



Royal Wharf London

Section 73: Phase 3 D+A Statement

(Addendum to Minoco Design + Access Statement + Design Code)
February 2015

Report prepared by:

GLENN HOWELLS ARCHITECTS

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ESTABLISHED 1987

Revision History

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Signed



Date 04/03/15

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left: images of phase 2

Outline planning permission was granted by Newham Borough Council on 30th March 2012 for the overall Masterplan on the Royal Wharf site (previously known as Minoco). The consented masterplan for the Royal Wharf development covers 15 hectares and will provide a vibrant mixed use development with up to 3,385 homes, a new school, shops, offices and restaurants providing a new destination on a stretch of south-facing waterfront to the west of Barrier Park.

At present Phase 01, which received detailed approval as part of the 2012 planning permission, is currently under construction and reserved matters approval has been granted for the majority of plots within Phase 02 in 2014. As the implementation of the planning permission is now moving on to Phase 3 of development on the site (which provides for up to 945 residential units and other mixed uses) it has become clear that the approved outline plots within this Phase require amendment to enable them to be effectively delivered. Approvals for these amendments will be sought through a section 73 application to be submitted to LB Newham.

In support of the Section 73 Application this document has been prepared by Glenn Howells Architects as an addendum to the Design + Access

Statement and Design Code previously submitted in May 2011 for the outline permission. The report summarises the design process undertaken when developing the proposals and the parameters for this third and final phase of the Royal Wharf masterplan.

The approved scheme mentioned throughout this report relates to the Section 73 scheme that was approved in December 2014 (14/01734/VAR), which comprised minor amendments to the outline approval received in 2012.

To avoid confusion the scheme that was previously referred to as 'Minoco' for the 2011 approved outline permission will be referred to as Royal Wharf throughout.



S73 application area

Royal Wharf will be an exemplary landmark development. In addition to the masterplan vision as a whole, the urban design strategy aspires to realise the full potential of this one-off combination, entailing a large site in single ownership next to the River Thames, with Views to the Thames Barrier, Canary Wharf and the Millennium Dome; to be an attractive place in Newham to live, work and play.

Achieving this goal requires the clear and carefully considered integration of well designed high quality residential buildings, alongside business workspace, local retail and a wide range of diverse community uses.

A desire to create special places summarises the team's approach for Royal Wharf. We aspire to create neighbourhoods where work, leisure and home life all come together.

The proposed concept focuses on family living and places shaped by building edges to make a high quality residential setting protected from the scale and hustle of neighbouring roads and public transport routes. The sensitive deployment of materials and landscape will enhance the sense of place and allow attractive private outdoor spaces, creating a place where people feel

they can belong within a wider contextual setting framed by famous London landmarks and city parks.

The masterplan proposals also aim to build upon and engage with existing and future designs for neighbouring sites; while also generating a successful individual and site specific urban strategy.

The site is situated in the London Borough of Newham (LBN). Phase 03 of the Royal Wharf masterplan lies to the West of Phase 02 and is bounded by the River Thames to the south, North Woolwich Road to the north and Deanston Wharf to the west.

The site forms part of a series of underdeveloped low grade industrial sites that are situated along the River Thames from the mouth of the River Lea in the west to the Tate and Lyle plant in the east. West Silvertown DLR station is located to the north west of the site and the Thames Barrier is located to the south east.

Framed by a stunning panoramic view across the widening River Thames, Royal Wharf is served by excellent transport links into the heart of London,

courtesy of the DLR, a new Crossrail (Custom House) station (opening estimated 2018) and the Jubilee Line (Canning Town), plus international connections from London City Airport and boat links from a brand new Thames Clipper Pier. Since the transformation of Canary Wharf into one of Europe's most powerful business districts, London's centre of gravity has been moving east, a shift recently affirmed with the success of the 2012 Olympics. A brand new riverside district in the form of Royal Wharf will consolidate London's dramatic east-facing reinvention.

Proposed New Masterplan



Scope of the Design and Access Statement Addendum

The design principles and rationale set out in the Minoco DAS that was submitted in May 2011 remain relevant to the Royal Wharf scheme as a whole and this document is to be read in conjunction with it. This document sets out to explain the resolution of the masterplan amendments proposed specifically in relation to Phase 3 and including Plot 14, which is the last plot from phase 2 to come forward. It clearly illustrates the commitment to design and quality in the masterplanning process to ensure that the proposed scheme realises the full potential for this site.

The proposed amendments to the masterplan were presented to the London Borough of Newham's (LBN) Design Review Panel (DRP) on the 13th January 2015. Following the DRP session, a report was submitted to LBN detailing the design developments, which arose from the DRP discussion. Additional comments have since been received from the DRP following an internal review of the design developments. The outcome of this process has had a positive effect on the emerging masterplan with the amended scheme providing a more coherent urban design solution. This process of resolution is recorded within this document.

The report is subdivided into the following broad chapter groupings which follow the chronology of the design process undertaken:

Phase 3 Masterplan Appraisal + Design Process

Appraisal of the approved masterplan.

Pre-DRP Design

A record of the scheme and design rationale as presented to the DRP.

Post-DRP Design

Breakdown of how the DRP feedback informed and developed the current scheme.

The Scheme Amendments

A description of amendments made to the components of the scheme.

Landscape Amendments

A description of amendments made to the landscape principles.

Design Code Amendments

A description of amendments to the spatial, architectural and landscape quality aspired to within the masterplan framework.

Project Data

Project Description

Revisions to Phase 3 of the outline approved masterplan scheme for Royal Wharf (previously known as Minoco Wharf).

Planning Information

Type of Application: Section 73

Masterplanning Design Team

Client	Oxley Wharf Property 3 Ltd
Development Manager	Roundstone Development Management Ltd
Architect	Glenn Howells Architects
Environmental Consultant	Aecom (previously known as URS)
Daylight Consultant	EB7
Landscape architect	Townshend Landscape Architects Ltd
Planning consultants	Rolfe Judd Planning Ltd
Transport Consultant	TPP
Aviation Consultant	Mark Eddowes

Approved Masterplan

- plot 20 inefficient footprint - poor daylighting to courtyard
- Boundary plot footprints are inefficient and offer limited flexibility in terms of future development across boundary - arrangement too prescriptive
- townhouse adjacency to the main vehicular (bus) route and close proximity to Deanston Wharf not ideal setting
- east-west orientation of high-street buildings produces high proportion of single-aspect north-facing accommodation
- plots bounding Deanston Wharf require blank gables to butt up to warehouse and to allow for adjoining development once DW is developed - potentially unattractive in the meantime and problematic to address in future development phase
- setting of plot 18 (landmark tall building plot) compromised by adjoining Deanston Wharf and surrounding streetscape
- plot 17 setting potentially poor due to surrounding streetscape



- single-aspect north-facing elevation
- blank gable abutting Deanston Wharf

Appraisal of the Approved Masterplan

Following the success of Phase 01 and 02, it was considered appropriate to carry out an appraisal of the Phase 03 masterplan before proceeding with the individual plot design. The appraisal revealed a number of issues with the approved arrangement, which are illustrated opposite and summarised below:

- Little efficiency and design flexibility in smaller plot footprints
- Plots butting up to Deanston Wharf boundary require blank gables in order to a) build up to Deanston Wharf and b) allow future development in the form of connecting buildings. This leaves a string of unattractive 'dead' facades until Deanston Wharf development comes forward.
- The future development of Deanston Wharf then becomes problematic both in architectural and practicality / buildability terms as it requires connecting new built form to existing gables.
- In their current orientation the main blocks defining the high street require a large proportion of single-aspect north-facing units if residential use is preferred. The aspiration of Royal Wharf has been to, wherever possible, eliminate single-aspect north-facing units in compliance with the London Housing Design Guide recommendations.
- The setting of Phase 3 plots is not ideal due to their location between

Deanston Wharf and the main vehicular route. Townhouses are deemed to be particularly compromised by their proximity to the main vehicular route.

- The approved masterplan permission defines plot 18 as a prominent tall building, which is reinforced by the Section 106 prescribing the requirement for a design competition to ensure architectural variety and individuality. In its current position adjoining Deanston Wharf, a problematic architectural language arises - why should the landmark building be connected to Deanston Wharf? The linear 'tail' element of plot 18 extending northwards behind the taller element is too close to Deanston Wharf to allow adequate daylighting and visual amenity to residential units on the lower 4 storeys.
- In the approved scheme, the main vehicle and bus route leading from North Woolwich Road to the river, currently by-passes the pier clipper stop and the park and reduces the capacity for enjoyment of the river as part of its journey.

Revised Masterplan 01 (Pre-DRP)

- existing junction to NWR retained and adapted
- main vehicular route relocated further west from approved position to provide definite edge upto Deanston Wharf boundary
- landscaping softens and enlivens edge
- Route from NWR to Silvertown Pier and river maintained
- reorientated plots minimise the extent of single-aspect north-facing accommodation
- plots reconfigured and amalgamated to improve plot efficiency and to provide greater design flexibility
- Plot 14 moved west to open up park and views to the river from 'community square'. Main vehicular route passes through, gaining views of the park and river. Mass of plot 14 broken up to create variety and improve daylighting
- Silvertown pocket square provides arrival point in sequence of spaces leading to the river and clipper stop
- plots 17 and 18 reorientated and moved away from Deanston Wharf boundary to improve their setting, particularly that of tall building (plot 18)
- potential public cycle store location reinforcing Silvertown Pier Square as a transport node to the clipper
- Silvertown Pier Square reorientated to provide improved setting for plots 17+18 and 16



6.0 Design Principles: Pre-DRP Arrangement

Following the appraisal of phase 03, a number of variations to the masterplan arrangement were explored. The arrangement illustrated opposite reflects the scheme that was presented to the DRP.

The design principles are summarised below:

- Plots 13 + 19, Plots 20 + 26 and Plots 24 + 25 have been amalgamated to create a more successful single plot design, offering greater efficiency and design flexibility.
- Relocation of the main vehicular route to the West provides a more defined edge between Royal Wharf and Deanston Wharf.
- This is also reinforced as a cycle and pedestrian friendly route from NWR to the river and the clipper stop with the implementation of hard and soft landscaping.
- Whilst a secondary vehicular route through is maintained, the high street now has more of a pedestrian focus, increasing the walkability along it to the main public market square.
- Relocating the vehicular route in this way also allows for car-free zone directly in front of the school, which contributes to the safety of children.
- The vehicle and main bus route now benefits from glimpses of the river and a view past the linear park at the heart of the development, which were previously hidden from view.
- Plots are reconfigured and amalgamated to allow greater efficiency and design flexibility
- Reorientation of plots reduces requirement for large proportion of single-aspect north-facing units
- Greater flexibility offered for future development of Deanston Wharf and improved boundary treatment is allowed for.
- Plot 17 and 18 reorientated to create better setting for a tall building and to maximise visual amenity towards Thames.
- Bus stop provided at Silvertown pocket square as an arrival point for pedestrians visiting the river and/or clipper service.
- Silvertown Pier Square given more prominence, providing an improved setting for plots 17, 18 and 16.
- Plot 14 is relocated slightly to the west, opening up the park and allowing the main vehicular route to move through it, offering glimpses of the river to this journey.
- Note that plot 23 has been designed in more detail, therefore its form has changed



Key:

Squares

- 01. Pontoon Dock Square
- 02. Market Square
- 03. Thames Barrier Park Square
- 04. Silvertown Pier Square

Parks

- 05. Linear Park
- 06. Riverside Park

Neighbourhood Squares / Pocket Parks

- 07. Community Pocket Square
- 08. Venesta Square
- 09. Silvertown Pocket Square

Tall Landmark Buildings

Urban Space

Arrangement

Movement / Connections / Urban Spaces

This diagram to the left illustrates that the main principles of the original masterplan in terms of vehicle and pedestrian movement remain largely the same as the original masterplan. Connections between transport nodes and key urban spaces are maintained. Rerouting of the bus route takes the bus closer to the Clipper stop to the south, strengthening the transport connections. The bus route runs along the edge of the park allowing for a park designated bus stop.

Tall Buildings

The intent to locate tall buildings adjacent to key urban spaces and the riverside remains the same as the original masterplan. This is further illustrated below in the riverside elevation.





Future Development

The same masterplan principles outlined in the approved May 2011 Outline Scheme have been applied. *While important to recognise that the plan for this part of the site remains an indicative layout only and not part of the Royal Wharf outline application, the strategic approach it provides does demonstrate confidence in the masterplan to adopt and incorporate a much wider area and an ever evolving future.*

The diagram to the left illustrates how the revised phase 3 footprints offer Deanston Wharf greater design flexibility as it does not rely upon the configuration of the footprints set in phase 3 in order to be delivered. Therefore the scale and massing of Deanston Wharf can be considered and designed in its entirety, rather than against a physically connected Royal Wharf development.

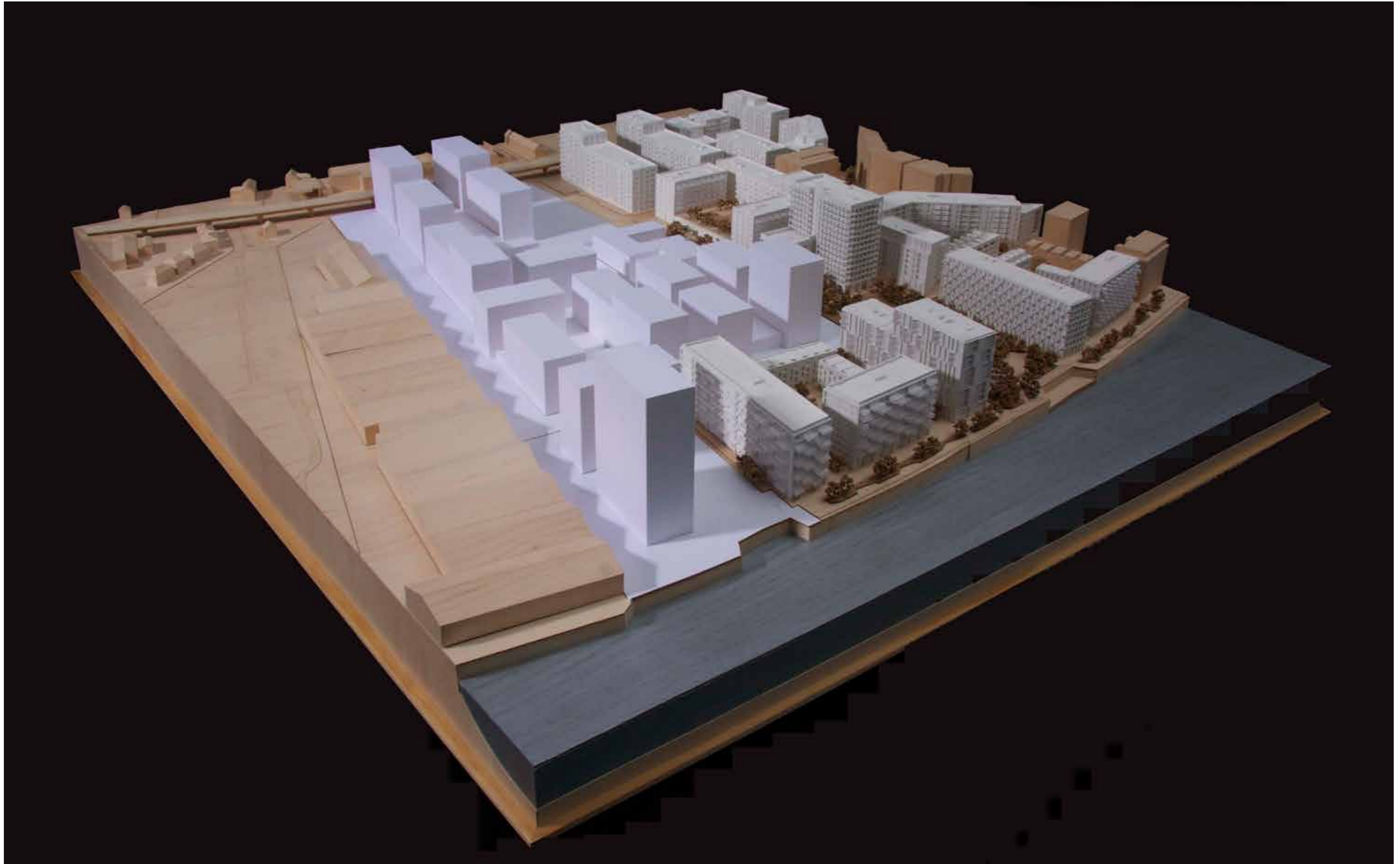
The revised boundary condition reduces buildability complications of building up to an existing structure and future issues of Deanston Wharf developments abutting the buildings in Royal Wharf.

The revised layout maintains the walkability and visual connections between Royal Wharf and Lyle Park.

Revised Masterplan Aerial Sketches Presented at January 2015 DRP









DRP Comments

The feedback received formally from LBN following the DRP presentation, which took place on 13th January 2015, is provided below for reference:

Much good work was done in developing the original masterplan for the site, and while we recognise there may be a rationale for some of the moves now being proposed, with the stated intention of being able to deliver the plots efficiently, it is crucial to ensure that the quality and integrity of the plan is not diminished.

In itself, we were broadly comfortable with the revised boundary condition that enables the westernmost plots to be delivered in their entirety but this has a number of consequences in other parts of the plan which have contributed to the deterioration of its overall quality. We also had concerns about the decision to re-route buses away from the high street and changes to the layout around the school and encourage the design teams to consider the effects of these moves more thoroughly.

We made the following points for consideration and action by the design team:

Layout

In the original masterplan the bus route helps to define the high street as a strong strategic spine through the site and will provide the footfall that will be crucial to its vitality. The decision to re-route buses to the south also erodes the spatial clarity and street hierarchy of the original plan by necessitating the widening of the route to the south in to accommodate bus movement.

The amended block and street pattern adjacent to the eastern site boundary provides a greater degree of certainty as to deliverability and quality of those plots adjacent to the existing warehouse on the Deanston Wharf site, as does the amalgamation of plot 26 into plot 20. Nevertheless the impact of this is felt in other areas in the plan such as to the south of the high street where the fine grain of some of the streets is lost and the definition and enclosure of the main riverside park is diminished. We feel this is to the detriment of the overall quality of the masterplan. Further efforts should be made to preserve these positive attributes of the original masterplan.

The indicative footprint of the school has changed and the routes and spaces around it have become less clear. We questioned the need for a secondary service road to the west of the school plot and were disappointed that the useful east-west route to the north – discussed in recent reviews of phase

2 plots – has now disappeared. The rationale behind these moves was not completely clear.

We asked about the position of the main entrance to the school, which will have implications for the character and function of the adjacent spaces and streets. Assuming the orientation of school is towards the adjacent public space to the east, the consequences for the high street need to be carefully considered. It would be desirable to provide a degree of activity and transparency to both these key frontages. We suggest it is important to develop a brief for the school and testing scenarios and assumptions, prior to committing to a layout. The public space adjacent to the clipper pier has been changed and requires careful consideration with regards to microclimate and we wondered if wonder it needs to be so large. It's orientation is better but it may feel more usable were it to become smaller and more enclosed.

Massing

The height of plot 18 is likely to accentuate the effects of the westerly wind on pedestrian comfort with the space adjacent to the clipper pier. Microclimate studies should be undertaken to understand what the impact of a tall building in this exposed location will be. Tree planting alone will not be sufficient to mitigate negative effects.

The reduction in numbers of townhouses and replacement with larger mansion blocks results in a more homogenous massing and a reduction in the townscape variety that was an important characteristic and strength of the original masterplan. The design team should strive to ensure that the intent of the initial plan in terms of a clear street hierarchy is safeguarded. The townhouses within plot 24 are over-dominated by the larger blocks within this plot, and the massing and proximity of built form within plots 13 and 14 look like they will present challenges in terms of creating high quality homes with good daylighting and outlook.

Landscape

The landscape proposals were not coherently presented and the panel struggled to understand the narrative sufficiently to be able to comment.

Once the layout has been developed further, the landscape proposals should be clarified and clearly represented.

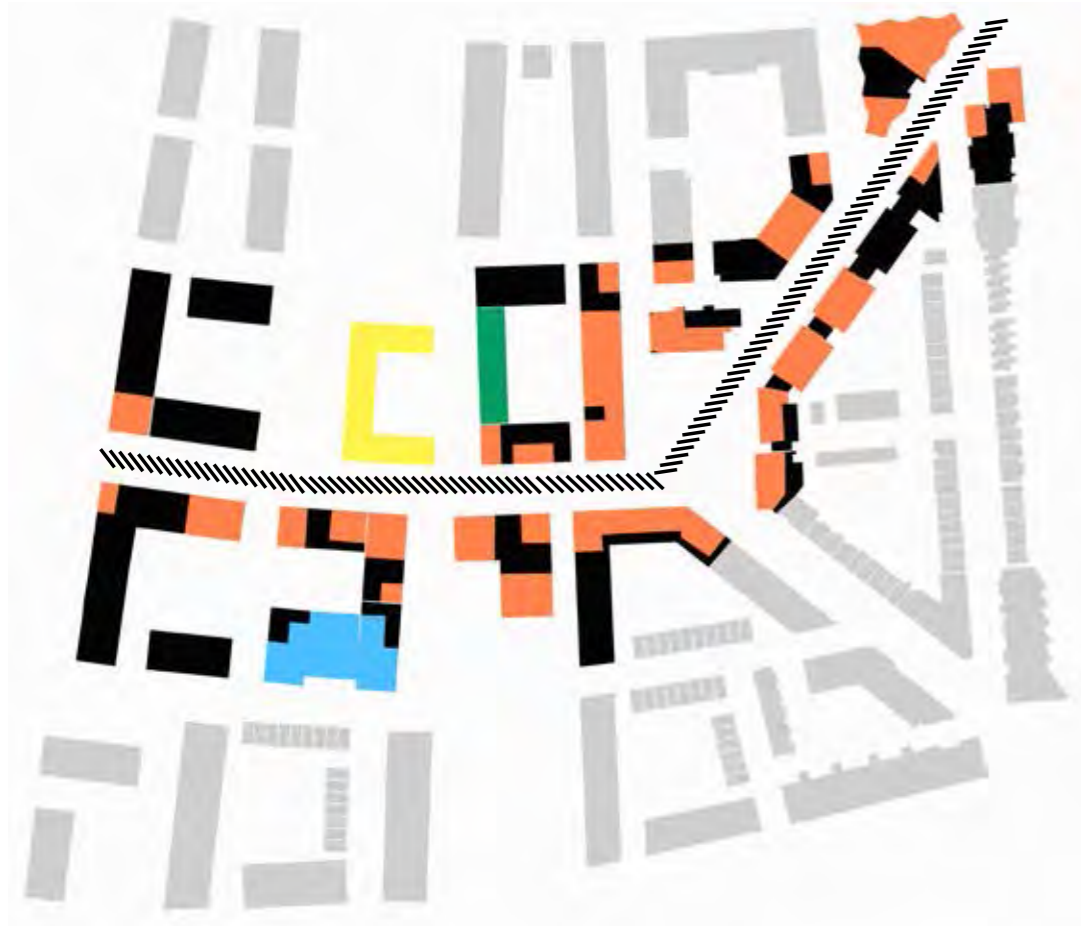
Revised Masterplan 02 (Post-DRP)

- plot 24 townhouses replaced with low mansion block typology
- school footprint reinstated and external space defined
- reorientation of high-street blocks to reinforce east-west orientation of high street
- eastern edge of plot 14 aligned to provide more positive edge to the park
- form of plot 13 and 14 opened up, to improve proximity and daylighting
- road hierarchy legibility improved with further consideration given to surface treatment and other landscaping



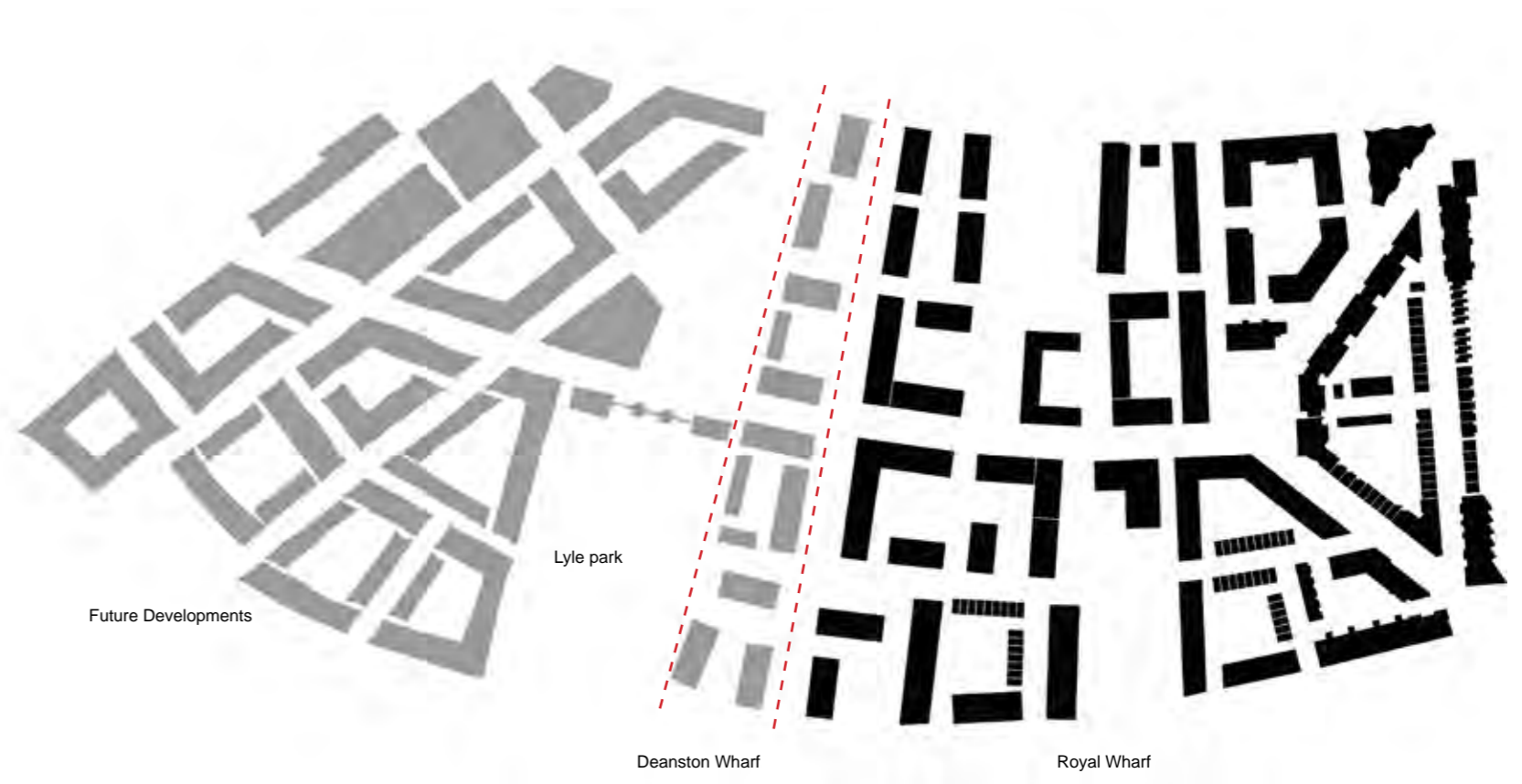
Design Principles: Post-DRP Arrangement

Following the DRP, the masterplanning design team sought to address the issues raised and develop the masterplan design accordingly. The following section responds to the comments raised and demonstrates how they have been addressed.



Current Revised High Street Ground Floor Uses

- KEY:
- COMMERCIAL / MIXED USE
 - COMMUNITY
 - SCHOOL
 - LEISURE
 - HIGH STREET



Future Development Plan

Layout

In the summary received from LBN is noted that the panel is 'broadly comfortable' with the revised boundary condition, which relocates the road west to improve the efficiency and deliverability of the boundary plots. The proposed redirection of buses south of the high street allows the high street to be more pedestrian focused and allows a greater connection with the river generally and more specifically to the Thames Clipper stop to the south-west corner of the site. It also assists with the revealing of the park and makes it more attractive as a result.



Pedestrian focused high-street.

Precedent; Stationsstraat by Grontmij Belgium

Streets and Movement

The internal streets within Royal Wharf have been designed to be people friendly and promote pedestrian activity. Pedestrian and cycle movement is very important to the site as a whole.

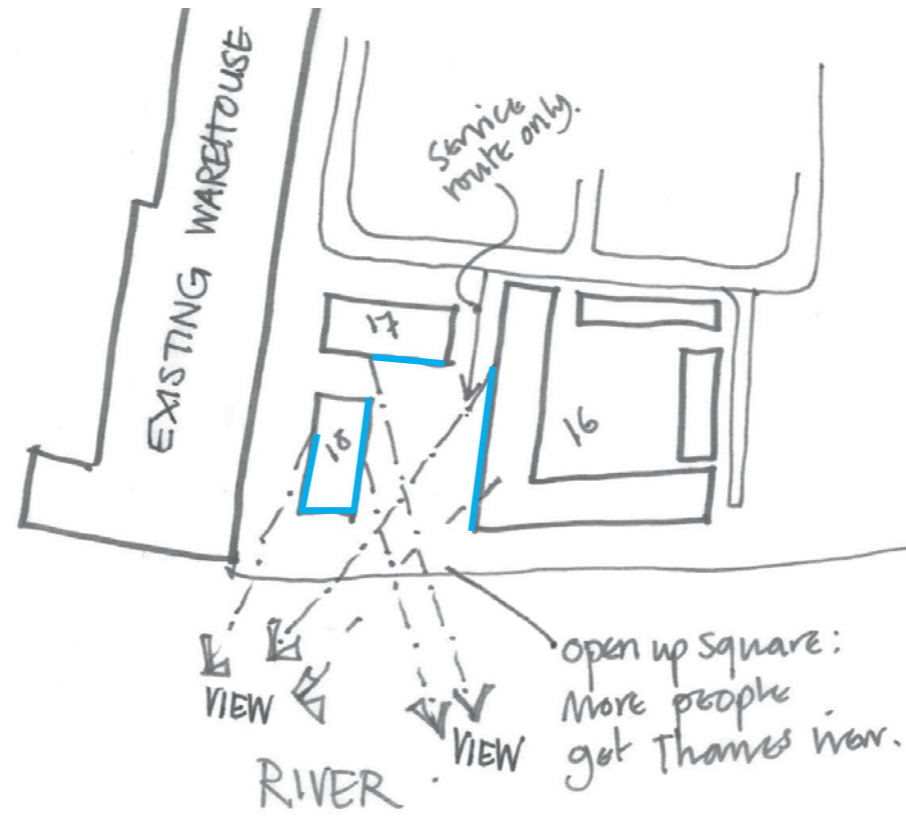
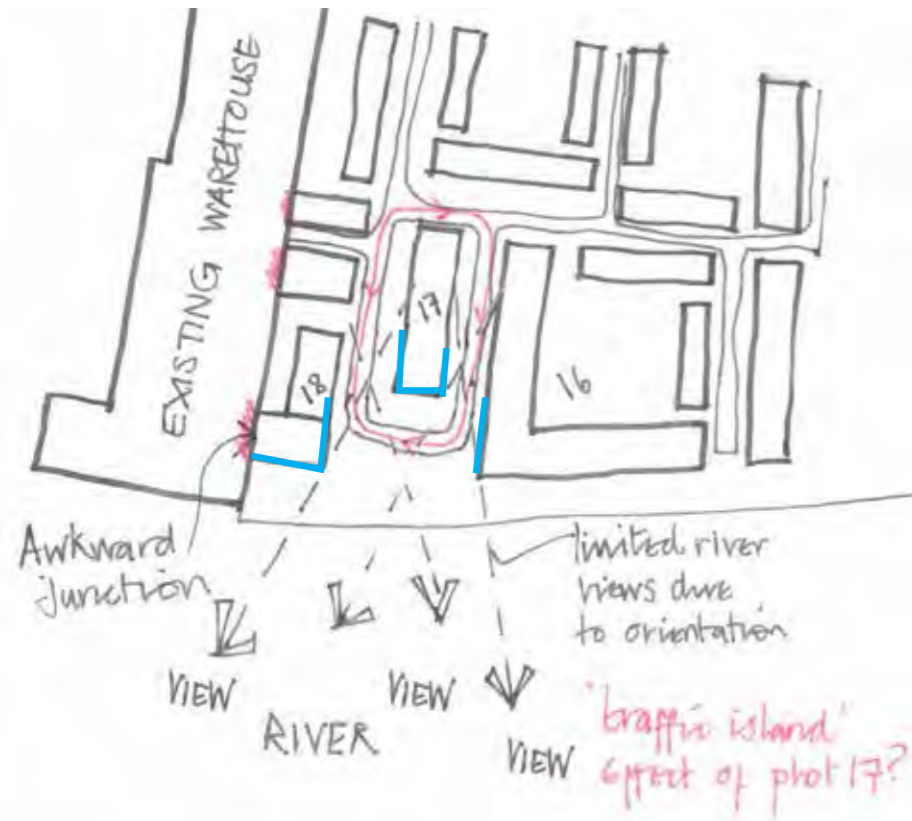
Rerouting the vehicular route to the south;

- Allows a more pedestrian focused section of the high-street, which is activated by a variety of ground-level mixed uses, the school and residential entrances rather than by vehicular flow
- Takes the public transport closer to the river, connecting it more closely to the Thames Clipper transport node and Silvertown Pier Square,
- Brings the public transport closer to the park,
- Makes the public space between plot 14 and the school to be safer for children and parents using and visiting the school
- Allows events and markets to extend from the market square animating the high street without causing additional problems by having to close-off traffic routes.
- Reinforces the character of the high street as a walkable route, by reducing the traffic flow
- Promotes accessibility away from, but close to, public transport routes
- Declutters the high street by removing need for bus stops and signage

- Makes the high street a more attractive environment to linger, particularly in terms of the use of tables and chairs outside cafes and restaurants in warmer months

The high street will remain the bustling heart of the development as always intended, accommodating a rich and diverse range of mixed uses at ground level such as retail, cafes and restaurants, educational and community uses. Bus stops will be positioned near to the high street to encourage footfall. It is anticipated that additional bus stops will be positioned at the Silvertown Pocket Square and at the park side, increasing the accessibility of these destinations within Royal Wharf.

The 'spine' is maintained and will become a connective walkable route linking the new riverside park with Lyle Park to the West once Deanston Wharf is developed.



— River View Elevation



Approved Masterplan



Revised Masterplan

Street Hierarchy and South of the High Street

The spatial hierarchy of the streets to the south has developed from the approved scheme. However, it is important to note that this is due to a number of factors, not exclusively the rerouting of the buses. Many of the changes have been as a result of re-evaluating the public realm within phase 3, which has given opportunity to contribute positively to the scheme as whole. Please also refer to section 'Streets' in the chapter entitled 'The Scheme' for further details.

The streets have been altered as follows:

- Plots 17 and 18 have been revised in conjunction with one another. Plot 18, which is a landmark plot, is pulled away from the boundary with Deanston Wharf, so that it does not have to physically connect to the existing warehouse building when implemented.
- Plot 17's setting is greatly improved, as it no longer sits on a plot bound by 4 roads, which previously created a 'traffic island' effect.
- The route between 16 and 17 is reduced (cropped), providing access for service and refuse vehicles only. This keeps car access and parking away from the public space Silvertown Pier Square, enabling a safe, high-quality environment.
- Repositioning the main vehicle road further west towards the boundary and amalgamating the plots reduces the number of roads to the west of it, which previously were indicative connective points with Deanston Wharf. Future connections in to the Deanson Wharf site are made possible with temporary landscaping at the road interfaces. On-street visitor parking is provided to the western boundary route.





Previous DRP Masterplan

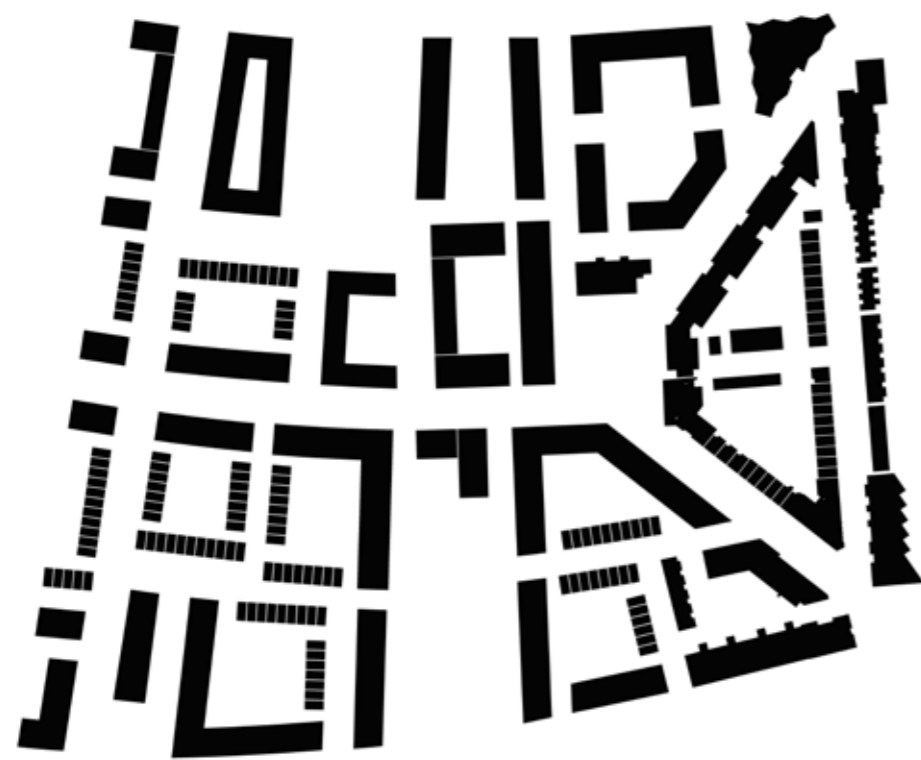


Revised Masterplan

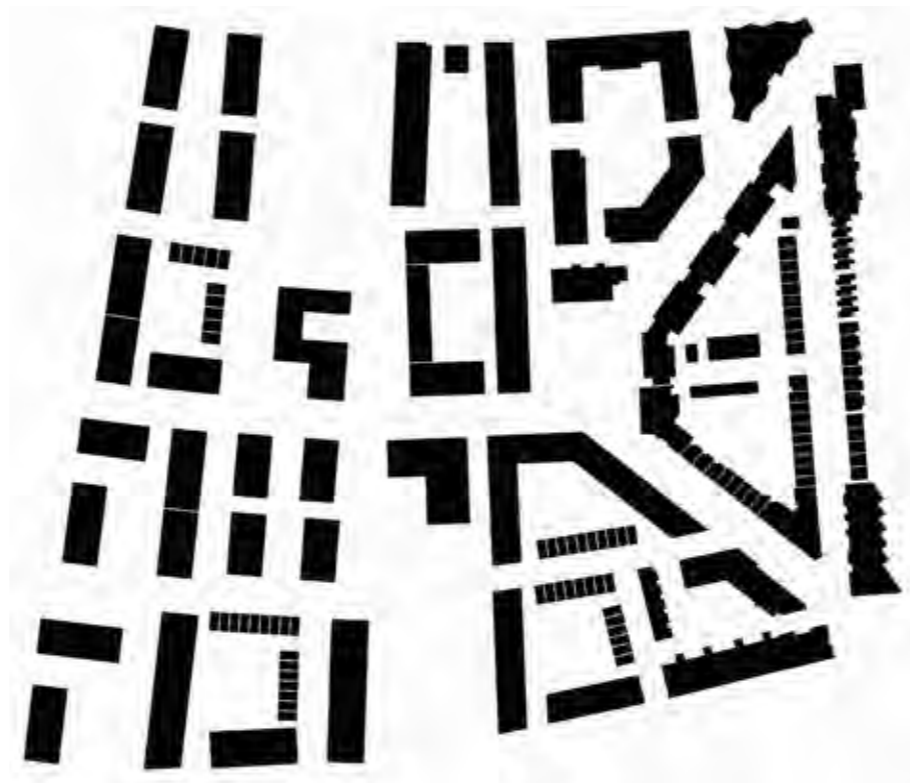
Enclosure of the Park

The footprint of plot 14 has been rearranged and realigned to form a definite edge to the park. Its overall form and massing has been revisited to improve the sense of enclosure. (see Massing section for further details).

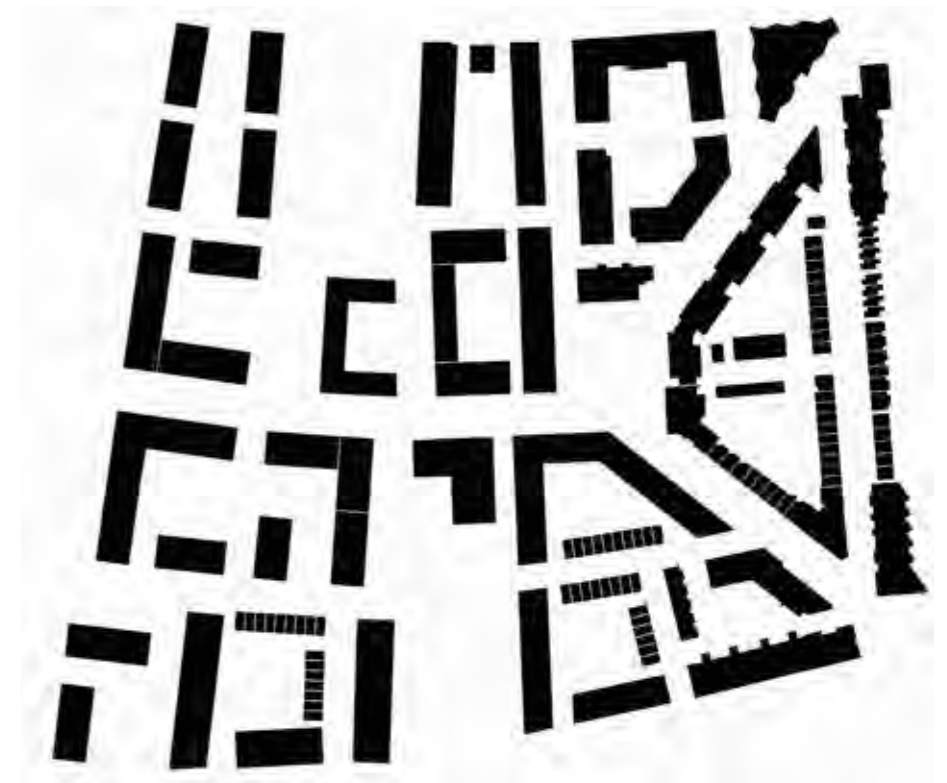




Approved Masterplan



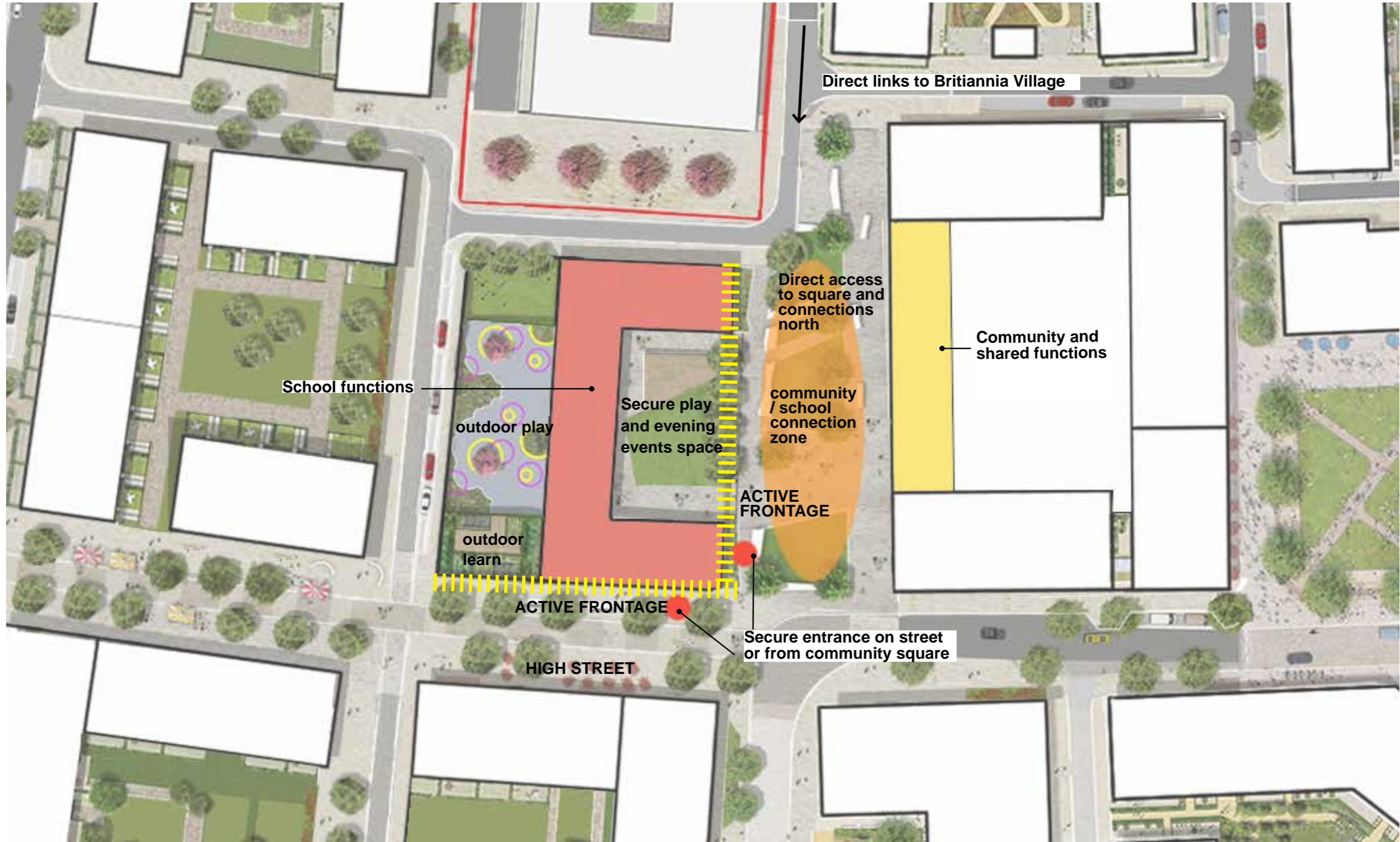
Previous DRP Masterplan



Revised Masterplan

High Street

The DRP suggested that there was a loss of definition to the high street due to the increase north–south orientated buildings, which were introduced to minimise the number of single-aspect north-facing units required. In order to address this, the plots bounding the high street have been redesigned to have a greater east-west emphasis. This reinstates the definition and coherence of this central spine of the site.



Schematic School Layout

School Footprint

The indicative footprint of the school that was presented to the DRP represented a very early initial feasibility study that was recently carried out by FCBS for discussion purposes only. It was agreed following the DRP that this approach was perhaps misleading to the panel and, as the school is not to be assessed as part of this section 73 application, the previous approved indicative footprint has been reverted to for the revised masterplan. The east-west route to the north of the school, noted as being useful by the DRP, has also been reinstated.

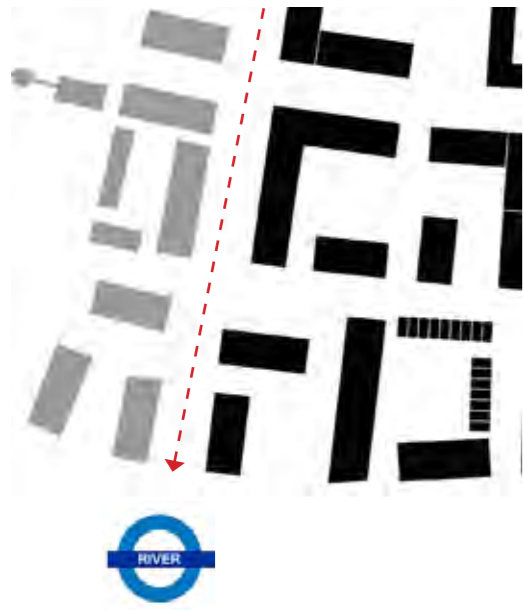
As a result of relocating the main vehicular route west, more external space has become available for the school, which has allowed an increase play space. This also allows further flexibility for the reserved matters design, once the school comes forward.

Some useful points emerged from the discussion with the DRP regarding the school arrangement and its future design. This feedback will help to inform the brief for the school that will be carefully developed to ensure that the critical design principles are retained and that scenarios and assumptions are fully tested to promote the school as a meaningful centre-piece to the Royal Wharf development.

Key design principles noted at DRP for inclusion in school design brief:

- activity and transparency to key high street frontages to maintain the character of the street-scape
- external spaces associated with the school must be carefully considered to not only provide the optimum layout for the school, but also a positive relationship to the public realm
- entrances, routes and spaces
- clarity of drop-off strategy

In order to provide further clarity and assurance that the school responds to the relevant urban design principles, a high-level strategic diagram is illustrated opposite. This will be developed further for inclusion in the project brief.



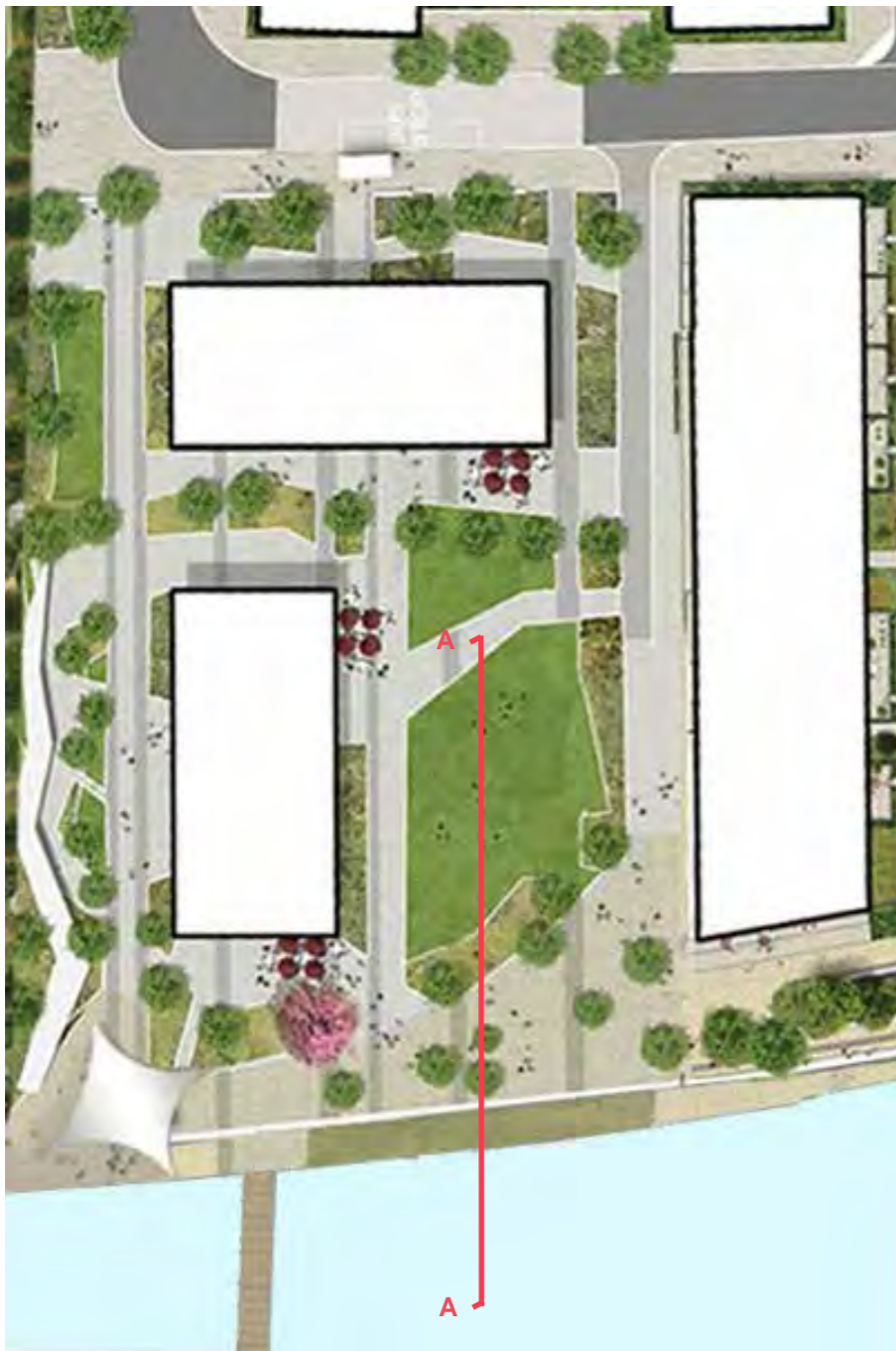
Section A-A

Silvertown Pier
(River Thames)

Riverside terraced planting

Pavillion & seating

Landscaped public square



Silvertown Pier Square Plan

Silvertown Pier Square

Following urban design lessons learnt from phase 2, we are seeking to increase the maximum height parameter of the competition design plot 18 by approximately 3no. storeys. This is to increase its prominence as the riverside marker building and offer design flexibility for the design competition winners. It has been confirmed by an aviation consultant that this approach is acceptable within aviation restrictions relating to London City Airport.

A wind specialist is currently carrying out a wind test for the entire revised phase 3 site that will determine the impact of the increased height up on the micro climate of this plot and the square in which it sits. Landscaping will be carefully considered to provide a degree of shelter, balanced with the Thames views that this square will offer.

The re-orientated of Silvertown Pier Square has the following benefits:

- Plot 18 does not have to be joined to the existing warehouse at Deanston Wharf boundary in order to be implemented
- Plot 17 setting is improved by allowing more space around it
- Plot 16 setting is improved by opening up the square, allowing a greater number of units to enjoy views of the Thames
- Creates a better arrival experience to complement the Thames Clipper transport node

Reduction in Number of Townhouses

As noted by the DRP, there is a desire to increase the density of phase 3 from the approved scheme, which results in a reduction in the number of townhouses, illustrated in the approved masterplan arrangement. Due to an over-provision of townhouses provided in Phases 1 and 2, the Royal Wharf development has met the requirements for townhouses set out in the Section 106 Agreement. An increase in the overall number of units to be provided is not sought as part of this application.

The increase in density has been carefully balanced with a footprint arrangement, massing and height for the plots that respects the principles of the original masterplan.

The overall massing is based on the approved maximum parameter heights, with the addition of some higher elements to add articulation and interest at key points.

It is important to note that the massing shown in the physical model represents the maximum parameter height approval being sought and not the actual detail building heights and form. The maximum height parameters allow design flexibility for articulation later at reserved matters design stage.

A clear design strategy has emerged that acknowledges that the scale

and density does steadily build westwards from Phase 1, which contains many townhouses. We feel this is an appropriate evolution of the original masterplan design.

Streetscape variety will be provided with a lively mix of ground floor uses, residential entrances and through architectural character and richness that will emerge from the reserved matters plot design.

The original masterplan typology was characterised by a language of larger blocks containing a lower scale inner typology, sometimes being townhouses. This language has been developed and adapted for the Phase 3 design with the outer Mansion blocks giving definition to key locations and edges enclosing lower blocks within.

Following exhaustive testing of various arrangements and massing, it was felt more appropriate to replace the townhouses in plot 24 with low-rise maisonette style blocks. This addresses the previous DRP concerns about the townhouses in Plot 24 being dwarfed by the surrounding blocks.



Previous DRP PLOT 13 + 14 Arrangement



Revised Masterplan Arrangement

Massing and Proximity of 13 and 14

The footprint of plot 14 has been rearranged and realigned to form a definite edge to the park and to reintroduce the east-west frontage to the high street that was deemed important to its success by the DRP. The form and massing of plot 14 has been addressed to improve the sense of enclosure and legibility of the riverside park. Balancing the heights of the forms within the plot, provides a quieter more unified appearance from the park, emphasizing the prominence of plot 12 as a landmark plot.

The arrangement of plot 13 has been revisited to open it up adjacent to plot 14, providing a less crowded feel and to improve daylighting.

Proposed New Masterplan Massing Model



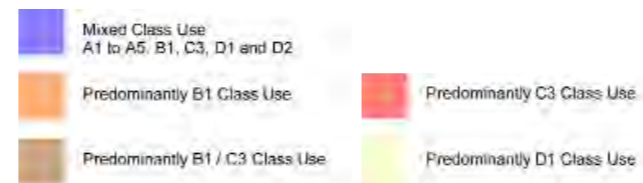


The amendments to phase 3 of the masterplan are underpinned by the main principles that defined the approved scheme. However, in order to provide clarity, the following section outlines the changes to the scheme in relation to the section 73 proposals.

Page numbers are provided for the equivalent sections of the May 2011 Design and Access Statement for ease of reference and comparison.



Flood Level and Formation Level Land Use Plan
 (Refer to page 104 in May 2011 DAS for Approved plan.)



Flood Level and Formation Level Class Use

A ground floor land use plan for the masterplan has been illustrated left. The strategic principles remain the same as the approved scheme. Wrapping the northern edge of the site in a predominant run of B1 employment uses, allows these functions to deal with a number of the technical challenges of the changing topography and proximity of the buildings to the DLR viaduct.

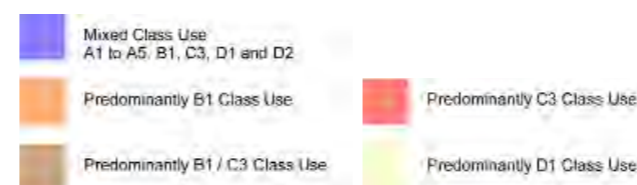
A concentration of mixed uses is proposed adjacent to Pontoon Dock DLR station forming the gateway and entrance to the scheme. This concentration of mixed use buildings connects in the middle to the masterplan to form the new high street as a heart to the development.

C class uses have been spread around the site principally protected from the scale and bustle of the neighbouring uses. The family units benefit from being located close to main thoroughfares as well as the amenity of the river, the new Riverside Park as well as Thames Barrier and Lyle Park.

The most significant amendment to this plan is plot 14. It is anticipated that a mix of D2, leisure uses and A1 to A5 commercial uses will be accommodated at formation level animating the park and the high street. Therefore, plot 14 is envisaged as having a double height podium base within which these uses are accommodated. This footprint offers flexibility for the reserved matters design in terms the use locations within the plot footprint.



Upper Level Land Use Plan
 (Refer to page 105 in May 2011 DAS for Approved plan.)



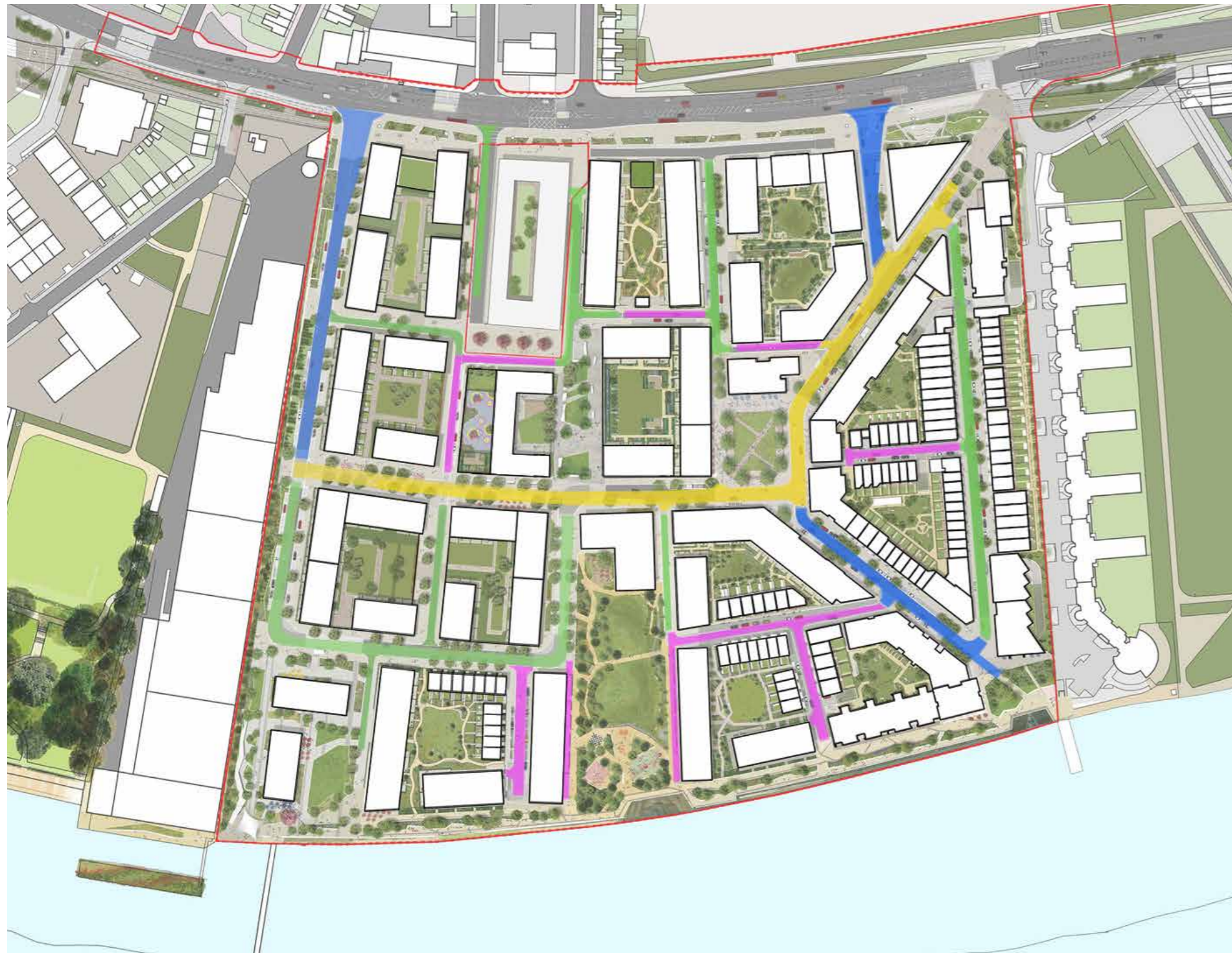
Upper Level Class Use

An upper floor level land use plan for the masterplan has been illustrated left. The principles remain the same as the approved scheme.

In this context the upper level residential use is defined as the predominant use over all the upper floors. Thus some buildings facing onto North Woolwich Road which have 3 floors of B1 with circa 7+ floors of residential above are shown as having a C class use.

The diagram builds on the principles set out by the ground level uses plan but recognises that a number of the buildings need to be adaptable to residential uses at the upper levels. This flexibility will allow a number of rich development opportunities to grow within the masterplan framework allowing distinctive neighbourhoods to be formed, each with a different and unique character created by the buildings and streets contained within.

As with the ground levels it remains the intention of the masterplan design to promote a rich and diverse range of uses along the high street, incorporating buildings that provide the opportunity to service the residents of the masterplan as well as provide them with a wonderful and vibrant place to live.



Street Hierarchy and Location Plan
 (Refer to page 106 in May 2011 DAS for Approved plan.)

Streets

As described in the previous section relating to the Post-DRP design, in order to deliver the plots within phase 3 effectively and efficiently, the vehicular route has been relocated west up to the Deanston Wharf boundary. The street hierarchy has been adjusted slightly to allow for this.

The diagram left illustrates the hierarchy of streets proposed within the masterplan framework ranging from larger scale high street environments through streets and lanes to the intimate and residential only mews streets.

The clarity and legibility of key routes reflect transport movement and town centre pedestrian activity within Royal Wharf. The success of defining the street hierarchy is essential to achieving a sense of normality within the scheme where pedestrian and vehicular movement patterns operate coherently together.

- High Street
- Streets
- Lanes
- Mews



Open Space Location Plan
(Refer to page 108 in May 2011 DAS for Approved plan.)



Open Space + Play Strategy

The open space and play strategy remains the same as the approved masterplan as it is based on the same number of residential units and mix. Some residential plots have been amalgamated, as too have some of the principal urban spaces. However, the same open space and play calculations apply to the masterplan.

Formal Play Space

0 - 5 Play	4,309m ²	2.77%
5 - 11 Play	2,987m ²	1.92%
12 - 17 Play	2,819m ²	1.82%
Private Gardens	7,995m ²	5.15%
Private Courtyards	19,922m ²	12.83%
Private Roof Amenity	35,566m ²	22.90%
Public Open Space	48,281m ²	31.08%
Green / Brown Roof	15,883m ²	10.23%
Road	5,731m ²	3.69%
School Community Play	1,095m ²	0.70%
Minoco Riverside Park	10,727m ²	6.91%
Total	155,316m²	100%

Figures exclude private balconies

Roof amenity areas measured at 100% efficiency



Tall Buildings Location Plan
(Refer to page 110 in May 2011 DAS for Approved plan.)

Royal Wharf Tall Buildings

The revisions to phase 3 of the masterplan are in accordance with the approved scheme tall buildings strategy. The section 73 seeks to increase the maximum height allowable for plot 18, located on the south west corner of the site. The approved masterplan identifies plot 18 as 'A landmark tall building to mark the landing point of the Silvertown Pier Riverboat service. Additionally this building will complement (plot 10) by adding to and enhancing the (Royal Wharf) skyline along the River Thames.'

In addition to its appropriate location the Royal Wharf tall building massing strategy aims that the tall buildings:

- Define edges of streets and open spaces
- Respond to micro-climate and sunlight / daylight conditions
- Highlight places within the masterplan
- Reinforce views and routes

To be acceptable, any new tall building should be in an appropriate location, should be of first-class design quality in its own right and should enhance the qualities of its immediate location and setting. It is for these reasons that Plot 18 was selected as a design competition plot, to ensure high quality design and architectural distinctiveness.

Increasing Plot 18's height will provide greater contrast between it and the height of the low-mid scale buildings, thus reinforcing its landmark status.



Plot Location Plan

Plot Numbering

The amalgamation of the phase 3 plots, has resulted in the following plot numbering:

- Plot 13: Amalgamation of 13+19
- Plot 17: Remains as before
- Plot 18: Remains as before
- Plot 20: Amalgamation of 20+26
- Plot 24: Amalgamation of 24+25




Formation Level Plan
 (Refer to page 112 in May 2011 DAS for Approved plan.)

Formation Levels

The main principles of the formation level strategy replicate the approved scheme.

However, due to the amalgamation and reconfiguration of the plot footprints within phase 3, the basement strategy has been revised. This proposed strategy aims to achieve the following:

- Amalgamation of plot 13 and 14 basements improves and shares efficiencies in circulation and reduces the number and impact of off-street basement carpark entrance points
- Omitting the basement from plot 24 will allow the planting of mature, deep rooted trees and planting to the courtyards, which will enhance the view in to the courtyard both for residents and from the street.
- Omitting the basement from plot 24 avoids the intrusion of a basement carpark entrance at the location of the lower scale units

 Undercroft parking

 Basement parking



Proposed Site Levels Plan
 (Refer to page 113 in May 2011 DAS for Approved plan.)

Proposed Site Levels

The new plot footprint arrangement has been set to align with the approved scheme proposed levels.

Illustrated by the adjacent diagram the red line highlights the adjusted flood defence level position in relation to the revised plot footprint layout.



Minimum Heights Plan
 (Refer to page 116 in May 2011 DAS for Approved plan.)

Minimum Heights AOD

The proposed revised minimum height parameters for phase 3 have been based on the approved scheme minimum heights strategy.

The main change from this is plot 14 that is given a minimum height for its podium to allow flexibility in terms of usage across the footprint. As this plot is to have double height commercial and leisure uses at ground level, the private residential courtyard will be set on a deck above this. Therefore, there is scope to extend the commercial and leisure units back in to the center of the plot footprint, which may be required for functions such as the swimming pool.

- Minimum A.O.D. Level (metres)
+11.00
- Minimum A.O.D. Level (metres)
+14.00
- Minimum A.O.D. Level (metres)
+22.00
- Minimum A.O.D. Level (metres)
+25.00
- Minimum A.O.D. Level (metres)
+32.00
- Minimum A.O.D. Level (metres)
+39.00



Maximum Heights Plan
(Refer to page 117 in May 2011 DAS for Approved plan.)

Maximum Heights AOD

The revised maximum height parameters are based on the key development principle of the approved masterplan:

Landmarks should be formed and those streets and areas of urban realm within the masterplan need to be further defined and enclosed, to heighten the quality of the scheme.

Additional height has been added to key plots to allow articulation and to signify important locations, such as adjacent to Linear Park, the high street and the Thames Clipper.

Plot 20 presents a robust massing against North Woolwich road and the DLR which is consistent with the approved scheme. The massing then reduces in scale away from Plot 20 towards the high street. From here, the heights build up towards the landmark riverside plots.

Two lower blocks replace the townhouses in Plot 24 at a low scale that is appropriate adjacent to the school. The massing of plots 13 and 14 define the high street spine and the edge of the park.

The maximum height parameters of the riverside plots have been increased to emphasise their landmark status.



Housing + Apartment Location Plan
(Refer to page 114 in May 2011 DAS for Approved plan.)

Mixed Use
 Houses
 Apartments

Housing / Apartment Mix

A revised housing / apartment plan for the masterplan has been illustrated in the diagram adjacent. Following extensive massing studies, it was concluded that townhouses be omitted from phase 3 for the following reasons:

- Adjacency to the vehicle route is problematic in terms of scale, noise disturbance and market value of the houses.
- It is crucial that buildings capable of accommodating a variety of uses at ground level are placed on the high street in order to provide active frontage and animate this key route. Therefore, townhouses are not appropriate in this location.
- Townhouses were eventually omitted from plot 24 (next to the school), as they were being dwarfed by the surrounding buildings.

Phases 1 and 2 are predominantly characterised by a typology of larger mansion block masses enclosing clusters of townhouses. A higher number of townhouses were delivered in these phases than was required by the outline permission and as such the Section 106 requirement for townhouses has been met by these previous phases. A natural increase in scale and massing westwards from the east of the site, is deemed appropriate and sets the tone for a mid-scale development in the neighbouring Deanston Wharf, thus apartment buildings are preferred.

The principle of larger apartment masses enclosing lower rise scale built forms is promoted in the revised masterplan as larger apartment blocks enclose lower scale mansion block buildings.



Principal Urban Spaces

The main urban spaces and public realm set out by the Royal Wharf masterplan are illustrated in red on the adjacent plan.

The main changes to the approved masterplan are outlined below;

Venesta Pocket Square located south of Plot 24 has been omitted. This was due to the plot amalgamation resulting in larger plot footprints. The pedestrianisation of the high street presented an opportunity to create an accessible pocket space (8). The new Venesta pocket square is located between Plot 23 and 14.

Silvertown Pocket Square becomes a significant urban space marking the arrival point for pedestrians and cyclists to the Thames Clipper service to the south. The square forms part of the sequence of spaces leading to the Thames Clipper.

Places Location Plan
(Refer to page 121 in May 2011 DAS for Approved plan.)

Squares

- 1 - Pontoon Dock Square
- 2 - Market Square
- 3 - Thames Barrier Park Square
- 4 - Silvertown Pier Square

Parks

- 5 - Linear Park
- 6 - Riverside Park

Neighbourhood Squares / Pocket Parks

- 7 - Community Pocket Square
- 8 - Venesta Square
- 9 - Silvertown Pocket Square

Key Area of Urban Design

- 10 - North Woolwich Road

Purpose of Design Guidelines

The Minoco masterplan design code was devised with the aim of supporting and supplementing the urban design strategies of the Minoco masterplan allowing architects, landscape architects and designers to maintain and engage in a design approach consistent and appropriate for this unique site; with the aim of enriching the development as a whole through the development of a common and identifiable design language for the masterplan.

The masterplan framework defines a clear hierarchy of built and open spaces providing a series of settings and themes that should be articulated and reinforced through architectural and landscape proposals.

The purpose of this design code is to provide the following:

- Live design guidance to form the brief for architects and landscape architects
- An assessment aid for client, local authority and stakeholder design review.
- Document the aspirations of the Minoco masterplan

The following section outlines the amendments to the design code relating to the Section 73 Application.

Parameter Plans

Parameter Plans linked to the Environmental Statement establish the high level spatial masterplan and individual vision for each of the main places within the masterplan scheme and should be read alongside this design code. These are to be used in support of emerging architectural, townscape and landscape proposals for the Royal Wharf site.

The revised parameter plans that form the basis of the section 73 application are listed below:

Parameter Plan 01	Site Location Plan
Parameter Plan 02	Application Boundary
Parameter Plan 03	Existing Site Levels
Parameter Plan 04	Basement Level Plan
Parameter Plan 05	Flood Defence Level Plan
Parameter Plan 06	Proposed Upper Level Plan
Parameter Plan 07	Proposed Building Footprints
Parameter Plan 08	Proposed Minimum AOD Levels
Parameter Plan 09	Proposed Maximum AOD Levels
Parameter Plan 10	Movement Plan

The following section illustrates how the revised masterplan amendments respond to and reinforce the masterplan framework relating to the revised masterplan for phase 3. The main themes of the masterplan framework have been retained and safeguarded. However, the principles are illustrated as follows in relation to the revised site layout and plot footprints.

Context

The site context is a key component of the masterplan framework. Layers of the masterplan's design framework have been developed to respond to the Royal Wharf site and its immediate and wider context. These frameworks remain the same and are as follows:

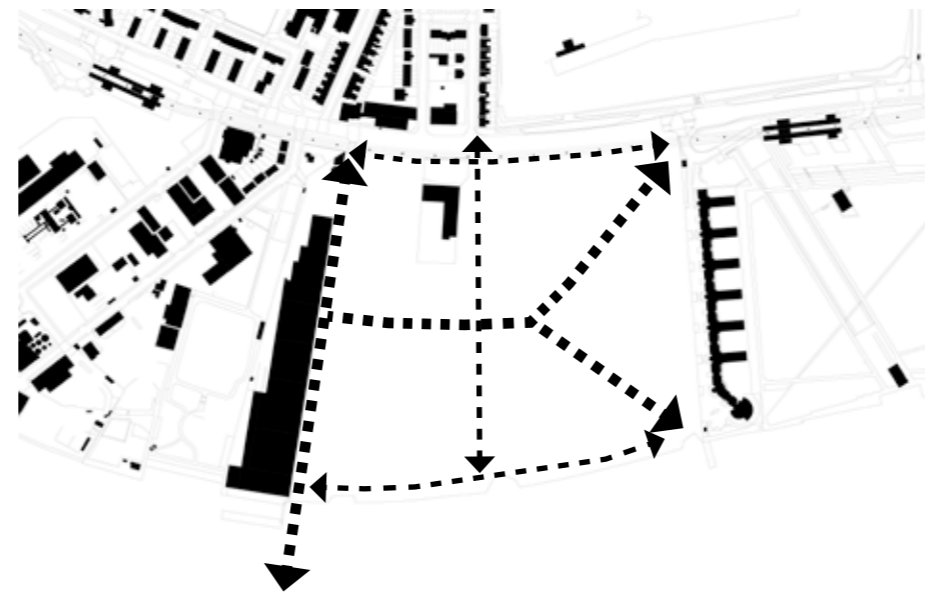
- Connection
- Major Spaces
- Build Form
- Urban Grain
- Sunlight + Daylight
- Drop Off
- Servicing
- Vehicular Movement
- Pedestrian Movement
- Public + Private Space
- Visual Links + Viewing Corridors



Connection

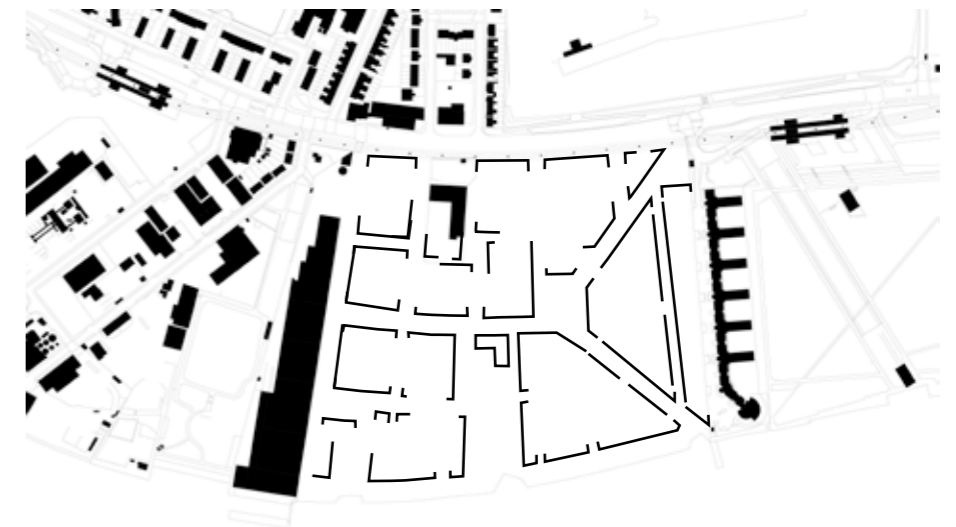
The major strategic connections established by the original masterplan framework have been retained and responded to. However, the north-south connection from the North Woolwich Road and the River Thames, specifically the clipper stop has been relocated further west. The vehicular route extends further south, closer to the clipper transport node. The central north-south connection is strengthened by the relocation of community plot in to plot 22 (previous section 72) and the repositioning of plot 14 west to open up the route adjacent to the park.

The legibility and ease of movement along these desire lines is reinforced.



Major Spaces

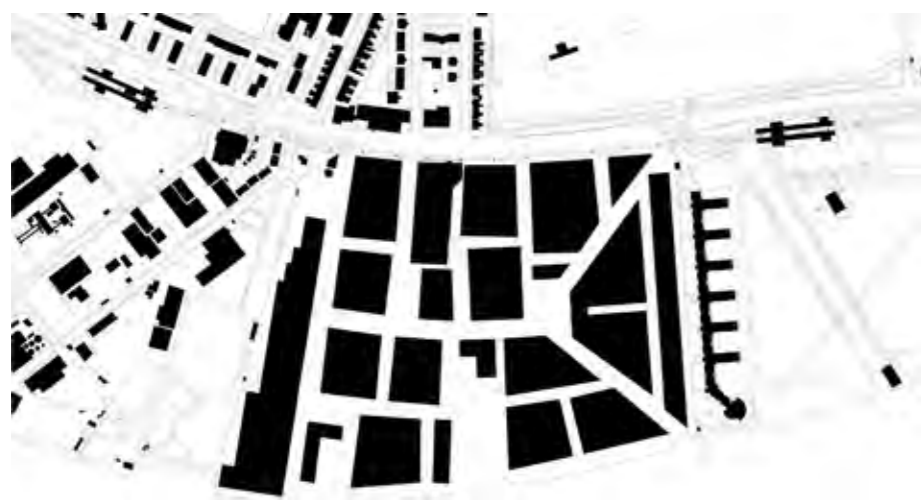
The clear and logical definition of the masterplan urban spaces, essential to the success of the scheme has been retained in the redesign of phase 3. The principles of the major spaces framework, illustrated below are reinforced with the revised masterplan in order to realise the urban framework for Royal Wharf.



(Refer to page 188 in May 2011 DAS for Approved plan.)

Built Form

The diagram below illustrates the areas of the scheme that are clearly established as urban built forms in order to define and fully articulate the streets and public spaces within the masterplan framework, in terms of the revised Phase 3 footprints.



Urban Grain

Within the context of the block diagram the masterplan recognises the need to break down the urban blocks and edges to allow permeable and visually accessible successful residential buildings to be delivered.

The diagram below illustrates how the masterplan framework as assessed allows for this to develop within the overall strategic aims and context of the scheme.

Phase 3 has been considered in the same way to achieve a fine urban grain in plan and elevation, and to avoid buildings reading as large impenetrable urban blocks in massing or elevation treatment



Sunlight + Daylight

The Proposed Development is primarily made up of residential accommodation and for this reason has been assessed for daylight and sunlight. Any areas of residential use that fall within the outline planning application have been looked at for sufficient daylight potential on each façade.

The supporting Royal Wharf Phase 3 EIA includes a sun-path shadow study, examining the transient as well as permanent shadow on any existing surrounding amenity space and internal proposed amenity space.

As a part of the urban design approach for Royal Wharf Phase 3, comparisons have been drawn against existing London streets with widths and proportions comparable to those proposed within the masterplan framework. These comparative studies illustrate how the scale and quality of the urban realm that these higher housing densities produce is both desirable and successful in many established places around London.

Detailed design of individual urban blocks will address the VSC and daylighting levels. That design work will investigate particular conditions, including acute angles in internal courtyards, ground floor conditions and areas of increased overshadowing which have been identified in the outline masterplan Environmental Impact Assessment documentation.

Drop Off

Drop off access to all buildings and front doors is a key principle of the masterplan. It is the aspiration of the original Royal Wharf masterplan scheme that each front door is accessible from a drop off zone or area of visitor parking to allow deliveries and residents to easily access their homes without the need to enter a basement or undercroft parking area. This principle is maintained in the revised Phase 3 scheme.

Servicing + Vehicular Access

Servicing for the residential apartments and townhouses is undertaken from the on street road network via front doors, residential cores and access points to undercroft elements. Frequencies of use are low per unit, the size of vehicles small and the length of stay for each vehicle short. The non residential units will be managed to allow access from the principal streets at times that do not conflict with the main pedestrian movements. The aspiration is to allow the main streets to operate in exactly the same way as a typical high street within London. Access for emergency vehicles and servicing of the residential, commercial and employment spaces is achieved across the site. The riverwall is accessible by vehicle for maintenance purposes.

- **Designers should provide a clear and legible servicing strategy for buildings and functions within Minoco**



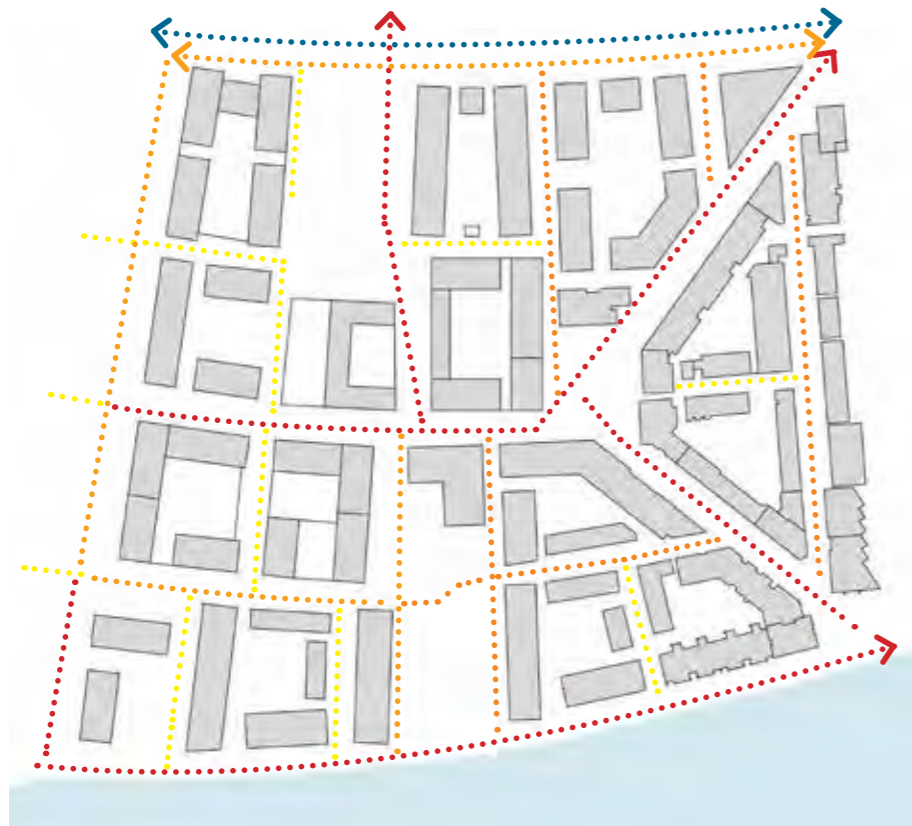
Vehicular Movement



- Primary
- Secondary
- Tertiary
- Restricted access/Pedestrian priority
- Main access road to site

- **Designers should seek to reinforce the principles of vehicular movement established in the strategy above**

Pedestrian Movement



- Primary
- Secondary
- Tertiary

• Designers should seek to reinforce and enhance the principles of pedestrian movement established in the strategy above

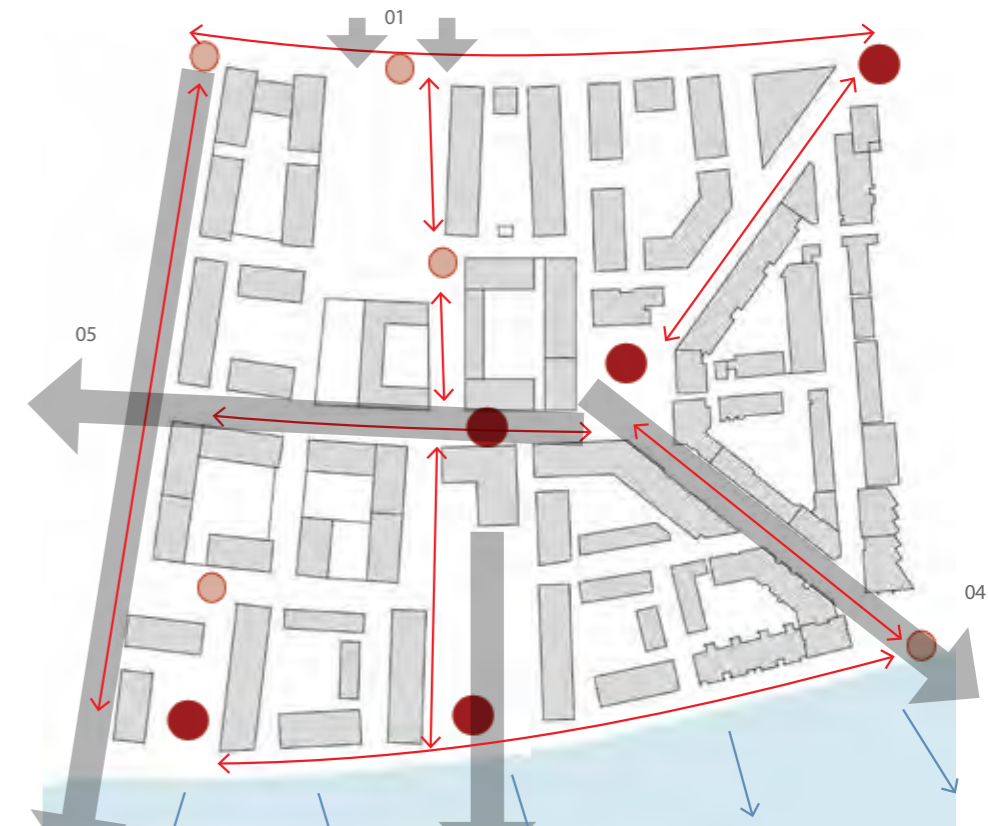
Public + Private Space



- Main Public Spaces
- Gateways
- Pocket Spaces
- Semi-private Spaces

• Designers should seek to reinforce and enhance the principles of public and private space established above

Visual Links + Viewing Corridors



- Main focal points
- Visual nodes
- Visual links
- Views across the river
- Protected Viewing Corridor
- 01 Views in from Britannia Village
- 02 View to the Pier
- 03 View to the River
- 04 View to the Thames Barrier
- 05 View to Canary Wharf

• Designers should seek to reinforce and enhance the principles of the viewing corridors illustrated above

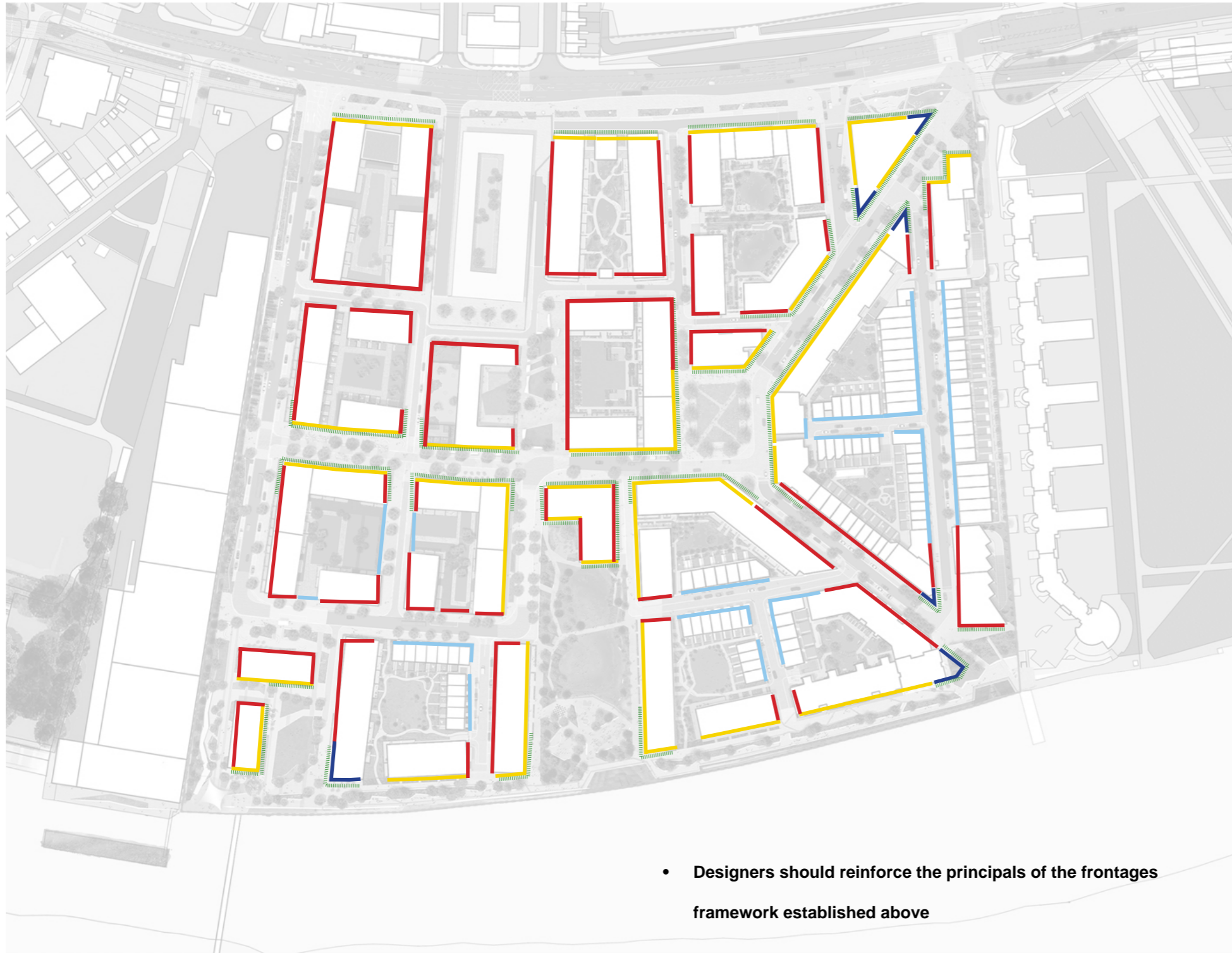
Hierarchy of Setting

Royal Wharf has a clear hierarchy of setting to order and provide visual clarity and subtle design divergence to the spaces formed by the masterplan framework.

Measuring against this spatial hierarchy allows designers to test ideas against the hierarchical location of place within the masterplan, to aid the legibility of overall scheme.

These place settings provide a backdrop of urban conditions throughout Royal Wharf to which the physical environment should respond, with expression and articulation considered in a specific way that makes reference to the location of architecture and landscape within its immediate and wider context.

The following section outlines the amendments to the hierarchy of setting included in the Section 73.



Frontage

Building frontages will be key to the success of the masterplan. Strategically the masterplan aspires to create spaces defined by a range of differing building frontages to provide variety and character to each street and the development as a whole.

The diagram illustrates the frontages to the revised phase 3 plot footprints.

Key:

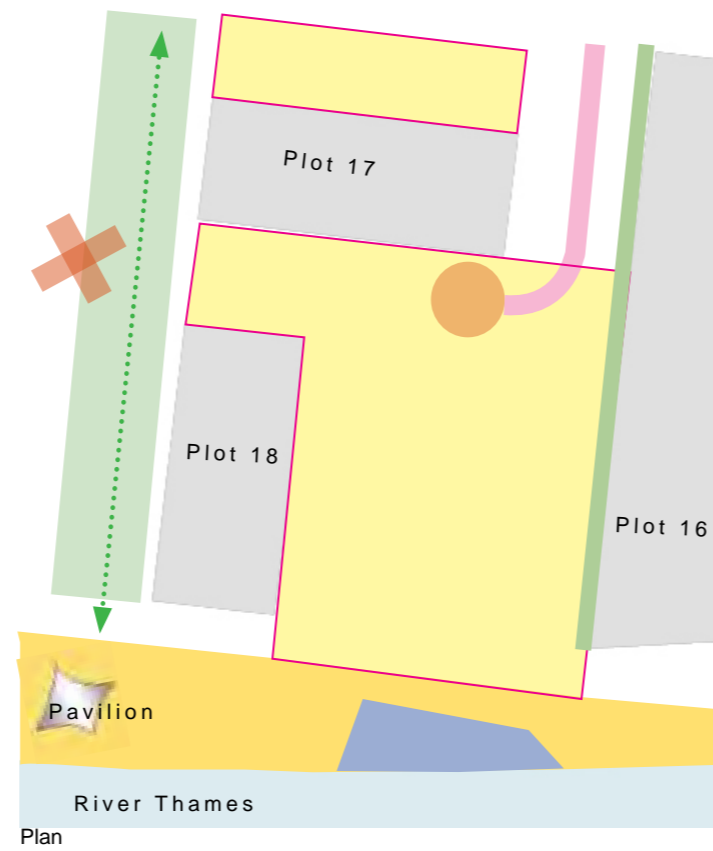
- Corner —
- Strong Edge —
- Publicly Permeable —
- Semi Private —
- Principal —

Royal Wharf Settings

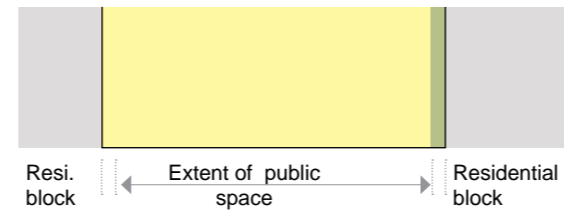
The principal settings established within the masterplan framework remain largely unchanged. However, opposite illustrates the revised Silvertown Pier Square and Silvertown Pocket Square in relation to the new plot 17 and 18 footprints.

- **Designers should respond to the settings established within the masterplan framework**

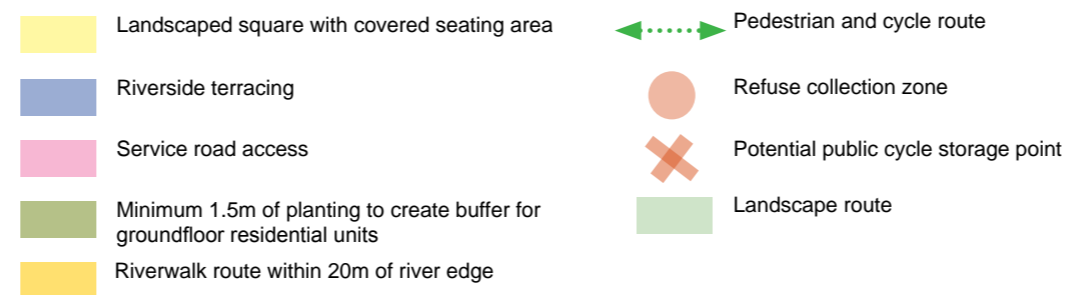
Silvertown Pier Square and Silvertown Pocket Square



Plan



Section



(Refer to page 197 in May 2011 DAS for Approved plan.)

Spaces and Connections

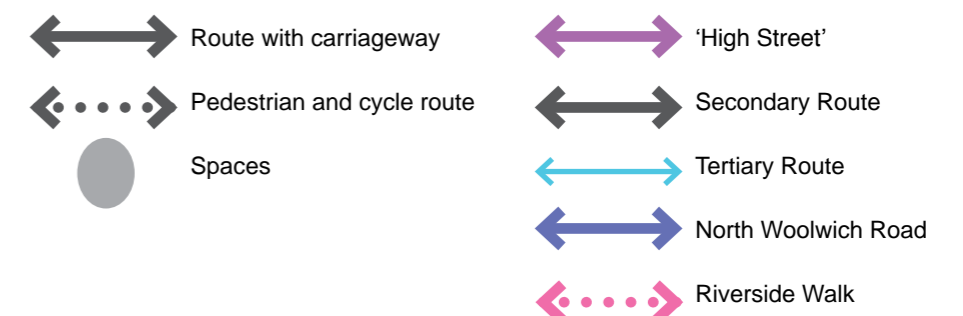


The landscape and public realm forms a key component of the Royal Wharf development. The aim of the masterplan is to create an attractive, vibrant new neighbourhood in London which will support a new population with a focus on family housing. This will be reinforced by the design of the public realm.

The structure of the public realm has been arranged around establishing a clear hierarchy of streetscapes and individual spaces located across the masterplan, including the Market Square and Royal Wharf Park.

The courtyards contribute to the amenity of the site, providing local spaces for the residents in the buildings around each garden court.

The illustrative landscape masterplan has been developed to demonstrate how the public realm could develop and the character and quality of the streets and spaces proposed within the scheme.



Landscape Masterplan



Streets

The previous masterplan established a clear hierarchy of streets; a central high street, secondary and tertiary streets which will use the palette of materials which are being implemented in the first phases of the scheme.

The high street creates a connection to the DLR station in the east and to the heart of the site. It will be characterised by the scale of the space created, the use of large tree planting, the design of the buildings fronting onto it and the locations of commercial uses.

The revised masterplan brings forward the opportunity to bring the bus routes closer to the Thames Clipper pier to enhance the site connections and linked public transport.

The design of North Woolwich Road will continue in line with the previous masterplan to create an attractive outlook, under the DLR with opportunities of planting and spaces to dwell and play.

The Spaces

The revised masterplan retains the Pier Square beside the Thames Clipper pier, although the form of the space has been revised as a result of the review of the plot location and orientation study and update. Pier Square will be designed to enable access to the Thames Clipper, interaction between the commercial units and space immediately outside, and a green, garden space for residents to enjoy spending time within and for visual amenity from the surrounding apartments.

The revised illustrative masterplan reflects the proposed plot boundary for the school, slightly to the west of previous proposals, creating an opportunity for dwell space for parents and children, including those waiting to collect pupils at the end of the day. The revised design of the space will retain much of the original intent with space for parents carers and siblings to dwell and interact with the landscape but creates more generous areas.



Pedestrian section of High Street



Courtyard gardens residential spaces



Pier Square opportunity for defined routes and space for activity

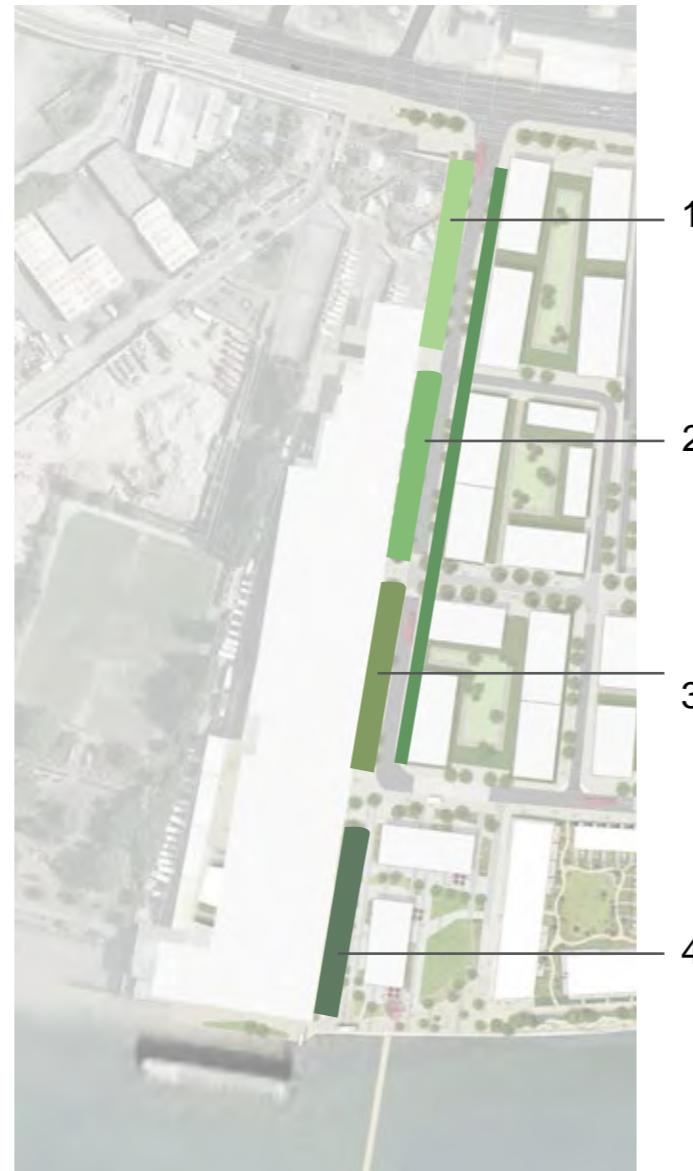


Existing variation of spaces and routes emerging through the site

The Western Boundary

The western boundary has been addressed in the revised master plan. The revised plot locations will reveal the site boundary against which a landscape strip is proposed, allowing for any future development to the west to tie into Royal Wharf and allow a well connected urban quarter to be created.

The landscape zone will create low level interest in front of the existing wharf, with scope for variation along the length. Tree planting would provide a visual connection both along the route and to tree planting along the eastern side of the route. The planting along the boundary would be an opportunity to express variation. Spaces between areas of planting provide a visual indication of where future connections through to the west could be made.



Opportunity for character variations



Landscape masterplan



Potential for future connections

The revised masterplan design for Phase 3 aspires to be the best solution for Newham. The comments received at DRP have positively informed the development of the revised masterplan presented in this document.

The success of the Phase 3 scheme will be measured by the quality of the built environment it produces. It is hoped that this new arrangement will be a positive contribution to the overall Royal Wharf development which has already received approval and is in the process of implementation. Phase 3 presents an exciting conclusion to the Royal Wharf development.