



THE GOODSYARD

Design and Access Statement

September 2019 - Part 7 of 21



ballymore.



4.4 VERTICAL CIRCULATION

4.4.1 Introduction

The vertical circulation is to be a key part of the Goodsyrd experience.

A series of stairways are strategically arranged around the site to provide a legible structure of accessible circulation.

The staircases are conceived as a family, all different but of similar construction and character. They are designed to be both a pleasure to use and be robust in detail.

The stairs will be made of two principal materials, steel and concrete. This material palette is proposed as a complementary contrast of colour and texture to retained historic structure.

The height difference from ground to Platform Level is generally around 7 metres.

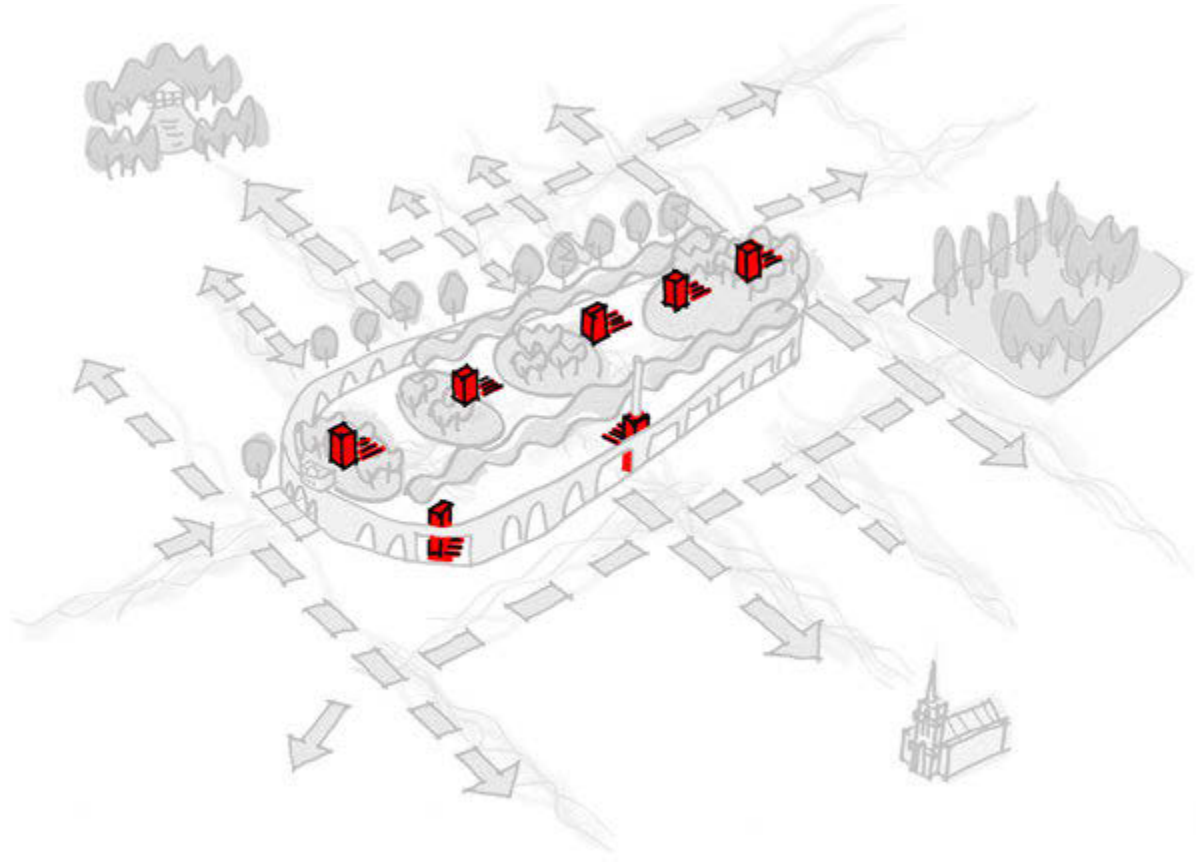


Fig 4.4.1: Concept sketch - vertical circulation



Fig 4.4.2: Ground level: Vertical circulation location plan

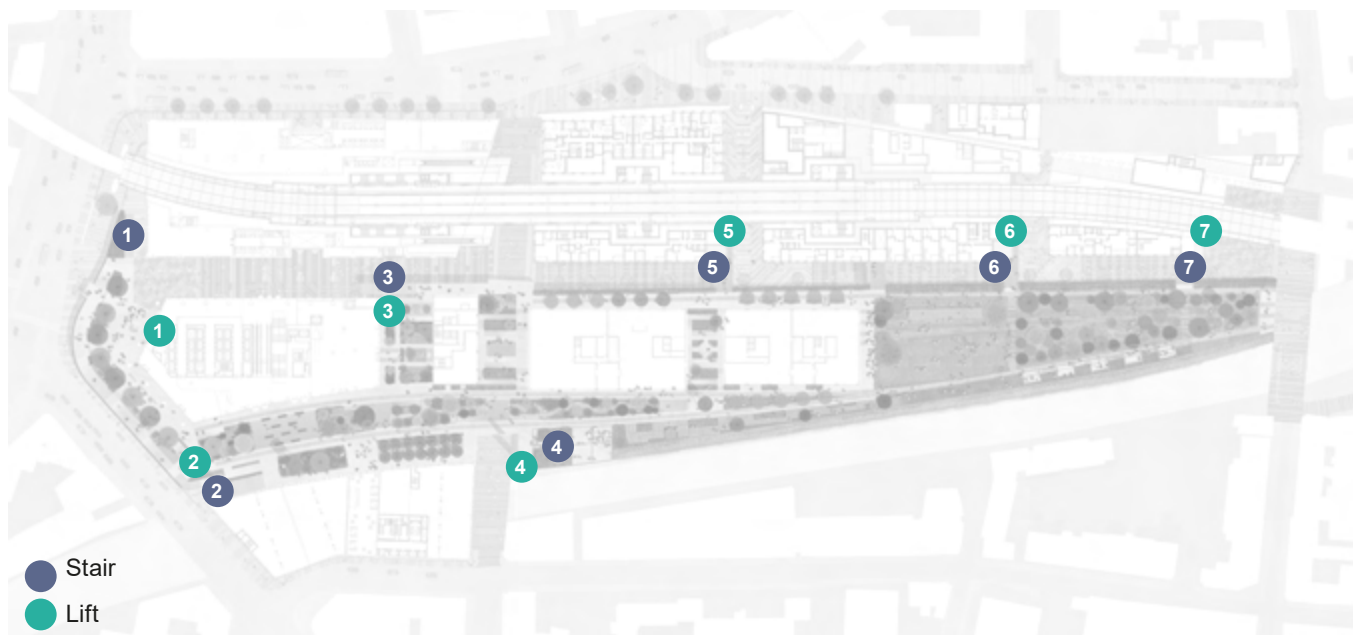


Fig 4.4.3: Platform level: Vertical circulation location plan

KEY

1. Oriel Stairway + Lift
2. Commercial Street Stairway + Lift
3. Middle Road Stairway + Lift
4. Boiler Room Stairway + Lift
5. Farthing Lane Stairway + Lift
6. Cygnet Lane Stairway + Lift
7. Brick Lane Stairway+ Lift

4.4.2 Oriel Stairway & Lift

The Oriel Stair provides a public route from Shoreditch High Street up to the Oriel and the Platform beyond. The stair is located on the west side of the Listed structure with its associated lift being located within Building 2.

The Oriel Gateway Stair is a key stair that marks the beginning/end of the elevated Platform route at this western end of the site.

4.4.3 Function

- Inclusive public access to Platform Level
- Active interaction with historic structure
- Access to the Oriel Balcony public realm
- Theatrical experience of use

4.4.4 Hard Landscape Treatment - Stair

- Steel structure + balustrade
- Concrete/ stone steps
- Integrated lighting

4.4.5 Hard Landscape Treatment - Lift

- Lift integrated within Building 2



KEY PLAN



Fig 4.4.4: Oriel Gateway Stair elevation



KEY PLAN

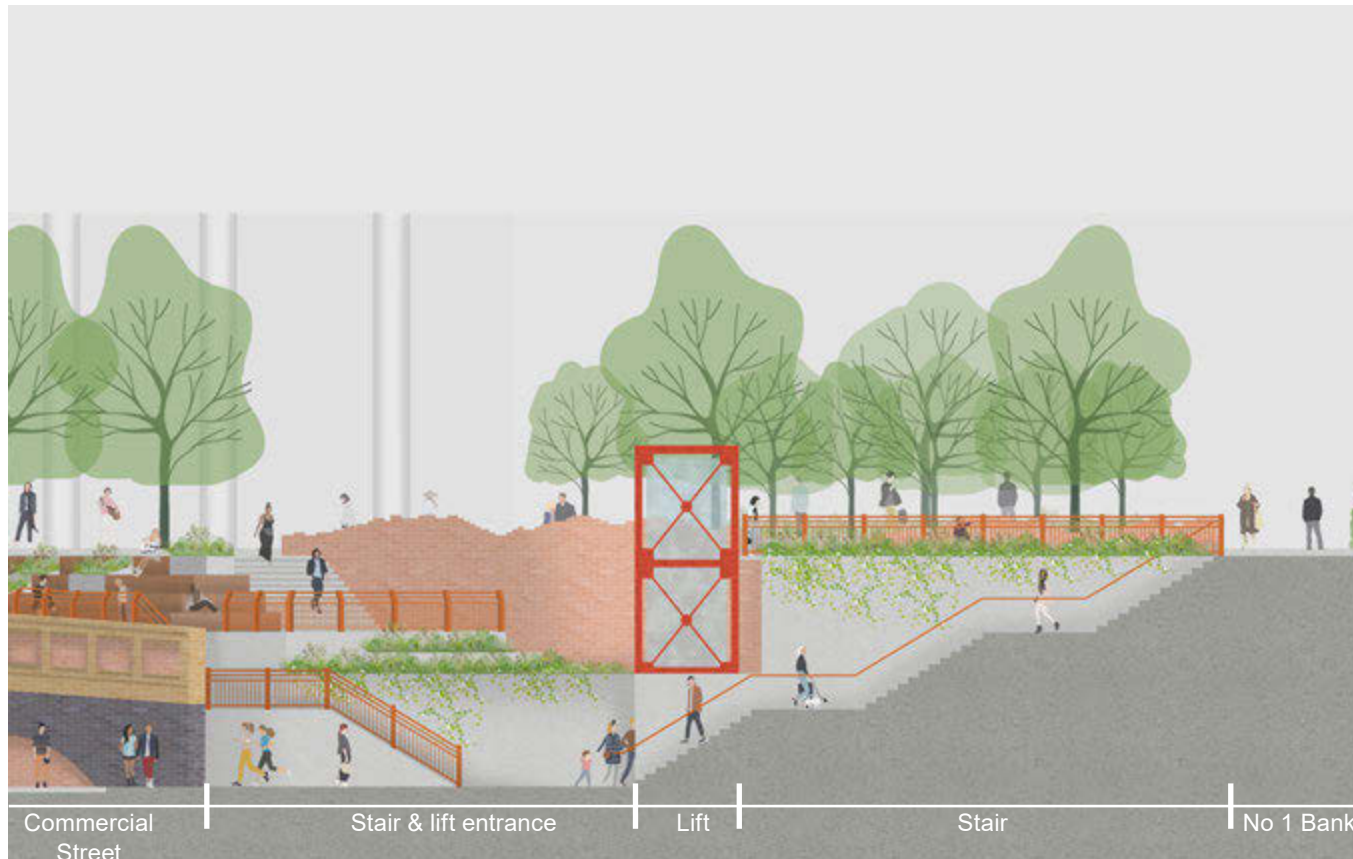


Fig 4.4.5: Commercial Street Stair elevation

4.4.6 Commercial Street Stairway & Lift

The Commercial Street Stair creates a visible marker at the western end of the site providing public access to the Oriel, the Banks and the Platform. The lift and stair are composed as a single element and are closely integrated with the retained listed wall structure.

The stair serves Building 2 with a direct route to its Platform Level reception area.

An adjacent second stair gives the opportunity to walk directly to the Oriel along the gradient of the historic roadway, known as 'Whelers Hill'.

The stairs and lift are to provide an enjoyable experience of moving to a higher level with a sense of theatre that interacts with the historic structure of the wall.

4.4.7 Function

- Inclusive public access to Platform level
- Visible marker at west end of site
- Active interaction with historic structure
- Theatrical experience of use
- Open stairway with views

4.4.8 Hard Landscape Treatment - stair

- Concrete
- Steel balustrade
- Integrated lighting

4.4.9 Hard Landscape Treatment - lift

- Concrete, brick, glass + steel enclosure

4.4.10 Middle Road Stairway & Lift

The Middle Road Stairway provides public access from the new east-west route to the Platform Level. It is located on the north side of Building 2 with adjacent lift integrated within the building itself.

The stair and lift arrive on the north side of The Platform providing access also to The Woodland Garden.

4.4.11 Function

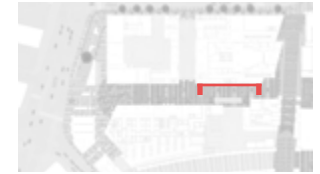
- Inclusive public access to Platform level
- Access to The Woodland Garden
- Theatrical experience of use
- Views along to Oriel and along Middle Road

4.4.12 Hard Landscape Treatment - Stair

- Steel structure + balustrade
- Concrete/ stone steps
- Integrated lighting

4.4.13 Hard Landscape Treatment - Lift

- Lift integrated within Building 2



KEY PLAN



Fig 4.4.6: Middle Road Stair elevation



Fig 4.4.7: Boiler Room Stair section

4.4.14 Boiler Room Stairway & Lift

The Boiler Room Stairway and Lift provide public access to the Platform level at the southern gateway to the site

The name references the historic boiler room that powered the Hydraulic Accumulators. Along with two gas engines, these powered the various turntables, lifts, cranes, capstans and snatch heads for the movement of wagons and goods.

A chimney to the boiler room is to be re-created here as a gateway marker into the site and also to incorporate the proposed lift.

4.4.15 Function

- Inclusive public access to Platform level
- Visible marker
- Heritage celebration

4.4.16 Hard Landscape Treatment - Stair

- Steel structure + balustrade
- Concrete/ stone steps
- Integrated lighting

4.4.17 Hard Landscape Treatment - Lift

- Lift integrated within brick chimney structure

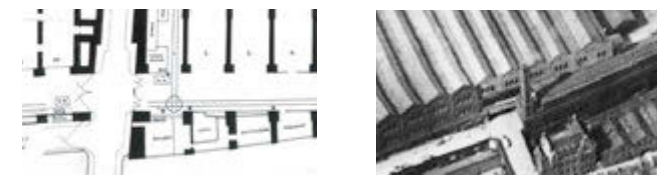
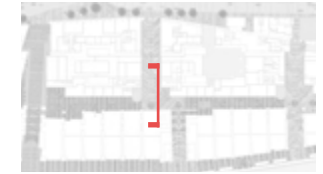


Fig 4.4.8: Boiler Room historic image reference

4.4.18 Farthing Lane / Cygnet Lane / Brick Lane Stairways, Bridges & Lifts

The stairways and lifts located along middle road are conceived as a family of interventions. Each stair is clearly visible at each of the junctions, Farthing Lane, Cygnet Street, and Brick Lane.

Each stair has an associated bridge. Each bridge connects the historic fabric of the platform with the upper levels of Building 10.



KEY PLAN

4.4.19 Function

- Inclusive public access to Platform level
- Celebration of historic structure
- Theatrical experience of use
- Creating legibility and identity of public realm
- Viewing points

4.4.20 Hard Landscape Treatment - Stairs / bridges

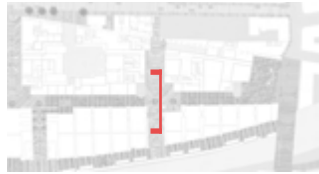
- Steel structure + balustrade
- Concrete/ stone steps
- Integrated lighting

4.4.21 Hard Landscape Treatment - Lift

- Lift integrated within Building 10



Fig 4.4.9: Farthing Lane elevation



KEY PLAN



KEY PLAN

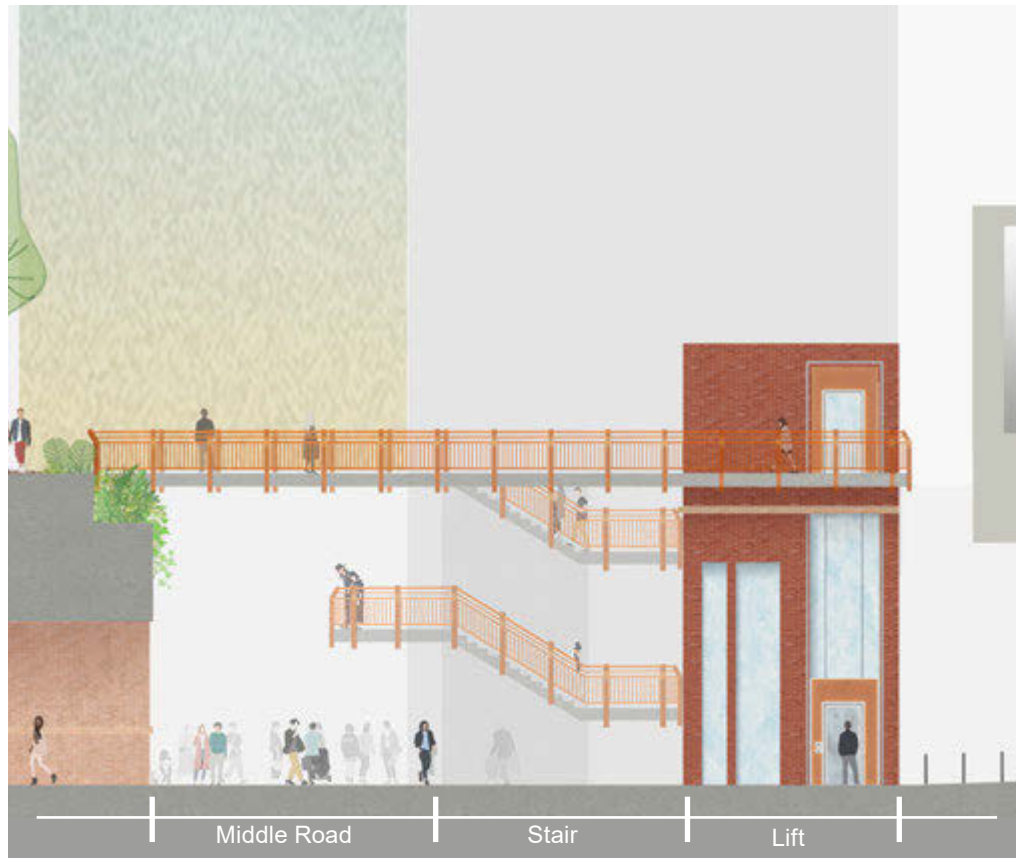


Fig 4.4.10: Cygnet Lane Stair elevation



Fig 4.4.11: Brick Lane Stair elevation

The Goodsyard Platform brings significant new amenity space to the neighbourhood, with a special character that reflects its fascinating industrial heritage.

A green oasis, in contrast to the bustling urban realm below, will provide the opportunity for a wide range of amenity uses from relaxing and enjoying a view to outdoor gym activities and community gardening.





4.5 PLATFORM LEVEL PUBLIC REALM

4.5.1 Introduction

This section describes the Platform Level illustrative design of the landscape and public realm within The Goodsyard.

The Platform Level seeks to create a special place that expresses the very unique narrative of the site and provides a verdant landscape as respite from the busy urban realm at ground level.

The series of interconnected garden spaces extend from the Oriel Balcony in the west to the Brick Lane Balcony.

Each of these garden spaces offers different character and function providing a wide range of amenity for all users.

The robust historic structure is able to support a substantial and varied planted landscape environment for both visual amenity and ecological enhancement.

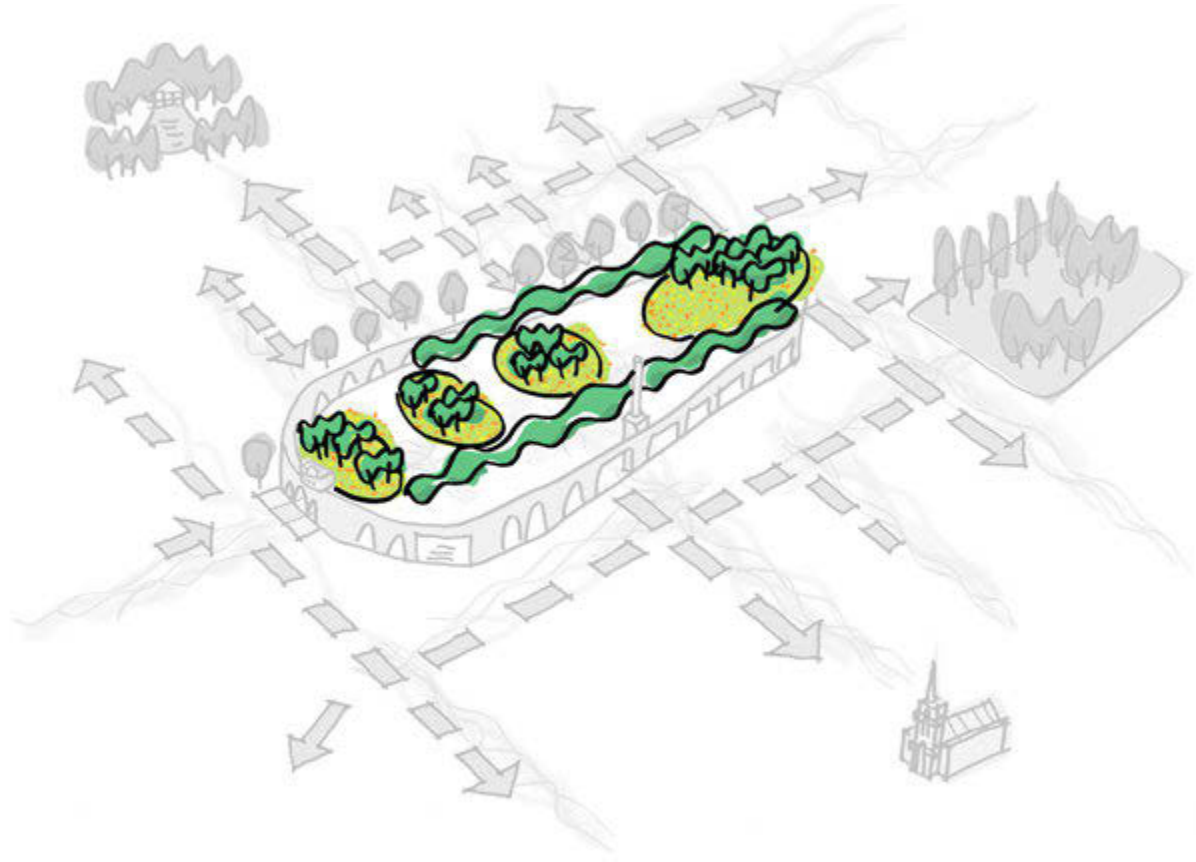


Fig 4.5.1: Concept sketch - platform level



Fig 4.5.2: Photo: Date unknown looking east across 'The Field'

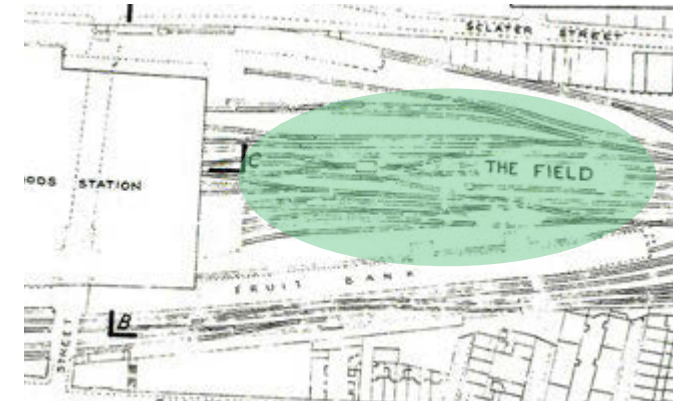


Fig 4.5.3: Plan: 1964 Platform level plan drawing

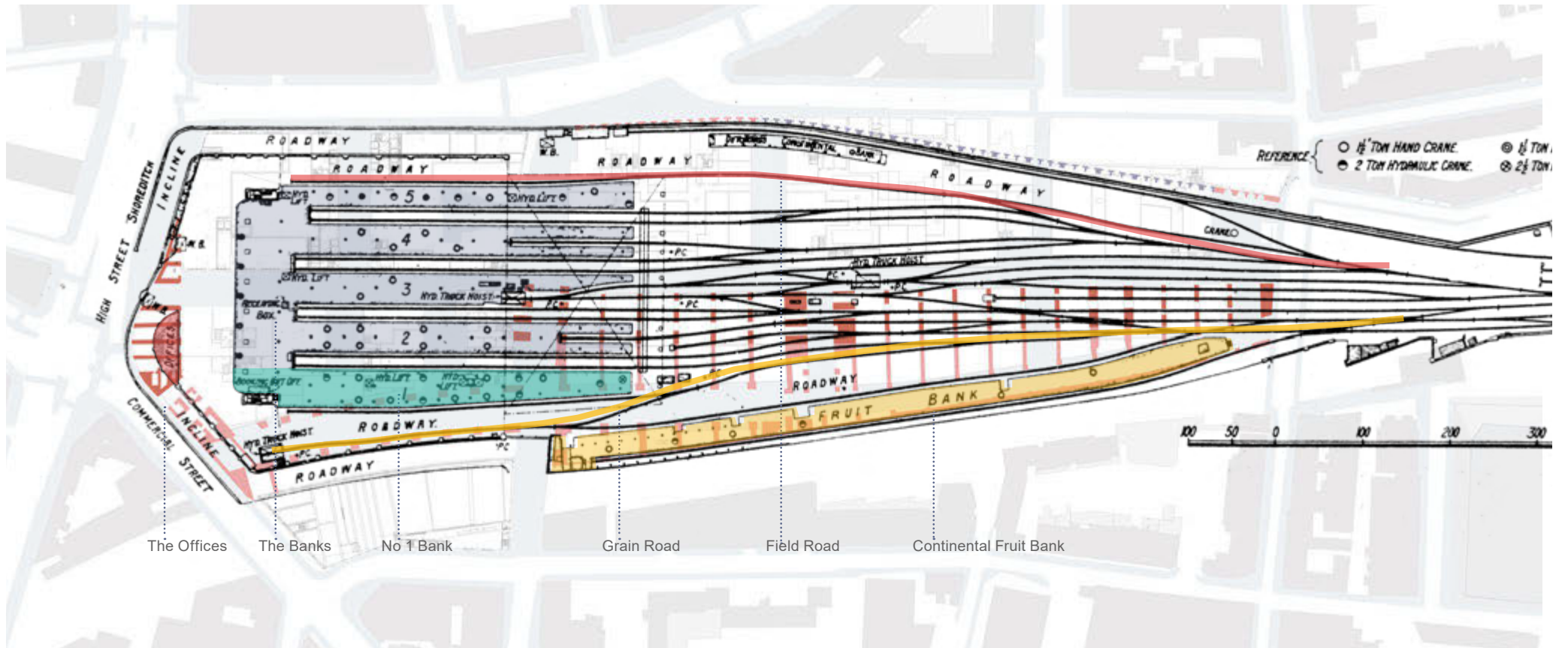


Fig 4.5.4: Historic plan: 1890s - Platform level Bishopsgate Goods Yard Station layout



Fig 4.5.5: Photo: c1945 aerial photograph

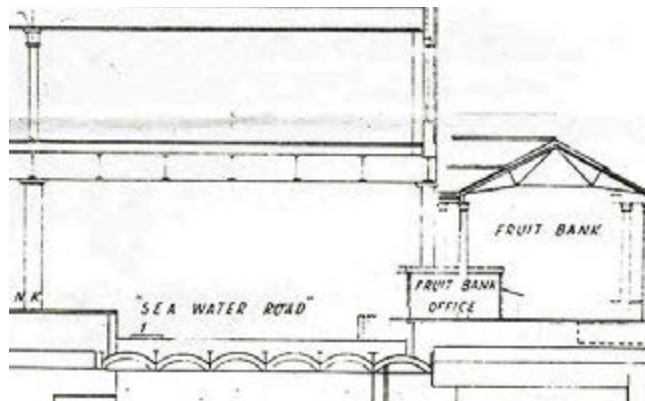


Fig 4.5.6: Drawing: 1964 Platform level section drawing



Fig 4.5.7: Photo: 1999 Aerial view

4.5.2 Platform Level illustrative masterplan

The Platform Level provides the community with a tranquil haven from the busy streets and transport infrastructure of the city below. It sits over the retained historic structure and is elevated approximately 7 metres above street level.

The main principles of the design include:

- **Heritage** - The design is to reveal and celebrate the historical narrative of the site;
- **Visibility** - The Platform Level landscape is to be highly visible from surrounding streets;
- **Accessibility** - access from ground level is to be clearly legible, inclusive and enjoyable to use;
- **Green infrastructure** - provide growing conditions for a robust and significant landscape that evokes a sense of nature, surprise and enhances biodiversity;
- **Diversity** - Create spaces with variety of character and use from informal relaxation to integrated play and education for all;
- **Aspect** - Optimise views within gardens and beyond to wider city;
- **Community** - Space for community uses such as education, play and food production;
- **Inclusive health & wellbeing** - Create an inclusive environment that promotes health and wellbeing for all.

The Platform Level is to be open for public access 24hrs.



Fig 4.5.8: Landscape masterplan - platform level



KEY

The Balconies

1. Oriel Balcony
2. Brick Lane Balcony

The Banks

3. No 1 Bank
4. Grain Road
5. Boiler Room Chimney & Fruit Bank Office
6. Continental Fruit Bank

The Gardens

7. The Woodland Garden
8. The Loading Dock
9. The Hanging Garden

The Field

10. The Lawn
11. Woodland Play Garden / Forest Environment

4.5.3 Character areas

There are four principal character areas that together make up The Platform. These are as follows:

4.5.4 The Balconies

The Balconies mark the western and eastern ends, announcing The Platform landscape to the wider context. The Oriel Balcony acts as a beacon on Shoreditch High Street and Commercial Street. The Brick Lane Balcony in much the same way announces the Platform to Brick Lane.

4.5.5 The Gardens

4.5.6 The Gardens are smaller scaled spaces between the Platform buildings, each with their own unique character and identity. They are designed with their microclimates in mind and act as garden rooms with a variety of functions and uses serving them.

4.5.7 The Field

4.5.8 The largest consolidated open space at the eastern end responds to the large open area of tracks on the historic Goods Yard platform known as The Field. This significantly scaled open green space provides the rejuvenated Platform with a flexible open lawn area and a wooded play garden.

4.5.9 The Banks

The Banks form a linear route from east to west connecting the Field, Gardens and Balconies together. This route is derived from the historic Goods Yard arrangement referencing the platform No 1 Bank, The Continental Fruit Bank, Grain Road and Field Road railway tracks which transported the incoming goods.

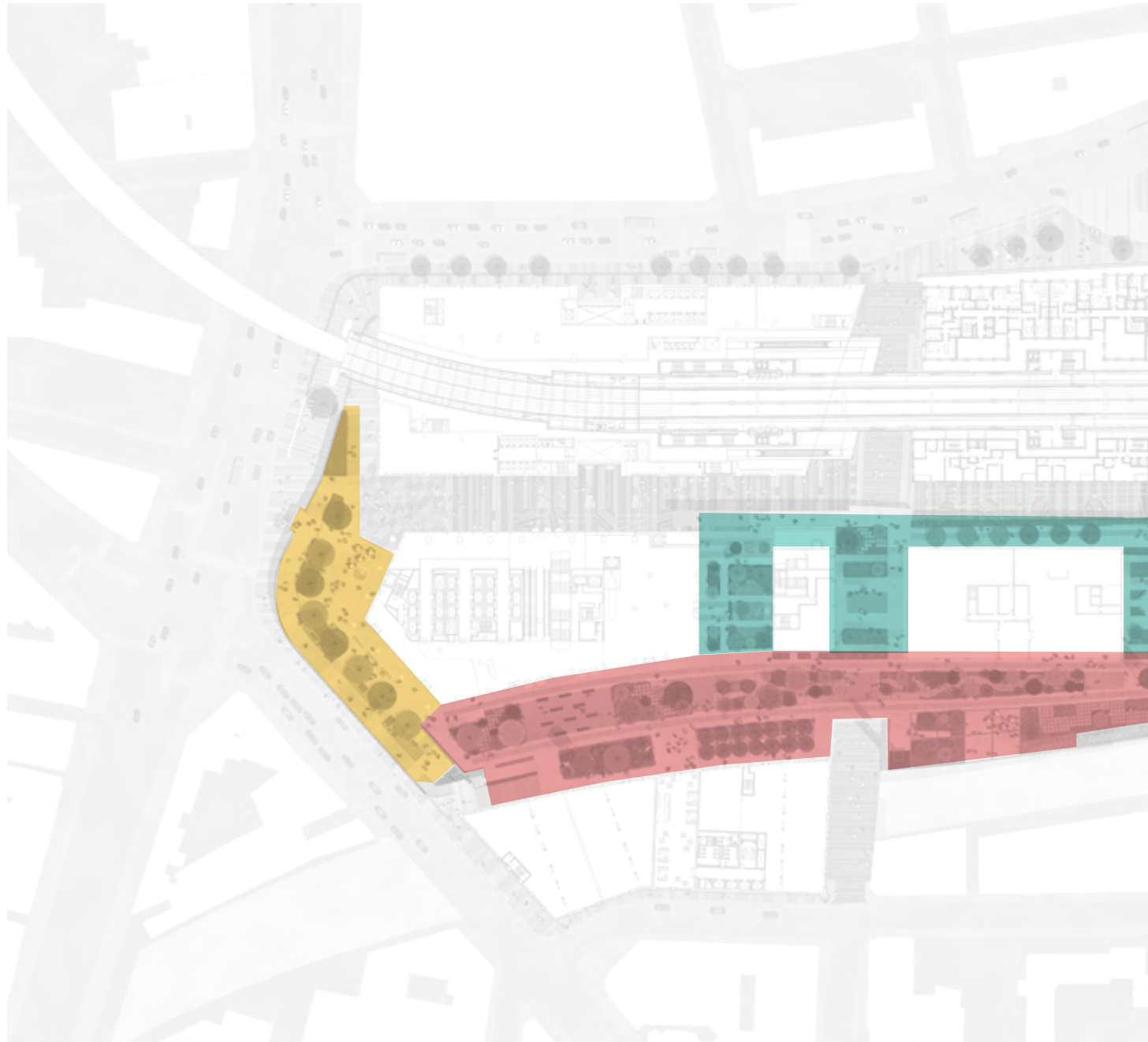
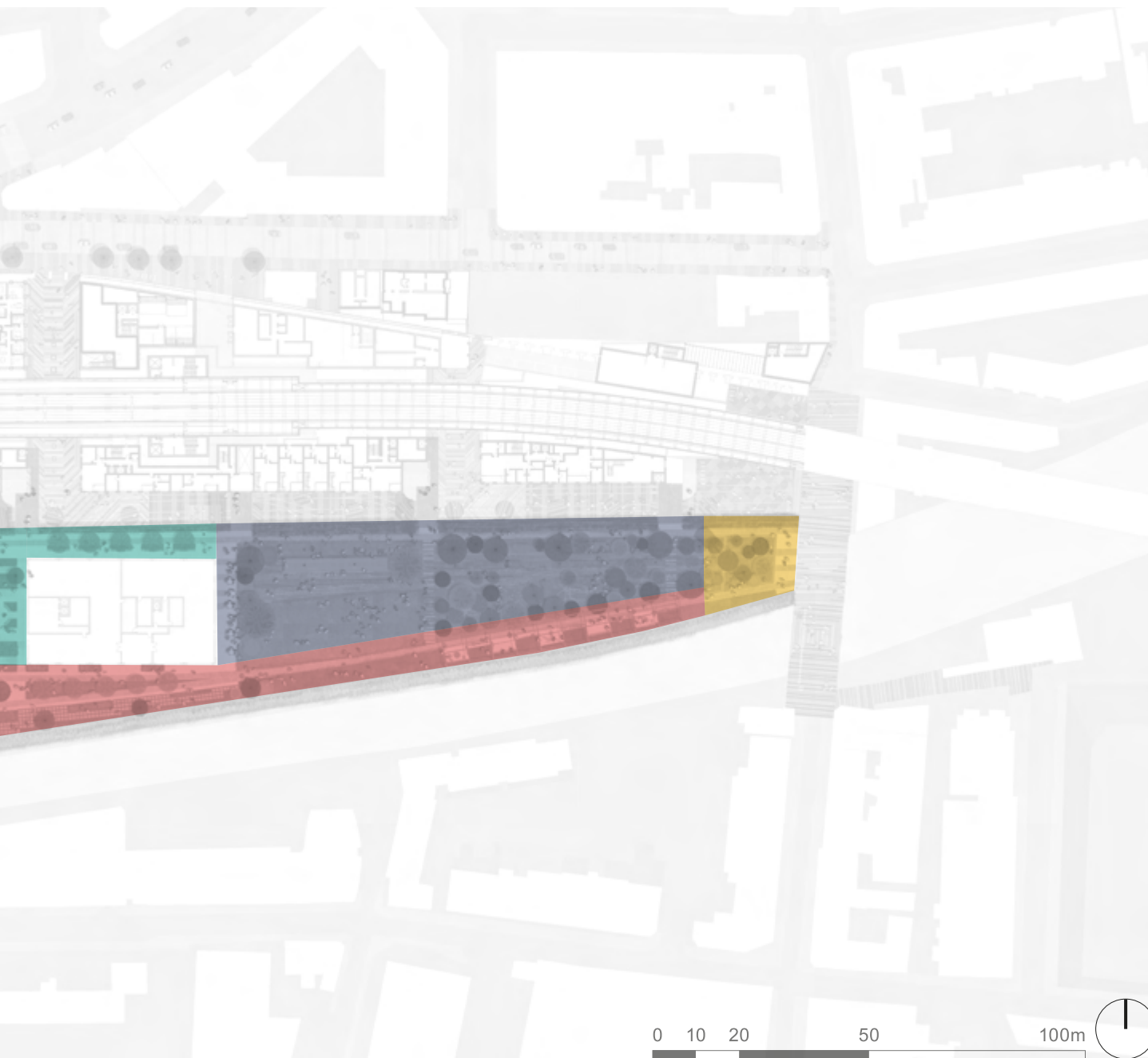


Fig 4.5.9: Character areas



KEY



The Balconies



The Gardens



The Field



The Banks

0 10 20 50 100m



4.5.10 Aerial view of working design model

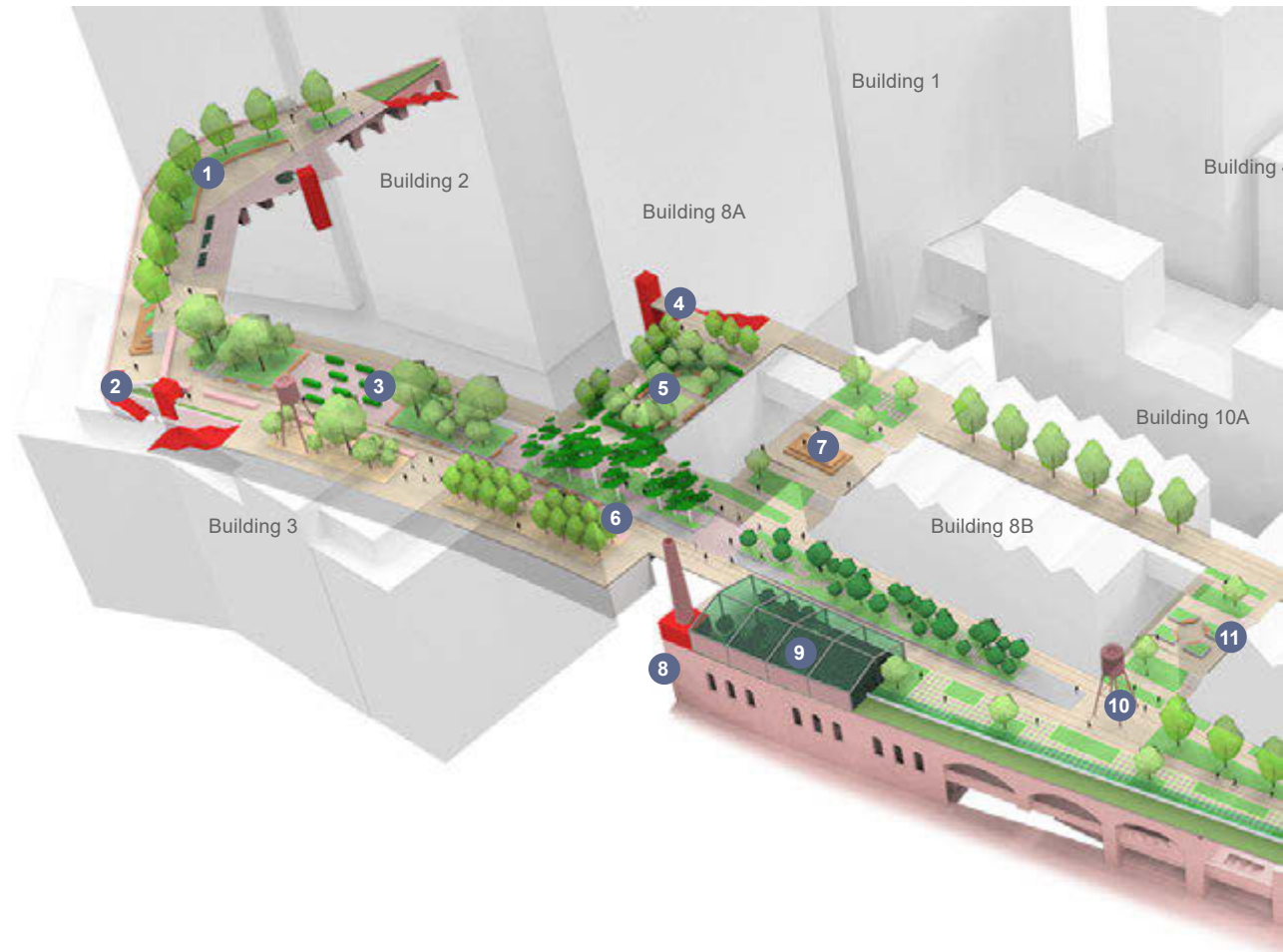
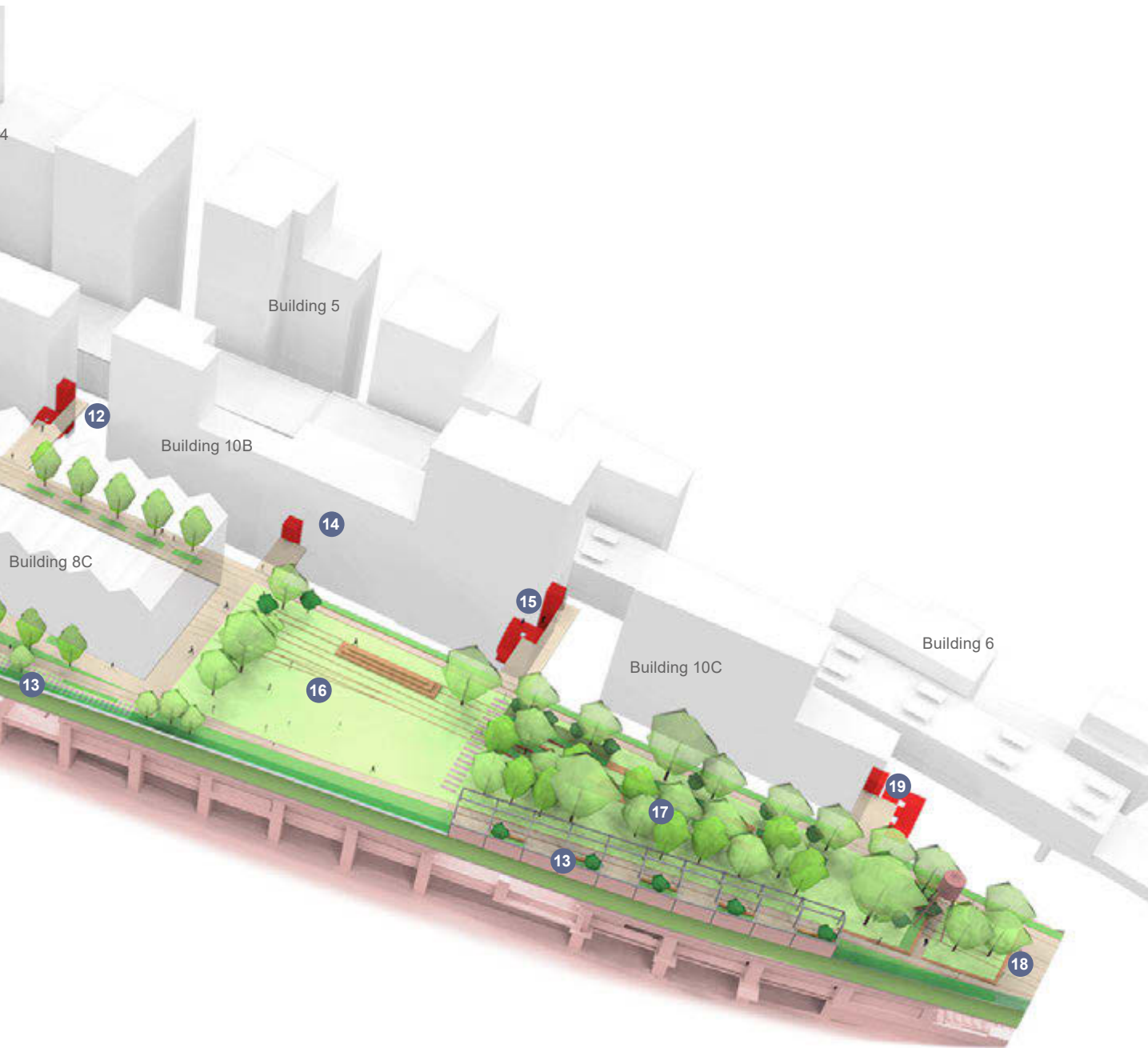


Fig 4.5.10: Design model overview



KEY

1. Oriel Balcony
2. Commercial Street Stairway & Lift
3. No 1 Bank
4. Middle Road Stairway & Lift
5. The Woodland Garden
6. Continental Fruit Bank
7. The Loading Dock
8. Boiler Room Chimney, Stairway & Lift
9. Fruit Bank Office
10. Water Tower
11. The Hanging Garden
12. Farthing Lane Stairway & Lift
13. The Continental Fruit Bank
14. Goods Lift
15. Cygnet Lane Stairway & Lift
16. The Lawn
17. The Woodland Play Garden / Forest Environment
18. Brick Lane Balcony
19. Brick Lane Stairway & Lift

4.5.12 Landscape strategies

4.5.13 Access and levels

Creating an inclusive environment is a key consideration within the landscape design. The Platform levels are arrived at by careful integration of a number of parameters. These include the technical demands of creating new landscape and buildings over the historic structures, provision of insulation, water attenuation, accommodating utilities/ services and providing appropriate soil profiles for planting of significant green infrastructure.

The design proposals seek to provide step free access to all areas of public realm. Levels are raised in some parts using steps to create viewing points to the wider cityscape.

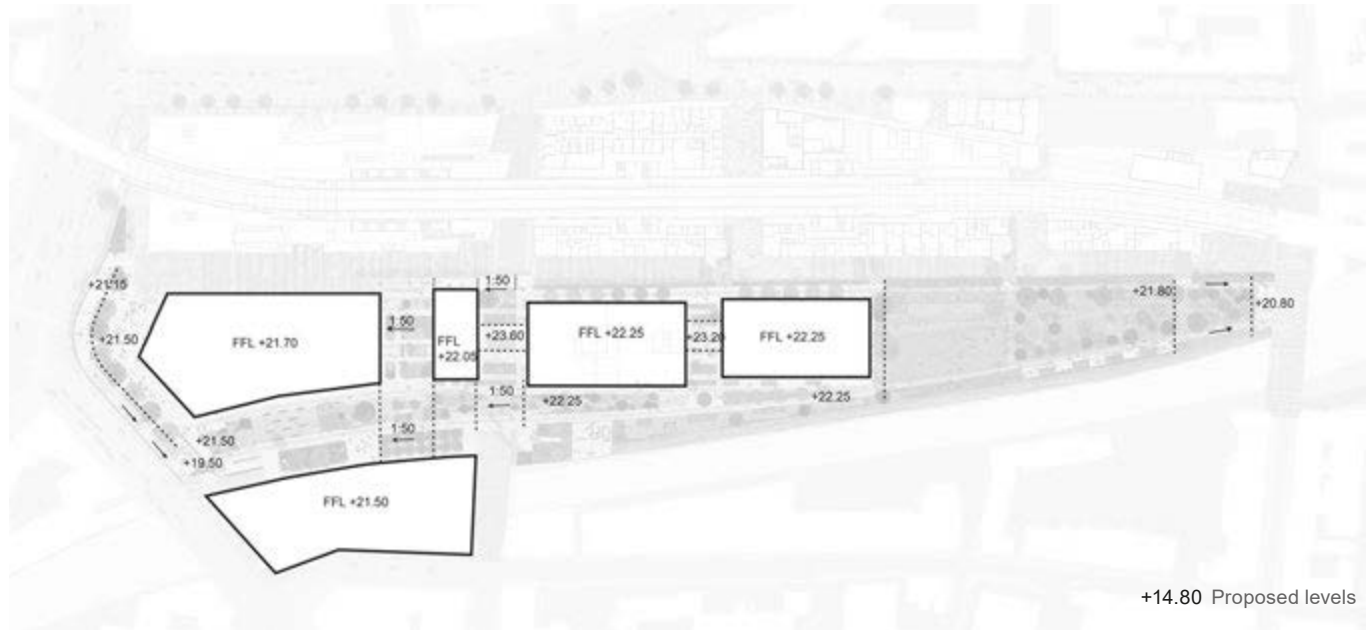


Fig 4.5.11: Levels

4.5.11 Slab levels

The strategy for determining the finished site levels is lead by defining the slab levels.

The strategy for setting the slab levels has been determined by the structural engineers to allow for appropriate protection and retention of the historic structures.

In addition to the structural constraints the level's design has been developed to avoid large level changes or steep slopes in the landscape between buildings.

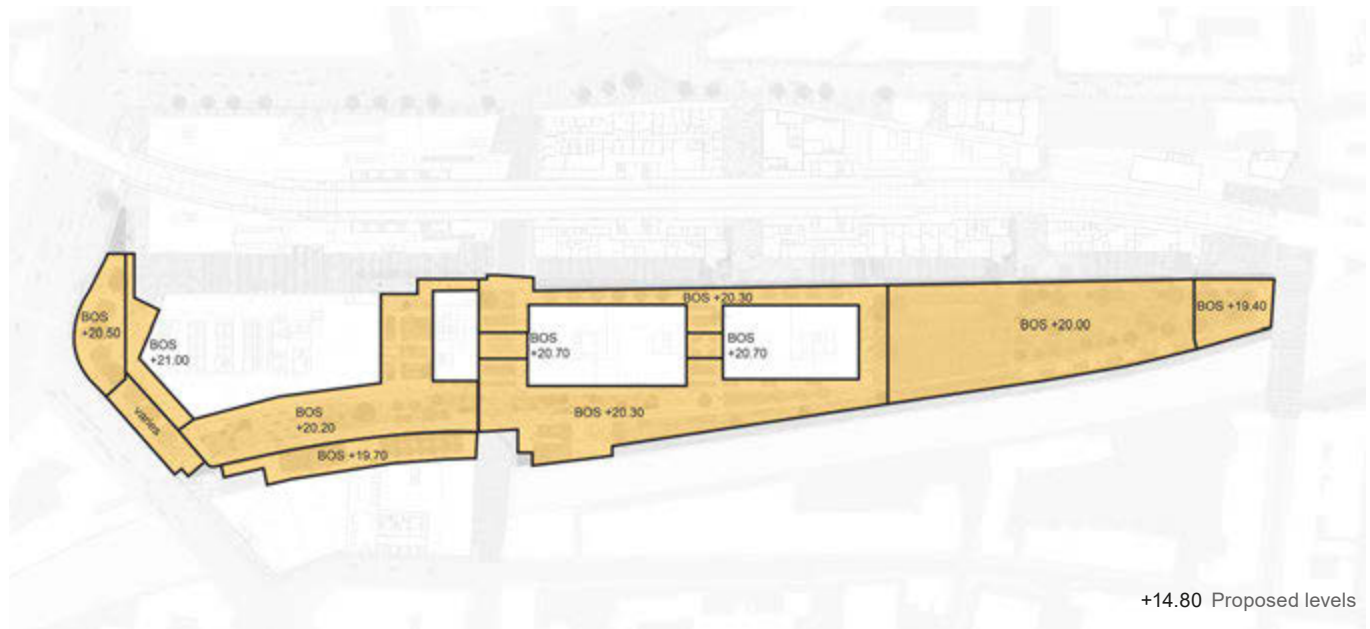


Fig 4.5.12: Slab levels

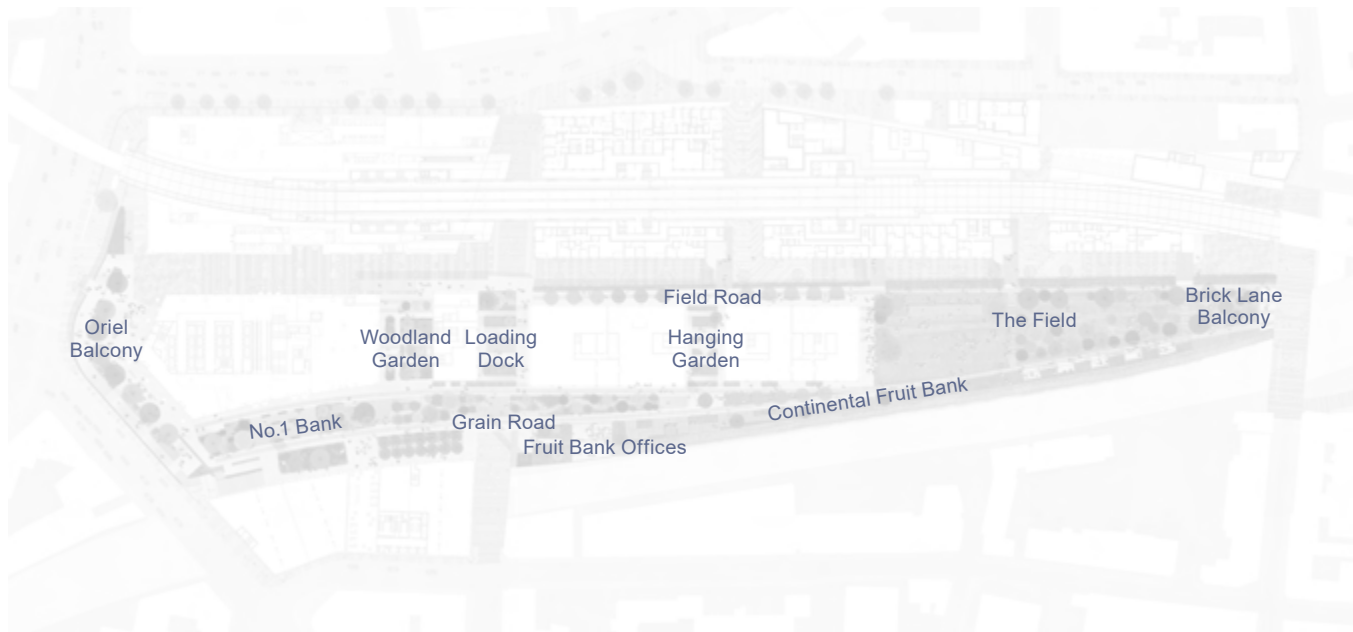


Fig 4.5.13: Place names

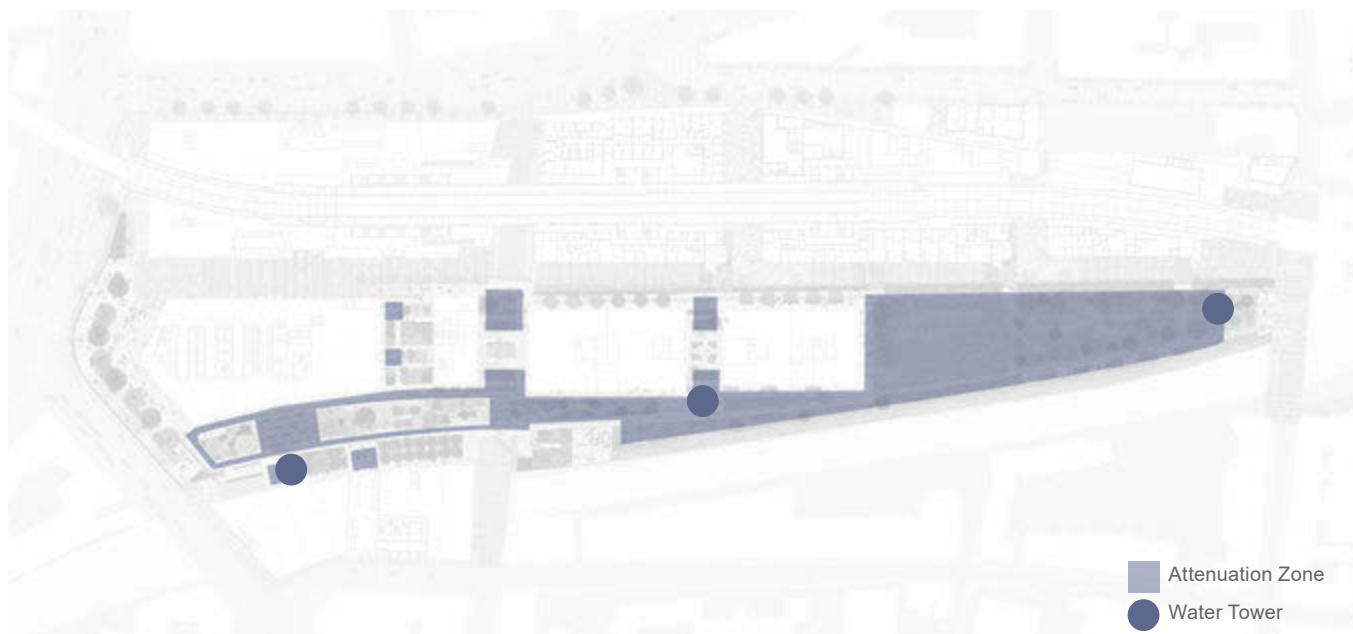


Fig 4.5.14: Water management

4.5.14 Place names

Placemaking is at the core of the landscape proposals. Whilst the Ground Level Public Realm looks beyond the sites rail history, the Platform delves into it's more apparent history.

Names of areas, gardens and the setting out of the Platform is based upon the arrangement of the historic Goods Yard platform.

4.5.15 Water management

A holistic relationship between architecture and landscape is to be proposed for the water management strategy.

Water will be collected in a series of water towers and will be used to supplement the required irrigation for the gardens.

Areas of hard surfacing are minimised to create a permeable landscape.

Water attenuation is provided for below the landscape finishes across the full extent of The Platform Level where possible.

4.5.16 Scale

Extending all the way from Shoreditch High Street to Brick Lane the scale of The Platform level reflects the grand scale of original Goodsyrd Station, creating a total area of over 3 acres, 1.2Ha of public realm.

The diagram opposite further illustrates the scale and dimensions of the various garden spaces that make up The Platform landscape.

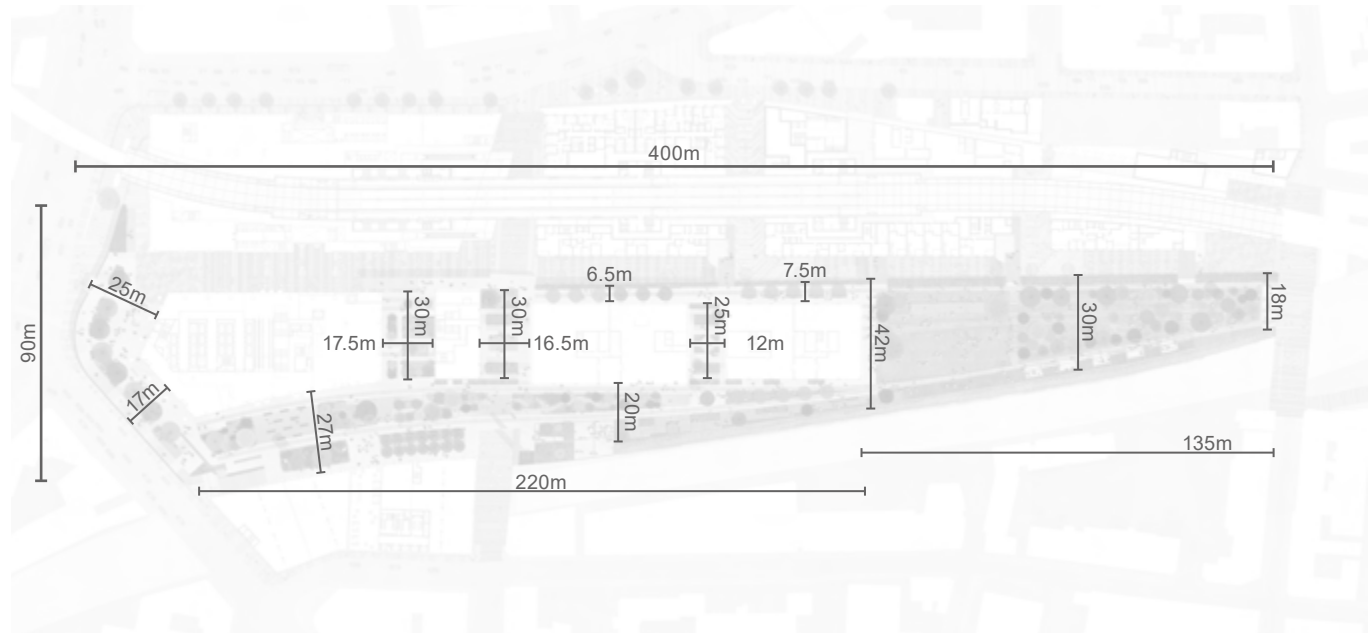


Fig 4.5.15: Scale

4.5.17 Feature structures

There are a number of structures on the Platform Level that perform a variety of functions from ecology, irrigation and play to creating identity and character of place that references the historic narrative of the design proposals. These are shown on the diagram opposite



Fig 4.5.16: Feature structures



Fig 4.5.17: Biodiversity

4.5.18 Biodiversity

The masterplan aspires to provide ecological habitats to increase biodiversity and improve environmental quality.

The various microclimates found on site will create a series of gardens that are suitable for different habitats.

The external areas will predominantly consist of native tree, shrub and herbaceous planting, climbing plants, biodiverse lawn and low maintenance biodiverse planting on the roofs.

The chimney, water towers and other habitat features will provide opportunities for a wide range of wildlife benefits.

4.5.19 Oriel Balcony

4.5.20 Introduction

The Oriel Balcony marks the western end of the Platform Level providing views out to the City and allowing people to enjoy public access once more right up the the historic Oriel structure itself.

Of significant scale, measuring 85m in length, and tapering 25m to 6m at the northern point, it provides for a range of functions.

Large trees, planting and seating terraces are integrated into the levels to provide green setting and backdrop to the Oriel.

It allows for range of uses from cafe spill-out / outdoor dining to gathering space, meeting point and viewing balcony.

The Balcony is framed by Building 2 whose reflective soffit will further animate the space.

4.5.21 Function

- Viewing gallery
- Heritage celebration & setting to Oriel
- Signalling the Platform landscape to surrounding streets
- Outdoor dining and cafe activity
- Gathering space with terraced seating

4.5.22 Soft Landscape

- Large scale feature trees
- Ornamental planting

4.5.23 Hard Landscape

- Paving to include natural stone, re-used granite cobbles and in-situ concrete
- Steel and timber balustrade
- Operational and feature lighting
- Integrated wayfinding and interpretation
- Timber terrace seating



Fig 4.5.18: Photograph of cityscape view looking west



KEY

1. Oriel Stairway
2. Oriel structure
3. Tree planting
4. Outdoor dining / cafe spill-out
5. Lift access point
6. Seating terraces
7. Existing wall
8. Commercial Street Stairway & Lift
9. Building 2 entrance

Fig 4.5.19: Plan: Oriel Balcony



Fig 4.5.20: View: Oriel Balcony



KEY PLAN



Fig 4.5.21: Section: Oriel Balcony

4.5.24 Brick Lane Balcony

4.5.25 Introduction

The Brick Lane Balcony marks the eastern end of The Platform Level providing gathering space and viewing point to the intersecting train cutting, Allen Gardens and south along the vibrant Brick Lane.

Measuring 16m by 24m, the space includes paved terrace and planting centred around the feature water tower that forms a marker of the Platform Landscape from surrounding streets.

4.5.26 Function

- Water Tower and tree planting signalling the Platform landscape to surrounding streets
- Viewing gallery
- Heritage celebration
- Gathering space with terraced seating

4.5.27 Soft Landscape

- Tree planting
- Native planting understorey

4.5.28 Hard Landscape

- Paving to include natural stone, re-used granite cobbles, concrete, in-situ concrete and gravels
- Steel and concrete water tower
- Steel and timber balustrade
- Operational and feature lighting
- Integrated wayfinding and interpretation
- Timber terrace seating



Fig 4.5.22: Photograph of view looking east towards Allen Gardens



KEY

1. Brick Lane Stairway, Lift & Bridge
2. Continental Fruit Bank play features
3. Planted edge to viaduct arches
4. Water tower
5. Biodiverse planting to 3m rail setback zone
6. Planted seating terrace
7. Paved balcony terrace

Fig 4.5.23: Plan: Oriel Balcony



KEY PLAN



Fig 4.5.24: Section: Brick Lane Balcony



KEY PLAN



Fig 4.5.25: Section: Brick Lane Balcony

4.5.29 No 1 Bank

4.5.30 Introduction

The platforms of the Goodsyard were referred to as Banks. No 1 Bank is part of the southern 'Banks' character area of the Platform Level and is based upon the historic position of the No 1 Bank.

No 1 Bank is 160m in length and varies between 10-25m in width. This character area includes the frontage to Building 3, to the south of the retained historic ramp wall.

The Banks are linked by Grain Road, the historic track name, that now provides the overall east west promenade route.

As Grain Road approached the original No 1 Bank the tracks diverged allowing the platform to be accessed from both sides. The reimaged No 1 Bank platform creates a raised edge condition that can be used for sitting on or playing on whilst providing a suitable soil profile to support tree planting.

4.5.31 Function

- East West Promenade
- Heritage interpretation and celebration
- Arrival & entrance to Buildings 2 and 3
- Planting and biodiversity
- Gardens for health, fitness, sitting, relaxing and enjoying a view

4.5.32 Soft Landscape

- Native tree planting
- Parterre hedge planting
- Mixed ornamental and ecological planting
- Food and flower species planting
- Climbing plants

4.5.33 Hard Landscape

- Paving to include natural stone, re-used granite cobbles, concrete, in-situ concrete and gravels
- Seating and play features
- Steel and concrete water tower
- Steel and timber balustrade
- Operational and feature lighting
- Integrated wayfinding and interpretation
- Raised platforms with timber seating edge



Fig 4.5.26: View: No 1 Bank



Fig 4.5.27: Precedent: Planted terrace seating



Fig 4.5.28: Precedent: Terrace tree planting

KEY

1. No 1 Bank - planted terrace with seating edge
2. No 1 Bank - parterre entrance to Building 2
3. No 1 Bank - planted terrace with seating edge
4. No 1 Bank - planted terrace with seating edge
5. No 1 Bank - planted terrace with seating edge
6. Water tower
7. Tree planting
8. Commercial Street Stairway & Lift
9. Existing wall retained
10. Water tower
11. Tree bosque entrance to Building 3





Fig 4.5.29: View: Looking east along Grain Road on No 1 Bank



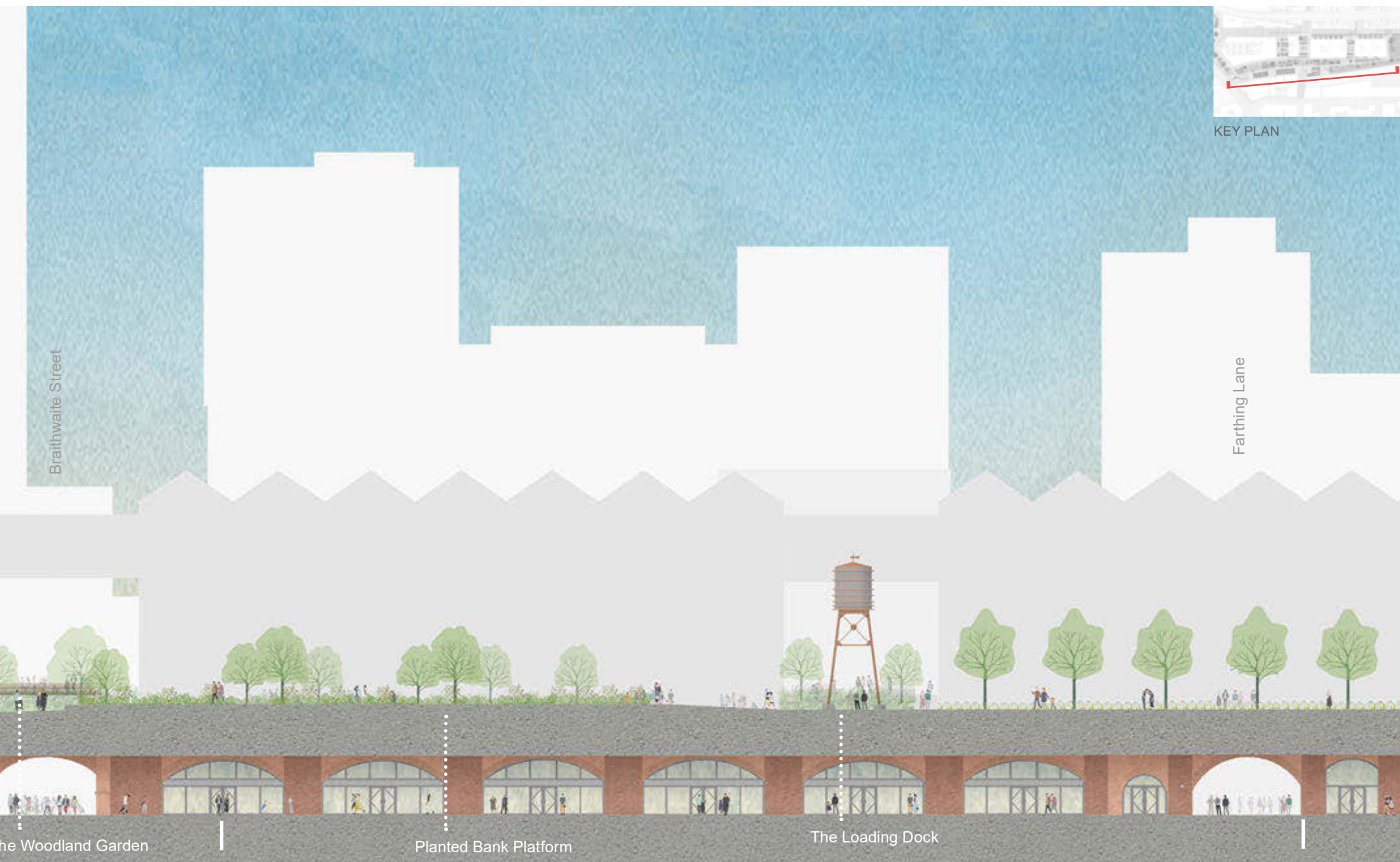
KEY PLAN



Fig 4.5.30: Sectional elevation: No 1 Bank



Fig 4.5.31: Section: No 1 Bank



4.5.34 Continental Fruit Bank

4.5.35 Introduction

The Continental Fruit Bank forms part of the southern 'Banks' character area of the Platform Level. It is laid out on the position of the historic loading platforms which served the southern edge of the Goods Yard. The Continental Fruit Bank measures 225m in length by a width varying between 4 - 12m.

The Banks are linked by Grain Road, the historic track name, that now provides the overall east west promenade route.

The Continental Fruit Bank forms the southern rail edge to The Platform Level. It has a varied conditions along its length to provide a range of amenity including planted viewing terraces, community growing areas, seating places, play features and the Fruit Bank offices cafe building.

The rail edge requires a 3m high barrier which is to be a mix of building, solid wall, wall with window openings and open mesh (non-metallic) which allows long distance views south towards Spitalfields.

4.5.36 Function

- East west promenade
- Heritage interpretation and celebration
- Opportunity for community growing
- Educational resource
- Inclusive and active play
- Place for sitting, relaxing and enjoying a view

4.5.37 Soft Landscape

- Native tree planting
- Mixed ornamental and ecological planting
- Food and flower species planting
- Community planting

4.5.38 Hard Landscape

- Paving to include natural stone, re-used granite cobbles, concrete, in-situ concrete and gravels
- Seating and play feature elements
- Steel and concrete water tower
- Operational and feature lighting
- Integrated wayfinding and interpretation
- Timber frame pergola structure
- Brick wall / mesh panel rail edge

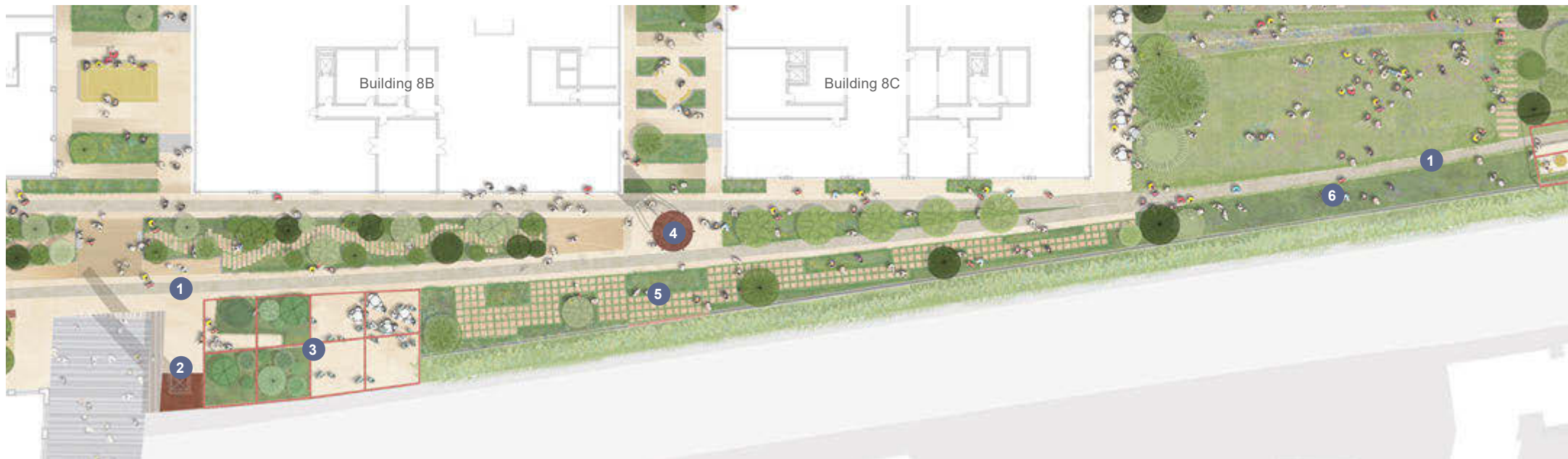


Fig 4.5.32: Plan: The Continental Fruit Bank



Fig 4.5.33: Views south to city skyline

KEY

1. Grain Road
2. Boiler Room Chimney & Lift
3. Fruit Bank Office (Building 11)
4. Water tower
5. Continental Fruit Bank - planted viewing terrace
6. Continental Fruit Bank - community planting
7. Continental Fruit Bank - play

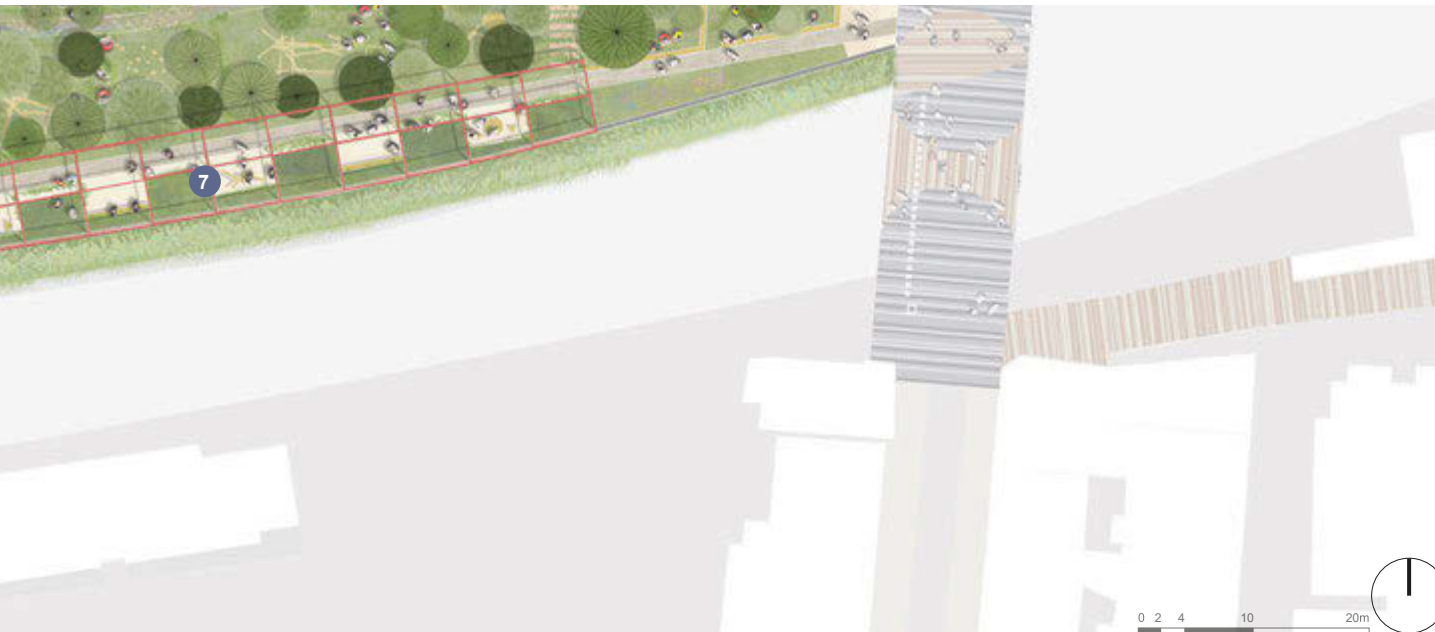


Fig 4.5.34: Photo: c.1890 The Continental Fruit Bank



KEY PLAN

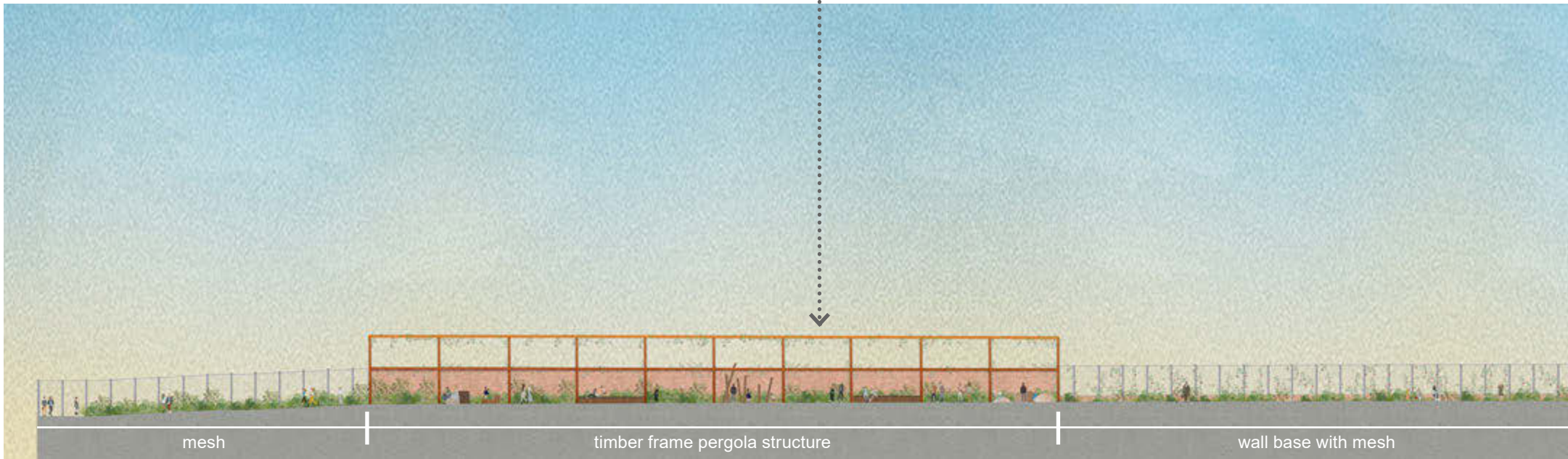
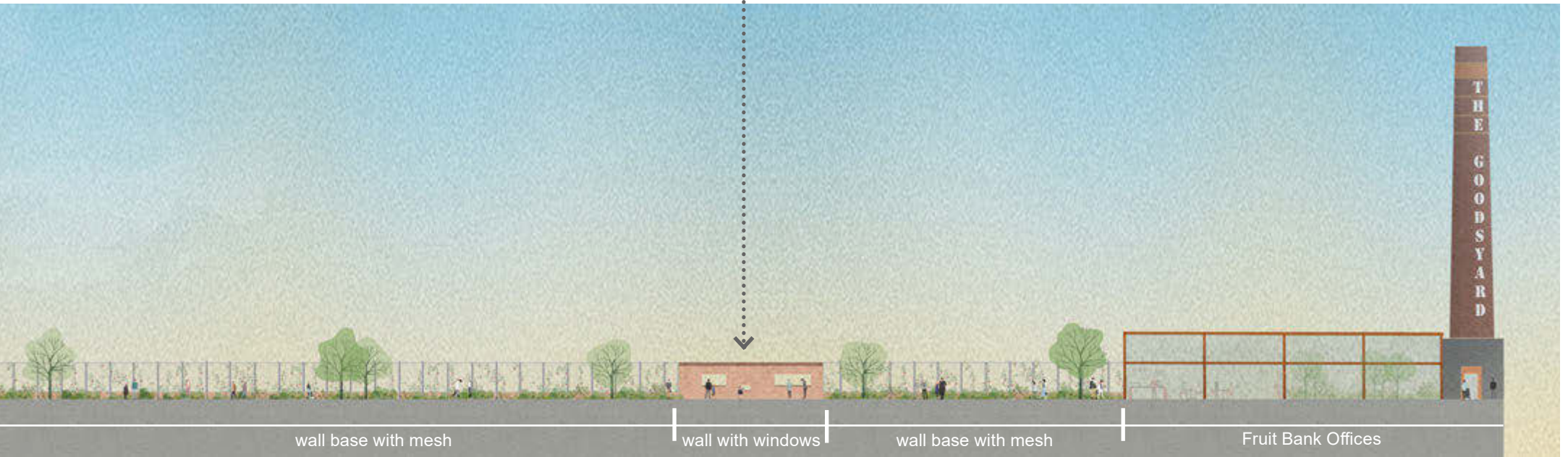


Fig 4.5.35: Elevation: The Continental Fruit Bank



4.5.39 The Gardens

4.5.40 Introduction

The Gardens form a series of smaller scaled spaces created by the Platform level buildings which provide active and animated frontages.

All interconnected and publicly accessible they provide a range of amenity with each garden having its own specific identity and character.

The Woodland Garden includes an area of communal doorstep play for Building 8 residents and is not accessible to general public.

Planting is to take account of the varied microclimatic conditions

The Gardens are as follows:

- The Woodland Garden
- The Loading Dock
- The Hanging Gardens

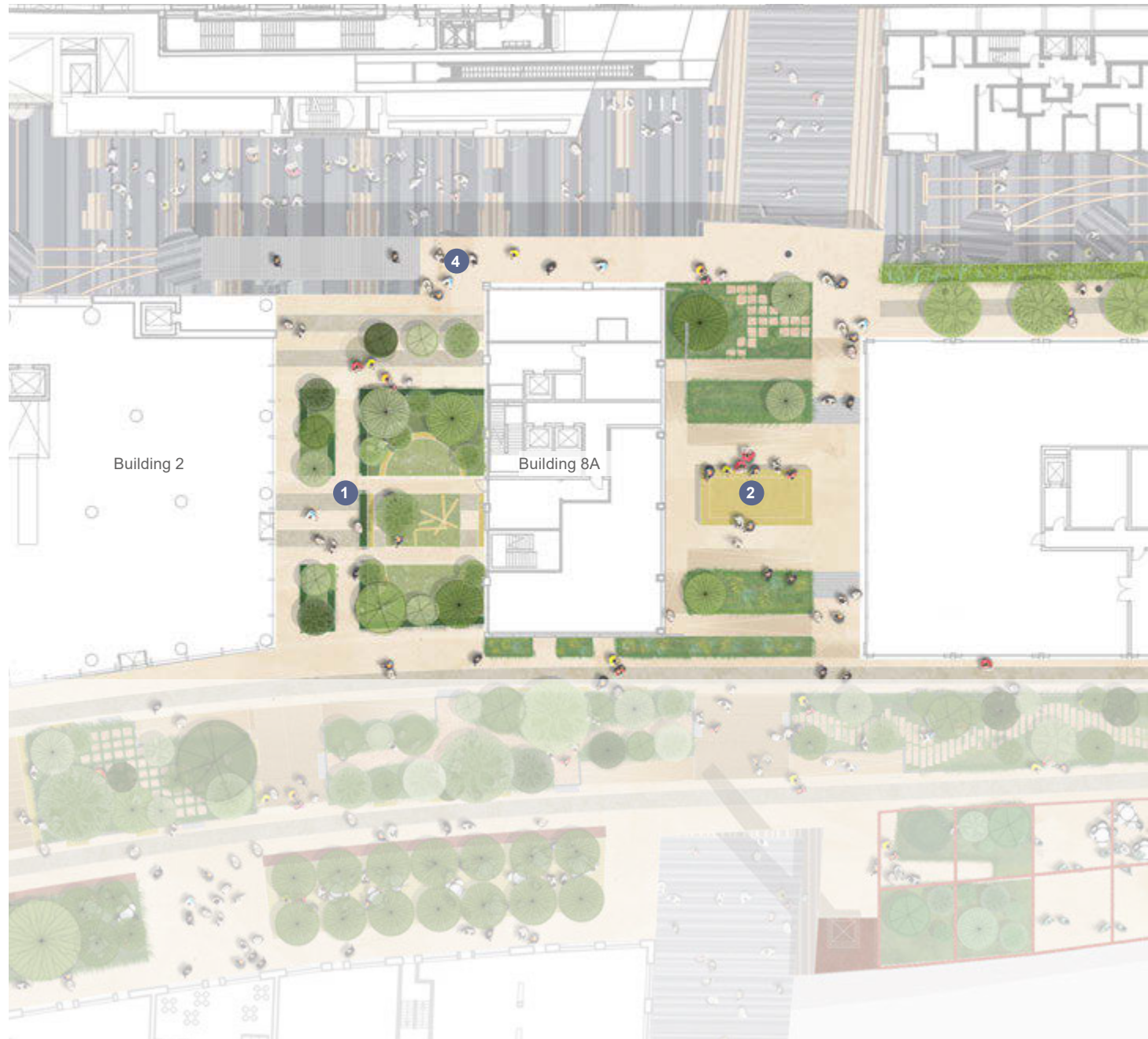
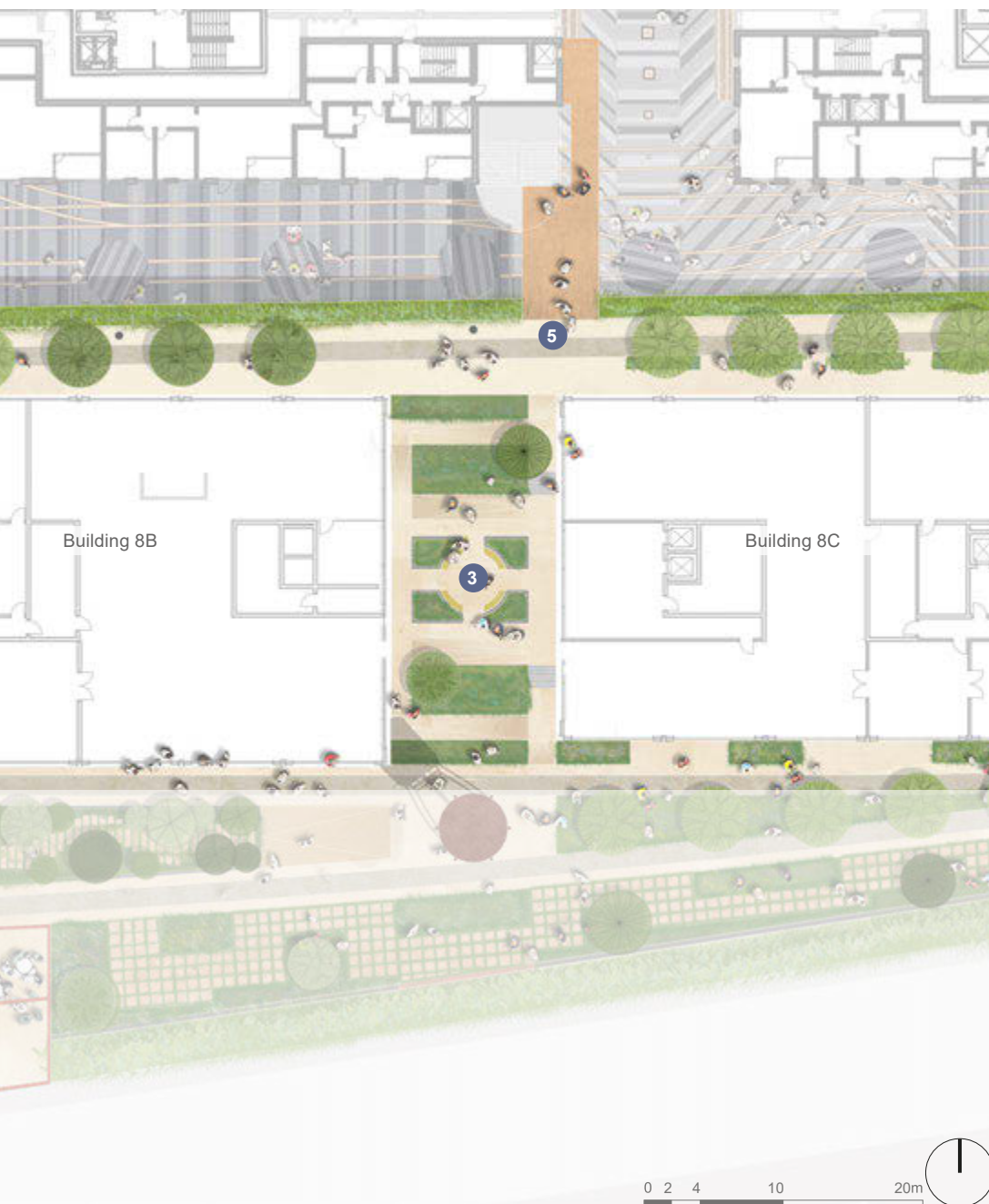


Fig 4.5.36: View: The Gardens



KEY

1. The Woodland Garden
(includes residential play garden)
2. The Loading Dock
3. The Hanging Garden
4. Middle Road Stairway & Lift
5. Farthing Lane Bridge



Fig 4.5.37: Precedent : Planted gardens and overhead bridge links

4.5.41 The Woodland Garden

4.5.42 Introduction

The Woodland Garden provides an access route, cafe/restaurant spill out space to Building 2 and a private communal play garden for Building 8A residents.

The garden provides areas of planting, seating and paved access ways through.

The play garden can be accessed by residents either from the Platform or from the communal areas within Building 8A. It includes areas for

play and seating areas to relax in. A fence and hedge will form elements of its boundary to ensure privacy for the residents.

The garden measures 10m by 25m and the adjacent route is 7.5m in width.

4.5.43 Function

- Play
- Relaxing
- Access and movement
- Residential access
- Temporary functions

4.5.44 Soft Landscape

- Woodland trees
- Hedge, shrub and ornamental planting

4.5.45 Hard Landscape

- Paving to include natural stone, re-used granite cobbles, concrete, in-situ concrete and gravels
- Seating and play feature elements
- Operational and feature lighting



Fig 4.5.38: Section: The Woodland Garden



Fig 4.5.39: Precedent: Planted gardens



Fig 4.5.40: Precedent: Play gardens



Fig 4.5.41: Section: The Woodland Garden

4.5.46 The Loading Dock

4.5.47 Introduction

The Loading Dock is a publicly accessible garden located between Building 8A and 8B. It provides a north south route from the Braithwaite Stair to the Banks as well the Boiler Room Stair.

The Loading Dock is positioned on the axis of Braithwaite Street below and is terraced in order to maximise southern views whilst also integrating the service corridor below between Buildings 8A and 8B.

The garden measures 12m by 25m. Inclusive access is achieved through the provision 1:21 gradients and stairs.

4.5.48 Function

- North South route
- Place for sitting, relaxing and enjoying a view
- Integrating Building 8 services corridor

4.5.49 Soft Landscape

- Planted terraces
- Native tree planting
- Mixed ornamental and ecological planting
- Climbing plants

4.5.50 Hard Landscape

- Paving to include natural stone, re-used granite cobbles, concrete, in-situ concrete
- Operational and feature lighting
- Timber terrace viewing bench



Fig 4.5.42: Photo: 1890s view of loading dock truck hoist



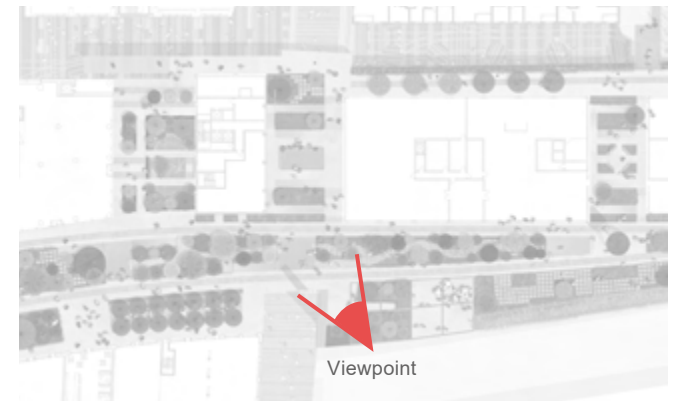
Fig 4.5.43: Photo: Current view looking south from The Loading Dock



Fig 4.5.44: Precedent: Planted sloping terraces



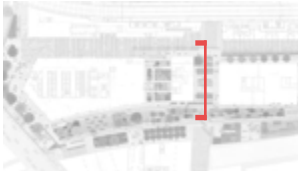
Fig 4.5.45: Precedent: Planted sloping terraces



KEY PLAN



Fig 4.5.46: View: The Loading Dock



KEY PLAN



Fig 4.5.47: Section: The Loading Dock

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4.5.51 The Hanging Garden

4.5.52 Introduction

The Hanging Garden is a publicly accessible garden located between Building 8B and 8C. It provides a north south route from the Farthing Lane Stair to the Banks.

Similarly to the Loading Dock, the gardens are terraced in order to maximise southern views whilst also integrating below ground services.



KEY PLAN

The garden measures 12m by 25m. Inclusive access is achieved through the provision 1:21 gradients and stairs.

4.5.53 Function

- North South route
- Place for sitting, relaxing and enjoying a view
- Integrating Building 8 services corridor

4.5.54 Soft Landscape

- Planted terraces
- Native tree planting
- Mixed ornamental and ecological planting
- Climbing plants

4.5.55 Hard Landscape

- Paving to include natural stone, re-used granite cobbles, concrete, in-situ concrete
- Operational and feature lighting
- Timber seating



Fig 4.5.48: Section: The Hanging Gardens



Fig 4.5.49: Precedent: Planted garden



Fig 4.5.50: Precedent: Planted garden



Fig 4.5.51: Precedent: Planted garden

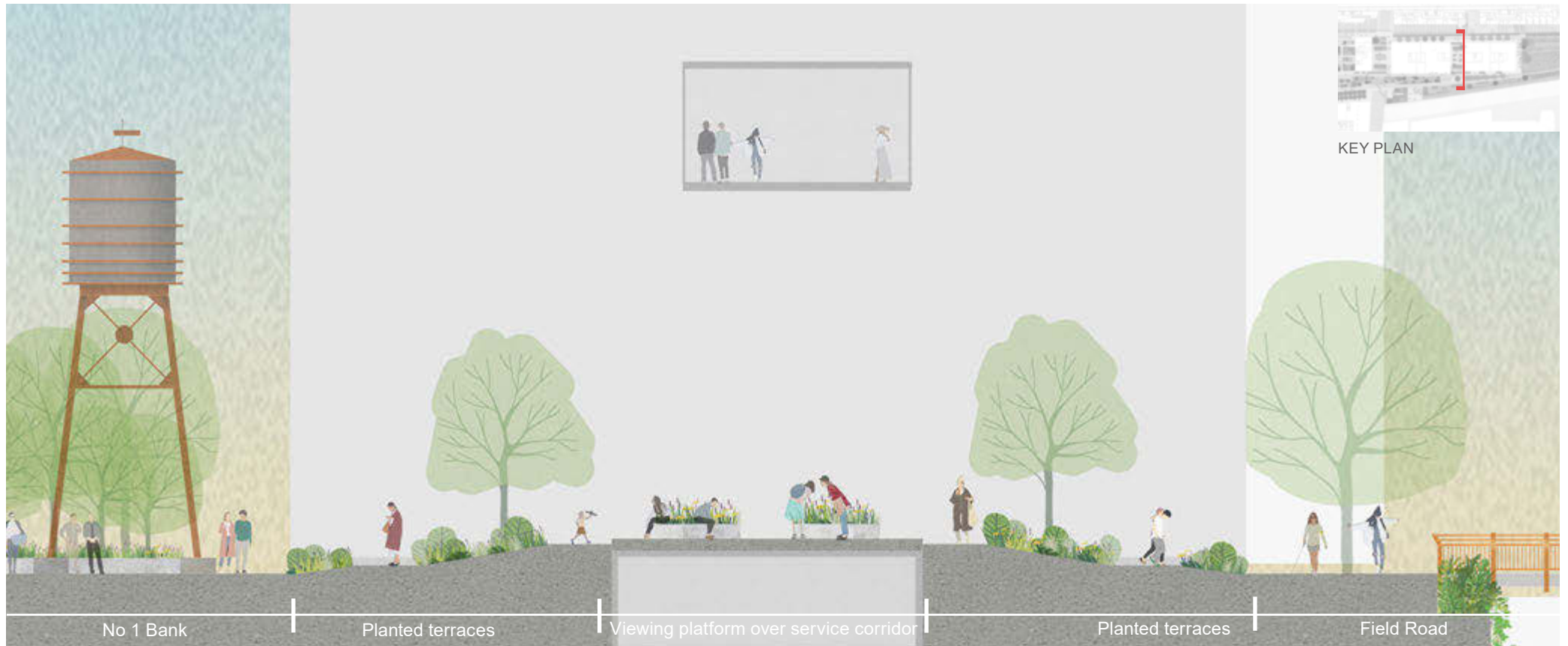


Fig 4.5.52: Section: The Loading Dock

4.5.56 The Field

4.5.57 Introduction

As the primary consolidated open space of the development The Field is to create a community focused park with a diverse range of amenity.

Measuring 115m in length, widening from 10m to 30m in width, the space is to be a green oasis and place for the community to enjoy the natural environment.

It includes a cafe terrace activating the western edge, a flexible-use open lawn area, a wooded play garden and the Continental Fruit Bank pergola with play and community planting to the southern boundary. The alignment of the historic train tracks from the Field are reimagined as raised landforms to create a playful landscape of linear waves.

4.5.58 Function

- Flexible-use community focussed open space
- Outdoor dining and cafe activity
- Picnicking and informal recreation
- Social activity, meeting and greeting
- Events space
- Heritage celebration & interpretation
- Educational resource
- Adventure and discovery
- Inclusive and active play
- Place for sitting, relaxing and enjoying a view

4.5.59 Soft Landscape

- Native woodland / forest tree planting
- Woodland understorey planting
- Wildflower lawns
- Mixed ornamental and ecological planting
- Community planting

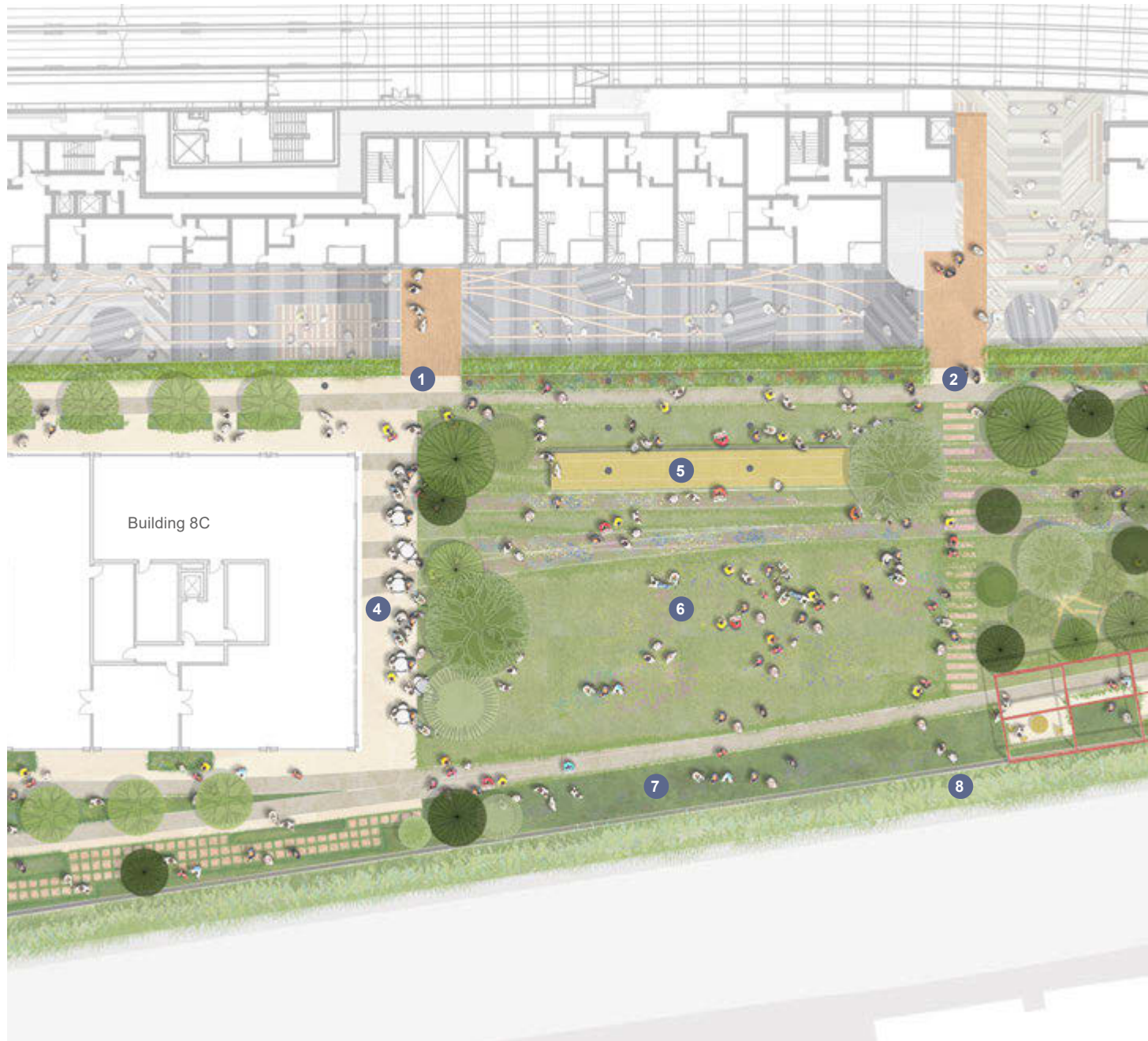


Fig 4.5.53: Plan: The Field



KEY

1. Farthing Lane Stairway & Lift
2. Cygnet Lane Stairway & Lift
3. Brick Lane Stairway & Lift
4. Cafe / restaurant terrace
5. Seating terrace
6. Open lawn
7. Community planting terrace
8. Biodiverse planting to rail setback edge
9. Woodland play garden / forest environment
10. Continental Fruit Bank play and planting
11. Water tower
12. Brick Lane Balcony terraces

4.5.60 Hard Landscape

- Paving to include natural stone, re-used granite cobbles, concrete, in-situ concrete and gravels
- Seating terraces
- Natural play features
- Steel and concrete water tower
- Operational and feature lighting
- Integrated wayfinding and interpretation
- Timber frame pergola structure
- Brick wall / mesh panel rail edge



Fig 4.5.54: View: The Field



Fig 4.5.55: Precedent: Planted garden



Fig 4.5.56: Precedent: Linear pathway terraces



Fig 4.5.57: Precedent: Lawn



Fig 4.5.58: Section: The Field



Fig 4.5.59: View: The Woodland Play Garden / Forest Environment



Fig 4.5.60: Precedent: Landform & play



Fig 4.5.61: Precedent: Climbing feature wall



Fig 4.5.62: Precedent: Play garden structure



Fig 4.5.63: Precedent: Landform & play



Fig 4.5.64: Precedent: Natural play features



Fig 4.5.65: Precedent: Play features



Fig 4.5.66: Precedent: Community growing



Fig 4.5.67: Precedent: Woodland planting



Fig 4.5.68: Precedent: Oculi play feature



Fig 4.5.69: Section: The Field



KEY PLAN



4.6 ROOFSCAPE

4.6.1 Introduction

The roofscape is located on multiple levels across the site and comprises both accessible and non-accessible roofs as follows:

- **Roof Garden Terrace Levels**
 - Residential amenity gardens
 - Office amenity terraces
- **Roof Level**
 - Biodiverse roof

These multi- levelled gardens are conceived as an integrated extension of the Platform Level landscape. Their design references higher more exposed natural landscapes such as rock outcrops, pine forests and wind-swept trees.

The gardens and terraces may be exposed to windy conditions due to their elevated locations. The layouts and general arrangements of planting and other screening structures are to assist in mitigating this to create appropriate microclimatic conditions suitable for comfortable and enjoyable use.

From below the gardens have been designed to be conspicuous to create visual connectivity between them and the public realm within The Goodsyard and the surrounding area.

From below the gardens and terraces are designed to be highly visible with trees and planting to create visual connectivity to the Platform Level landscape and also to the surrounding area.



Fig 4.6.1: Concept sketch - roofscape



4.6.2 Residential amenity gardens

4.6.3 The residential amenity gardens are communal shared spaces for private use of residents and not for public access.

As well as providing space with planting and seating areas for residents to relax in and enjoy the views. The spaces provide secure overlooked space for young children's play.

The elevated nature of the garden create unique views.

Office amenity terraces

4.6.4 The office amenity terraces are communal shared spaces for private use of office occupiers.

The terraces are to provide flexible use space with planting and seating areas.

As with the residential gardens the elevated position of the terraces create panoramic viewing galleries to the surrounding cityscape.

The main principles of the design include:

- **Integrated design concept** - The design is conceived as a three dimensional highly visible extension of the Platform Level landscape
- **Green infrastructure** - The inclusion of trees and extensive visible planting are key to creating character, identity and assisting microclimatic conditions. Appropriate growing medium is to be provided.
- **Play** - the residential gardens are to provide well overlooked, safe children's play amenity
- **Outlook** - the gardens and terraces are to optimise opportunities for enjoying panoramic cityscape views
- **Edge condition** - access to the edge of the gardens and terraces is allow enjoyment of views with seating and planting setbacks for safety

Fig 4.6.2: Precedent images



Fig 4.6.3: Landscape masterplan - roof level



KEY

1. Building 1

- Terraces at level 6, 12, and 16
- Biodiverse roof at level 13 and 17

2. Building 2

- Terraces at level 15 and 16
- Biodiverse roof at level 26

3. Building 3

- Terrace at level 7
- Biodiverse roof at level 8

4. Building 4

- Terrace at level 10
- Biodiverse roof at level 13 and 19

5. Building 5

- Terraces at level 1, 6, and 10
- Biodiverse roof at level 2, 6, 10, and 13

6. Building 6

- Biodiverse roof at level 4 and 5

8. Building 8A, 8B, 8C

- Biodiverse roof at level 23

10. Building 10A, 10B, 10C

- Terraces at level 3 and 6
- Biodiverse roof at level 7, 9, 10, 11

4.6.6 Character areas

There are four principal character areas that together make up The Roofscape. These are as follows:

4.6.7 The Office Terraces

Buildings 1, 2 & 3 make up the office campus at the western end of the site and all include a number of external terraces at multiple levels of varying size and aspect

The Residential Gardens

Buildings 4, 5, 8A, 10A, 10B and 10C all include residential accommodation. Each of these has a privately accessed communal garden for residents amenity and childrens play. These are all on external roofs except Building 8A which has its garden on Platform level

The Hotel terraces

Building 8B and 8C of the hotel have external terraces. These external dining and leisure terraces are for use by hotel users and visitors and are accessed through the hotel.

The Biodiverse roofs

Inaccessible roofs at top of all buildings include blue roofs and biodiverse planting where possible.



Fig 4.6.4: Character areas



KEY



The Office Terraces



The Residential Gardens



The Biodiverse / Blue Roofs



Additional Biodiverse Roof
subject to TfL

4.6.8 The Office Terraces

4.6.9 Introduction

Buildings 1, 2 & 3 make up the office campus at the western end of the site. The inclusion of high quality external areas form an important element of the commercial office offer.

The terraces provide valuable amenity space allowing workers the opportunity to go outside and have a break in the fresh air, socialise, sit and relax or enjoy informal outdoor meetings and entertaining.

4.6.10 Function

- Informal amenity space
- Opportunities for sitting and relaxing outdoors
- Social interaction
- Outdoor dining
- Enabling panoramic cityscape views
- Events and entertainment
- Green infrastructure

4.6.11 Soft Landscape

- Tree planting
- Ornamental planting
- Climbing plants

4.6.12 Hard Landscape

- Paving to include natural stone, concrete and timber decking
- Seating
- Stone and steel planters
- Steel and glass balustrades / screens
- Pergola structures



Fig 4.6.5: Precedent images



Fig 4.6.6: Plan: Office terraces

KEY

Building 1

1. Level 6 north terrace
2. Level 6 north terrace
3. Level 13 terrace
4. Level 17 terrace
5. Level 6 south terrace

Building 2

6. Level 16 terrace
7. Level 15 east terrace

Building 3

8. Level 7 terrace

4.6.13 The Residential Gardens

4.6.14 Introduction

All the residential accommodation within the site is located in Buildings 4, 5, 8A, 10A, 10B and 10C. The inclusion of high quality external garden areas forms an important part of the residential offer.

Each of these buildings has a privately accessed communal garden for residents use. These are all on external roofs except Building 8A which has its garden on Platform level

The gardens provide valuable amenity space allowing residents the opportunity to be outside, enjoy the fresh air, socialise, sit and relax and take in the views.

An important function of the gardens is to provide safe, overlooked and accessible areas for children's play.

Function

- Informal external amenity space and young children's play
- Enjoying cityscape views
- Social interaction and communal activities
- Green infrastructure

4.6.15 Soft Landscape

- Tree planting
- Ornamental planting
- Climbing plants

4.6.16 Hard Landscape

- Paving to include natural stone, concrete and timber decking
- Seating
- Stone and steel planters
- Steel and glass balustrades / screens
- Pergola structures

KEY

Building 4

1. Level 10 garden

Building 5

2. Level 10 west garden
3. Level 1 central garden
4. Level 6 east garden

Building 8

5. Platform level garden

Building 10

6. Building 10A Level 6 garden
7. Building 10B Level 6 garden
8. Building 10C Level 3 garden



Fig 4.6.7: Precedent images



Fig 4.6.8: Section: Plan: Residential gardens

4.6.17 Biodiverse & Blue Roofs

4.6.18 Introduction

Inaccessible roofs across the site are to be utilised for location for mechanical plant, water attenuation and biodiversity.

Where roofspace is not required for mechanical plant it is proposed to have biodiverse roof planting for biodiversity, habitat creation and ecology benefit.

Function

- Biodiversity & habitat creation
- Visual amenity

4.6.19 Soft Landscape

- Biodiverse roof planting

4.6.20 Hard Landscape

- Hibernaculum
- Log piles
- Beehives

KEY

Building 1

1. Level 17 biodiverse roof
2. Level 13 biodiverse roof

Building 2

3. Level 26 biodiverse roof

Building 3

4. Level 8 biodiverse roof

Building 8

5. Level 23 biodiverse roof

Building 4

6. Level 19 biodiverse roof
7. Level 13 biodiverse roof

Building 5

8. Level 13 biodiverse roof
9. Level 10 biodiverse roof
10. Level 2 biodiverse roof
11. Level 6 biodiverse roof

Building 6

12. Level 5 biodiverse roof
13. Level 4 biodiverse roof

Building 10

14. Level 10 biodiverse roof
15. Level 9 biodiverse roof
16. Level 10 biodiverse roof
17. Level 11 biodiverse roof
18. Level 7 biodiverse roof
19. Overground box subject to TfL



Fig 4.6.9: Precedent images



Fig 4.6.10: Plan: Biodiverse roofs

4.7 SITE-WIDE STRATEGIES

4.7.1 Hard Landscape

4.7.2 Introduction

A variety of hardscape materials are proposed, including paving, street furniture, play equipment, bicycle storage, balustrades, gates and lighting. They are to be selected to reflect and reinforce the particular distinctiveness and character of the development proposals.

The design and application of the hard materials is to respond to the different qualities, character and design requirements of each space. Choice of materials is to be appropriate to heritage context, function, durability and maintenance considerations.

Existing site material

Existing materials on site are extensive, ranging from former entrance gates and turntables to rail lines, cast iron fixings and granite sett paving. There are extensive areas of granite sett paving, both on ground level and on the higher former station platform level.

This extent and range of existing materials is a very significant asset that will contribute to the character and identity of the public realm and landscape design. In particular there are large quantities of granite setts across both ground and platform level. It is intended to re-use as much as is practical and viable within the development.

The varying elements can be structured into the following categories:

4.7.3

Surfaces

Paving materials shall be of a high quality and shall include natural stone, re-used granite setts, clay brick, in-situ concrete and gravels.

Re-used granite setts are to be laid to create a suitably safe trip free walking surface finish.

Furniture

Street furniture will include a range of seating for relaxation, litter bins at key locations and cycle stands for visitors at thresholds and in the cycle hubs.

Play equipment

A series of natural and man-made features are located throughout the Platform and the Residential Gardens to provide children with a wide variety of safe and secure play amenity.

Gates

The existing gates at the Oriel Gateway former ramp entrance are to be retained and restored in their original locations.

A family of new gates and screens are to be installed at service yard and entrance thresholds. These are proposed for both security and visual screening.

Feature elements

Due to the scale, extent and character of the site there will be a wide range of feature elements developed at later detailed design stage. Elements include items such as the Boiler Room Chimney, the Continental Fruit Bank pergola structure, the water towers, the Loading Dock terraces and The Oculi in addition to the incidental features such as insect hotels and habitat piles to encourage biodiversity.



Granite paving



Yorkstone paving



Granite paving



Brick paving



Granite paving



Brick paving



Granite paving



In-situ concrete paving



Granite paving



In-situ concrete paving



Granite paving



Gravel paving

Fig 4.7.1: Paving materials

Fig 4.7.2: Paving materials



Kerb detail



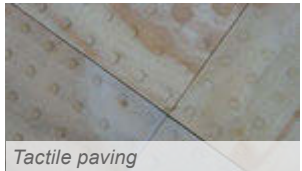
Integrated bench seating



Balustrade



Outdoor gym equipment



Tactile paving



Timber baulk seating



Cycle stands



Integrated playful features



Engraved paving



Portable cafe seating



Integrated HVM protection



Incidental elements



Stepping stone



Bench seating



Wayfinding signage



Large play logs



Bollard



Turntable



Heritage detail



Wayfinding signage



Gates & screens



Climbing features



Granite cobbles



Rail parts



Drainage channel



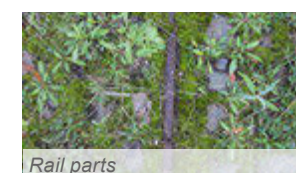
Tree grill



Tree grill



Climbing features



Rail parts



Granite cobbles

Fig 4.7.3: Paving details

Fig 4.7.4: Street furniture

Fig 4.7.5: Street furniture

Fig 4.7.6: Play equipment

Fig 4.7.7: Existing site materials

Fig 4.7.8: Existing site materials

Stairways & balustrades

The stairways/lifts and balustrades are designed as a family, all different but of a coherent language of industrial character and materials. The principal materials include concrete, steel and timber.

Materials Palette Images

The following page shows a range of images for the illustrative purposes only. The hard landscape material palette will be further developed as part of the design development process.

4.7.4 Soft Landscape

4.7.5 Introduction

The strategy for the soft landscape is to deliver a broad range of planting and green spaces across the site that will enhance wildlife, improve local biodiversity and compliment the built environment, both existing and new.

The intention is to provide a long-term structure, of predominantly native species planting, and within that to provide for diversity of habitat, character and visual amenity. The variety will to provide year round seasonal interest, spatial structure, visual amenity, biodiversity, play and educational resource as follows:

Ground Level - The Shoreditch Tapestry

- New street tree planting
- Planting to historic wall at Building 4 & 5
- Climbing plants on blank facades

Platform Level - The Platform

- Wide range of planting typologies to each of the garden areas;
- Planting to include, trees, hedging, shrub, groundcover, climbing planting ornamental planting, wildflower, woodland planting and community planting beds;
- The Field, being the largest consolidated green space includes extensive planting including the creation of a large wildflower lawn and woodland play garden / forest environment with variety of trees and mixed understorey planting.

Roof Level - Office terraces Gardens

- Variety of planting to include trees and ornamental planting suited to microclimate

Roof Level - Office Gardens

- Variety of planting to create verdant gardens which are highly visible as extension of the platform level garden planting
- Creation of visual amenity for residents along with horticultural interest and variety of colour, texture, scent and character

Roof Level - Biodiverse Roofs

- Planting for visual amenity and biodiversity
- Low maintenance design

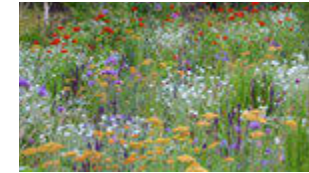
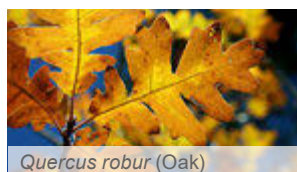


Fig 4.7.9: Precedent: Planting character images



Quercus robur (Oak)



Quercus robur (Oak)



Quercus robur (Oak)



Prunus avium (Wild Cherry)



Prunus avium (Wild Cherry)



Prunus avium (Wild Cherry)



Morus nigra (Black Mulberry)



Morus nigra (Black Mulberry)



Morus nigra (Black Mulberry)



Cercis siliquastrum (Judas Tree)



Cercis siliquastrum (Judas Tree)



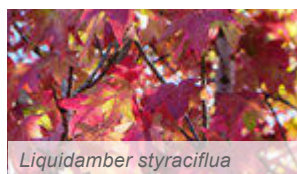
Cercis siliquastrum (Judas Tree)



Liquidambar styraciflua



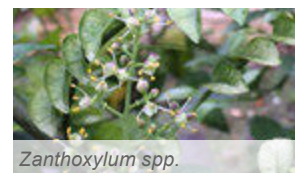
Liquidambar styraciflua



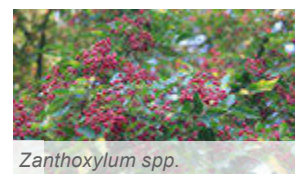
Liquidambar styraciflua



Zanthoxylum spp.



Zanthoxylum spp.



Zanthoxylum spp.

Indicative Species List

The following species lists and associated images are to provide an indicative strategy for the planting. This lists are not intended to be comprehensive but to provide a general guide for illustrative purposes only.

Trees

Trees are to be of various forms including clear stem for open view requirements, standards, multi-stem and other types for character variety to suit design requirements. Sizes will vary from small standards to semi-mature specimens to create a substantial long-term tree structure.

- *Acer griseum*
- *Acer campestre*
- *Amelanchier lamarckii*
- *Betula* spp.
- *Catalpa bignonioides*
- *Carpinus betulus*
- *Cercis siliquastrum*
- *Fagus sylvatica*
- *Ginkgo biloba*
- *Juglans regia*
- *Liriodendron tulipifera*
- *Liquidambar styraciflua*
- *Malus domestica*
- *Morus nigra*
- *Parrotia persica*
- *Platanus x acerifolia*
- *Prunus* spp.
- *Quercus* spp.
- *Sorbus* spp.
- *Tilia* spp.
- *Zanthoxylum* spp.

Fig 4.7.10: Tree species

Hedging

Hedging is to include a range of forms from whip planting to fully pre-formed clipped hedging.

- Mixed native hedgerow species hedge
- *Buxus sempervirens*
- *Carpinus betulus*
- *Fagus sylvatica*
- *Ilex crenata*
- *Ligustrum ovalifolium*

Shrubs

The selection is to provide a wide range of opportunity for both ecology, visual amenity, horticultural interest and sensual experience. Plants are to include a range of sizes.

- *Camellia* spp.
- *Cornus* spp.
- *Corylus avellana*
- *Crateagus monogyna*
- *Hedera* spp.
- *Hydrangea paniculata*
- *Ilex aquifolium*
- *Leycesteria formosa*
- *Lonicera periclymenum*
- *Magnolia* spp.
- *Pachysandra terminalis*
- *Pieris japonica/formosa*
- *Philadelphus* spp.
- *Physocarpus opulifolius* 'Diabolo'
- *Rubus ideaus*
- *Rubus fruticosus*
- *Rosa rugosa*
- *Rosmarinus officinalis*
- *Skimmia* spp.
- *Symphoricarpos alba*
- *Viburnum* spp.
- *Vinca* spp.

Climbers and green walls

Vertical planting is generally to be provided by use of climbing plants. Pre-grown modular systems may also be included for particular design requirements.

- *Hedera* spp.
- *Holboellia coreacea*
- *Hydrangea* spp.
- *Jasminum nudiflorum*
- *Lonicera periclymenum*
- *Parthenocissus quinquefolia*
- *Passiflora caerulea*
- *Lonicera fragrantissima*
- *Trachelospermum jasminoides*

Grasses & herbaceous

A wide range of grasses planting is proposed. The species are too numerous to list in detail but a few are included here for illustrative purposes

- *Calamagrostis x acutiflora*
- *Hakonechloa macra*
- *Miscanthus* spp.
- *Pennisetum* spp.
- *Pennisetum setaceum*
- *Stipa gigantea*

Herbaceous

A wide range of herbaceous planting is proposed. The species are too numerous to list in detail but a few are included here for illustrative purposes

- *Achillea millefolium*
- *Alchemilla mollis*
- *Anemone nemorosa*
- *Aquilegia* sp
- *Asarum europaeum*
- *Astrantia major*
- *Conopodium majus*
- *Digitalis purpurea*



Fig 4.7.11: Shrub species



Agapanthus 'Purple Cloud'



Geranium spp



Kniphofia 'Elvira'



Euphorbia characias



Achillea spp



Anemone spp



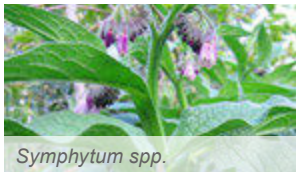
Alchemilla mollis



Stipa calamagrostis



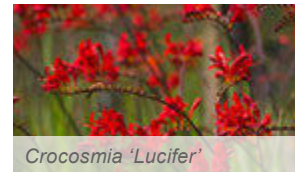
Matteuccia struthiopteris



Symphytum spp.



Leucanthemum x superbum



Crocsmia 'Lucifer'



Helianthus tuberosus



Hakonechloa macra



Epimedium x youngianum 'Niveum'



Helleborus spp



Campanula persicifolia



Polygonatum spp.



Allium ampeloprasum



Galanthus spp



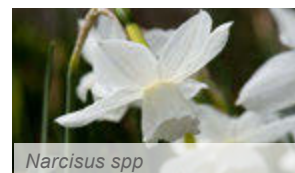
Echinacea purpurea



Calamagrostis 'Karl Foerster'



Crocus spp



Narcissus spp

Fig 4.7.12: Herbaceous species

Fig 4.7.13: Herbaceous species

Fig 4.7.14: Herbaceous species

Fig 4.7.15: Herbaceous species

- *Diplotaxis tenuifolia*
- *Echinacea purpurea*
- *Epimedium x youngianum*
- *Helianthus tuberosus*
- *Helleborus* sp.
- *Knautia arvensis*
- *Leucanthemum vulgare*
- *Linaria purpurea*
- *Lotus corniculatus*
- *Liriope muscari*
- *Lunaria annua*
- *Lupinus* sp
- *Matteuccia struthiopteris*
- *Muscari armeniacum*
- *Penstemon* sp
- *Polygonatum* sp.
- *Pulmonaria* sp.
- *Schizostylis coccinea*
- *Symphytum* sp.
- *Thalictrum delavayi*
- *Verbena boniariensis*

Bulbs and woodland understorey planting

- *Allium ampeloprasum*
- *Crocsmia* spp.
- *Cyclamen hederifolium*
- *Galanthus nivalis*
- *Fragaria vesca*
- *Hyacinthoides x non scripta*
- *Iris* spp.
- *Narcissus* spp.
- *Oxalis acetosella*
- *Tulipa* spp.
- *Viola riviniana*

Wildflower Lawn

- Species rich wildflower turf

Biodiversity roof planting

- See Biodiversity strategy

4.7.6 Biodiversity Strategy

4.7.7 Introduction

The Goodsyard site has an existing ecology resulting from its industrial heritage and subsequent abandonment. It was designated as a Site of Importance for Nature Conservation (SINC) but this was removed following construction of the London Overground. The proposals for public realm and landscape aim to enhance biodiversity value and create a more coherent ecological network.

4.7.8 Regional Ecological Context

The proposals are to support local and regional biodiversity targets by enhancing and creating suitable habitat for London priority species. Some of these priority species include Black Redstart, Bats and House Sparrow, which can be supported by integrating habitat proposals for these species within the public realm and landscape. Suggested habitats to support these London Priority species are:

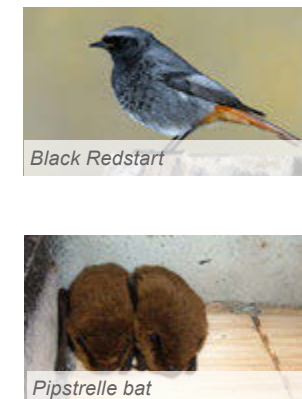
- Black Redstart: sparse wasteland vegetation, stony ground sculpted to increase surface area for feeding, pioneer vegetation communities ledges, perching places and crevices for nesting. This habitat will be provided on the biodiverse roofs.
- Bats: mature trees with holes in trunks, broken or split branches will provide suitable crevices for roosting bats. Artificial bat roosting habitat integrated within the building design and provision of suitable foraging habitat will be provided.
- House Sparrow: scattered planting of UK native scrub and trees. Terraced nest boxes for communal nesting opportunities to be provided.

4.7.9 Local Ecological Context

In addition to these habitat opportunities, careful re-development should also create opportunities for enhancing the local biodiversity through integrating habitat for local authority priority species for City of London, London Borough of Tower Hamlets and London Borough of Hackney within the proposals. This will include providing suitable habitat for priority invertebrates such as loggeries for the stag beetle, swift nest boxes, wild flower rich habitat for pollinators and planting of high conservation species such as hawthorn and ivy, which provide a habitat and foraging source for a number of priority species.



Large Ranunculus Moth



Black Redstart



Stag Beetle



English Oak



Brown-Banded Carder Bee



Small Leaved Lime



Hawthorn



Peregrine Falcon



Red Belted Clear Wing Moth

Fig 4.7.16: Local priority species

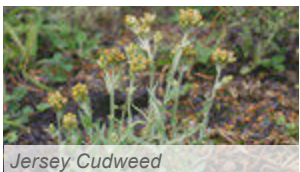
Fig 4.7.17: Local priority species



Ivy



House Sparrow



Jersey Cudweed



Slow-Worm



London Rocket



Swift



Cornflower



Greatspotted woodpecker



Black Knapweed



Small blue butterfly

Fig 4.7.18: Local priority species

Fig 4.7.19: Local priority species

4.7.10 Visible Ecology and Biodiversity

The landscape and public realm proposals will be detailed to maximise biodiversity enhancement opportunities whilst providing an attractive environment. Creating opportunities for protected and notable species in the area using native planting will allow the enhanced biodiversity to become a visible part of the site.

4.7.11 Notable Species in Adjacent Spaces

Integrating and connecting neighbouring wildlife habitats with landscape will provide opportunities for habitats and species to re-colonise the site. Allen Gardens is the nearest locally designated site (SINC) and there are opportunities to connect this area.

4.7.12 Access to Nature and Open Spaces

The public realm and landscape will provide important ecological and biodiversity enhancements in an area where there is a deficiency in access to nature and open space. Densely populated neighbouring boroughs will benefit from this core aspect of the site from the biodiversity and important amenity and education resource.

4.7.13 Tree Planting

Native tree planting that builds on the ecological context of the site is the approach to new tree planting. Significant tree planting will provide important habitat to support the biodiversity as well as contribute to the landscape environment. English Oak (*Quercus robur*) and Scots Pine (*Pinus sylvestris*) are suggested for their ecological benefits, character and connection to local site - Allen Gardens.

4.7.14 Phase 1 Habitat Report

The phase 1 ecology report highlights the requirement for further phase 2 habitat surveys. The results of these surveys will further influence detailed proposals. An area of existing of 'Open Mosaic Habitats' is identified. The proposals are to incorporate habitat of this nature.

4.7.15 Replacement Habitat

The proposals should incorporate open mosaic habitat which can include:

- Sparsely vegetated, low nutrient substrates of different grades, sculpted into landforms
- Diversity from bare areas to scrub patches
- Ephemeral and pioneer vegetation
- Wildflower rich areas and native scrub

Biodiversity roofs will help provide replacement habitat of this nature.

4.7.16 Habitat Opportunities

In order to maximise biodiversity on site other habitat creation opportunities will form part of landscape proposals to include:

- Green walls - Native climbers such as ivy, common hop and traveller's joy can provide vertical green and contribute to biodiversity and the attractiveness
- Reptile hibernacula or reptile banks
- Bird boxes or integrated nesting habitat suitable for Black Redstart and other priority bird species
- Invertebrate habitat features such as wood piles, insect hotels, loggeries for stag beetle, wildflower areas and substrate banks
- Artificial bat roosting sites, either bat boxes or integrated features in the building design

4.7.17 Ecology opportunities

4.7.18 Ground Level Public Realm

Ground level opportunities include:

- Mature tree planting including native priority species;
- Shrub areas with a diversity of fruit and seed bearing species and a varied vegetation structure to replicate open habitat mosaic on previously developed land.

4.7.19 The Platform Level

The Platform Level provides a significant opportunity to create wildlife habitat, maximise biodiversity and contribute to the amenity of the space as a natural landscape. Ecology opportunities include:

- Mixed native planting & wildflower grassland;
- Woodland glade, scrub & ground flora;
- Varied vegetation structure using sculptural landform to provide a mosaic of habitat features.

4.7.20 Roof gardens and terraces

Roofscape opportunities include:

- Structural diversity including bare ground and gravel and stony substrates, scrub, ephemeral and pioneer vegetation;
- Quieter areas at higher levels for bird nesting;
- Perching and singing posts for priority species such as black redstart.

KEY

- Woodland glade / scrub
- Biodiverse lawn
- The Platform landscape
- Roof gardens and terraces
- Open mosaic habitat
- Cultivated landscape
- Habitat Features

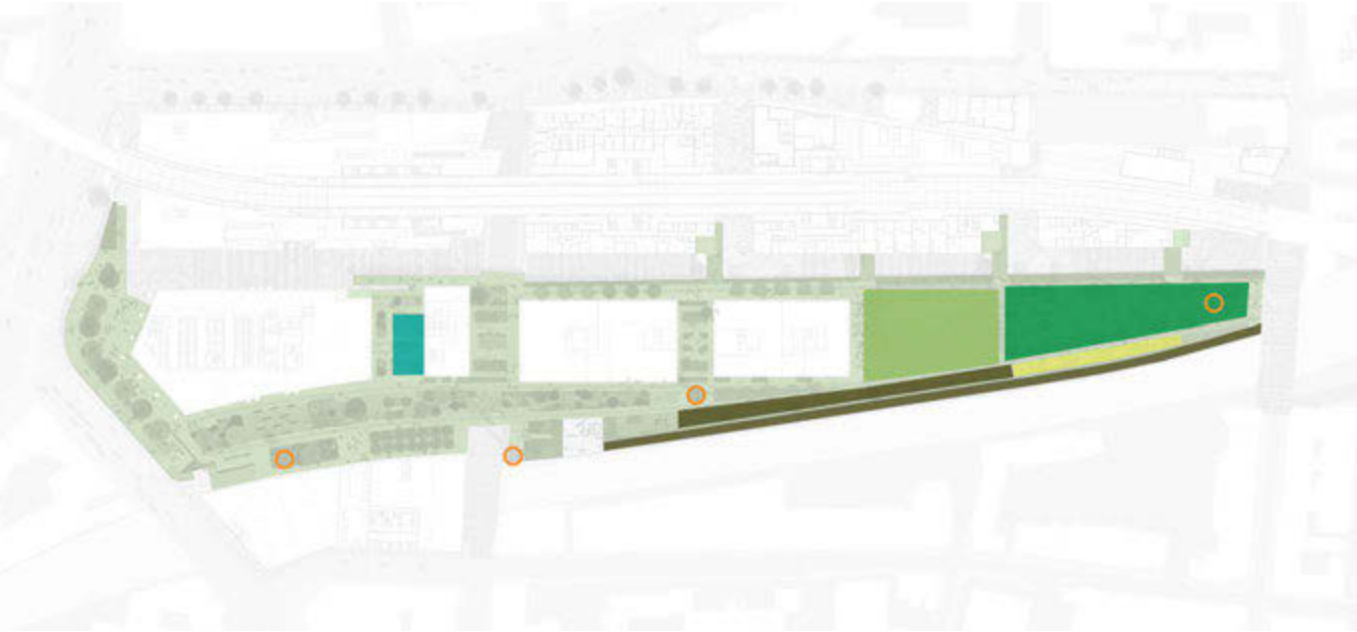





Fig 4.7.20: Platform level - Ecology opportunities diagram

KEY

	Roof gardens and terraces
	Open mosaic habitat / Biodiverse roof
	Biodiverse roof opportunity subject to TFL

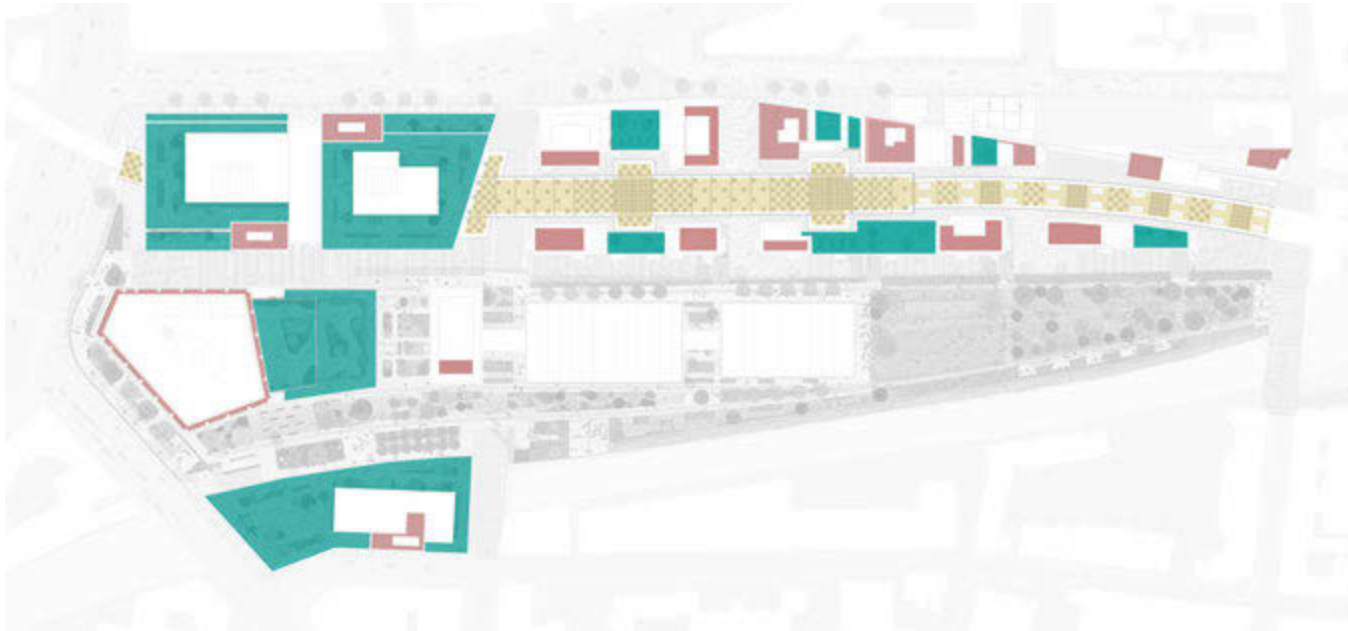


Fig 4.7.21: Roofscape level - Ecology opportunities diagram

4.7.21 Biodiverse Roofs

Biodiverse roof opportunities include:

- Wildflower rich drought tolerant planting ;
- Bare stony ground with substrate of various grades left to colonise by plants naturally will provide suitable habitat for black redstart priority bird species;
- Quieter areas at higher levels for bird and invertebrates.

The roofscape of the TfL London Overground box presents a further opportunity for habitat creation and biodiversity as well as visual amenity for those overlooking this structure. Proposals here are for illustrative purposes only and would be subject to TfL.

4.7.22 Education

Educational opportunities include the use of facilities on site such as interpretation boards, monitoring of wildlife, wild foraging, cultivation beds and wildlife trails can assist in creating an exemplar urban site that integrates ecology within the scheme.

4.7.23 Biodiverse roofs

4.7.24 Introduction

The Development Proposals include a range of biodiversity roofs across the upper levels of the buildings to provide both visual and ecological benefit.

The illustrative section opposite shows key components and build-ups of a biodiversity roof system. A minimum depth of 100mm extensive substrate is to be used. This is to be increased locally to add visual interest and enhanced biodiversity values. Mounding and formation of swale features can assist increase retention of rainwater and additional ecological habitat value. Additional mounding of 200mm depth can be applied to 20% roof area.

Some biodiverse roofs will be left unplanted to allow natural colonisation and will contain a mix of aggregates of various grades from crushed brick to larger stones

Perching posts to favour hunting strategies of black redstart, ledges and nesting holes integrated within the building design at roof level will further improve the habitat for black redstart priority species.

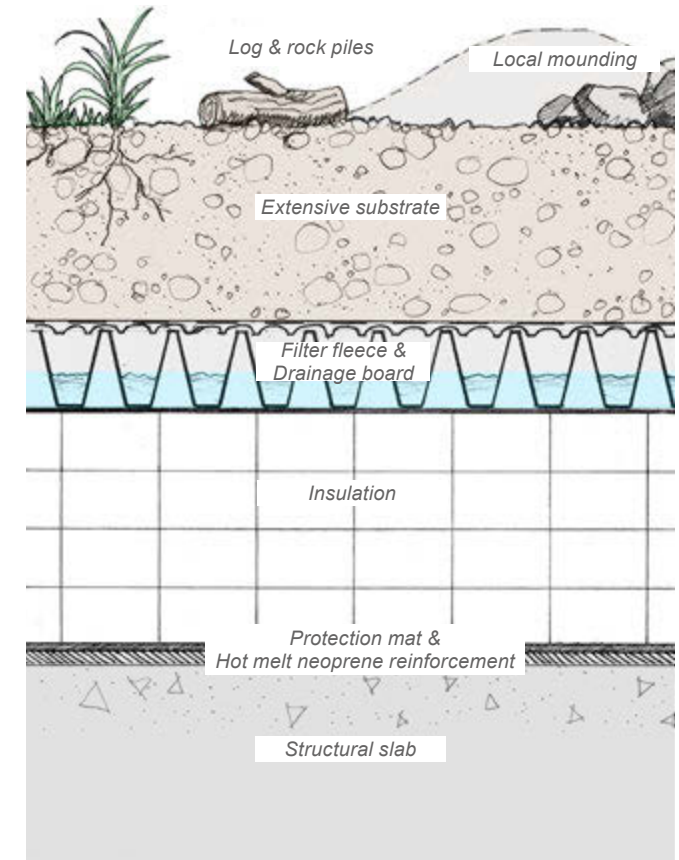
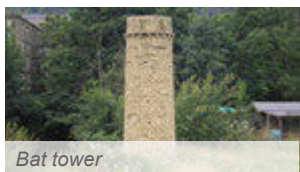
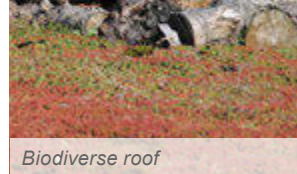
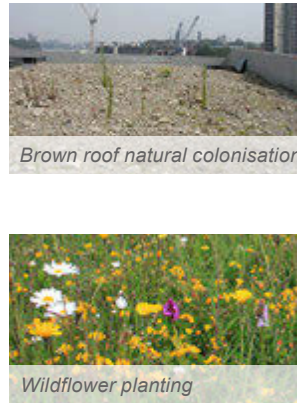


Fig 4.7.22: Section: Biodiverse roof



Fig 4.7.23: Precedent: Biodiverse roof



4.7.25 Indicative species list for biodiverse roof planting

- *Achillea millefolium*
- *Armeria maritima* spp *maritima*
- *Anthyllis vulneraria*
- *Blackstonia perfoliata*
- *Campanula glomerata*
- *Carex flacca*
- *Centaurea erythraea*
- *Centaurea cyanus*
- *Clinopodium vulgare*
- *Centaurea nigra*
- *Daucus carota*
- *Echium vulgare*
- *Geranium robertianum*
- *Galium verum*
- *Helianthemum nummularium*
- *Hypericum perforatum*
- *Hypochaeris radicata*
- *Plantago coronopus*
- *Knautia arvensis*
- *Leucanthemum vulgare*
- *Leontodon hispidus*
- *Linaria vulgaris*
- *Lotus corniculatus*
- *Origanum vulgare*
- *Plantago lanceolata*
- *Primula veris*
- *Papaver rhoeas*
- *Rumex acetosa*
- *Sanguisorba minor*
- *Scabiosa columbaria*
- *Sedum acre*
- *Silene latifolia*
- *Sedum alba*
- *Trifolium pratense*
- *Thymus polytrichus*
- *Viola tricolor*

Fig 4.7.24: Hibernacula

Fig 4.7.25: Hibernacula

Fig 4.7.26: Soft landscape

Fig 4.7.27: Educational

4.7.26 Play and recreation

4.7.27 Introduction

Distribution

The 'Local Open Spaces' diagram opposite locates the opportunities for play within 5 or 10 minutes walk of the site. It shows walking distances to named open space capable of providing amenity, in accordance with the Mayor of London's Supplementary Planning Guidance (SPG), which are set out as follows:

Doorstep playable space

Playspace for children aged 0-5 is proposed to within each building demise and therefore under the 100m walking distance from a residential development. These spaces shall be provided within the private shared gardens of Buildings 4, 5, 8A and 10.

Local playable space

Playspace for children aged 5-11 shall be located within a 400m walking distance from a residential dwelling. Some spaces shall be provided within the Platform Level public realm. Other play provision such as kickabout areas and any wheeled facilities may be provided within Allen Gardens.

Youth space

Playspace for children aged 12+ shall be located on site and supplemented within a 800m walking distance from a residential dwellings. Play opportunities within the Platform Level public realm such as climbing and exercise trail are to provide more challenging play opportunities for the youth space category.

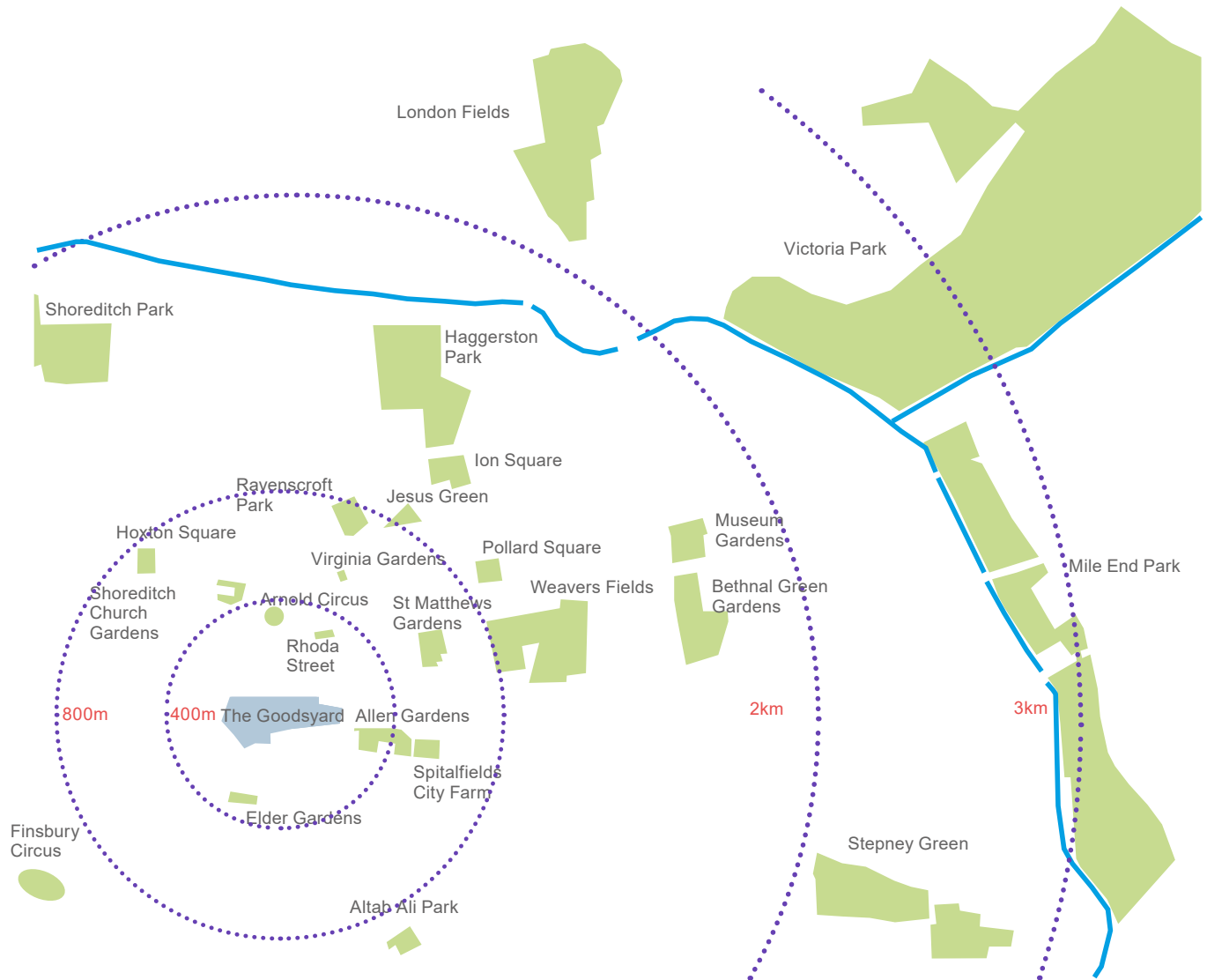


Fig 4.7.28: Local open spaces

Neighbourhood playable space

Playspace for children of all ages shall be provided on site and is required 400-800m distance from the site. This will be required on site and could be supplemented with nearby amenity space at Allen Gardens

Current guidelines and policy

The play strategy for The Goodsyard has been developed to comply with the Mayor of London's SPG, Shaping Neighbourhoods: Play and Informal Recreation (September 2012).

No. of children	10 – 29	30 – 49	50 – 79	80+
Size of space required	100-300 sq m	300-500 sq m	500 – 800 sq m	800 sq m +
Facilities for under 5s	On-site doorstep playable space	On site local playable space	On-site local playable space	On-site local or neighbourhood playable space
Facilities for 5-11s	Off-site within 400 m			
Facilities for 12+	Off-site within 800 m	Off-site within 800 m	Off-site within 800 m or on-site subject to size and local circumstances	On-site youth space
Possible variation to reflect existing provision	If area is deficient in play space for 5 – 11s, some on-site facilities should be provided	If area is within 400m of existing facilities for 5-11s, an off-site contribution may be considered if in accordance with play strategy	If area is deficient in spaces for 12+, some on-site facilities or new off-site provision should be provided within 800 m	If area is within 800 m of existing facilities for 12+, an off-site contribution may be considered if in accordance with play strategy
The Goodsyard 110 - 162 no. Children				

Varied play for different age groups

The approach to play will meet the SPG requirements to provide varied play forms that provide appropriate provision for different age groups whilst allowing for flexible play integrated throughout the open spaces and public realm.

Play typologies

The proposed typologies of play spaces build on the multi- functional concept of 'playable space' rather than play areas and defines a hierarchy of play provision:

Doorstep playable space - 0-5s

Play provision, on plot, will include small age appropriate play equipment for the under 5 age group integrated into open space with potential for informal play through engaging play features and seating.

Local playable space - 5-11s

Provision will be in the form of open space with potential for informal play. Age appropriate play equipment where possible and seating.

Neighbourhood playable space - all ages

Playable space for all ages will be accommodated within the public realm and landscape where possible including street furniture and character trees for climbing in open space, equipment and seating.

Youth space - 12+

Age appropriate provision is made where possible within the Platform Level public realm to encourage integration of ages and social activity. Facilities for informal recreation, trim trail and seating will be provided.

Fig 4.7.29: London Plan SPG table

4.7.28 Playspace provision

Play and Recreation provision

The area of playable space being provided on site exceeds the play space requirements calculated using the London Plan Supplementary Planning Guidance (SPG September 2012) 10m² per child. Refer to figure opposite for proposed distribution on site.

For the purpose of calculating the play provision a child yield of up to 141 has been used based on the current maximum parameter dwelling mix. This strategy demonstrates that the current expected child yield could be readily accommodated with the current proposals.

Open space per child	10m ²
Development child yield range	110 - 162

Doorstep playable space	610m ²
Local playable space	580m ²
Youth space	430m ²
Total playable space	1,620m²

The GLA population yield calculator has been updated as of 19th June 2019. This update increases the maximum child yield of the site from 162 children to 199, resulting in a total maximum playspace requirement of **1,990m²**.

In the absence of an updated Supplementary Planning Guidance, it is currently unclear how these new figures will be applied to the different types of playspace.

The overall provision of playspace proposed still significantly exceeds the increased requirement.

Open Space Area Calculations

Ground level:

Public	12,958m ²
Private	0m ²

Platform Level:

Public	12,854m ²
Private shared	210m ²

Roof Level:

Private shared	1,116m ²
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Proposed on site play provision	
Doorstep playable space	680m ²
Local playable space	2800m ²
Youth space	490m ²

Total play space provision	3,970m²
-----------------------------------	---------------------------

Off site amenity

The majority of play space provision will be on the Platform Level public realm and within private shared residential gardens. The ground level public realm also has the opportunity for playable space integrated with public realm furniture and design.

Additional provision for age 12+ will be provided within 800m distance from the residential units to supplement the play provision on site. The provision on site includes a range of spaces offering a variety of play opportunities.

Off site amenity spaces:

- Allen Gardens
- Spitalfields City Farm
- Weavers' Fields

4.7.29 Approach

'Playable' landscape is the approach throughout the open space to provide challenging and interesting opportunities for all ages to engage with the site and encourage social activity. A key aspect to the play strategy is to ensure that all play amenity considers the varying needs of users of all ages and abilities.

Play typologies will be based on natural landscape typologies inspired by the site's physical setting and microclimate and link in with the ecological proposals where appropriate.

Quantum

The projected child yield for The Goodsyards is 141 children. The Platform and private shared residential gardens shall significantly over provide the Mayor's Housing SPG policy to provide 10m² of dedicated play space per child, regardless of the age of child. The child yields are associated with the new residential development

The local area has some play provision within 5 and 10 minute walking distances from the site. Allen Gardens is a large recreation ground which also has a playground, MUGA and city farm. The Boundary Estate (Arnold Circus) has a MUGA, and play space.

Allen Gardens

This nearby recreation ground of over 1Ha in size will play an important role in the overall provision of open space and play space for local residents, especially for the 12+ and young adults. Although the site has capacity for the suggested provisions in the SPG this is proposed as complementary to further amenity provision within Allen Gardens.



Fig 4.7.30: All levels - Playable space distribution

KEY

On site play provision by age groups



Doorstep Playable space

0-5 age group

Engaging play features, seating

Total proposed area: 680m²



Local Playable space

5-11 age group

Engaging play features, seating and open lawn

Total proposed area: 2,800m²



Youth space

12+ age group

Space for informal sport, recreation

Total proposed area: 490m²

* Note: The overall Platform is 12,854m² and provides for numerous play areas within the public realm. Therefore it is considered a Neighbourhood Play Area that is suitable for all ages.

TOTAL AREA FOR PLAY REQUIRED

1,620m²

TOTAL AREA PROPOSED

3,970m²

4.7.30 Play strategy

Emerging play themes

There are three play themes which are proposed as a framework within which detailed proposals can be made to meet the SPG requirements and respond to the rich site context.

The application of these play themes will be evident in the design of The Platform, Roof Level gardens and terraces and Ground Level public realm wherever possible with elegant and robust design solutions.

Escapism and natural play

Within the design of the Platform and Roof level gardens in particular, natural play interventions should form part of the 'wilderness' character. Natural play elements such as log piles, boulders and hollows should be designed to engage children with the ecology of the site.

Ecology based on natural landscape typologies and vegetation for play should be placed incidentally in wider landscape using natural materials. This will have ecological benefits, and aesthetic benefits to the landscape experience.

Integrated play

Play should be integrated with public realm as a flexible and innovative approach to urban landscape design.

Linear furniture, hard surface treatments and three dimensional elements in the landscape should be detailed to integrate playful elements. A low wall or edge can also become a seat, playful steps and slide.



Fig 4.7.31: Play and recreation

Fig 4.7.32: Play and recreation



Climbing walls



Engraved paving



Interpretation paving



Hammock seating



'Oculi' feature



Historic column reference



Landform with play



Historic interpretation

Fig 4.7.33: Play and recreation

Fig 4.7.34: Feature interpretation

Play inspired by historic site context

Play proposals are to have educational quality inspired by the historical site context. Education, art and knowledge based play inspired by historic site can use technology and architectural language to engage children and people of all ages.

The site's history and retained structures can be expressed in the new three-dimensional form in the public realm and landscape. It is possible to develop this by highlighting some of the historic features through simple activation such as water and sound.

Oculi

The locations of the oculi (former light and ventilation openings to vaults) are to be expressed within the landscape as features including play element to assist with historic interpretation.

4.7.31 Cycle culture

Cycling culture is an increasingly significant issue to be addressed in London and this applies to The Goodsyard proposals.

The cycle strategy is to support the local cycle culture through a number of initiatives, the key aspects of which are as follows:

- Providing a safe environment for both cyclists and pedestrians
- Generous provision of cycle storage facilities
- Visitor cycle parking facilities located at perimeter at all entrances
- Hire cycles located at key locations north, south, east and west
- Cycle hub facility to Braithwaite Street and Cygnet Lane



Fig 4.7.35: Cycle culture precedent images

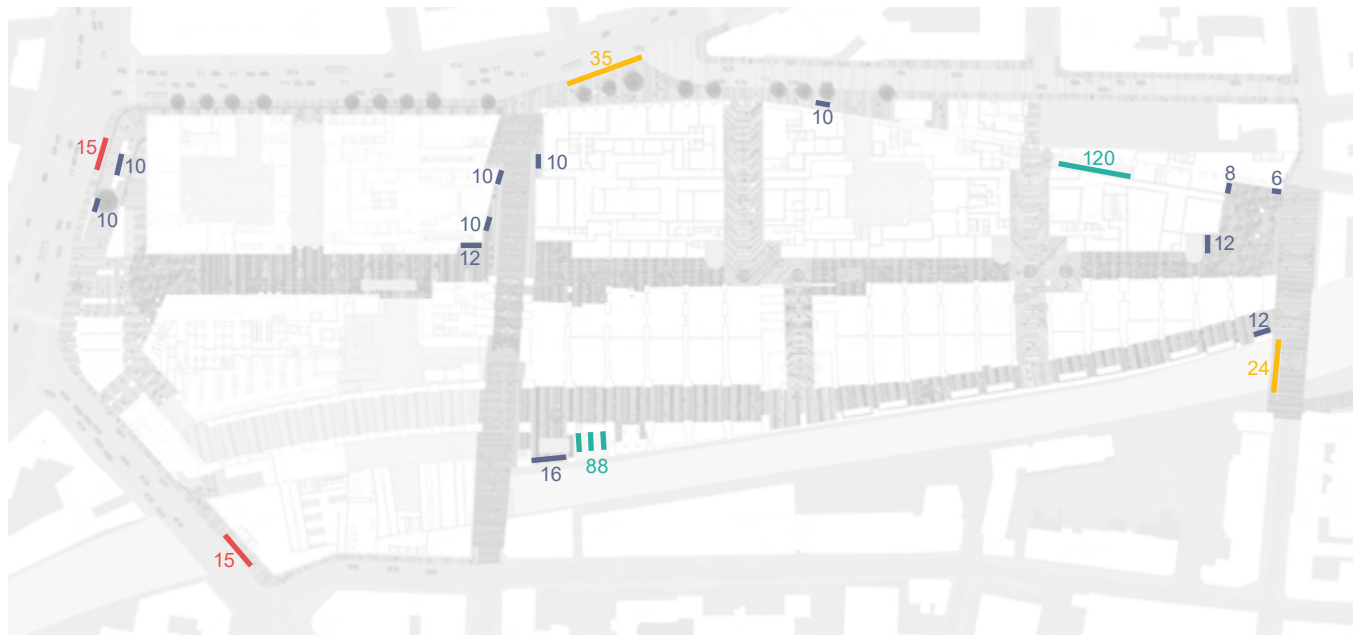


Fig 4.7.36: Ground level - Cycle strategy

KEY

- Existing TfL cycle hire docking station - total 59 spaces
- Proposed TfL cycle hire docking station - total 30 spaces
- Cycle stands - total 126 spaces
- Cycle hub facilities - total 208 spaces

Total short stay cycle parking requirement - 334 spaces

Total short stay cycle parking provision - 334 spaces

4.7.32 Lighting

4.7.33 Introduction

The lighting strategy for The Goodsyard aims to ensure the landscape and public realm creates a welcoming environment after dark which is both safe and attractive.

Key consideration is given to the site's character, location and the desire to minimise glare and light pollution.

The design intent is to provide an appropriate light level to suit operational requirements and for this to be enhanced with feature lighting that can add interest and character to the development. The arrangement of lighting is to assist the legibility of the scheme by providing higher levels of light at key points and avoiding over lighting the areas generally.

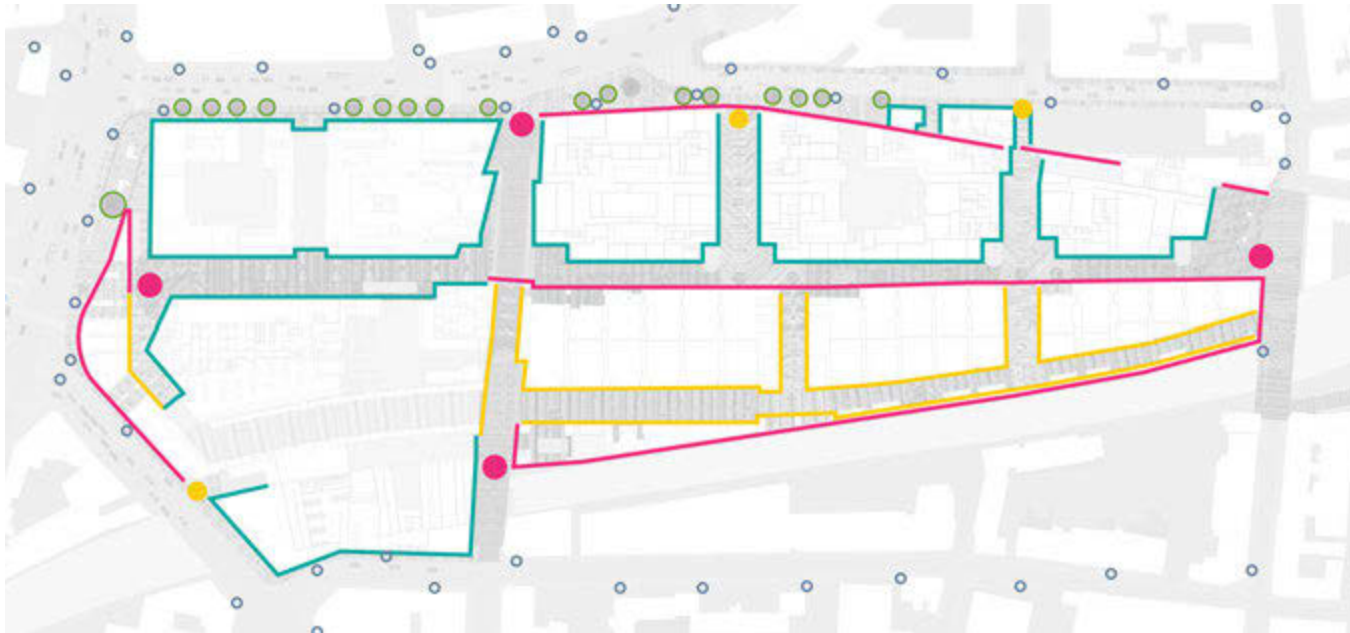


Fig 4.7.38: Ground level - Lighting strategy

KEY

Ground Level

- Operational lighting integrated into architecture
- Feature external lighting to historic structure
- Feature internal lighting to historic structure
- Feature 'gateway' lighting
- Feature 'threshold' lighting
- Uplighting to trees
- Existing street lighting

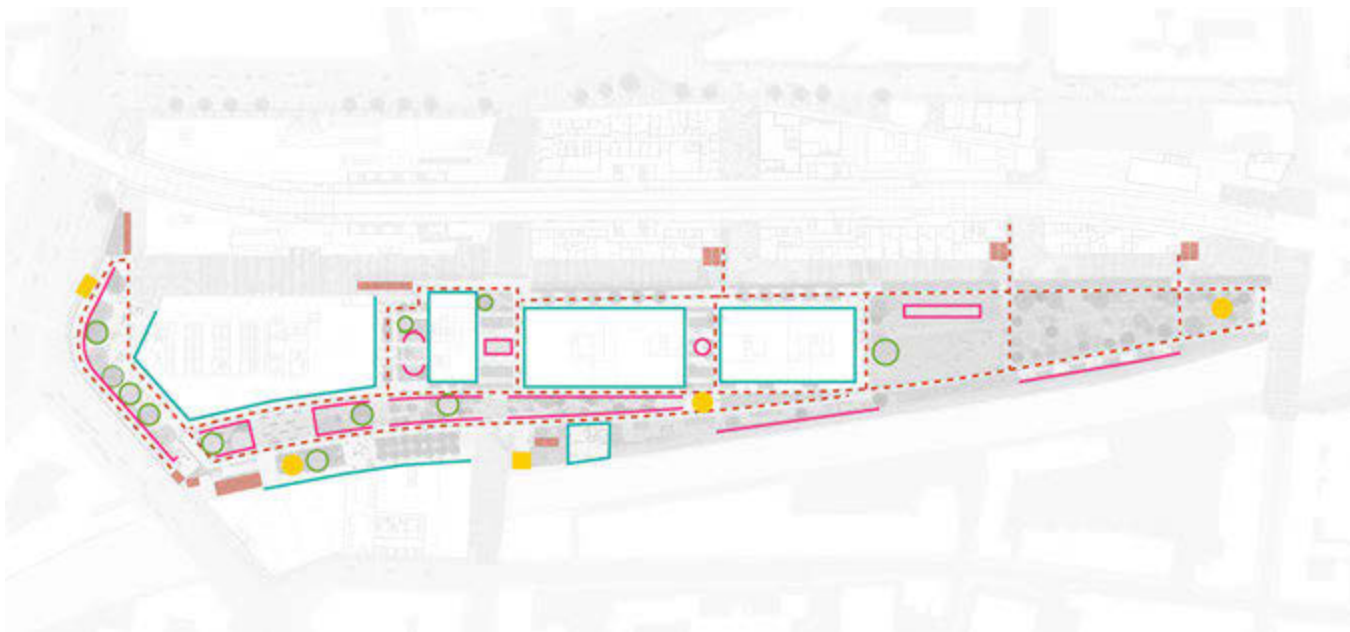


Fig 4.7.37: Platform level - Lighting strategy

KEY

Platform Level

- Operational lighting integrated into architecture
- - - Pathway lighting
- Integrated lighting to furniture/structures
- Integrated lighting to feature structures
- ||||| Integrated stairway lighting
- Uplighting to trees

4.7.34 The lighting strategy has three principal elements as follows:

4.7.35 Operational Lighting

Key considerations and aims of the operational lighting are to provide for safety and security, wayfinding, orientation and visitor comfort. This lighting is generally to be provided by building mounted, lighting integrated into the architecture, uplighting of vertical planes, low level pathway lighting and illuminated bollard lights.

4.7.36 Feature Lighting

Feature lighting elements are to highlight certain features within the public realm, the landscape and the architecture and can also be landmarks in their own right. Feature lighting may include uplighting to feature elements such as trees, the Oculi, historic paving details and lighting integrated into street furniture such as bench seating.



Column light



Walkway lighting



Feature stair lighting



Feature element lighting



Column light



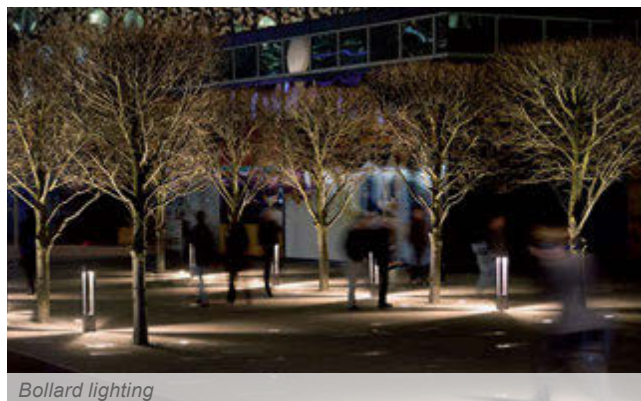
Walkway lighting



Feature wall lighting



Balustrade lighting



Bollard lighting



Tree uplighting

Fig 4.7.39: Operational lighting

Fig 4.7.40: Feature lighting



4.7.37

Seasonal / Temporary Installation

Seasonal or temporary installations can be erected for specific events or periods of time. Examples of installations include suspended light webs, fibre optics and fairy lights.

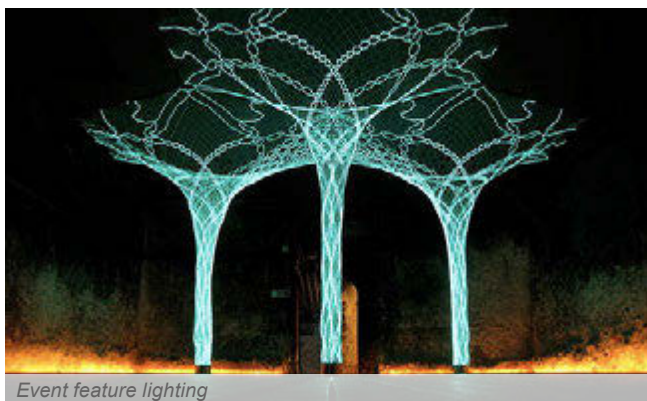


Fig 4.7.41: Event & seasonal lighting

Fig 4.7.42: Event & seasonal lighting

4.7.38 Wind Mitigation

4.7.39 Introduction

The design team is committed to ensuring a safe and comfortable public realm environment for all users. As part of the Environmental Assessment (Vol 2 Chp.10 and Vol 4 appendix F) the proposals have undergone rigorous testing and analysis, through wind tunnel testing and computational flow dynamics (CFD). The landscape and public realm were a particular focus of these tests, with the design optimised to minimise potential mitigation measures. This detailed assessment has identified that in order to eliminate strong winds and windy conditions, mitigation measures may be required along 'Middle Road', subject to the detailed design of the buildings as reserved matters applications come forwards.

Should wind mitigation measures be required, a number of banners along the space will eliminate the conditions identified during testing. The following pages explore the possible design of these banners. They would need to be around 6m in height and 1.5m wide, constructed of perforated metal, of a material in keeping with the character of the site, and aligned to the layout of the historic vaults. The banners would have sufficient clearance to keep the ground plane open and permeable. On the banners, opportunities for graphic placemaking could be explored, potentially giving a street presence to the exhibition space.

Additional wind mitigation may be required on the underside of the Overground box, and on the platform level, as illustrated on the following pages.

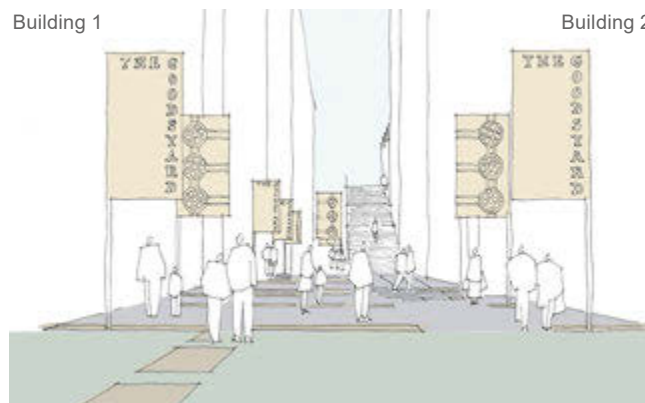


Fig 4.7.43: Sketch of wind mitigation banners on Middle Road



Fig 4.7.44: Sketch of wind mitigation under the Overground box



Fig 4.7.45: Possible locations for wind mitigation measures at ground level

KEY

Ground Level

- Wind mitigation banners
- Suspended baffles under Overground structure

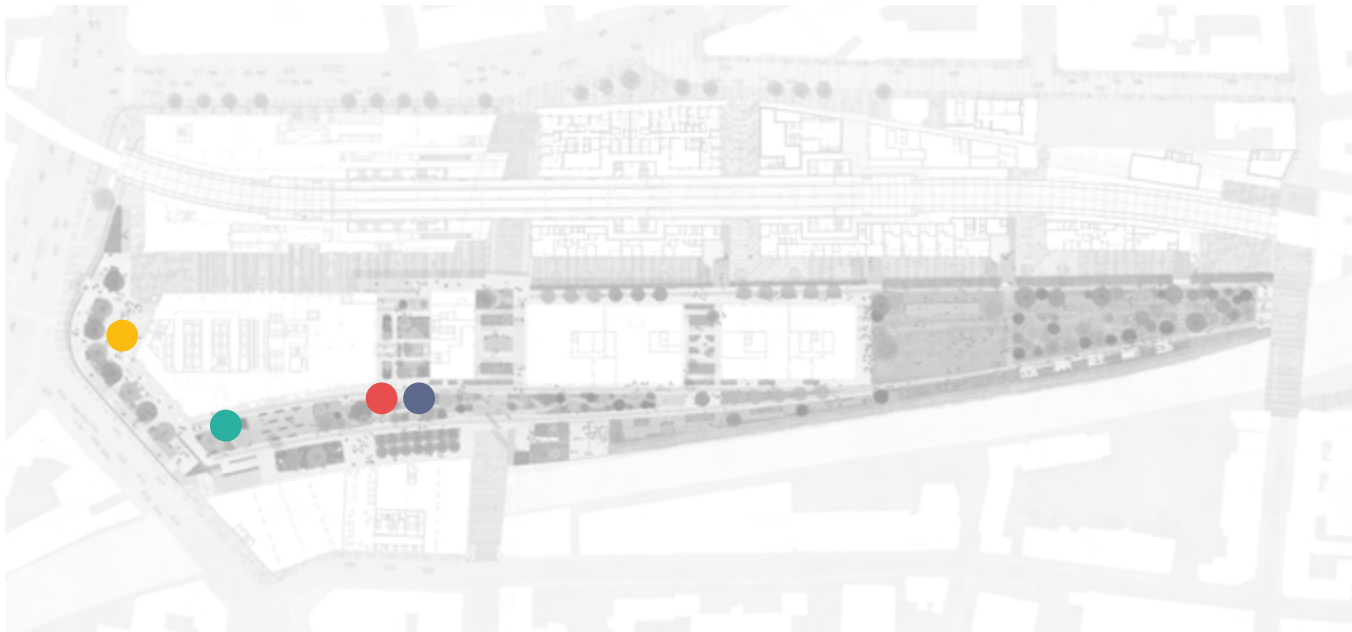


Fig 4.7.46: Possible locations for wind mitigation measures at platform level

KEY

Platform Level

- Radial hedges
- Additional 8m tall deciduous trees
- Staggered screens
- Additional planters

