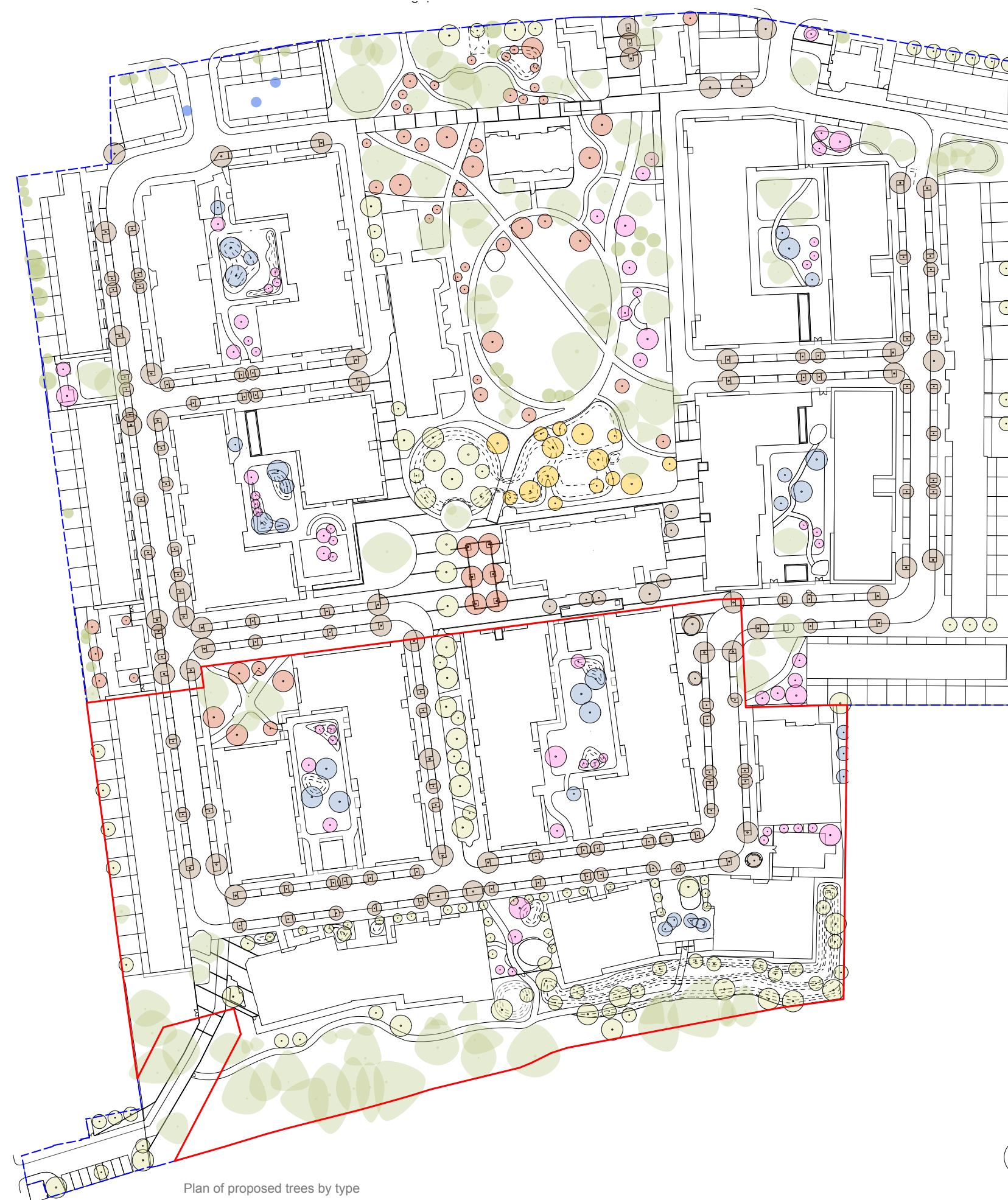
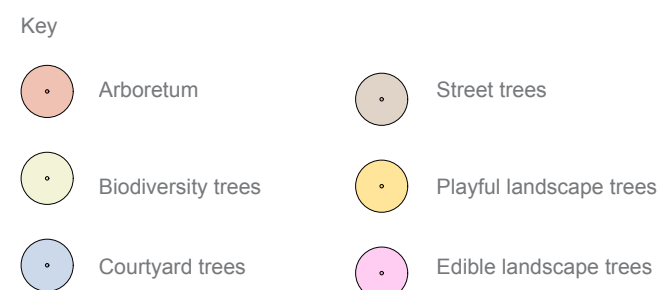


Proposed Trees

The Scheme looks to maximise the potential for new tree planting, complementing the rich layers of existing trees present across the site. The conditions for tree planting varies, ranging from urban street environments and hard landscaping to naturalistic and native planting within the settings of parks and the SINC. The tree planting strategy will be considered as a whole making careful selection of tree species to suit the location, as well as providing suitable conditions for the planted trees to reach their full species potential. The trees form a key part of the soft landscape proposals. A number of key tree characters have been identified, which will be used throughout the site to strengthen functionality while also contributing to placemaking within the various spaces created.

Seasonality and character will be key considerations for the species selection, building upon the existing stock of parkland, fruiting and arboretum trees. Further to ornamental and amenity values the trees also offer important biodiversity value, creating habitat and green corridors as well as foraging opportunities for wildlife. Space restrictions both above and below ground, in relation to building proximity, traffic, available rooting volume and sunlight conditions will steer species selection for all tree planting.

A total of 176 new trees, of almost 60 different species, are proposed in Phases 1B&2. These consist of 48 large sized species, 87 medium sized species and 41 small sized species.





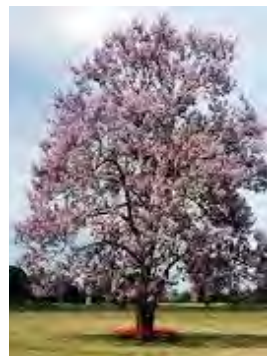
● Arboretum trees

Description:

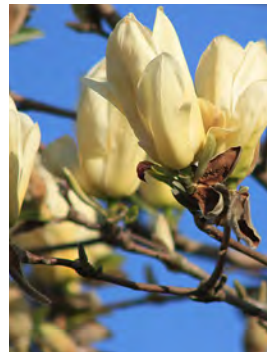
- Rare & characterful species
- Characteristics: uncommon, interesting foliage/seeds/bark/ flowers
- Ultimate size range: Varies
- Girth size at planting: 16-18mm & 30-40mm



Sorbus torminalis



Paulownia tomentosa



Magnolia denudata 'Yellow River'



● Biodiversity trees

Description:

- Native or of known benefit to local wildlife
- Characteristics: native species, pollinator species, fruiting
- Ultimate size range: Medium to large
- Girth size at planting: 14-16mm & 30-40mm



Betula pubescens



Alnus glutinosa



Sorbus aucuparia



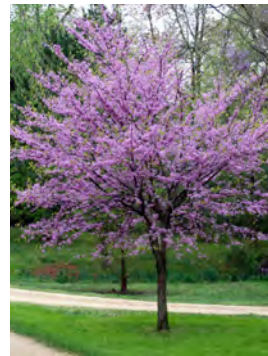
● Courtyard trees

Description:

- Light foliage & seasonal interest
- Characteristics: light foliage, autumn colour, conifers
- Ultimate size range: Medium to large
- Girth size at planting: 20-25mm



Betula pendula 'Dalecarlica'



Cercis siliquastrum



Arbutus unedo 'Rubra'



● Street trees

Description:

- Robust trees with seasonal interest
- Characteristics: clear-stemmed, robust, narrow canopy, tolerates flooding
- Ultimate size range: Medium to large
- Girth size at planting: 20-25mm



Alnus cordata



Ulmus lutece



Prunus padus 'Watereri'



● Playful landscape trees

Description:

- Trees with sensory & playful characteristics
- Characteristics: interesting foliage / seeds / bark, climbable trunk, pendulous form
- Ultimate size range: Medium to large
- Girth size at planting: 16-18mm



Betula nigra



Prunus x subhirtella 'Autumnalis'



Salix alba 'Tristis Chrysocoma'



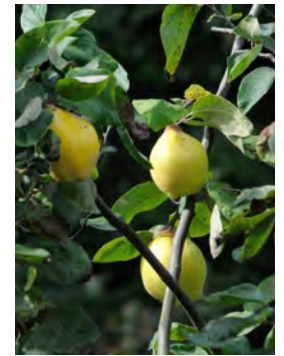
● Edible landscape trees

Description:

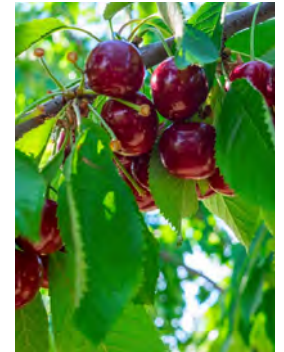
- Fruiting, berrying and nut bearing trees
- Characteristics: fruiting, berrying, nut bearing in UK climate
- Ultimate size range: Small to medium
- Girth size at planting: 12-14mm



Juglans regia 'Buccaneer'



Cydonia oblonga 'Fruitful'



Prunus avium 'Stella'

2.7 Ecology Strategy

Ecology Strategy

The illustrative masterplan has been developed with consideration to how the existing ecological features and habitats could be protected, enhanced and reprovided as part of the Scheme. A number of strategic goals have been established as part of the ecological strategy for the site:

- protect existing and establish new ecological links between existing and new habitats by creating continuous green spaces and linear tree planting;
- protect mature existing trees and plant diverse species of new trees, including UK native species;
- protect and extend the existing SINC area by creating new woodland habitats and ecotone conditions;
- support local bat and bird populations by creating new forage and habitat opportunities across the site;
- create new habitat areas on site, including wet and dry wildflower rich grasslands;
- provide good quality green roofs to reprovide lost open mosaic habitats and add ecologically valuable grassland habitats;
- utilise SuDS features to create additional ecologically valuable green spaces;
- use a large portion of UK native plant species, in combination with carefully selected non-native species of known ecological value.

Phased development will allow existing flora and fauna to be displaced and then to recolonise the site over time without wholesale clearance. With the extended SINC and new Green Link connecting to the enlarged Peace Garden of Phase 1A , RMA 1 will complete the key north-south ecological route. Interim maintenance of the site prior to development will encourage biodiversity.



Habitat Typologies and Biodiversity Features

The soft landscape proposals for the site will feature a number of ecologically valuable habitats and planting chosen to support local BAP priority species.

The key habitat typologies proposed for the site are:

- Grasslands - a mix of flowering lawns and wildflower rich meadows across the site. Grasslands will be subject to less frequent mowing regimes and allowed to grow taller than typical amenity lawns to allow for flowering herbs to set seed;
- Wet grasslands within larger SuDS features;
- Woodland, including the SINC area;
- Hedgerow/shrubbery planting.

Maintenance regimes will be developed to ensure that the green spaces bring maximum benefit for biodiversity and local ecology.

In addition, local wildlife will be supported by introduction of various habitat aids which could include stag beetle loggeries, bat and bird habitat boxes and bee hotels positioned in undisturbed spaces across the site. Building integrated features such as swift habitat bricks will also be utilised.



Grasslands, flowering lawns and meadows



Wet grasslands



Woodland



Hedgerow/shrubbery



Felled and cut logs arranged as new habitats
Arnold Circus



Stag beetle loggery,
Railway Fields



Planting for BAP priority species - Toadflax
brocade moth



Garden bird habitat boxes



Solitary bee hotels

Green Roofs

The purpose of the green roofs (accessible only for maintenance) is to maximise the contribution towards ecological and greening targets as well as providing visual amenity where overlooked. A mixture of biodiverse planting at roof level, predominantly designed as native wildflower meadow, will provide undisturbed habitats in support of a wide diversity of plants, insects and bird species.

Habitat features will be incorporated as part of roof landscapes and where possible substrate depths will be varied to create subtle microtopography, further strengthening the potential biodiversity value.

Selected plant species mixes will be robust, drought tolerant and suitable for the specified substrate depths. Roofs with PV provision will be designed as biosolar roofs, with species selected to suit varied sunlight and moisture conditions under and around PV modules. Use of sedum roofs will be limited to constrained locations only, where a deeper build-up is not possible.



Green Roofs
Variety of green roof habitats are indicated in % terms in the UGF/ BNG calculations, Locations to be determined in detail design



Extensive sedum roof



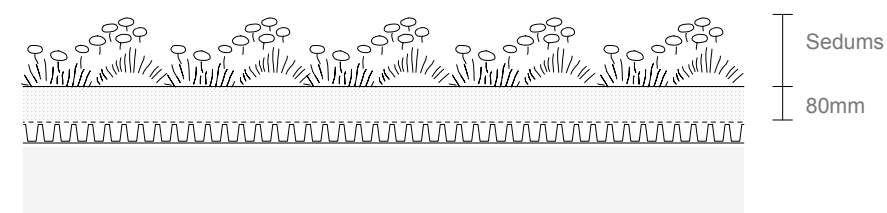
Extensive wildflower roof



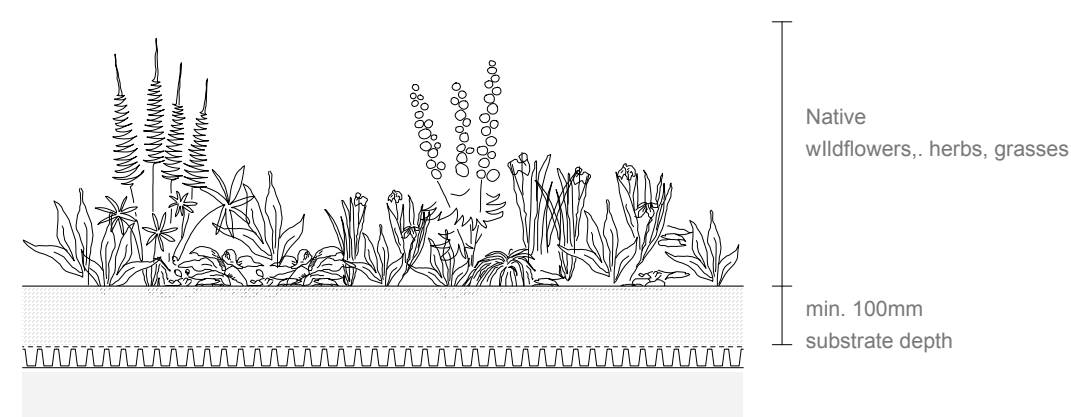
Biodiverse roof



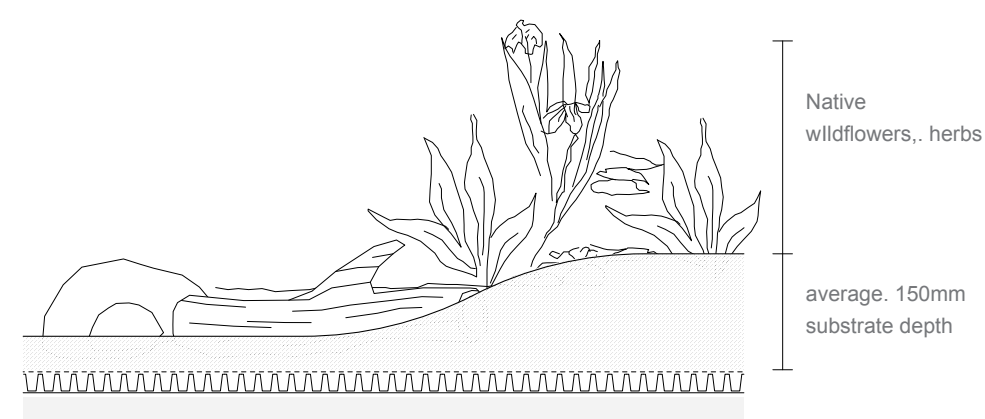
Biosolar roof



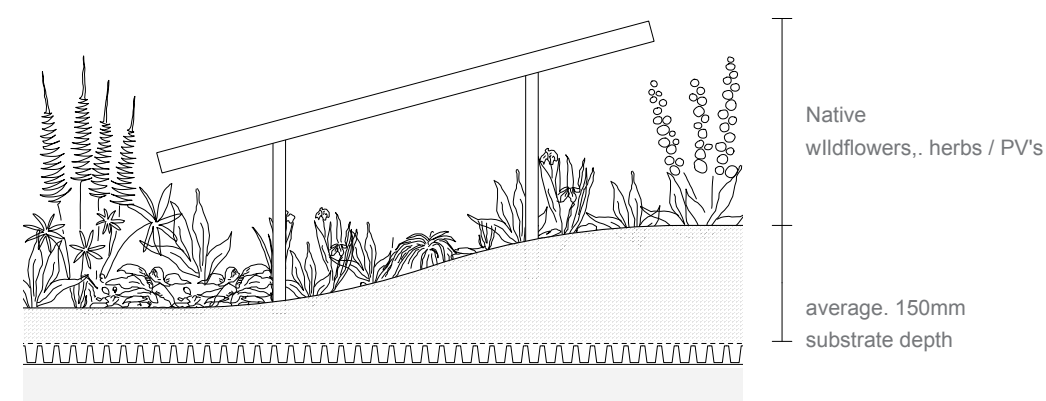
Sedums
80mm



Native
wildflowers, . herbs, grasses
min. 100mm
substrate depth



Native
wildflowers, . herbs
average. 150mm
substrate depth



Native
wildflowers, . herbs / PV's
average. 150mm
substrate depth