



East

Finchley Road O2

Urban Greening Factor

Explanatory note

East

September 2022

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Introduction and policy context

1. From tarmac to park

2. Urban Greening Factor

3. Trees

4. Constraints and justification of scoring

Introduction

Purpose of this document



Service road towards West Hampstead



National rail hedge looking towards Finchley road



Carwash in-lieu of the detailed phase 1



Service road along the southern edge

Within the context of the climate emergency and ecological crises it is the aim of this landscape-led masterplan to increase the amount and diversity of vegetation within the development to help mitigate the impacts of heat and stormwater and to provide people with more contact with nature. We believe it provides a significant uplift on the present site condition whilst balancing other policy requirements such as the transition to net zero

Policy context

London Policy G5 states that developments should aim for an urban greening factor of 0.4.

London Plan Policy G6 sets out that development proposals should aim to secure net biodiversity gain.

Additionally, Policy A3 of Camden Local Plan states that existing features of biodiversity value should be protected and green corridors should be improved. All opportunities to realise benefits for biodiversity should be assessed. The policy also recommends to incorporate additional trees and vegetation wherever possible.

In addition, the London Plan Policy G7 notes to retain existing trees of value and that additional trees to be planted have a preference for large canopies.

This documents responds to the comments from the GLA Stage 1 Letter (para. 128) as listed below:

'128. The applicant has calculated the UGF of the detailed element as 0.35, and the outline element as 0.32. Both phases are therefore below the 0.4 target. The plans in the DAS are too small to read in detail and clearer drawings and supporting page 27 calculation tables should be provided. It appears that entire plots have been categorised as green walls and no green roofs are included. The applicant should review the extent of proposed urban greening across the masterplan based on the UGF LPG, and improve the quality and quantity of greening and the UGF. Given the comprehensive approach to planting at ground level it is important that the review includes the extent and quality of green roofs. In the event that the 0.4 target cannot be met, robust justification should be provided, setting out fundamental site constraints that cannot be overcome. The final UGF for the outline element must be confirmed at reserved matters and assessed against the 0.4 target.'

LBC's Nature and conservation comments noted that:

'The UGF can be increased by either increasing the area of greening, or the quality of the greening. I note that the DAS refers to sedum roofs in places – we don't generally consider these good enough, so changing these to biodiverse roofs with a deeper substrate would help increase the UGF (and biodiversity).'

The Applicant team have reviewed these comments in collaboration with the London Wildlife Trust and have sought to explore opportunities to increase the UGF in the Detailed and Outline phases where feasible.

This document includes the updated UGF diagrams and scores, demonstrating an uplift resulting from changes to the design of extensive green roofs and an increase in native climbers on walls.



Landscape-led masterplan

1. From car park to green park

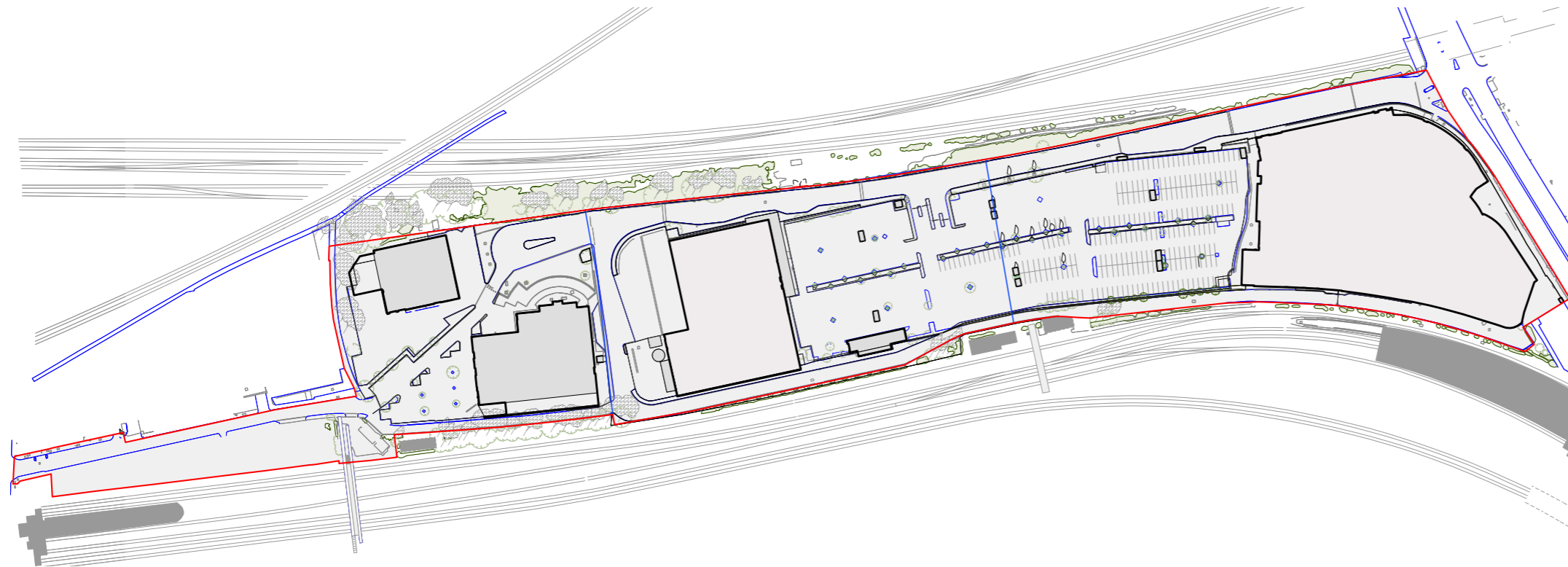
The original illustrative masterplan aimed to achieve an urban greening factor score of **0.32** by providing new extensive green open spaces, including seasonal and flower-rich perennials, planted sustainable drainage systems, additional trees and green walls, replacing the large areas of existing tarmac whilst also delivering 1 800 new homes.

In addition the proposal aimed to achieve a bio-diversity net gain of approx. 160% across the site through ecologically-sensitive landscape design.

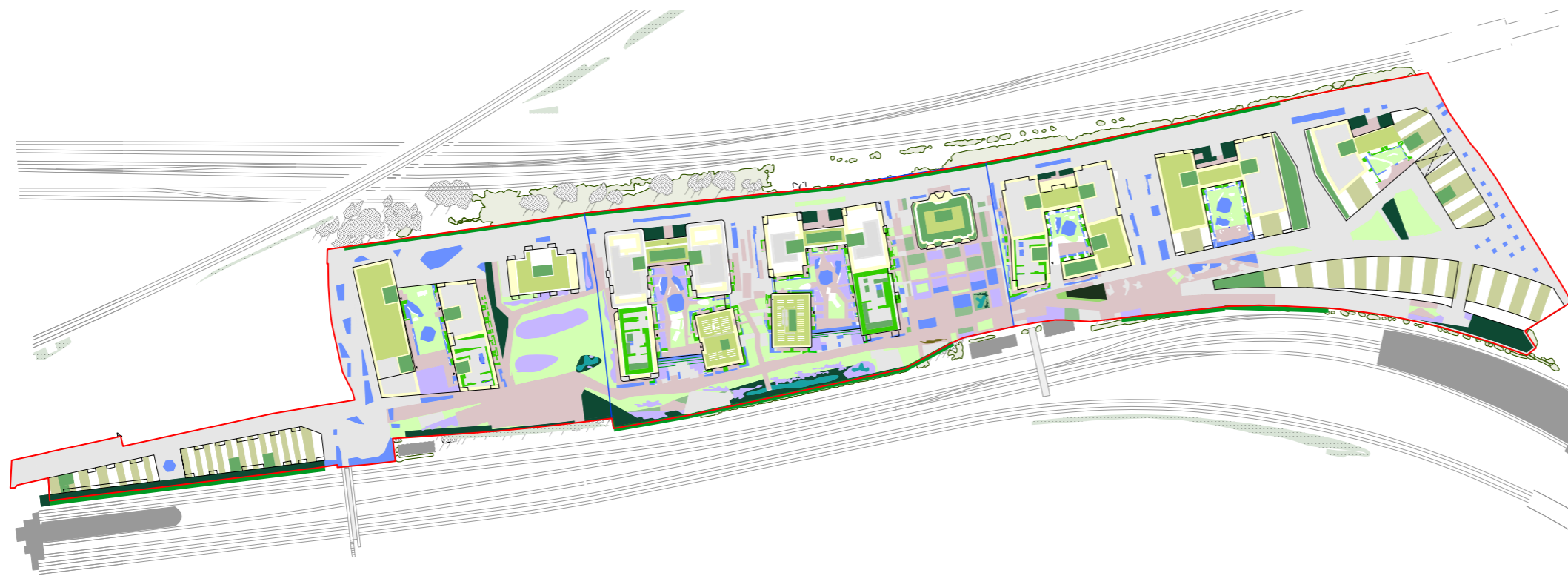
We have worked hand-in-hand with the London Wildlife Trust to ensure that the masterplan offers :

- seasonal planting palette and habitats for a holistic all-year around landscape
- Sustainable drainage across the site
- Seasonal swales
- Non-accessible biodiversity pockets to enhance ecological habitats
- Native hedges and green walls
- Inclusion of run-over grass cretes, permeable grids, wild grass as well as wildflowers

Illustrative masterplan UGF : **0.32**



Existing site plan 2022



Proposed urban greening factor diagram

Biodiverse planting:

Ground cover planting	0.5
Green wall	0.6
Hedges	0.6
Flower rich perennial	0.7
Rain gardens	0.7
Semi natural vegetation	1.0
Water habitats	1.0

Typical surfaces:

Sealed surfaces	
Permeable surfaces	0.1
Amenity grass	0.4

Roofs:

Extensive sedum roof	0.3
Extensive green roof	0.7
Intensive green roof	0.8

2. Urban Greening Factor - Phase 1

As part of this review, our main actions have been to increase the amount of native climbers on walls along both railway corridors, taking the number from 400 sq. m to over 810 sq. m and to change our extensive roof of sedum to extensive biodiverse solar roofs where possible. With these updates in areas, the detailed phase Urban Greening Factor is now of = **0.37**

Biodiverse planting:

Ground cover planting	0.5
Green wall	0.6
Hedges	0.6
Flower rich perennial	0.7
Rain gardens	0.7
Semi natural vegetation	1.0
Water habitats	1.0

Typical surfaces:

Sealed surfaces	
Permeable surfaces	0.1
Amenity grass	0.4

Roofs:

Extensive sedum roof	0.3
Extensive green roof	0.7
Intensive green roof	0.8



	Surface cover type	Factor	Area (sq. m.)	Score
	Semi-natural vegetation	1.0	654	654
	Wetland or open water	1.0	127	127
	Standard trees in soil or connected tree pits	0.8	1522	1217.60
D	Intensive green roof or vegetation over structure	0.8	713	570.4
E	Extensive green roof	0.7	854	597.8
T	Flower-rich perennial planting	0.7	1018	712.6
A	Rain gardens or vegetated SUDS	0.7	785	549.5
I	Hedges	0.6	644	386.4
L	Standard trees in pits	0.6	200	120
E	Green wall	0.6	900	540
D	Groundcover planting	0.5	378	189
	Amenity grassland	0.4	1515	606
	Extensive green roof of sedum	0.3	0	0
	Water features	0.2	0	0
	Permeable paving	0.1	3995	399.5
	Sealed surfaces	0	0	0
	TOTAL AREA		13305	6669.8

SITE TOTAL 17935

DETAILED UGF SCORE 0.37

Proposed urban greening factor diagram for the detailed phase 1

2. Urban Greening Factor - Outline Phases

As part of this review, our main actions have been to increase the amount of native climbers on walls along both railway corridors, taking the number from 50 sq. m to over 600 sq. m and to change our extensive green roof of sedum to extensive biodiverse solar roofs where possible. With these updates in areas, the outline phase Urban Greening Factor is now of = **0.30**

Biodiverse planting:	
Ground cover planting	0.5
Green wall	0.6
Hedges	0.6
Flower rich perennial	0.7
Rain gardens	0.7
Semi natural vegetation	1.0
Water habitats	1.0

Typical surfaces:	
Sealed surfaces	
Permeable surfaces	0.1
Amenity grass	0.4

Roofs:	
Extensive sedum roof	0.3
Extensive green roof	0.7
Intensive green roof	0.8



	Surface cover type	Factor	Area (sq. m.)	Score
O U T L I N E	Semi-natural vegetation	1.0	1660	1660
	Wetland or open water	1.0	30	30
	Standard trees in soil or connected tree pits	0.8	2553	2042.40
	Intensive green roof or vegetation over structure	0.8	1355	1084
	Extensive green roof	0.7	2327	1628.9
	Flower-rich perennial planting	0.7	748	523.6
	Rain gardens or vegetated SUDS	0.7	1410	987
	Hedges	0.6	355	213
	Standard trees in pits	0.6	1344	806.4
	Green wall	0.6	1000	600
	Groundcover planting	0.5	40	20
	Amenity grassland	0.4	2678	1071.2
	Extensive green roof of sedum	0.3	2807	842.1
	Water features	0.2	0	0
	Permeable paving	0.1	4266	426.6
Sealed surfaces	0	0	0	
TOTAL AREA			22573	11935.2

SITE TOTAL 39880

OUTLINE UGF SCORE 0.30

Proposed urban greening factor diagram for the outline phases

2. Urban Greening Factor

Examples of landscape interventions across the proposed masterplan, classified as per the Urban Greening Factor scoring chart and their corresponding score.



Permeable surface 0.1



Green walls (with native climbers) 0.6



Extensive green roof (Biosolar roof) 0.7



Grass cretes 0.3



Hedges 0.6



Intensive green roof over structure 0.8



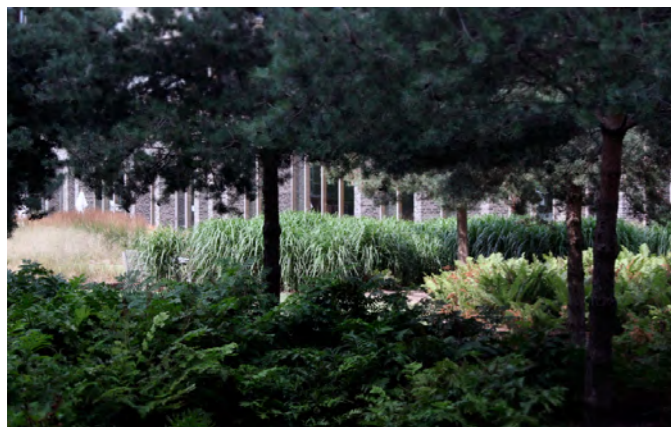
Amenity grass 0.3



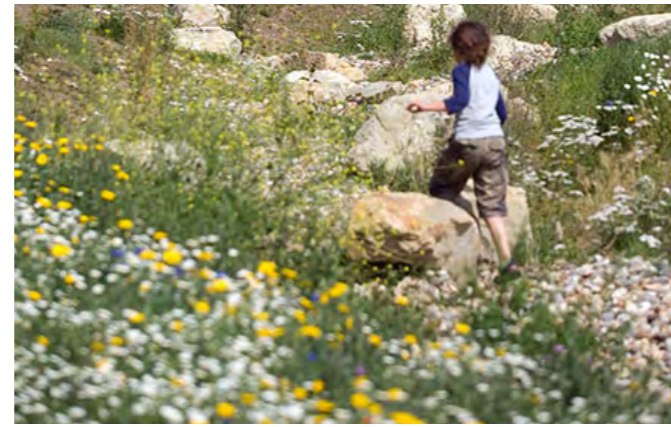
Rain gardens or SUDS 0.7



Wetland 1.0



Groundcover planting 0.5



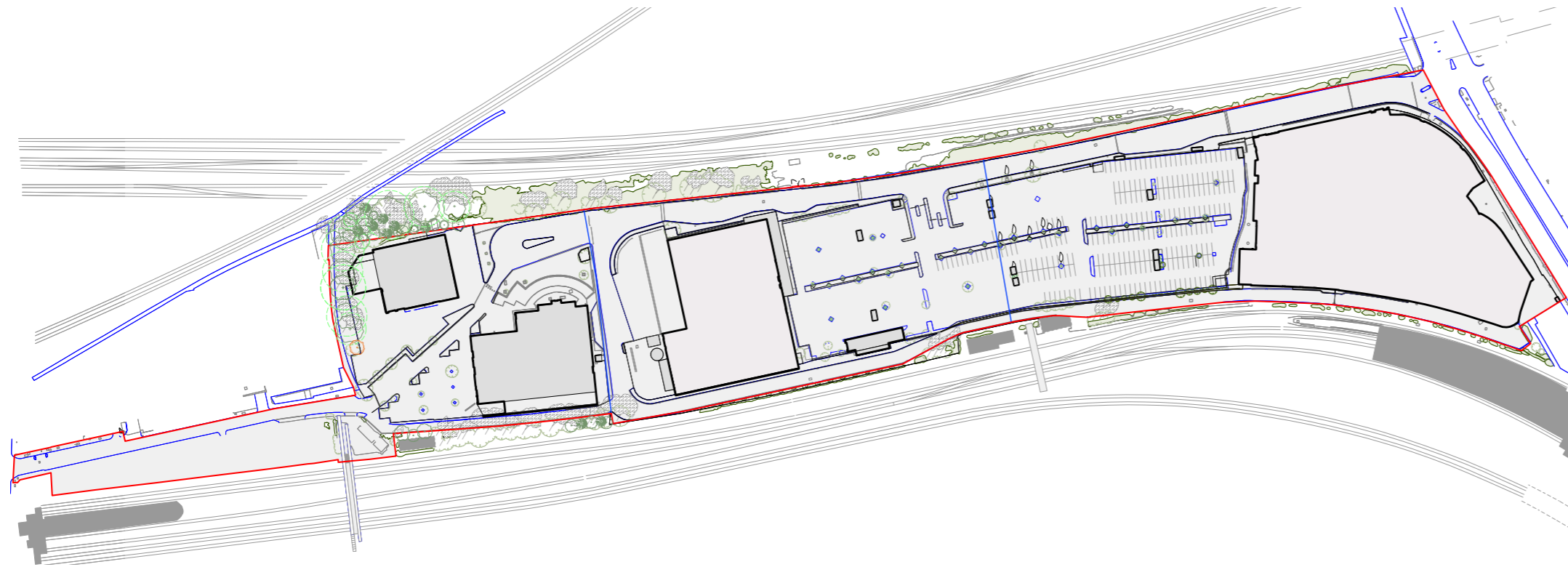
Flower-rich perennials 0.7



Semi-natural vegetation 1.0

3. Trees

The proposal aims to retain the existing trees of significance along Billy Fury Way and will propose over 100 new trees to be planted across the masterplan. These will be rich and varied in sizes, shapes, colours and scents. Whenever possible, trees are planted in soil or interconnected pits to enhance their ecological value. The bottom of the trees is also planted and made permeable.



Existing tree survey 2021

- Tree planting:
- Trees in natural soil or connected tree pits 0.8
 - Trees in pits 0.6



Proposed tree plan

4. Justification of UGF scores

The landscape-led masterplan is striking the careful balance at providing a landscape that can be used by all, be playful by offering some areas where one can sit, rest and relax, and avoid any conflict of users. This may result in some areas offering amenity grass for which the scoring is quite low.

Other environmental factors constrain the areas for Urban Greening Factor. For example, the design for the roofs in particular, which is trying to optimise the need for greening and the need for net zero energy (Pvs and air source heat pump) and both requirements are competing for the same space.

Since the upcoming change in fire regulations, the design team and the client have decided to update the designs to the latest requirements and therefore less roof area will be available for extensive green roofs to the benefit of safer pressurised cores.

On the other hand, through our partnership with the London Wildlife Trust we have designed non-accessible biodiverse areas, where we hope to create resilient and thriving habitats.

We are hoping to continue to develop the landscape planting palette emphasizing native, rich and diverse species, that are well connected together, conscious that such opportunity for ecology must not be missed.

The landscape designs at O2 will be strengthened by this organic approach where designs are simple and mimic the natural settlement of fauna and flora and benefit from how habitats would evolve and develop in a natural state. Prioritising the use of organic maintenance methods and cut back on lawns will increase the ecology of the site.

The proposal will ensure that the ecological corridors are continued and enhanced, not forgetting to provide wildlife corridors and connections with the other green spaces of the site. The development aims to offer a 'green route' with habitat that is structured and connected to allow for the movement of both wildlife and people through the development.



Impression of the proposed ecological corridors and planted fence



Relationship between the different uses and nature along the linear route



Landscape-led masterplan

Thank You