

Highgate School - Dyne House Design & Access Statement

Landscape Proposals

LDĀ DESIGN

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This document has been prepared and checked
in accordance with ISO 9001:2015

1.0 Highgate Bowl Context

Dyne House is situated within the Highgate Conservation Area and borders the Highgate Bowl; with the lower part of the site - known as the Parade Ground - sitting within the Proposed Significant Open Land Area.

The main site entrance is at the highest point of the site where it adjoins Southwood Lane. The site then slopes down quite steeply to the Parade Ground from west to east with an approximate level change of 16m across the site. Owing to the level change across the plot, the site benefits from long views in an easterly direction.

The southern and eastern boundaries of the site are flanked by mature trees - primarily Sycamore (*Acer pseudoplatanus*) and classed as Category B (trees of moderate quality with an estimated remaining life expectancy of at least 20 years).

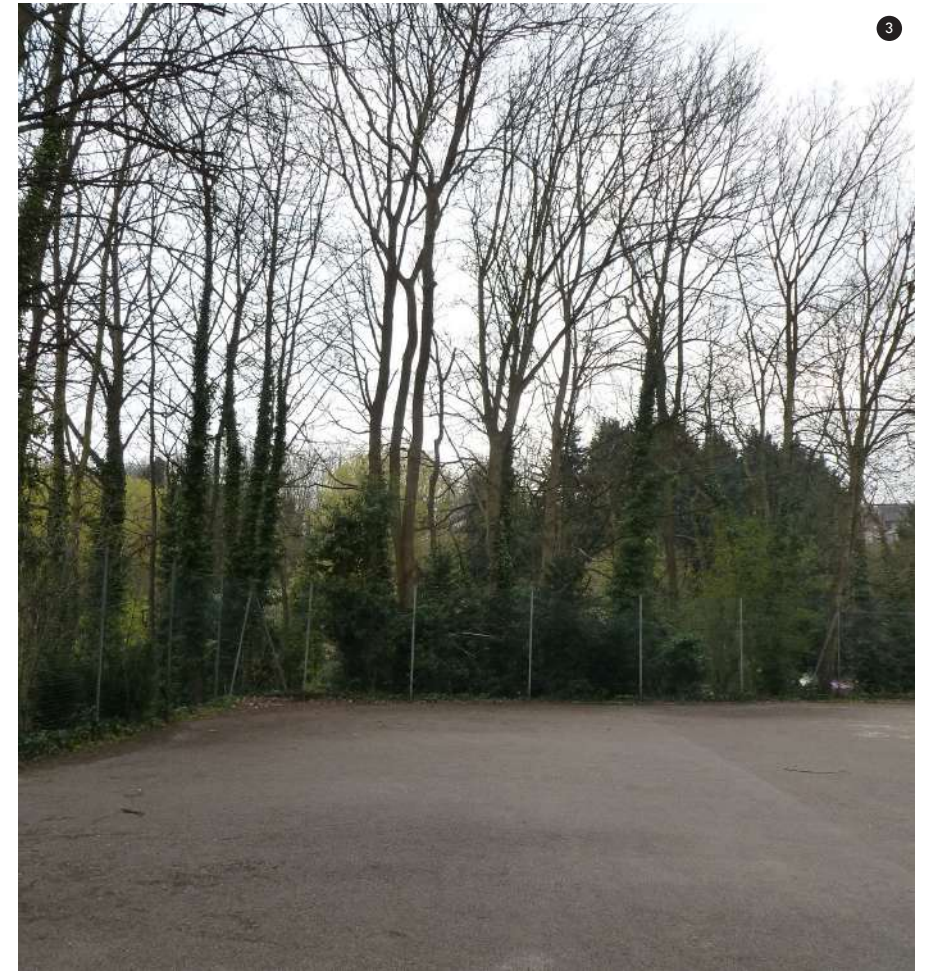
The external spaces are poor landscape quality being the abandoned and overgrown swimming pool along the southern boundary (image 5), the extensive macadam of the Parade Ground (image 3) or the rundown Gibbon Garden. There is a pedestrian route (image 2) bounded by an interesting historic yellow brick retaining wall.

Highgate Conservation Area & Highgate Bowl

Legend

-  Site boundary
-  Highgate Conservation Area
-  Highgate Bowl (approximate location)
-  Proposed Significant Open Land (approximate location)





- ¹ Existing views north from the Dyne House roof terrace
- ² Existing northern boundary wall
- ³ Existing parade ground and boundary planting
- ⁴ Brick paved roof terrace with brick parapet wall
- ⁵ Site perimeter currently overgrown and neglected



2.0 Design Drivers

Extending the Highgate Bowl Open Space

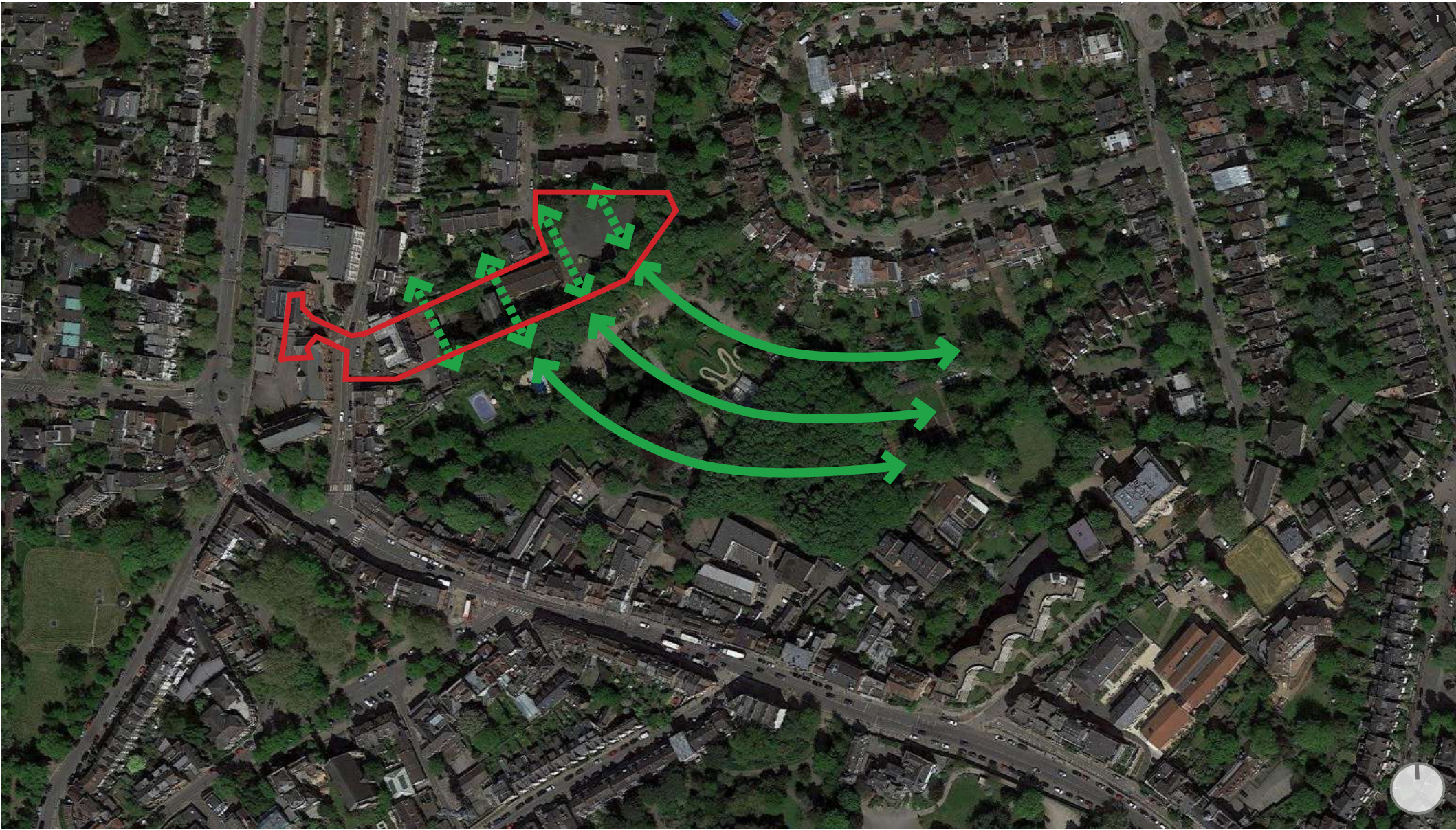
The landscape concept draws on the idea of extending the Highgate Bowl accross the site and 'greening' it as much as possible. This will help to anchor the new building and landscape into its setting.

The terraced roofs of the proposed building are proposed to be planted, and the Parade Ground, which is currently macadam, is proposed to have a much larger planted area around the perimeter to reduce the area of hardstanding and maximise areas of soft landscape.

Highgate Bowl Extension

Legend

-  Site boundary
-  Highgate Bowl
-  Highgate Bowl extension - proposed



¹ Site aerial and Highgate Bowl context



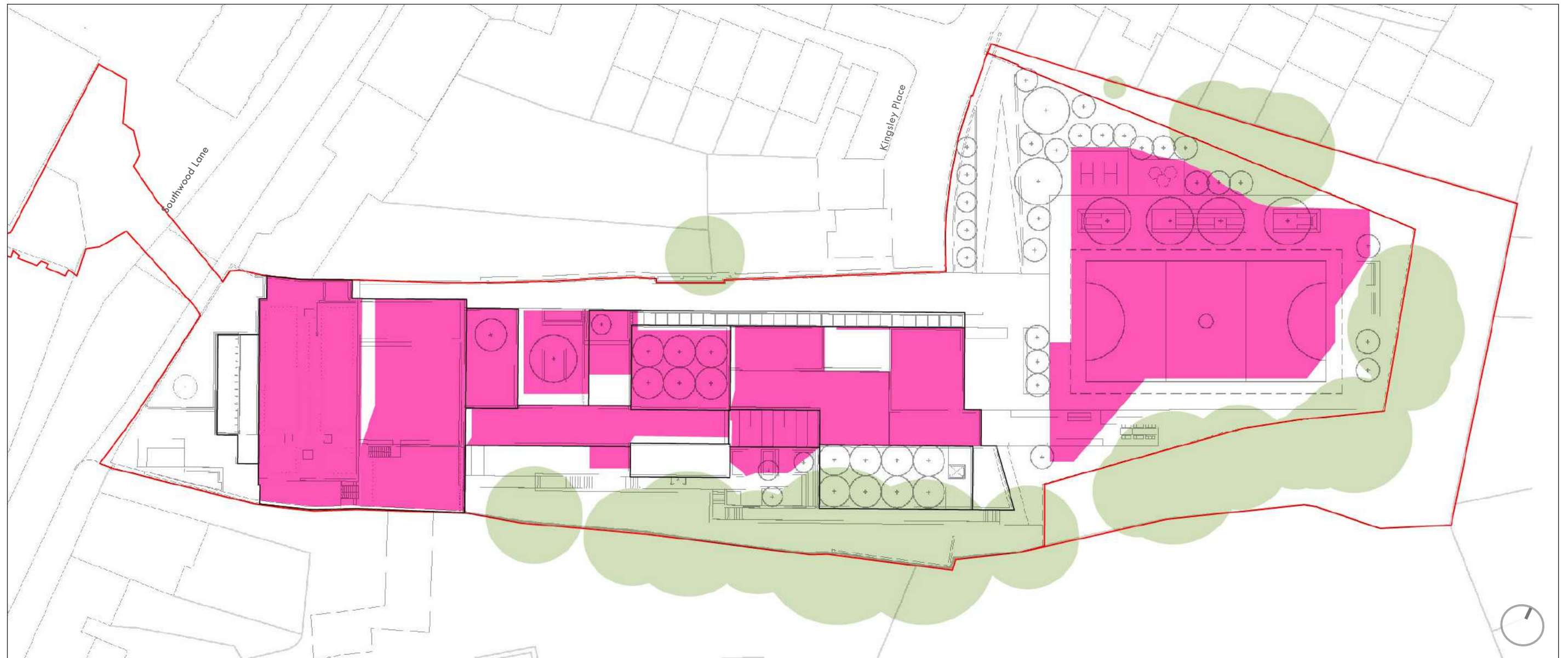
Existing trees

Legend

-  Existing tree canopy
-  Root protection area (RPA)
-  Structural root zone (SRZ)

Existing trees

The existing mature trees along the boundary are proposed to be retained. The retention of these trees will maintain the existing screening between the school site and the adjacent properties. Where it is not possible to avoid construction within the root protection area (RPA), the structural root zone (SRZ) will be respected with no work taking place within this zone.



Solar Analysis

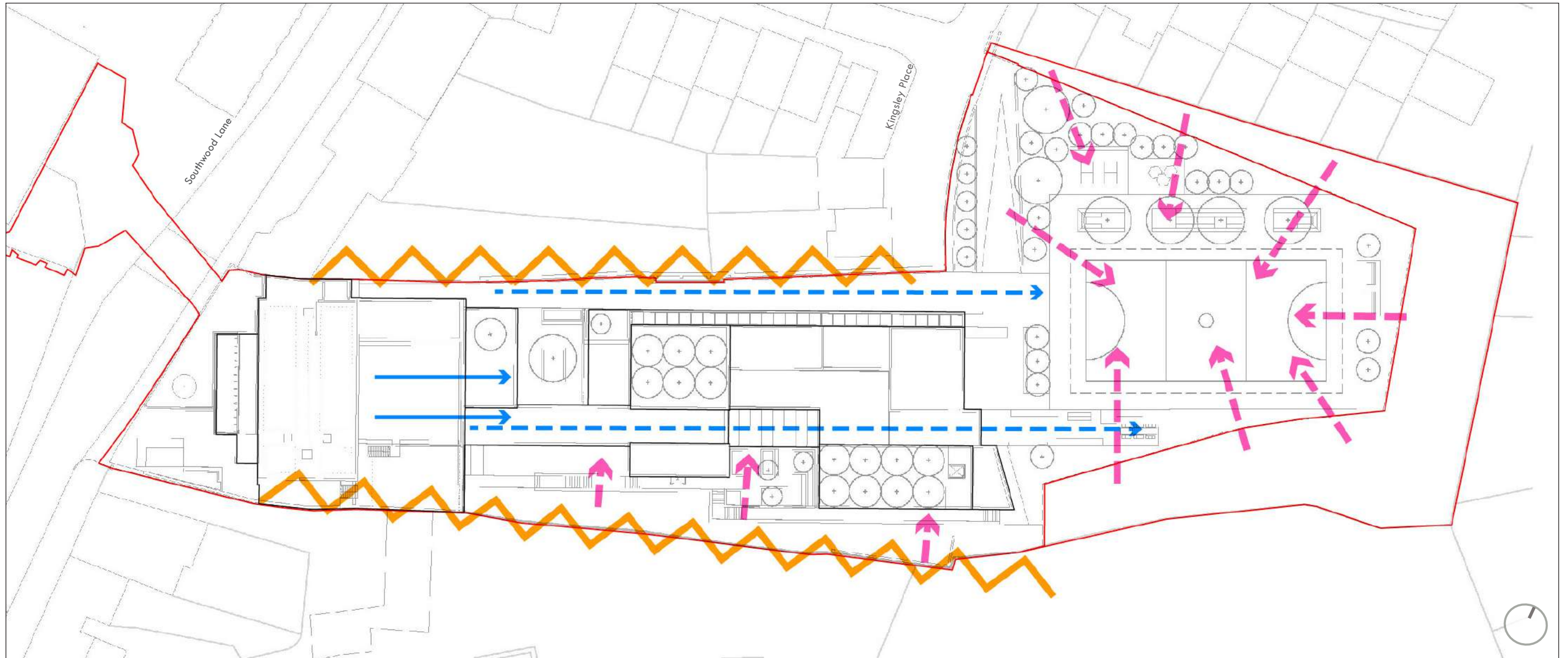
Legend

- Existing trees
- Area of sun

Solar Analysis

The existing trees along the south-eastern boundary cast a significant proportion of the site in shade, and the proposed building will cast shade over the north-western edge of the site.

The Parade Ground, however, benefits from a sunny aspect, as do the two roof terraces proposed on the new building. The courtyard gardens will benefit from some sunshine throughout the day. The sun study was derived from a 3D digital model to showcase the average amount and location of sunshine across the site within a whole year, from August 2018 to August 2019.



View Analysis/ Addressing Neighbours

Legend

-  Sensitive boundary
-  Long views to London and roof terraces in the foreground
-  Axial views contained within the site
-  Inward view/ enclosure provided by perimeter vegetation

View Analysis/ Addressing Neighbours

From within upper floors of the proposed building, there are extensive views eastwards across London and the planted terrace in the foreground. From the roof terrace of the auditorium long views north eastwards have been retained, owing to the site topography, Directed by the mature trees along the southern boundary.

There are long axial views through the building and to the Parade Ground, as well as along the northern boundary.

The Parade Ground, and the majority of the site at ground level, is inward looking due to the surrounding mature vegetation. The north-western and south-eastern boundaries with adjoining properties are sensitive and the design of the landscape will respond to this by preventing over-looking of neighbours where possible.

3.0 Proposals



Illustrative Masterplan

Legend

-  Existing trees
-  Proposed trees
-  Bio-diverse/ planted roof
-  Herbaceous planting
-  Proposed mixed native hedge

-  Native shrub planting
-  Roof terrace
-  Niches
-  External paths
-  Species rich amenity/ meadow grass
-  Benches/ walls

- ¹ Roof terrace
- ² Gibbon garden
- ³ Sunken garden
- ⁴ Library roof terrace
- ⁵ Southern terrace
- ⁶ Pergola garden
- ⁷ Games court (Netball)
- ⁸ Activity spaces

Design Principles

The landscape proposal for Dyne House and the Parade Ground follows the principle of reinforcing the character of Highgate Bowl by substantially increasing the area of planting within the site to help set it in its context whilst also incorporating a diverse range of different spaces and functions.

The existing trees along the site boundary will be retained to maintain separation between the school site and the adjacent properties. The terraced roofs will be planted with small trees, shrubs and herbaceous perennials which softens the buildings as well as giving good seasonal variation and interest. The hard surface of the Parade Ground is to be minimized with substantial areas of native trees and shrub planting around its perimeter creating a woodland dell that captures the spirit of the 'Highgate Bowl'. It also helps to screen or soften the appearance of the Parade Ground from neighbouring properties.

The Parade Ground is a multifunctional games court, which can accommodate Netball, located in the centre and a number of smaller activity niches nestled into the perimeter planting which might be for: table tennis, gym equipment, climbing structure, tables or seating or incorporate multi-functional capability. Seating is also proposed alongside the Games court for informal gathering and socialising by students.

Towards the southern corner of the Parade Ground a garden, enclosed by a pergola structure, is proposed to frame the view from within the internal corridor of the building. This is a key social space for smaller groups to gather and also has the capacity to act as a spill out space for student studies or eating.

The front of Dyne House on to Southwood lane is simply planted in a raised bed to provide mediation between the building and the road, as well as continuity of frontage. There is a single wheelchair accessible parking space with additional space for pedestrian access to the building at road level.

Several different planting typologies are proposed to provide a variety of delightful and interesting spaces

through the changing seasons around the building. This includes three accessible courtyards – The Gibbon Garden, the Sunken Garden and the Southern Terrace, which all have different characters and an enclosed, intimate scale with opportunity for smaller groups or individuals to sit or gather.

Two roof terraces are enclosed by planting, railings or walls. These give limited access to external space. The large majority of the roof is planted to be enjoyed in views from the upper levels of the building as well as enhancing the experience of using the roof terraces

The images on the right illustrate a number of precedents used to influence the landscape design proposals.

Groves of Amelanchier trees are proposed on the building roof (image 2). These groves will act as accents and, along with the planting proposed to other areas of the roof, will have the effect of extending the Highgate Bowl character across the building.

A pergola structure is proposed to frame and extend the view from the internal building corridor out into the wider landscape (image 1). This pergola will enclose a sensory garden with quiet seating areas and a communal table.

Courtyard gardens, particularly those on the north side of the building, will be partially shaded but with careful plant selection green 'oases' can be created. Being framed on three sides the courtyard gardens will have the effect of drawing the landscape into the building (image 5).

Flexible furniture solutions are proposed to accommodate changing requirements and facilitate interaction between students in the Parade Ground (see image 4).

A roof terrace is proposed for the Common Room (see 1 on the plan to the left). This terraces benefit from long views north-eastwards and a sunny position. Planting is proposed around the edge of the terrace to prevent overlooking of neighbours.



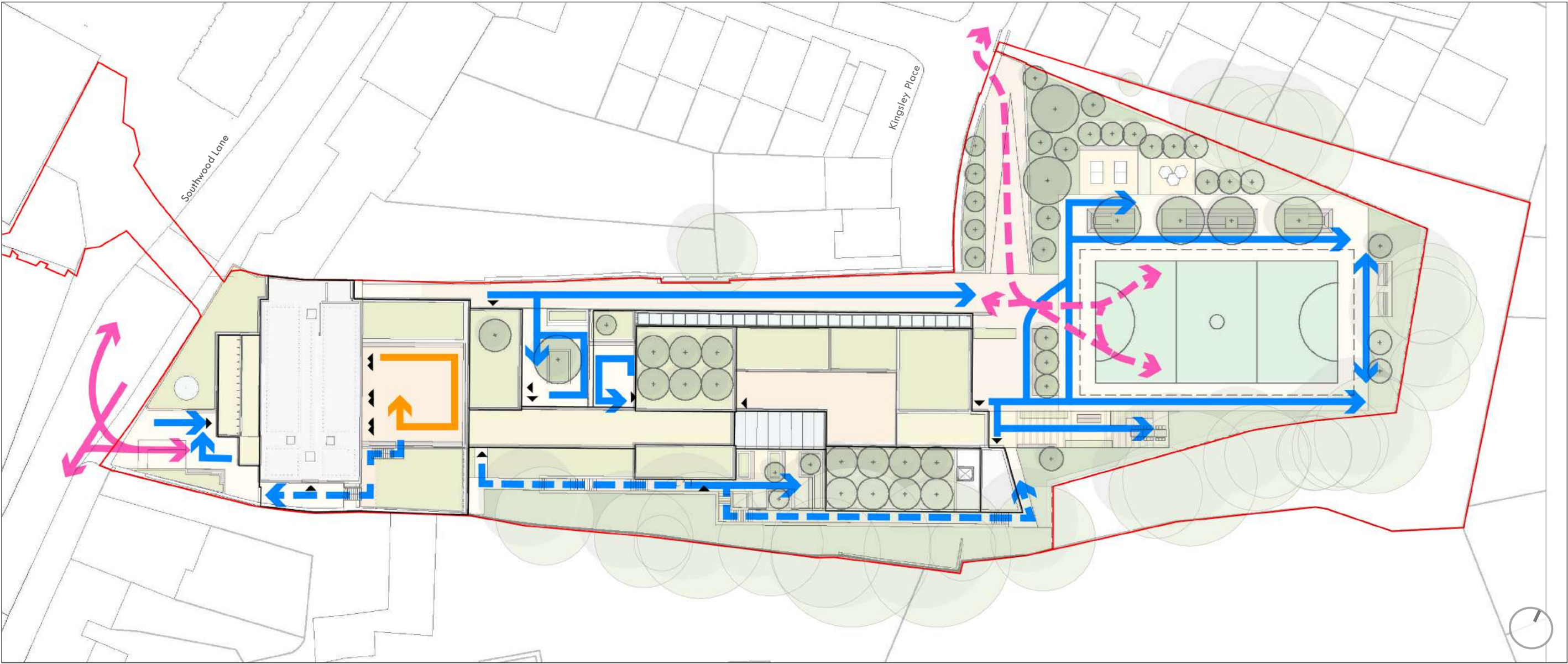
¹ A pergola frames the view southwards from the central corridor within the building and creates an intimate seating area

² Tree groves proposed on rooftops

³ Wildflower planting on inaccessible flat roofs extends the Highgate Bowl across the site and maximises biodiversity opportunities

⁴ Flexible seating arrangements allow for informal interaction

⁵ Courtyard garden inspiration



Access & Movement

Legend

-  Pedestrian movement
-  Pedestrian fire escape route
-  Pedestrian roof terrace movement
-  Vehicle movement to wheelchair accessible parking
-  Fire tender route
-  Building entrance/ exit

Access & Movement

Vehicle Access & Movement

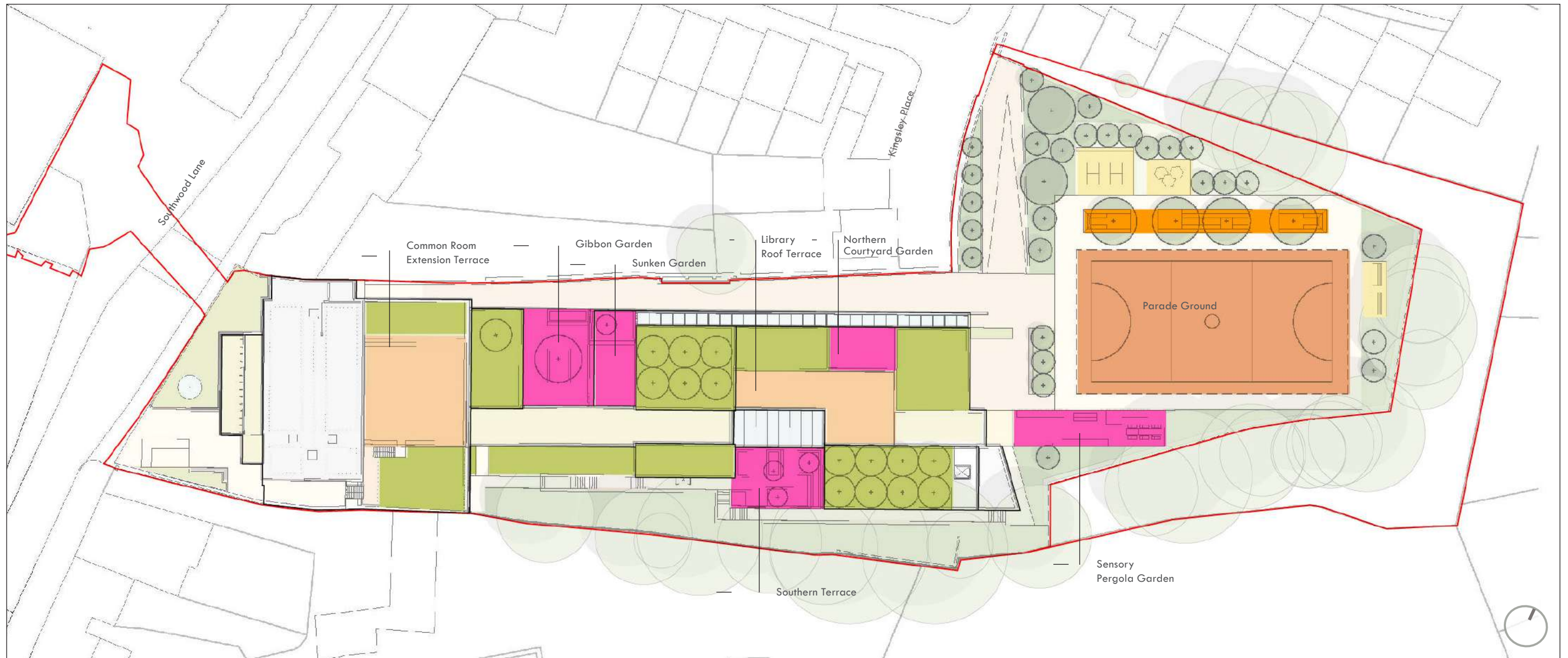
A wheelchair accessible parking space is provided to the front of the school, accessed via Southwood Lane. The space is provided to one side of the main pedestrian entrance to avoid conflict between vehicles and pedestrians.

Fire tender access is via Kingsley Place - with space for turning on the Games court. Vehicle servicing will also come off Kingsley Place.

Pedestrian Access & Movement

Primary pedestrian movement is along the north-western side of the site (with access to the Gibbon Garden) and around the Parade Ground perimeter. Pedestrian fire escape routes are provided to the southern boundary - leading to either Southwood Lane or the Parade Ground.

There is an accessible roof terrace for the Common Room extension. The terrace space has been designed with planting or walls to the perimeter to prevent overlooking of neighbouring properties.



Character & Function

Legend

	Roof terrace		Activity niche
	Courtyard gardens (ground level)		Terraced seating
	Planting		
	Netball court		

Character & Function

The landscape has been designed to provide a variety of characters and to accommodate a range of different functions.

The Parade Ground area will remain the most active part of the site. This area is enclosed by existing mature vegetation which will be reinforced with nature woodland planting which affords some visual separation from adjoining neighbours.

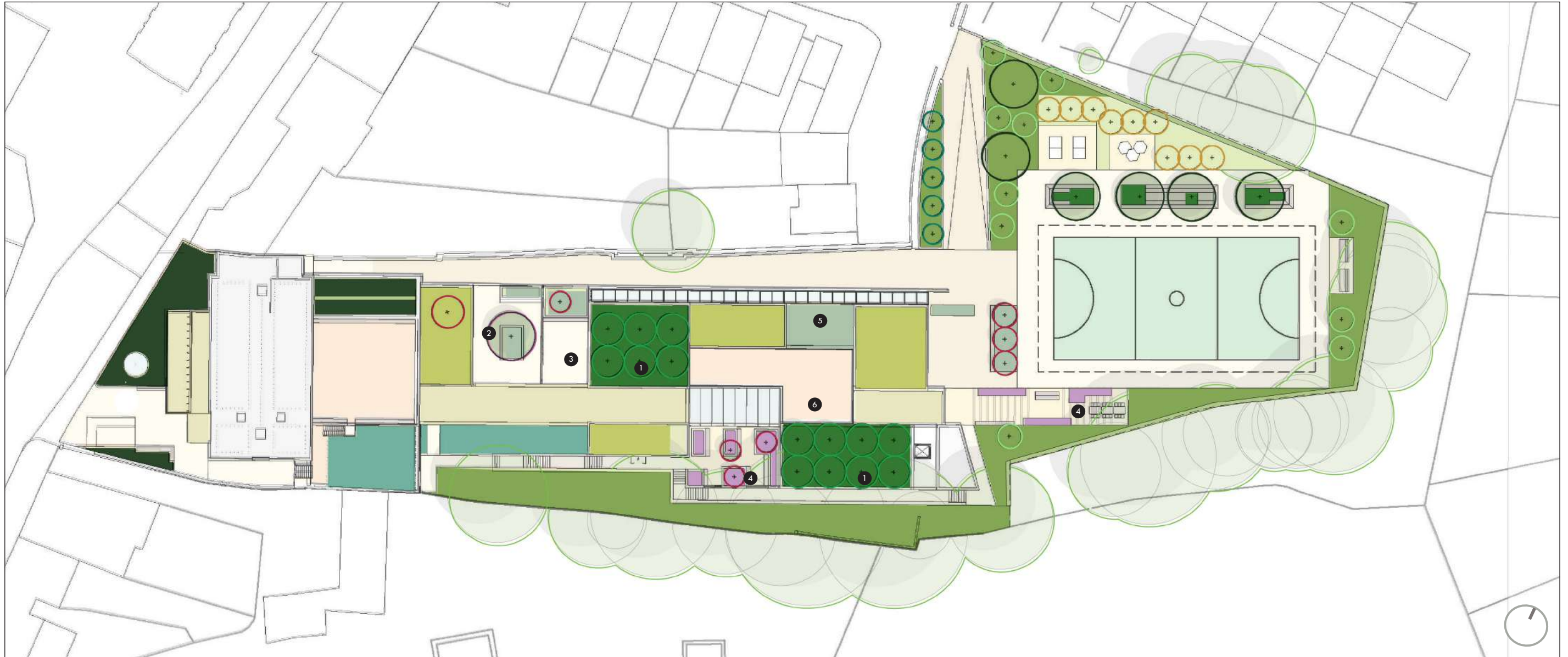
A Games court is located to the centre of the Parade Ground, with niches for activities such as table tennis and potentially an outdoor gym or climbing structure located to the north and west. Terraced seating is located along the north-western edge of the court with a smaller area located to the north-east corner. A sensory garden,

enclosed by a pergola structure, is located to the southern corner which is designed to extend and frame the view from within the internal building corridor.

Three accessible courtyard gardens are proposed; nestled amongst the various levels of the building - the Gibbon Garden, the Sunken Garden and the Southern Terrace. These spaces will all have an intimate character owing to the enclosed nature of the spaces. An inaccessible Northern Courtyard Garden helps to create a visual link between the landscape and the building.

The roof has one accessible terrace for the Common Room extension, as well as planted areas. The terrace with the planting gives attractive foreground when viewed from the building.

4.0 Planting



Planting Character Areas

Legend

- Existing Tree canopy
- Proposed large tree
- Feature tree - Magnolia x soulangeana
- Amelanchier lamarkii
- Small Tree/ Shrub

- Small flowering tree
- Orchard tree mix
- Medium sized tree
- Biodiverse and grasses roof - low growing
- Native shrub mix
- Species rich amenity grass
- Shade tolerant mix - Amelanchier understory (green mix with some white flowers)

- Shade tolerant mix - Gibbon Garden and Northern courtyard garden (green mix with some white and pink flowers)
- Herbaceous and shrub (grass and herbaceous species with predominantly yellow and orange flowers)
- Wildflower and grasses mix
- Southern Terrace and Pergola garden (herbaceous mix - predominantly pink and purple flowering species)
- Evergreen hedge
- Herbaceous and shrub planting

- ¹ Amelanchier groves
- ² Gibbon garden
- ³ Sunken garden
- ⁴ Sensory garden
- ⁵ Northern terrace garden
- ⁶ Library terrace

¹ Amelanchier autumn colour

² Prunus Serrula

³ Amelanchier blossom

⁴ Apple tree

⁵ Liquidambar autumn colour

⁶ Magnolia flowers

Planting

The high quality planting scheme has been designed to achieve an overall coherence but with rich variety. Continuity is achieved through the use of form and texture with distinctive variation provided through the use of colour. Plants chosen for their architectural forms - such as ferns and hostas, complement plants with a softer form and lots of movement - such as ornamental grasses. Colour relationships have been carefully considered. Restricted colour palettes have been chosen for each of the planting character areas to provide variation across the site. For example, the sensory gardens contain planting with primarily pink and purple flowers, whilst the Library Terrace enjoys a warmer colour palette of reds, oranges and yellows. The amelanchier understoreys have a restrained palette of green and white, and the Gibbon Garden contains a similarly restrained palette but with accents of pink to complement the Magnolia blossom.

Planting within the locality has been considered to reinforce the qualities of the Highgate Bowl and Highgate Conservation Area. Boundary planting in particular is proposed to be of native species to integrate the site into the Highgate Bowl, with more ornamental garden areas benefitting from a wider range of flowering plants with inspiration taken from the adjacent Omved Nursery. Native species and species chosen for their attractiveness to pollinating insects help to increase the biodiversity across the site and enrich the site's ecology - strengthening the green open space network in the area.

Reinforcing seasonality is a primary concept of the planting design -with a focus on spring and autumn colour and with architectural planting proposed that can be retained through the winter months (seedheads etc.) to provide year-round interest.

Structure Planting - Trees

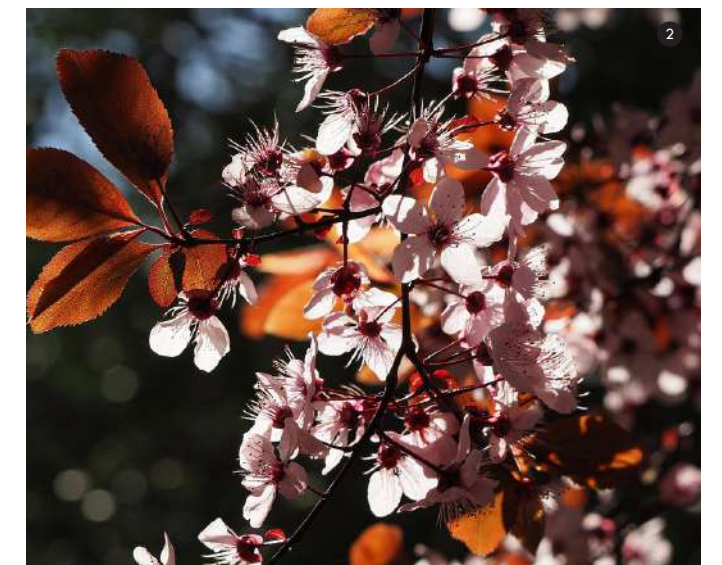
Trees to the north side of the Netball court create a strong linear structure and provide shade to this sunny seating area. Liquidambar styraciflua 'Lane Roberts' is a broad-crowned medium-sized deciduous tree with maple-like, dark, glossy green leaves which turn to deep blackish-crimson for several weeks in autumn (image 5). Ultimate height 12 m, spread 8m.

Groves of Amelanchier lamarckii perch on the rooftops providing a strong clear structure when viewed from upper terraces and high level windows. These multi-stem trees have delicate white spring blossom and beautiful autumn foliage (images 1 and 3).

A solitary Magnolia soulangeana sits within the Gibbon Garden and makes reference to the existing Magnolia tree on site (image 6). This is complemented by Prunus serrula which sit on the roof garden and within the sunken garden to either side of the Gibbon Garden. The Prunus are also located to the eastern end of the building and within the Southern terrace garden. Prunus serrula have beautiful red bark which provides visual interest in the winter months when the trees have lost their leaves (image 2).

Orchard trees of apple and pear are planted within the species rich amenity grassland that encloses the Parade Ground to the north (image 4). These trees have white scented blossom in the spring, edible fruit and good autumn colour.

All of the tree species are attractive to pollinating insects and have been chosen to provide seasonal variation - with particular emphasis on spring and autumn characteristics.





- ¹ Amelanchier lamarckii
- ² Asplenium scolopendrium
- ³ Epimedium x youngianum 'Niveum'
- ⁴ Libertia grandiflora
- ⁵ Fritillaria raddeana
- ⁶ Tellima grandiflora
- ⁷ Narcissus 'Thalia'



Shade Mix - Understory

For the Amelanchier groves a simple design, of an evergreen understory with white accents, has been chosen as a colour and textural contrast to other spaces.

Plants have been selected for their seasonal variations - hellebores flower in winter and early spring - before the arrival of the Amelanchier blossom, Anemone sylvestris comes into flower as the Amelanchier blossom fades, and late flowering bulbs - such as Ornithogalum narbonense - arrive in time to complement the autumn Amelanchier foliage.

The adjacent indicative plant list provides a palette from which a carefully considered planting design can be derived.

Indicative Plant List

(e) = evergreen

Ferns

- Asplenium scolopendrium (Hart's-tongue fern)
- (e)
- Polypodium vulgare (Common polypody) (e)
- Dryopteris affinis (Golden male fern) (semi-evergreen)

Perennials

- Anemone sylvestris (snowdrop anemony)
- Digitalis purpurea f. albiflora
- Epimedium x youngianum 'Niveum'
- Euphorbia amygdaloides var. robbiae (e)
- Helleborus argutifolius (e)
- Helleborus x hybridus (Lenten rose [white form]) (e)
- Libertia grandiflora (e)
- Luzula sylvatica marginata (e)
- Tellima grandiflora

Bulbs, corms and tubers

- Erythronium californicum 'White Beauty'
- Fritillaria raddeana
- Narcissus 'Cheerfulness' and 'Thalia'
- Ornithogalum narbonense





- ¹ Magnolia
- ² Digitalis - foxglove
- ³ Hellebore - Christmas rose
- ⁴ Matteuccia struthiopteris
- ⁵ Lamium maculatum
- ⁶ Nectaroscordum siculum subsp. Bulgaricum
- ⁷ Hosta



Shade mix - Gibbon and Northern Terrace garden

This planting palette is used within the Gibbon Garden, the sunken garden and the northern terrace garden. Located on the northern side of the building, these areas require the selection of shade tolerant species.

A restrained palette of shade tolerant, low growing plant species have been chosen to allow the sculptural quality of the magnolia stems to shine through.

White and pink flowers complement the magnolia blossom whilst plants with architectural foliage, such as ferns and hostas, provide a green textural understory.

Plants with spring, autumn and winter interest have been selected to provide strong seasonal colour and textural changes throughout the year.

Indicative Plant List

Ferns

- Matteuccia struthiopteris
- Polystichum munitum

Perennials

- Actaea pachypoda (White baneberry)
- Anemone x hybrida 'Honorine Jobert' (Japanese anemone)
- Bergenia cordifolia 'Purpurea'
- Cimicifuga racemosa
- Convallaria majalis (Lily of the valley)
- Cortusa matthioli
- Digitalis x mertonensis (Strawberry foxglove)
- Epimedium grandiflorum 'Rose Queen'
- Geranium macrorrhizum 'Ingwersen's Variety'
- Geranium nodosum
- Helleborus species
- Hosta species
- Lamium maculatum
- Pachysandra terminalis
- Persicaria campanulata
- Pulmonaria (Lungwort)
- Tiarella cordifolia (Foamflower)

Bulbs, corms and tubers

- Fritillaria raddeana
- Galanthus species
- Nectaroscordum siculum subsp. Bulgaricum





- ¹ Planting precedent
- ² Helenium 'Moerheim Beauty'
- ³ Hakonechloa macra 'Aureola'
- ⁴ Stipa tenuissima
- ⁵ Santolina chamaecyparissus 'Nana'
- ⁶ Berberis x stenophylla 'Carollina Compacta'
- ⁷ Euphorbia polychroma



Roof herbaceous and Shrub mix

The Library terrace benefits from a sunny aspect and it is proposed that the planting here provides a contrast to the Amelanchier groves and Gibbon Garden planting, with a strong theme of grasses with a softer, meadow like characteristic.

A green backdrop is accentuated with bold yellow, orange and red coloured flowers and foliage. Ornamental grasses provide the primary structure with soft flowing lines and lots of movement.

Indicative Plant List

Grasses

- Carex hachijoensis 'Evergold'
- Hakonechloa macra 'Aureola'
- Hordeum jubatum (Foxtail barley)
- Pennisetum alopecuroides
- Pennisetum villosum (Feather-top)
- Stipa calamagrostis (Rough feather grass)
- Stipa tenuissima (Mexican feather grass)

Perennials

- Achillea 'Coronation Gold'
- Coreopsis
- Euphorbia cyparissias
- Euphorbia polychroma
- Helenium 'Moerheim Beauty'
- Kniphofia rooperi
- Ligularia stenocephala
- Persicaria amplexicaulis 'Firetail'
- Rudbeckia fulgida var. sullivantii 'Goldsturm'
- Verbascum nigrum

Shrubs

- Berberis x stenophylla 'Corallina Compacta'
- Euonymus japonicus 'Jean Hugues'
- Santolina chamaecyparissus 'Nana'
- Viburnum davidii
- Hebe albicans

Bulbs, corms and tubers

- Crocosmia 'Golden Fleece'
- Crocosmia 'Lucifer'
- Fritillaria chitralensis
- Fritillaria imperialis (Crown imperial)
- Narcissus 'Fortune'





- ¹ Green wildflower roof precedent
- ² *Millium effusum* 'Aureum'
- ³ *Gallium verum*
- ⁴ *Knautia arvensis*
- ⁵ *Leucanthemum vulgare*
- ⁶ *Lotus corniculatus*
- ⁷ *Carex comans* bronze-leaved



Wildflower and Grasses mix

It is envisaged that the link roof has a strong association with the Library Terrace and continues that theme across the roof of the building. A base of ornamental grasses and a primarily yellow and green colour palette provides this link between the two areas.

The link roof will have a more meadow-like character however, with lower growing species and wildflowers.

Accents of purple lilac add an additional dimension to the link roof and create another subtle difference to the Library Terrace.

Indicative Plant List

Grasses

- *Carex comans* bronze-leaved
- *Hakonochloamacra* 'Aureola'
- *Millium effusum* 'Aureum'
- *Pennisetum villosum*
- *Stipa tenuissima*

Wildflower

- *Achillea millefolium* (yarrow)
- *Allium schoenoprasum* (chives)
- *Carthusianorum* (carthusian pink)
- *Echium vulgare* (viper's bugloss)
- *Gallium verum* (lady's bedstraw)
- *Knautia arvensis* (field scabious)
- *Leontodon autumnalis* (rough hawkbit)
- *Leucanthemum vulgare* (oxeye daisy)
- *Lotus corniculatus* (birdsfoot trefoil)
- *Vulgaris* (common thyme)





- ¹ Planting precedent
- ² Sedum spectabile
- ³ Lavandula angustifolia 'Hidcote'
- ⁴ Allium hollandicum
- ⁵ English climbing rose
- ⁶ Echinacea purpurea 'Robert Bloom'
- ⁷ Rosmarinus officinalis



Sensory and Pergola Garden

It is proposed that the Sensory Garden has a contrasting colour palette to differentiate these spaces on the southern side of the building. Plants with primarily pink and purple flowers have been chosen here.

At times partially shaded by the large boundary trees, this area will still retain a decent amount of sunshine - allowing for the inclusion of some Mediterranean style planting. Rosemary and Lavender provide wonderful scent and, along with the other species selected here, are attractive to pollinating insects.

Indicative Plant List

Annual/ biannual

- Myosotis (forget-me-not)

Ferns

- Dryopteris erythrosora (Japanese shield fern)

Grasses

- Molinia caerulea subsp. caerulea 'Edith Dudsus'

Perennials

- Aster thomsonii 'Nanus'
- Brunnera macrophylla 'Jack Frost'
- Echinacea purpurea 'Robert Bloom'
- Echinops ritro 'Veitch's blue'

- Eryngium x tripartitum
- Geranium phaeum 'Lily Lovell'
- Iris 'Flight of Butterflies'
- Pulmonaria 'Blue Ensign'
- Sedum spectabile
- Symphyotrichum cordiolium 'Sweet Lavender'
- Verbena bonariensis

Shrubs

- Lavandula angustifolia 'Hidcote' (English lavender)
- Perovskia 'Blue Spire'
- Rosmarinus officinalis (rosemary)
- Salvia officinalis 'Purpurascens' (purple sage)

Bulbs, corms and tubers

- Allium giganteum
- Allium hollandicum
- Chionodoxa forbesii
- Cyclamen hederifolium

Climbers

- English climbing roses
- Honeysuckle
- Clematis





Native shrub planting

British native plants make up the majority of the boundary planting which is proposed for the banks that surround the Parade Ground and are located to the western and southern edges of the site.

Small trees and larger shrubs such as field maple, blackthorn and guelder rose will be located to the site perimeter with dogwoods and lower growing shrubs located further into the site. A mixed native hedge is proposed to the inward side of the replaced boundary fence to provide additional screening.

Chinese bramble, although not native, provides an excellent carpet through which foxgloves, snowdrops, bluebells and daffodils will emerge in the spring.

The selected plants will all benefit local wildlife and increase the biodiversity of the site - enriching the site's ecology and strengthening the green open space networks in the vicinity

- ¹ Native shrub mix
- ¹ *Hyacinthoides non-scripta*
- ² *Cornus sanguinea*
- ³ *Viburnum lantana*
- ⁴ *Prunus spinosa*
- ⁵ *Viburnum opulus*
- ⁶ *Galanthus nivalis*



Indicative Plant List

Small Trees

- *Acer campestre* (field maple)
- *Corylus avellana* (hazel)
- *Crataegus laevigata* (midland hawthorn)
- *Malus sylvestris* (crab apple)
- *Prunus spinosa* (blackthorn)

Shrubs

- *Cornus sanguinea* (dogwood)
- *Euonymus europaeus* (spindle)
- *Hippophae rhamnoides* (sea buckthorn)
- *Rhamnus cathartica* (buckthorn)
- *Viburnum lantana* (wayfaring tree)
- *Viburnum opulus* (guelder rose)

Groundcover

- *Rubus tricolor* (Chinese bramble)

Perennials

- *Digitalis*

Bulbs, corms and tubers

- *Galanthus nivalis* (British snowdrop)
- *Hyacinthoides non-scripta* (British bluebell)
- *Pseudonarcissus lobularis* (British daffodil)





Green roofs, Ecology & Biodiversity

The increased proportion of soft landscape and the inclusion of green roofs help to create a much greener site than currently exists. This greening of the site has been designed to 'extend' the Highgate Bowl across the site and reinforce the green characteristics of the area. The additional benefit of this is the increase to the site's potential for richer biodiversity and ecology.

The living green roofs will compose of biodiverse green roof species.

A mix of species ideal for city environments is included in the urban biodiverse flora mix. The plants chosen are able to absorb pollution and CO2 and give a suitable environment for insects and invertebrates. and provide flower display midsummer that are attractive to bees, butterflies and insects. Whilst *Hyloelephium cauticola* provides an evergreen ground cover to the living roof.

Native plant species and species chosen for their attractiveness to pollinating insects help to increase the biodiversity across the site and enrich the site's ecology - strengthening the green open space network in the area (image 3).

Bird and bat boxes, log piles and insect hotels can be located across the site to provide additional habitat (images 2 and 4).



¹ Green roof - seasonal colour interest

² Bird box

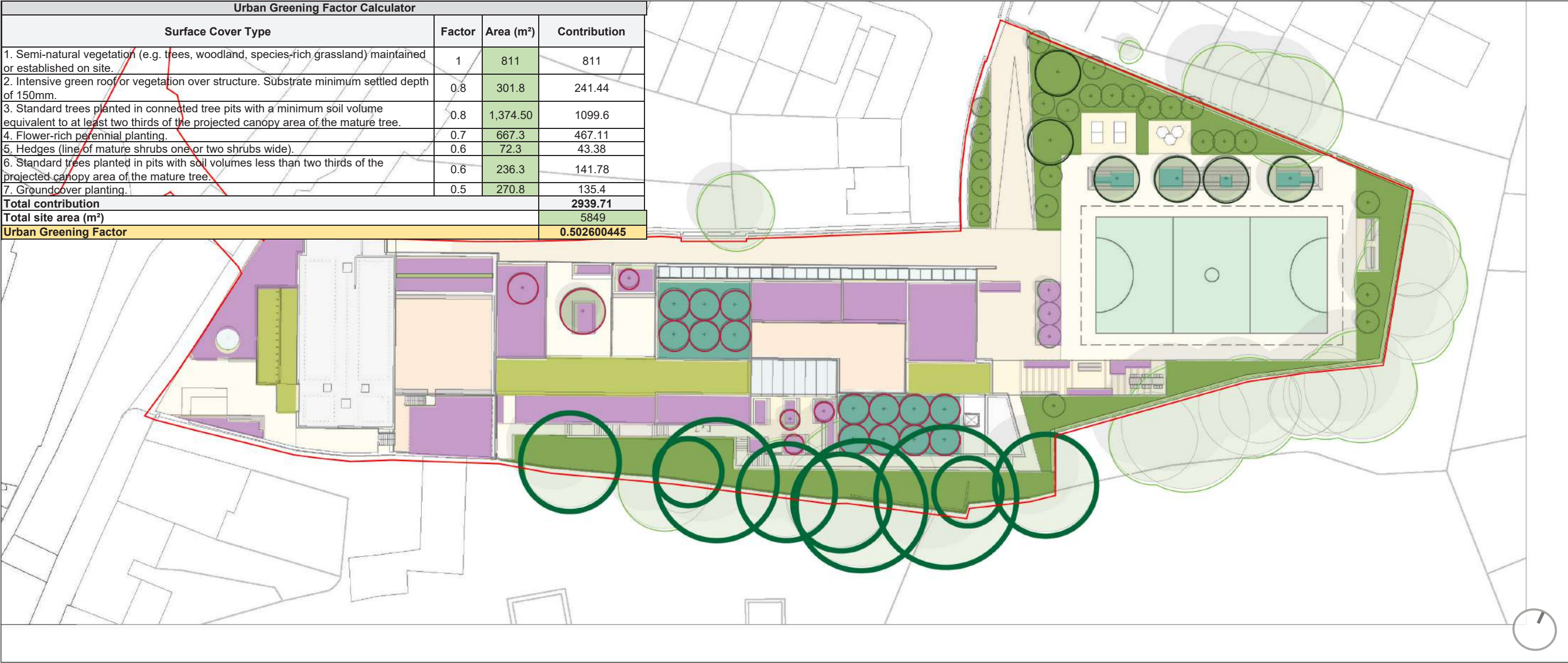
³ Native bluebells

⁴ Insect hotel

⁵ Green roof

WASHGATE SCHOOL

5.0 Urban Greening Factor



Urban Greening Factor

Legend



Existing Tree canopy



Standard trees planter with 2/3 projected canopy area of the mature tree - 346.5m²



Standard trees planter with less than 2/3 projected canopy area of the mature tree - 260.3m²



Existing trees where trunk is within boundary line - 1028m²



Intensive green roof or vegetation over structure - 336.8m²



Groundcover planting - 294.8m²



Flower-rich perennial planting - 632.3m²



Hedge - 72.3m²



Semi-natural vegetation (Specie-rich lawn and Native shrub areas) - 811m²

Urban Greening Factor

There are a variety of habitats proposed on site including, flower rich perennial planting, intensive and extensive green roofs green wall and a number of tree species.

The urban greening factor, as required by the New London Plan for the Site is 0.3, calculated using the Urban Greening Factor table and method below.

Urban green factor:(Factor A x Area) + (Factor B x Area) + (Factor C x Area) etc. Divided by Total Site Area

The diagram above illustrates the UGF of the Scheme and is calculated as follows: Semi-natural vegetation (811 x1) Intensive green roof (336.8 x 0.8) + Flower rich perennial planting (632.3x 0.7) + Standard Trees in Soils more than 2 thirds projected canopy 346.5x 0.8) + Standard trees in pits with soil volumes less than 2 thirds projected canopy (260.3 x 0.6) = 2939.71/5849 = **0.50**

HIGHGATE SCHOOL

6.0 Materials & Furniture

Hard Surface Materials

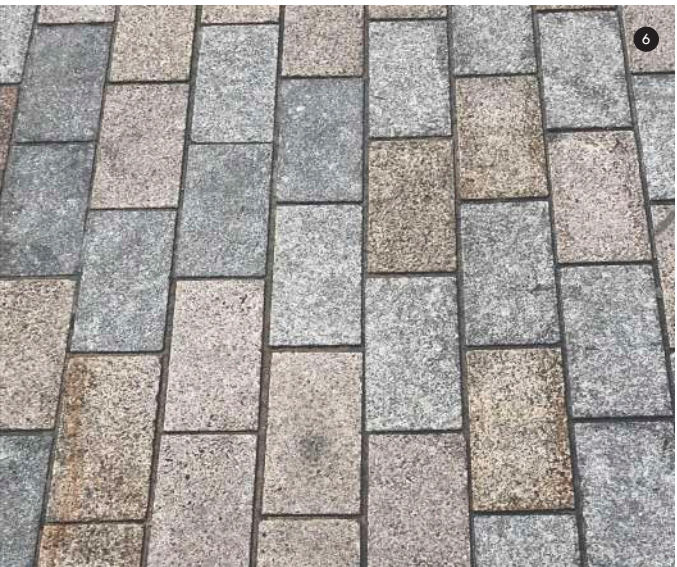
The hard surface material palette has been restricted to create a visual consistency and unity across the site.

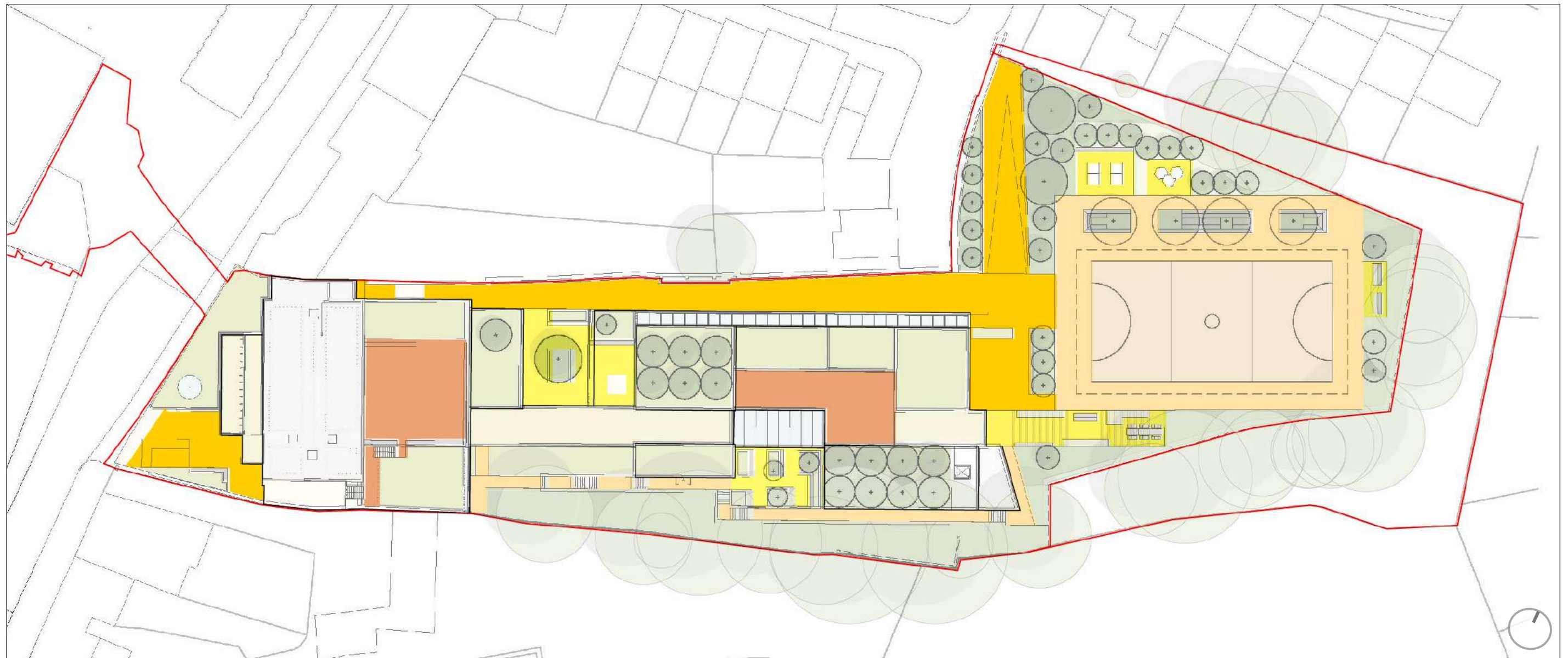
The primary material proposed is resin bound gravel. This material is permeable, durable, has a warmth and visual softness, and is easy to maintain (image 1). Using natural and recycled aggregates, a colour can be chosen to complement the materials specified within the building. A secondary, Exposed aggregate In situ concrete is proposed for the niches around the Games court and within the sunken garden (image 3). A small modular paving of Exposed aggregate is proposed to provide durable surfaces where vehicles have access (image 6).

A permeable polymeric surface is proposed for the Games court - suitable for a range of sports and as a general recreation area. The exact polymeric specification and colour will be determined once the proposed range of sports has been agreed (image 2).

It is proposed that the roof terraces are paved in a neutral coloured concrete paving such as the Modal Piora and be laid on a pedestal system to allow for drainage (image 5). The roof terraces will Also have fixed timber-topped furniture (image 4).

- ¹ Resin bound gravel with metal edging
- ² Games court surfacing
- ³ In situ Concrete paving
- ⁴ Timber decking with integrated planter/ seat
- ⁵ Modal Piora - Modular Concrete paving
- ⁶ Granite setts paving





Hard Surface Materials

Legend

	Netball/ Games court surface		Vehicle access surface - Granite setts
	Primary surface - Resin bound gravel		Roof terrace paving - Modal Piora concrete paving
	Secondary surface - Exposed aggregate In situ paving		

Furniture

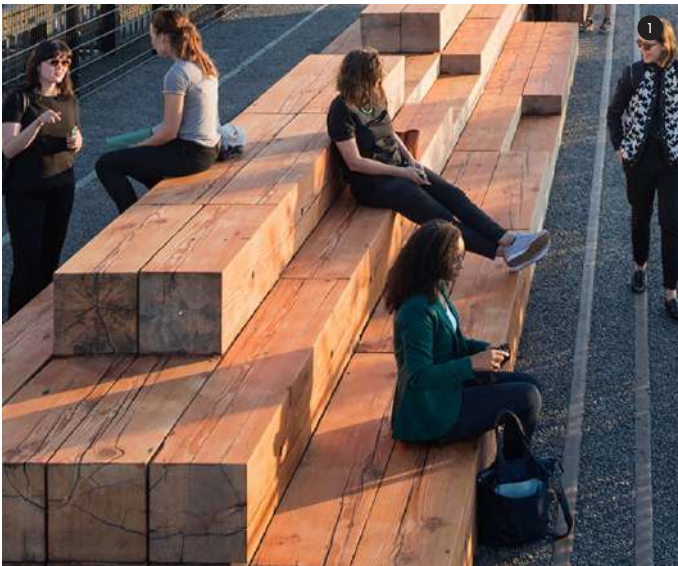
A variety of furniture is provided across the site to facilitate a wide range of seating options.

On the roof terraces, there is limited fixed bench seating. (image 2)

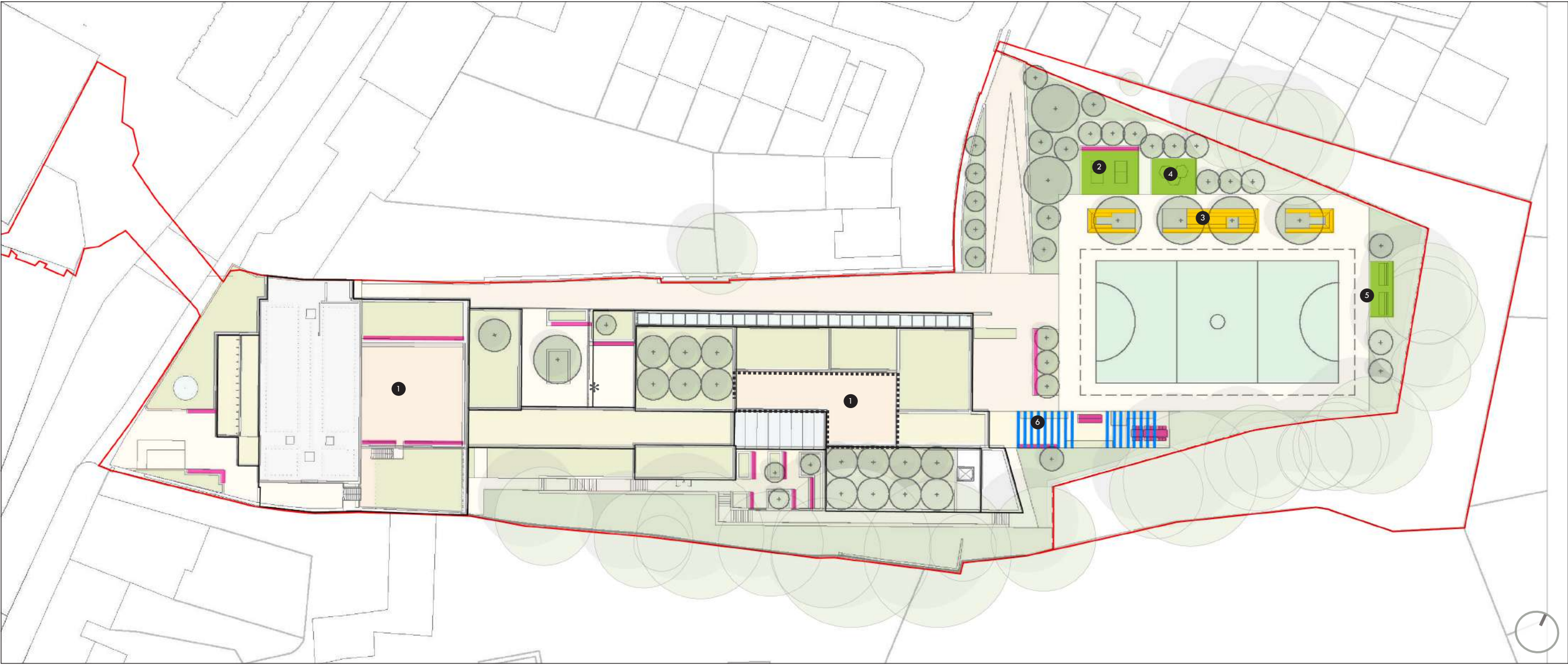
Timber topped benches offer a durable, timeless design and complement the range of hard surface materials proposed across the site. Timber is also tactile and warm to sit on.

Terraced seating with integrated planting is proposed to the northern edge of the Netball/ Sports court to provide a sports viewing area and place to congregate and relax with friends (image 1).

Smaller, more intimate seating areas are provided across the site - within the courtyard gardens and beneath the pergola (image 2).



- ¹ Terraced seating with integrated planting is proposed to the northern edge of the games court to provide a range of seating options
- ² Moveable furniture creates flexibility
- ³ Planter with built-in seating
- ⁴ Railing for the roof terraces
- ⁵ A combination of fixed bench seating and moveable furniture is proposed for the roof terraces



Furniture

Legend

- Fixed bench seating - timber
- Parade Ground Niches
- Terraced seating with integrated planters

- Pergola
- Sculpture or water feature
- Railing

- ¹ Roof terrace with fixed and moveable furniture
- ² Parade Ground Niche 1 - Table tennis area
- ³ Terraced seating to Games/ Netball court
- ⁴ Parade Ground Niche 2 - Climbing structure/ outdoor gym/ sculptural object
- ⁵ Parade Ground Niche 3 - Informal gathering/ dining/ outdoor classroom
- ⁶ Pergola

Parade Ground Niches

The niches provide opportunities for a variety of activities to be provided. These have not been concluded yet but may be selected from:

Table Tennis

Outdoor table tennis provides the opportunity for pupils to engage with each other and relax (image 4).

Outdoor Gym

Outdoor gym equipment can be used formally or informally either as part of lessons or during breaks (image 1).

Climbing Structure

A multi-purpose structure/ shelter provides the foundation for a multitude of activities such as climbing, swinging, sitting, gathering and informal interaction. The structure could also double up as a place to shelter on cool, windy or wet days (image 5).

Sculptural Object

A single object or group of sculptural objects such as climbing poles, a climbing wall or boulder would provide a visual focus and a destination for the pupils to congregate and let off steam.

Informal Gathering/ Dining/ Outdoor working

Benches, tables, work benches and seating steps provide informal places for students to talk, eat, work and relax (images 2 and 3).



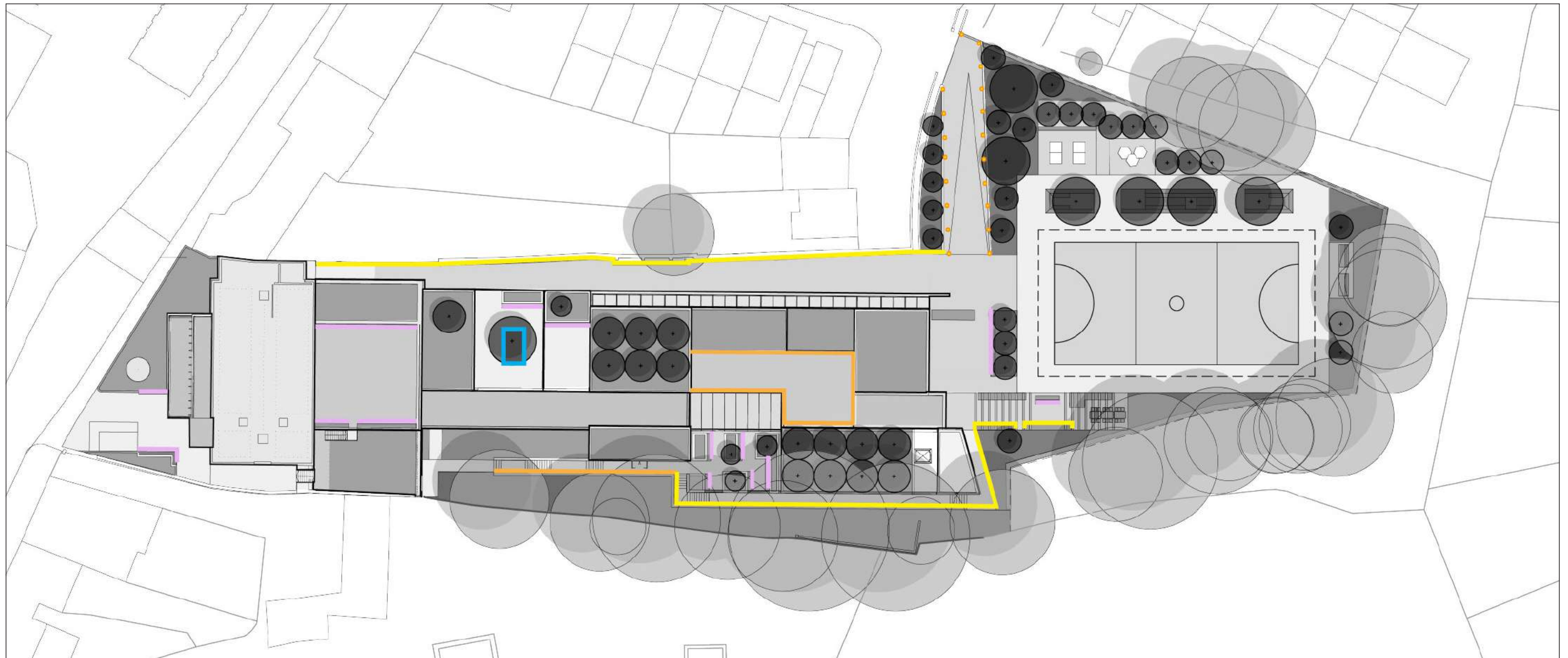
¹ Outdoor gym equipment

² Raised bar/ table provides space for outdoor working and dining

³ A large table provides space for an informal outdoor classroom or group lunch under the pergola

⁴ Table Tennis

⁵ Climbing structure/ pergola



Lighting Strategy

Legend

-  Integrated Bench strip lighting
-  Integrated Planter lighting
-  Integrated Wall lighting
-  Integrated lighting to balustrade/fence
-  Integrated bollard lighting

HIGHGATE SCHOOL 7.0 Lighting Strategy

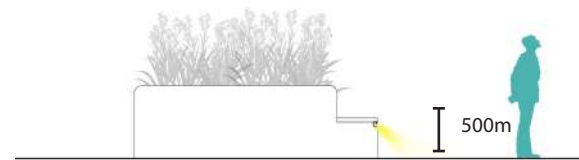
External Lighting Design Principles

External Lighting will be used to create focal points and a sense of place to the Site after dark. The lighting strategy has the following design principals:

- Create a cohesive lit environment after dark;
- Use lighting to develop a character and identity for the Site;
- Establish a visual hierarchy of the lighting to assist with wayfinding;
- Protect and support surrounding habitats; lighting to be excluded by trees to prevent disturbance to wildlife.
- Use appropriate levels of light with respect to security and safety without over-lighting
- Minimise light pollution, glare and flicker

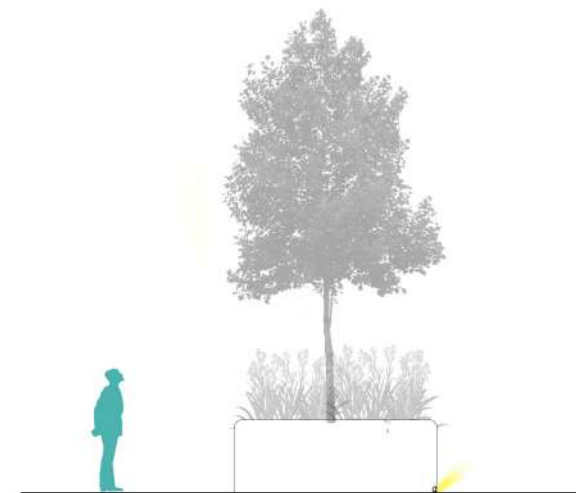


- ¹ Integrated Bench strip lighting
- ² Integrated Planter lighting
- ³ Integrated Wall lighting
- ⁴ Integrated Balustrade lighting
- ⁵ Integrated Bollard lighting



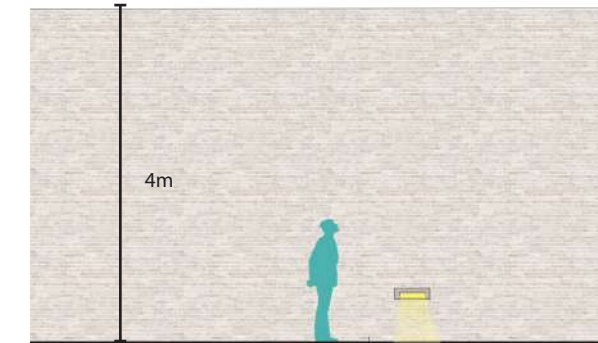
Integrated bench strip lighting

The timber benches through the site will have recessed LED strip lighting to invite you to take a sit at night as well as casting low levels of ambient lighting on the floor.



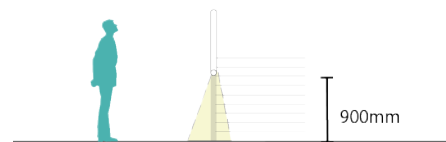
Integrated planter strip lighting

The planters through the site will have recessed LED strip lighting to enliven the planting as well as casting low levels of ambient lighting on the floor.



Wall Lights

The wall lights will have a decorative feature lighting the wall to the long ramp. This will guide people through the landscape and be a stand out feature.



Balustrade lighting

Balustrade lighting will be used at staircases to provide low level lighting to access routes.



Bollard lighting

Bollard lighting will be use along the ramp to guide the way and to provide low level lighting to access routes.



Illustrative Masterplan Night

- ¹ Roof terrace
- ² Gibbon garden
- ³ Sunken garden
- ⁴ Library roof terrace
- ⁵ Southern terrace
- ⁶ Pergola garden
- ⁷ Games court (Netball)
- ⁸ Activity spaces

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