

# LEVEL 3 GARDEN

A BIODIVERSE CONTEMPLATION GARDEN MADE OF NATIVE SPECIES



*Viburnum lantana* / wayfaring tree



*Acer campestre*



*Prunus avium*



*Corylus avellana*



*Viburnum opulus* 'Roseum' / European cranberrybush



*Amelanchier lamarckii* / Juneberry



*Malus sylvestris* / Wild Crab Apple



*Pinus sylvestris*



*Rosa arvensis* / field rose



Ground covering roses and ornamental grasses

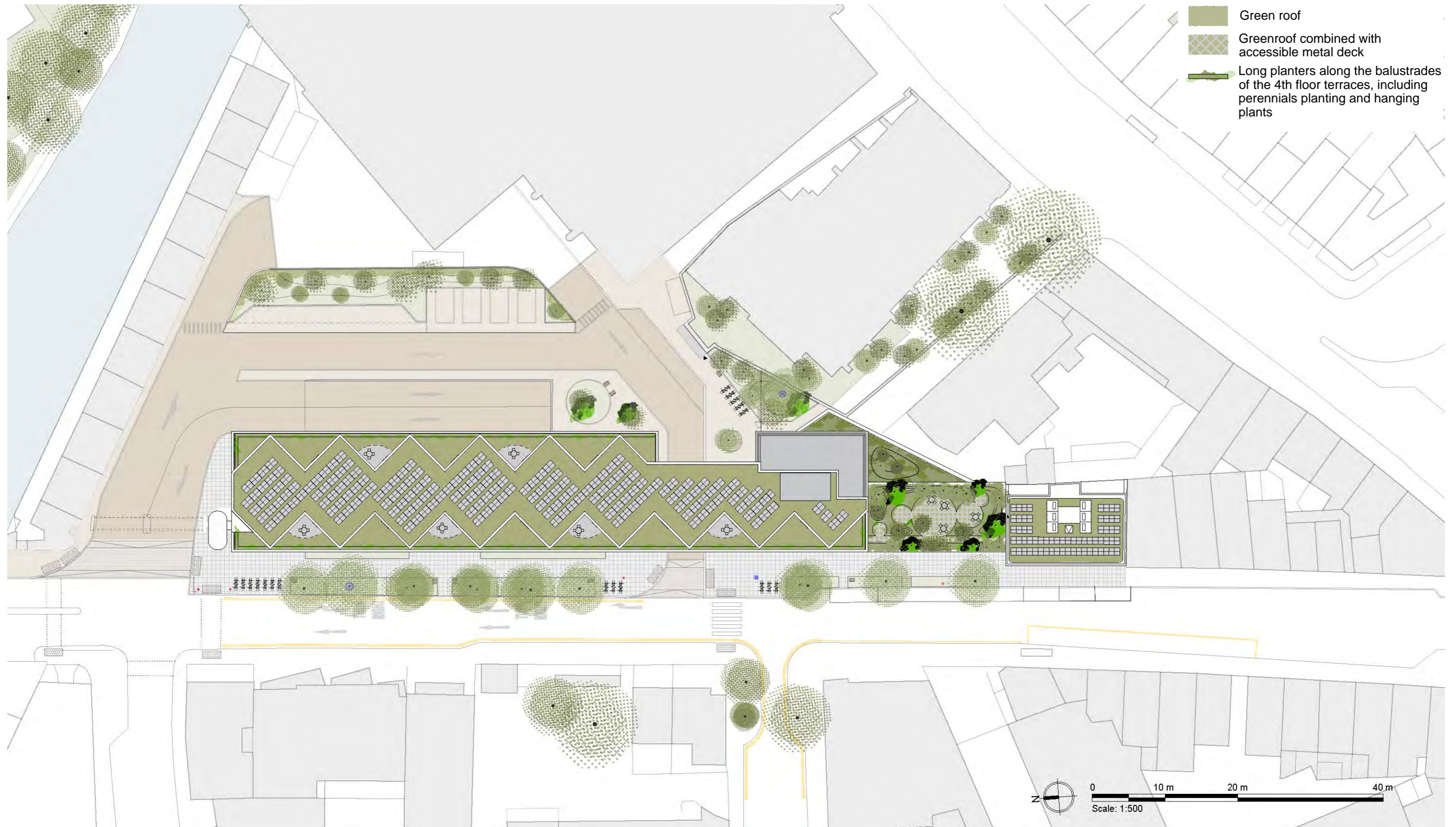


*Leucanthemum vulgare* / Ox-eye daisy



Rich species meadow and stainless steel metal deck

# LEVEL 4 PRIVATE TERRACES AND GREEN ROOFS



4th floor terraces and greenroofs plan 1/500@A3

# LEVEL 4 PRIVATE TERRACES



Extensive groundflora will be planted on the 4th floor and roof tops of the office building as well as roof top of residential building to enhance the overall biodiversity of the development, create a habitat for invertebrates and provide other environmental benefits such as water attenuation, improved water quality and reduced urban heat island effect.

On the 4th floor amenity terraces, the creation of open bare areas, and wildflower meadows, coupled with the addition of features such as logs/dead wood and sandy bee banks, will greatly increase the roof's potential to support invertebrates.

In addition to basic green roof system, on each terrace, a long planter of around 400x400x9600mm will be positioned along the main facades and include perennials planting and hanging plants creating more vegetation and biodiversity opportunity.

The selected palette of species will provide long flowering window annually.

In term of accessibility, 6 of the 13 accessible terraces will include metal grating deck and be compliant with the Equality Act 2010.



Rosa arvensis / field rose



Rosa rubiginosa / Sweet briar



Herbaceous perennials

Indicative rich-species mix:

(75mm of substrate)

[Species name / flowering colour / height / flowering period]

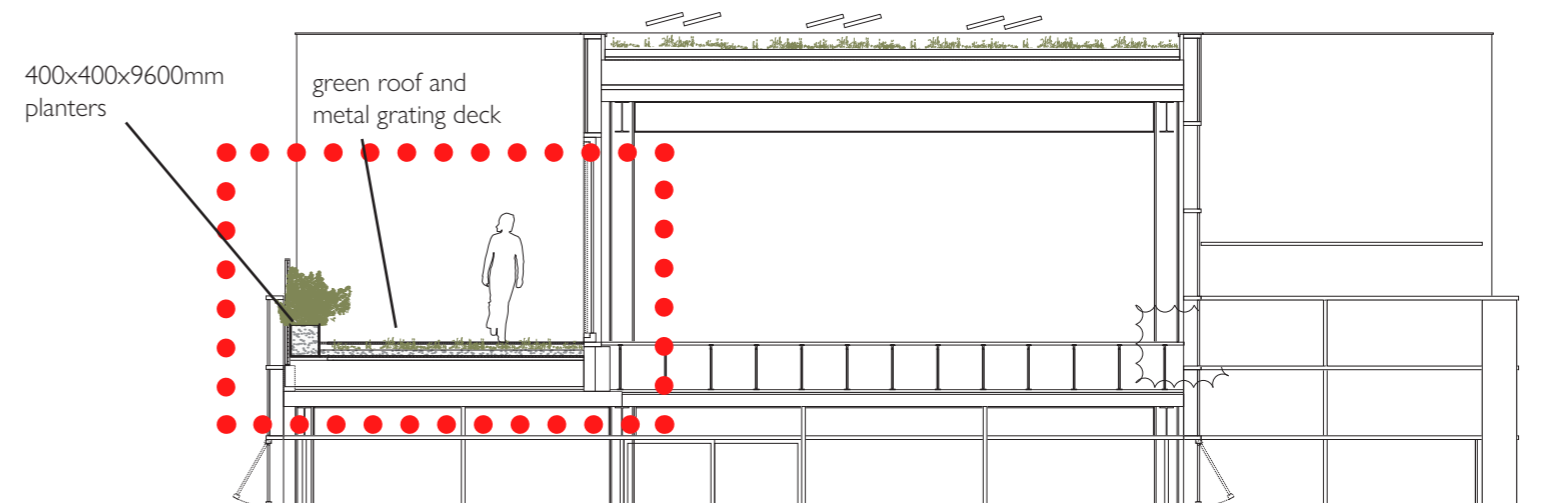
**Herbs:**

- Achillea tomentosa / yellow / 20 / 6-8
- Allium schoenoprasum / pink / 10-40 / 6-8
- Antennaria dioica / white / 15 / 6
- Hieracium pilosella / yellow / 5-25 / 5-10
- Hieracium x rubrum / red-orange / 25 / 5
- Petrorhagia saxifraga / white-pink / 10-25 / 6-9
- Potentilla verna / yellow / 10 / 6-7
- Prunella grandiflora / blue / 10-30 / 6-7
- Saponaria ocymoides / red / 10-30 / 5-6

- Sedum album / white / 12 / 6-8
- Sedum reflexum / yellow / 15 / 7-8
- Sedum sexangulare / yellow / 12 / 7-8
- Sedum spurium / reddish / 15 / 7-8
- Thymus montanus pink-purple / 10 / 7-10
- Thymus serpyllum / pink-purple / 12 / 7-10

**Grasses:**

- Carex flacca - 20 / 6-8
- Carex humilis - 15 / 6-7
- Festuca amethystina - 20 / 5-7
- Festuca ovina - 20 / 5-7
- Poa compressa - 20 / 6-7

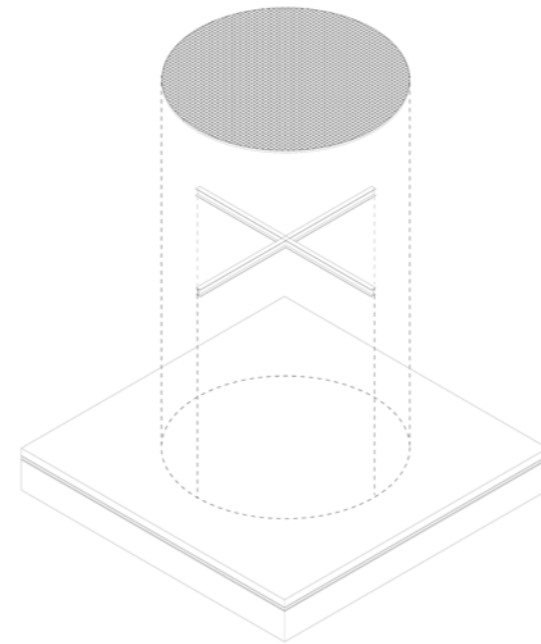


# LEVEL 3 GARDEN AND LEVEL 4 PRIVATE TERRACES

## PRINCIPLE OF GREENROOF COMBINED WITH ACCESSIBLE METAL DECK

Both 3rd floor garden and 4th floor terraces have the same combined green roof and metal grating system although the 3rd floor garden has a more intensive type of vegetation including more important soil depth (variation in substrate depth up to 600mm).

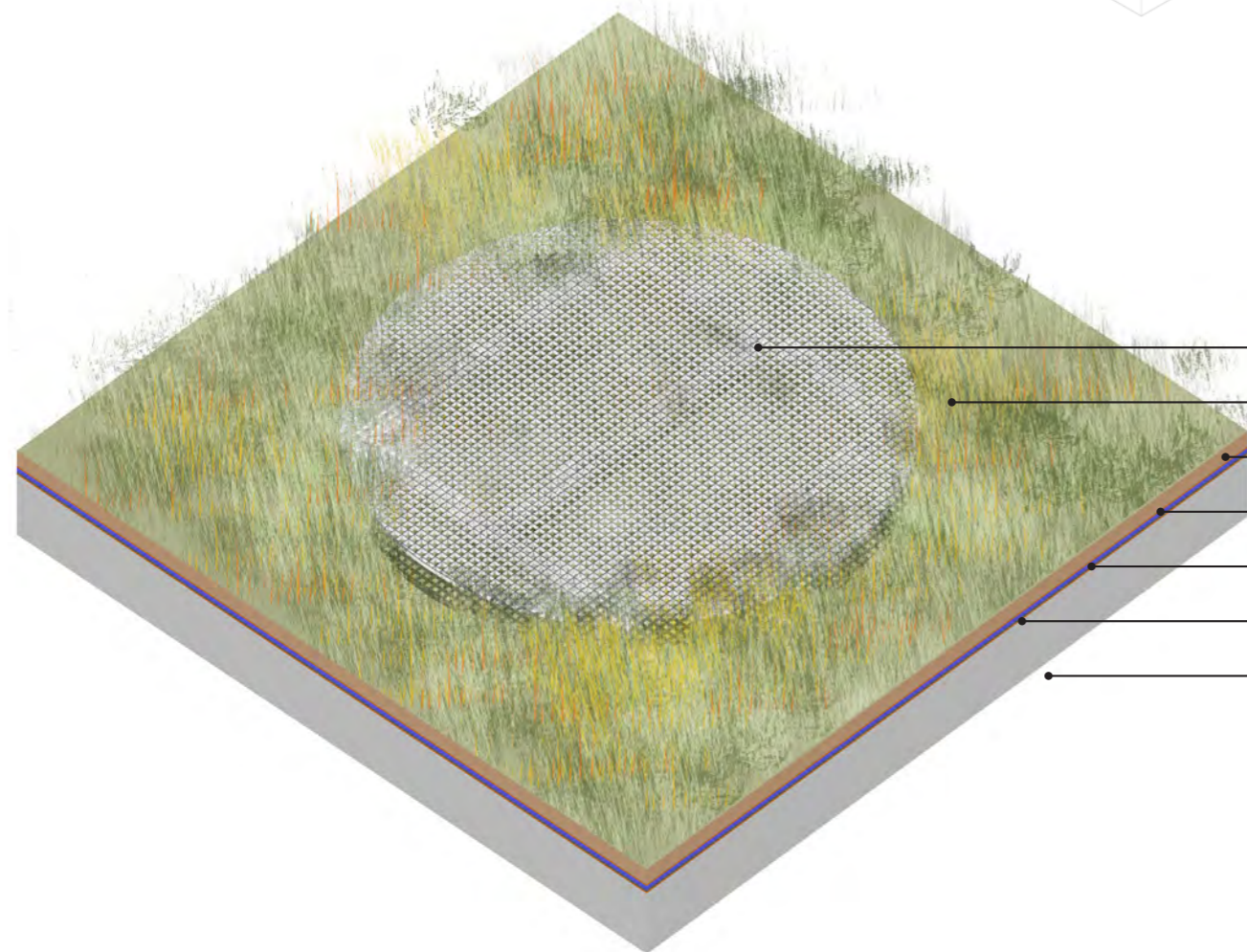
The 4th floor and roof tops have a more extensive type of vegetation relating to thinner soil layer (reduced loading allowance).



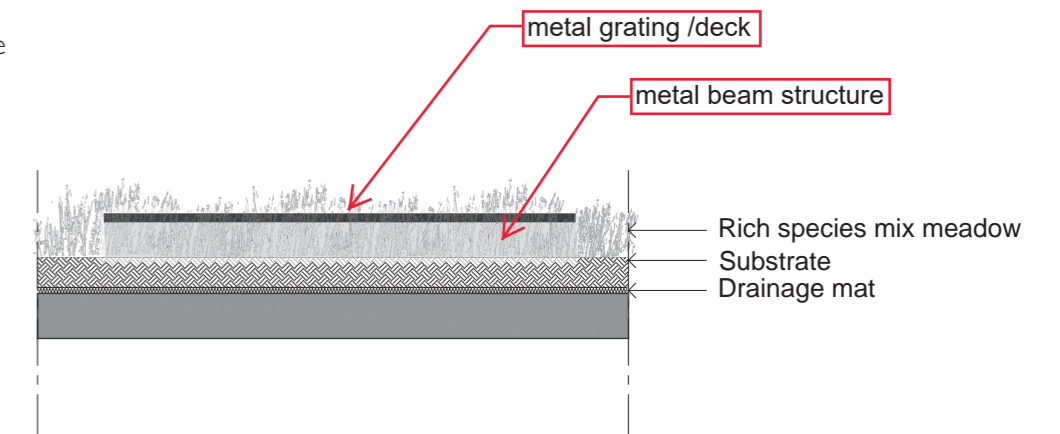
Green roof and metal deck at Les jardins de l'Archipel des Berges de Seine Niki-de-Saint-Phalle



Metal deck above ground flora.



- Metal grating on metal beams
- Species rich mix ground flora
- 75mm Extensive substrate
- Filter fleece
- Drainage mat
- Root barrier & Waterproofing membrane
- Roofing complex & slab



Typical section on green roof planting complex.

# GREEN ROOFS ON OFFICE BUILDING AND RESIDENTIAL BUILDING



The roof tops of the office and residential buildings will be planted with an extensive type of green roof, mainly planted with sedum and herbs. Mixes used will comprise four to six different species of Sedum and twenty to twenty-five different herb.

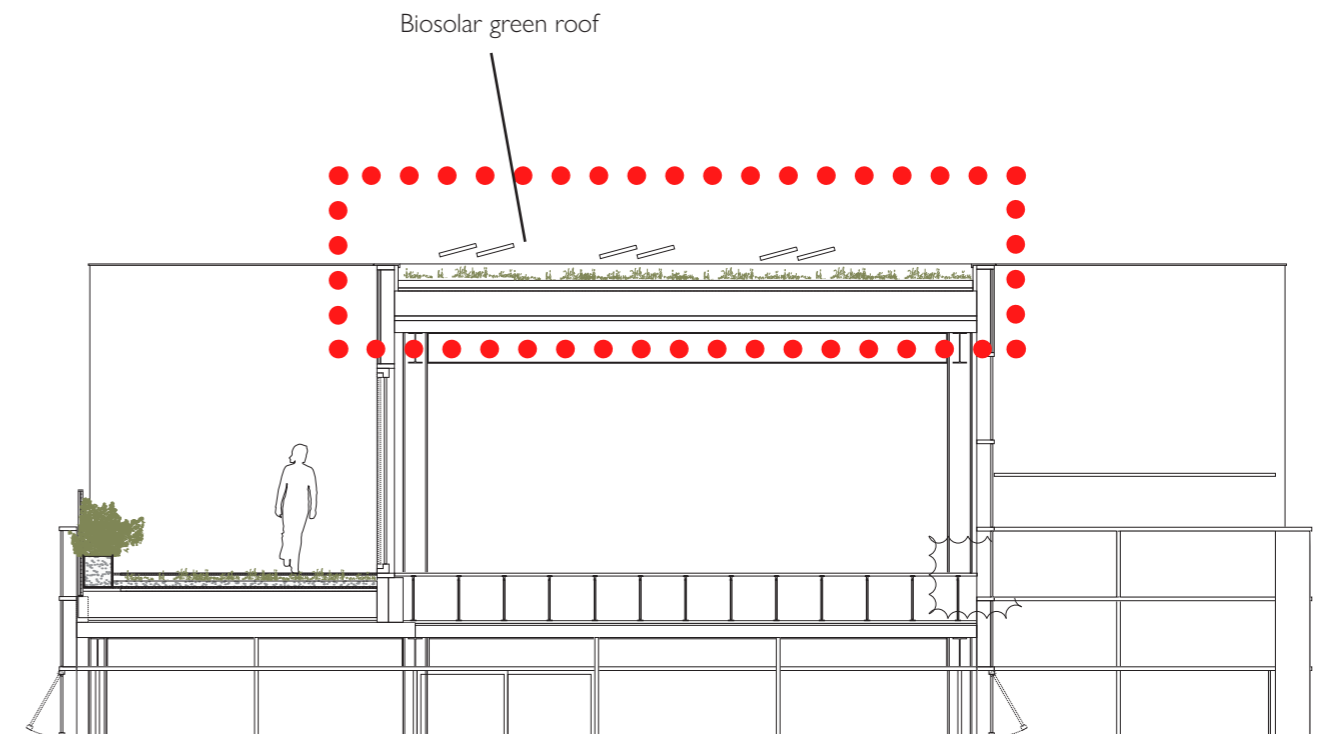
Their characteristics are:

- Traditional multi-layered structure including drainage and filter fleece
- Low maintenance requirement
- Water attenuation
- Improved water quality
- Reduced urban heat island effect
- Biodiversity

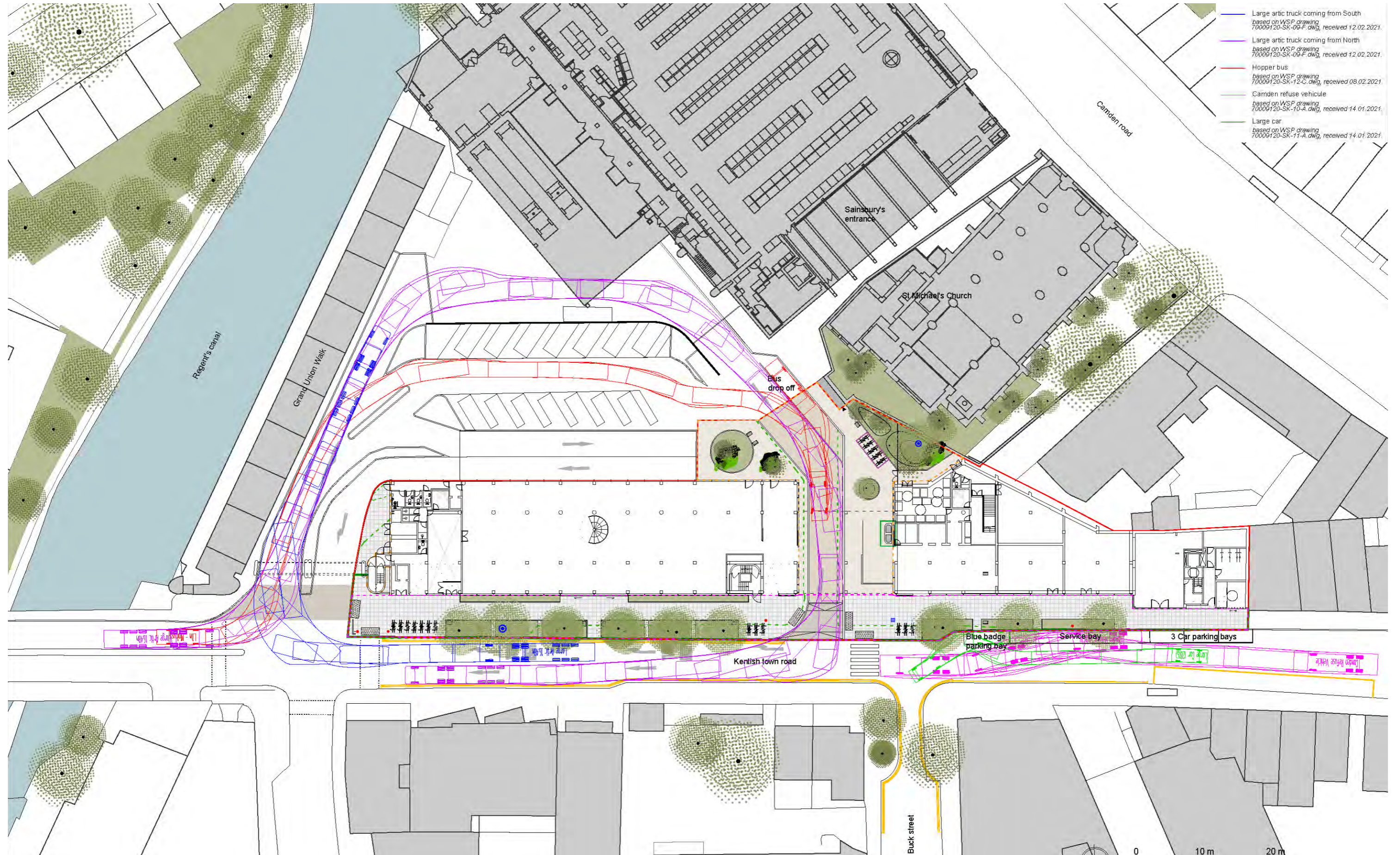
Indicative and partial palette for the sedum/herbs green roofs:  
(60mm of substrate)

[Species name / flowering colour / height / flowering period]

- Dianthus deltoides / red / 10-30 / 6-9
- Hieracium pilosella / yellow / 5-25 / 5-10
- Petrorhagia saxifraga / white-pink / 10-25 / 6-9
- Prunella grandiflora / blue / 10 / 6-8
- Sedum reflexum / yellow / 15-35 / 6-8
- Teucrium chamaedrys / pink-purple / 25 / 7-8
- Thymus pulegioides / magenta / 5-30 / 6-10
- Thymus serpyllum / magenta / 5-15 / 6-10
- Viola arvensis / white / 5-20 / 4-10



# TRACKING PLAN



Plan based on tracking studies by WSP

# URBAN GREEN FACTOR CALCULATION

The area included within the Planning Application boundary is 3003 m<sup>2</sup> while the proposed planted area is about 1770m<sup>2</sup> (total). This calculation excludes the green house planting (65m<sup>2</sup> of planted zone).

This UGF calculation schedule is based on the "Publication London Plan December 2020" guidance.

London Plan recommends a target score of 0.4 for predominantly residential developments, and a target score of 0.3 for predominantly commercial developments. However, Boroughs can develop their own targets but the Borough of Camden do not currently have specific UGF targets.

The calculated score is 0.31.

Surface Cover Type	Factor	Areas in m <sup>2</sup>	Score	Notes
Semi-natural vegetation (e.g. woodland, flower rich grassland) created on site.	1	181,20	181,20	Include rain garden, tree planting and associated meadow in streetscape (in open ground)
Wetland or open water (semi-natural; not chlorinated) created on site.	1		0,00	
Intensive green roof or vegetation over structure. Vegetated sections only. Substrate minimum settled depth of 150mm – see livingroofs.org for descriptionsA	0,8	352,20	281,76	Yard's raised planters, planters in streetscape, 1st floor visual amenity, 3rd floor garden, 4th floor planters.
Standard trees planted in natural soils or in connected tree pits with a minimum soil volume equivalent to at least two thirds of the projected canopy area of the mature tree – see Trees in Hard Landscapes for overviewB.	0,8		0,00	
Extensive green roof with substrate of minimum settled depth of 80mm (or 60mm beneath vegetation blanket) – meets the requirements of GRO Code 2014C.	0,7	287,10	200,97	
Flower-rich perennial planting – see Centre for Designed Ecology for case-studiesD.	0,7		0,00	
Rain gardens and other vegetated sustainable drainage elements – See CIRIA for case-studiesE.	0,7		0,00	
Hedges (line of mature shrubs one or two shrubs wide) – see RHS for guidanceF.	0,6		0,00	
Standard trees planted in pits with soil volumes less than two thirds of the projected canopy area of the mature tree.	0,6		0,00	
Green wall –modular system or climbers rooted in soil – see NBS Guide to Façade Greening for overviewG.	0,6		0,00	
Groundcover planting – see RHS Groundcover Plants for overviewH.	0,5		0,00	
Amenity grassland (species-poor, regularly mown lawn).	0,4		0,00	
Extensive green roof of sedum mat or other lightweight systems that do not meet GRO Code 2014I.	0,3	900,80	270,24	Biosolar roofs (office and residential buildings)
Water features (chlorinated) or unplanted detention basins.	0,2		0,00	
Permeable paving - see CIRIA for overviewJ.	0,1	5,80	0,58	Pavers on tree trenches along KTR
Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone).	0		0,00	
<b>TOTAL</b>		<b>1727,10</b>	<b>934,75</b>	
		<b>UGF</b>	<b>0,31</b>	

# NOTE ON MAINTENANCE

The applicant and the freeholder are in discussions about a public realm management plan to ensure the proposed landscape features (public realm and internal planting) will be maintained throughout the building lifespan.

## Long term design objectives

The general intent of landscape maintenance of the site is to ensure that, over a period of time, the planting develops to form a mature landscape. Management and maintenance is to be undertaken in such a way as to:

- Allow healthy plants to develop
- Ensure equipment is kept in a safe/good working condition and to maximise its longevity.

## General planting notes

Suggested maintenance strategy subject to development of planting specification & environmental conditioning systems at the next design phase.

All works shall to be undertaken to a high standard, to recognised horticultural practice and to all relevant British Standards, by a specialist landscape contractor.

Maintenance visits will be undertaken regularly.

The primary maintenance operations will include:

- Programming and control of automatic irrigation system. Additional manual watering if necessary to aid establishment during the early years after planting.
- Keeping planting areas free from weeds. All planted / mulched areas shall be hand weeded or treated with an appropriated organic herbicide as appropriate / required.
- General pruning and trimming to ensure footways, signs etc. are not obscured and to ensure plants develop appropriately according to their species.
- Fertilizing of planting once yearly in spring using a suitable slow release organic fertiliser.
- Removal of litter (to be undertaken as part of the general site cleaning and not necessarily by the landscape maintenance contractor).
- Replacing plants that fail where required, with the approved species.
- Clearance of planting encroachment within specified distances from utility easements as required.



