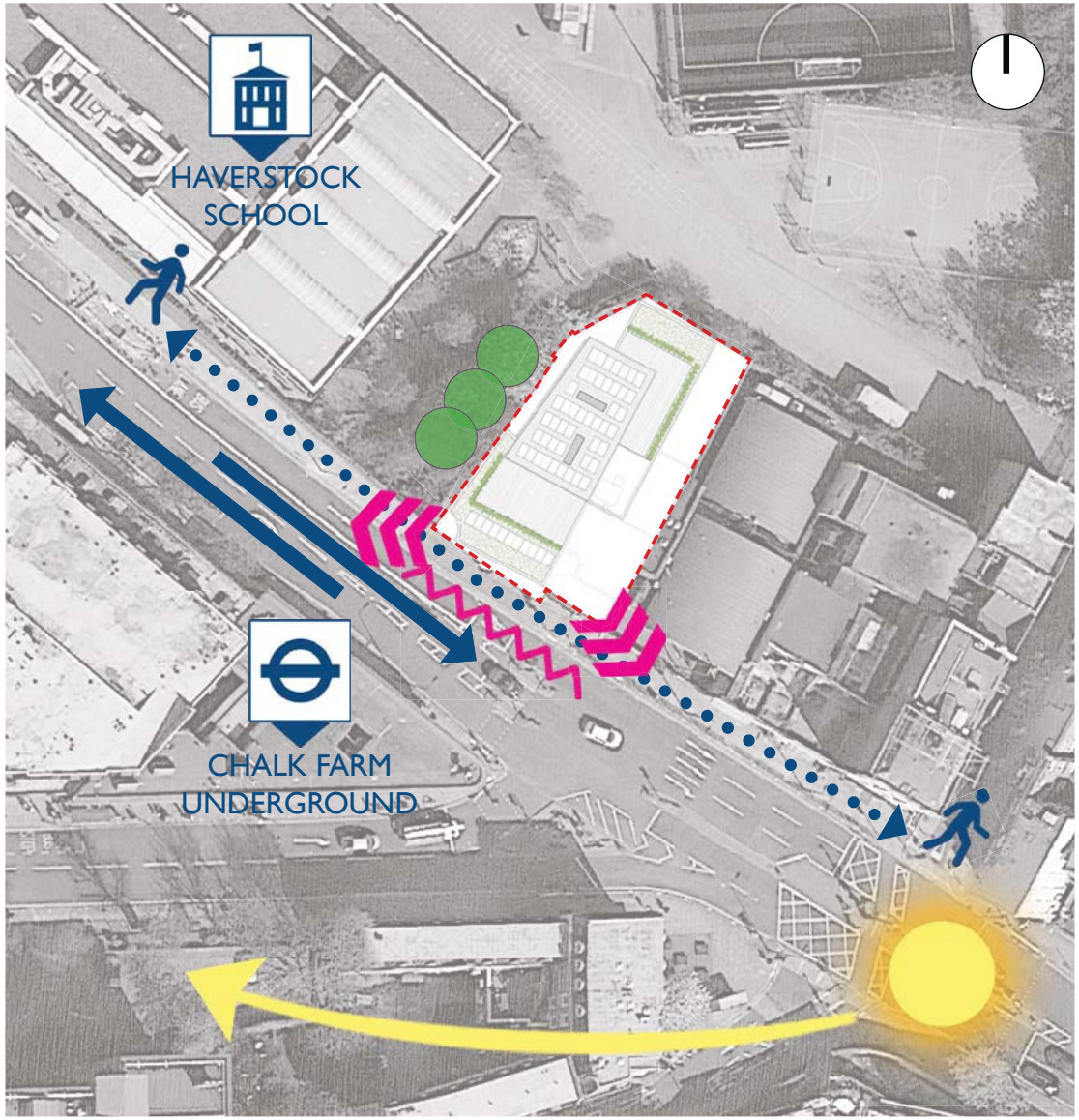
6.0 Landscape Proposal



Pedestrian circulation

Vehicular circulation

Views

Noise and sound

Existing tree

6.1 Site analysis

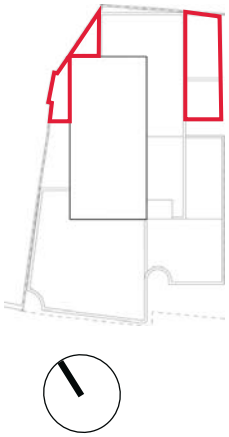
The various levels of the building allow for a range of treatments and activities depending on the aspect and relationship with Haverstock Hill (A502).
Areas with good light levels will have more active areas, whereas areas with lower light levels may need more lighting or reflective materials to enhance the spaces.
Areas that will have high light levels will use materials that reduce the reflective values so not to increase the urban heat effect.
Aspects would influence planting palette choices, trees and
shrubs can also be used to mitigate noise and pollution from Haverstock Hill.

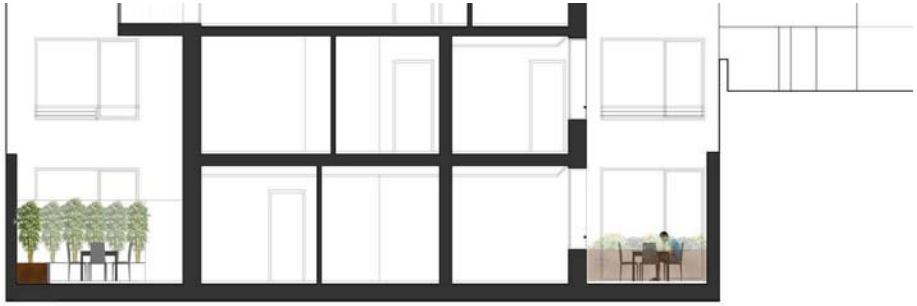
Landscape design/text/images by:

MACFARLANE + ASSOCS
URBAN & ENVIRONMENTAL LAND PLANNING

6.2 Landscape strategy

The landscape strategy has been informed by the surrounding local context and the building design. There are four key areas to the landscape strategy: private courtyards (basement), public entrance (ground floor), resident amenity space (4th floor), private terraces (5th floor).
The key principles of the landscape strategy are to:
- Ensure a strong sense of community amongst residents
- Compliment the architectural building and local context
- Create appealing and characterful landscape spaces
- Build functional spaces that are multi-generational and promote health and wellness
- Devise a landscape that is sustainable throughout design, installation and performance
- Replace removed trees
- Screen the development from the school boundary





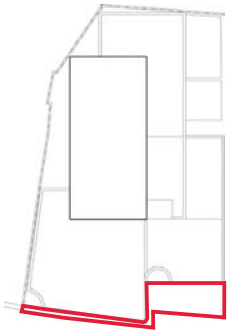
Section AA

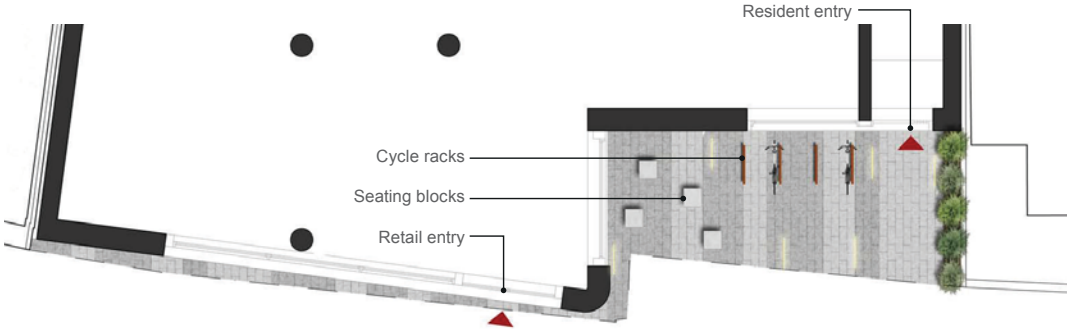
6.3 Private Courtyard

Private courtyard in the basements are primarily shaded during the day. Materials and colours could be chosen to have higher high solar reflectance values to increase the amount of light in the space. Raised planting beds could be installed where possible to allow screening between terraces and of the basement walls.

Raised planters and white render wall

Screen planting





South elevation

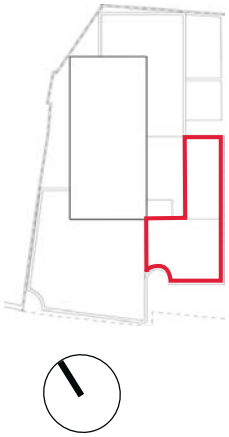
6.4 Public entrance

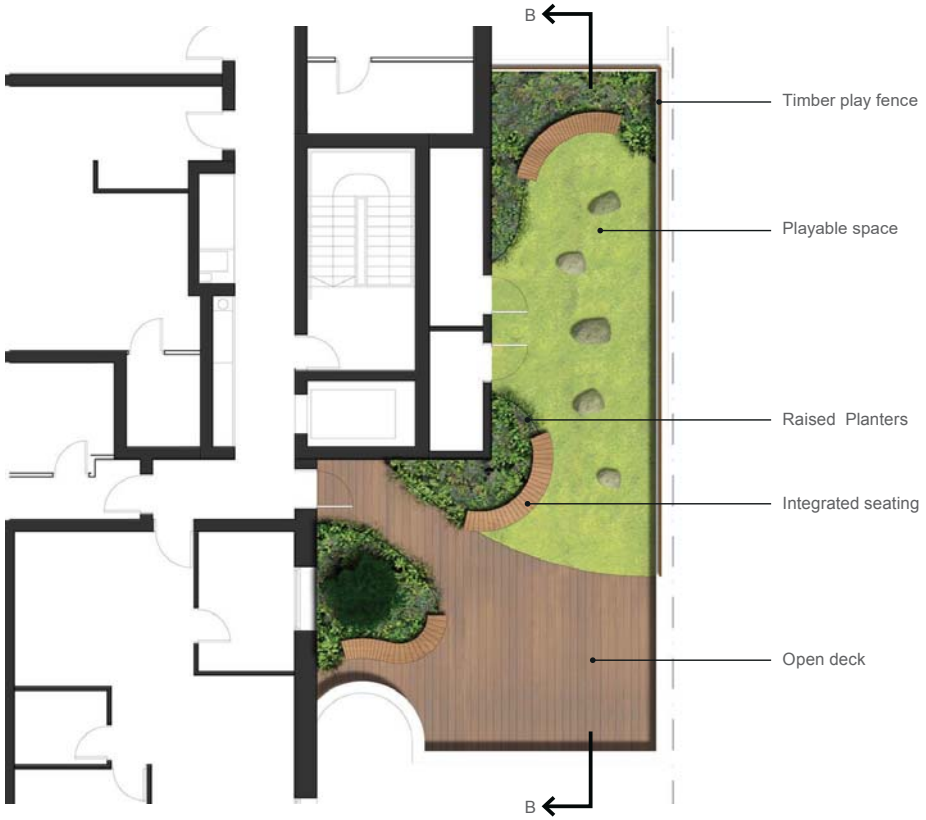
The ground floor public realm could serve as both an entry for the residents but also as a breakout space for future retail/restaurant facilities. Stone seats could offer opportunities for casual gathering and cycle racks could allow short-term cyclers a safe place to lock up their bikes. Linear pavers with recessed lights could run perpendicular to the building widening and brightening the space.

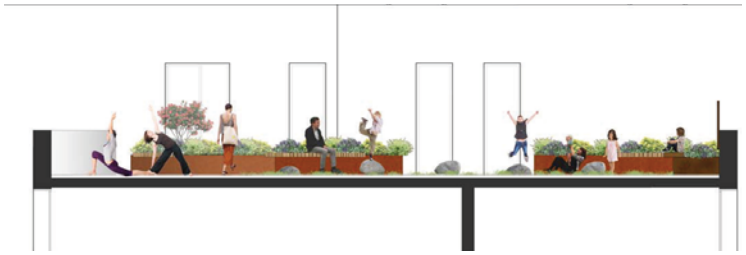
Pavers with integrated feature lighting

Cycle racks

Seating blocks







Section BB

6.5 Resident amenity space

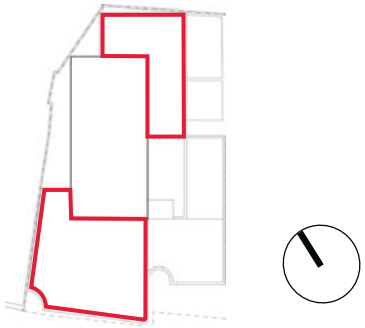
The resident amenity space on the 4th floor could create a space that can be used for multi-generational residents, curved seating and planter walls make the L-shaped space a unified cohesive space. An artificial turf area with small stone boulders could allow informal play amongst younger children, whilst offering a formal seating area for parents. Enhanced timber play fence would offer increased fall protection for children playing in this area. A larger timber deck platform could offer areas for adult health and wellness such as yoga and body callisthenics workouts. Curved benches surround the platform to create areas of interaction and conversation with neighbours. The orientation of the curve allows views of the surrounding Camden area including the Roundhouse Concert Hall. The timber play fence offers enhanced fall protection within the informal play area.

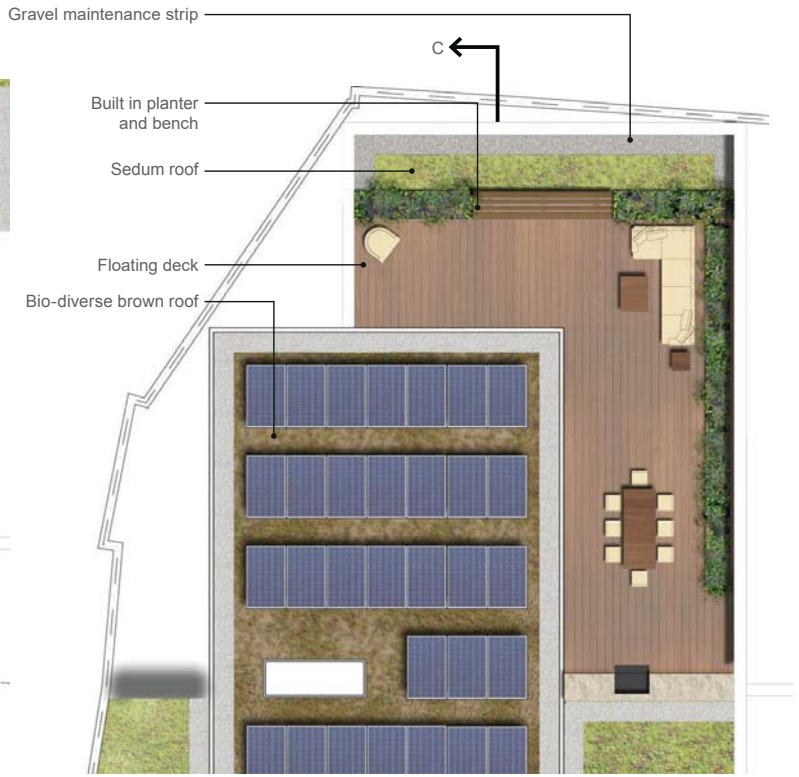
Timber play fence

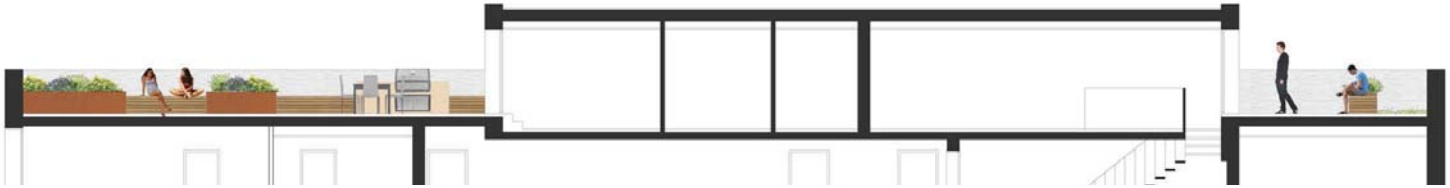
Natural play elements

Steel planter with integrated seating

Outdoor wellness space







Section CC

6.6 Private terraces

The private terraces on the 5th floor have both private amenity space and sedum roofs to increase bio-diversity and stormwater retention. A brown roof could offer additional areas of biodiversity amongst the PV cells. Built in planters and benches would separate the different uses of the terrace. A built-in bbq would be used for outdoor cooking and entertaining while the rest of the terrace could be decorated to an outdoor living room with expansive views of the Camden area. Due to the high sun exposure natural materials could be used such as timber to reduce solar reflectance that would contribute to urban heat effect.

Seating elements with screen planting

Access to views

Brown roof

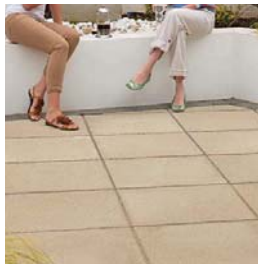
Sedum roof and floating deck

6.7 Materials strategy

Materials could be complimentary to the architecture, demarcate various use areas, provide colour and interest suitable for the demands, and absorb or reflect light depending on the aspect of the site. All materials could be durable and allow for easy on-going maintenance.

Private courtyard

Render planter wall
Bespoke
Brick wall with textured render



Texture garden paving
Saxon
Marshalls or similar
600mm x 600mm & 300mm x 300mm repeat random

Public entrance

Concrete pavers
Metrolinia
Marshalls or similar
320mm x 130mm

Cycle rack
Edge type
MMCite or similar

Seating blocks
Granite
CED or similar
500mm x 500mm x 450mm

Resident amenity space

Artificial turf
Cheltenham
Quickgrass or similar

Timber deck
Excel
Kinley or similar

Steel planter with integrated seating
Bespoke
Kinley or similar
500mm (h)

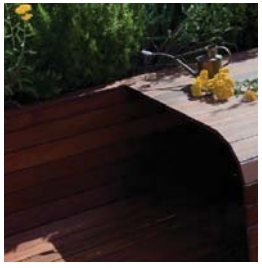
Play boulder
CED or similar

Timber play fence
Bespoke

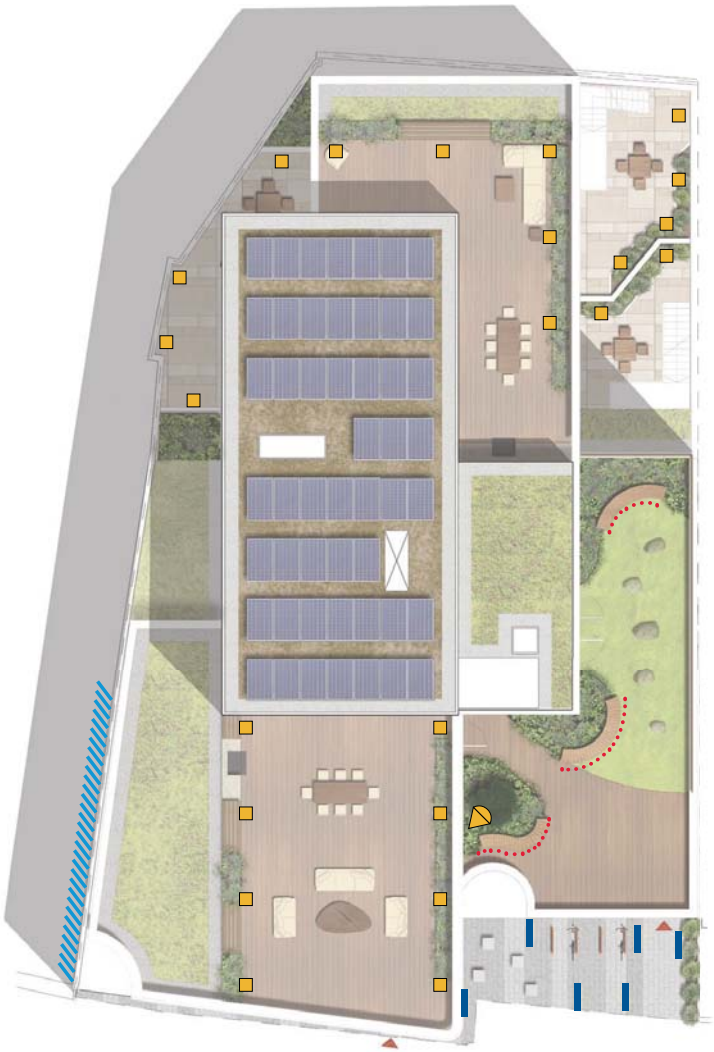
Private terrace

Timber deck
Excel
Kinley or similar

Outdoor bbq
Bespoke



Built-in timber bench and planter
Bespoke



6.8 Lighting strategy

Lighting for the site could create interest through accent lights situated in the ground, up lighting trees, small shrubs,
and building facades. Planter and bench lighting could use recessed LED lights to accent curved walls and identify areas of seating. LED lights could be used for their energy efficiency, sustainability, and superior light-focus qualities.

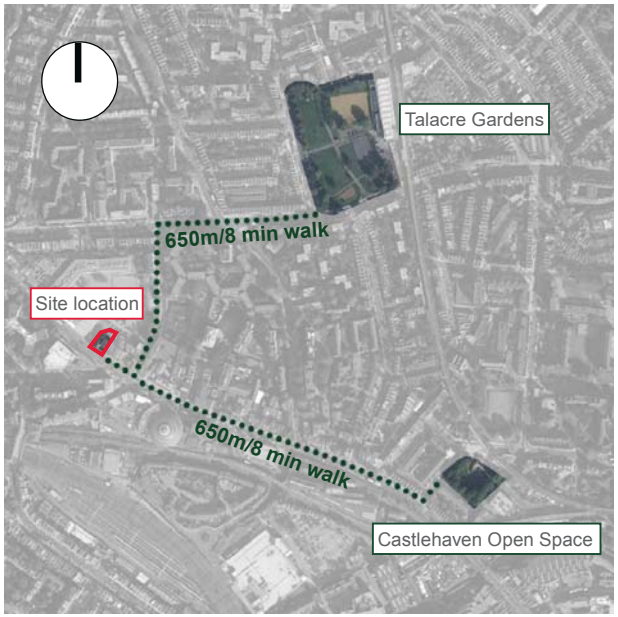
LED strip lighting
Underscore in/out
iGuzzini or similar
6mm

LED facade uplighting
Lineluce
iGuzzini or similar

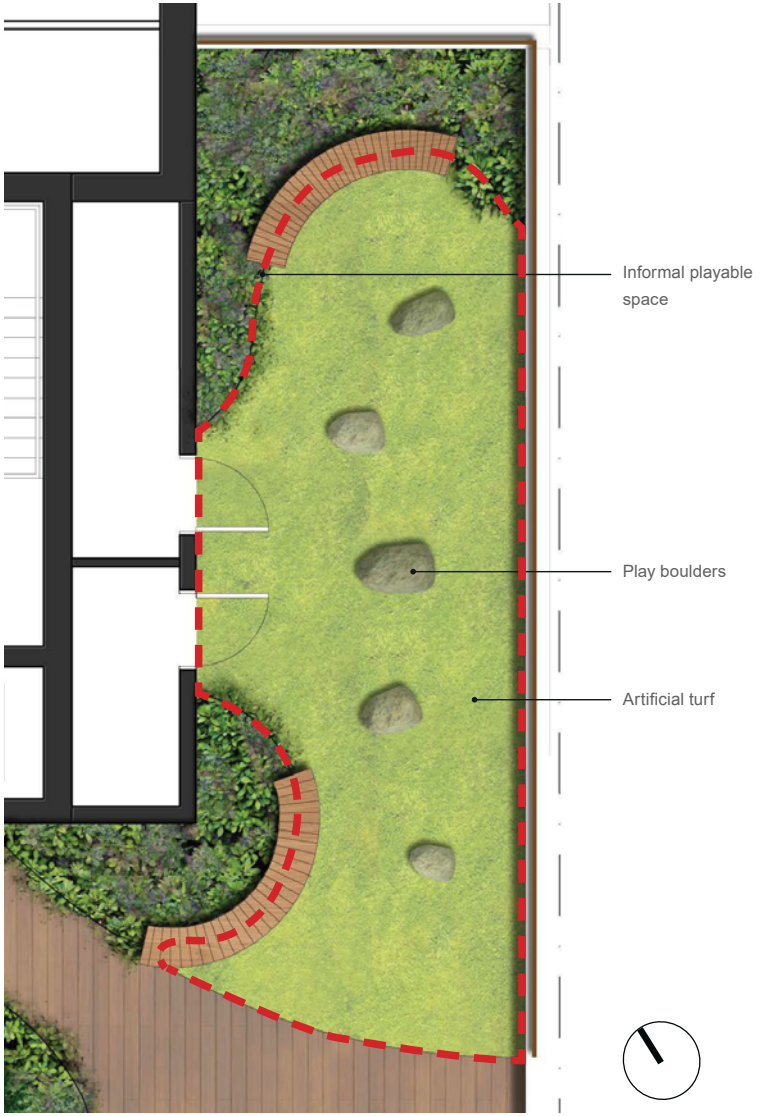
Wall lighting
Recessed wall
Bega or similar
150mm x 100mm x 100mm

LED paving lighting
Inground drive over
Bega or similar

Landscape uplighting
LED garden flood
Bega or similar



Local context



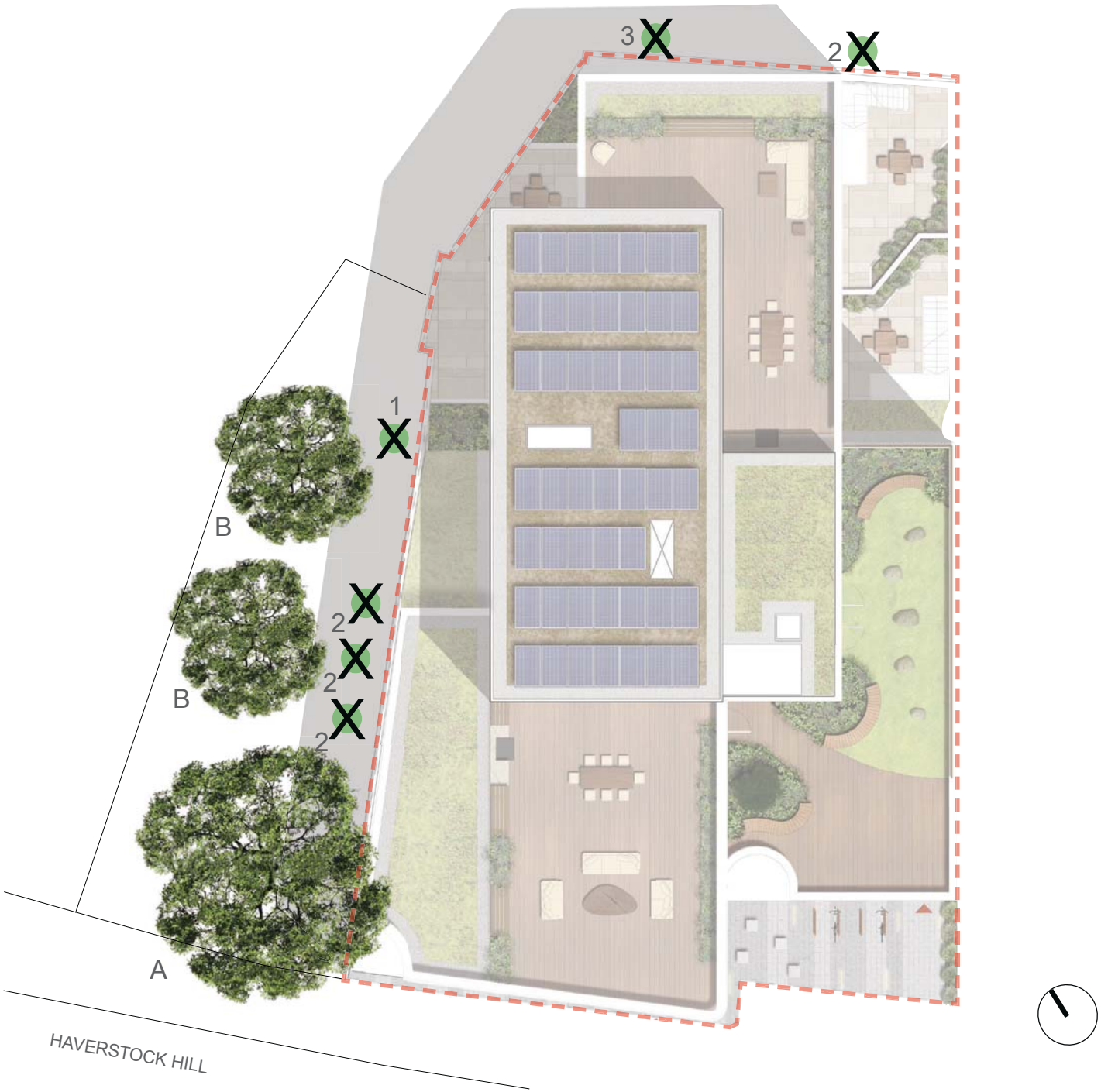
Residential playable space

6.9 Play strategy

Due to the building's unit mix, there will be no required play provision. However, the resident amenity space includes a playable space of 35 square meters that includes an artificial turf surfacing natural play boulders that supports informal play opportunities such as climbing and an obstacle course for younger children. Bench seating allows for caretakers to look on. For more advanced play opportunities, the local neighbourhood supports two local parks within a 650m/8 min. walk. Talacre Gardens provides an all-weather pitch, children's playground, planted seating, wide expanse of grass, and dog walking. The second park, Castlehaven, is a community centre that includes an allweather pitch, community gardens, and playgrounds.


Artificial turf


Play boulder



6.10 Arboricultural implication plan

Six existing trees on the adjacent property to the West could be removed due to impacts on existing retaining wall, ongoing maintenance, and tree health concerns. Small immature trees could also be removed to allow new mature tree growth. Replacement trees were selected with discussions with local authority tree officers, maintenance, and seasonal interest. A new prominent semi-mature deciduous tree could enhance the public realm environment. Additional Carpinus could help screen the development from the school boundary.

Legend

Tree to be removed

Proposed tree

Removed tree schedule

Item	Species
1	Prunus sp.
2	Salix caprea
3	Corylus sp.

Proposed tree schedule

Item	Species
A	Acer cappadocicum ‘Rubrum’
B	Carpinus betulus ‘Frans Fontaine’

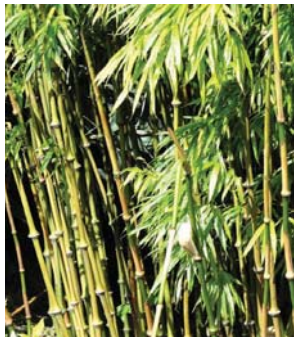
Acer cappadocicum ‘Rubrum’
25-30cm girth

Carpinus betulus ‘Frans Fontaine’
20-25cm girth


Allium sphaerocephalon


Anemone hupehensis


Carex oshimensis


Chimonobambusa marmorea


Carpinus betulus


Choisya x dewitteana


Dryopteris ‘Brillance’


Hebe ‘Margret’


Helictotrichon sempervirens


Liriope muscari


Luzula sylvatica


Pachysanandra terminalis


Sedum roof


Sesleria nitida


Viburnum x bodnantense

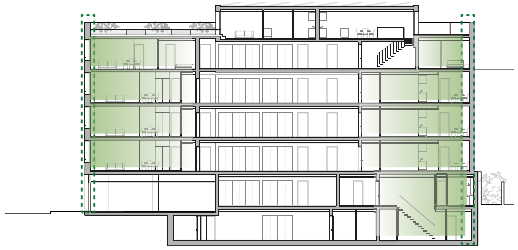
6.11 Planting palette

The planting strategy for the site has been organised in consideration to the different levels of the building and selected upon:

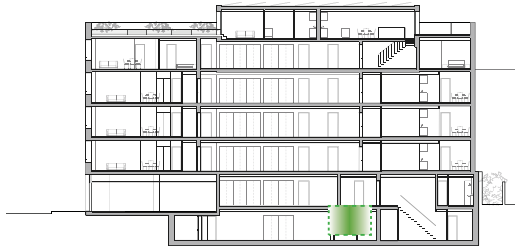
- Aspect
- Durability
- Year-long interest and seasonal interest
- Contributions to bio-diversity
- Maintenance

To screen the school northern boundary, a hornbeam hedge was chosen to provide screening, low maintenance,
and although decidious, the winter leaves will match the architectural trim.

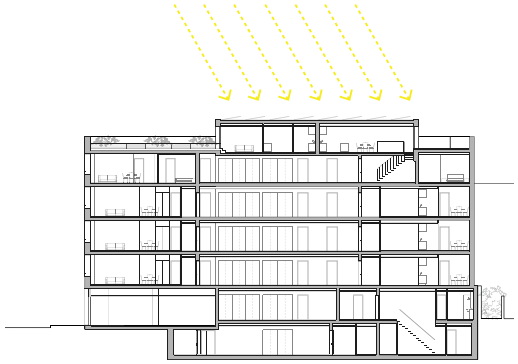
7.0 Sustainability & Renewables



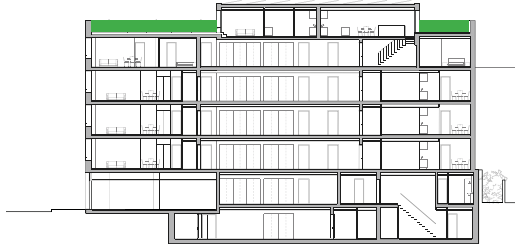
1. BE LEAN



2. BE CLEAN



3. BE GREEN



3. BE GREEN

7.1 Key Sustainability Principles

Camden CPG 3 Paragraph 3.20 refers to the CO2 reduction targets stated in the London Plan Policy 5.2 that new developments needs to follow the given hierarchy using less energy, [in particular by adopting sustainable design and construction measures (Policy 5.3)], supplying energy efficiently, [in particular by prioritising decentralised energy generation (Policy 5.5 and 5.6), and using renewable energy (Policy 5.7)].
Policy 5.2A states that carbon dioxide emissions should be reduced in accordance with the following energy hierarchy:

'Be Lean': The proposed energy strategy has, as its first priority, to minimise energy consumption through the performance of the building envelope, facades and plant. The energy efficiency features proposed for the scheme include optimised thermal performance of the facade and low air permeability through a very high standard of construction.

'Be Clean': The development will be served by central condensing boilers, with variable flow controls to promote consistent low flow and return water temperatures around the system and within the primary boiler circuit. The heating system will be designed to operate with water temperatures in the region of 70°C flow and the system will also be designed to meet the recommendations of the Heat Networks Code of Practice and the GLA District Heating manual. Ventilation to the apartments will be by a balanced system with heat recovery (MVHR). Within the dwellings, all fixed light fittings will be low energy lamps, including storage and infrequently accessed areas. The lighting to common areas will be provided with PIR movement detectors and daylight control where appropriate.
For the non dwelling uses, energy efficient lighting with improved performance relative to the minimum standard is anticipated with an average efficacy of 95 luminaire lumens / circuit watt and 65 LL/CW for display lighting.
It is proposed that a single energy centre will be provided to serve the development. However, due to the low number of apartments it is not viable to install a combined heat and power plant. The design of the plantroom will incorporate features that will ensure connection to any future heat network is possible. This will include adequate space for a heat substation and connection points, and pipework routes to the site boundary.

'Be Green': The Energy Assessment states that PV panels are technically viable and an installation of 95m² will be installed on the building roof.
Green roofs and planted terraces are included in the design. Part of the terraces on the first and 5th floor have sedum roofs to increase bio-diversity and stormwater retention.

7.2 BREEAM Pre-Assessment & Sustainability Statement

The developer has targeted a BREEAM rating of Excellent p/unit in accordance with guidance provided by the GLA. It should be noted that given the size of the units <200m2 p/unit, this serves as a strategic intent rather than definitive.
The pre assessment provides an indication of how a rating of excellent could be achieved, with each retail / office unit subject to individual assessments and
strategies.

The final rating of each unit will be subject to detailed design and tenant fit out strategy.
The Sustainability Statement for Haverstock Hill development demonstrates that the design will holistically incorporate sustainable principles into the full range of sustainability aspects covered by BREEAM and the London Borough of Camden CPG 3:

BROWN ROOFS, GREEN ROOFS AND GREEN WALLS / BIODIVERSITY AND LOCAL FOOD GROWING

- A Suitably Qualified Ecologist (SQE) has been appointed as part of the development to assess the current ecological value of the site and make recommendations for the protection and enhancement of the site and on-site actions during construction to protect features of ecological value;
- The site context is typical of the Borough of Camden, with leafy green streets and mature residential gardens, and larger areas of open greenspace comprising Regents Park and Hampstead Heath, among other smaller urban parks and formal gardens.
- The recommendations of the SQE will be implemented for the scheme and will lead to a positive change of ecological value for the site. Recommendations include: Good horticultural practice, provision of a green roofs, shrub planting, tree planting, provision of bird boxes and planting for bees.
- A wildflower and perennial green roof mat has been selected for the scheme by the landscape architect for the scheme for its high ecological value. It includes a ready established mixture of drought tolerant wildflowers, sedum, herbs and flowering perennials, all of which are suited to the growing conditions created on a green roof. The green roof proposed will provide biodiversity networks and allow continuity of green space within the London Borough of Camden. The green roof will also assist with sustainable drainage, overheating and air quality.

ADAPTING TO CLIMATE CHANGE

- The incorporation of outdoor areas as part of the development is suitable for the increased demand associated with warmer weather. The landscaping areas and the green roof incorporated into the design would assist in the protection of the building from solar gains. The vegetation would also assist in cooling the building through evaporation;
- The peak rate of runoff over the development's lifetime, allowing for climate change, will be no greater for the developed site than it was for pre-development rate of run-off;
- The installation of a green/blue roofs will attenuate and treat rainwater and reduce the impact of rainfall on the drainage system;
- The proposed development will significantly reduce its demands on mains water supply through the use of water efficient fittings.

SUSTAINABLE USE OF MATERIALS

- The building materials will be selected and assessed against the BRE Green Guide to Specification, and the team will aim at specifying A+/A rated building elements where practically feasible;
- In addition, wherever possible all building and finishing materials will be sought from suppliers and manufacturers registered to an environmental management scheme such as FSC or PEFC for timber based products and BES6001 or ISO14001 for all other materials.
- All insulation materials selected for this development will have a Global Warming Potential of below 5 in order to minimise the impact on climate change.
- All materials selected will be assessed for their durability in line with their proposed level of use and exposure, with a particular focus on materials that are well adapted to handling climatic variations, long lasting, robust and low maintenance.

WASTE

- The scheme will follow the waste hierarchy and will aim at having a minimum of 10% of the total value of the materials used within the construction of the proposed development derived from recycled and reused sources;
- On-site construction and operational waste will be sorted on-site into the relevant waste groups in order to improve the efficiency of the waste management process. Procedures and commitments to divert waste from landfill will be implemented;
- When in operation, the dwellings will be provided with internal and external waste and recyclable waste storage to encourage the appropriate management of materials. Information will be provided to residents on the kitchen and garden waste collection scheme;
- All dedicated storage will be clearly labelled to assist segregation, storage and collection of the recyclable waste streams; external space will be accessible to building occupants / facilities operators for the deposit of materials and collections by waste management contractors, and of a capacity appropriate to the development.

ENERGY

- The London Plan Energy hierarchy has been followed for the scheme. An optimised energy efficient design will minimise the energy demand of the development. In addition, the use of Low and Zero Carbon systems (LZC) in the form of a gas Combined Heat and Power (CHP) and Photovoltaics (PV) will reduce the CO2 emissions of the scheme. The proposed highly optimised energy strategy will allow the scheme to achieve an improvement over Part L1A: 2013 and Part L2A:2013 of approximately 36.9% exceeding the requirement of the London Plan and of the London Borough of Camden Core Strategy (2010)) and London Borough of Camden Planning Guidance CPG 3 – 'Sustainability' (2015);
- Energy display devices, drying spaces, home office and energy labeled white goods provided in all flats;
- Secured and covered cycle storage for the residential scheme.

WATER EFFICIENCY / FLOOD RISK AND DRAINAGE

- Water efficient fittings for all residential and nonunits;
- All the flats will have an individual, easily accessible water meter installed as part of their specification.
- Both the residential and non residential aspects of this proposed scheme can be seen to perform strongly in the field of water conservation through the specification of products that remove or restrict the amount of water required within their relevant context.
- Individual water meters, with pulsed outputs (to allow for connection to a Building Management System) will be supplied to the non residential units, along with leak detection systems to water consuming areas within each unit and on the mains intake to the building.
- Most of the external landscaping and planting will be self-sufficient and rely on precipitation only following establishment.
- The Proposed Development is assessed to be air quality neutral.
- There are a number of mitigation measures embedded in the design that will reduce air pollution and minimise the potential exposure of future occupants to poor air quality.
- As confirmed by the EA flood maps the site is located within Flood Zone 1, an area with less than 0.1% annual probability of flooding by rivers and/or the sea. The risk of surface water flooding is also shown as very low.
- The basement should be designed to be of water retaining construction such that any rise in the ground water table or inflow of perched waters cannot pass through the wall into the occupied spaces. A secondary cavity drainage system should also be specified which would collect any leakage and convey the collected water to a sump from where it would be drained to the sewer.
- An attenuation tank will be located beneath the ground floor to the south line of the proposed new basement. The surface water attenuation will incorporate flow control measures which will restrict the allowable outflows from the site to allowable rates.
- Green roofs specified for the development would reduce runoff volume and reduce the time of concentration, and thus reduce the attenuation requirement.