



### 4.6 GAPS AND VIEWS THROUGH





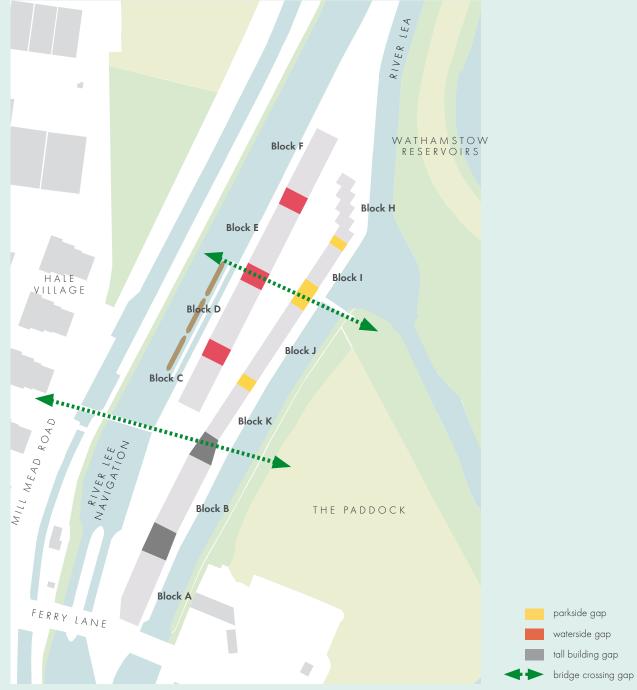
Illustrative waterside gap views from the River Lee Navigation Towpath

### 4.6.1 Maintaining visual permeability through the site

Permeability through the scheme has been a key consideration in the formulation of the illustrative masterplan. Visual permeability through the site from Hale Village and the River Lee Navigation towpath to the parklands and reservoirs beyond is important to establish a physical and visual connection between the Hale Wharf development and the existing neighbourhoods of Tottenham Hale.

This permeability is attained by limiting the overall width of building typologies (see Design codes Section on Typology 4.4) and by the careful placement of the blocks to create gaps between them which allow for views through the site from east and west as well as in to and out of the site itself.

Different types of gaps have been identified as well as how they must relate to one another. The following section outlines the characteristics of these 'gaps' between buildings.



Gap types diagram

#### **DESIGN CODE: GAPS BETWEEN BUILDINGS**

### 4.6.2 Types of gaps

 All gaps must adhere to minimum widths from the ground floor to the maximum height extents of any building either side of it. These minimum widths are set out by the parameter plans.

To ensure that physical and visual permeability is maintained through the site from west to east - from the adjacent urban and parklands areas (respectively).

- Gaps between buildings are identified by the following types as illustrated in the diagram on the facing page and are as follows:
  - Parkside gaps
  - Waterside gaps
  - Tall building gaps

To ensure that appropriate distances are allowed in between buildings in relation to their height, density and site location.

### 4.6.3 Arrangement of gaps between buildings

- Gaps between buildings must be arranged to ensure views through the site.
- Gaps between buildings should change in character according to their relationship with other building gaps. The streetscape character of each gap is defined by the following types.
  - Waterside/parkside gap
  - Bridge Crossing/ waterside (or) Bridge
  - Crossing/parkside gap

To ensure that appropriate distances are allowed in between buildings in relation to bridge landings and the public spaces around them.

#### 4.6.4 Use of gaps

Parkside gap space must not be used for parking



Staggered gaps between buildings on either side of development allowing indirect views through

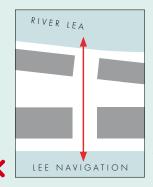
# 4.6.5 Waterside/ Parkside gaps

 The arrangement and character of a waterside/ parkside gap must adhere to the rules as set out in the adjacent diagrams.

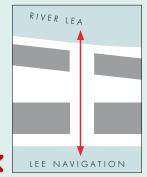
To ensure that physical and visual permeability is maintained through the site from west to east - from the adjacent urban and parklands areas (respectively).



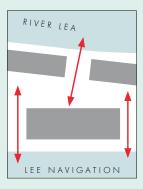
Staggered gaps between buildings on either side of development allowing indirect views through



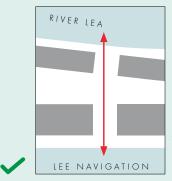
Aligned gaps between buildings on either side of development allowing direct views through



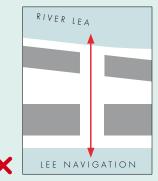
Non-perpendicular building footprint to allow direct views through site



Building gaps staggered too far apart therfore blocking views through the site



Aligned gaps between buildings on either side of development allowing direct views through



Non- perpendicular building footprint to form gap

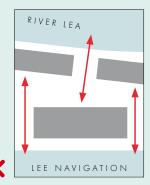
- 4.6.6 Bridge crossing /waterside gap (or) Bridge crossing / parkside gap
  - Special consideration must be given to gaps between all building types that are adjacent to any bridge crossing.
  - The arrangement and character of gaps adjacent to bridge crossings must adhere to the rules as set out in the adjacent diagram.

To ensure that physical and visual permeability is maintained through the site from west to east - from the adjacent urban and parklands areas (respectively).

To help with way-finding, to help define key routes and to enhance the overall legibility of the scheme.



Staggered gaps between buildings on either side of development allowing indirect views through



Building gaps staggered to far apart blocking view through the site



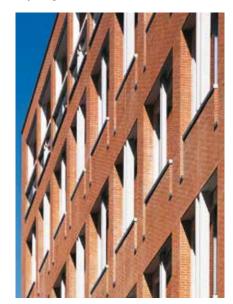




St. Andrew's, London



Keybridge House, London



Pater Noster Square, London



St. Andrews, London



Girton Collge, Cambridge



Barrier Park, London



Highbury Square, London



St. Andrews, London



Great Suffolk Street, London

#### 4.7 APPEARANCE

Future designers of the outline component buildings should seek to find commonalities between their designs and Blocks A and B which have designed in the detail application scheme.

The overall stratgey is to produce a visually harmonious palette of robust materials coupled with well proportioned window and door openings with reveals appropriate in depth in relation to the mass of each building.

Brick is chosen as the primary material to give buildings a robustness appropriate to their scale and use. The durability and low maintenance nature of brick makes it appropriate for housing. Brick also offers the opportunity to subtly vary the colour, type, mix, bond and mortar to create a rich family of related buildings within the masterplan.

## 4.7.1 Materiality: Facades and robust detailing

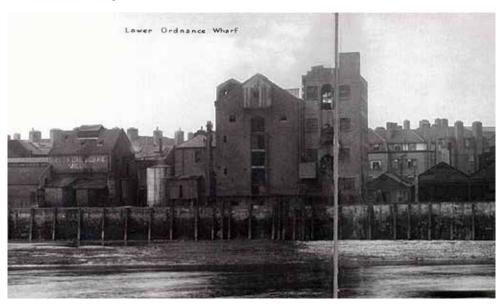
Character and identity of each block, unit and/or floor can be defined through the detailing of the elevation and its components combining simplicity and delight: the use of brick colour and texture give variety to the surface of walls and piers; simple and elegant balustrades introduce an element of decoration; precast concrete sills and fins to window establish a degree of contrast to the predominant brick surface.

A limited palette of external materials is proposed across the site:

- Brick facades
- Timber front doors (natural or painted)
- Timber or metal screening, gates and louvers to plant, bins. bike stores
- Aluminium powder-coated windows
- Steel and glass balconies
- Pre-cast concrete details
- Zinc roofs



Historial reference image: fenestration and detail



Historial reference image: industiral wharfside buildings



Historial reference image: robust brick materiality



Historical reference image: mill building



Historical reference image: Regents Canal, London



Historical reference image: Leeds waterfront

# 4.7.2 Historical industrial and wharf side precedents

The images on this and the facing page serve to illustrate the historical wharf side precedence that has influenced the appearance of the buildings in the illustrative masterplan. The following appropriate characteristics of these precedents have been incorporated in to the appearance of the masterplan.

- A robust materiality comprised of a limited set of materials, primarily comprised of brick and metal fenestration
- A robust materiality that requires low maintenance and that weathers well over longer periods of time
- A combination of pitched and flat rooflines within a single site
- An ordered facade comprised of repetitive external elements
- Large metal fenestration
- Lightweight metal balconies



Building character diagram

#### **DESIGN CODE: APPEARANCE**

#### 4.7.3 Architectural character

 Each elevation should have a consistent and harmonious architectural language across its entire surface.

To create a coherent appearance of the built fabric.

## 4.7.4 Building Character

- The character for each building is defined by the relevant assigned typology. Any building within a defined typology will have a consistent design approach as described in section 4.4 Typology Design Code and 4.5 Roof Design Code.
- Each building typology should have a coherent language of external wall elements such as windows, doors and balconies.

The typologies are defined as follows:

- Parkside family home character
- Waterside apartments character
- Flexible residential/ workspace character
- Tall buildings

To help develop a comprehensive approach to the appearance of the scheme across different phases. Also to encourage future architects to respond to the different conditions surrounding their buildings in a coordinated manner. This does not imply similar architectural styles, but an attitude towards use of materials, size of openings, symmetry and rhythm in facade composition, etc.

Tall buildings (Blocks A and B) are included as typologies for reference only. Please refer to Chapter 5 for information on the appearance and building materiality of these buildings.



Windows: orthogonal window openings



Building materials: limited palette



Windows: brightly coloured fenestration and balconies



Building materials: limited palette



Windows: floor to ceiling windows are encouraged

### 4.7.5 Building materials: All typologies

 A limited material and colour palette should be used for all building typologies. Each building typology should have a primary material and - other than materials used for windows and balconies - no more than 2 other secondary materials.

To ensure consistency of character and a coherent, calm appearance of the buildings. Richness and visual interest to emerge through consideration of detailing and materials, rather than large scale gestures or patchwork of colours.

 The masonry type and colour used as the primary material on all brick buildings of the same type should be of the same family. No more than 5 different brick types (colour and mix) may be used.

To ensure a calm, coherent and consistent character of the buildings across the masterplan.

 The texture of the masonry may vary within limitations and accent bricks (max. 20%) may be used where they form part of the facade design strategy for each proposed building.

To allow richness and visual interest to emerge through detailing and materials.

 Masonry types and colours should be complimentary to those of the buildings in the detail application.

To ensure harmonious and coherent appearance of the buildings.

 All masonry used as the primary material on brick buildings should be moulded stock bricks. No wire cut or engineering bricks will be acceptable.

To ensure warmth, richness, and quality.

All materials used should be durable and robust.

To create a stable environment for the community without the need to rely on high levels of maintenance.

# 4.7.6 Windows and Openings: All typologies

 Windows should be provided in stair and circulation areas wherever possible.

To comply with Housing Supplementary Planning Guidance.

All window openings are to be orthogonal.

To ensure coherence of design.

 Tall glazing is encouraged to admit natural light deep into internal spaces.

Quality of residential accommodation is paramount to the design.

 All external glazing of windows is to be accessible from within the residential accommodation (unless they are accessible from adjacent floor or balcony areas).

For maintenance and cleaning purposes

 A maximum 10% of window reveals are to be flush, or with projecting bays, only when it is part of a clear design strategy to introduce interest and variety to the building facade.

To retain a degree of flexibility for future designers to innovate.

### 4.7.7 Roofs: All typologies

 Where a roof is pitched in any way its materiality must be metal of a complimentary colour to the roofing materials of buildings in the detail application.

To ensure coherence of design across the roofscape of the masterplan.

 Where a roof is flat it surface must be predominantly comprised of green or brown roof systems.

To enhance and encourage biodiversity on the site.





# 4.7.8 Building materials: Parkside homes

 The primary facing material of buildings should be brick.

To ensure consistency of character and a coherent, calm appearance of the buildings.

To minimise the need for maintenance and cleaning of building facades.

# 4.7.9 Windows and Openings: Parkside homes

 Window brick reveals are to be designed with a minimum depth of 1 brick (215 mm).

To maintain the quality and appearance of robustness, provide additional privacy from inside people's homes, respond to the scale of apartment buildings and use light and shade to create variation in the building surface.



Primary building material brick



Floor to ceiling windows are encouraged



Window brick reveal is to be a depth of 1 brick (215mm)



Window opening with no brick reveal

# 4.7.10 Building materials: Waterside apartments

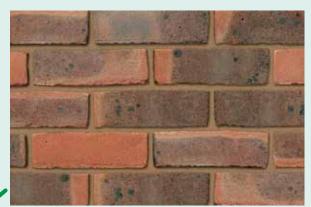
 The primary facing material of buildings of this type should be brick.

To ensure consistency of character and a coherent, calm appearance of the buildings.

To minimise the need for maintenance and cleaning of building facades.

 The masonry colour, type and accent should be the same on all buildings of this type.

Richness and visual interest to emerge through consideration of detailing and materials, rather than through the use of a single masonry type and colour.



Stock brick with softer brick edges



Brick of single type and colour across all waterside apartment buildings

# 4.7.11 Windows and Openings: Waterside apartments

 Window brick reveals are to be designed to a minimum depth 1.5 bricks (327.5 mm).

To maintain the quality and appearance of robustness, provide additional privacy from inside people's homes, respond to the scale of apartment buildings and use light and shade to create variation in the building surface.



Engineering brick or any brick with overly defined edges



Window brick reveals to be a depth of 1.5 bricks (327.5mm)



Stock brick- softer brick edges



IF workspace- primary material timber cladding



IF residential window brick reveals to be a depth of 1.5 bricks (327.5mm)



IF residential - primary colour must be brick

# 4.7.12 Building materials: Flexible residential/ workspace block

 IF the building use is predominantly residential then the primary facade material should be brick.

To ensure consistency of character and a coherent, calm appearance of the buildings.

To minimise the need for maintenance and cleaning of building facades.

 IF the building use is predominantly for workspace then the primary facade material may be brick OR timber.

To retain a degree of flexibility for future designers to use different building materials to define the character of the building according to its use.

# 4.7.13 Windows and Openings: Flexible residential/ workspace block

 IF the primary use of the building is residential then window brick reveals are to be designed to a minimum depth 1.5 bricks (327.5 mm).

To maintain the quality and appearance of robustness, provide additional privacy from inside people's homes, respond to the scale of apartment buildings and use light and shade toh create variation in the building surface.

 IF the primary use of the building is for workspace then window brick reveals are to be designed to a minimum depth 1 brick (215 mm).

To maintain the quality and appearance of robustness, respond to the scale of building and use light and shade to create variation in the building surface.











# 4.7.14 Balconies: All typolgies

 Balconies should be fully integrated with the architecture of the building and overall facade composition.

To ensure coherence of design of each of the proposed buildings.

 Designers should refer to the relevant guidance from the Greater London Authority and others with regards to appropriate balcony dimensions according to occupancy.

To ensure sufficient provision of private outdoor amenity space.

 Balconies should emphasise the design principles of the various parts of the development and respond to their immediate context.

To ensure consistency of appearance.

 No principal part of any balcony should be curved, faceted or irregular in shape or in plan.

To ensure consistency of appearance and privacy.

 No part of any balcony should be closer than 500 mm to any part of any other balcony, except where balconies may be considered integral to the structure of the facade and continuity is an essential element of facade composition.

To ensure consistency of appearance and privacy.

 While the primary facade material is clearly defined, balconies across the site are encouraged to vary in materiality.

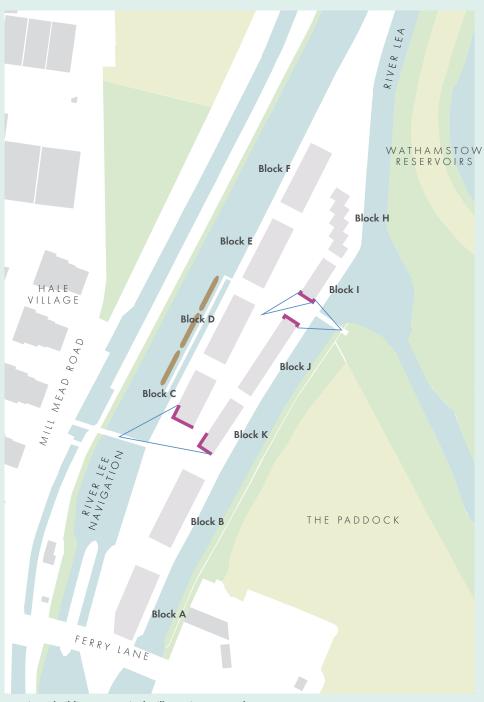
To allow richness and visual interest to emerge through detailing and materials and allow each elevation to respond to its context.

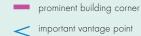
 Balconies can utilise balustrades comprised of upstands of a semi-transparent material.

To ensure consistency of appearance and privacy.

 Balconies should not oversail over the adopted public vehicular access route through the site.

To retain clear, unobstructed acces through the site and to allow headroom for maintenance machinery above utility corridors and retain a clear differentiation between public and private realms.





Prominent building corners in the illustrative masterplan









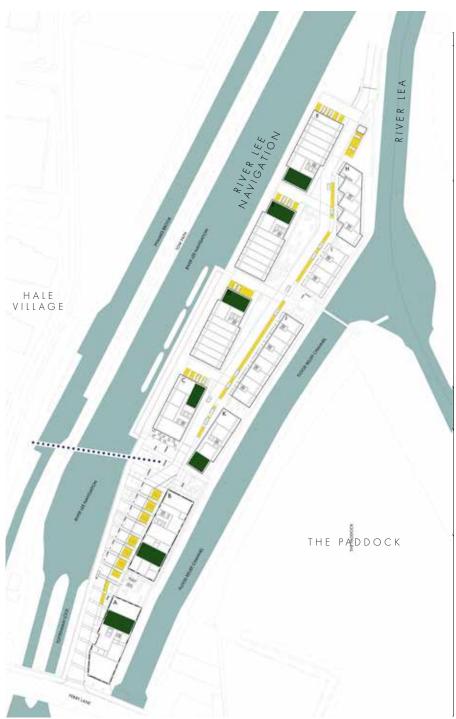
# 4.7.15 Prominent building corners

 Key building corners highlighted on the adjacent diagram are to have differentiated architectural features.

To help with clear way-finding, define key routes and enhance the legibility of the scheme.

- The following architectural features to highlight prominent building corners are to be avoided:
- Curved or chamfered building mass
- Stark contrast in colour and materiality of cladding material to the building as a whole
- Use of excessively saturated colours
- Use of brightly coloured fenestration or building materials
- Use of a non-masonry cladding material that requires high maintenance and annual cleaning such as painted aluminium composite panels





Transport and Parking Diagram



#### 4.8 TRANSPORT AND PARKING

#### 4.8.1 Bus services

The site benefits from being within close proximity to bus services that currently run along Ferry Lane past the site as well as all of the services that access Tottenham Hale Bus Station, which is less than 400m from the site.

### 4.8.2 Rail and London Underground services

The site benefits from being less than 400m from Tottenham Hale National Rail Station and Tottenham Hale London Underground Station. Tottenham Hale London Underground Station is served by the Victoria Line, which runs from Brixton to Walthamstow Central, giving access to Oxford Circus, Euston and King's Cross St Pancras.

## 4.8.3 Pedestrian and cycle access

The existing pedestrian and cycle access to the site is described in Section 2.5 of this Statement. Further improvements to pedestrian access are anticipated as a result of a new pedestrian bridge that will run from the Hale Wharf site across the River Lee Navigation and allow a new connection towards the Hale Village development. This is being provided by LB Haringey. Transport for London are also proposing to improve pedestrian connectivity to the Station by providing a new pedestrian bridge across the rail line from Hale Village. In combination, these would give an alternative route from the site towards the Station and Tottenham Hale avoiding Ferry Lane.

Cycle parking will be provided on site to reflect the London Plan standards of 1 space per 1-bedroom units and 2 spaces for 2-bedroom and larger units. Residential visitor parking at 1 space per 40 units will also be provided, as will additional spaces for the proposed non-residential floorspace.

Residential cycle parking will be secure and sheltered, with no general access to members of the public.

### 4.8.4 Vehicular access and parking

Vehicle access to the site is to continue to be via a simple priority junction from Ferry Lane. This has been designed to accommodate the turning needs of a large refuse vehicle. A vehicle route runs through the centre of the site to give access to the limited parking provision and for refuse and servicing vehicles. Reflecting the highly accessible site location and the restricted availability of on-street parking opportunities in the surrounding streets, the development will have a restricted car parking provision of 58 spaces.

Six of these spaces are to be allocated to the existing business barges that are moored adjacent to the site (replacing an existing facility) and two are to be allocated to car club vehicles. Spaces for wheelchair adaptable units will be provided with over-sized spaces in order to facilitate wheelchair access.

Car parking has been designated between buildings and along the central courtyard. All car parking courts are oriented and open towards the courtyard and canal, where they will be visible from footways, shared surface public areas, and the frequently used Lee Navigation waterway and towpath. Units adjacent to the parking courts provide windows onto these spaces where possible, which also provides natural passive surveillance. Parking in the central courtyard also benefits from natural surveillance, with unit entrances enlivening the space, as well as windows from units overlooking the space.

A Parking Management Plan will be agreed with LB Haringey and implemented to control the allocation of spaces.

car park provision	number
disabled	50
car club	2
business barges	6
TOTAL	58





Appropriate cycle parking





Inappropriate cycle storage



Appropiate venting to facade



Inappropriate venting to undercroft parking



On street parking

#### **DESIGN CODE: PARKING**

# 4.8.5 Car parking appearance

 Car parking spaces on the site should be located in the public realm/ streetscape and not in building undercrofts. No structures for the sole use of car parking should be constructed and large unbroken areas of car parking at grade should be avoided.

Car parking should be an integrated part of the concept, but not become a visible focus.

 Where provided, on-street car parking is encouraged to be integrated within the streetscapes/ public realm.

Provide adequate parking and activate the public realm.

 Car park entrances - where required - should be integrated into the building fabric and should be clearly legible to help orientation.

Car parking should be an integrated part of the landscape and building design, but not become a visible focus.

 Disabled car parking spaces should comply with relevant regulations and be located in close proximity to the building core or entrance.

To provide good access for building users with special access requirements.

 Car park ventilation - where required - should be integrated into the fabric of the buildings or landscaping.

Car parking should be an integrated part of the concept, but not become a visible focus.

 Parking areas should be visually connected to the central courtyard, and where possible adjacent units should incorporate windows onto the parking areas.

To ensure natural surveillance to parking areas.

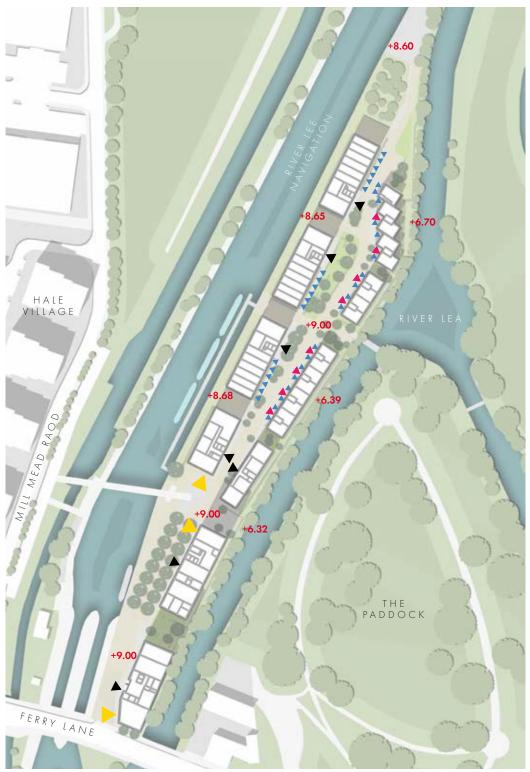
### 4.8.6 Cycle storage appearance

 If cycle spaces are located in the public realm, they should be designed to complement the public realm.

To ensure coherent design and uncluttered appearance of public realm.

 Cycle storage should be lockable, well accessible and lit in accordance with Transport for London recommendations.

To ensure storage is safe and accessible.



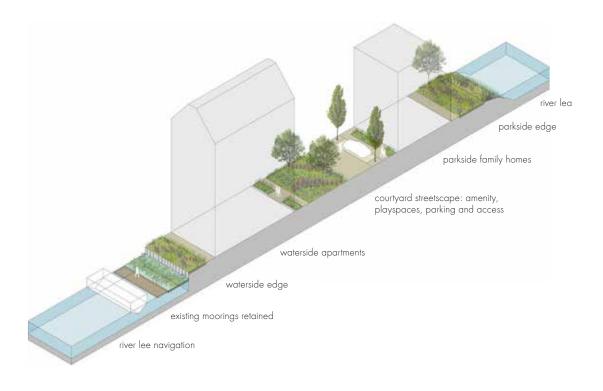
Entrances: Site wide strategy

commercial unit entrance
flat / workspace / core entrance
duplex core front entrance
maisonette front door entrance
+0.00 proposed levels

### 4.9 PUBLIC AND PRIVATE REALM

The masterplan creates two very different types of external space. Buildings are placed towards the edges of the site, creating a new public courtyard and shared space through the centre of the masterplan. The diagram on the facing page illustrates how the site wide entrance strategy is defined by the central courtyard.

Beyond the buildings the ecologically sensitive waterside edges of the site are maintained as private spaces for the enhancement of biodiversity. The strong distinction between the character of these two different types of external spaces and the extent to which they are publically accessible is outlined in the following design codes section.



Landscape section through the site



RIVER LEE NAVIGATION

### 4.9.1 Courtyard: Access and Entrances

The main accessible route through the site is via the shared central courtyard. All residential accommodation is accessed from this central spine of the masterplan. The courtyard provides access for vehicles, bicycles and pedestrians as well as playspace and parking. The courtyard is enhanced at its edges with private front gardens for ground floor maisonettes which create active residential frontages and defensible spaces for units.

### 4.9.2 Waterside edges: Biodiversity

A key principle of the masterplan is the protection and enhancement of the bio-diverse waterside edges. Buildings are placed at minimum of 3.8 metres from the waterside and are protected from public access by private back gardens and hedges as illustrated in the diagram on the facing page.

For further information concerning access see Chapter 7 of this Statement.

#### 4.9.3 Privacy

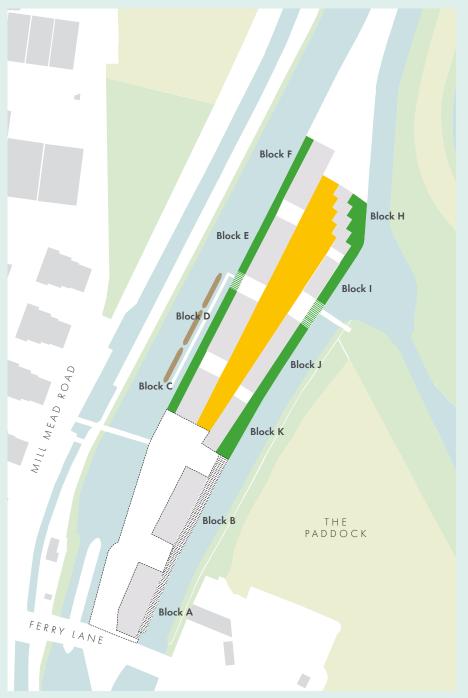
Privacy of units has been considered as part of the design.

In general, primary windows face onto the courtyard or waterside spaces with secondary windows facing into the closer gaps between buildings.

Where buildings are very close across the courtyard (Blocks C and K) the layout of flats within the buildings have been conceived to provide maximum privacy between habitable rooms.







public courtyard and front gardens
biodiverse edges and back gardens
biodiverse edges at bridge/moorings crossing
public spaces- Detail application
biodiverse edges- Detail application

Waterside edges and courtyard streetscape diagram

# DESIGN CODE: COURTYARD STREETSCAPE AND WATERSIDE EDGES

Clear demarkation between streetscape and landscaping elements: courtyard streetscape



Planting provides buffer zone to front door entrances: courtyard streetscape



Pedestrian footpath: waterside edge

# 4.9.4 External space character

- The character of the external spaces of the masterplan are defined by the diagram on the facing page. The different types of spaces are defined as follows:
- Courtyard streetscape
- Waterside biodiverse edge
- Parkside biodiverse edge

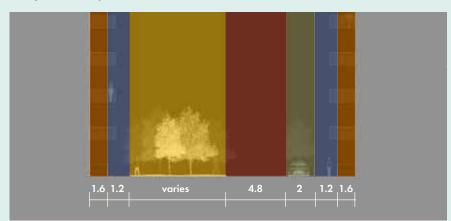
To ensure the quality of external spaces in the public realm and to protect the ecological assets of the waterside site.



Internal courtyard precedent



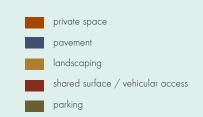
Courtyard streetscape section: minimum distance between facades



Courtyard streetscape section: breakdown of minimum distances in metres



Courtyard streetscape plan: illustrative





Front garden amenity as buffer between public paths and maisonette front door



Front garden amenity as buffer between public paths and maisonette front door



Front door directly off public path

### 4.9.5 Minimum distances: Courtyard streetscape

- The character of the courtyard streetscape is comprised of a defined set of built and landscaped elements as illustrated by the diagrams on the facing page.
- The minimum dimension of each street or landscape element is defined in the diagram on the facing page.

To ensure the quality of the central courtyard streetscape and to enhance the quality of the central public space within the masterplan.

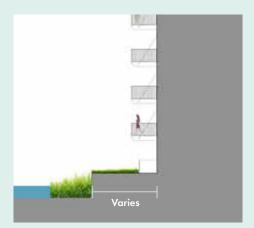
# 4.9.6 Entrances and front gardens

 An enclosed front garden/ amenity space should be provided for all flats with direct access to the courtyard via their own front door. Front doors should be accessed via this front garden space.

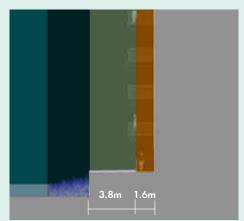
To provide defensive space for homes at ground floor level.

 Any walls, gates or planting to the perimeter of the front garden must be lower than 1.5 metres high.

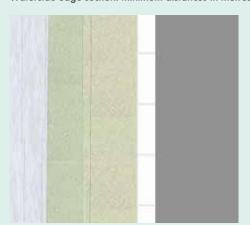
To prevent the blocking of active residential frontages on to the central courtyard.



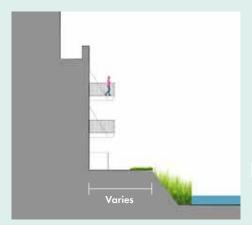
Waterside edge section: illustrative



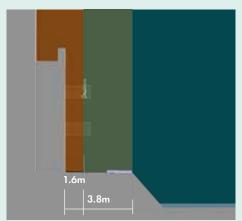
Waterside edge section: minimum distances in metres



Waterside edge plan: illustrative



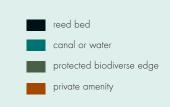
Parkside edge section: illustrative



Parkside edge section: minimum distances in metres



Parkside edge plan: illustrative



# 4.9.7 Minimum distances: Waterside and Parkside biodiverse edges

- The character of the waterside and parkside are comprised of a defined set of built, landscaped and bio-diverse habitat elements as illustrated by the diagrams on the facing page.
- The minimum dimension of each element is defined in the diagram on the facing page.
   To ensure the privacy of back gardens near to the water's edge and to protect and enhance biodiversity on the site.

# 4.9.8 Back and front gardens

• Any walls, gates or planting to the perimeter of the garden must be lower than 1.5m high.

To prevent the blocking of views from ground floor flats to the waterways.

# 4.9.9 Privacy

 Where building faces are less than 18m apart, placement of habitable rooms and windows should be considered with regards to privacy. To ensure privacy for residents.



Refuse strategy diagram

bin stores

#### 4.10 REFUSE AND SERVICING STRATEGY

# 4.10.1 Refuse and Recycling

Each residential block will be provided with a dedicated bin store at ground floor accommodating communal bin storage for each waste stream. The quantum of bin storage and access strategy will be in accordance with Building Regulations H Drainage and Waste Proposal and British Standard BS 5906:2005 Code of practice for waste management in buildings.

With regards to collections, each bin store will be located so that LBH's appointed contractor does not have to exceed a 10m drag distance for communal bins. Where this threshold cannot be met, an estate management team will be employed to relocate bins from their store to a designated presentation area immediately prior to collection day.

A refuse vehicle will not have to reverse more than 12m in a straight line distance within the site layout.

A series of Euro bins each with a capacity of 1,100 litres will provide segregated handling for household waste, mixed recycling and food waste. Refuse storage rooms are designed to allow for Haringey Councils Sustainable Design and Construction SPD adopted 2013 which outline thats for 50 beds the following must be provided.

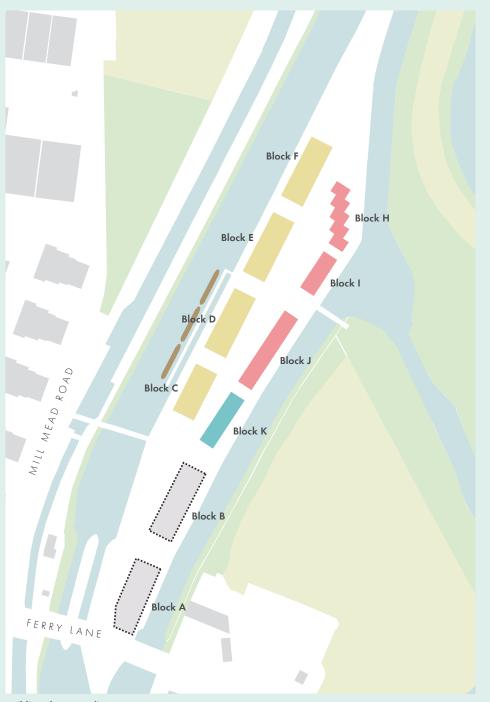
- Refuse 1100 Litres / 6 flats
- Recycling 1100 Litres / 10 flats
- Food Waste 360 Litres / 40 flats

### 4.10.2 Deliveries and Servicing

As the level of vehicle traffic using the access route through the site is very low, it is intended that deliveries and servicing takes place from the street within the site. Smaller delivery vehicles with a short drop-off time will be able to make use of the areas within parking courts to stop. Localised widening of the carriageway in two or three locations is provided to allow a drop off zone for larger vehicles to stop that will still allow a car / delivery vehicle to pass.

# 4.10.3 Access for emergency services

The emergency vehicles will also make use of the main route through the site to gain access to all parts of the development.



Building character diagram

parkside family homes
waterside apartment blocks
flexible residential/ workspace block

•••• tall buildings

#### **DESIGN CODE: REFUSE**





Parkside Homes: unaccepatble examples



Parkside Homes: refuse storage as integrated into overall design



Waterside apartment and flexible block: acceptable examples

# 4.10.4 Refuse and building typology

- The appearance and character of spaces for refuse storage and collection vary in accordance with the relevant building typology, which are split in to the following types.
- Parkside family homes refuse
- Waterside/ flexible block refuse

To ensure a clear and uncluttered appearance of the public realm.

# 4.10.5 Parkside family home refuse

Refuse areas should not be located in the public realm or within front gardens unless within a screened enclosure.

To ensure a clear and uncluttered appearance of the public realm.

# 4.10.6 Waterside apartment and flexible block refuse

All refuse areas of apartments and maisonettes in waterside blocks should be located within ground floor of buildings and be easily accessible from core areas and street collection bays.

Where refuse areas are located outside 18m distances from street collection space, an appropriate management strategy should be in place.

Refuse areas should be well ventilated. If access doors are located close to entrances or front doors, they should be appropriately screened or otherwise treated.

To avoid odour issues and ensure acceptable hygiene and visual appearance in the public realm.



Waterside apartment: unacepptable example

#### 4.11 ENERGY AND SERVICES STRATEGY

#### 4.11.1 Introduction

The strategy for reducing energy emissions across Hale Wharf development has followed the energy hierarchy, in line with The Greater London Authority, and The London Borough of Haringey requirements.

- Be Lean improving passive design and high energy efficiency equipment
- Be Clean incorporating a high energy efficiency supply of services
- Be Green use on site renewable technology where possible.

# 4.11.2 Energy Strategy Summary

### Be Lean

Passive design and high efficiency building services are proposed throughout the development. The development has been designed to reduce energy demand firstly by considering the location, orientation and building fabric.

The development has been designed to have high efficient building fabric and high performing glazing. Daylight has been maximised where possible to reduce the need for internal lighting. The development has been designed to have a high level of air tightness. The thermal bridging details are being investigate to minimise heat loss.

The development will include high efficient services, including efficient lighting, low NOx high efficient condensing boilers.

#### Be Clean

The development over all phases has a high steady heat load that is provided by the constant DHW load throughout the year. The demand is sufficient to encourage communal heating throughout the development.

There are currently two options being considered to incorporate high efficiency supply of heat as follows. The development has pursued two options for delivery decentralised energy to the development.

A. Option A will look at the London Heat Map, and consider the possibility of connecting into a district heat network. Hale Village is located across the river from the development has an energy centre that has the potential to increase in size to serve Hale Wharf. The energy centre currently has a biomass boiler providing 25% of the heat demand and gas boilers that supply the remaining heat to the development. If Hale Wharf connect into the existing system 35% CO2 emissions would not be achieved. Where the source of heat from the biomass is increased or the energy centre incorporates a CHP unit to allow Hale Wharf to achieve 35% CO2 emission savings from the heat network, Hilson Moran would recommend connection into the system.

B. Option B will consider an energy centre on site that can provide decentralised energy to the dwellings and commercial areas by a communal heat system supplied by a CHP unit and a boiler. Hale Wharf would supply an energy centre with a CHP system where the district heating network at Hale Village did not have the capacity or the ability to allow Hale Wharf to reach the targeted 35% emission savings through the 'Be Lean' and 'Be Clean' process.

#### Be Green

Since CHP is a low carbon technology, and the planning requirements in terms of CO2 savings, and renewable technology have been exceeded through either option A or option B renewable technology has not been recommended.

Photovoltaic panels on the roof were considered but would only provide an additional 8% CO2 emission savings, on the available roof space. This would not allow Option A with the existing district heat network performance to meet the 35% CO2 emission savings. It would also be unfeasible due to the additional cost of installing PV panels on top of the infrastructure costs of connecting into a district heating system.

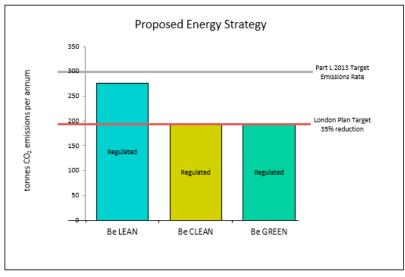
Other renewable technology that provide low carbon heat would compete with the CHP or district heating network. Wind turbines are not considered appropriate for this development.

#### 4.11.3 Part L1A

The site wide development will be designed to exceed Part L1A carbon emission requirements in line with the Code for Sustainable Home Level 4 target. This will result in a saving of at least 19% more than Part L1A requirements.

The fabric will be designed to exceed the target fabric energy efficiency rate when averaged across a block. Thermal comfort analysis has been carried out on the development, indicating that occupants will be comfortable throughout the summer and winter months.

The development will insulate communal heating pipework to minimise overheating in communal corriodrscorridors.



Proposed energy strategy chart



Dry riser inlet not considered in relation to facade



Dry riser inlet considered in relation to facade



Dry riser inlet considered in relation to facade



Visible wires and satellite dishes



Visible metres and controls



Concealed metres and controls

#### **DESIGN CODE: SERVICES**

### 4.11.4 Visible services: All typologies

• All meter boxes should be concealed.

To ensure a clear and uncluttered appearance of the public realm.

 Satellite dishes, cables or wires should not be visible from the public realm/ streetscape.
 Wherever possible alternative systems (cable) or communal installations should be used.

To ensure a clear and uncluttered appearance of the public realm.

 Sanitary waste pipes should not be visible on any elevation visible from the public realm. For other elevations, they should not be visible or be fully integrated with the architecture of the building and treated as part of the overall facade composition.

To ensure a clear and uncluttered appearance of the public realm.

 Dry riser inlet and other service elements should have finishes to match other facade elements, such as paint or powder-coat finish.

To ensure a clear and uncluttered appearance of the public realm.

 Building ventilation, air extract grilles etc. should be fully integrated into the architecture of the building and treated as part of the overall facade composition.

To ensure coherence of design.

• All roof top plant including any access elements should be screened appropriately.

To ensure a clear and uncluttered appearance of elevations and roofscape.

Building maintenance equipment should not be visible when not in operation.

To ensure a clear and uncluttered appearance of elevations and roofscape.



#### 4.12 SUSTAINABILITY STRATEGY

### 4.12.1 Environmental Sustainability Statement

Hale Wharf will be designed to incorporate Haringey Council's high sustainability principles. The principles of sustainability will be incorporated into the design and construction process in a balanced way, with the aim to provide a space that considers the heritage of the development site, transport issues, waste management, reducing energy demand, CO2 emissions and water management.

The client has high sustainable aspirations and although no longer required by planning will be aiming to achieve a Code for Sustainable Homes Level 4 or the equivalent level on the BRE Home Quality Mark Environmental assessment.

It will create a living space that considers the local biodiversity of the Lea River, and create recreational facilities that can be enjoyed by all the residents.

The sustainable aspirations of the developers, management, and future residents have all be incorporated into the design to provide a development that will comply with Great London Authority, and Haringey Council's sustainable requirements. It will result in providing a space that residents will enjoy living in with minimised impact on the environment

## 4.12.2 Community and Place

The residents will be provided with the infrastructure for low carbon living by the incorporation of low carbon technology. The architectural design that has been optimised between reducing heat loss, and solar gain, while providing natural lights to the apartments which will minimise the overall CO2 emissions from the development.

The design will incorporate the surrounding Lea Valley and open land to provide the residential community with recreational space and amenities. The design will contribute to the local wildlife and ecological habitats with the inclusion of green spaces. The improvements in access to the local area will encourage residents to explore the nearby ecological areas and encourage a healthier lifestyle.

To maintain the proposed low energy demand design long term the residents will be educated about how to use the technology. The management team will undergo post occupancy evaluation, providing residents with the opportunity to give feedback on how the development is working for them. Additionally the management team will monitor the energy usage to allow them to provide feedback to the residents about how they are using the technology. This should encourage the low energy environment to be maintained long term/.

### 4.12.3 Efficient Design

The design has been developed to consider the embodied energy of the materials used in the design. Minimising the life time CO2 emissions of the infrastructure.

The energy demand has considered a passive approach first, and considered the orientation, and location of the properties, to minimise the energy demand of the building. The proportion of glazing has been optimised to increase daylight and minimise heat loss. The building fabric has been chosen to minimise heat loss, by reducing the U Value of the building fabric, and reducing solar gain through the glazing elements, by choosing a low g value. The overall fabric properties will be over and above those that are required in Part L.

#### 4.12.4 Efficient Construction

The construction team will be encouraged to consider the environment they are working in. The team will only use legally traded timber. They will sign up for the considerate construction scheme that encourages the health and wellbeing of the construction workers and the local residents. The contractor will also consider the impact of the construction process on the local environment and protect nearby ecological features. A waste management plan will be developed to encourage the reduction, recycling and reuse of waste from the construction process.

The construction team will monitor its energy demand, transport emissions and water during the construction process to encourage the overall CO2 emissions through the construction to be reduced.



#### 4.13 ECOLOGY

The following design interventions are included within the proposed development's design or will guide the detailed design of the outline element of the proposed development:

- Floating reedbeds within the pontoon on the River Lee Navigation Channel;
- Landscape planting which will include native or nectar-rich species, which will benefit wildlife such as birds and insects:
- Built-in house sparrow boxes will be included where appropriate at mid-level on the eastern elevations, such as in the lower gables of Block B;
- Built-in swift and/or starling boxes will be included where appropriate at high-level on the northern elevations. Swifts are high-flying birds and have been observed using holes in tower blocks, therefore Block A would be appropriate for swift boxes;
- Built-in bat boxes will be included where appropriate
  near the edges of the elevations. The eastern sides of
  the southern elevations of Blocks J or K are considered
  the most preferable location as this is closer to the
  semi-natural habitat and more likely to be away from
  direct lighting;
- Invertebrate habitat incorporated into the landscape design and play space where appropriate; and
- A Lighting Design Code (Appendix C) that sets the technical parameters for the operational phases of the proposed development that improve the lighting environmental performance with regard to aspects such as light spill, sky glow, and glare.

In addition, a number of mitigation and enhancement measures will also be incorporated at both the construction and operational phases. During the construction this will comprise the development and implementation of a Construction Environmental Management Plan (CEMP) by the principal contractor.

To include:

- Provisions for control of invasive non-native plants (including mitigation of the risks of spreading and to contractors for potential harmful plants such as giant hogweed);
- Provisions for the prevention of disturbance to nesting birds through avoidance of clearance during the nesting season, or the presence of and Ecological Clerk of Works (ECoW);
- Pollution prevention commitments including measures to control the emission of dust during construction;
- Use of acoustic hoarding on the eastern boundary of the development site during construction to reduce noise disturbance; and
- A Lighting Management Plan (LMP).

The demolition and construction lighting effects cannot be addressed through design intervention measures and as such, are to be mitigated through appropriate controls and thresholds, which are set out in the LMP to avoid, minimise, reduce and offset adverse effects during the demolition and construction of the proposed development. Following the design interventions already identified, the operational mitigation measures focus on the use of pollution prevention plans.

The application site itself was found to have little ecological value and careful consideration has been given to ensuring that the proposed development is sensitive to the surrounding important ecological designations. As such, following assessment it is considered that the proposed development would have no significant adverse ecological effects following implementation of the design interventions, and, the proposed mitigation and enhancements measures.