

Landscape, Sustainability & Ecology

Landscape

The Dense planting will create a semi-enclosed communal garden area around timber decking. This communal garden will provide amenity space for the intermediate housing occupants to relax. It will also be accessible to residents in addition to their private terraces.

The communal gardens above **Block B + D** is sub-divided with an obscured glass screen to allow privacy for private residents adjacent to the garden. Bio-diverse roof above **Block A + C**



Aerial view roof gardens

Ecology

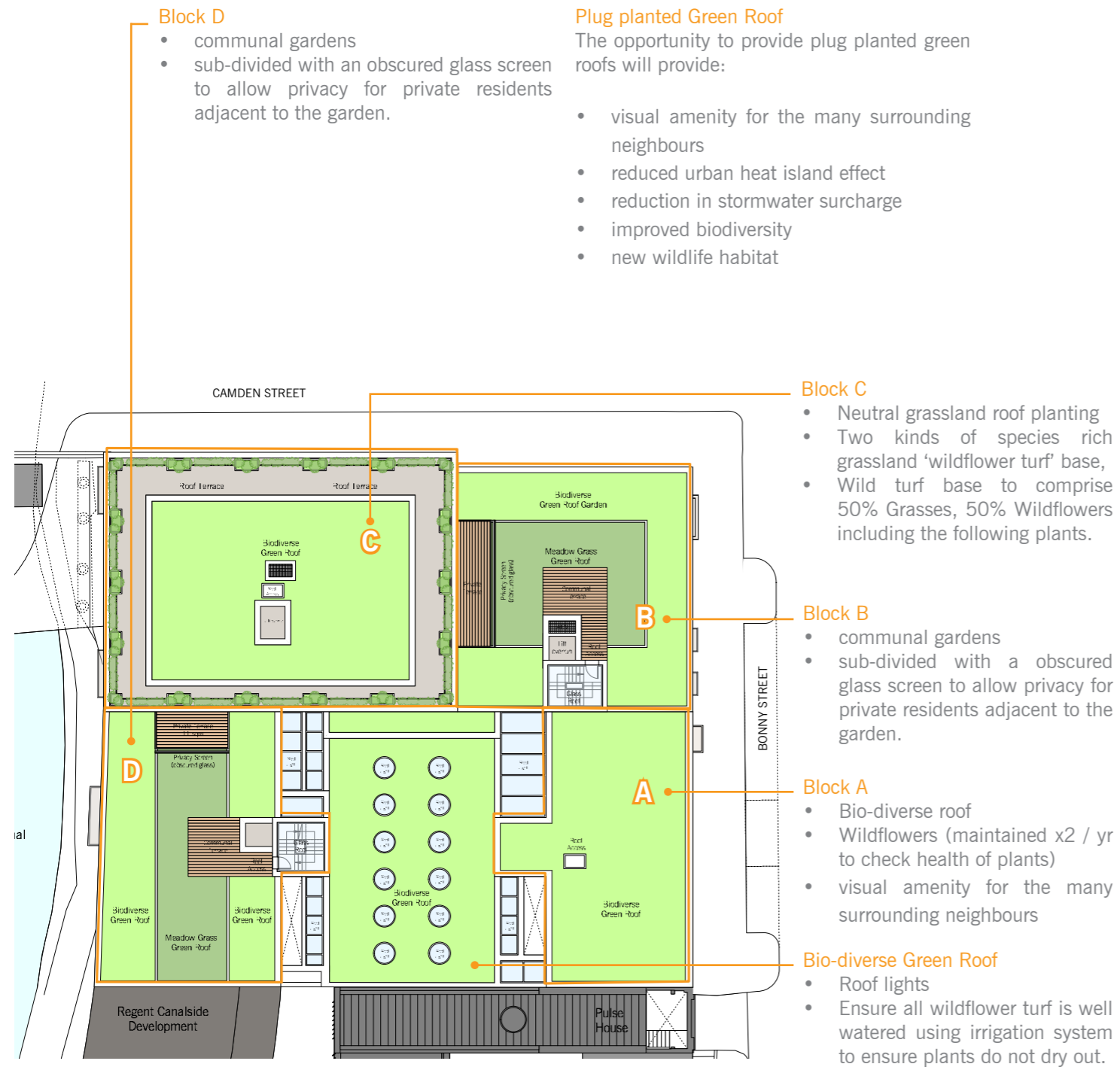
An **Ecology** Appraisal and Daytime Bat Assessment has been carried out by The Ecology Consultancy Ltd. It was concluded that the development of the site would not impact on any statutory or not statutory designated sites due to the distance they are from site.

All the habitats within the site were assessed as having negligible to low habitat value. Biodiversity enhancement measures which are planned into the development will provide increased biodiversity potential for the site.

The biodiversity enhancement measures include:

- Provision of bird bricks
- Provision of bat bricks
- Creation of a biodiverse green roof with night scented flowers to attract insects
- Provision of insect boxes on the green roof
- These provisions will enhance the local natural habitat.





Sustainability roof plan

Planting Schedule

The proposal seeks to enhance ecological measures by incorporating green roof planting to both communal gardens on Block B +D as illustrated below.

Acid & neutral grassland roof planting for BlockC:

Two kinds of species rich grassland (acid and neutral) roots are proposed for Block C roof. Plants to be supplied as a 'wildflower turf' base, with specialist seeds for neutral grassland sown in, as supplied by coronet turf, Basingstoke (tel 01256 771222) or similar approved source. Wild turf base to comprise 50% Grasses, 50% Wildflowers including the following plants:

Grasses:

Sheeps Fescue, Small Leaved Timothy, Creep Red Fescue, Crested Dogstail

Wildflowers;

Yarrow, Common Knapweed, Field Scabious, Gallium Verum, Meadow Cranesbill, St. Johns Wort, Cats Ear, Oxeye Daisy, Birdsfoot Trefoil, Ragged Robin, Musk Mallow, Ribwort Plantain, Cowslip, Self Heal, Meadow Buttercup, Yellow Rattle, Salad Burnet, Red Capion, Betony, Turfed Vetch, Conon Vetch, Wild Carrot, Common Sorrel, Meadowsweet, White Campion, Autumn Hawbit, Greater Hawbit, Common Toadflax, Wild Red Clover, Bladder Campion, Wild Marjoram.

Specialist seeds to be sown into base for acid grassland mix to include:

Stachys officinalis, Luzula pilosa, campanula rotundaifolia, Stellaria graminea, Viola riviniana, Ranunculus acris, Carex ovalis, Sanguisorba minor, Geum urbanum Teucrium scordonium, Hypericum pulcrum.

Specialist seeds to be sown into base for neutral grassland mix to include:

Lotus corniculatus, Hypochoeris radiata, Gallium verum, Leucanthemum vulgare, Achillia millefolium, Salvia officinalis, Scabiosa columbaria, Rumex actosa, Prunella vulgaris, Clinopodium vulgare.

Installation & Maintenance:

Follow guidance from suppliers for correct laying of turf. Ensure all wildflower turf is well watered in at outset to fill reservoir boards below.

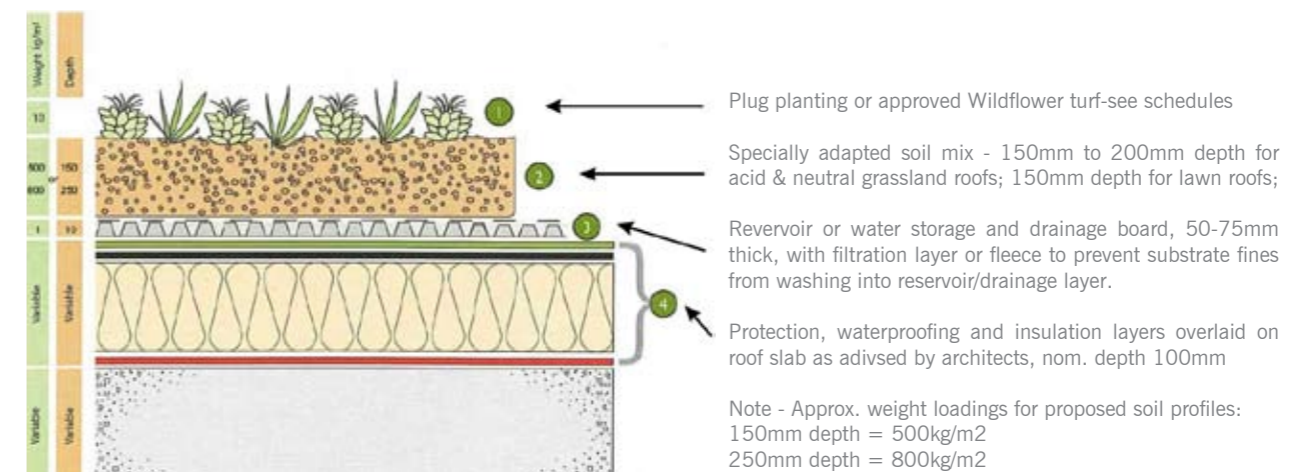
Make visit to plants at least two times per year to check health and establishment. Check drip irrigation system is functioning, and in times of drought, water using irrigation system to ensure plants do not dry out. Strim back dead flower heads after flowering season in autumn, and compost arising.

Green roof plant mix:

Planting for neutral grassland and heath roofs to be specially selected seed mix grown in nursery as plugs to be planted at a density of 16/m2 to form a full cover, and in random arrangement to achieve a naturalistic effect. Aim of planting is to provide a variety of attractive, bio-diverse, planted terraces requiring minimal irrigation & maintenance. See attached plant schedules for separate roof types. Planting for lawn roof types is to be species rich lawn mat as supplied by Cornet Turf or Lindum Turf or similar approved.

Irrigation:

Drip irrigation lines to be installed into soil at 300mm centres and fed by rainwater recycling tanks, topped up by automatic mains supply when required.



Schematic Section showing Soil Build-up for Green Roof Terraces

Chassay+Last Architects are committed to responsible and sustainable development. Sustainability will be considered in all aspects of the design. Measures proposed include:

- Level 4 of the Code for Sustainable Homes will be applied to the residential element.
- The commercial element will achieve BREEAM 'Excellent'.
- Renewable energy will be provided by ground source heat pumps and Solar energy by Photo Voltaic-Thermal combined collectors.
- 100% energy efficient lighting.
- Passive design – to achieve the best practical levels of sustainability the design makes use of high levels of thermal insulation and mass.
- Re-use of a vacant brownfield site.
- Daylight and sunlight are maximized with large south-facing windows for passive solar gain. Protection from unwanted solar gain is achieved by deep reveals.
- Green roofs will provide good thermal insulation and new species habitats.
- Rainwater from all the roofs will be harvested for irrigating the landscaped areas.
- SUDS (Sustainable Urban Drainage System).
- Due to it's high rated PTAL, it is intended that this will be a car-free scheme.
- The residential units will conform to Lifetime Homes standards.
- The contractors will commit to the Considerate Contractors Scheme.
- Cycle storage facilities will be provided to encourage sustainable commuting.
- A full energy/sustainability analysis will have been carried out and submitted as part of the application.

Sustainability and carbon reduction will be incorporated into the development proposals for both the commercial and residential premises. This to include improvements, including increased energy efficiency of the building fabric and services.

- Reduction of carbon emissions from the development, by adopting the London Mayor's Energy Hierarchy, 'Be Lean, Be Clean, Be Green.'
- The potential for whole house ventilation with heat recovery will be assessed.
- The use of combined heat and power plant (CHP).
- Highly efficient gas condensing boiler.
- Good heating control systems.
- Absorption chiller serving the commercial area.
- Energy efficient lighting
- Metering of ventilation, plant and lighting.
- Metering of water use.
- Solenoid valve to water supplies to toilets in commercial areas.
- Water leak detection.
- Solar and PIR control lighting.
- Smart electric metering to all residential and commercial units.
- Heat meters to all residential and commercial units.
- Main water harvesting.
- Use of grey water recycling.

The property has reasonable access to public transport; the sites begin with potential for good environmental credentials.

Summary

The regeneration benefits for the site outweigh any value of retaining the existing buildings. We have worked together with the client and the council via the pre-application process to produce the Proposed development of high design standard of contemporary style which reflect the scale, bulk and height of the immediate surroundings. The Proposed Development will provide a new mixed use sustainable urban block of high quality design that will:

- Enhance the character and appearance of the Regents Canal Conservation Area
- Enhance the settings of the adjacent Jeffrey's Street Conservation Area.
- Regenerate this well located brownfield site
- Provide much needed housing, both private and affordable designed to the London Mayor's and Lifetime Homes standards
- Provide replacement employment space of a higher standard and quality than existing
- Provide good quality flexible employment space
- Provide flexible future proof scheme
- Provide a car free scheme
- Provide improved access for cycling with dedicated on-site cycle storage
- Provide increased amenity space
- Provide exemplar levels of sustainability
- Provide improved surveillance to the canal