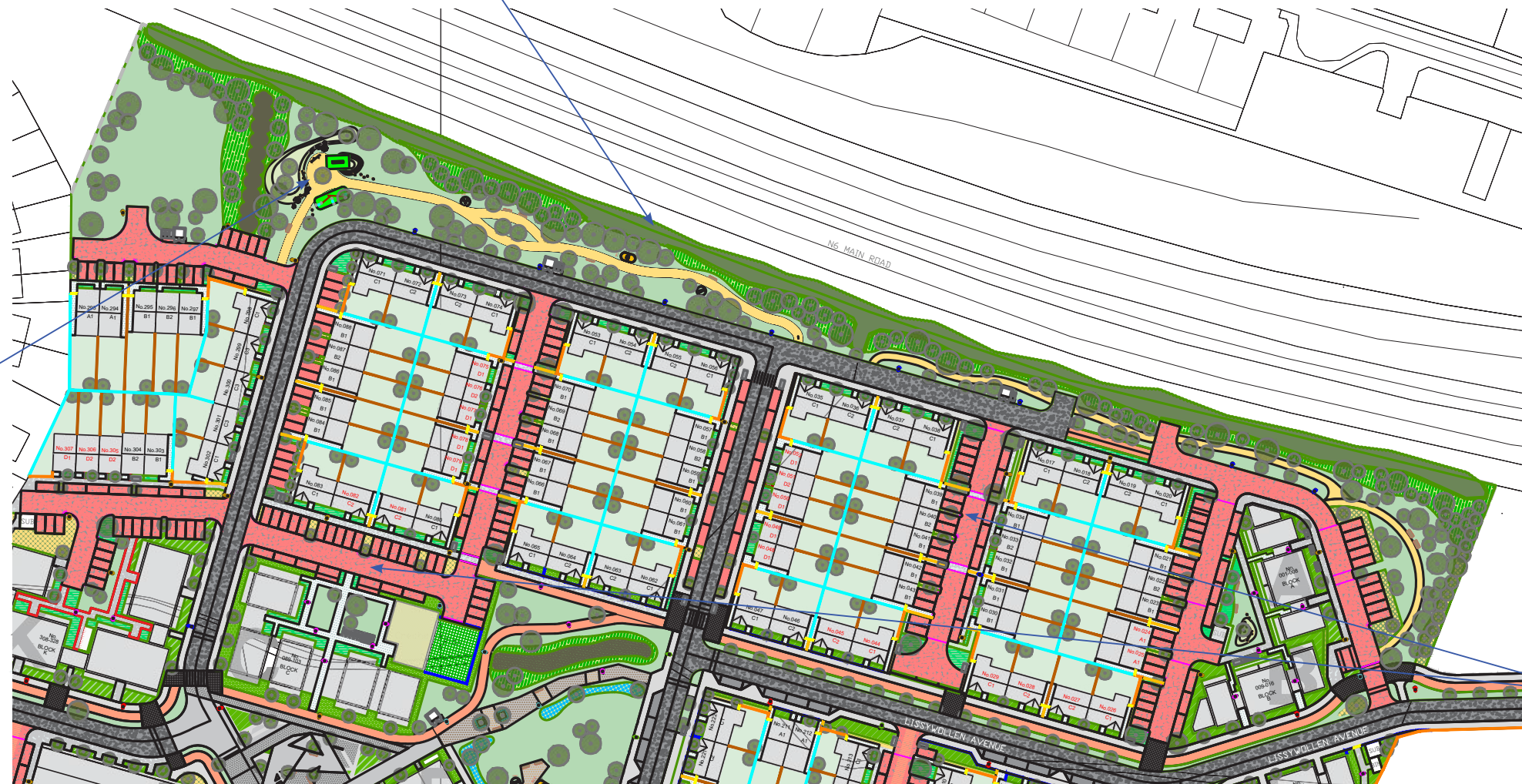


Existing boundary hedgerows to be retained and augmented with new native tree planting, creating a habitat buffer that will act as an ecological corridor and mitigate noise from the adjacent roadway.

A woodland path meanders through this linear space, providing a series of recreational open areas for exercise and play.



Informal Play Items

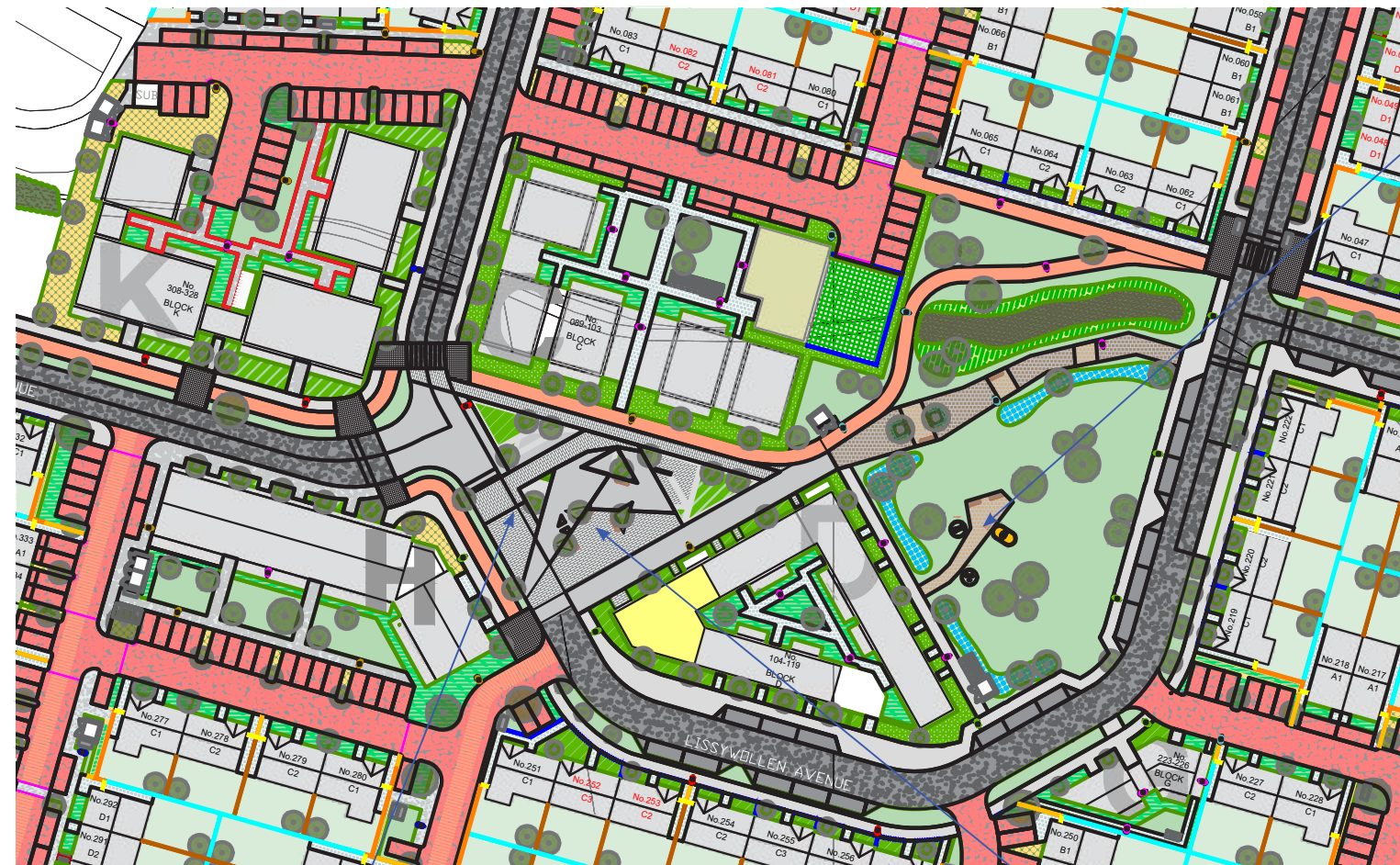


Shared surface areas with raised roads and flush footpaths.





# Character Area 3 - Lissywollen Village



Parkland with Outdoor Exercise Facilities



Streetscape character defined by specific tree species, creating a sense of place.

The Village provides attractive and inviting spaces that creates a focal point for the entire development.

Located at the midpoint of the site's spine road, the Urban Plaza is the main congregation point of the village. This space fosters positive social interaction and a high quality environment for living and working.

Relief from the urban scale is found in the adjoining Central Park, where passive relaxation, fitness stations and kick about areas are proposed.





# Character Area 4 - Lissywollen Berths



Sharing a boundary with the Old Rail Greenway, Lissywollen Berths offers high levels of permeability and connectivity. The 4no. new access points to the greenway promote local access for residents, while allowing ease of movement to the rest of the site.

Legible access points and passive oversight create a sense of comfort and safety for the greenway users. The design intention is to increase the presence of people and encourage sustainable transport options.

Permeable paving by type to driveways with boundary definition provided by low hedgerow



Pocket park open space located next to the existing hedgerow and overlooked from adjoining dwellings.

Streetscape character defined by specific tree species, creating a sense of identity.





# Character Area 5 - Lissywollen Station



Communal Open Spaces defined by specific tree species, creating a sense of place.



Communal Open space areas providing play, relaxation and passive recreation. Existing hedgerows are to be retained.



Permeable paving to driveways



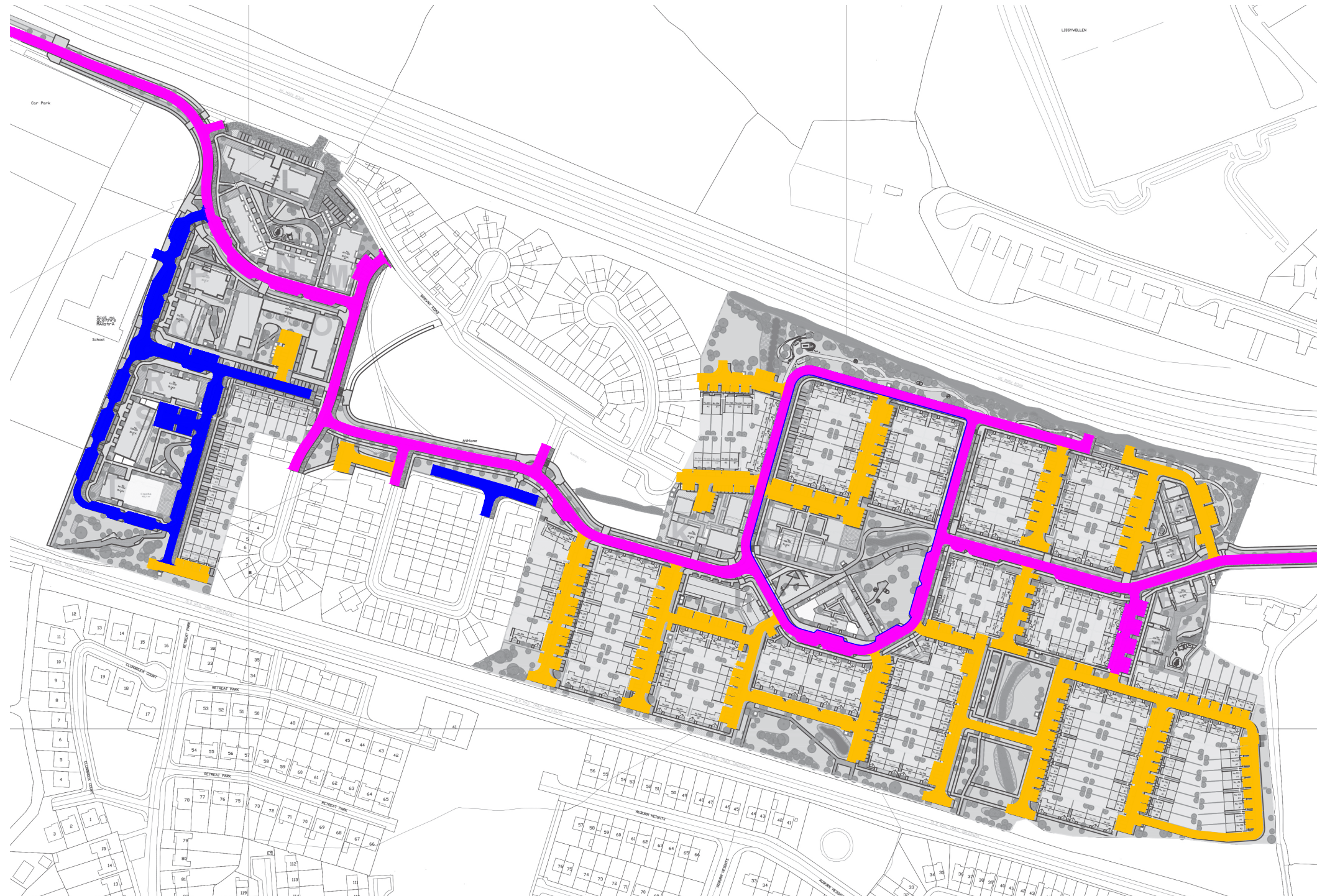
Access junction between existing road, old rail greenway, and the proposed development.



Parkland style landscape with tree clusters of medium to large trees incorporating large sweeps of bulb planting.



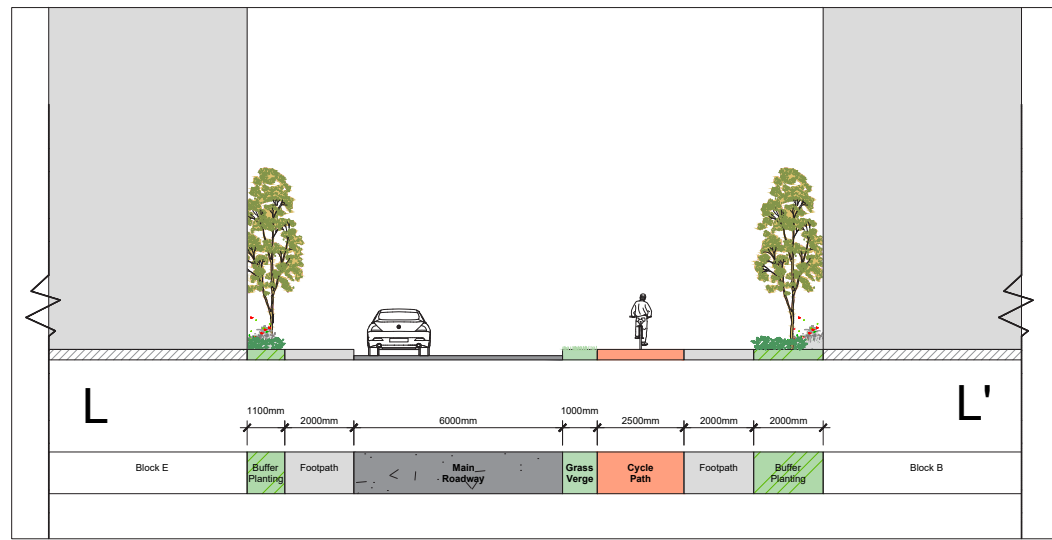




- Lissywollen Avenue
- Secondary Road
- Tertiary Road - Homezone



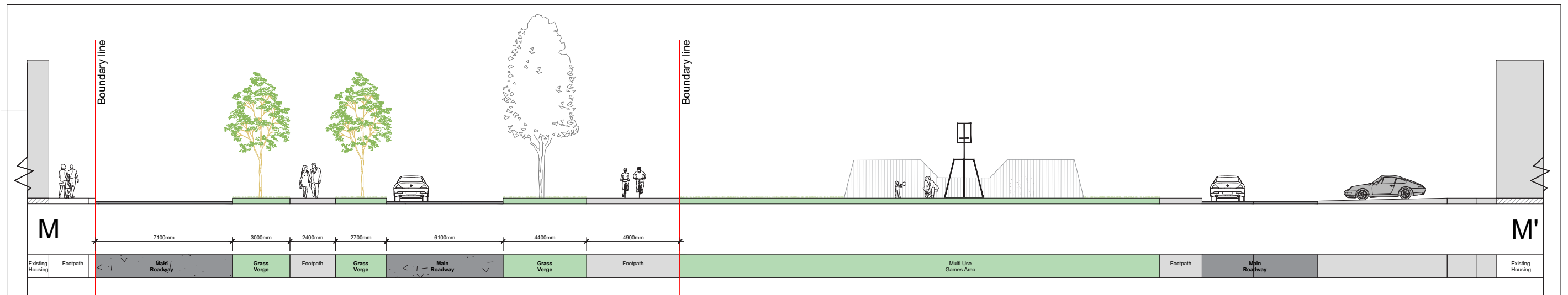
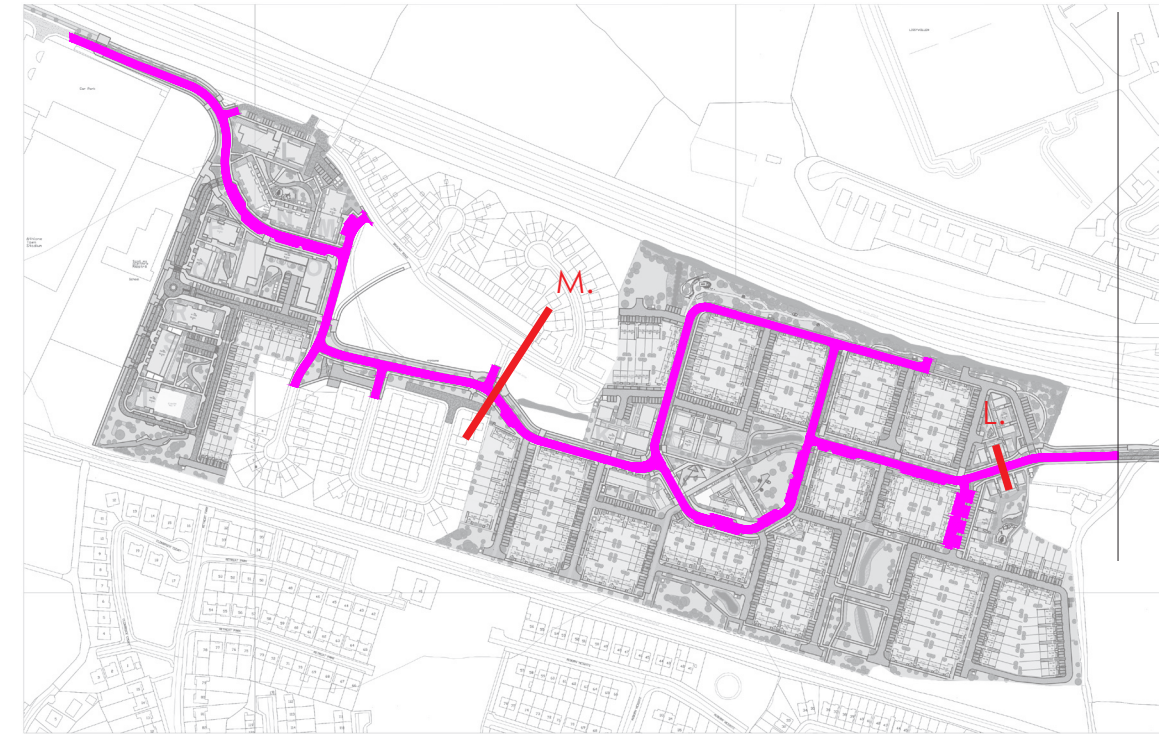




1. Defensive Planting Paths & Road

### Typology

- Public path
- Cycleway
- Public Tree (open space side)
- Private Tree (house side)



2. Integration with existing open space





## Central Urban Plaza

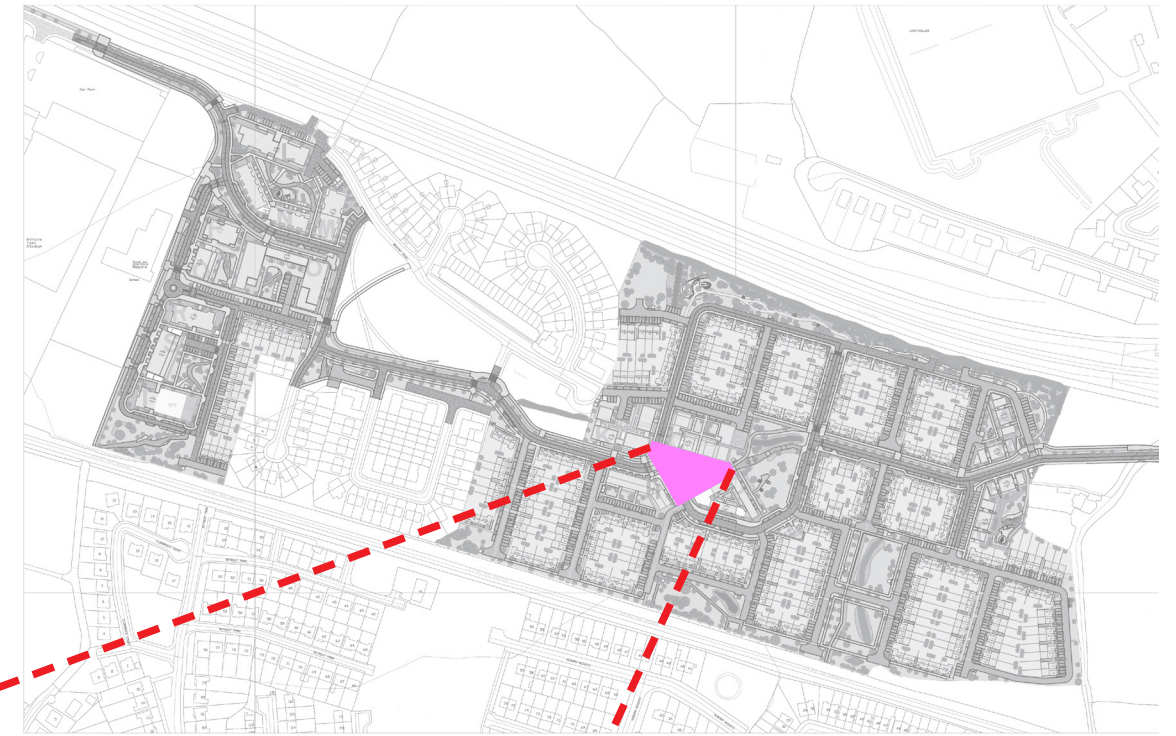
The Village centre incorporates residential housing with a community hub around a formal plaza area, which acts as a focal point for the entire development.

A palette of high quality landscape materials has been suggested in order to enhance the pedestrian area. Changes of landform add interest and help delineate the different congregation spaces.

A variety of seating and gathering points are an integral part of the proposal. These attractive surface treatments are accompanied with natural and formal tree and shrub planting to soften the appearance of the areas, with proposed pollinator species used to bring biodiversity into this space.



Paving to Street



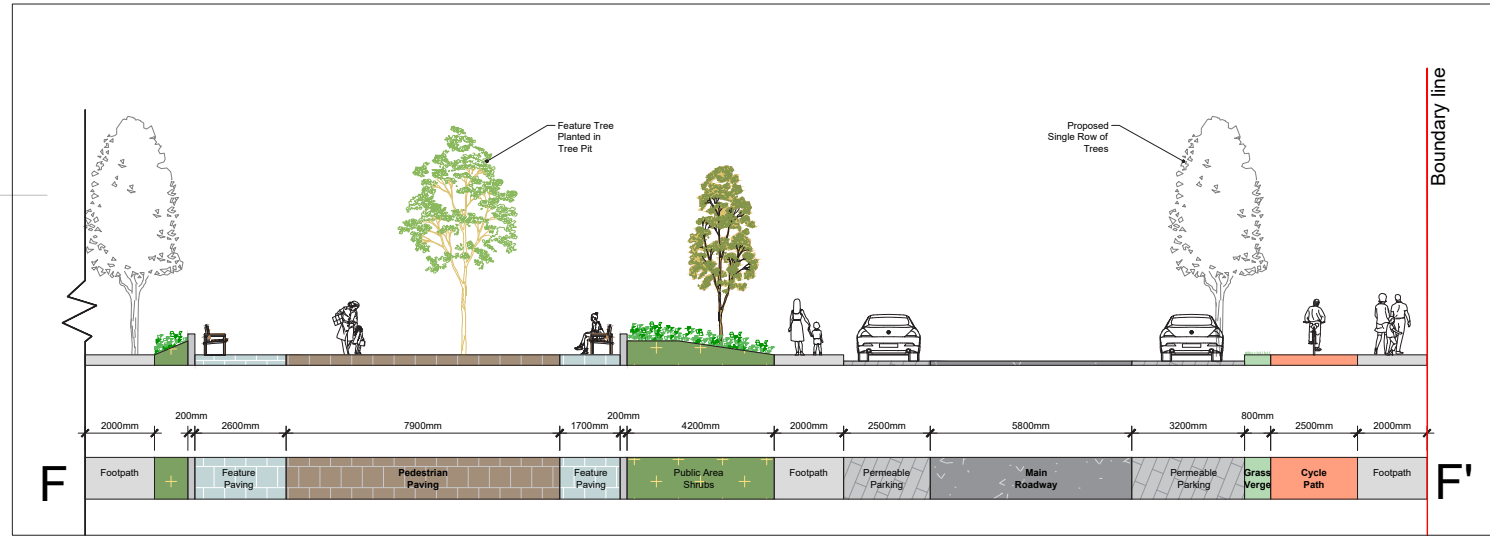
- Cycle Route
- Circulation Path
- Terrace Seating
- Raised Planters
- Paved Surface - Pedestrian Plaza
- Raised Table - Traffic Calming





# Road Treatments

## Secondary Road Network

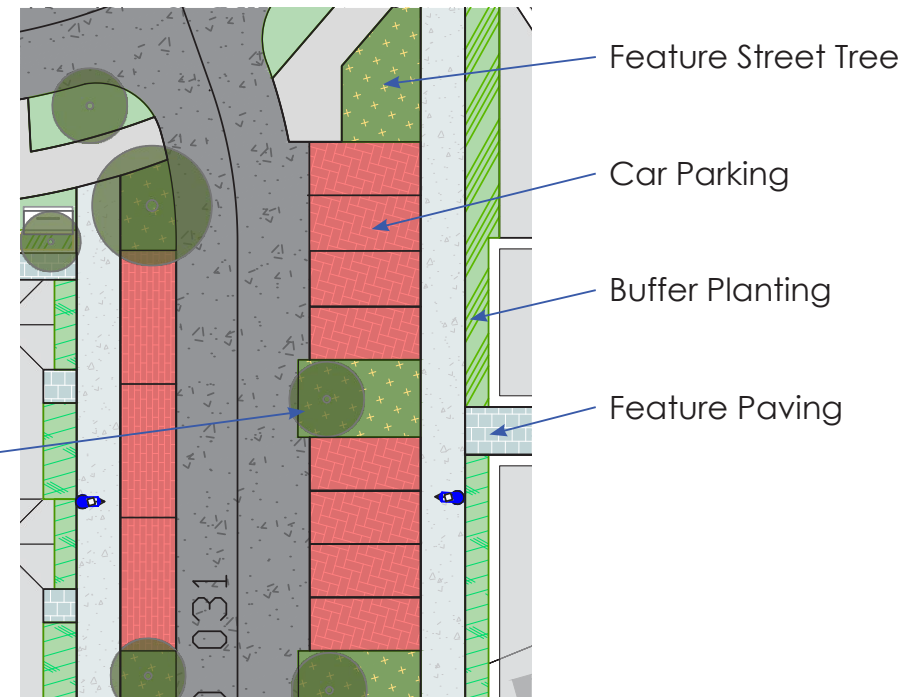
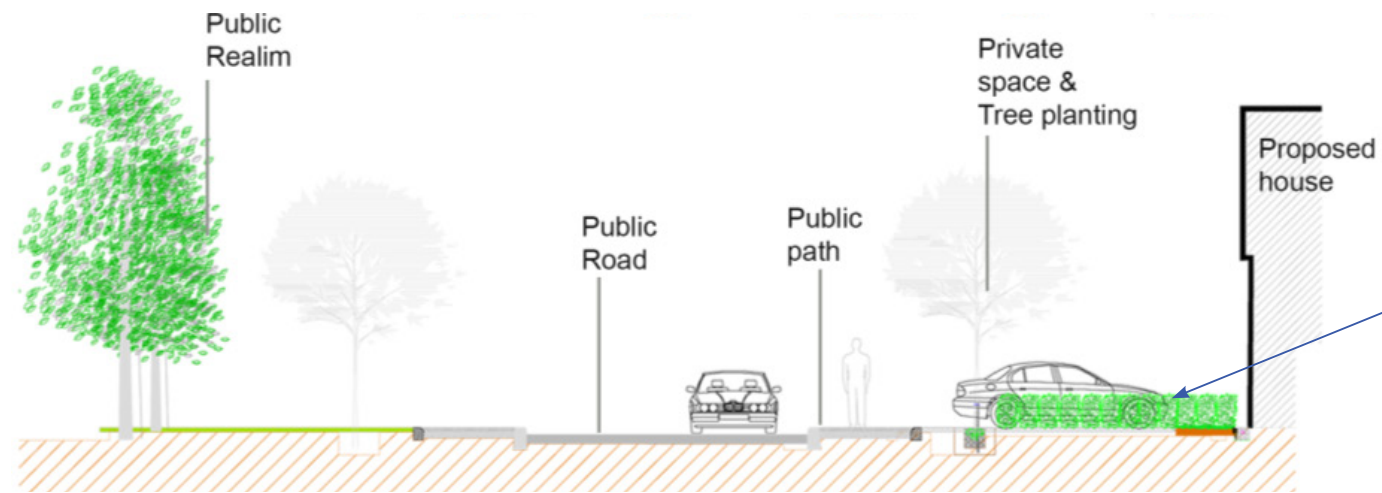


Street Tree



Hedge

- Public path (on both sides of road)
- Tree – in Public Space





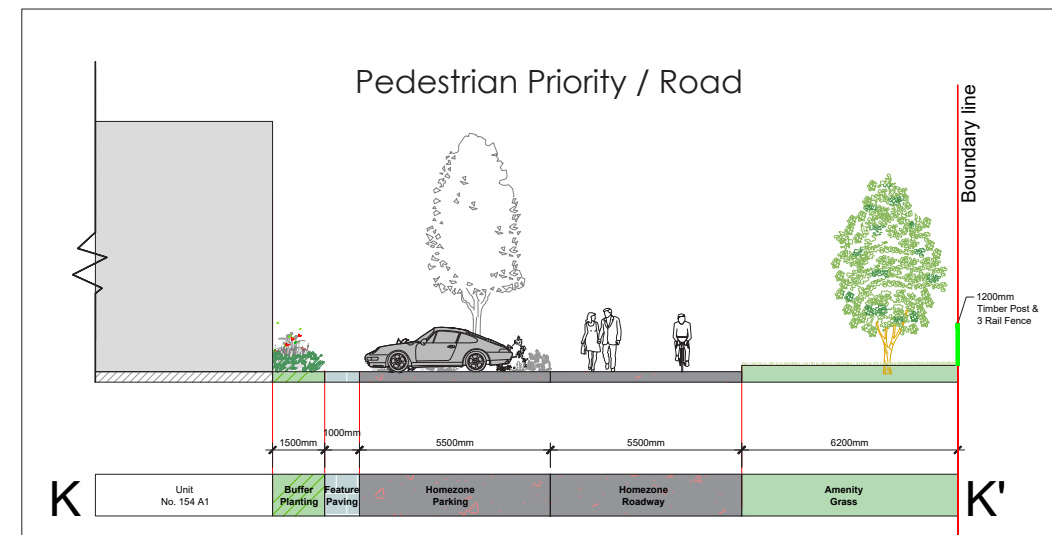
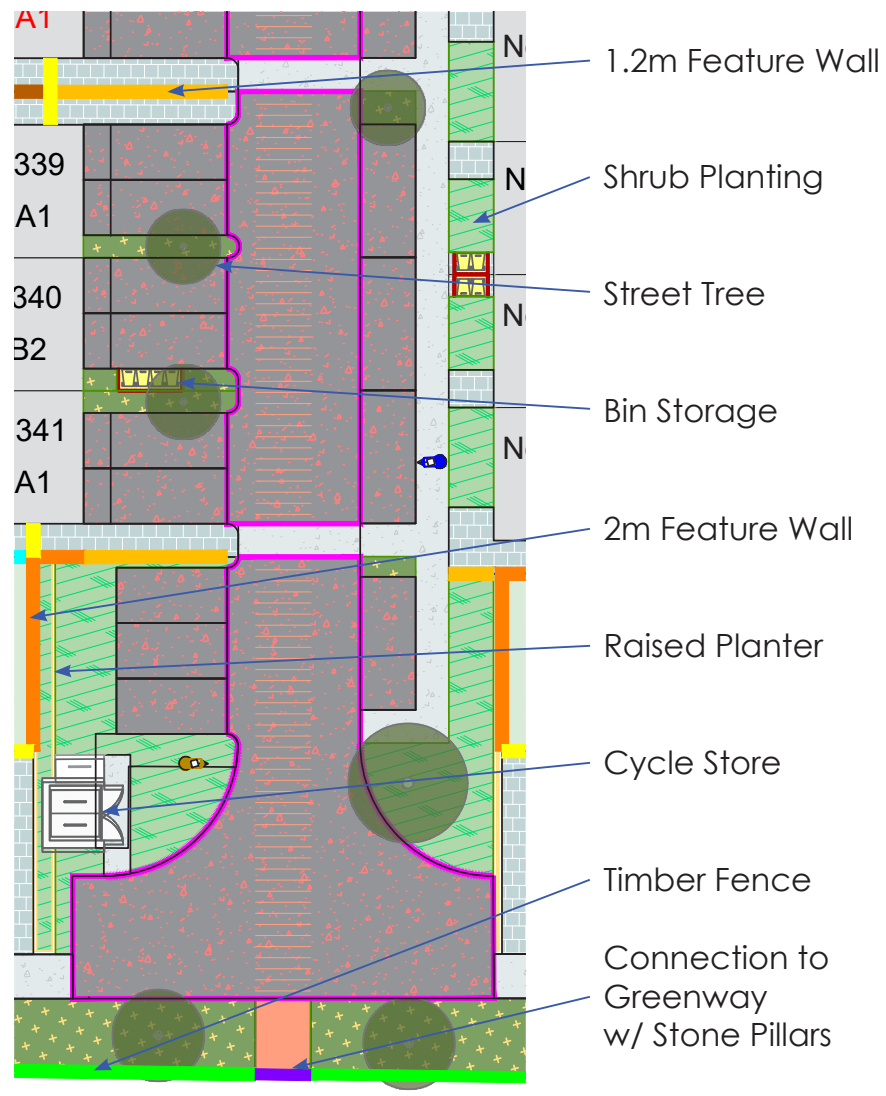
## Homezone / Homezone Areas



Homezone



Homezone Shared Surface



- Shared surface
- Pedestrian priority
- Tree in Public realm
- Path & road at same level





# Open Spaces Categories



## Public Park / Open Spaces

A range of high quality Public Open Spaces have been proposed to cater for the recreational and amenity requirements of future residents within the Plan lands. The Public Open space have been developed with proposed extensive path systems that are organic in style. We have proposed native woodland tree planting, native transplants & a wild flower meadow mix to help create a natural habitat area.

Total Developable Area :  
13.64 hectares

16% Open Space



A. Primary – Class 1 - Parkland / Habitat Buffer - 11,769



B. Secondary – Class 2 – 4,259m<sup>2</sup>/0.42 hectares



A. Primary – Class 1 - Urban Plaza - 1,127m<sup>2</sup>/0.11 hectares



C. Tertiary – Communal – 5,422m<sup>2</sup>/0.54 hectares





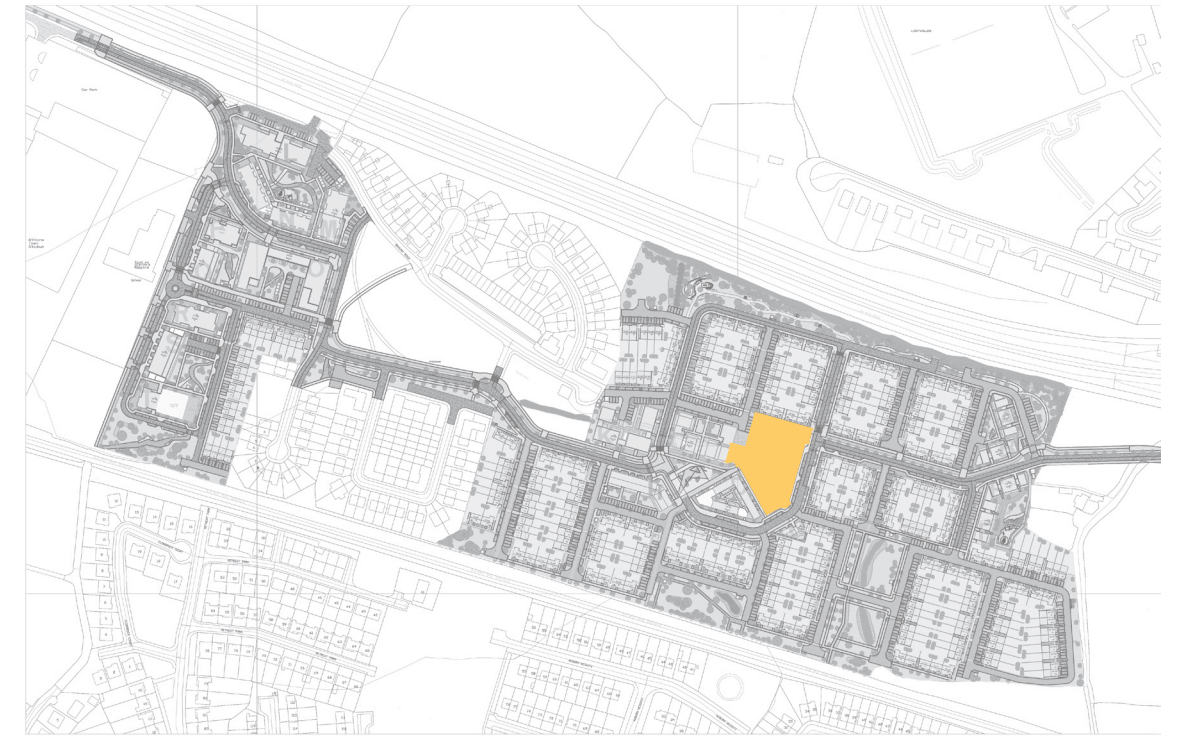
# Hierarchy of Open Spaces



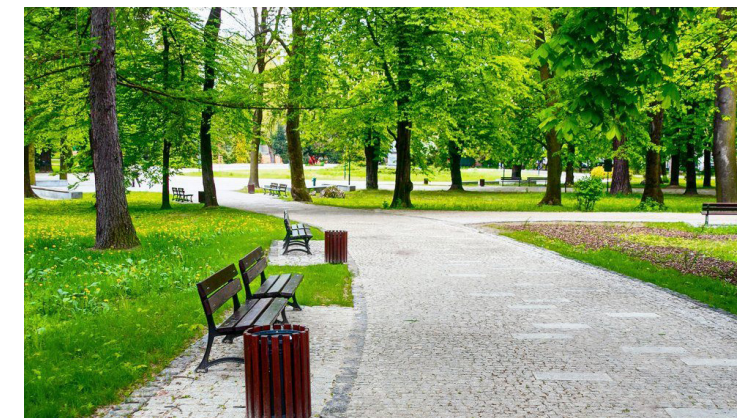


## Parkland

The central space is open and grassy, defined by paths and semi-mature trees, allowing visibility through the park. The open spaces allow for active recreation and passive uses, creating a green focal point for the development. The park has more active elements to the east, including a natural play area and a multi-use games area with low observation mounds to the north and south.



- Cycle Route
- 1.2m bow top railing
- Existing Hedgerow
- Wild Flower Planting
- Bulb Planting
- Bench Seating
- Outdoor Gym Equipment

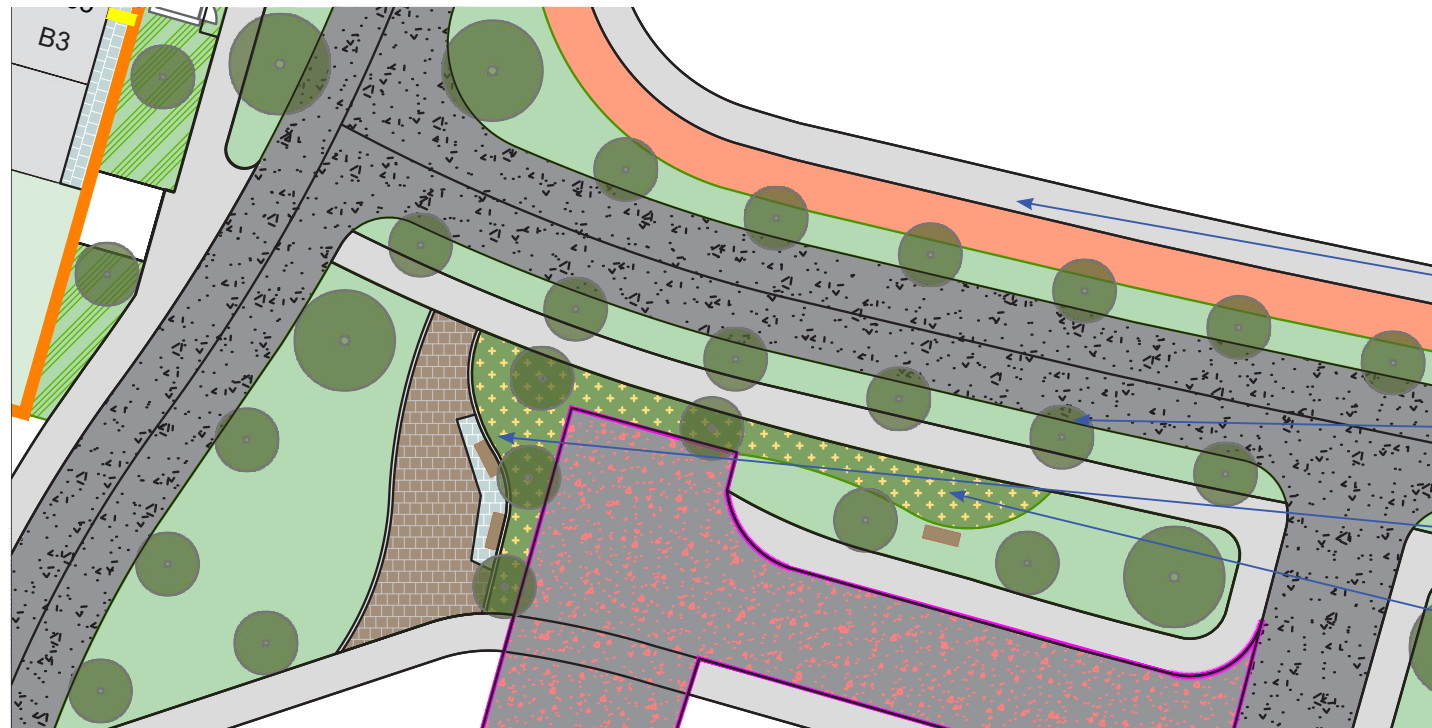
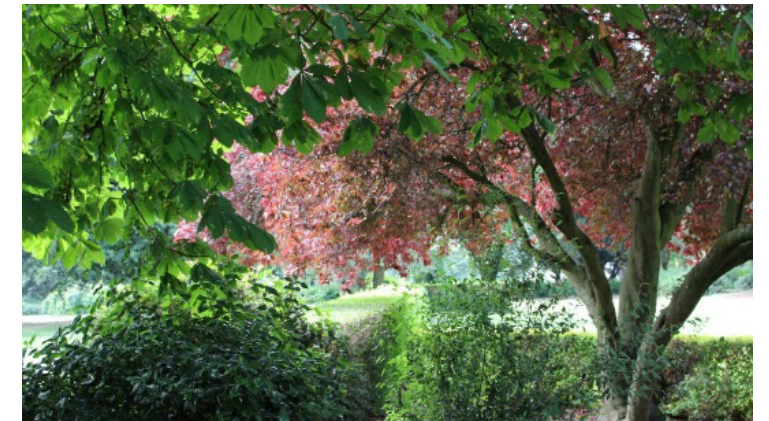




## Pocket Park 5



There are smaller open spaces throughout the development, including several pocket park. These smaller parks are green areas designed for as a visual amenity with trees and seating for neighbourhood use.



- Cycle Route
- Tree Lined Street
- Bench Seating
- Shrub Planting

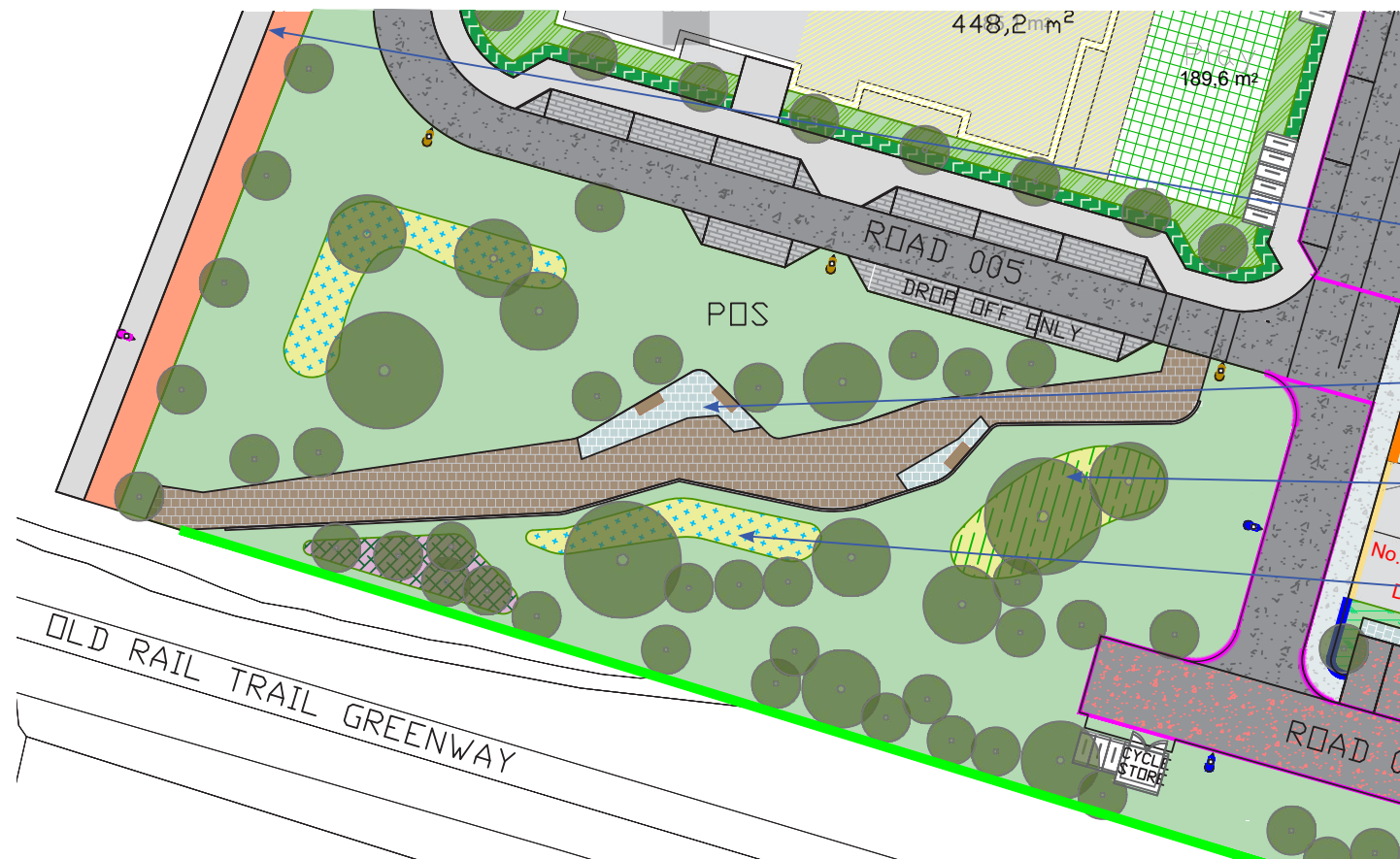




## Pocket Park 6



There are smaller open spaces throughout the development, including several pocket park. These smaller parks are green areas designed for as a visual amenity with trees and seating for neighbourhood use.



Cycle Route

Bench Seating

Wild Flower Planting

Bulb Planting





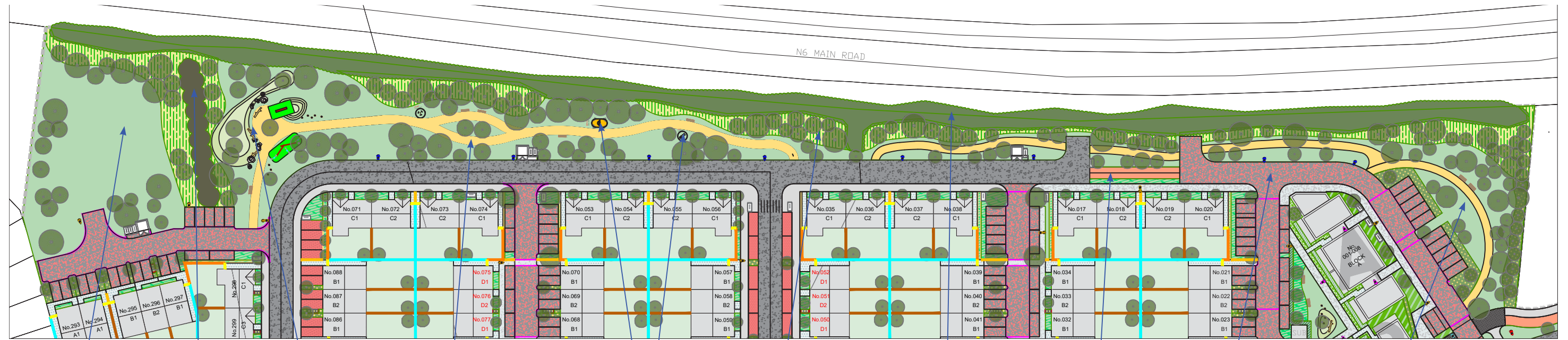
## Habitat Buffer

The northern boundary separates the site from the adjacent N6 motorway. The existing hedgerow is retained and supplemented with planting of wildflower meadows and trees, creating a significant buffer zone, habitat renewal, and visual screening.



Natural Play Ground

Woodland Walk



Kickabout area

Existing Hedgerow

Natural Play Ground

Woodland Walk

Outdoor Gym Equipment

Wildflower Buffer

Existing Hedgerow

Cycle Path

Homezone Streetscape

Community Amenity Area





## Community Open Space 6

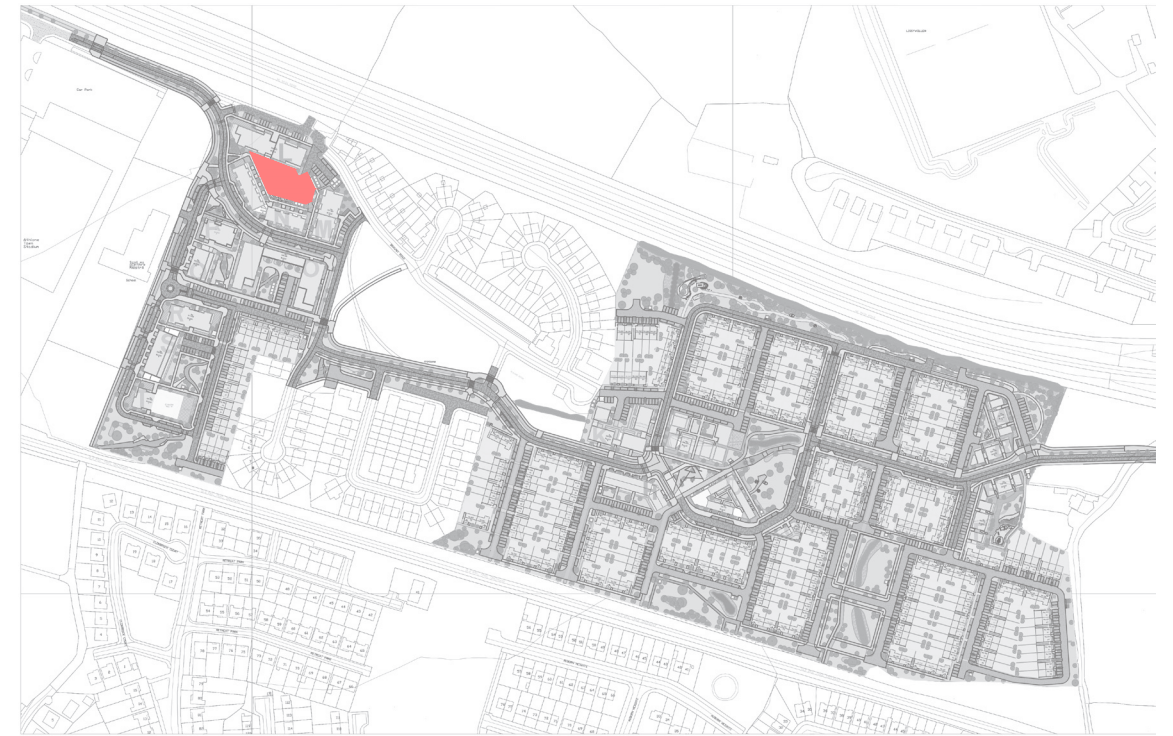
Communal courtyards and open spaces create a sense of place between the proposed apartment and duplex blocks, providing small play spaces, seating areas, and congregation points for other community activities. Defensive planting buffer the building edge, ensuring privacy and planting that is unique to these spaces.



Structured Play Ground



Communal Amenity Space



Feature Entrance Paving

Bench Seating

Circulation Path

Kickabout Area

Cycle parking

Junior Play Area

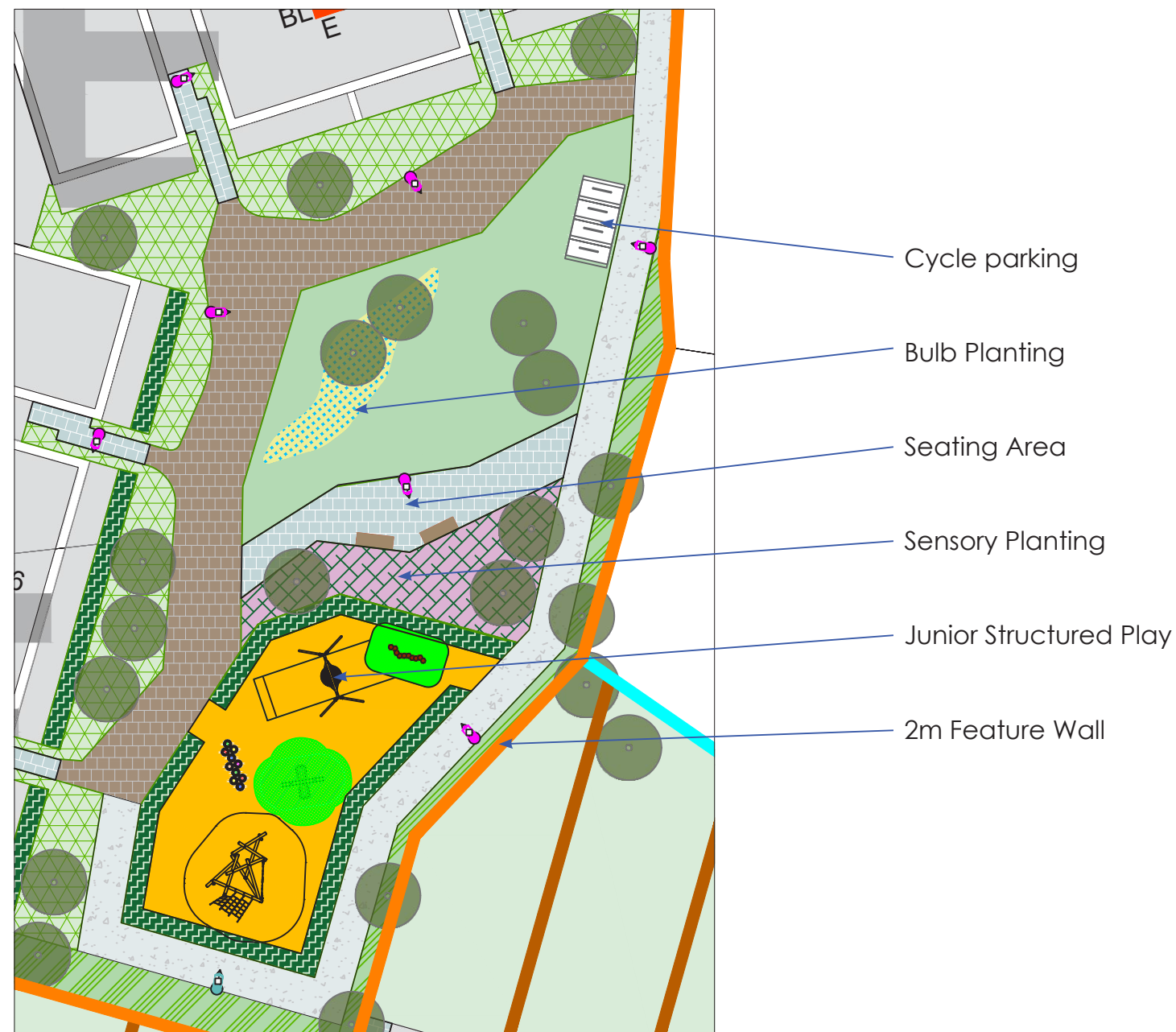
Defensive Planting





## Community Open Space 2

Communal courtyards and open spaces create a sense of place between the proposed apartment and duplex blocks, providing small play spaces, seating areas, and congregation points for other community activities. Defensive planting buffer the building edge, ensuring privacy and planting that is unique to these spaces.



Communal Play Space



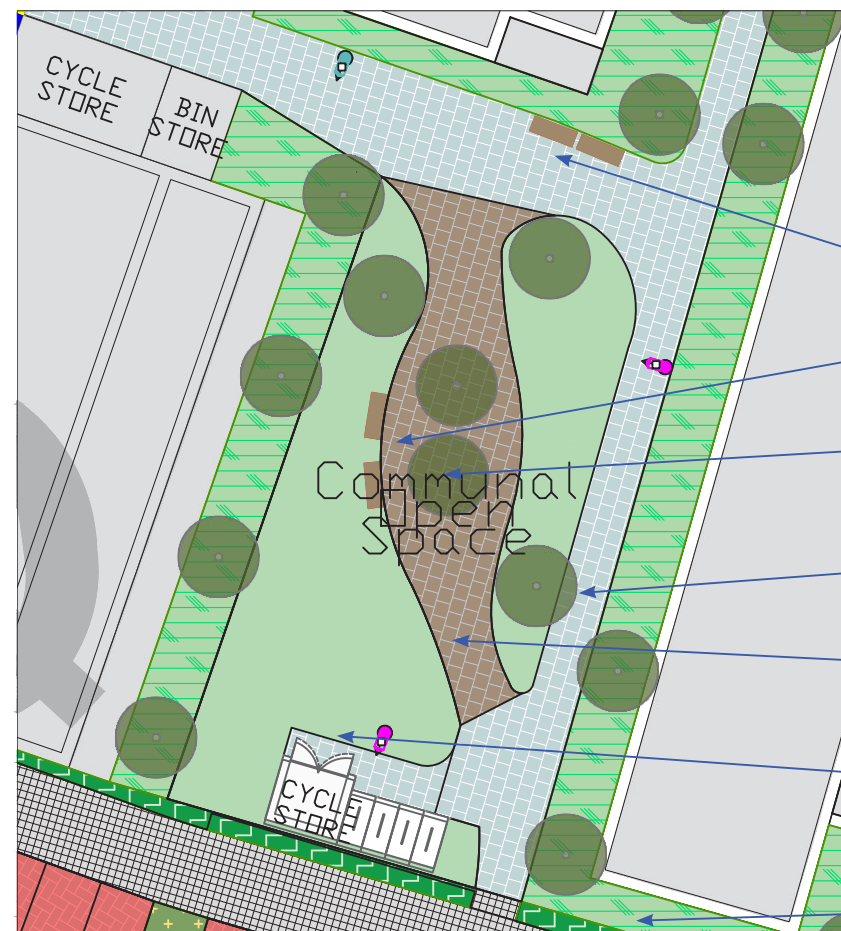


## Community Open Space 8 & 9

Communal courtyards and open spaces create a sense of place between the proposed apartment and duplex blocks, providing small play spaces, seating areas, and congregation points for other community activities. Defensive planting buffer the building edge, ensuring privacy and planting that is unique to these spaces.



### Communal Amenity Space



- Hedge Planting
- Seating Area
- Tree Pits
- Feature Paving
- PC Block Paving
- Kickabout Area
- 1.2m bow top railing

Resin Bound Surface





## Pocket Park 2



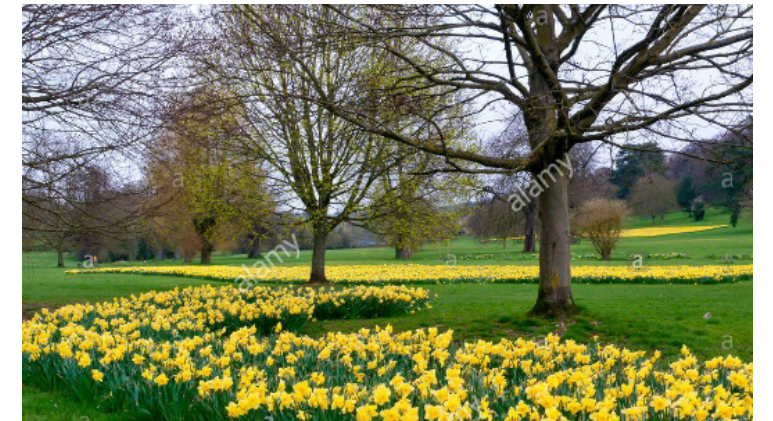
There are smaller open spaces throughout the development, including several pocket park. These smaller parks are green areas designed for as a visual amenity with trees and seating for neighbourhood use.



### Informal Kick About



- Existing Hedgerow
- Cycle Route
- Wildflower Meadow
- Play Area and Kick about space
- Bulb Planting
- Timber Post & 3 Rail Fence





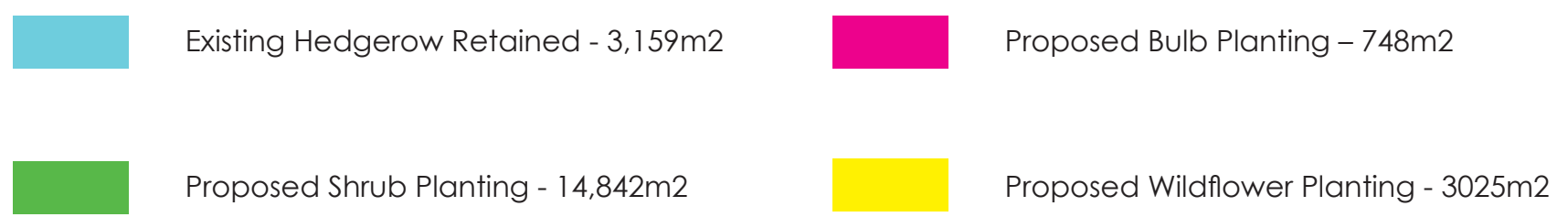
# Retained & Enhanced Biodiversity



Retention and enhancement of biodiversity ensures that the natural, cultural, and health requirements of communities are integrated into, and not compromised by, the new development.

This green infrastructure strategy follows an overarching strategy of protecting, creating, enhancing, and connecting the natural heritage and biodiversity value of the lands.

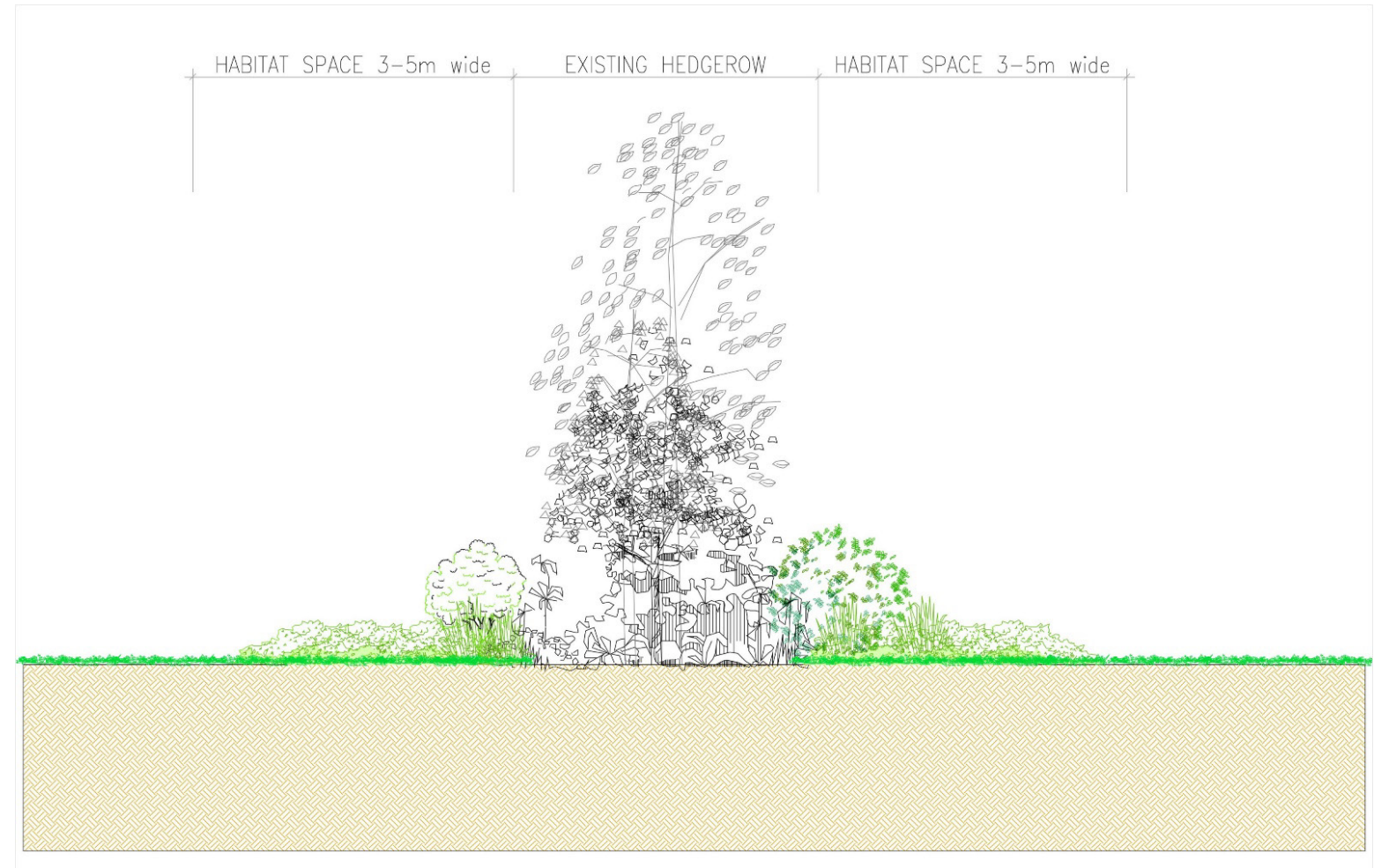
The provision of 1746no. trees, along with shrub, wildflower, and bulb planting, thread through and surround the built environment and connect to one another, maximising the environmental benefits and habitat creation.







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 Lissywollen. These areas will not be mown or sprayed so that wildlife can thrive uninterrupted by humans and create a stronger biodiversity within the development.





# Proposed Hard Landscape Elements

## Elements Palette

### Landscape Elements

Wooden seating element, some areas to incorporate lines of Yeats poems along side of bench



Hartecast HC2001S Bench  
- 1950x540x450mm

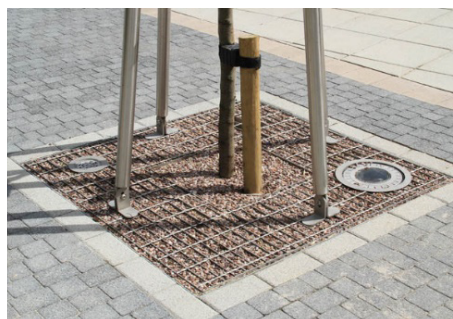
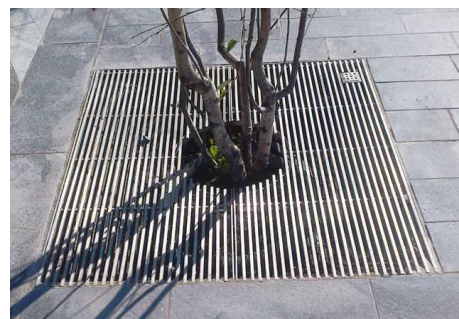


Flush Slipform  
Concrete Kerb



Sheffield Cycle Stands  
- 1000mm x 1000mm

### Tree Pit Grilles



## Paving Palette

### Feature Paving

Light coloured flags to maximum light within courtyards w/ contrasting paving blocks



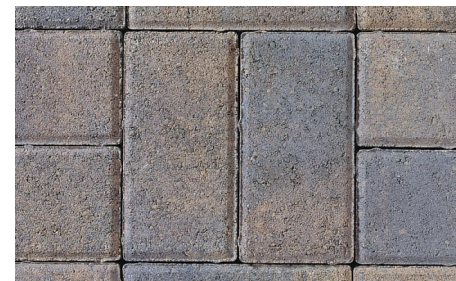
Tobermore City Pavers  
- Graphite 300x150x100mm



Tobermore City Pavers  
- Silver 300x150x100mm

### Traffic Area & Parking

Permeable Surface  
dim. 200x100x60mm with contrasting parking dividers



Tobermore Hydropave  
Pedesta Pavers - Bracken



Tobermore Hydropave  
Pedesta Pavers - Heather

## Surface Palette

### In-situ Surfaces



Ballylusk Dust Path  
(pedestrian path)



Coloured tarmac  
(cycle path)



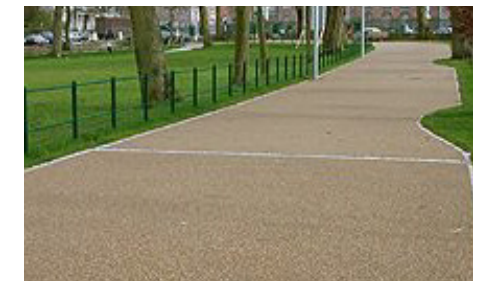
Brushed Concrete with  
trowel edge finish (streets)

### Resin Bond Paths

Resin-bound surfacing for high impact areas across the development



Ballylusk Dust Path  
(pedestrian path)



Coloured tarmac  
(cycle path)



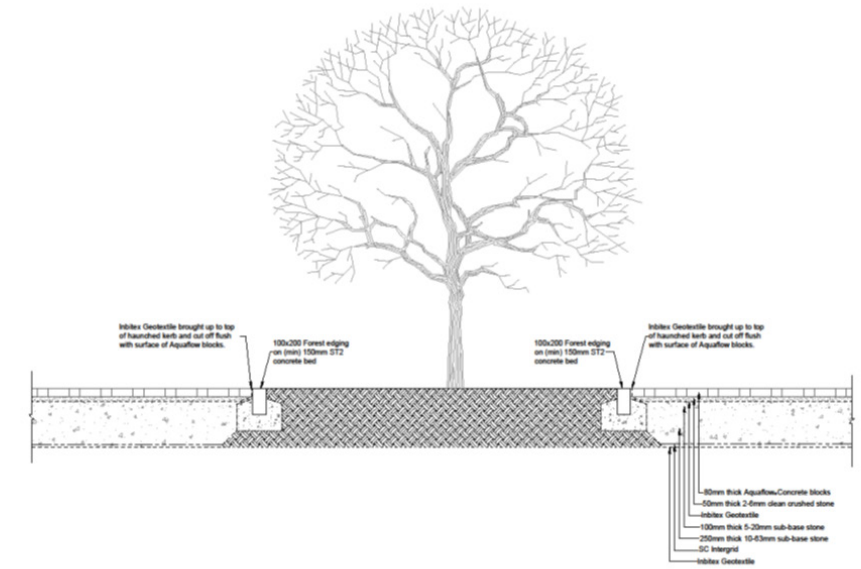
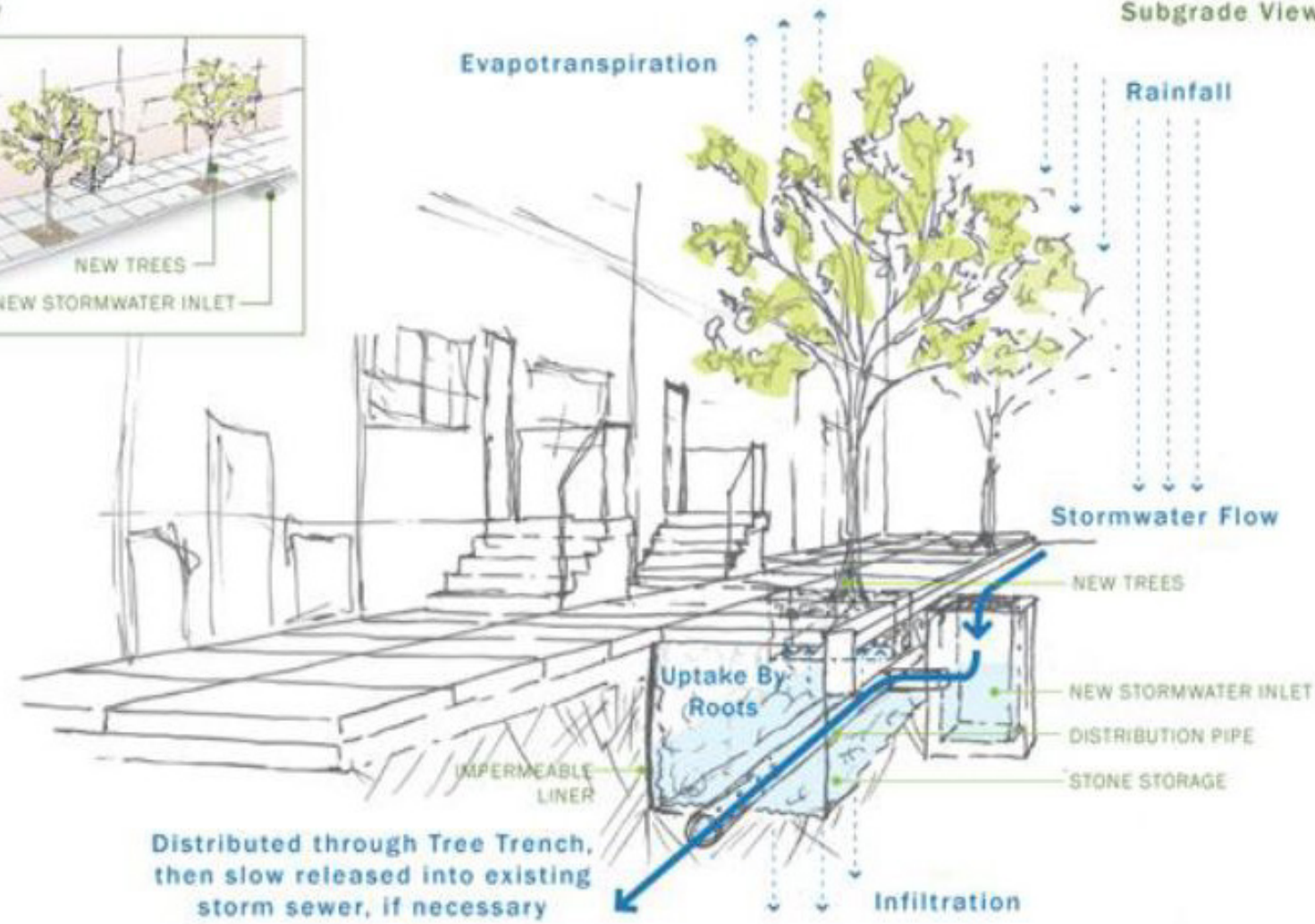


### GREEN STREETS: STORMWATER TREE TRENCH

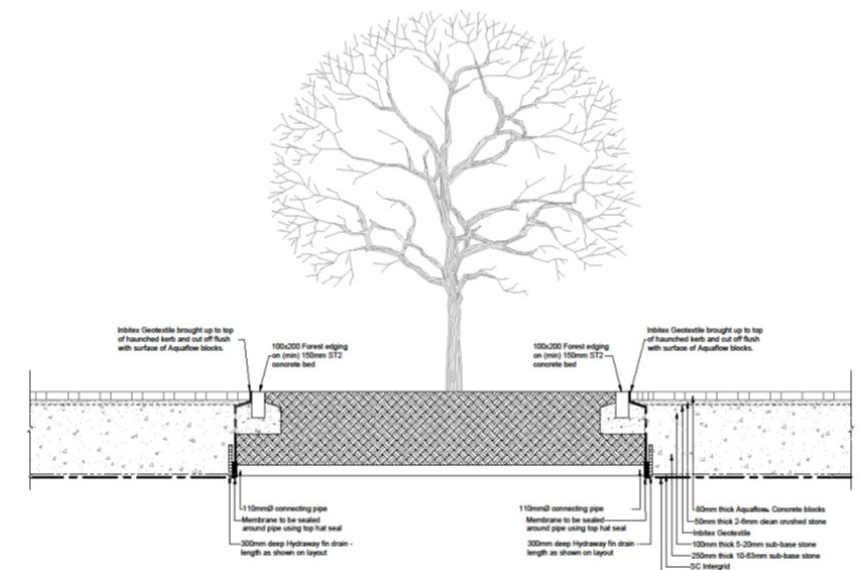
Street View



Subgrade View



TYPICAL SECTION THROUGH FORMPAVE AQUAFLOW INFILTRATION SYSTEM INCORPORATING LANDSCAPED AREA



TYPICAL SECTION THROUGH FORMPAVE AQUAFLOW ATTENUATION SYSTEM INCORPORATING LANDSCAPED AREA AND CONNECTING PIPE





Continuous tree pit  
(UK)



Suds retrofit in an urban street.  
Source: Susdrain 2011  
[www.susdrain.org](http://www.susdrain.org)





# Proposed Tree Planting

## Open Space / Parkland Trees

Planting species and sizes were selected for their visual interest, hardiness, and the positive ecological qualities.

## Street Trees



Quercus robur 'Koster'



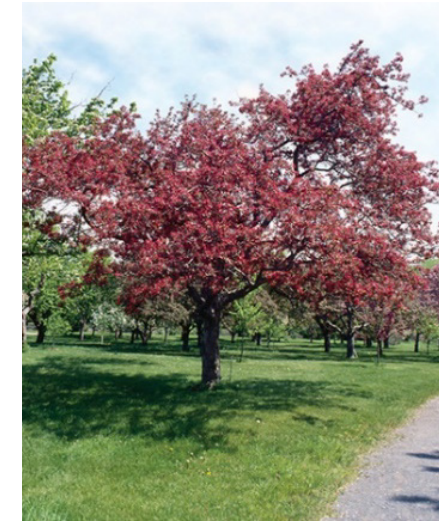
Tilia cordata 'Greenspire'



Tilia Tomentosa 'Brabant'



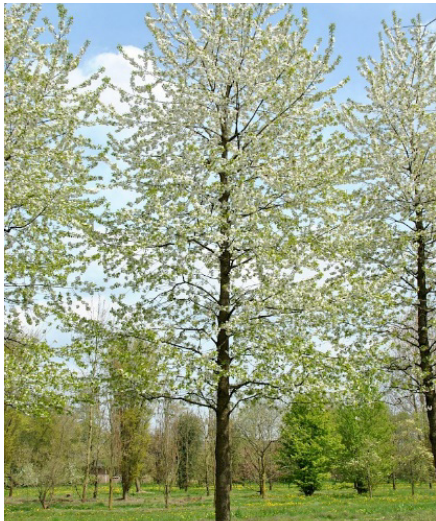
Sorbus aucuparia



Malus 'John Downie'



Platanus x acerifolia



Prunus avium 'Plena'



Betula pendula



Amelanchier lamarckii



Carpinus betulus Fastigiata'



Acer griseum

- Acer campestre 'Elsrijk'
- Acer platanoides 'Columnare'
- Acer griseum
- Alnus glutinosa\*
- Amelanchier lamarckii
- Betula pendula\*
- Carpinus betulus 'Fastigiata'
- Corylus avellana\*
- Platanus x acerifolia
- Prunus avium 'Plena'
- Sorbus aria
- Sorbus aucuparia
- Tilia Tomentosa 'Brabant'
- Quercus robur 'Koster'

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





# Proposed Planting

## Residential Edging Buffer



Athyrium filix-femina

- Viburnum x bodnantense 'Dawn'
- Viburnum opulus
- Cornus sanguinea
- Phalaris feeseey
- Calamagros 'Karl Foerster'
- Miscanthus sinensis 'Gracillimus'
- Lonicera pileata
- Helleborus foetidus
- Cornus alba
- Erica cinerea
- Heuchera 'Palace Purple'
- Artemisia vulgaris
- Athyrium filix-femina
- Helichrysum italicum

## Shrub Planting: Front of Houses



Astilbe 'Rheinland'

- Astilbe 'Rheinland'
- Hipericum 'Hidcote'
- Viburnum davidii
- Lavandula 'Hidcote'
- Sarcococca humilis
- Carex oshimensis 'Evergold'
- Rosmarinus officinalis 'Roseus'
- Lonicera pileata
- Prunus Laurocerasus "prostratus"

## Undergrowth Planting Shrub



Rosmarinus officinalis 'Roseus'

- Sambucus nigra
- Rosmarinus officinalis 'Roseus'
- Ilex crenata 'Helleri'
- Heuchera villosa
- Mentha x piperita
- Stachys byzantina
- Artemisia 'Powis Castle'
- Athyrium filix-femina
- Helichrysum italicum
- Hebe x franciscana



Cornus sanguinea



Erica cinerea



Carex oshimensis 'Evergold'



Viburnum davidii



Sambucus nigra



Heuchera villosa

## Hedge Planting



Ligustrum Ovalifolium



Elaeagnus x ebbingei



Ilex aquifolium

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





# Proposed Bulb Planting



Daffodil – Narcissus 'Early Sensation'



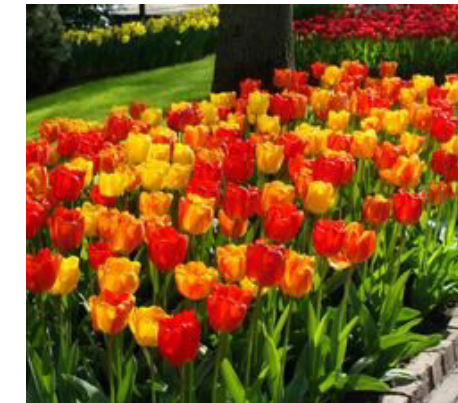
Daffodil – Tamara



Crocus tommasinianus



Daffodil – Dutch Master



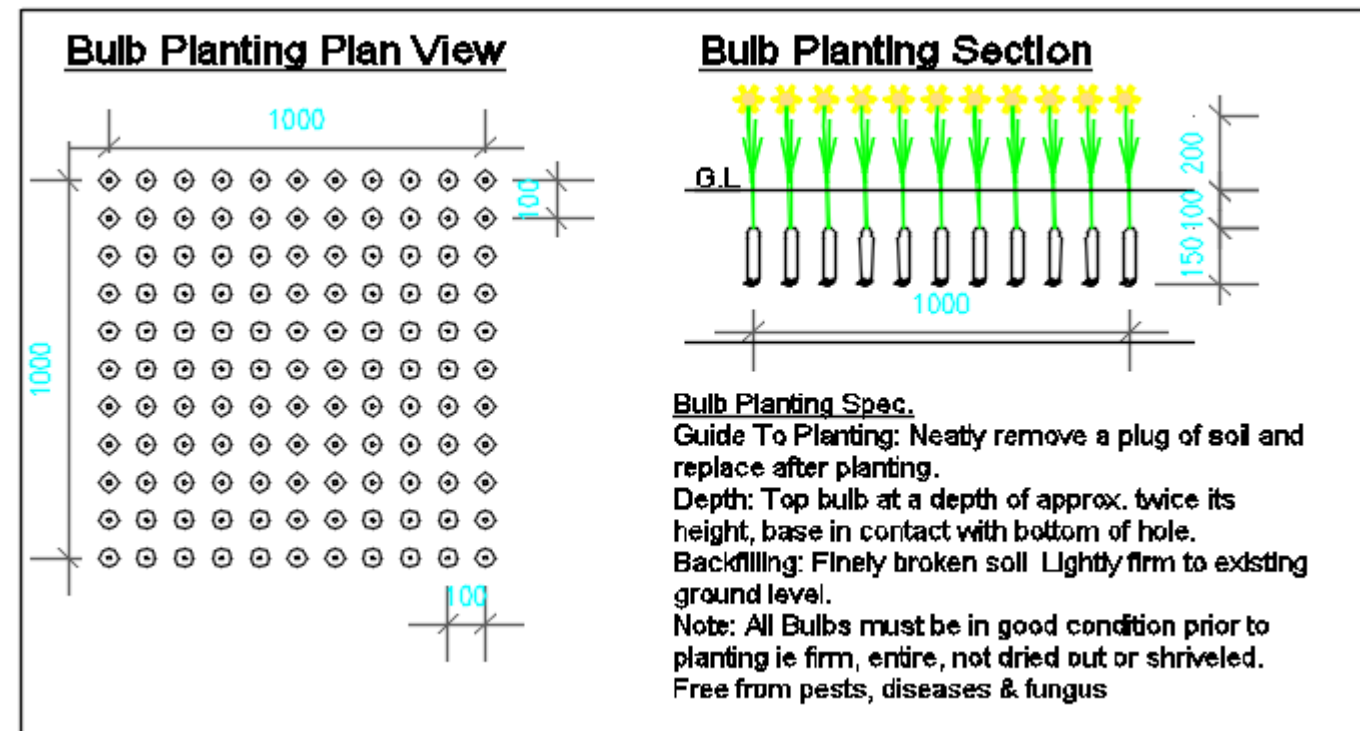
Tulip - Apeldoorn



Camassia – Leicht caerulea



Allium - Sensation

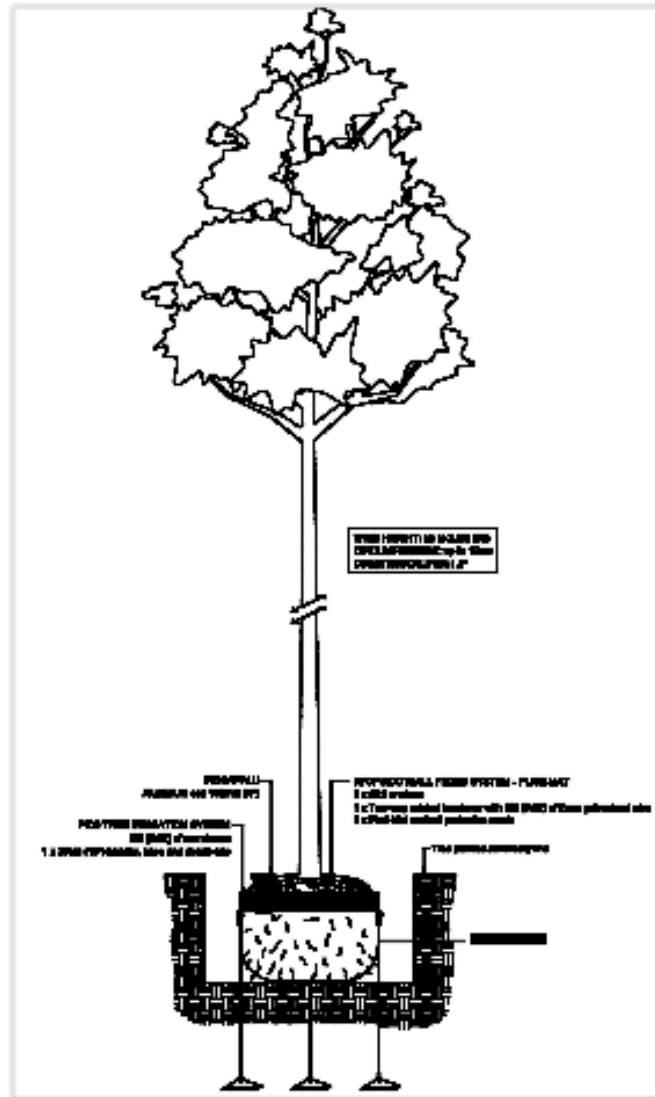


Proposed Bulb Planting					
Name	Time of Flowering	Variety	Bulb Size At Planting	Planting Guide	Plant Height
A - Daffodil	January	Early Sensation	14-16cm	15cm Deep, 50/m <sup>2</sup>	20cm
B - Daffodil	February	Tamara	14-16cm	15cm Deep, 50/m <sup>2</sup>	20cm
C - Crocus	February	tommasinianus	14-16cm	10cm Deep, 15cm Apart, 50/m <sup>2</sup>	7-15cm
D - Daffodil	March	Dutch Master	14-16cm	15cm Deep, 50/m <sup>2</sup>	20cm
E - Tulip	April	Apeldoorn	12-14cm	15cm Deep, 10cm Apart, 50/m <sup>2</sup>	20-45cm
F - Camasisa	May	Leicht Caerulea	14-16cm	10cm Deep, 20cm Apart, 50/m <sup>2</sup>	45cm
G - Allium	June	Allium sensation	10-12cm	15cm Deep, 15cm Apart, 50/m <sup>2</sup>	100cm

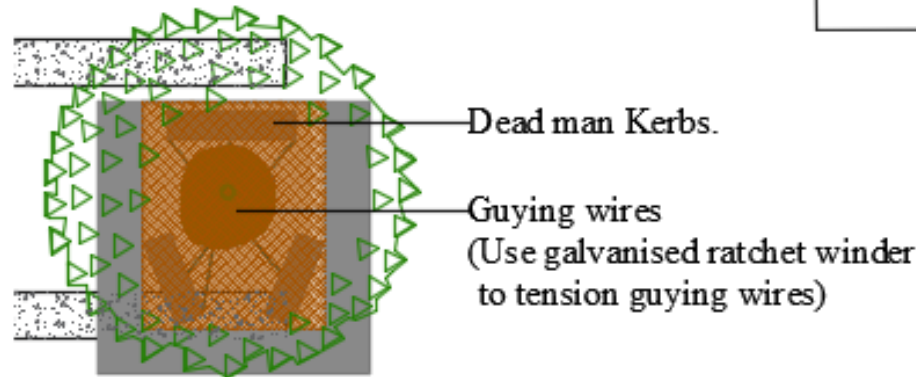




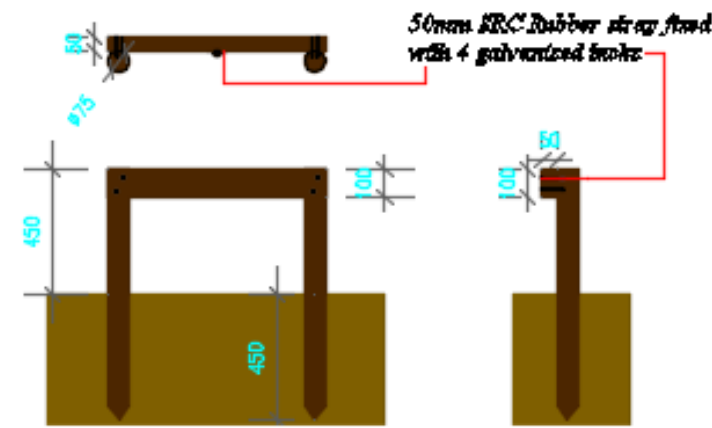
## Plati-Mat Rootball Tree Anchoring Detail (For Podium Planters)



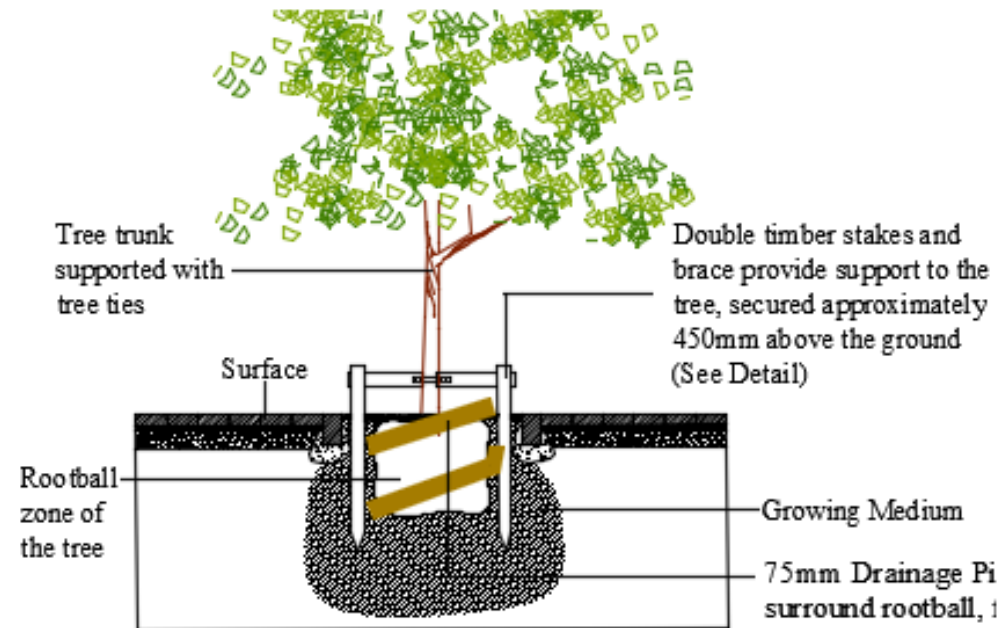
Plati-Mat Plan View Scale (1:50)



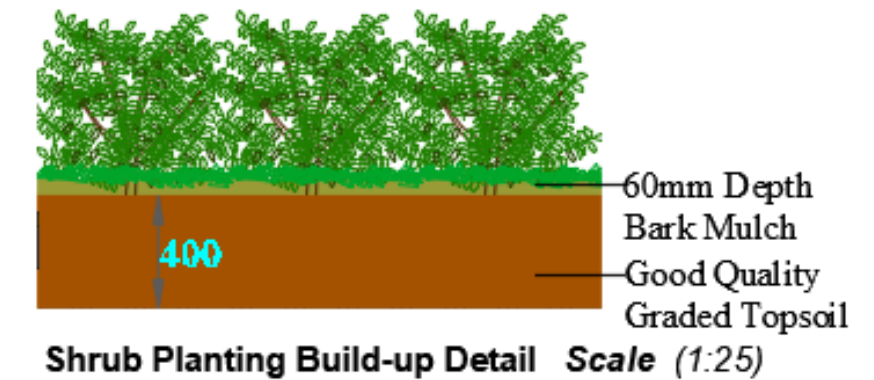
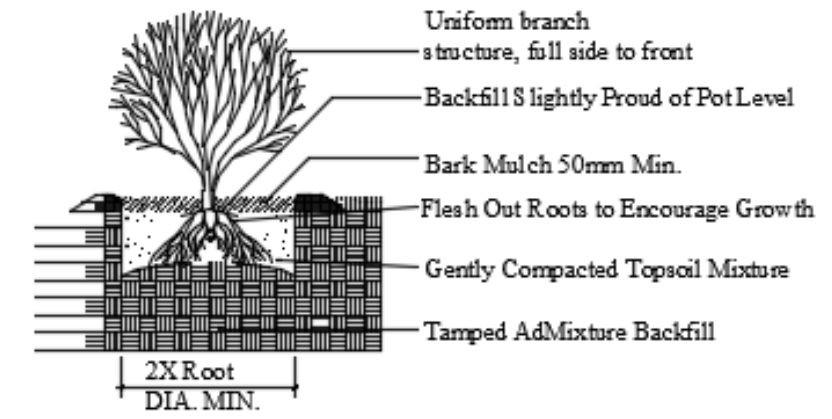
## Typical Double Tree staking Detail Scale (1:25)



## Tree Planting Detail, 12-14cm girth and greater - (for trees outside Podium Area)



## Shrub Planting Detail



### 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).

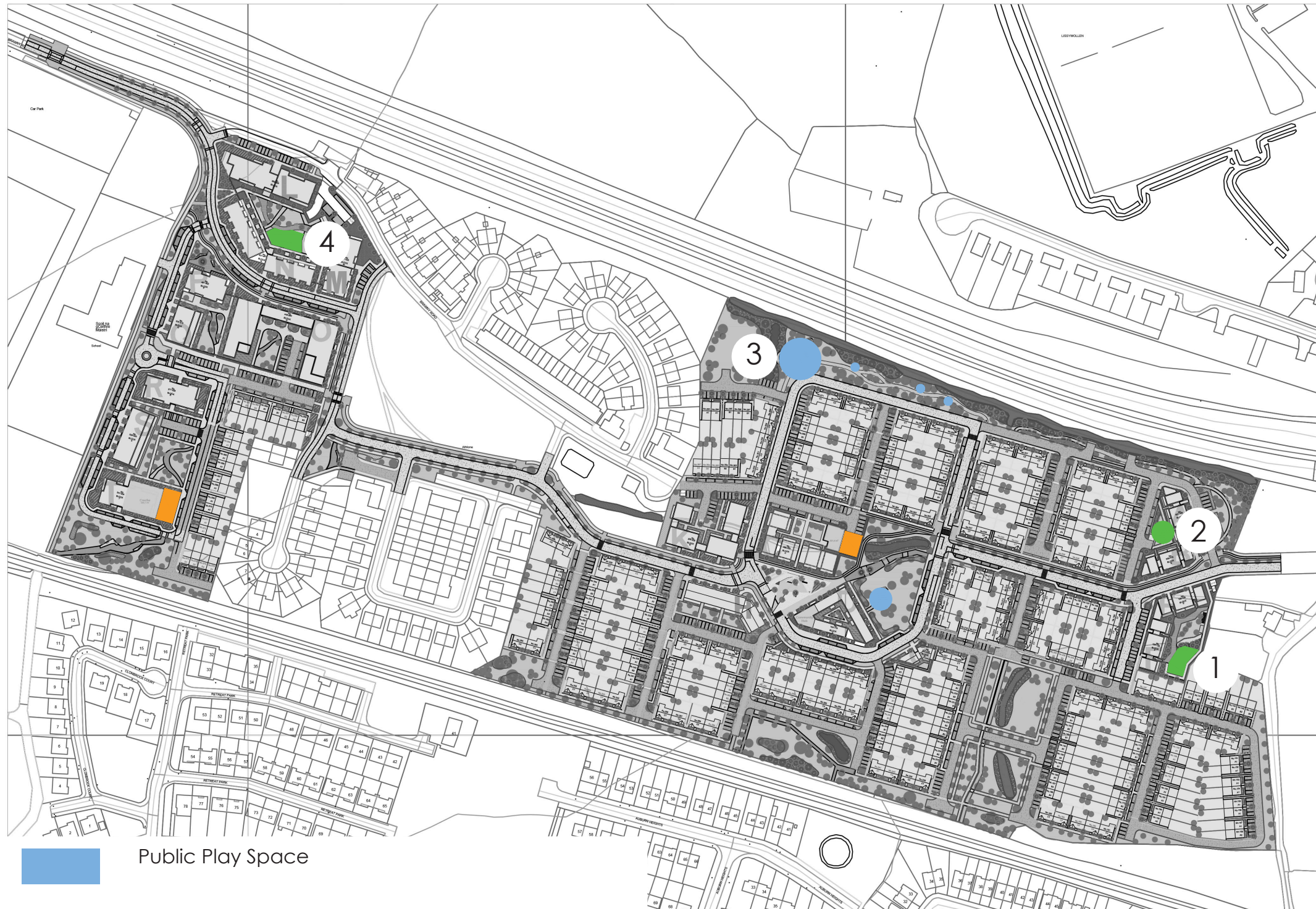
ALL NEW TREE PLANTING SHALL BE POSITIONED IN ACCORDANCE WITH THE REQUIREMENTS OF TABLE 3 OF BS 5837: 2005 TREE IN RELATION TO CONSTRUCTION RECOMMENDATIONS, WHICH SPECIFIES MINIMUM DISTANCES BETWEEN NEW PLANTING AND STRUCTURES.

### 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 SEEDING 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.







1. Structured Junior Play - 210m<sup>2</sup>  
(3+ years)
  - Seesaw
  - Climbing pyramid
  - Stepping logs
  - Hop skotch
  - Bird's Nest Swing
2. Incidental Play Area - 160m<sup>2</sup>  
(3+ years)
  - Grass Mounding
  - Timber log
  - Stepping logs
3. Natural Play Area - 600m<sup>2</sup>  
(3+ years)
  - Grass Mounding
  - Timber log
  - Natural Stepping Stone
  - Stepping logs
  - Double Balancing Beam
  - Embankment slide
4. Structured Junior Play - 250m<sup>2</sup>  
(3+ years)
  - Seesaw
  - Climbing pyramid
  - Stepping logs
  - Bird's Nest Swing

There are also several outdoor gym equipment and kickabout areas scattered around the development in the open space areas.





## Equipment Palette

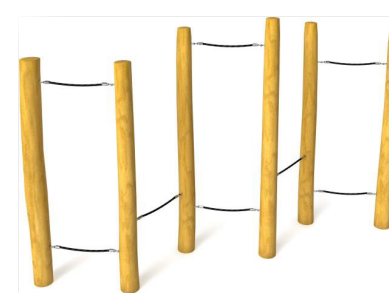
### Junior Play - Under 5 years of age

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



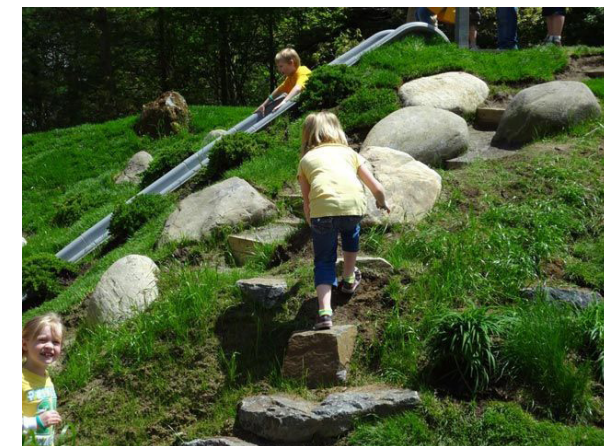
### Junior Play - Over 6 years of age

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



### Adult Exercise 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.



Natural playgrounds stimulate a child's imagination and creativity, and integrate into level changes and the natural environment.





# Boundary Treatments



Concrete Post & Wooden Panel Fence



Parkland Railing & Hedge



Double Sided Treated Wooden Panel Fence with internal courtyard post & gravel board



Dash & Brick Pier



Dash & Rendered Pier



Stone Feature Wall



Double Sided Treated Wooden Panel Fence to Boundary & Existing Hedge

