Stephenson House

Landscape Design
Design and Access Statement

Issue: Planning

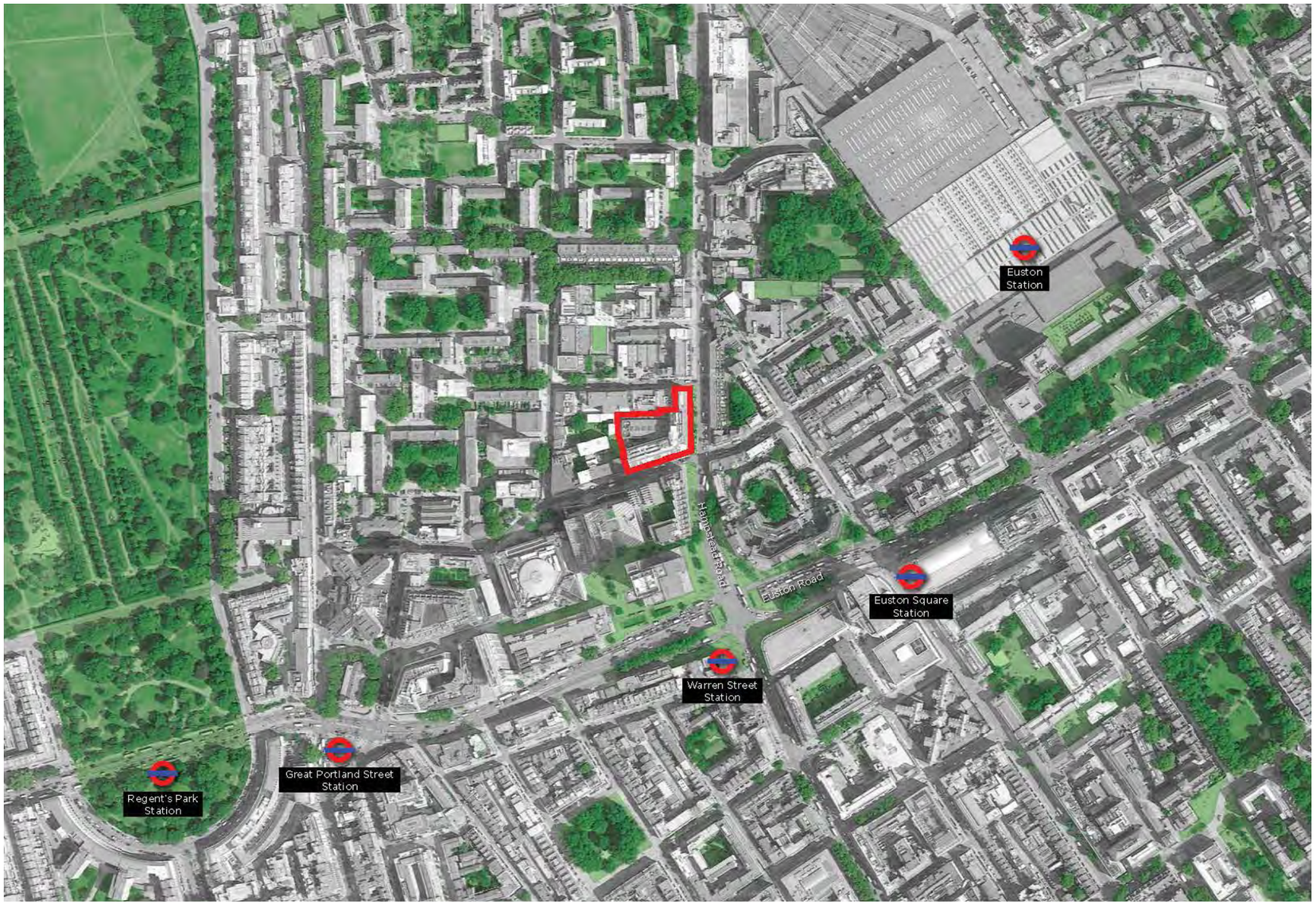
June 2017

thelandscapepartnership

Contents:

1.0 Introduction

The redevelopment of Stephenson House, provides an exciting opportunity to enhance the contribution the building makes to the public realm, streetscape and local biodiversity. A fresh approach to the building and site has been taken to help create an enriched identity, introducing biophilic design principles to help redefine the very essence of cities as places of wild and restorative nature, from rooftops to roadways. The approach aims to reconnect building users and residents to the abundant nature by bringing plants and natural diversity in close proximity to large numbers of users to help them value, protect and actively restore the biodiversity of the city.



An extract from Marks Barfield's report showing the context of the site - located in dense central London but close to Regents Park and a network of small green spaces

1.1 Existing Site and Context

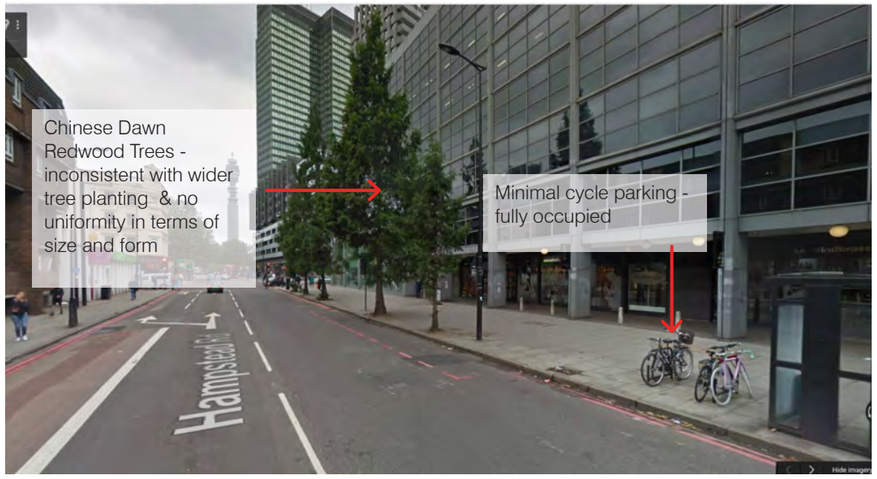
Currently, the streetscape adjacent to Stephenson House, particularly to the Hampstead Road frontage, is low in quality with standard paving, uncoordinated street furniture including signs, multiple utilities boxes, cycle hoops and a phone box. The street trees are an important element but are varied in species and size, some have failed while others are under strain.

This is a marked contrast to Regents Place, the recent neighbouring development at corner of Euston Road. Regents Place, supports office, commercial and residential units within an area of high quality public realm.

The photo survey opposite highlights the key issues with the existing streetscene.

Key Plan

1. View looking south along Hampstead Road



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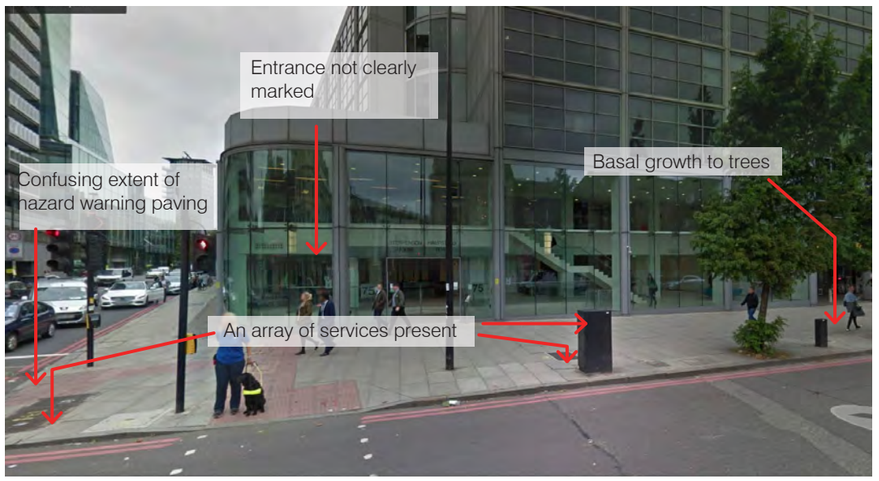

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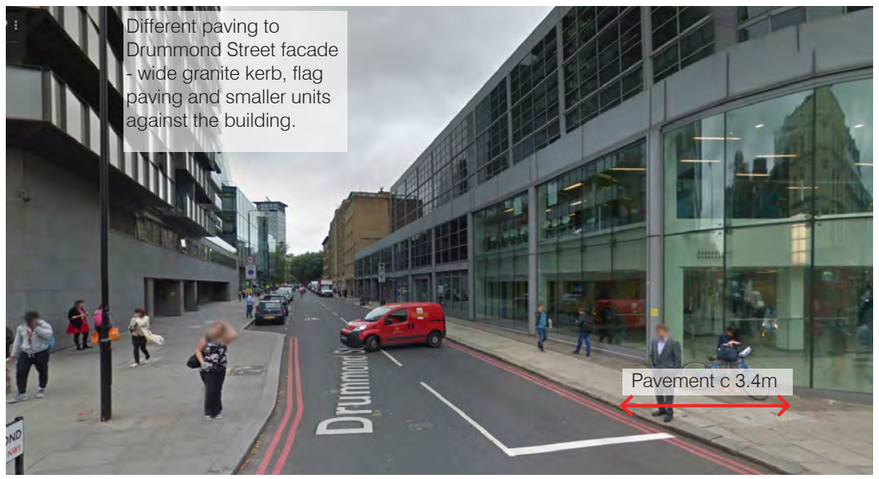
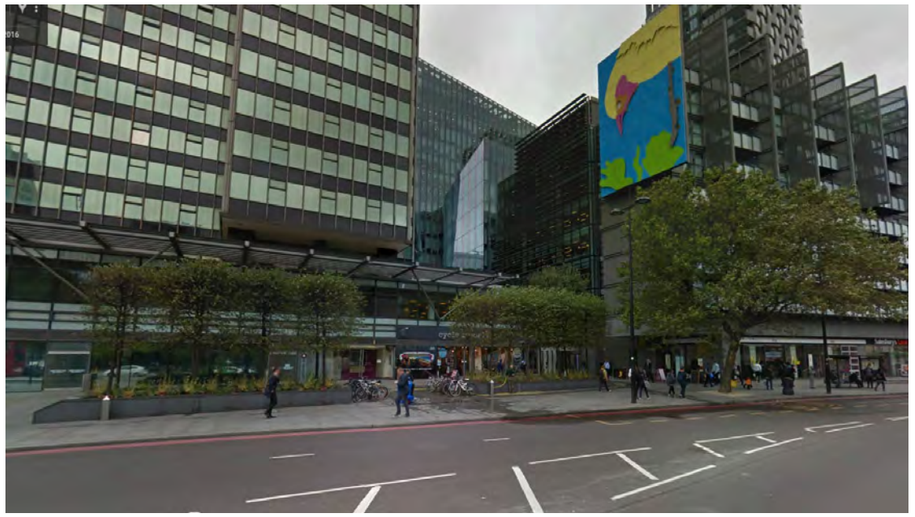
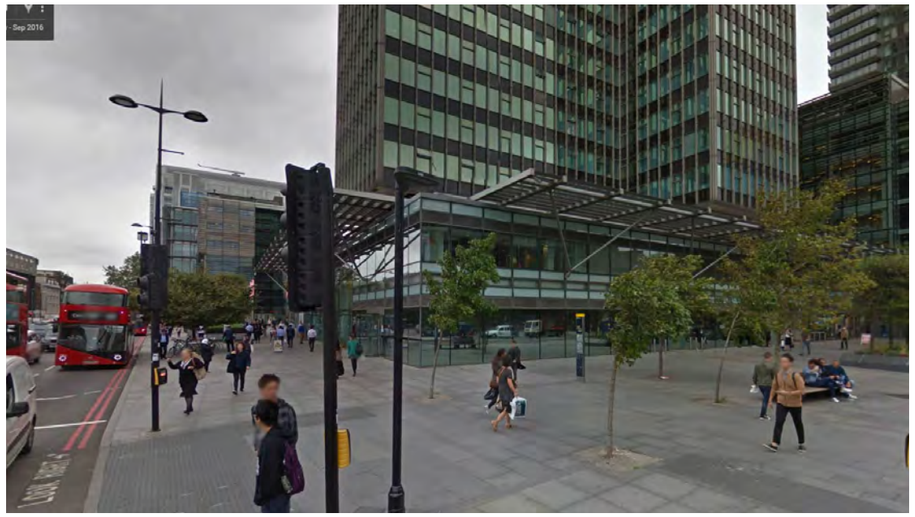


4.

1.2 Existing Context



1. View looking north from the corner of Euston Road and Hampstead Road.
The recent development, Regents Place with pleached trees and a mature London Plane tree



2. New trees at the corner of Hampstead Road and Euston Road. Vulnerable to wind.

Key Plan

3. Hampstead Road west side. A cluster of existing London Plane trees in self binding gravel spaced randomly and a range of signs and street furniture. Provides little coherence to the street.

1.3 Precedents - Public Realm

The precedents opposite show recent schemes in other central London locations and are comparable in terms of scale. They illustrate a good level of quality with regards to the detailing of the public realm.

The Angel Building, St John Street
Large street trees and a designated spill out area for the cafe defined by raised planters. Formal box hedge articulates the area within which the street trees are located.
Pavement width varies from 10-15m

Bankside 1 2 3 , Southwark Street,
High quality paving and careful hardscape detailing define areas for trees and cycles. Street trees are evenly spaced and uniform species. Cafés spill onto the street. Coordinated zone for cycle parking, utilities, signs, street trees creates a well planned coherent space. A raised table also features which adds quality and coherence.
Pavement width c.8.5m

1.4 Key Objectives

Situated at the corner of Hampstead Road and Drummond Street, Stephenson House has a role to play in contributing to both streets at ground level, particularly since the main entrance is situated at the corner of the two streets. It will be significant in providing a new elevation both to the local and wider streetscape.

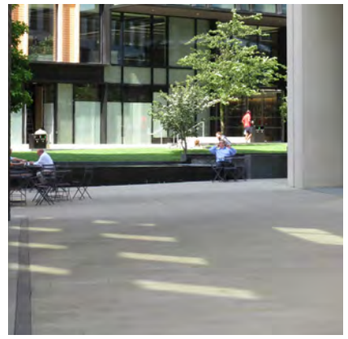
In addition, a new layer will be added to the roofscape with the combination of terraces, pocket gardens and green screens, which will further enhance the building when viewed from the surrounding streets, offices and homes. The overarching principle is to improve the response to the streetscape in terms of the quality of the ground plane and planting/biodiversity to public realm, elevations and roofscape.

The key objectives and opportunities with regards to the public realm are to:

- Raise the quality of the materials of the ground plane to provide a welcoming and attractive street scene that response to the particular local aspect, orientation as well as the wider public realm context.
- Use materials that are inherently light and warm in visual appearance to help mitigate overshadowing effects of the surrounding buildings as well as contributing to reducing the effects of heat gain from paving material choice.
- Provide an accent to the street corner and provide legacy street tree planting to enliven the street with porous tree surround materials helping to reduce run off, existing tree health and new tree establishment.
- Rationalise the hazard warning paving and potentially provide raised crossing points to Drummond Street and William Road.

The site boundary extends approximately 4m into the public highway to Hampstead Road. The public highway beyond this, is under the ownership of TfL.

Any improvements to the adjacent streetscape would therefore need to be agreed with TfL. Improvements also need to be considered in the wider context of Hampstead Road so that a palette of materials and street trees can be proposed that are appropriate and offer a fully coordinated, cohesive response.



Street re paved with natural stone e.g. Yorkstone (subject to agreement)

Existing street trees
- Dawn Redwood
Metasequoia glytostroboides

Proposed trees
- Maidenhair Tree
Gingko Biloba

The diagram above illustrates the suggested improvements to the streetscene. Tree planting would also need to be carefully coordinated with a detailed utilities survey.

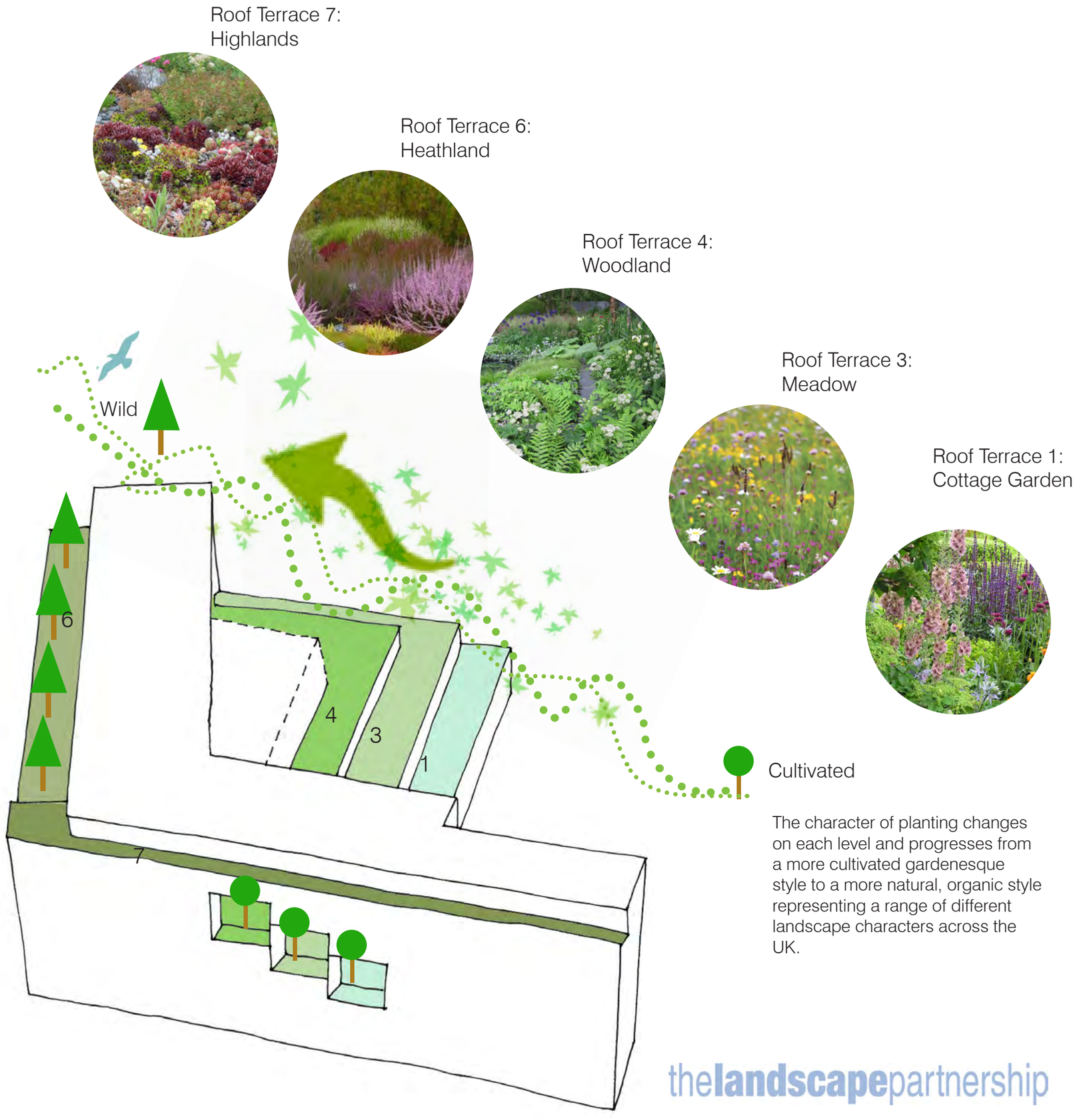
1.4 Key Objectives

In considering the opportunities that the roof terraces present, reference has been made to Camden's Planning Guidance *CPG 3, Sustainability* and *DP22 Promoting Sustainable Design and Construction* and Camden's *Biodiversity Action Plan,* which promote green roofs and walls. The latter contains a range of options to consider to increase biodiversity value.

The Key objectives with regards to the roofscape are to:

- Maximize the potential for biophilic design by creating opportunities for planting where possible and to increase green and open space in a dense urban environment.
- Increase biodiversity, include planting for pollination, slow down rainwater run-off and help reduce the heat island effects.
- Use different planting styles and palettes to help create varied and distinct characters to the different levels of the building.
- Design spaces that have a range of scales to accommodate different activities.

The planting to the roof terraces would establish a character and identity of planting types and performance that responds to the different levels and soil depths. The proposal is that each roof terrace would be characterised by a different planting style. Ascending the levels, the planting would progress from a more cultivated garden style to a more naturalistic, informal style. In addition, the planting would also reference a range of different landscape characters from across the UK.



The character of planting changes on each level and progresses from a more cultivated gardenesque style to a more natural, organic style representing a range of different landscape characters across the UK.

1.5 Concept - Roof Terraces

7th Floor
Highland

Lithospermum diffusum
Purple gromwell

Iberis saxatilis
Alpine candytuft

Pinus mugo
Dwarf pine

6th Floor
Heath

Molinia caerulea
Moor grass

Festuca gautieri
Bearskin fescue

Dryopteris affinis
Golden scale fern

4th Floor
Woodland

Geranium sylvaticum
Wood cranes bill

Symphytum Hidcote Blue
Comfrey

Heuchera americana sp.
Coral bells

3rd Floor
Meadow Style

Luzula nivea
Snowy woodrush

Melica ciliata
Silky spike melic

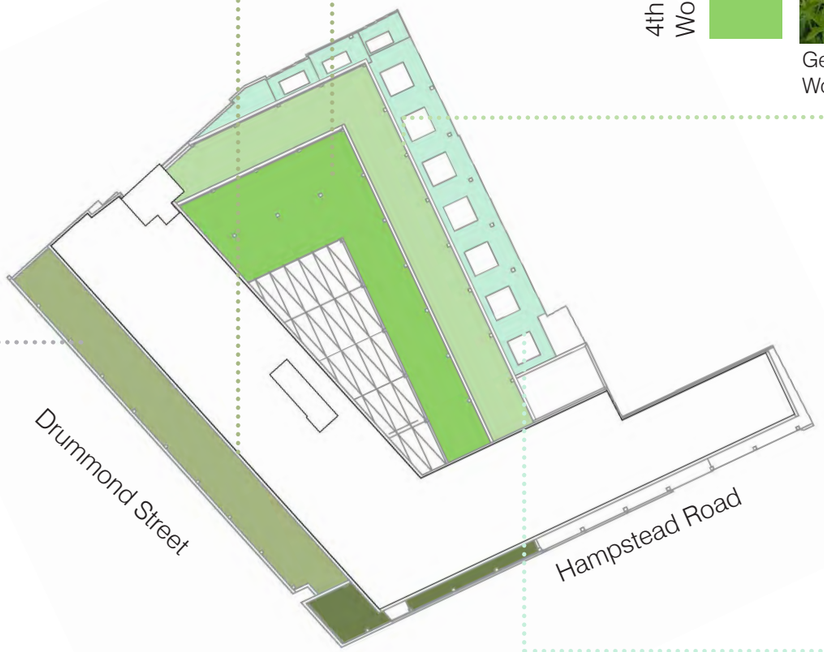
Allium schoenoprasum
Chive

1st Floor
Cottage Garden

Euonymous japonicus ‘Jean Hughes’
Spindle planted as a hedge

Digitalis purpurea
Common foxglove

Anemone ‘Honorine Jobert’
Japanese anemone



1.6 The Proposals - Roof Terraces

Terrace 1: Cottage Garden Style:

Herbaceous planting
Clipped hedge
Green screens to protect privacy
Synthetic turf
Flag paving

Terrace 3: Meadow Style:

Herbaceous planting and grasses
Composite timber deck and seating edges

Terrace 4: Woodland Style:

Shrubs, herbaceous planting and grasses
Multi stem trees
Composite timber deck and seating edges

Terrace 6: Heathland Style:

Shrubs, sedum, herbaceous planting and grasses
Composite timber deck and seating edges

Pocket gardens: to levels 2,3 and 4

Small trees in raised planters planting to accord with adjacent terrace

Terrace 7: Highland Style:

Sedum and plug planting
Gravel

0m 5m 10m 20m

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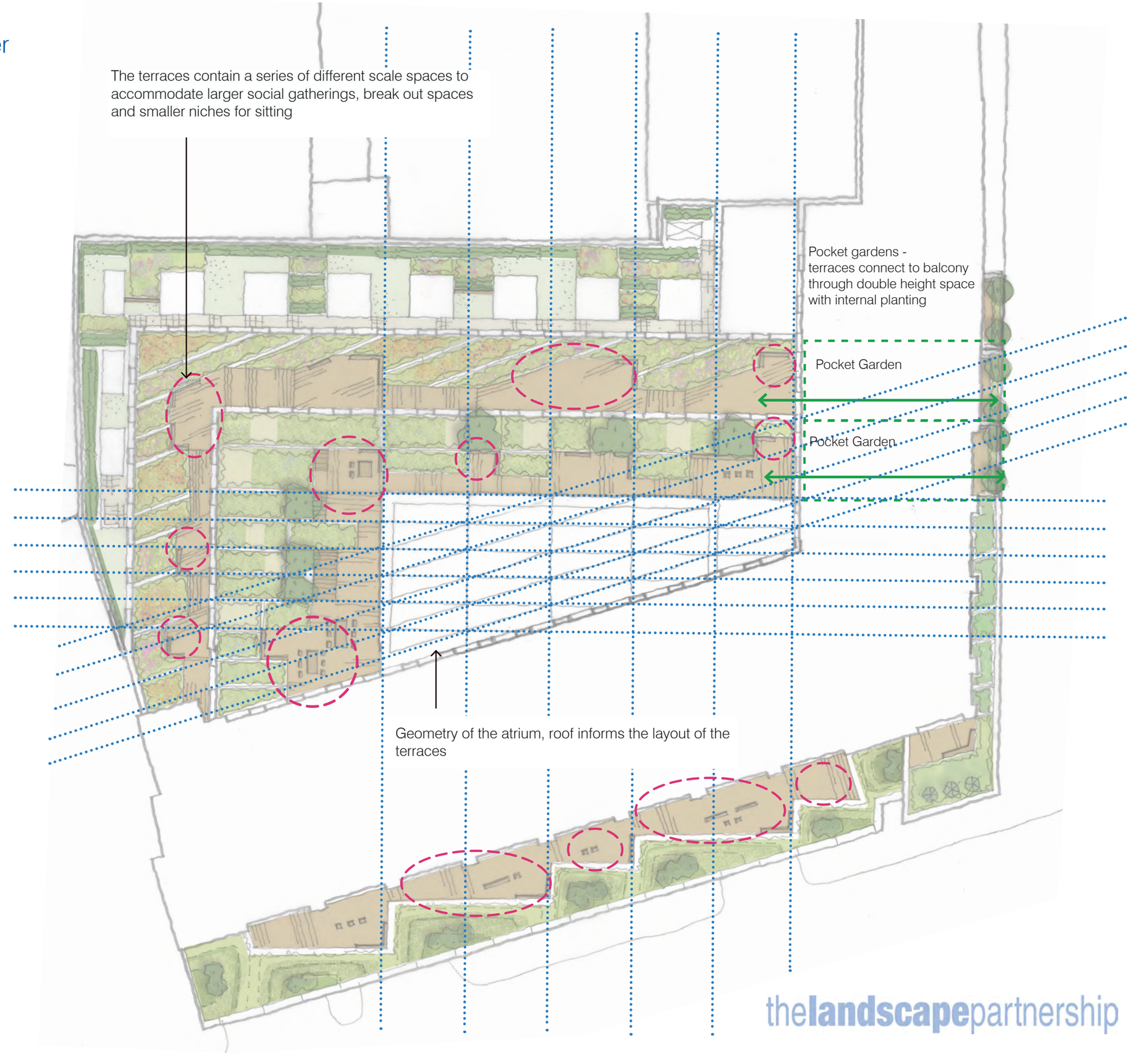
1.7 The Proposals - Structure and Spatial Order

The geometry of the atrium roof informs the layout and patterns of materials and planting of the terraces. The redevelopment of the existing building provides a unique opportunity to create important new amenity space, terraces, and balcony “pocket gardens”. Within this matrix, a variety of different scale spaces will accommodate larger social gatherings, break out spaces and smaller niches for sitting.

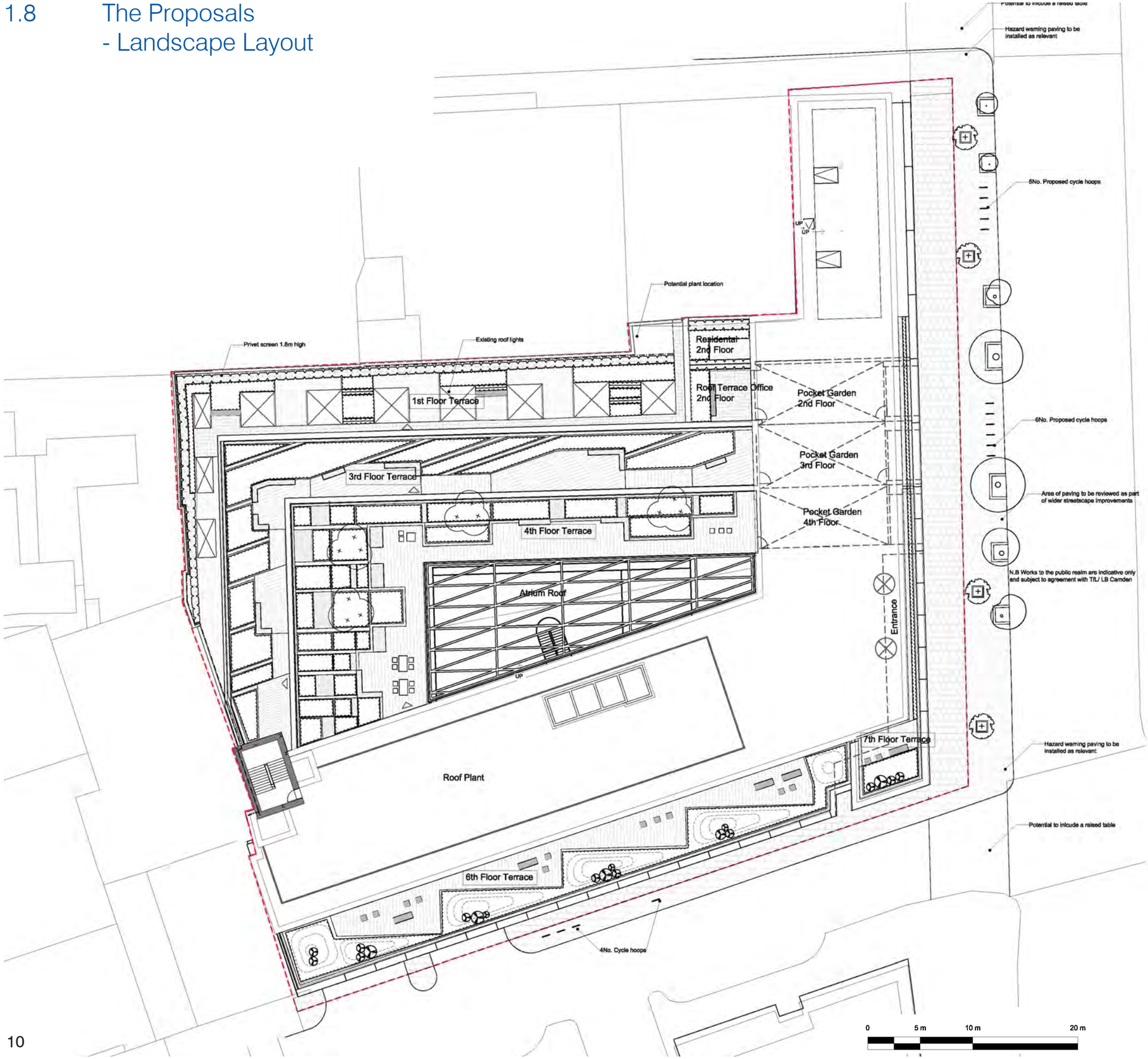
The roof terraces will provide an outdoor garden space for staff and users, with paving or timber decking leading to more extensive green roofs. In designing appealing outdoor amenity space on the various terraces, it is important to consider and address the issues of overlooking for the adjoining residents. Planting forms the perimeter of each of the terraces to prevent people from accessing the edge. In addition, pre grown screens are proposed to the first floor, where issues of overlooking are most prevalent.

The green and brown roofs will be planted on substrate in bands of varying thickness - with simple sedum communities on the shallow bands and dry meadows, heathland communities on thicker layers, low-growing drought-tolerant perennials and shrubs on the thickest bands.

The Pocket gardens would contain small trees in raised planters, which would be visible from Hampstead Road. The planting style would correspond with the style of the adjacent terrace.



1.8 The Proposals - Landscape Layout



Site boundary

SOFTWORKS

Existing trees to be retained

Proposed multi stem trees

Proposed trees

Proposed planting

Proposed hedge 600mm high

1.8m high Pre grown Privet screen e.g. green screen by Mobilane mounted to galvanised steel framework

Synthetic turf e.g. 'Kensington' by EasiGrass or similar agreed

Proposed feature shrubs

HARDWORKS

Paving & surfacing

350(l)x400(w)x50(h)mm Smooth ground paving stones with natural aggregate e.g. Perfecta by Marshalls or similar agreed

3600(l)x176(w)x32(d)mm Composite decking boards e.g. 'Enhanced Grain Coppered Oak' by Millboard or similar

Gravel strip
Rounded ballast

Natural stone paving e.g. Yorkstone

FURNITURE

FSC European timber seat with metal legs e.g. 'Clifton' Bench by Woodscape

FSC Eurpoean timber cube seat

FSC European timber table and bench seating e.g. FalcoFare by Falco

FSC European timber seating element integrated with raised metal planter

Raised planter formed of composite deck boards with integrated seating elements e.g. 'Ehanced Grain Coppered Oak' by Millboard or similar agreed

Revision	Number	By	Date

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landscape architecture urban design environmental planning

Bedford	01234 261315	☐
Woodbridge	01394 380509	☐
London	0203 092 4141	☒
Norwich	01603 230777	☐

Project
STEPHENSON HOUSE

Drawing
LANDSCAPE LAYOUT

Job No.	17412
Dwg. No.	17412-TLP-PA01
Scale	1:200@A1
Drawn	MR
Checked	OL
Date	02-06-2017

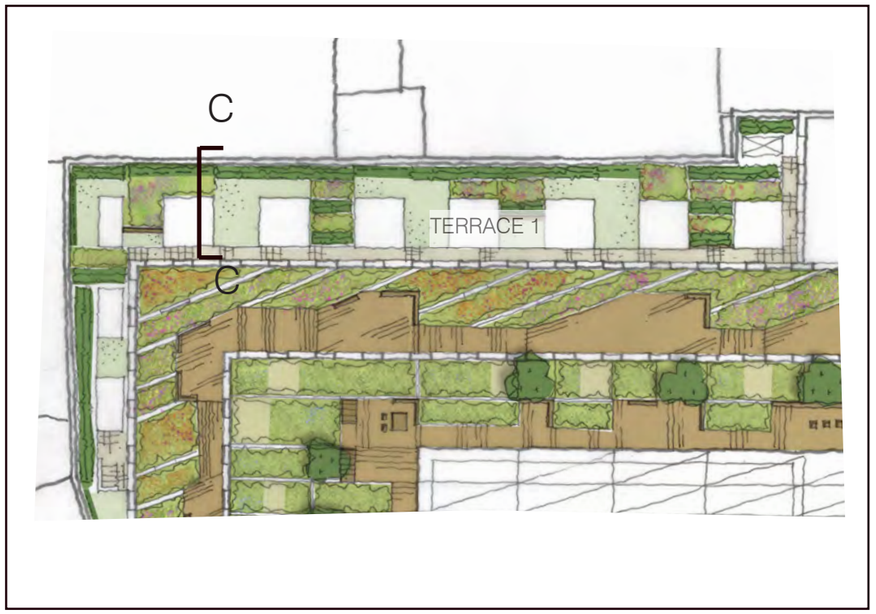
Status
PLANNING

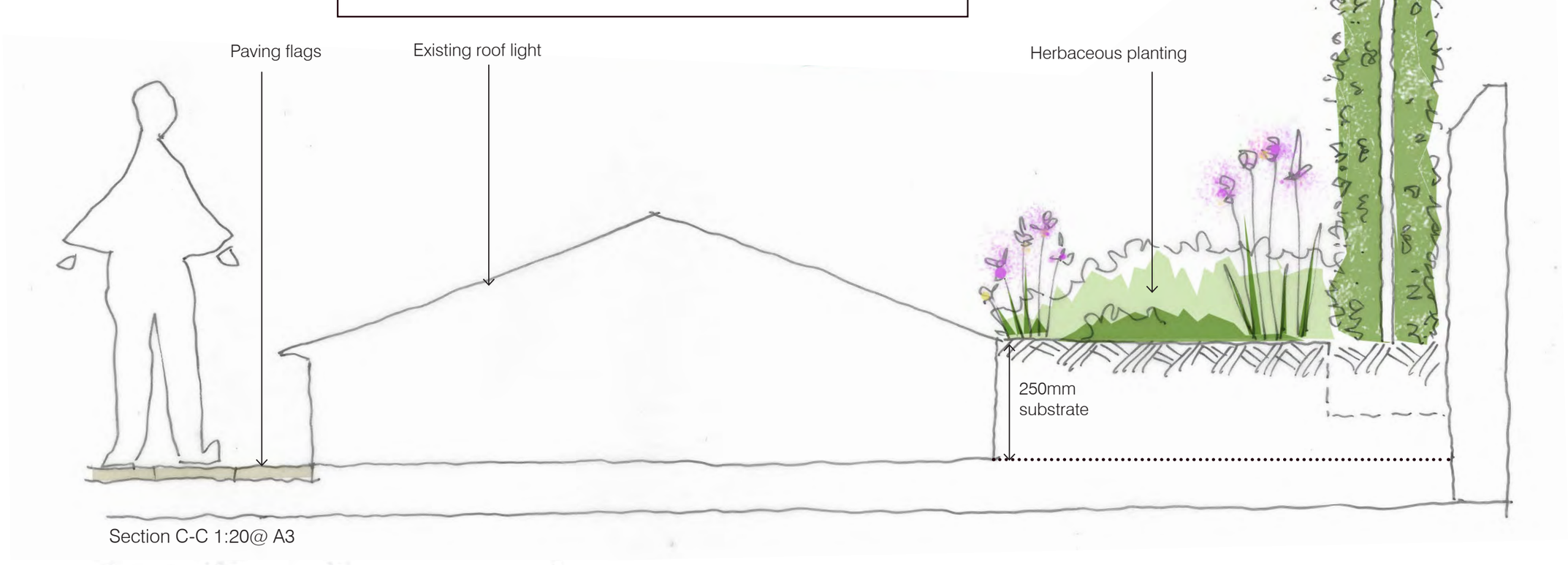
North

1.9 The Proposals - Terrace 1

Terrace 1 has a formal layout comprised of paving flags adjacent to the building, areas of synthetic turf for ease of maintenance and longevity and bands of ‘cottage garden style’ planting.

The edge of the lowest terrace has evergreen planting to the periphery to maintain privacy to the neighbours. The planting is a dense c. 1.5m hedge or a c.1.8m pre grown screen which limits views. The planting also prevents those using the terrace from getting close to the edge.





Section C-C 1:20@ A3

0 0.5 m 1m 2m

SCALE: 1:20

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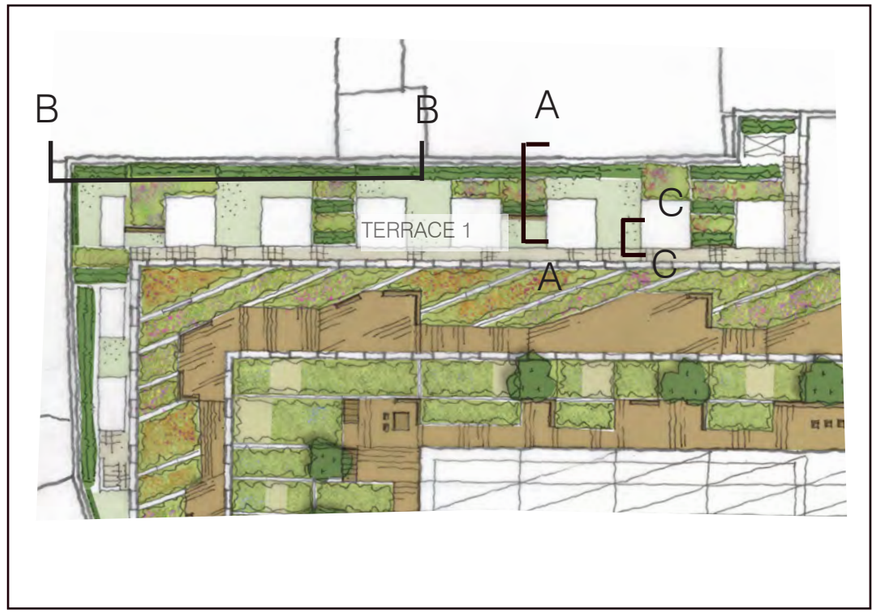
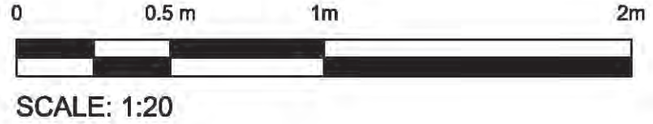
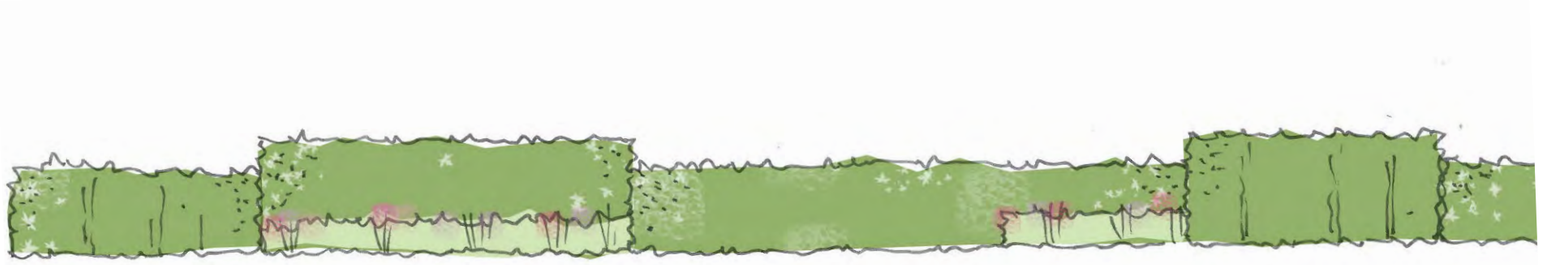
1.9 The Proposals - Terrace 1

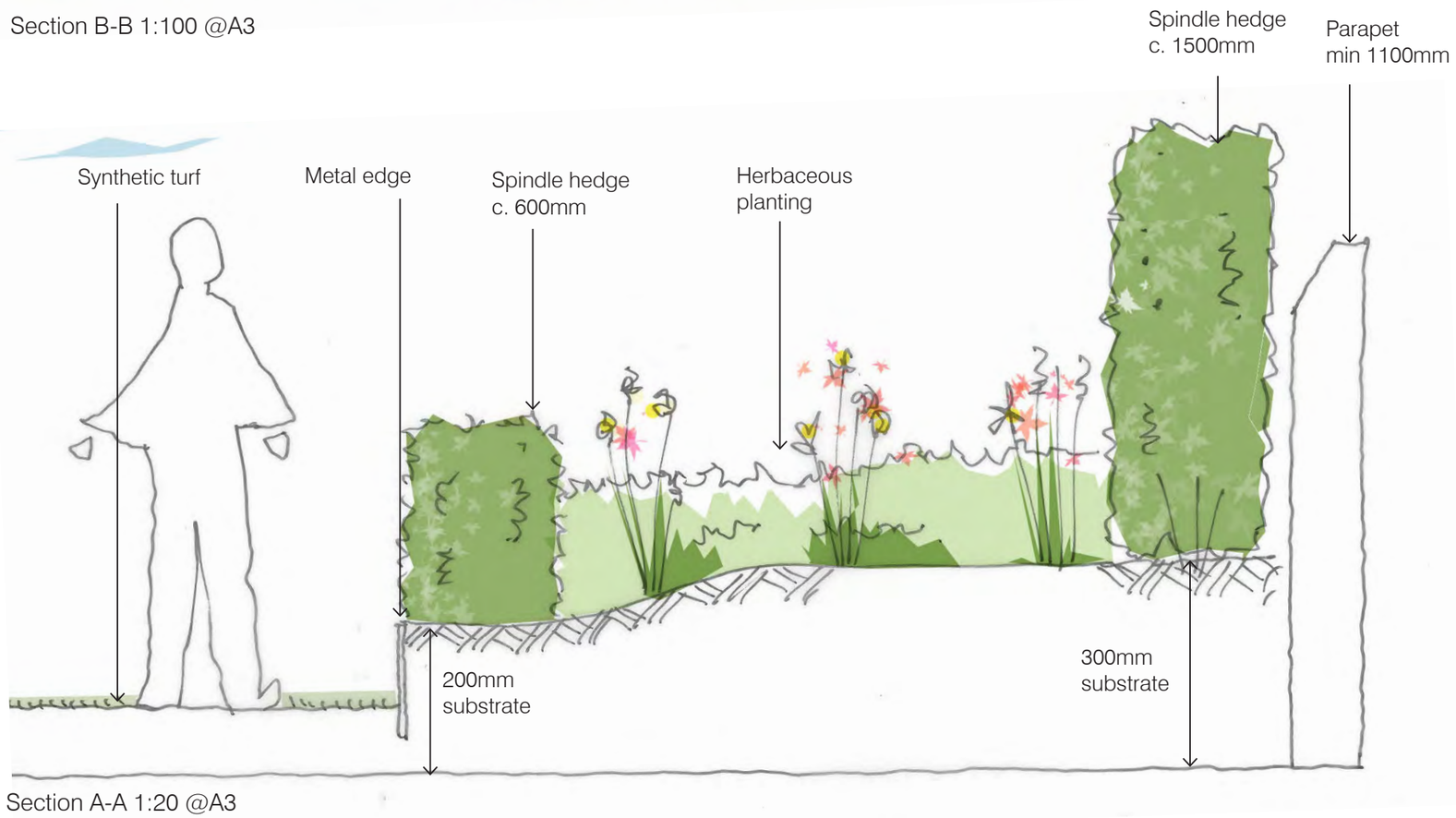




SCALE: 1:20



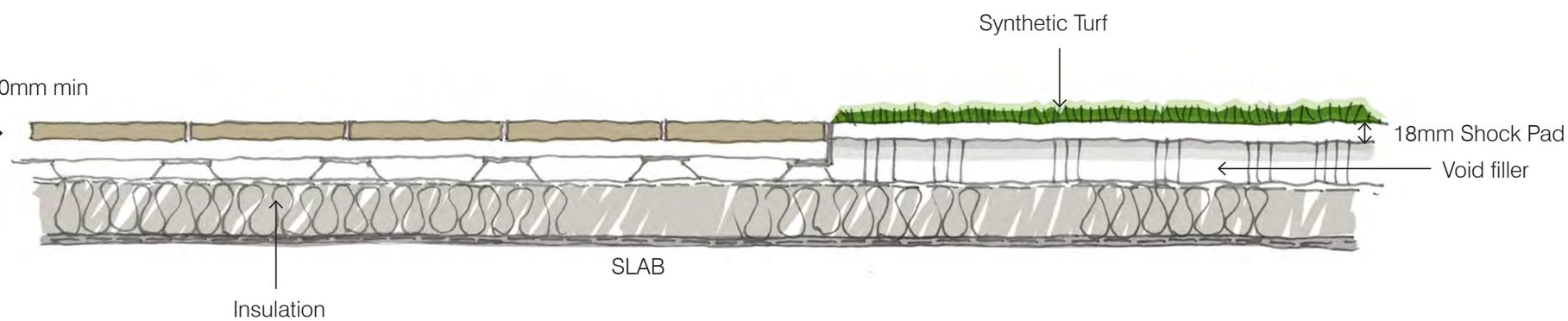
Section B-B 1:100 @A3



Section A-A 1:20 @A3

Paving:

Porcelain = 20mm - 50m
For Concrete/Stone = 50-80mm min



Typical Detail C-C 1:10 @A3

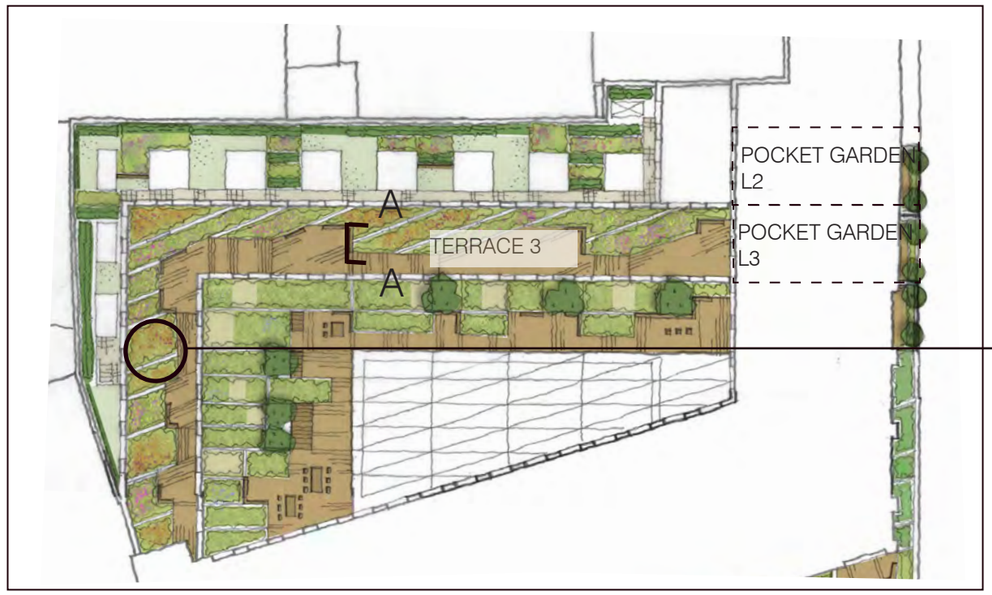
1.10 The Proposals - Terrace 3

Terrace 3 comprises areas of timber decking against the building to provide circulation and seating areas. Meadow style planting has been arranged using a diagonal grid informed by the atrium roof.

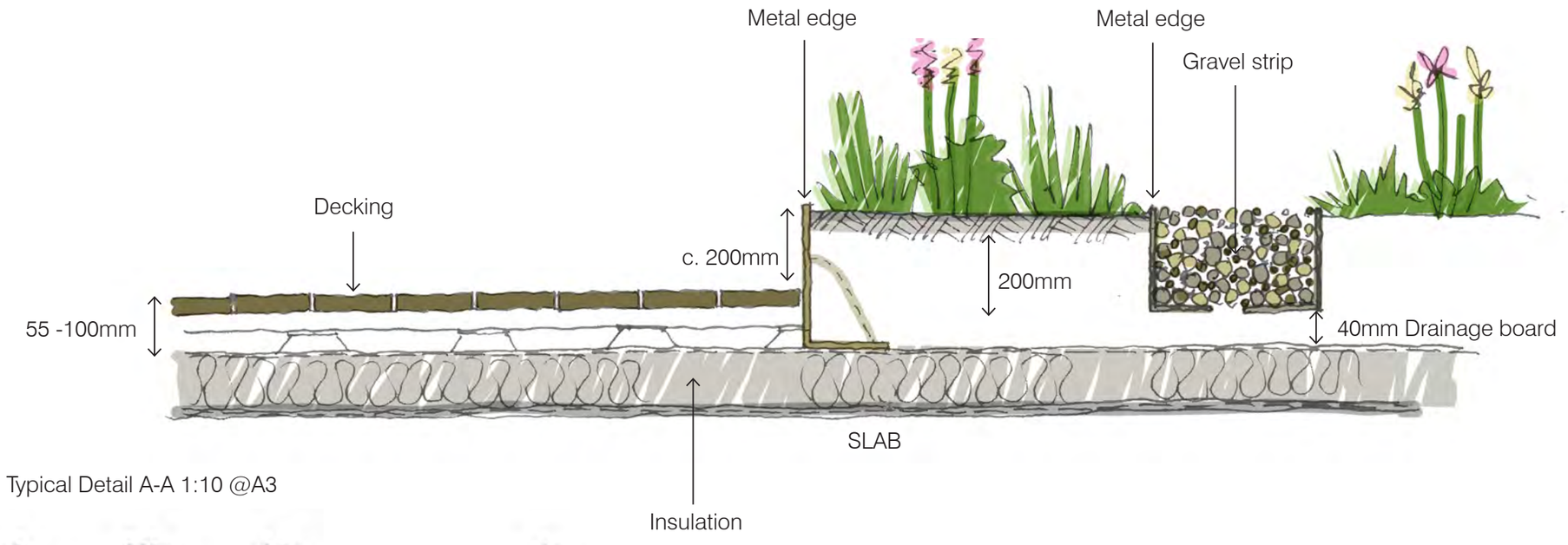
Bands with a combination of gravel and flag paving allow for ease of access for maintenance.

The pocket garden at this level, to the balcony would contain two small trees such as a Star Magnolia within raised planters.
The raised planters would contain species included on the main terrace for continuation. Internally small trees such as fig, which grow reliably in internal spaces, would be incorporated. Once the micro-climatic conditions have been established the choice of tree can be reviewed to ensure that the most appropriate species is specified.

A pocket garden is also present on the second floor. The same principle would be adopted. Since there is no external terrace to the second floor, species present on the first floor would be incorporated in the raised planters to accompany the two trees.



Gravel path and stepping stones between planting for maintenance.



Typical Detail A-A 1:10 @A3

0 0.25 m 0.5 m 1m

SCALE: 1:10

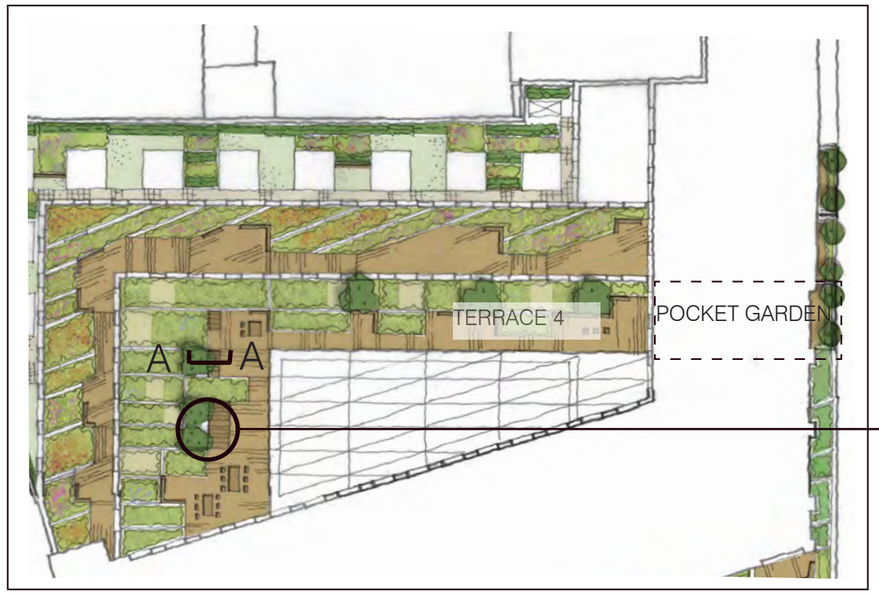
1.10 The Proposals
Roof Terraces - Terrace 4

Terrace 4 is the largest terrace and it is considered that trees could be accommodated here.

Areas of timber decking and bands of woodland style planting feature in a rectilinear formation.
Within this configuration different size seating spaces are incorporated to provide larger, more sociable areas and smaller niches.

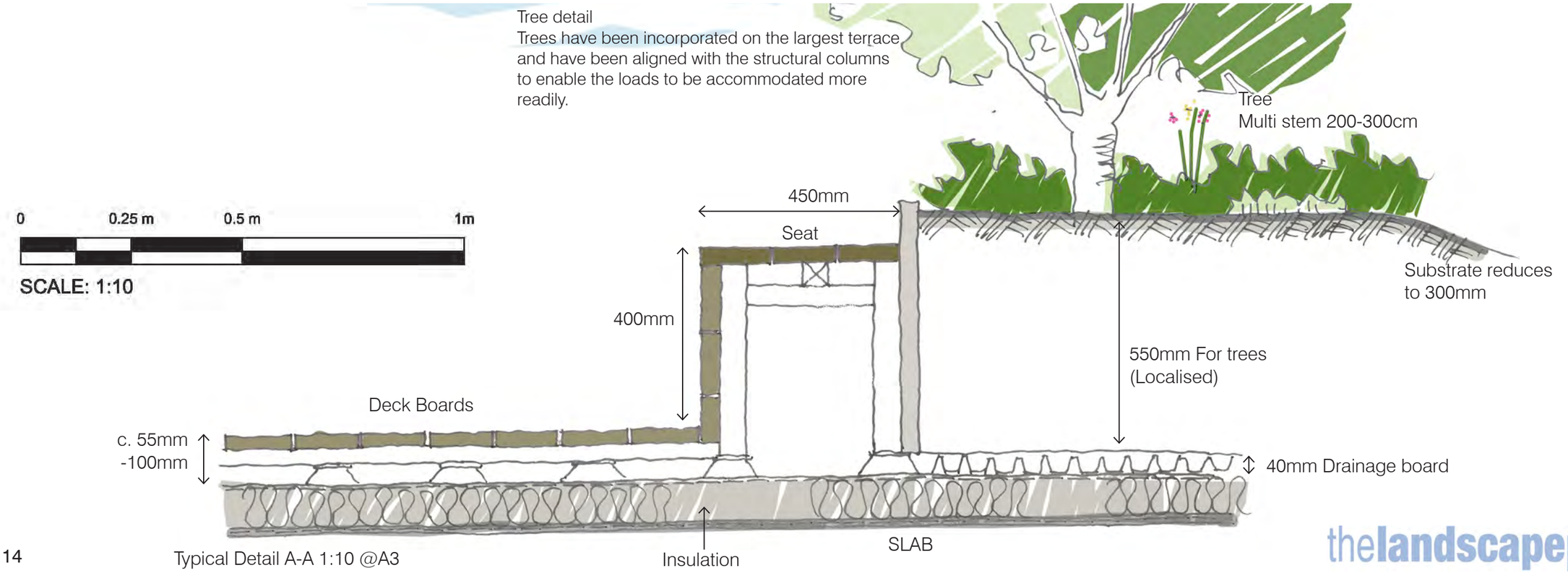
The pocket garden at this level, to the balcony would contain two small trees such as a Star Magnolia within raised planters to remain consistent with the pocket gardens at lower levels.

The raised planters would contain species included on the main terrace for continuation. Again, internally small trees such as fig, which grow reliably in internal spaces, would be incorporated. Once the microclimatic conditions have been established the choice of tree can be reviewed to ensure that the most appropriate species is specified.



Seats project into the planting and the back rests create a taller raised planter to the trees.

Tree detail
Trees have been incorporated on the largest terrace and have been aligned with the structural columns to enable the loads to be accommodated more readily.

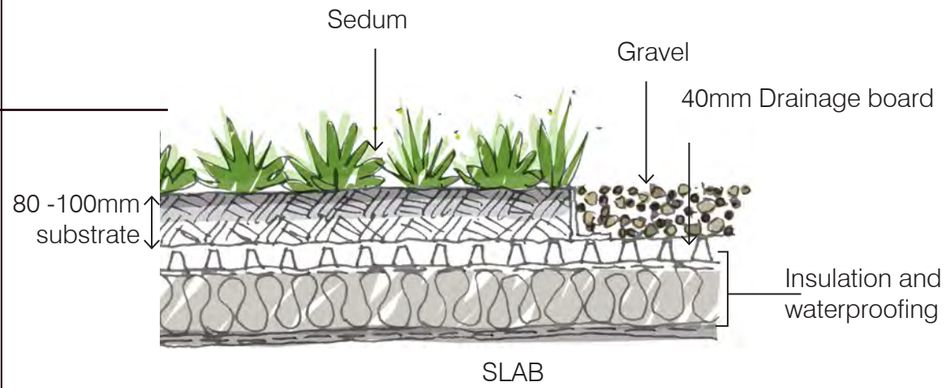


Typical Detail A-A 1:10 @A3

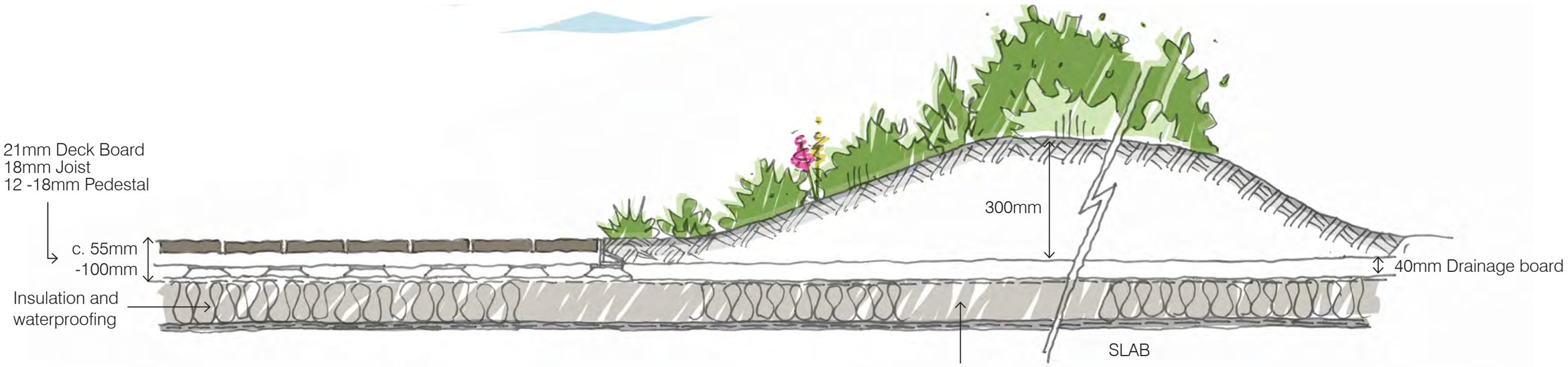
1.11 The Proposals
Roof Terraces - Terrace 6 and 7

Terrace 6 uses mounding to accommodate the depth of substrate required for the planting. Some larger shrubs would be incorporated here, which could be visible from Drummond Street below.

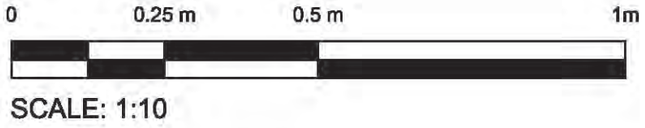
Terrace 7 is the smallest roof terrace and will not be accessible. It will comprise a simple sedum mix with plug plants for ease of maintenance.



Typical Detail A 1:10 @A3



Typical Detail B-B 1:10 @A3



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1.12 Hardscape Materials Strategy Roof Terraces

The materials have been selected to complement the planting style on each terrace and to reinforce the proposed different character areas. The materials will also provide a robust, low maintenance and visually appealing.
Paving flags to Terrace 1 - smooth ground paving flags with natural aggregate e.g. Perfecta by Marshalls
Synthetic turf to Terrace 1 e.g. Kensington by Easi grass
Composite timber decking to Terraces 3, 4, 6 ,7 e.g. Enhanced grain deck boards by Millboard.
Metal planters to terraces 1 and 3 with integrated timber benches and seats e.g. Perimeter Planterline by Kinley Systems.

Synthetic turf - Terrace 1

Smooth ground paving flags - Terrace 1

Multi stem trees - and planting
Terrace 4

Composite timber deck and seats
Terraces 3 and 4

A matrix of planting and gravel - Terraces 4 and 7

Sedum/ plug planting and a gravel margin - Terraces 7

1.13 Softworks/ Planting Strategy Roof Terraces

The green and brown roofs will be planted on substrate in bands of varying thickness - with simple sedum communities on the shallow bands and dry meadows, heathland communities on thicker layers, low-growing drought-tolerant perennials and shrubs on the thickest bands.

The planting palette will be developed with input from the ecologist to ensure that opportunities for biodiversity are maximised.
Plants have been chosen that are robust and drought tolerant and are considered suitable to the conditions of the site. The plants, at times provide an impression of the various character areas rather than being true natives of that particular landscape type. For example, it was recognised that establishing an actual meadow in this context would be challenging, instead grasses and perennials have been selected that would mimic a meadow.

A typical plant list is included opposite to provide an indication of the type of planting, character, species, size and density.

PLANTING STRATEGY - TYPICAL SPECIES LIST

Stephenson House Roof Terraces

Terrace Number		Class	Plant Name	Height	Root	Container	Density	Girth
	Typical Species							
1	Cottage Garden Style							
		Herbaceous	Anemone 'Honorine Jobert'	10-15cm	C	1.5-2L	0.4	
		Herbaceous	Digitalis purpurea				0.4	
		Herbaceous	Alchemilla mollis		C	1.5L	0.3	
		Pre grown hedge screen	Ligustrum Liga	Panel size 120(w) x 180(h)				
		Hedge	Euonymous japonicus 'Jean Hughes'	30-40cm		2L	4 per lm	
3	Meadow Style							
		Herbaceous	Luzula nivea		C	1.5-2L	0.45	
		Herbaceous	Melica ciliata	20-30cm	C	2L	0.45	
		Herbaceous	Allium schoenoprasum		C	1L	0.25	
		Herbaceous	Carex morowii		C	1.5-2L	0.3	
4	Woodland Style							
		Herbaceous	Geranium sylvaticum		C	1.5-2L	0.35	
		Herbaceous	Symphytum Hidcote Blue		C	1.5-2L	0.4	
		Herbaceous	Heuchera americana			1.5-2L	0.4	
		Tree	Betula pendula multi stem	300-400cm	RB		N/A	
6	Heath Style							
		Shrub	Betula nana	30-40cm	C	2L	0.45	
		Herbaceous	Molinia caeulea		C	2L	0.5	
		Herbaceous	Festuca gautieri		C	1.5-2L	0.3	
		Shrub	Dryopteris affinis		C	1.5-2L	0.4	
7	Highland Style							
		Herbaceous	Lithospermum diffusum 'Heavenly Blue		C	1.5-2L	0.3	
		Herbaceous	Iberis saxatilis		C	1.5-2L	0.3	
		Herbaceous	Eryngium planum	20-30cm	C	2L	0.5	
		Small tree	Pinus mugo	50-90cm	C	45L	NA	
	Pocket Gardens - levels 2,3 and 4							
External		Small tree	Magnolia Stellata	200-300cm	C		N/A	
Internal		Small tree	Ficus Benjamina	200-300cm	C			

1.14 Maintenance: Roof Terraces

General Maintenance

Selecting plants appropriate to the particular micro-climates on the roof terraces and pocket gardens will reduce the need for complex or intensive maintenance and enable the planting to succeed in the local environment providing succession and longevity. General maintenance is normally carried out twice annually during springtime and autumn months. However, additional maintenance may be required which will be dependent upon the location of the roof, such as the removal of weeds, seedlings and accumulated leaf litter from nearby trees may also need to be done carried out.

Any vegetation which has encroached into drainage outlets, walkways and the vegetation barriers (pebbles) should be removed. Weeding an extensive green roof is necessary to maintain a healthy roof and all aggressive species of shrub sapling and undesirable plants should be removed. Some weeds however are helpful to the biodiversity of the roof and considered as a problem only of aesthetics. If considered excessive, they can be removed ensuring that care is taken to follow specific instructions as to the type and species of vegetation removed. All extensive green roof installations will at times include some moss and grass.

Areas of dead vegetation / bare patches can be easily repaired and this is best done during the main growing seasons of March/April or from late August until the end of September. This can be achieved by taking plug plants (new) or vegetation cuttings from surrounding areas of healthy mature plants and place on bare patches, pressing gently into the soil.

Irrigation

It is generally not considered necessary to irrigate extensive substrate green roof systems as shown on the 7th Terrace - ‘Highland Style’. However, a water supply point should be provided adjacent to the all green roofs, both to assist with general maintenance of the planting on areas of deeper substrate and to enable a manually operated drip-line irrigation system to be installed as a precaution against extreme drought conditions.