LEA RIVER PARK DESIGN MANUAL

QUEEN ELIZABETH OLYMPIC PARK

LEA RIVER PARK
DESIGN MANUAL

CONTENTS

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WELCOME TO THE PARK

The Lea River Park provides an exciting opportunity to invest in Newham's wealth of natural resources in waterways and green spaces, in addition to the industrial and built heritage, to create an outstanding public space accessible to all who live and work in the borough. Our vision for the Lea River Park is for high quality, accessible parkland incorporating open space and waterways with new walking and cycling routes which will add to the decades of investment in transport infrastructure that have gone into the borough, enabling our community to be even better connected.

Running through the spine of the borough's key opportunity area, the park and improved connections will help to attract further investment into the borough whilst providing high quality leisure and recreational space to those who live and work here.

With the scale of regeneration taking place in Newham, it makes us one of the most exciting places to visit in the UK.

Sir Robin Wales
Mayor of Newham

Everybody recognises the Thames as the lifeblood of London. But very little is said about the River Lea and its importance to East London. It's one of the few Thames tributaries to still exist as an above ground river. It's an area filled with green spaces, wildlife, and flows through some of the most interesting parts of Tower Hamlets

The Leaway is an idea I have long championed, since my time as the Deputy Chair of the London Thames Gateway Development Corporation. In my time at City Hall, I have become additionally aware of the spaces 'between' boroughs and quite how important, but often neglected, they can be. Running through historic parts of the borough such as Trinity Buoy Wharf, Three Mills and East India Dock Basin, it will connect a series of existing public open spaces along the river, helping to make this river a destination for leisure and tourism and better tie our communities together.

Tower Hamlets will see lots of new and exciting developments over the coming years and it is crucial that we protect and enhance the green spaces along the River Lea.

John Biggs
Mayor of Tower Hamlets

Three Mills Green, the first park area of the Lea River Park completed in 2012


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EXECUTIVE SUMMARY

The Leaway / Lea River Park

The Lea River Park project connects Queen Elizabeth Olympic Park to the Royal Docks and the River Thames with new continuous public parklands - 'completing' the 26-mile long Lee Valley Regional Park. The strategic first phase of this vision is the delivery of a linear park named the Leaway which creates a continuous walking and cycling route along the River Lea. This connects a series of existing but fragmented public open spaces; over time this route will be added to with new parks and additional pedestrian and cycle connections, delivered as land becomes available.

This document introduces the concepts behind the Lea River Park, an initiative that will aid regeneration and address the acute lack of public open space for existing and future residents within the Lower Lea Opportunity Area and Poplar Riverside Housing Zone.

The Leaway is the first phase in delivering this park and will provide 1.41ha of new and improved public open space through its initial projects. However, this measure of scale belies the project's strategic importance: in tackling the most challenging physical severances that affect the Leaway, these projects fulfil a key enabling role. By providing the backbone of the emerging park, the Leaway will be instrumental in creating and assembling 235ha of new and improved public open space within the Lower Lea Valley.

Design Manual

This manual is intended as a design guide and has been developed in close collaboration with the project's partners. The document scopes out the extent and ambition of the Leaway and sets up a framework of reference for its delivery. A palette of materials, street furniture and finishes have been outlined that are intended to give level of continuity across the series of diverse spaces that will form the new park. The design manual is not intended as a specification, but rather as a framework that other professionals can operate within during the delivery of the Leaway.

Curating the Valley

In addition to this design manual a Curatorial Strategy has been commissioned from Create London by the LLDC. This document identifies key artefacts and stories which tell the stories which underlie the park. These themes are broad and include; maritime endeavor, industrial development, revolutions in public health, social struggle and emancipation, immigration, creative energy, agricultural innovation and environmental change.

The two key outcomes of this are the publication of the 'Odd guides' and a series of proposals for artistic commissions and events to increase public engagement and support for the project. The published Odd Guides are part artwork, part map and part trail guide, and have been developed to create a broader more imaginative reading of the valley's historical narratives.

DESIGN PRINCIPLES

The Lea River Park is an evolutionary project: the park will come together over time, through the action of many agencies and modes of delivery. The *Design Framework* for the park sets out to describe a process of creating a park which is therefore open to change and adaptation over time.

At the heart of the Lea River Park project is the Leaway (formerly, the Fatwalk): a linear park in itself, which acts like a skewer - linking together each of the park areas as they become available and creating vital north-south and cross-valley links.

The Leaway can be described as a 'topography of difference', the continuity of which is established by a common discipline and an orientation to the valley's traditional role in provisioning London.

Rather than establishing a connecting structure with a unified aesthetic along its length, the Leaway reflects the diversity of the valley and is made up from a variety of landscape character areas - some which adopt existing riverside routes (i.e. the riverside walk at Electra Wharf), some new, and some historic (i.e. listed settings including Three Mills, Twelvetrees Crescent and East India Dock mouth).

With this responsive strategy the Leaway can:

- accommodate change adapting over time - allowing interim routes, growth, and extension

- be opportunistic - it can seize on things that come to light (archaeology, found site relationships or suddenly available materials for use; such as reclaimed material from the construction of Queen Elizabeth Olympic Park).

A Kit of Parts

To bring a sense of unity to this diversity we have established a 'kit of parts' which establish continuity, and can respond to the very different conditions throughout the Leaway and Lea River Park. These include:

Mats	A family of paved 'Mats' installed at points where a change of direction is made: where the Leaway is joined by other routes, at points of entry to the park, or when reassurance is needed. The 'Mats' often combine elements below.
Continuity Elements	A selected material palette and a range of park objects - including fencing, benches, wastebins, lighting columns and signage - are to be used along its length.
Structures	A family of structures share design characteristics, address key severances along the route including: the new bridge at Poplar Reach, the A13 Ramp and the Twelvetrees connection.
Planting	The Lea River Park can also tell an interesting story about the importance of flora to London's growth. The park's landscaping proposals should establish a variety of planting palettes which draw on the rich tradition of the valley's flora and heritage.

This Manual provides a guide for how these elements could be deployed and how partners to the project can make a practical contribution to establishing the Lea River Park.

Right: The proposed park connecting the river valley with the communities and landscapes on either side


Leaway route
Leaway route (coming soon)
Leaway access routes
Leaway future phase routes
Future Lea River Park
-park area projects
Development/regeneration sites
Cycle superhighways
Underground/DLR/railways
QUEEN ELIZABETH OLYMPIC PARK
South Park Hub
GREEN WAY
A12
Interim Leaway route
Pudding Mill Lane
Stratford >
< Aldgate
Bow Church
CS2
Stratford High Street
Three Mills Green
Mill Meads
Abbey Mills
Bromley-by-Bow
The House Mill
Devons Road
Twelvetrees
Limehouse Cut
West Ham
Twelvetrees Park
The Cody Wilds
Langdon Park
Interim Leaway route
Star Lane
Cody Dock
Working Wharves
Poplar River Park
Canning Town Riverside
A13
A12
Silvocea Way
< Tower Gateway
Ecology park
Canning Town
CS3
Barking >
East India
East India Dock Basin
The Exotic Wild
Silvertown Way
Silvertown Viaduct
The Thames
Trinity Buoy Wharf
Royal Victoria
North Greenwich
ROYAL DOCKS

PARK SEVERANCES

The Lower Lea Valley has historically suffered from major physical severances: where accessible stretches of landscape and riverside paths had been delivered, they were previously fractured, limiting connectivity and the creation of user groups.

The delivery of the Leaway creates for the first time a continuous route between Queen Elizabeth Olympic Park, the Thames and the Royal Docks by opening up the edges of the River Lea to pedestrians and cyclists.

This section identifies the key severances which need to be resolved, where effort and investment are needed to overcome physical separation.

These ‘knuckles’ are characterised by complex topography, each holding the potential to not only provide connections but to become interesting and engaging places in their own right: locations for art installations, new landscapes and activities to be introduced to the Valley’s already rich sense of place.

These ‘knuckles’ each have the capacity to act as gateways into the Lea River Park and are being developed as engaging spaces which anticipate the development of the future park spaces.

Above: An example of the severances which exist in the valley, especially apparent around existing infrastructure such as at the Poplar Reach cable bridge: a structure designed to allow a pedestrian path beneath it but which has formed an obstruction for 20 years. Work is in progress to open this connection, which will unlock nearly a mile of existing riverside paths.

Right: An example of a section of new riverside path proposed between the A13 and Cody Dock, linking existing, yet, disconnected sections of path.

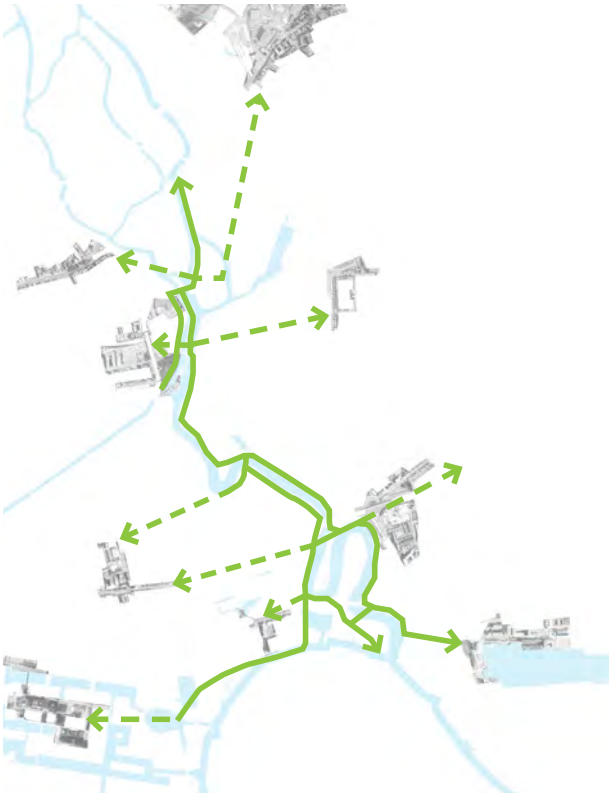

LEAWAY
north
LEAWAY
south

THE LEAWAY - OVERCOMING SEVERANCE

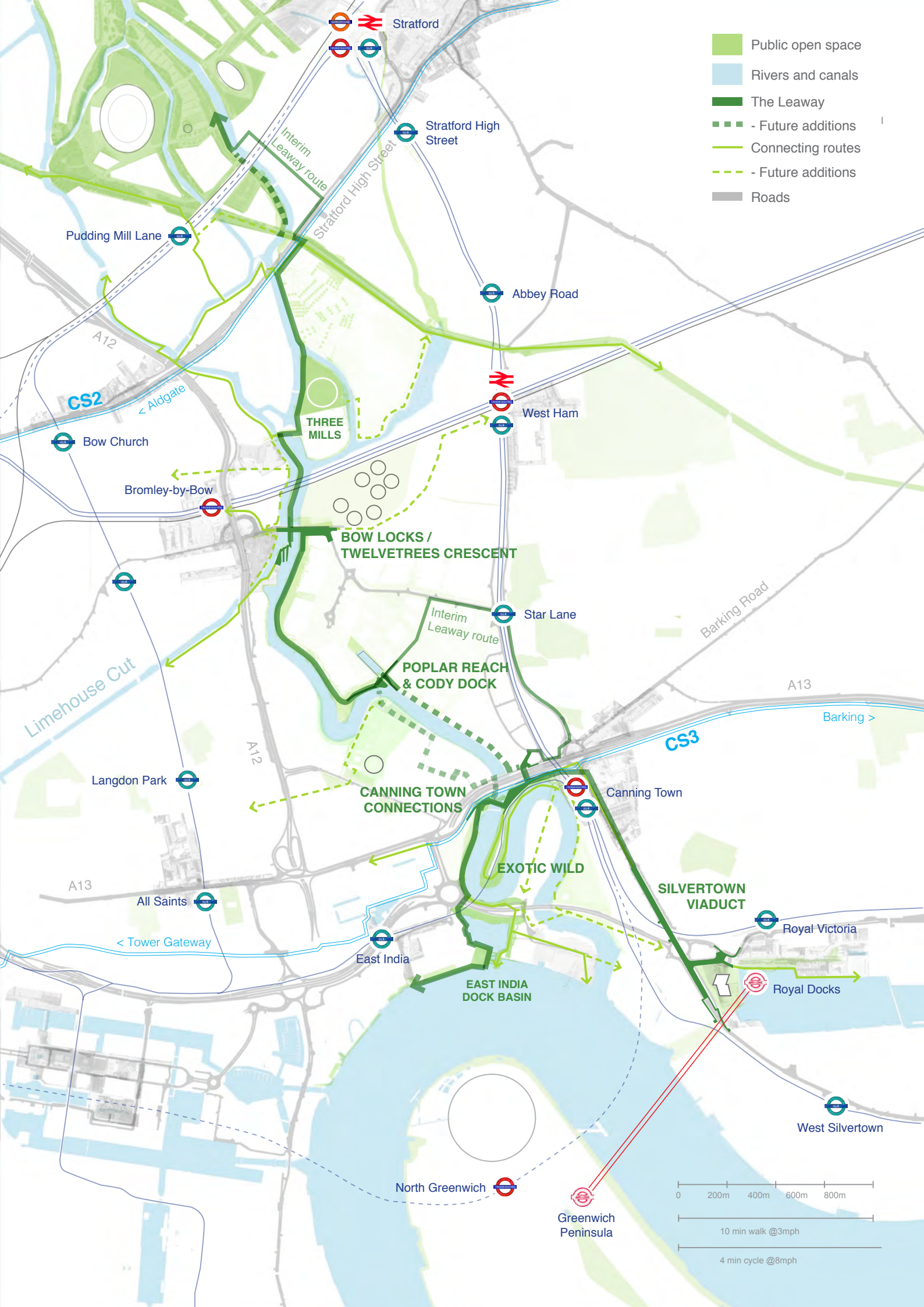
A process of analysis and discussion with the project team and other stakeholders has resulted in a clear strategy for the early phase of investment in the park. A focused series of projects unlock a connective route down and across the valley, enabling a spine of places to enjoy, while anticipating future adoption of park spaces in later phases of the project.

These tactical points of investment will have much greater effect: opening up existing riverside routes, enabling connections between existing transport infrastructure and access to the River Lea. These interventions aim to humanise and unlock the potential of their contexts, which are too often dominated by the scale of existing infrastructure.

BEFORE - Disconnected local centres



AFTER - Connected by the park


Public open space
Rivers and canals
The Leaway
- Future additions
Connecting routes
- Future additions
Roads
Stratford
Stratford High Street
Interim Leaway route
Stratford High Street
Pudding Mill Lane
Abbey Road
A12
CS2
< Aldgate
Bow Church
THREE MILLS
West Ham
Bromley-by-Bow
BOW LOCKS / TWELVETREES CRESCENT
Star Lane
Interim Leaway route
Barking Road
POPLAR REACH & CODY DOCK
Limehouse Cut
A13
Barking >
CS3
A12
Langdon Park
CANNING TOWN CONNECTIONS
Canning Town
EXOTIC WILD
SILVERTOWN VIADUCT
A13
All Saints
Royal Victoria
< Tower Gateway
East India
EAST INDIA DOCK BASIN
Royal Docks
West Silvertown
North Greenwich
Greenwich Peninsula
0
200m
400m
600m
800m
10 min walk @3mph
4 min cycle @8mph

THE LEAWAY - CONNECTIONS DELIVERED

To date there has been success in delivering a range of strategic connections and public spaces along the Leaway route.

This map identifies these achievements, with interventions focussed on creating entrances for the surrounding communities to the future Lea River Park, opening up the existing greenspaces to the public to create active riversides.

Multiple stakeholders and delivery partners have been involved in this process, and this document the Lea River Park: Design Manual has been developed and tested through the delivery of these first parkspaces and routes.

KEY ACHIEVEMENTS

1. Leamouth roundabout crossing
2. Silvocea Way
3. London City Island pubic realm
4. Silvertown Viaduct stairs
5. Canning Town Riverside
6. Reubens bridge
7. A13 underpass
8. A13 ramp
9. Leamouth North bridge and connection to Canning Town station
10. Opening up beneath Poplar Reach cable bridge
11. Cody Dock
12. Greening Cody Wilds river walls
13. Twelvetrees connections
14. Three Mills Green
15. Long Wall path and ramp to the Greenway
16. Short Wall ramp to Stratford High Street
17. Greenway ramp to Pudding Mill Lane


Public open space
Key park area - secured
Key park area - unsecured
Development Site
Local Centre
Key route - delivered
Public highway route
Bridge - secured
Underpass - secured
At grade crossing
East Village
Hackney Wick
Westfield
Stratford
Roman Road
Aberfeldy
Chrisp Street
Canning Town
Canary Wharf
Royal Docks
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THE LEAWAY - OPPORTUNITIES

The next phase in the realisation of the Lea River Park relies upon the continued collaboration of the multiple stakeholders and delivery partners.

This map identifies the remaining opportunities which will realise major new green spaces and strategic cross valley routes. Realising new parklands to deal with existing deficiencies in access to open space and connecting the existing and developing communities on either side of the river.

It is intended that this manual is used as a key document in the design and delivery of these remaining public spaces and connections.

KEY OPPORTUNITIES

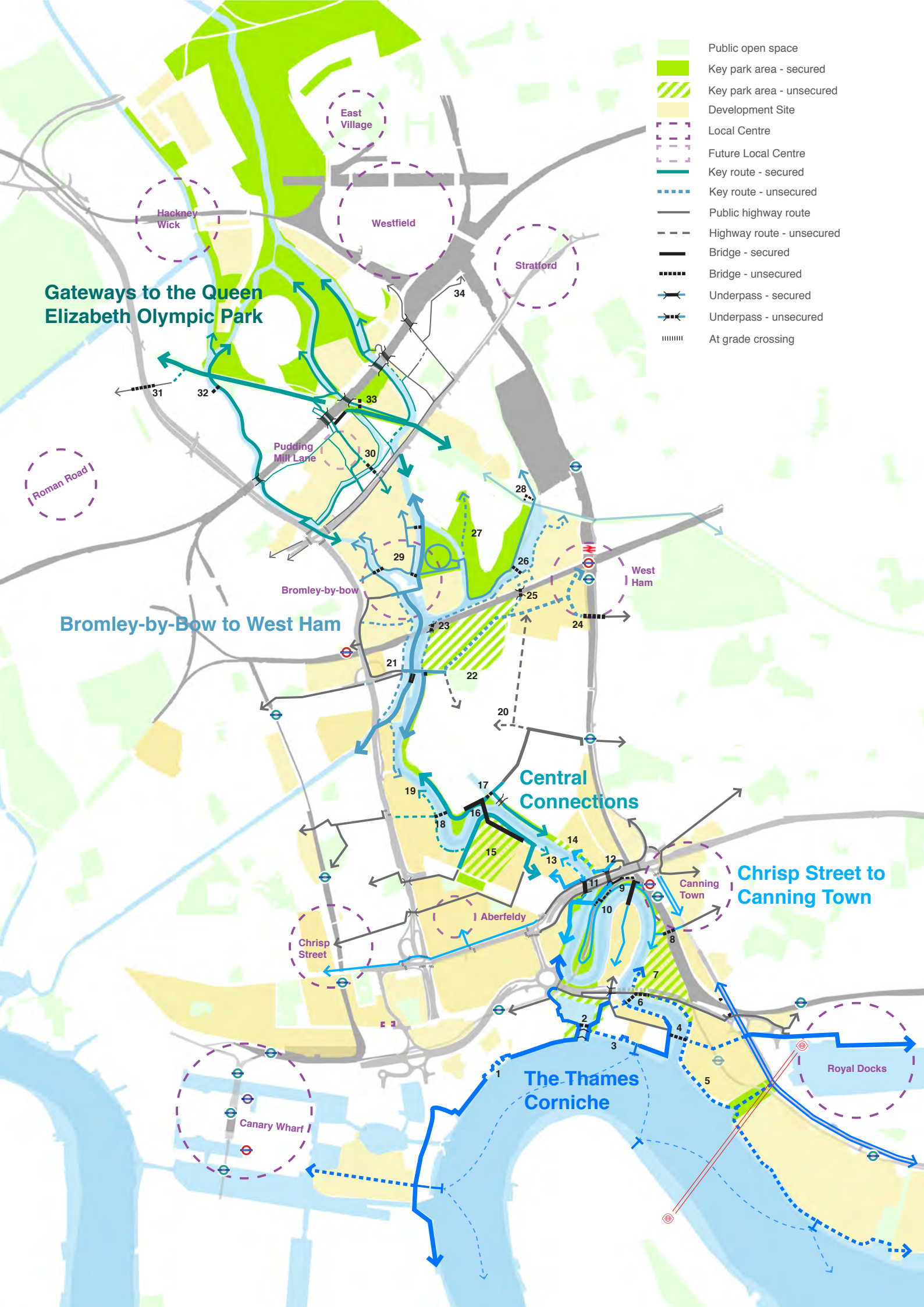
The Thames Corniche
1. Reuters riverside walk
2. East India Dock Basin
3. Orchard Wharf riverside walk
4. Thames Wharf bridge
5. Thames Path (Royal Docks)
6. Leamouth footbridge
7. Limmo park

Chrisp St to Canning Town
8. Hallsville Road bridge
9. A13 ramp and DLR bridge
10. Reubens bridge
11. A13 Connector
12. A13 underpass
13. Blackwall Estate riverside
14. Worlands, Mayer Parry, Crown Wharf riverside walk

Central Connections
15. Poplar Reach park
16. Poplar Reach bridge
17. Cody Dock bridge
18. Ailsa Street bridge
19. Western towpath
20. Twelvetrees Estate roads opened

Bromley-by-Bow to West Ham
21. Western towpath
22. Twelvetrees Park
23. Pacific Wharf connections
24. Milner Street bridge
25. Crow Road underpass
26. Abbey Creek pathways and bridge
27. Mill Meads connections
28. Greenway ramp to Channelsea Path
29. Strand East bridges and public realm

Gateways to the Queen Elizabeth Olympic Park
30. Marshgate Lane bus bridge
31. Old Ford bus bridge
32. Iceland Road bridge
33. Greenway connections
34. New western Stratford station entrance


Public open space
Key park area - secured
Key park area - unsecured
Development Site
Local Centre
Future Local Centre
Key route - secured
Key route - unsecured
Public highway route
Highway route - unsecured
Bridge - secured
Bridge - unsecured
Underpass - secured
Underpass - unsecured
At grade crossing
East Village
Hackney Wick
Westfield
Stratford
Gateways to the Queen Elizabeth Olympic Park
Roman Road
Pudding Mill Lane
Bromley-by-bow
West Ham
Bromley-by-Bow to West Ham
Central Connections
Chrisp Street to Canning Town
Canning Town
Aberfeldy
Chrisp Street
Canary Wharf
The Thames Corniche
Royal Docks
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TWELVETREES CRESCENT

A ramp connection between the Bow Locks spit and Twelvetrees Bridge links two existing but discontinuous sections of riverside walk. This overcomes a critical severance through the creation of a continuous walking and cycling route - the Leaway - along the Lower Lea Valley.

The proposal, sponsored by the London Legacy Development Corporation, is a scalable response, that provides a highly effective and useful connection (although non-standard) on the severely constrained site in the short term, which becomes enhanced by Phase 2 improvements to provide manifold connections alongside the River Lea in the medium term. The completed route creates a fully accessible network of riverside paths. The project has been developed in consultation with Transport for London and with LB Tower Hamlets and Newham, who form part of the project's steering group.

Both the lower spit area and the upper surface of the bridge allow wonderful south-facing vantage points to enjoy views down the valley, and across both tidal and non-tidal working waterways of the Lea. The project also brings Twelvetrees Bridge back into public use as an important piece of valley heritage. The various components which enable the link, together with supporting landscape work, will create an important gateway into and across the valley.

Proposed Phase 2 Western Towpath
A fully accessible connection from Twelvetrees Crescent to Bromley-by-Bow town centre

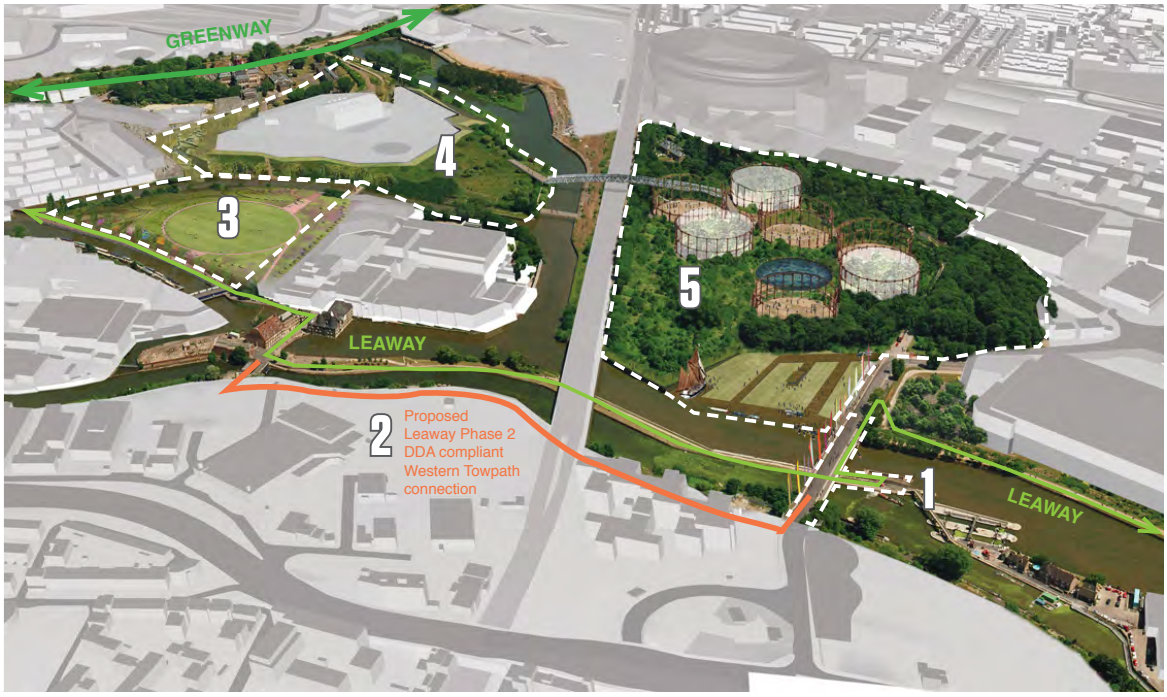
Right: Public realm being delivered on the east bank of Twelvetrees Crescent Bridge, due for completion November 2016

CONTINUES ON NEXT SPREAD >

Ramp proposal - vertical feature incorporating lighting and potential curated artefacts

The long term ambition

1. Twelvetrees Crescent Ramp connection
2. Western Towpath
3. Three Mills Green
4. Mill Meads
5. Twelvetrees Gaswork Park



TWELVETREES CRESCENT (CONTINUED)

The view from Bow Locks Crossing towards the Grade II Listed Twelvetrees Crescent Bridge, highlights the historic disconnection between the towpath along the spit and bridge deck level. The constructed ramp and stair overcome this severance, allowing the Leaway to continue across to the Cody Wilds riverside path on the opposite bank.

This view illustrates the Twelvetreees ramps wayfinding structure and the maritime objects which sit at the top of the new ramp. These help to indicate the position of new the ramp from bridge level, as well as further away at the A12 and to the north of the site over the utilities bridges.

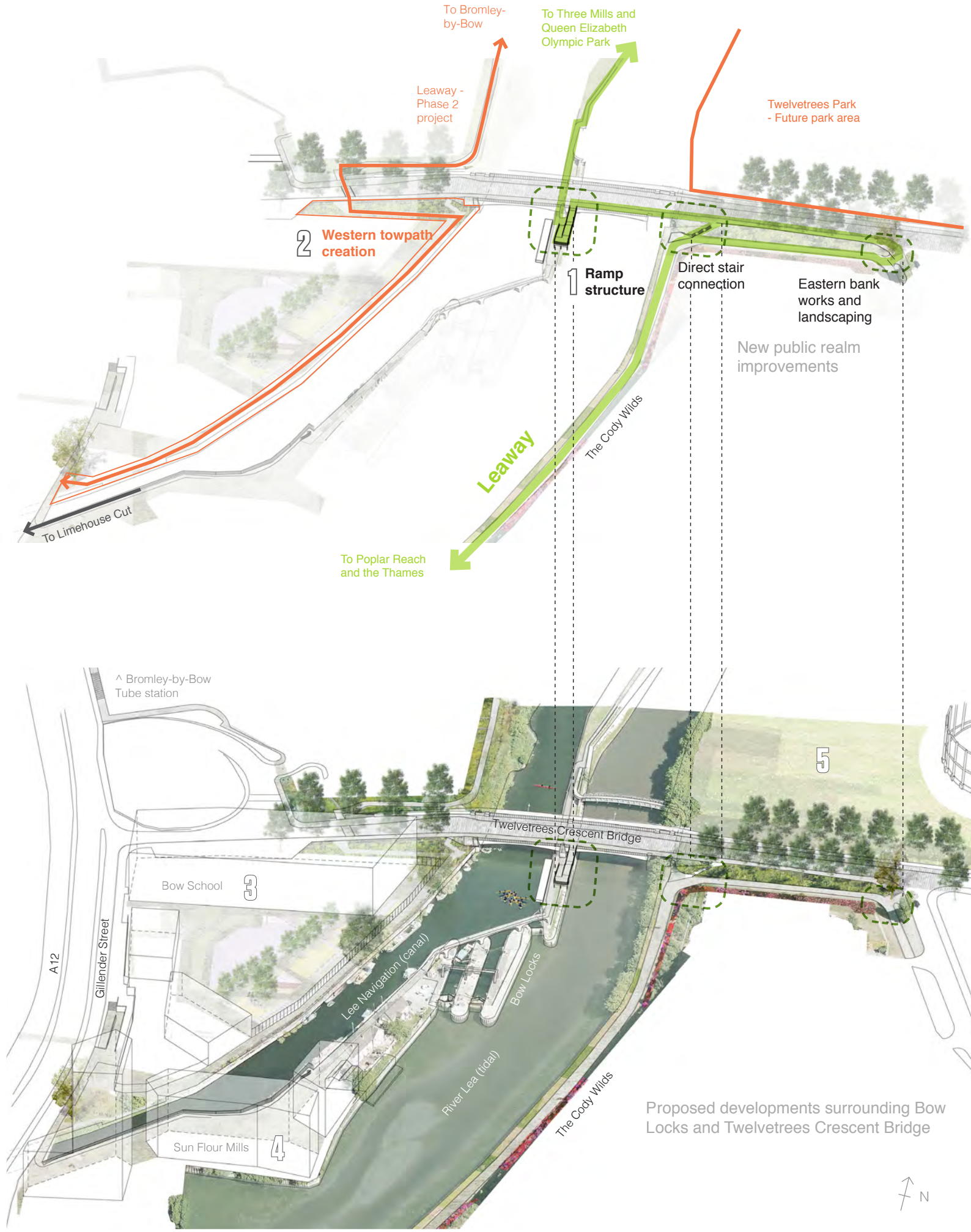
View heading south from Three Mills, the position of the ramp is masked by the collection of bridges to its north. The wayfinding structure rises above these to provide a new landmark to help navigate the Leaway

Development Context

Bow School

Sun Flour Mills

Gasworks decommissioning and creation of Twelvetrees Park - future phase 3



Proposed developments surrounding Bow Locks and Twelvetrees Crescent Bridge

POPLAR REACH & CODY DOCK

A bridge crossing has been designed for Poplar Reach, which will connect the boroughs of Newham and Tower Hamlets and establish a new public riverside park on the site of the decommissioned Leven Road gasworks.

Cody Dock is becoming a thriving valley attraction, and therefore is an important location on the Leaway route. A wider bridge crossing is required over Cody Dock Lock to allow access to the existing towpath further north once the dock is reopened.

A utilities bridge carrying high voltage cables, until recently, blocked the riverside path at the northern end of Electra Wharf. This bridge was designed to allow a walkway to pass beneath it, so a connection to Cody Dock is achieved by removing the fence.

The creation of a permissive riverside route along the edges of the working wharves will connect to an extant public walkway at Electra riverside, linking Cody Dock to Canning Town.

Continuing south, a connection to Canning Town will rely upon the creation of a new section of publc riverside across Mayer Parry, Worlands and Crown Wharf, as illustrated at the start of this chapter.

Poplar Reach bridge (above right and below) was granted planning permission in 2010, and all the necessary consents are in place to allow for its construction and future maintenance.

A tranquil spot on the approach to the proposed Poplar Reach Bridge. The existing reed bed is celebrated by the positioning of park furniture and complimented by light touch landscaping improvements.

Right: Poplar Reach Bridge will provide an accessible connection to a new 6ha active park landscape providing much needed open space to the surrounding estates and a moment of expansiveness on the Leaway.

CONTINUES ON NEXT SPREAD >

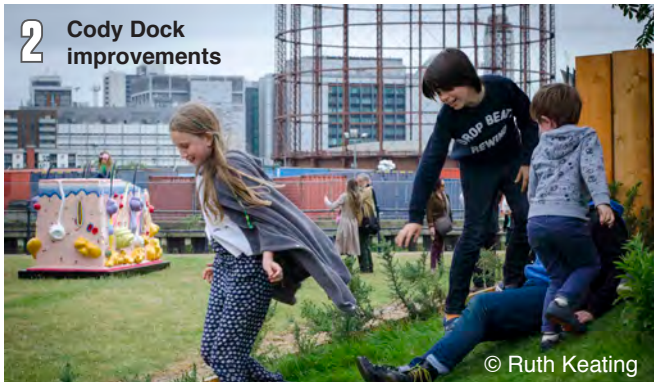
The long term ambition

1. Poplar Reach Bridge (Leaway Phase 2)
2. Cody Dock improvements
3. Cable Bridge improvements
4. Cody Wilds
5. Poplar River Park (Leaway Phase 2)
6. European Metal Recycling Riverside Access

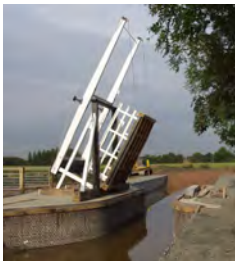
POPLAR REACH & CODY DOCK (CONTINUED)

Development Context

Poplar Reach Bridge will provide a connection from the first phase of the Leaway to a new 6ha active park landscape, providing much needed open space to the surrounding estates in Poplar and a moment of expansiveness on the Leaway



The thriving community driven Gasworks Dock Partnership at Cody Dock

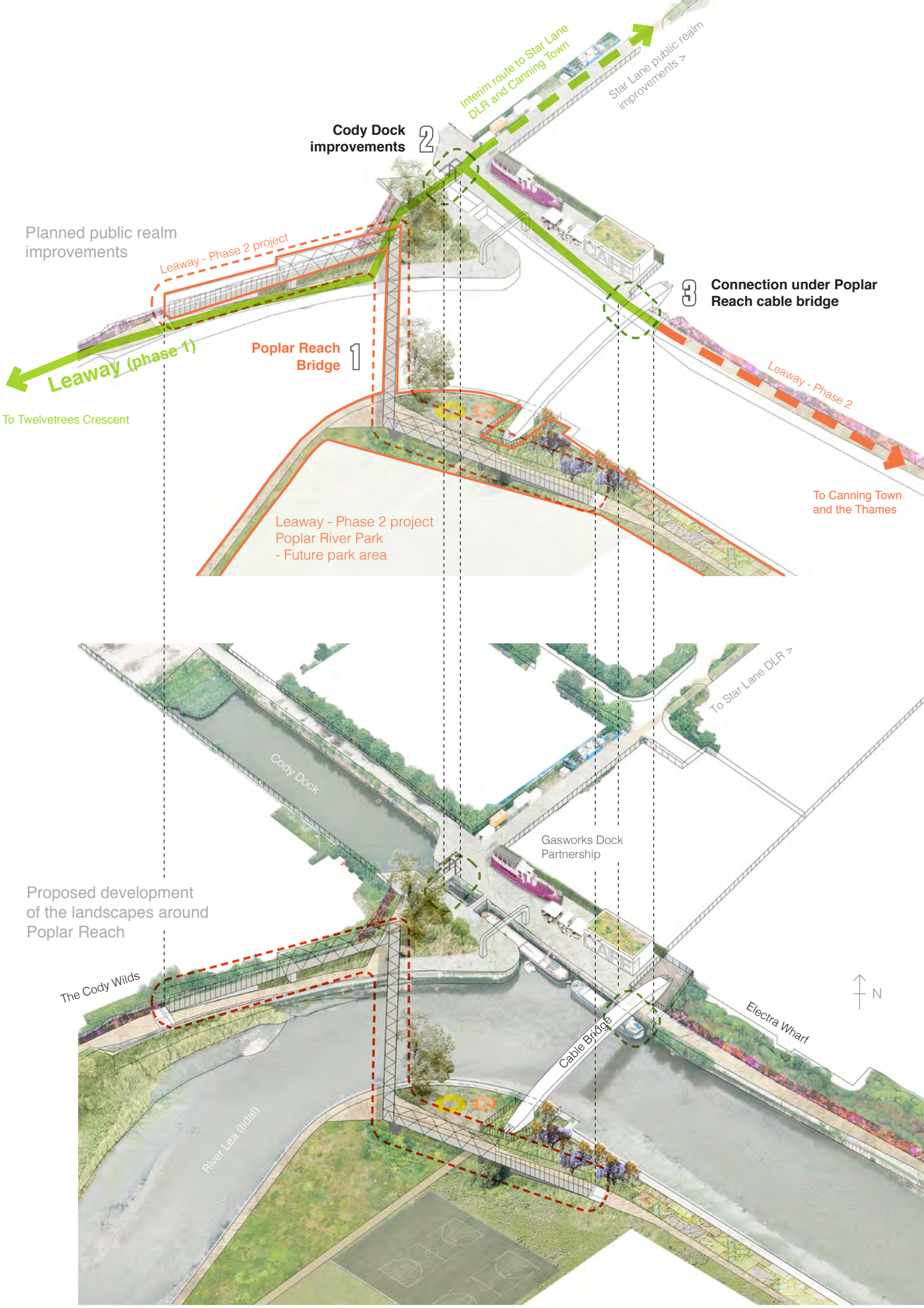


An example of a Bascule bridge crossing similar to that proposed at of Cody Dock - this project will replace the existing dock crossing, and has planning approval, allowing the dock to be used for moorings.

Poplar Reach cable bridge: a structure designed to allow a pedestrian path beneath it but which has formed an obstruction for 20 years.

Work is in progress to open this connection, which will unlock nearly a mile of existing riverside paths.

Fire-proofing has been undertaken and landscaping work finished to provide access from Cody Dock to Electra Wharf, and eventually south to the Leaway at Wharfside Road.


Interim route to Star Lane
DLR and Canning Town
Star Lane public realm
improvements >
Cody Dock
improvements
2
Planned public realm
improvements
Leaway - Phase 2 project
Leaway (phase 1)
To Twelvetrees Crescent
Poplar Reach
Bridge
1
3
Connection under Poplar
Reach cable bridge
Leaway - Phase 2
To Canning Town
and the Thames
Leaway - Phase 2 project
Poplar River Park
- Future park area
To Star Lane DLR >
Cody Dock
Gasworks Dock
Partnership
Proposed development
of the landscapes around
Poplar Reach
The Cody Wilds
Cable Bridge
Electra Wharf
River Lea (tidal)
N

CANNING TOWN CONNECTIONS

Canning Town is separated from the River Lea by a confluence of transport infrastructure, which forms a physical barrier to movement and divides Canning Town and its population from the River.

The opportunity here lies in adopting an under-used area of land between the DLR and the A13, rediscovering an accessible riverside for Canning Town - reconnecting the community to both the heritage and open spaces of the Valley.

These interventions also form a key manifold of routes on both sides of the river for recreational use and commuting. A series of public realm projects will greatly increase orientation within a connected valley and steer the communities of adjacent developments to the river, while supporting their requirement for improved connections to local centres and transport nodes.

As one of only eight crossings of the Lea Valley south of the M25, there is an opportunity to celebrate the valley at this point, signalling its significance to drivers on the A13 as part of a placemaking strategy.

The existing underpass is being upgraded and made more pleasant as a means of continuing a park landscape beneath the severance of the A13.

There is also the potential to provide a connection between the A13 ramp and the Leamouth North bridge (outline design work has been undertaken to investigate its feasibility). Any interventions in the area should ensure that the necessary levels and space are safeguarded to allow its future delivery.

Before: The A13 underpass has been little used since the closure of the works at Wharfside Road. It is now unlit and under-maintained.

After: The underpass is being renovated to create a more welcoming connection for future park users. Essential maintenance work is required which could be enhanced by improved lighting provision and the resurfacing of the tunnel walls and ceiling. There is the opportunity to commission an artist to curate imagery for the underpass that will help to identify this piece of infrastructure as a key link in the parkscape of the Leaway.

CONTINUES ON NEXT SPREAD >

After: The A13 Ramp is imagined as a key park gateway, this new wedge of public realm tackles the level changes between the road and the entrance to Bow Creek Ecology Park; a cornice to the A13 with signage structures appropriating the historic maritime language of semaphores, cardinal points and tide gauges. The detailed design of such structures should be approached with care so as to ensure that key signage remains legible alongside these curated objects.

Before: The redundant strip of land caught between the fenced tracks of the DLR and the A13's busy slip roads is currently a neglected and unsafe space. The proposal aims to deliver an active, well trafficked connection on this land, that encourages access to Bow Creek Ecology park and extends the Leaway route network south.

Above: Historic etching of the quayside at Trinity Buoy Wharf, part of the delta of amazing spaces that could be accessed from Canning Town, acts as key reference for creating a unique maritime character.

CANNING TOWN CONNECTIONS (CONTINUED)

Canning Town is also the site of major development, as set out in the Canning Town and Custom House Regeneration Project Masterplan. The Lea River Park offers a chance to help orientate these developments to the river, and help stitch together the disused and neglected spaces which border both city-scale infrastructure and industrial sites. Opportunities should be sought for cross public-body projects to deal with fragmented ownerships and assemble land for public realm improvements.

Before (Right): Whafside Road was subject to fly tipping, parking issues and poor public realm. Routes to connections were obscured and felt dangerous.

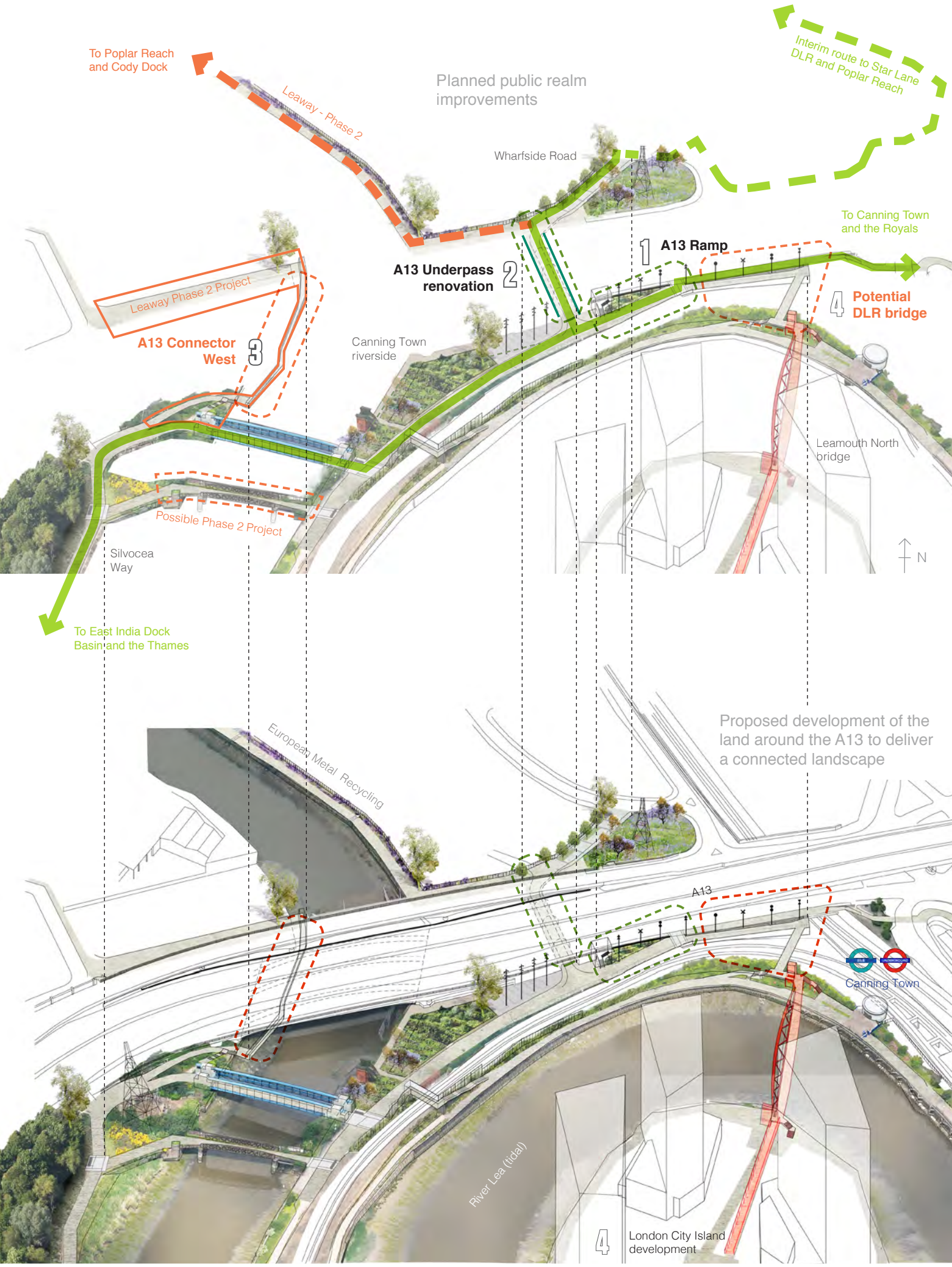
After: London Borough of Newham have worked in close collaboration with Transport for London to rationalise the position of fences to produce clear sight lines. Actions such as installing CCTV and closing the road to traffic will create a new safe pedestrian and cyclist dominated access point to the park. Hardlandscaping and tree planting is complete and soft landscaping will be finished in Autumn 2016.

Development Context

A13 Connector - Western bank
Planning approval 2011 Phase 2 Project

London City Island
Phase 1 Completed

Hallsville Quarter - Canning Town


To Poplar Reach and Cody Dock
Leaway - Phase 2
Planned public realm improvements
Interim route to Star Lane DLR and Poplar Reach
Wharfside Road
To Canning Town and the Royals
1 A13 Ramp
A13 Underpass renovation 2
4 Potential DLR bridge
Leaway Phase 2 Project
A13 Connector West 3
Canning Town riverside
Leamouth North bridge
Possible Phase 2 Project
Silvocea Way
N
To East India Dock Basin and the Thames
Proposed development of the land around the A13 to deliver a connected landscape
European Metal Recycling
A13
Canning Town
River Lea (tidal)
4 London City Island development

EXOTIC WILD

Leamouth boasts spectacular views of both the River Lea and its entrance to the River Thames with the potential to maximise access to the river's edge. Features such as Bow Creek Ecology Park and the expansive reed beds of Bow Creek strengthen the natural riverine character of the area. Valley attractions like East India Dock Basin and Trinity Buoy Wharf tell the narrative history of trade and maritime activities in the valley. The Leaway seeks to catch and steer surrounding developments to implement a fully accessible riverside that unifies the changes coming forward in the area.

Previously fragmented and difficult for pedestrians and cyclists to navigate, additional river crossings connect stretches of riverside, park destinations and transport connections to create a network of legible routes.

Canning Town Riverside

Before: Dense vegetation and anti-social behaviour currently restrict access and use of the area.

1 Canning Town Riverside

After: Once cleared, the large riverside space has been populated with boulders and benches. A brick plinth can become a stage or event space for the community, and the steep existing topography can be negotiated by a gentle path to the river's edge. Long grasses and riverine species will be planted in Autumn 2016, whilst the canopies of the existing white willows are lifted creating good visibility from Wharfside Road.

2 Silvocea Way

Silvocea Way, a major stretch of Tower Hamlet's Leaside riverine edge will benefit from improvements to allow park users to make the most of this riverside space, including extensive replanting with exotic colonisers that reference the history of trade in the area.

Before: Highways environment dominated the riverside walk.

After: Removal of hoardings and landscaped berms create a more sheltered envirnoment against the river.

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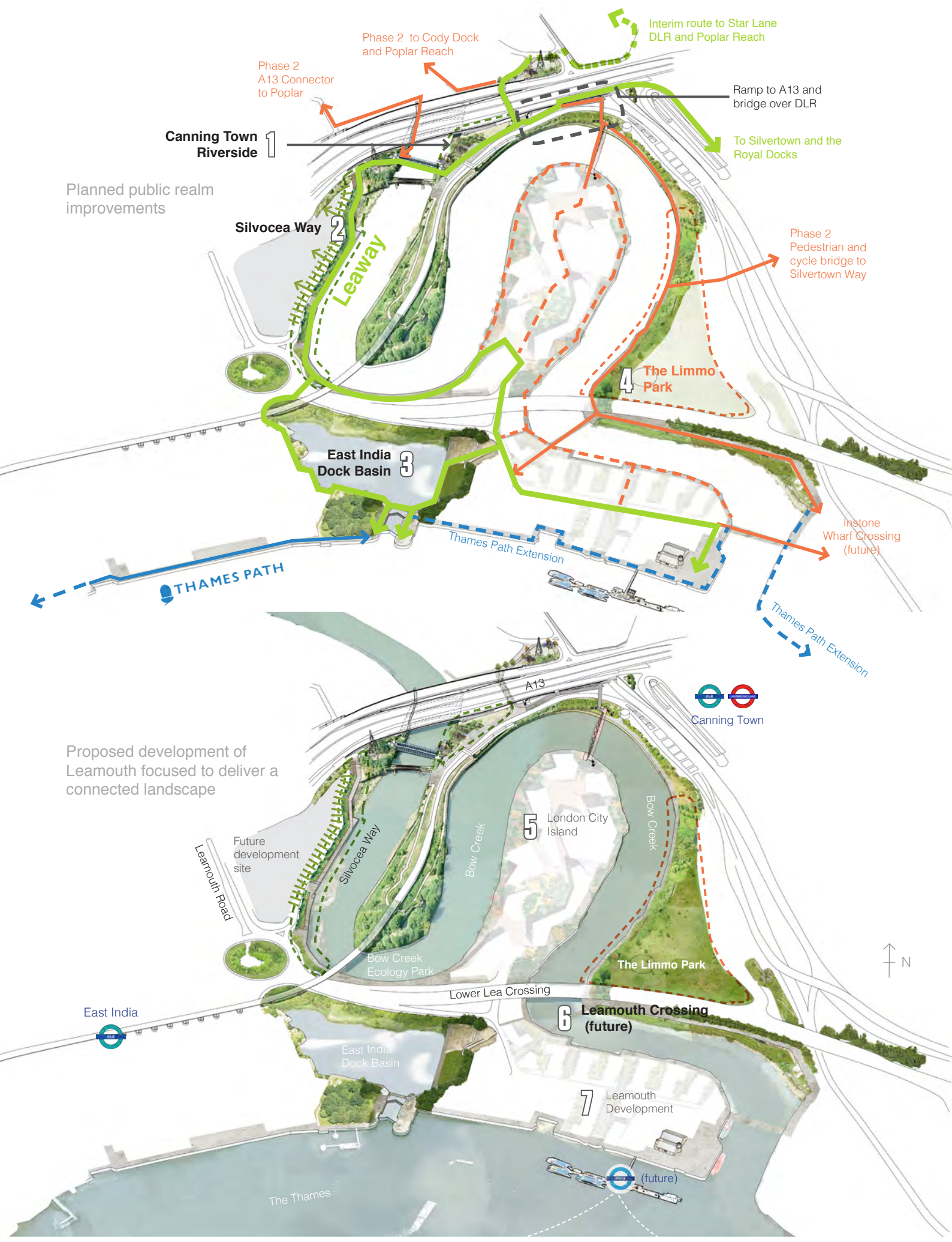

Interim route to Star Lane DLR and Poplar Reach
Phase 2 to Cody Dock and Poplar Reach
Phase 2 A13 Connector to Poplar
Ramp to A13 and bridge over DLR
Canning Town Riverside 1
To Silvertown and the Royal Docks
Planned public realm improvements
Silvocea Way 2
Leaway
Phase 2 Pedestrian and cycle bridge to Silvertown Way
4 The Limmo Park
East India Dock Basin 3
Thames Path Extension
Instone Wharf Crossing (future)
THAMES PATH
Thames Path Extension
A13
Canning Town
Proposed development of Leamouth focused to deliver a connected landscape
Future development site
Leamouth Road
Silvocea Way
Bow Creek
5 London City Island
Bow Creek
Bow Creek Ecology Park
The Limmo Park
N
Lower Lea Crossing
East India
6 Leamouth Crossing (future)
East India Dock Basin
7 Leamouth Development
(future)
The Thames

EXOTIC WILD (CONTINUED)

Both East India Dock Basin and Trinity Buoy Wharf should be protected for their respective narratives of ecology and heritage. Scoping studies have been carried out to extend the Thames Path, connecting the Leaway to a wider network of Thames edge walking routes. A possible future link across the Lea to Instone Wharf would connect these park attractions with the Royal Docks.

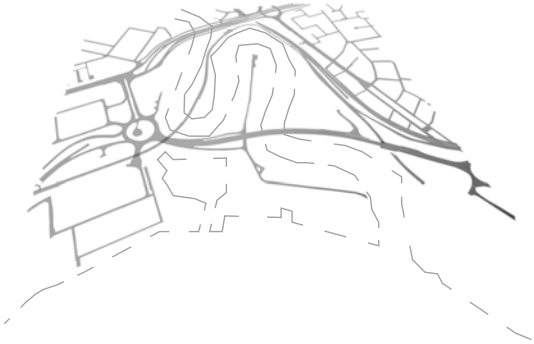
The Limmo, currently occupied by Crossrail, is identified in LB Newham's 2027 local plan as an pen space forming appropriate connections and terminus to Lea River Park. Opportunity exists here to create a large scale riverside green space for Canning Town. Proposals for this site should work to 're-naturalise' its river edge creating an ecologically focused park space, akin to Bow Creek Ecology park.

Historic view of Trinity Buoy Wharf

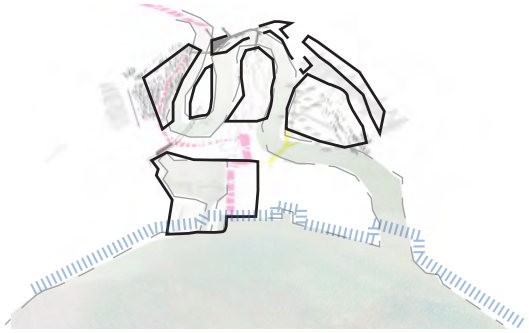
Site characteristics

An incredible stretch of waterways and their meeting points

...defines a clearing within the city...



...that is criss-crossed by infrastructure.

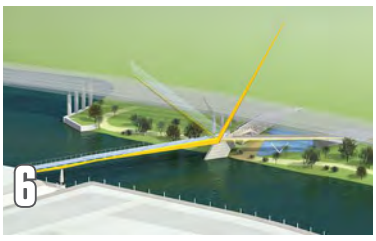


The location for a collection of bizarre landscapes - the exotic wild.

Development context

London City Island - under construction
Phase 1 anticipated mid 2016

Leamouth Crossing



Leamouth South
Planning submitted December 2014

East India Dock Basin

Above: Ambition for the creation of a visitor and educational centre, balancing the needs of visitors and that of the established wildlife preserve in the basin. The location of the placement of this facility will require further detailed design development with project partners.

Potential exists for such a centre to include a dedicated bird-watching hide (left) with views over East India Dock's wetland bird reserve.

The Limmo

The Limmo is an important area of open space for the Lea River Park and offers the chance to create a sizeable new park within the Leamouth. It is also one of the few locations where softening of the river edge is pracitcal.

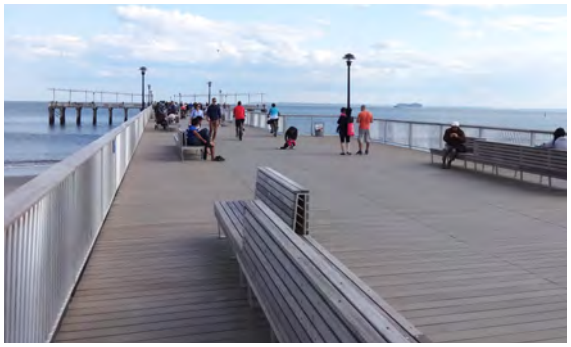
SILVERTOWN VIADUCT

“Canning Town Pier”

Silvertown Viaduct is a fantastic and under-used section of the Leaway route. Constructed in 1934 the bypass was Britain’s first flyover; originally built to serve the Royal Docks in their heyday, traffic levels on the viaduct have since reduced significantly. This now presents an opportunity to greatly increase its role as a strong pedestrian connection between the growth areas of the Docks and Canning Town, exploiting its pier-like qualities and the fantastic views that it offers of the Lea Valley and the Thames at Blackwall Reach.

The decrease in traffic volume has seen its wide carriageway become a fast urban road. With the surrounding sites on Caxton Street, Peto Street and Tidal Basin Road, being identified as sites for tall buildings within the regenerated Canning Town South area, the character of this streetscape is going to be key to a successful regeneration. The opportunity has been recognised to calm the traffic by narrowing the carriageways, providing segregated cycle paths, and more generous pavements, leading to an enhanced North Woolwich Road and proposed new local centres in the Royal Docks.

Historic photograph of the viaduct (1939)
Having been designed to accommodate the large volume of heavy traffic that serviced the Royal Docks, the viaduct has a generosity and structural significance that could be exploited.



The viaduct has a ‘pier-like’ character that could be furthered by drawing from successful, albeit coastal, examples like Coney Island pier, New York. Its varying benches and sheltered places to sit and take in the surroundings, are a useful precedent for the character and nature of the proposed improvements to the viaduct’s upper level.

After: Re-imagining the viaduct as a ‘pier’ - a curious boulevard; with a widened pavement, improved cycle provisions, belvederes and a collection of dock-related artefacts, narrating the surrounding landscape.

Before: The existing road, engineered for dock traffic that has now ceased, has the potential to be generously re-purposed.

CONTINUES ON NEXT SPREAD >

After (Right):The spaces beneath could be re-purposed - infill walls removed and generous public halls and community workshops retrofitted - a spine of amenities which can be added to, as surrounding developments are delivered.

Before (Above): The existing stairways connecting it down to a finer grain of streets have been neglected and are unwelcoming.

SILVERTOWN VIADUCT (CONTINUED)

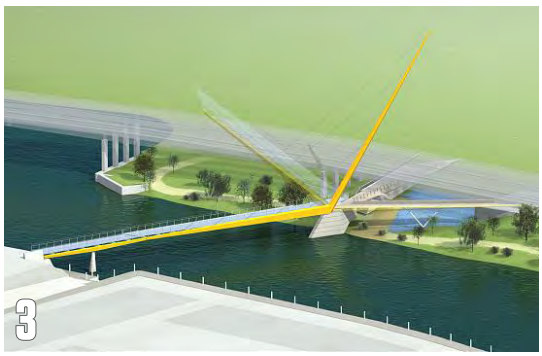
Rijnhavenbrug, Rotterdam - a piece of infrastructure that has been 'humanised' and treated as a part of the city.

The viaduct was built to handle the traffic of the docks, raised high on its legs to oversail the railways and lock movements.

Silvertown Viaduct could be better integrated into the city by finding a 'street-like' quality, that will share out the generosity of the structure more successfully, to accommodate pedestrians, cyclists and vehicles.

World Class Streets - New York City
Ghel Architects

Development Context

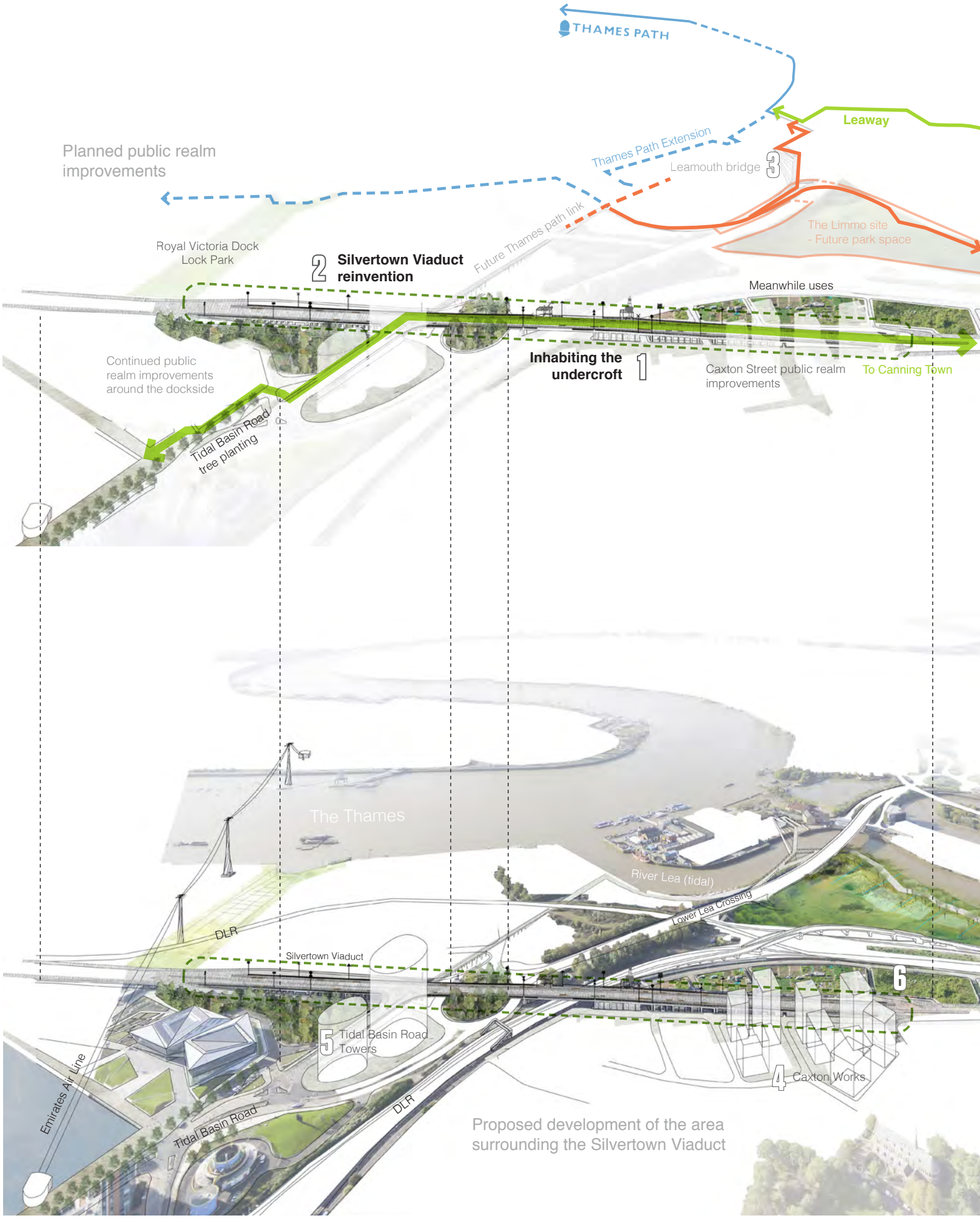


Leamouth footbridge

Caxton Works, mixed use development by Cathedral developers - under construction

Tidal Basin Road towers, residential and hotel - under construction

Silvertown Reach Development



Proposed development of the area surrounding the Silvertown Viaduct

CONTINUITY ELEMENTS

The Leaway route requires a range of components to be considered from benches and surfaces to wayfinding and enclosure.

A palette and strategy for implementing these components along the route is set out here, proposing coherence rather than literal continuity. The specific examples given within this chapter are for guidance only and are intended to illustrate the desired character of each element.

The material palette and range of street furniture outlined within the Design Manual has been developed in conversation with project partners, to ensure long term validity for delivery and maintenance. The Design Manual should be used in conjunction with the appropriate Borough's *Streetscape Design Guidance.*

The finishes and components within this chapter have been selected with their lifetime maintenance in mind. They are principally self finishing, easy to clean and obvious / simple to repair if damaged. This criteria should be maintained throughout subsequent detailed design work, developing interventions along with the maintenance partners to ensure the park's longevity.

Right: Precast concrete benches and large format timber 'add-ons' at Three Mills Green, the first park area of the Lea River Park, completed in 2012

PALETTE OF MATERIALS

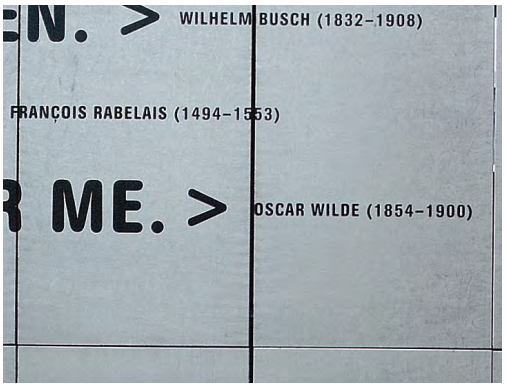
As the route of the Leaway has been created through a range of both existing riverside landscapes, streetscapes and new phased routes across several boroughs, a palette of materials is proposed. Principally, these materials should aim to be self finishing, requiring low maintenance, be neutral in colour (to allow visual contrast with soft landscaping) and explore the industrial and maritime history of the valley. This leads to a general exclusion of plastic/PVC and stainless steel from the palette in favour of more raw materials.

ENCLOSURES

EXPANDED METAL MESH
Enclosure to structures

FINISHES

FAIRFACED CONCRETE
Concrete channel benches - vertical surfaces



GALVANISED STEEL PLATE GUARDING
With contrasting painted wayfinding

MODULAR SURFACES

PRECAST CONCRETE CATTLE-SLATS
Made flush with landscape off of main routes

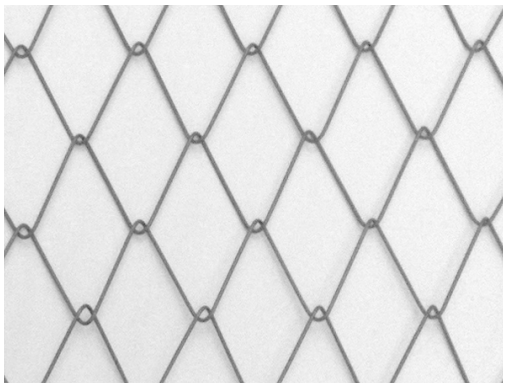
PRE-CAST CONCRETE PLANK PAVING
Paving mats, in mid greys, non-slip

CONTINUOUS SURFACES

GRASS OR MEADOW PLANTING
With reinforcement mesh as appropriate

SPRAY TAR AND CHIP / RESIN BOUND CHIPPINGS

ENCLOSURES



“ENCLOSURE” ELEMENT
High tensile steel mesh

SECURE FENCES
Steel weld mesh

FINISHES

M.I.O PAINT
Dark Grey

other paint finishes should provide a close match - RAL 7021 (Black Grey)

TIMBER IN LARGE BAULKS
Including green oak or sweet chestnut

MODULAR SURFACES

GRANITE SETTS/COBBLES
Reclaimed or new, laid flush for accessibility

GRANITE PAVING SLABS
In mid greys

CONTINUOUS SURFACES

IN SITU CONCRETE
Brushed Concrete

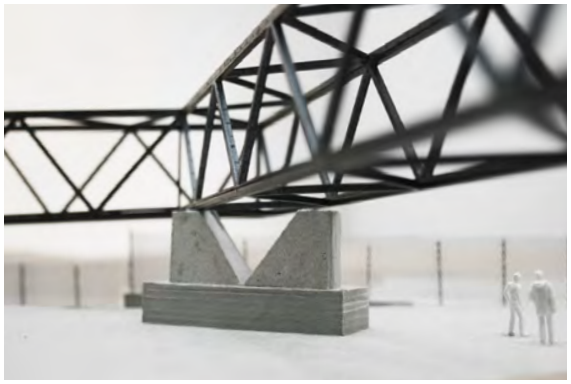
HOT ROLLED ASPHALT WITH COATED CHIPPINGS OR RIVER GRAVELS

PARK STRUCTURES

The Leaway structures have been developed to employ a material language that delivers both refinement and robustness. Crisp surfaces of metal architectural mesh and exposed aggregate concrete describe a clean volume, providing robustness while aspiring to a sense of fineness befitting the rich context of the River Lea.

The structures are conceived as part of a family of new park structures that make reference to the industrial and utilitarian aesthetic of the existing bridges, pylons and river-works that populate the Lea Valley, characterised by clean, simply rendered forms and framed structures

The proposals employ a concise palette of hardwearing and cost effective finishes. A micaceous iron oxide paint protection system is proposed for structural steelwork members, while galvanised steel is proposed for the balustrade guarding and framing of mesh panels. This material combination provides an effective contrast between the strong figure of the steel superstructres and the finer balustrading. Self finished in-situ or pre-cast concrete is used for the structural bridge piers, retaining structures and ramp structures.

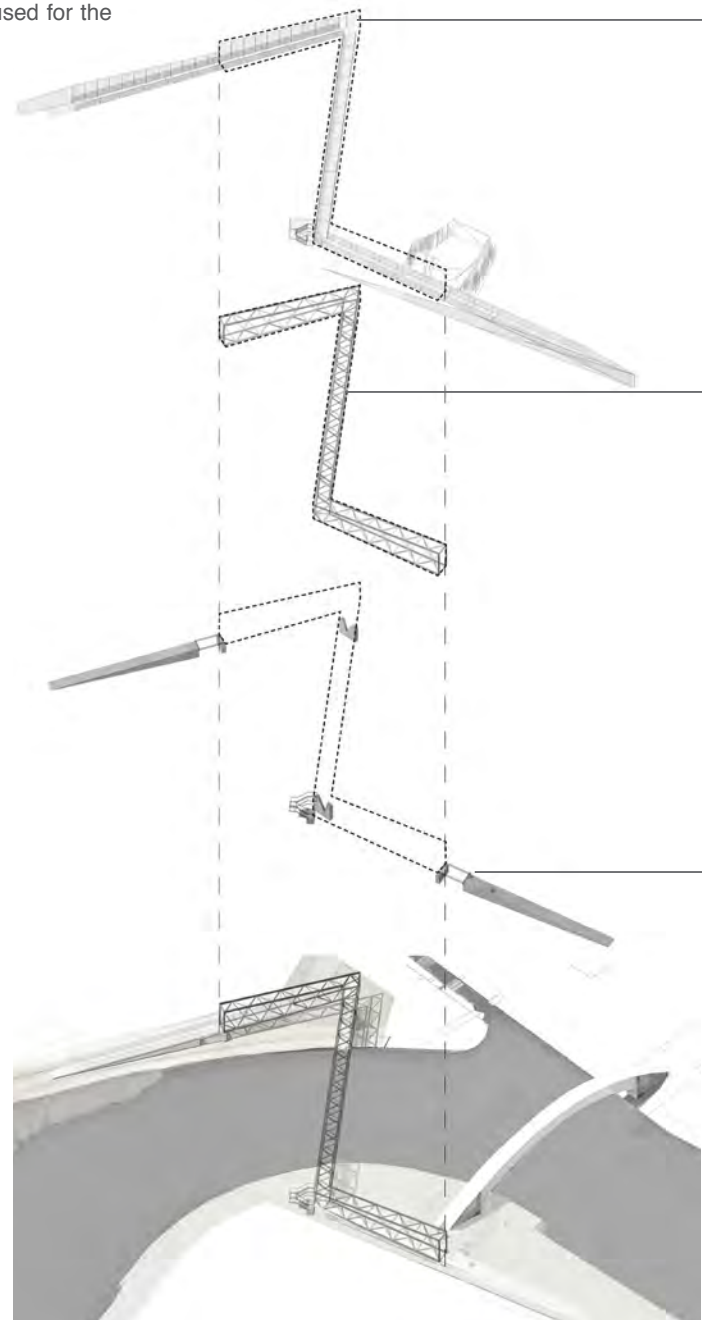


Model testing the showing development of the distinctive charecteristics of the Poplar Reach bridge's steel warren truss and sculptural concrete substructure.

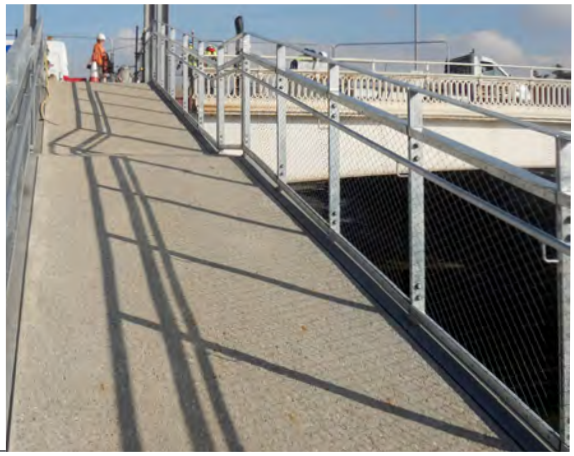
ANATOMY OF THE STRUCTURES >

Detail view showing the use of the finer language of the mesh guardings continued to create larger enclosures to respond to security concerns along adjacent property boundaries.

The bridge at Poplar Reach is Ilustrated in the drawing on the right. Details of the other Leaway structures can be found in the Park Severances section of this document.



FINE GUARDINGS AND ENCLOSURES



Within or above the steel superstructures a language of galvanised steel framed guardings. The framing to these balustrades is constructed from steel flat plates, and infilled with either solid guarding panels or mesh infill where necessary. The use of mesh infilled frames should be extended to areas where enclosure is required for security reasons. A similar finish is proposed for the handrail and their supports across the structures.

STEEL SUPERSTRUCTURES

A language has been developed throughout all the Leaway structures of steel spanning structures constructed from simple steel sections - capturing the industrial character of the valley. These structures are to be painted with a protective layer of M.I.O paint in a dark grey colour.

CONCRETE SUPPORTS

The ground bearing structures supporting the spanning structures, and retaining walls to ramps have been developed to have a strong muscular character reflecting the existing supports of the many utilities bridges along the river Lea. An exposed aggregate finish is proposed for this concrete, with the concrete supports at Twelvetrees ramp considered a benchmark finish.

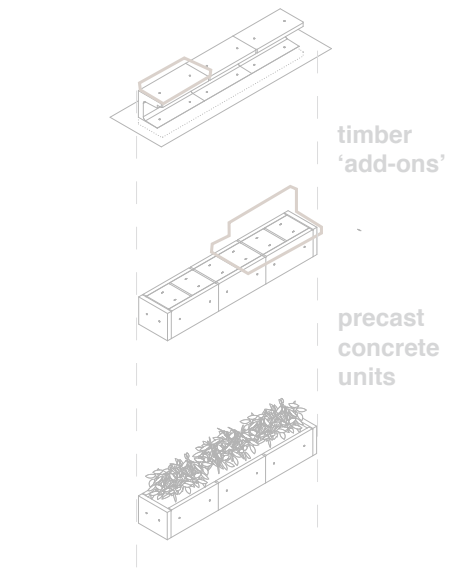
SURFACES - THE CONCEPT

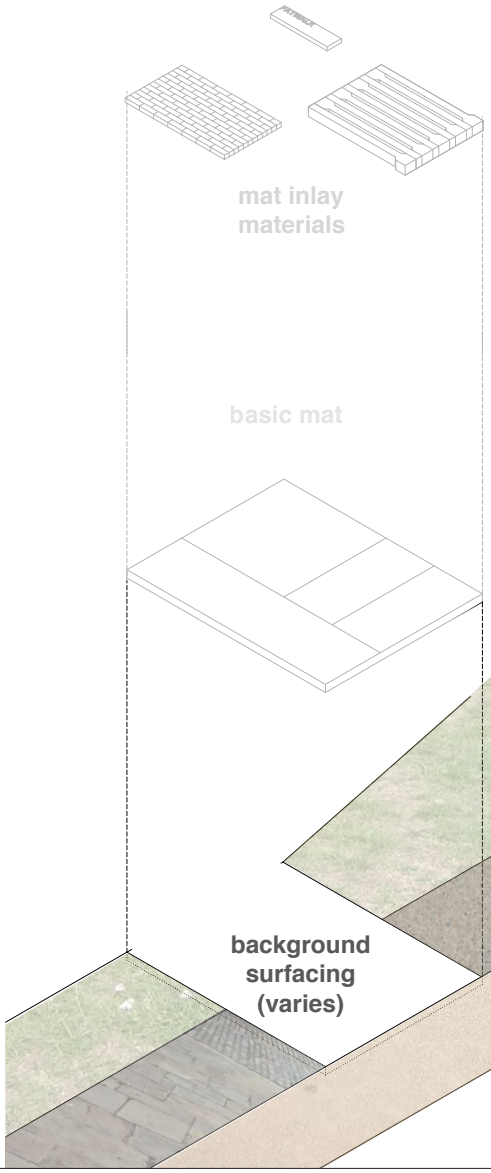
The first phase of the Lea River Park - the Leaway - is a continuous North-South route along the River Lea established by connecting a range of existing but fragmented riverside paths, stitched together with new public realm interventions.

Key to the implementation of a 'quick win - long term value' project, is the continuing use of the existing surfaces where possible, judged through an updated set of the previous Fatwalk standards. Due to the broad range of previously existing surfaces, it would have been a flawed strategy to propose that the Leaway consist of a continuous monolithic surface treatment. It would have been both be prohibitively expensive, and disregard the varying landscape settings it passes through.

Where new surfaces are required, or where new paths are created, the performance specification should be considered. If the surface is the primary traficked route, a surface of hot rolled asphalt or spray tar and chip relating to its context, should be considered. All surfaces, proposed and existing, should be assessed to ensure that they are providing the necessary slip resistance required for their context and level/type of traffic. Adjacent surfaces to the principal route are either a planted (described later in this chapter), or a permeable surface such as self binding gravel.

Examples of the diverse range of existing path surfacing which, although they do not exactly match the material palette, are currently working successfully and should be kept and maintained.

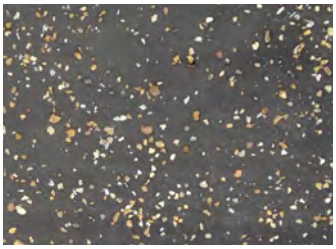




NEW INTERMEDIATE SURFACES

A variety of asphalt finishes can be achieved by controlling types of aggregate, shot-blasting, and additional finishes. The new surfaces within the park provide the opportunity to incorporate appropriate recycled or reclaimed aggregates eg. crushed brick from site clearance or chrushed shells within new paths by tidal waters.

Example of standard asphalt distinguished by the use of river gravel aggregate



Exposed aggregate at Wharfside Road

Spray tar and chippings repairs to existing asphalt pathway at Three Mills Green

EXISTING SURFACES RETAINED

Existing surface finishes (asphalt, concrete with different finishes, access panels) are retained and co-opted into the parks proposed network of paths and landscaping schemes

Existing Modular Paving

Where existing modular paving is incorporated into the primary trafficked route, it should be inspected and re-laid flush to regulations where appropriate. Where paving is damaged or lifted, it is appropriate to remove it (i.e. sections of Silvocea Way).

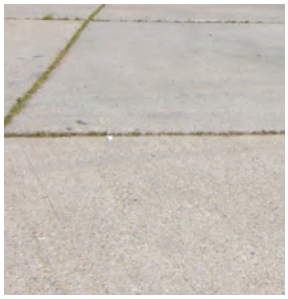
Blockwork paving - Silvocea Way

Blockwork paving appropriate to remove - Silvocea Way

Cobbles - Cody Wilds

Artificial stone paving (ASP) - Around A13

Existing Continuous Surfaces



Insitu Concrete - North of A13

Re-use following inspection. Gaps should be repaired where necessary to comply with accessibility standards.

Existing public highways

Stippled concrete with granite kerb can be adopted into Leaway Route. Repairs should be made where necessary by the appropriate Borough Highways Team.

Precast concrete service covers

Re-use as footpath and unsure access remains possible. Inspect and repair where appropriate to comply with standards.

Black top - Asphalt

Clean and repair where necessary.

PAVING MATS - THE CONCEPT

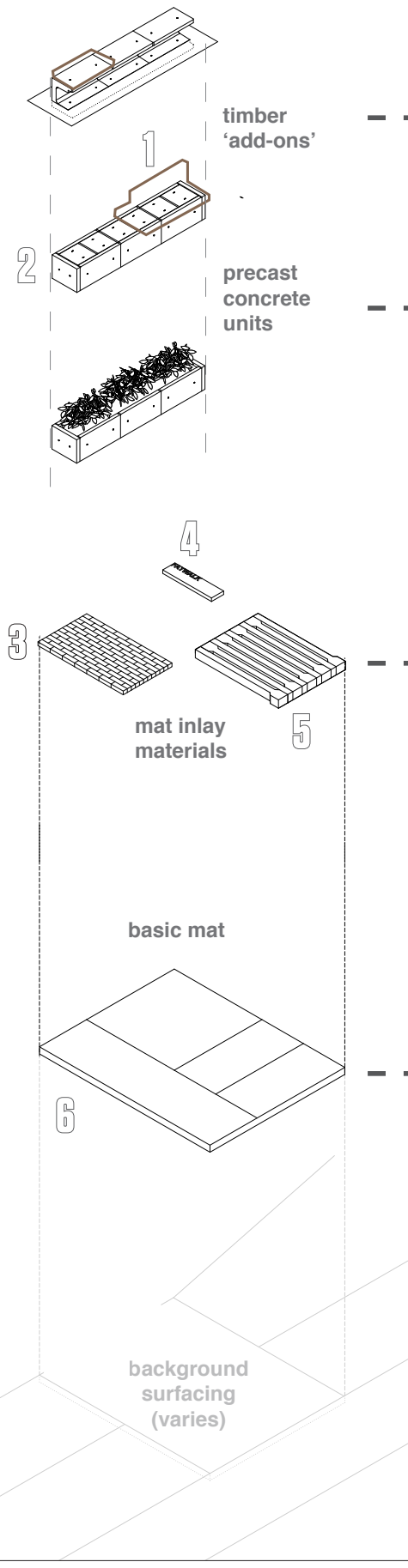
Rather than attempting to provide a continuous surface - impossible by virtue of the Prologis and Electra estates - we suggest a strategy of nodes at key decision points along the route. Instead of being used in an extensive and linear fashion, they are used in a more intensive but localised manner creating a series of episodic waymarkers or 'paving mats' which repeat along the length of the Leaway. The role of these mats is similar to that which was previously imagined for the Fatwalk paving, albeit across a wider range of different physical forms:

- Providing coherence and a distinctive and recognisable material identity for the Leaway. This is achieved through material quality as well as 'branding' with imprinted words.
- Assisting with wayfinding. The mats are located at key thresholds - where people join the Leaway, or have to make a decision about the direction in which to move.

Whilst providing an all important coherence along the length of the Leaway, the mats would also recognise and respond to the particularity of their individual contexts. We have set out opposite the 'anatomy' of a paving mat, to explain what might constitute its ingredients.

See the following chapter 'PAVING MAT EXAMPLES' for further detail.

Creating a coherent approach to the layout of street furniture by condensing all elements into mats



VERTICAL ELEMENTS

Precast concrete channels in use at Three Mills Green

Timber 'add-ons'

These soften and adapt the basic concrete plinth/mat to provide a variety of seating conditions - including places with back- and arm-rests as required.

While the design is bespoke, it is an assemblage of robust, readily available components/materials, making repair - rather than replacement - feasible and relatively straight-forward.

It is intended that these elements - as part of the language of mats - provide a degree of continuity along the Leaway. Therefore, they possess a common language related to their materiality, and the 'chunky' dimensions of the timber - even when the specific seating arrangement differs.

This family resemblance extends to other seating proposed or installed along the leaway route, such as the timber add-on atop the existing wall at Twelvetrees Crescent, and the timber benches installed - as a continuation of the Leaway - at Three

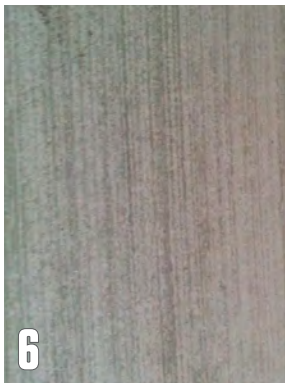
PRECAST CONCRETE MAT ELEMENTS

3. Precast concrete plank paving to areas of paving mats. 300 x 100mm, thickness 80mm Product reference: Marshalls, Metrolinea City Silver Grey

4. Precast concrete plank cattle-slats. Brushed finish

5. Bespoke precast concrete 'signslab' with cast-in lettering set into paving mats.

INSITU CONCRETE MATS



Cast-in situ concrete mats with aluminium edging, incised lines/crack control joints and brushed and exposed aggregate finish. Where services are present and there is a greater risk of the surface being lifted for repair or maintenance, a modular material should be used as the primary mat area to avoid unsightly repairs.

BENCHES

Whilst it is proposed that some benches are to be integrated within the paving mats (see preceding pages) - as part of a coherent Leaway wide identity- the revised strategy for seating also aims to respond to the particularities (materiality, setting and potential use) of each portion of the Leaway route.

A varied selection of benches and seating along the route are responsive to the particularity of their context, and the potential of different locations to support particular activities (ie. perches v. picnic tables). The varied seating should be at 50m intervals where possible and must also include some provision of backrests, armrests and locations for wheelchairs or buggies to be designed in.

PERCHES / STOOLS

Perches and stools could be provided along the Leaway route as less formal resting points. These should always compliment the regular provision of accessible benches.

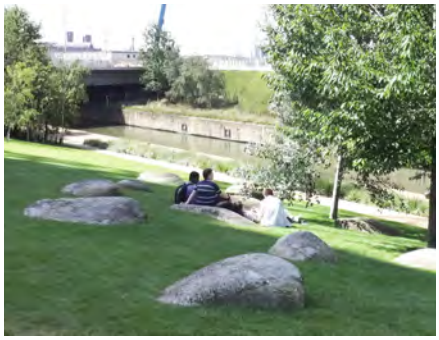
BENCHES

Benches made from large format timbers with back and armrests are preferred. The large timbers should resist vandalism - theft, damage and arson - but should also be easy to source and replace when necessary. Arrangements of pre-cast concrete channels with (or without) 'timber add ons' is another seating option along the Leaway.

Left: Image shows a Leaway bench at

INFORMAL SEATING

A resting place might be more ambiguous in character, with the potential to be a play structure or a retaining edge. The opportunity to appropriate found or reclaimed objects as seating should also be considered where possible.



Boulders embedded into a grassy verge; Queen Elizabeth Olympic Park, London.

Vertical arrangement of large format timbers for both seating and play; regeneration of Carlsberg Brewery, Copenhagen.

CANNING TOWN RIVERSIDE

TIMBER BENCHES

Furnitube, Fordham Bench - Queen Elizabeth Olympic Park

Escofet, Tramet - Three Mills Green

Furnitube, Albert Basin Bench

Although not illustrated in all of the examples above, installation of benches should always incoporate a provision of arm rests, back rests and appropriate space between benches for wheelchair users or buggies to be accomodated.

SEATING WITHIN THE LEAWAY LANDSCAPES

Cody Wilds, pre-cast concrete channels can be used both as a retaining edge and a bench.

Silvocea Way, timber benches situated on a paving mat and a more ambiguous bench created with a timber addition to a heritage object.

Cody Wilds, pre-cast concrete stools arranged informally to encourage rest and play on river edge.

STANDARDS FOR SEATING

4	Seating/Rest points

Design Intent

Mobility ranges vary greatly between disabled people, while factors such as weather, topography (gradients) and obstacles can also affect mobility ranges (see Appendix 4). Resting places should therefore be provided on all circulation routes.

Mobility impaired people need to rest and recover at reasonably frequent intervals, in commonly used pedestrian areas and the frequency of seating provision should consider the mobility ranges of disabled people as described in Standard 1 - Graded routes.

Inclusive design guidelines

Seating areas should provide a choice of different seat designs, for example single seats and benches and some seats should have backrests.

As an alternative to standard seating, consideration should be given to the provision of perching seats, either fixed or pull-down, with and without backs, as casual rest places in longer circulation routes.

When considering the design of seating designers should note that materials that are cold to the touch are best avoided.

Seating should be located along, but not within, pedestrian routes and may be combined with/ associated with merchandising, toilet provision and other spectator support services within the Olympic Park.

Seats may also be located on soft landscaping though this will require an associated accessible route.

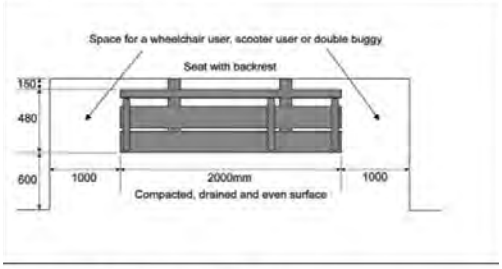
Seating provided in close proximity to each end of bridges

The preferred distance on level ground between resting places is 50m[1], though this may not be a formal seat

Seating should:

- have a seat height of between a height of 470mm – 480mm for seats and benches[1]
- have a seat height of 650 mm – 800 mm for perch seats[2]
- be clearly identifiable against their surroundings[2]
- be sited on a suitable surface[2]
- designed to allow a wheelchair user or scooter user to sit alongside friends and family or in groups[2]
- armrests when provided at approximately 200mm above seat level[1]

Diagram 1: Indicative seating layouts



[1] Inclusive Mobility Department of Transport 2002

[2] BS 8300:2001(incorporating Amendment no 1) Design of buildings and their approaches t the needs of disabled people - Code of practice, 2001

Preferred distance on level ground between resting places is 50m*, though this may not be a formal seat

* Inclusive Mobility - Department of Transport 2002

Left: Extract from the LLDC's Inclusive Design Standards, avaible online at:

http://queenelizabetholympicpark.co.uk/our-story/transforming-east-london/accessibility

PLAY

The 'topography of difference' is also an opportunity to incorporate a wide range of exciting playspace. Constrained by the often limited width of the Leaway, a strategy of peppering the route with interesting objects and landscapes offers the chance for active liminal play*, that draws on and reinforces the character of the valley areas.

Robustness is key and materials used should aim to be self finishing and low maintenance. In choosing what to place, 'real' materials and objects should be chosen over reproductions or artificial/ generic play equipment, which are perceived as attracting vandalism and encouraging anti-social behaviour.

Scope for moments of play should not be focused exclusively at children. Through the use of robust materials, activities including: trials cycling, BMX, skateboarding, and free running, should be encouraged and accounted for. Structures and park furniture should be designed robustly enough to allow for appropriation by these users, rather than adding studs or other deterrents.

Play equipment should not impede upon the key circulation routes of the Leaway, being instead, set into parallel stretches of landscape or wider clearings. Designers should also demonstrate that they have considered issues surrounding inclusive play provision, with designs which allow for users of all abilities to make use of the play provision proposed. Further advice is given in the LLDC's Inclusive Design Guideline 17 -'Inclusive Play'.

Some initial proposals:
- Bespoke play equipment
- Basic infrastructure (hillocks/retaining edges/channels) provides some basic opportunities/punctuation of the route
- Sited along links to adjacent communities (ie. Aberfeldy).
- Placing of erratic objects that both contribute to the curation of the valley and create curious and unsusual playspace

* Liminal play occupies spaces which have no fixed purpose, allowing the player to interpret and occupy through their own interpretations of the space's characteristics

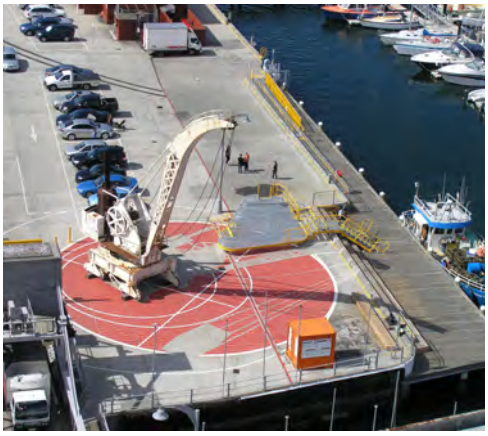
Existing imaginative playspaces of Wild Kingdom, Three Mills Green

Urban sports including trials cycling, free running or exercise should be expected in this situation rather than designed out

Cast-in metal edgings can prepare street furniture for skaters; Normand Park, London

The industrial artefacts of Landschaftspark Nord Duisburg offer the chance for liminal play for both children and adults; slight adjustments to existing structures create climbing walls, and collected artefacts are robust enough to encourage clambering and imaginative play.

Sections of decommissioned industrial kit/found or recycled objects as things to play on/around



Painting hardstanding/tarmac to create a richer visual landscape, where games can be created based around the abstraction of the markings. This is not considered appropriate along the key circulation routes of the Leaway, in order to not be confusing for people with visual impairments.

Successful examples of incorporating formal and informal play can be seen in the play spaces delivered in the Queen Elizabeth Olympic Park, notably the Canal Park (above). Here slides are incorporated into the level changes of the site and recycled materials from the 2012 Olympics have been incorporated to create clambering play elements.

Play barges in the Netherlands

^ The park should also seek to provide moments for more conventional 'play' and recreation through the provision of: table tennis tables, informal markings for games such as petanque, or access to the water for kayaking/canoeing. The location of tables should be carefully planned, considering: maintenance, enforcement of anti-social behaviour, footfall, and trying to create a sheltered environment to play.

WAYFINDING

Wayfinding should be provided in several forms along the Leaway. Primarily, this will follow the continuing roll out of Legible London signage throughout London's Boroughs.

At informal entrances to the park and as part of the 'to the river' projects, Legible London finger posts should be used to tie the park into the surrounding streets, communities and transport links.

Additionally at the key valley entrances and complex knuckles of routes - such as at Twelvetrees/Bow Locks, the A13, East India Dock Basin, and Silvertown Viaduct - Legible London Midiliths should be used to inform the park users of orientation, route distances/times, adjacent attractions, and transport connections.

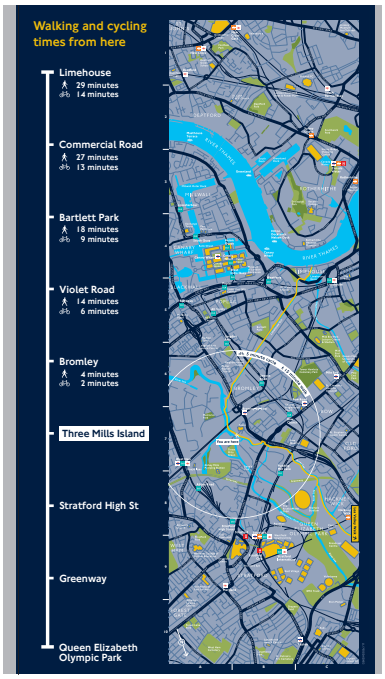
It is proposed that along the route, bespoke signage pavers will feature both place names and directions, subtly reinforcing the users sense of direction along the Leaway. In addition to these pavers, opportunities to paint additional signage onto existing or proposed structures/benches should be recognised and could potentially lead to artist/designer commissions, which respond to the unique cultural and historic context of the Lower Lea Valley.

A final layer of signage and wayfinding on the Leaway, will deliver information about the curation of the valley's rich history. This should be developed as separate commission resulting in a signage system that can be published as an appendix to this document when complete. This category of signage may include interpretation boards for planting and the display of historic photographs, as well as additional information for park users, that cannot be accomodated within the format of Legible London.

LEGIBLE LONDON

Midiliths - Installed adjacent to Cody Dock

Fingerposts - Twelcetrees Crescent



Detail of Midilith at Three Mills

The development of the Lea River Park over the coming decade, will be reflected in the ongoing development of the Legible London base mapping. Given the live nature of the base mapping for these signs, it is important that the boroughs are kept up to date with the delivery of new sections of the park, ensuring that refreshes of the physical signage panels are timed to coincide with key park milestones.

A Legible London Midilith as one of the street furniture elements that are consolidated on a typical paving mat

LEAWAY PAVING SLABS Bespoke

The bespoke signage paving slabs are seen as a secondary signage method, at low level, offering a background reassurance to park users of their route. These should incorporate the names of the wharves or local parkspaces which the Leaway passes through. More information on these mats is provided in the following 'Paving Mat Examples' chapter and in the appendix 'Bespoke Signage Slabs'.

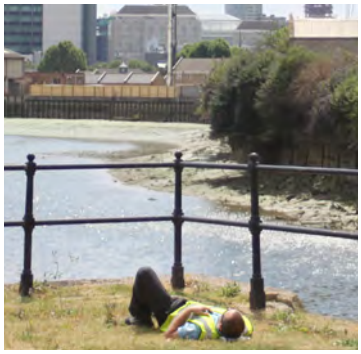
OPPORTUNISTIC SIGNAGE Commissions

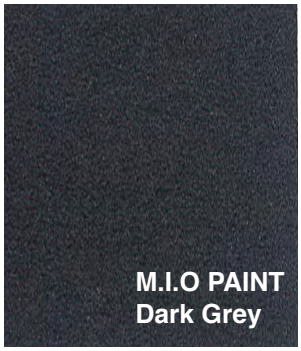
This form of signage is intended as an additional layer of the parks overall curation. Locations should be identified for artist/designer commissions, which explore aspects of the Lea River Park's botanic, horticultural, industrial or social narratives.

RIVER GUARDING, BOLLARDS AND BINS

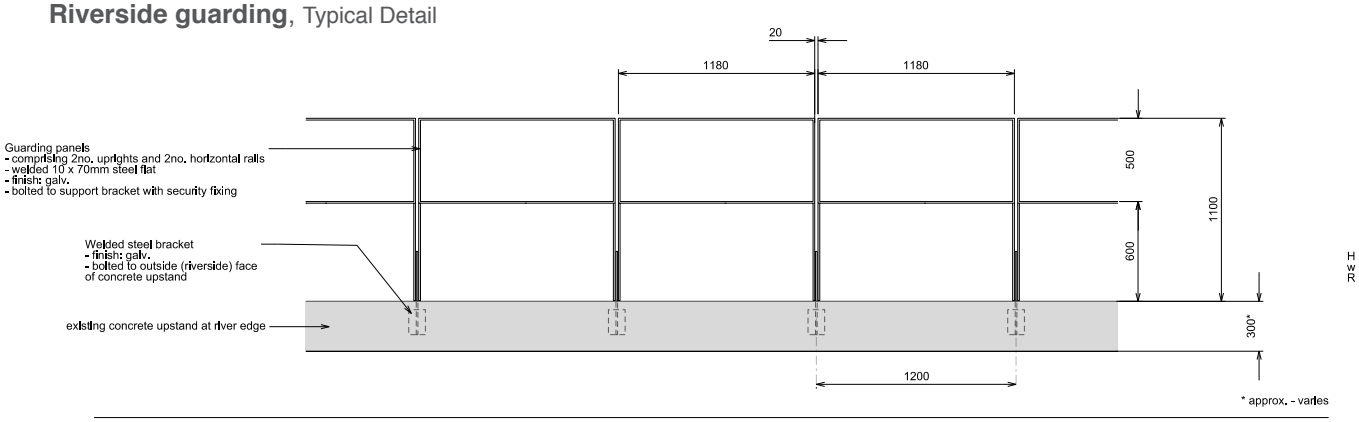
RIVER GUARDING

There is no consistency in existing riverside railing design along the river Lea, except that the existing railings are always dark painted and generally have two horizontal rails. The proposed railings should mediate between both this trend and the language of the now connection structure's balustrades (i.e. steel flats) with two horizontal rails and M.I.O paint finish. While M.I.O paint finishes have varying tones, other paint finishes should provide a close match, i.e. RAL 7021 (Black Grey).





Riverside guarding, Typical Detail



BOLLARDS

Bollards should only be used after attempts have been explored to use either tree planting, and/or street furniture to block access. Bollards should be avoided wherever possible as they can be a hindrance to people with visual impairments. When used, they should provide visual contrast to their surroundings. More advice on their use can be found in the LLDC's Inclusive Design Guidance 07 - 'Street furniture'. Any bollard used should be a minimum height of 1m, with a 150mm contrasting strip applied to the top.

A range should be used which offers both fixed and removable options. Drop-down or removable bollards should be fitted with fire brigade accessible locks. However, FB11/14 locks should be avoided as their keys are readily available, and their use will make the bollard vunerable to vandalism. Preferably bollards should be galvanised or painted Dark Grey in M.I.O paint.

The design of bollards should be simple and free of ornament or additional decoration. Forms which emphasise the language of standard steel angle sections and universal steel beams are preferred, in order to mirror the industrial charecter of the new park infrastructure. LB Tower Hamlets request that in their parks areas bollards are provided with a sloping top surface (below right).

Below are some examples of possible bollards:

^ Incorporating all street furniture into coherent layouts on paving mats

BINS

In consultation with the boroughs is has been established that bins should be placed: at entrance/ exit points, key 'nodes' and near to picnic areas.

Finishes should be in line with the material palette for the Lea River Park set out in this document, and should provide strong visual contrast to their surroundings.

LB Tower Hamlets request that bins in their park areas are root fixed and include domed tops (below centre).

Where possible, bins should be attached to existing street furniture such as light columns or signposts, in line with TfL's Streetscape guidance, to help declutter the public realm.

Bins should also be provided with covers, in order to decrease the occurances of fly tipping of domestic or commerical waste and issues with vermin.
Choices should be made in consultation with the Borough's team who will maintain and empty the bins.

Below are some examples of possible bins:

Broxap, **Budworth Litter Bin**

Broxap, Kelshall litter bin (LBTH approved)

Broxap, **Queen Elizabeth Olympic Park**

BICYCLE STANDS

Bicycle stands should be provided only where there is an identified need - at Leaway 'destinations' - points where park users are encouraged to stop and spend time in a particular park area. They should be located in a position with good passive surveillance, to reduce the risk of bicycle theft. Stands should include signage, to indicate that they are for push bikes only, and a tapping rail to aid the visually impaired. Specific product choices should be made in consultation with the relevant Borough and their *Streetscape Design Guidance,* with the Leaway finishes palette in mind.

FENCING/MESH ENCLOSURES

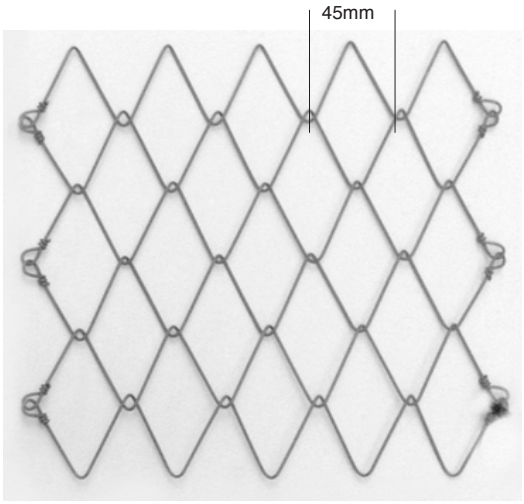
It is proposed that edges (fences/railings/walls) are allowed to respond to the specific context/conditions/needs along the distinctive sections of the Leaway, rather than attempting to unify these conditions along the whole route.

This strategy could allow for the use of economic, 'off-the-peg' products, where appropriate. The finishes of all new fences should aim to comply with the material palette established in this document, predominantly galvanised or mid grey.

Below are some examples of possible fence products:

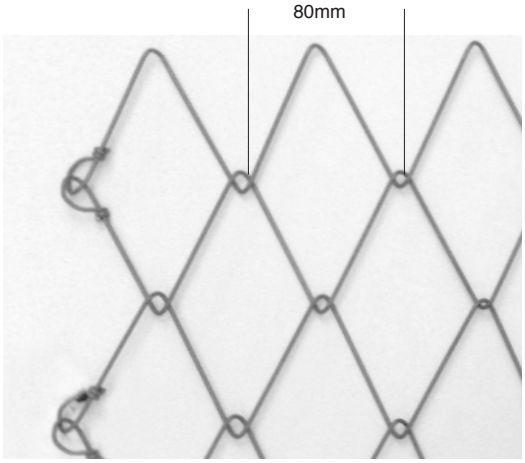
Option 1:
Product: Geobrugg Rombo G45/2 woven wire mesh.
Material: High tensile strength steel.
Finish: Proprietary SUPERCOATING corrosion protection system (zinc/ aluminium coating).

USE CRITERIA:
• Highly transparent minimal framing/ intermediate structure.
• Focused use on Leaway structures.
• High tensile steel resistant to cutting, etc.
• Used in locations where there is a risk of climbing and attendant security risks or risks of abuse to structures - e.g. perimeter fencing or full height enclosures that when climbed could provide access to structure.



Option 2:
Product: Geobrugg Rombo G80/3 woven wire mesh.
Material: High tensile strength steel.
Finish: Proprietary SUPERCOATING corrosion protection system (zinc/ aluminium coating).

USE CRITERIA:
• Highly transparent.
• Minimal framing/intermediate structure.
• Focused use on Leaway structures.
• High tensile steel resistant to cutting, etc. - 3mm thickness.
• Used in locations where there is low risk of abuse through climbing, and where maximum transparency is desired.

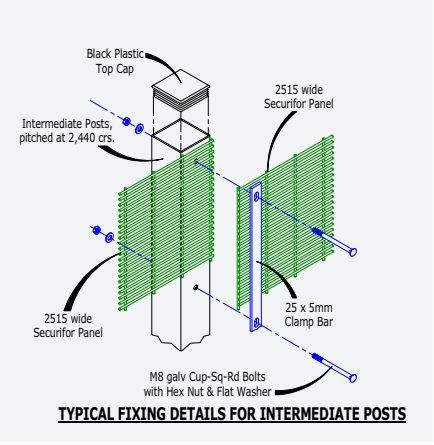


Option 3:
Product: Betafence Securifor 358 (or similar according to adjacent site's security requirements).
Material: Steel weld mesh.
Finish: Zincalu Super.

USE CRITERIA:
• 'Off-the-peg' system for use in extensive, background applications - e.g. perimeter fencing foregrounded by planting.
• The intention is that this fencing would be removed if/when adjacent sites are developed.
• Tops can be finished so as to greater dcrease climbing risks.

Option 4:
Re-use, renew, repair existing fence.

Rural Studio - Auburn University, USA



Betafence Securifor 358 is solution for boundaries to adjacent businesses, offering tested and industry recognised levels of security

LIGHTING

Principally, the Leaway is a day-time park to be enjoyed and utilised within daylight hours. Therefore, to minimise anti-social behavior and misuse of park spaces, the provision of lighting has been kept to a minimum along the Leaway. However, as the park encompasses sections of public highway and makes infrastructure connections that may be used outwith daylight hours, lighting will have to be considered in particular instances (eg. the underpass beneath the A13 and Silvertown Viaduct).

In these cases, lighting provision should be of high quality and integrated successfully into the area of landscape or piece of infrastructure it is required to light. These instances are in such varied conditions that no proscriptive guidance will be given within this design manual. Decisions should be made in conjunction with the appropriate Borough and the team that will ultimately be responsible for its maintenance.

Care should be taken to prevent the overspill of artificial lighting onto the river or onto areas of soft landscaping ,to minimise the effects on biodiversity. The finish to new/renovated lighting within the park should be coordinated to match the surrounding street furniture. Preferred finishes are dark grey M.I.O or galvanised to other match park structures or Black RAL 9005 (as accepted in TfL Streetcape guidance).

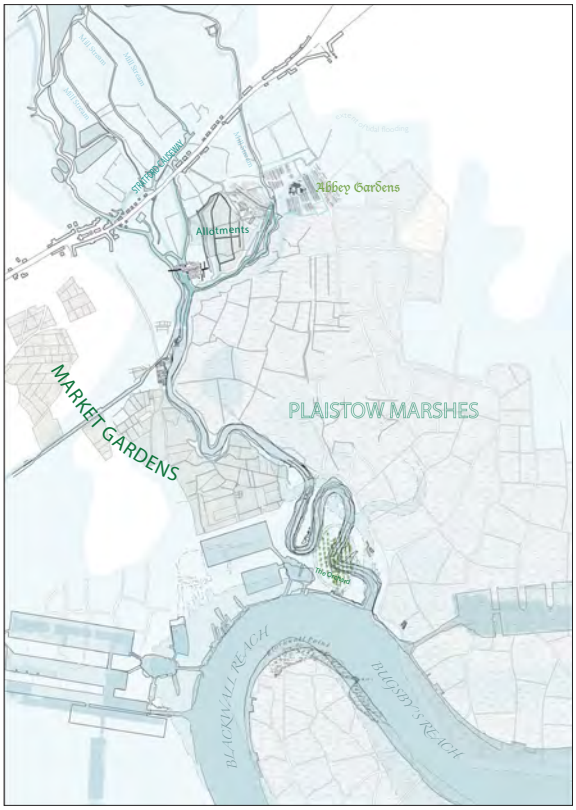
As the areas surrounding the park regenerate and developments come forward, the local populations and footfall within the area will increase. When this ‘future context’ has been established, it will be important to revisit the need for lighting. Increased footfall may justify the lighting of landmark structures (existing bridges and new Leaway structures) and key park spaces, making the route safer and more accessible outside of daylight hours.

PLANTING

It is proposed that the planting plan should aim to strengthen the particularities of its context. The Leaway passes through diverse, characterful, landscapes that each draw upon the history and unique existing qualities of each location. It should respond to the subtle variety of landscapes along the Valley, and to its history of mixing native and non-native/exotic species.

Alongside planting and landscape, the provision of interpretation boards should be included.

ANCIENT LANDSCAPES rediscovering the native valley



Very little remains of the original native valley landscapes. Centuries of 'improving', reclamation and channelisation of the river have all played a part in the editing of the topography.

A key move in the landscape strategy is that the river edge, when found, should be celebrated and its particular character enhanced. By planting groups of native riverine tree species and actively greening the river walls, the aim is to rediscover a biodiverse river edge. Proposed planting includes naturalistic groups of native riverside trees within swards, with areas of wildflower meadow that combine to create wild spaces between the surviving reed beds and contrasting distinctly with the artificial wharves.

EDIBLE PLANTING a productive landscape






From the early Twelfth Century, Stratford Langthorne Abbey began to reclaim marshland in the Lower Lea Valley. The Abbey was joined by mills, orchards and market gardens along the fertile river. It is proposed that part of the landscape strategy should be to 'improve' the corporate or municipal character of existing landscape, such as Cody Wilds, by the introduction of edible fruiting species.

This could re-establish a source of food and a culture of foraging along the Leaway route (where soil sampling proves that conditions are suitably uncontaminated). It is important that the landscape strategy progresses with an 'edible' emphasis, favouring fruiting hedgerows and trees where possible, to ensure the Leaway fulfils its potential as a productive urban landscape.

LANDMARK TREES planted wayfinding

Along the route of the Leaway there are several locations, including Twelvetrees Crescent, where there are established and mature hybrid black poplars and white poplars, which already define this valley and mark its route.

It is proposed that similar specimen planting should be used, to both act as landmarks along the valley and also to tie into the surrounding townscape.

The native Populus nigra betulifolia

EXISTING LANDSCAPES relaxing maintenance regimes

Along the proposed route of the Leaway are several areas of existing soft landscape which are to be incorporated into the Lea River Park. Areas such as the Cody Wilds are currently heavily maintained, with frequent mowing of meadows and cutting back of native hedgerows. This acts to suppress the rich diversity of the riverside meadows and hedgerows.

Maintenance routines should be developed which introduce more relaxed cycles, allowing flowering and fruting to take place before strimming or thinning to ensure that the sites biodiversity potential is realised.

Latent wild flower at Cody Wilds is currently suppressed by a rigorous program of over-maintenance to could be relaxed to allow it to flourish

BROWNFIELD HABITATS

Alongside the narrative of native and edible landscapes is the more recent development of the new ‘natural’ landscape of the Lower Lea Valley - the brownfield site. Following years of semi-dereliction, industrial sites are being cleared for redevelopment, and consideration should be given as to how to continue these habitats which can be rich in their own form of biodiveristy.

The artificial nature and industrial history of some stretches of the park could support a unique planting strategy celebrating both pollution-tolerant and bioremediator species, and those exotic species that have established themselves in London, both due to its warmer microclimate and history of international trade - a new urban wildspace.

Seeding/plug planting of appropriate and colourful species, which offer broader ecological value should be explored. Succesful brownfield habitats have been established as part of the Queen Elizabeth Olympic Park, replicating the habitats lost during its construction.

A useful reference is also the work of Dr Stuart Connop of U.E.L, including the Barking Riverside brownfield habitat creation project (right).

Examples of test beds experimenting with brownfield habitats

BIODIVERSITY

In seeking to create a verdant park within the industrialised Lower Lea, there are many locations where artificial landscapes can benefit from well judged habitat restoration or introduction, helping to return the channelised River Lea back towards a natural condition. These interventions offer the chance to greatly increase the biodiversity and increase the resilience of the existing eco-systems.

Thames 21 is a charity and key project stakeholder which aims to transform the neglected rivers and waterways of London. The 'Love the Lea' campaign to clean up the River Lea has recently championed projects that include reed bed restoration and the re-introduction of inter-tidal planting areas.

REED BED RESTORATION Greening the river walls - 'Project Reed Bed'

An ongoing project of Thames 21's, is the restoration and cleaning of the reed bed at Poplar Reach, removing the invasive Japanese knotweed and large quantities of litter. Recently Thames 21 have developed a system of mats, which have been successfully installed along the sloping river walls of the Cody Wilds. These coir filled mesh panels are bolted down to the artificial concrete river wall. Installed in spring 2013, they have successfully taken and are now well established. Following a review of their construction methods, a second round of reed beds is planned as part of the Phase 1 Leaway.

These and the existing reed beds, help to clean and oxygenate the river water, reducing the chance - common at the moment - of the river's oxygen depletion through pollution incidents.

There are several other areas along the River Lea which could benefit from this system as well as the continued removal of rubbish and fly-tipping.

INTER TIDAL PLANTING restoring pre-flood defense landscapes

Thames 21 have also been working with Kings College to develop a system of planters which can be attached to vertical river walls, to introduce planting into the inter-tidal zones (above left and middle). Opportunities should also be found for the reintroduction of greater areas of inter-tidal flats, such as those created at Battersea Reach.

S.U.Ds Sustainable Urban Drainage

A major role that the green areas of the park can play, is in the control and mitigation of rainwater and its entry into the river or mains drains. This should be expressed where possible, helping to communicate the narrative of what role considered landscapes can play in the city.

Given that many areas of the riverside contain buried services, water attenuation should be investigated in the form of planted swales and rain gardens.

Tree planting should not involve hard landscaped surrounds. Instead, permeable areas should be left surrounding the trees to allow for drainage, helping to reduce water run off.

The use of S.U.Ds along the Leaway should build on the experience and success of L.B. Tower Hamlets, who have installed S.U.Ds across their Borough and are enthusiastic to continue to implement them. *SUDs Guidance,* produced by the Borough, can be referred to for further information.

Reference should also be made to the *London Sustainable Drainage Action Plan.*

Stockholm Tree Pits, Bethnal Green Road, Tower Hamlets

Swale, Derbyshire Street, Tower Hamlets

Rain Garden, Derbyshire Street, Tower Hamlets

MISCONNECTED DRAINS water pollution

Another program which Thames 21 is championing is ‘Connect Right’, involving the education of building users and households to ensure that their appliances and drains are connected properly into mains sewers. Their studies demonstrate the negative impact in water quality that the discharge of effluent and detergents pose. Chances to further educate the local population and industries should be taken within the park and its surrounding neighbourhoods.

PAVING MAT EXAMPLES

The linear route of the Leaway is formed from a collection of existing, improved and new riveside routes, which does not lend itself to a singular continuous surface finish as much of the route will not need resurfacing, such as the Cody Wilds stretch.

Given this context, we suggest that the coherence and identity of the Leaway should be established by a family of incidental interventions, rather than a literal continuity of surface.

The following chapter explores some scenarios for the deployment of the paving mats covered in the preceding continuity elements pages. It is imagined that there will be a wide range of situations where the mats need to be deployed, with varying site geometries, levels and programmatic or operational requirements.

The overriding concept of the mats is that they should play a ‘quiet’ role in experiencing the park. They should be placed intelligently; to either provide localised rest points responding to key views, to collect street furniture together - avoiding clutter, or at key entrance points so as to incorporate signage, vehicle access restriction and act as an orientation device. Mats should aim to ‘play down’ to the particularities of their contexts, often responding orthogonally to their sites and maintaining signage strips perpendicular to the direction of travel.

As the park is delivered, it is anticipated that future design teams should visit and learn from the implementation of paving mats in earlier schemes, continuing a commonality throughout the Lea River Park which acts to connect its disparate parts.

Right: A section of the Leaway has already been delivered at Three Mills Green under the working title of the ‘Fatwalk’, here some of the initial mats can be visited to understand their aesthetic approach.


Danger
THREE MILLS
GREEN

HOW DO I KNOW I AM ON THE LEAWAY?

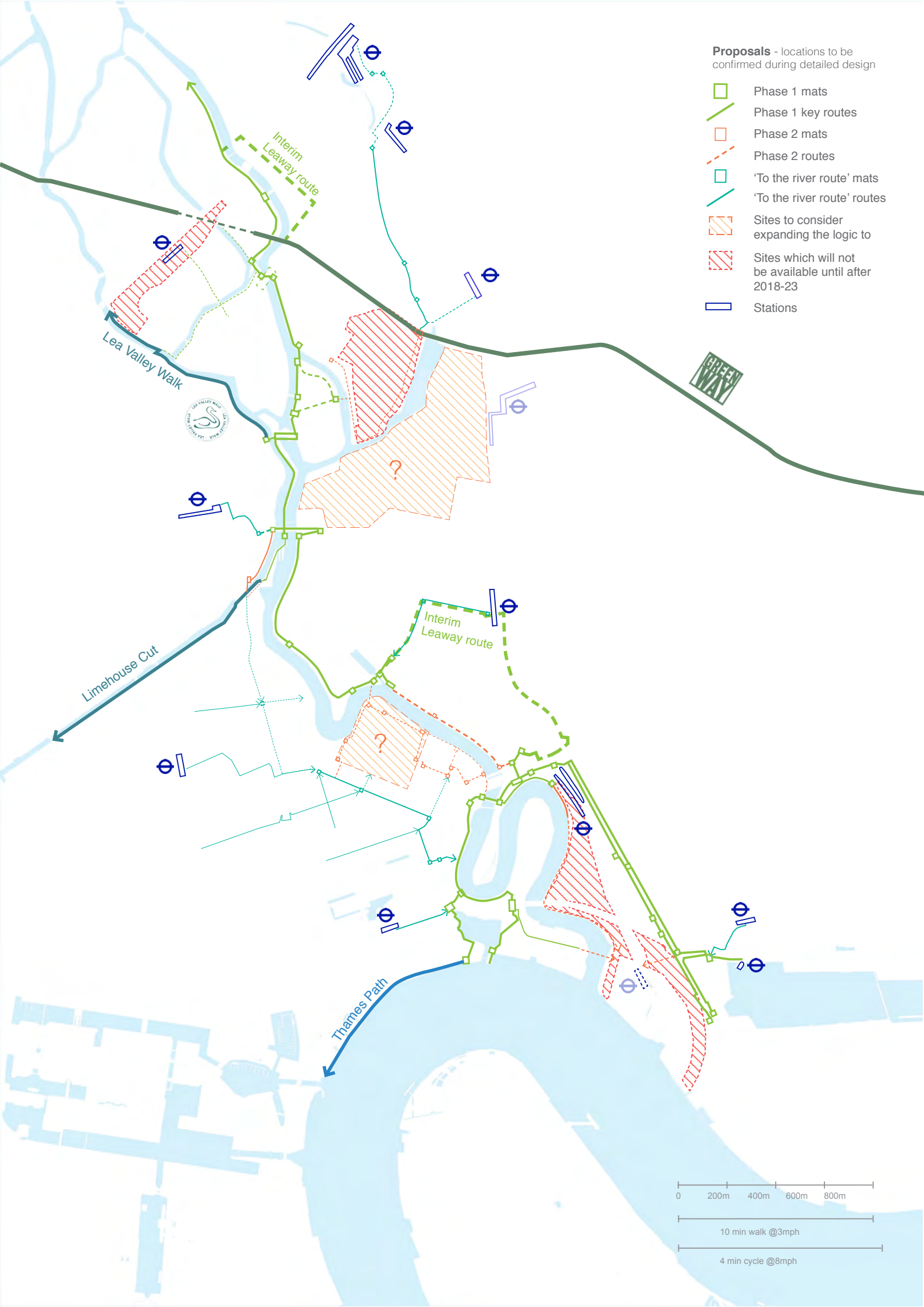
Instead of being used in an extensive and linear fashion new paving is used in a localised manner - creating a series of episodic way-markers - 'paving mats' which repeat along the length of the Leaway. The role of these mats would be similar to that which was previously imagined for the Fatwalk paving, albeit in a different physical form:

- Providing coherence and a distinctive and recognisable material identity for the Leaway. This could be achieved through material quality as well as 'branding' through imprinted words.

- Assisting with wayfinding. The mats would be located at key thresholds - where people join the Leaway, or have to make a decision about the direction in which to move.

Whilst providing an all important coherence along the length of the Leaway, the mats should also be designed to recognise and respond to the particularity of their individual contexts. In the Continuity Elements chapter, the anatomy of a paving mat was set out, overleaf we begin to flesh these out to explore how they might respond to the great range of locations down the valley.

Right: An indication of the deployment of paving mats throughout the developing Lea River Park and its approaches


Proposals - locations to be confirmed during detailed design
Phase 1 mats
Phase 1 key routes
Phase 2 mats
Phase 2 routes
'To the river route' mats
'To the river route' routes
Sites to consider expanding the logic to
Sites which will not be available until after 2018-23
Stations
Interim Leaway route
Lea Valley Walk
Limehouse Cut
Interim Leaway route
Thames Path
?
?
0
200m
400m
600m
800m
10 min walk @3mph
4 min cycle @8mph

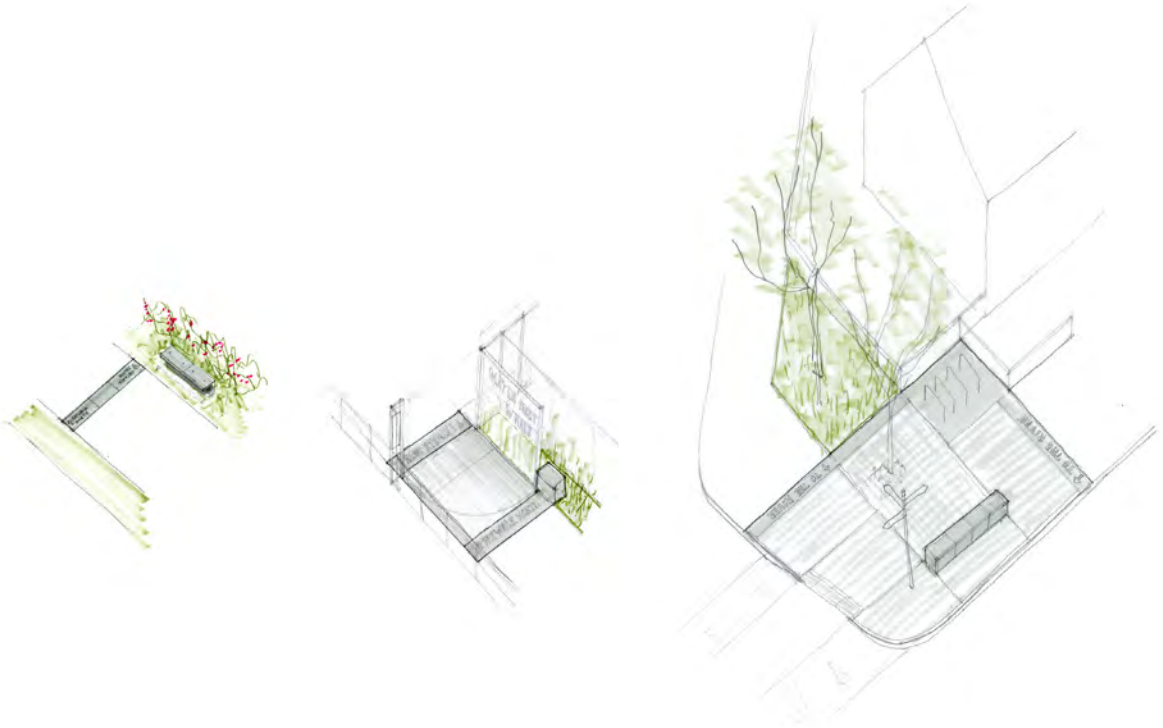
PAVING MATS - A RANGE OF SCALES

As the core of the park's broad context and a design strategy which is based on a reading of the landscape through a 'topography of difference', placing mats at key route decisions will inevitably lead to a range of scenarios for deploying the mats.

In order to orientate park users, these mats will range in scale from an strip inlaid into existing surfaces, to larger 'three dimensional' mats which are incorporated into the retrofitting of city scale infrastructure.

The geometries of the paving mats should be simple and legible. Where possible, paving mats should be orthogonal and perpendicular to the direction of travel. Where site geometries are more complicated, paving mats should look to carefully rationalise these geometries rather that adding to the visual confusion.

Please see Appendix 3 for Worked Examples.



'INSET'

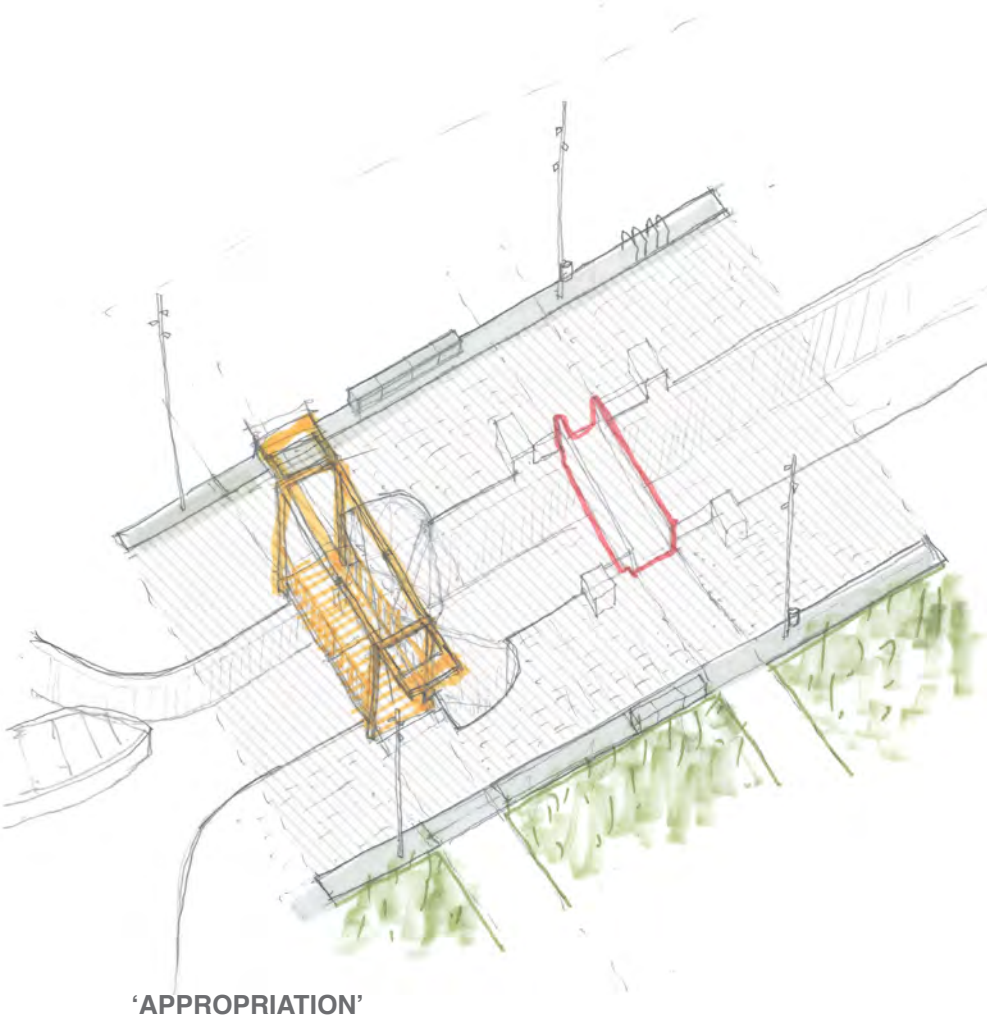
- Cody Wilds
- Isthmus
- Thames Path
- Short Wall

'THRESHOLD'

- Mayer Parry
- Poplar Reach Cable Bridge
- Crown Wharf

'ENTRANCE'

- Abbot Road
- Cody Road
- Star Lane
- Twelvetrees Crescent



‘INTERCHANGE’

- A13
- Silvertown Viaduct
- Twelvetrees Crescent stair and ramp

‘APPROPRIATION’

- Cody Dock
- Bow Locks
- Three Mills
- East India Dock Basin

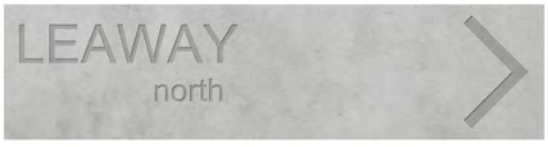
LEAWAY PAVERS

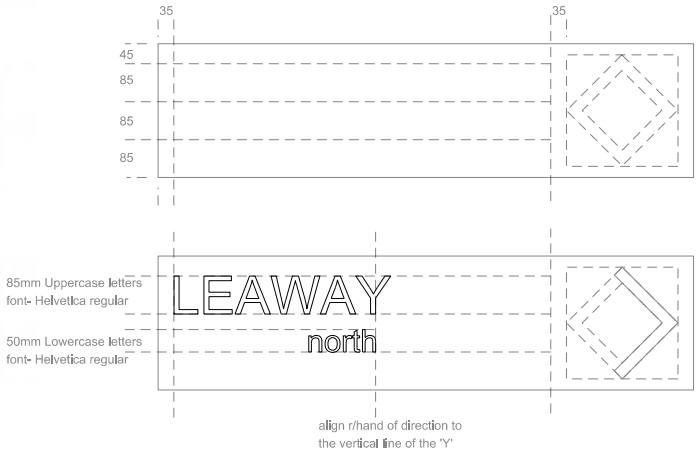
Key to the wayfinding strategy of the Lea River Park is the development alongside the standardised Legible London signage, of its own bespoke Leaway paving slabs. These paving slabs provide a background level of reassurance to park users that they are following the correct route, as often the Leaway route is potentially unclear, especially around existing infrastructure.

These custom paving slabs are designed to be easy to form, similar to methods used to fabricate Charcon's CG marker blocks. It is expected that the agreed designs will be made available to the project partners to ensure a continuity in what is signed and the agreed specifications.

The following is a draft specification for the bespoke precast concrete signage slabs;

- 300x1233mm, nominal thickness 75/150mm (to be confirmed by structural engineer to comply with expected vehicle loadings)
- Natural colour concrete, to a standard surface finish to provide required PTV value.
- Cast in lettering, 5mm deep, formed from laser cut acrylic or similar
- Lettering, Helvetica Regular, uppercase names 85mm high and cardinal directions in lowercase text 50mm high
- To be installed on an appropriate sub-base determined by the ground conditions and an assessment of the necessary vehicle traffic for either maintenance or emergency access.





Top: An early concept view of a paving mat, including signage strips which extend into the main pathway.

Above: Some examples of the custom pavers which have been developed for the Lea River Park.

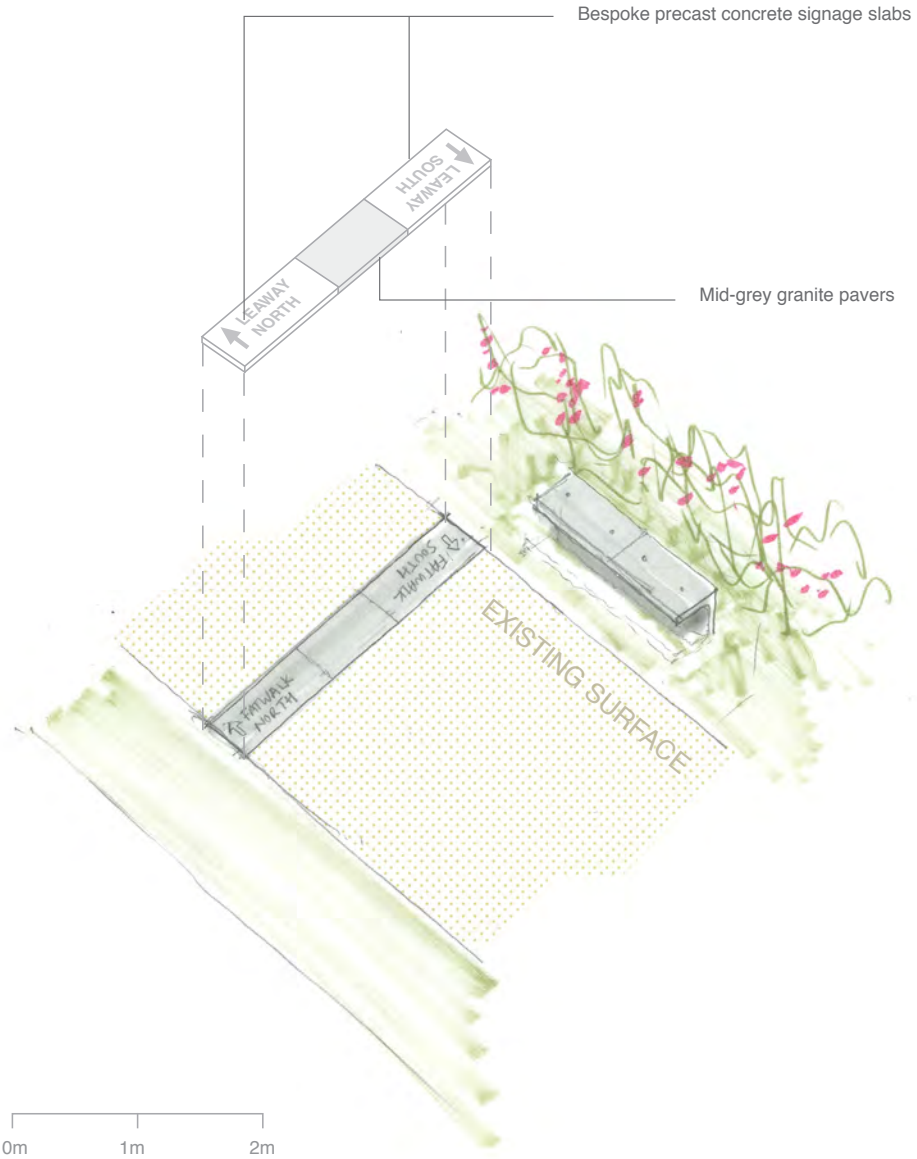
PAVING MAT - 'INSET'

The simplest form of paving mats are inset strips of bespoke directional signage pavers and granite pavers. The custom pavers can be easily fitted into either new or existing surfaces providing the park users with a reinforcement of the route of the Leaway and its direction.

This one of the most common examples of mats found within the park, given how easily they can be retrofitted into the existing riverside walkways.

Examples of locations include,
- Cody Wilds
- Twelvetrees Crossing
- Thames Path
- Short Wall

Custom paver installed at Three Mills Green



PAVING MAT - 'THRESHOLD'

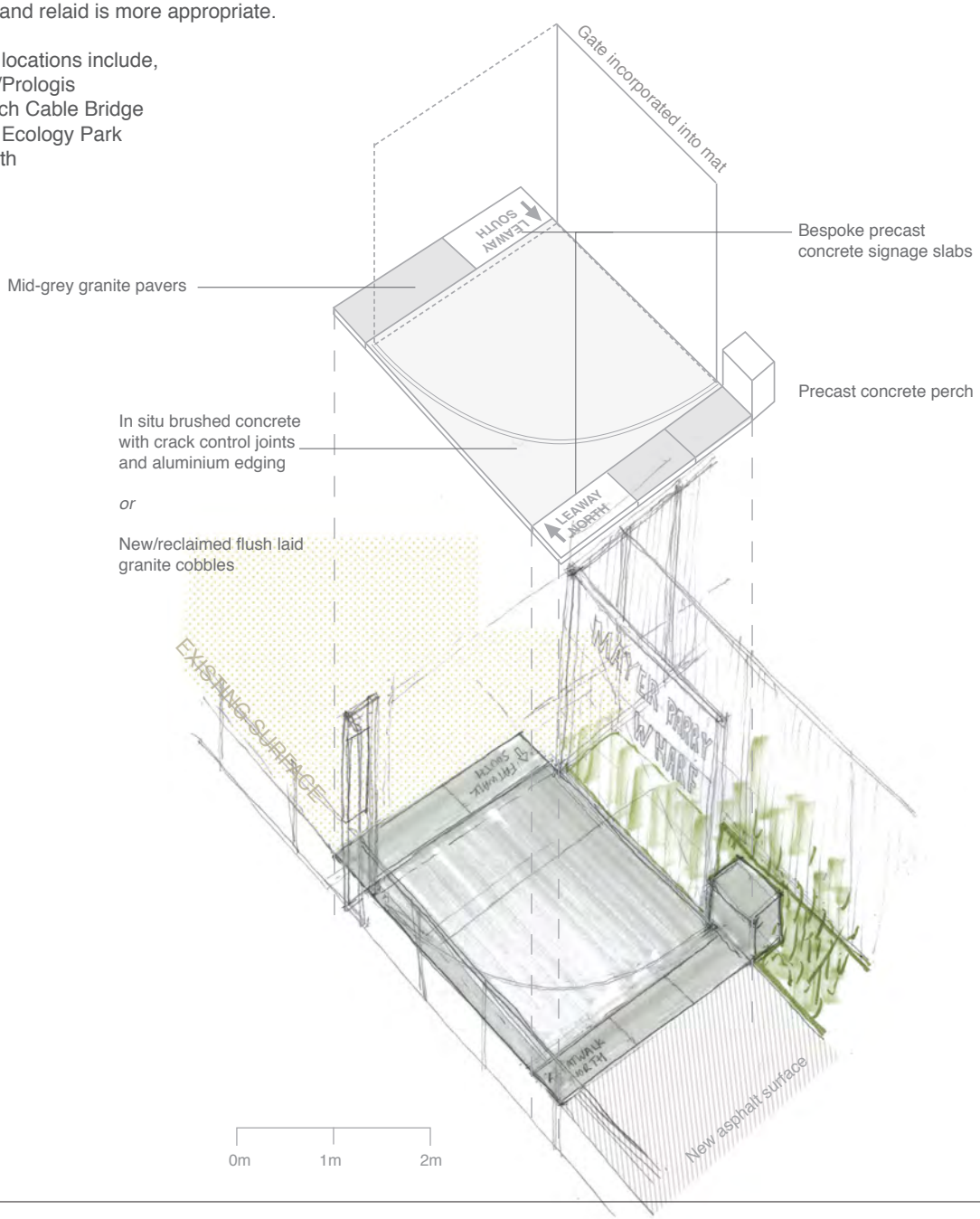
This paving mat variation will also be relatively common, mediating between varying site conditions along the route of the Leaway. These will exist at junctions between new and appropriated route sections, mediating between new and old surfaces or where gates may need to be provided for security or to conform with landowners operational requirements.

The example below shows an early study for a paving mat at the threshold between Electra Wharf and the new Mayer Parry/Crown Wharf permissive route.

Here a gate might need to be incorporated, with its swing, drop bolts and stays. These threshold mats should aim to inform the user as to the route options, with this mat incorporating signage showing alternative routes in the exceptional circumstances when the wharf must be shut for the transfer of goods.

In detailing the mats consideration should be given to any underlying services, determining whether monolithic in situ concrete or small format paving which can be lifted and relaid is more appropriate.

Examples of locations include,
- Cody Dock/Prologis
- Poplar Reach Cable Bridge
- Bow Creek Ecology Park
- Thames Path



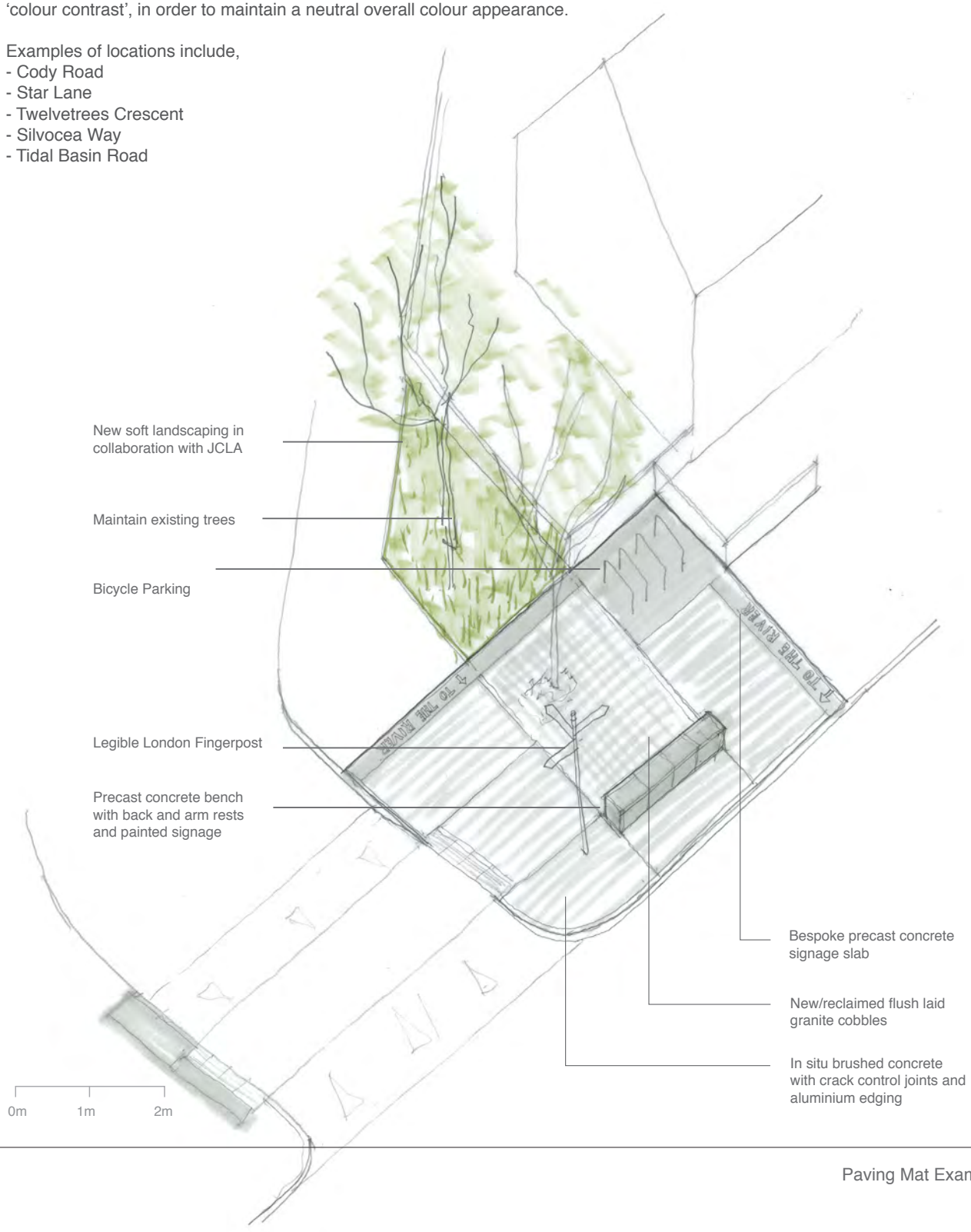
PAVING MAT - 'ENTRANCE'

This mat variation is expected to play the role of an entrance into the park from neighbouring communities. Their greater scale allows them to begin to accrue additional elements including wayfinding, benches, cycle parking or trees. Typically they will combine precast directional paving slabs and small module paving within areas of in situ brushed concrete

The example below shows an early study for a 'to the river' mat at the junction of Abbott Road and Dee Street.

Here an existing tree will need to be incorporated. When paving mats need to include tactile paving, the required visual contrast from its surroundings should be developed - where appropriate - through tonal contrast instead of 'colour contrast', in order to maintain a neutral overall colour appearance.

Examples of locations include,
- Cody Road
- Star Lane
- Twelvetrees Crescent
- Silvocea Way
- Tidal Basin Road

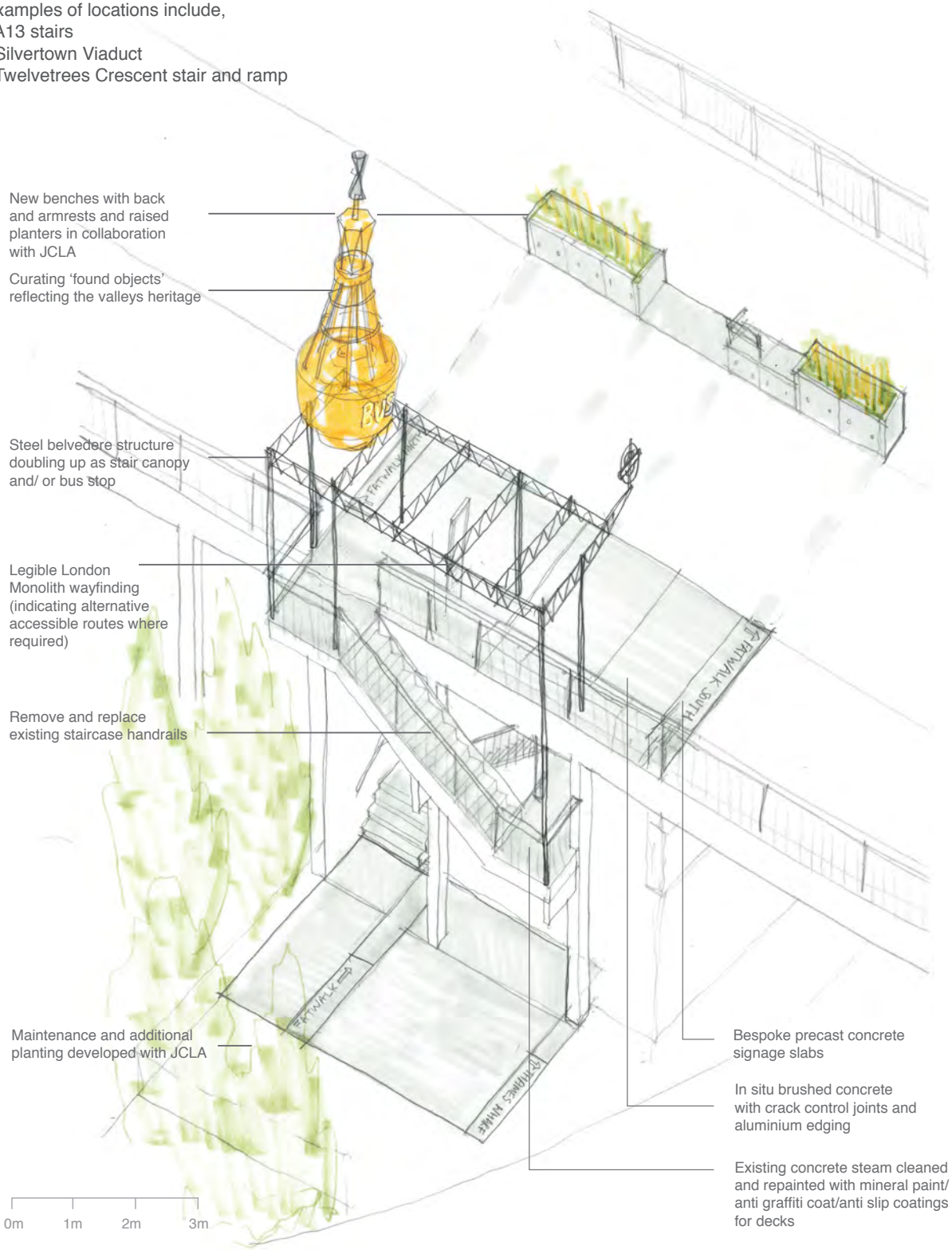


PAVING MAT - 'INTERCHANGE'

These paving mats exist at the key park entrances, around valley crossings where infrastructure create severances to the Leaways legible continuation. In these scenarios it is likely that the opportunities will arise to tackle level changes and tie the park into existing route networks.

These mats should be highly visible and are expected to become more vertical, acting visually as gateways as well as offering benches, wayfinding and planting strategies

Examples of locations include,
- A13 stairs
- Silvertown Viaduct
- Twelvetrees Crescent stair and ramp

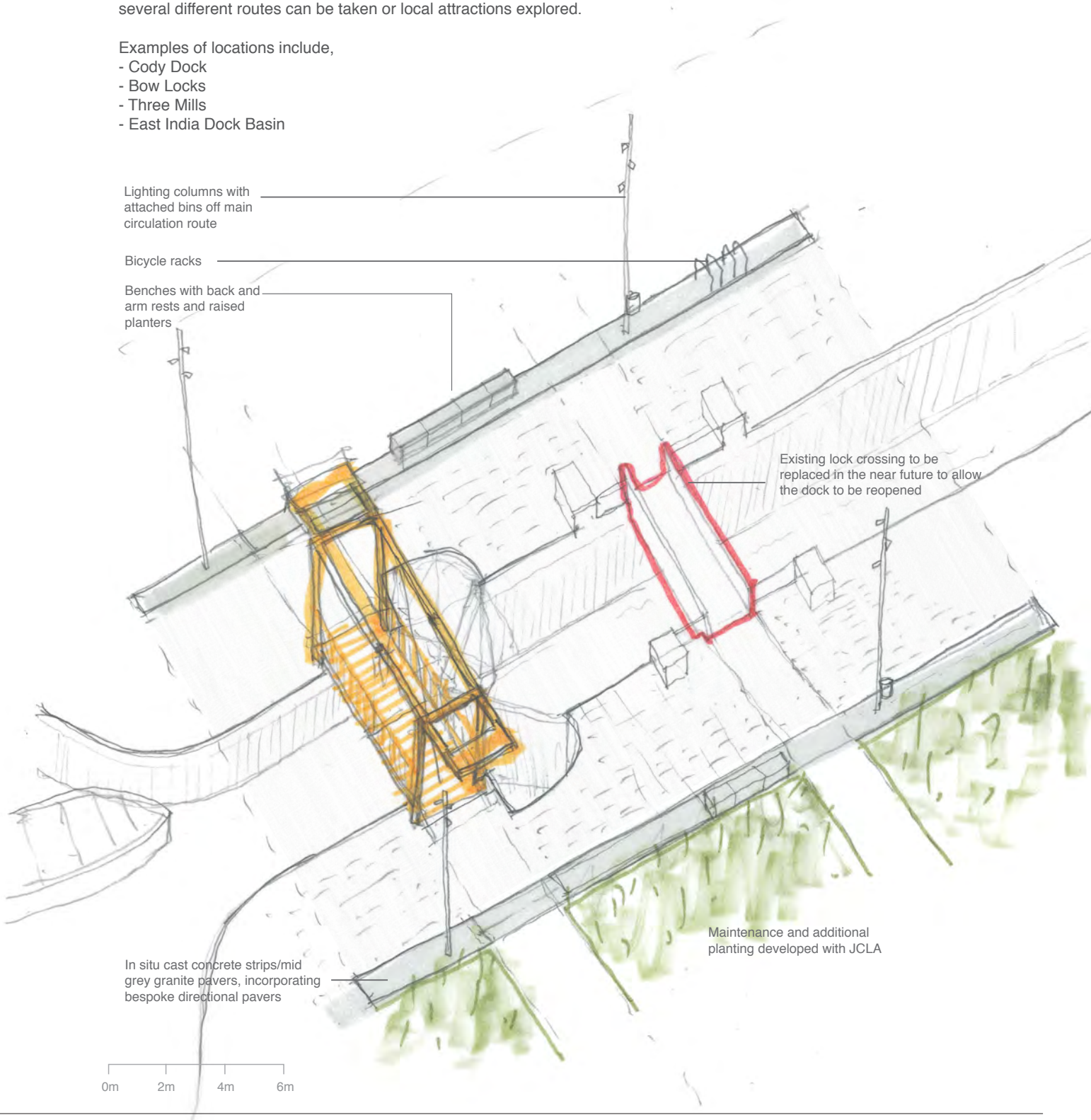


PAVING MAT - 'APPROPRIATION'

Located in larger park areas these mats attempt to co-opt existing surfaces and structures while incorporating park furniture such as benches, bins, lighting and cycle parking.

The approach illustrated below for Cody Dock involves two new linear mats either side of the dock entrance that contain all the new park furniture, preventing the cluttering of the heritage settings which this paving mat type will often need to engage with. The goal is also to try and frame a larger quayside area supporting its development as an active node along the Leaway, from where several different routes can be taken or local attractions explored.

Examples of locations include,
- Cody Dock
- Bow Locks
- Three Mills
- East India Dock Basin



A TOPOGRAPHY OF DIFFERENCE

The Lower Lea Valley is a 'made' landscape, which plays an intimate role in provisioning the city around it. Naturalistic landscape scenography is not appropriate here, but rather, park space is created from adopting and 'contaminating' elements of infrastructure and monocultural land uses, which have had free reign in the valley, forcing them to culture a richer, more urbane role. Elements such as railway tunnels, by-pass structures and gasholders are co-opted into making places for a day out in the valley.

The landscape strategy for the park aims to:

- Draw out the extraordinary landscape narratives that have shaped the valley, juxtaposing 'native' riverine landscape with an 'exotic' overlay, referencing, for example, the global trading of the docks, and the adaptation of colonising plants to industrial sites.
- Respond to and enhance particular landscapes that already exist in the Lower Lea Valley.
- Support and encourage new activities throughout the Lea River Park, to appeal to both visitors and local residents to create a diverse user group.
- Create new landscapes that help uncover the overlaid uses that have shaped the landscape.
- Create 'edible landscapes', referencing the Lower Lea Valley's role in provisioning London.
- Use tree planting to create 'urban connectors' leading into the park, and to mark the course of the River Lea.

CHARACTER AREAS

The character of the river valley undergoes a series of marked changes along its length. From the reservoirs of the north to its confluence with the Thames, these shifts can be identified as distinct character areas which describe the relationship between the river and the landscape in which it sits. This analysis has formed the basis of planning the new park, responding to the existing landscape in each area in a particular way. Later pages will illustrate how the various park areas relate to and reference the particular characteristics of their site.

These character areas are:

MILL MEADS

1. Short Wall
2. Three Mills Green
3. Three Mills

TWELVETREES

4. Isthmus
5. Victorian Infrastructure

WORKING RIVER

6. Cody Wilds
7. Poplar Reach
8. Working Wharves

EXOTIC WILD

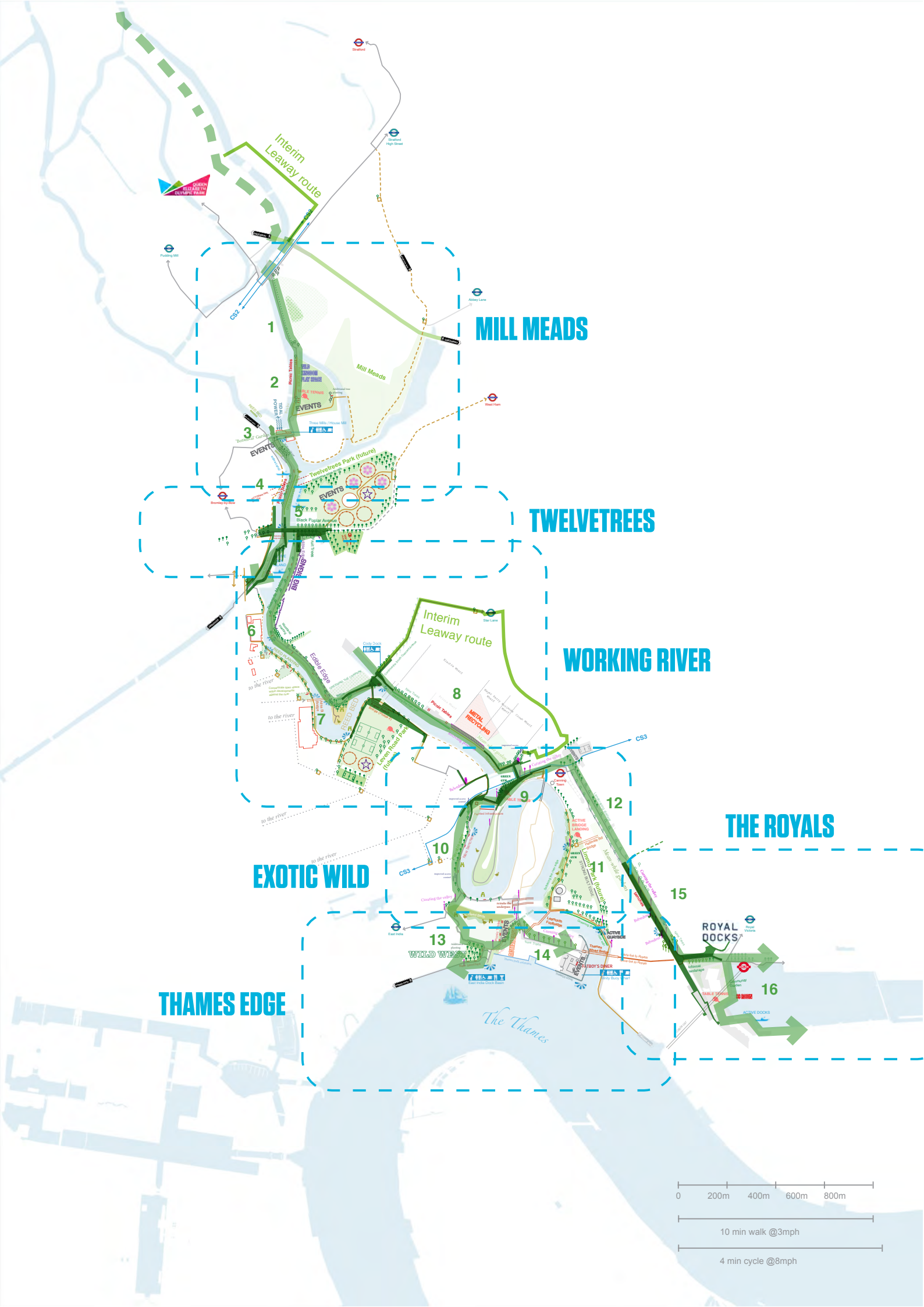
9. Canning Town Riverside
10. Silvocea Way
11. Limmo
12.. Silvertown Way

THAMES EDGE

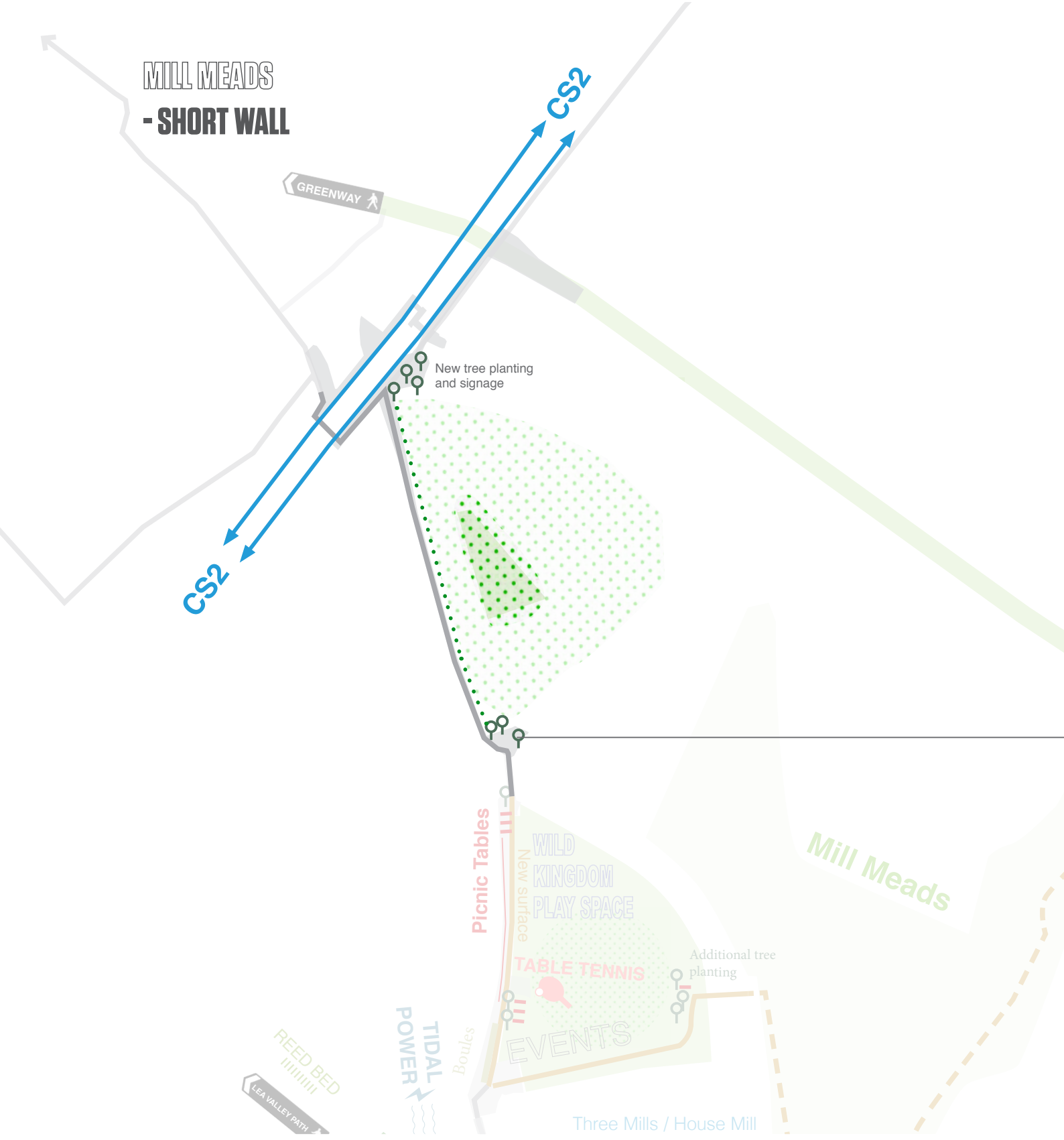
13. East India Dock Basin
14. Orchard Place

THE ROYALS

15. Silvertown Viaduct
16. Tidal Basin and the Royals


Interim Leaway route
MILL MEADS
TWELVETREES
WORKING RIVER
THE ROYALS
EXOTIC WILD
THAMES EDGE
Interim Leaway route
Mill Meads
Twelvetrees Park (future)
Lea River Park (future)
Limmo Park (future)
ROYAL DOCKS
WILD WEST
The Thames
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
0
200m
400m
600m
800m
10 min walk @3mph
4 min cycle @8mph

MILL MEADS
- SHORT WALL



This section of the Leaway was resurfaced and regraded as part of the Olympic connection improvements.

A wider strategy for this area might include the re-establishment of a grid of orchards, forming a coherent landscape across the fragmented public realm of Bison Road, with improved wayfinding to the Greenway and Leaway routes.

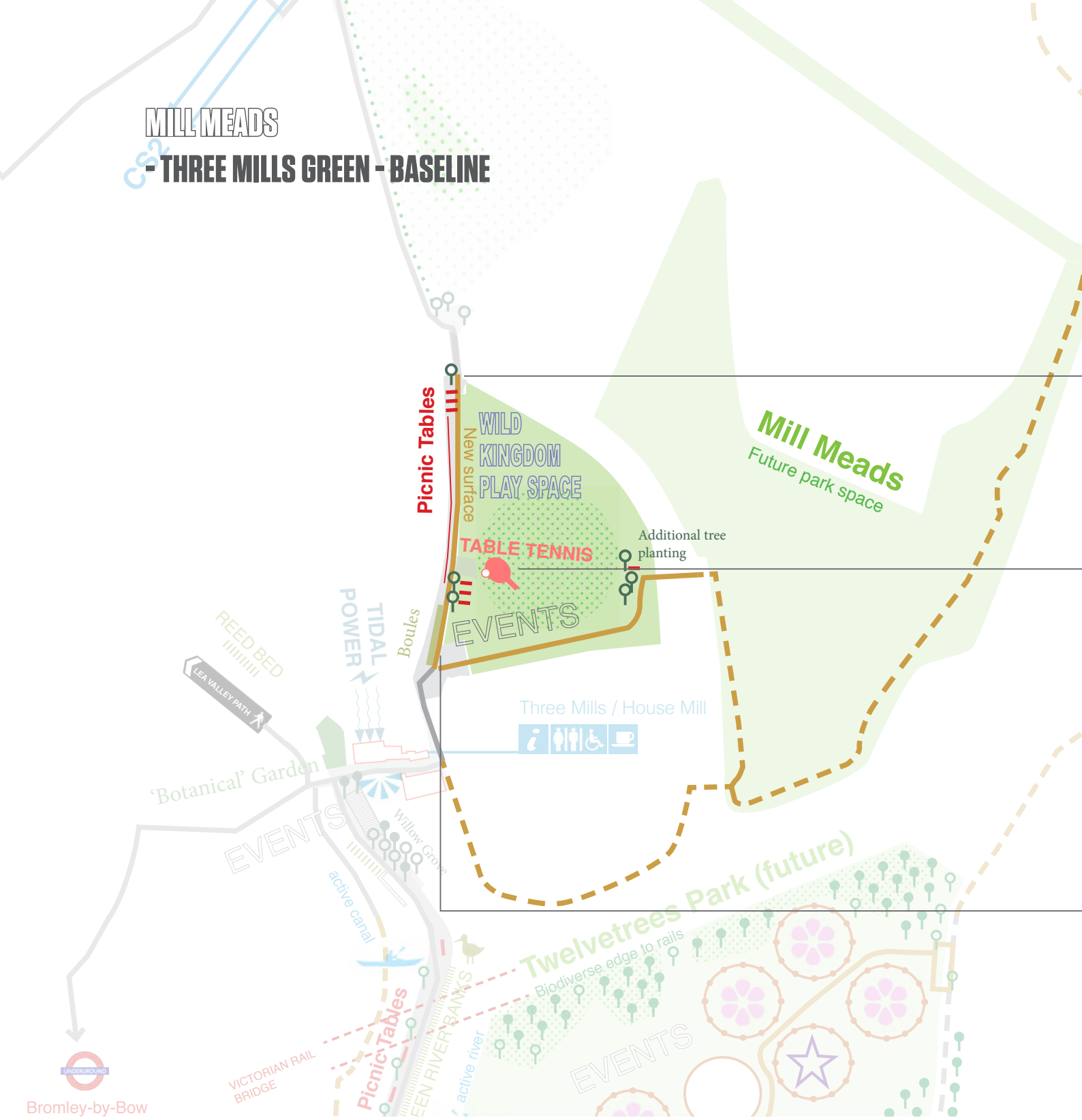
Key

- New tree planting
- Existing trees
- Seating
- 'To the river' mat
- New surfacing
- Existing surface

Tree planting to re-establish the orchards of the former Stratford-Langthorne abbey

Bison Road Corner Improvements - Encouraging community gardening schemes, similar to nearby the Abbey Gardens project

MILL MEADS
- THREE MILLS GREEN - BASELINE



The western edge of Three Mills Green is the first stage of the Leaway which has been completed, and as such, acts as a baseline for the other character areas.

Rather than providing just a 3m wide strip of paving, a wider 12m area is reprogrammed to create an active linear park. Interventions range from the provision of semi-mature trees and picnic tables, to table tennis tables and a boules pitch.

Several key details were developed and tested at Three Mills Green, including the inset wayfinding pavers, concrete channel benches and the use of Tramet street furniture.

Key

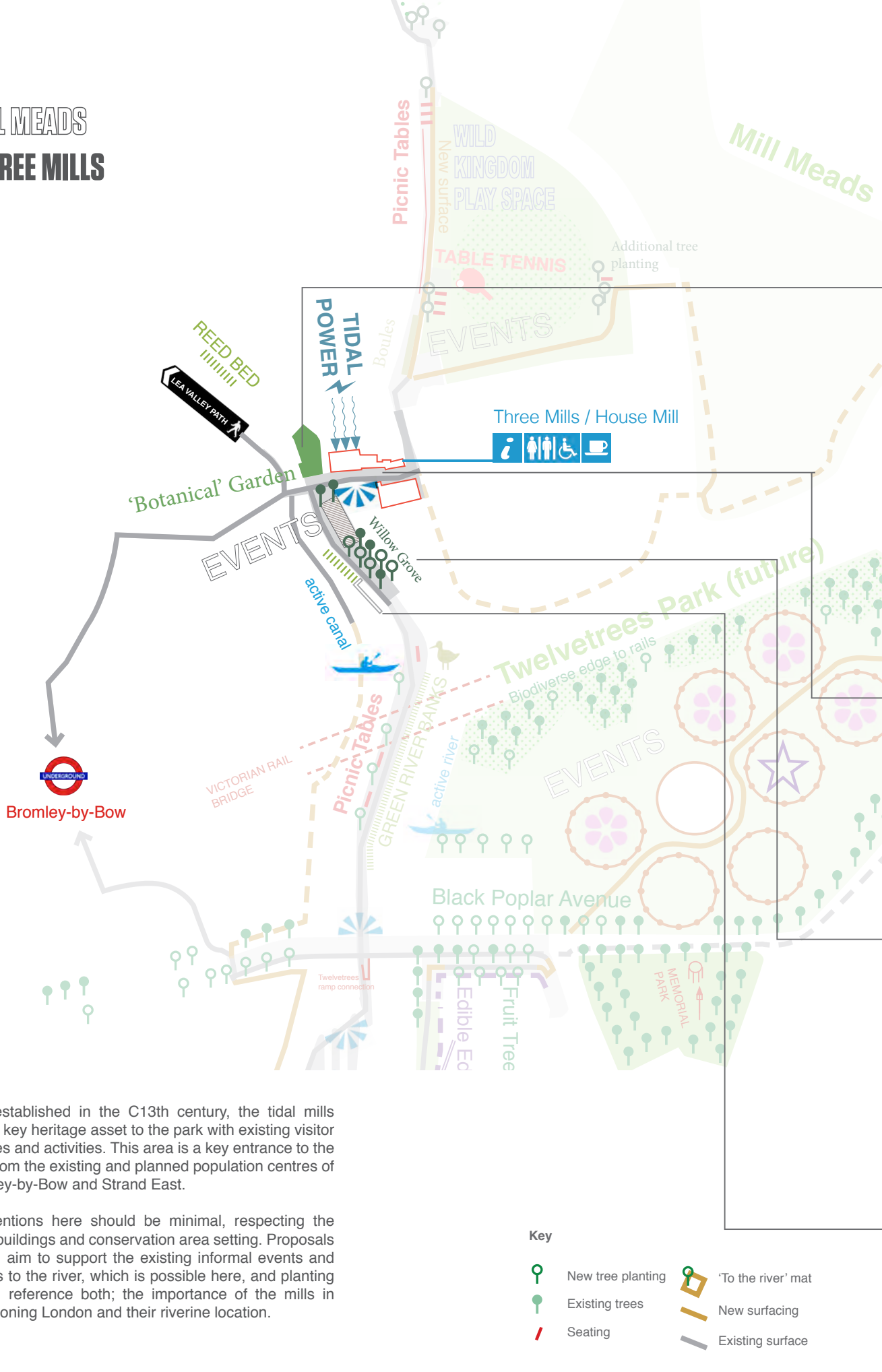
- New tree planting
- Existing trees
- Seating
- 'To the river' mat
- New surfacing
- Existing surface
- Future Green-way link

Provision of benches and picnic tables at the northern end, adjacent to the canal.

An active edge: table tennis tables, a boules pitch and We Made That ‘s ‘Wild Kingdom’.

Resurfaced generous width path with redundant railings removed, to create a canal edge which is part of a more generous park.

MILL MEADS
- THREE MILLS



First established in the C13th century, the tidal mills form a key heritage asset to the park with existing visitor facilities and activities. This area is a key entrance to the park from the existing and planned population centres of Bromley-by-Bow and Strand East.

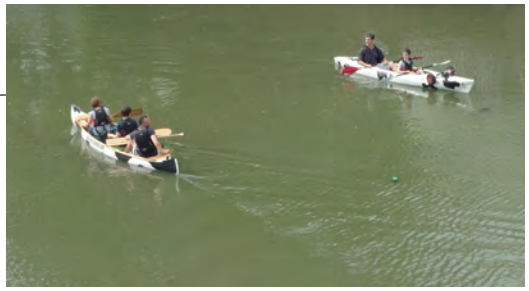
Interventions here should be minimal, respecting the listed buildings and conservation area setting. Proposals should aim to support the existing informal events and access to the river, which is possible here, and planting should reference both; the importance of the mills in provisioning London and their riverine location.



Planting leftover spaces with botanic specimens involved in the historic production of gin at Three Mills.

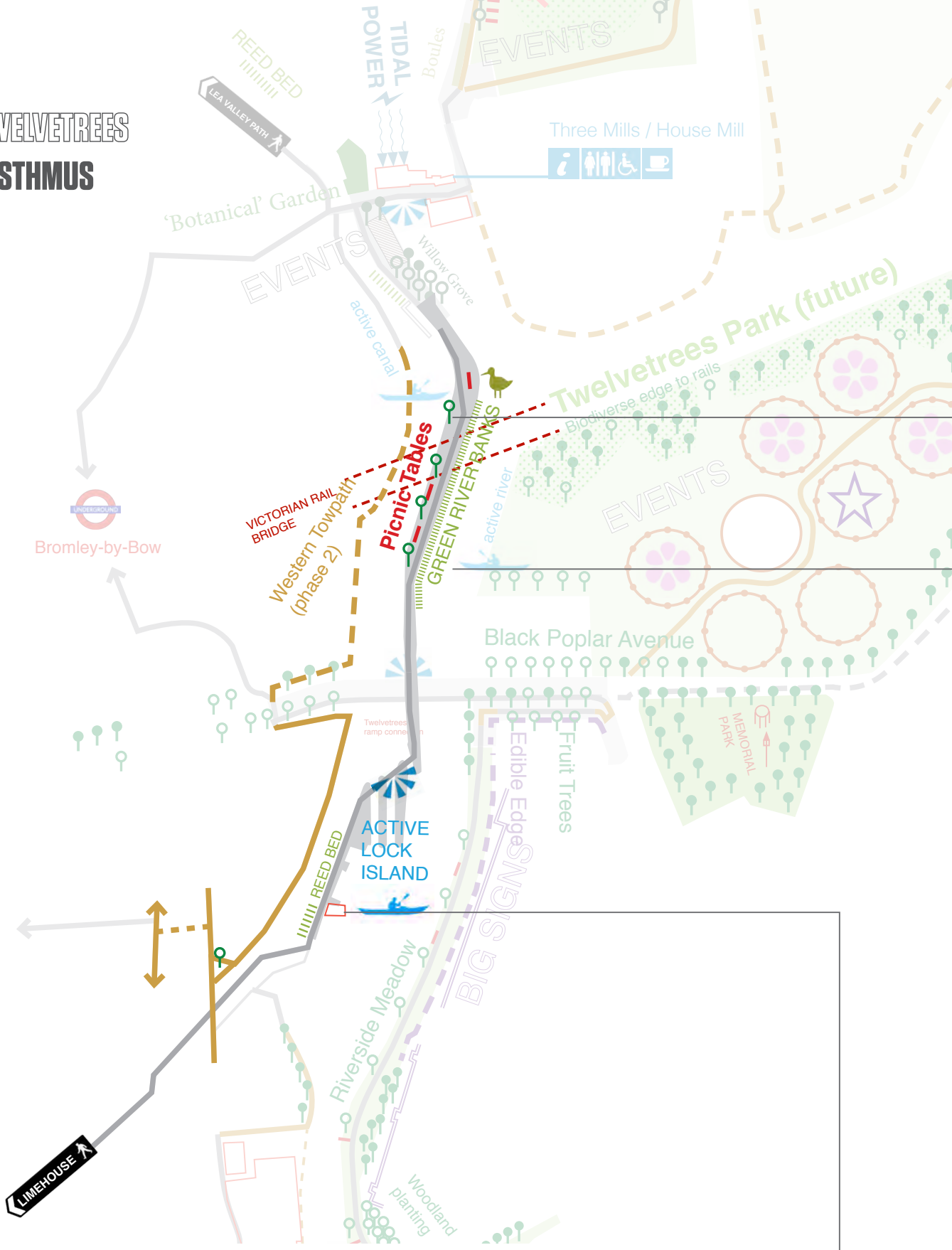
Support the Tidal Mill Trust in the running of the historic mills, maintenance of their historic setting and their attempts to reintroduce tidal energy production. If the opportunity arises to improve the accessibility of the landscaping here the cobbled roadway should be treated sensitively as it is a key interest in this conservation area and is Grade II listed.


Maintain the hard paving at the beginning of the spit for informal events and gatherings, whilst adding a new grove of pollarded willows adjacent.



Provide adequate facilities to improve accessibility for all who wish to use canal waters for recreation.

TWELVETREES
- ISTHMUS



This thin strip of land, the 'Isthmus', acting to separate the canalised Lee & Stort Navigation from the tidal River Lea is the continuation of the Lea Valley Walk to Limehouse Basin, and is currently well trafficked. Improvements here might be of a very light touch; offering additional places to pause and enjoy the unique setting, whilst planting should aim to further restore the native 'lower marsh' landscapes.

A new connection between the towpath and Twelvetrees Crescent Bridge improves access to the east bank and provides improved surfaces to the north of Bow Locks.

Key

- New tree planting
- Existing trees
- Seating
- Curation of found objects - M.o.L
- 'To the river' mat
- New surfacing
- Existing surface

Improving the setting of the canalside with new landmark trees and improved seating and picnic tables

Greening the riverbanks -similar to Thames 21's work at Cody Wilds downstream

Creating an active, improved setting to the lockside through the development of the vertical link for cyclists up onto Twelvetrees Crescent bridge and the formation of a new hard surfacing to the surrounding canal path. Alternative accessible routes to be signed.

There is the opportunity to investigate the use of the 'old stable building' as a home for a canoe and kayak club, run in partnership with the new Bow School (above left).

TWELVETREES
- VICTORIAN INFRASTRUCTURE

Twelvetrees Park is the chance to create a major new park space as part of the Lea River Park. The site benefits from mature trees and the largest collection of listed gas holders in the UK. These gas holders are now redundant and are awaiting decontamination to create a new park, as set out in the All London Green Grid.

The unique character of the grouping of gas holders should be respected in crafting careful interventions which explore their vast volumes to create unique cultural spaces, botanical glass houses and open space. The opportunity to curate the history of the valley should also be included in creating a park which is an asset to its surrounding communities.

The river frontage creates an opportunity to provide active water uses, as well as a unique, tranquil riverside environment. A key strategic connection is made through the park, connecting the Leaway, Poplar and Bow into West Ham underground station.

Twelvetrees Crescent Bridge is a key entrance to the park from both Tower Hamlets and Newham, enabling the continuation of the North-South Leaway route.

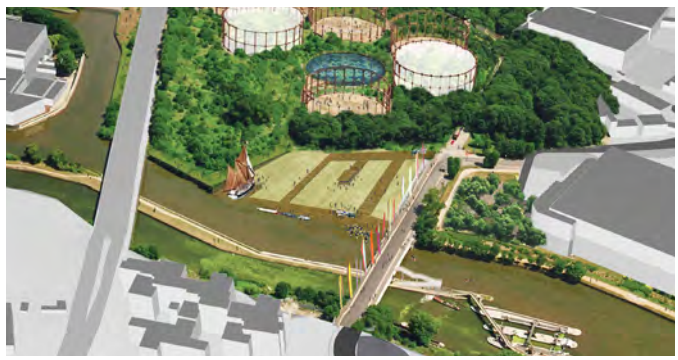
The bridge offers spectacular views North and South which help to orientate visitors. However, in order for the bridge to act as a gateway to the Leaway, the bridge's deck should be improved. This requires negotiations to be furthered in order to influence the maintenance of the bridge's deck and approaches. This strategy should aim to demonstrate best practice in developing shared space - refer to LLDC Inclusive Design Guidance - IDS 15 - Shared Space.

Key

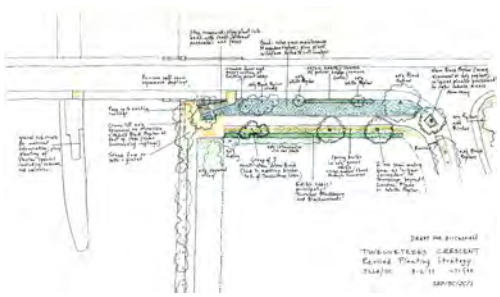
- New tree planting
- Existing trees
- Seating
- Curation of an edible valley
- 'To the river' mat
- New surfacing
- Existing surface

The redundant Twelvetrees gas holders are listed structures that have the potential to be transformed into a London wide attraction. This park has the scope to combine much needed open space with unique occupation of the gas holders, which could range from institutional attractions such as a botanic garden or become park structures for viewing or rock climbing.

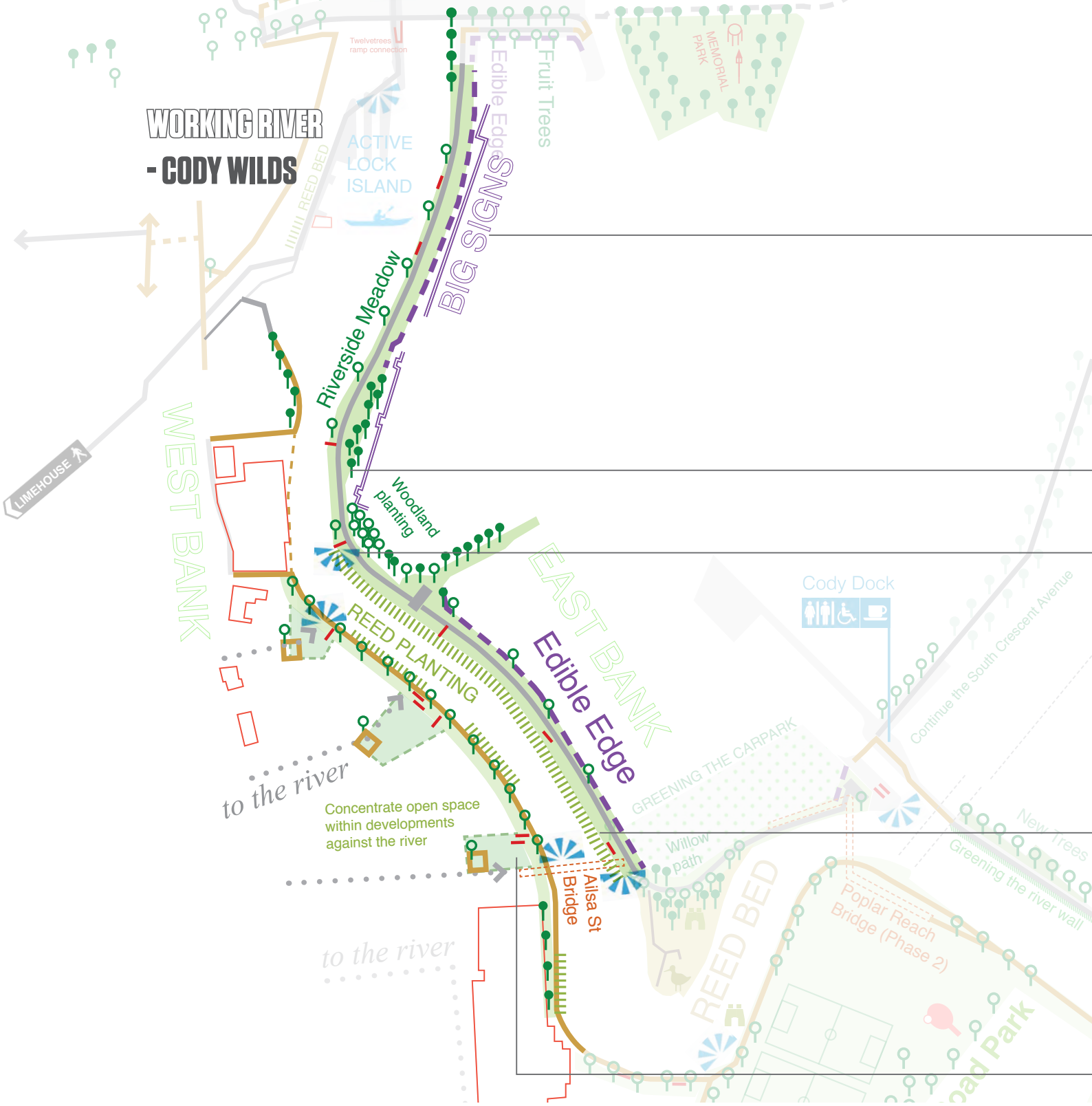
Investigate the potential for resurfacing Twelvetrees Crescent Bridge in order to develop its identity as a park entrance. Landscape strategy for the embankments and carparks includes the provision of fruiting trees and bushes.



Creating an active riverside, with direct access to the water for potential uses such as, a launch for kayak clubs, community boat repair workshops or accessing river boat tours.



New landscaping designed with Jonathan Cook Landscape Associates, along the eastern bank incorporated fruiting bushes and trees.



The Cody Wilds stretch proposes a series of interventions which aim to de-industrialise and rewild this landscape. Along the eastern side of the River Lea the current landscaping implemented in the early 2000's offers very little to a park user, whilst to the west there is currently no access to the riverside.

Along the eastern bank the interventions focus on the boundary between the industrial estate and the riverside route. Fences should be planted with thornless fruiting bushes, such as blackberries, while the route down the river emphasised by the continued planting of Willows and native Black Poplars

Open spaces within developments along the west bank should address the scale of the surrounding landscapes, opening up to the river and avoiding the creation of overly manicured spaces - typical of residential developments. New parkspaces along the western side of the Lea can bring new areas of biodiversity and should respect the wilder native landscapes along the River Lea.

Key

- New tree planting
- Existing trees
- Seating
- Curation of an edible valley
- 'To the river' mat
- New surfacing
- Existing surface

Painted Murals and Signage to reveal the inner workings of otherwise anonymous industrial sheds

Maintain existing guarding/fences and surfaces while relaxing the current maintenance of the existing soft landscaping.

Planting to the adjacent boundaries can be supplemented through planting a hedge against the existing fences of edible fruit bushes.

View of one of the proposed mats - situated to provide a picnic spot at a key outlook over the river.

Re-calling the history of the Bromley-by-Bow Gas Works, with artefacts which allow for creative play.

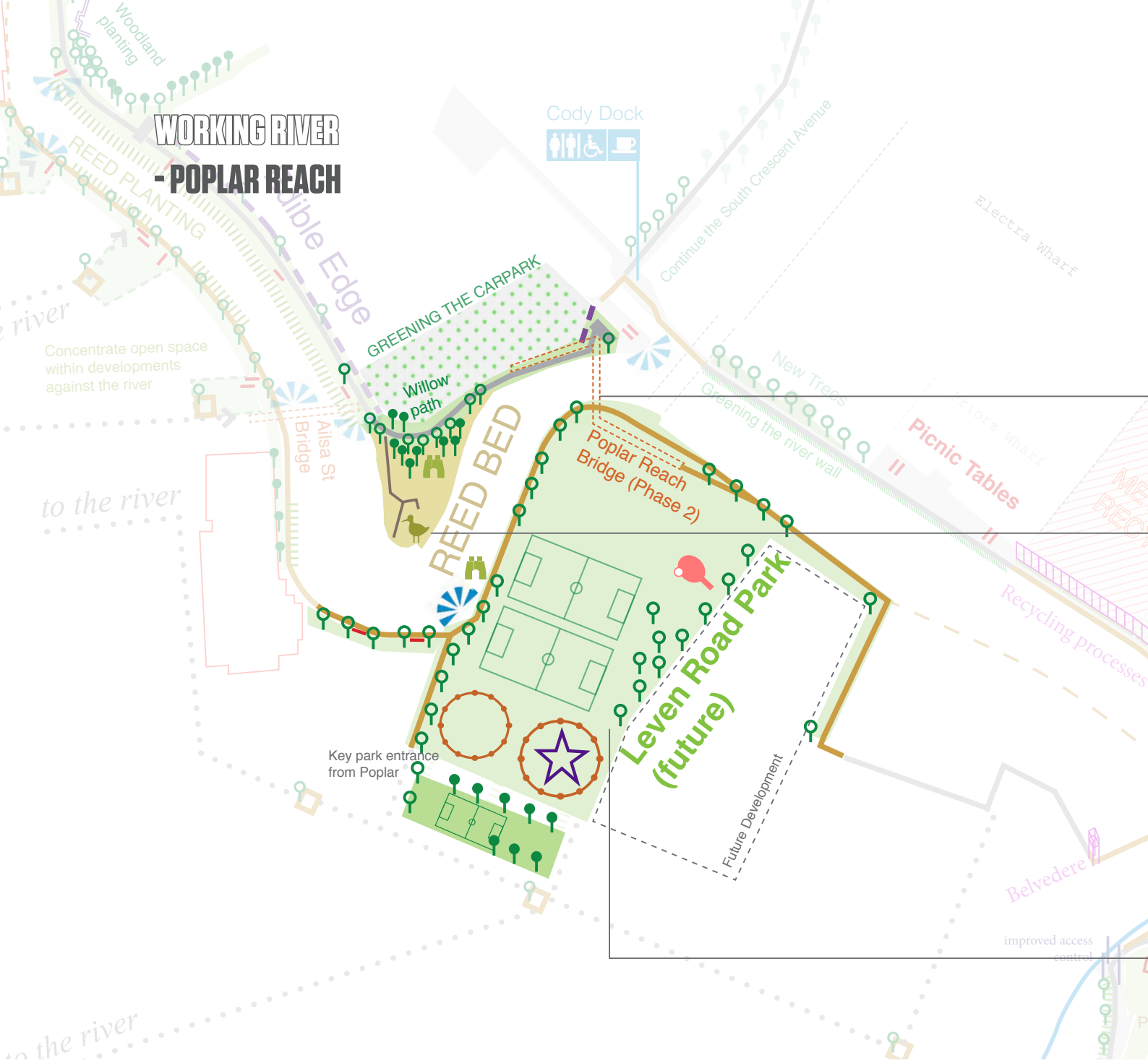
Greening the riverbanks -Thames 21 work in progress

Planting additional riverside trees, Poplar and Willows

Greenspaces within developments should play multiple roles - referencing the wilder landscapes of the River Lea, whilst providing biodiversity, and SUDs. Similar greenspaces have been delivered within the East Village (above) along Victory Parade.

Creating wilder river edges which incorporate play provision as along the Canal Park in the Queen Elizabeth Olympic Park

WORKING RIVER - POPLAR REACH



The Leven Road Gas Works site has will deliver a key new neighbourhood park. Adjacent to new areas of housing, and connecting to the existing communities currently cut off from the river by the gas works, the park will have a community focus - a place for learning, sport and recreation.

The OAPF identifies the site as an area of future strategic open space, which is proposed to occupy approximately two-thirds of the site, incorporating all of the river frontage, and establishing cross-river links to Newham.

Creative reuse of the gasholder frames should be investigated in order to take advantage of their landmark quality and act as a park structure for climbing, viewing platforms or as an event space.

The artificial nature and industrial history of this stretch support a unique planting strategy celebrating both pollution-tolerant and bioremediator species, and those exotic species that have established in London both due to its warmer microclimate and history of international trade.

The reed bed at this bend in the Lea is one of the few remaining fragments of an original ancient landscape, and has in recently been improved by Thames 21. A network of securable boardwalks and hides could be developed in the reeds, along with a wind powered water pump to oxygenate the water and reference a history of power generation in the area.

Key

- New tree planting
- Existing trees
- Seating
- 'To the river' mat
- New surfacing
- Existing surface

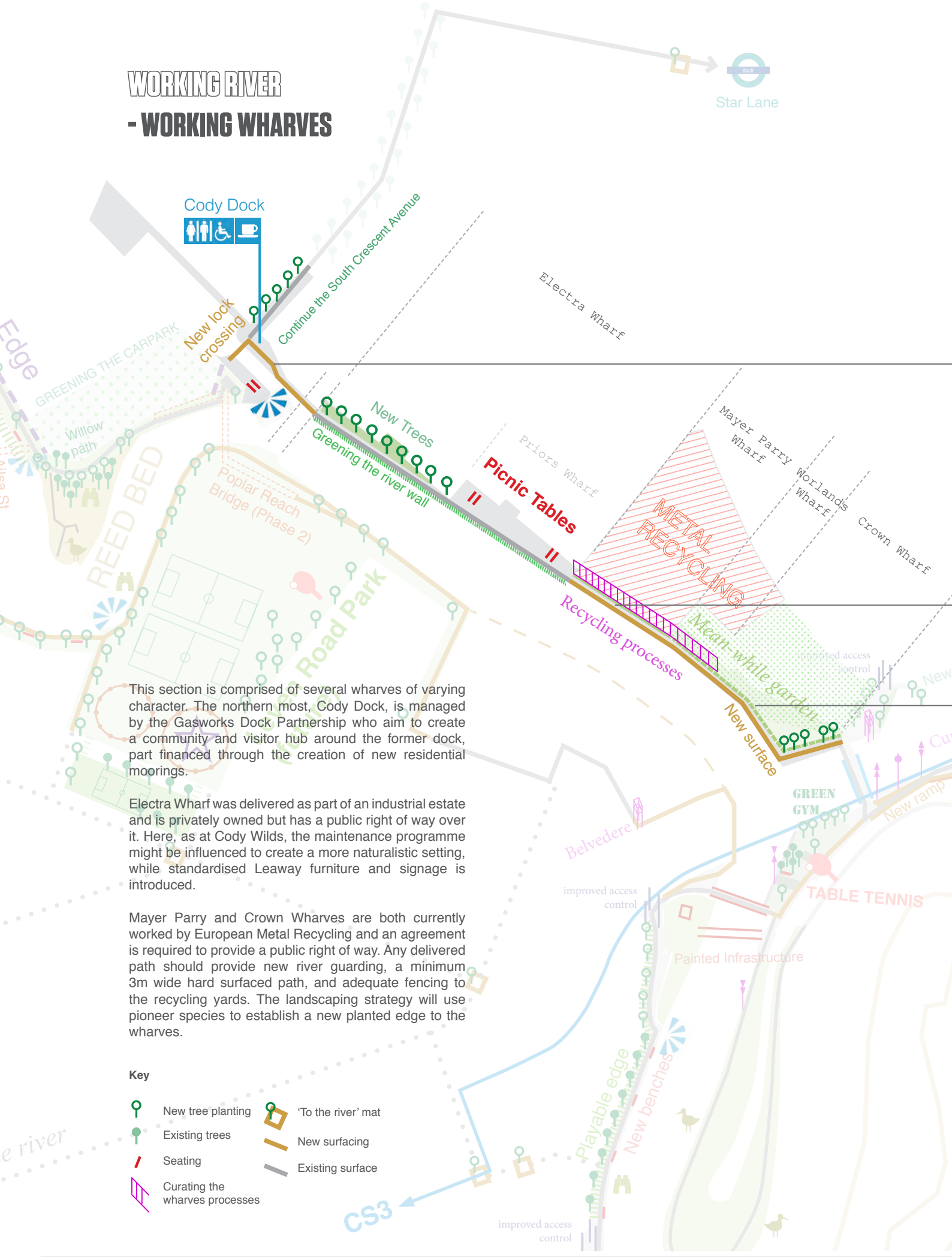
View of Poplar Reach Bridge towards Cody Dock. The bridge will provide a connection from the first phase of the Leaway to a new 6ha active park landscape, providing much needed open space to Poplar's surrounding estates and creating a moment of expansiveness on the Leaway.

Improvements to the existing pathways incorporate well placed restpoints, paving, additional tree planting, and edible fruiting bushes along the Prologis palisade fence, as well as additional wild meadow flowers to the existing grass banks. Development of a series of hides enable educational trips to witness the biodiversity of the reeds. Boardwalks should be restricted to maintenance access for clearing litter from the reed beds, so as to decrease the impact of visitors on nesting birds.

Propositional view through the retained gasholder to the park and river beyond. The park pushes back from the river to meet the existing green space on Abbott Road.

View north of the new proposed riverside spaces around Poplar Reach Bridge.

WORKING RIVER
- WORKING WHARVES



This section is comprised of several wharves of varying character. The northern most, Cody Dock, is managed by the Gasworks Dock Partnership who aim to create a community and visitor hub around the former dock, part financed through the creation of new residential moorings.

Electra Wharf was delivered as part of an industrial estate and is privately owned but has a public right of way over it. Here, as at Cody Wilds, the maintenance programme might be influenced to create a more naturalistic setting, while standardised Leaway furniture and signage is introduced.

Mayer Parry and Crown Wharves are both currently worked by European Metal Recycling and an agreement is required to provide a public right of way. Any delivered path should provide new river guarding, a minimum 3m wide hard surfaced path, and adequate fencing to the recycling yards. The landscaping strategy will use pioneer species to establish a new planted edge to the wharves.

Key

- New tree planting
- Existing trees
- Seating
- Curating the wharves processes
- 'To the river' mat
- New surfacing
- Existing surface

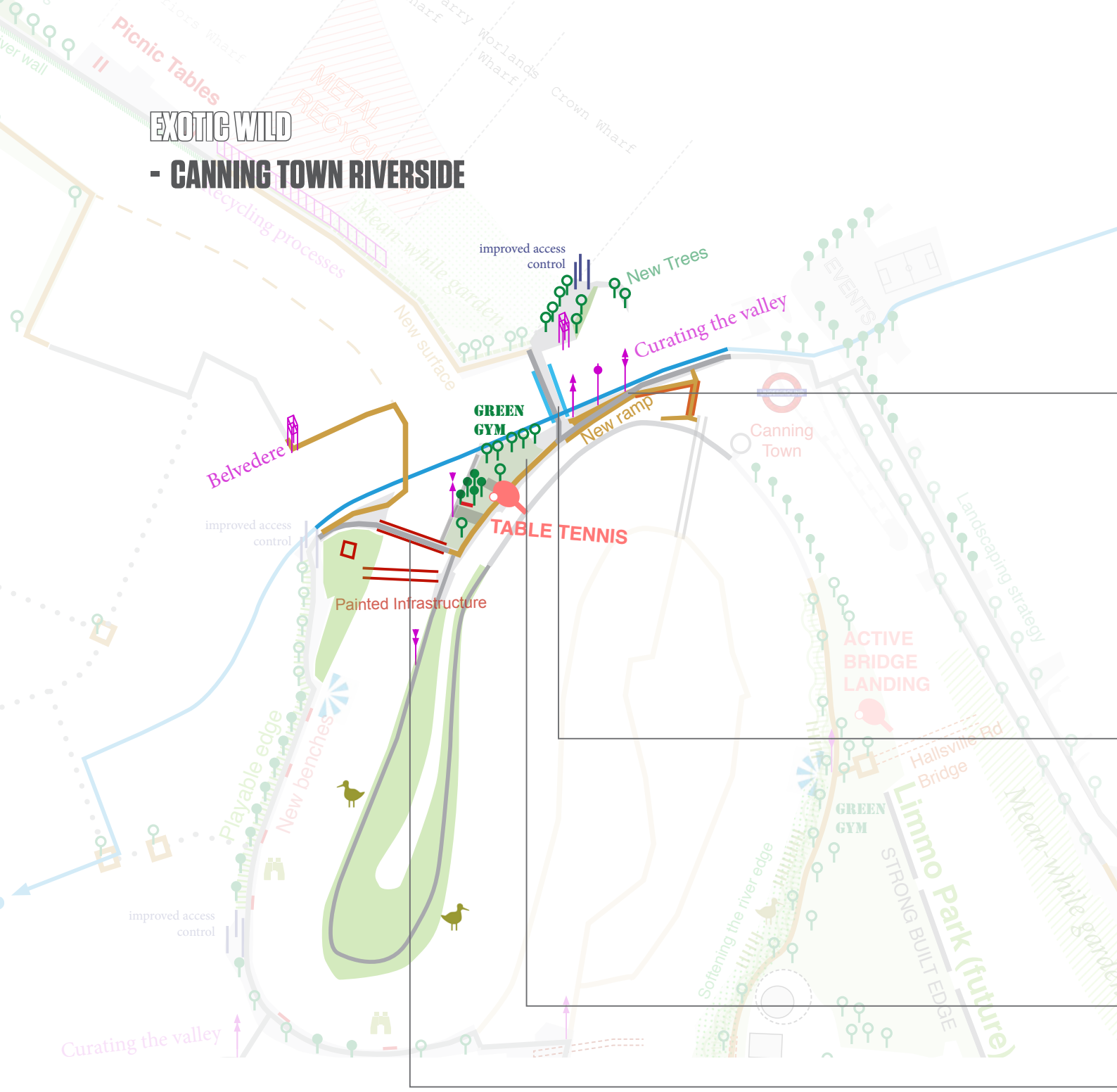
An active quayside with space for picnics and events alongside residential moorings and artist studios

A permissive path along the European Metal Recycling river frontage could include planting pioneer species, to establish a new landscape edge to the wharves.

Curated artefacts relating to the ongoing industrial processes

‘Meanwhile skip-gardens’ allow planting to be moved as developments come forward - eventually the plants could be incorporated into new, permanent landscaped open space.

EXOTIC WILD
- CANNING TOWN RIVERSIDE



The previously fragmented landscapes, caught between the A13, the River Lea and the DLR offer the chance to form a key entrance to the Leaway, acting as a manifold to the multiple routes south to the River Thames and the Royal Docks.

An existing but poorly maintained underpass beneath the A13 avoids negotiating the ten lanes of traffic above. Its improvement requires both additional lighting and renovation of all surface treatments, with the opportunity to create a space which is more inviting, secure and incorporated into the Park.

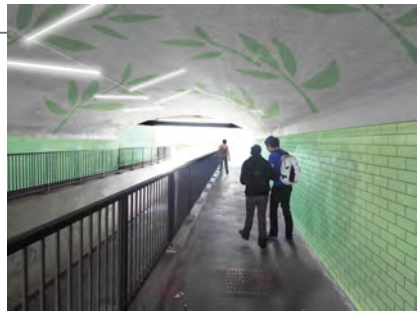
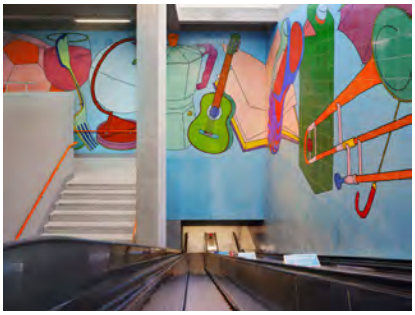
To the south the new ramp connecting to Canning Town and CS3 should be treated as a valley gateway with vertical structures recalling the maritime history of the valley and acting as a visual presence from the road. The riverside landscape should offer Canning Town its own riverside, with the provision of a multi-use space, for markets and events. The domination of infrastructure should be tackled by visually appropriating these structures and branding them as part of the cornucopia which maintains London.

The refurbishment of the staircases to the North of the A13, potentially adorned by wayfinding belvedere structures, will complete this complex node of the Leaway.

Key

- New tree planting
- Existing trees
- Seating
- Curation of found objects - M.o.L
- 'To the river' mat
- New surfacing
- Existing surface
- Belvedere structure

A new ramp providing improved access to Canning Town and populated by structures, recalling the maritime history of the valley south of this point.

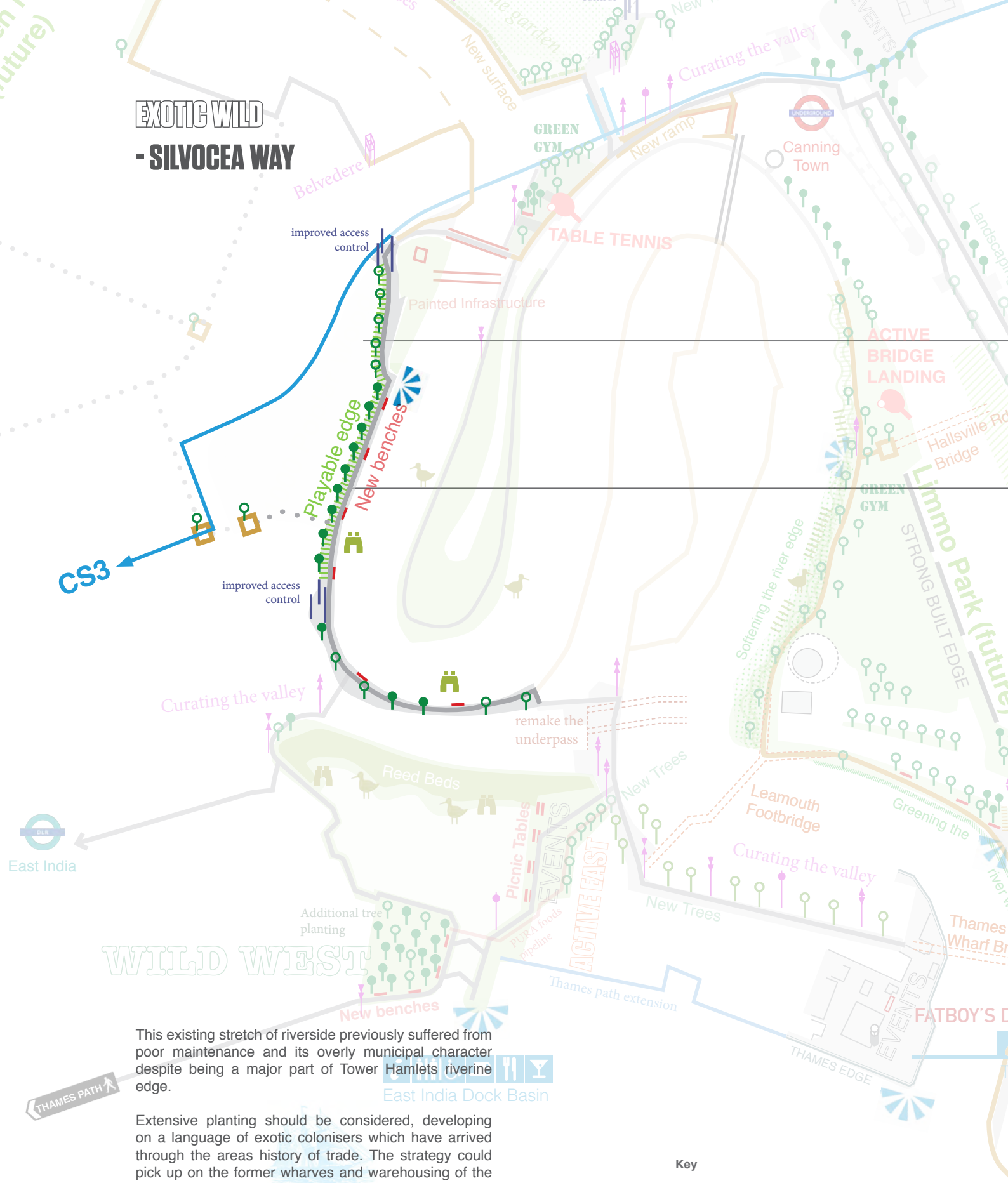




Underpass improvements to the tunnel beneath the A13- there is scope for introducing both additional lighting and an art brief.


The creation of a multi-use space providing Canning Town with its own riverside, with additional trees and hard surfacing.


Investigate the potential to influence the maintenance and painting of existing bridges and structure to introduce a coloured branding for the park.

EXOTIC WILD
- SILVOCEA WAY



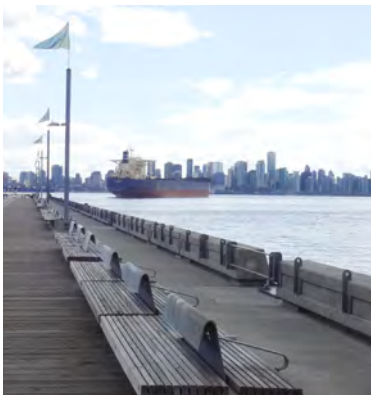
This existing stretch of riverside previously suffered from poor maintenance and its overly municipal character despite being a major part of Tower Hamlets riverine edge.

Extensive planting should be considered, developing on a language of exotic colonisers which have arrived through the areas history of trade. The strategy could pick up on the former wharves and warehousing of the East India Company.

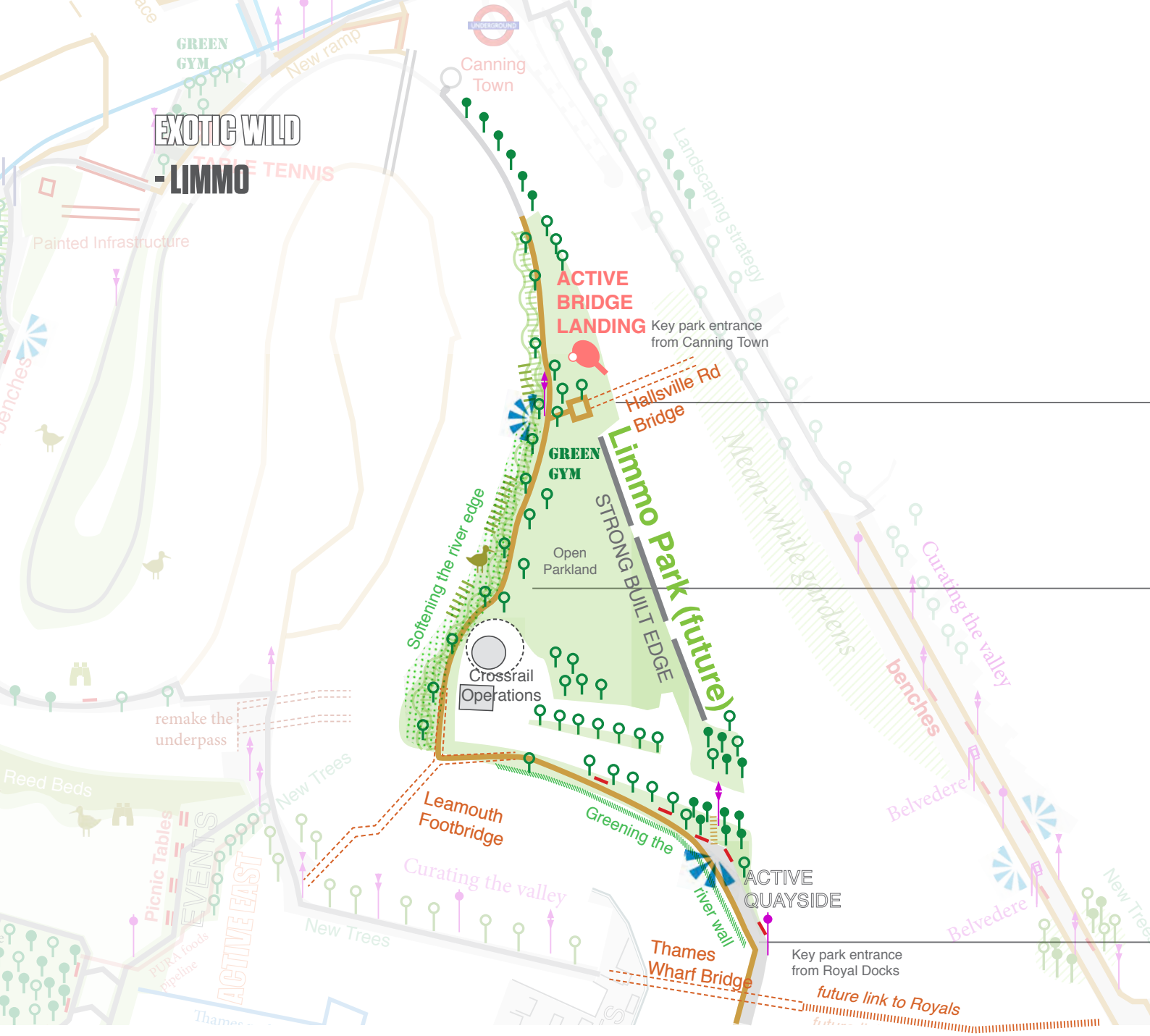
The existing access control measures, a series of large concrete blocks should be removed, and an alternative solution introduced. Previous street furniture and way-finding should be replaced to match the Lea River Park standards, and the existing surface repaired as necessary, to create a more appropriate riverside.

Proposed long term ambition for a much denser riverside woodland of native species including willows and black poplars - especially Populus nigra subsp. betulifolia.

A planting strategy to colonise the rough ground adjacent to the path at this point, providing ground cover beneath the existing trees could include species which reference the trade of the docks. Liminal play provision might accompany the planting strategy.



Replacing municipal landscaping and street furniture to reinforce the maritime history of the wharfsides.



The Limmo is an important area of wild riverside open parkland for the Lea River Park. Providing much needed open space for the highly dense development context being delivered in and around Canning Town and the Royals. The Limmo will include a riverside pedestrian/ cycle route connection Canning Town station with the Thames Path. It is also one of the few locations where softening of the river edge is practical.

Engineering work on Crossrail requires permanent shaft access and ventilation which should be integrated into the park landscape. This site would be linked by the proposed Leamouth footbridge to Trinity Buoy Wharf and East India Dock Basin, which has planning permission.

Planned crossings to the developments along Silvertown Way and the Royal Docks for pedestrians and cyclists, should be integrated into the landscape of the park. These crossings provide a critical connection into the Lea River Park and activities such as green gyms, table tennis and picnic areas should be clustered around these entrances to create destinations. The Hallsville Road bridge will provide a key entrance from Canning Town, whilst the Iron Bridge Wharf bridge would provide a critical connection between Leamouth and the Royal Docks.

The OAPF identifies future development on the eastern edge of the Limmo, which this could both reinforce and provide natural surveillance to the park. A strong built edge could promote access across the rail tracks and shelter the park from the East. Larger scale park-friendly uses could populate the lower floors with dwellings at upper levels, overlooking the park.

Key

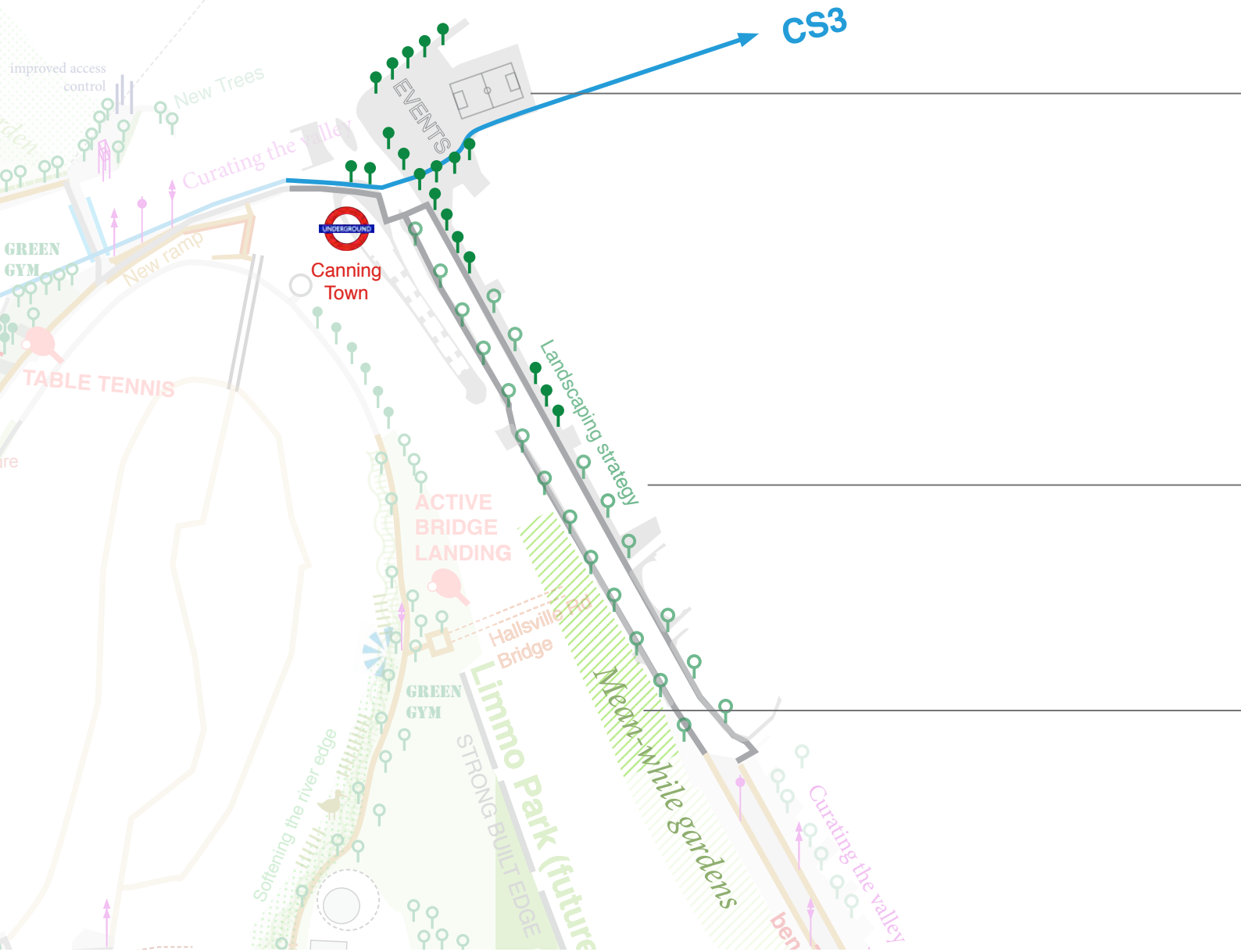
- New tree planting
- Existing trees
- Seating
- Curation of found objects - M.o.L
- 'To the river' mat
- New surfacing
- Existing surface
- New landscaping

Softening the river edge through either creating tiered inter-tidal habitats (top left) or retrofitting the river walls with structures to support plants growing as at Cody Wilds (top right).

The Limmo is an important area of open space for the Lea River Park. Here there is the opportunity to create a sizeable new park at the confluence of Lea and Thames. It is also one of the few locations where softening of the river edge is practical.

Explore opportuniites to explore new active relationships with the river, including opportunities for direct access to the river for kayaks, or exploring inter-tidal habitats. Precedent illustrated above: Hudson River Education Center And Pavilion / Architecture Research Office.

EXOTIC WILD
- SILVERTOWN WAY



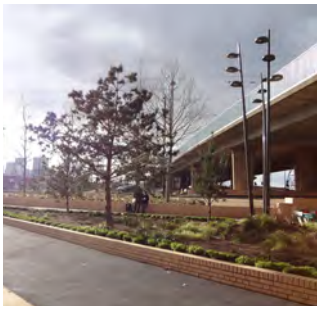
Key to understanding this section of the Leaway is the definition of what quality of public space Silvertown Way should provide.

The current generous carriageways and pavements have seen partial resurfacing in recent years, funded by the adjacent developments. With Canning Town, the centre of such change, the opportunity emerges to reinvent the street which connects both the developments and the Royal Docks to the Lea Valley.

A detailed study should consider both the holistic and detailed development of the public realm. From creating a narrative on the communities development, to introducing traffic calming or planting an avenue of London Planes.

Key

- New tree planting
- Existing trees
- Seating
- Curation of found objects - M.o.L
- 'To the river' mat
- New surfacing
- Existing surface



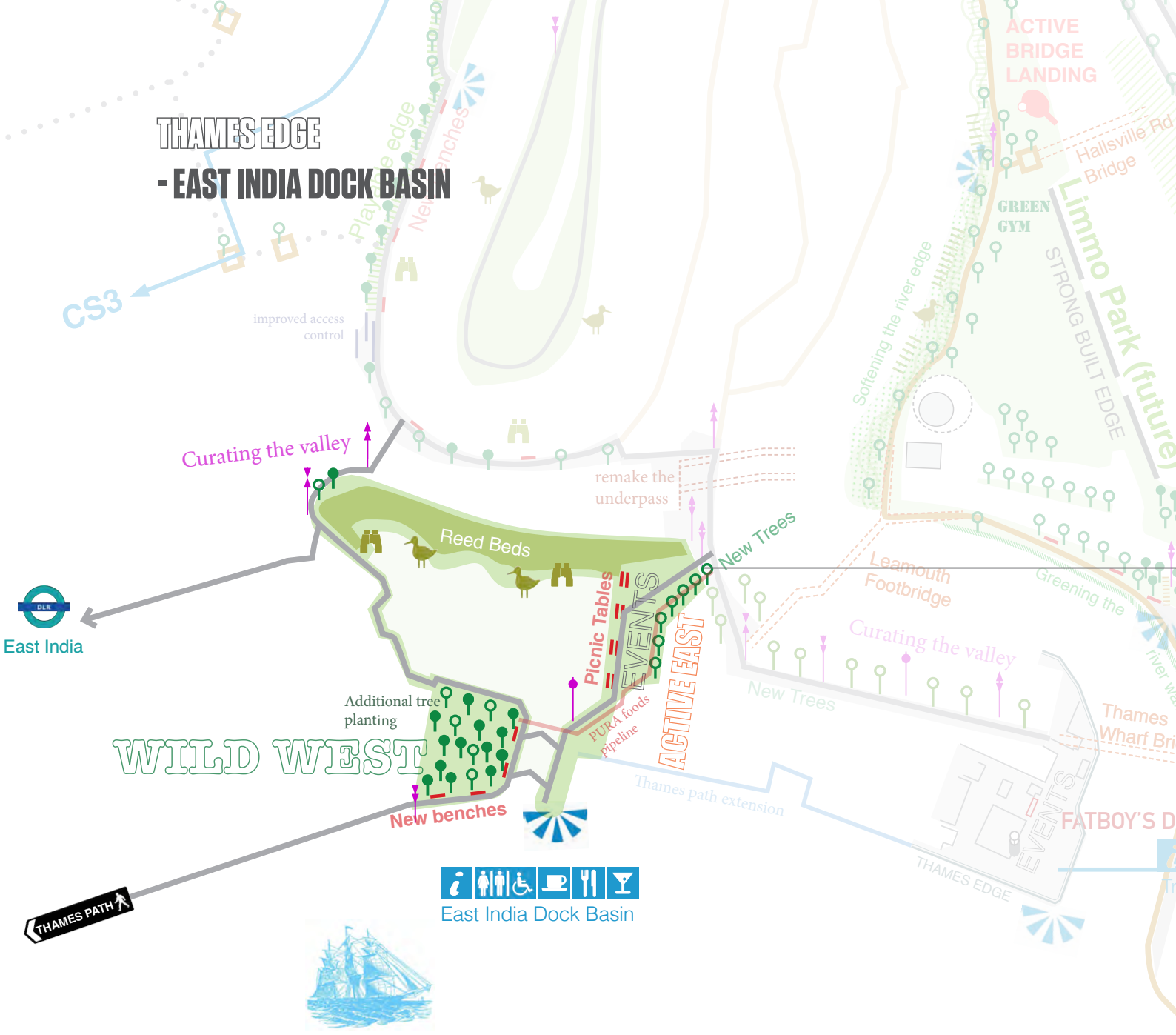
Building upon the existing improvements to the A13 undercroft and steering the continuing public realm of the Hallsville Quarter

Develop a public realm and planting proposal which aims to both meet TfL Streetscape guidance and act to create a sense of place

Continue to support the creative use of hoardings and temporary/meanwhile uses of development sites along Silvertown Way

In the face of massive change, much of the historic built fabric of Silvertown Way is being demolished. Detailed design strategies in this area should encourage the streetscape to refer to the former industries, communities and collective memories.

THAMES EDGE
- EAST INDIA DOCK BASIN



The Thames

The dock basin itself is a key biodiversity asset - a nature reserve popular with migrating birds- and as such, any interventions here should tread lightly enough to maintain a balance between human and natural occupations.

Curation of the site should seek to tell the story of the dock and its rich history. The site also offers the scope for provision of future park visitor facilities, which might house further education/heritage displays.

Landscaping should increase biodiversity and remove the remnants of the PURA foods pipeline. Legible London signage, Lea River Park standard way-finding and furniture should be introduced with approval from the Lee Valley Regional Park Authority.

Key

- New tree planting
- Existing trees
- Seating
- Curation of found objects - M.o.L
- 'To the river' mat
- New surfacing
- Existing surface

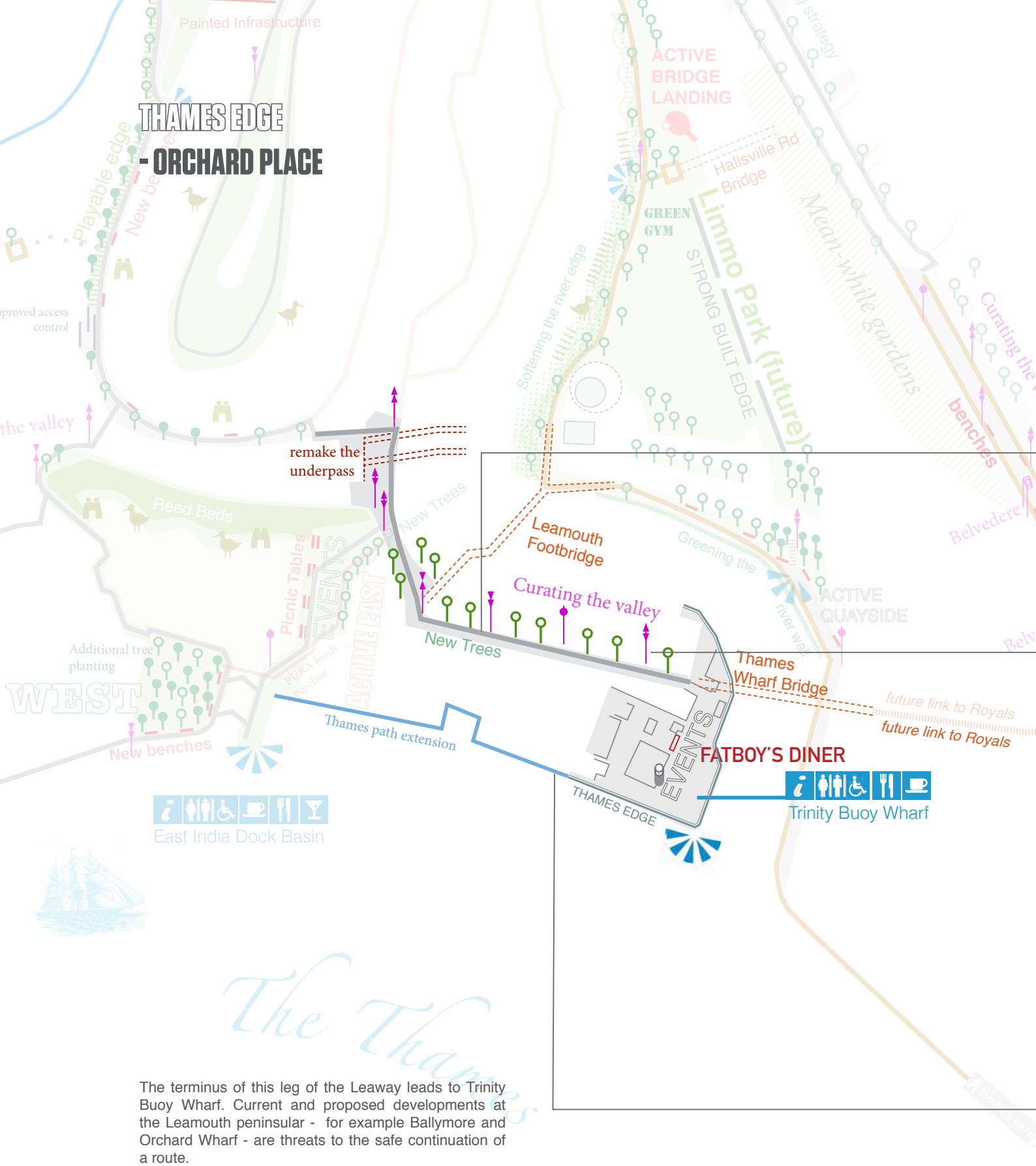
Ambition for the creation of a visitor and educational centre, balancing the needs of visitors and that of the established wildlife preserve in the basin. The location of any building will require further detailed design development with project partners.

Telling a story of trade and international commerce

Maintaining the ecological value of the site with additional planting and selected dredging of the basin

The redundant PURA pipeline should be removed, to restore the setting of the listed dock gates, along with the dated utilitarian paving which does little to enhance the docks heritage character.

THAMES EDGE
- ORCHARD PLACE



The terminus of this leg of the Leaway leads to Trinity Buoy Wharf. Current and proposed developments at the Leamouth peninsular - for example Ballymore and Orchard Wharf - are threats to the safe continuation of a route.

In response, a strategy for providing safe and generous cycling and pedestrian routes should be progressed, in order to ensure that the public realm is improved to deal with the potentially conflicting increases in both pedestrian, cycling and vehicular traffic.

Urban Space Management and the creative industries at Trinity Buoy Wharf should be further encouraged to colonise Orchard Place in the manner they have started.

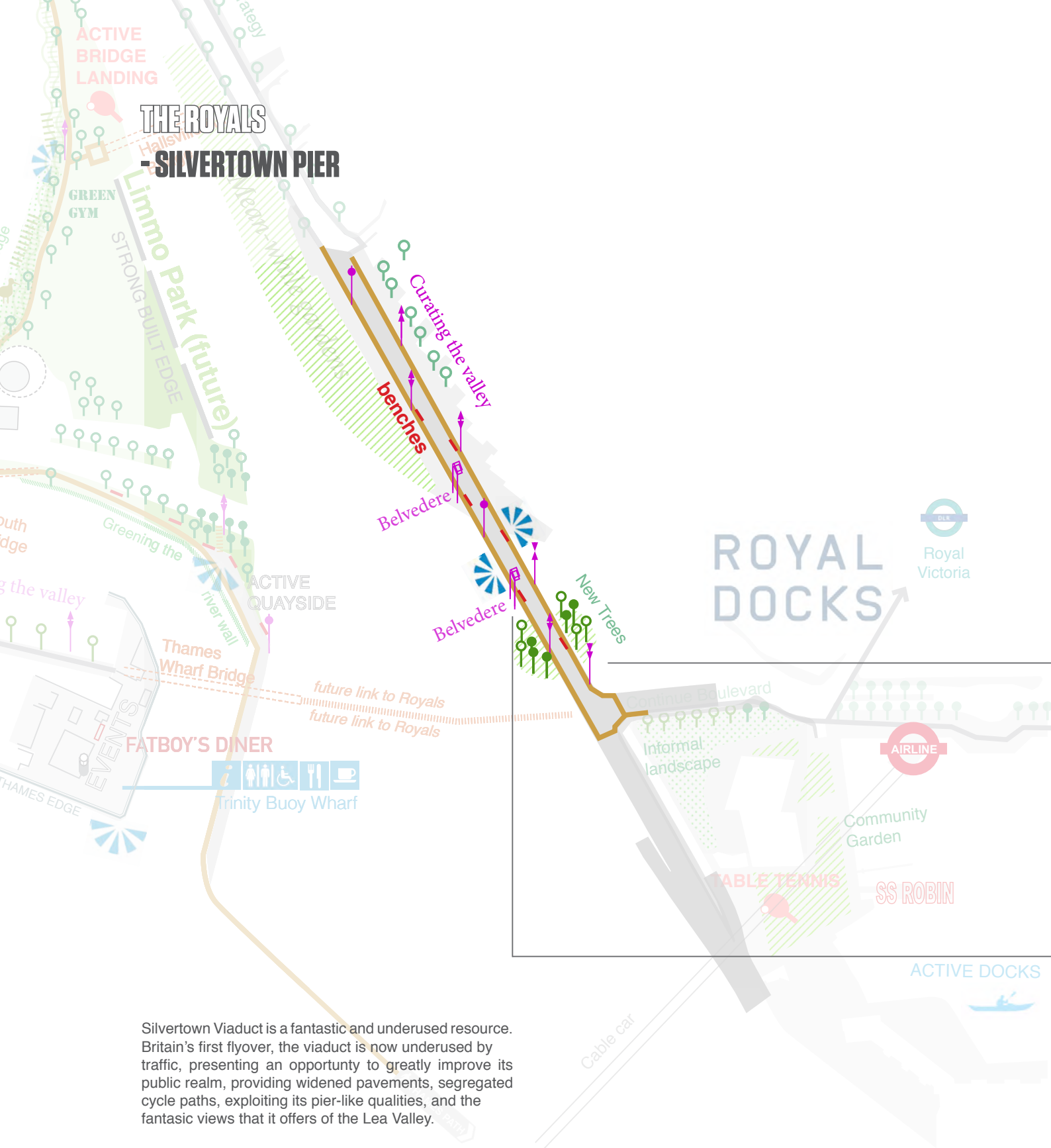
A need to improve the character and quality of the public realm - potentially locked into Orchard Wharf being reopened

All proposals should aim to reinforce the maritime history, which is so well demonstrated in the existing curation of Trinity Buoy Wharf, and focuses successfully on the unique history and riverine setting of the area.

Potential or the development of an extension of the Thames. Path across Orchard Wharf

The temporary Thames Path on Greenwich Peninsular

THE ROYALS - SILVERTOWN PIER



Silvertown Viaduct is a fantastic and underused resource. Britain's first flyover, the viaduct is now underused by traffic, presenting an opportunty to greatly improve its public realm, providing widened pavements, segregated cycle paths, exploiting its pier-like qualities, and the fantasic views that it offers of the Lea Valley.

The following design work will need to respond to the needs of this strategic road, whilst improving junction designs to provide safer cycling connections into the Royal Docks. Where possible, design workshops should take place with the surrounding developments to work out how to tie the viaduct into the surrounding regeneration projects.

A family of belvedere structures and a display of relevant curated objects along the viaduct, will help to celebrate the pier-like qualities of this impressive piece of infrastructure and help to establish the Viaduct as a Leaway destination.

Key

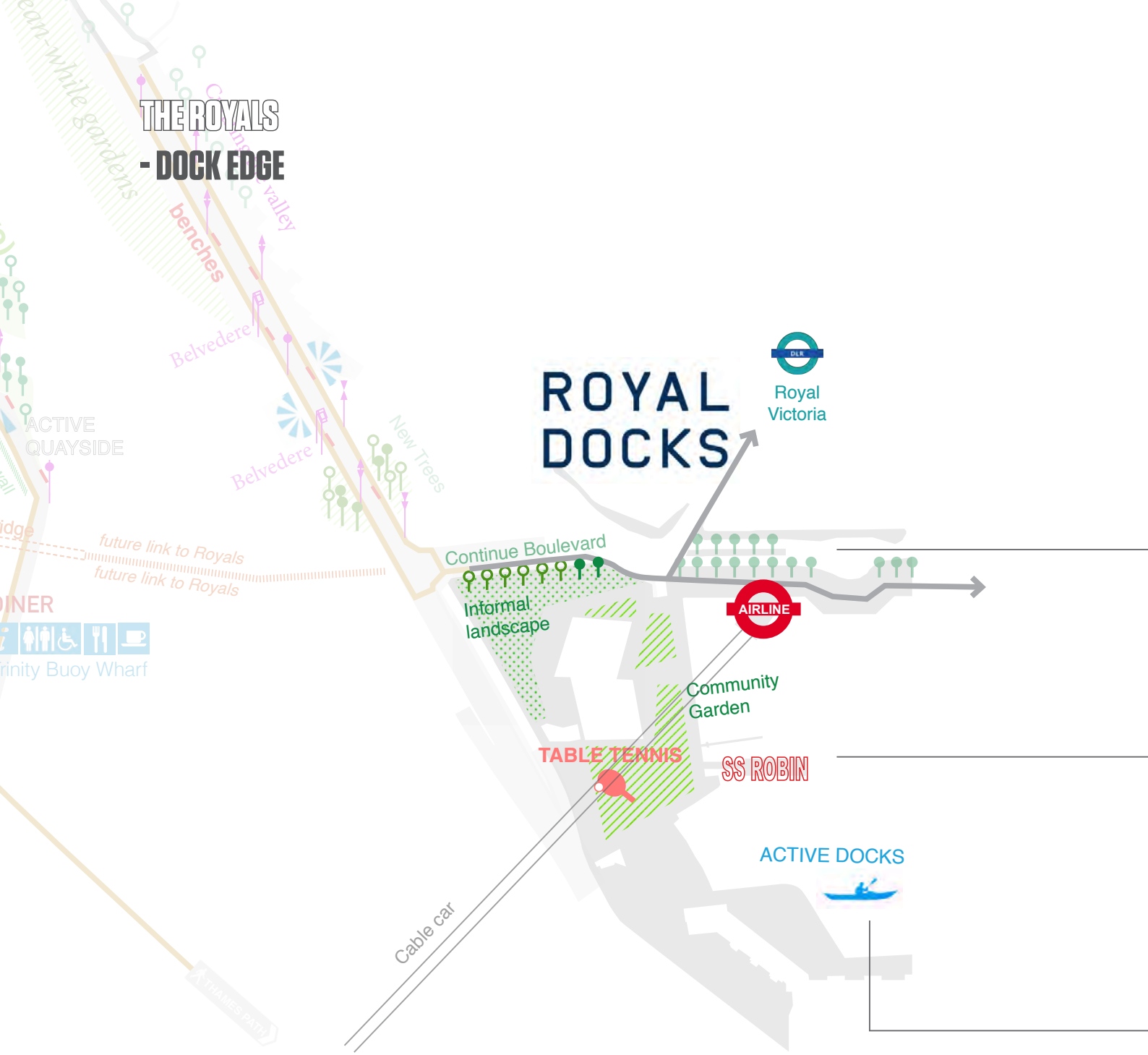
- New tree planting
- Existing trees
- Seating
- Curation of found objects - M.o.L
- 'To the river' mat
- New surfacing
- Existing surface
- Belvedere structure

Visualisation of a re-surfaced viaduct, reducing carriageway widths to calm traffic, introducing segregated cycle paths and encouraging pedestrians to pause and enjoy the elevated views of the Royal Docks, Thames, Lea Valley and back towards the City of London.

A creative curation of key artefacts and reinterpretations of the shipping that created the artificial landscape of Silvertown, and celebrating the pier-like qualities of the road deck of the viaduct through introducing sheltered places to sit or view the surroundings.

The staircases to access the pier could be refurbished as ‘gateways to the park’, adorned with a Leaway belvedere structure that could act as a platform for curation and signage.

THE ROYALS - DOCK EDGE

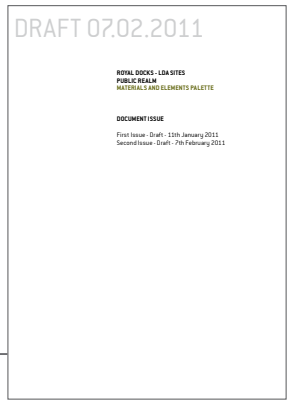


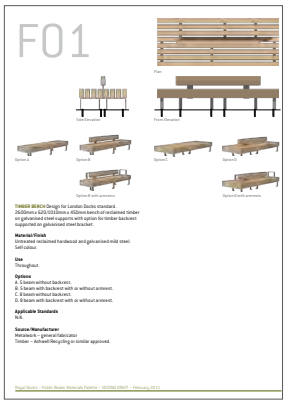
Continue to encourage the active use of the dockside and the activities it accomodates. Build on the success of the urban beach and watersports provision, by extending the active area by introducing new facilities for sport and play.

Continuing the boulevard of trees from Silvertown Viduct will guide park users to the dockside and its attractions, terminating this branch of the Leaway route.

Key

- New tree planting
- Existing trees
- Seating
- Curation of found objects - M.o.L
- 'To the river' mat
- New surfacing
- Existing surface





Referencing the existing material palette established by Peter Beard, and continuing the tree planting and landscaping directly up to the Silvertown Viaduct

Using the history of the docks to reinforce a sense of place

Continue to encourage the active use of the dockside, urban beaches, watersports, and new pitches or facilities

APPENDIX 1

LEAWAY STANDARDS

The Leaway standards have been developed out of a major review of design standards, that were considered applicable to what was then known as the Fatwalk, under the client lead of the London Thames Gateway Development Corporation. Often the breadth of applicable standards meant that there was contradicting or disparate guidance. In these instances, decisions were made to favourably balance the requirements of all park users and the often complex constraints of the park's relationship to the existing infrastructure and riverine topography.

The Fatwalk standards were presented to, and supported by, numerous stakeholders and were subsequently used to inform the first set of Fatwalk structures and landscapes. These standards were reviewed when the project was transferred to the London Legacy Development Corporation and deemed appropriate as guidance for the Leaway proposals set out within this document.

LEAWAY STANDARDS

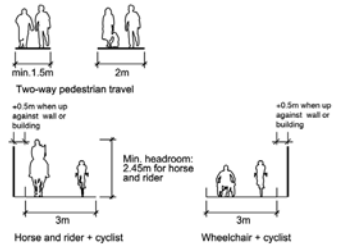
The Lower Lea Valley presents a challenging context in which to intervene in terms of both accessibility and security. The intertwining canal side and riverine characters of the site are fascinating, but bring with them: obstacles to access, and potential risks to personal safety and security. In order to provide a clear frame of reference for best practice for the broader Leaway project, overarching Leaway Standards have been developed through an extensive audit of existing standards regimes.

The Leaway engages with a myriad of conditions along its length - multiple land ownerships, and different realms of statutory oversight. However, achieveing accessibility is an overarching requirement. The aforementioned bodies selective detailed requirements, do not constitute a holistic framework of standards that would satisfy the demands of the Act in terms of design. Similarly, ensuring that the structures provided for safe shared usage by cyclists and pedestrians, requires an interpretation of interrelating guidelines and design requirements produced by TfL, Sustrans and the Department of Transport.

WIDTHS

GUIDELINES (Metric Handbook)

- One-way travel: 900mm
- Two-way travel: 1500mm
- Single track bikeways: 2750mm recommended (1800mm acceptable)
- Two-way bikeways: 3600mm
- Cycle path shared with pedestrians: min. 3000mm



CONCLUSION:

Maintain a minimum width of 3000mm for Fatwalk and Bridges/ Bridge approaches with 2.45m clear headroom

STAIRS

GUIDELINES (Part M: external steps and stairs)

- Rise: 150-170mm
- Going: 280-425mm
- Nosing: max. 25mm (avoided if possible)
- Headroom: min 2m

Risers between landings:

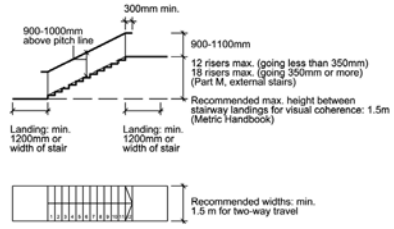
- Max. 12 risers for a going of less than 350mm
- Max. 18 risers for a going of 350mm or more

Landings:

- Unobstructed length of each landing at least 1200mm or width of stair

Handrails:

- 900-1000mm high
- Continuous handrail on each side of a flight and landings, additional handrails divide the flight into channels not less than 1m wide and not more than 1.8m wide where the overall unobstructed width is more than 1.8m.



CONCLUSION:

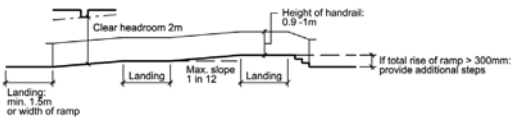
Use width of at least 1.5m for any staircases +max. 1.5m height between stairway landings

RAMPS/GRADIENTS

GUIDELINES (General ramp design guidelines, Part K)

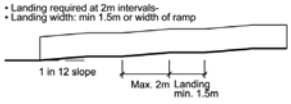
- Min. width of ramps: 1.5m
- Length of landings to be at least equal to the width of the ramp
- Landings should be level unless they are formed by the ground at the top and bottom of a flight. Max. slope of this type of landing may be 1: 20 provided that the ground is paved or otherwise made firm.
- Ramps should be accompanied by steps for ambulant disabled people when the rise of the ramp is greater than 300mm

General Guidelines:



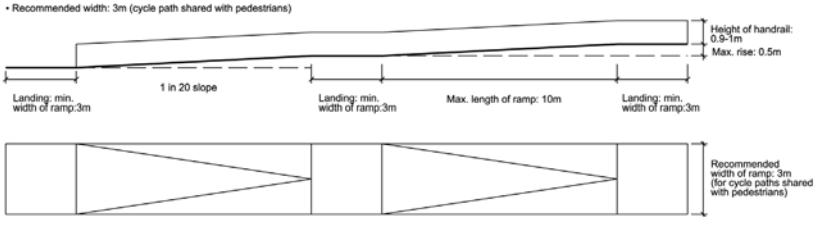
Maximum slope: 1 in 12

- Landing required at 2m intervals-
- Landing width: min 1.5m or width of ramp



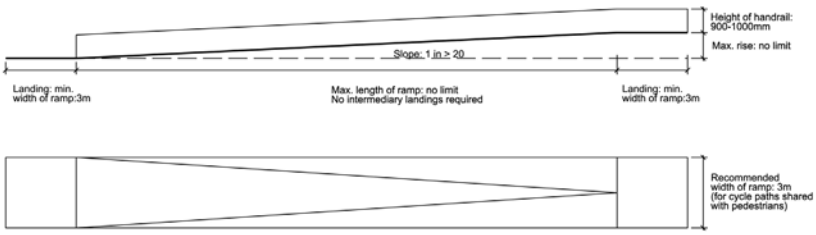
Recommended Slope: 1 in 20 (net gradient 1:26)

- Recommended width: 3m (cycle path shared with pedestrians)



Slope shallower than 1 in 20

- Slopes less than 1 in 20 are not considered ramps and have no limit on their length or height, but can be tiring for disabled people



CONCLUSION:

Generally use slopes of 1:20 with landings as best practice. Consider shallower slopes (<1:20) - not defined as ramps - only when steeper net gradient is crucial to feasibility

Leaway Standards		
Off-Carriageway Paths	Gradient	Less than 1:20.
	Width	Generally min. 3m wide.
Ramps	Gradient	- Avoid ramps where possible, utilise shallower than1:20 rises. - Preferably 1:20, up to 1:15 where minimising linear length is a priority.
	Width	- Generally surface width of 3m. - 2m minimum in constrained situations.
	Guarding	Where shared cycle and pedestrian, guarding to be 1.4m high. Where pedestrian use only, guardings to satisfy BS 8300:2009. Handrails to satisfy BS 8300:2009.
	Lengths	Lengths and landings to satisfy BS 8300:2009.
Bridge Decks	Gradient	Preferably level, but where necessary, gradients should be: - preferably 1:20, up to 1:15 where minimising linear length is a priority.
	Width	Generally surface width of 3m. 2m minimum in constrained situations.
	Guarding	- Where shared cycle and pedestrian guarding to be 1.4m high. - Where pedestrian use only, guardings to satisfy BS 8300:2009. - Handrails to satisfy BS 8300:2009.
	Other	- min.2.4m head clearance. - slip resistance of deck to be a minimum pendulum test value of 45 units or equivalent.
Surfaces		To BS 8300:2009 where practicable, accounting for the nature of the Leaway site.
Generally		- Min 2.4m head clearance. - Widths between localised obstructions, either by design (such as gates or bollards to manage access) or not (such as constrictions or obstructions imposed by existing site conditions), shall be a preferred , with an absolute minimum of 1.2m, in line with Sustrans guidance (National Cycle Network - Guidlines and Practical Details, issue 2, 1997). - 'Preferable having "substandard" clearance than a blockage or dangerous road crossing…' (pg.108) - therefore localised reduction in acceptable standards recommended, if existing conditions demand it, in order to maintain the continuity of the route - in line with Sustrans guidance (Connect2 and Greenway Design Guide Second Draft, May 2009).

APPENDIX 2

BESPOKE SIGNAGE SLABS

This appendix is intended as a style guide for the delivery of the bespoke concrete signage slabs.

These signage slabs should be used sparingly, as an accompaniment to the installation of the standardised and accessible Legible London signage system.

As such, the bespoke signage slabs should prioritise signing elements which the Legible London family is less capable of accomodating, such as the Leaway's route and the incidental names of the park spaces, wharves and enclaves which it passes through.

When a paving mat is designed, priority should be given to the Leaway directional slabs followed by, where appropriate, a 'naming' slab which denotes the established park name of the area in which the specific mat is placed.

There may also be some instances when it is appropriate for bespoke signage slabs to be included in mats, that direct users towards transport interchanges or neighbouring communities, though this responsibility should principally remain with Legible London signage. Installing these slabs should be carefully judged to ensure that legibility is being maintained and that the mat is not becoming too cluttered, ultimately decreasing its useability.


Danger
THREE MILLS
GREEN

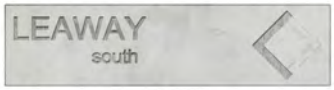
SIGNING THE LEAWAY AND STRATEGIC ROUTES

The primary purpose of the bespoke signage slabs, is to provide a repeating element which reassures the user that they are still on the Leaway as it crosses a diverse range of landscapes.

These paving slabs should be incorporated into paving mats, (described in detail within the Lea River Park Design Manual) where they will provide directional information to the user. North of the A13, these directions are limited to Leaway north and Leaway south. South of the A13 where the route bifurcates, there are both Leaway Leamouth and Leaway Royal Docks as southerly directional pavers; all northerly routes will be signed Leaway North.

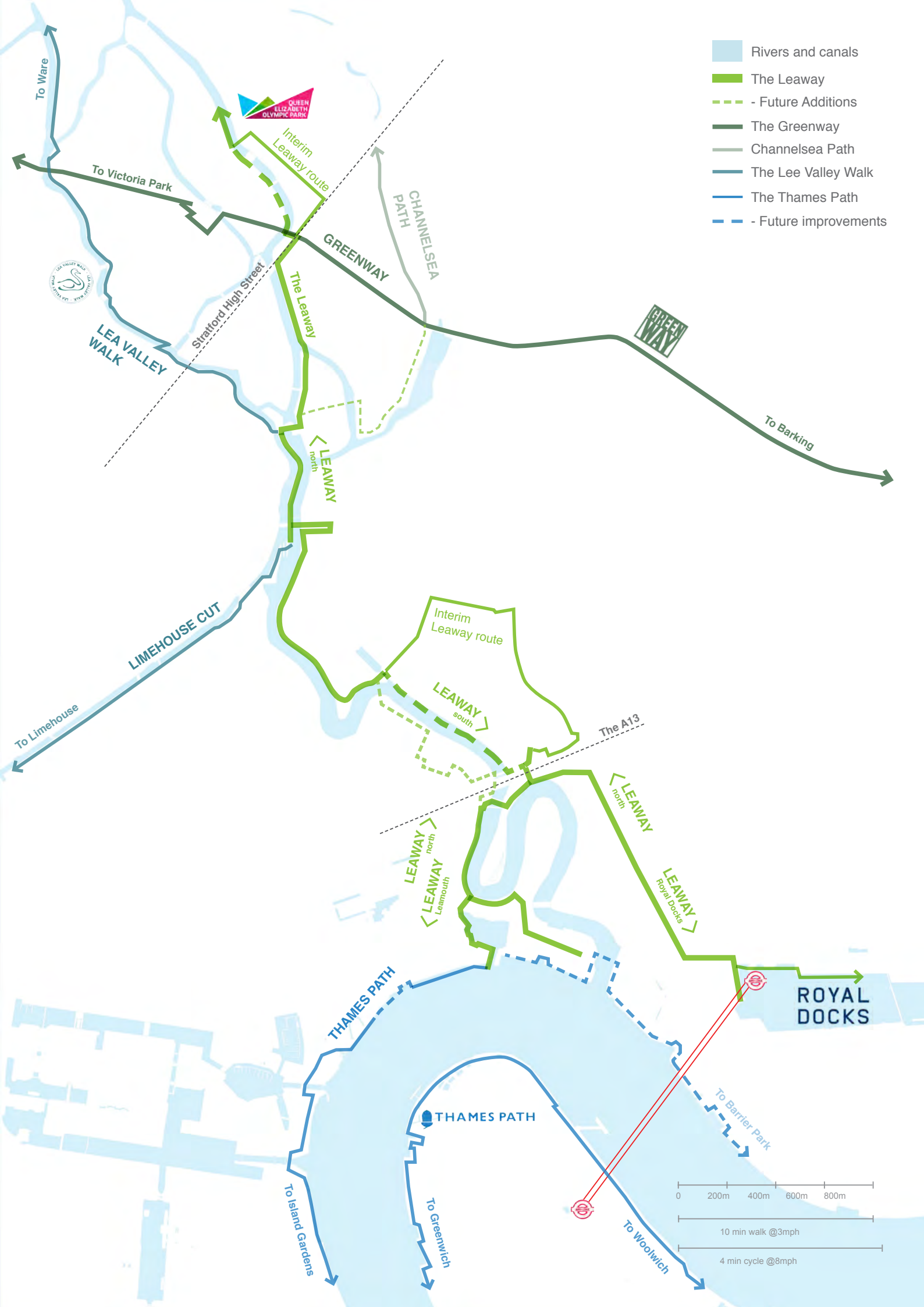
As well as providing orientation along the Leaway, it is proposed that paving mats are also used to mark thresholds/entrances at key junctions with other strategic walking and cycling routes. These are anticipated to incorporate directional signage slabs, which will indicate these adjoining routes and help the park user with their onward journey.

Leaway, Directional



Strategic Routes, Directional

Right: The strategic walking and cycling routes of the Lower Lea Valley with the Leaway at its core.


Rivers and canals
The Leaway
- Future Additions
The Greenway
Channelsea Path
The Lee Valley Walk
The Thames Path
- Future improvements
To Ware
To Victoria Park
QUEEN ELIZABETH OLYMPIC PARK
Interim Leaway route
CHANNELSEA PATH
GREENWAY
Stratford High Street
The Leaway
LEA VALLEY WALK
LEAWAY north
To Barking
LIMEHOUSE CUT
To Limehouse
Interim Leaway route
LEAWAY south
The A13
LEAWAY north
LEAWAY north
LEAWAY Leamouth
LEAWAY Royal Docks
THAMES PATH
ROYAL DOCKS
THAMES PATH
To Barrier Park
To Island Gardens
To Greenwich
To Woolwich
0
200m
400m
600m
800m
10 min walk @3mph
4 min cycle @8mph

NAMING THE PARTS - THE VALLEYS TOPONYMY

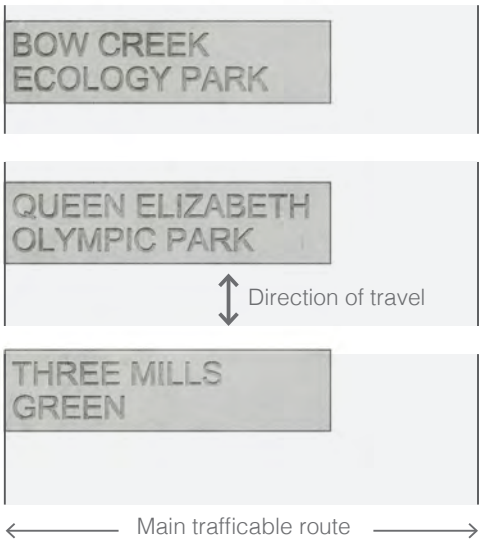
In order to create a sense of place, amidst otherwise new or recently created stretches of public riverside, the curation of the valley's rich heritage is seen as key.

It is proposed that a series of bespoke, non-directional pavers are included in paving mats to identify place names and park areas. These would play a secondary role to the directional Leaway pavers.

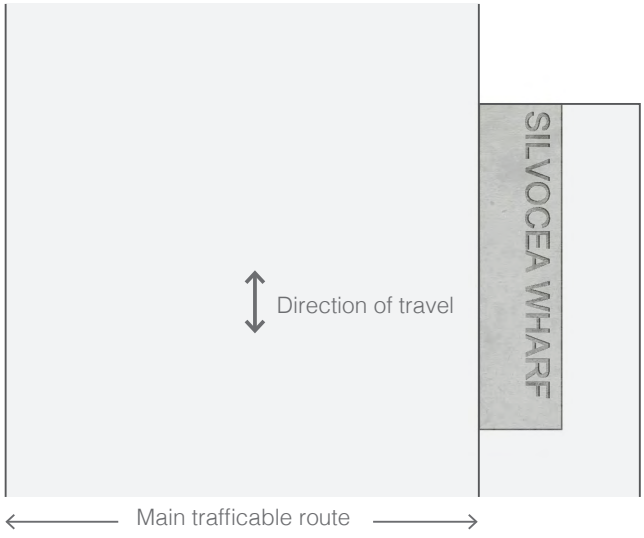
Although many of the previous occupations of the valley have left behind traces of their wharves, enclaves and industries, this is scarely reflected in the toponymy of the Lower Lea Valley. Modern development names should be excluded from the park; names such as Prologis Riverside, Electra Riverside and European Metal Recycling should not be signed. Instead, their historic wharf or agreed park names should be used to help curate the social history of the park.

It is intended that to improve legibility, agreed park names are laid across the main trafficable route at the thresholds of the different park areas. The signing of historic wharf names is to be incorporated adjacent to the main trafficable routes, along with objects such as benches and to be set out parallel to the main direction of travel.

Agreed park names



Historic wharf names



Key to wharf names

1. Tredegar Wharf
2. Empress Wharf
3. Pacific Wharf
4. Sun Wharf
5. South Wharf
6. St Leonards Wharf
7. Ailsa Wharf
8. Islay Wharf
9. Devon Wharf
10. Priors Wharf
11. Mayer Parry Wharf
12. Worlands Wharf
13. Crown Wharf
14. Essex Wharf
15. Commercial Wharf
16. Creek Wharf
17. Moody Wharf
18. Ironbridge Wharf
19. Great Eastern Railway Wharf
20. Orchard Wharf
21. Silvocea Wharf
22. Bridge Wharf
23. Crown Wharf
24. Baldwins Wharf
25. Ocean Harvest Wharf
26. Upper Wharf
27. Cooperage Wharf
28. Middle Wharf
29. Old School Wharf
30. Davies Wharf
31. Glasshouse Wharf
32. Tar Wharf
33. Lower Wharf
34. Jubiee Wharf
35. Castle Wharf
36. Bond's Wharf
37. Hercules Wharf
38. Leamouth Wharf
39. Brunswick Wharf
40. Orchard Wharf
41. Union Wharf
42. Trinity Buoy Wharf
43. Thames Wharf

Right: The agreed park names and historic wharf names (figures) of the Leaway


Rivers and canals
Park Spaces
The Leaway
- Future Additions
Park Areas
- Future Areas
Interim Leaway route
The Leaway
Short Wall
Three Mills Green
Three Mills
Mill Meads
Long Wall
Three Mills Spit
Twelvetrees Park
Twelvetrees Crescent Bridge
Bow Locks
Cody Wilds
Interim Leaway route
Cody Dock
Poplar Reach
Poplar River Park
Canning Town Riverside
Silvocea Way
Bow Creek Ecology Park
Silvertown Way
Limmo
East India Dock Basin
Silvertown Viaduct
ROYAL DOCKS
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
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18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
0
200m
400m
600m
800m
10 min walk @3mph
4 min cycle @8mph

CONNECTING TO SURROUNDING COMMUNITIES

As a part of the 'to the river' mats and also at key park entrances, there may be situations where, due to the legibility of the surrounding public realm, additional signage might be provided to connect the Leaway into its neighbouring communities.

However this is seen as a lower priority for the bespoke signage slabs, as a primary signage strategy has been agreed for locating Legible London fingerposts and midiliths at park entrances. It is therefore unlikely that these village/neighbourhood names will be reproduced in the signage pavers, due to their permanency and the ability for Legible London to be refreshed more easily.

In instances where neighbouring communities are signed, 'villages' and 'neighbourhoods' or geographical placenames should be used instead of the names of commericial developments. All names should be drawn from the existing Legible London base mapping in order to create a coherent toponymy; some revisions to the basemapping may be necessary to reflect development areas.

Above: Tower Hamlets 'Jelly Bean' map from the 2010 Local Plan identifying recognisable places - for illustration purposes only

Right: Some proposed village names compiled from Legible London base mapping, Ordance Survey 25k, Tower Hamlets local plan and the London A-Z map, subject to confirmation with boroughs and Transport for London.


Queen Elizabeth Olympic Park
Stratford
Rivers and canals
Park Spaces
The Leaway
- Future Additions
To the river routes
- Future Additions
Interim Leaway route
West Ham
Bow
Mill Meads
Plaistow
Bromley -by-Bow
Star Lane
Interim Leaway route
The Leaway
Canning Town
Poplar Riverside
Poplar
Leamouth
Blackwall
Royal Victoria Dock
Canary Wharf
Wood Wharf
Silvertown
Greenwich
0
200m
400m
600m
800m
10 min walk @3mph
4 min cycle @8mph

SIGNING ADJACENT TRANSPORT HUBS

Signage towards stations within the bespoke paving slabs is considered of tertiary importance. It is expected that the signing of adjacent transport connections will be delivered through the installation of Legible London fingerposts and midiliths.

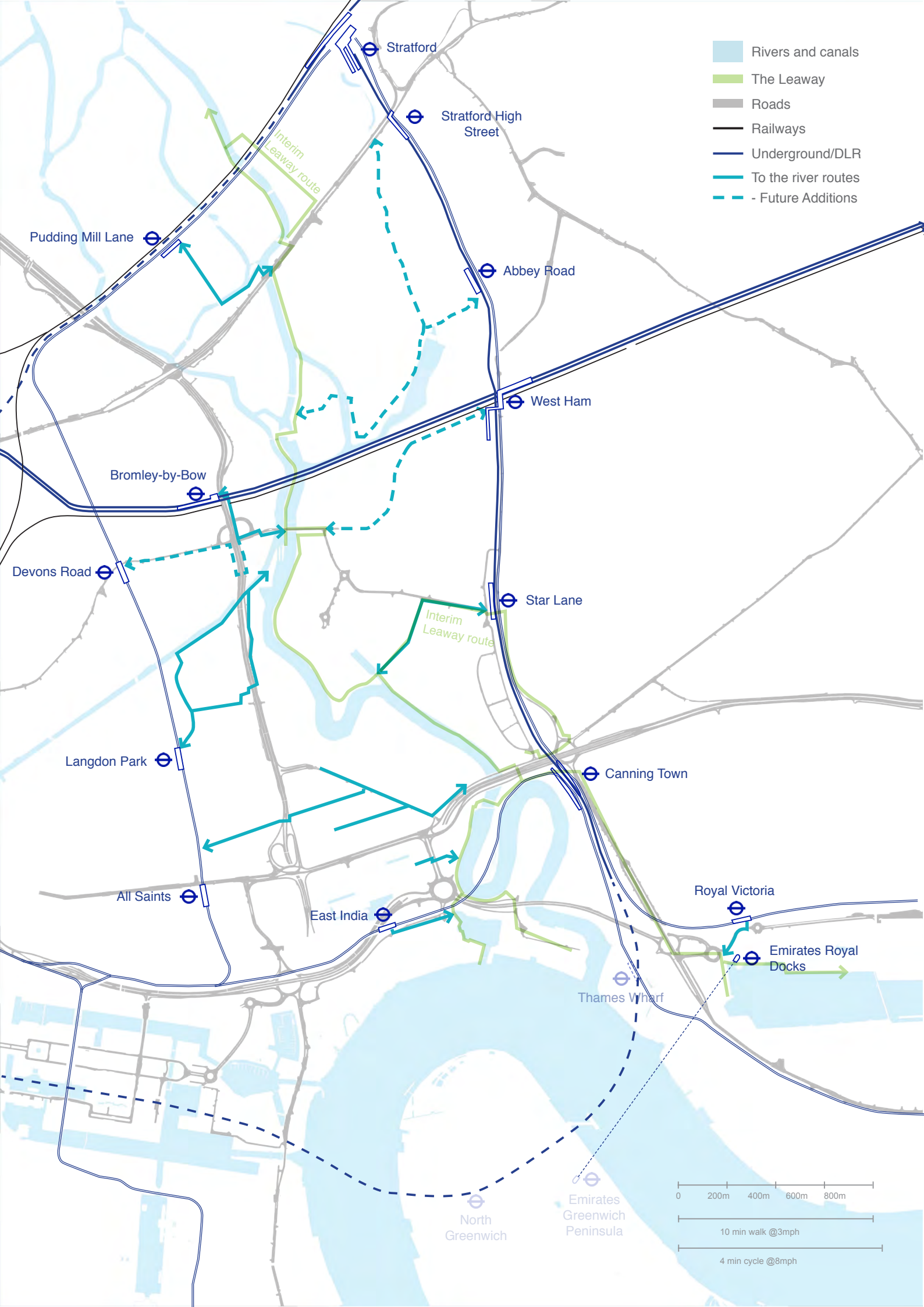
There may be some situations where there is a justifiable need to install bespoke signage slabs which provide additional signage towards transport interchanges, but these installations should be limited to within 'to the river routes' mats. In these instances bespoke paving slabs should only be placed if there is no direct view of the transport interchange, i.e. a visible TfL roundel, station sign, or the station buildings itself.

The justification for this is to deliver a series of paving mats which are calm, legible and principally orientate users to and along the Leaway.

Transport Hubs, Directional

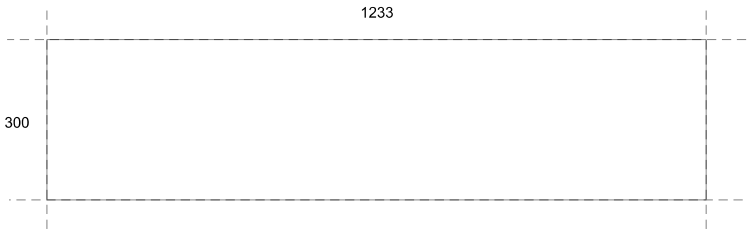
Above: The last signage slab demonstrates a contraction of the station name, this is in line with the Transport for London's guidance for the Landmark bus stops; LBSL - Landmark London graphical standards. More contractions are provided at the back of this document.

Right: The key transport hubs which surround the Leaways routes


Rivers and canals
The Leaway
Roads
Railways
Underground/DLR
To the river routes
- Future Additions
Stratford
Stratford High Street
Interim Leaway route
Pudding Mill Lane
Abbey Road
West Ham
Bromley-by-Bow
Devons Road
Star Lane
Interim Leaway route
Langdon Park
Canning Town
All Saints
East India
Royal Victoria
Emirates Royal Docks
Thames Wharf
North Greenwich
Emirates Greenwich Peninsula
0
200m
400m
600m
800m
10 min walk @3mph
4 min cycle @8mph

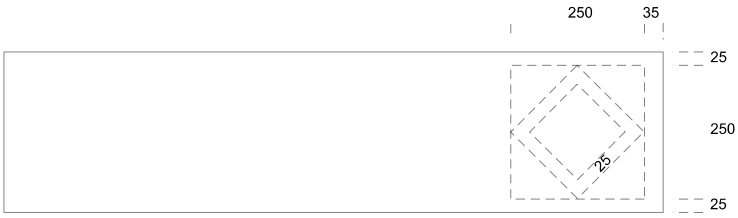
LEAWAY DIRECTIONAL PAVERS

1. Begin with standard paver dimensions : 1233 x 300



2. Construct grid for the arrows

- draw a 250mm square set in 35mm from the end and centred 25mm from the top and bottom of the paver
- draw a square turned through 45 degrees within this
- draw a square within the last, offset by 25mm



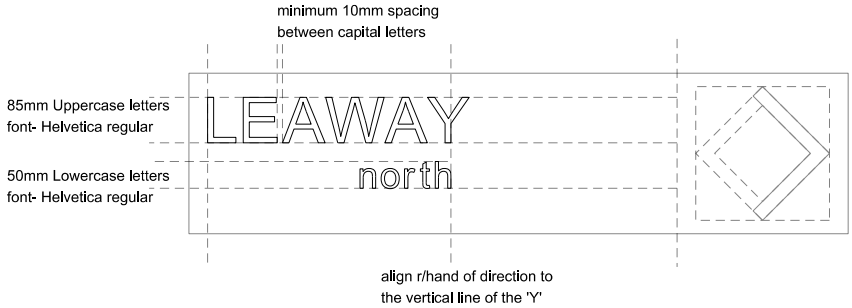
3. Construct the illustrated grid for the positioning of the letters

4. Arrange the text and the arrow head as required
Leaway directional paving should read:

LEAWAY north
LEAWAY south
LEAWAY Leamouth
LEAWAY Royal Docks

depending on the location of the paver

10mm spacing between lower case letters

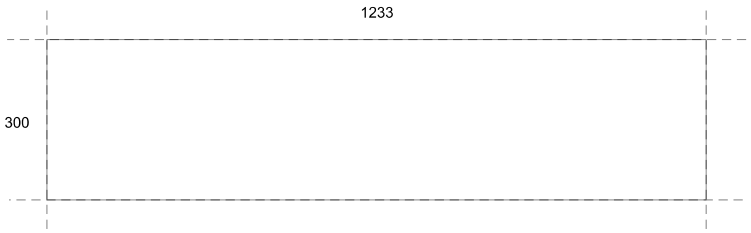


5. An example of a completed Leaway directional paver

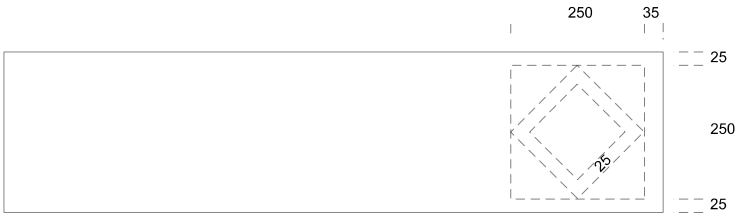
NOTE: Refer to GA plans for specific content of signage paving slabs.
This drawing explains the process of setting out the content only.

STRATEGIC ROUTES DIRECTIONAL PAVERS

1. Begin with standard paver dimensions : 1233 x 300



2. Construct grid for the arrows
   - draw a 250mm square set in 35mm from the end and centred 25mm from the top and bottom of the paver
   - draw a square turned through 45 degrees within this
   - draw a square within the last, offset by 25mm



3. Construct the illustrated grid for the positioning of the letters

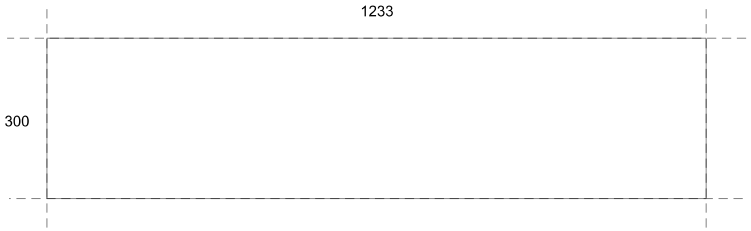
4. Arrange the text and the arrow head as required
   All letters should be 85mm and Uppercase

5. An example of a completed Strategic Route directional paver

NOTE: Refer to GA plans for specific content of signage paving slabs.
This drawing explains the process of setting out the content only.

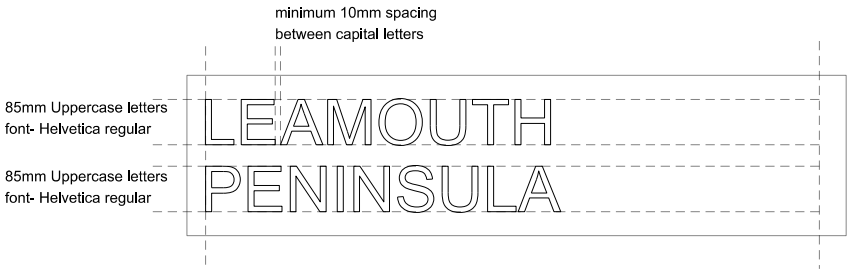
PLACE NAME PAVERS

1. Begin with standard paver dimensions : 1233 x 300



2. Construct the illustrated grid for the positioning of the letters

3. Arrange the text and the arrow head as required
   All letters should be 85mm and Uppercase

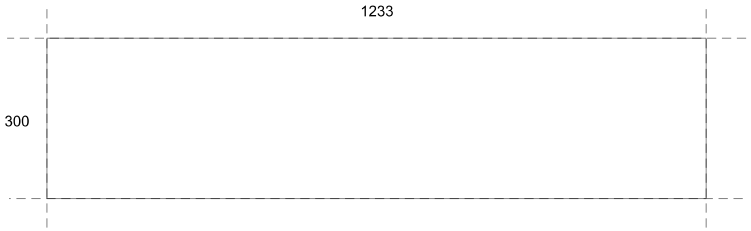


4. An example of a completed Place Name paver

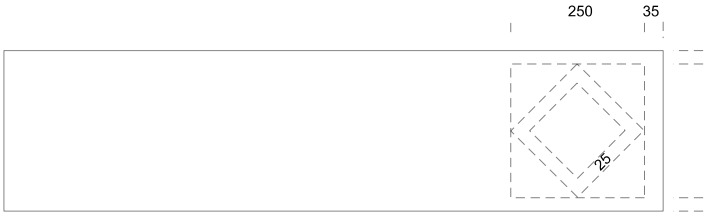
NOTE: Refer to GA plans for specific content of signage paving slabs.
This drawing explains the process of setting out the content only.

TRANSPORT DIRECTIONAL PAVERS

1. Begin with standard paver dimensions : 1233 x 300

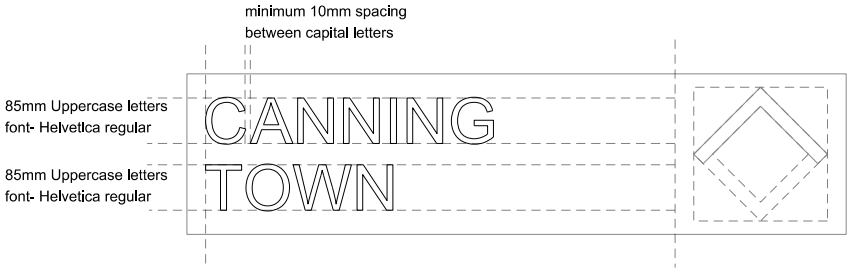


2. Construct grid for the arrows
   - draw a 250mm square set in 35mm from the end and centred 25mm from the top and bottom of the paver
   - draw a square turned through 45 degrees within this
   - draw a square within the last, offset by 25mm

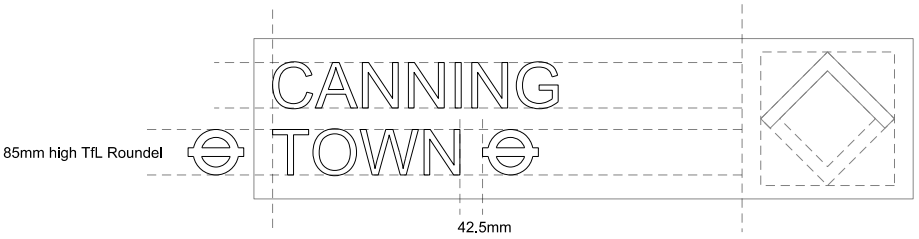


3. Construct the illustrated grid for the positioning of the letters

4. Arrange the text and the arrow head as required
   All letters should be 85mm and Uppercase



4. Position the TfL roundel
   The roundel should be 85mm high and should be off set from the end of the station name by 42.5mm



6. An example of a completed Transport directional paver

NOTE: Refer to GA plans for specific content of signage paving slabs.
This drawing explains the process of setting out the content only.

APPENDIX 3

LEAWAY PAVING MATS: WORKED EXAMPLES

This appendix contains a selection of Leaway Paving mats that have been worked through and agreed in the first phase of Leaway projects.

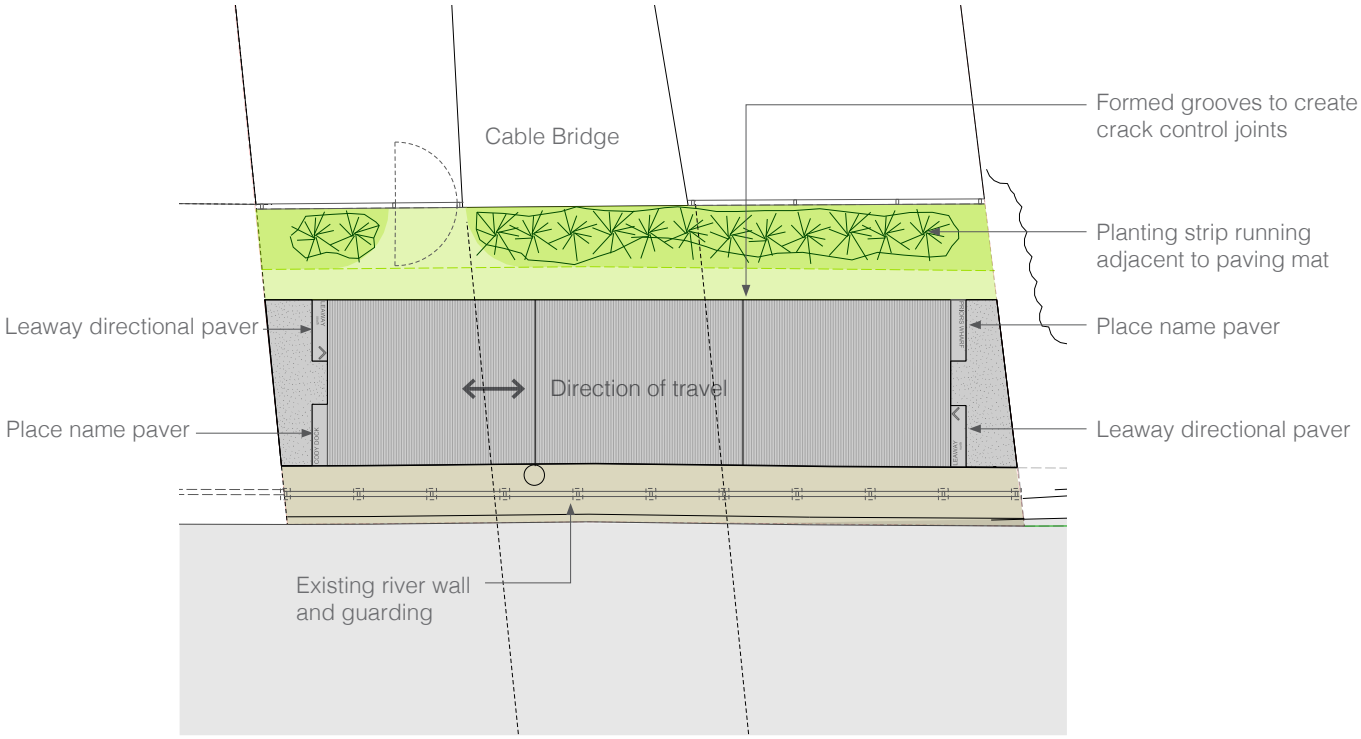
These mats are all particular to their situations, but follow the principles set out in ‘Paving Mat Examples’ (pg 56-68). They should be used as a guide for the implementation of future paving mats on the Leaway.


Danger
THREE MILLS
GREEN

POPLAR REACH CABLE BRIDGE

The paving mat under Poplar Reach Cable Bridge is a 'threshold' on the Leaway route. The mat will unite two stretches of previously disconnected riverside path. The geometries of the Leaway at this 'threshold' are simple and there is no requirement for the mat to incorporate signage or street furniture.

Two concrete finishes have been deployed to differentiate the body of the mat from its beginning and end. The beginning and end of the mat picks up the geometry of the site boundary, however, pavers stay in board and perpendicular to the direction of travel.



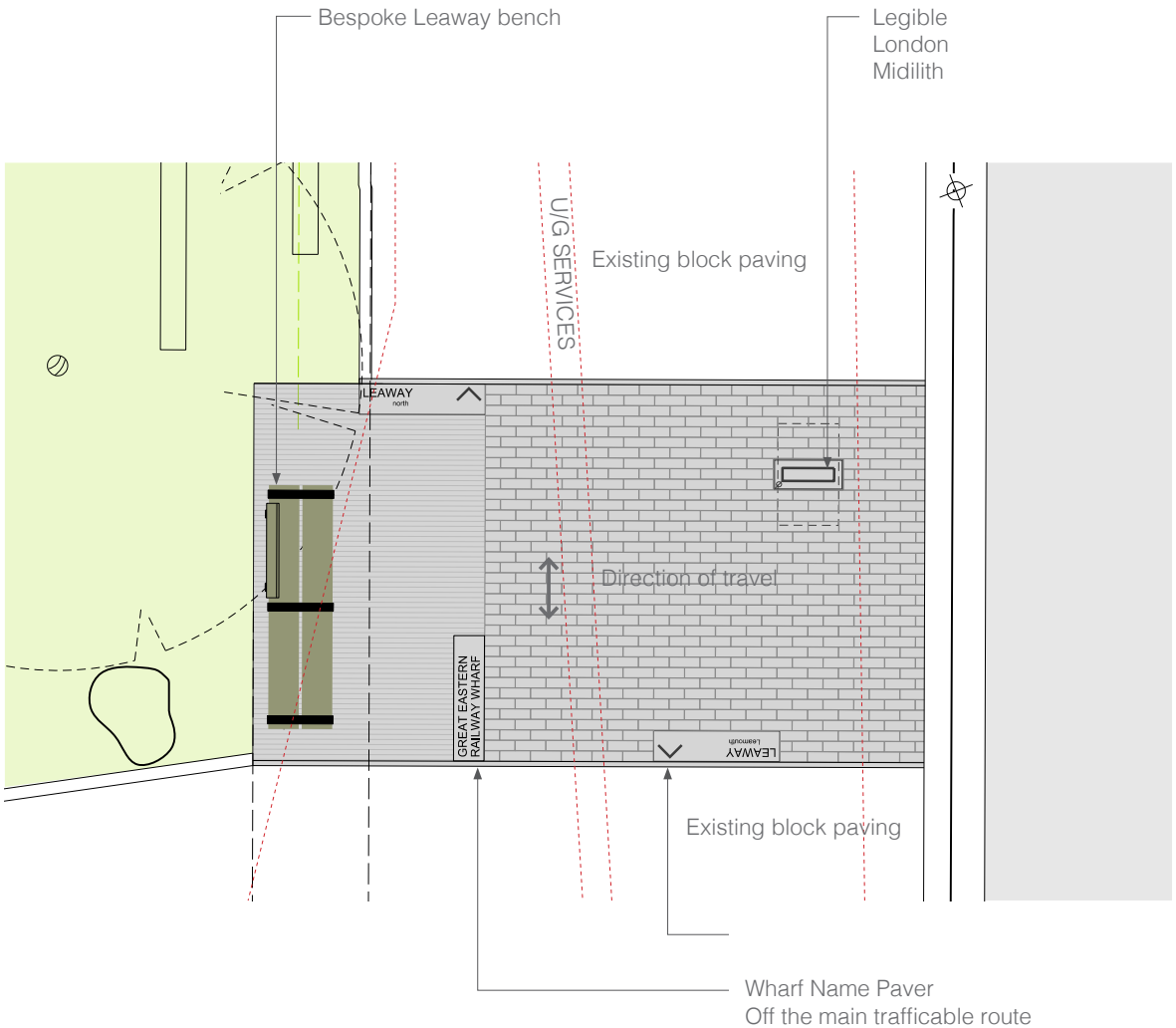
In situ **brushed** concrete slab
No services are present in the ground so it is appropriate to use a monolithic surface

In situ **exposed aggregate** concrete slabs
No services are present in the ground so it is appropriate to use a monolithic surface

SILVOCEA WAY

This paving mat on Silvocea Way is a ‘threshold’ mat, that reassures park users on their route down the Leaway. Its geometry is orthogonal and the mat runs across the riverside path, perpendicular to the direction of travel.

A modular surface is used where services are present beneath and the bench is set back into the adjacent planting bed to maximise path widths. The mats on this stretch have a precast concete edging to neatly transition between the existing blockwork and the new mix of modular and monolithic surface. A Legible London Midilith is accomodated within the mat.



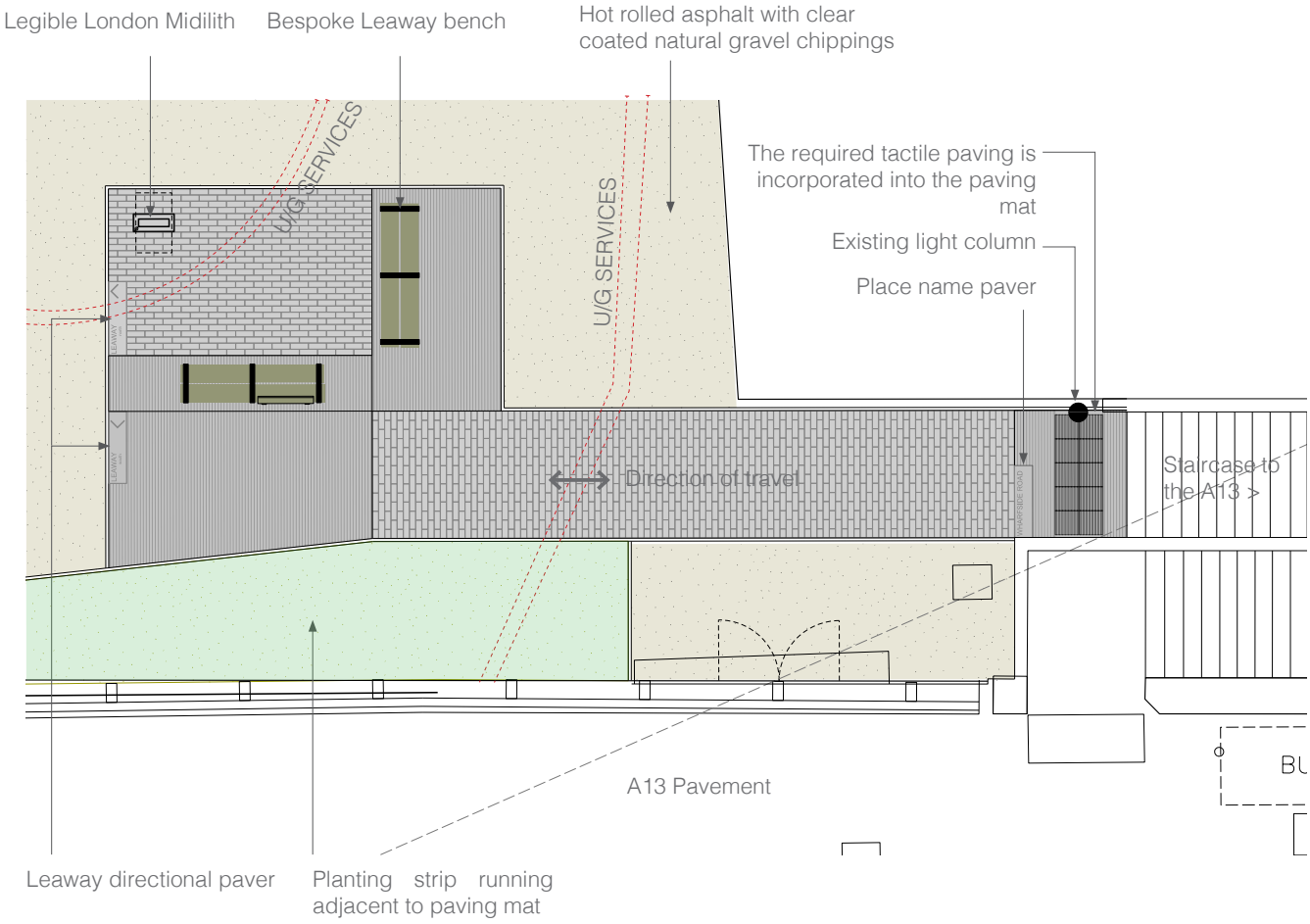
Indicative below ground services

In situ **brushed** concrete slab
No services are present in the ground so it is appropriate to use a monolithic surface

Pre-cast concrete plank paving
Modular surfaces are used where services are known to be present

WHARFSIDE ROAD - FOOT OF STAIR

The paving mat at the foot of the north western staircase to the A13 is an ‘entrance’ to the Leaway. It aims to orientate park users who have joined the Leaway route from the A13 above. The mat incorporates park furniture and a Legible London Midilith whilst maintaining access to service doors. Where underground services are present a modular surface has been used.



In situ **brushed** concrete slab
No services are present in the ground so it is appropriate to use a monolithic surface

Pre-cast concrete plank paving
Modular surfaces are used where services are known to be present

Indicative below ground services

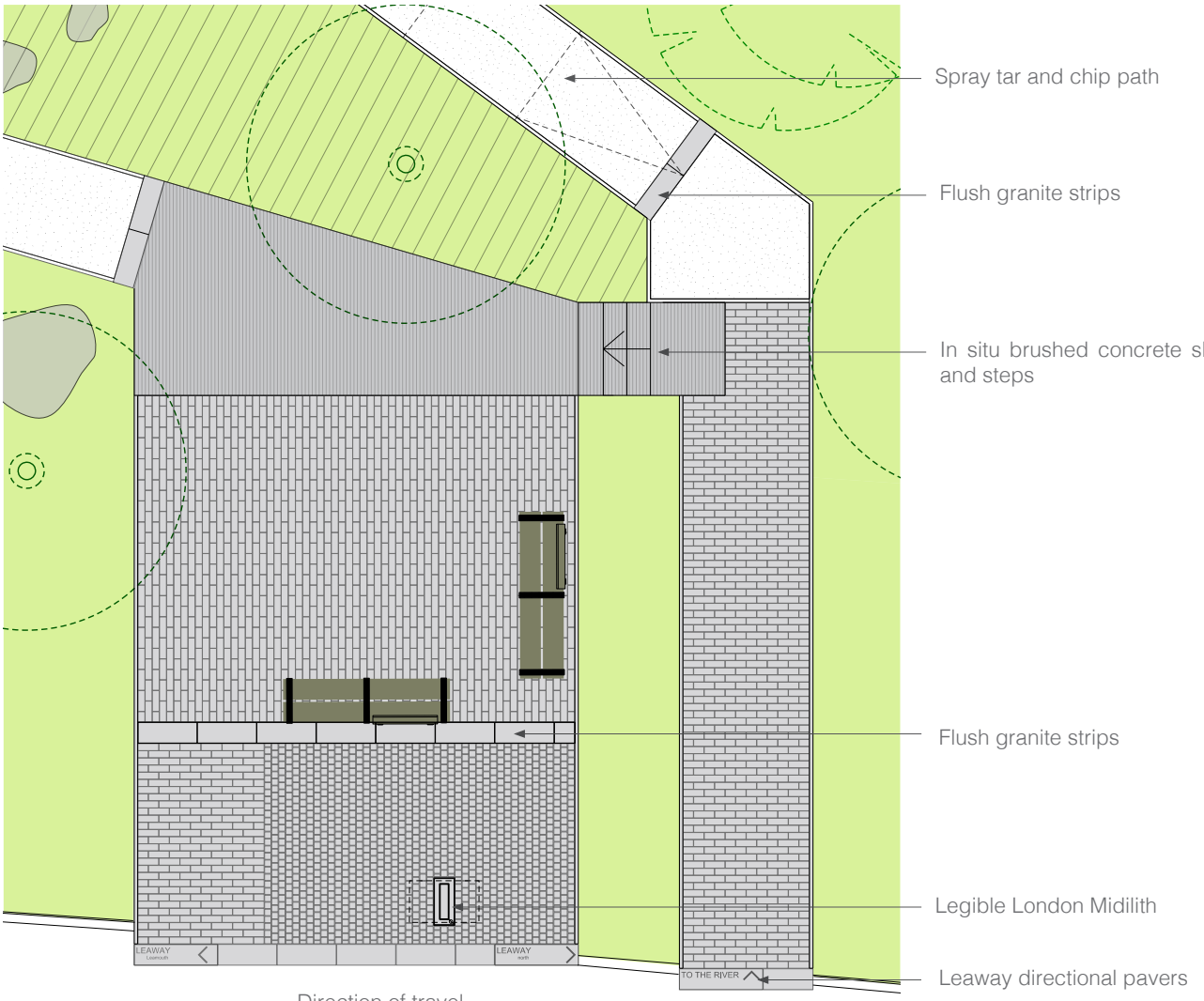
WHARFSIDE ROAD - JUNCTION WITH BIDDER STREET

The paving mat at the junction between Wharfside Road and Bidder Street is an 'appropriation' mat, that co-opts a relocated vehicle access gate to create a coherent gateway to the Leaway. The geometries of the two roads are mediated by a tree pit, whilst the body of the mat remains orthogonal and aligned to Wharfside Road. Granite strips bookend an area of modular paving, as the area is dense with services. The mat accomodates a Legible London fingerpost and a range of Leaway bollards that prevent unauthorised vehicluar access.

CANNING TOWN RIVERSIDE

The paving mat at the top of Canning Town Riverside is a ‘threshold’ mat that directs Leaway users to the park space below. The main body of the mat is orthogonal and perpendicular to the direction of travel, whilst the back section picks up the geometries of the two paths that take Leaway users to the river edge.

The mat accomodates two bespoke Leaway benches and a Legible London Midilith. It is split into two fingers of modular paving to accomodate a level change and flush granite strips containing signage pavers are inlaid for orientation.



Direction of travel

Exisitng asphalt surface

In situ brushed concrete stair and slab

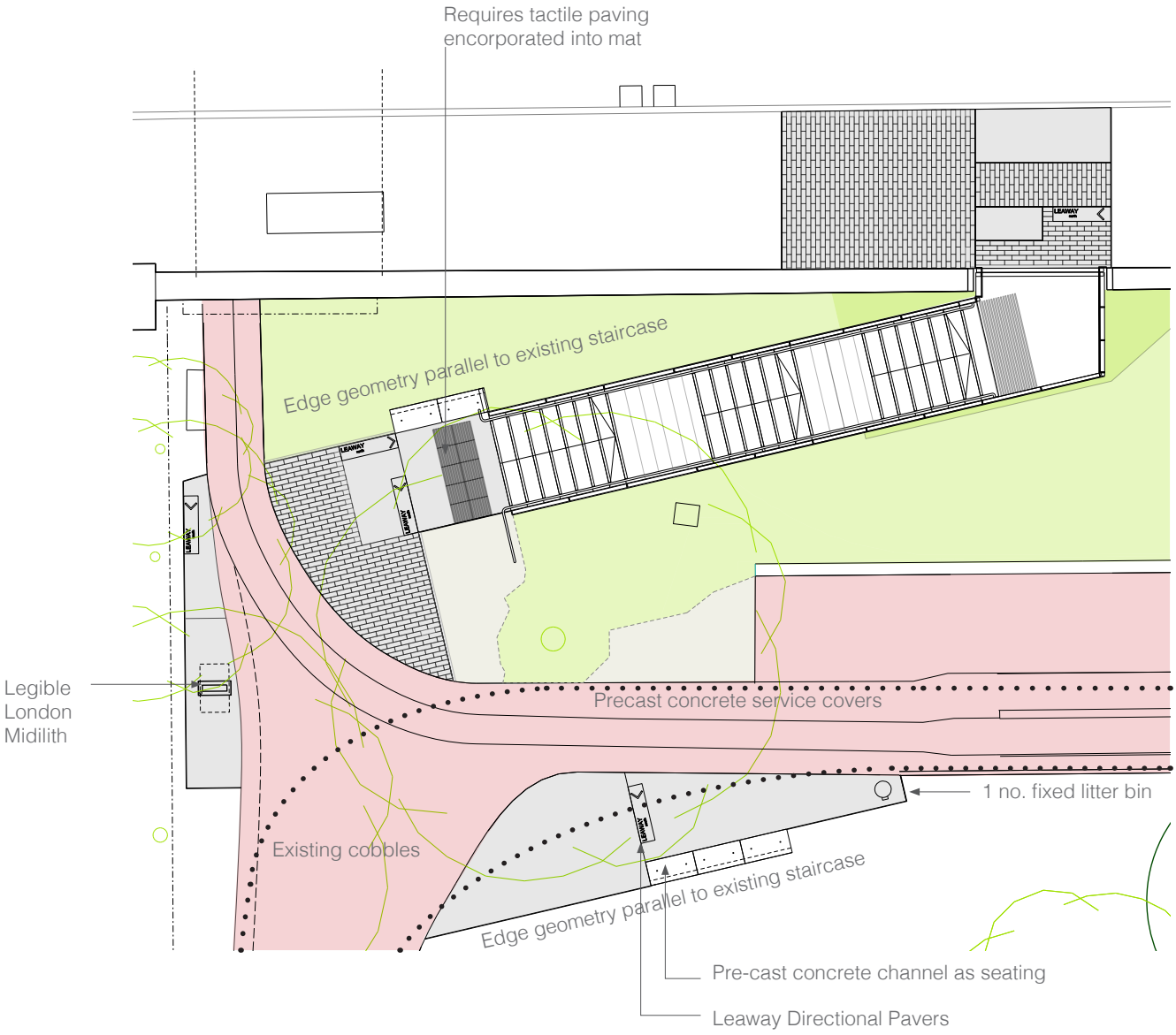
Pre-cast concrete plank paving
Modular surfaces are used where services are known to be present

Small modular units selected to deal with changing levels and avoid cut units

TWELVETREES - EAST BANK STAIRCASE

The paving mats at the top and bottom of the East Bank Staircase at Twelvetrees Crescent work together as an 'interchange' mat. The mats ensure that the Leaway route is legible across the change in level.

The mats at the foot of the stair are used to consolidate items of park furniture and take their curved edges from the presence of existing cobbles and covered service ducts. Although the principle outlined within the manual is that paving mats should be orthogonal, a site specific exception has been made in this instance to accomodate the existing geometries and features.



Indicative tracking for vehicle overrun

Pre-cast concrete plank paving
Modular surfaces are used where services are known to be present

In situ concrete slab
No services are present in the ground so it is appropriate to use a monolithic surface

APPENDIX 4

REFERENCES

Mayor's Great Spaces Practical Steps Better Green and Water Spaces	November 2009	Mayor of London
Lea River Park Design Framework	May 2008	5th Studio for London Thames Gateway Development Corporation
Supported by: Lower Lea Valley Opportunity Area Planning Framework	May 2006	Greater London Authority
London Borough of Tower Hamlets Streetscape Design Guide	February 2012	London Borough of Tower Hamlets
Design Guide for Borough Roads	March 2009	London Borough of Newham
Parks and Open Spaces Design Guidance		London Borough of Newham
SuDs Guidance		London Borough of Tower Hamlets
Inclusive Design Standards	March 2013	London Legacy Development Corporation
Royal Docks - LDA Sites Public Realm Materials and Elements Palette	February 2011	Peter Beard_LANDROOM for London Development Agency, Design for London and London Borough of Newham
London Cycling Design Standards Draft for Consultation	June 2014	Mayor of London Transport for London
Legible London Yellow Book A Prototype Wayfinding System for London	November 2007	Transport for London Mayor of London
Streetscape Design Guidance 2009: A Guide to Better London Streets	January 2009	Transport for London Mayor of London
Lea River Park Primer	October 2016	5th Studio for London Legacy Development Corporation

APPENDIX 5

COMMENTS TRACKER

COMMENTS ON THE LEA RIVER PARK DESIGN MANUAL

Issue Date	Revision
04-Nov-14	-
24-Nov-14	A

The Design Manual has been developed throughout the duration of the Leaway project and the document in its current form is the result of a long period of consultation and comment from the project's partners. The following Comment Tracker is a log of the revisions and amendments that have been made in response.

These notes refer to the detailed content of the manual and excludes notes highlighting graphic layout, spelling or grammatical errors.

First and Second Rounds of comments on the Leaway Design Manual

Following these comments the content of the Leaway Design Manual was agreed by the consulted stakeholders.

Section	Issue	Commenter	Team	Body	Initial Comments	Response	Comments on Revision A	Response
Executive Summary	Re-wording/ organisation	Pippa Gueterbock	Design & Physical Regeneration	LLDC			Suggestion to separate out Leaway/ Lea River Park summary and Design Manual summary. A summary of the design could outline the intentions of the document as a guidance, rather than a specification.	Text describing the intent of Design Manual as a guide for other professionals has been added to Executive summary.
Design Principles	References	Pippa Gueterbock	Design and Physical Regeneration	LLDC			Clarification of reference to 'Design Framwork' and 'Invitation to the valley'. Both references are unclear to a newcommer to the Park.	The Design Framework, produced in the previous Fatwalk stage for the LTGDC, has been italicised, as with other reference documents, and added to the references appendix. The reference to 'Invitation to the Valley' has been removed for clarity as they are not refered to subsequently throughout the document.
Knuckles - Twelvetrees Crescent	Bow Locks crossing	Amy Thompson	Pre-Applications Team Leader	LB Tower Hamlets	Is there the potential to remodel the existing bow locks crossing to make it fully accessible	This has previously been discounted owing to the heritage setting and visual impact of the required ramps		
Knuckles - Twelvetrees Crescent	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	clarification on the descriptions of the ramp as DDA	Amendments have been incorporated into the text		
Knuckles - Twelvetrees Crescent	Image	Pippa Gueterbock	Design and Physical Regeneration	LLDC			The overview image is out of date and should be revised.	The Three Mills section has been updated to as built. The remainder of the image is intended as a speculative/aspirational view of what might happen in the future so remains as such.
Knuckles - Poplar Reach	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	clarification on the descriptions of the structures accessibility	Amendments have been incorporated into the text		
Knuckles - Poplar Reach	Content	Pippa Gueterbock	Design and Physical Regeneration	LLDC			Better image of Cody Dock .	We do not have any better non-copywrited photographs of Cody Dock ie. none where events are taking place.
Knuckles - Canning Town Connector	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	clarification on the descriptions of the structures accessibility and risk of confusing signage	Amendments have been incorporated into the text		
Knuckles - Canning Town Connector	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	Ensuring cobbled setts are laid flush	This note is covered later in the materials section		
					Provision of an alternative accessible route/connection	The principal route of the Leaway along the Silvertown Viaduct is fully accessible, the staircases illustrated are just been maintained.		
Knuckles - Canning Town Connector	Lighting	Mark Perkins	Head of Commissioning for Sport and Leisure	LB Newham			A13 underpass and A13 connector should consider lighting features/ installation. Concerns current proposals do not do enough to address the unwelcoming aspect of these areas which, if not readily used, will remain a key severance on the Leaway route.	Comment added within A13 'Knuckles' section highlighting need for imoved lighting provision within underpass. Note also added to 'Lighting' within Continuity Elements to suggest that the strategy- for lighting the park should be readdressed as development comes forward and footfall increases.
Knuckles - Silvertown Viaduct	Content	Mark Perkins	Head of Commissioning for Sport and Leisure	LB Newham			Opportunity to reference some successful precedents should be considered.	Precedents have been added that show pieces of infrastructure being 'humanised' and treated more as sections of city/streetscape.
Continuity - General							Suggest involvement of project partners in development of continuity elements within the chapter introduction.	Text has been added to chapter introduction.
Continuity - Hard Landscape	Material Palette	Sarah Finn	Transport and Highways	LB Tower Hamlets	we would like to see the manual tie in with our SD Guide . This will help with the maintenance of these elements, the time delay in replacing like for like, and the short supply of storage we have for materials.	Considered that largely the Lea River Park - Design Manual does not counter the design principles set out in Chapter 7 - Special Streetscapes.		
Continuity - Hard Landscape	Material Palette	Mark Perkins	Head of Commissioning for Sport and Leisure	LB Newham			Would like to see increased reuse of existing and found materials to reference local heritage but accept this may not be deliverable as with the Olympic Park	Specific note added to section about surfaces and the inclusion of recycled/ reclaimed aggregates. Specific note regarding the appropriation of found/ reclaimed/ heritage objects as seating included in benches section. It is also already noted that the reuse of objects/ arefacts for play is supported within the Leaway.
Continuity - General	Material Palette	Kevin Twyford	Principal Landscape Architect	LB Newham			The approach to not prescribe but still cite proprietary products as examples is good, but the 'product reference' is not given throughout. It seems the identity of the route could end up being 'borough by borough'.	Reference to example products has has been made more cosistent within chapter. We have tried to fully describe the intended character of the element/finish so that delivery partners can source similar elements from their usual supply routes. Issues with items going out of stock/out of manufacture and a lack of space to store replacements/spares has made it impossible for the Boroughs to commit to a specific range of elements.
Continuity -General	Material Palette	Sarah Finn	Transport and Highways	LB Tower Hamlets			The Design manual does not make reference to or have any materials that appear in the Borough's Streetscape Design guide.	Specific product/material references have been removed (except within captions to example images). Explicit reference to the individual Borough's design guides had been made within the text and both are referenced in the references appendix.
Continuity - Material Palette	Material Palette	Kevin Twyford	Principal Landscape Architects	LB Newham			Fair faced concrete is noted as a vertical surface but is a chanel - needs clarification.	Note changed from channel to bench for clarity as the element is a channel but we are appropriating it as a bench.
Continuity - Hard Landscape	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	Expanded metal mesh as flooring	This was previously approved for Poplar Reach - note has been changed to describe its use as for enclosures		
					Fairfaced Concrete - slippery when wet if used o	Amended to clarify for use only as vertical surfaces		
					Concrete Cattle Slats - not accessible, be sure not to trap castors or canes	Description changed to use only off of main routes and when flush with landscapes		
					Precast concrete plank paving - describe as non-slip	Note added and text included on following page about non-slip requirements		
					Cobbles to be laid flush	Amended		
Continuity - Maintenance	Maintenance Responsibilty	Kevin Twyford	Principal Landscape Architect	LB Newham			Ownership boundaries indicating maintenance responsibility is not referenced.	It is expected that ownership and maintenance of the different sections of the park will need to be agreed on a site by site basis. This will be discussed at the forthcoming Park Governance review.
Continuity - Hard Landscape	Maintenance	Sarah Finn	Transport and Highways	LB Tower Hamlets	Street maintenance works in the borough are undertaken by our Clean and Green section and not by the Transport and Highways section, so the palette of materials needs to be easy to read and easy to repair , source and replace.		Agreed that text should be included about the repair and maintenance approach (hardwearing, easy cleaning, easily replaceable componenets). It should be noted that modular surfaces should be used where services are present and there is a high chance of area being lifted to avoid poor repairs.	Text addressing maintenance approach has been added to the chapter introduction of continuity elements. The use of a modular surface within 'paving mats' where services are present has been noted.
Continuity - General	Services	Kevin Twyford	Principal Landscape architect	LB Newham			Strategy for dealing with services is not picked up.	See above.
Continuity - Hard Landscape	Paving	Jessica Bolsin	Regeneration	LB Newham	The use of proprietary products such as Marshalls - Metrolinea - City Silver Grey has been questioned, with the suggestion that granite would be more suitable in these locations as it is more generic	Reference to Marhalls Metrolinea removed		
					This could be used at all mat scales in some form but most useful from entrance up, and in particular where the mat language potentially includes carriageway such as Silvertown Pier, Twelvetrees Crescent Bridge or potentially at the Canning Town 'Multi-use Space'.			
					Also, given the amount of granite available in LBN stock at a significantly reduced price it would seem sensible to make more use of this than has been suggested.	Due to the programme of the project this may run out or become unavailable later.		
Continuity - Hard Landscape	Surfaces	Jessica Bolsin	Regeneration	LB Newham	'Hard binding gravel' needs further description to implement as intended, this may mean 'self binding' as it is noted as permeable.	Noted, Hard binding changed to self binding		
Continuity - Mats	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	Trip Hazard on edge of mat currently illustrated	Illustration amended to show flush with landscape		
					Text on the Bespoke Leaway Pavers would be preferred in sentence case and with greater visual contrast	This design approach was developed in the previous Fatwalk stage, with the first pavers installed at Three Mills Green, these are illustrated here. The greenway also uses UPPERCASE signage. A signage strategy has been developed for the park which uses the accessible Legible London signage system as the principle communication device.		
Continuity - General	Products/Materials	JB, SF		LB Newham & LB Tower Hamlets			Agreed that products should not be named within the design guide. Specific products could be given as examples in small text within captions only. Instead, descriptive terms should be used to outline the palette of continuity elements.	Specific product names have been removed for general text. Specific product names are only used within captions in small text.

Continuity - Benches	Not suitable	Sarah Finn	Transport and Highways	LB Tower Hamlets	The seating does not appear to cater for elderly and disabled users who would require arm rests in order to lift themselves on and away from the seat, and back rests for those who need support.	Further notes have been included indicating that these elements are necessary - examples have been included of benches at Three Mills Green which already have backs and armrests		
Continuity - Benches	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	Proposed changes to the text and need to include reference to the LLDC Inclusive Design	Amended		
Continuity - Seating	Furniture	Pippa Gueterbock	Design and Regeneration	LLDC			Concrete stools should be included within the seating descriptions.	Concrete stools have been added, citing the Greenway as an example of their use.
Continuity - Bollards	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	Prefer not to have bollards, if they must be included they should meet LLDC IDS 07	Amended		
Continuity - Benches/Bins/Bollards	Furniture	Jessica Bolsin	Regeneration	LB Newham	To bear in mind the strategic nature of the guide for proprietary site furniture in terms of programme and potential for discontinued products. Furniture should be easily repaired and readily available, or fabricated to a bespoke detail and this should be applied from seats to bollards and bins.	Proprietary benches are proposed which incorporate large sections of timber which it is anticipated could be replaced if necessary. There exists an uncertainness about the number of bespoke items used throughout the park. As noted elsewhere the longer maintenance and management of the wider park remains unclear but might allow for more bespoke items to be included if an agreement is reached.		
Continuity- Bins	Bins without tops	Peter Gay	Parks and Greenspaces	LB Newham	Bins will need tops as problems with foxes and mis-use through fly-tipping are common	Noted and illustrated in examples	Bins require lids so no pictures without lids should be shown. Fixed bins aren't as successful as moveable bins. Note that each Borough's cleansing team should be consulted when finalising bin design. Bins on a single stand often get bent and are left in disrepair so should be avoided. As a rule bins should be as big as possible to reduce the requirement for emptying them.	Bin without lid has been removed - replaced with Broxap Budworth bin. Note made the bin choice should be made in consultation with those who will empty and maintain them.
Continuity - Bollards	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	Prefer not to have bollards, if they must be included they should meet LLDC IDS 07	Amended		
Continuity - Play	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	Proposed changes to ensure play does not impact upon circulation and the need to include reference to the LLDC Inclusive Design Standards	Amended		
Continuity - Table Tennis	Location	Sarah Finn	Transport and Highways	LB Tower Hamlets			Table tennis tables to be positioned in an open and well-trafficked area (where it is not possible for cars to pull up).	Note made to consult Boroughs on location of formal play items
Continuity - Wayfinding	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	Text on the Bespoke Leaway Pavers would be preferred in sentence case and with greater visual contrast	As above		
					Possible reference to Queen Elizabeth Olympic Park signage strategy	Uncertain? - a signage strategy is been developed separately for the Leaway		
Continuity - Wayfinding	Signage	Pippa Gueterbock	Design and Regeneration	LLDC			Signage typology missing from the manual - 'special signs' like the DDA compliant route sign at 12TC. Agreed a non-standard Legible London vitrious enamel panel should be used if possible? PG to confim with Legible London contact?	Note made within text regarding signage that there is a typology that is not described within the current manual. Curatorial and 'special' signage should be developed as a separate commission and issued as an appendix to the manual when complete.
Continuity - Wayfinding	Wayfinding	Mark Perkins	Head of Commissioning for Sport and Lesiure	LB Newham			Would have liked to have seen something more distinctive eg. Greenway signage.	A separate curatorial level of signage is expected to be commisioned that will be more specific and 'Leaway' distinctive.This will be detailed in an appendix to the manual when complete.
Continuity - Lighting	Lighting	Steering Group					Note about ambition for lighting to be high quality and integrated successfully etc. Could show some examples? Accepted that the lighting will be so varied across the valley that this section will not be proscriptive. Explain that the park is a daytime park and is primarily un-lit to avoid anti-social behaviour.	A paragraph has been added within Continuitiy Elements that outlines the guidance on lighting within the park. No example images were given as the situations where lighting will be required is so varied that examples are unlikely to be relevant.
Continuity - Fences	standard fencing/mesh enclosures	Amy Thompson	Pre-Applications Team Leader	LB Tower Hamlets	Is there the potential to pull in some more creative boundary treatment as opposed to the standard fencing/mesh enclosures. For example you can get some great lace-link fencing, which serves an art feature	Where this is appropriate this is likely to be an exception to the guidance - and should only be deployed where its installation and maintenance can be justified.		
					Alternatively, a green wall would be nice to consider too.	There are few situations where a green wall due to the maintenance and cost implications is likely to be appropriate and will require additional justifications and approvals.		
Continuity - Fences	Range of fencing			LB Tower Hamlets	Choice of fences is limited with few intermediate options between the Geobrug Rombo and Betafence Securicor	Description of Securicor Betafence modified to include - or similar according to adjacent sites security requirements.	Is naming of specific fences appropriate?	Reference to specific fences within text has been removed - the products are only named within the manual when in a caption in small font and all specific products are given as examples only.
Continuity - Fences	Mesh enclosures	Jessica Bolsin	Regeneration	LB Newham	Concerns raised that the 'Enclosure' element Geobrugg Rombo could distort or unravel if cut - unfamiliar with the product but essential that it is robust.	A mock-up was presented to LB Newham and TfL in relation to the A13 connector and Poplar Reach in Jan 2012 and considered appropriate.		
Continuity - Paint	MIO Paint	Tamsin Hill	Landscape	LB Tower Hamlets			Give RAL colour for MIO paint.	We have contacted the paint's manufacturers to request an RAL colour - they were unable to give us a RAL colour due to the nature of the paint and its make up (the colour is too variable depending on application method/ angle you are looking from - ie. it is not a flat colour). We could give an approximation by eye match to a sample (we would have to order a sample).
Continuity - Planting	General Planting	Kevin Twyford	Principal Landscape Architect	LB Newham			Rather than removing references to species these could be included as examples in the same way as hard materials product references. Either way the guide should state parameters for choice in terms of native or for biodiversity etc. rather than leaving planting entirely to each project.	
Continuity - Planting	Productive landscapes	Kevin Twyford	Principal Landscape Architect	LB Newham			Productive landscapes need to be expanded. This is a serious piece of green infrastructure and has the potential for a 'continuous productive urban landscape' to develop (for example synergy with Gasworks Dock Partnership).	Text re-written to emphasise potential of 'edible' landscape component.
Continuity - Planting	Landmark Trees	John Archer	Biodiversity Officer	LB Tower Hamlets	refers to existing white poplars and hybrid black poplars, and talks about planting similar landmark trees elsewhere. Surely any new poplars planted should be the native black poplar, a priority species in the Tower Hamlets and London BAPs and the tree which gave rise to the name of Poplar district	As part of the wider planting strategy which has been developed, it has been proposed previously that white poplars with their visual interest be used to express artificial/engineered landscapes which lead into the park while the native black poplar is used to express the natural river edges		
Continuity - Colonisers	Rosa rugosa	John Archer	Biodiversity Officer	LB Tower Hamlets	invasive non-native species. Rosa rugosa is on Schedule 9 of the Wildlife & Countryside Act 1981 (as amended), making it an offence to plant it in the wild or to cause it to grow in the wild	Specific reference to species has been removed		
Continuity - Colonisers	Buddleia	John Archer	Biodiversity Officer	LB Tower Hamlets	is on the list of invasive species on conservation concern in London published by the London Invasive Species Initiative. These species should not be planted in the park.	Specific reference to species has been removed		
Continuity - Planting	Colonisers	Peter Massini	Urban Greening Team Leader	Greater London Authority	I think the planting schedules for 'colonisers' will need further consideration.	Specific reference to species has been removed		
					There is currently a reference to decorative varieties of buddleia, Rosa rugosa, valerians and goldenrod. Whilst these are plant species and types that are robust and will have some ecological benefits by providing a nectar source their broader ecological value could be rather limited. Furthermore, because buddleia daviddii, Canadian goldenrod, and red valerian are very successful colonisers of brownfield sites and similar habitats, and Rubus rugosa is frequently used in landscaping schemes, if the planting was dominated by these species it may detract from the distinctiveness of Lea Way landscape?	Aspects of the following comments have been included in the planting pages		
					There have been some successful examples of landscaping schemes that aim to replicate and/or mimic coloniser type habitats:			

					a. Brownfield habitats have been created at the Olympic Park specifically to replicate some of the key brownfield habitats (and the biodiversity they supported) that we present prior to its construction, and some of the other open habitats have been designed with key species in mind eg Brown carder bee. It would certainly be worthwhile looking at some of the planting schemes in the park and see if they might be appropriate to replicate throughout the Lea Way to extend this habitat type. Eleanor or one of her colleagues should have access to the planting schedules.			
					b. The landscaping scheme at Bexhill sea front, although more ornamental and horticultural is also a useful reference http://htalandscapedesign.blogspot.co.uk/2011/08/next-wave-planitng-lists-published-come.html			
					c. Dr Stuart Connop at the University of East London is also undertaking a lot of research into this issue using to inform the landscaping of barking Riverside.			
					See http://www.cieem.net/data/files/Resource_Library/Conferences/2012_RES_IEEM_Invertebrates/06_Stuart_Connop_FINAL.pdf			
Continuity - Planting	Planting	Jessica Bolsin	Regeneration	LB Newham	Good that the variety and character of existing vegetation and the view to enhance this has been picked up. With the areas being reclaimed from industrial land, there is an opportunity to design planting appropriate for the site - alluded to under 'colonisers'. A suggestion was provided from a test site in Cumbria which uses a grass - Festuca Rubra - rather than the species referred to in the document.	Detailed planting plans should be produced on a project by project basis		
Continuity - Planting	Buddleia and golden rod	Jessica Bolsin	Regeneration	LB Newham	In ecological terms it may be a mistake to plant Buddleia and Golden Rod - as both of these are invasive species.	Specific reference to species has been removed		
					They will appear on the sites as they are now endemic in London, but any new planting should aim to increase the range of species.			
Continuity - Planting	Landmark Trees	Jessica Bolsin	Regeneration	LB Newham	Landmark Trees, using species that are already found along the Lea is understandable, so hybrid Black Poplar, White Willow and White Poplar are fine.	Incorporated into manual		
Continuity - Planting	Purple Sycamore	Jessica Bolsin	Regeneration	LB Newham	There are two types of Purple Sycamore, hybrids from early/late C19th, planted as ornamental trees. Native tree species will do far more to increase local biodiversity.	Specific reference to species has been removed		
Continuity - Planting	Planting - general	Jessica Bolsin	Regeneration	LB Newham	Advised that further consultation could be done on the planting suggestions and it would be beneficial to consult some of the work done on the river bank restoration in the QE Park	Detailed planting plans should be produced on a project by project basis		
Continuity - Bollards	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	Suggestion of including raised planters and interpretation	Proposed that this would be taken up on a detailed design stage		
Continuity - SUDS	Planting	Sarah Finn	Transport and Highways	LB Tower Hamlets			Make SuDs more prominent and reference Tower Hamlets guidence and their examples.	Pictures updated to use Tower Hamlets examples and explicit reference was made to their SUDS guidance, previous success and ambition to extend the use of SuDs.
Paving Mats	Suitability for Vehicular loading	Sarah Finn	Transport and Highways	LB Tower Hamlets	The mats could be used in a number of locations on Silvocea Way for example, away from vulnerable areas (this includes service vehicle impact)	Further specification advice has been given describing how light vehicular traffic (maintenance) can be anticipated in the installation of these pavers		
Paving Mats	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	Notes on including provision of arm and back rests, maintaining clear circulation routes and flush laid cobbles	Amended		
Character Areas - Three Mills	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	Issue of the cobbled surface	These cobbles form part of a listed roadway. A note has been included that its improvement needs to be treated sensitively to reflect this protection		
					Improving access to the water for all	Note amended to reflect accessibility for all		
							Show Bromley by Bow, Stand East and Orchard wharf Development areas within Character Areas mapping.	This would be inconsistant as we are not showing development areas elsewhere. We could show images, as in other sections of 'Character Areas' - but those would need to be provided.
Character Areas - Twelvetrees	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	Changing notes on the Twelvetrees connection been a cycle connection and the signing of alternative accessible routes	Amended		
Knuckles - Poplar Reach	Content	Steering group/Pippa Gueterbock					Remove power generation for clarity as there is no evidence of it in the proposals.	Power Generation images and icon removed.
Character Areas - Victorian Infrastructure	Accessibility	Iain McKinnon	Accessibility and Inclusive Design	LLDC	Make reference to IDS 15 - Shared Space	Amended		
Character Areas - Silvocea Way	"1000 Black Poplar Wood"	John Archer	Biodiversity Officer	LB Tower Hamlets	the images associated with this show the Lombardy poplar, which has a columnar (tall and thin) shape. The native black poplar, which is undoubtedly what we should be planting here, is a much broader, spreading tree. I don't think the area shown would hold 1000 mature Lombardy poplars, and would certainly not support anything like that number of mature native black poplars. The aspiration should be changed to a Hundred Black Poplar Wood, comprising native black poplars.	Removed		
Character Areas - East India Dock Basin	Visitor Centre Location	John Archer	Biodiversity Officer	LB Tower Hamlets	The plans for East India Dock Basin on pages 28/29 include a visitor and educational centre, which would be excellent. However, the proposed location is on a nice bit of developing birch and alder wood, which is good for birds. Would the large, flat, relatively bare area in the NE of the site not be more appropriate?	The location of the proposed visitor centre was developed under the LTGDC, although no planning application was sought this location was identified for its potential to create a riverside café which responded to many of the sites landscapes and was distanced from the Lower Lea Crossing in order to achieve the required acoustic requirements for education spaces. A note has been included caveating this placement will require further detailed design development with project partners.		
Character Areas - East India Dock Basin	New Tree planting	Amy Thompson	Pre-Applications Team Leader	LB Tower Hamlets	Trees along southeastern boundary of East India Dock Basin should be incorporated, to mitigate against potential industrial use on the adjacent Orchard Wharf site	Tree 'symbols' have been clarified to illustrate new tree planting along this edge		
Standards	Ramp Gradient	Pippa Gueterbock	Design and Physical Regeneration	LLDC			Twelvetrees Ramp exceeds the standard given within the design manual for the maximum ramp gradient.	Twelvetrees Ramp is described within the body of text as a non-standard structure.
Standards	Cycling	Jess Bolsin		LB Newham			Reference the latest London Cycle Standards that the park is aiming to comply with.	Draft London Cycling Design Standards has been referenced in the appropriate appendix.
Bibliography	Bibliography	Steering Group					5th Studio to compile a bibliography of documents that the park supports/is in compliance with. Boroughs should send documents they wish to be included/referenced to 5th.	A list of relevant references appears as an appendix within the Design Manual.

Subsequent Comments to approved Leaway Design Manual

Following these comments the content of the Leaway Design Manual was agreed by the consulted stakeholders.

Section	Issue	Commenter	Team	Body	Comments on Revision B	Response		

APPENDIX 6

REVISIONS TRACKER

REVISIONS TO THE LEA RIVER PARK DESIGN MANUAL

Issue Date	Revision
04-Nov-14	-
24-Nov-14	A
17-Jun-15	B
19-Feb-16	C
16-Sep-16	D

Appendix 5 (Comments Tracker) logs the process of discussion and revision between the design team, the LLDC and the London Boroughs involved in the project. Revision A of this document, issued in November 2014, was approved by these stakeholders following the logged process.

The following Revisions Tracker aims to track subsequent changes to the the approved document and details any change in content between revisions.

Revision D

Manual Section	Page	Description of addition / revision
Inside Cover		Contacts and document sponsors moved to back of document
Welcome to the park	4	Quote from Mayor of London removed
Executive Summary	6	Text ammended to include curatorial strategy
Twelvetrees Crescent	14-16	Imagery updated to reflect construction progress
Poplar Reach & Cody Dock	20	Imagery updated to reflect construction progress
Canning Town Connections	24	Imagery updated to reflect construction progress
Exotic Wild	26-29	Imagery updated to reflect construction progress
Palette of Materials	37	HRA image updated to be Wharfside Road surfacing
Surfaces - The Concept	38	HRA image updated to be Wharfside Road surfacing
Perches/Stools/Benches	42-45	Images updated to illustrate the Leaway perch and benches
Wayfinding	50-51	Imagery updated to reflect consstruction progress
Bollards/Bins	52-53	Bollards and bins updated to reflect LB Tower Hamlets requirements
BIodiversity - SUDS	59	Reference included to the *London Sustainable Drainage Action Plan*
A Topography of Difference	76-105	Imagery updated to reflect construction progress

Image Credits

Page 4, Sir Robin Wales; Mayor of Newham's office
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Pgae 20, Wrenbury Lift Bridge; Paul Huntley, Wikicommons
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Page 23, Trinity Buoy Wharf; The Illustrated London News

Page 24, Hallsville Quarter; Buoyges

Page 28, Leamouth South development; Ballymore Group

Page 32, Caxton Works; Studio Egret West/Cathedral
Silvertown Reach; Galliford Try
Leamouth Bridge, Ramboll Whitbybird
World Class Streets, New York; Ghel Architects
Rijnhavenbrug, Rotterdam; Quist Wintermans Architekten

Page 44, Benches at Boble Plads,Copenhagen; David Bülow/ Primus Arkitekte

Page 48, Wild Kingdom; We Made That
Trials Cycling; Yann Dunant, Youtube
Boble Plads benches; Primus Arkitektur

Page 49, Play, Landschaftspark Duisburg-Nord; Pippa Gueterbock

Page 50, Franklin Wharf painted surfaces; Occuls Landscape Architecure
Play Barges; Murray Woodburn

Page 51, Three Mills Green; Philip Vile

Page 52, Legible London; Transport for London

Page 54, Bollards; MMCITÉ
Bollards; Broxap

Page 55, Budworth Bin; Broxap
Kelshall Bin; Broxap

Page 57, Baseball pitch enclosure; Rural Studio
Betafence Securifor fencing; Betafence

Page 59, Brownfield landscaping: urban invertebrate conservation; Dr Stuart Connop (UEL) Presentation at TURAS

Page 60, Reed bed restoration; Thames 21
Inter-tidal Planting; Thames 21

Page 61, Stockholm Tree Pits, Bethnal Green Road; LBTH
Rain Garden, Derbyshire Street; LBTH
Swale, Derbyshire Street; LBTH
Mis-connected drains; Thames 21

Page 79, Stratford Langthorne Abbey; Newham Archives

Page 81, Table Tennis; Philip Vile
Wild Kingdom; We made That

Page 89, Berry picking; Cambridge Cycling Campaign
Overgrown engine;
Greening the riverbanks; Thames 21

Page 93, Harbour Inn quayside, Porthleven; Fergus McIver, Flickr
Skip garden; Michael Bernstein
Volunteer skip garden planting; Global generation

Page 95, Woolwich Arsenal DLR station; Alan Williams/DLR
LED tunnel Lighting; Sustrans
Vancouver underpass; Sadie Dingfelder/Express

Page 101,Trinity Buoy Wharf; The London Illustrated News
Leamouth;

Page 103,Trinity House, buoy store;

Page 105, Newham Beach; Gareth Williams, flickr
Wakeboaring on the docks; WakeupDocklands.com
Three Mills Green; Philip VIle

Page 116,Jelly Bean Map; London Borough of Tower Hamlets

The Leaway is being delivered by the London Legacy Corporation, the London Boroughs of Newham and Tower Hamlets and Transport for London, Poplar HARCA, and Gasworks Dock Partnership.

To find out more about the Leaway visit:
queenelizabetholympicpark.co.uk/leaway

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