



Chapter 6 describes the landscape strategy for the masterplan, explaining how the scheme proposals have been informed by different constraints and opportunities, by the site's heritage, and by the architectural masterplan.

The evolution of the strategy is described before explaining the approach to placemaking driven by landscape and architecture "Character Areas" which create a collection of different settings for life within the development.

Sitewide strategies explain how the masterplan will develop the physical elements of hard and soft landscaping, tree planting, wayfinding, street furniture and lighting.

The chapter describes how technical and planning considerations have been addressed, including flood defence, surface water drainage, urban greening, ecology, amenity, open space, sports and play, and the development of an arts and cultural strategy.



The River Thames provides a picturesque waterfront setting for a new mixed use development with the potential to become an important hub within the ever improving and growing Silvertown and Royal Docks area. The Landscape and public realm strategy works to maximise the water as a key driver for activity and recreation, while also informing the creation of character areas that relate to the land uses within the masterplan.

Large public offerings such as Dock Park and the new DLR Station Plaza anchor key spaces within the riverside experience to ensure strong connections both with nature and the existing settings. References to the site's working industrial past are expressed through spatial arrangement, materiality and art; the site's unique history and context informing the design.

Numerous flooding, infrastructure and topographic constraints have been harnessed as positive design drivers to create a flowing plan that simplifies access and promotes easy permeability, creating a strong memorable journey for residents and future visitors to the area.

## 6.01 Landscape Heritage

Reclaimed from the "Lands End" tidal mudflats and marshland, the site was dramatically shaped in the first half of 19th Century, becoming a major hub for trade with the creation of the deep water Victoria Dock, opened in 1855, and followed by the Albert Dock (1880) and King George V Dock (1921), collectively taking the name "Royal Docks".

Designed to take iron steamships, the Victoria Docks pioneered the onward passage of goods by railway, with the majority of the Development site having served as the goods yards and terminus of the Great Northern Railway. Lines came in from the north to meet the Thames alongside the wharves, dry docks and the giant ship lock which all shaped the waterfront. Building on this, the eastern docks brought the rail lines directly to the dock edge.

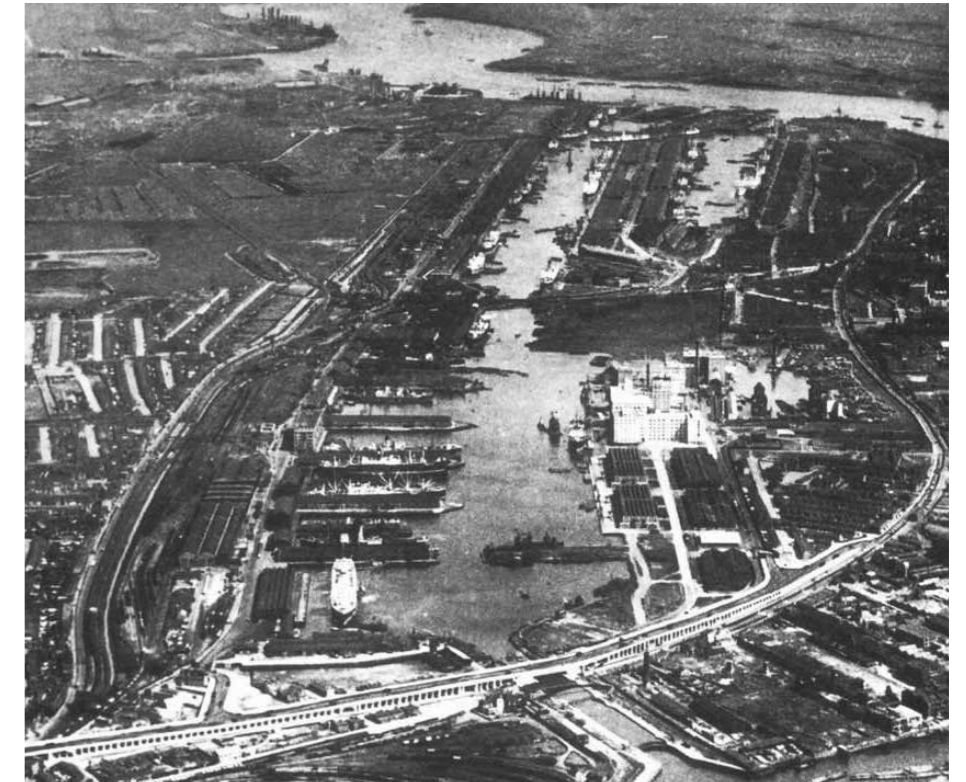
The steamships, railways and docks on the Site played a pivotal role in the development of Britain's global position in the 19th and 20th Centuries. The heritage of the working river will be referenced and remembered through the creation of a landscape which animates the waterfront with jetties and docks, echoing the railway lines in the floor surface, and creating a narrative through planting, sculpture and public realm design.

The industrial past has never left this site, evolving to suit the changing needs of London. The landscape of Thameside West will provide a setting which evokes the golden age of the Docks, at the same time providing interesting and appropriate settings for the continuing working future of industry.

This continuity of landscape will connect both residents and the workforce with their neighbourhood's history and instil pride in the place.



Ordnance Survey plan (1895) showing railway lines, dry docks and the ship canal entering the Victoria Dock



Aerial photograph (1935) looking east along the Royal Docks



Illustration (1854) showing workmen building the Victoria Docks



Aerial photograph (c.1935) showing the ship canal and railway lines

## 6.02 Landscape and public realm principles

The landscape masterplan aspires to establish a framework for high quality settings to create inspiring places for people to live, work and play, integrating positively with the surrounding area.

The creation of character areas and the development of a varied journey through the development has shaped the landscape and public realm design approach. The juxtaposition of various characters has worked with the proposed level requirements to make a functional and accessible place with a unique identity.

Offering of key large public spaces anchors the plan to always involve and prevent the creation of 'dead' unusable space. There is flexibility in the public realm to provide space for a variety of activities to suit a range of different user groups across the 18.8 Ha site.

The spaces within the masterplan have been designed according to a logical sequence of scale and use, routes and nodes where spaces, axes and activities overlap. Together, the public spaces define the structure of the public realm defining different character areas or townscape settings.

A variety of uses at street level are proposed to create activity and animation. Uses will be complemented by a cultural and educational programme, which will generate a specific local identity and establish a positive perception of what it means to live in Thameside West.

The masterplan concept has been developed from 10 landscape and public realm principles of design which are derived from the different site constraints and opportunities.



### 1 Promote links and permeability

- Reinforcing key connections:
- Create a clear street hierarchy that reinforces movement within the site
- Connects the different plots of land



### 2 Maximise water frontage

- Views to the Thames
- Riverfront promenade



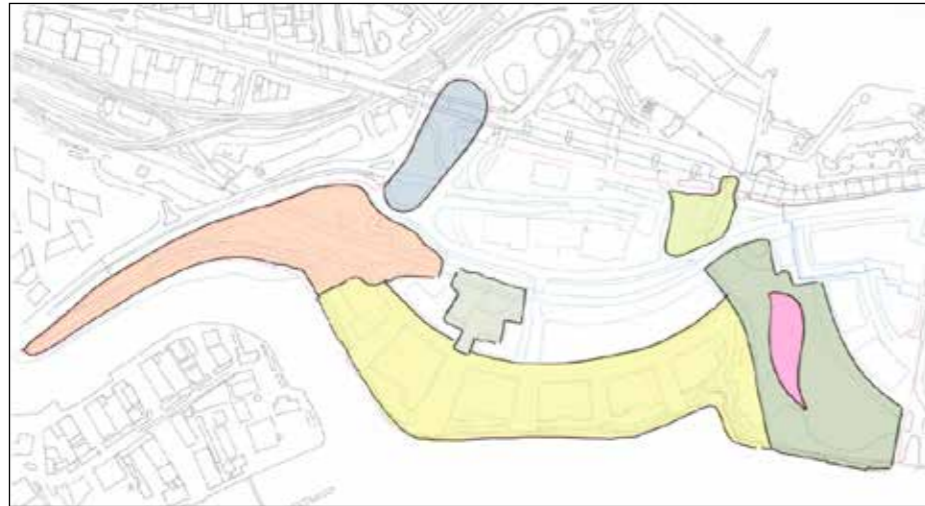
### 3 Create a major community public realm offering:

- Dock Park
- Station Plaza
- Riverfront Walk
- Leaway Ecology Park



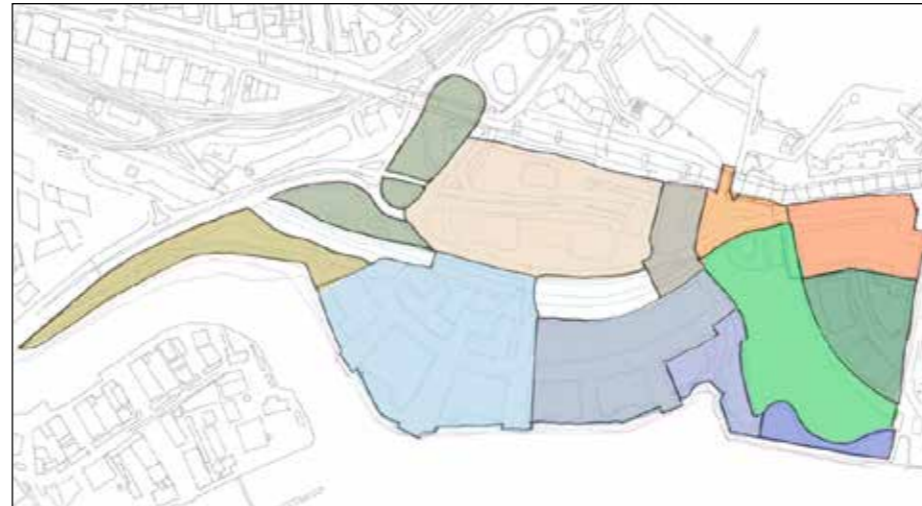
### 4 Establish a hierarchy of streets and access

- Primary distribution streets
- Neighbourhood streets
- Vehicle accessible squares
- Pedestrian only zones



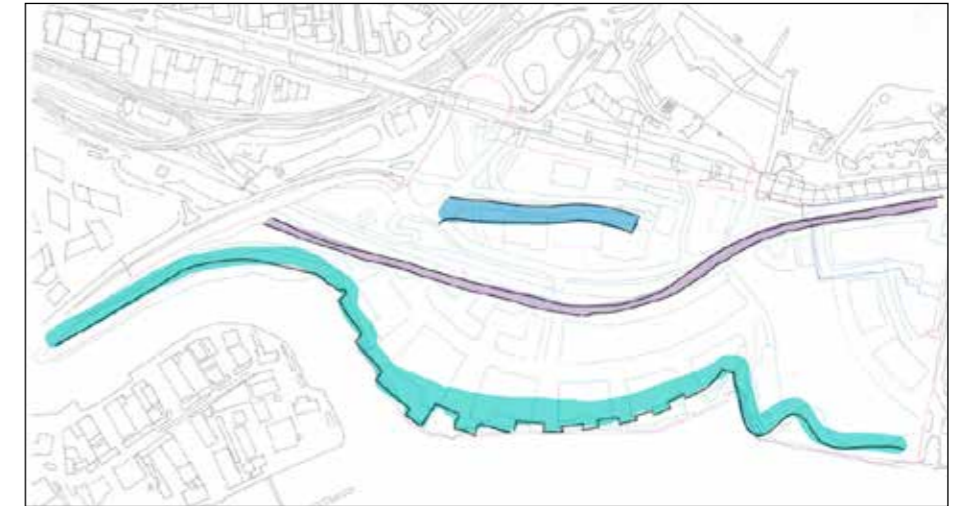
**5 Provide flexible outdoor uses and activities**

- Variation of experience and activity
- Spaces for different user groups



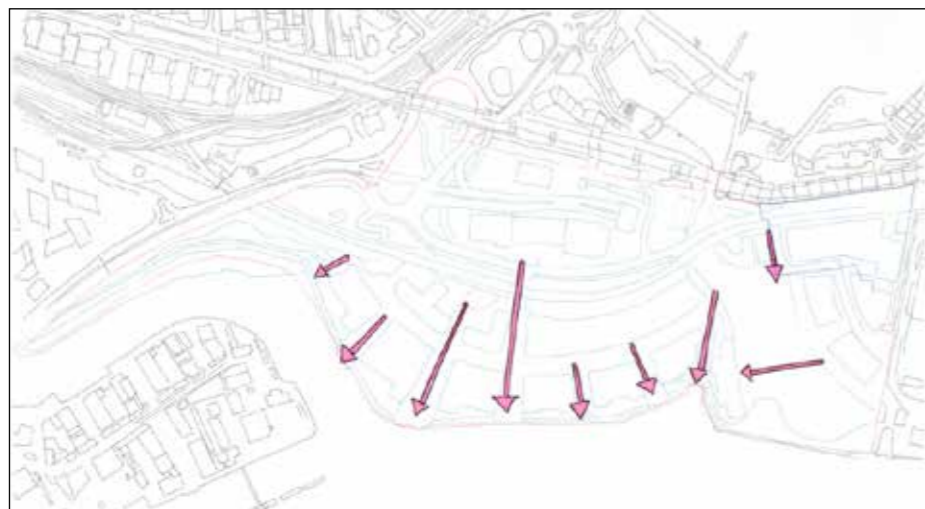
**6 Create distinct neighbourhoods**

- Reinforcing the architectural masterplan
- Creating an 'address'
- Enriching the sense of place



**7 Use constraints as opportunities**

- Flooding
- Tunnel corridor
- Infrastructure



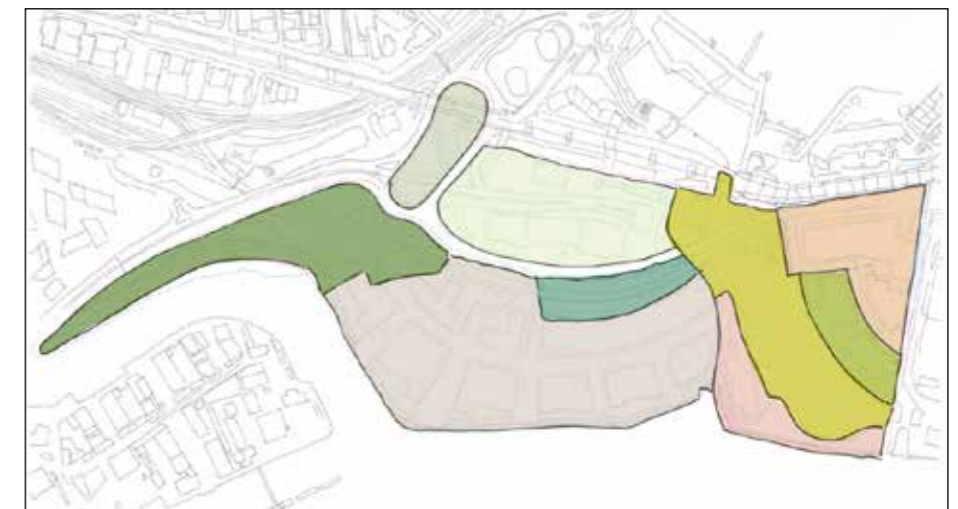
**8 Provide functional level access**

- Promoting Inclusive Accessible Design for all
- Step-free access between all public areas
- Gently sloping gradients addressing level changes



**9 Maximise sustainability**

- Drainage capacity
- Drought tolerance
- Urban greening effect



**10 Create a hierarchy of materials and planting**

- Seasonal interest/colour
- Variety of hard and softscape



## 6.03 Design evolution

As the project has developed, the design team have presented on a number of occasions to the Newham Design Review Panel (DRP) and to the GLA.

The landscape masterplan has evolved following the changing masterplan, with the following key changes to landscape arising as a result of DRP and GLA comments:

### Opening up a route between Victoria Wharf and the Park

- Direct visual and pedestrian links following the route of the historic canal connection to the Docks

### Stopping vehicles crossing the Park

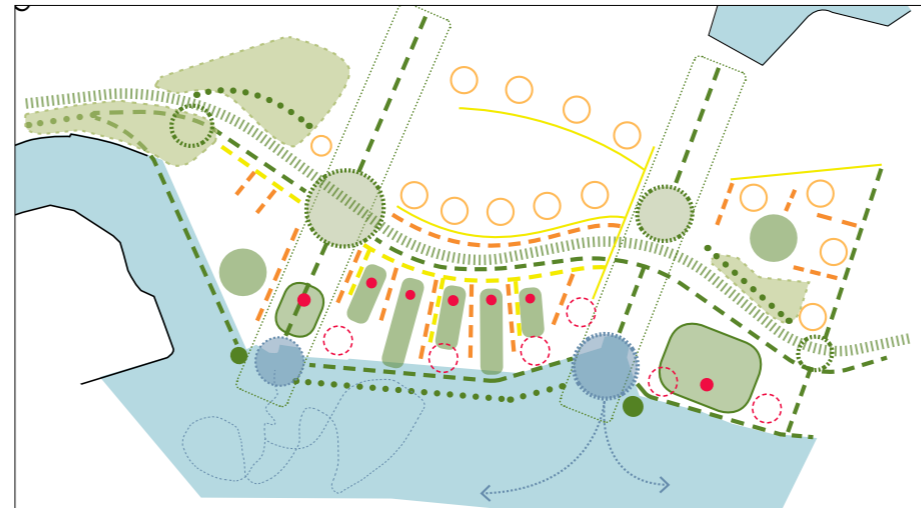
- Omitting of the road connection bridging Dock Park, creating a more flowing public realm

### Continuation of the primary route through the masterplan

- Change of level, access and circulation to create a continuous walkable and cycling route from the Leaway Park all the way through the site

### Creation of dedicated areas for formal and informal sports

- Introduction of a large open lawn for informal sports, and a MUGA ball court, large equipped play area, and BMX pump track within and adjoining the park



**1 Initial site response**

**January 2018**

- A collection of different character areas
- Key hierarchy of connections and spaces
- Street, squares, gardens and the riverfront
- Rich and site responsive public realm



**2 Design Review panel 01**

**April 2018**

- Dock Park 'river' design concept established
- A flowing connection between the Thames and Victoria Dock.
- Primary axis of activity established between the DLR and river crossing.
- Leaside Arc road link crosses Dock Park to potential future development



**3 Design Review panel 02**

**June 2018**

- Road crossing dock Park omitted.
- Victoria Wharf linked through to Dock Park on Canal route.
- Primary commercial axis realigned to the end of the peninsula.



**4 Design Review panel 03**

**September 2018**

- 'Landings' curving crescent introduced.
- Larger Dock Park for open space and amenity.
- MUGA and BMX pump track added to soften and animate Silvertown Yard
- Significant children's play space in Dock Park

## 6.04 Landscape character areas

The public realm defines specific settings that support various building typologies. Spaces within the masterplan have been arranged according to a logical sequence of scale and use, related to entrance points to the Site and routes and nodes where spaces, axes and activities overlap. Building massing and typology significantly contribute to the scale and experience of the spaces.

The specific characteristics of the spaces will be articulated by the choice of materials, plant species, architectural features and street furniture. Together, these features define the character areas that structure the townscape.

To maintain consistency across the Site there will be common themes incorporated within all of the spaces that will underpin the place-making strategy. This could include a trail of artwork, integrated play features and ecological habitats, making reference to the current use of the Site but also its history and cultural significance.

There are three primary characters in the masterplan:

### Soft landscapes

Significant neighbourhood parks for amenity and ecology, providing green infrastructure for the development and the wider community, including two riverfront parks with a 1.0km long waterfront.

### Waterfront neighbourhoods

The core residential, community and commercial heart of the masterplan, arranged to provide multiple connections to the Thames and Lea, and a variety of different ways to interact with the river along a continuous promenade.

### Active Yards

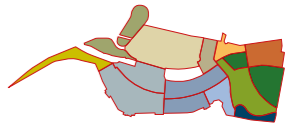
Mixed neighbourhoods with significant working industrial space and a more robust, urban feel in contrast to the character of the parks and waterfront.



Key character areas

<span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span> Leaway Park	<span style="display:inline-block; width:15px; height:15px; background-color:grey-blue; border:1px solid black;"></span> Riverside Quarter + Station Plaza	<span style="display:inline-block; width:15px; height:15px; background-color:tan; border:1px solid black;"></span> Thameside East
<span style="display:inline-block; width:15px; height:15px; background-color:lightgreen; border:1px solid black;"></span> Eastern Ecology Park	<span style="display:inline-block; width:15px; height:15px; background-color:blue; border:1px solid black;"></span> Thameside Crescent + The Quays	<span style="display:inline-block; width:15px; height:15px; background-color:brown; border:1px solid black;"></span> Silvertown Yard
<span style="display:inline-block; width:15px; height:15px; background-color:mediumgreen; border:1px solid black;"></span> Dock Park	<span style="display:inline-block; width:15px; height:15px; background-color:lightblue; border:1px solid black;"></span> Victoria Wharf	<span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span> Dock Gateway
<span style="display:inline-block; width:15px; height:15px; background-color:darkgreen; border:1px solid black;"></span> Parkside	<span style="display:inline-block; width:15px; height:15px; background-color:darkblue; border:1px solid black;"></span> Victoria Waterfront	<span style="display:inline-block; width:15px; height:15px; background-color:red; border:1px solid black;"></span> The Landings

## 6.05 Landscape masterplan



Former industrial brownfield sites create constraints that in the past have held back regeneration and development. The Thameside West site is no different and provides many obstacles to the creation of a strong place and settings appropriate for people to not only work, but also live and enjoy daily life. Continuing Industrial use both within and around the site offers additional challenges to overcome.

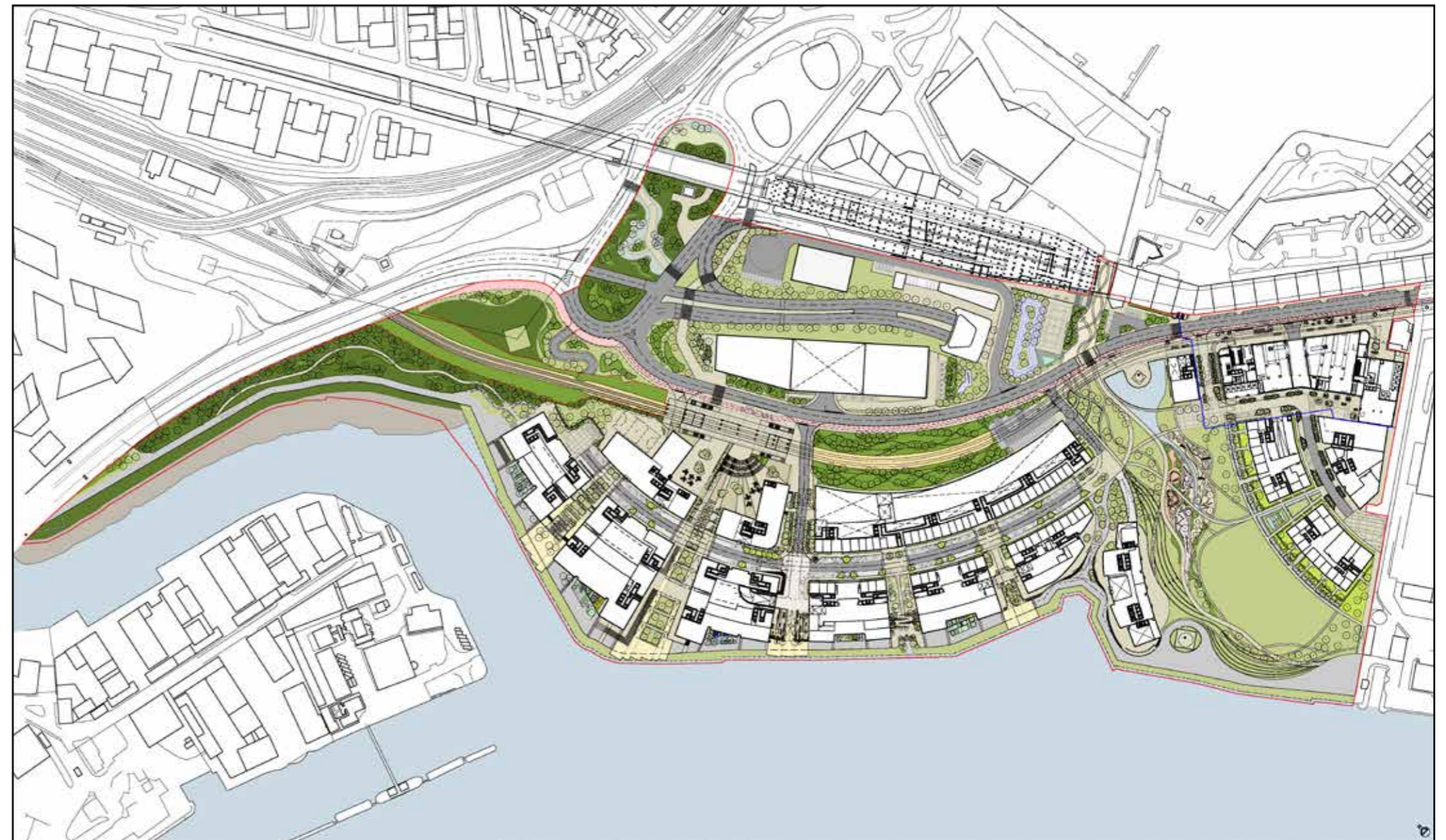
The key priority of the landscape masterplan was to create clear and permeable access, to overcome the severances in the site; maximise connectivity to the riverside; and create clear linkages through existing and future infrastructure including the Silvertown Flyover, The Lower Lea Crossing (A1020), Dock Road, DLR flyover, Cable Car and the proposed Silvertown Tunnel.

Strong open spaces; Dock park and the Leaway Ecology Park; anchor the ends of the site, buffering some of these issues while at the same time creating green 'lungs' to allow the site to breathe; becoming flexible enjoyable outdoor amenity spaces.

The residential and working neighbourhoods have spaces and streets of varying scale, materiality and character which feed into a logical hierarchy that is easily navigable through the site.

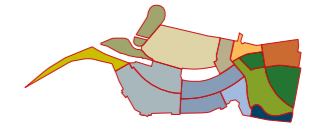
The layering and crossroads of key character spaces is highlighted through the creation of strong squares and the use of materials that guide users through the site and beyond its boundaries.

A circuit of livable green spaces with appropriate play and amenity also provides a local draw for visitors, and reasons to stay and enjoy Thameside West as a vibrant, living place.



Landscape masterplan

## 6.06 Tree planting



The tree planting strategy has been designed to provide a robust layer of greenery affirming the structure of the proposed public realm and defining its identity and distinctiveness.

Trees have been divided into different groups of a single or multiple species in order to maximise their potential qualities.

The tree species which make up these groups have been selected according to the following criteria:

- Ensure a long term durability, robust species capable to resist and adapt the possible consequences of climate change (e.g. long periods of drought and heavy rain falls).
- Offer human comfort, providing dense shaded areas and a strong structure with the capacity to mitigate the negative effects of high temperatures and strong winds.
- Provide seasonal visual amenity during the whole year with attractive ornamental qualities.
- Promote local biodiversity by increasing the overall population of native species and attracting the local fauna, offering an ecological niche and refuge.



Sideshow tree planting strategy



Evergreen



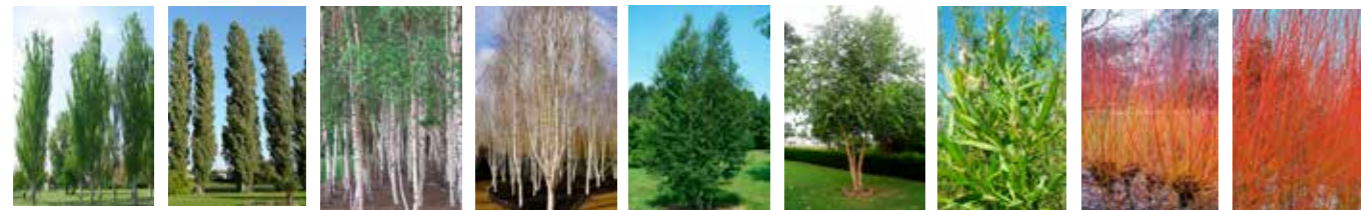
Chamaecyparis obtusa    Araucaria araucana    Pinus mugo 'Columnaris'    Pinus pinea umbrella form    Pinus nigra    Magnolia grandiflora

Deciduous with structural interest during winter



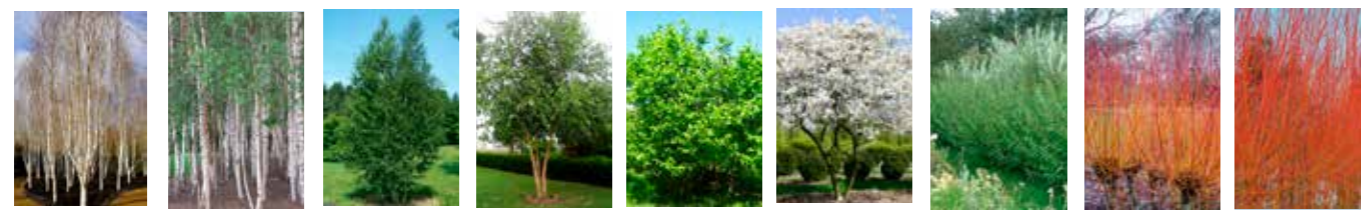
Platanus x acerifolia    Carpinus betulus    Carpinus betulus 'Fastigiata'    Quercus robur 'Fastigiata'    Metasequoia glyptostroboides    Metasequoia glyptostroboides    Populus nigra 'Italica'    Populus alba

Wetlands and habitats



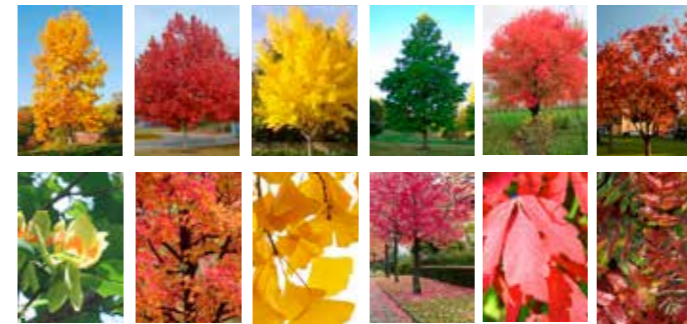
Populus alba    Populus nigra 'Italica'    Betula pendula    Betula utilis 'Jacquemontii'    Betula pubescens    Betula nigra    Salix viminalis    Salix viminalis    Cornus sanguinea

Swales and suds



Betula utilis 'Jacquemontii'    Betula pendula    Betula pubescens    Betula nigra    Corylus avellana    Amelanchier lamarckii    Salix viminalis    Salix viminalis    Cornus sanguinea

Autumn parkland colour interest



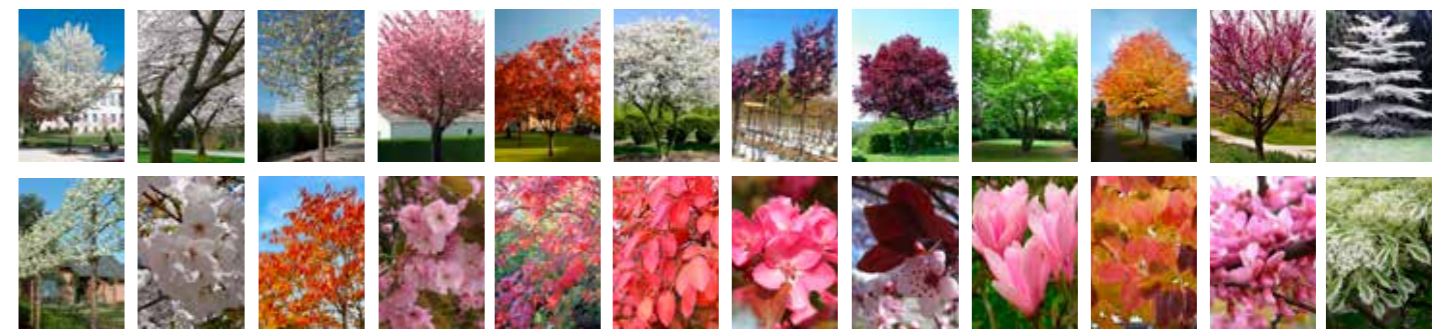
Liriodendron tulipifera    Acer rubrum    Ginkgo biloba    Liquidambar    Acer griseum    Sorbus aucuparia

Broadleaved parkland



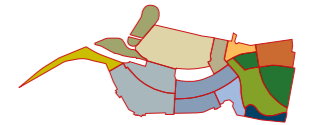
Acer campestre    Alnus glutinosa    Tilia cordata    Corylus avellana    Gleditsia triacanthos    Carpinus betulus

Specimen



Pyrus chanticleer    Prunus yedoensis    Prunus avium    Prunus serrulata    Sorbus aucuparia    Amelanchier lamarckii    Malus rudolph    Prunus cerasifera    Magnolia x soulangeana    Cercidiphyllum japonicum    Cercis siliquastrum    Cornus controversa

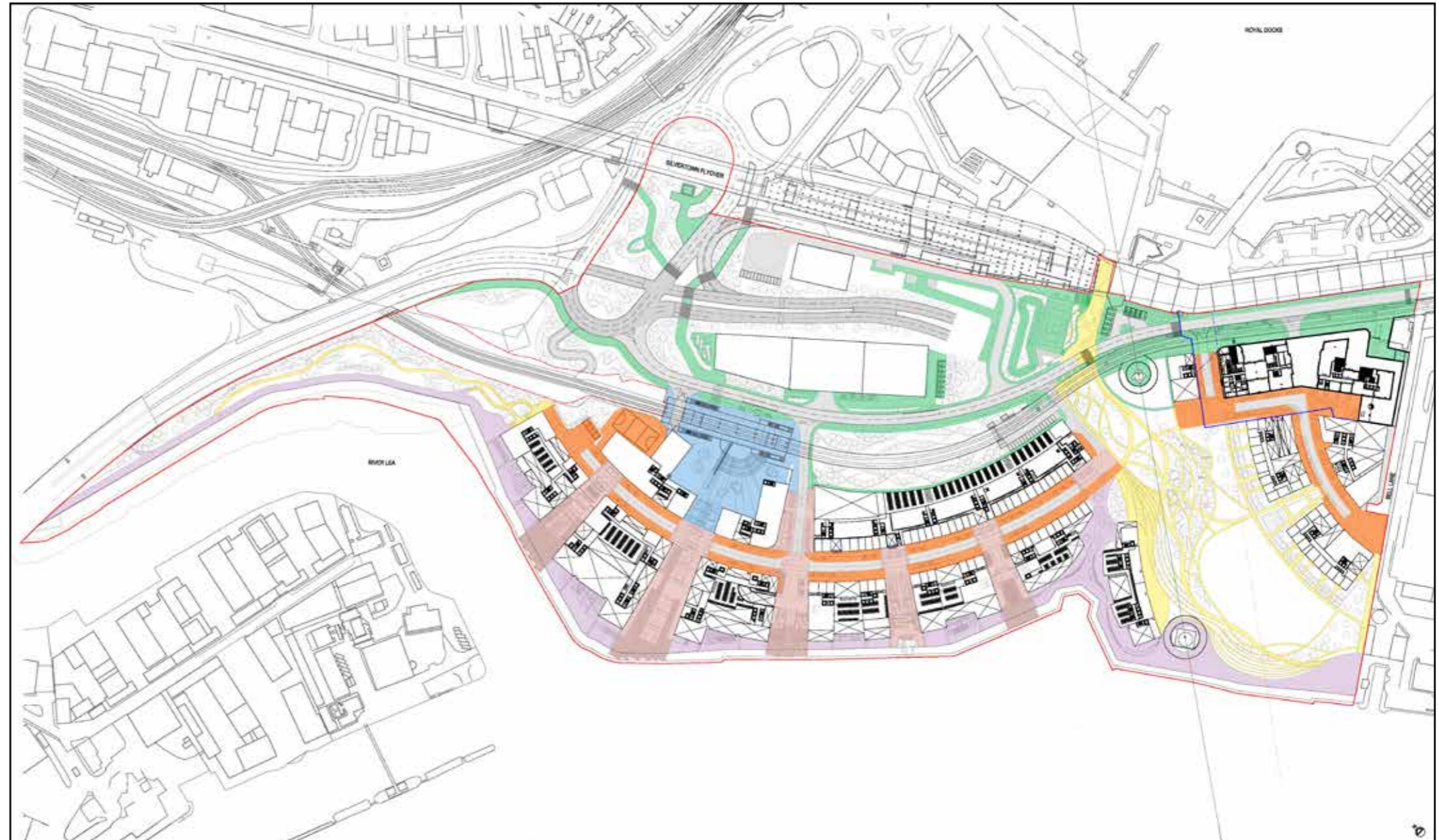
## 6.07 Hard strategy









The proposed paving materials have been selected for their appearance and durability. The predominant paving types are natural stone and permeable paving. A combination of these materials could be used for pavements, roads and pedestrian priority areas.

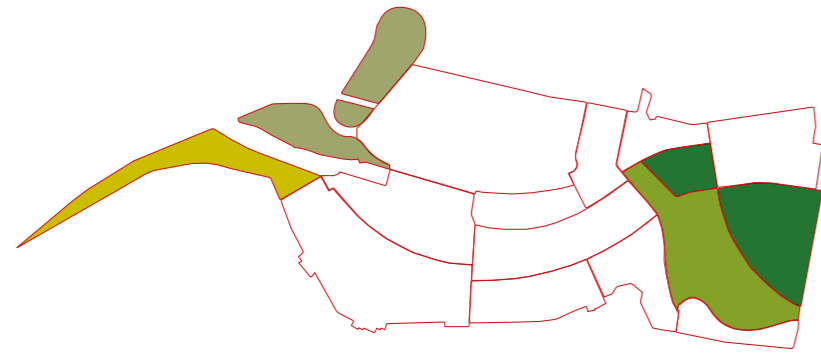
The remainder of carriageways can be tarmac lined with concrete conservation kerbs. All of the paving will work to complement the architectural typologies while building upon the character areas.

The following images provide references for the desired design quality throughout the illustrative masterplan. Further information of hardscape design and materiality can be found within the Design Code: Landscape Design Guidelines.

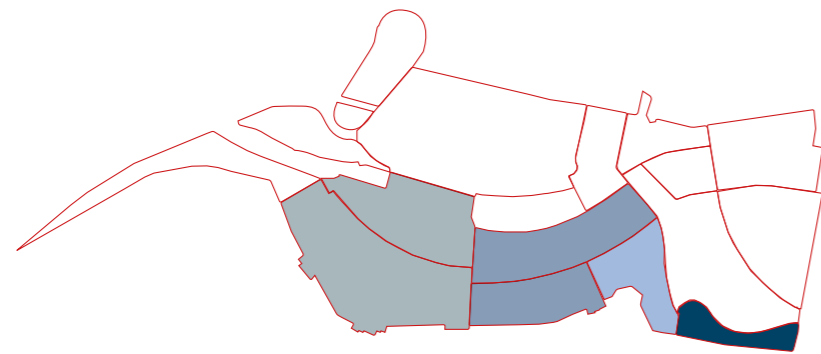


Site wide paving strategy

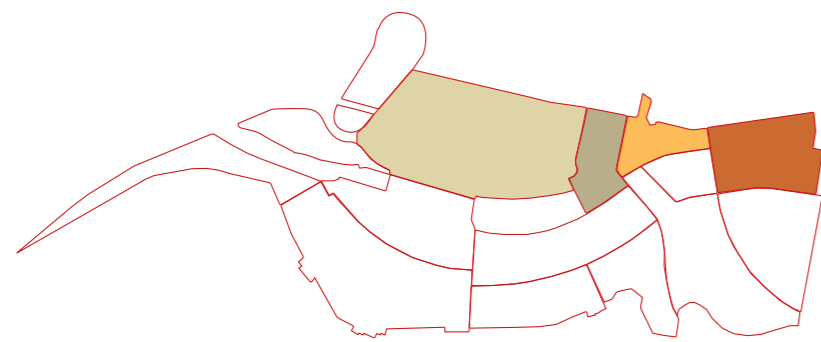
- |   |  |
|---|--|
|  Waterfront walkways             |  Urban streets and yards  |
|  Dock gardens                    |  Park and nature pathways |
|  Neighbourhood streets and yards |  Station Plaza            |



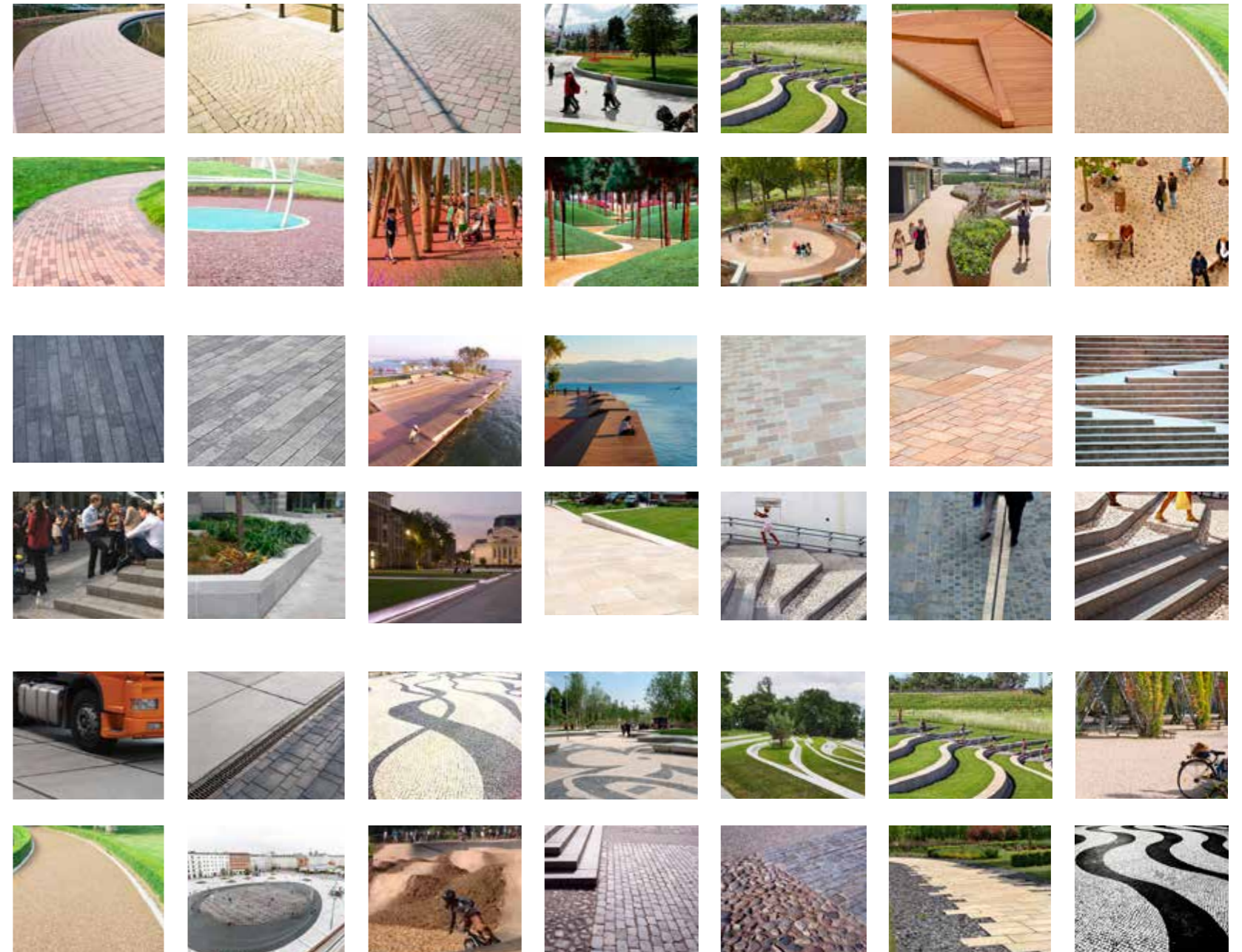
Soft landscape



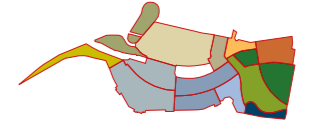
Waterfront and neighbourhoods



Active yards



## 6.08 Soft strategy



The site has many differing character areas where a differing quality of planting is required. There is an overlapping of themes and species to help bring together the site as a holistic and verdant place.

Swathes of industrial and infrastructure land are re-purposed and enhanced for the pedestrian experience with strong and vibrant visual palettes, while ecologically friendly planting helps to create a mind-set of sustainability and pride in the neighbourhood.

Functional amenity spaces are hard wearing yet allowing for a variety of flexible uses. All of these are interconnected by a series of ornate planted streetscapes, front gardens and walkways that make for a wonderful accessible green grid and infiltration of nature into the site






Longevity and ease of maintenance has been planned to correspond with the areas where basement or podium are located below the planting and could cause issues if not considered early in the design process. The size of shrub and perennial planters allows for proper growth while potential water irrigation usage has been considered for potential impacts of global warming. Planters also integrate into ramps and steps at level changes to soften the experience and journey.

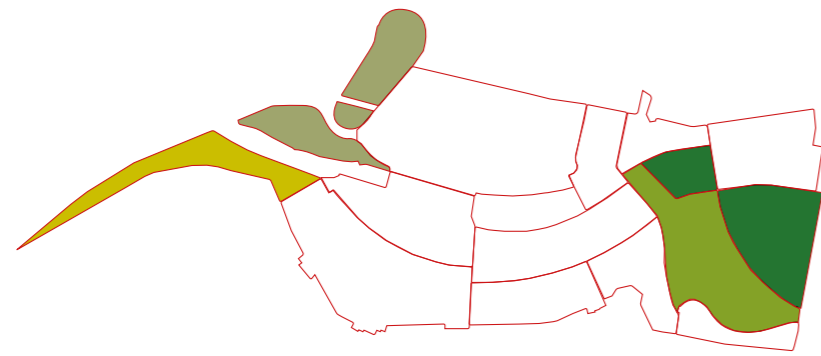
Seasonal interest has been considered to ensure a year round quality experience with colour, flower and leaf types of various heights and sizes.

By maximising the amount and area of planting across the site the proposals provide intrinsic yet sometimes unconscious setting to a wonderful place for residents.

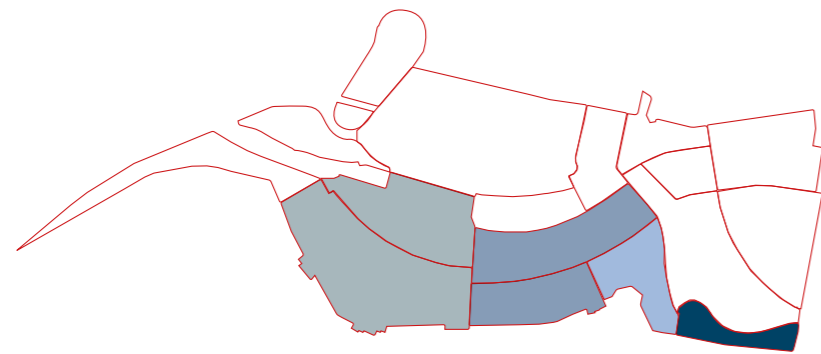


Site wide soft planting strategy

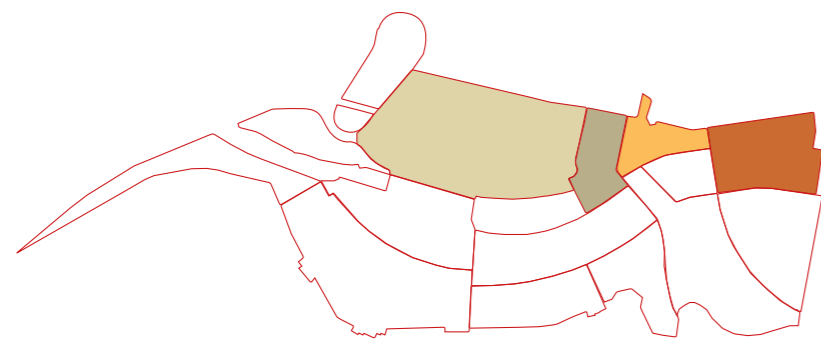
- |  |   |
|--|---|
|  Amenity lawn                         |  Dry SUDS channel - Dock Park                |
|  Ground cover and ornamental planting |  Dry SUDS channel for privacy frontage       |
|  Tall perennials                      |  Buffer planting for privacy frontage        |
|  Grassland meadow                     |  Buffer planting for infrastructure frontage |
|  Wildflower meadow                    |  Thames intertidal planting                  |
|  Wetland and marginal planting        |  Existing intertidal planting                |



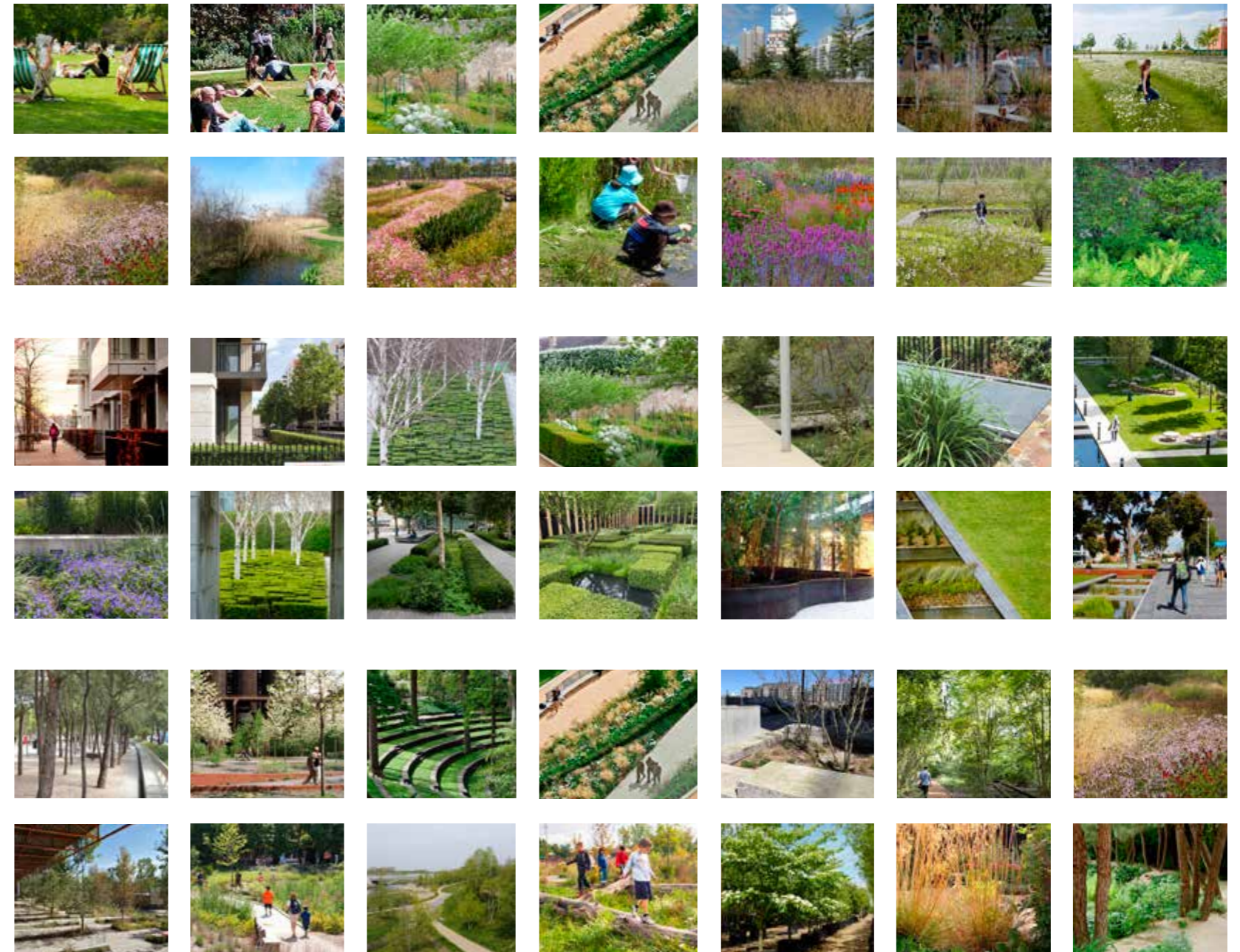
Soft landscape



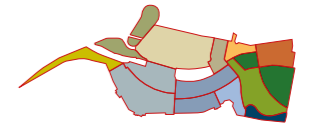
Waterfront and neighbourhoods



Active yards



## 6.09 Furniture and Lighting strategy

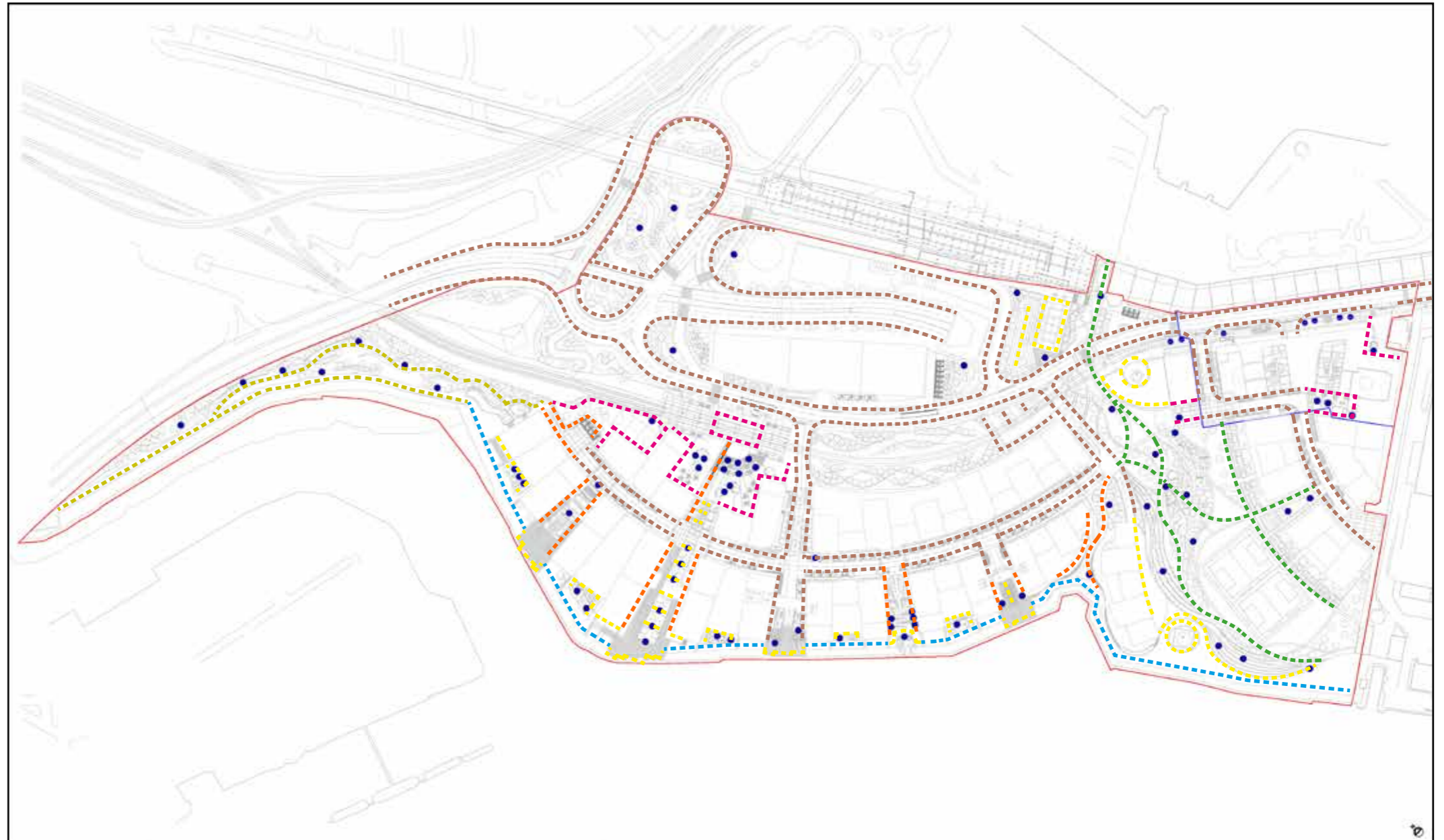


A well designed furniture and lighting scheme will enhance the resident and visitor experience while providing function and purpose. The character areas are enhanced by a palette of suitable types of furniture and lighting bringing together the landscape, public realm and architecture.

Providing flexibility in the furniture specification, size and arrangement will allow for different uses and sizes of groups to find multiple ways to enjoy the outdoor spaces. Appropriate seating is provided at key locations for restful interaction with the riverside environment, while other furniture and lighting works to guide people towards the river and through the space for a rounded experience.

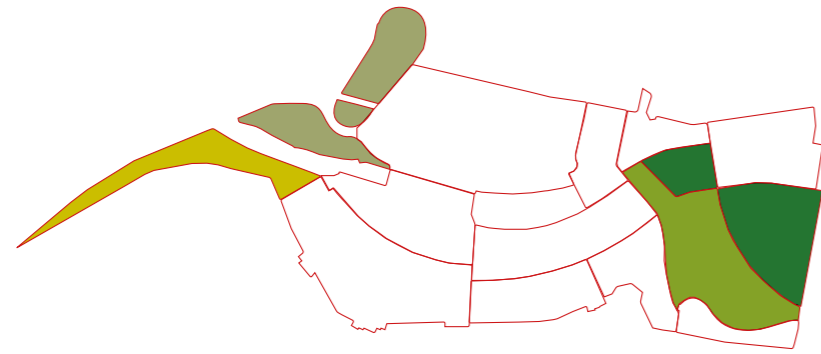
Designs should be selected to minimise roosting, perching, nesting scavenging opportunities for the identified birds of concern for the airport.

The proposed lighting types will make a safe and pleasant night time environment. It will also reinforce the way finding and circulation strategies, giving emphasis to the primary circulation routes and highlighting special features.

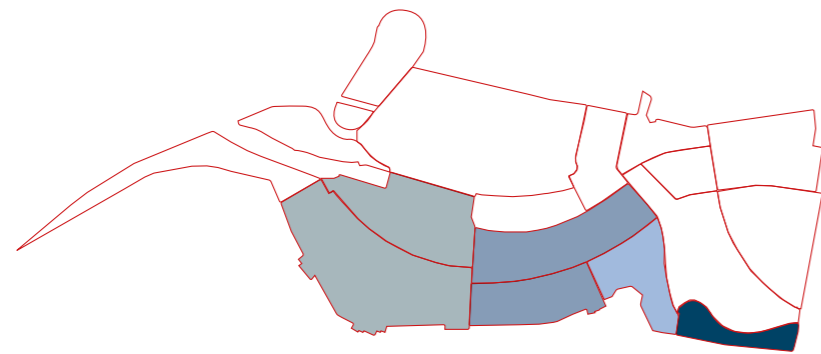


Lighting and furniture strategy

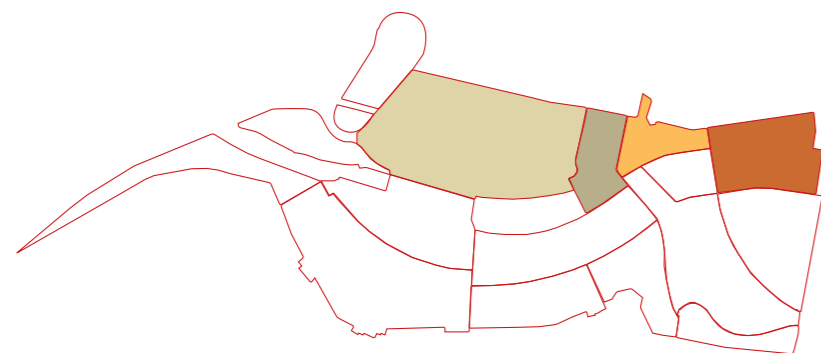
- |                                 |                                      |
|---------------------------------|--------------------------------------|
| Lighting - vehicle              | Lighting - waterfront promenade      |
| Lighting - pedestrian and cycle | Lighting - low lux habitat sensitive |
| Lighting - feature              | Lighting - park                      |
| Lighting - courtyard            | Seating areas                        |



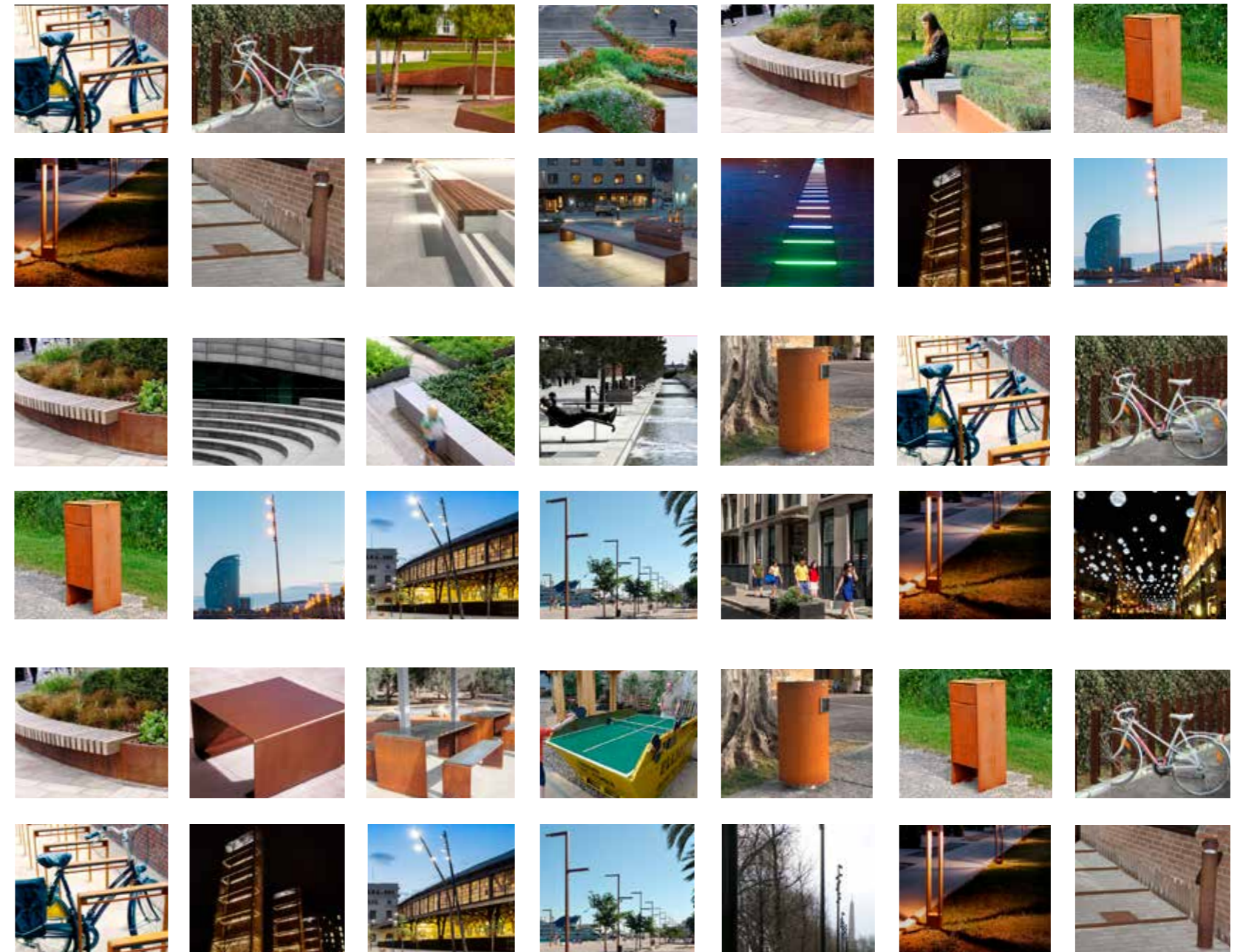
Soft landscape



Waterfront and neighbourhoods



Active yards



## 6.10 Planning guidance

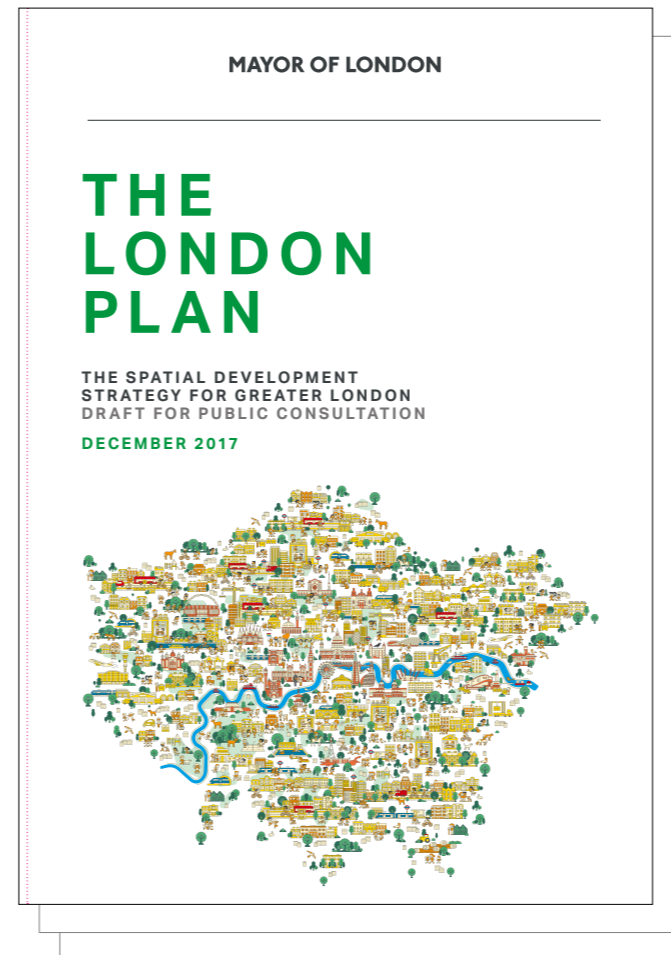
Careful consideration has been given to National, London and Borough planning policy in regards to the allocation and design of outdoor amenity space. The amount of amenity and play space corresponds with the requirements to provide ample and enjoyable spaces as part of the landscape and public realm experience.

For example; the Newham Parks and Open Spaces Design Guide (2008) was prepared in advance of significant change in the borough anticipated with preparations for the 2012 London Olympic Games.

The NPOSDG set out to:

- Set high design standards for all improvement works and enable a co-ordinated approach to be achieved across all parks and open spaces
- Inform all officers acting as clients about design considerations to be incorporated in a brief and throughout the design process
- Guide design teams engaged to design integrated schemes for the refurbishment or renewal of existing parks and open spaces
- Enable those responsible for parks and open spaces management to appreciate how design should contribute to raising quality whilst being realistic about future maintenance provision
- Enable local people and stakeholders to appreciate considerations associated with the design of parks and open spaces
- Enable decision-makers to appreciate the factors that must come together to achieve best design practice
- Increase awareness, of long-term design and management considerations, with a specific view to their sustainability.

Working with the GLA and Newham policy has driven the aspiration to create a series of character areas appropriate to such a site as this.



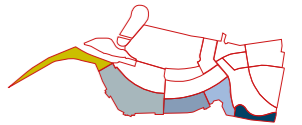
The London Plan (DRAFT December 2017)



Newham Parks and Open Spaces: Design Guide (2008)



## 6.11 Flood Strategy / River Wall



A flood and river wall strategy has been developed as part of an early works package to ensure that the Silvertown Tunnel can be bored and constructed while safeguarding the site against rising future flood risk and enhancing the ecological value of the riverfront.

The strategy consists of three interventions along the river edge:

### Wall 1

- A new river wall set just beyond the line of the existing river wall to a height of +2.9m AOD, with intertidal planted terraces rising at 1:7 slopes towards the land.

### Wall 2

- A new continuous hard paved River Walk created at +5.2m AOD a minimum of 4.0m width.

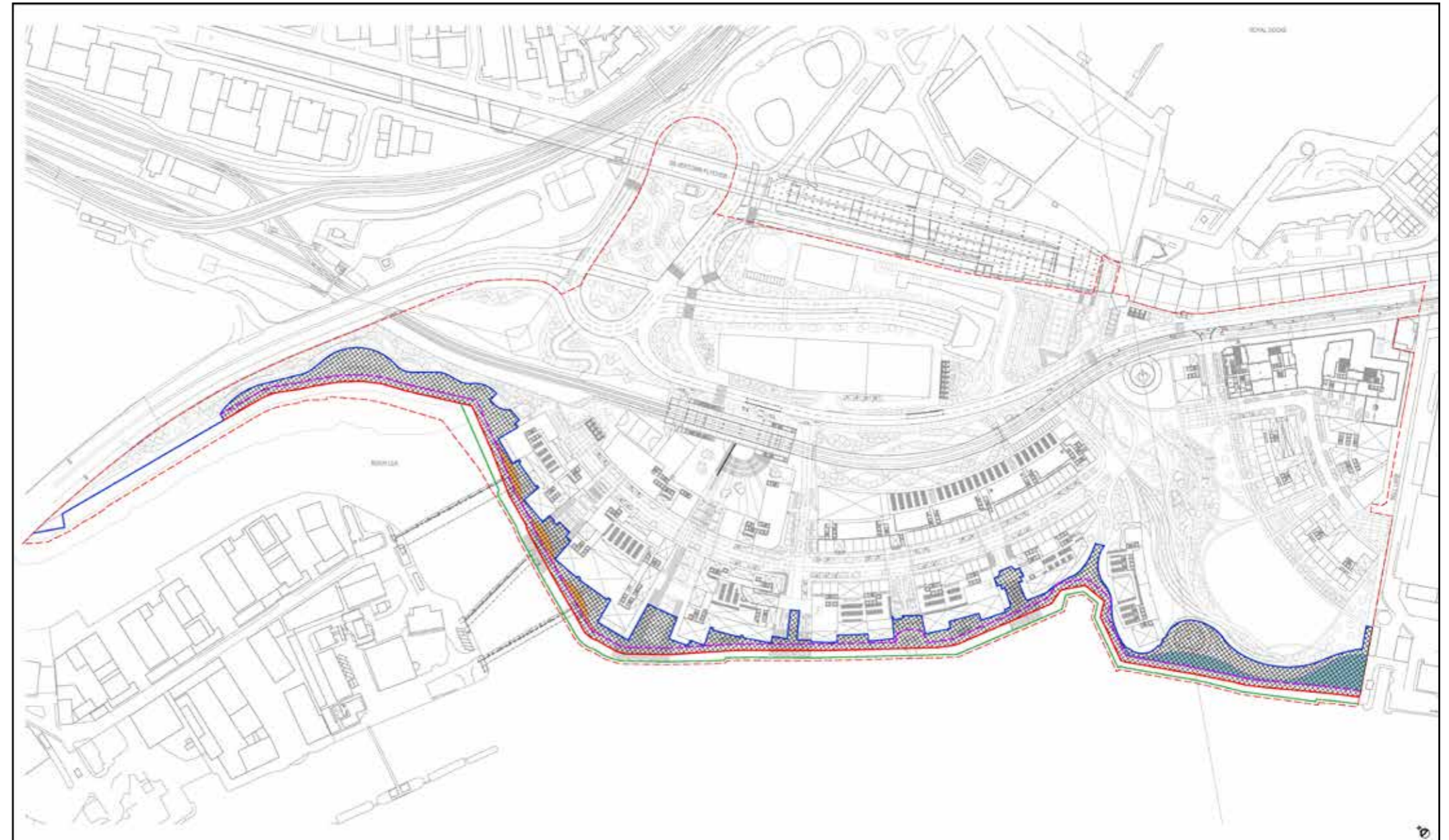
### Wall 3

- A flood defence level of +6.2m achieved with steps, building lines and rising landscape to provide further flood capacity and defence.





The +5.2m AOD River Walk will protect most Thames flooding events except for a Thames Estuary 2100 breach event, for which the +6.2m line has been provided (For further detail refer to engineering reports)

A landscape strategy has been developed to give the riverside promenade the flexibility to handle EA/site wide and emergency access requirements while still providing usable positive amenity experience. Level changes from +5.2m to +6.2m create the need for ramps and steps up from the river promenade out of flood risk areas towards the residential levels and entrances to the majority of buildings.

Further phasing and construction coordination will occur with future Reserved Matters Applications. The proposed overhanging jetties extend up to the outer line of the intertidal planting, and should be detailed to allow light to the planting below, and to provide safe access for maintenance and inspection.



Site levels and flood defence lines

-  Wall 1 - +2.9m AOD
-  Wall 2 - +5.2m AOD
-  Wall 3 - +6.2m AOD
-  +5.2m to +6.2m AOD flood capacity area