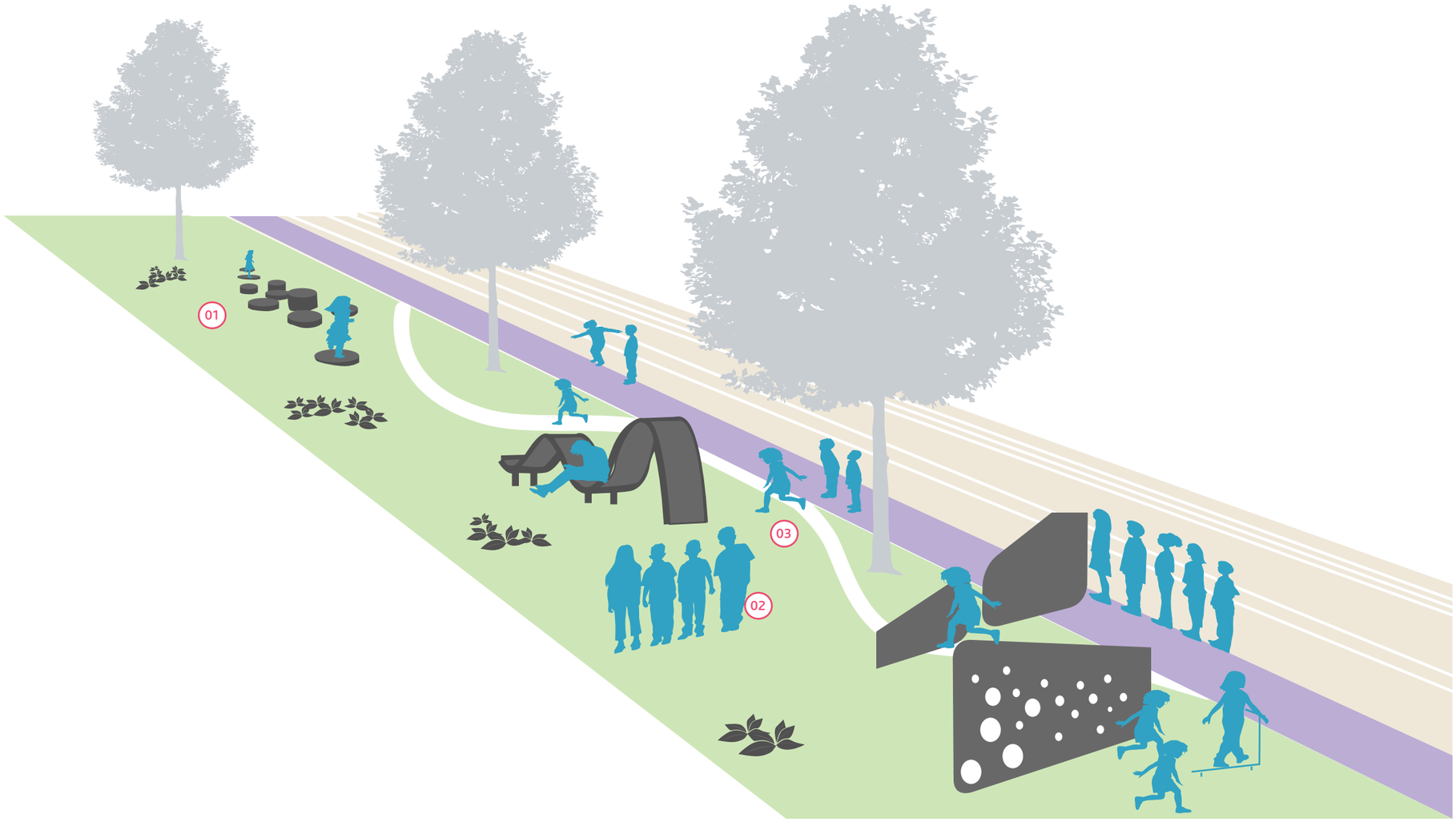
PLAY ON THE WAY (ALL AGES)

Opportunities for children to play can be integrated into public realm landscapes of the site such as William's Lane and Aynescombe Lane.

These facilities can include:

- Equipment integrated into the landscape that allow children to jump, climb and explore (1)
- Small scale play equipment (2)
- Equipment e.g.. climbing walls or boulders, exercise trials (3)
- Sculptural play equipment that provides opportunities for play as well as being aesthetically pleasing (4)



01

02

03

04

05

PRECEDENT IMAGES ABOVE SHOWING DESIGN INTENT.

DOORSTEP PLAY FACILITIES FOR RESIDENTIAL COURTYARDS:

LOCATION PLAN

PRECEDENT IMAGES BELOW SHOWING DESIGN INTENT:

01

02

01

01

01

01

‘PLAY ON THE WAY’ ELEMENTS WITHIN GREEN LINK

PRECEDENT IMAGES BELOW SHOWING DESIGN INTENT:

01

02

03

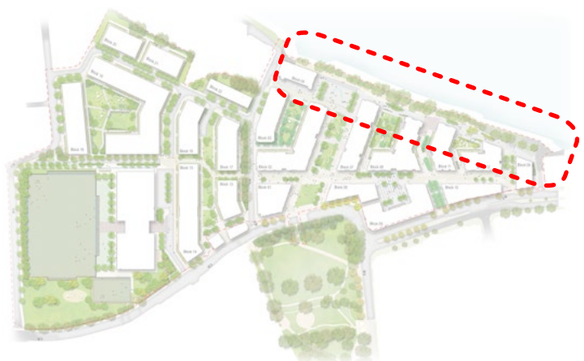
04

02

03

03

‘PLAY ON THE WAY’ ELEMENTS IN STREETSCAPE/RIVER TERRACE



LOCATION PLAN

PRECEDENT IMAGES BELOW SHOWING DESIGN INTENT:

02

01

02

03

WATER PLAY AND WATER JETS AT MALTINGS PLAZA

LOCATION PLAN

PRECEDENT IMAGES BELOW SHOWING DESIGN INTENT:

01

02

02

02

02

01

STRATEGY:

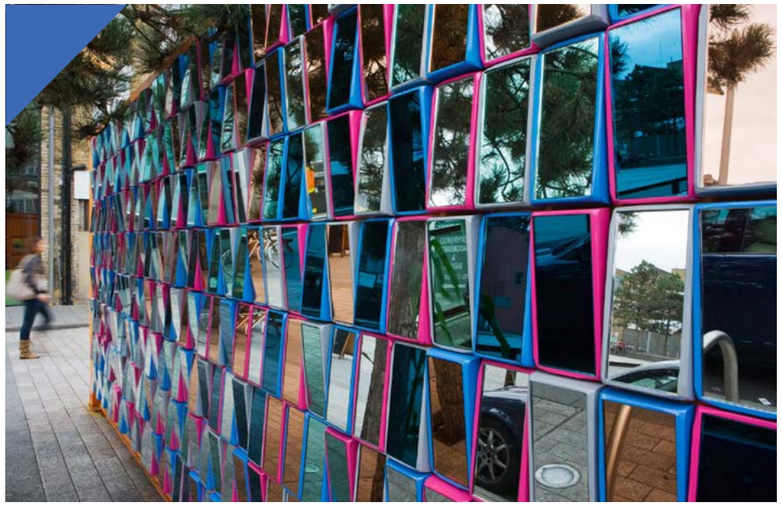
Opportunities exist within the landscape and public realm of the masterplan to integrate public art that will provide reference to the long and intricate history of the site, the riverside location and add a layer of interest and animation to the user experience. The initial strategy is to identify potential positions for interventions along key routes and in locations that tie in with the site-wide art strategy, potentially including:

- Sculptures at major focal points
- Appropriate found objects from the brewery
- Artistic play installations
- A history trail – with cast or etched narrative panels
- Temporary happenings and installations related to the project,
- Paving art, light and sound pieces, elements within street furniture,
- Signage, graphics and branding

The proposal would be to work with a curatorial specialist in the next phase of the development to identify and commission artists to bring this vision to life.

Legend

- Locations of Potential Art Installations
- Heritage Celebration Through Public Realm (incorporated in hardscape and street furniture design)
- Potential Location for the War Plaques
- Riverside Art Trail
- Brewery Gates Relocated
- Section of Existing Riverwall Patrially Retained
- Site Application Boundary
- School Application Boundary



BIODIVERSITY ROOF

BIODIVERSITY ROOF

BIODIVERSE ROOFS (Total 2,524m²):

It is proposed to implement extensive green / brown roof systems on a number of the buildings with flat roofs, exploiting the ecological potential of these upper levels. A percentage of the roof space on new buildings in the development has been designed as extensive green or brown roofs, to provide biodiversity and energy benefits, as well as contributing to stormwater drainage and short term attenuation storage. While it is acknowledged that the LBRuT recommendation of 70% of roofs being allocated to green roofs is not achieved, we have provided over 50% of green or brown roofs and have endeavoured to maximise suitable biodiversity through the green and brown roof strategy, as well as significant planting areas and retained vegetation throughout the site. The roofscape is also utilised to provide PV cells, air conditioning and other mechanical plant and lift overrun structures, together with maintenance access. The calculated available roof space excludes areas unsuitable for the inclusion of biodiverse roofs such as pitched roof structures, lift over-runs and areas allocated for building plant or services.

Green and brown roofs provide beneficial insulation to buildings and a degree of infiltration and storage of rainwater, while adding to the biodiversity of the site with a range of plant types, habitats for various insects and invertebrates and potentially birds and bats. A number of bat and bird boxes and bricks will be integrated into the roofscape and informal habitats created with rocks and gravel surfaces to brown roof sections.

Green roofs include a wildflower and native grasses mix and are designed as a sustainable, biodiverse roofscape and a pleasant visual outlook for surrounding higher buildings. This light weight roof system will assist in absorbing rainwater as well as increasing the biodiversity of the site by providing additional foraging and habitat for insects and birds.

Brown roofs are accessible for maintenance purposes and will incorporate PV cells in some areas, as indicated in Architectural and MEP drawings. Each brown roof will be seeded with plant species collected from the site or nearby, to boost local endemic habitat and foraging for local species. Certain features will be introduced to maximise potential for biodiversity and habitat for target species. These will include log piles, slabs or tree branches gathered from the local area, combined with bird and bat boxes noted below. Where possible, the substrate depth will be varied to provide opportunities for small pools of water to collect on the roof.

For Development Area 2, biodiverse roofs will be incorporated using same principles as above and additional details will be provided in detail design stage.

Biodiverse roof allocation - Development Area 1

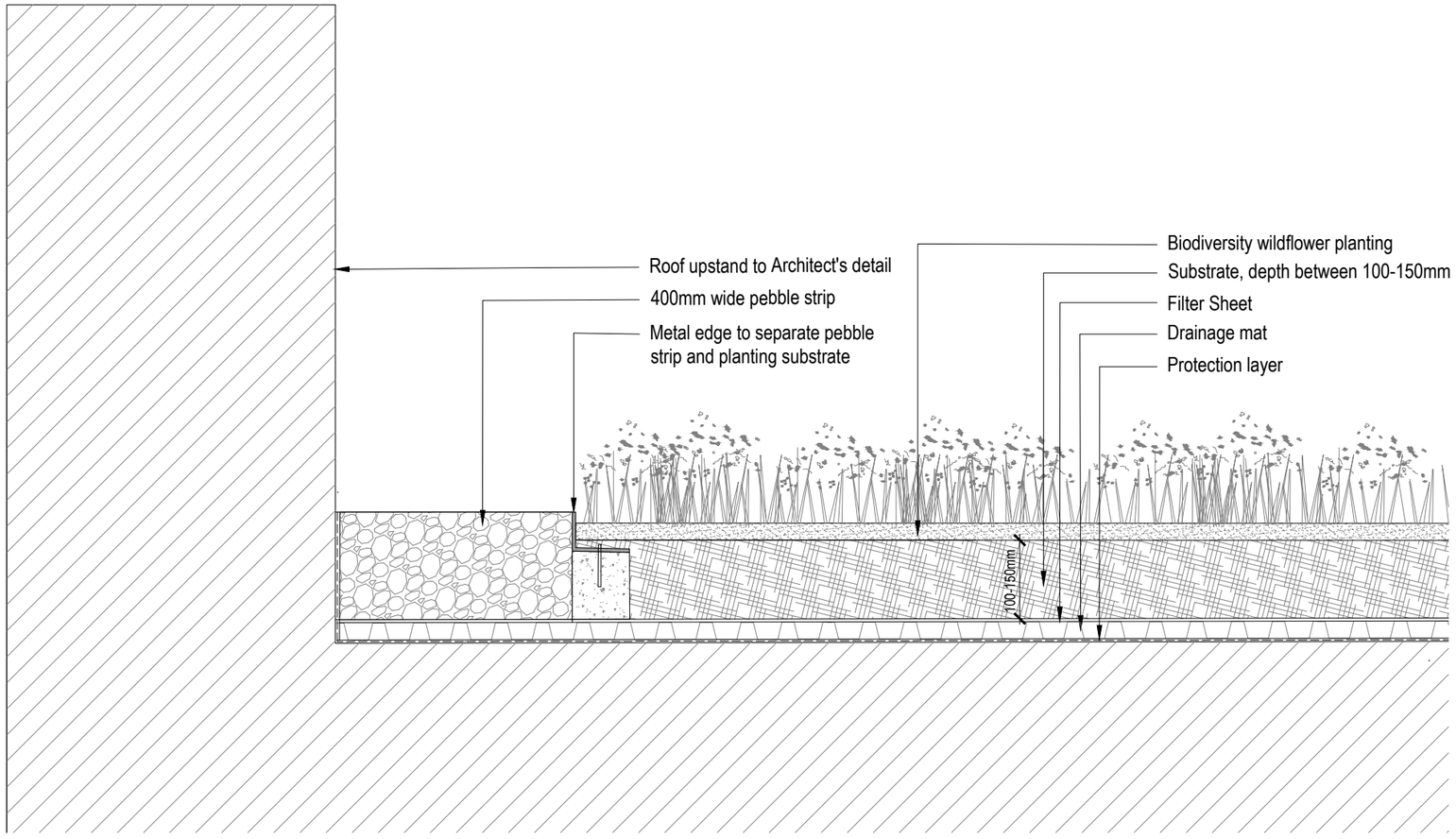
	Area (square metres)	Area as percentage
Available roof space	4,475	N/A
Green roof allocation	2,164	48%
Brown roof allocation	360	8%
Total allocated	2,524	56%

Legend

- Green Roof (total 2,164m²)
- Brown Roof (total 360m²)
- Site Application Boundary
- School Application Boundary

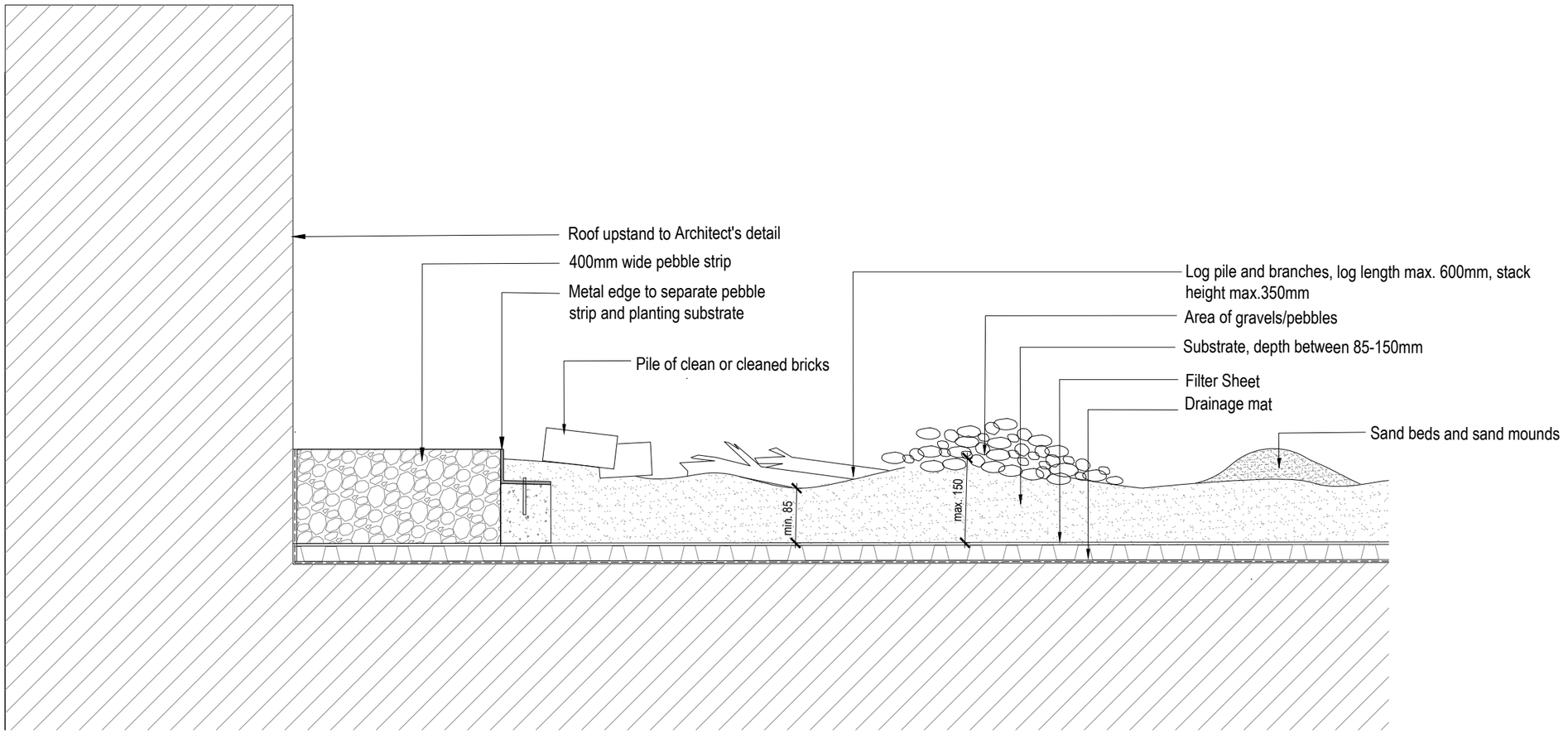
BIODIVERSITY ROOF

GREEN ROOF TYPICAL DETAIL



BIODIVERSITY ROOF

BROWN ROOF TYPICAL DETAIL



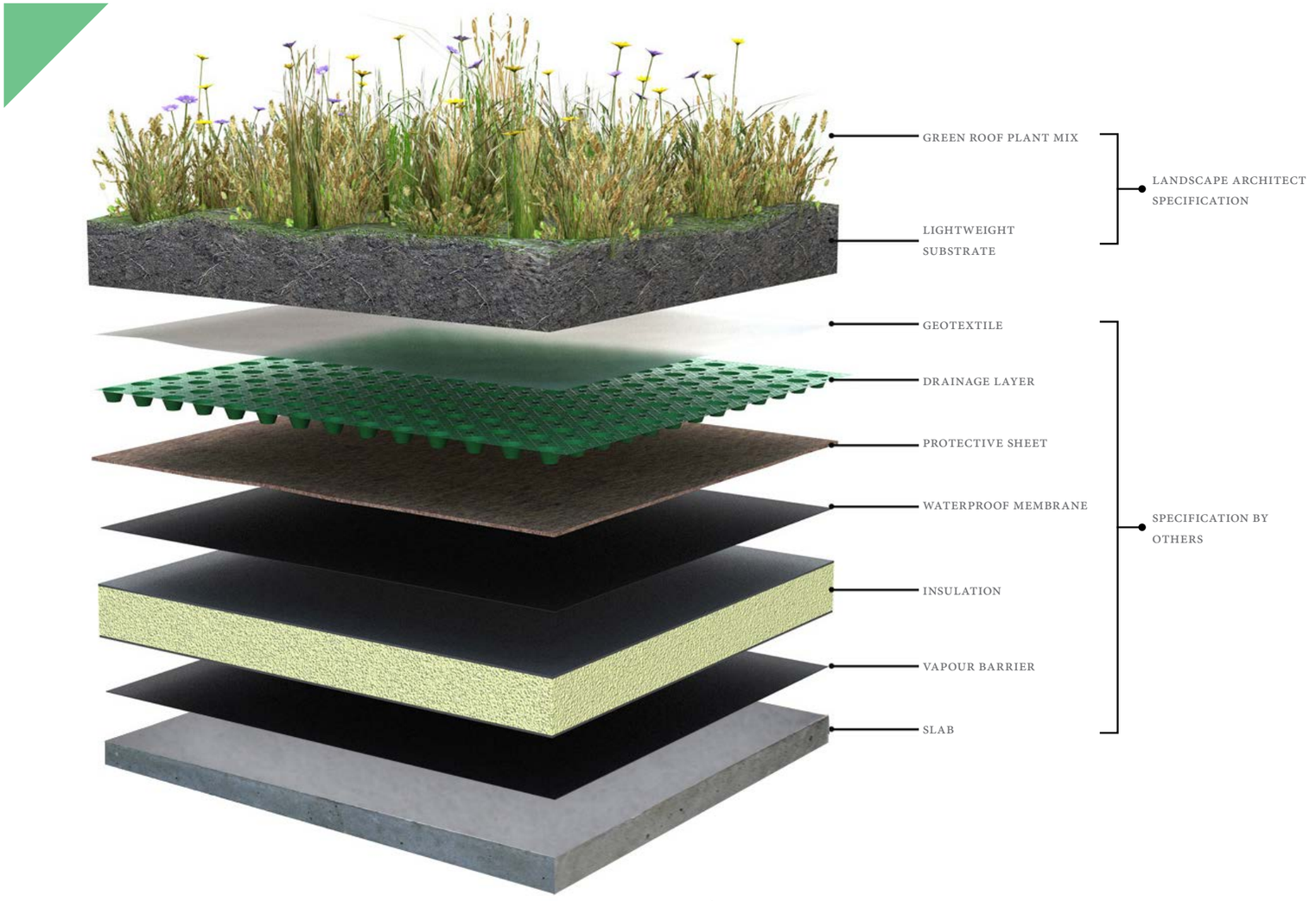
BIODIVERSITY ROOF

GREEN ROOF PLANTING DETAIL

Green roofs include a wildflower (90%) and native grasses (10%) mix and are designed as a sustainable, biodiverse roofscape and a pleasant visual outlook for surrounding higher buildings. An indicative species palette is included on this page.

XF118 WILDFLOWER INDICATIVE SPECIES LIST

Botanical Name	Height	Blossom	Flowering Season
Achillea millefolium	8-40 cm	White	June-August
Armeria maritima	5-20 cm	Pink	April-October
Bellis perennis	3-12c m	White / Yellow	March-October
Campanula glomerata	3-30 cm	Blue	June-October
Campanula rotundifolia	15 cm	Blue	July-September
Centaurea cyanus	20-50 cm	Blue	June-August
Centaurium erythrea	10-40 cm	Pink	July-August
Dianthus deltoides	15-30 cm	Pink	April-October
Echium vulgare	30-60 cm	Blue	June-September
Galium verum	15-60 cm	Yellow	July-August
Geum rivale	20-40 cm	Pink	April-August
Linaria vulgaris	20-40 cm	Yellow	July-September
Lotus corniculatus	10-20 cm	Yellow	June-September
Lychnis flos-cu-culi	50-60 cm	Pink	May-August
Papaver rhoes	20-60 cm	Red	June-August
Pilosella aurantiaca	20-60 cm	Orange	July-October
Prunella vulgaris	5-20 cm	Purple	June-October
Rhianthos minor	30-50 cm	Yellow	May-August
Saponaria officianalis	20-40 cm	Light Pink	July-September
Scabiosa columbaria	15-50 cm	Blue	July-October
Sedum acre	5-10 cm	White / Yellow	July-August
Silene uniflora	8-25cm	White	June-August
Silene vulgaris	25-50 cm	White	June-August
Thymus polytricus	4-10 cm	Mauve	May-August



Precedent Image of Green Roof Detail

GREEN ROOF WILDFLOWER SPECIES


Alliaria petiolate


Echium vulgare


Papaver rhoes


Galium verum


Daucus carota


Prunella vulgaris


Silene vulgaris


Rhianthos minor

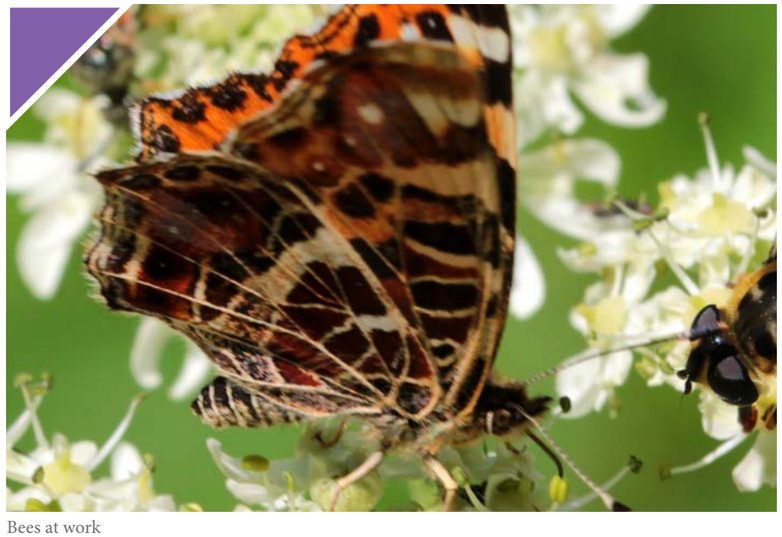
ECOLOGY

Living roofs are designed, with a combination of green and brown roofs to provide a range of plants and habitats, as well as contributing to the biodiversity of the site.
Insect attracting plants and structures to form shelters and habitats will be included in green and brown roof details.
A number of ecological enhancements will be incorporated in the proposed landscape and a minimum of ten bat boxes are to be provided in suitable location within the Detailed Application Boundary Area.

Bird boxes

Bat box

Bat box



Bees at work

Wood log piles

SUSTAINABLE URBAN DRAINAGE STRATEGY:

RAIN GARDENS

Rain gardens form a significant landscape feature within the central Green Link, draining one side of the pavement directly into a planted storage 'trench' which ultimately connects to the stormwater attenuation system. This feature provides an effective sustainable drainage system while creating an obvious ecological feature in the public realm, accentuating the visibility of sustainable measures taken in the development. This feature provides a link to the master planning strategy for ecological development and sustainable drainage and allows surface water to be collected in mass planting areas along the Green Link.

BIODIVERSE ROOFS

Green and brown roofs on the majority of buildings across the site provide biodiversity and also contribute to the rainwater attenuation. Surface treatments in the public and private realm are proposed as predominantly permeable, with soft landscape, turf and grasses, together with permeable pavements of gravel (self-binding or bonded) contrasting with hard paving surfaces and assisting drainage of stormwater.

IRRIGATION

An irrigation system will be provided to all soft landscape areas (planting and lawn) excluding green or brown roofs. This will include soil moisture monitors and a programmable control system to ensure efficiencies in operation and water management.

The irrigation plant room and central controls will be positioned in the basement plant room and link to mains water supply.

PERMEABLE SURFACES

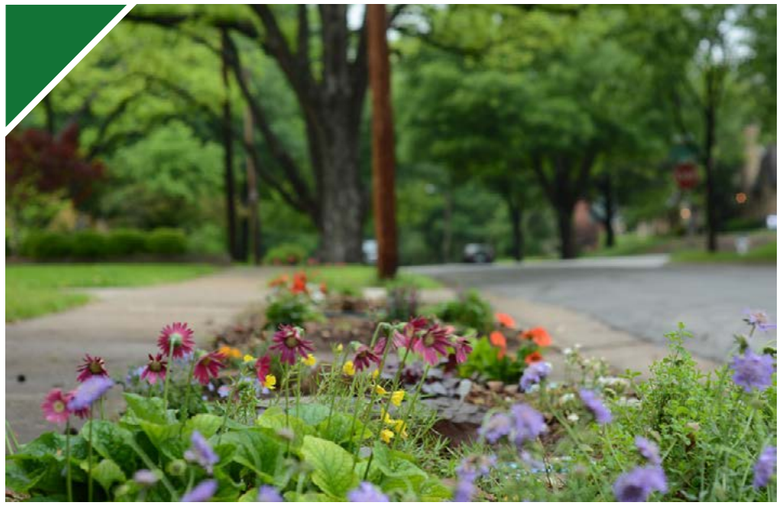
Paved areas will be designed where feasible to drain into tree pits and planting areas, providing natural watering and assisting infiltration and storage of stormwater.

For Development Area 2, the sustainable urban drainage strategy will be developed in accordance with the above and provided in detail design stage.

Legend

- Rain Garden
- Planter
- Permeable Paving
- Site Application Boundary
- School Application Boundary

Rain garden



Planter

Rain garden detail

Rain garden detail

Permeable paving

URBAN GREENING FACTOR

The objective of urban greening is the inclusion of measures within new developments that result in an increase in green cover within the development area, and should be integral to planning the layout and design of new buildings and developments. This objective has been considered from the inception of the design process for the Stag Brewery.

Urban greening covers a wide range of interventions including, but not limited to, street trees, green roofs, green walls, and rain gardens. It can provide a range of benefits including amenity space (especially where traditional green space may be limited), enhanced biodiversity, addressing the urban heat island effect and sustainable drainage.

Policy G5 Urban Greening of the Draft New London Plan sets a urban greening factor model to assist in determining the appropriate provision of urban greening for new developments in London. The Mayor recommends a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development.

The Urban Greening Factor for a proposed development is calculated in the following way:

(Factor A x Area) + (Factor B x Area) + (Factor C x Area) etc. divided by Total Site Area.

The table opposite summaries the urban greening factor for the Stag Brewery development.

P10736-00-003-GIL-190806 Urban Greening Summary
Rev 02

GILLESPIES

Surface cover type	Factor	Area (m2)	Value
Semi-natural vegetation (e.g. woodland, flower-rich grassland) created on site.	1	396	396
Wetland or open water (semi-natural; not chlorinated) created on site.	1	0	0
Intensive green roof or vegetation over structure. Vegetated sections only. Substrate minimum settled depth of 150mm	0.8	2164	1731.2
Standard trees planted in natural soils or in connected tree pits with a soil volume equivalent to at least two thirds of the projected canopy area of the mature tree	0.8	4956	3964.8
Extensive green roof with substrate of minimum settled depth of 80mm (or 60mm beneath vegetation blanket)	0.7	360	252
Flower-rich perennial planting	0.7	0	0
Rain gardens and other vegetated sustainable drainage elements	0.7	213	149.1
Hedges	0.6	774	464.4
Standard trees planted in pits with soil volume less than two thirds of the projected canopy area of the mature tree	0.6	148	88.8
Green wall –modular system or climbers rooted in soil	0.6	0	0
Groundcover planting	0.5	2455	1227.5
Amenity grassland (species-poor regularly mown lawn).	0.4	11022	4408.8
Extensive green roof of sedum mat without substrate	0.3	0	0
Water features (chlorinated) or unplanted detention basins.	0.2	58	11.6
Permeable paving	0.1	9220	922
Sealed surfaces	0	60823	0
Total site area (m2)		92589	
Urban Greening Factor			0.15

DEVELOPMENT AREA 1 DETAIL AREAS AND STREET TYPOLOGIES

GREEN LINK

The Green Link runs through the centre of the site and is flanked on both sides with retail and commercial activation at the ground floor level. The Link incorporates wide paved zones for circulation as well as outdoor activities, dining and display of merchandise. The centre of the Link includes a range of open grassed, mounded play and informal recreation spaces, seating areas and pathways.

The Green Link has been developed to support the surrounding land uses, providing broad paved circulation space for pedestrians, cyclists, service and emergency vehicles while catering for outdoor dining, exhibition or display uses by retail and commercial uses adjoining the Link. The centre of this space is predominantly soft landscape for relaxation, seating and gathering, with a linear rain garden capturing pavement runoff. A variety of sustainable planting aid biodiversity within the urban setting of the development while a canopy of feature trees define the route. Play features and facilities are interspersed through the landscape with associated seating areas for parents and carers in close proximity.

The Green Link connects the open space of Mortlake Green and the wider area of Mortlake including the railway station and Mortlake High Street through to the river, providing a defined entrance to the site and a clear connection between the main public spaces of the new Entry Plaza, Bottleworks Square and Maltings Plaza and down to the river's edge.

Stag Brewery Gate 2 is proposed across the northern end of the Green Link, defining the separation between the soft landscape and hard paved Maltings Plaza.

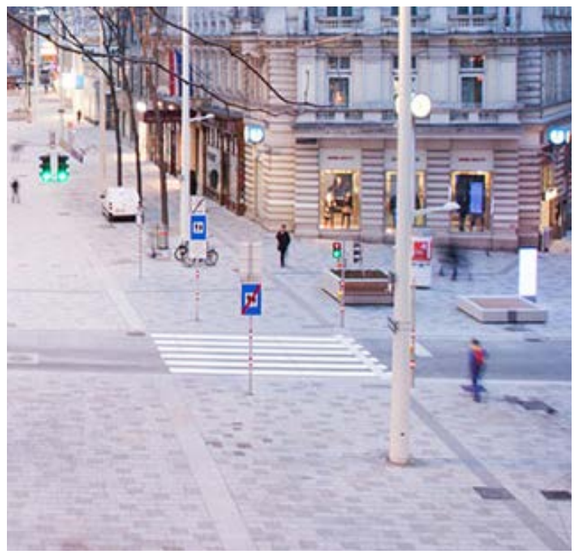
1. Maltings Plaza: tree planting with feature perennial planting
2. Maltings Plaza: hard landscape with water feature
3. Green Link with lawn, trees, planting, rain garden, spill-out spaces and access route.
4. Paved area connecting spaces and buildings with outdoor seating
5. Natural play area
6. Entrance Plaza: lawn and seating steps
7. Seating
8. Rain garden
9. Steps and slopes to Towpath
10. Outdoor dining
11. Thames street with access route
12. Stag Brewery Gate 2 relocated

Location plan

Section AA
30m

GREEN LINK PRECEDENT IMAGES

GREEN LINK PRECEDENT IMAGES



GREEN LINK - ILLUSTRATIVE VIEW

GREEN LINK - ILLUSTRATIVE VIEW

ENTRY PLAZA

The main entrance from Mortlake Green into the Stag Brewery site is via the Entry Plaza on Lower Richmond Road. A new raised pedestrian / cycle crossing will be provided from Mortlake Green, created by removing a small number of understorey plants from the screening shrubbery along Lower Richmond Road and constructing a new pathway through this zone and across the road. New low planting will be installed either side of the path to assist in the integration of the new connection into the setting of Mortlake Green.

Contrasting pavement surfacing is proposed to replace the existing road surface. This surface will extend the width of the Green Link to further highlight this entry point into the site and to assist in traffic calming for this new crossing point.

The Entry Plaza consists of pathways along both sides of an open grassed space, with seating terraces outside the commercial units on either side of the space. A rain garden encloses one side of the space capturing surface runoff as part of the drainage and sustainability strategy for the site.

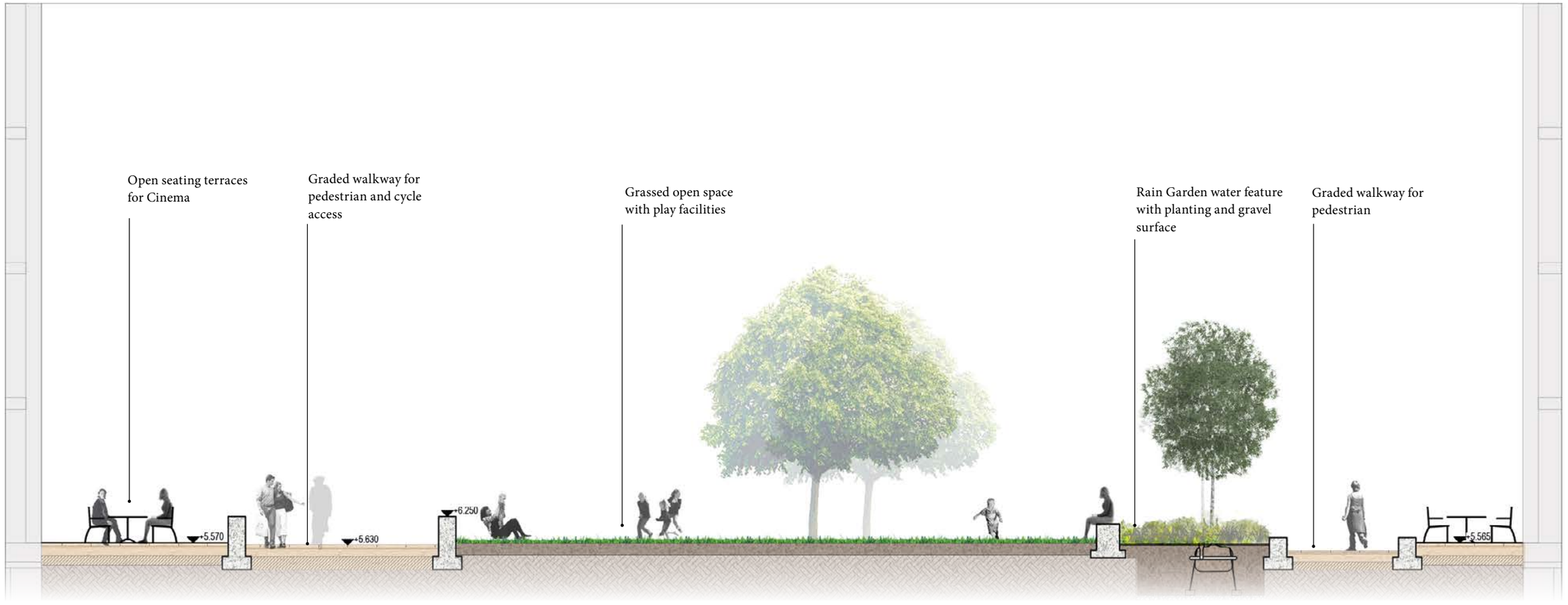
Low concrete walls contain the changes of level within this space and the increase in level from the street into the site is managed with a combination of steps and graded walkways to allow access for all users.

The proposed street trees to Lower Richmond Road are kept clear of this space to allow a visual link into the site and clear connection to Maltings Plaza and the River Thames.

1. Green Link with lawn, trees, planting, rain garden, spill-out spaces and access route.
2. Thames street with service vehicle route
3. Outdoor seating
4. Lawn
5. Seating
6. Graded access
7. Rain garden
8. New crossing (pedestrian and cyclists)
9. Proposed link through Mortlake Green

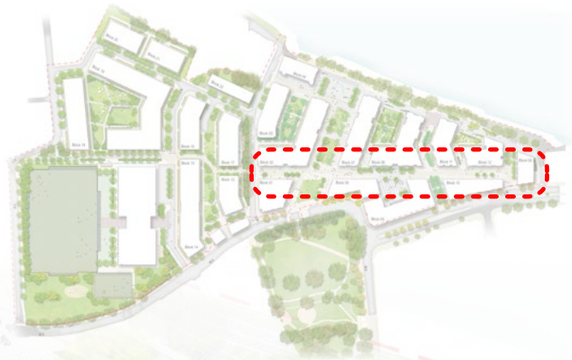
Location plan

Section AA
38m



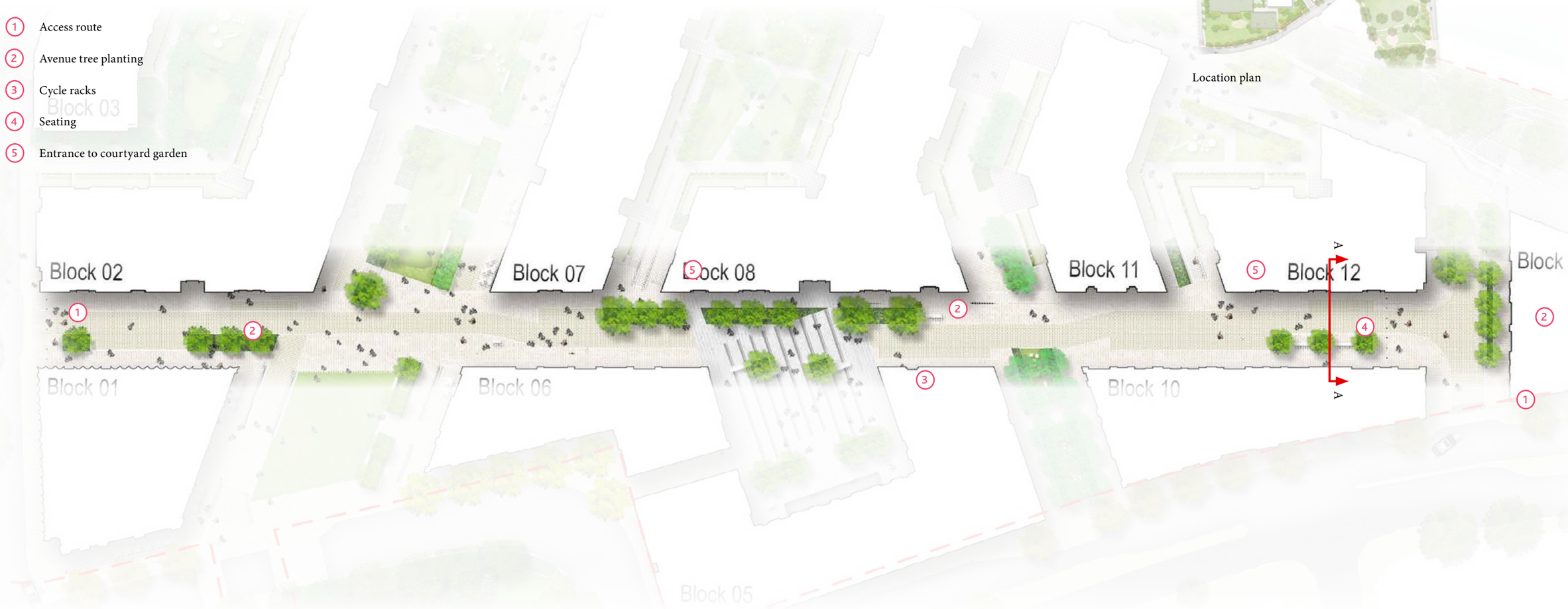
THAMES STREET

As the main commercial street in the development, Thames Street is designed to facilitate pedestrian and cycle movement as well as service and emergency vehicles. Street trees, lighting and planting frame the shared corridor and subtle pavement treatments and low kerbs define vehicle circulation and loading bays.

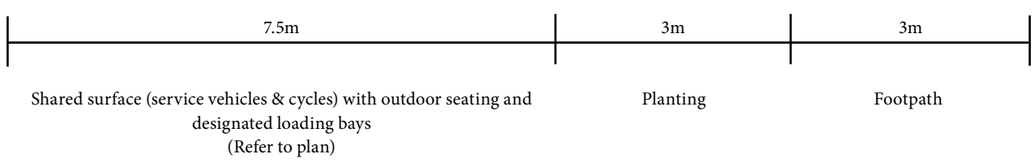


Location plan

1. Access route
2. Avenue tree planting
3. Cycle racks
4. Seating
5. Entrance to courtyard garden

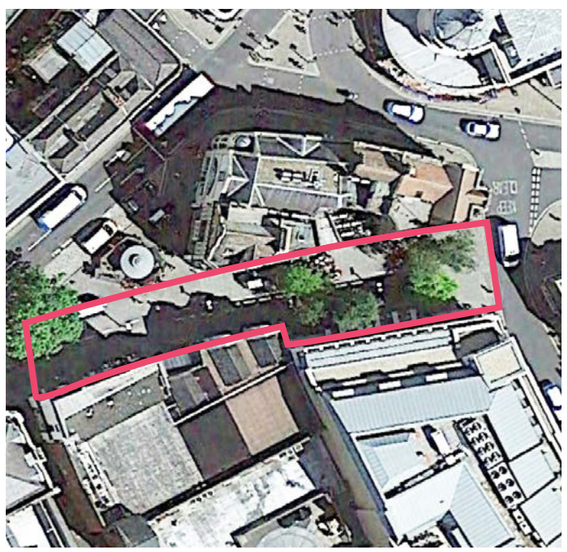


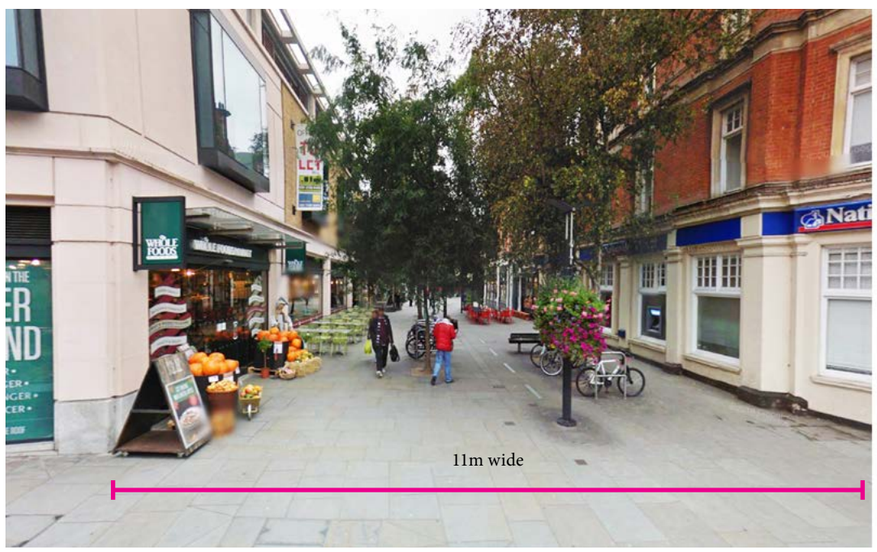
Section AA
13.5m



THAMES STREET - PRECEDENT IMAGES

Precedents | Shopping streets - perch points and treatment





Scale comparison | George Street in Richmond

THAMES STREET LOOKING WEST - ILLUSTRATIVE VIEW

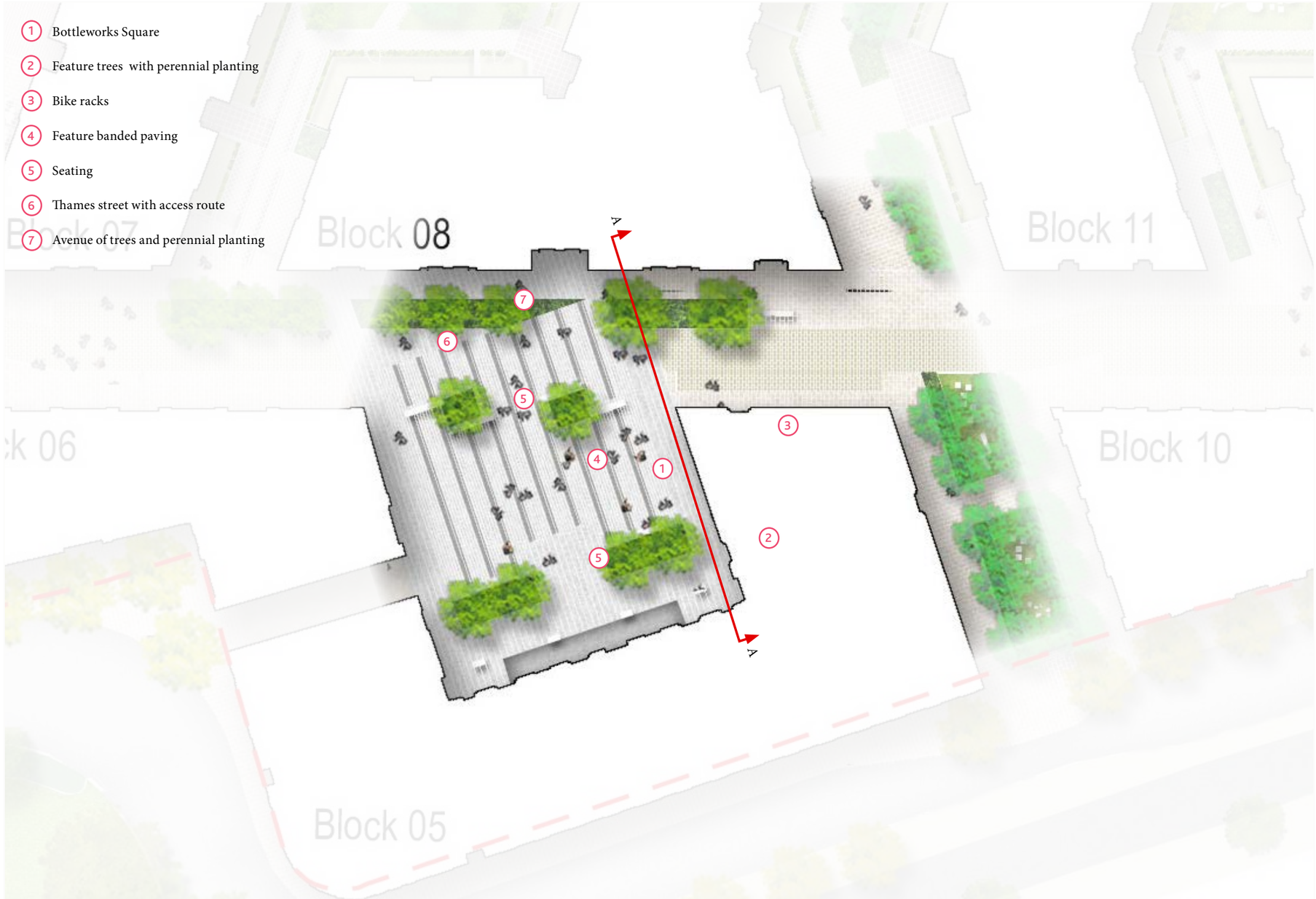
BOTTLEWORKS SQUARE

A secondary open space is proposed adjacent to the retained Bottling Hall, contained by this retained building are the Hotel and a proposed flexible commercial space.

The square extends from Thames Street, the central retail street running east west through the site, and provides space for community activities, markets and displays as well as circulation for service vehicles accessing the surrounding retail and commercial buildings.

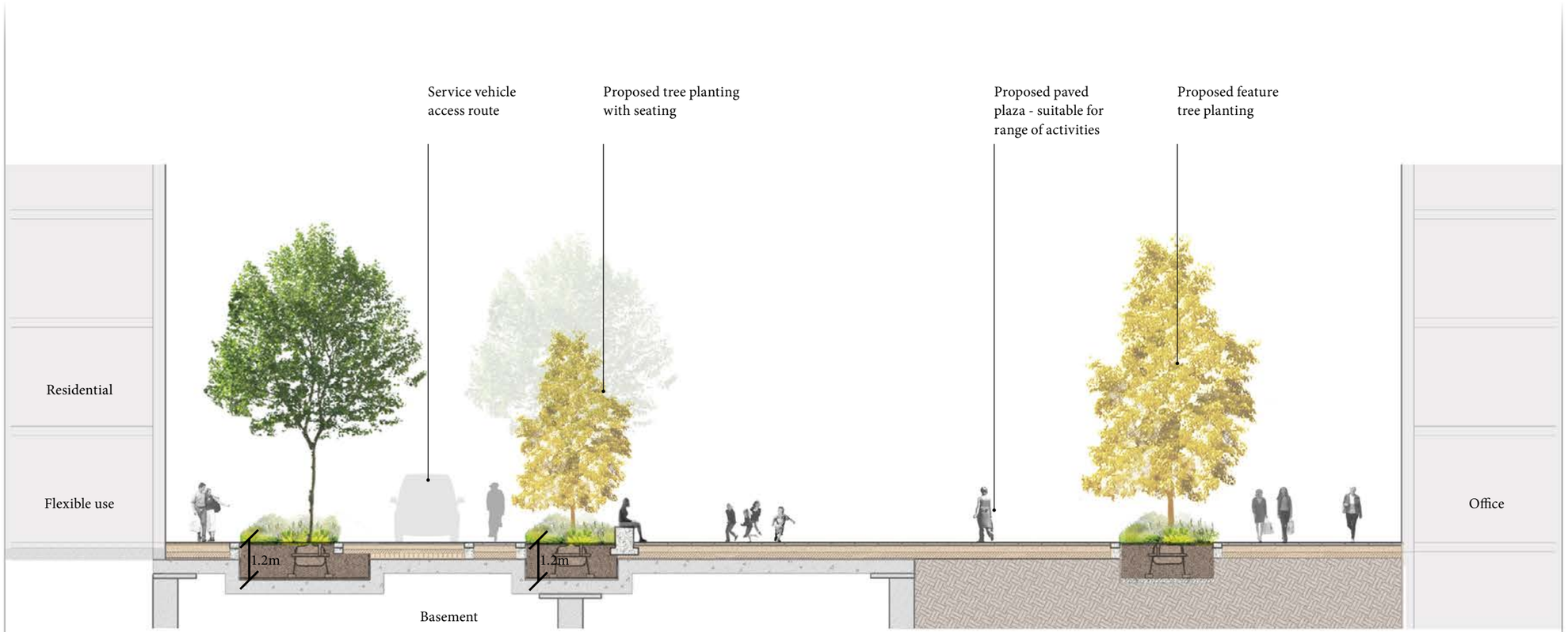
This space is predominantly hard paved to facilitate a range of functions and features regular specimen trees providing scale, shelter, seasonal colour and greenery to frame the space. Seats and cycle parks are also provided to allow casual use of the space in quieter periods, with lighting to provide safe and secure night-time use of the space as well as the ability to highlight activities within the square or light features and special events.

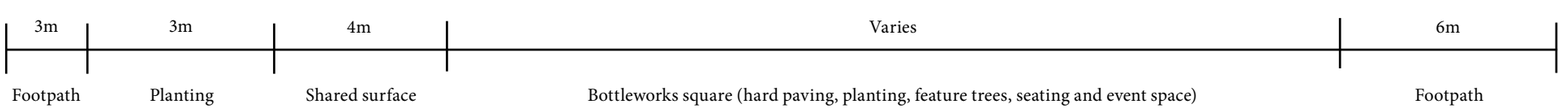
1. Bottleworks Square
2. Feature trees with perennial planting
3. Bike racks
4. Feature banded paving
5. Seating
6. Thames street with access route
7. Avenue of trees and perennial planting



Location plan

Section AA
40m





BOTTLEWORKS SQUARE LOOKING SOUTH - ILLUSTRATIVE VIEW

MALTINGS PLAZA

This more formal space forms the main public open space adjacent to the River Thames. Maltings Plaza supports a variety of community-based and retail activities as well as recreational functions. The plaza is primarily hard paved to cater for a range of functions at various times of the year with a water feature proposed within the space. The proposed water feature consists of a series of pop-jet fountains along a stone etched segment of the River Thames, relating to the famous boat race between the University's of Cambridge and Oxford which finishes adjacent to the site. This feature will assist in activating the space and provide a desirable attraction for children and adults alike, with the potential to create a range of effects day and night. Alternatively, the feature can be closed down, allowing a full range of other activities to occur in the paved plaza.

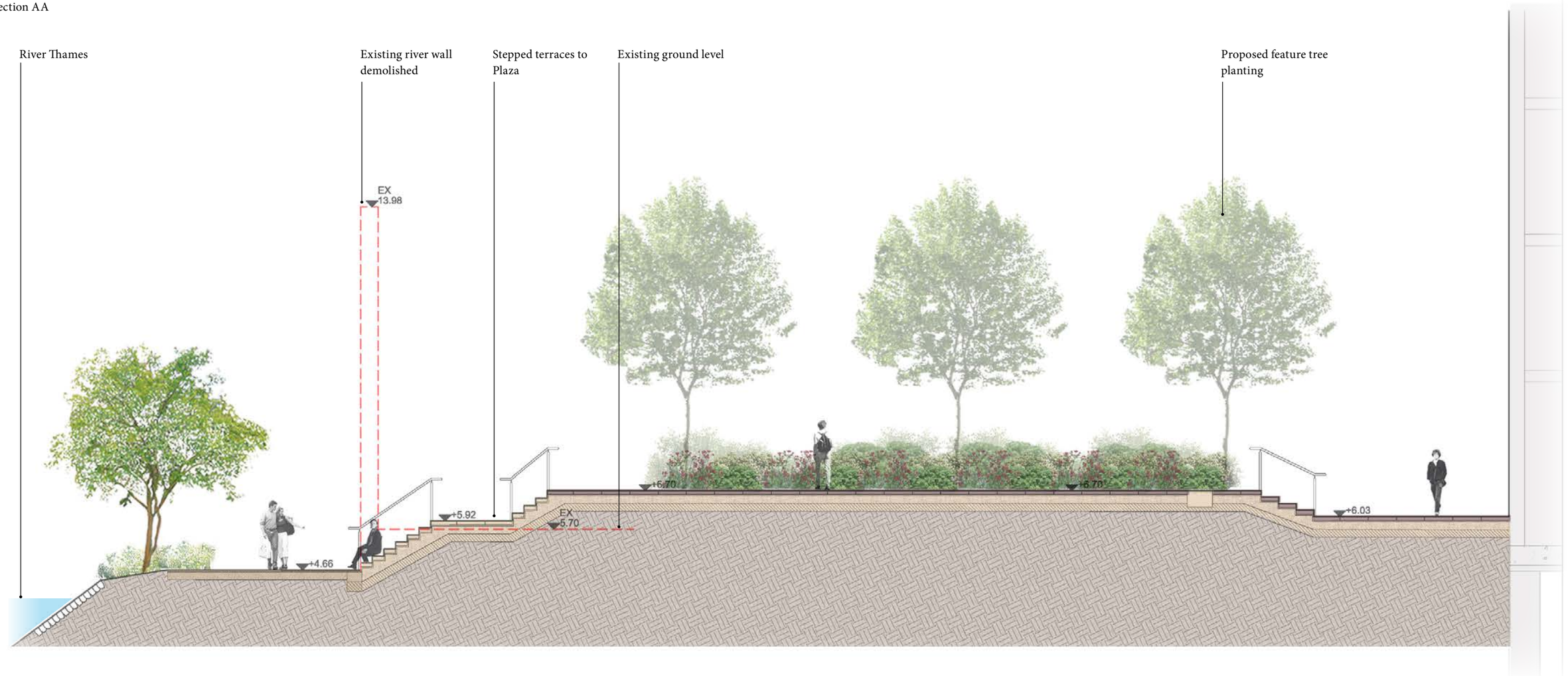
Views to the historic Boat Race finish line, adjacent to this end of the site can be facilitated within the new Maltings Plaza with temporary seating, together with other seasonal community activities and regular markets or displays.

A number of level changes are facilitated within the design of the square, providing separation of various function areas and accessible connection to the Towpath and river edge with a combined stepped and graded access. Connection to the Maltings Building and various function areas and access points have also been incorporated.

Location plan

1. Maltings building
2. Lower plaza to heritage building
3. Graded shared surface (max 1:21)
4. Water Feature - Boat Race pop jets
5. Maltings Plaza: paved function / play space and formal tree planting
6. Broad steps (informal seating)
7. Steps and graded access to Towpath
8. Towpath
9. Green Link with lawn, trees, planting, rain garden, spill-out spaces and access route.
10. Outdoor dining
11. Residential courtyard garden
12. Cycle racks
13. Shared surface

Section AA


River Thames
Existing river wall demolished
Stepped terraces to Plaza
Existing ground level
Proposed feature tree planting
EX
13.98
+4.66
+5.92
EX
5.70
+6.70
+6.70
+6.03
3.5m wide
Self seeded planting
Towpath
Steps and accessible ramp
Maltings Plaza
Stepped terraces to Plaza
Lower level access

MALTINGS PLAZA LOOKING SOUTH - ILLUSTRATIVE VIEW