



- KEY:**
- Softworks**
- Red line boundary
  - Shrub and perennial planting
  - Ornamental hedge planting
  - Ornamental gravel
  - Bulb planting in lawn
  - Bioretention matrix planting
  - Bioretention central shrubs
  - Native hedge planting
  - Emorsgate Seeds EL1 Flowering Lawn Mixture
  - Emorsgate Seeds EM2 Standard General Purpose Meadow Mixture
  - Shade-tolerant wildflower mix to not include any toxic species
  - Emorsgate Seeds EM8 Meadow Mixture for Wetlands for attenuation basin base.
  - Emorsgate Seeds EM4 Meadow Mixture for Clay Soils
  - Proposed tree
  - Proposed specimen tree
  - Retained existing tree canopy
  - Retained existing hedgerow
  - Removed vegetation
  - Root protection area
- Hardworks**
- Buff block paving (subject to Highways approval)
  - Grasscrete parking spaces
  - Hoggin path
  - LEAP surface to be specified by play designer
  - Other hard surfaces to be determined by drainage requirements
- Street Furniture**
- Timber knee rail
  - Timber bench

**NOTES:**

NOT FOR SITE PURPOSES: This drawing is a general arrangement plan only and is not intended for use for construction.

SCALE: As indicated on this drawing.

SETTING OUT: All setting out levels, dimensions to be agreed on site. Do not use the information on this drawing without checking all dimensions on site. Any discrepancies between drawings, specifications and site values are to be reported to The Urbanists. Order of construction and setting out is to be agreed on site.

CHECK: This drawing must be the latest revision, read in conjunction with all other drawings, details, specifications and schedules. All dimensions are in millimetres unless otherwise stated. Where any contradiction or uncertainty arises between the drawings and/or the specification or notes, the contractor's responsibility is to seek verification from The Urbanists before proceeding. No claims will be met by The Urbanists, where the contractor continues work in violation of such confirmation.

No.	Date	By	Revision Notes
P01	06/04/21	GE	Graphical changes
P02	13/04/2021	GE	Plot, soft and hardworks changes
P03	16/04/2021	GE	Further detail to text

PROJECT STATUS: S3 (SUITABLE FOR REVIEW)

**theurbanists**  
planning & design

Client: Barratt Homes

Project: Llewellyn Road, Penlanger

Title: Amenity and Biodiversity Plan

Project ID	Designer	Volume	Level	Type	Role	Class	Disc	Rev.	Status
1598	URB	XX	XX	DR	L	90	0101	P03	S3

Drawn: GE Date: 16/04/2021 Checked: GB Scale: 1:500/8A0

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**Drainage Features**

Bioretention areas - There are two distinct planting palettes for the bioretention areas, all of which include species that tolerate both wet and dry conditions (see full species lists right):

- Planting running parallel to the highways across the site - these are identified by dwarf Berberis shrubs down the centre of each bioretention bed to emulate the flow of water around the development. Either side of are a matrix of grasses and perennials that will provide visual interest for residents and an resource for local wildlife without impeding driver visibility splays. There has been a focus on evergreen species and those that are RHS Plants for Pollinators.
- Bioretention areas to the rear of parking spaces benefit from being able to include taller plant species that tie in to the wider soft landscape's natural aesthetic with an emphasis on tall grasses and wildlife-friendly perennials.

Attenuation Basins - the base and banks of these drainage features will be seeded with their own meadow mixture that will suit the different conditions. The wildflowers will create a long season of interest through the summer months and be a valuable resource for insects and other wildlife that feed on them such as bats and birds. Paths around both of the basins allow residents to see the sustainable drainage in action, with timber benches as seating opportunities to appreciate the natural environment. Evergreen shrub planting beneath the timber knee rail and adjacent to the path create winter features with colourful dogwood stems and winter-flowering heathers. Tree planting around parts of the basin provide vertical greening, vital shade provision in the summer and act as an important ecological resource.

- Plant species within bioretention areas parallel to the road:**
- Berberis thunbergii var. atropurpurea 'Nana'
  - Bergenia cordifolia
  - Carex divulsa
  - Carex morrowii 'Ice Dance'
  - Fritillaria meleagris
  - Geranium oxianum 'Wargrave Pink'
  - Stachys byzantina 'Silver Carpet'
  - Verbena bonariensis 'Lollipop'
- Plant species within bioretention areas behind areas of parking:**
- Ajuga reptans 'Caillit's Giant'
  - Calamagrostis x acutiflora 'Overdam'
  - Carex divulsa
  - Deschampsia caespitosa 'Goldtau'
  - Fritillaria meleagris 'Alba'
  - Sanguisorba officinalis 'Red Thunder'
  - Verbena bonariensis 'Lollipop'

**Tree Planting:**

Tree planting across the site has had a focus on native species or those with value to wildlife. Key townscape tree species have been chosen to create landmarks for the site and provide year-round interest. A further benefit of tree planting, particularly within public open spaces is to create shade during the summer months. Trees have also been positioned along existing hedgerows to reinforce green corridors, as well as provide screen existing residential housing to the South of the site. Existing vegetation within the site has been retained as far as possible. Bird and bat boxes are to be fitted in line with ecologist's recommendations and under supervision of the ecological clerk of works.

**Hedge Planting:**

In line with the ecologists recommendations, selected hedgerows have been widened with native species to reinforce their role as green corridors through and around the periphery of the site.

**Wildflower Meadow Planting:**

The variety of wildflower meadow planting across the site will introduce a wide variety of flowering species to the site and enhance a number of habitats, particularly those adjacent to retained existing hedgerows which will further widen ecological corridors. Future residents will benefit from the variety of different flora on show and the natural aesthetic and the ecological benefits it brings.

**On-Plot Planting:**

On-plot planting has been designed to reflect the street hierarchy of the development to aid wayfinding, with primary routes being more formal with clipped hedging and becoming less formal as residents move into secondary and tertiary spaces. Species have been selected to reflect these design aspirations, as well as providing interest and colour through out the year. An emphasis on ornamental grasses planting provides shelter for wildlife and is punctuated by flowering perennials as nectar sources.

**Public Open Space Planting:**

A flowering lawn mixture is used for areas of grass lawn, allowing for informal recreation and acting as an ecological resource. Nearby bench seating within the shade of trees are respite from the Sun. Crocus planting beneath many trees creates a vibrant display of colour in late winter and is a valuable early source of nectar for insects. Planting around the LEAP features a matrix of native grasses dotted with perennials, shrubs and bulbs to create a dynamic and natural perimeter.

**Wildflower Meadow Planting:**

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**Recreation Route Strategy:**

A recreation route wraps the perimeter of the site, providing a circular walking route for residents within a more natural environment, with trees, hedgerows, and planting to create a natural border to the development that blends the site within its surroundings. Stretches of native ornamental grasses create a sensory feature for those on the route that also act as shelter for wildlife. A series of natural play elements encourage children to be active and interact with the natural world.