

# Old | Newham

## Re-generating the eastern part of the Royal Docks

**BU1** – Transforming Local Areas

Exercise in London Borough of Newham

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Phase 2: Design Response

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# Introduction

North Woolwich, Albert Island and Beckton, an area carved out the eastern Royal Docks, has lying at its somewhat shaky foundations, a paradox: although well connected to London through its various transport links, at the local level it is fragmented and disconnected. The way the area was produced historically—literally dug up and laid in place to make the Royal Albert and King George the V docks—continues to define it. Once a busy dock supporting a sizable local workforce (in extremely difficult living conditions); now evidence of the docks can be found in a collection of poorly connected islands, which house other islands: new private housing developments, City Airport, the University of East London, further west, the ExCel, the O2 and Siemens. This inherent disconnectivity has impacted social connectivity, both within the area and from the outside.



This design response aims to address this fundamental challenge by building new connections, drawing new networks, exploiting existing nodes and creating new ones. We recognise the singular challenge that the Airport presents – in terms of noise pollution and of its impact on land use – and try to come up with a plan, particularly for Albert Island that works within those limitations. As such we look at the eastern Royal Docks as a whole, and through its constituent parts, looking to reinvigorate the area considering themes of connectivity, everyday life and regeneration.

This document is organised in the following way: first, we develop a synthesized analysis, filtered through six lenses of analysis, which brings an overview of the main attributes of the area. Next a SWOT analysis captures the area's strengths, weaknesses, opportunities and threats, which lays the groundwork for principles and guidelines that orient our design responses for the area. Then we propose four design strategies through a series of interventions: a reconceiving of the mobility network, a re-engagement of North Woolwich through several small acupunctural changes, a revitalization project in Albert Island introducing several leisure amenities, and a reactivation of Beckton, where bold multi-functional developments can change the everyday life of the area. These interventions form a collection of design responses that aim to shift the eastern Royal Docks into an attractive place for living, working, studying and visiting.



Figure 1. Real estate south of Albert Island



Figure 3. King George V DLR station



Figure 5. Housing in North Woolwich



Figure 7. Abandoned pier



Figure 2. Empty lot near the Crossrail site



Figure 4. Danger sign on private property gate



Figure 6. Pier Road



Figure 8. Historic station and railway museum near the pier



# Synthesizing Analysis

When considering the six lenses of analysis employed to better understand the eastern Royal Docks—Housing and Dwelling, Urban Fabric and Landmarks, Open and Public Spaces, Thresholds and Leftovers, Cultures and Economies, and Transport and Mobility—one is left with a sensation that the area is filtered through with illusions. An area that on the map seems so well connected—an airport, two rail lines, several bus lines, a ferry and a ring road—is disconnected and fragmented in practice. A former docklands, peninsular landmasses surrounded by water, is fenced off from that which generated the reason for its existence at all—the river. A short hop from some of London's most headline-making developments in recent decades—Canary Wharf, the Olympic Park, the O2—it seems forgotten and lost in the excitement.

These differences can be understood as issues of scale and vision—the area is envisioned, connected and imagined at a macro scale, the process of which is having a detrimental effect on the locality. To explore these conflicts of scale, we will focus our synthesized analysis on issues of connectivity, everyday life, and regeneration.



Figure 10. Embodiment map (from: Urban Analysis - Infrastructure and Mobility)

#### How to connect?

The area of study has, on the face of it, extraordinary transportation links. City Airport to the world, the North Circulars to Greater London, the DLR to central London, and the Woolwich ferry and buses more locally. This is no doubt, true, and particularly in the case of the bus links and the DLR, that connectivity is one of the area's assets. However, analysis revealed that at the micro-scale, these transportation networks were impeding connectivity. The ferry—the only river crossing in the area—and the North Circular mean the road network is prioritized over pedestrians and often users of that road are large lorries. The airport, which is set to expand from 80,000 to 120,000 flights annually, generates significant noise pollution and imposes restrictions on land use. The DLR, while providing good central London access, is expensive for many local residents (the area scores high in terms of measures of multiple deprivation).

Crossrail, considered a boon to greater London, is slicing the area in two, disjointing an already poorly networked region [for more on how macro-scale architecture can create barriers at local levels, see Graham and Marvin (2000)]. Many of these infrastructure projects, meanwhile, have carved up the land, leaving pockets of unused land without obvious potential.

Socially, the area was also found to be struggling to achieve meaningful connectivity and interaction. The lack of an integrated pedestrian network, despite the area's well-placed landmarks, impedes interaction as some public spaces are difficult to reach. (This is due in part to the area's low porosity in both coarse-grained Albert Island and parts of Beckton, and more finely grained residential Beckton and North Woolwich.) While the area's diversity—economic, social, cultural, and architectural to name a few—is considered an asset, its social and physical community infrastructure is weak and therefore has not achieved its potential.

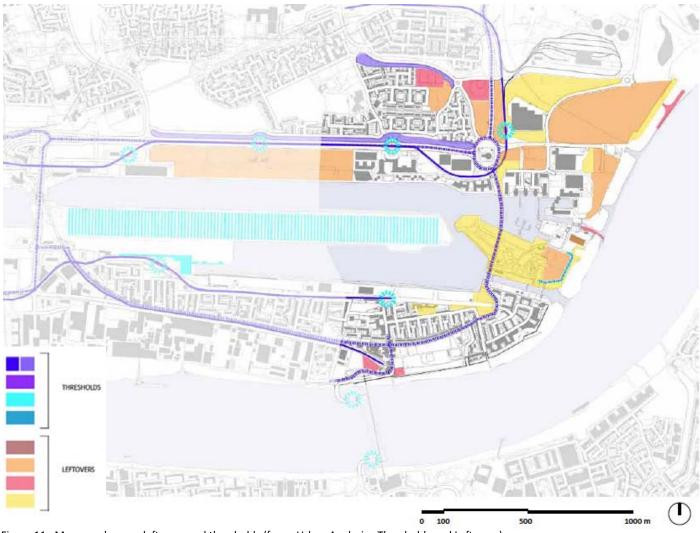
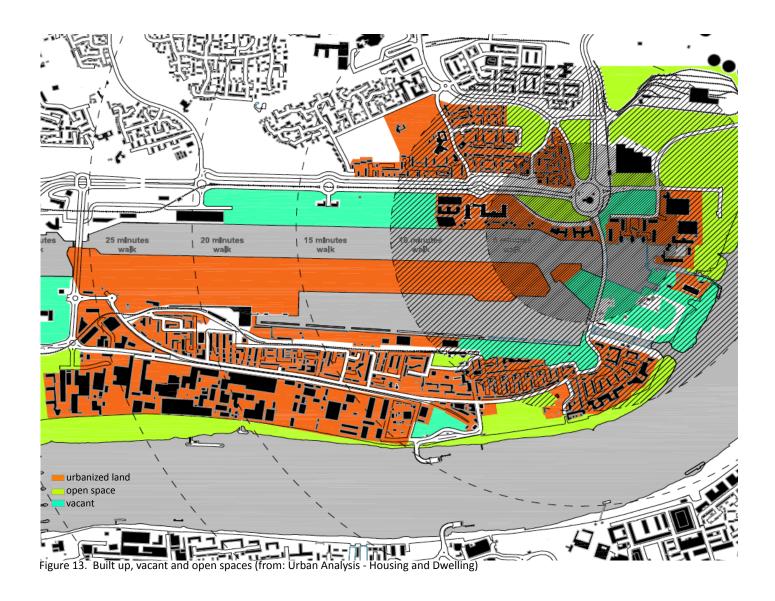


Figure 11. Macro scale map: leftovers and thresholds (from: Urban Analysis - Thresholds and Leftovers)



Figure 12. Map of abandoned buildings (from: Urban Analysis - Housing and Dwelling)



#### Where is everyday life?

This idea of social disjointedness, established through interviews and observation, was a common theme. Though it must be said that the area was observed during a wet and cold London midwinter, few found evidence of a vibrant public life. Pier Parade, witness to a failed market, is bordered by empty shopfronts and contains little life. Royal Victoria Gardens and the park in Beckton provide a green respite, though views on the gardens, in particular, were mixed. Some see the space as a strong community asset, while others talked instead of muggings, street drinking and assaults.

Further disrupting the area are leftover spaces, both empty land and buildings. The study area is pockmarked with empty brownfield sites, some of which are residual spaces left over by development, others, in particular Albert Island, are large swathes of neglected space. In the wake of the area's de-industrialisation and changing residential communities, a number of buildings - industrial, heritage, and others – have been left empty, symbols of an increasingly forgotten history and economic stagnation. The sheer quantity of empty and neglected space and buildings can generate feelings of disharmony, which is further compounded by the difficulty in getting around (Lynch 1960).



Figure 14. Street signs and barriers on Pier Road



Figure 15. River bank in the new real estate area



Figure 16. Abandoned pub in North Woolwich



Figure 17. Pier Parade square



Figure 18. Walls at Royal Victoria Gardens



Figure 19. Path along the river near Royal Victoria Gardens

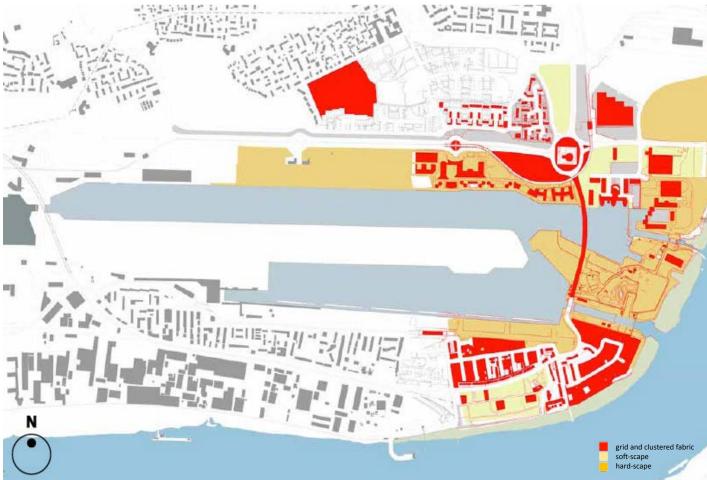


Figure 20. Grain and porosity (from: Urban Analysis - Infrastructure and Mobility)

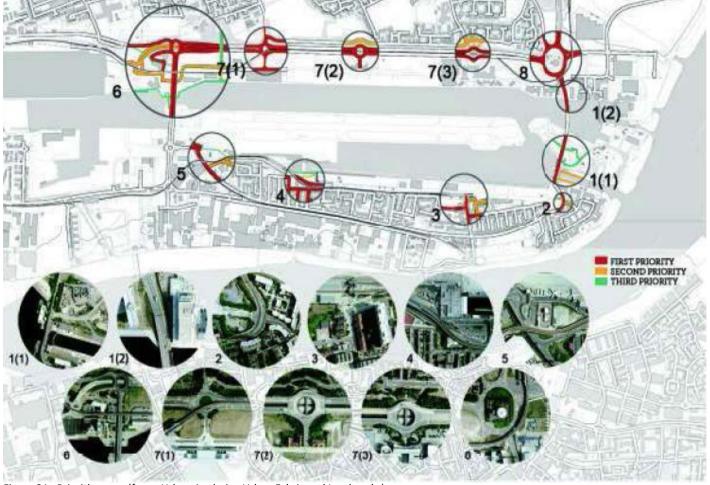


Figure 21. Priorities map (from: Urban Analysis - Urban Fabric and Landmarks)

#### Whose regeneration?

Meanwhile regeneration efforts have been driven by large single-purpose developments, such as the airport and University of East London, motivated by commercial and industrial growth, with little consideration for and tie-in to the locality. Other developments on the horizon, notably the Asian Business Park, seem to follow along that vein. The lack of integration is not helped by the multiple actors influencing the area. From a planning perspective it falls within both Newham Council and the Greater London Authority's remit, with significant and multiple transport quangos also involved, creating conflicting priorities for the area.

According to the different documents that lay out the future of the Royal Docks, the planners hope to achieve 'radical' change in the coming years (Royal Docks Spatial Principles, 2011), focused on building a 'world-class business centre: world leader in high technology, green enterprise and research and an international forum for the exchange of knowledge and ideas' (Royal Docks Vision Document, 2011). The repeated reference to the global illustrates how the planner's imagination for the area is largely removed from the local.

#### Possibility for change

Many of challenges summarized in this analysis, however, offer possibility for change, grounded in what the eastern end of the Royal Docks is now. The design response laid out in the following pages tries to increase connectivity – both social and physical – and by doing so, aims to inject some locally sourced energy into the area's everyday life.

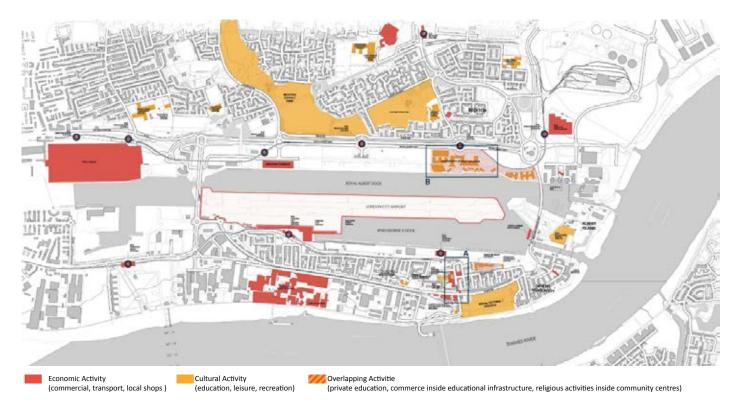


Figure 22. Cultural and economic spaces (from: Urban Analysis - Culture and Economies)



# SWOT Analysis

S

- Numerous Housing Associations
- \*Strong support from London Development Agency and London Borough of Newham
- \*Existing support from UEL (provides library, restaurants, cafes and childcare facilities).
- \*Existing investment to the area
- •Existing well-planned open and public spaces (Royal Victoria Garden)
- ·Existing riverbank paths and views
- \*Land available (150 with public ownership and 250 hectares of brownfield site)
- \*Some inhabitants consider it as a quiet area, there are some indications of a sense of community
- \*Several Green islands in the concrete, industrialised area
- \*Strong social mix of high cultural diversity
- .Strong transport links
- ·Existing quality housing in relatively good condition

#### STRENGTHS

- · Playground: potential to be a social interaction point
- · Many investment interests on the area
- · Existing cultural centers and economies, networks and interventions
- · GLA 'Green Enterprise Zone': classification should warrant investment in the local area
- · Perceived as the future "world-class business center"
- Cultural diversity
- UEL
- · Young diverse population
- . Link between park and residential area
- . Existing landmarks with historical value
- · Reducing the importance of the vehicular presence by Albert Road
- Existing landmarks could be catalysts for transformation processes
- . Green branches from the park towards the rest of North Woolwich
- Semi public spaces



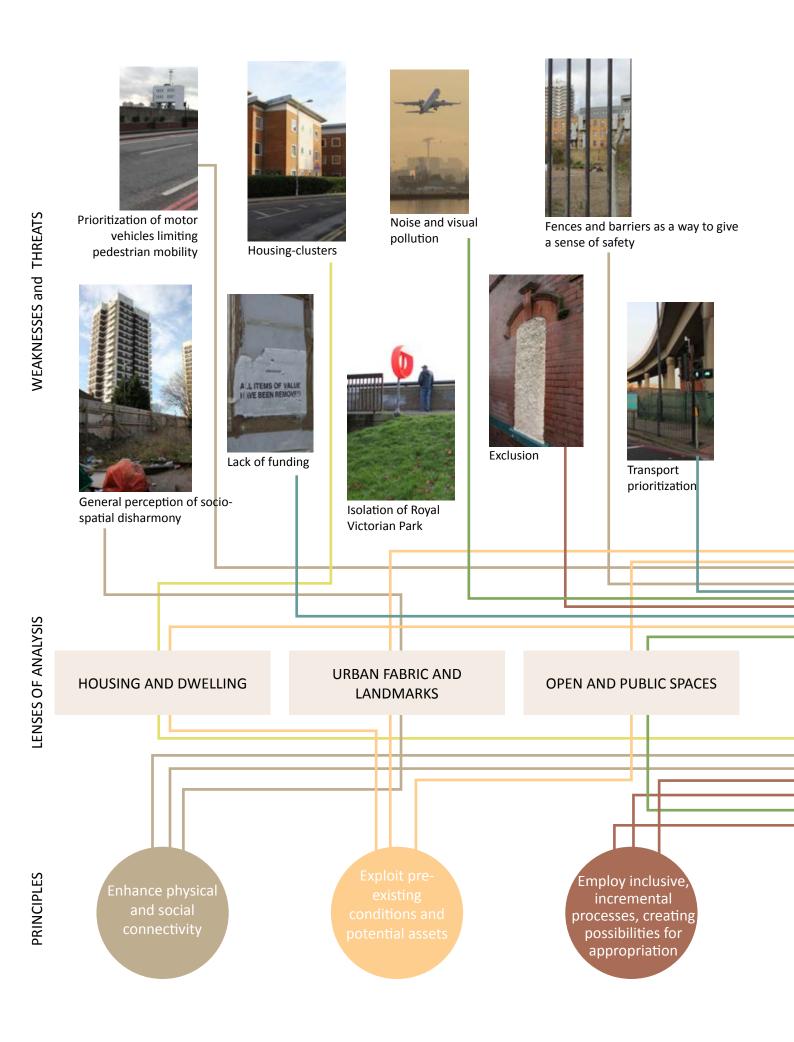
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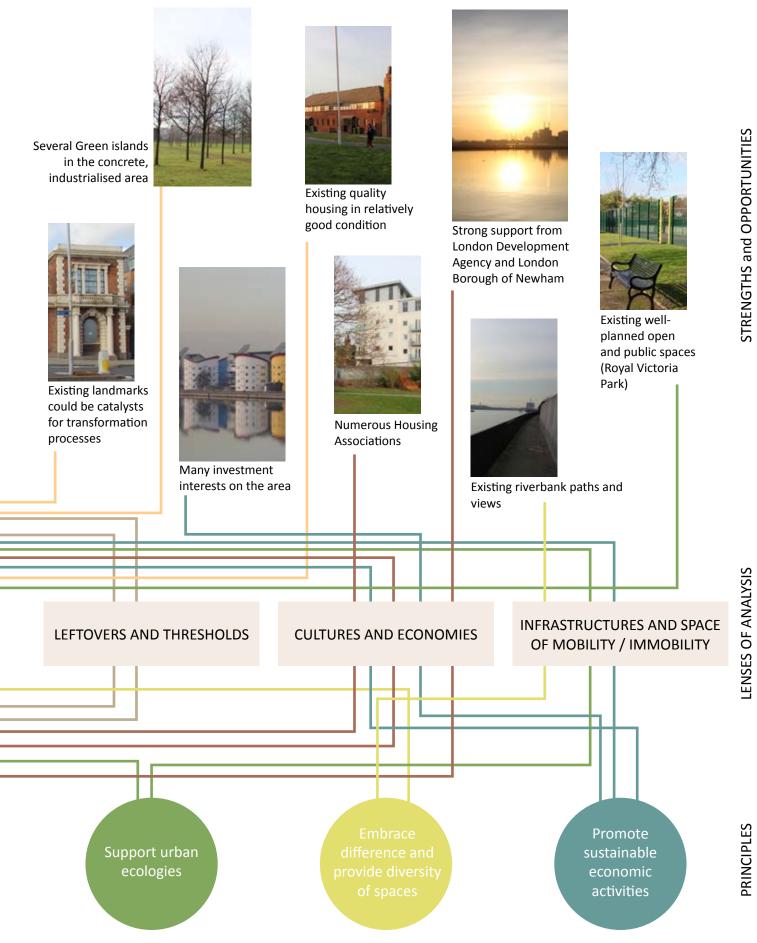
#### WEAKNESSES

- · Priority of commercial and industrial development over housing and social development
- · Prioritization of motor vehicles limiting pedestrian mobility
- · Prioritization of external public
- · Cultural and language barriers
- · High unemployment and poverty
- · General perception of socio-spatial disharmony
- · Sense of restriction and little sense of safety
- · Noise and visual pollution
- · Lack of planning and disjointed historical development
- · Limited exploitation of Thames and brownfield sites
- Albert Road and Hartmann Road
- Housing-clusters
- Isolation of Royal Victoria Gardens
- · Lack of and entertainment and infrastructures in some areas

#### **THREATS**

- · Commercial prioritization
- Transport prioritization
- · Relation between macro and micro scale intervention, both made and future ones
- · Rising land values/rents
- · Fences and barriers
- Unemployment
- · Expansion of the airport
- Exclusion
- · New developments
- · Lack of funding
- · Flood risk





# IV Principles & Guidelines

After a thorough review of the six urban analysis reports and conducting a SWOT analysis, we concluded that there were three areas that needed to be addressed directly through our design response — issues of connectivity, both physical and social; a enlivening of the area's everyday life; and redirecting the focus of the regeneration itself on the locality to make it a place that was desirable to live and visit. As such our principles and guidelines drew from these challenges — the area's multiple enclaves needed to be bridged, connectivity vastly improved and opportunities created for social interaction; interventions should address the area's liveliness and livelihood; and they should tap the area's potential — found materially in unused resources such as abandoned buildings and, most importantly, the river — to generate a sense of identity and ownership.



Employ inclusive, incremental processes, creating possibilities for appropriation

Enable public appropriation through flexible design.



Improve and develop pedestrian, bicycle, and water-based transportation networks.



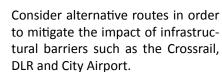
Encourage temporary reuse of empty buildings.



Establish and improve a network of pathways and routes to enhance integration.

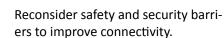


Promote regeneration and reuse of heritage buildings and structures and connect them to public spaces.





Strengthen specific localities by enhancing the role of existing meaningful elements and practices in the area.





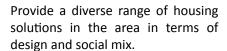
ecological function of Support places.



Reconnect the area towards the river to create a landmark of the waterfront.



between O Soften the gradient anthropic spaces and 'wild spaces' to achieve sustainable maintenance and development of the area's open spaces.













Reflect the area's diversity (historical, cultural, economic and social) through a multiple of land uses.



Embrace the smooth transition between public and private spaces.



Promote new local activities to strengthen the area's social and economic dynamics.



Emphasize the importance of the connection and integration of new developments with the public realm and the surrounding elements of the area.



Ensure design interventions are integrated with their surroundings.



Involve all stakeholders in the preliminary stages of the design and open forums for the citizens to propose ideas and express needs.



Explore options that promote interaction and local employment.



Ensure that design and implementation processes are transparent and accountable to the affected stake-



Support the re-activation and creation of social and cultural events to attract people to public space.



holders.

Promote innovative designs that enable better communication and connection between council and the



Promote social encounters with both existing physical elements and the design of new playful spaces.



residents of the area.





### ∨ Vision

Our vision of North Woolwich, Albert Island and Beckton is one of diverse, vibrant integrated localities, enlivened by enhanced connectivity to catalyse change from within.

The eastern Royal Docks, now an interrupted sequence of nodes, will be more tightly connected, with an emphasis on intimate networks to direct residents and visitors alike to the area's greatest existing asset – indeed the very reason for its existence – the River Thames. The area's rich cultural past and present will be tapped to reengage the people living, working and playing in the area, to brighten existing landmarks and spark the creation of new ones. Imaginative interventions will seek to catalyse social interaction, bringing the diverse and overlapping communities together and creating a destination to attract people from around London. Finally, the area will highlight both social and environmental sustainability, incubating local employment and supporting the area's ecological function.

In achieving our vision, the eastern Royal Docks – North Woolwich, Albert Island and Beckton – will be an integral part of the regeneration of the Royal Docks at large, as an area transformed through tapping potential energy found in its local materiality and sociality.

Now, introducing our strategies are two maps: the first offers a conceptual representation of our vision for the area; the second provides an overview of our proposed interventions.

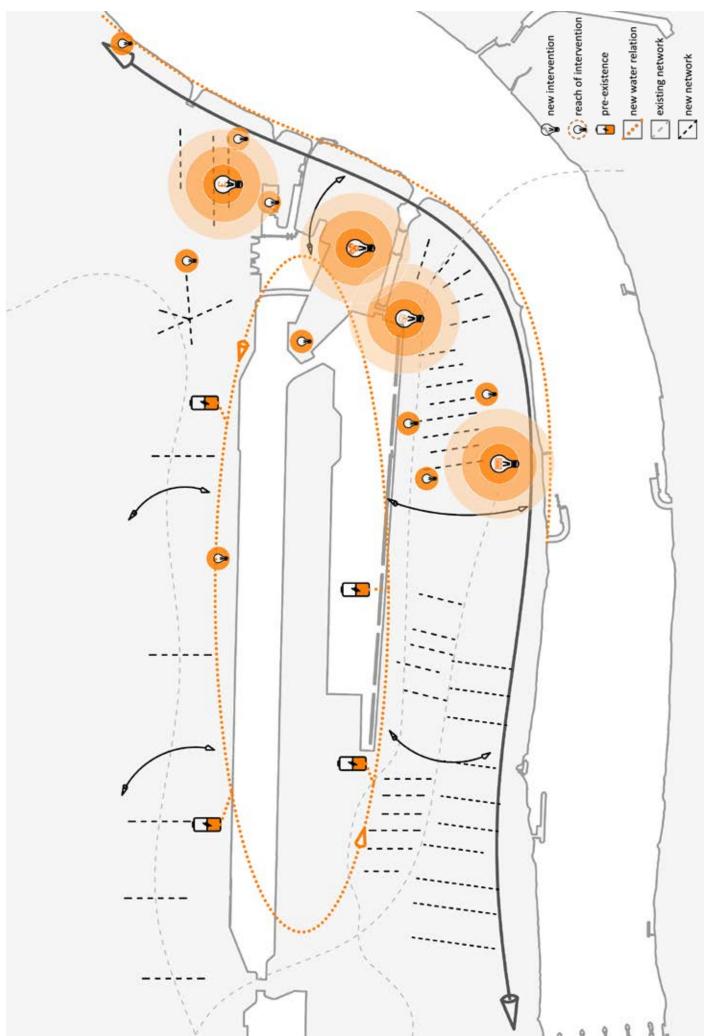
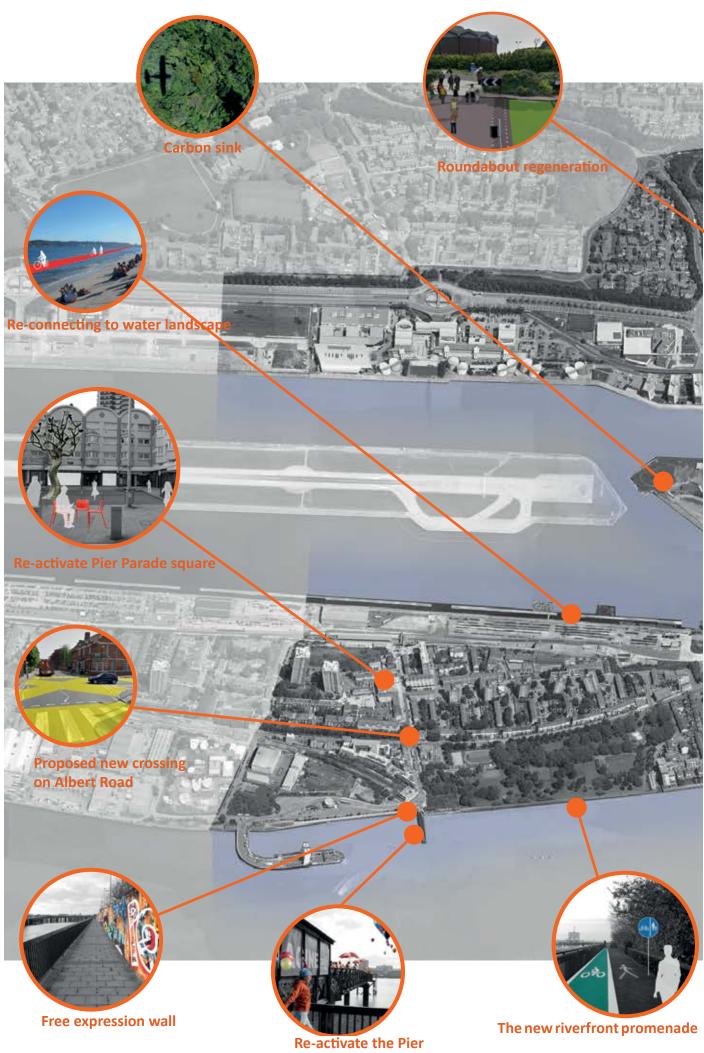
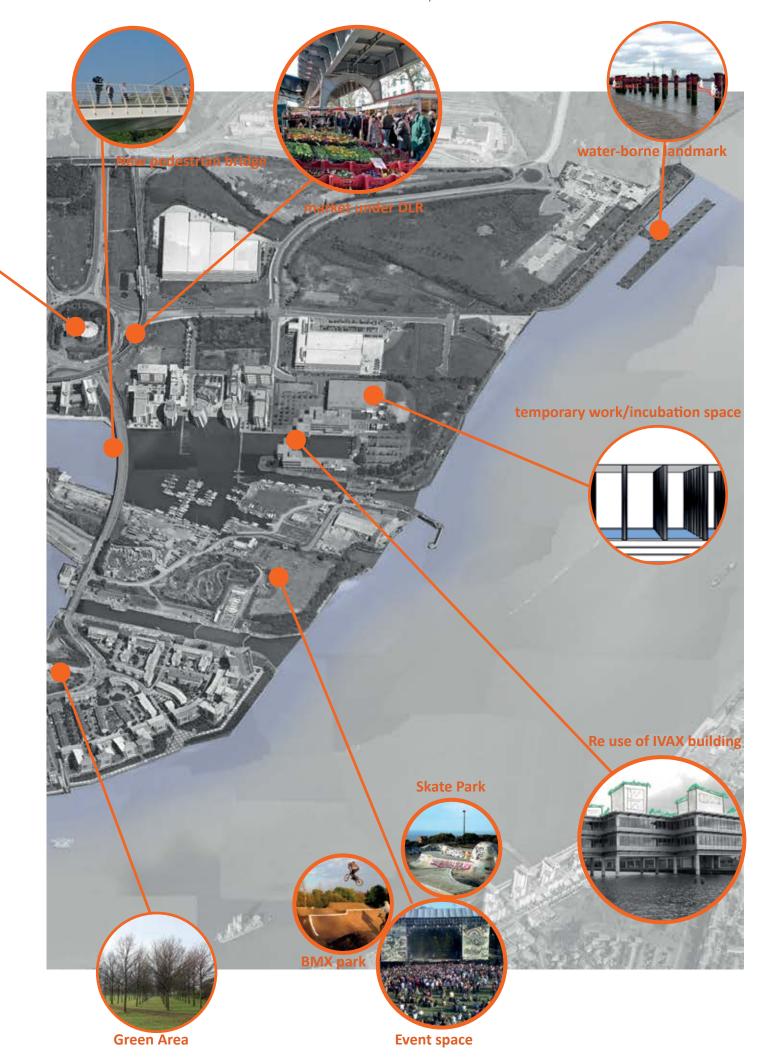


Figure 23. Vision map





## VI Design Response

This design response is comprised of four themes: Connectivity; Re-engaging North Woolwich; Re-vitalising Albert Island; and Re-activating Beckton. We have organised our interventions by taking into account the time scale of regeneration, dividing them into short-, medium- and long-term phases, in order to ensure an incremental process of change at the micro, meso and macro scales. The interventions touch on all principles in direct and indirect ways, and are organised geographically, starting in North Woolwich, through Albert Island, to Beckton.

However, we are starting with connectivity, our first and most important overarching aim, that addresses the area at a macro scale. This theme will be built on considerably, proposing to improve the pedestrian and bicycle network to generate a human-scale integration for the local area.

#### Connectivity

One of the eastern Royal Docks' greatest challenges is connectivity and legibility at the local level. This series of interventions aims to redress the balance between the car and the pedestrian; between the large-scale infrastructure such as the DLR, Crossrail, the airport and the North Circular, and the locality. The river is used as the principle orienting landmark for eastern Royal Docks as a whole. The interventions aim to re-dimension the city at human-scale through the improvement of pre-existing structures and with the creation of new strategic connections. Other smaller, more local connectivity-driven interventions will be discussed in the other three sections.

Redirecting the Woolwich Ferry: Lobbying to redirect the Woolwich Ferry away from North Woolwich to Gallions Reach, as is being considered by Transport for London, would remove the heavy through-traffic along the North Circular, opening up the main roads — Albert Road and Woolwich Manor Way — for more local use and navigation. It would also permit the opening up of a river walk across the river bank running along the southern side of North Woolwich.

**Extend the Thames Path:** Creating a continuous pedestrian and cycle path along the river bank through the entire study area would improve circulation locally and help attract visitors to the area who are embarking on short or long river walks.

Suspend a pedestrian and bicycle bridge along Woolwich Manor Way: This intervention would

vastly improve the mobility between Beckton and North Woolwich, currently an uncomfortable experience thanks to the heavy traffic, particularly lorries, that dominate the bridge.

**Develop cycle paths throughout:** Marking out cycle paths connecting the different nodes (King George V DLR to the river; along the inner waterways bordering North Woolwich, Albert Island and Beckton; and from Gallions Reach DLR to the river) improves connectivity and offers transportation alternatives.

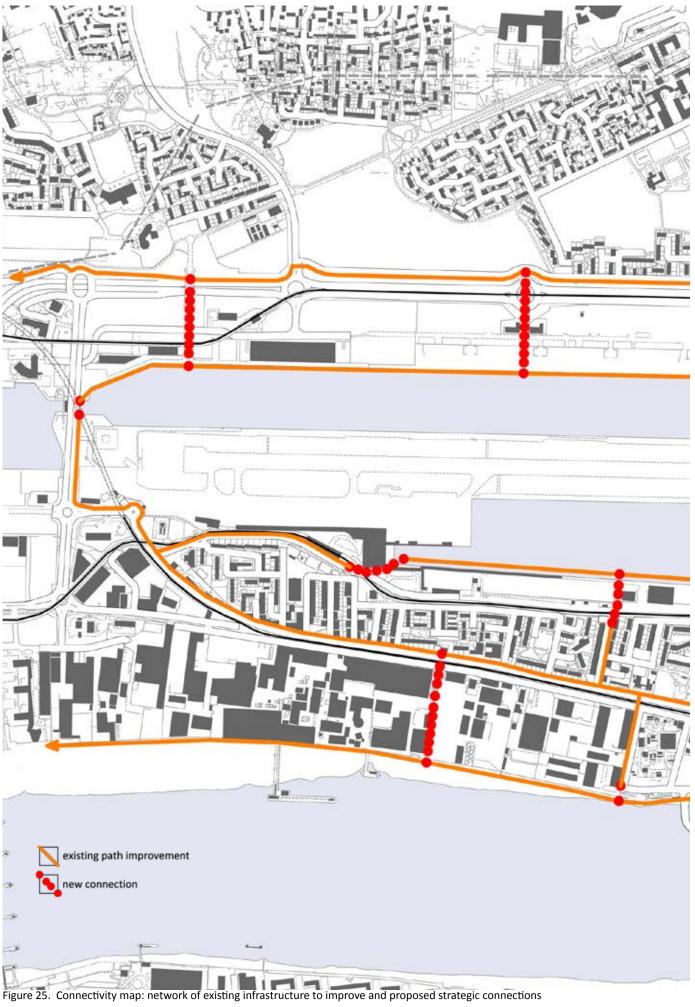
Improve pedestrian crossings: Using simple, brightly coloured, painted road crossings at the Albert Road and Pier Road intersection and at the Gallions roundabout will visibly reassign some road priority to pedestrians, also directing them towards the various local landmarks.

**Develop a bicycle/running path:** Developing a running path along the inner waterway between the former King George V Dock and Royal Albert Dock (in essence running around the City Airport runway island) would create an asset of the airport, currently a difficult neighbour for the area.

Our aims with the connectivity interventions are to reinstate the locality as central to the area's infrastructure, increasing permeability, and subsequently, interaction.



Figure 24. Proposed new path along the river and through the old pillars on the water





#### **Re-engaging North Woolwich**

Though North Woolwich has several significant landmarks - Pier Parade Square, the Royal Victoria Gardens, the riverfront, and several heritage buildings - poor pedestrian connectivity and further disruption caused by traffic along Albert Road and the Crossrail has negatively impacted the area's sociality. We have focused on micro-level strategies that can be scaled up through their interconnectivity, aiming to re-engage the local residents with the area, fostering a sense of ownership and participation. In Pier Parade Square, now a sterile grey space, we will employ a landmark sculpture to help a sense of identity, introduce movable furniture to allow users appropriate the space (Whyte 1980). Further appropriation will be possible on the north side of North Woolwich. A new Thames Path and re-use of the North Woolwich Station and pier will create a destination while referencing the area's heritage and re-orienting the area towards the river. We utilize other empty space to create a community garden, adding ecological value and involving locals in an engaging place-making activity.

#### Short term

- install movable furniture and green landscaping to Pier Parade Square
- install central landmark to Pier Parade Square
- promote policy of allowing for a short-term rental policy for empty shopfronts to encourage locals to try out business ideas
- enlist community infrastructure to set up pocket garden in the empty land sitting at the southern end of Woolwich Manor Way Bridge

#### Mid term

- open the riverfront promenade from North Woolwich through to Albert Island
- invite street artists to decorate wall that borders the Thames Path; keep open for evolution
- strengthen pier and turn into viewing point with cafe kiosk
- build the Pocket Park, using recycled materials from the local area to build the beds

#### Long term

- reconnect North Woolwich Station to Royal Victoria Gardens
- install panes of plexiglass into the brick wall on the Thames for more open viewing
- clear the industrial land on the northern side of North Woolwich facing the airport to create opportunity for appropriation



Figure 26. Re-activate the pier



Figure 27. The new riverfront promenade



Figure 28. Re-activate Pier Parade square



Figure 29. Proposed new crossing on Albert Road

#### NORTH WOOLWICH INTERVENTION MAP



Figure 30. Strategic map - North Woolwich



Figure 31. Free expression wall

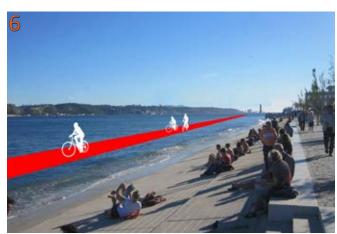


Figure 32. Re-connecting to water landscape: King George V dock



Figure 33. Location map-North Woolwich

#### **Re-vitalizing Albert Island**

Albert Island - empty, neglected, mysterious already has something of an appropriated space, the BMX park, which provides an interesting entry point for the further expansion of a sports and leisure profile for the space. Our strategy aims to transform Albert Island into a flexible place that permits further appropriation by local residents, UEL students and visitors from elsewhere. Continuing the theme of sports already present with the BMX and the marina, there will be a skateboard park and the warehouse could eventually shelter an outdoor pool. A meadow will lead down to the Thames Path and the river, opening up space for events, small and large. In the small peninsula of space on the other side of the bridge, there will be small, hardy trees and grasses to creating a small carbon sink to relieve City Airport's high carbon dioxide emissions.

#### Short term

- remove fences that enclose the Thames Path and redirect the Path across the meadow
- level out the land's gradient from the river to create a gradual transition from the center of the island to the waterfront
- create open space events area
- · picnic tables for meadow
- build public restrooms

#### Mid term

- build skateboard park
- plant wildflowers at the waterfront meadow
- create and maintain green landscape at the waterfront
- create carbon sink in the western-most peninsula

#### Long term

- convert the warehouse to outdoor swimming pool
- expand activity offfering to other water sports, such as kayaking



Figure 34. Outdoor swimming pool



Figure 35. Skate park



Figure 36. BMX Park



Figure 37. Event space



Figure 38. Re connecting to the water landscape

#### ALBERT ISLAND INTERVENTION MAP



Figure 39. Strategic map - Albert Island



Figure 40. The Meadow



Figure 41. Location map - Albert Island

#### **Re-activating Beckton**

The southwestern area of Beckton will serve to pull people in from the inland of the Royal Docks while actively dialoguing with the River Thames. New mixed-tenure housing will run towards the river; while the former IVAX building will be converted (and perhaps vertically expanded) to increase the student housing stock. The Thames Path will continue to curve around; bicycle paths will connect to the river along Atlantis Avenue, connecting the waterfront to the rest of Beckton. A weekly market located under the DLR can provide opportunities for local residents for social and economic interaction.

Our most provocative intervention is the conversion of a factory into temporary work/ incubation space. The architectural concept is to open the building up by removing the walls and then bringing water in through covered canals, which can then house small temporary work pods and art spaces. The aim is to subvert the perception of the area's different landmarks, reactivating the area's relationship with the water. The hope is the building will attract local business ideas, interaction with UEL and attract visitors from outside.

#### **Short term**

- connect the pylons to create a water-borne landmark
- extend the Thames Pathway to anchor a new waterfront
- organize occasional market under the DLR at the Gallions roundabout
- extend bicycle paths along Atlantis Avenue and into New Beckton Park

#### Mid term

- reuse the IVAX building as student housing
- redesign Gallion roundabout with bright painted crosswalks to facilitate pedestrian and bicycle access

#### Long term

- redevelop the factory into temporary reuse space
- redevelop the waterfront with mixed-tenure buildings open towards the river
- expand IVAX building through vertical additions



Figure 42. Roundabout regeneration



Figure 43. Water borne Landmark



Figure 44. Re use of IVAX building

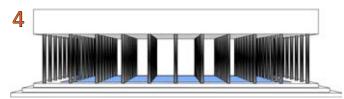


Figure 45. Temporary work/incubation space

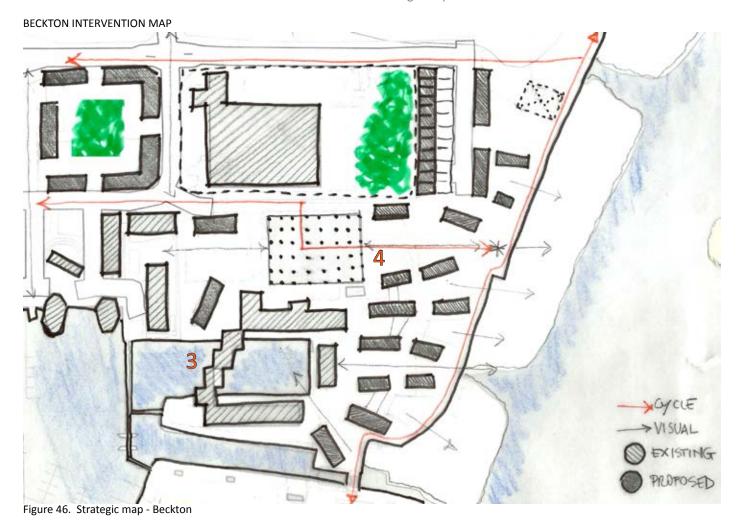




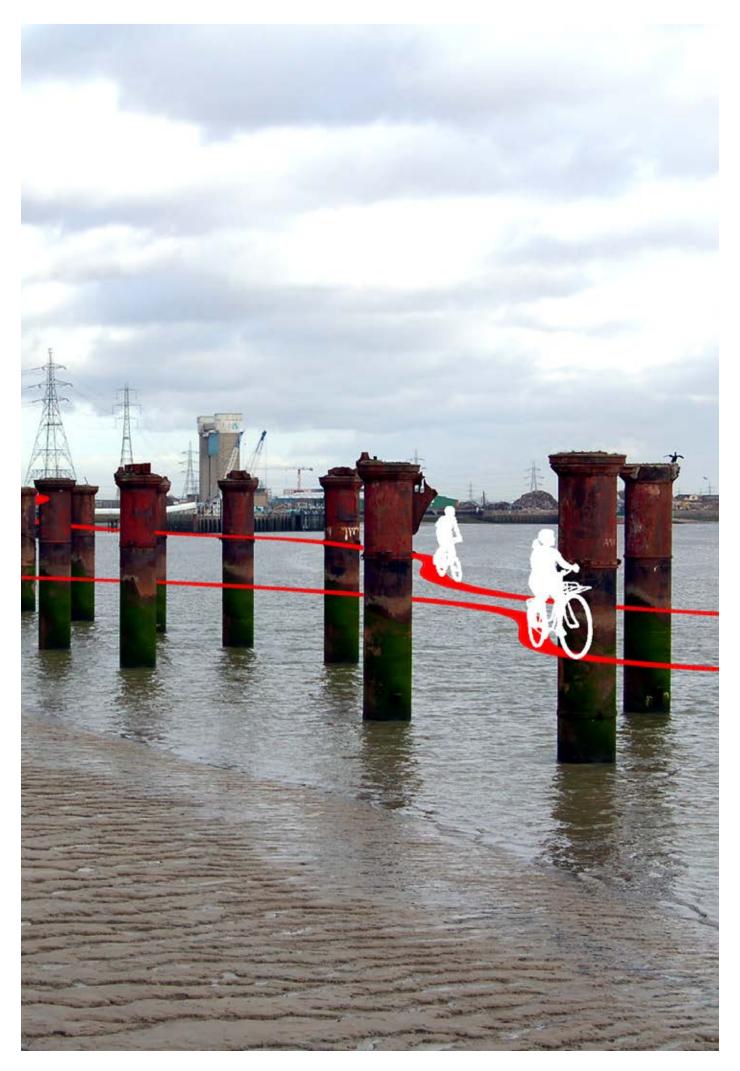
Figure 47. Location map - Beckton

## VI Conclusion

Through our analysis, we found the eastern Royal Docks – comprised of North Woolwich, Albert Island and Beckton—to feel in many ways like a large leftover. Cut off by large infrastructure projects, with poor interconnections, a shifting population, and a complicated land ownership structure, it has been unable to gain any internal traction. Meanwhile, some of its multiple planning authorities see its 'leftover' position as an opportunity to ignore its needs (as seen in expansion plans at City Airport, Crossrail's cutting it in two without stopping, planning large business driven projects such as the Asian Business Park).

Our design response, as laid out in the previous pages, aims to redress the balance. Connectivity driven strategies aim to facilitate interaction. We looked at enhancing and creating nodes to develop a sense of place—grander ones such as the Woolwich Pier and Albert Island to attract visitors from the outside; and more intimate ones, such as Pier Parade Square and a community garden, for local residents, workers, and students. We conceived strategies to incubate local businesses through the reuse of existing structures.

The eastern Royal Docks face tough challenges, principally through the detracting nature of City Airport and the disruption of Crossrail, which has ripple effects on the area's housing, sociality and connectivity. However, through our strategies—working to leverage existing assets and unleashing unrecognized potential—we feel these challenges can be met, and that the diversity of North Woolwich, Albert Island and Beckton can serve as attractor, making it a lively, interesting place to live, work, study and visit.



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