



# Minoco

Design + Access Statement + Design Code

For Clearstorm Limited and Heracles Limited  
both wholly owned subsidiaries of Ballymore Group

May 2011



Report prepared by:

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T O W N S H E N D   
Landscape Architects



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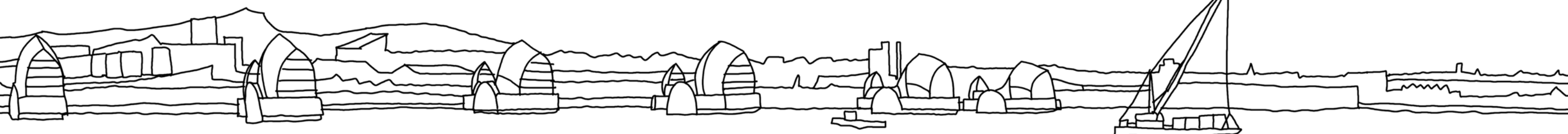


In support of the Minoco outline masterplan planning application submitted in May 2011, this document forms the design and access statement for the application site, known as Minoco and located in the London Borough of Newham (LBN). The document was first issued in May 2011.

This report summarises the design process undertaken when developing masterplan design proposals and parameters for this key site. It records development of the masterplan scheme from concept through to technical appraisal and in particular records the process of workshop consultations undertaken between July 2010 to April 2011 with the Greater London Authority (GLA), London Borough of Newham (LBN) as well as the London Thames Gateway Development Corporation (LTGDC).

The outcome of the workshop process has had a positive effect on the emerging masterplan with the amended scheme providing greater consideration to a wider range of issues, sensitivities and opportunities particular to the locality. In addition the process undertaken has afforded the opportunity for each of the planning authorities and some of the statutory consultees to become key participants in creating the masterplan brief as well as affecting the emerging site layout, design strategy and character of the development.

The collaborative workshop and open design process has allowed the structuring of a carefully prepared masterplan for the Minoco site which embodies best practice in urban design, will improve the quality of any resultant development, encourage more ownership and opportunity on the part of local communities and lead to a better understanding of the site and development in its context.



Riverside Promenade









Minoco 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, both houses and apartments alongside business workspace, local retail and a wide range of diverse community uses.

A desire to create special places summarises the teams approach for the Minoco masterplan. We aspire to create neighbourhoods where work, leisure and home life all come together.

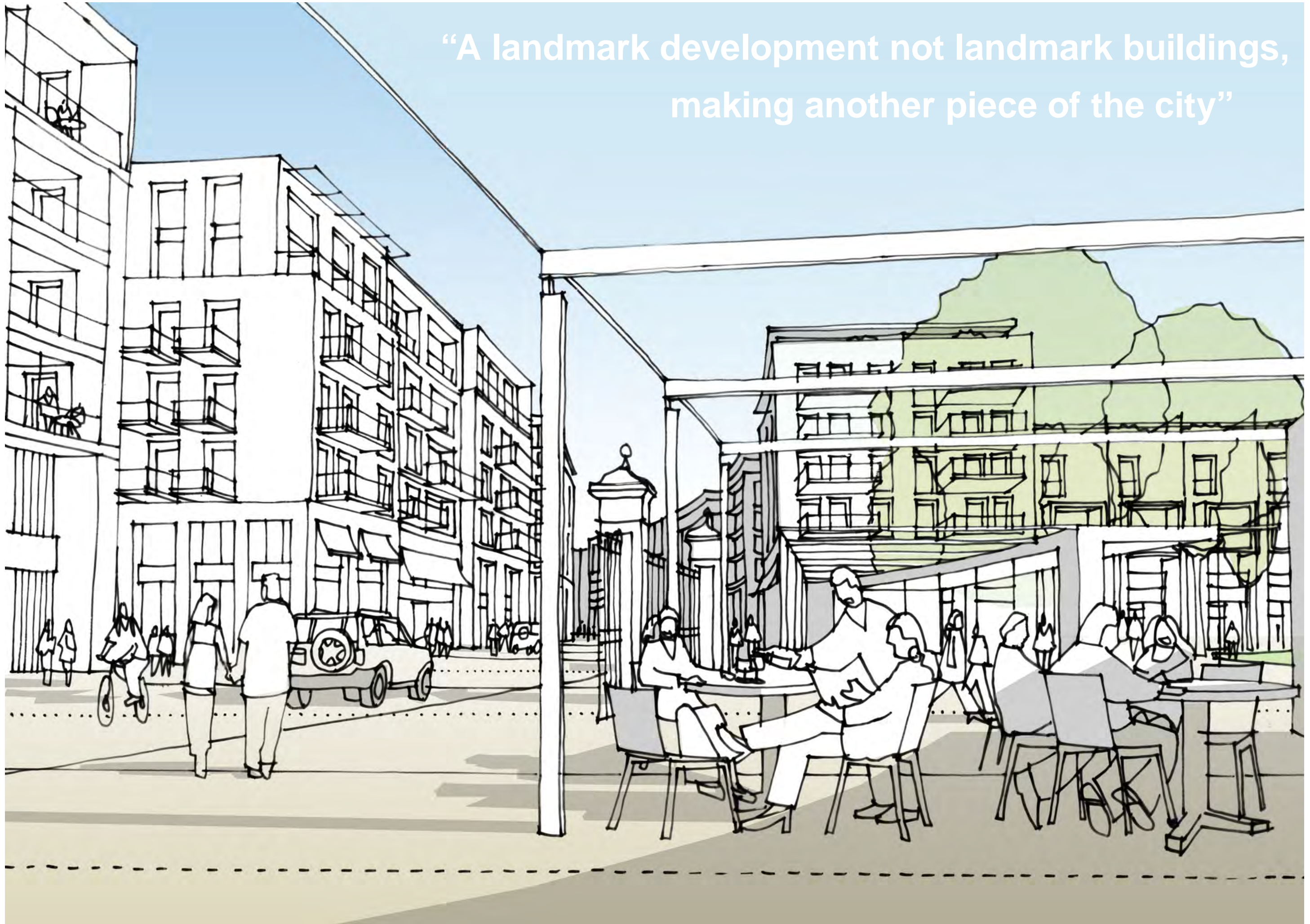
Minoco Pocket Square

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. This will be achieved by learning from significant examples of urban development, both historical and contemporary from within London and from further afield.



“A landmark development not landmark buildings,  
making another piece of the city”







**“A Beautiful, vibrant new neighbourhood”** “A wonderful meandering river and fantastic open spaces” **“Places to live, work, shop and enjoy life”** “A beautiful landscape mixing the old with the new” **“Walkable streets”** “A diverse mix of new employment growth” **“New demand for different kind of housing”** “Renew the existing surrounding residential communities”

**“Create an attractive urban neighbourhood, with a focus on family housing”** “Open up access to the River” **“Improve the image of the area through the design of high quality, contemporary buildings”** “Provide buildings that respond to and maximise the use of their natural surroundings and minimise their environmental impact”





A new public park



Scope of the Design and Access Statement

We believe that place making is the key ingredient to creating a successful scheme and buildings will only prosper if people want to be around them. The combination of a unique river and park context and quality setting provides a great opportunity for integrating new high quality buildings bounded by high quality public realm.

This design and access statement sets out the work undertaken to establish the key elements for realising this vision. Innovative and high quality urban design is a vital part of achieving the goals set, both by the master planning team as well as from comments received from the GLA, LBN and LTGDC.

This document outlines the design process undertaken from commission through a collaborative and progressive workshops between the master planning team and the GLA, LBN and LTGDC during the period of June 2010 through to April 2011, and sets out to explain in detail the resolution of the masterplan proposed. It clearly illustrates the commitment to design and quality in the masterplaning process to ensure that the proposed scheme realises the full potential for this site.

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

Site Context

Introduction of the existing site in its context, both physical and historical as well as an analysis of the opportunities and constraints which have aided the masterplan development.

Masterplan – Pre Workshop

Description of the scheme from early conceptual stage through detailed cityscape and precedent analysis of other urban sites of importance from elsewhere in London.

Workshop Process

A record of the GLA, LBN, LTGDC workshop process as well as a clear itemised breakdown of how these meetings informed and developed the current schemes principles.

The Scheme + Places

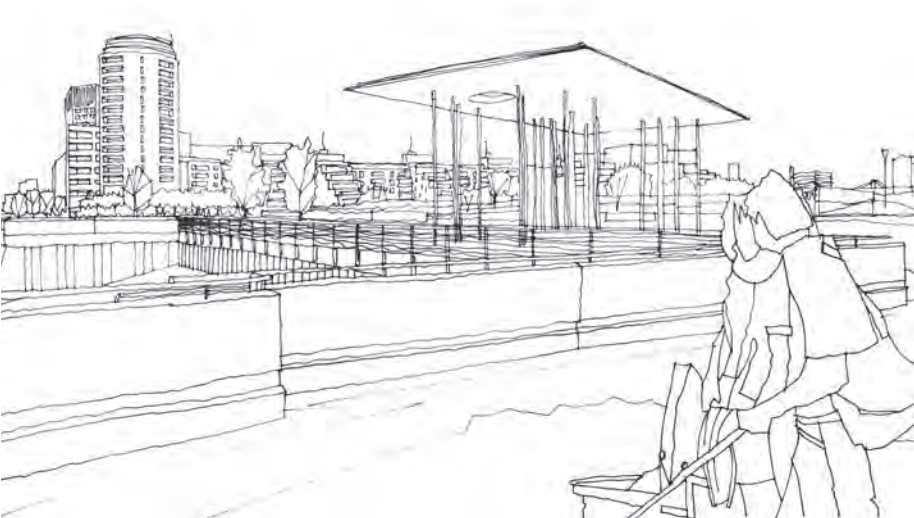
The masterplan proposals are explained in terms of scale and massing, quantum's and land use. This section also illustrates the spaces and places created within the proposed development.

Design Code

A guide to achieving the spatial, architectural and landscape quality aspired to within the masterplan framework.

Masterplanning Team

Client	The Ballymore Group
Masterplanning Architect	Glenn Howells Architects
Planning Consultant	Sellwood Planning
Environmental Consultant	URS Corporation Ltd
Transport Consultant	WSP
Energy Consultant	Element Energy
Landscape Architect	Townshend Landscape Architects
Public Relations	Indigo Public Affairs
Townscape Consultant	Tavernor Consultancy



Proposed view from Barrier Park



Design + Access Statement Context

This design and access statement and associated design code have been prepared in context of, and comply with the The Town and Country Planning (Development Management Procedure) (England) Order 2010 and the circular Guidance on changes to the development control system 01/2006.

This document provides information on the amount, layout, scale and the landscaping of the proposed masterplan development and should be read alongside supporting Minoco outline application documents.

Consultation / Workshop Process

Between July 2010 and April 2011, the developing masterplan proposals were tabled at a number of workshop meetings held at Glenn Howells Architects offices in London. In attendance were representatives from the master planning and client teams as well as representatives from the GLA, LBN, LTGDC and other stakeholders such as TFL and the local PCT.

The workshops followed an informal process consisting of presentations from the master planning team, citing design work undertaken to date, followed by an open debate and ideas session whereby themes of urban design, block typology, scale, connectivity and land use were developed.

Workshops were held on the dates below:

Workshop 01	19th July 2010
Workshop 02	10th August 2010
Workshop 03	01st September 2010
Workshop 04	22nd September 2010
Workshop 05	19th October 2010
Workshop 06	24th January 2011
Workshop 07	22 February 2011
Workshop 08	14 April 2011

Following each meeting, ideas debated were developed in detail by the master planning team and each strategic development and design amendment highlighted at the following workshop. This interactive workshop process is recognised as having significantly influenced and positively developed the emerging masterplan; at both at a strategic and micro level.

Specific details of the workshop process are outlined in further detail later in this report.



Family Housing

CABE

On 20 October 2010 the Culture Department, DCMS, announced it would withdraw funding from CABE as part of a the coalition governments Comprehensive Spending Review.

The Minoco team maintained a dialogue with CABE throughout the pre application process with the aim of a design panel review occurring before the outline planning application submission in May 2011.

Unfortunately from October 2010 through May 2011 CABE were not in a position to commit to a design review of the emerging masterplan and regrettably it has not been possible to introduce the project to the commission before the application was due for submission.

As part of the ongoing open and collaborative design process, which has greatly benefited the masterplan development to date, it is hoped that in the future Minoco may be presented to CABE to gain their feedback as well as to inform emerging phase 1 designs in their wider master planned context.

LBN DRP

In tandem with the workshop process the emerging masterplan design was tabled at a number of LBN Design Review Panel (DRP) presentations. As with comments received from the statutory bodies, recommendations and issues raised by the DRP were instrumental in informing the developing masterplan.

Where appropriate the DRP comments received by the masterplanning team have been included in this document alongside comments made during the workshop process. Issues raised and the masterplans response to them are discussed in the body text and supporting illustrations have been provided to fully explain the design response and processes undertaken.

DRP sessions were held on the dates below:

Review 01	18th November 2010
Review 02	01st March 2011
Review 03	12th April 2011

Mayor of London

On 30th November 2011 the masterplan proposals and strategic site intent were presented to the Mayor of London.

The Mayors initial assessment of the scheme was received on 23rd December 2010 commenting on the land use principle, urban design approach, climate change mitigation / adaptation, housing and affordable housing, transport and conclusions on the design.

While the masterplanning team regonises that the design was commented on at a early stage; releasing of the site from Strategic Industrial Land (SIL) status, the proposal for a residential lead mixed use development and design rationale were supported in principle.





Pocket Neighbourhood Square



Strategic Planning Policies and Material Considerations

Relevant planning policies and material considerations for the Minoco application are noted below:

Economic development	London Plan; the Mayor’s Economic Development Strategy; draft	Transport	London Plan; the Mayor’s Transport Strategy; PPG13	Tall Buildings / Views	London Plan; RPG3A, View Management Framework SPG, draft Revised View
Housing	London Plan; PPS3; Housing SPG; Providing for Children and Young People’s Play and Informal Recreation SPG; Housing Strategy; revised interim Housing SPG	Cross Rail	London Plan Alteration; revised draft Cross Rail SPG (March 2010)	Ambient Noise	Management Framework SPG
		Parking	London Plan; the Mayor’s Transport Strategy; PPG13	Context	London Plan; the Mayor’s Ambient Noise Strategy; PPG24
		Employment	London Plan; PPS4; Industrial Capacity SPG	Environment	Planning for the Historic Environment Development and Flood Risk
Affordable Housing	London Plan; PPS3; Housing SPG, Housing Strategy; revised interim Housing SPG	Access	London Plan; PPS1, PPS1 supplement; PPS3; PPG13; PPS22; draft PPS Planning for a Low Carbon Future in a Changing Climate; the Mayor’s Energy Strategy; Mayor’s draft Climate Change Mitigation and Adaptations Strategies; Mayor’s draft Water Strategy; Sustainable Design and Construction SPG	The draft replacement London Plan (October 2009) for consultation and London Borough of Newham Core Strategy draft are also a material considerations.	
Density	London Plan; PPS3; Housing SPG; revised interim Housing SPG			Additionally the Newham UDP comments on economic development, housing, affordable housing, density, mix of uses, regeneration, transport and employment.	
Urban Design	London Plan; PPS1				
Mix of Uses	London Plan				
Regeneration	London Plan; the Mayor’s Economic Development Strategy; draft replacement Economic Development Strategy				





A New High Street





## Masterplan - A wider vision

Generally in London the opportunity for a joined-up riverside environment along the River Thames has largely been missed because high value development enclaves, mostly concentrate on the relationship of the site to the river and not the east-west connections. There are many examples of the failure of this approach in west London.

In east London there is the opportunity to realise what has been lost in the west, a 10-mile long tapestry of walkable developments on both sides of the river stretching from Southwark to beyond the Thames Barrier, taking advantage of under used land.

But, to realise this fantastic opportunity, we need a really clear vision, bigger than a masterplan, which prevents individual developments creating isolated pockets of housing as the early enterprise zone Docklands residential developments did in the 1980's.

This vision should seek to develop contiguous, integrated places, each with their own character and centre – places to live, work and play linked together to make the most of the river for amenity and transport.

The principles that would unlock this potential are:

- Developments should look east and west
- Parks and open spaces, sometimes but not always linked to the river should be part of the tapestry
- The emphasis should be on the open space rather than buildings to ensure there is a successful pedestrian and cycle network stretching along both sides of the river
- New opportunities to link the north river bank as well as generating and reinforcing connections north into the wider community within the London Borough of Newham
- Access to the river

The Minoco site is located both physically and strategically central to achieving the goals outlined above. To this regard the masterplan has been developed to respond and successfully develop both within the constraints of the site boundary but also to illustrate the wider extended vision for this vital site.

Resulting from the above a “Vision Masterplan” drawing has been developed clearly describing how the language of the emerging Minoco masterplan may extend principally west, past Lyle Park to Peruvian Wharf; to create the opportunity to generate a joined-up exciting riverside for the London Borough of Newham.

When illustrated in this document the wider vision masterplan has been shown continuous with the emerging Minoco masterplan. The diagram above defines the extent of the red line (Minoco) application scheme and the wider Vision masterplan.

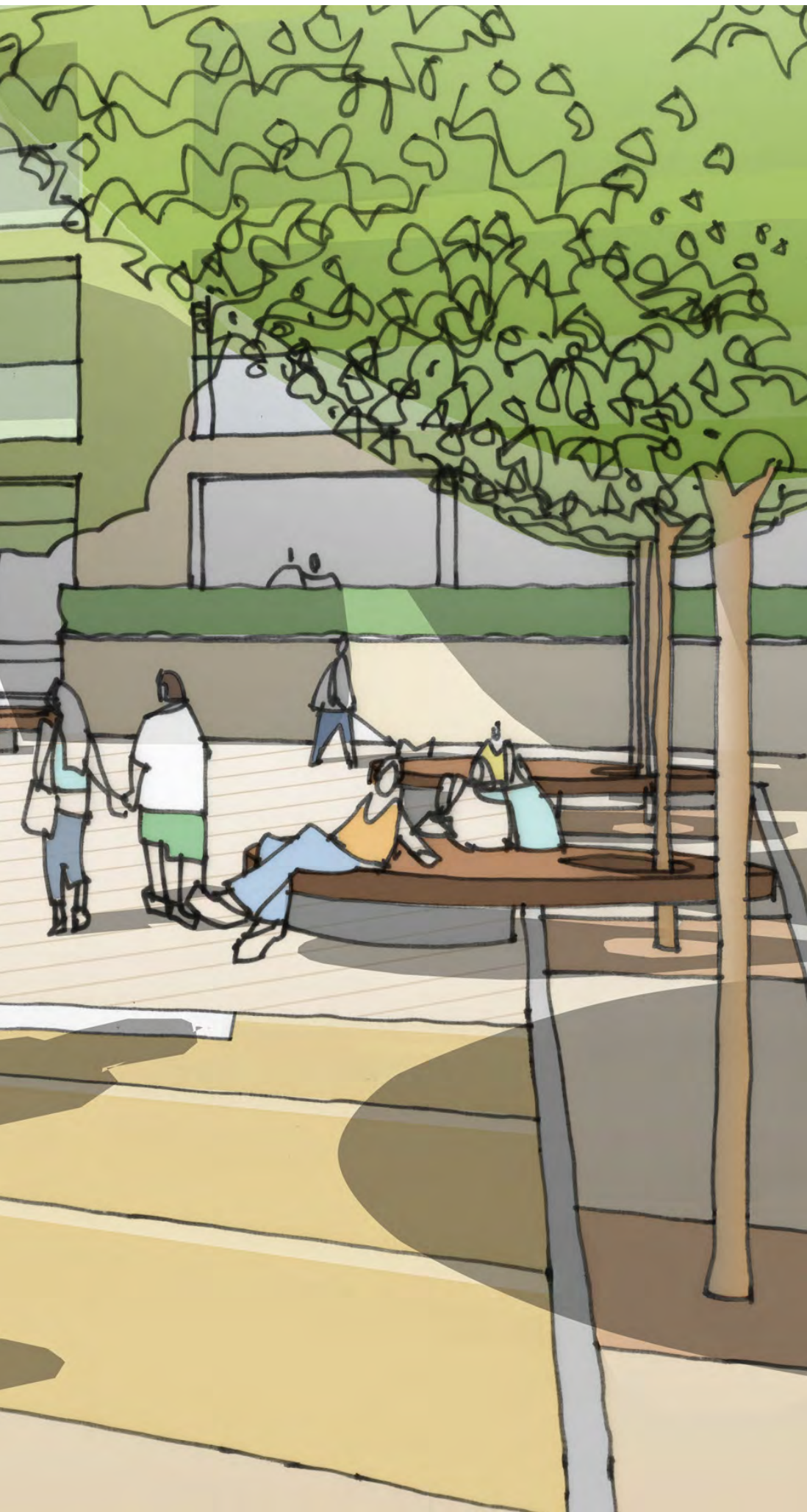
Although sometimes drawn in this document the Vision masterplan anticipates and allows the future extension and connection of the scheme further west along the river incorporating sites such as Peruvian Wharf where appropriate, but for the avoidance of doubt the wider vision masterplan is not sought for approval in any regard by this planning application, it is an indicative and illustrative plan only.





Pocket Neighbourhood Square





## Brief

The client's brief to the master planning team was to explore the following issues:

- Provision of good quality workspace allowing the possibility of more and better jobs
- Provide attractive family housing at a mix of tenures
- Accessible / walkable community heart to the development
- An accessible river front
- Develop a design which sits well within its own site but also respects neighboring context
- Investigate and design and appropriate mix and range of unit types for the residential accommodation
- Develop a better understanding of real community value
- Scale testing: models / visual montages
- Explore a viable flooding strategy
- Address the DLR line as well as the river and other existing constraints
- Establish a clear urban strategy for the site acknowledging the issues above
- Prepare easily understandable information
- Provide the range of facilities and services to support a new community
- Develop a clear and appropriate open space strategy
- Develop a clear connections strategy for the site in its wider context

This document follows a logical progression through, the issues above and in conclusion presents the Minoco masterplan incorporating the aspirations of the brief.

The plan presented in this report illustrates a body of work that aims to present a solid grounding and set of parameters within which the further detailed development of a comprehensive and appropriate urban architectural and landscape language may be formed which easily facilitates the successful development of the site to realise the vision and brief of the masterplan.

















## Location plan

The photograph adjacent illustrates the location of the Minoco site within the London Borough of Newham.

Within the context of a wider masterplan vision for the Royals, land holdings held by the Ballymore Group present a clear and unique opportunity to develop a substantial length of Thames River frontage to fully realise the opportunity for the Royals.

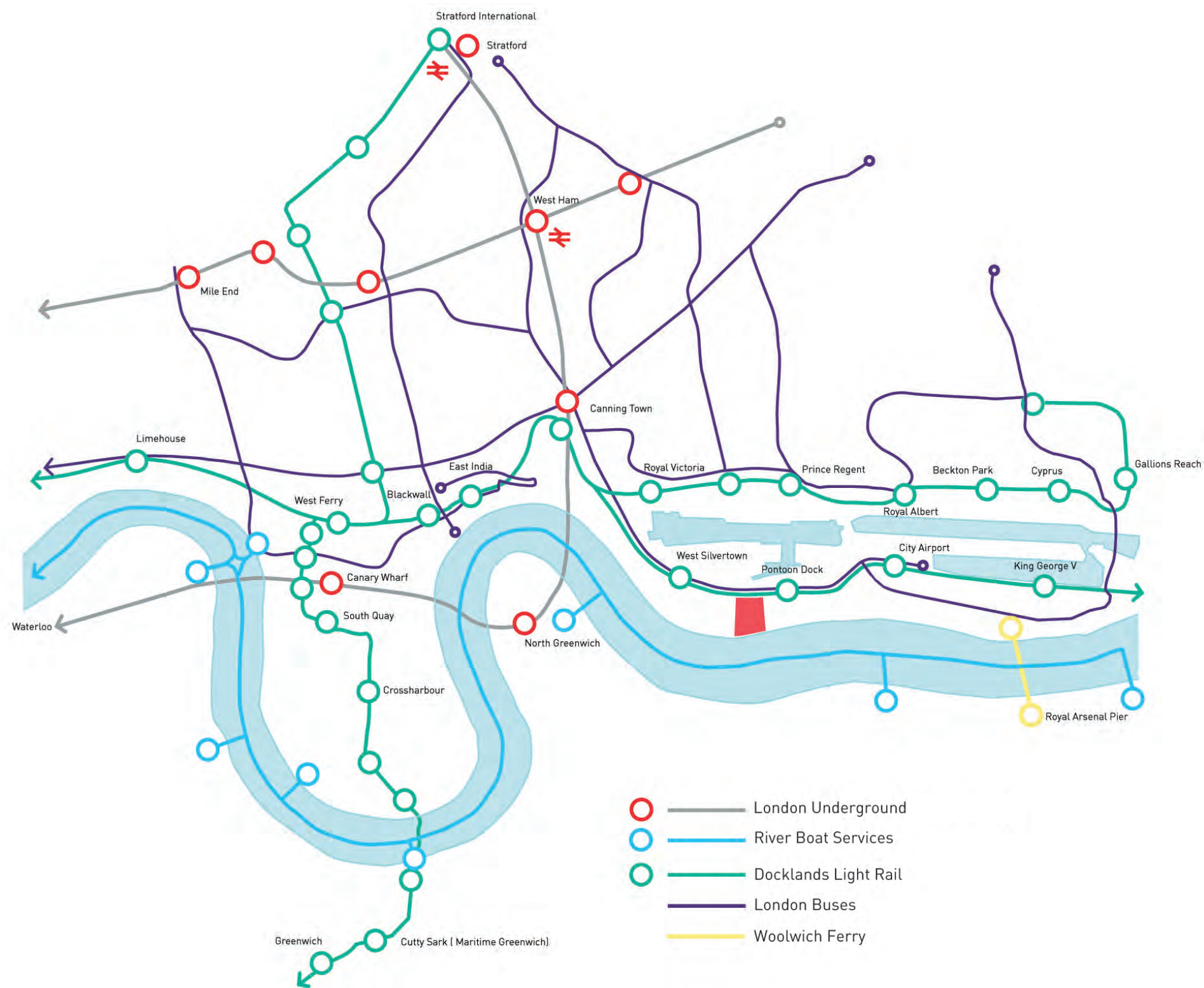


Minoco Site



Land owned by Ballymore





Existing Site Transport Connections

## Transport and Connections

The Royal Docks have benefited from significant public investment in the DLR and Crossrail, which will provide excellent accessibility to Canary Wharf, central London and the southeast of England.

The closest Crossrail station will be at Custom House and is expected to be complemented with feeder bus services to provide access for current and future Newham residents and businesses. Latent provision has also been made for a future DLR station on the Woolwich branch to the west of the site.

London City Airport provides both national and international connections, along with related business opportunities.

The development of Minoco will maximise the benefits of these nodes, linking with Canning Town and supporting the bus, cycle and river networks, encouraging a greater use of the waterway and riverside through improved pedestrian links and an extension to the current river bus routes.

The waterfront will also be utilised fully by the proposed River Boat Service from Silvertown Pier at Minoco to key destinations further up river. Consent for the pier is being considered as a separate planning application already submitted to LBN and planning permission is not sought as part of the Minoco application.

## The Royals - A Vision

The Royals have been developing for over two centuries. First managed as areas of pasture maintained in areas of a low lying flood plane the area changed drastically in the 18th and 19th centuries.

Throughout the 18th and 19th centuries the industrial revolution necessitated land east of the city be developed into industrial factories and warehousing cumulating in the development of the Royal Docks which remained in use through to the 1980's.

As trade declined and Britain's economic focus shifted the Royals steadily lost its focus as a centre for import and export. This steady decline from an industrial led centre, has left a legacy of dereliction and vacant land which is only recently being positively addressed in proposals for the Royal Docks Opportunity Area.

Now the Royals area is undergoing significant change. The former historic industrial land uses are relocating to more appropriate sites and a new mixed use community is emerging including significant residential developments, led by public investment in the DLR and attraction of a riverside setting.

The airport, ExCeL and the University of East London are amongst the new businesses. Britannia Village, Barrier Point East and Tradewinds and the land east of ExCeL include significant new residential consents.

There have been more recent consents at Silvertown Quays, Minoco Wharf and Barrier Park East. These more recent developments are more inclusive, and have allowed external site linkages to inform the layout and uses more than the earlier schemes at Barrier Point and Tradewinds. A new mixed use community is emerging.

The Minoco site in this context provides the opportunity to connect existing communities with new areas of development on both sides of North Woolwich Road while creating a diverse local and intensely active new urban quarter of London.





- Britannia Village
- River Thames
- Peruvian Wharf
- Royal Victoria Dock
- Future Development Site
- Vanesta Wharf
- Minoco Wharf Oil Pontoon
- Sunshine Wharf
- Manhattan Wharf
- Deanston Wharf
- Thames Barrier
- Thames Barrier Park
- Minoco and Crescent Wharf
- Lyle Park
- DLR Viaduct
- North Woolwich Road
- Barrier Point Residential Development



## Existing Site

The application development site covers 15.2 hectares of brown field land and comprises three former wharves; Vanesta and Crescent Wharves to the west and Minoco Wharf to the east, none of which have the status of safeguarded wharves. The western area of the site houses a number of warehouses and industrial buildings; all of which are either derelict and / or in a poor state of repair. The remainder of the site comprises cleared vacant land and unused temporary structures.

The site is situated in the London Borough of Newham (LBN) and all but the extreme eastern part of the site is also in the administrative area of the London Thames Gateway Development Corporation (LTGDC). The River Thames is located to the south, Barrier Point Road to the east and North Woolwich Road to the north.

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.

The site is currently accessed from North Woolwich Road. This is the primary route connecting the Royals to Canning Town via Silvertown Way. Along North Woolwich Road to the East, Pontoon Dock, Docklands Light Railway station is located. The Thames Barrier is in close proximity to the south of the site where the river width reaches 550 metres. There is currently no public access to the river front through the site.

The Barrier Point residential development comprising mainly 7 - 8 storeys with an 18 storey tower on the river front, is located to the east of the site on the former Prince Regents Wharf, overlooking Thames Barrier Park. The building is a white rendered linear block running the full length of the site with stepped terraces facing Barrier Park and is raised above Minoco Wharf by several metres. The building turns its back on the Minoco Site and is truly a barrier. Parking for the apartments directly overlooks the Minoco Wharf site.

Thames Barrier Park is a 9 hectare park which opened in 2000. It is owned and maintained by the London Development Agency and includes a riverside walk and a sunken landscaped garden overlooking the Thames Barrier. The park also incorporates formal and informal planting as well as a children's playground and a hard surfaced area for basketball.

The Kierbeck Business Complex, which consists of warehouses and industrial units used by small businesses and for storage is an indent into the norther perimeter of the site.

Deanston Wharf stands as a brick warehouse building running approximately 350m uninterrupted along the entire length of the western site boundary. The building is in a poor state of repair.

To the west of Venesta Wharf is Lyle Park, which was established in 1924, by Tate and Lyle for factory workers within the Royal Docks area. The park comprises open green space, play areas, a football pitch, tennis courts and formal and informal planting.

To the north of the site are located a number of warehouses and former industrial buildings, one of which is Grade II listed, Silo D. To the north west of the site, adjacent to the Silvertown Quays area, is located Britannia Village a residential development which also contains a primary school. This development began in 1994 and comprises private and social housing as well as community facilities such as a village hall and a health centre.





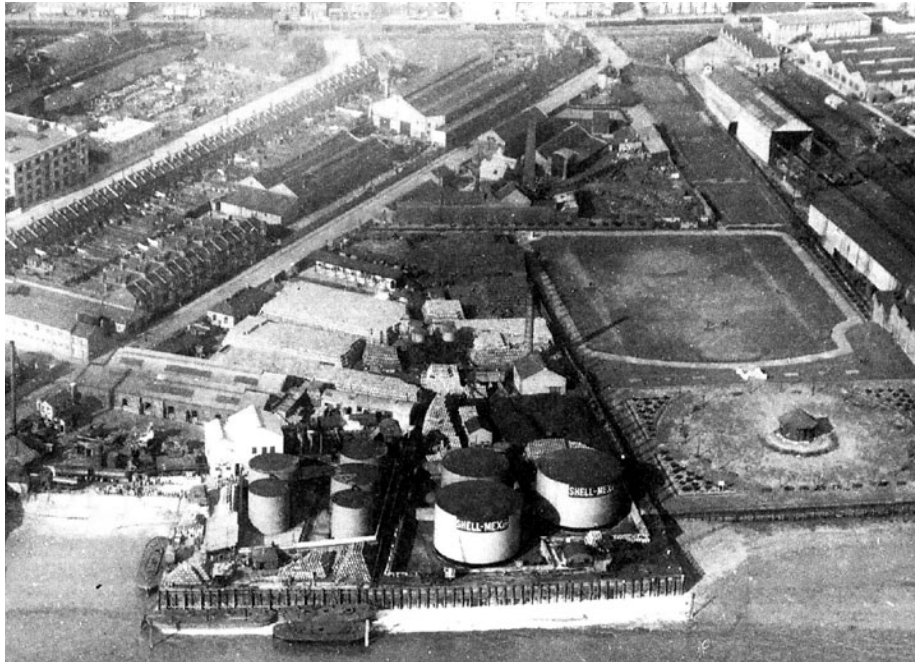
Knight's Road c1950



Aerial Photograph c1945



Aerial Photograph c1980



Lyle Park Aerial photograph c1940



Aerial Photograph c1940



Boxley Street c1959



## Site History

The Royal Victoria Dock, opened in 1855, was the first dock built expressly for steam ships and the first to be connected to the national railway system through the North Woolwich branch of the Great North Eastern Railway.

The Graving and Pontoon Docks were the first to use hydraulic power to raise ships out of the water for maintenance. The King George V Dock was opened in 1921, completing the Royal group of docks which formed the largest area of impounded water in the world.

The demand for land for factories here was encouraged. One of the first to arrive, in 1852, was Samuel Silver's waterproof clothing works which gave its name to the Silvertown district. C.J.Mare built an iron works and ship-building facility at Orchard Yard, which became the world renowned Thames Ironworks. Important among the industrialists were Henry Tate and Abram Lyle who brought their refineries to the area. All this and the Royal Victoria Dock, created employment and very soon there was a huge demand for housing to accommodate the workers and their families. Thus originated new settlements such as those at Hallsville, Canning Town and North Woolwich and before long there was housing in much of what is now Custom House, Silvertown and West Silvertown.

By the 1880s the area had become a major centre of industry attracting people from all over Britain to work in the factories, docks and the Beckton Gasworks. Minoco Wharf was in the mid 1890s, an oil storage depot operated by Shell Lubricants. The adjacent Crescent Wharf was established as a chemical works in the 1890s by Brunner Mond Ltd.

Many of these industries were unhealthy or dangerous. This was highlighted on 19th January 1917 when 50 tons of TNT blew up in the Brunner Mond & Co works in Crescent Wharf, which had been given over to making munitions for the First World War. The noise of the greatest explosion in London's history could be heard as far as Southampton and Norwich. Upwards of 70,000 buildings were damaged and 73 people were killed.

Traffic through the Royal Docks reached its peak in the 1950s and early 1960s. Following the development of containerisation, technological changes and with EEC membership, Britain's trade rapidly declined. The Royal Docks were closed for general cargo handling at the end of 1981.

Such was the situation in mid 1981 when the London Docklands Development Corporation was established to secure the regeneration of the area. This was a response to a huge decline in the economy of the area brought about by the progressive closure of the docks from the 1960s onwards.

Among the projects on the new Corporation's early agenda was the proposal to build London City Airport. This was put to the Corporation in November 1981. It was pursued with great determination and following a public inquiry in 1983 work started on building the new facility in 1986. The proposal to build London City Airport was a radical break with the past and opened in 1987.

In addition, there have been a number of other significant developments in this area of the Royal Docks most notably the Thames Barrier completed in 1984.

ExCeL, the large-scale exhibition Centre on the north side of the Royal Victoria Dock opened in November 2000. It represents London's largest single site exhibition centre, with 65,000 square metres of column-free exhibition space. The listed warehouses at ExCeL west were converted at the turn of 2002 / 03. They provide a theme pub and restaurant, a nightclub, offices and apartments.

Thames Barrier Park opened in November 2000. Key features are a sunken landscaped garden, the 'Green Dock', a riverside promenade, cafe and a children's play area. The sites fringing the park are allocated for residential development; Barrier Point to the West and Tradewinds to the East.









### Existing Site Photographs

The following pages illustrate a number of existing views into and out of the Minoco Site. The photographs have been grouped according to views into and out of the northern site edge as well as views into and out of the southern site edge.





01 View east along northern site boundary from Barrier Point



02 View north along existing access road towards ExCeL



04 View south from North Woolwich Road entrance into Minoco site



05 View of existing buildings in Vanesta Wharf looking south





03 View of west elevation Barrier Point development



06 View west along North Woolwich Road to Canary Wharf



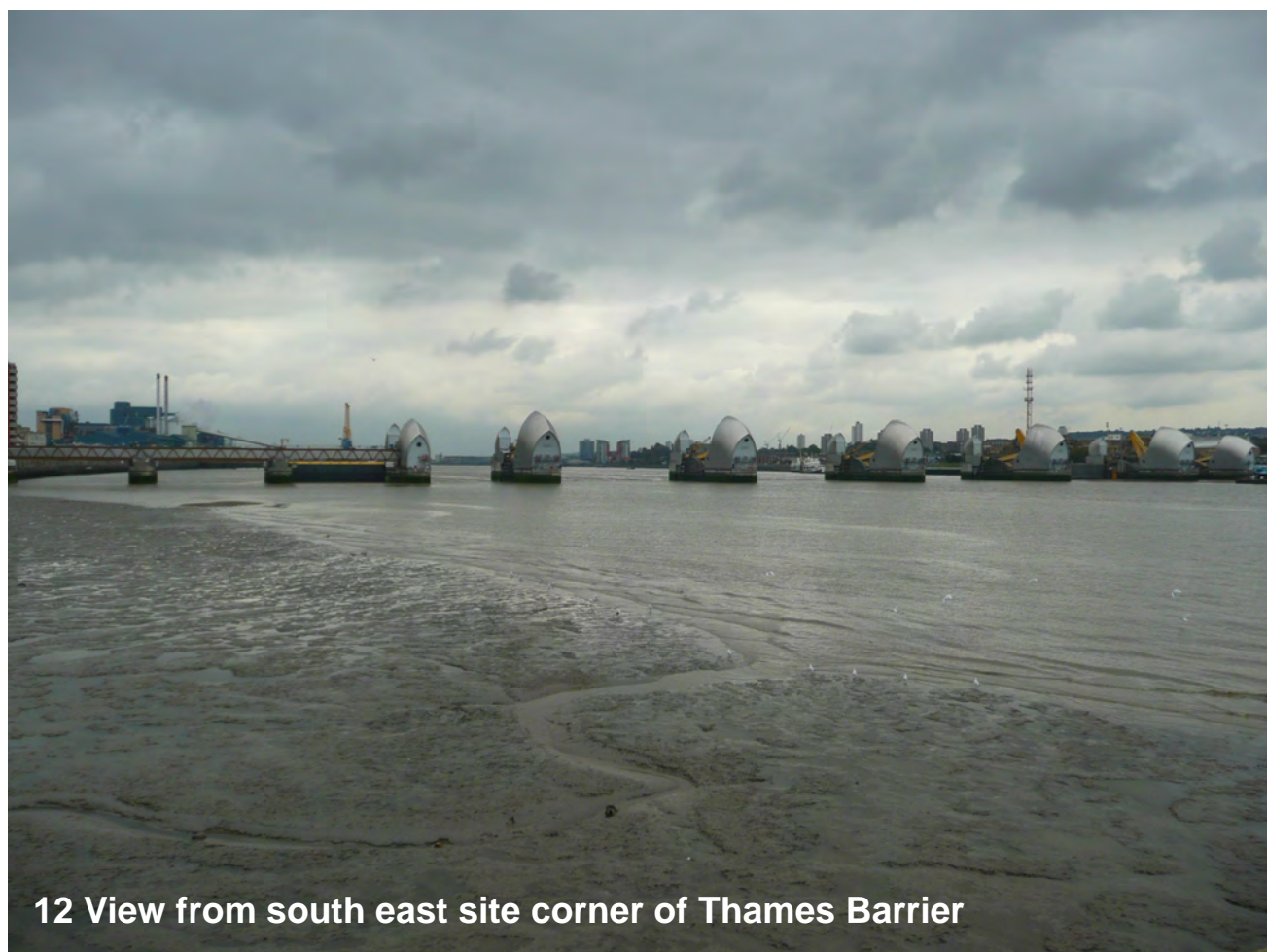








**09 View from souther site edge towards Minoco Wharf Oil Pontoon**



**12 View from south east site corner of Thames Barrier**





**Constraints**

A number of constraints exist for the Minoco site, each of these has been responded to in a positive way by the emerging masterplan.

A non exhaustive list of site constraints has been illustrated in the diagrams to the right.

**DLR**

A Docklands Light Railway viaduct runs alongside the northern part of the site and imposes a constraint to the proposed masterplan. A 5m easement exists at either side of the DLR structure resulting in a no build zone. The DLR viaduct varies in height across the site from 10m to 15m.

While the DLR is elevated infrastructure, the supporting elements at street level interrupt the existing links running north / south through the site, often with posts aligning with existing road junctions and crossing points into the Minoco site.

**Neighbouring + Listed Structures + Land Ownerships**

The Works War Memorial is a listed structure located along the northern site boundary. Commemorating the tragedy of WW1 and the Silvertown explosion of 1917 the memorial may benefit by being relocated to a more appropriate location within the future development.

The site is bounded by a number of existing buildings and varying edge conditions. Each of these has been individually responded to and has informed the masterplan design.



DLR Constraints Location Plan



Neighbouring Buildings + Listed Structures Location Plan



Existing Levels

The existing site levels are below the 1 in a 100 year floor level as advised by the Environmental Agency. The northern part of the site is the lowest level and will need to be raised up to adhere to the requirements set by the EA for new developments.

The diagram below illustrates the change in topography across the site, from dark red +5m AOD through to the existing levels at North Woolwich Road of +1.5m AOD, illustrated in light red, which will need to be raised as part of the proposed development.



Levels Plan

River Wall

The river wall in its current state is in a poor condition and will need to be repaired / reinstated across a substantial length of site frontage. Having the ability to improve the flood defenses also allows for opportunities to emerge for the new Minoco riverside promenade.

The masterplan design for the riverside will aim to make best use of this constraint come opportunity by providing an exciting new riverside with tidal terracing and landscape features.



River Wall Location Plan

Civil Aviation Height Restrictions

Due to the close proximity of London City Airport and the airplane flight path there is a height restriction across the site.

The area illustrated in dark red is most limited by the flight path eastbound onto and westbound off the runway while the restriction reduces dramatically the further west and south you move across the site.



Civil Aviation Restrictions Plan



**Opportunities**

In addition to constraints informing the design the masterplan seeks to clearly identify the opportunities presented by this unique site location.

Some of the principle site opportunities which may be responded to by the Minoco masterplan are illustrated right.

**Transport Nodes**

The two existing DLR stations, Pontoon Dock and West Silvertown, are a great opportunity to connect the city and surrounding areas with the site and give the site good PTAL levels. The site is large enough to allow buses to pass through, further enhancing public transport accessibility.

The addition of a new pier along the southern river bank will create a new node of activity within the site. It will also provide a physical link to the river and improve the connectivity of the site. Connections across and through the site joining the main transport nodes are explained in further detail later in this document.

**Public Amenity**

Thames Barrier Park and Lyle Park offer a great opportunity to be connected by a new Minoco riverside walk. This linear amenity offer may be further enriched by the addition of further green spaces as well as urban squares within the site itself.

The current amenity strategy and distribution of future spaces are explained in further detail later in this document.



Transport Nodes

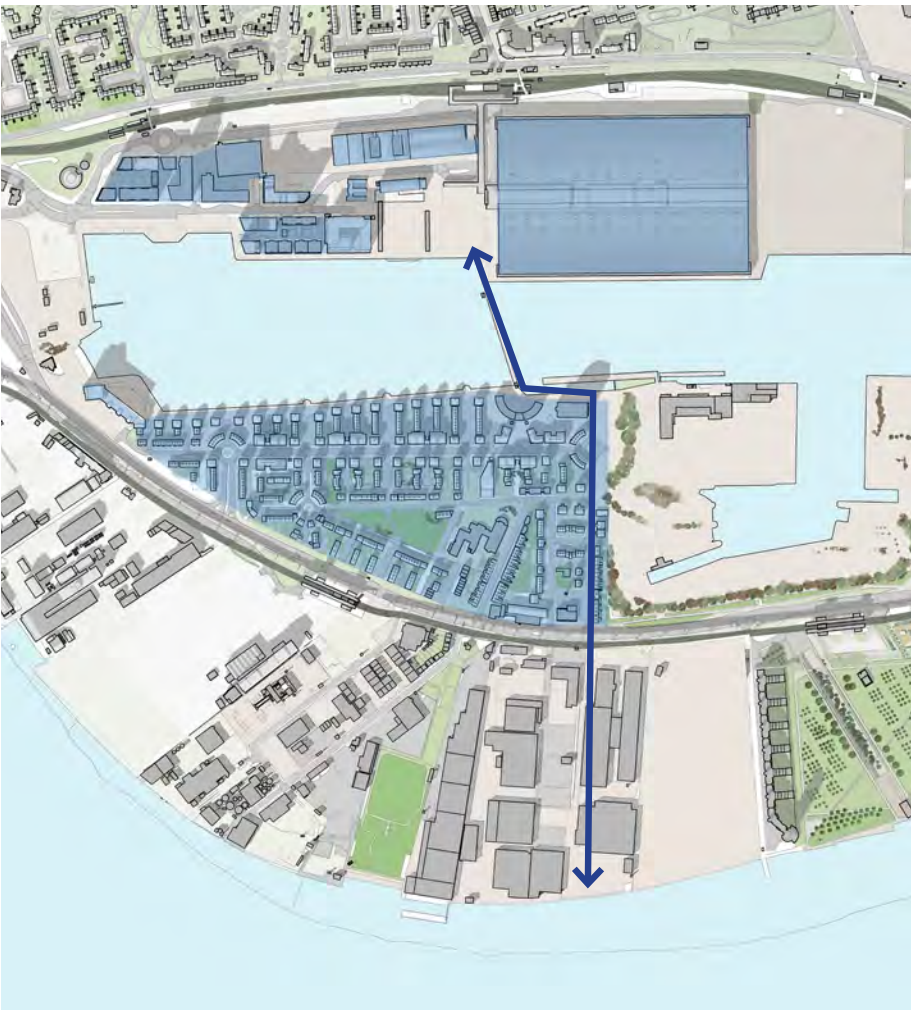


Amenity



Connections North

The close proximity of Britannia Village and ExCeL presents a great opportunity to provide links into the proposed site. By improving connections into the local areas, Minoco seeks to enrich and enhance the quality of surrounding developments.



Connections North

Future Development

With the potential future development of sites adjacent to the masterplan site it will be a great opportunity for any future schemes to integrate with the Minoco proposals.

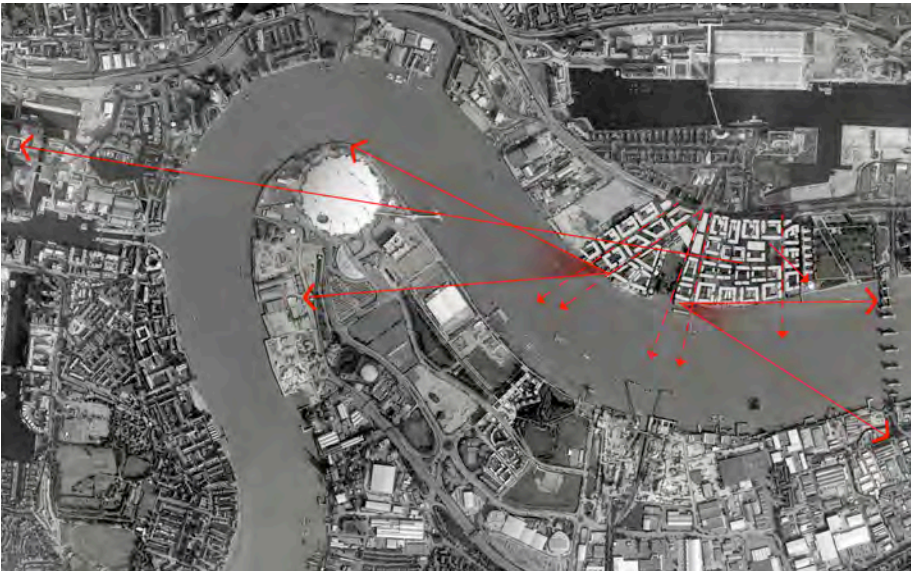
Connecting in this way will not only enrich the masterplan proposals but serve to provide an integrated and wholistic movement strategy for the Borough as well as improving the offer of any future development site.



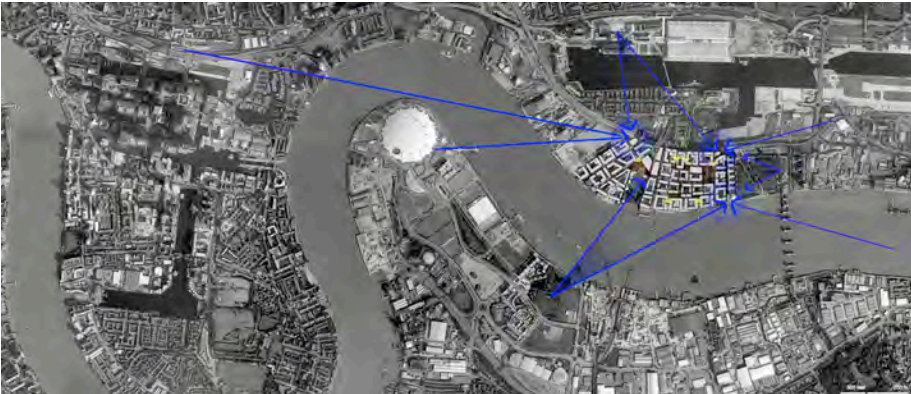
Future Development Site Location plan

Views

There are dramatic views of the Canary Wharf skyline, the Millennium Dome and the Thames Barrier visible at various points thought-out the site. These views are great opportunities to celebrate the identity and characteristics of the location of the site and its history.



Views Out



Views In















## Concept

### “To create a landmark development not a landmark building.”

Modern developments along the River Thames typically respond to the river only, aspiring to create value by providing a view of the waterfront. Resulting from this approach developments inevitably respond to a north south axis running from river to road. They sit as alien forms within an urban context and provide limited or no way for adjacent future development of any kind to integrate their built form into a holistic urban framework.

### “Making another piece of the city.”

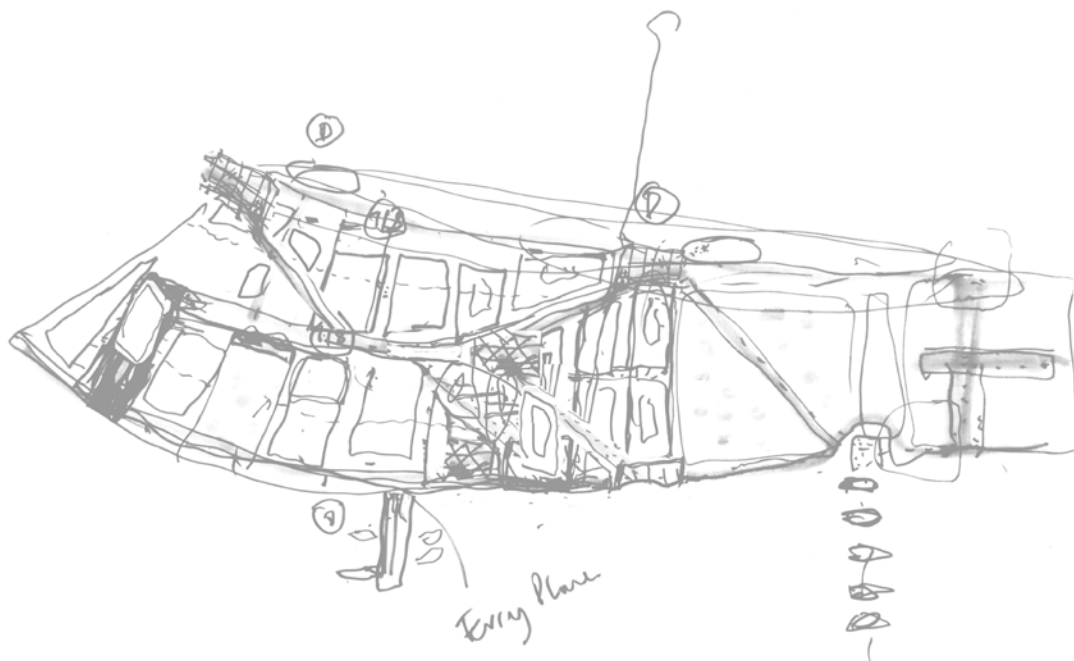
Conceptually the site has been developed as a permeable piece of urban realm with high quality public and private spaces formed by definite built edges which seeks to add as much value into the middle of the masterplan as can be achieved along the river front.

This vision is to be achieved by the implementation of a number of strategic site connections formed by the careful design of city scale urban blocks.

The connection of principal importance is the introduction of a new central east / west vibrant high street as a community focused heart to the development. This proposed main street connects the development strategically with all surrounding transport nodes and public amenities as well as allowing a focused connection to Britannia Village and ExCeL to the north. Its also serves to add value to the middle of the site creating a layered tapestry of urban public realm draped around this main route allowing smaller more residential friendly streets and squares to organically grow outwards to the river and North Woolwich Road.

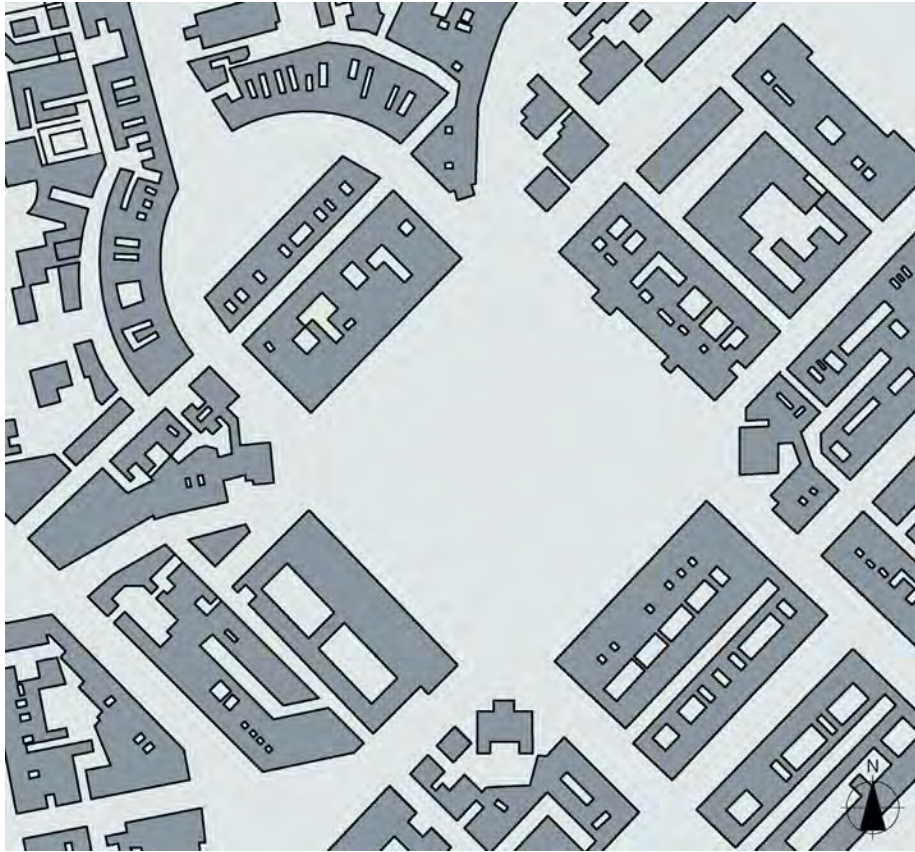
Towards the eastern and western site boundaries the geometry of the high street changes in response to the desire line connections of new Silvertown Pier as well as the important connection to the river and frontage as well as Pontoon Dock DLR station.

To inform the main east west connections the design team has analysed a number of notable character areas of London in order to better understand scale and massing, urban grain and street layouts which have contributed to the continuing success of London and to the enriching character of these areas. The outcome of this analysis process has clearly informed the development of the housing lead urban blocks proposed within the masterplan.



Concept Sketch





Belgravia Figure Ground Plan



Belgravia Character



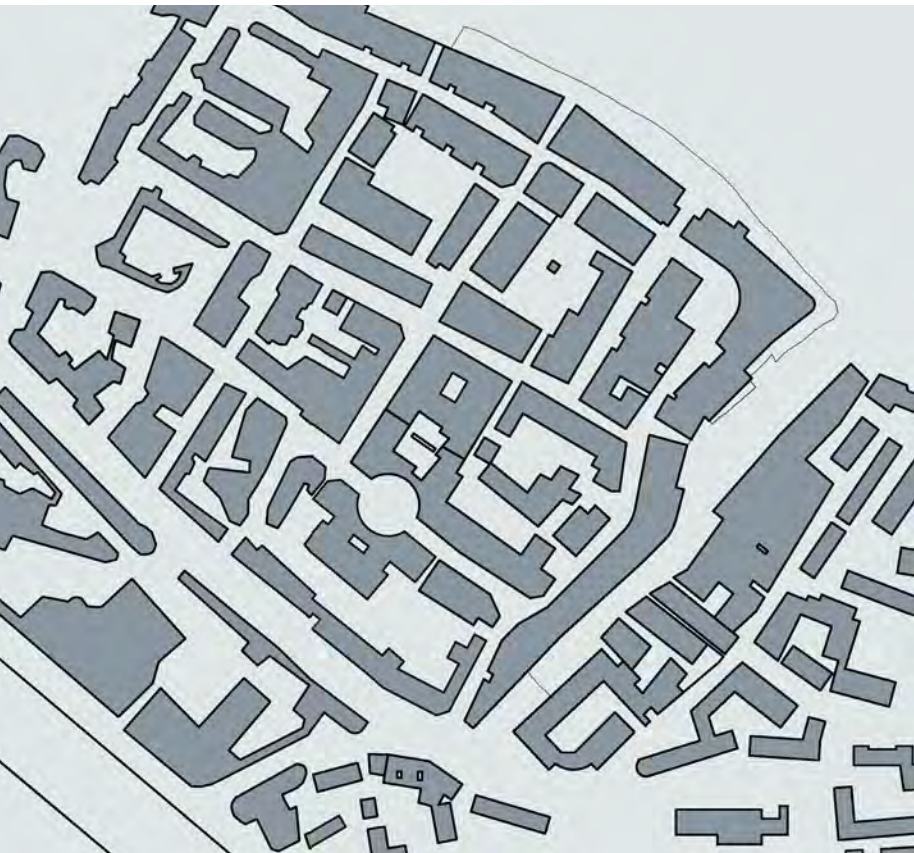
Portland Place Figure Ground Plan



Fitzrovia Figure Ground Plan



Fitzrovia Character

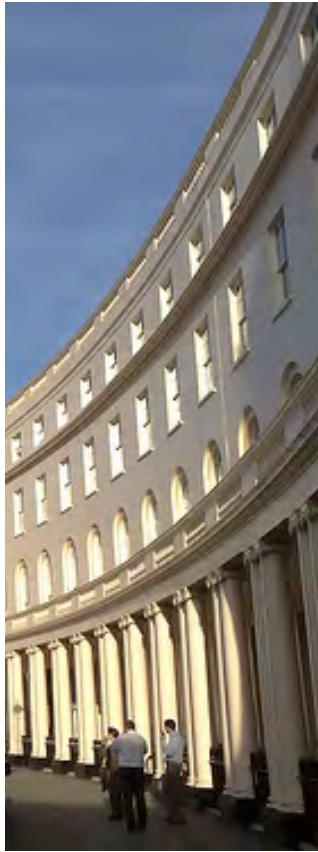


Shad Thames Figure Ground Plan





Portland Place Character



### Character

Creating the best possible framework within which a diverse but coherent character for the Minoco master plan can emerge and organically grow will be critical to the success of the scheme.

The development seeks to challenge the idea that contemporary urban design should reinvent and recompose the clarity of the streets and squares of London as a traditional city.

As a starting point therefore the masterplan team has developed an open critique of historic urban areas of west London based on a careful analysis at the macro scale as well as at the more intimate setting of the neighborhood, street and building.

The team has been inspired by the success of London's Great Estates with their uncomplicated typologies of streets and squares, which create a rich and subtly diverse tapestry of urban realm hinged around many of the most successful connections and thoroughfares used in the city.

The diagrams adjacent illustrate a portion of the urban tissue studies undertaken which after debate and input throughout the GLA, LBN and

LTGDC workshop process, have been able to focus on the great estates such as Portland Place, Belgravia and Fitzrovia.

Additionally character areas discussed during the workshop process, typically from the C20th have also allowed the team to clearly evaluate how urban masterplans have previously failed in their aspirations to deliver a rich urban environment.

Collectively the wider team views these 'enriching, valuable and defined neighbourhoods', of notable merit in their city contexts and it is recognised how they stand in opposition to a mass of modern exclusive and closed communities which remain disjointed from the normal patterns of London.



Shad Thames Character









## Blocks + Squares

Modern cities and the character of the development require a reconciliation of traditional urban forms with a suitable density in order to occupy and create the footfall needed to animate and complete the community. The success of this aspiration depends upon a clear language of streets, buildings blocks and squares which create both parks and hard landscaped environments.

As with the character areas investigated a comprehensive review of London streets and squares has informed the evolution of the masterplan and in particular the width and scale of these public spaces.







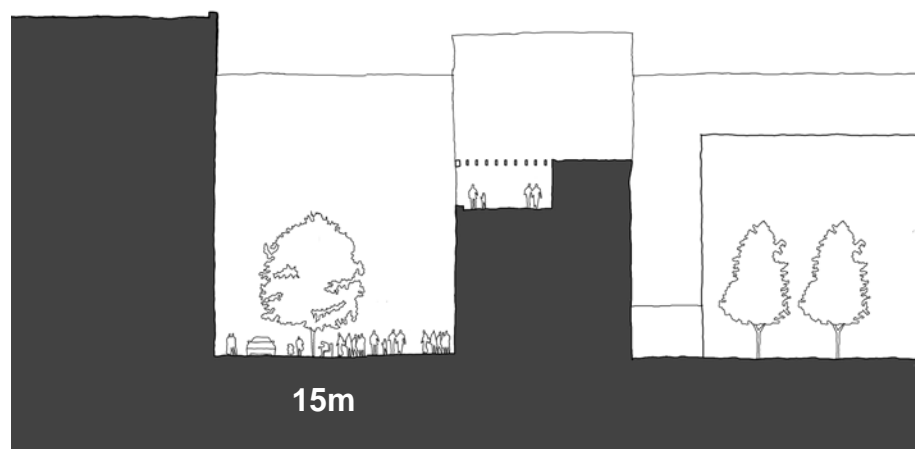




### High Street - Wapping High Street

Wapping High Street benefits from an intimate and characterful urban grain. It's proximity to the river allowed it to have a strong maritime character for centuries, well into the 20th century.

The high street photographed left is typically bounded by 7 / 8 storey warehouse buildings and ranges from 10m to 20m in width. The street width to height ratio is approximately 1:1.



### Lane - Gainsford Street Shad Thames

Shad Thames included the largest warehouse complex in London. Completed in 1873, the warehouses housed huge quantities of tea, coffee, spices and other commodities, which were unloaded and loaded onto river boats. Gainsford Street running centrally through Shad Thames contains buildings ranging from 4 - 7 stories and averages 12.5 to 15m in width.



### Street - Narrow Street

Narrow Street is believed to take its name from the closeness of the original buildings, now demolished, which stood barely a few metres apart on each side of the street.

As it stands today the street has changed notably but it does retain its original character defined by buildings ranging from 4 - 6 storeys typically 15m apart.



### Mews - Lancaster Gate Paddington

Lancaster Gate is a mid-19th century development in the Bayswater district of west central London, immediately to the north of Kensington Gardens. It consists of two long terraces of houses overlooking the park, with a wide gap between them opening onto a square containing a church. Typically the houses are 2 - 3 stories in height at 10m or less apart.

## Streets

A clearly legible and defined street hierarchy will be essential to defining the character and achieving the sense of place within Minoco which the master plan aspires to.

As with the urban grain studies a number of principal London streets have been analysed to inform the proposals on the Minoco site. A strategic approach has been developed which aims to deliver all the masterplans streets within one of four main typologies, listed below:

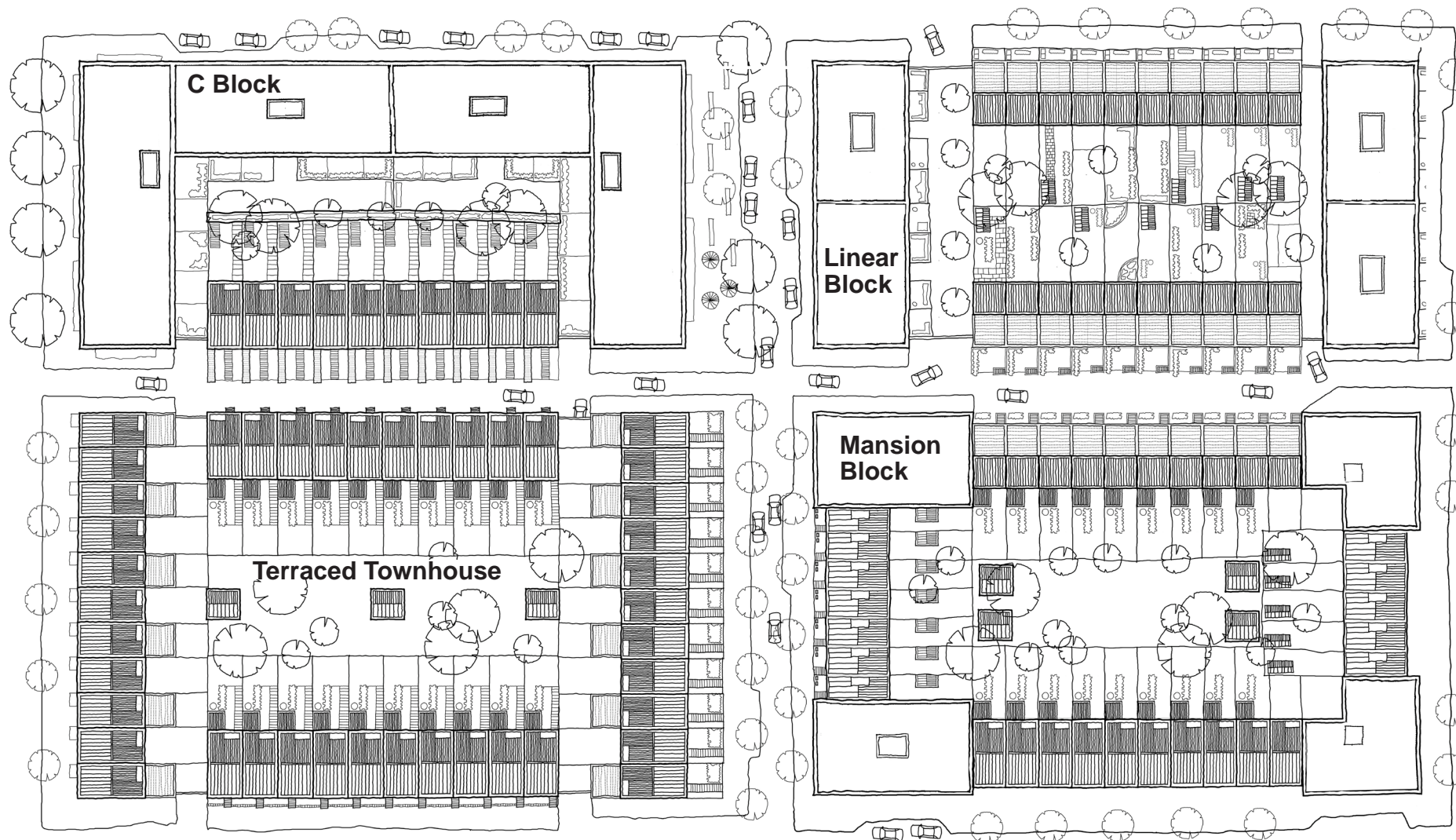
- High Street
- Street
- Lanes
- Mews

From the street analysis undertaken and illustrated left principle defining characteristics of these street environments may be formed and in turn proposed for use within Minoco.









The plan diagram above explores how each of the four major types of residential accommodation found in London sit together to form urban blocks with different conditions of streets. Observations concerning each typology applicable to contemporary building blocks of the Minoco masterplan are noted below:

#### **C Block**

- Broken street frontage
- Change in scale and architectural character
- Opportunity for varying architectural styles along frontage

#### **Linear Block**

- Apartment courtyards may vary in depth according to orientation
- Larger garden spaces to houses

- Houses to vary in height, massing and width across street
- Generally streets have smaller building runs of facades

#### **Terraced Townhouse**

- Broken block plan allows additional light into gardens
- Houses may/may not have defensible spaces detailed to the front
- Private back garden
- Communal garden / courtyards area with play facilities
- Houses vary in height according to orientation and setting

#### **Mansion Block**

- Lower rise corner apartment units provide variety of typology within site
- Opportunity for increased sense of enclosure in courtyard
- Set back in street line add variation to vista
- Apartments turn corners

## **Residential Typology**

As with the design proposals for the urban fabric of the masterplan, the master planning team also seeks to draw on normal and understood forms of residential buildings used not only within London, but widely throughout Europe.

- Mansion Block
- Linear Block
- C Block
- Terraced Townhouse

Basing the masterplan residential buildings around these understood forms of dwelling house will contribute strongly to the establishment of place and a sense of permanence desired within the Minoco scheme.

Using the typologies described left provides a comprehensive and complete set of building blocks from which the masterplan proposals may insure that the planning framework they establish will allow normal, known and successful city blocks to emerge and ultimately provide a place where people want to live.













Minoco Landscaped Courtyard

## Landscape

The masterplan aims to develop a network of new public spaces and legible pedestrian routes which will weave into the existing fabric of the wider Newham context. The new development will promote an urban environment where quality of life and quality of environment are integral.

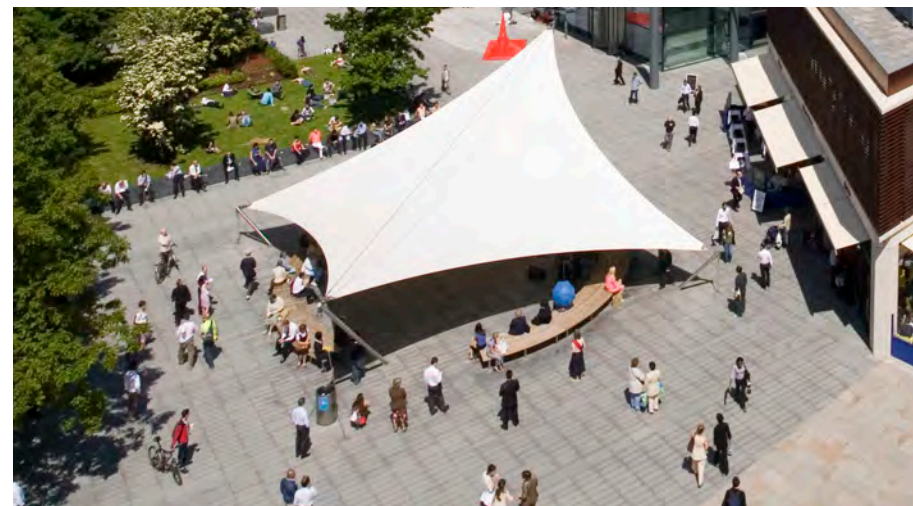
The key objectives for the public realm are to:

- Establish a clear identity for the Minoco Development.
- Improve permeability through the development and strengthen the connectivity across the main roads surrounding the development.
- Achieve a successful balance between pedestrian movement and vehicles.
- Activate the street level use around the proposed buildings.
- Ensure that the spaces around the buildings are designed to afford access and enjoyment for everyone, safely and without prejudice.
- Contribute, and provide a catalyst, to wider urban regeneration proposals.





**Cental Square, Brindleyplace, Birmingham**  
A central main square provides a heart to the development.



**Bishops Square, Spitalfields, London**  
Hard open spaces provide opportunities for events, markets, or public art.



**Coleman Street, London**  
Garden areas and green spaces provide places for people to meet and relax.



**Brushfield Street, Spitalfields, London**  
Ground floor frontages are activated by spill out seating and overlooked by windows above.

## Towards a Successful Public Realm

To ensure that the Minoco Development becomes a vibrant new area it is important to consider the relationship between the buildings and the public realm, which encompasses the streets, squares and open spaces.

Essential to this is recognising that people are interested in peripheral participation of activities and tend to go where they feel comfortable or are part of a larger group. In understanding the needs and patterns of people's behaviour, a language can be developed and used to guide a successful piece of public realm for the development.

A well designed public realm can contribute significantly to the quality of the built environment and play a key role in the creation of sustainable, inclusive, and mixed communities. The proposals illustrated in the masterplan are based on a number of integrated principles to produce an attractive, distinctive and inclusive place which maintains the area's character and identity.

The public realm should be designed to bring these principles together in a cohesive manner that will contribute to the overall character of the development, integrating it within the context of Newham to create a lively, diverse and safe series of places where people will want to live and visit.





**Aachen Train Station**  
Gateways should be well defined.



**Aachen Train Station**  
Clear crossings reinforcing pedestrian movement



**Crispin Place, Spitalfields, London**  
Ground floor frontages are activated by spill out seating and overlooked by windows above.



**Water Fountains**  
Fountains providing a focal point.



**Brindleyplace, Birmingham**  
A journey of sequential spaces will create interest and diversity.



**St Andrews Development, London**  
Walls provide a protective buffer between routes and ground floor occupiers.



### Key Principles

A prerequisite to achieving a successful public realm is to create an inclusive environment in which people will feel comfortable and enjoy spending time in, where they will participate in social activities and help to promote a civic sense of pride.

The design approach attempts to improve and create a successful public realm by following the principles set out below:

- Defining Spaces, Connections and Permeability
- Urban Form
- Designing Streets as Social Places
- Activity and Cultural Strategy
- Comfort and Safety
- Inclusive Play Provision
- Public Art

### Defining Spaces, Connections and Permeability

A legible public realm should be provided throughout the development, allowing pedestrians to understand their position within it and its relationship with the surrounding neighbourhoods.

The design draws on the importance of integrating with the existing local urban fabric to create a regenerating effect and provide a clear cohesive link with the surrounding social structures. The proposals seek to develop dense, busy spaces and environments of high quality, both in their materiality and design.

The public realm follows the concept of creating a ‘serial vision’, in that environments are experienced as a dynamic, emerging, unfolding temporal sequence, with delight and interest being stimulated by contrasts. A journey of sequential spaces that weaves through the site, each with its own individual character, are formed to create a continual interest and diversity.

### The Urban Form

The transition between the public/semi-private/private spaces needs to be carefully considered in order to ensure clarity of definition between them. Ground floor frontages surrounding the public spaces should be active and transparent and streets with residential units can be activated by placing front doors to ground floor units along their length. Windows and balconies facing out onto the streets and open spaces will provide good natural surveillance. When enhancing these streetscapes within predominantly residential areas, it is important to consider a defensible buffer to protect the privacy of occupants and to provide a transitional space between the street and your front door. A predominance of walls or railings could lead to a harsh street environment and best left to the main arterial routes. Minor streets and lanes should be used in conjunction with low garden hedges or planting strips.





**Ashford, Kent**  
Placemaking at key intersections



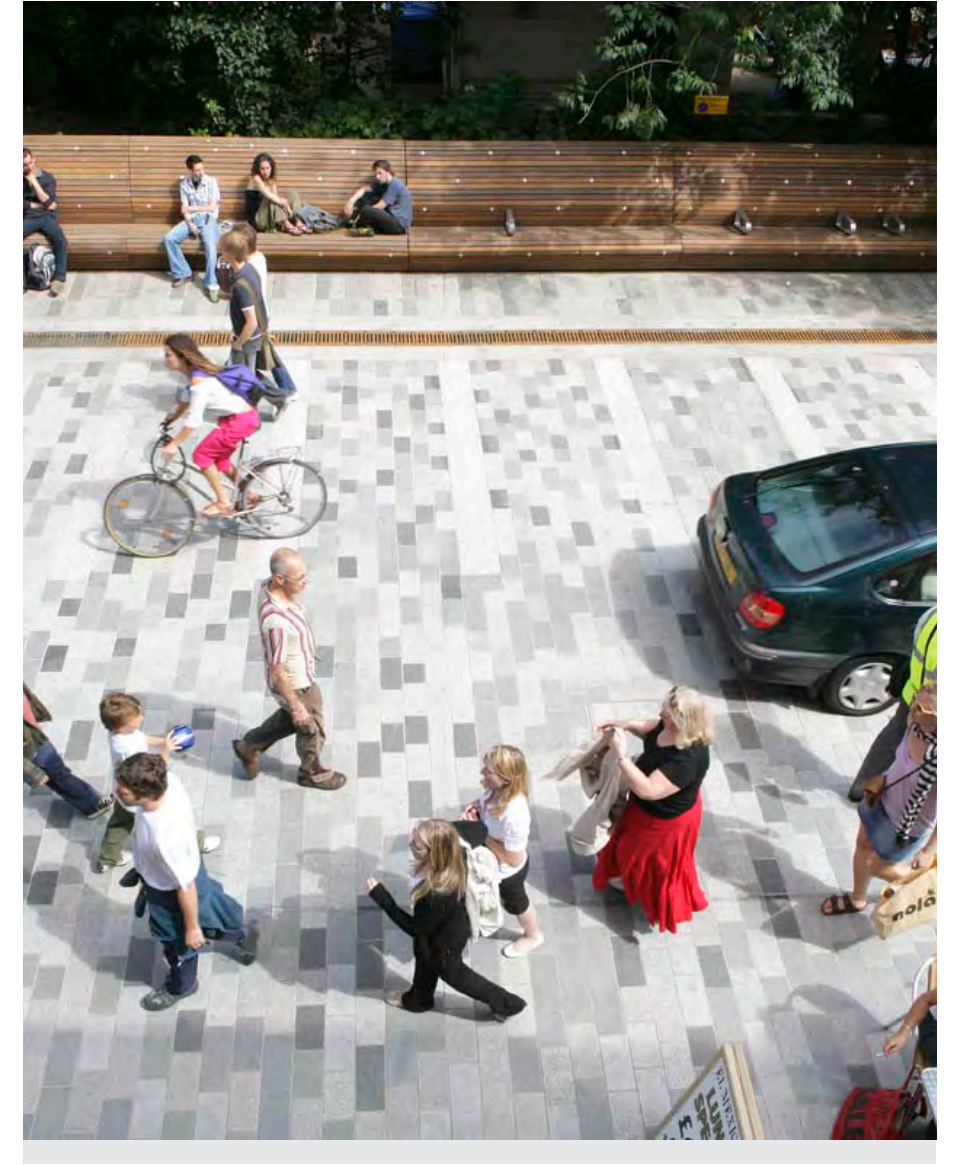
**Exeter High Street**  
High quality materials and activity at street level will contribute to the character of the street.



**Bankside 123, London**  
Cafe seating and on street cycle parking provide activity with commercial activity above.



**St Andrews Development, Bow, London**  
Active frontages and private amenity along a residential street.



**New Road, Brighton**  
Use of high quality materials in a clutter free environment helps to create a legible public realm.



## Comfort and Safety

The length of time people spend in a public space is a key indicator to its comfort. Comfort can be defined by its physical properties, such as providing a range of seating types, shelter from rain and sun etc. Comfort can also be defined by psychological effects such as the perception of safety, a sense of refuge, the character and ambience a place creates. The design for the public realm addresses this by acknowledging that people have different requirements and that by providing diversity within the design a range of people's needs can be accommodated.

Appropriate public realm management and maintenance is vital to its success, since even the best-designed spaces need to be cared for, and inappropriate behaviour needs an effective response. The designs of the public realm should foster perceptions of safety and a degree of self-regulation of behaviour through encouraging active, positive uses by a diverse mix of users, while offering specific places for young people to meet. Ground floor uses around the site should be open, active and transparent, adding to feelings of security and increasing natural surveillance.

## Designing Streets as Social Places

Streets must be social spaces, not just spaces for moving traffic through.

Well-designed streets can encourage informal meetings, build and strengthen communities by providing space for all kinds of activity and promote civility. They are the arena in which everyday life - chatting, playing, and wandering - happens.

### Streetscape Strategy

A rational approach to the road layouts has been taken to readdress the balance between the needs of vehicle users and pedestrians. This is supported by recent UK guidance from the 2007 Department for Transport Manual for Streets (MfS), which puts well-designed streets at the heart of sustainable communities and advises on how street design can help create better places – places with local distinctiveness and identity.

Conflicts amongst various user groups can be minimised or avoided by reducing the speed and flow of motor vehicles, with continuous links broken up by introducing features along them to slow traffic. A range of traffic calming measures that are available incorporate physical features, changes in priority, street dimensions, reduced visibility and psychological and perceptual elements to promote eye contact between pedestrians and drivers.

### Low Speed Environment

The proposed streets within the development should present a deliberate contrast to the characteristics of the other major roads surrounding the site. The intention should be to create an environment that promotes low-speed, uninterrupted traffic flows that can be universally integrated with pedestrian and bicycle movements and other civic activities. These characteristics will be achieved through contextual design and careful attention to layout, dimensions, and details, rather than through extensive regulations and physical controls. Central to the approach should be in the creation of an environment that promotes lower speeds through contextual clues and social protocols.

### Creating Places

A key principle underpinning the streetscape strategy should involve an emphasis on place-making at all intersections and focal points along the lengths of the streets. This approach should aim to emphasize the spatial qualities of the public realm and to avoid the dominance of linear routes and roads.





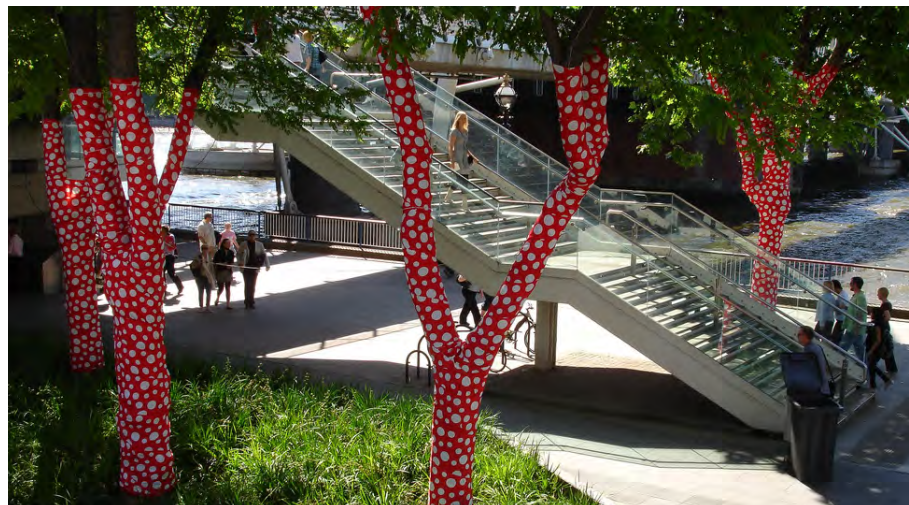
**Plantation Place, London**  
Light installations add interest to pedestrian routes.



**Bishops Square, Spitalfields, London**  
Provision of different types of seating adds comfort to the public realm.



**Bankside 123, London**  
Colonnades provide sheltered spaces for cafe seating.



**South Bank, London**  
Temporary art installations.



**New Street, Brighton**  
Spaces for cultural activities and events.



Avoiding clutter

The contrast between the highway and the public domain within the development should be further emphasised by the lack of conventional road signs, road markings, traffic signals, barriers, high kerbs and bollards. Such elements, which are essential to the single-purpose environment of the highway, are not necessary or appropriate for the public domain. In their place, the design, paving materials, street furniture, layout and lighting should define the relationship between traffic and other activities.

local community.

Activity and Cultural Strategy

Activity can be classified under two main types: activities which are necessary for everyday tasks such as access to buildings and transport hubs, and activities which are optional and include social and active participation.

It is important that the development has the potential for 24 hour activity which will help to provide natural surveillance to the streets and public spaces in order to reduce the opportunities for crime. Providing a mix of uses will generate vibrant spaces which is a major factor in achieving a successful public realm.

The use of the public realm changes during the course of a day, week and year. The proposals create a design that is flexible and responds to these fluctuations by providing suitable surfaces and spaces which could be used for a range of programmed activities and performances, as well as outdoor cafés, markets, and art displays.

Public Art Strategy

The Public Art Strategy sets out the following principles and recognises that public art should;

- contribute to place-making,
- enhance and animate usage of public space and
- contribute to social cohesion.

The purpose of the Public Art Strategy will be to implement the vision for art and to be used as a base from which to select and commission an artist

or artists and generate site-specific ideas, to work with local schools and engage with the local community. The vision is to find an artist or artists who, by example, can illustrate an innovative and exciting approach to designing high quality work for the public realm as well as a willingness to work in collaborative engagement with the Client and Design Team.

The Artists brief should:

- Stimulate the onlooker’s curiosity
- Surprise us all
- Create public art where it is not expected
- Make innovative connections
- Use new technologies
- Create ephemeral as well as permanent art
- Use materials that remind us of nature
- Challenge our concepts of sustainability
- Enhance our understanding of the natural world





**Sculptural Seating**  
Public art can be combined with function and use.



**Planting**  
Hedges can be incorporated into playable features.



**Children's Play**  
Play items incorporated into a busy high street.



**Water Fountains**  
Children playing in fountains.



**Children's Play**  
Spaces should accommodate a range of activities to allow children of different age groups to use the space at different times of the day.





**Barking Town Square**  
Play elements threaded throughout the public realm.



**Palais Royale, Paris**  
Children playing on sculptures.

## Inclusive Play Provision

This play strategy sets out how the development will give recognition of children and young people's need and wish for play and recreation. The key principles are multi-functionality, design quality, permeability, and effective, sensitive management and maintenance.

The aim is to create a public realm that is genuinely child-friendly and inclusive to ensure that all children have safe access to good quality, well-designed, secure and stimulating play and informal recreation provision. The proposals allow for sufficient publicly accessible open space envisioning that as much of the public realm as possible will be in the form of what it calls 'playable space': space where children's play and recreation is one legitimate use amongst a range of uses without compromising other residents and users needs and enjoyment.

Play facilities should not be segregated and fenced-off 'play ghettos.' Instead, playful offers will be threaded throughout the public realm, including distinctive focus points such as play equipment set in engaging landscaping, and incidental features that encourage children to play. Different age groups should be able to make use of the spaces through varying activities at different times of the day.

Carefully selected play equipment, facilities and non-prescriptive features such as changes of level, hard and soft landscaping, and other landscape features will create playful offers that merge into the wider open space, encouraging a wide range of play activities while also allowing the space to be enjoyed by adults.

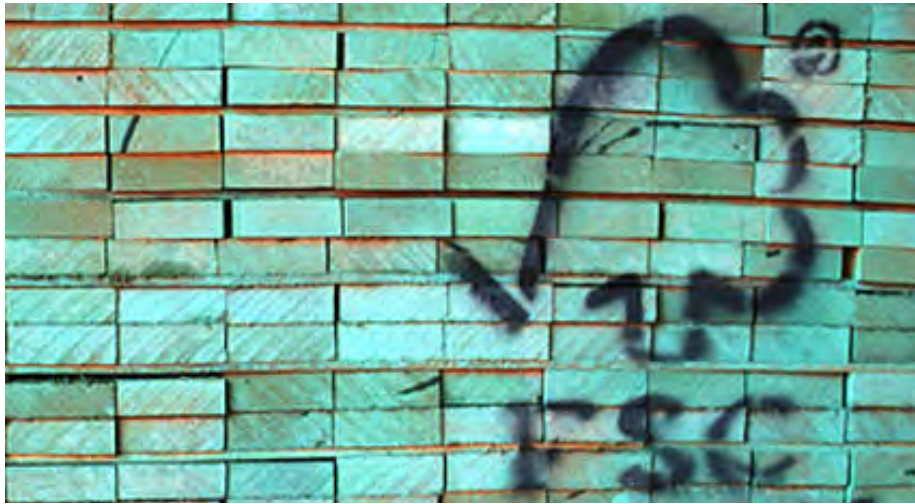




**Community Consultation**  
Working with the local community and other stakeholders to develop long term plans with a clear vision for future needs.



**SUDS**  
Cuts in raised kerbs can allow surface water to run into planted areas.



**FSC approved**  
Specify Forest Stewardship Council (FSC) certified timber



**Biodiversity**  
Selecting plants with known benefits to local fauna.



**Green roofs**  
Reduces rainfall runoff and can increase biodiversity.



Landscape Sustainability

Measures to address issues of sustainability are embedded within the principle concept for the design of the landscape. This will be considered at every stage of the project from design through to construction and future management.

These principles include:

- Working with the local community and other stakeholders to develop long term plans with a clear vision for future needs.
- Considering from the outset of the design process how the landscape will be managed and maintained in the long term.
- Creating places that are inherently flexible taking account of the future impacts of climate change, and adaptation measures that may need to be retrofitted.
- Considering the implementation of water management and recycling schemes.

At a detail level this can include:

- Materials specification
- Seek to select materials from sustainable sources where fit for their purpose.
- Aim to use locally sourced materials where practicable.
- Examine the potential for retaining and reusing site materials.
- Seek to maximise the design life of projects by optimising the use of durable materials that last longer, reducing the volume of water produced over the developments’ life time.
- Consider the use of prefabrication and standardisation techniques to minimise waste.
- Examine the use of recycled materials.
- Specify Forest Stewardship Council (FSC) certified timber or timber certified under the Pan European Forest Certification Scheme.
- Seek to install energy efficient components including lighting.
- Water Conservation
- Seek to install efficient irrigation.
- Seek to install water efficient products/ features.
- Consider the use of grey-water recycling, rainwater harvesting and Sustainable Urban Drainage System (SUDS).

Biodiversity:

- Provide a network of trees and green spaces which connect to existing trees and green spaces forming a connection of potential wildlife habitats and green corridors.
- Promote an environment where quality of life and quality of environment are integral to the development.
- Enhance wildlife habitats in urban areas.
- Promote sustainable planting by developing planting designs that are appropriate for their location, including the availability of sunlight and water.
- Improve the local urban biodiversity by selecting plants with known benefits to local fauna.

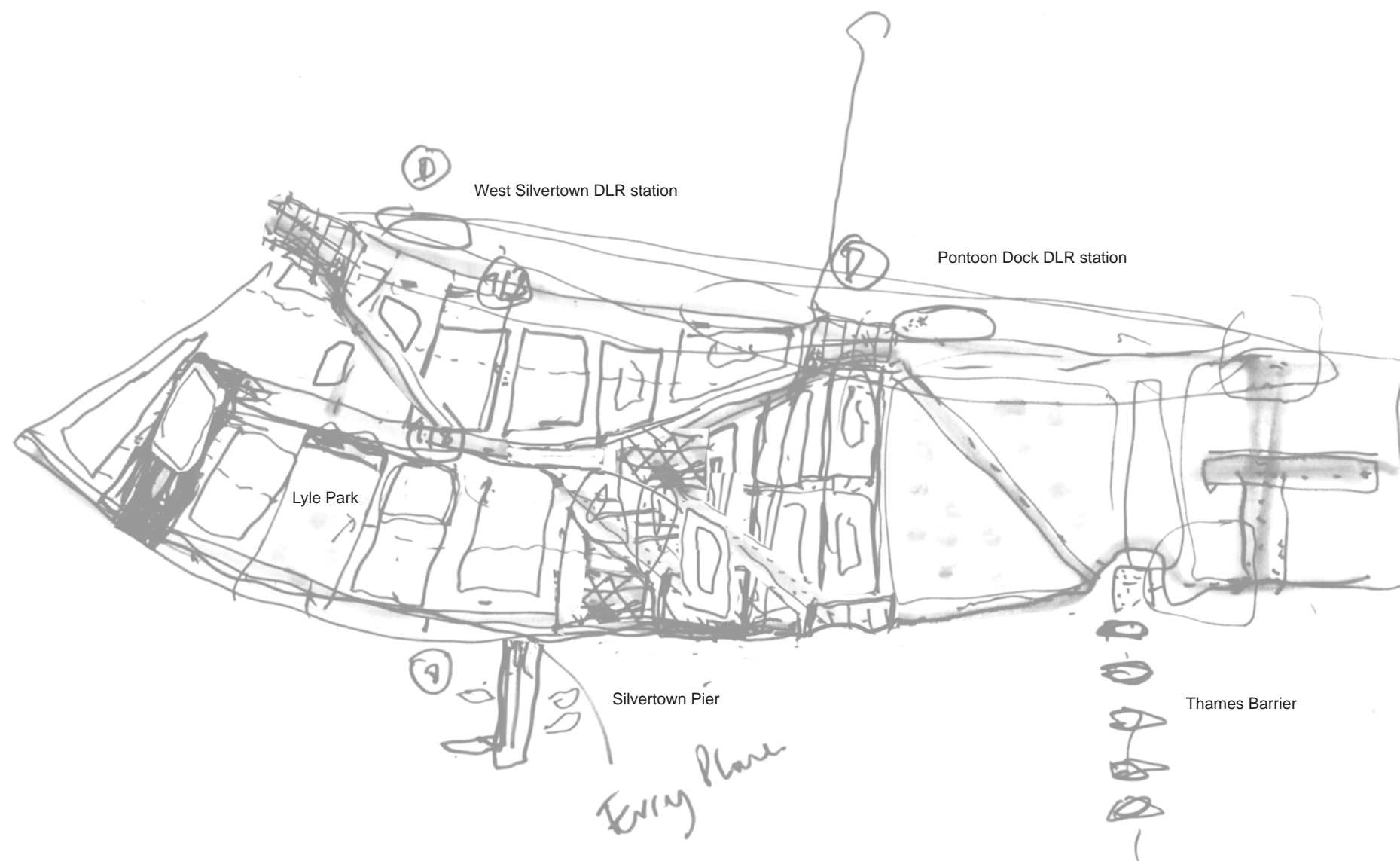












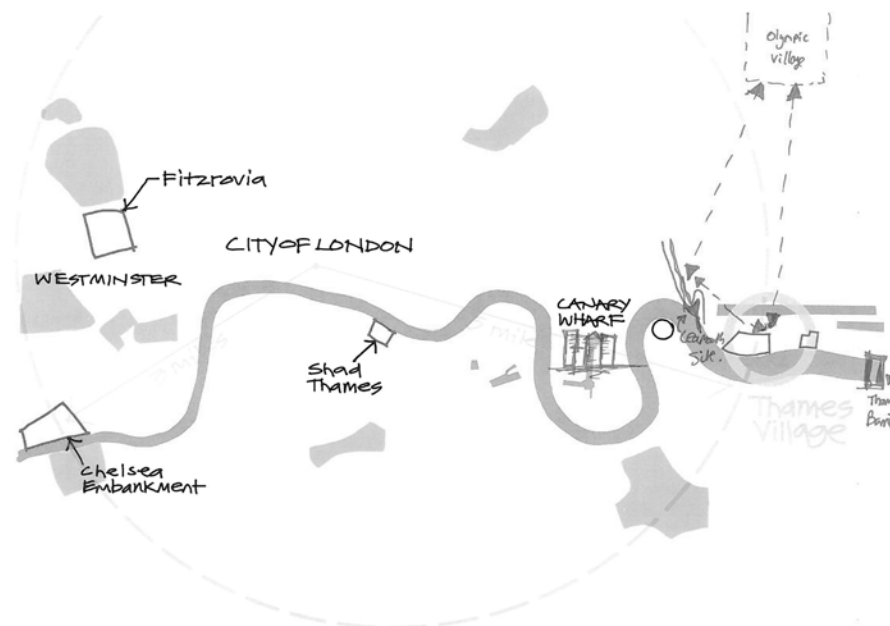
## Concept masterplan

Conceptually the team began the Minoco design process by layering the urban principles discussed earlier in this document alongside the desire lines and strategic connections required to successfully deliver and integrate the Minoco site as a residential led mixed use part of the city of London, and establish the scheme as a model for new developments within Newham.

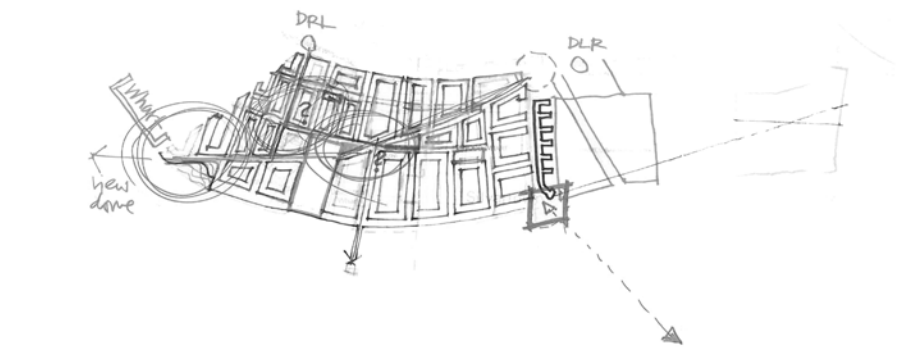
The first concept diagram drawn for the masterplan is illustrated left. Key principles established at the earliest design stage were:

- Creating value in the heart of the development
- Connections - integrating into Newham
- Pedestrian movement
- Fine tapestry of urban blocks
- Linking the river to Britannia Village
- A riverside promenade
- A normal part of London

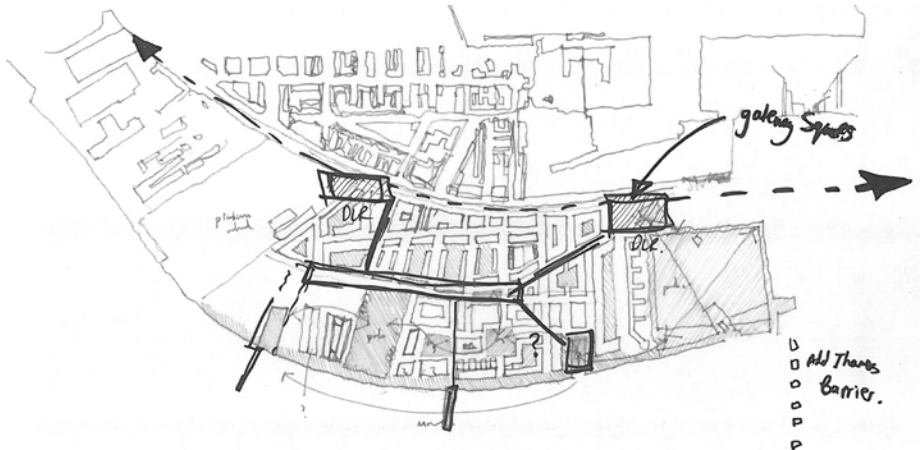




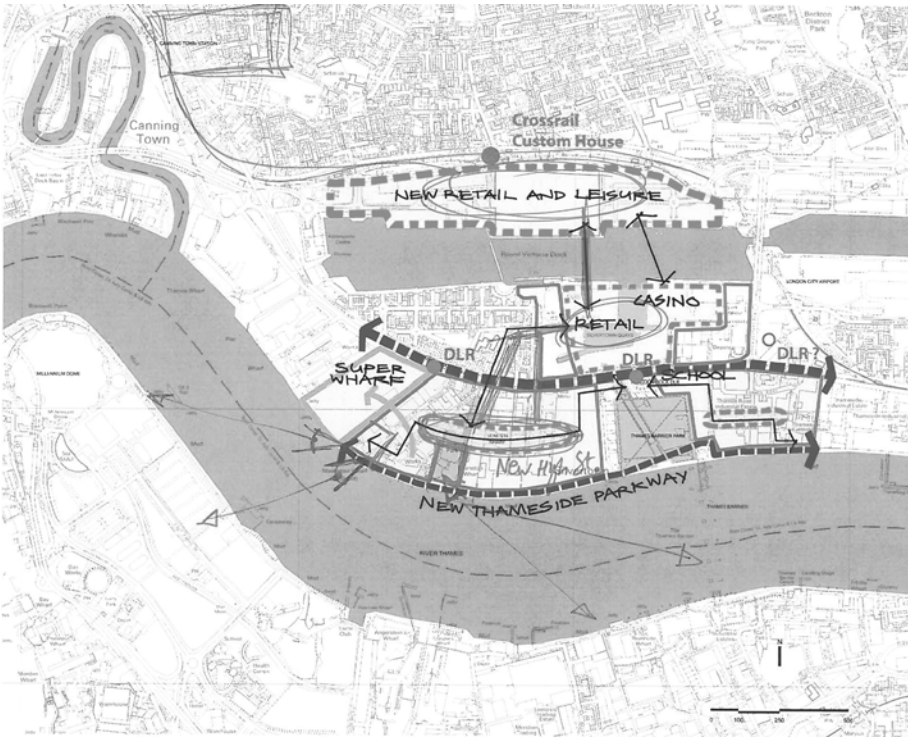
Minoco London Context Concept Sketch



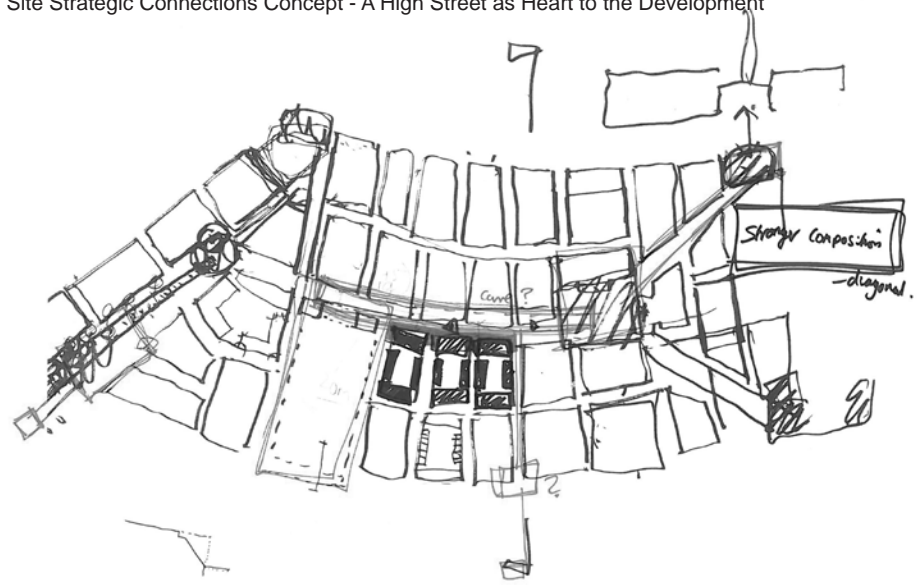
Site Strategic Connections Concept - Road to River



Site Strategic Connections Concept - A High Street as Heart to the Development



Minoco Wider Context Concept Sketch



Site Strategic Connections Concept - Refining Connections

### Site Strategy

Strategically Minoco aims to connect and integrate into Newham and as a result enhance the existing borough's urban fabric and public realm.

The conceptual diagram was therefore developed as an overlay on the existing site plan, a process which allowed the establishment of the site strategic principles of connection, movement, orientation and scale to be developed through the initial design process drawings.

The drawings left illustrate the strategic site wide principles, which informed the initial masterplan design proposals. The following pages describe in further detail how this approach was developed in stages leading up to the commencement of the GLA / LBN / LTGDC workshop consultations during which time the masterplan developed in conjunction with recommendations made by the statutory consultees.





07 Composite Pre Workshop Masterplan Block Plan and Wiring Diagram





01 Existing site connections



04 Extending green park



02 A new high street



05 Major urban public spaces



03 Connecting into London and marking the entrance



06 Infilling finer city grain

## Wiring Diagram

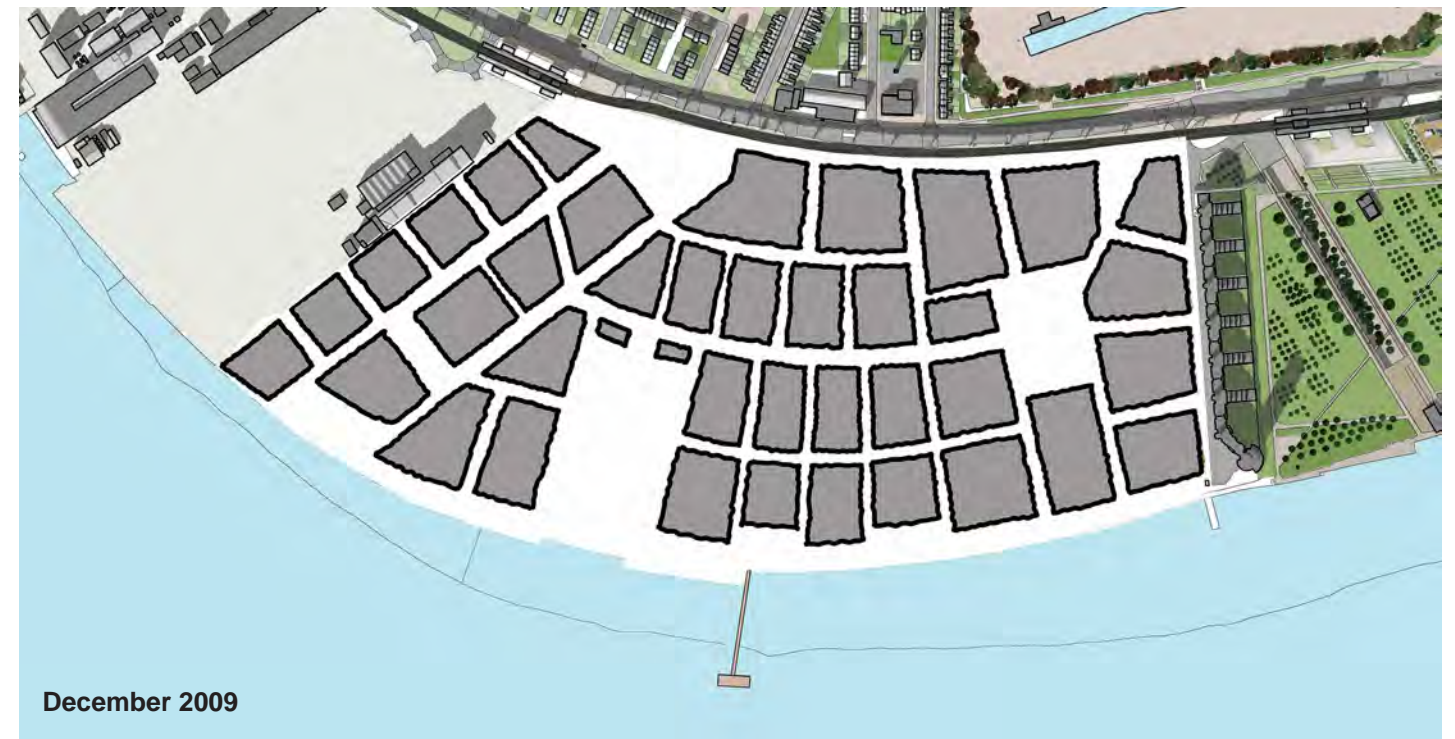
The diagrams adjacent illustrate how the strategic level approach was broken down into clearly defined layers of urban design, each of which was studied independently and then layered as a whole to ensure that the emerging scheme encapsulates the clarity + richness of urban and landscape design aspired to.

The masterplan illustrated far left and on the following pages benchmark the development of the masterplan from concept through to the realisation of a block plan proposal at the pre workshop stage, from October 2009 through to July 2010.





Building on the strategic design principles described above, the design evolved through a number of stages prior to being presented to the GLA, LBN and LTGDC workshop group. Each of the design stages is illustrated in the chronology it developed in the plans illustrated above and below.



The plan diagrams clearly show how the conceptual approach to the site has remained constant throughout the design process, with the evolving design changes principally focusing on the development of the spaces in between the buildings adjacent to the river and the treatment of North Woolwich Road.

The design evolution is clearly illustrated by the stages undertaken to grow the main eastern high street square (and surrounding urban blocks) as well as an intention in the wider masterplan to connect Lyle Park north to Britannia Village and the wider locality.





Pre Workshop Masterplan

The sketch plan illustrated below benchmarks the scheme prior to being presented to the GLA, LBN and LTGDC workshop group. A summary of each major design change during the pre workshop design phase has been illustrated with a brief description in the following design and access

statement chapter. The strategic principles of the masterplan, connection, tapestry of spaces and a normal urban proposition have remained consistent in the scheme throughout the design process. The masterplan design principles have not been revisited, only refined by the masterplan team as

well as input from the statutory consultees. Key spaces have transformed in scale and proportion but strategically remain consistent with the original diagrams developed for the site.















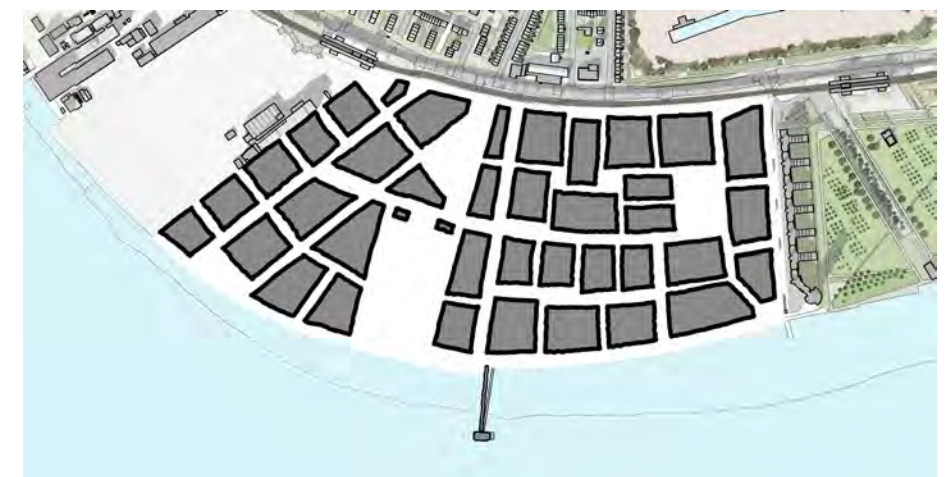
The diagram and artists impression above illustrates the scheme at the pre workshop stage. Each of the following step by step diagrams itemise each of the key moves made to the masterplan block plan during the workshop process. With each step a brief explanation of the reason behind the amendment has been provided.

## 10 Steps

During the GLA, LBN and LTGDC workshop process the masterplan benefited and evolved considerably through an open and rich critique of the master planning teams original approach.

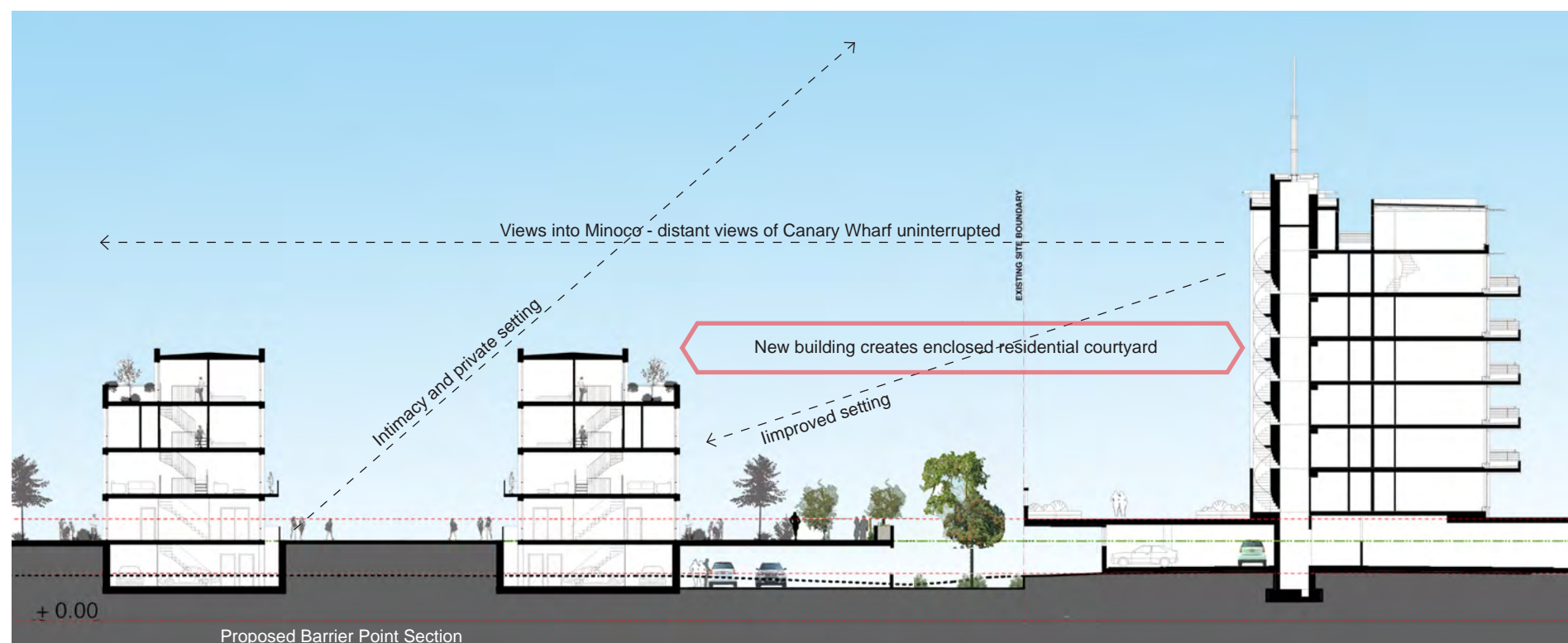
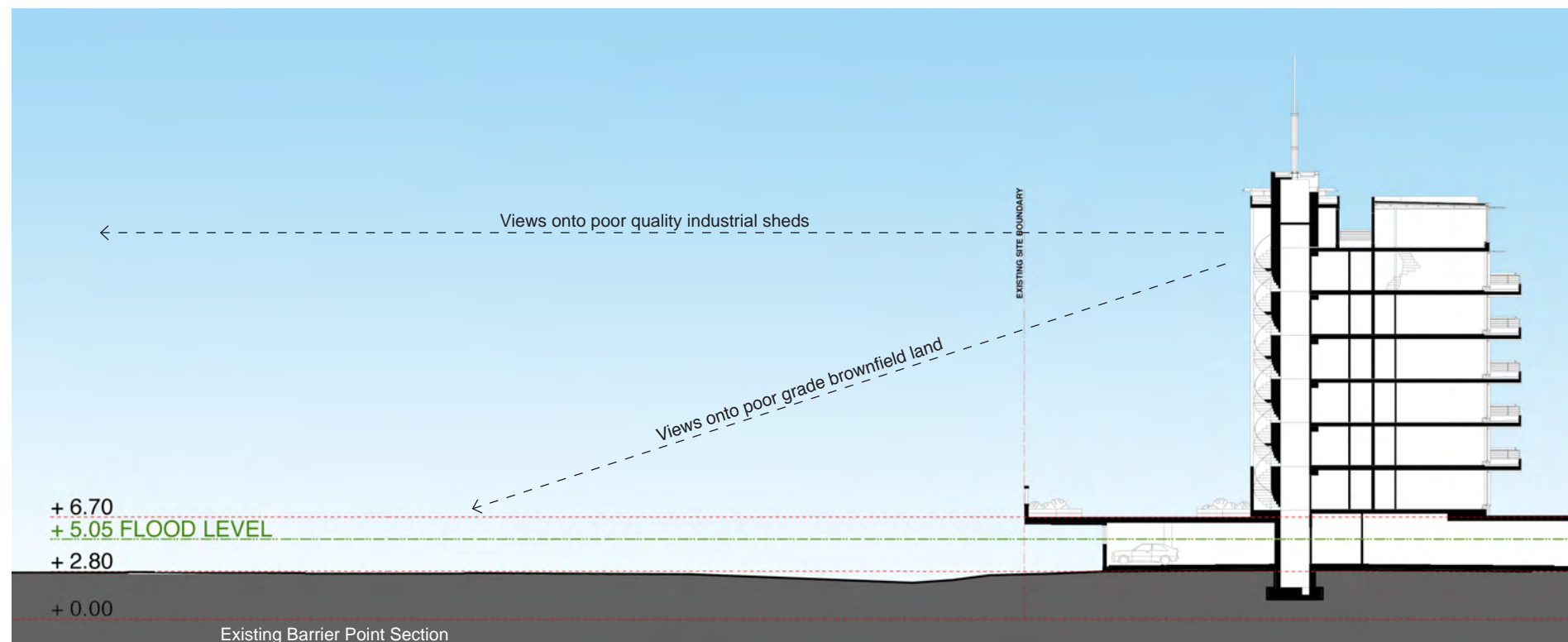
The design aspirations and character references first tabled by the master planning team were widely accepted as an appropriate and welcomed approach for the Minoco site. Throughout the workshop process design development comments focused principally upon site layout, the strategic connections and allocation of non residential uses.

Each of the key outcomes and ways in which the workshops informed the developing scheme have been summarised into 10 steps, each one recorded in the diagrams following.



Pre Workshop Block Plan Diagram





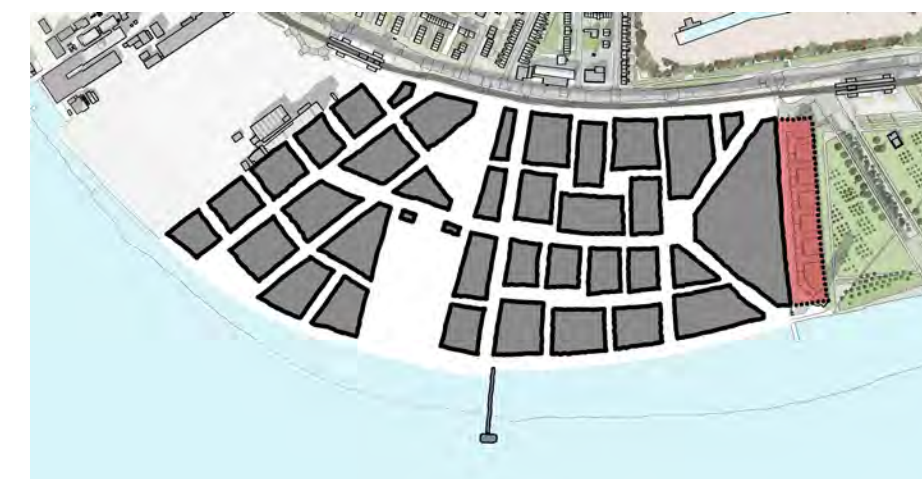
## Step 1

### How does the masterplan respond to Barrier Point?

The pre workshop masterplan responded to Barrier Point through the introduction of a north south street which potentially offered a pedestrian cut through to the rivers edge.

Informed by the workshop process the masterplan was revised to consider Barrier Point as an integral part of the eastern residential quarter of the Minoco Masterplan.

In both plan and section the new development seeks to incorporate the existing building as a homogenous part of the proposed scheme.



Step 1 Diagram



## Step 2

**Should there be a direct view / connection from the high street to the Thames Barrier?**

The pre workshop Minoco masterplan failed to fully incorporate strategic views of the surrounding landmarks except when adjacent to the rivers edge.

It was felt that a realignment of the main access from the eastern extent of the high street to the river could be targeted onto one of the Thames Barrier pontoons, thus providing an iconic backdrop to one of the most important nodes in the site. In addition this new view will improve the character and sense of place achieved in the heart of the new development.



Step 2 Diagram



Sketch from New Public Square Illustrating View to Thames Barrier Pontoon No. 7





Step 3 Diagram

### Step 3

#### Should more of the high street be delivered in the first phase?

Following a number of design evolutions, each addressing the eastern entrance to the site differently, the block massing of the pre workshop scheme ultimately became fragmented and may not have provided a clear and focused entrance into the heart of the scheme.

In addition the proposals at that time were leading to the distribution of the main non residential uses to the western edge of the plan, greatly reducing the opportunity to provide the new high street during the first phase of the scheme.

In response the north eastern urban blocks were revised during the workshop process, to clearly provide a long uninterrupted run of buildings allowing the opportunity to provide a substantial part of the non residential uses in the early phases of the scheme.

Furthermore development in this way allows a much more organic and fluid opportunity for the high street to grow naturally west in the medium to long term as well as announcing itself on North Woolwich Road to form a hub with Pontoon Dock DLR Station in support of the local centre core strategy aspirations for the site.



Sketch From Site Entrance Square from Pontoon Dock DLR Station into the New Development



#### Step 4

Should the main square actually run from the high street to the river?

Pre workshop the majority of public open space was concentrated in a proposed new urban square located centrally in the middle of the masterplan site.

While this was a significant urban gesture the point was raised that this space may be of more benefit to the future residents if the open space ran from the rivers edge to the main high street.

Re-configuring the space in this way contributes to an emerging typology of public parks growing from the rivers edge, already exemplified by Thames Barrier Park and Lyle Park.



Step 4 Diagram



Sketch of the New Riverside Park - February 2011

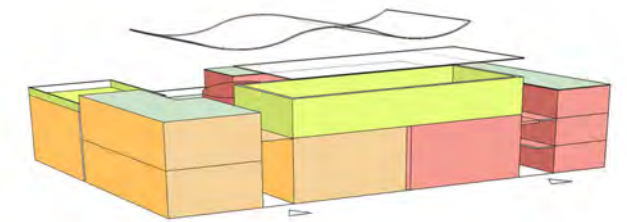


**Where is the primary school / community heart best located?**

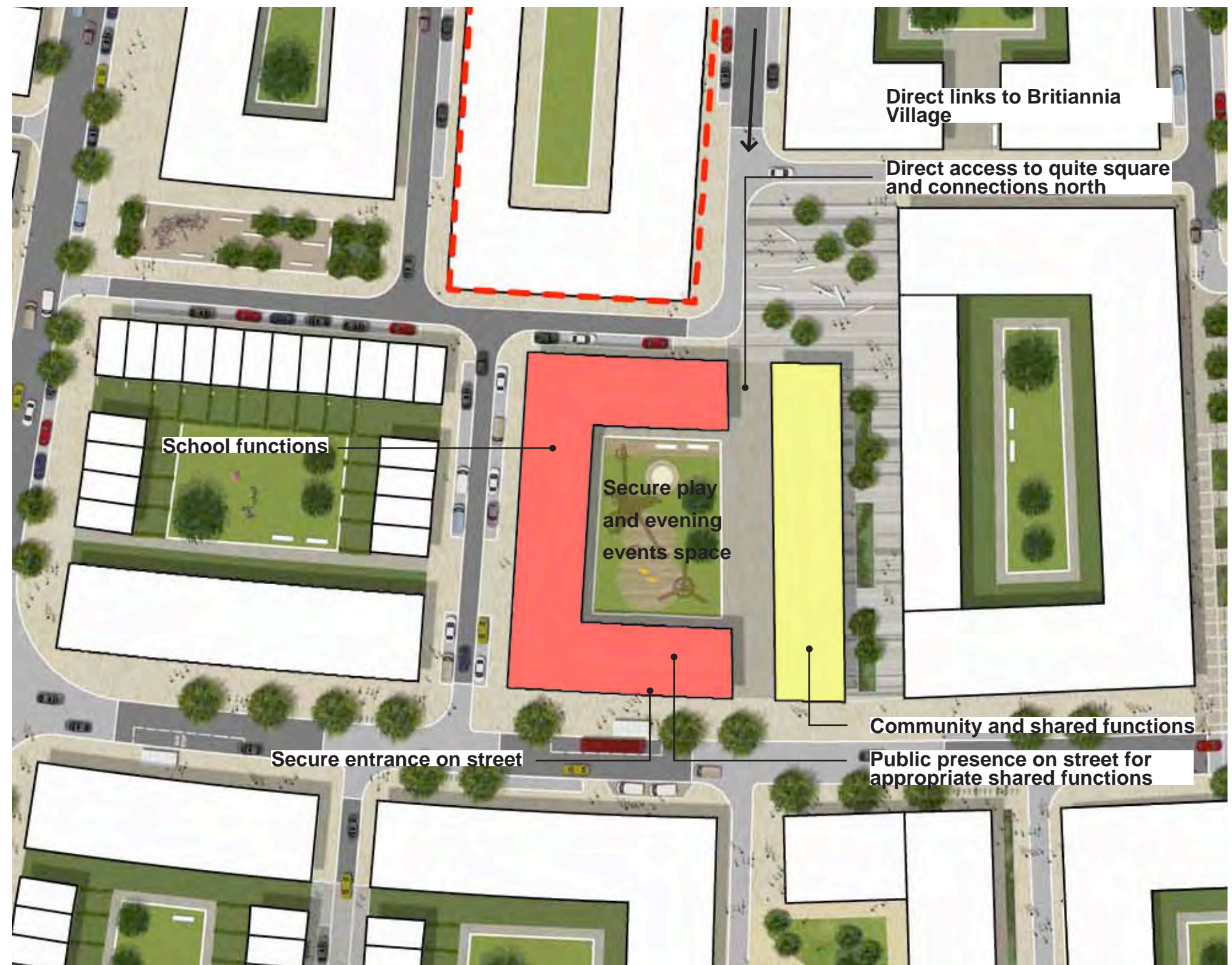
Having considered a number of options for the location of these facilities during the workshops, the team proposed the community / school focus of the scheme be moved away from the high street square, to be located centrally providing best access to all. This community heart will be focused at its centre by the presence of the new 2 FE primary school and community centre.

An aerial photograph of a downtown area with a red shaded region labeled 'Community heart'. The shaded area covers a central cluster of city blocks. Within this red area, two specific blocks are highlighted with yellow borders. A line points from the text 'Community heart' to the red shaded area. Another line points from the yellow highlighted blocks to the text 'Community heart'. A third line points from the yellow highlighted blocks to the text 'Community heart'. A fourth line points from the yellow highlighted blocks to the text 'Community heart'. A fifth line points from the yellow highlighted blocks to the text 'Community heart'. A sixth line points from the yellow highlighted blocks to the text 'Community heart'. A seventh line points from the yellow highlighted blocks to the text 'Community heart'. An eighth line points from the yellow highlighted blocks to the text 'Community heart'. A ninth line points from the yellow highlighted blocks to the text 'Community heart'. A tenth line points from the yellow highlighted blocks to the text 'Community heart'.

Masterplan Design + Access Statement + Design Code



### Sketch Options for Primary School Development



Concept for New Courtyard 2 FE School and Community Centre





Aerial Sketch of the New Public Square - February 2011

## Step 6

### Introduction of a High Street Square?

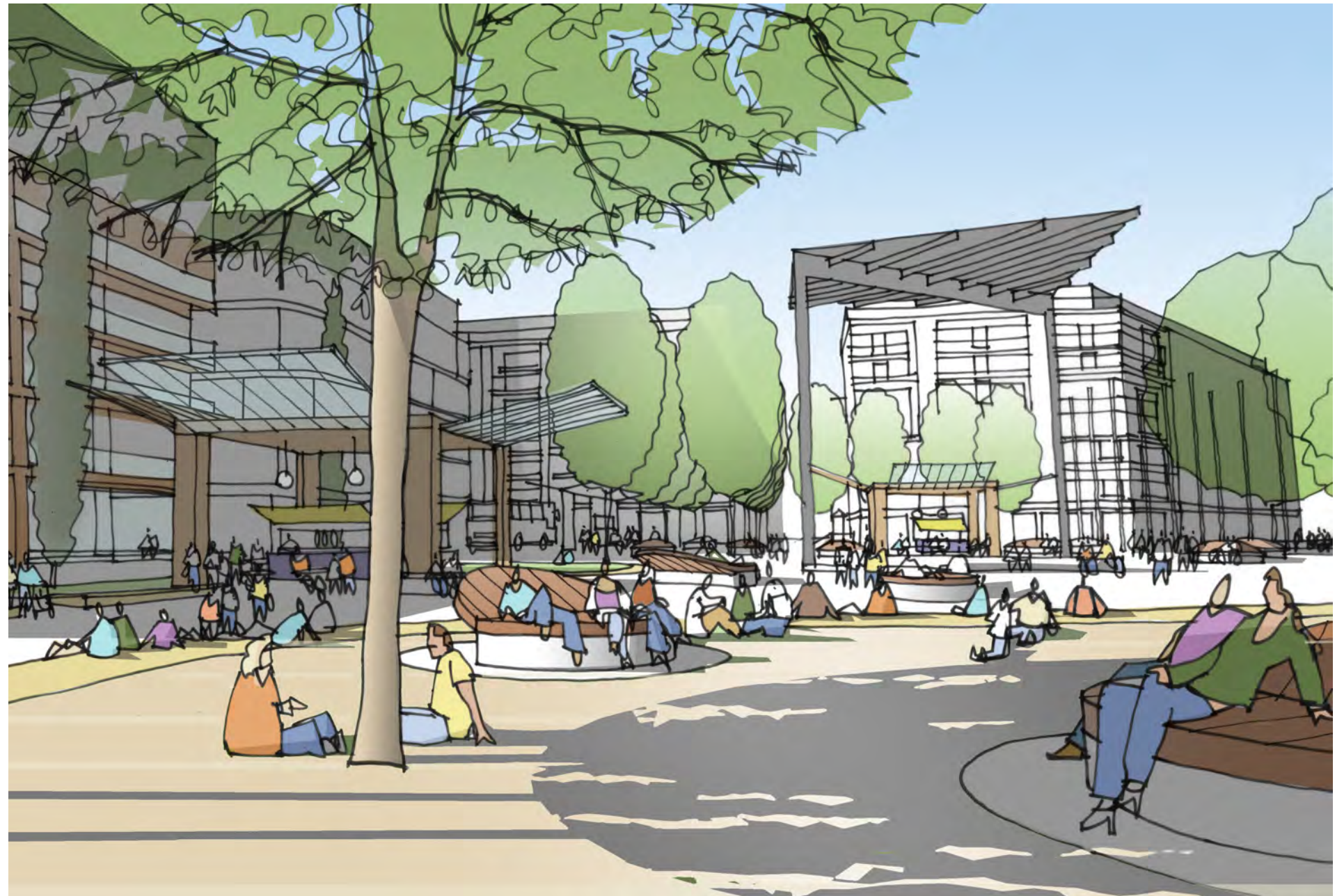
Having relocated the main square from the centre of the plan to the rivers edge, creating the Riverside Park, the team took the opportunity to debate the re-introduction of a urban square.

This new high street square serves to provide a clear focus for the main circulation node in the east of the plan and allows the urban design framework the opportunity to clearly articulate the junction of each of the two eastern main routes into the site.

Most importantly the new square provides a new opportunity for an additional type of and layre of urban space within the scheme.



Step 6 Diagram



Sketch of the New Public Square - February 2011

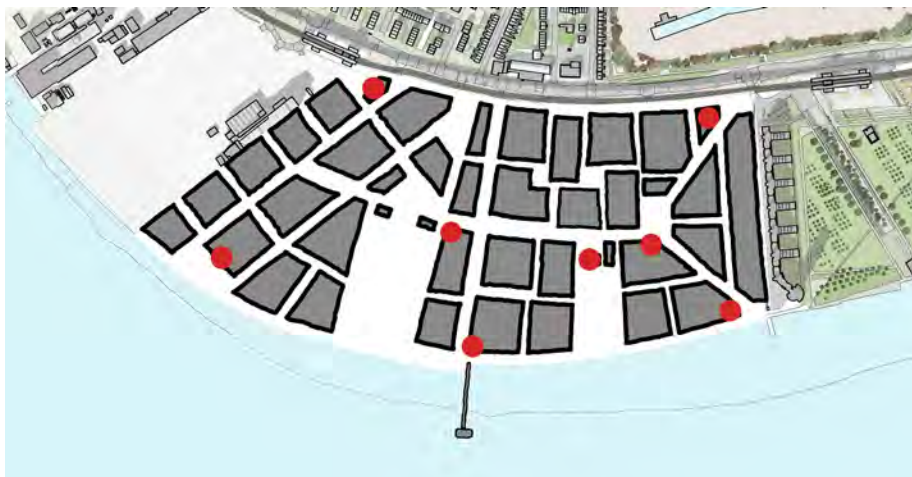


## Step 7

### Where should there be taller landmark buildings be?

The plan below illustrates suggested locations for the inclusion of taller landmark buildings. These have been placed to respond typically to one of two main principles:

1. Announce the entrance to the masterplan site, as important from the north and the approach along the DLR or from ExCeL as the future Thames Clipper connection from the river.
2. Mark main urban spaces within the plan itself and articulating these environments through architectural form.



Step 7 Diagram



Taller Buildings Within the Masterplan

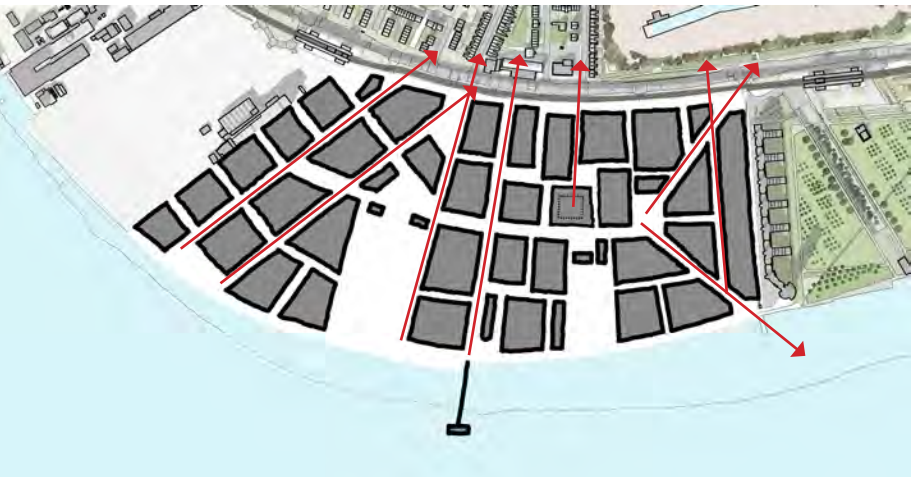


Step 8

Should there be literal and direct connections north / south into  
Britannia Village?

As one of the most critical aspects of the evolving masterplan the connections strategy in the wider Newham context was constantly revisited during the workshop process.

Discussions during the workshops centered around provision of a link into Britannia Village (north of the masterplan site) which may be formed either as a direct connection or a route with a series of events and pocket spaces, which pedestrians and cyclists may move through as they make their journey to the river.



Step 8 Diagram

Throughout the workshop process two options for improving the opportunity for connections across North Woolwich Road were discussed:

- Option 01 - Progressive route through defined tapestry of city spaces
- Option 02 - Straight / direct connection north south

The diagrams on the following pages discuss the merits of each of the two strategic options highlighting where each is beneficial to the success of the scheme.

The photographs adjacent illustrate proposed views of the Minoco scheme when observed from Britannia Village. The proposed site massing is illustrated in orange on the views from Boxley Street and Mill Road while, the artist's impression on the opposite page illustrates the opportunity the masterplan provides to improve and animate not only connections across North Woolwich Road but also the nature of the road itself.



Proposed View from Boxley Street

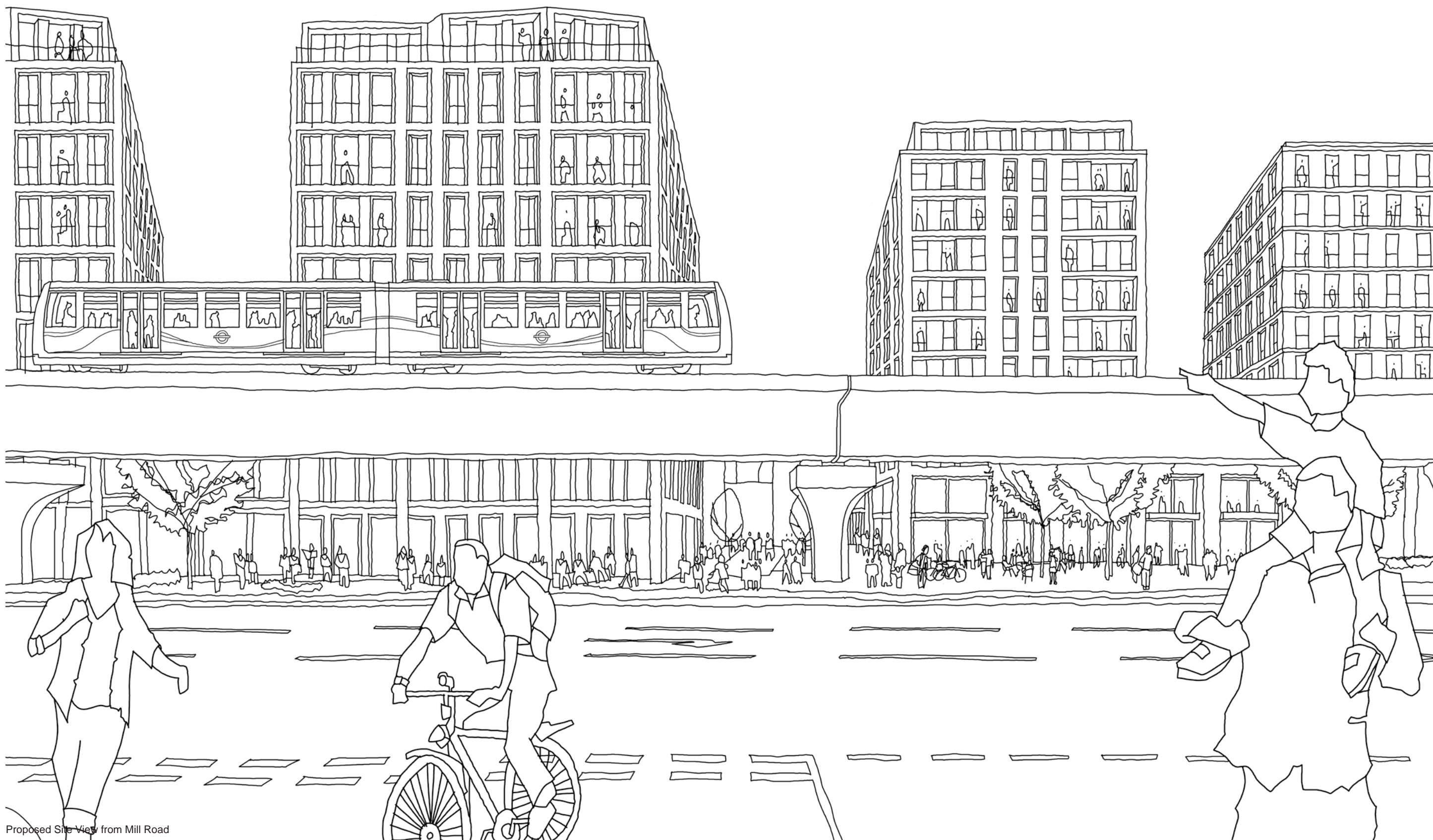


Proposed View from Rayleigh Road / Mill Road



Existing Site View from Mill Road





Proposed Site View from Mill Road





## Existing Site Condition

There are two existing principal destinations north of the Minoco site, ExCeL and its associated facilities as well as the residential area of Britannia Village.

When moving from ExCeL south through Britannia Village to Minoco pedestrian movement as currently provided for, has no direct or convenient connection south. The existing routes are convoluted and indirect as illustrated on the adjacent diagram.

Achieving the aspiration of a seamless and integrated connections strategy is further compounded by the technical constraints of the DLR infrastructure and column positions blocking most direct views into the Minoco site from Britannia Village; as well as the required change in levels to avoid flood risk issues.

Additionally along North Woolwich Road pedestrian crossings opportunities are further limited by the clear access and visibility requirements of Silvertown Fire Station.



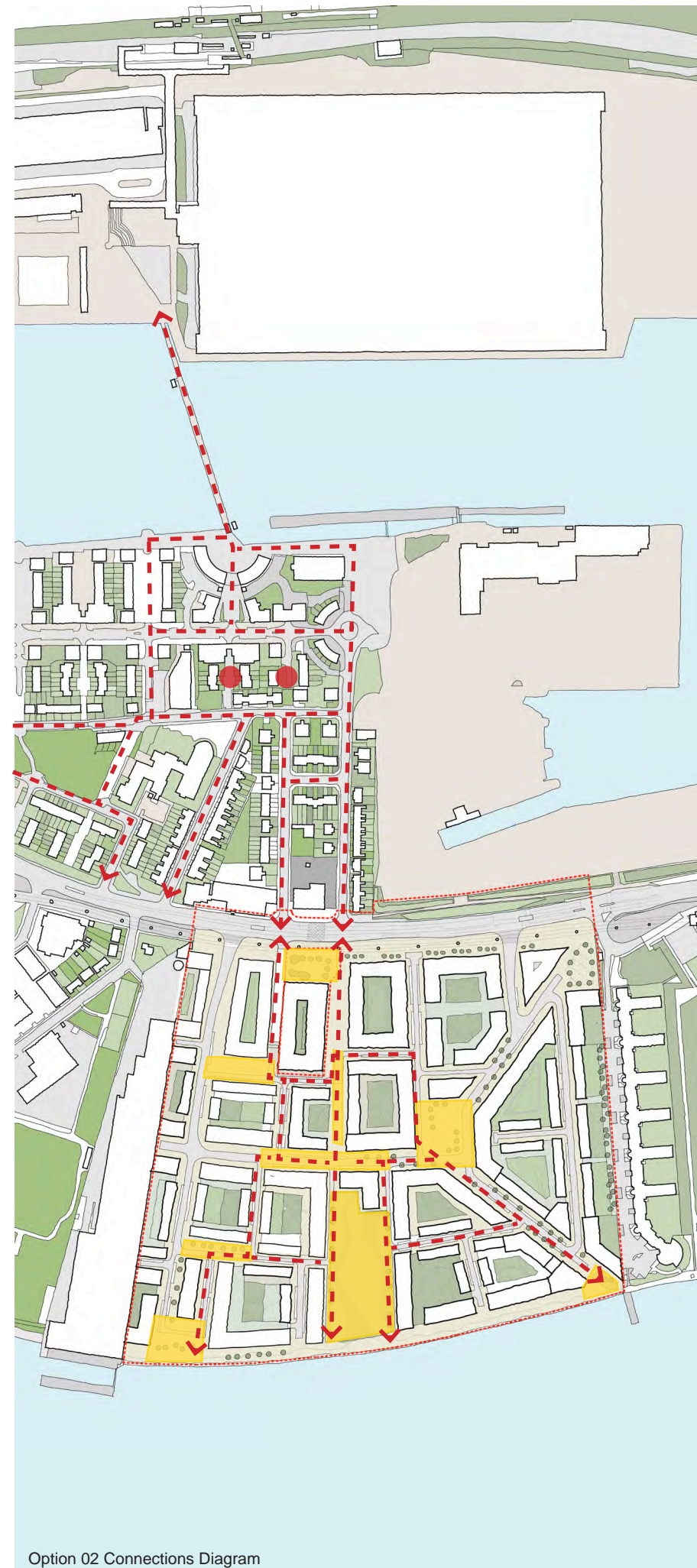


### Option 01

Connection option 01 retains the pre workshop masterplan desire of movement through a diverse tapestry of intimate streets and pocket spaces, each with an individual and identifiable character.

Principally concerned with pedestrian movement, circulation as outlined in the diagram left offered a less direct approach to pedestrian movement, both throughout the Minoco site to the river but also into Britannia Village and Newham.

As residents and visitors circulate through the scheme the vision of moving through a series of appropriate, characterful, and identifiable spaces is achieved.



Option 02 Connections Diagram

### Option 02

Connection option 02 proposed a direct connection from Britannia Village and ExCeL straight through the masterplan site to the river's edge.

This strategy provides a very clear movement diagram from Britannia Village to the River Thames while maintaining the principles as outlined and achieved by connection option 01.

The direct route created by the masterplan framework allows an integral connection for pedestrian movement from Britannia Village not only to the Thames but also to the new primary school and community centre which become integral and central to the overall movement strategy.

Following debate and discussion throughout the workshop process connection option 02 was favoured by the masterplan design team as the optimum solution for the Minoco site.



## Step 9

**Why does the vision masterplan high street not anticipate further development west or the incorporation of the existing Tate and Lyle Building on Peruvian Wharf?**

As originally planned the longer term high street, extending west from the new market square, sought to resolve itself within the confines of the wider vision masterplan site. While all parties agreed that the urban proposition of the street should respond to and connect to West Silvertown DLR station, the drawn propositions for the street never fully suggested an appropriate resolution of the street along the western edge of the vision masterplan boundary.

Following the workshop process the future development of the masterplan westwards into and in support of Peruvian Wharf has been planned for.

While important to recognise that the plan for this part of the site remains an indicative layout only and not part of the Minoco 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.



Tate and Lyle Building Aerial Photograph



Tate and Lyle Building View from Peruvian Wharf



Tate and Lyle Building View from the DLR at West Silvertown Station



Vision Masterplan - February 2011



Vision Masterplan - March 2011





Vision Masterplan Post Workshop Illustrating Indicative Possible Further Site Development West



Step 10

What are the proposals for North Woolwich Road?

Throughout the design process, emerging proposals for North Woolwich Road have been regonised as critical by all parties to the success of the scheme to fully realise its potential to both integrate into its immediate surroundings as well as the wider Borough, but also to provide an edge for this critical thoroughfare and arterial route through Newham.

A number of technical factors contribute to the design evolution of proposals along North Woolwich Road. A brief summary of items is below:

- Very wide street
- DLR viaduct and 5m no build easements to either side
- Fire, ambulance and petrol station accesses limiting opportunity for pedestrian crossings
- Poor northern edge condition
- No continuity of landscape / urban design treatments / strategies

Initial concepts presented to the workshop teams for North Woolwich Road, while aspirational with regard to activity, retail, landscape and circulation strategies; one coherent story for the space was not clearly presented.

Through the process of workshop consultations the team has been able to refine not only each of the specific design conditions of movement, materiality and animation, but also to develop a more coherent and appropriate response to the street as a whole.

This vision is presented later in this document.



Proposed View from Pontoon Dock DLR Station













Post Workshop Masterplan Aerial Sketch

## Post Workshop Masterplan

Upon completion of the workshop process the masterplan had significantly benefited from the input of each consultee as well as having notably advanced as an urban design proposal for this key site.

The workshops had allowed an open and holistic debate around issues of urban planning, spatial hierarchy, open space and land uses. The ideas contributed by the GLA, LTGDC and the London Borough of Newham as well as the LBN design review panel, informed and matured the masterplan design and planning proposals on all levels of the schemes design.

The scheme presented on the following pages is acknowledged by the master planners as representing a composite and best practice approach to the design process undertaken resulting in a well considered masterplan framework for the Minoco site.

The diagram on the far page illustrates the masterplan upon conclusion of the workshop and DRP consultations. It illustrates the agreed connections strategy and block layout for the site within the indicative vision masterplan proposal and the wider London Borough of Newham context.















## Minoco Development Schedule

The comprehensive redevelopment of the 17 Ha Minoco site to include:

- up to 330,000 m2 of residential (C3) floorspace in a mix of dwelling sizes, types and tenures
- up to 15,000 m2 of employment uses (B1)
- up to 3,250 m2 of retail floorspace (A1)
- up to 750 m2 of financial and professional floorspace (A2)
- up to 750 m2 of hot food / take away floorspace (A3 and A5)
- up to 750 m2 of pub and restaurant floorspace (A4)
- up to 9,600 m2 of “non residential institutional” floorspace to include a new primary school, creches / nursery schools and community facility (D1)
- up to 3,000 m2 of assembly and leisure floorspace to include gym and fitness centres (D2)
- new public realm including a hierarchy of open spaces including a riverside park
- creation of areas of private open space
- riverside walkway, including a link to the proposed Silvertown Pier
- two accesses on to North Woolwich Road
- internal access roads, footpaths and cycleways
- basement and undercroft car, motorcycle and cycle parking, plant, machinery and storage
- other supporting infrastructure.



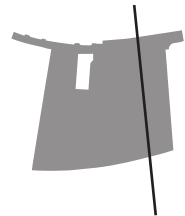


Illustrative Masterplan In Wider Context

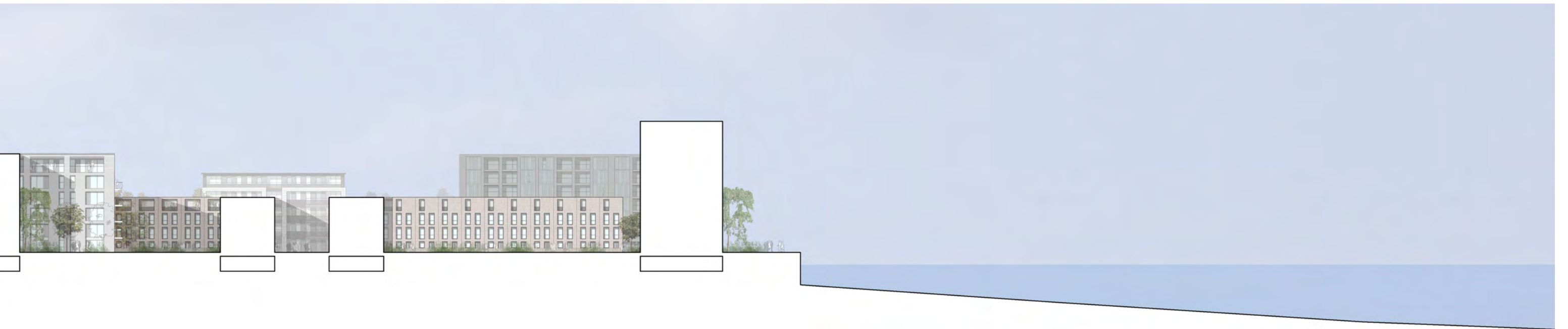
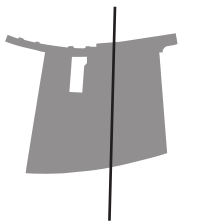
























Flood Level and Formarion Level Land Use Plan

## Flood Level and Formation Level Class Use

A ground floor land use plan for the masterplan has been illustrated left. The diagram illustrates the strategic principle of wrapping the northern edge of the site in a predominant run of B1 employment uses, allowing 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 new 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.







Upper Level Land Use Plan

## Upper Level Class Use

An upper floor level land use plan for the masterplan has been illustrated left.

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 recognizes 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

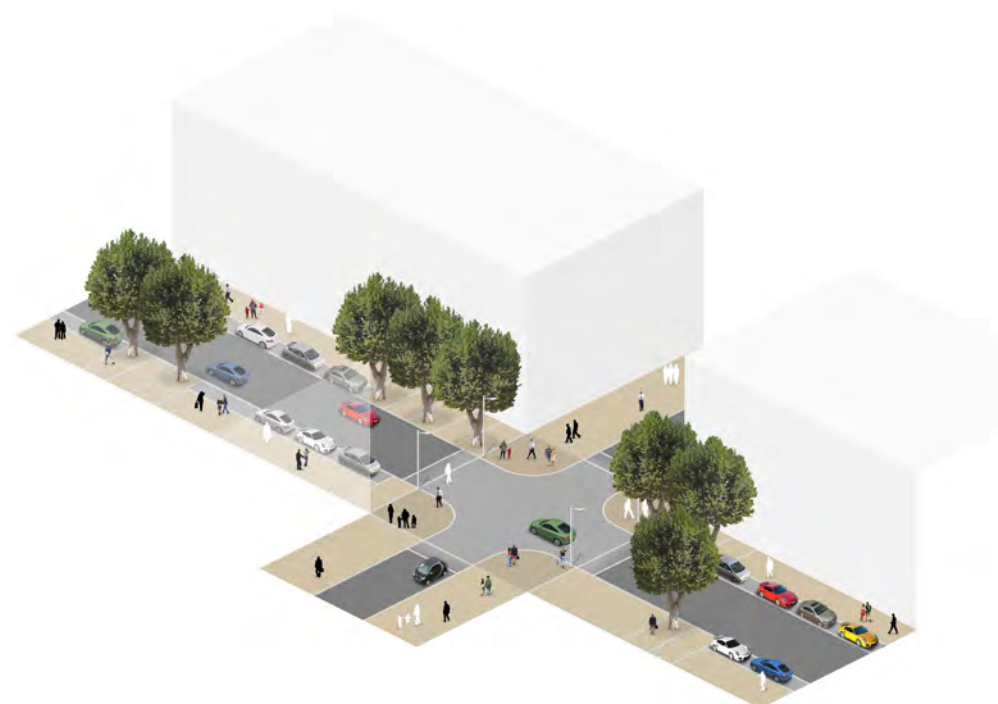
## Streets

The clarity and legibility of key routes reflect the importance of transport movement and town centre activity within Minoco. 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 as normally as any other part of London.

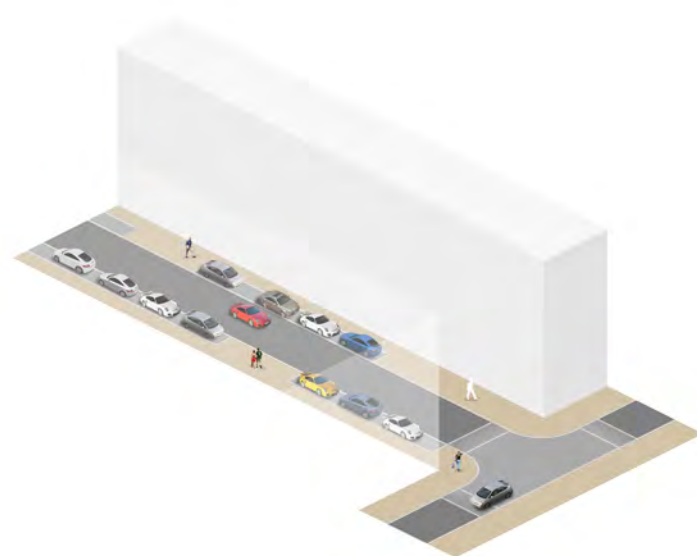
The diagram left illustrates the hierarchy of streets proposed within the masterplan frame work ranging from larger scale high street environments through streets and lanes to the intimate and residential only mews streets.







Parking Strategy High Street Diagram



Parking Strategy Lane Diagrams



Parking Strategy High Street Plan



Parking Strategy Street Plan

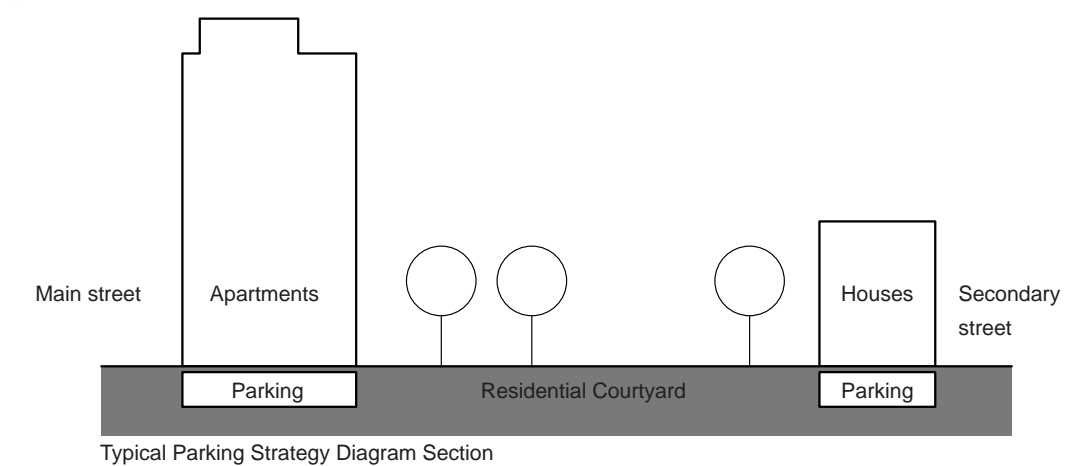


Parking Strategy Lane Plan

## Parking

Car use and parking is a normal occurrence in everyday life. The Minoco design intention is to provide all residential parking adjacent to the house or residential core, provided in a designated space in basements or undercroft areas. The basements will be built under building footprints only to ensure the communal courtyards will benefit from proper landscape planted in soil.

On street parking is a welcome and essential feature of the site above ground. As much parking on street as possible has been provided serving employment uses, visitor and drop parking. The on street activity created by people coming and going gives a life and welcome animation to the street. The position of car parking on street has been coordinated with strategic landscaping principles (such as the location of street trees) as has the location of points of access to car parks beneath blocks.







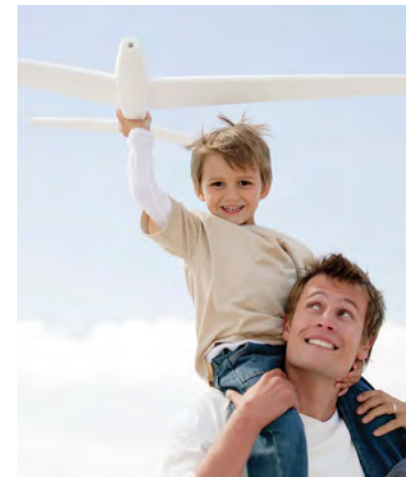
Open Space Location Plan

Open Space + Play Strategy

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

Figures exclude private balconies  
Roof amenity areas measured at 100% efficiency





Play and open space is essential to the residents happiness, health and each family's ability to grow and live within the Minoco masterplan.

Utilisation of the open space has to be well considered and balanced with respect to providing for formal play and creating flexible spaces that meet the needs of the community.

The diagram to the left explains the break-down of the different types of open space in the masterplan. The coloured areas represent the spaces which at this stage in the design process are being considered towards the play provision whereas the grey represents other open public space for the use of residents and the visiting public.

The vision is to create a public realm environment that supports the residential led mixed use waterfront living by providing a safe and healthy place to live which is socially inclusive and engenders a sense of ownership.

Placemaking is at the heart of the proposals through the creation of a network of connected streets, squares and parks, and the establishment of a strong identity for the new Minoco community and the residents of Newham. The proposals at Minoco deliver a well considered play strategy which

satisfies the Mayor's Supplementary Planning Guidance (SPG), Providing for Children and Young People's Play and Informal Recreation (March 2008).

The SPG outlines the need for varied play forms that provide appropriate provision for different age groups, whilst allowing for flexible play integrated throughout the open space.

The proposed typologies of play space builds on the multifunctional concept of 'playable space' rather than any particular designated play space and defines a hierarchy of play provision. This can be summarised as follows:

- Doorstep playable space - under 5s. Potential elements may include fixed equipment, engaging play features, seating
- Local playable space – up to 11. Potential elements may include: fixed equipment, landform, kick-about area and seating
- Neighborhood playable space - under and over 11s/ all ages. Potential elements may include: fixed equipment, kick-about area, skateboard/ bike facilities, basketball nets and seating
- Youth space (sport-based activities) – 12 plus. Potential elements may include: facilities for informal sport & recreation, MUGA, exercise trails, youth shelter

In addition to the designated age related playable spaces highlighted on the plan to the left, there exists within Minoco extensive areas of the public realm which are 'playable' further still, such as Minoco Riverside Park, the pocket parks and pocket squares dotted throughout the masterplan framework.

Different play space typologies will be designed within the masterplan's public open space each with a differing type of play.

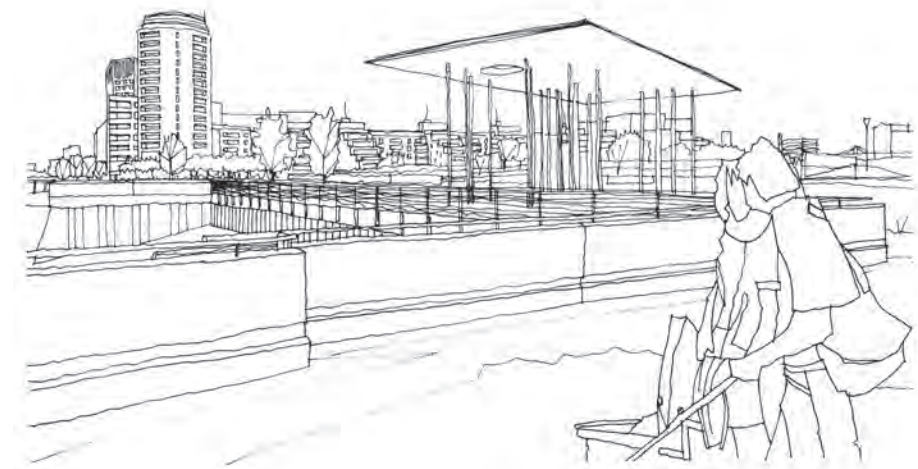
Minoco embraces the aspirations which are set out in the SPG to provide comprehensive and inclusive play provision. The play spaces provided on site exceed the play space requirement calculated using the SPG benchmark. The play strategy at Minoco has been developed to work within the Minoco boundary without relying on neighbouring parks and play spaces. While a number of neighbouring parks exist in close vicinity to the Minoco site boundary, these are supplementary to the play provision required for the development to be successful.

Private and semi private amenity space relating to each residential unit is targeted at the GLA guidance of 5m<sup>2</sup> and will be provided through a mix of balconies, courtyards and roof terraces. When relating to terraced houses this figure is expected to notably increase.





Minoco View from Greenwich Yaught Club



Minoco View from Thames Barrier Park

## Minoco Tall Buildings + CABE + EH Guidance

In June 2001, English Heritage and the Commission for Architecture and the Built Environment (CABE) published a consultation document Guidance on Tall Buildings. Tall buildings have to take into account many components of national and regional planning policy guidance as well as local policies.

Government policy is to get the right developments in the right places. It states that tall buildings should be of the highest architectural quality and designed in full cognisance of their likely impact on their immediate surroundings and the wider environment.

Both CABE and English Heritage strongly endorse this approach, and recommend that local planning authorities should carry this out as part of their plan-making functions. Where there is a possibility of such proposals, the locations where tall buildings are, or are not, appropriate should be identified in local authority development plans or, in future, when preparing development plan documents. These should be drawn up through effective engagement with local communities and with proper regard to Government planning policies and matters such as the local environment.

Such an approach will ensure that tall buildings are properly planned as part of an exercise in place-making informed by a clear long-term vision, rather than in an ad hoc, reactive, piecemeal manner.

It is within this context that the proposals for taller buildings within Minoco have been considered and developed.

The masterplan strategically proposes medium to low rise building, typically 7 stories and below. Medium rise apartment and mixed use buildings serve to articulate and enclose principal circulation routes and act together to form the enclosure and setting for the more private and intimate mews environments.

The masterplan contains very few tall buildings and where appropriate these are positioned to exploit views within and beyond the site, to give local points of orientation and to act as landmarks on the horizon. Tall buildings are proposed within the scheme as follows:

1. Marker building announcing the entrance to the scheme along North Woolwich Road
2. A landmark tall building denoting the centre of the site and enclosing and adding character to Minoco Park
3. A tall building to mirror the end tower of Barrier Point and thus create a gateway into the scheme from the river.
4. A landmark tall building to mark the landing point of the Silvertown Pier riverboat service. Additionally this building will compliment building 3 by adding to and enhancing the Minoco skyline along the River Thames

In addition to its appropriate location the Minoco 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.



Tall Buildings Location Plan





Plot Location Plan

**Plot Numbering**

The masterplan has been subdivided into 26 development zones each of which sits in a defined urban quarter of the masterplan framework. The plots are numbered as follows:

**North East Quarter**

- Plot 01
- Plot 02
- Plot 03
- Plot 04

**Eastern Quarter**

- Plot 05
- Plot 06
- Plot 07
- Plot 08

**South Eastern Quarter**

- Plot 09
- Plot 10
- Plot 11
- Middle**
- Plot 12

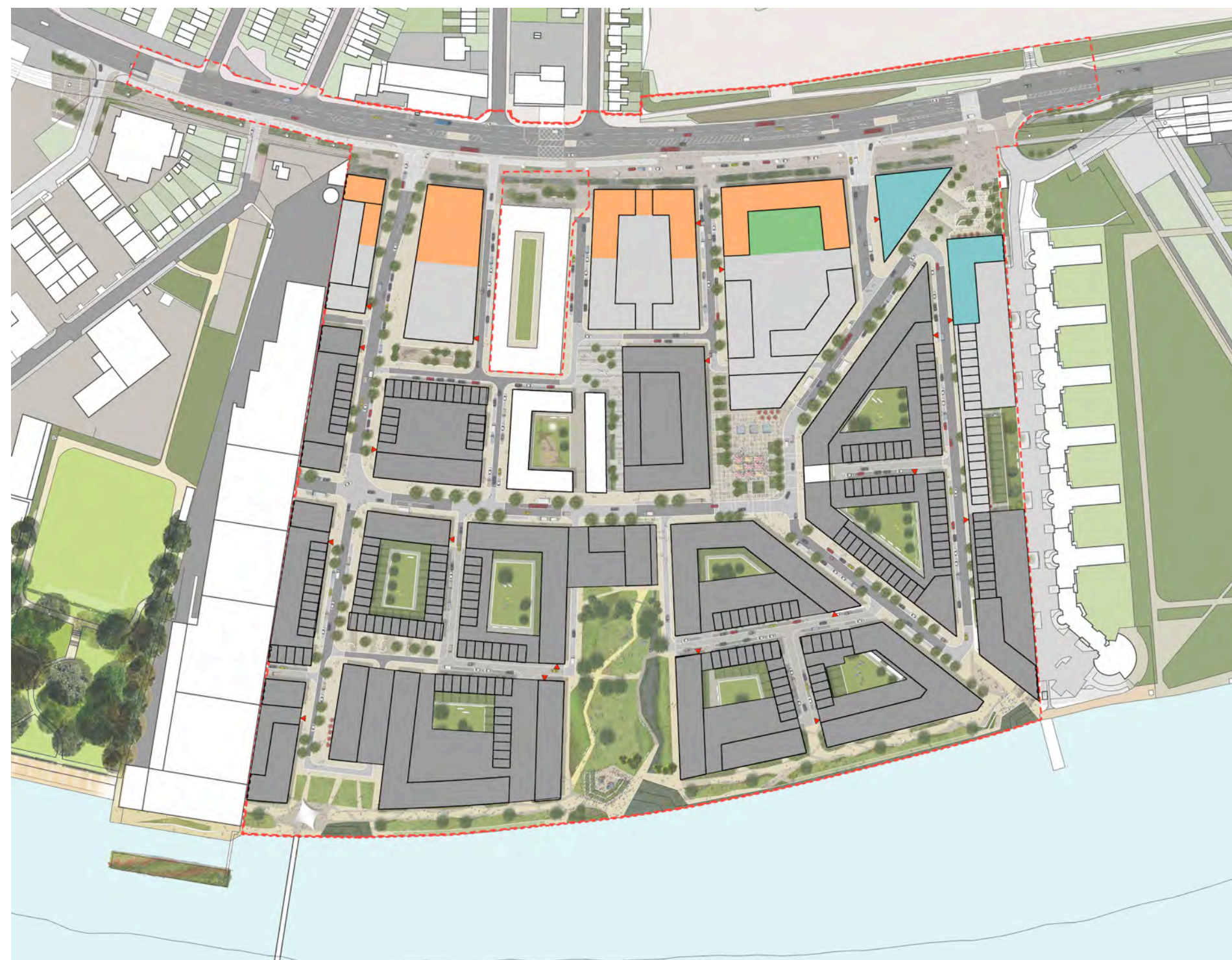
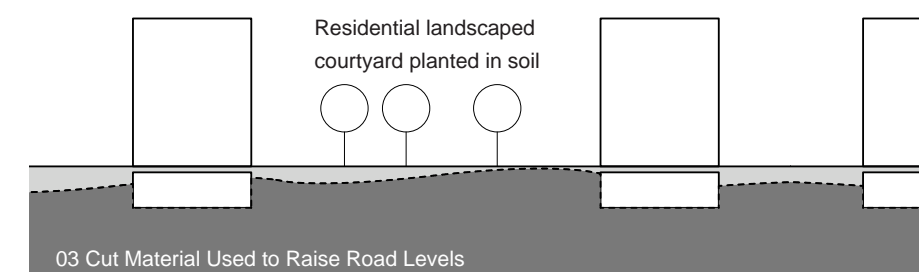
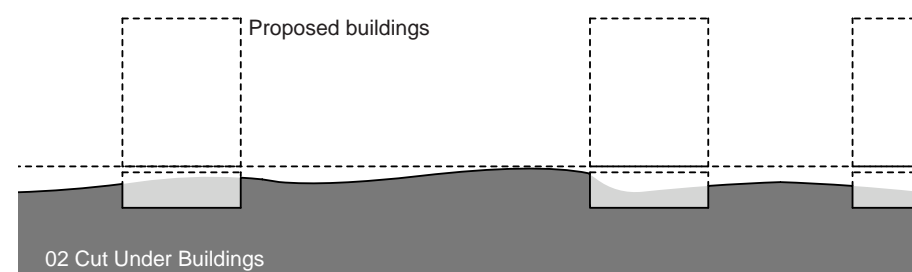
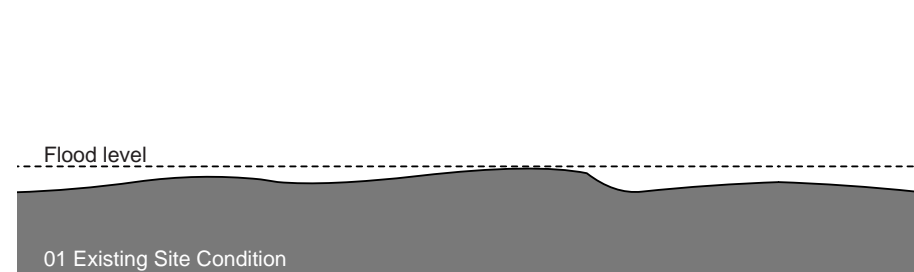
**South Western Quarter**

- Plot 13
- Plot 14
- Plot 15
- Plot 16
- Plot 17
- Plot 18
- Plot 19

**North Western Quarter**

- Plot 20
- Plot 21
- Plot 22
- Plot 23
- Plot 24
- Plot 25
- Plot 26





Formation Level Plan

## Formation Levels

Existing site levels vary considerably across the Minoco site, ranging from +5.7m A.O.D. down to +1.5m A.O.D.. Within this range, the design of the formation levels for the masterplan site has been set to achieve three strategic aims:

- Realise a net cut : fill balance across the site
- Limit basements to area under buildings only to maximise green space in courtyards and parks
- Achieve the EA flood defense level as soon as appropriate within the Minoco site boundary to allow houses to be built with front doors onto the street

The proposed formation site levels will be generated as has been the tradition in London, to cut soil under building footprints and to use this material to build up the adjacent street levels. Developing the site in this way offers a natural and appropriate strategy for Minoco to be built without the need to bring soil onto site nor for extensive earth moving within the site boundary.







Proposed Site Levels Plan

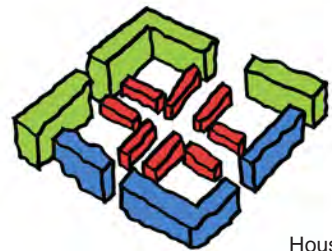
## Proposed Site Levels

The EA flood levels of for the site has been set at +5.05m A.O.D.. The proposed site levels strategy is therefore principally defined by the aim to achieve a level of +5.05m A.O.D. grading up from the existing North Woolwich Road pavement levels; as soon as is feasible within a responsible and appropriate access strategy.

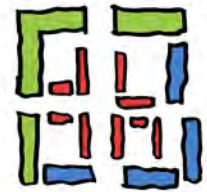
Rising above +5.05m A.O.D. allows the masterplan the flexibility to introduce terraced housing as well as a wider range of residential activities at the new masterplan ground level.

Illustrated by the adjacent diagram the red line highlights the position on site where the contours achieve the flood defence level from the existing levels along North Woolwich Road. Continuing southwards the site levels continue to gently rise to a natural peak of +6.35m A.O.D. along the central east / west route, whereby the site levels gently fall to the rivers edge in a very natural and appropriate way for the site.





Housing and Apartments In Context



The sketches adjacent illustrate the Minoco strategy for organisation of the houses adjacent to the apartment buildings. Houses have been grouped as the inner core to a citadel type urban block with the taller mixed uses and apartments framing and protecting the inner core of residents homes.



Housing + Apartment Location Plan



## Housing / Apartment Mix

A housing / apartment plan for the masterplan has been illustrated in the diagram adjacent.

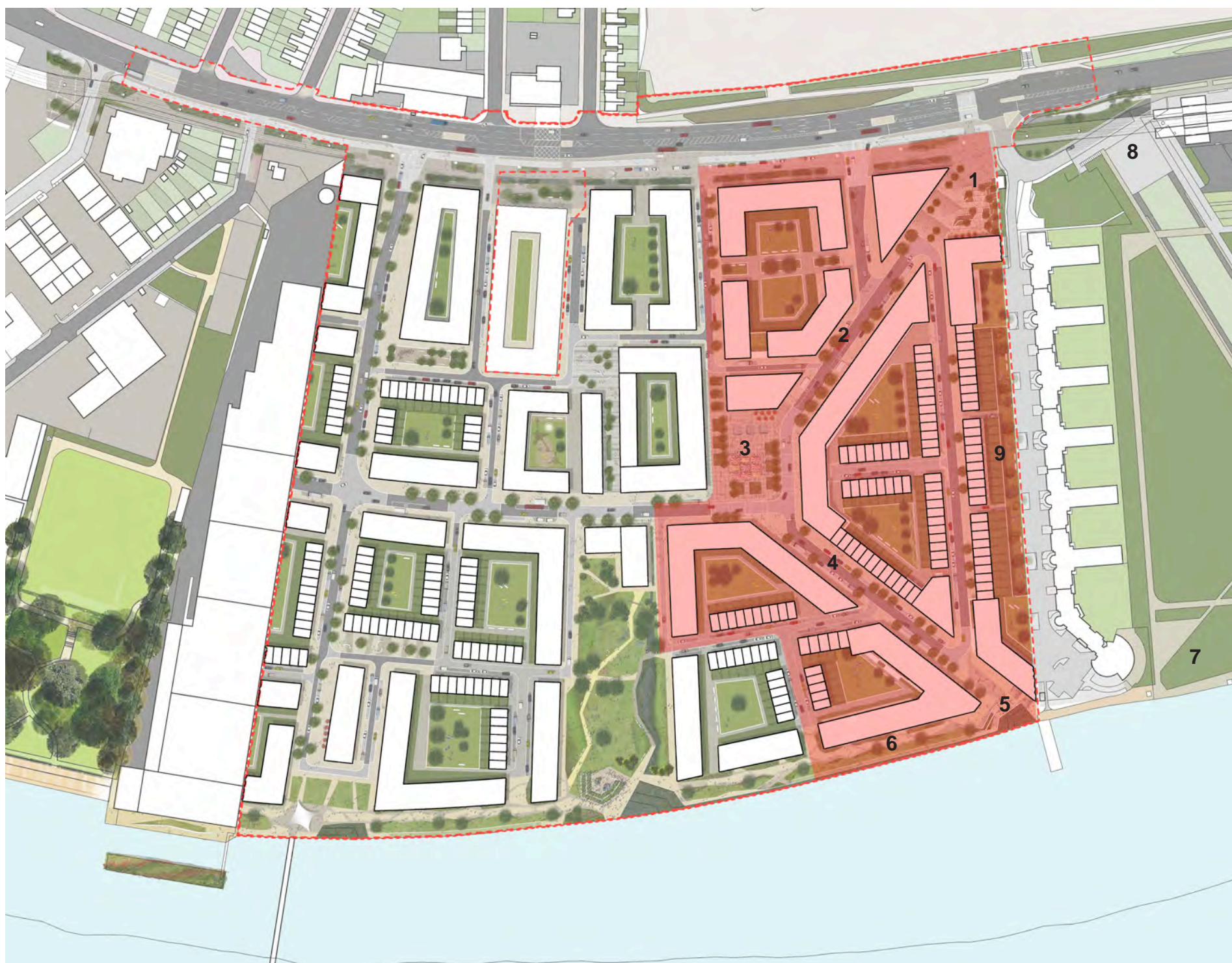
The diagram illustrates how housing within the masterplan framework may be developed to integrate with apartments as well as the mixed use buildings proposed for the site.

Where placed the housing has been grouped around mews / home zone streets protected within an massing of apartment buildings.

Designing the masterplan in this way allows for a rich mix of housing typologies and tenures to be developed within each character area.

The masterplan application documentation establishes a clear residential unit mix for the comprehensive masterplan site incorporating a range of tenures, unit sizes and typologies - this has been detailed in the development specification and design code.





Phase 1 Plan

## Phasing

Phase 1 of Minoco needs to have a clear identity and provide easily for growth and development of the masterplan framework without interrupting the living patterns of residents of the early phase buildings. For this reason the diagram left highlights how a Phase 01 of Minoco (red shading) may be developed to tell its own story and to allow uninterrupted development west as the site grows.

- 1 - Mark the entrance
- 2 - Provide a high street with shops and amenity
- 3 - End the high street mark the heart
- 4 - A view to the river
- 5 - The riverside park and ecological terraces
- 6 - Riverside promenade
- 7 - Connect into Barrier Park
- 8 - Provide an alternative route to the station
- 9 - Positively relate to neighboring sites

Further to Phase 01 development of the second and third and fourth phases will occur from the western edge of the red line Phase 01 boundary indicated left.





Minimum Heights Plan

### Minimum Heights AOD

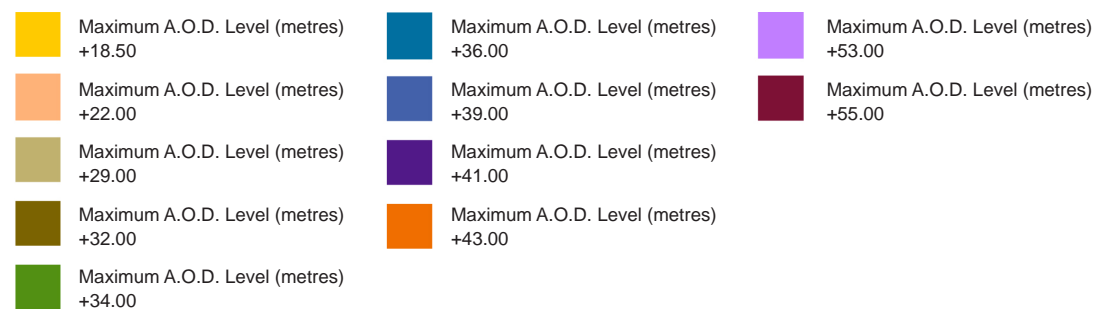
In order for the masterplan to be a success a minimum level of built form needs to be achieved, to ensure enough people live in the area to animate the scheme but also to ensure streets and spaces receive an appropriate level of enclosure to form their edges.

The minimum heights strategy seeks to balance the need for occupancy density with an appropriate level of urban realm and built form density. The heights strategy must allow for a wide range of building forms and architecture to be developed within its framework while also providing certainty in the deliverability of the masterplan aspirations.

It is within this context that the minimum heights for Minoco have been set.

- 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

## Maximum Heights AOD

The maximum heights strategy needs to define where landmarks should be formed and those streets and areas of urban realm within the masterplan that need to be further defined and enclosed, to heighten the quality of the scheme. The diagram for maximum development sets taller buildings adjacent to existing infrastructure along North Woolwich Road, along the principle streets, riverside and main urban spaces but limits height adjacent to the townhouses.

In some cases the maximum building heights vary within a Plot to reflect the role of the building in the overall master plan framework. The tallest buildings will be located at:

- The eastern element of Plot 12 (maximum of 58.0m (AOD)), this building sits at the northern end of the new park and marks the centre of the site
- The southern element of Plot 18 (maximum of 58.0m (AOD)) is located adjacent to the pier and will act as a 'marker' for this facility
- The south eastern part of Plot 10 (maximum of 58.0m (AOD)) which is the termination of the diagonal route from the central square and announces the development across the riverfront













View from a Minoco Terraced House

## Places

In order to achieve a sense of place, the masterplan must consist of a diverse range of varying public urban, semi-private and private spaces.

When developing Minoco a legible and developed language of urban spaces has been clearly defined within the scheme, each of a scale, proportion and character suitable to its urban function and major role within this new piece of Newham.

The design of these spaces has been clearly defined by the master planning team's understanding of streets, squares, urban forms and density as outlined earlier in this document. While not aiming to recreate a character pastiche of these referenced spaces, the Minoco masterplan seeks to learn from the defining principles of the quoted urban realm and allow these references to find their own Newham character and identify within the masterplan. Additionally the scheme seeks to provide urban spaces unique to Minoco, particularly in its offer of public parks and pocket squares.

The diagram illustrated right indicates the location within the scheme of the main spaces that form the principal spatial hierarchy of the Minoco masterplan. Excluding streets which are discussed separately within this document, each main urban space is described in detail on the following pages.





Places Location Plan

## Principal Urban Spaces

The main urban spaces and public realm set out by the Minoco masterplan are illustrated in red on the adjacent plan. The key spaces are listed out below:

### Squares

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

### Parks

- 5 - Minoco Park
- 6 - Riverside Park

### Neighbourhood Squares / Pocket Parks

- 7 - Crescent Square
- 8 - Venesta Pocket Park
- 9 - Silvertown Pocket Park

### Key Area of Urban Design

- 10 - North Woolwich Road

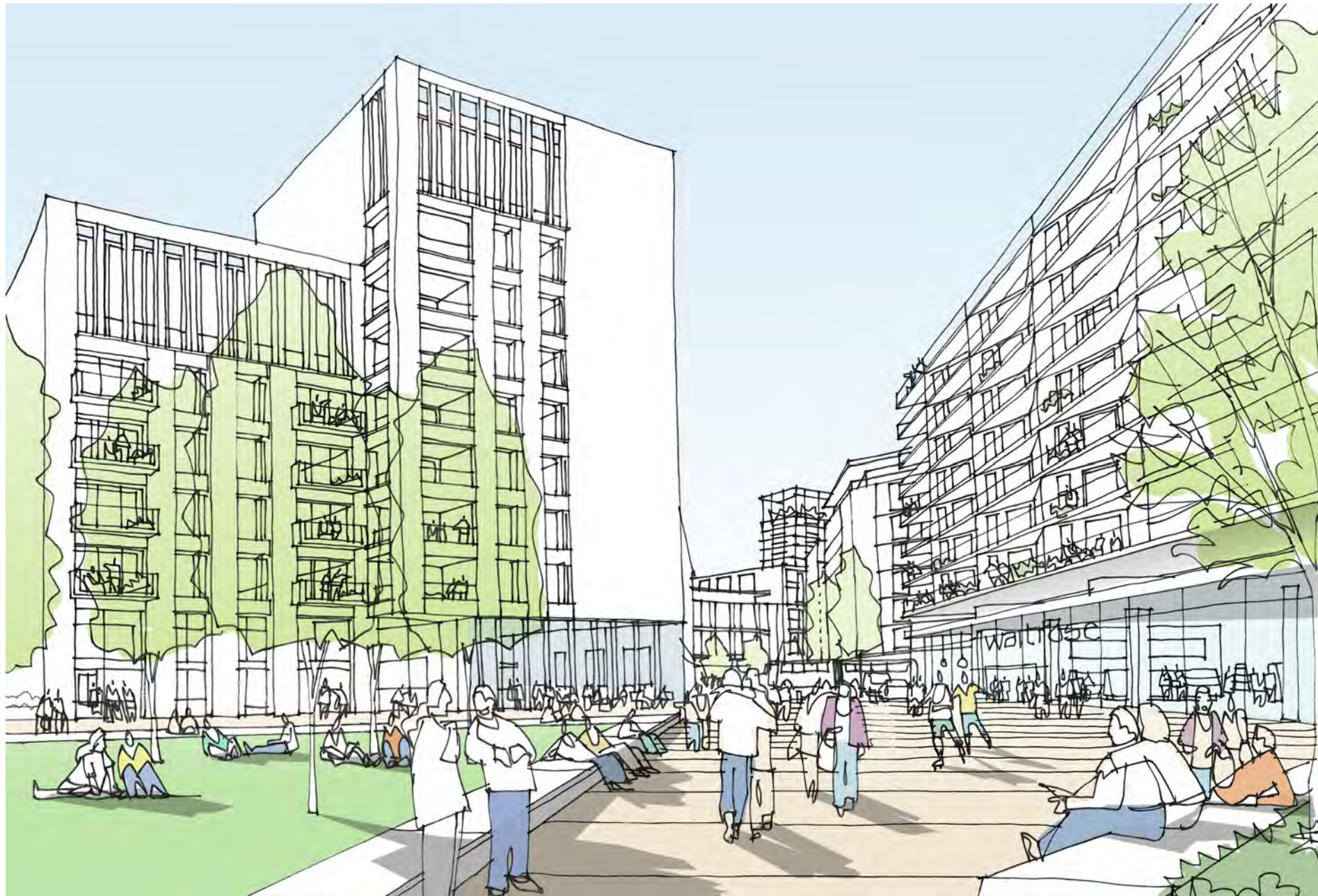






Within Pontoon Dock Square there are opportunities for:

1. Tree planting
2. Pocket spaces for seating and play
3. Main pedestrian route
4. Shrub and tree planting buffer toward Barrier Point vehicular access
5. Active frontages
6. Cafe spill out



Above: Pontoon Dock Entrance Square View

Left: Pontoon Dock Entrance Square Plan

## Pontoon Dock Entrance Square

Pontoon Dock Entrance Square is one of the key entrance nodes of the site, with the space fulfilling a number of major functions for the scheme.

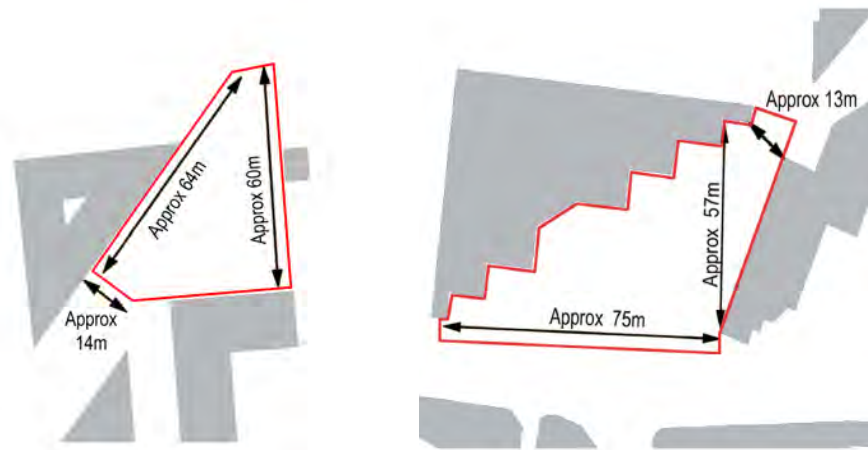
- Marking an entrance
- Announcing the quality of the scheme
- Drawing people into the development / Serving as a collector
- Providing a transition into Thames Barrier Park
- Serving Pontoon Dock DLR Station

Spatially the square is enclosed to the west and south by building plots 02 and 06. Plot 02 is expected to be architecturally unique for the development to assist with marking the site when viewed from the City or from the DLR's elevated position. Plot 06 will further complement the architecture and massing of the wider site in tandem with plot 02 to frame and announce the entrance into the high street.

Landscaping in this square must also provide a transition from the existing road levels up to the flood level and the crest in the centre of the site.

Strategically therefore the proposed landscape design for this space benefits from the interest and opportunity presented by the gentle change in level.





Spatial Comparison - Entrance Square, More London Place, London



Federation Square, Melbourne  
Terraced spaces.



Federation Square, Melbourne  
Steps, seating and level changes incorporated to create spaces.



More London Place, London



More London Place, London  
Edges with retail and cafe spill-outs.



Benches for sitting and meeting.





Section A-A'

Arrival space /  
Area for small events and play

Stepped seating and terraced planting  
incorporated into level change.

Entrance Square connects to High Street

A green wall and terraced planters create a  
backdrop to the square

An upper level cafe spill out area with views  
of the planting and across the square







Within Market Square there are opportunities for:

1. Water feature
2. Cafe spill out
3. Planted areas with seating
4. Market
5. Open space for events
6. Active frontages along the edges of the square



Market Square View

## Market Square

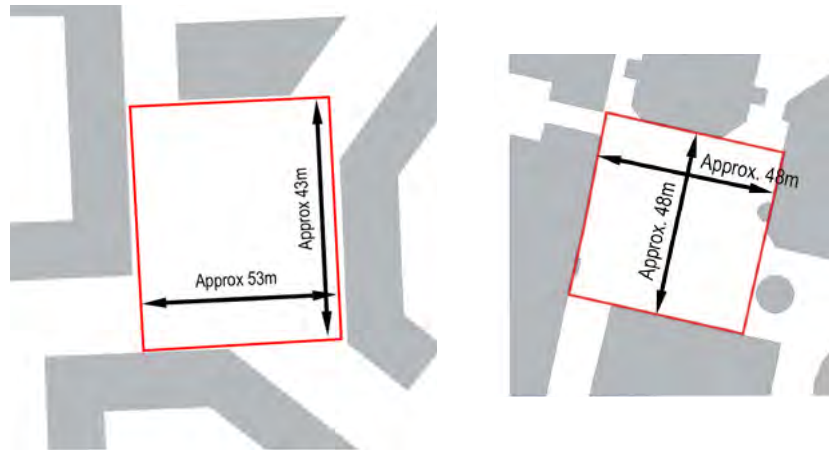
Market Square will be the heart of the development. Working in tandem with Pontoon Dock Entrance Square, these two urban spaces will serve to dumbbell the high street in phase 01 and provide a focus of activity at either end of the main mixed use street.

Market square is south facing and surrounded by mixed use buildings on all perimeters. From the centre of the space it is possible to view pontoon 07 of the Thames Barrier framed by the diagonal route to the river. Looking west the geometry of the main street and flanking buildings have been set to frame a view of Canary Wharf.

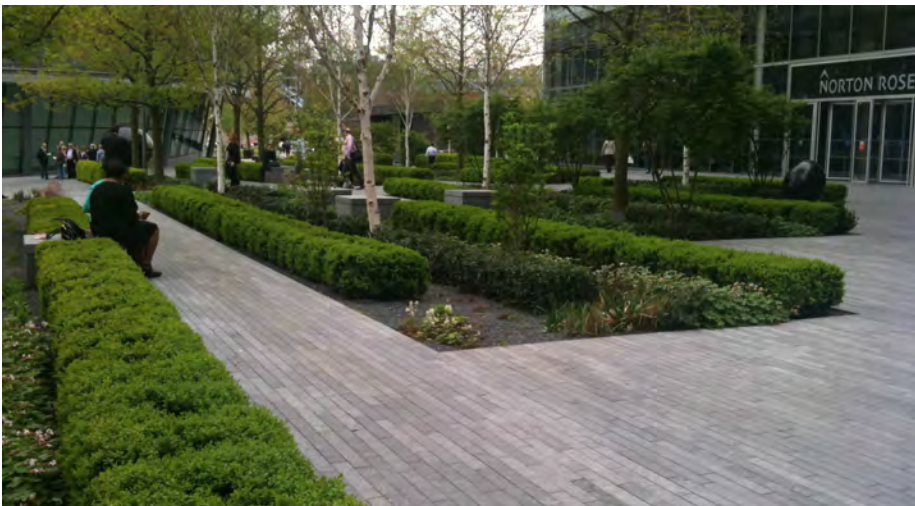
It is anticipated that a range of seasonal, farmers, and arts and crafts markets might be established in this space to the benefit of the new Minoco community as well as the wider residential area.

The space is flanked typically by buildings in the range of 7 / 8 stories and is comparable in scale to St Jame's Square in central London.





Spatial Comparison - Market Square, Finsbury Avenue Square, London



More London Place, London  
Using linear planting to reinforce direction.



Paving pattern.



Finsbury Avenue Square, London



More London Place, London  
Edges with retail and cafe spill-outs.



Benches for sitting and meeting.





Seating under trees near water.



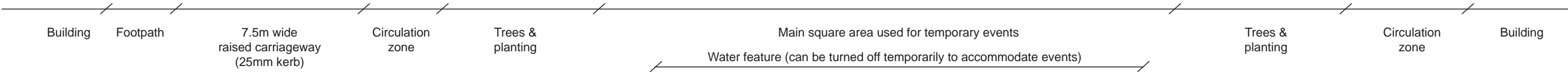
Textured water feature.



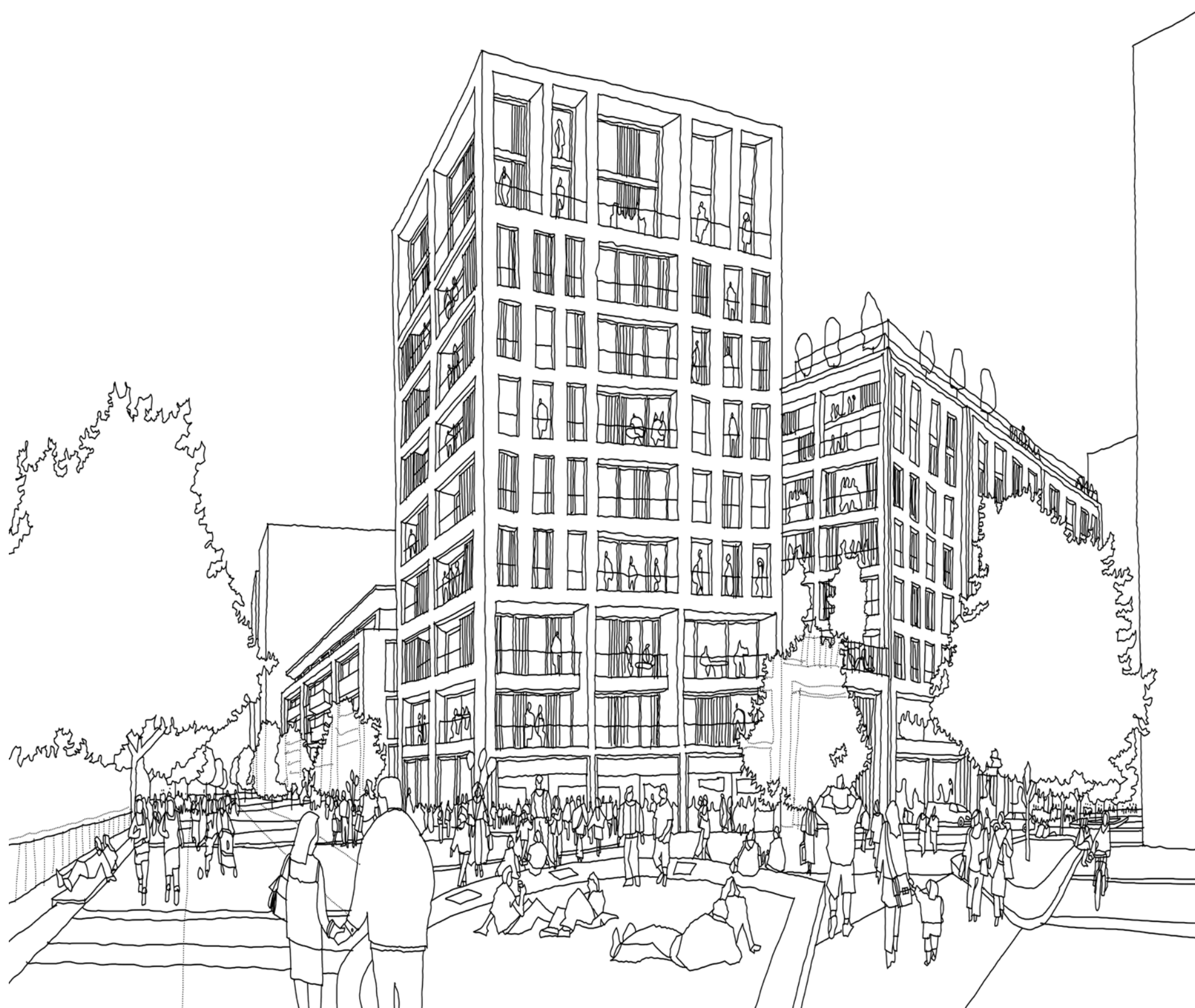
Local farmer's market.



Section B-B'







Barrier View Square

## Barrier View Square

Barrier View Square serves to mark the entrance from Barrier Park but also will play an important role in announcing the scheme against the wider riverscape.

In its urban context the square forms the third part of the story for pedestrians moving from North Woolwich Road through the scheme, across the high street and to the river. The space is articulated principally by plots 07, 08 and 10 of which the corner of plot 10 is massed higher to work in tandem with the tower of Barrier Point to mark and complement the start of the Riverside Park stretching along the rivers edge.

The square and landscape will provide a wonderful setting to view the iconic Thames Barrier and this view will be key to the quality of experience in Minoco as it serves to ensure that the scheme is identifiable as a part of London in a world context.





Barrier View Square Plan

Within Market Square there are opportunities for:

1. Tidal terrace
2. Cafe spill out
3. Planted areas with seating
4. Thames Barrier viewing area
5. Open space for events
6. Active frontages along the edges of the square



Section H-H'

River Thames

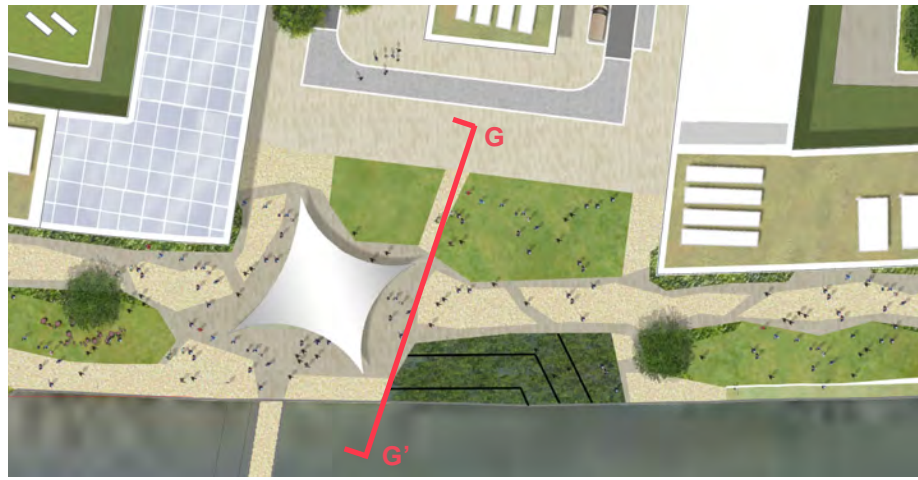
Riverside terraced planting

Upper level play / activity / sitting area

River walk

Ecological planting incorporated into stepped seating with river views





Silvertown Pier Square Plan



Section G-G'

Silvertown Pier  
(River Thames)

Riverside terraced planting

Pavillion & seating

Lawn area

Carriageway

Circulation  
zone

Building





Silvertown Pier Square

### **Silvertown Pier Square**

The new Silvertown Pier is a significant asset to the Minoco masterplan.

Approval for the pier is sought under a previously submitted planning application and the new terminal will be integrated into the Thames Clipper service when the facility comes on line.

To mark the significance of this entrance node Silvertown Pier Square will form a suitable arrival point and a destination in itself - serving not only commuters, local residents but also visitors to Newham and pedestrians using the Riverside Park.

In its role within the urban masterplan strategy the square allows a terminus to the riverside promenade while dealing with the transition of pedestrians and vehicles moving north through the development and eventually onto North Woolwich Road.

The landscape design is appropriate and robust for the footfall anticipated in this space while also serving as a physical and visual amenity for residents of all surrounding buildings.





In Minoco Park there are opportunities for:

1. Entrances connected across the park
2. Paths
3. Play areas in the mounded landscape

4. SUDS water features/swales incorporating play
5. Flat areas for seating and relaxation
6. Amphitheatre/performance space
7. Stepped SUDS feature



Landform auditorium.



Shallow water, opportunity for nature play.



Sculpted lawn incorporating play features.





Minoco Park

## Minoco Park

Minoco Park will be a significant asset to the masterplan development. Its location and proportion against the River is not only unique in London but also compliments the existing typology of riverside parks in the Borough such as Lyle Park and Thames Barrier Park.

The park will provide a wide range of physical and visual amenities to the local community as well as containing a number of ecological features such as tidal terracing and swales serving the wider ecological strategy for the scheme. A SUDS strategy will also be present in the landscape design.

Regarding play activities the park is large enough to contain games pitches, landscaped play parks and sculpted land form features as well as areas of set planting all of which are proposed in the masterplan landscape strategy to ensure a rich and diverse range of facilities is provided for by the new park.





Section C-C'

- |          |   |                                    |                   |   |   |                                    |                   |                                |   |          |
|----------|---|------------------------------------|-------------------|---|---|------------------------------------|-------------------|--------------------------------|---|----------|
| Building | Footpath<br>(Restricted<br>vehicle<br>access) | Mounded landscape<br>encloses park | Path &<br>seating | Children's<br>natural play<br>equipment | Flat lawn area for informal play and kick-about | Mounded landscape<br>encloses park | Decked<br>walkway | Swale &<br>water edge planting | Footpath<br>(Restricted<br>vehicle<br>access) | Building |
|----------|---|------------------------------------|-------------------|---|---|------------------------------------|-------------------|--------------------------------|---|----------|





Section D-D'

Planting

Path

Amphitheatre/outdoor performance area

Seating along paths

Children's  
natural play  
equipment

Mounded landforms create interest and an informal area for playing, sitting and lying





Riverside Park Precedent





In Riverside Park there are opportunities for:

1. Silvertown Pier Square with an opportunity for a covered area to provide shelter.
2. Thames Barrier Park Square
3. Terraced SUDS feature
4. Benches and lawn for seating and relaxation with planting creating seasonal interest and defining edges.
5. Pedestrian and cyclist route
6. Amphitheatre linking to Minoco Park
7. River side path



Minoco Riverside Park

## Riverside Park

The new Riverside Park and Promenade will be one of the main focal points of the masterplan development. Spatially the riverside will be unique in London both generous in its width as well as providing an active and animated built edge to the river.

Framed by Barrier View Square and Silvertown Pier Square the new park will become an extension of Barrier Park, with a new and unique landscape and spatial identity of its own, serving to connect the aforementioned squares.

The promenade will provide a space for play, learning and exercise as well as an amenity offer to complement the pedestrian nature of the entire masterplan. Planting and features will be low lying and allow distant views along the route while also allowing spaces to stop and admire the 500+ m of south facing riverside view with glimpses of Canary Wharf, the Millennium Dome as well as the Thames Barrier.





Lawn and benches for seating and relaxation.



River walk.



Opportunity for art features relating to the history of the site.



Ecological planting.

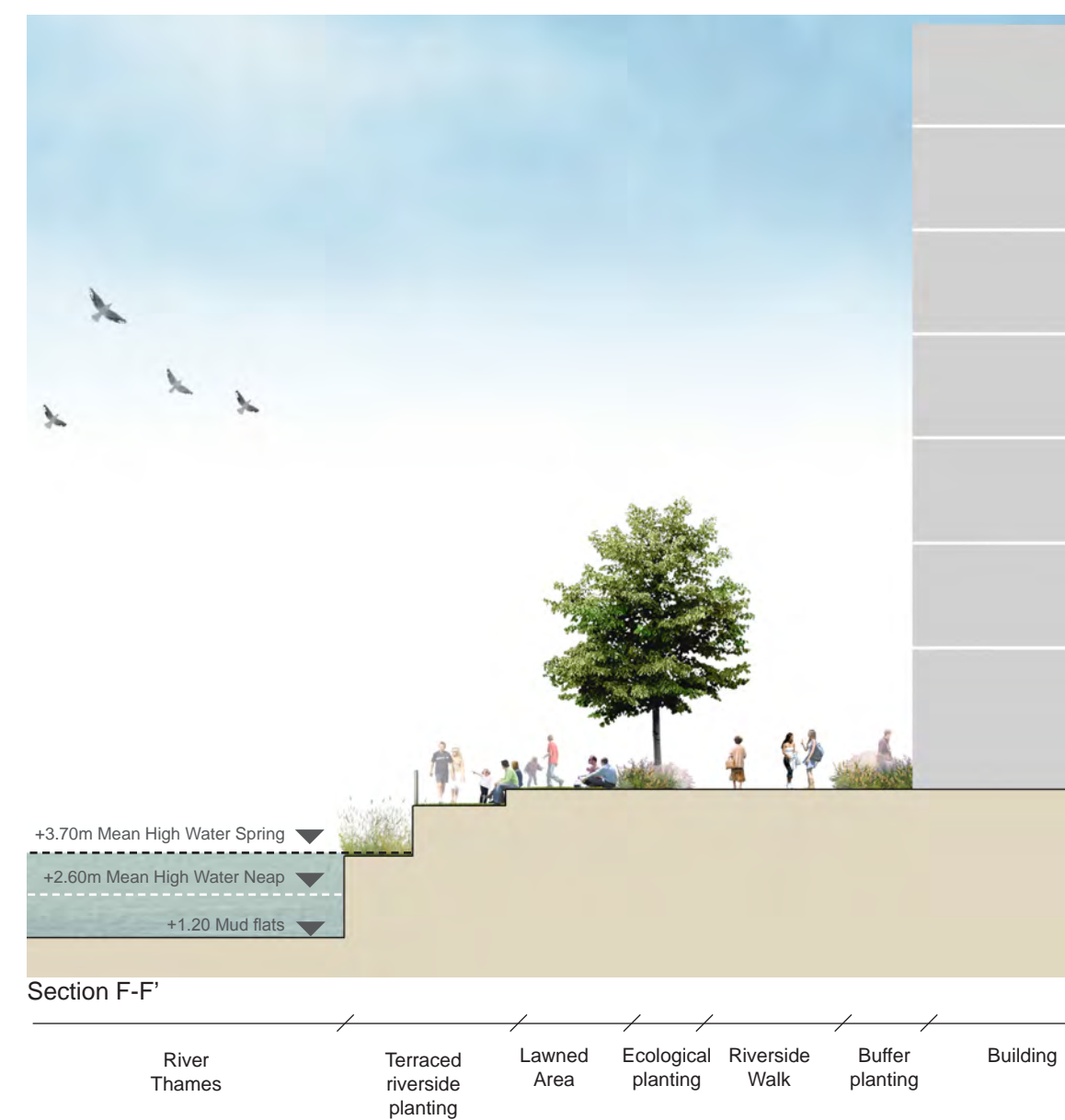


Cafe spill outs overlooking River Thames.



Lawn, seating and ecological planting.









**Barking Town Square**  
Play elements threaded through the square.



**Coleman Street Garden, London**  
Ground floor frontages are activated by spill out seating and overlooked by windows above.



**External games and gathering**



**Opportunity for informal play**





Pocket Park Aerial View



Pocket Park View

## Pocket Squares + Pocket Parks

The Pocket Squares and Pocket Parks form a primary vocabulary of spaces within the masterplan. These spaces address the transition from streets up to the more major urban squares and parks. Each has the opportunity to have its own unique character and function defined by the buildings surrounding the space as well as the local environmental conditions.

These parks and squares are intimate in the wider masterplan context but are appropriate in proportion for surround apartments and houses, which will add a level of domesticity and ownership to these spaces.

Play equipment as well as rest zones, exercise areas and formal landscape features will be provided as part of the overall landscape, play and amenity strategy for the scheme.





North Woolwich Road View of Ecological Planting





North Woolwich Road View

## North Woolwich Road

North Woolwich Road is an area of the Minoco masterplan of critical importance to the scheme. The road represents the predominant extent of the Minoco site which addresses and seeks to enhance the relationship between Minoco and its wider Newham context.

This fact is further reinforced by Newham's Core Strategy draft, policy S22 which advocates the provision of a new local centre between Pontoon Dock and West Silvertown DLR Stations.

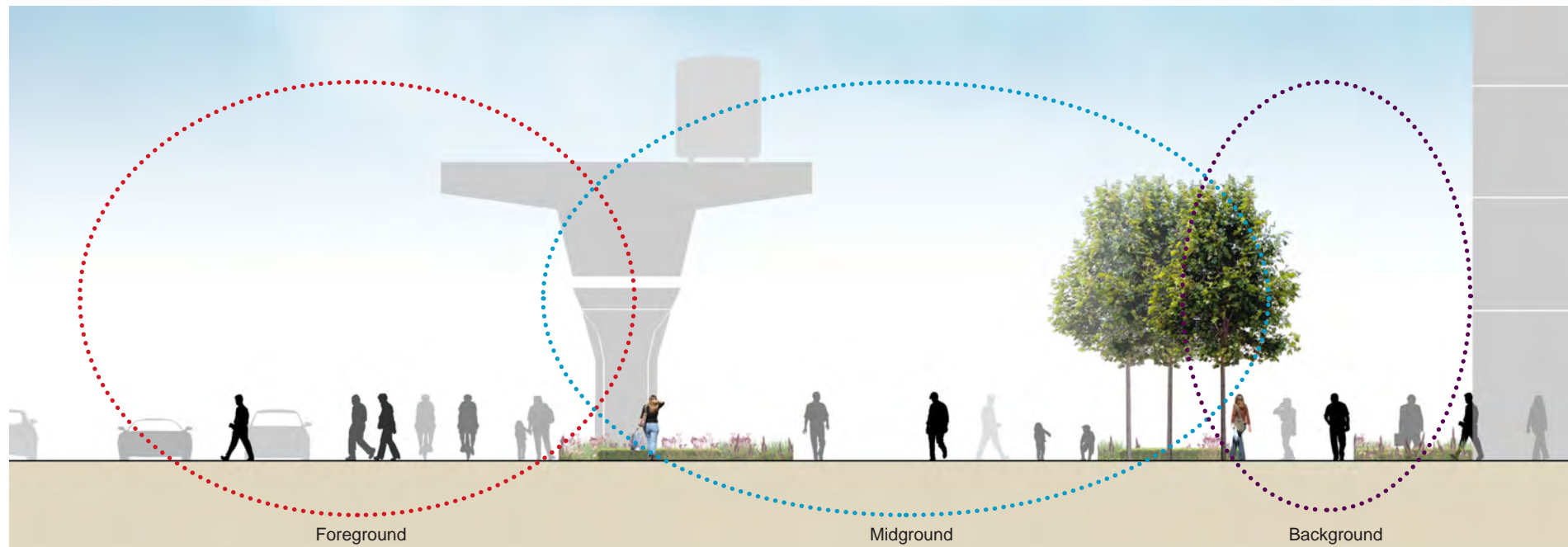
The Minoco masterplan proposals fully support and seek to enhance the opportunities presented by the core strategy policy. The masterplan land use proposes a mixed use hub of activity located adjacent to Pontoon Dock DLR station and also provides for commercial and retail buildings along North Woolwich Road that will allow the creation of linked local centre between the two DLR stations.

A continuous line of active building frontages and ecologically led landscape proposals have been placed to address the street rather than to turn away from it. This is to ensure a safe and secure environment, which acts as a first impression and gateway point into the development, by providing a sense of activity and natural surveillance, while serving to connect residents of neighbouring developments into Minoco.





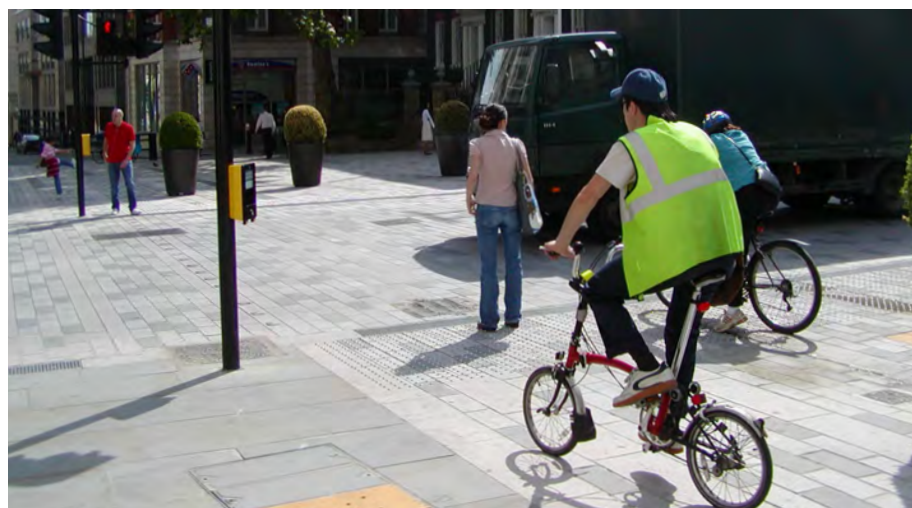
North Woolwich Road - A Wider Vision



North Woolwich Road - Spatial Hierarchy

To create a clear and comfortable street environment on North Woolwich Road three activity zones have been created along the route:

- Foreground zone - area for cycle routes, pedestrian movement, bus stops and road crossings
- Midground zone - area with opportunities to provide ecological swales and planting as well as cater for play activities as well as providing the opportunity for some car parking to serve the non residential uses fronting the road
- Background zone - area with active frontages and pedestrian movement



**Foreground**  
Pedestrian movement, cycle paths, bus stops & crossings



**Midground**  
Planting and through spaces for pedestrians

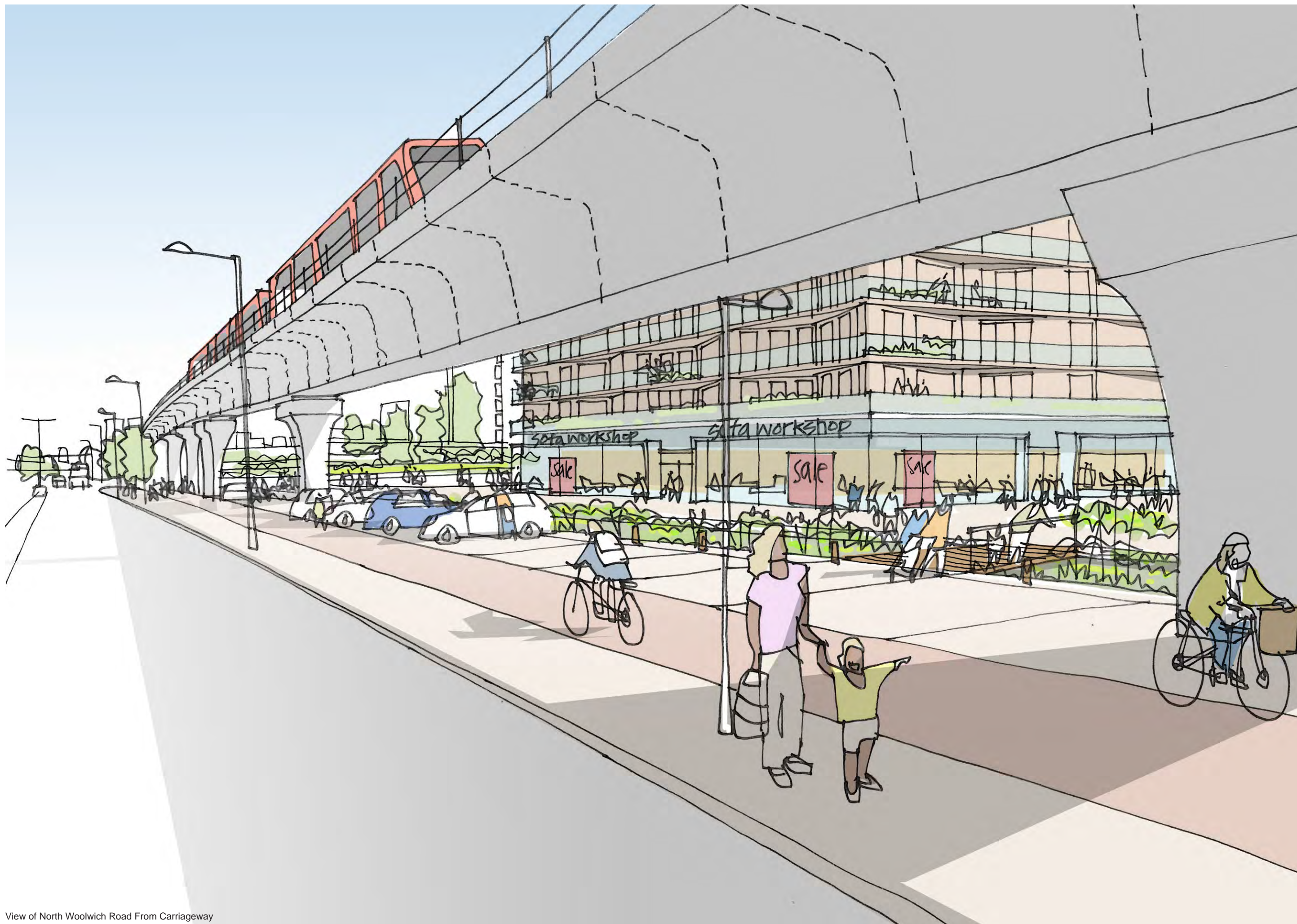


Opportunity for activities



**Background**  
Pedestrian movement and active retail frontages





View of North Woolwich Road From Carriageway









**Children's Play Space**  
Play space in close proximity to residential areas to allow for greater security and accessibility.



**Lawn Area**  
Open green spaces for recreational activities, meeting and relaxing.



**Areas for families to meet**



**Green buffers along buildings**

## Courtyards

As part of the wider space strategy, the courtyard designs are intentionally well enclosed, clearly defining private amenity space from public.

The courtyard spaces are generous enough to receive good lighting levels during the day and enclosed to offer a sense of security during the evening/night.

The spaces are designated for resident access only, and with the high levels of natural surveillance allows portions of the spaces to be child friendly and secure. Trees and semi mature planting will be strategically positioned, able to offer areas of privacy and shade during the day.

The communal residential courtyards will provide:

- doorstep playspace for the youngest children
- areas for sitting and relaxing on benches and lawn areas
- shrub planting and tree planting
- planted buffers along buildings





Street View from River into Minoco



## Streets and Movement

The internal streets have been designed to be people friendly and to promote pedestrian activity. Generally the design of these streets follows proportions and arrangements that will encourage a natural reduction in vehicle speeds to respect the nature of the development. This will be achieved by the change in character and texture of road surfaces and through landscape features which identify the hierarchy of various roads and spaces. The roads will be planned with the guidance of a road traffic engineer and the appropriate assessments made to determine patterns of usage to inform the design.

Movement across the site has been designed to respect the primary modes of transport by bicycle, bus, walking or secondary modes by car and ensures that they blend into an environment and do not conflict with one another.

Pedestrian and cycle movement above ground is the most important on this site and is intrinsically linked with the ground floor use of each building and the way each residential entrances and accesses will be designed.

The main access routes create zones of high pedestrian activity. These areas require spaces for residents and the public to be able to move freely and enjoy the open and permeable nature of the site layout. In contrast a predominance of lanes and mews streets have been created where residents live.

The main retail frontages create zones of high pedestrian activity. These areas require spaces for residents and the public to be able to move freely and enjoy the open and semi permeable nature of the site layout. However, where residents live on the ground levels, the streetscape begins to define boundaries, privacy and areas of natural surveillance.

The streetscapes are designed to tell the story of the development and subtly inform the viewer that they are entering a unique residential development.

Trees, furniture and lighting will be integrated into the landscape to create a harmonious and legible environment. Along with the buildings, this will create a legibility that can be clearly understood both visitors and residents

Good visibility, careful planning, the hierarchy of routes and boundaries are key to create footpaths that practically work and feel safe. Planting next to footpaths will be carefully selected with future maintenance and natural surveillance in mind.

Where seating is to be located it will be specified to be appropriate for its place taking into account the potential problems regarding congregation and safety. A fully coordinated lighting design will be produced so that spaces are lit appropriately along footpaths.

It is proposed that the roads are designed to be 'visually open, direct and well used.' Where areas are private, such as areas around the townhouses, a change of road surface and the natural enclosure of the buildings will promote surveillance and a sense of privacy.

Planting and trees will be designed in such a way to not hinder natural surveillance and will define boundaries. The species will be carefully selected to ensure it is suitable for its location.

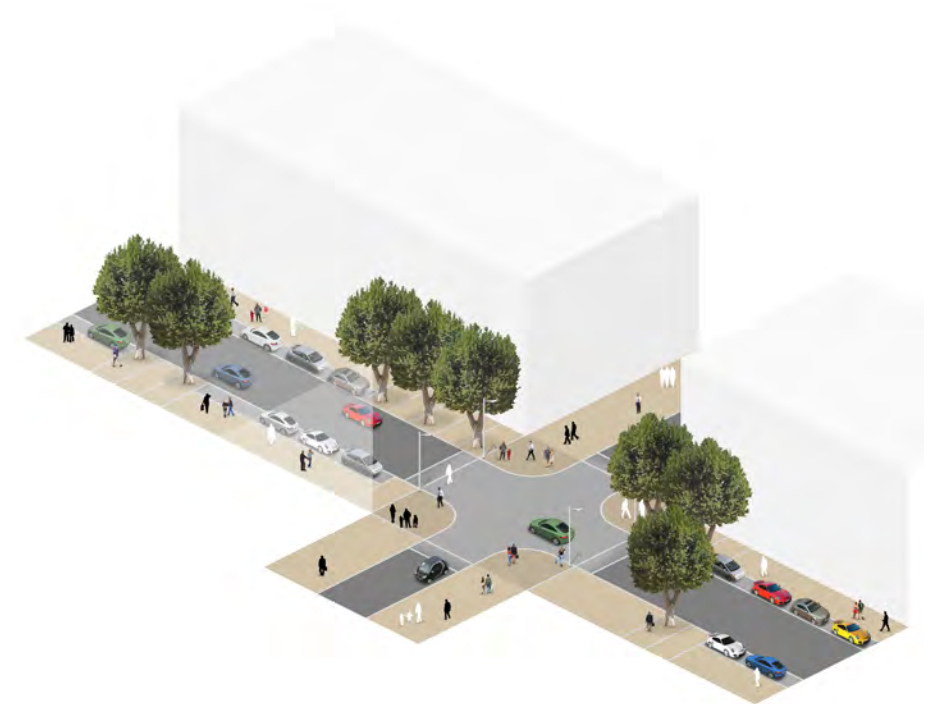




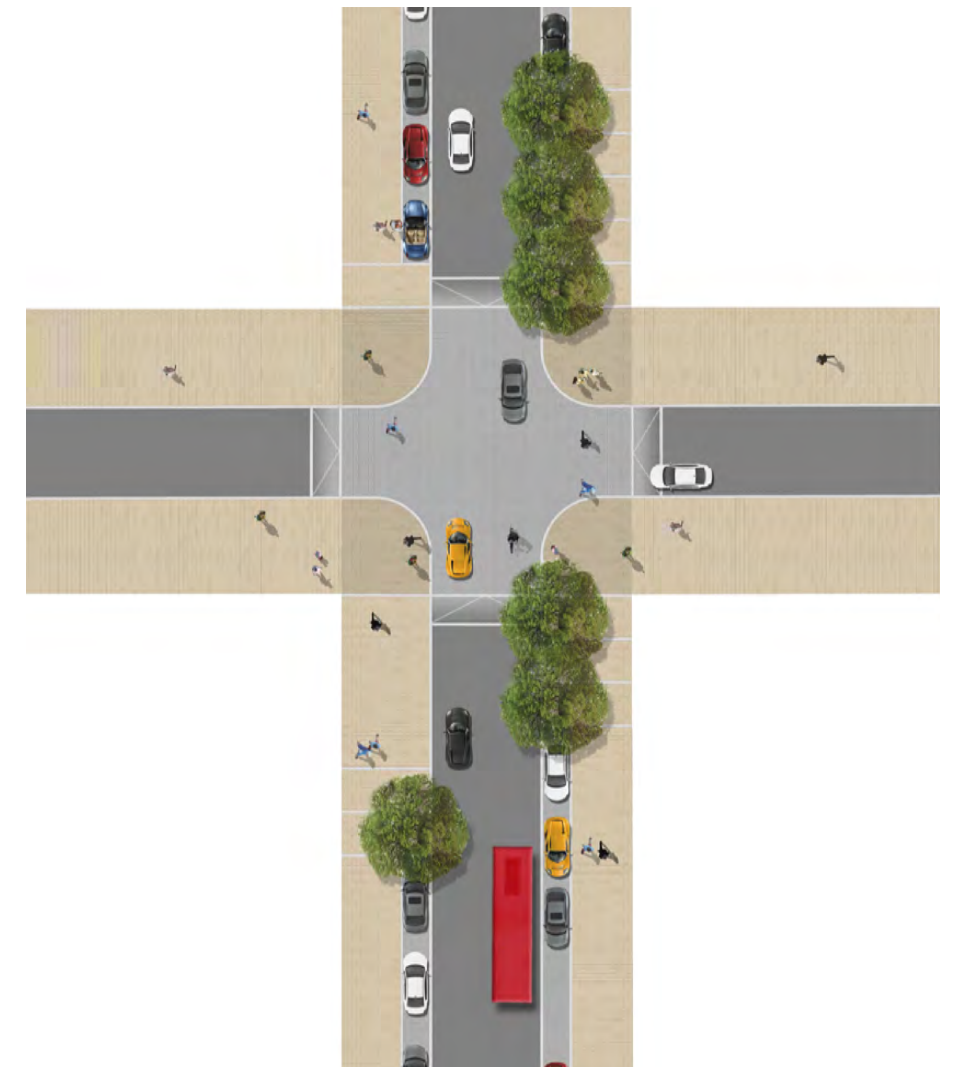
## High Street

The high street will be the bustling heart to the development.

Initially provided during the first phase of the development, the street will provide for local retail needs as well as providing a rich range of diverse mixed uses such as medical, educational, public services shops and facilities.



High Street 3D Diagram



High Street Plan





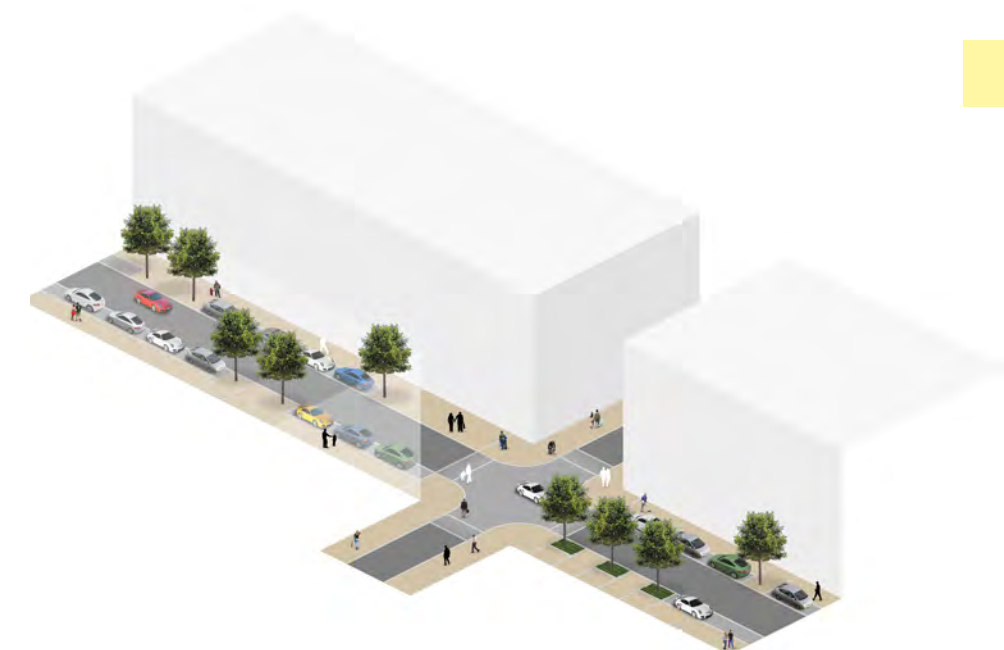
## Streets

The streets form the spine of east west movement on the site, typically connecting the pocket parks and smaller spaces to the main spatial events and the high street within the masterplan.

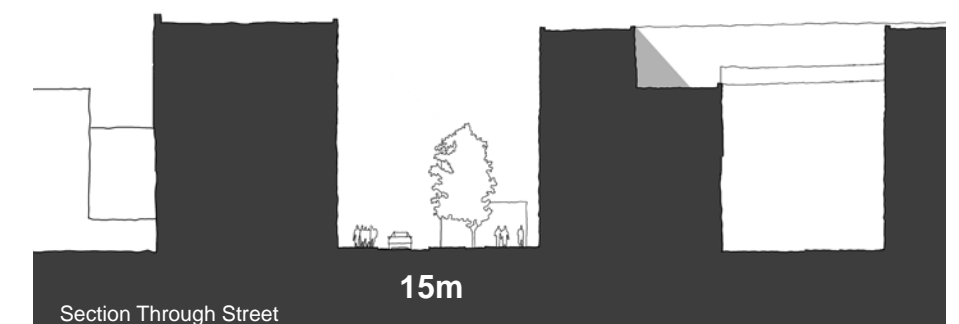
More intimate in scale than the high street the streets nominally are flanked by 6 to 7 storey buildings and will have a unique and characterful feel to them.

As with the high street the streets will be animated with a range of ground level uses, entailing corner shops and services as well as numerous residential building entrances.

Where possible traffic movement has been managed to reduce expected vehicular flow through the streets a strategy which works in support of a number of one way streets dotted throughout the scheme.



Street 3D Diagram







## Lanes

Lanes within the masterplan have been designed in support of the streets movement strategy to provide an appropriate residential setting for residents of Minoco.

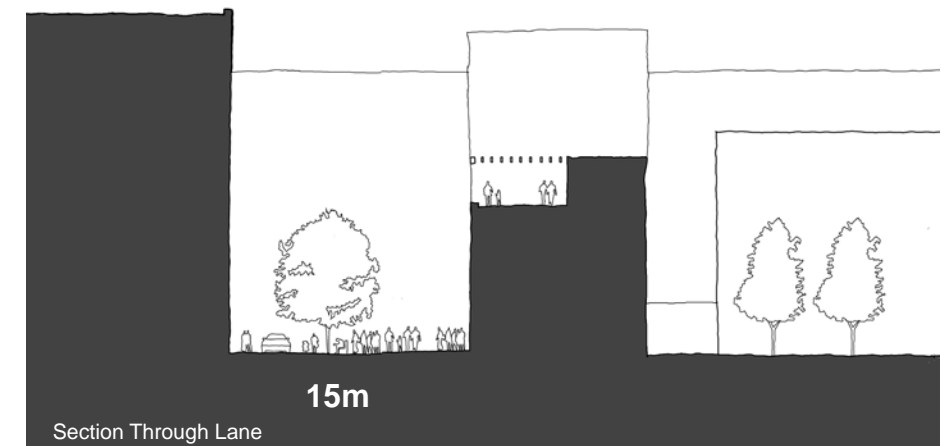
Lanes have been appropriately scaled to address the heights and massing of residences while also allowing an intimate and community feel to the space

created between the buildings and ultimately the front doors to all of the residential units.

The lanes will have an identifiable material strategy and character which sets them apart from the more public areas of the scheme aiding the spatial hierarchy and landscape clarity of the masterplan proposals.



Lane View







## Mews

An additional success of the Minoco masterplan will be the creating of mews streets as a further development of the residential typology established by the lanes.

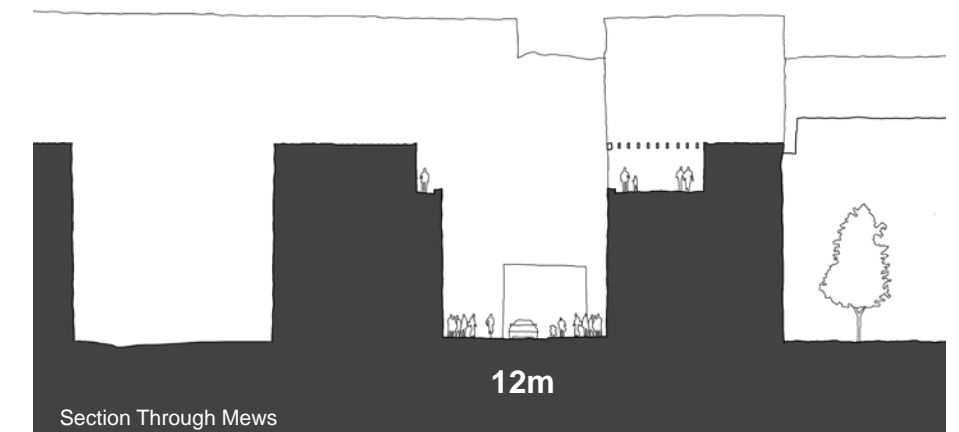
Mews exist where the street is flanked on both sides by residential town houses and have been deliberately but carefully designed to be open

homezone types spaces with numerous terraced front doors opening into the space.

These streets are conceived similar to mews found elsewhere in London as environments populated and characterised not only by the quality of the houses but also by the individuality of the residents and home owners who live there.

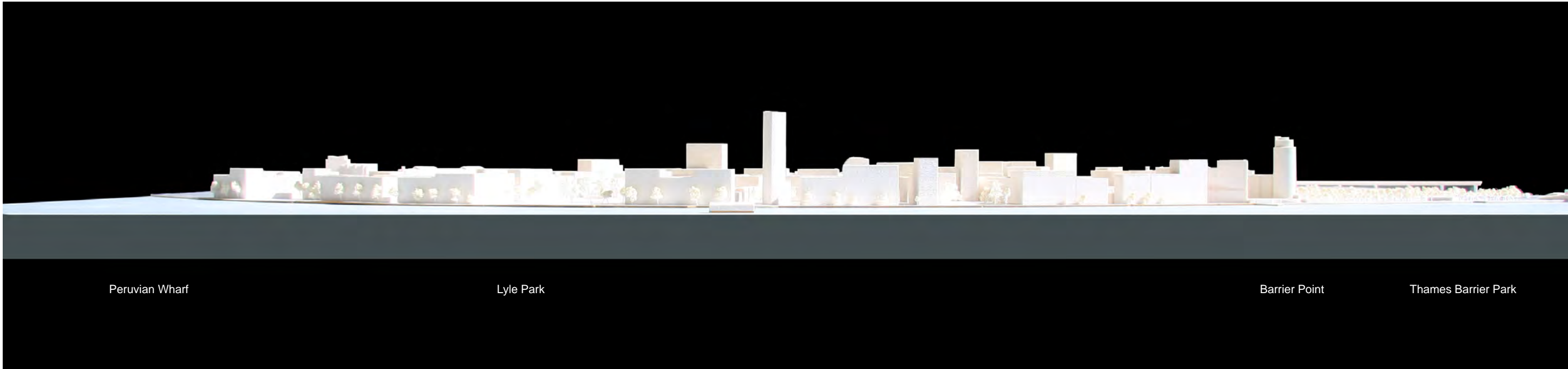


Mews View

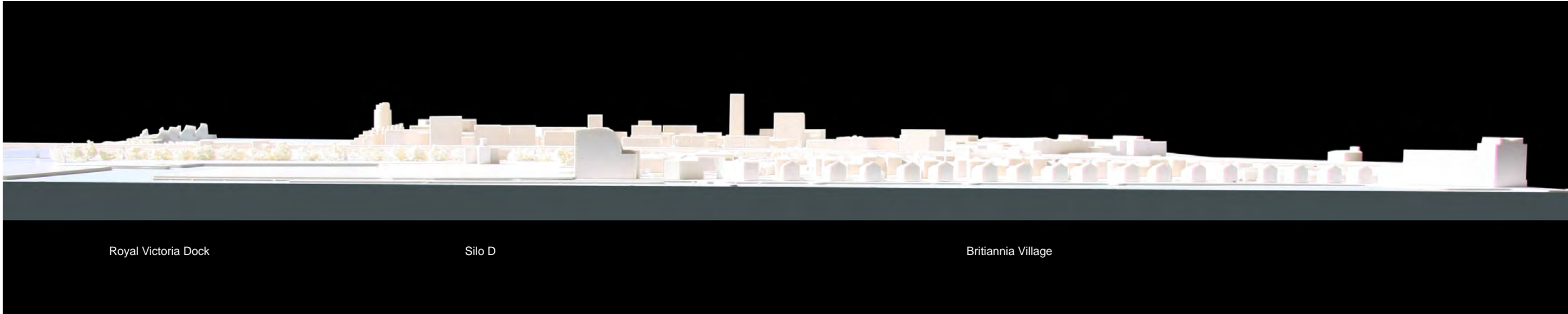


Section Through Mews



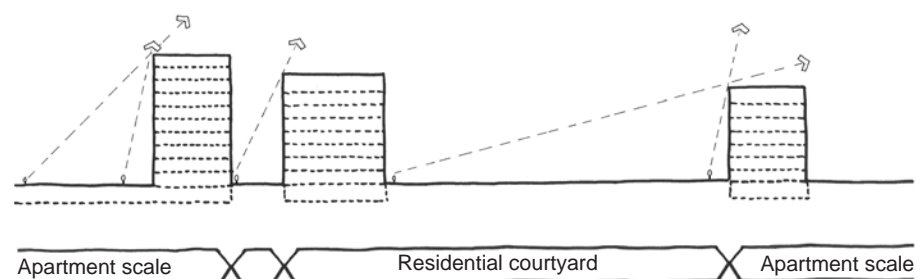
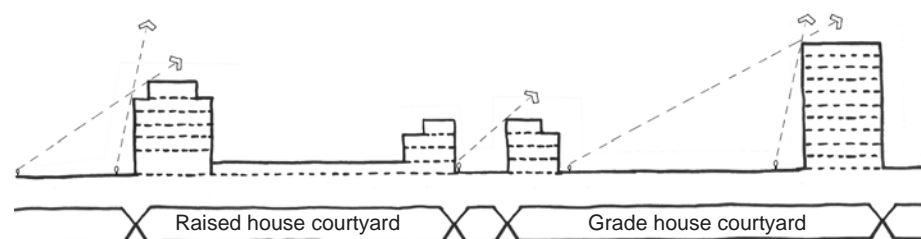


Site Elevation View From South



Site Elevation View From North





Sketch Sections

## Scale and Massing

The massing strategy will provide a cohesive, balanced and well proportioned response to the hierarchy and character aspirations of the masterplan.

Strategically the massing responds to a number of existing conditions around the site edge:

- Civil Aviation Authority restrictions inform the height of all development on the site.
- A flood prevention level of 5.050m AOD restricts development and use at lower levels
- Barrier Point is predominantly a seven storey residential development; 300 metres long with a 18 storey tower on the river
- The Site has an extensive south facing river edge. Adjacent to the Thames Barrier, the river is approximately 550m wide
- Uses proposed next to the DLR viaduct need to respond positively to the infrastructure

Central to the masterplan massing strategy is the intention to address the conditions above while establishing a variety of coherent and active street environments, in particular between the town houses and apartment blocks.

Designed within an efficient footprint, the houses themselves can be increased to 4+ stories in height, enhancing the relationship between varying class uses on the site.

The apartment blocks offer a variety of different heights, ranging from 5 to 8 stories (7 with a set back), typically with a mixed use base fronting the main routes. Taller blocks at pivotal locations are designed to become visual landmarks, with these rising up to 16 stories.



Site Edges

The proposed development at Minoco has two site edges where the masterplan addressed neighboring properties.

Along the western boundary the masterplan abuts Deanston Wharf, an existing brick warehouse complex aligned river to road. The existing warehouse runs for 317m along the western site edge with no aspect nor relief from the 15m high gable brick elevation.

Along the eastern boundary the masterplan abuts Barrier Point, a residential apartment building with a raised podium car park running the full length of the eastern site boundary.

Both the design and scale of Deanston Wharf and the Barrier Point car park present a unique challenge for the eastern and western edges of Minoco which the masterplan framework positively addresses by the design solutions proposed adjacent.

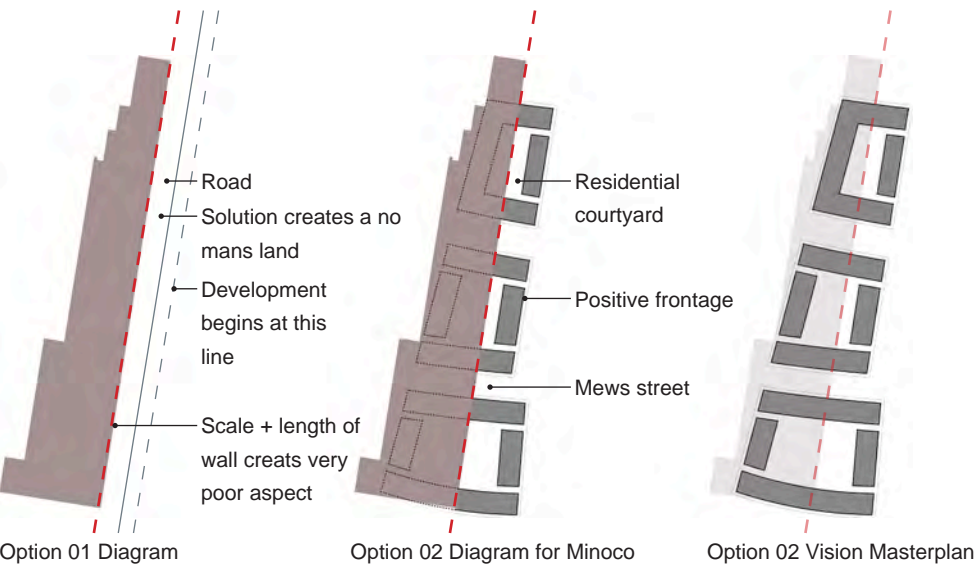


Western Site Edge - Deanston Wharf

Adjacent to Deanston Wharf two options exist for the boundary treatment at this point.

- 1. Provide a road running north south adjacent to the existing building and creating a physical separation of the new development to the existing Wharf.
- 2. Integrate the existing building into the masterplan proposals.

Option 01 proposes a road running alongside the existing warehouse and would allow development to front this environment. In this solution however the shear scale and dominance of the existing building is not addressed nor does the road align with the new Silvertown Pier. A no mans land could be created with no residents taking ownership of the space between the new buildings and the existing warehouse.



Option 02 (used in the masterplan) proposed the integration of the existing building to enclose residential courtyards created by C shaped buildings that allow the western site boundary to become animated by the new buildings while also addressing the length and nature of the warehouse's brick wall.

Option 02 would allow the residential courtyards proposed to benefit from the privacy and enclosure generated by the existing structure while also anticipating the future development of the new Minoco buildings further west should Deanston Wharf become available for redevelopment in the future.

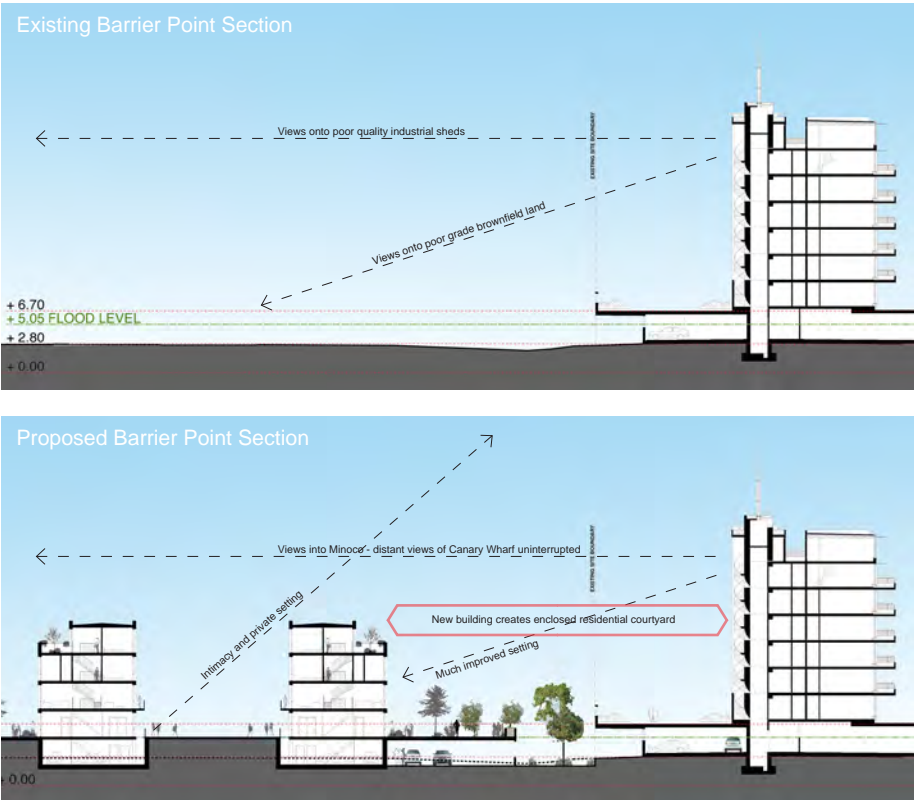
While this solution anticipates development further west than the existing site boundary it does not preclude no further development occurring. For this reason and regarding the positive manor by with the block forms address the existing structure option 02 has been brought forward as part of the masterplan framework.



Eastern Site Edge - Barrier Point

Barrier Point proposes a different set of requirements to those of the western site boundary. It is essential that the masterplan framework addresses and integrates the neighboring residential development in a positive and appropriate manor to ensure the new buildings are appropriate and respect their existing residential neighbours.

A comprehensive review of this boundary solution was undertaken during the GLA / LBN / LTGDC workshop process and the outcomes have been recorded in the relevant chapter of this design and access statement. For reference the existing and proposed section diagrams have been provided below.



Masterplan Design + Access Statement + Design Code

Land Ownership

Within the application site boundary a pocket of land adjacent to North Woolwich Road is not within the client’s ownership.

The masterplan framework as proposed respects this existing condition and the masterplan has been designed to respond to this land parcel should it be retained in its existing format or at a future date become available for integration into the overall masterplan scheme.

The existing site access from North Woolwich Road of this land parcel is not affected by the proposed masterplan development.



Masterplan With Existing Building Retained



Masterplan With Existing Building Site Redeveloped



## Footprints

The Minoco masterplan reflects and reinforces the urban footprints and edges established by the strategic connections and links developed through the workshop process. The masterplan strategy therefore seeks to generate clearly defined and legible residential block layouts throughout the scheme responding to the geometry and layout of these established strategic urban principles.

Generation of the blocks in this way allows for a number of key benefits which draw on the existing qualities of the referenced London urban fabric, but reinterprets them in a contemporary idiom which will compliment and reinforce the Minoco emerging and developing identity both locally and nationally.

Typically each of the urban plots has been arranged around an internal courtyard garden and amenity space providing a unique and intimate environment to the townhouses and apartments respectively.

Parking has been contained under each plot's built footprint - uniquely enabling the private courtyards to achieve two defining characteristics which greatly enhance the residential quality of the proposed buildings:

1 - Courtyards may be level with the streets to allow glimpses and some controlled views into the natural environment behind the buildings.

2 - A proper area of landscape, trees and plants rooted in the ground and not constrained by planters.

All principle commercial and retail space has been located at ground level and would front the majority of the main routes and roads.

Around each of the blocks it is intended to create a series of public spaces and zones that would be pedestrian friendly, safe, secure, well lit and sensibly landscaped. The surrounding streets would have a shared surface to encourage slower traffic and greater pedestrian integration.

In plan the urban blocks commonly respond in two ways to their location within the masterplan. Where required the apartment component has been placed to provide scale, enclosure and a mix of uses to animate and active each main space and street within the scheme. Stepping back from the principle thoroughfares the masterplan has a legible zoning of lanes and mews streets fronted by the terraced housing component of the urban block.

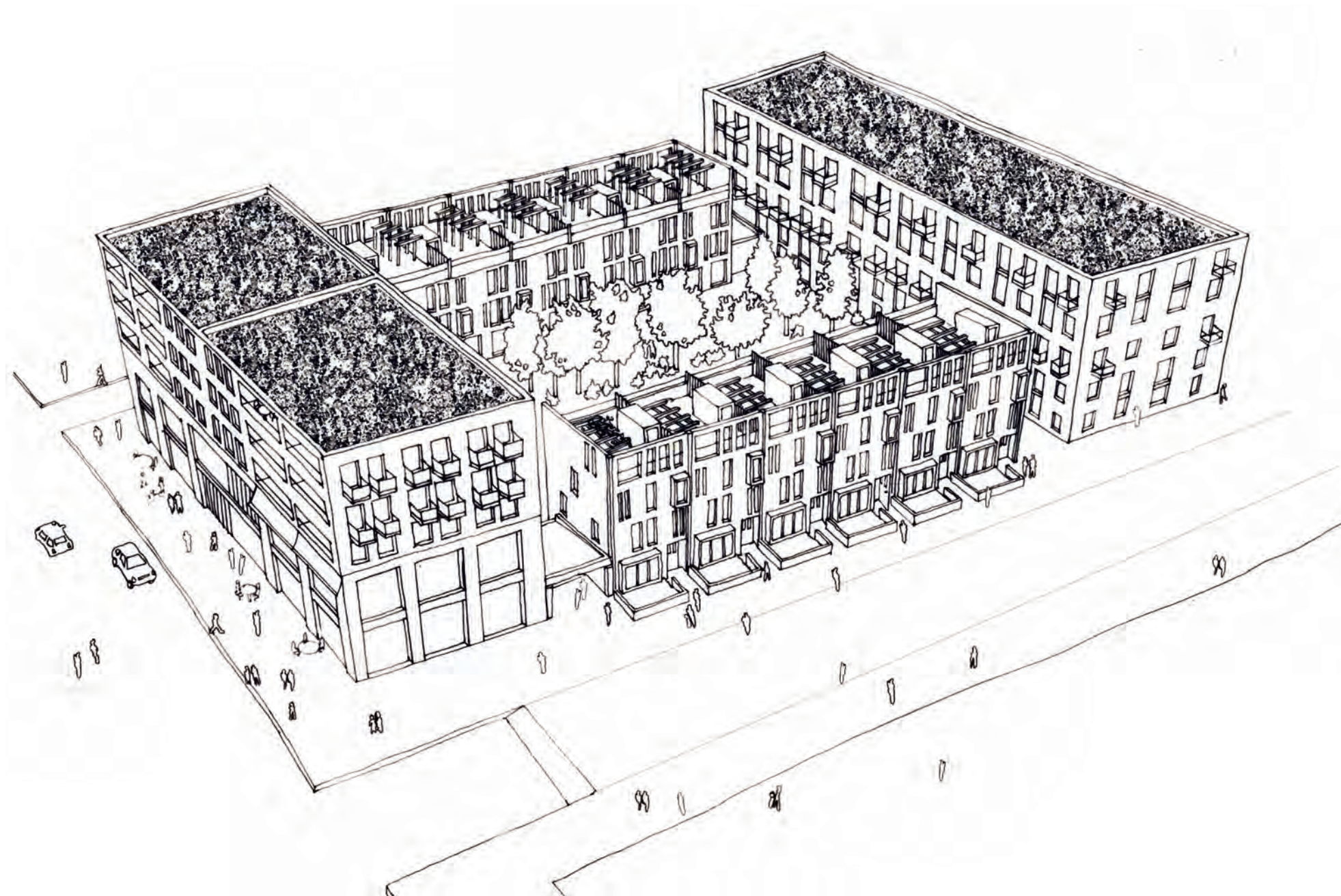
The diagram on the opposite page illustrates the master planning team's base building block which has been matured to respond to each location with the wider scheme. Where required the urban footprints have been moulded from the base concept to respond to sunlight + daylight, scale of street and desired locations of land use and the need to animate main spaces.

The illustration below describes how housing has been successfully integrated with taller apartment buildings adding to the urban character and success of the proposed masterplan.



Integration of housing with apartments and taller buildings





Concept Block Typology Sketch

## Urban Block Typologies

The outline masterplan framework provides a comprehensive structure for the Minoco site area. Having undertaken a comprehensive critique of the conceptual approach to the urban block form we felt the basis for the masterplan framework was sound and represented a carefully considered and positive response to the proposed design approach for the masterplan.

Minoco seeks to create new edges and enclosures to form streets, squares and parks as well as generating activity and key opportunities for living, socialising and working within the scheme all of which are principles reinforced by the outline masterplan proposal.

Drawing on the above the proposed urban block framework advocates a comprehensive approach to the development of each plot within its locality and immediate context within the Minoco site aiming to improve connections and animation both through the area itself and towards the surrounding city locations, including Britannia Village, the river and local amenities.

The proposals aimed to build on and strengthen key character areas, which have been defined as places earlier in this document.





Sketch Aerial View Plot 05



Apartment Typology

The Minoco apartment typologies have been developed strategically to respond to a number of defining criteria in order to maximise the amenity and quality of the homes being provided. Each apartment building will be planned to incorporate the following:

- An efficient layout which minimises the amount of vertical circulation.
- Be organised to create more family orientated design
- Be generous in terms of their size
- Maximise the amount of natural light
- Provide generous external balconies and external terraces
- Maximise the surrounding environmental conditions

The apartment buildings will be designed so that there are a limited number of apartments surrounding a circulation space to help create a sense of ownership and to generate a greater interaction between residents.

The buildings will contain a mix of apartments types to cater for the demand for larger dwellings as will be required if the residences are to achieve the greater aspiration of allowing families to move into the area and then to grow and ultimately stay in the area.

As the scheme will contain spectacular views when looking both into the site as well as out of the site, it is essential if the residential accommodation is to be successful as a family home, that the provision of dual aspect units are established within the apartment design and building plan layout from an early stage.

The master planning design team has therefore strove to establish a framework of plan typologies that allow the internal planning of each building to respond to its immediate contextual and environmental conditions. Where possible apartments are conceived as a through type allowing aspects both north and south or east and west.

The scheme has therefore been designed to maximise the potential for dual aspect units, with shallower blocks running north-south, and the provision of larger units in the centre of the east-west blocks. North facing single aspect units are anticipated at no more than 5% of total apartments.

In addition to the internal planning of the building the success of the masterplan framework will require a range of unique building typologies to sit comfortably together providing a wide ranging and diverse approach to building design, facade layout and housing offer to ensure an enriching and diverse range of backdrops is provided to the residential setting.

A range of private spaces associated with the apartments are proposed. As part of the wider space strategy, the apartment courtyards and private roof terraces are intentionally well enclosed, clearly defining private amenity space from public. The courtyard spaces are generous enough to receive good lighting levels during the day and enclosed to offer a sense of security during the evening/night. The spaces are designated for resident access only, and with the high levels of natural surveillance allows portions of the spaces to be child friendly and secure. Trees and semi mature planting will be strategically positioned, able to offer areas of privacy and shade during the day.

Ground floor residential units will be provided with accessible defensible space, in front of all windows and entrances. The space will provide residents private amenity space to enjoy and offer an appropriate level of security / privacy.

To create a mixture and variety of building elevations balconies are proposed to articulate facades individually, whilst also providing high quality private amenity space for each residential unit. The specific unit requirements for private amenity space, based upon the various types of sizes, tenure and orientation allows variety of balcony solutions and therefore elevational variety.





Houses Opening into Courtyards



View from House Roof Terrace



Houses Animating Streets



### Terrace House Typology

The design of the terraced houses aims to create a modern and contemporary scheme, constructed as an exemplar example of modern housing planning and urban design. We would propose to use simple and effective materials that will age gracefully and give each home a sense of permanence. The design would also be complimented by a variety of secondary materials expressing the difference from the townhouse to townhouses, and from townhouse to apartments.

The houses have been specifically designed to be modern contemporary homes of the highest quality, incorporating innovative adaptable design. Each property seeks to:

- Maximise the surrounding environmental conditions into the design
- Allow for future adaptation and be a home for life
- Utilise economic building techniques in order to maximise the house's area.
- Create houses that enhance and activate the street
- Provide a range of housing types and design solutions
- Have proper gardens and usable amenity spcaes, particuarly for children

As a result of these criteria a number of different housing typologies have been developed for the Minoco site, each of which responds to concerns of community, sustainability and location.

The houses have been specifically designed to adapt to the following bespoke criteria of the masterplan:

- Parking under the ground floor
- Provision of large usable gardens
- Adapting to the proximity of the apartment buildings
- Economy of build incorporating ease of future conversion and extension

The design team has created a number of bespoke house typologies. A range of traditional terrace house designs have been generated to address density and scale in certain locations on the masterplan where apartment building are not appropriate.

Traditional terrace house designs have been generated to address density and scale to specifically address and best serve each location in the masterplan. Each property's entrance will be directly accessible off the

a residential street and will allow direct access to the family living area, incorporating the staircase and allowing views throughout each level of the property. The depth of plan layout will allow natural light to penetrate the living spaces.

Adaptability and growth of the family home has been a prime consideration in the design, which seeks to allow a family to easily adapt their home to their individual needs. The terraced houses have been designed to provide a range of 2, 3 or 4+ bedrooms as well as allowing enough external space so the home may be further extended. Allowing adaptability in this way helps ensure that families who move into Minoco are catered for and may grow and continue to live spaciouly in their family home for many years.



Houses Development Model











### Accessibility

The London Plan and government circular 01/2006 states that Boroughs should require applicants to submit an Access Statement showing how the principles of inclusive design have been incorporated into the development and how inclusion will be maintained and managed.

The purpose of this statement is to outline the overall approach to inclusive design within the scheme in accordance with the relevant local and national planning guidance, along with how the different access principles will be implemented into the scheme and managed.

The masterplan aims to achieve the following with regard to accessible design:

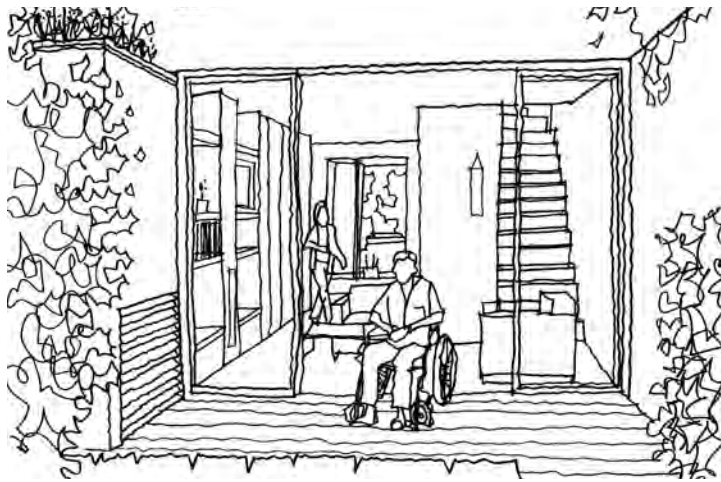
- Maximise access to all parts of the development, its facilities and services for people who are residents, visitors and members of staff regardless of disability
- To ensure that wherever possible appropriate standards for accessibility can be met at the outset as part of mainstream inclusive design
- To meet requirements of The Building Regulations Approved Document M – Access to and Use of Buildings, 2004

- To meet the aims of the Disability and Equality Act 2010 (DEA 2010)
- To follow design guidance given in relevant British Standards, and other currently published good practice detailing the needs of disabled people where possible
- To meet Greater London Authority and Local Authority access policies where relevant

While frequently used documents such as Approved Document Part M and BS8300 - Design of Buildings and their Approaches to Meet the Needs of Disabled People provide general advice, other guidance may be more specific. Access standards are in a continuing state of development with no single authoritative document as a source of reference. Instead several separately authored documents have to be referred to, inevitably revealing anomalies and contradictions.

Additionally planning and legislative policy and access regulations and standards govern the emerging Minoco masterplan as follows:

**Disability and Equality Act 2010 (DEA) [Formerly Disability Discrimination Act 1995 (DDA)]**



The developers or others may have ongoing obligations under the DEA 2010 as landlords and may also have obligations as service providers where they are also providing services to the public. In the main, the Act will apply more to issues of services and information rather than to building design.

### Planning Policy Statement 1 (PPS 1)

Creating Sustainable Communities PPS 1 stresses the importance of community involvement in planning to deliver sustainable developments. “Planning policies should address accessibility to all jobs, health, education, shops, leisure and community facilities. Planning policies should take into account the need of all the community, including particular requirements relating to age, sex, ethnic background, religion, disability or income.”

### Planning Policy Statement 12 (PPS 12) Local Development Frameworks

This document states that in preparing Local Development Documents (LDDs), Local Authorities must include policies on design and access in accordance with PPS 1 and relevant good practice set out in documents such as “Planning and Access for Disabled People: A good Practice Guide” published by the Office of the Deputy Prime Minister (ODPM, now the Department for Communities and Local Government)



**Building Regulations Part M (2004) and Part B (2002)**

The Building Regulations Approved Document B - Fire Safety, and Approved Document M – Access to and Use of Buildings, 2004 are the only standards directly relevant to access. It is essential to understand that these standards require Building Control approval. The Regulations make clear that designs other than those shown in the document can be approved if they are justified as being equally or more effective. Approval confers acceptance that the building meets all reasonable standards in respect of physical access for disabled people with regard to the DDA.

**British Standard 8300:2009 - Design of Buildings and their Approaches to Meet the Needs of Disabled People.**

Where practical and reasonable it is recommended that BS 8300:2009 standards are applied to new buildings. The revised BS 8300: 2009 has been in effect since February 2009.

**British Standard 9999:2008**

This standard, published 2008, provides guidance for the safe evacuation of disabled people from buildings in an emergency.

**Lifetime Homes Standards**

The London Plan and Supplementary Planning Guidance Accessible London: Achieving an Inclusive Environment, set out the GLA's references for Lifetime Homes and Wheelchair Housing standards (London Plan Policy 3A.4). The London Plan Policy 3A.5 Housing Choice requires that: "policies should seek to ensure that all new housing is built to 'Lifetime Homes' standards"

**Wheelchair Housing Standards Adapted dwellings**

The London Plan (2008) refers to the Wheelchair Housing standards set out in the Wheelchair Housing Design Guide (2006). Dwellings that meet the requirements of this document meet the Wheelchair Housing standards.

**Adaptable dwellings**

The Mayor of London's Best Practice Guidance on Wheelchair Accessible Housing (2007) represents the standards of the Wheelchair Housing Design Guide (2006) that should be incorporated into dwelling designs from the outset to ensure that they are easily adaptable to meet the full Wheelchair Housing standards. A proportion of the market housing of a development is usually required to be easily adaptable to meet the standards.

**Percentages of the above that apply**

The exact percentage of residential units that will be designed to meet the Wheelchair Housing standards, or be easily adaptable to meet the needs of a wheelchair user is not sought as part of the outline permission. It is expected that a notional 10% will be designed when individual plots come forward for reserved matters applications or detailed planning submissions and at this time by means of consultation with the local authority the needs of local residents may be best served. Applicable dwellings will be distributed throughout the development, and throughout all types and tenures as far as possible, as required by The London Plan and Newham's policies.

**Parking**

London Plan Policy 3C.22 and Annex 4 set out the required provision of accessible car parking spaces to be provided. Local Authority requirements will also be followed.

**Inclusive design**

Inclusive design is a fundamental aspiration of the Minoco masterplan and means designing beyond the minimum standards set by regulations.



The masterplanning team’s aim is to achieve a high standard of inclusive design and respond to Newham’s requirements to achieve a socially, as well as a commercially successful development. Consultations with the GLA’s Access Officer as part of the pre-consultation process (prior to submission of the Planning Application) have assisted this aspiration.

There are six overriding approaches to the design of the accommodation for all occupants and any visitors relating to the retail, community and residential buildings:

1 - To ensure that inclusive access is available at each level for occupants and visitors, as well as general public access, and that they can circulate and exit each type of accommodation with ease so that the built design does not present barriers to people with disabilities.

2 - To ensure that there are step free routes to all parts of each building and that passenger lift access is provided between all storeys.

3 - The shell and core will allow for future tenant fit out proposals to include accessible facilities for employees to access and use the back of house ancillary facilities within the retail and community spaces.

4 - To adopt as far as possible a repetitive plan form to facilitate navigation and way finding to essential facilities, for the public and occupants at all levels.

5 - To provide within the development shell and core the opportunity for the individual retail tenants to provide an inclusive environment for their staff and customers as part of their own fit out proposals.

6 - To anticipate emerging standards and public expectation.

If the design deviates from published access guidance and regulations as it progresses then approval will be sought for appropriate alternative arrangements. Such arrangements will be recorded as part of the development process.

The Proposed Development benefits from access to the DLR stations at Pontoon Dock and West Silvertown. It also has bus stops on North Woolwich Road, which together with the DLR provide access to Canary Wharf, Custom House and the City. Custom House is also proposed to have a Crossrail station which will provide direct connections to central London and the

West. City Airport also provides both national and international connections. Collectively, these nodes provide the Site with a large public transport catchment area which benefits from good accessibility.

A detailed site access plan has been included as part of the planning application Transport Assessment.



Accessible Housing Design



Public Realm Accessibility

A well designed public realm can contribute significantly to the quality of the built environment and play a key role in the creation of sustainable, inclusive, mixed communities.

The proposals illustrated in this strategy are based on a number of integrated principles which is in accordance with the guidelines set out in The Principles of Inclusive Design (CABE 2006)

Inclusive design which:

- Places people at the heart of the design process;
- Acknowledges diversity and difference;
- Offers choice where a single solution cannot accommodate all users;
- Provides for flexibility in use, and;
- Provides buildings and environments that are convenient and enjoyable for everyone.
- This document deals with specific accessibility and inclusive design matters which have informed the design of the public realm.
- The public realm that forms part of the Minoco development will provide a clear and inclusive environment suitable and safe for everyone, including people with disabilities, the elderly, and children in pushchairs. The legibility of the proposed scheme will help to orientate people without the need for elaborate signage, and the provision of facilities will cater for the needs of all.

Level Changes

Gradients will be less than 1:21 and have a landing for every 500mm rise where possible, or follow the existing site topography, and where practicable slopes will be employed in lieu of steps. Where steps are necessary they will be a positive feature of the design and comply with the Approved Document Part M of the Building Regulations.

Vehicle Circulation

Vehicular circulation within the development responds to the recent guidance from the 2007 Department for Transport Manual for Streets (MfS), a replacement to Design Bulletin 32 which puts well designed streets at the heart of sustainable communities and advises on how street design can help create better places with local distinctiveness and identity. The proposals outlined in this report draw on the most recent findings in urban traffic engineering and safety findings, including those pioneered in recently constructed examples such as Kensington High Street.

The design is proactive in the approach to recognising that a fundamental culture change is needed in the way streets are designed and used. However the needs of all users, including blind and partially sighted people are considered when areas of shared surfaces are proposed. Vehicle carriageways internal to the development will be clearly demarcated with kerbs of contrasting colour to the pavement and the road.

Street Furniture

Street furniture can contribute greatly to the character of a place, and at Minoco it is proposed that a simple, consistent range of benches, bollards, cycle racks and litter bins will be selected. Benches will be simple, durable, and robust but also comfortable, and located at distances of no more than 50 metres apart. All disability requirements will be considered in the selection/design of benches including the need for arm and back rests. The specification and exact locations of all street furniture will be subject to further detailed design development.

Access Into Site

As part of the masterplan outline planning submission a detailed access plan has been provided illustrating how the development will be accessed of North Woolwich Road and integrated into the existing highway network.





Site Gradients Plan

## Gradients

The diagram adjacent illustrates the gradients achieved by the proposed site levels strategy.





Animation of Public Space

## Security

To achieve a safe and secure development, key factors need to be considered as an integral part of the overall design concept. Examples of these principles are as follows:

- Natural Surveillance- Street Ownership
- Community
- Quality of Design and Materials
- Coherent Well Lit Public Realm
- Safe Secure Well Lit Car Parking

Movement across the site is vital in promoting activity and life within the development. Careful street design will promote a thriving community that feels free to enjoy the public and private domain safely. The internal streets feeding into the site are designed to be primarily people friendly in order to promote pedestrian activity. The design of these streets follows proportions and arrangements that will encourage reduced vehicle speeds to respect the nature of the development. This will be achieved by the change in character and texture of road surface and landscape to identify the hierarchy of various spaces.

Movement through the masterplan site needs to respect primary modes of transport and to make sure that they blend into the environment and do not conflict with one another. Pedestrian movement above ground is the most important on this site and is intrinsically linked with the ground floor use of each building. The main retail frontages create zones of high pedestrian activity. These areas require spaces for residents and the public to be able to move freely and enjoy the open and semi permeable nature of the site layout. However, where residents live on the ground levels, the front garden begins to define boundaries, privacy and surveillance.

The car parking strategy places the vast majority of the parking below ground. This approach allows the pedestrian plane of the landscape to be largely free of the visual impact of the car. The other advantage is that buildings can better relate to the ground plane rather than being artificially being raised above ground and losing contact and immediacy with the surrounding environment.

We understand the need to create safe communal areas that residents and visitors can use. Secure by design principles will be observed and development of the scheme with the police liaison officer will be encouraged to ensure a safe and secure environment is created. Lighting of main public routes and car parking as well as self policed spaces will be some of the measures integrated into the design.



## Sustainability

Environmental sustainability should be at the heart of good design and should be maximised by taking a holistic view of sustainability in terms of energy consumption, carbon emissions and running costs throughout the life of the development. Planning development to reduce demand on energy use in terms of heating and power, transportation and food and waste is the primary route to environmental sustainability.

Our approach to creating sustainable communities develops from gaining an understanding of local context and the character of neighbouring existing communities. At Minoco it is important that we not only create a balanced and long term new community but also that it reinforces and strengthens the communities that it is located within. To achieve this it is important that we take a wider view of the site, reaching beyond partners ownerships to make sure we provide the facilities that provide local retail, education, health, leisure, culture and work for this quarter of the Newham.

A development must be capable of meeting the social, environmental and economic needs of the community it serves both in the present and for future generations.

We recognise the future needs for developments to be sustainable, responsible and integrated together with an increasing need for the

implementation of renewable energies that also requires active rather than transient communities. The opportunities at Minoco are unique as the project allows the opportunity to develop crucial issues and provide housing in close proximity to the city and due to its location is able to integrate with existing facilities and transport networks. As city living identifies measures such as prioritising the pedestrian and cycle usage over the car it allows the promotion of active streets, squares and parks.

Careful site analysis has been undertaken and all the opportunities and options available to produce an environmentally sustainable development have been considered. An understanding is required of the inter-relatedness of all these factors to develop a set of solutions which work on all levels.

There are a number of significant key environmental benefits which will be included in the design. The site has a variety of excellent public transport connections to offer alternatives to private car use for business and recreational purposes. Specification of recycled/recyclable materials where possible will reduce embodied energy. Specification of locally sourced construction materials where possible will reduce transport related carbon emissions. South facing living accommodation allows maximum beneficial ingress of natural light and solar gain, while the principle of north south

terrace orientation predominant in the residential masterplan allows sunlight to enter each room in the house throughout the day

Energy efficiency in the buildings is controlled through a combination of the architecture, technical systems, construction and the behaviour of the occupier. We believe that simple solutions which do not rely on complex technology control systems are likely to be most effective in residential design. Our team recognise that the energy use in the buildings is only a small part of the total sustainability equation and that a significant factor will be how the development responds to and influences the lifestyle choices of the community who live and work in it.

In order to achieve our aspirations in terms of sustainability, we have taken a holistic and integral approach to environmental design. We believe that the location of buildings and the spaces created need clearly defined edges and boundaries creating a variety of spaces which focus around streets and semi private courtyards.

Residential units in Minoco will achieve Code for Sustainable Homes Level 4 with the aspiration for Level 5, while commercial units and offices will achieve BREEAM Very Good Standard.





**Watermark Place, London**  
Solar pannels intergrated with sedum planting



**Biodiverse Roof**  
Different substrate levels that will eventually support a range of planting species

## Green Roofs

There are opportunities to incorporate a range of living roofs such as extensive and intensive green roofs, balconies and private roof terraces. Detailed development proposals should aim to incorporate a range of the types of living roofs highlighted below.

Benefits can include:

- Additional amenity space
- An increase in potential wildlife habitats
- A reduction in storm water run-off
- Contribute to a reduction in energy costs with increased thermal resistance and evaporative cooling.

### Sedum and Grass Roofs

Extensive green roofs consist of a lightweight, shallow growing medium layer (75mm-150mm depth), supporting smaller plant species (e.g. sedum and grasses). They require little maintenance and are generally inaccessible to all but those occasionally looking after the plants or the roof. They are best suited to conditions where a minimal build-up is available or desired. These roofs can be valuable ecosystems and support a wide range of plants and invertebrates by varying the types and densities of vegetation.

### Bio-diverse Roofs

Extensive green roofs are generally considered as habitats with a low biodiversity. Research has indicated that this is due to a thin substrate layer which is unable to support a range of species. Designing green roofs so that they have varying substrate depths and drainage regimes creates a mosaic of microhabitats on and below the soil surface and can facilitate colonisation by a more diverse flora and fauna.

### Usable Roof Gardens

Intensive green roofs require a deeper and organically richer growing medium and usually a deeper drainage layer but can support a wider variety of plants including shrubs and trees. As such they are usually designed as accessible garden terraces to form outdoor extensions to the architecture, and the structure must be designed to accommodate the additional loadings associated with this system; i.e. the weight of the plants at maturity, the build-up (saturated), and the number of people likely to use the terrace at any given time (live loads).

The type of planting and green roof system to be considered will be largely determined by the constraints or requirements of an individual building. In any event the species chosen must be hardy enough to withstand the exposed conditions inherent with roof-top planting, although careful plant selection can contribute to the attenuation of adverse microclimatic conditions.





**Creating visual and physical variation**  
To create visual and physical interest and variation there are opportunities for landscape features that fill up on rainy days and is dry on sunny days



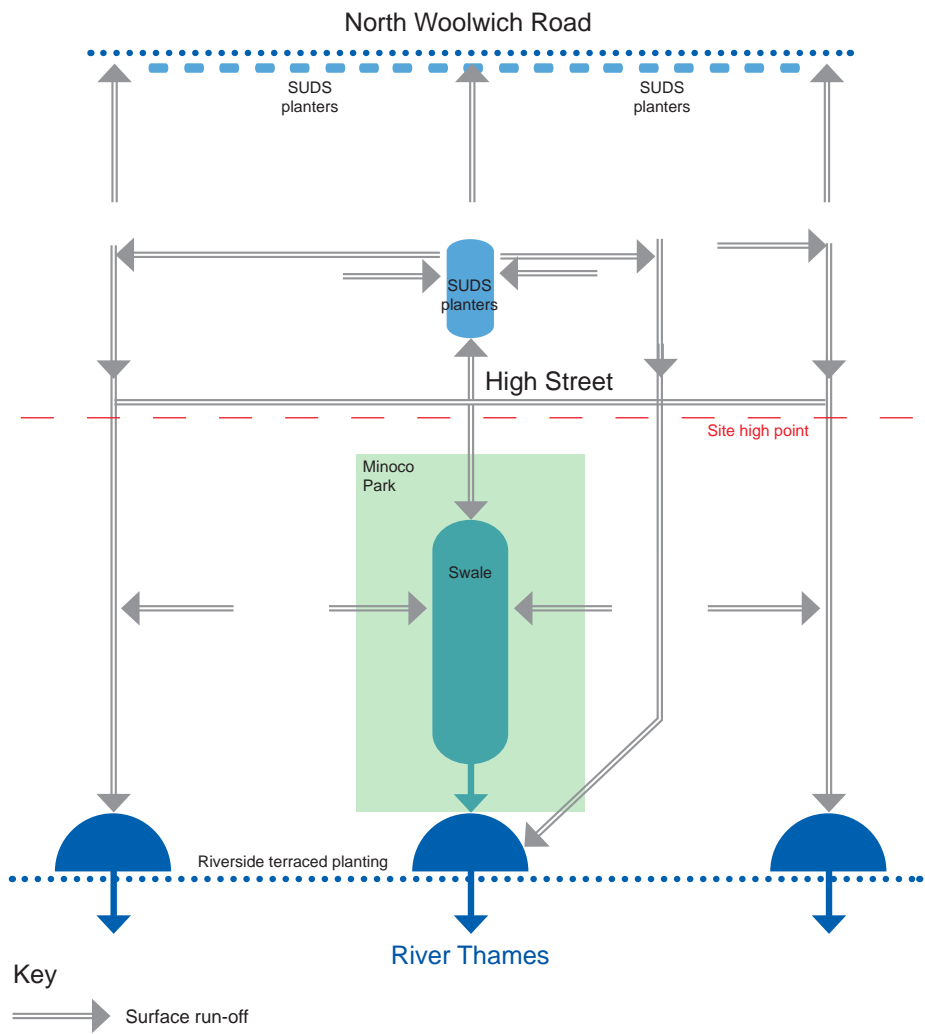
**Water play**  
Shallow areas in the swale in Minoco Park can be used for play



**Riverside Terraced Planting**  
Provides a soft edge to the site and ecological value



**SUDS planters**  
Rainwater collected in SUDS planters incorporated into the streetscape.



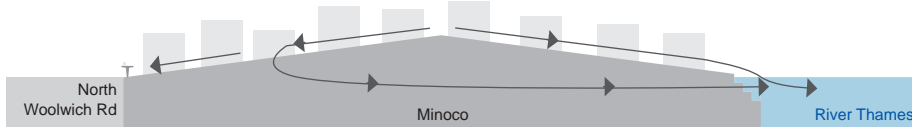
**Water Attenuation Concept Diagram**

## Water management

The run-off water management on the Minoco site will be treated in various ways:

- water attenuating through SUDS water features such as swales, terraced planting and SUDS planters
- water collected and transported underground to River Thames which will be directed over a series of terraces to mediate the velocity of the water. The terraces will be designed to reduce the erosion of the terraces by the water.

The water management plan is further described in the Environmental Statement.



**Section diagram**  
Water run-off from the site will be attenuated through planters and swales at street level or carried underground to the final destination of the River Thames





Common reed



Grey Club-rush



Sea Club-rush



Sea aster

### Terraced planting

The heights of the terraced planting will follow the Environmental Agency’s Estuary Edges Ecological Design Guidance. Plant species like common reed will be planted on the upper level (which sits just below the Mean High Water Spring tide) and Grey Club-rush, Sea Club-rush and Sea Aster will be planted in the middle level (which sits just above the Mean High Water Neap tide). The lower level could also be planted, or alternatively, used as an inter-tidal gravel habitat.

Detailed plant selection will be specified during detail design.



Section through Rivers Edge



**Adaptability / Livability**

A key aspiration of the Minoco masterplan is to provide high quality family accommodation through designing for the needs of families when they move into this exciting new area of Newham and to allow families to grow in the area and their new homes without having to move out. Therefore buildings and spaces must be fit for current purpose and adaptable to change to accommodate future occupancy needs and technologies.

Adaptability and livability are two key characteristics fundamental to the design philosophy of the Minoco masterplan. The design of the each of the new buildings, with particular emphasis on the family dwellings will accommodate where possible the following criteria to ensure the buildings remain suitable for use for years to come:

- Large secure private gardens
- Access to secure toddlers play area
- Natural daylight lighting each room
- Compliance to Lifetime homes standards
- Wheelchair accessibility standards built in from day one
- National Housing Federation space standards
- Secure bike storage
- Home office space
- Internet delivery spaces
- Passive surveillance

**Community**

The creation of a strong and coherent community identity is central to the success of the new masterplan and will rely on careful consideration of the following criteria:

- Hierarchy of clearly identifiable community spaces – private/semi-private through to public park
- Secure by design principles organically integrated into the design
- Local retail and community facilities
- Coherent design and material use
- Range of house types and tenures
- Community consultation processes informing key design decisions

Community involvement needs to be encouraged to ensure that initiatives are maintained and built-upon, and to assist in spreading positive influences into the wider community beyond. To achieve a safe and secure development, key factors need to be considered as an integral part of the overall design concept. Examples of these principles are as follows:

- Natural Surveillance- Street Ownership
- Community facilities
- Quality of Design and Materials
- Coherent Well Lit Public Realm
- Safe Secure Well Lit Car Parking

The development responds to the need of a varied community by providing a range of housing types and tenures as well as being located near schools and other community facilities, whilst offering a range of integrated community facilities and local retail amenity.





Minoco House and Residential Design Standards

## Residential Design Standards

The Minoco masterplan has been developed to include the principles of the following design guidance documents. The list below represents a proportion of residential design standards and does not preclude the development of this strategy on a plot by plot basis nor compliance to specific standards in relation to tenure or land use class. A comparison matrix measuring the masterplan against the GLA Interim London Housing Design Guide 2010 has been provided as an appendix to this design and access statement.

Design standards referenced:

- Greater London Authority Interim London Housing Design Guide 2010
- London Borough of Newham Supplementary Planning Guidance  
Residential Planning Guidelines
- Homes and Communities Agency Design and Quality Standards
- Homes and Communities Agency Housing Quality Indicators
- Code for Sustainable Homes
- BRE Environmental Assessment Method
- Lifetime Homes (July 2010)
- Building for Life
- BRE Wheelchair Housing Design Guide (2006)
- Secure By Design
- Manual for Streets Department for Transport
- Standards and Quality in Development – National Housing Federation
- Building for Life











Purpose of Design Guidelines

It is the intention of the Minoco masterplan design code is to support and supplement 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 site.

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 vision for Minoco is comprehensively documented elsewhere in the Design and Access Statement and supporting documentation prepared for the outline submission.

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 and should be used in support of emerging architectural, townscape and landscape proposals for the Minoco site.

The parameter plans submitted as part of the outline 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
Parameter Plan 11	Public Realm

Status of Guidelines + Associated Documents

These guidelines form part of the Minoco masterplan Outline Planning Application (May 2011) and seek to form a suitable platform for the foundation of design briefs relating to the development of detailed architectural plots and landscape design proposals within the approved masterplan framework.

The design code does not seek to be prescriptive to designers, but seeks to inform a series of principles upon which designs may be viewed, critiqued and measured against as the masterplan aspirations are realised.

This design code should be read alongside the following associated documents:

- Minoco masterplan Development Specification (May 2011)
- Minoco masterplan Design and Access Statement (May 2011)
- Minoco masterplan Environmental Impact Assessment (May 2011)
- Minoco masterplan Parameter Plans (May 2011)





View Along Street From North Woolwich Road To School

## Guidance Organisation + Hierarchy

The chapters of this design code are organised under the following headings:

### Objectives

This explains the objectives of the design guidance within this document.

### Framework

This section seeks to establish the site wide conditions to which buildings and landscape proposals should respond. It sets the context in terms of movement, open space structure and built form.

### Settings

This section identifies the places within the masterplan that form specific conditions, and to which design guidance must operate at a local scale.

Where text in the design code is written in lower case this is considered as guidance, design code instructions have been written in bold and listed as bullet points, as below.

- **Design Code Instruction**



Design

The aim of this report is to convey the vision for the Minoco masterplan and provide a framework of design guidance to control elements of the masterplan design, viewed as important to the success and quality of the overall scheme.

The guidelines recognise the need to balance the aims of the masterplan proposals with the flexibility and opportunity to fully exploit the specifics of each building plot and landscape proposal; in relation to its individual location, setting and brief.

Debates raised through analysis of the principles established in this report will allow individual design teams to refine the strategic approach set in this document in order to contribute to an organic development and growth of the scheme over the medium to long term.

While each design issue is addressed individually in this report the design guidelines seek to address positively issues arising around:

- Changes in scale and massing within the masterplan plots
- Proximity of buildings working together to achieve a sense of place
- Definition of key spaces and activities within the scheme
- The creation of a successful “normal” urban environment
- Hierarchy in built form and landscape



Apartment Yield

The masterplan framework has established a set of requirements for the apartment mix and NIA sizes across Minoco. This is reflected in the table below which illustrates a detailed starting point for designers housing briefs.

Unit	Unit Size	Private	Intermediate	Rented
Suite	35 m²	10%		
1 Bed	55 m²	34%	34%	25%
2 Bed	70-85 m²	40%	50%	35%
3 Bed	93-110 m²	16%	16%	32%
4 Bed	100 m²			5%
5 Bed	135 m²			3%
Total		100%	100%	100%

The apartment schedule has been developed with due regard to the Mayor of London’s Interim London Housing Design Guide 2010 and generally exceeds the Mayors minimum unit sizes for dwellings. This is an intrinsic characteristic of Minoco and should be protected by designers delivering buildings within the masterplan framework.

Interaction

The design guidance for settings across the masterplan indicate the implications for architectural expression of buildings in various locations. This includes the concept of ‘marker’ and ‘background’ buildings, in which the former are intended to be visually more important in the identification of routes, defining views or containing spaces. Background buildings and adjacent landscape designs form the principle means of achieving the masterplan vision by allowing the masterplan to be a landmark development and not a competing set of landmark buildings.

To achieve this relationship, it is essential that the process of design development within individual blocks demonstrates recognition of the specific conditions established by the design guidance.

To this regard architects, landscape architects and designers must be able to demonstrate that their design proposals respond positively to the formal spatial relationships and frameworks established within the masterplan framework set or implied by the design guidance in this document. Where the emerging design proposals differ from the established themes the design team must use the criteria outlined by these guildines as the benchmark from which to assess the proposals on their individual merit.

A coherent architectural language is essential for the success and identitiy of the scheme both from within its local as well as national context.

Conversations between buildings and a consistancy of landscape design quality are essential to achieveing this goal.

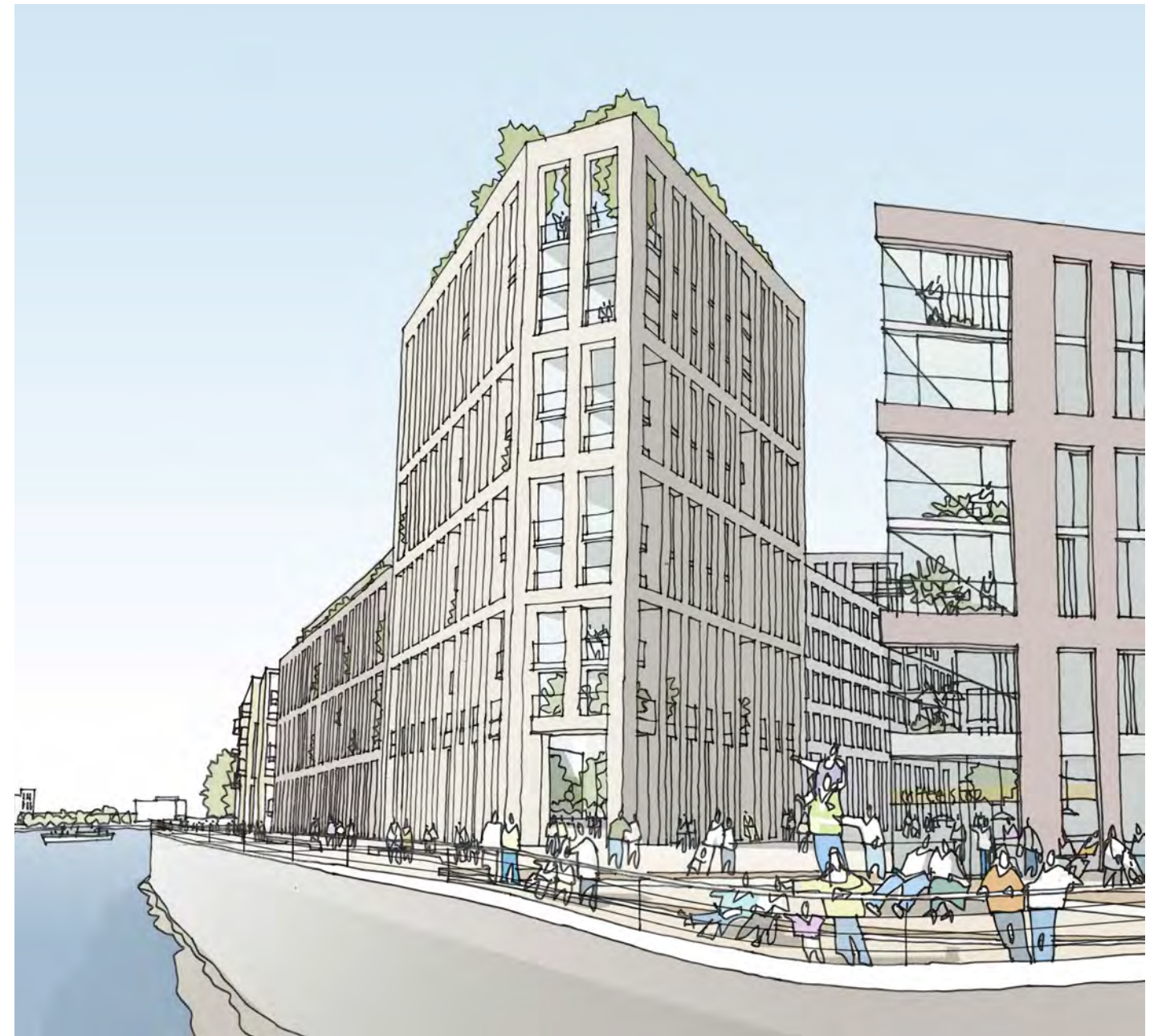
The ongoing process of dialogue between architects and the master planning team are essential for the implementation and realisation of these guidelines.

Architects, landscape architects and designers should demonstrate that their design proposals respond in terms of formal expression to the relationships across streets or open spaces set or implied by the design guidance in this document.





View to River from Market Square



Riverside View



## Implementation

Ballymore Properties has an established track record in the design and delivery of high quality residential led, architectural, planning and landscape projects. The Minoco masterplan seeks to supplement this approach regardless of size or budget, based on gaining a fundamental understanding of the key issues and aspirations of future local residents as well as those of the wider community. To achieve this goal the scheme recognises the need to invest as much time and energy as possible, listening at an early stage, so a full range of options may be explored to arrive at the optimum solution.

Underlying the Masterplan is a belief in clarity and simplicity, whereby the optimum solution is achieved through an intensive process of design and refinement with clients and through public consultation and stakeholder events. The Masterplan aspires to delivering the highest quality homes and spaces possible, using the most appropriate materials and technologies.

Fundamental is the belief that the optimum solution is often the simplest. This has resulted in the proposals for Minoco having a clear, legible and efficient design whilst at the same time attaining exciting and enjoyable urban building blocks responding to a number of key criteria.

The Minoco masterplan will be an exemplary mixed use development, however in addition to the masterplan as a whole, the residential buildings aspire to realise the full potential of their excellent location, to be an attractive place to live, work and play. Achieving this goal requires the clear and carefully considered integration of well designed high quality residential houses and apartments reflecting the highest standards in contemporary residential design.

This design code follows the intentions of the masterplan framework by developing a language of spaces, buildings and landscape proposals that improve legibility, urban form and structure; create pedestrian thoroughfares throughout the London Borough of Newham (LBN) while improving links to the surrounding existing residential neighborhoods.

The proposed concept focuses on family living and places shaped by building edges to make a high quality residential settings protected from the scale and hustle of neighboring roads and infrastructure. 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.

Through imaginative massing on the site, the scale of buildings and architectural language at the site edge will serve to reinforce the schemes integration into Newham while creating a unique place to live.

Proposed buildings are appropriate in scale to the site context and seek to improve their setting by creating enclosure and through the generation and reinforcement of key views to fully realise the vision for the area.

In order to fully realise the vision a number of key criteria have been considered as being fundamental to the masterplan design. These are highlighted in this document and where appropriate expanded in further detail.

Much of the project will be implemented over an extremely compressed period of time. Unlike normal projects of this scale, much design work will be undertaken in parallel, and it is therefore all the more important that these guidelines provide a robust framework to guide design teams, clients and those reviewing the project.



Context

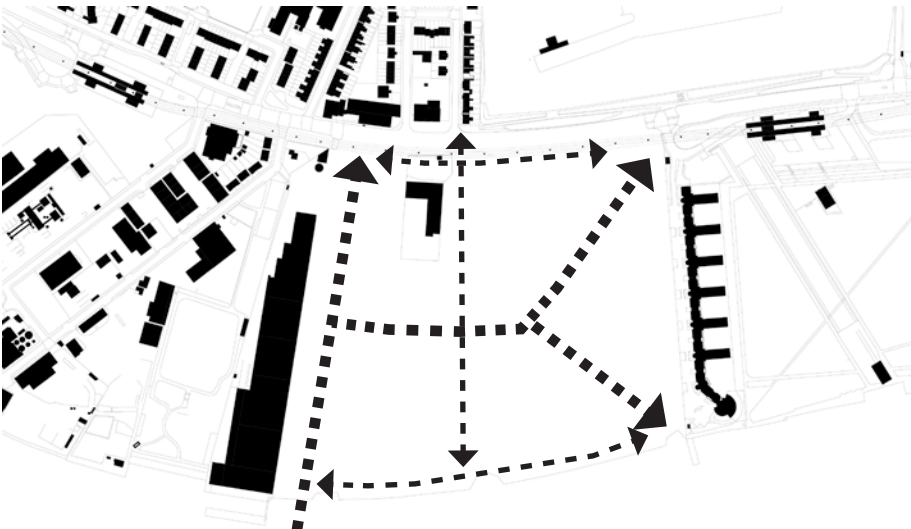
The site context is a key component of the masterplan framework. Layers of the masterplan’s design framework have been developed to respond to the Minoco site and its immediate and wider context. These frameworks are as follows:

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

Connection

A number of strategic connections existing within the scheme. While the masterplan promotes a rich and varied tapestry of minor lanes and mews type environments the diagram below illustrates the principal strategic connections as defined by the masterplan framework which should be adhered to by architects and urban designers developing building proposals.

- **Designers must respond to and maintain the major connections established by the masterplan framework illustrated below, the legibility and ease of movement along these desire lines should be reinforced and protected**

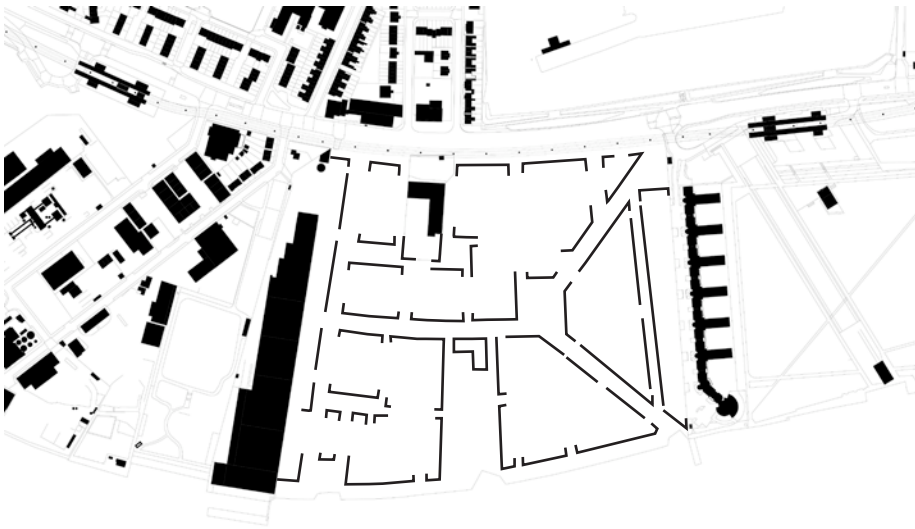


Major Spaces

The clear and logical definition of the masterplans urban spaces is essential to the success of the scheme.

The diagram below illustrates how edges of major spaces should be defined with clarity in order to realise the urban framework for Minoco.

- **Designers should seek to reinforce the principles of the major spaces framework illustrated below and protect the hierarchy and clarity of these environments within the masterplan**

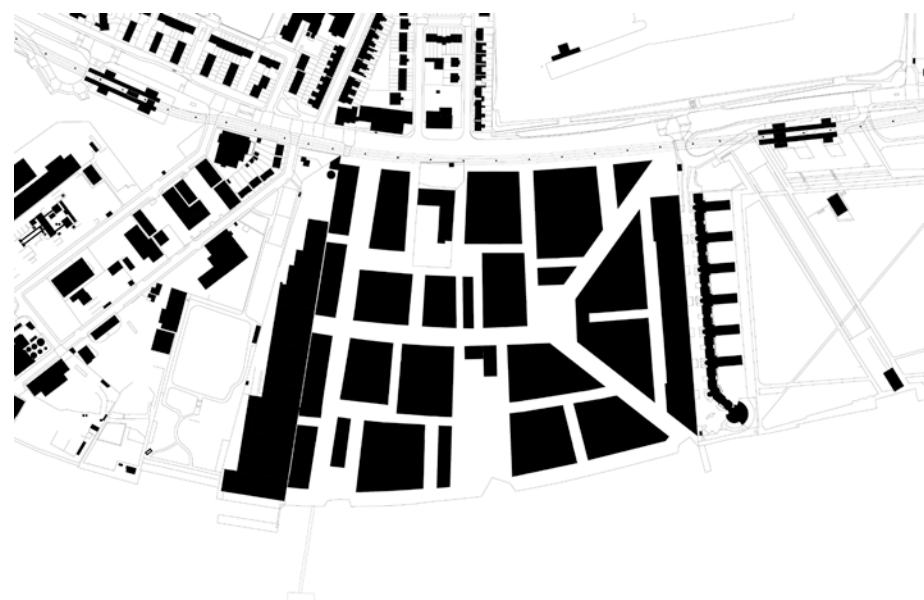




## Built Form

The Minoco block plan and built form strategy is illustrated below. The diagram illustrates the areas of the scheme that should be clearly established as urban built forms in order to define and fully articulate the streets and public spaces within the masterplan framework.

- **Designers will respond to the principles of the built form strategy as illustrated below, seeking to maintain and enhance the streets and urban spaces generated by their buildings and landscapes**



## 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.

- **Designers should aspire to achieve a fine urban grain in plan and elevation, buildings should not read 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 Minoco 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 Minoco, 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 which these higher housing densities produce is both desirable and successful in many places around London.

Detailed design of individual urban blocks will address the VSC and day lighting 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 Minoco 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.

- Buildings and their respective uses should be easily assessable from local drop off points within the scheme at ground level

Servicing + Vehicular Access

Servicing for the residential apartments and townhouses is undertaken either from the on street road network via front doors + residential cores. 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 principle streets at times which 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 fully accessible by vehicle for maintenance purposes.

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



Vehicular Movement

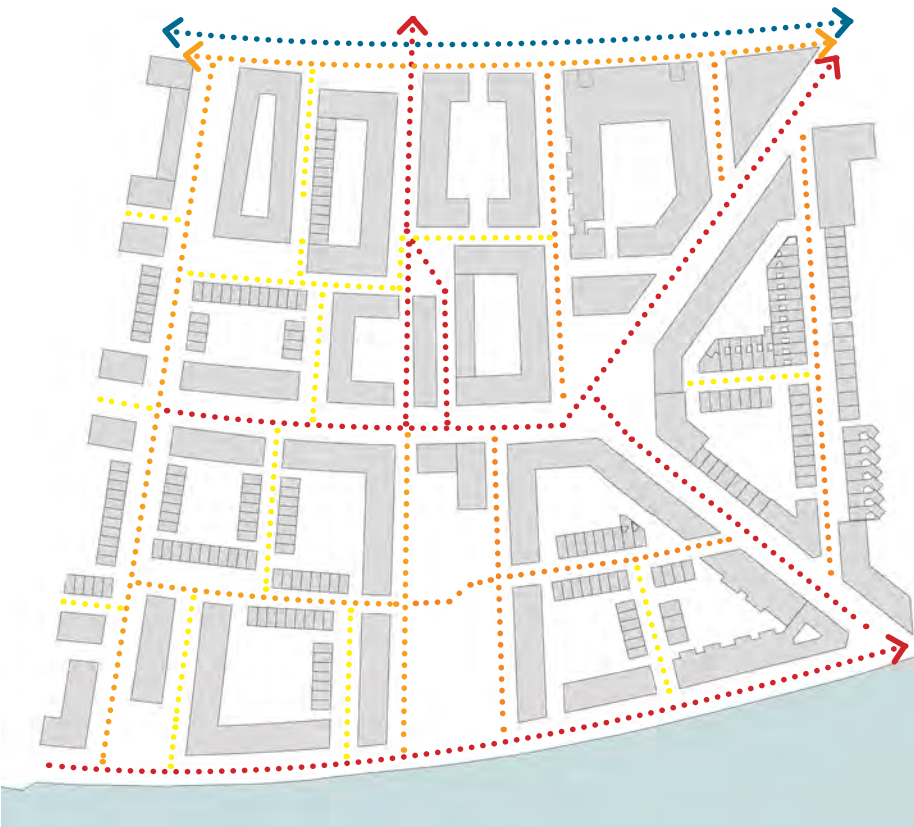


- Primary
- Secondary
- Tertiary
- Restricted access/Pedestrian priority
- Main access road to site

- 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

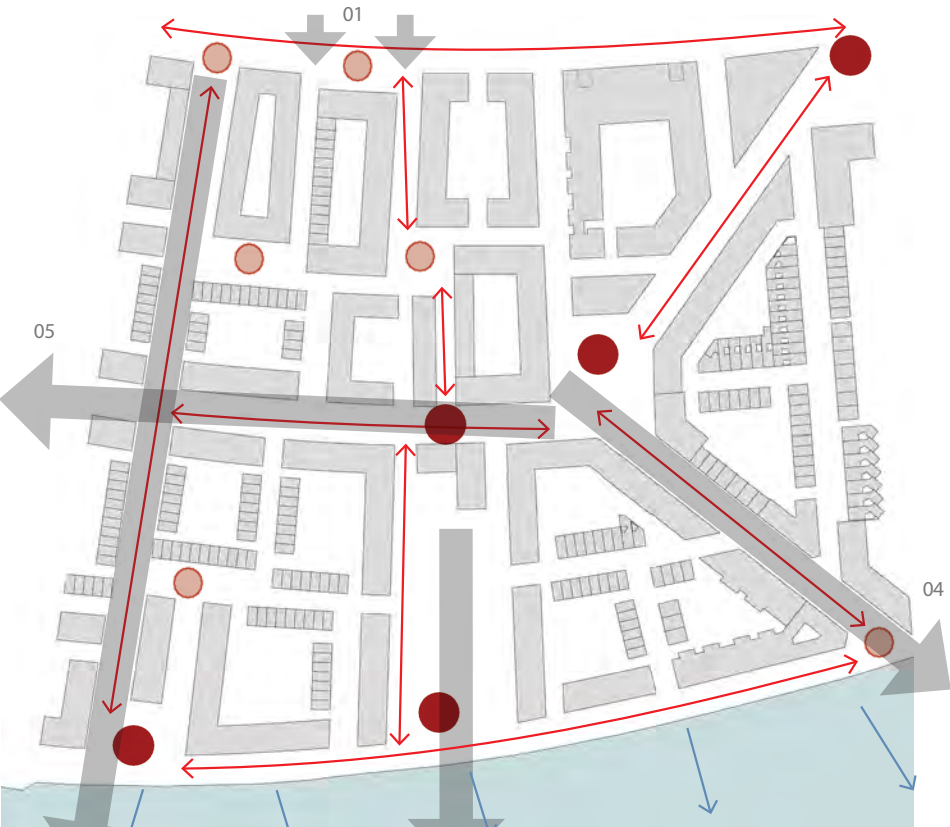
**Public + Private Space**



- 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



**Synthesis of Urban Design, Architecture and Landscape**

Minoco seeks to create a cohesive, diverse and varied townscape which synthesise the strategic masterplan principles with the urban, architecture and landscape design approach.

To achieve this goal the a dialogue must be established and maintained by design teams and the master planners to ensure that designs are explored and tested at all scales applicable to the developing design.

Additionally the emerging designs must respond to the sites heritage and context as a unique riverside location in the London Borough of Newham, exploiting the finest grain of movement through the masterplan’s urban spaces and high levels of tactility and articulation in its architecture and public realm.

The narrative device which unites this concept is the idea of creating a series of legible experiances + journeys, comprising clairty of routes through Minoco for visitors and residents of the scheme alike.

- **Designers should seek to create and reinforce a cohesive and complimentary townscape for Minoco, design proposals should reinforce and enhance the emerging character of the development**

**Hierarchy of Setting**

Minoco 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 Minoco 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.

- **Designers should must maintain and seek to enhance the spatial hierarchy established within the masterplan framework, working to contribute to the clarity and legibility of all spaces (public + private) created within the scheme**





## 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.

Buildings within Minoco should touch the ground with long lengths of facade broken down into master and subordinate sections with a clear hierarchy to the elevation. Excessive lengths of unbroken / non articulate elevations should be avoided.

While plot land use is defined by the masterplan's strategic parameters it is expected that the building use may be read from the frontage it presents, articulating the facade and defining the building character onto the street.

The Minoco masterplan defines a clear hierarchy of frontage from which plot designs should be tested as follows:

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



Building Typology

As outlined in the design section of this report, the urban building typologies established by Minoco are as follows:

Linear / Mansion Block

Mansion / Corner Block

C / L Block

Terraced Houses

- **Designers should respond to the principals of building typology illustrated by the adjacent diagrams**

Building Typology Key

1 - Core animates street

2 - Core position reduces overlooking

3 - Repetitive facade

4 - Varying facade along street

5 - Set back to rear apartments

6 - Lower roof as amenity space

7 - Step up to articulate corner

8 - Taller roofs typically green / brown

9 - Gaps allow views into courtyard

10 - Shared gardens to courtyard

11 - Private gardens to courtyard

12 - Corner / special houses

13 - Variation in base articulation

14 - Articulation along roof line

15 - Private amenity to townhouse roof

16 - Articulate base

16 - Apartments articulate and turn corner

17 - Change in house scale

18 - Apartments articulate courtyard corners

19 - Larger gardens

20 - Symmetrical facades

21 - Asymmetrical facades

22 - Articulated houses

23 - Varying roof lines

24 - Stepped scale on shorter streets

25 - Alternate house widths

26 - Mixed use to ground on main streets

27 - Residential use to ground on street

28 - Apartments articulate and turn corner

29 - Large communal courtyards

30 - Apartment buildings flank houses

31 - Variation in street facades

32 - Change in roof line

33 - Set backs

34 - Variation in housing typology

35 - Change in floor heights

36 - Varying uses at ground levels

37 - Top

38 - Middle

39 - Bottom

40 - Corner houses articulate corner of plot

41 - Change in house type along street

42 - Larger houses to corners and end of street

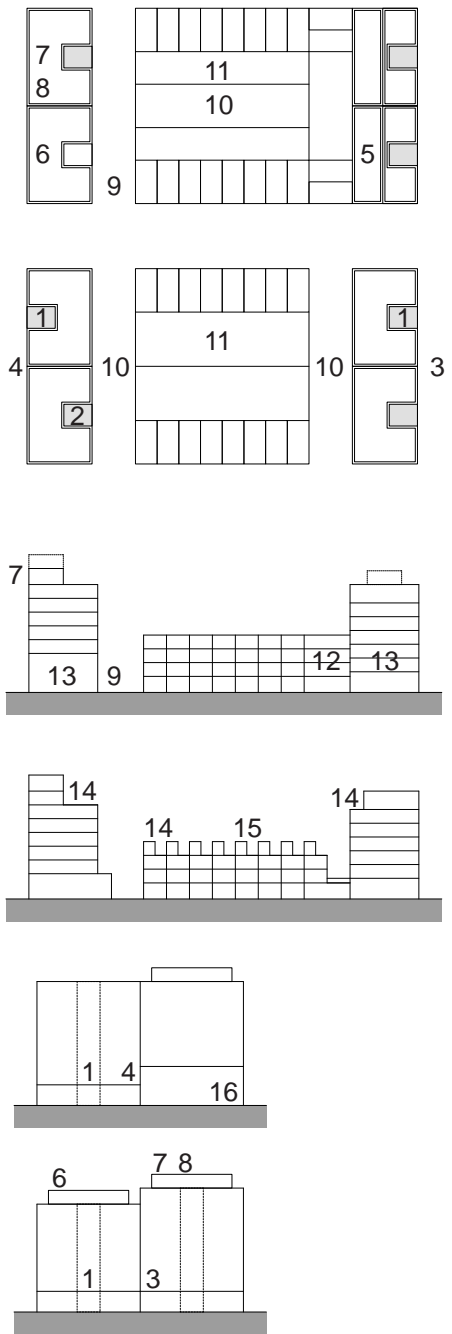
43 - Set back amenity spaces

44 - Tall elevations to articulate street

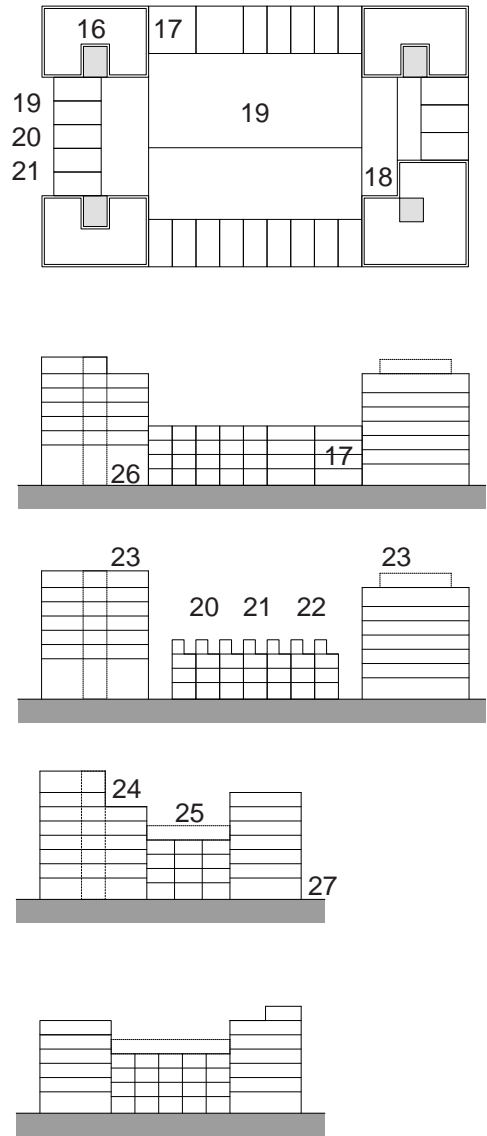
45 - Tall elements to corners



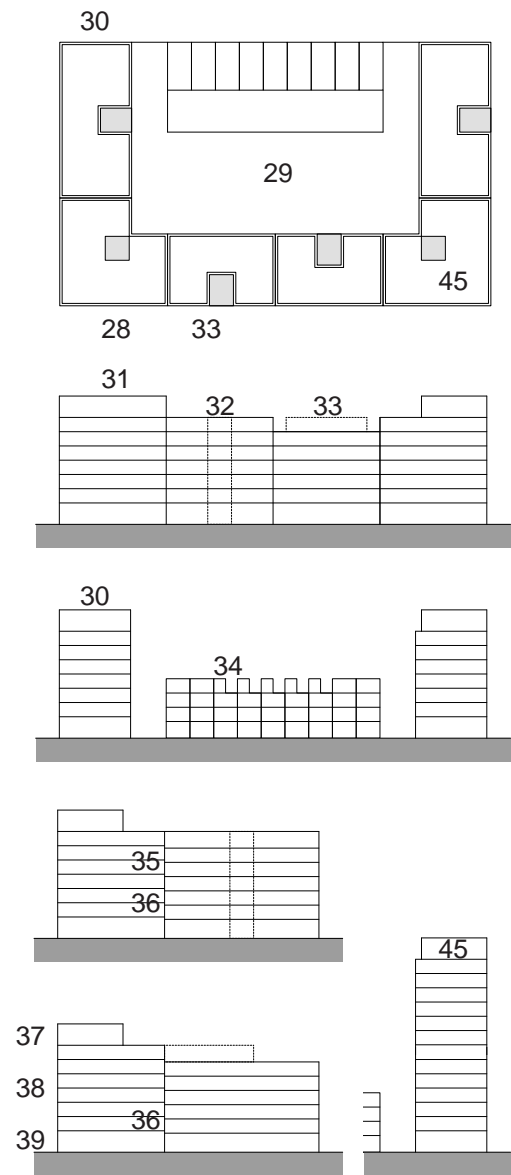
Linear Block / Mansion Block



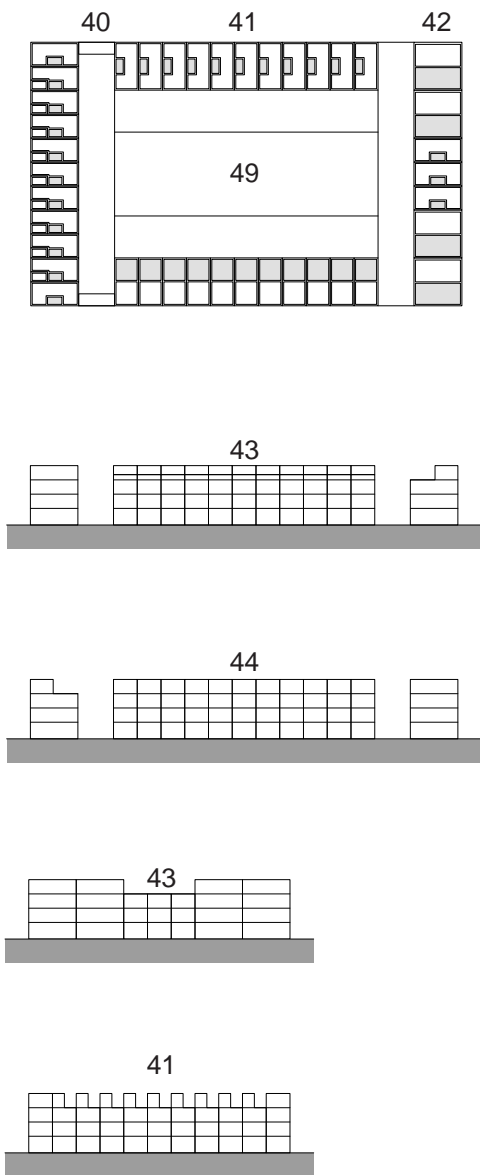
Mansion / Corner Block



C / L Block + Tall Building



Terraced Houses



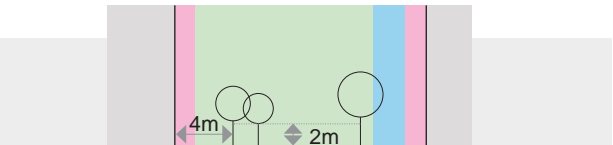
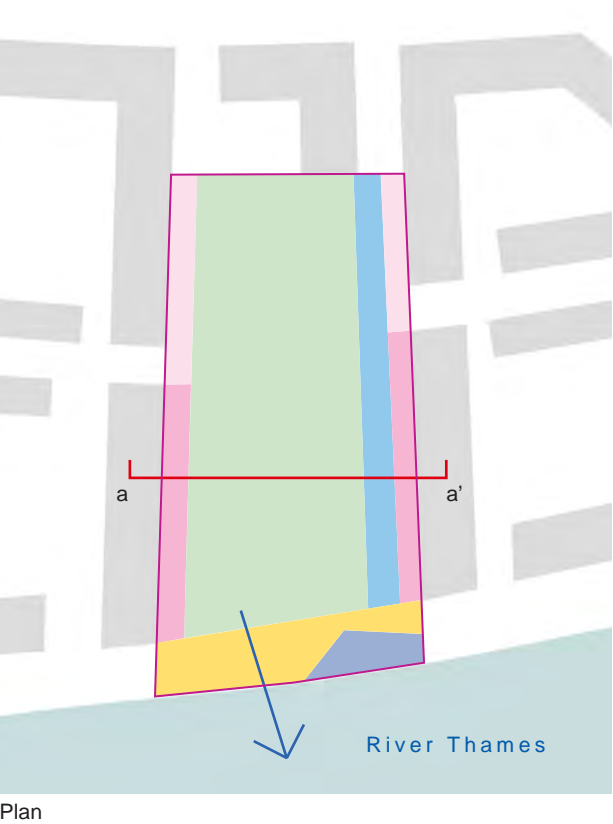


Minoco Settings








The principal settings established within the masterplan framework have been illustrated adjacent.

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

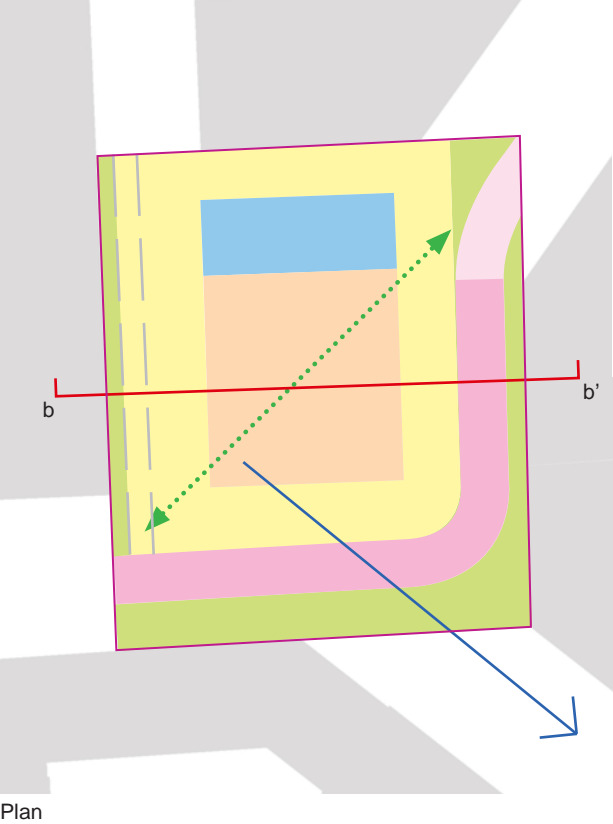
Minoco Park












Section

- |   |  |   |   |
|---|--|---|---|
|  | Zone for collection of surface water run off                           |  | Low vehicle volume carriageway                                    |
|  | Riverside terracing  |  | Pedestrian priority route with flush kerb; limited vehicle access |
|  | Riverwalk route within 15m of river edge                               |  | Opportunity to enhance river views                                |
|  | Predominantly soft landscaping, footpaths and areas for childrens play |   |   |

Market Square

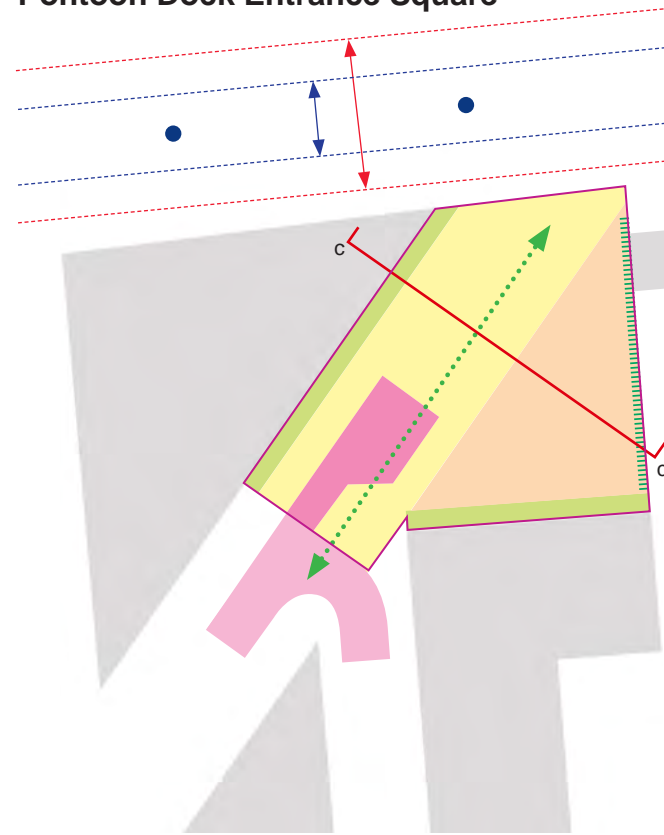


Section

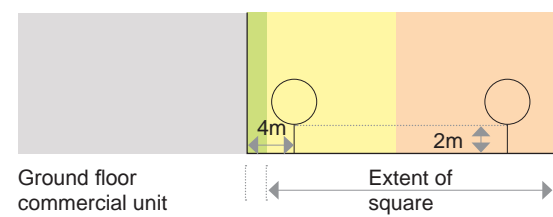
- |   |  |   |  |
|---|--|---|--|
|  | Raised section of carriageway with 25mm kerb to define the square                  |  | Main pedestrian route through square                               |
|  | Zone for water feature as a focal point in the square. Fountain to be interactive. |  | View to Thames Barrier to be clear from within the square          |
|  | Zone for temporary activities  |  | Minimum 3m wide footpaths to allow comfortable pedestrian movement |
|  | Perimeter zone to include tree planting, shrub planting, street furniture          |  | Two-way carriageway  |
|  | Temporary road to be constructed to serve Phase 1 vehicle movements                |   |  |



### Pontoon Dock Entrance Square



Plan



Ground floor commercial unit

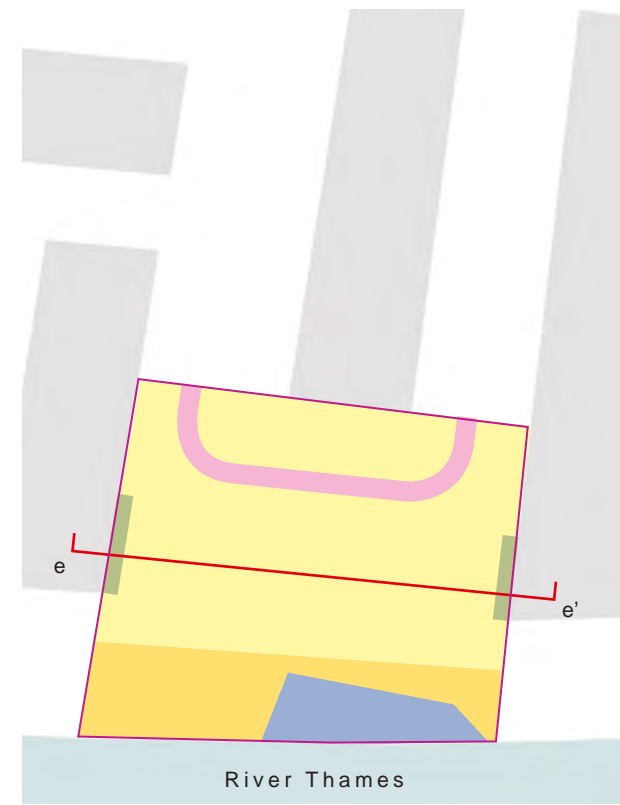
Extent of square

Section

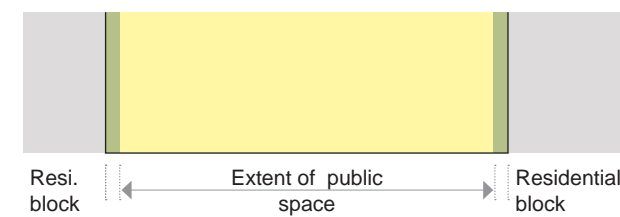
- Minimum 3m clear zone against building facade to allow for comfortable pedestrian movement
- Trafficable surface to facilitate servicing to buildings fronting onto the entrance square
- Zone for movement
- Zone for resting
- Raised carriage way with 25mm kerb

- Landscape to create an attractive boundary
- Clear and obvious pedestrian route into site to be maintained
- Extent of DLR viaduct
- 5m DLR easment zone no permanent structures
- DLR column

### Silvertown Pier Square



Plan



Resi. block

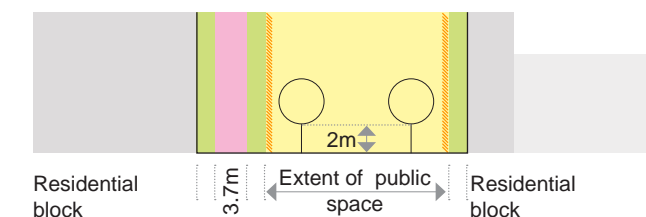
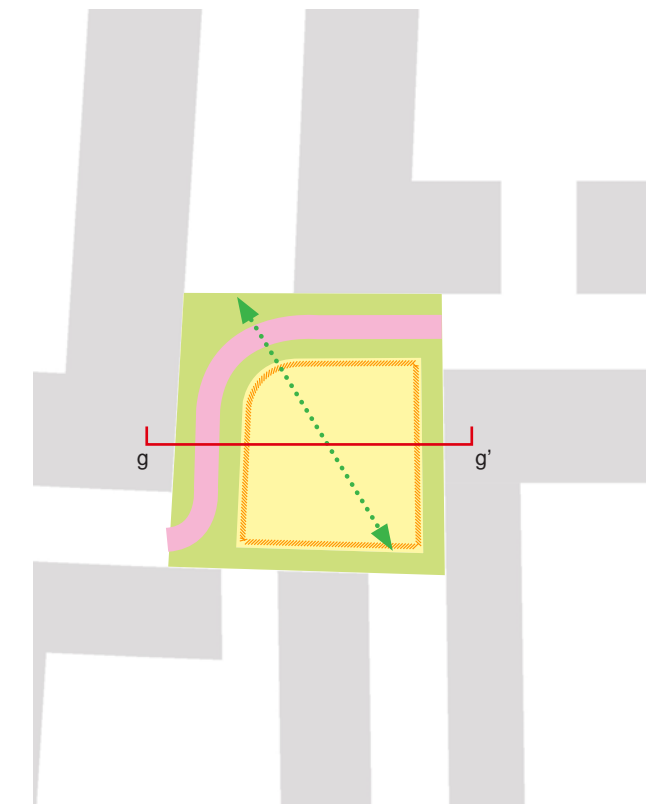
Extent of public space

Residential block

Section

- Landscaped square with covered seating area
- Riverside terracing
- Raised single lane carriageway with 25mm kerb
- Minimum 1.5m of planting to create buffer for groundfloor residential units
- Riverwalk route within 20m of river edge

### Pocket Parks



Residential block

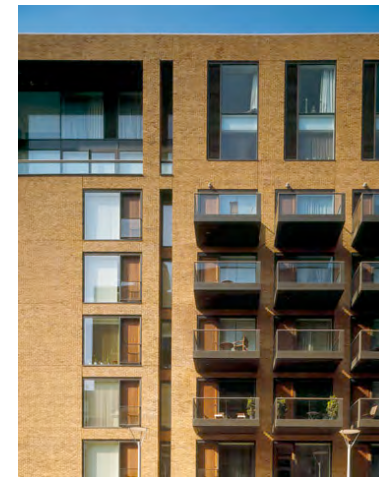
Extent of public space

Residential block

Section

- Landscaped square
- Minimum clear zone of 3m against building facade and 2m against road to allow for comfortable pedestrian movement
- Raised one-way carriageway with 25mm kerb to encourage lower vehicle speeds around space
- Zone of opportunity for trees, planting and furniture
- Clear route through space to be maintained

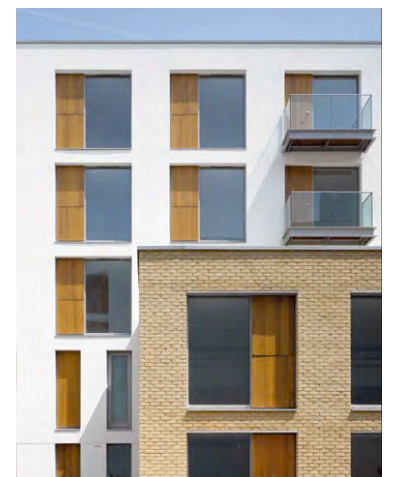
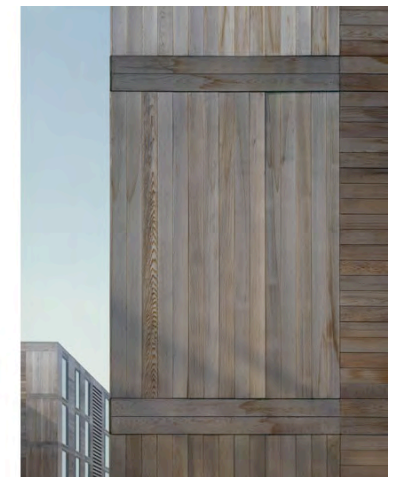




## Materials - Architecture

The material identity of the buildings within Minoco will be fundamental to the success of the scheme. The masterplan frameworks seeks to establish a simple and complimentary pallet of architectural materials with the aim of achieving the objectives below:

- Provide a diverse and rich range of materials appropriate to the diversity and scape of the masterplan site
- Achieve a cohesive and mutually responsive material language enhancing the character and sense of place of the masterplan
- Designers should respond to the principals of landscape materiality established above and seek to maintain a limited and appropriate language of materials consistent with the character of the scheme





Materials - Landscape

Hard materials

Hard landscape should be generally consistent across the scheme, with variations in material and colour employed to distinguish streets of differing character. Open areas should employ sensitive variations to imbue key spaces with a defining character, while maintaining an overall, cohesive aesthetic across the scheme.



High quality stone



Concrete



Stone kerb



Asphalt



Resin bound gravel

Planting

A limited palette of trees should be used along streets, where the size of the tree reflects the position of the street within the street hierarchy. A variety of species, appropriate to the location, can be used in open areas to give identity to individual spaces. Planting should offer ecological variety, and encourage biodiversity, while seeking an overall visual harmony across the scheme.



Street trees



Secondary trees



Structured planting

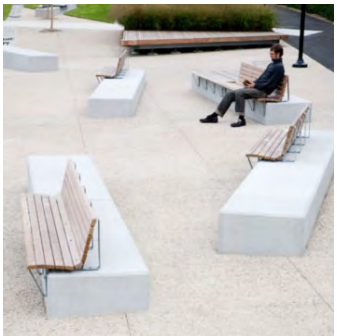


Ecological planting

Street Furniture

Street furniture examples are shown and should be consistent across the site. Variation can occur, where appropriate, in accordance with location, use and character of spaces.

- **Designers should respond to the principals of landscape materiality established above and seek to maintain a limited and appropriate language of materials consistent with the character of the scheme**



Bench seating



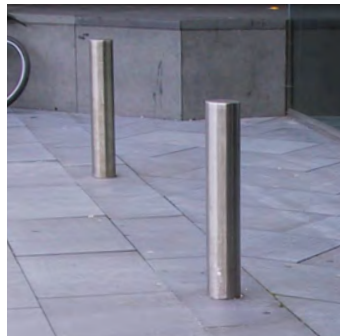
Lighting



Bins



Cycle racks



Bollards











**Interim London Housing Design Guide 2010**

The interim edition of the Mayor’s London Housing Design Guide (LHDG) has been revised following public consultation on the draft LHDG in 2009 and the findings of a cost and delivery impact analysis.

The draft document has been published to show the direction of travel of the final guide, to shape the design of London Development Agency (LDA) supported developments, and to encourage all involved in the design of new housing to embrace the Mayor’s aspirations.

While the guide is not a statement of planning policy it does reflect good guidance for all housing tenure design. At the core of the guide are new minimum space standards all of which are fully supported by the Minoco masterplan.

On the following pages the masterplan design team has listed the Interim London Housing Design Guide core standards and has noted the masterplans response to them. While it is regonised that a number of specific standards can only be fully addressed and incorporated into a buildings design at a detailed design stage, the masterplan has been designed to allow the requirements of the standard to be integrated into the building and / or landscape design.

Achieving the Mayor’s standards and in many areas exceeding them will be key to the success and longevity of the housing and community aspired to at Minoco.

The guide is based around six key themes, starting at the scale of a neighbourhood then focusing on the individual home. These have been illustrated in the following pages as follows:

- 1.0 Shaping Good Places: integrating the development within the wider public realm network, providing opportunities for access to open and green space, and ensuring that development enhances the existing character of the area.
- 2.0 Housing for a Diverse City: designing for a mix of housing sizes, types and tenures, at appropriate densities.
- 3.0 From Street to Front Door: guidance on the design of shared circulation areas and the entrance and approach to a group of flats or individual dwelling.

- 4.0 Dwelling Space Standards: new minimum space standards and guidance on the size and layout of different rooms, including minimum sizes for storage and private outdoor space.
- 5.0 Home as a Place of Retreat: design guidance for privacy, dual aspect dwellings, noise, floor-to-ceiling heights, daylight and sunlight.
- 6.0 Climate Change Mitigation and Adaptation: clarifying the London approach to the implementation of the Code for Sustainable Homes in relation to London Plan policy.

The guide contains defines 1 of 2 priority weighting to each standard categorised as either a ‘Priority 1’ or ‘Priority 2’ standard. ‘Priority 1’ standards must be met in full, while ‘Priority 2’ standards are strongly recommended as best practice.



Standard	Pri. 1 2	Description	Comment
<b>1.0</b>		<b>Shaping Good Places</b>	
<b>1.1</b>		<b>Defining Places</b>	
1.1.1	1	Development proposals should demonstrate: <ul style="list-style-type: none"> <li>• how the design responds to its physical context, including the character and legibility of the area and the local pattern of building, public space, landscape and topography;</li> <li>• how the scheme relates to the identified character of the place and to the local vision and strategy or how bolder change is justified in relation to a coherent set of ideas for the place expressed in the local vision and strategy or agreed locally.</li> </ul>	The masterplan has been carefully considered in its local and national context. The design and access statement details at length the appropriateness of the development strategy with regard to character, local vision and the generation of place.
1.1.2	1	Development proposals should demonstrate: <ul style="list-style-type: none"> <li>• how the scheme complements the local network of public spaces, including how it integrates with existing streets and paths;</li> <li>• how public spaces and pedestrian routes are designed to be overlooked and safe, and extensive blank elevations onto the public realm at ground floor have been avoided;</li> <li>• for larger developments, how any new public spaces including streets and paths are designed on the basis of an understanding of the planned role and character of these spaces within the local movement network, and how new spaces relate to the local vision and strategy for the area.</li> </ul>	<p>The provision of public spaces and their legible hierarchy and form is integral to the masterplan proposition.</p> <p>The role and character of the main public spaces is carefully outlined in the design and access statement accompanying the outline application submission</p>
<b>1.2</b>		<b>Outdoor Spaces</b>	
1.2.1	1	Development proposals should demonstrate that they comply with the borough's open space strategies, ensuring that a review of surrounding open space is undertaken and that opportunities to address a deficiency in provision by providing new public open spaces are taken forward in the design process.	Open space has been carefully designed with regard to the Mayors standards and has been developed through an open dialogue with the local authority.
1.2.2	1	For developments with a potential occupancy of ten children or more, development proposals should make appropriate play provision in accordance with the London Plan SPG, Providing for Children and Young People's Play and Informal Recreation.	Open space has been carefully designed with regard to the Mayors standards and has been detailed in both the environmental impact statement and design and access statement.
1.2.3	1	Where communal open space is provided, development proposals should demonstrate that the space: <ul style="list-style-type: none"> <li>• is overlooked by surrounding development;</li> <li>• is accessible to wheelchair users and other disabled people;</li> <li>• is designed to take advantage of direct sunlight;</li> <li>• has suitable management arrangements in place.</li> </ul>	Communal space has been carefully considered within the development proposals. It is appropriately overlooked for passive surveillance reasons, will be accessible and appropriately tested against for adequate sunlight provision. The spaces will be managed as part of the estates management plan.

Standard	Pri. 1 2	Description	Comment
<b>2.0</b>		<b>Housing For A Diverse City</b>	
<b>2.1</b>		<b>Appropriate Density</b>	
2.1.1	1	Development proposals should demonstrate how the density of residential accommodation satisfies London Plan policy relating to public transport accessibility level (PTAL) and the accessibility of local amenities and services, and is appropriate to the location in London.	Scoping submitted as part of pre submission material with the PTAL level agreed to by the local authority.
<b>2.2</b>		<b>Residential Mix</b>	
2.2.1	1	Development proposals should demonstrate how the mix of dwelling sizes and the mix of tenures meet strategic and local borough targets and are appropriate to the location in London.	A comprehensive range of tenure and size of units is proposed in the masterplan. These are published in the design and access statement and development specification.



Standard	Pri. 1 2	Description	Comment
<b>3.0</b>		<b>From Street to Front Door</b>	
<b>3.1</b>		<b>Entrance and Approach</b>	
3.1.1	1	All main entrances to houses, ground floor flats and communal entrance lobbies should be visible from the public realm and clearly identified.	This standard is proposed for the site.
3.1.2	1	The distance from the accessible car parking space of requirement 3.3.4 to the home or to the relevant block entrance or lift core should be kept to a minimum and should be level or gently sloping [Lifetime Homes Criterion 2].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.
3.1.3	1	The approach to all entrances should preferably be level or gently sloping [Lifetime Homes Criterion 3].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.
3.1.4	1	All entrances should be illuminated and have level access over the threshold. Entrance doors should have 300mm of clear space to the pull side, and clear minimum opening widths of 800mm or 825mm depending on the direction and width of approach. Main entrances should have weather protection and a level external landing [Lifetime Homes Criterion 4].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.
<b>3.2</b>		<b>Shared Circulation Within Dwelling</b>	
3.2.1	2	The number of dwellings accessed from a single core should not exceed eight per floor.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
3.2.2	1	An access core serving 4 or more dwellings should provide an access control system with entry phones in all dwellings linked to a main front door with electronic lock release. Unless a 24 hour concierge is provided, additional security measures including audio-visual verification to the access control system should be provided where any of the following apply: <ul style="list-style-type: none"> <li>• more than 25 dwellings are served by one core</li> <li>• the potential occupancy of the dwellings served by one core exceeds 100 bed spaces</li> <li>• more than 8 dwellings are provided per floor.</li> </ul>	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
3.2.3	1	Where dwellings are accessed via an internal corridor, the corridor should receive natural light and adequate ventilation.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
3.2.4	1	The minimum width for all paths, corridors and decks for communal circulation is 1200mm. The preferred minimum width is 1500mm, and is considered particularly important where corridors are double loaded (they serve dwellings on each side) and where wheelchair accessible dwellings are provided.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
3.2.5	2	For buildings with dwellings entered from communal circulation at the first, second or third floor where lifts are not provided, space should be identified within or adjacent to the circulation cores for the future installation of a wheelchair accessible lift.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
3.2.6	1	All dwellings entered at the fourth floor (fifth storey) and above should be served by at least one wheelchair accessible lift, and it is desirable that dwellings entered at the third floor (fourth storey) are served by at least one such lift. All dwellings entered at the seventh floor (eighth storey) and above should be served by at least two lifts.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
3.2.7	1	Every designated wheelchair accessible dwelling above the ground floor should be served by at least one wheelchair accessible lift. It is desirable that every wheelchair accessible dwelling is served by at least two such lifts.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.

Standard	Pri. 1 2	Description	Comment
3.2.8	1	Principal access stairs should provide easy access regardless of whether a lift is provided. Where homes are reached by a lift, it should be fully wheelchair accessible [Lifetime Homes Criterion 5].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.
<b>3.3</b>		<b>Car Parking</b>	
3.3.1	1	All developments should conform to London Plan policy on car parking provision. In areas of good public transport accessibility and/or town centres the aim should be to provide less than one space per dwelling. Elsewhere parking provision should be as follows: <ul style="list-style-type: none"> <li>• 4+ bedroom dwellings: 1.5 - 2 spaces per dwelling;</li> <li>• 3 bedroom dwellings: 1 - 1.5 spaces per dwelling;</li> <li>• 1 - 2 bedroom dwellings: less than 1 per dwelling.</li> </ul>	Masterplan allows for parking to be provided to meet this standard.
3.3.2	1	Each designated wheelchair accessible dwelling should have a car parking space 2400mm wide with a clear access way to one side of 1200mm.	Masterplan allows for parking to be provided to meet this standard. .
3.3.3	1	Careful consideration should be given to the siting and organisation of car parking within an overall design for open space so that car parking does not negatively affect the use and appearance of open spaces.	Masterplan allows for parking to be provided to meet this standard. Details of streetscape provided in the design and access statement.
3.3.4	1	Where car parking is within the dwelling plot, at least one car parking space should be capable of enlargement to a width of 3300mm. Where parking is provided in communal bays, at least one space with a width of 3300mm should be provided per block entrance or access core in addition to spaces designated for wheelchair user dwellings [Lifetime Homes Criterion 1].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.
<b>3.4</b>		<b>Cycle Storage</b>	
3.4.1	1	All developments should provide dedicated storage space for cycles at the following levels: <ul style="list-style-type: none"> <li>• 1 per 1 or 2 bedroom dwelling; or</li> <li>• 2 per 3 or more bedroom dwelling</li> </ul>	Masterplan allows for cycle parking to be provided to meet this standard.
3.4.2	2	Individual or communal cycle storage outside the home should be secure, sheltered and adequately lit, with convenient access to the street. Where cycle storage is provided within the home, it should be in addition to the minimum GIA and minimum storage and circulation space requirements. Cycle storage identified in habitable rooms or on balconies will not be considered acceptable.	Masterplan allows for cycle parking to be provided to meet this standard.
<b>3.5</b>		<b>Refuse, Post and Deliveries</b>	
3.5.1	1	Communal refuse and recycling containers, communal bin enclosures and refuse stores should be accessible to all residents including children and wheelchair users, and located on a hard, level surface. The location should satisfy local requirements for waste collection and should achieve full credits under the Code for Sustainable Homes Technical Guide. Refuse stores within buildings should be located to limit the nuisance caused by noise and smells and provided with means for cleaning.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
3.5.2	1	Storage facilities for waste and recycling containers should be provided in accordance with the Code for Sustainable Homes Technical Guide and local authority requirements.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.



Standard	Pri.	Description	Comment																																										
	1 2																																												
4.0		Dwelling Space Standards																																											
4.1		Internal Floor Area																																											
4.1.1	1	<p>All developments should meet the following minimum space standards.</p> <table><thead><tr><th></th><th>Dwelling type (bedrooms/person)</th><th>Essential GIA (sqm)</th></tr></thead><tbody><tr><td rowspan="6">Single storey dwelling</td><td>1b2p</td><td>50</td></tr><tr><td>2b3p</td><td>61</td></tr><tr><td>2b4p</td><td>70</td></tr><tr><td>3b4p</td><td>74</td></tr><tr><td>3b5p</td><td>86</td></tr><tr><td>3b6p</td><td>95</td></tr><tr><td rowspan="4">Two storey dwelling</td><td>4b5p</td><td>90</td></tr><tr><td>4b6p</td><td>99</td></tr><tr><td>2b4p</td><td>83</td></tr><tr><td>3b4p</td><td>87</td></tr><tr><td rowspan="4">Three storey dwelling</td><td>3b5p</td><td>96</td></tr><tr><td>4b5p</td><td>100</td></tr><tr><td>4b6p</td><td>107</td></tr><tr><td>3b5p</td><td>102</td></tr><tr><td></td><td></td><td>4b5p</td><td>106</td></tr><tr><td></td><td></td><td>4b6p</td><td>113</td></tr></tbody></table> <p>For dwellings designed for more than 6 people, at least 10 sq m gross internal area should be added for each additional person.</p>		Dwelling type (bedrooms/person)	Essential GIA (sqm)	Single storey dwelling	1b2p	50	2b3p	61	2b4p	70	3b4p	74	3b5p	86	3b6p	95	Two storey dwelling	4b5p	90	4b6p	99	2b4p	83	3b4p	87	Three storey dwelling	3b5p	96	4b5p	100	4b6p	107	3b5p	102			4b5p	106			4b6p	113	Masterplan generally exceeds the standards for all units. A schedule of unit sizes is provided in the design and access statement and development specification.
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Single storey dwelling	1b2p	50																																											
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		4b6p	113																																										
4.1.2	1	<p>Dwelling plans should demonstrate that dwellings will accommodate the furniture, access and activity space requirements relating to the declared level of occupancy.</p>	Standard is supported by the masterplan but will require demonstration at a detailed design stage.																																										
4.2		Flexibility and Adaptability																																											
4.2.1	1	<p>Dwelling plans should demonstrate that dwelling types provide flexibility by allowing for alternative seating arrangements in living rooms and by accommodating double or twin beds in at least one double bedroom.</p>	Standard is supported by the masterplan but will require demonstration at a detailed design stage.																																										
4.3		Circulation in the Home																																											
4.3.1	1	<p>The minimum width of hallways and other circulation spaces inside the home should be 900mm. This may reduce to 750mm at 'pinch points' e.g. next to radiators, where doorway widths meet the following specification:</p> <table><thead><tr><th>Minimum clear opening width of doorway (mm)</th><th>Minimum approach with (when approach is not head on)</th></tr></thead><tbody><tr><td>750</td><td>1200</td></tr><tr><td>775</td><td>1050</td></tr><tr><td>900</td><td>900</td></tr></tbody></table> <p>Where a hallway is at least 900mm wide and the approach to the door is head-on, a minimum clear opening door width of 750mm should be provided [Lifetime Homes Criterion 6].</p>	Minimum clear opening width of doorway (mm)	Minimum approach with (when approach is not head on)	750	1200	775	1050	900	900	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.																																		
Minimum clear opening width of doorway (mm)	Minimum approach with (when approach is not head on)																																												
750	1200																																												
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4.3.2	1	<p>The design of dwellings of more than one storey should incorporate potential for a stair lift to be installed and a suitable identified space for a through-the-floor lift from the entrance level† to a storey containing a main bedroom and an accessible bathroom [Lifetime Homes Criterion 12].</p>	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.																																										

Standard	Pri.	Description	Comment												
	1 2														
4.4		<b>Living, Dining and Kitchen Areas</b>													
4.4.1	2	The following combined floor areas for living / kitchen / dining space should be met:  <table><tr><td>Designed level of occupancy</td><td>Minimum combined floor area of living, dining, and kitchen spaces (sqm)</td></tr><tr><td>2 persons</td><td>23</td></tr><tr><td>3 persons</td><td>25</td></tr><tr><td>4 persons</td><td>27</td></tr><tr><td>5 persons</td><td>29</td></tr><tr><td>6 persons</td><td>31</td></tr></table>	Designed level of occupancy	Minimum combined floor area of living, dining, and kitchen spaces (sqm)	2 persons	23	3 persons	25	4 persons	27	5 persons	29	6 persons	31	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
Designed level of occupancy	Minimum combined floor area of living, dining, and kitchen spaces (sqm)														
2 persons	23														
3 persons	25														
4 persons	27														
5 persons	29														
6 persons	31														
4.4.2	2	The minimum width of the main sitting area should be 2.8m in 2-3 person dwellings and 3.2m in dwellings designed for four or more people.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.												
4.4.3	2	Dwellings with three or more bedrooms should have two living spaces, for example a living room and a kitchen-dining room. Both rooms should have external windows. If a kitchen is adjacent to the living room, the internal partition between the rooms should not be loadbearing, to allow for reconfiguration as an open plan arrangement. Studies will not be considered as second living spaces.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.												
4.4.4	1	There should be space for turning a wheelchair in dining areas and living rooms and basic circulation space for wheelchairs elsewhere [Lifetime Homes Criterion 7].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.												
4.4.5	1	A living room, living space or kitchen-dining room should be at entrance level [Lifetime Homes Standard 8].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.												
4.4.6	1	Windows in the principal living space should start 800mm above finished floor level (+/- 50mm) to allow people to see out while seated. At least one opening window should be easy to approach and operate by people with restricted movement and reach. [Lifetime Homes Criterion 15].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.												
4.5		<b>Bedrooms</b>													
4.5.1	2	The minimum area of a single bedroom should be 8 sq m. The minimum area of a double or twin bedroom should be 12 sq m.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.												
4.5.2	2	The minimum width of double and twin bedrooms should be 2.75m in most of the length of the room.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.												
4.5.3	1	In homes of two or more storeys with no permanent bedroom at entrance level, there should be space on the entrance level that could be used as a convenient temporary bed space [Lifetime Homes Criterion 9].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.												
4.5.4	1	Structure above a main bedroom and an accessible bathroom should be capable of supporting a ceiling hoist and the design should allow for a reasonable route between this bedroom and bathroom [Lifetime Homes Criterion 13].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.												
4.6		<b>Bathrooms and WC's</b>													
4.6.1	2	Dwellings designed for an occupancy of five or more people should provide a minimum of one bathroom with WC and one additional WC.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.												
4.6.2	1	Where there is no accessible bathroom at entrance level, a wheelchair accessible WC with potential for a shower to be installed should be provided at entrance level° [Lifetime Homes Criterion 10].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.												
4.6.3	1	An accessible bathroom should be provided in every dwelling on the same storey as a main bedroom	All residential buildings are to be lifetime homes compliant. This standard is												



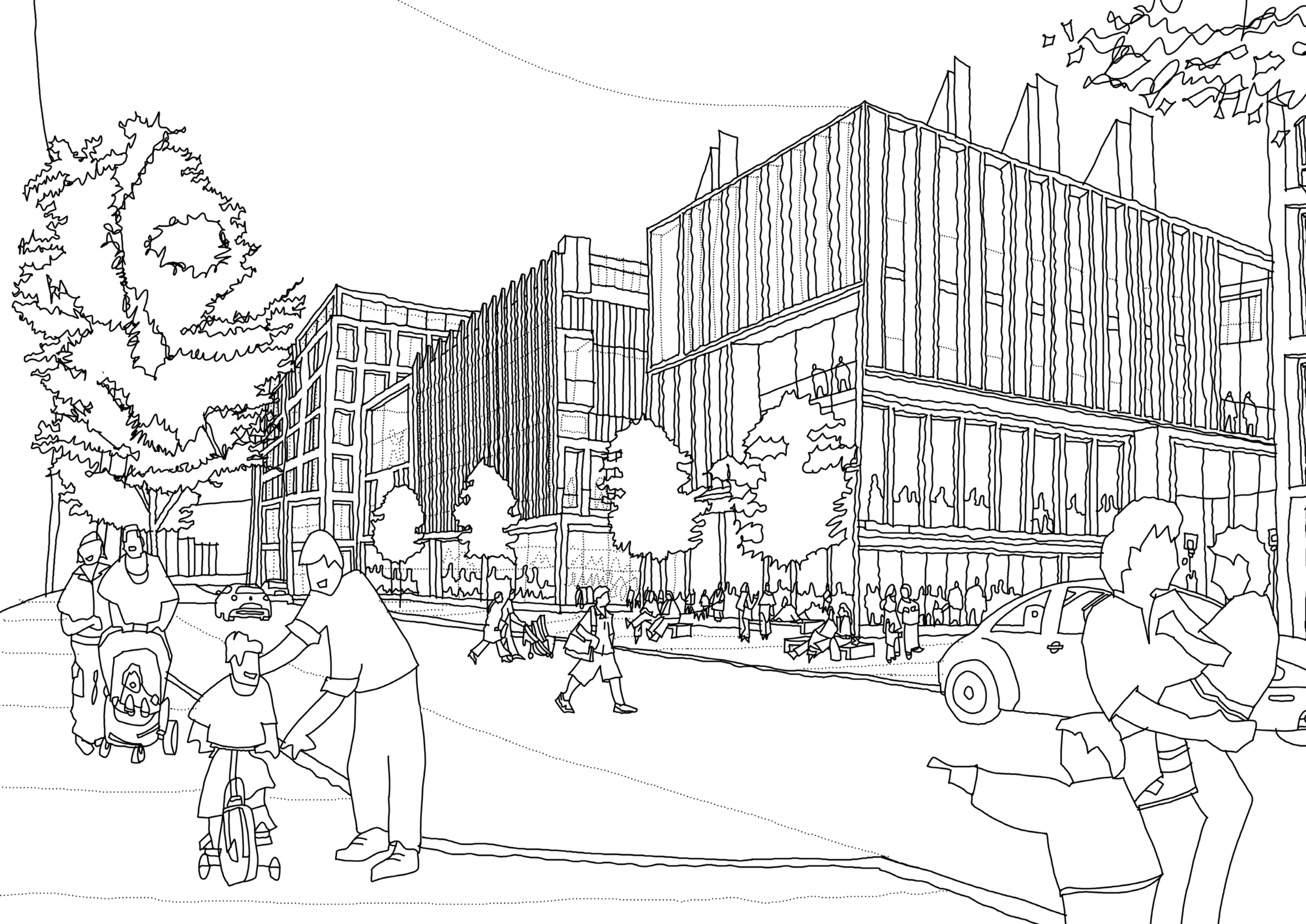
Standard	Pri. 1 2	Description	Comment
4.6.3	1	[Lifetime Homes Criterion 14].	proposed for the site.
4.6.4	1	Walls in bathrooms and WCs should be capable of taking adaptations such as handrails [Lifetime Homes Criterion 11].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.
<b>4.7</b>		<b>Storage and Utility</b>	
4.7.1	1	Built-in general internal storage space free of hot water cylinders and other obstructions, with a minimum internal height of 2m and a minimum area of 1.5 sq m should be provided for 2 person dwellings, in addition to storage provided by furniture in habitable rooms. For each additional occupant an additional 0.5 sq m of storage space is required.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
<b>4.8</b>		<b>Study and Work</b>	
4.8.1	1	Dwelling plans should demonstrate that all homes are provided with adequate space and services to be able to work from home. The Code for Sustainable Homes guidance on working from home is recommended as a reference.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
4.8.2	1	Service controls should be within a height band of 450mm to 1200mm from the floor and at least 300mm away from any internal room corner [Lifetime Homes Criterion 16].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.
<b>4.9</b>		<b>Wheelchair User Dwellings</b>	
4.9.1	1	Ten percent of new housing should be designed to be wheelchair accessible or easily adaptable for residents who are wheelchair users in accordance with the GLA Best Practice Guide, Wheelchair Accessible Housing.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
<b>4.10</b>		<b>Private Open Space</b>	
4.10.1	1	A minimum of 5 sq m of private outdoor space should be provided for 1-2 person dwellings and an extra 1 sq m should be provided for each additional occupant.	Standard is supported by the masterplan but will require demonstration and specific development at a detailed design stage.
4.10.2	1	Private outdoor spaces should have level access from the home [Lifetime Homes Criterion 4].	All residential buildings are to be lifetime homes compliant. This standard is proposed for the site.
4.10.3	1	The minimum depth and width of all balconies and other private external spaces is 1500mm.	Standard is supported by the masterplan but will require demonstration and specific development at a detailed design stage.

Standard	Pri. 1 2	Description	Comment
<b>5.0</b>		<b>Home as a Place of Retreat</b>	
<b>5.1</b>		<b>Privacy</b>	
5.1.1	1	Design proposals should demonstrate how habitable rooms within each dwelling are provided with an adequate level of privacy in relation to neighbouring property and the street and other public spaces.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
<b>5.2</b>		<b>Dual Aspect</b>	
5.2.1	1	Developments should avoid single aspect dwellings that are north facing, exposed to noise exposure categories C or D, or contain three or more bedrooms.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
5.2.2	1	Where single aspect dwellings are proposed, the designer should demonstrate how good levels of ventilation, daylight and privacy will be provided to each habitable room and the kitchen.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
<b>5.3</b>		<b>Noise</b>	
5.3.1	1	The layout of adjacent dwellings and the location of lifts and circulation spaces should seek to limit the transmission of noise to sound sensitive rooms within dwellings.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
<b>5.4</b>		<b>Floor to Ceiling Heights</b>	
5.4.1	1	The minimum floor to ceiling height in habitable rooms is 2.5m between finished floor level and finished ceiling level. A minimum floor to ceiling height of 2.6m in habitable rooms is considered desirable and taller ceiling heights are encouraged in ground floor dwellings.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
<b>5.5</b>		<b>Daylight and Sunlight</b>	
5.5.1	2	Glazing to all habitable rooms should be not less than 20% of the internal floor area of the room.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.
5.5.2	2	All homes should provide for direct sunlight to enter at least one habitable room for part of the day. Living areas and kitchen dining spaces should preferably receive direct sunlight.	Standard is supported by the masterplan but will require demonstration and specific design development at a detailed design stage.



Standard	Pri.	Description	Comment								
	1 2										
6.0		Climate Change Mitigation and Adaptation									
6.1		Environmental Performance									
6.1.1	2	Designers should seek to achieve a minimum of Level 4 of the Code for Sustainable Homes in all new developments.	Standard is supported by the masterplan and expected for all new residential development.								
6.1.2	1	All homes should satisfy London Plan policy on sustainable design and construction and make the fullest contribution to the mitigation of and adaptation to climate change.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.								
6.2		Energy and CO <sup>2</sup>									
6.2.1	1	Development proposals should be designed in accordance with the London Plan energy hierarchy, and should meet the following minimum targets for carbon dioxide emissions reduction.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.								
		<table><tr><td>Year</td><td>Improvement on 2006 Building Regulations</td></tr><tr><td>2010 – 2013</td><td>44 %</td></tr><tr><td>2013 – 2016</td><td>55 %</td></tr><tr><td>2016 - 2031</td><td>Zero Carbon</td></tr></table>	Year	Improvement on 2006 Building Regulations	2010 – 2013	44 %	2013 – 2016	55 %	2016 - 2031	Zero Carbon	
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6.3		Overheating									
6.3.1	1	Development proposals should demonstrate how the design of dwellings will avoid overheating during summer months without reliance on energy intensive mechanical cooling systems.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.								
6.4		Water									
6.4.1	1	New dwellings should be designed to ensure that a maximum of 105 litres of water is consumed per person per day.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.								
6.4.2	1	Where development is permitted in an area at risk of flooding, it should incorporate flood resilient design in accordance with PPS25.	Commentary illustrating design compliance has been provided in the environmental impact assessment supplied in support of the outline planning application.								
6.4.3	1	New development should adhere to standards for surface water run-off as set out in the Code for Sustainable Homes.	Commentary illustrating design compliance has been provided in the environmental impact assessment supplied in support of the outline planning application.								
6.4.4	1	New development should incorporate Sustainable Urban Drainage Systems and green roofs where appropriate.	SUDS systems are provided as part of the landscape strategy.								
6.5		Materials									
6.5.1	2	All new residential development should meet the requirements of the Code Level 4 with regard to using materials with lower environmental impacts over their lifecycle.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.								
6.5.2	1	All new residential development should accord with Code for Sustainable Homes Level 4 and the London Sustainable Design and Construction SPG with regard to the sourcing of materials.	Standard is supported by the masterplan but will require demonstration at a detailed design stage.								
6.6		Ecology									
6.6.1	1	The design and layout of new residential development should avoid areas of ecological value and seek to enhance the ecological capital of the area in accordance with GLA best practice guidance on biodiversity and nature conservation.	Commentary illustrating design compliance has been provided in the environmental impact assessment supplied in support of the outline planning application.								









## CONCLUSION

Minoco aspires to be the best solution for Newham. The masterplan presented in this document is a product of a long and considered design process undertaken with consultation and corporation with the London Borough of Newham, the Greater London Authority and the London Thames Gateway Development Corporation. This process has informed and matured the framework for development proposed within the scheme and has resulted in a design authored by many hands.

The success of the scheme will be measured by the quality of the built environment it produces. It is hoped that this starting point contributed to the transformation of this key site into a unique and exceptional place where many people enjoy living, working and playing.



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