



CHARLTON RIVERSIDE DELIVERY FRAMEWORK

Royal Borough of Greenwich

670-KCA-XX-XX-RP-A-000402-STG_Stage 2



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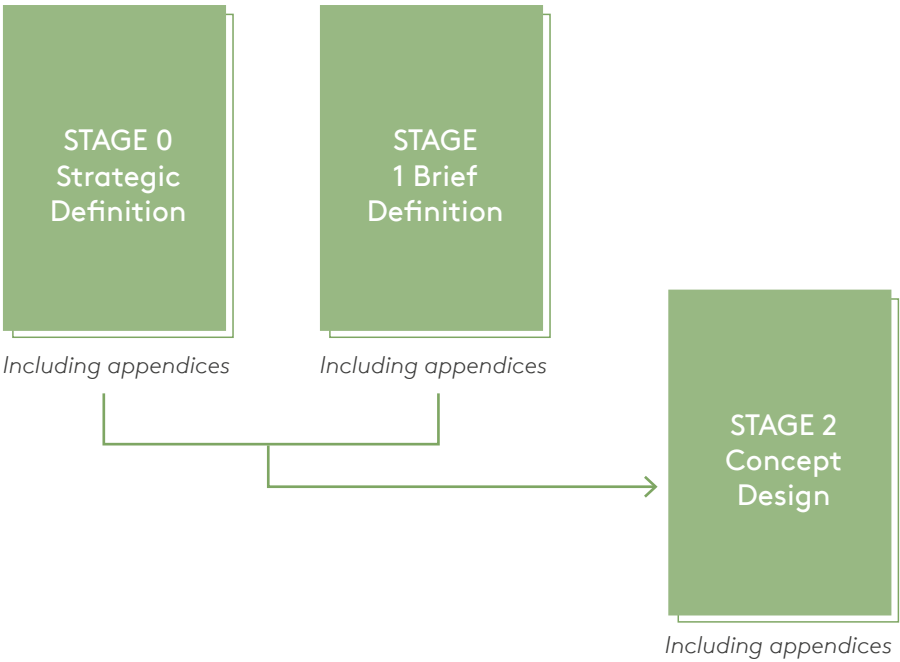
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1. INTRODUCTION

1.1 STAGE 2 OVERVIEW

During Stage 2, the design team has refined the masterplan spatial strategies and vision as well as developed high level capacity studies and an illustrative delivery strategy for Charlton Riverside.



Refined Spatial Strategies

The spatial strategies have been refined following feedback received during the on-going engagement with key stakeholders.

These strategies respond to the 5 aspirations defined for Charlton Riverside:

- An employment hub
- A Thriving Community
- Active neighbourhood
- Safe & accessible
- Sustainable & Resilient

The spatial strategies create a framework for future development ensuring a holistic vision for Charlton Riverside. More information on the refined spatial strategies on Section 2 of this report

Capacity Study

The site was identified as an opportunity area, and the London Plan sets an indicative capacity to provide additional 1,000 jobs and additional 8,000 homes.

The design team has developed three design scenarios to test the impact of delivering the capacity set by GLA.

During the engagement process with GLA they confirmed they expect Local Authorities to test these capacities and come back with proposals that demonstrate any potential deviation.

Delivery Strategy

The design team in collaboration with RBG and Deloitte have refined a delivery strategy for Charlton Riverside including the following:

1. Revision of the infrastructure requirements and costs listed in the SPD to understand which are still relevant and which should be redefined
2. Identify a development area that could be delivered first including significant quantum of homes and employment as well as the delivery of key infrastructure that would unlock or encourage future development in the area.
3. Define an indicative phasing strategy

In parallel, Deloitte developed a delivery strategy from a viability perspective looking at land assembly opportunities. Their work has informed the preferred strategy presented in this report.

The design team have also identified potential early interventions and meanwhile uses as a potential alternative delivery strategy.

2.REFINED SPATIAL STRATEGIES

2.1 WIDER CONSIDERATIONS & ASPIRATIONS

During Stage 2, the design team refined the spatial strategies for Charlton Riverside based on feedback from all bodies and teams engaged during the design process, but these also respond to wider aspirations and considerations.

Considerations:

- **Opportunity Area:** Charlton Riverside was identified as an Opportunity Area by GLA in the last London Plan (2021), with capacities of additional 1,000 jobs and 8,000 new homes.
- **Location & Context:** Charlton Riverside is a 120.9 ha site to the northern edge of the Royal Borough of Greenwich. The site sits between the River Thames to the north, and Woolwich Road to the south, and it is mainly covered with industrial buildings and yards. The site is surrounded by emerging areas like Greenwich Peninsula (delivering ca. 17,000 new homes and 15,000 new jobs) to the west and Woolwich Town Centre to the east, and has an opportunity to become a new vibrant neighbourhood that combines employment, amenities and high quality affordable homes.
- **Industrial Character:** The industrial history of Charlton Riverside has defined its current character and role as a key employment area in the borough. The site includes two SILs and three protected Wharves, and based on the most recent information, it has 310 businesses and 5,260 jobs which make ca. 9% of the jobs in Greenwich.

Aspirations:

There is an opportunity to create a new neighbourhood that can be an employment hub as well as a welcoming residential area that is well connected to the surrounding context.

The masterplan spatial strategies enhances the industrial historical background, maximising employment retention and encouraging new types of businesses that will promote the local economy whilst also creating a welcoming and active neighbourhood with high quality homes, increasing access to affordable homes, as well as a range of outdoor spaces and amenities.



Lower Charlton c.1900. The Siemens factory lies by the river where the Thames Barrier Gardens are today.



Emerging development in Greenwich Peninsula

Wider Context

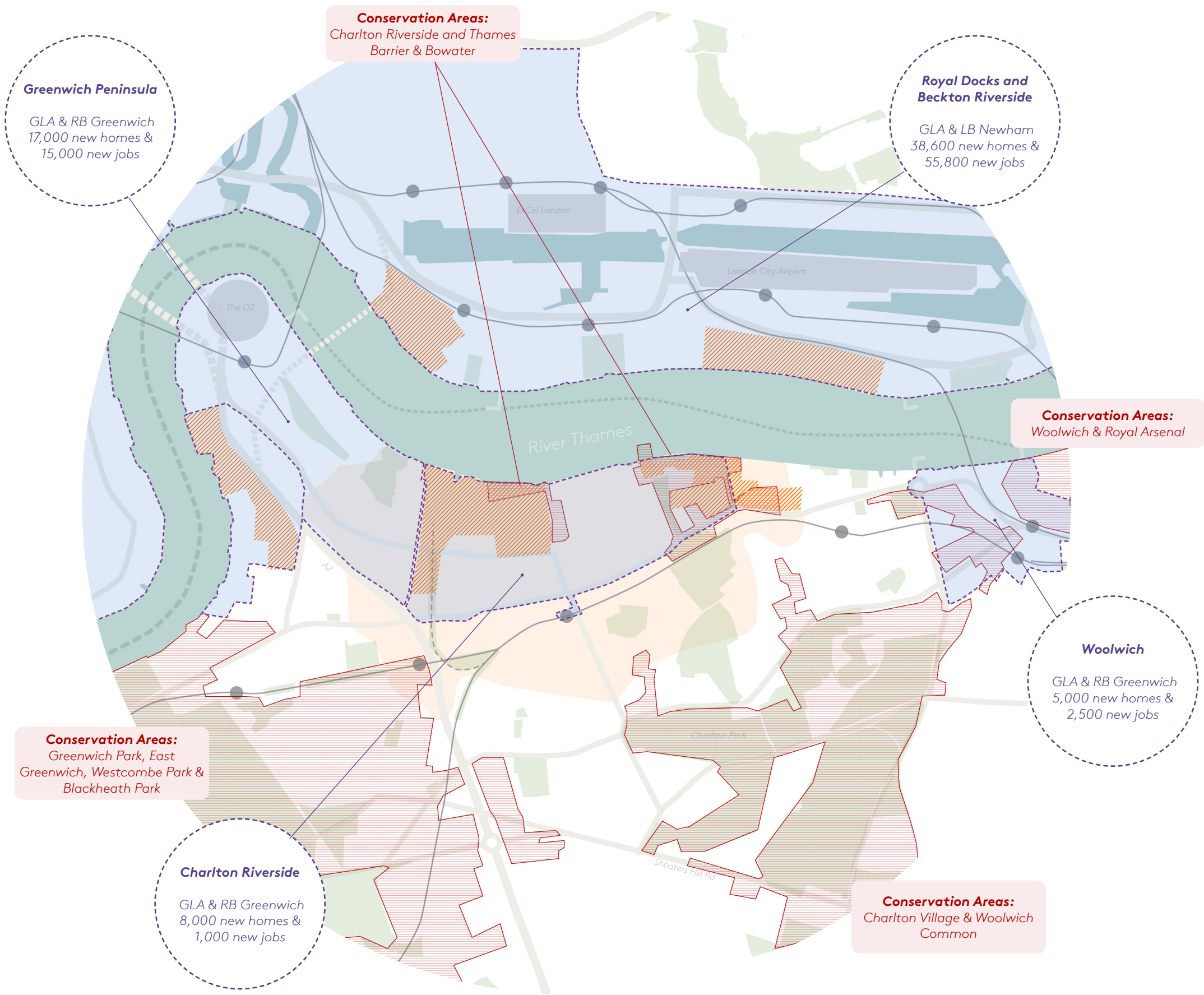
Charlton Riverside sits in constantly changing area, surrounded by emerging development and Opportunity areas.

There is an opportunity for the site to become a key link between Greenwich Peninsula and Woolwich.

Charlton has two SILs (Strategic Industrial Land) and is a key employment area for Greenwich, and there is an opportunity to create a new neighbourhood that successfully combines industrial and residential.

KEY

-  Site Area & Charlton Riverside Strategic Development Site
-  10 minutes walking distance from site's edge
-  Conservation Areas
-  Opportunity Areas - Strategic Development Sites
-  SIL - Strategic Industrial Land



2.2 MASTERPLAN ASSUMPTIONS/BRIEF

As defined in the Stage 1 report, and refined during Stage 2, the emerging masterplan's brief and assumptions are the following:

Industrial & Employment

- Retain the employment hub character
- Maximise retention of existing jobs and types of businesses,
- Retain SILs, and potentially intensify where possible, as per Policy E5 from London Plan 2021
- Provide a cluster of industrial uses to be accessed from Bugsby Way, encouraging separation of regular vehicular routes and industrial service routes, as per the RBG Urban Design Guidance
- Provide ca. 1,000 additional jobs across the site, as per GLA's capacities in the London Plan 2021
- Consider multi-stack industrial buildings
- Provide a mix of spaces that can accommodate multiple types of employment, following emerging trends mentioned in the Employment & Growth Study by Hatch 2021.
- Promote co-location of industrial uses with residential

Public Realm & Movement

- Improve existing streets to be safe and welcoming
- Provide new streets that improve access to the river path as well as improve east-west permeability
- Potential for a new bus route through the site
- Promote separation of industrial service vehicles and other vehicular access as per the RBG Urban Design Guidance
- Enhance existing green spaces and provide additional outdoor spaces
- Promote an industrial character that celebrate the site's history
- Increase biodiversity net gain as per current policy requirements

Residential

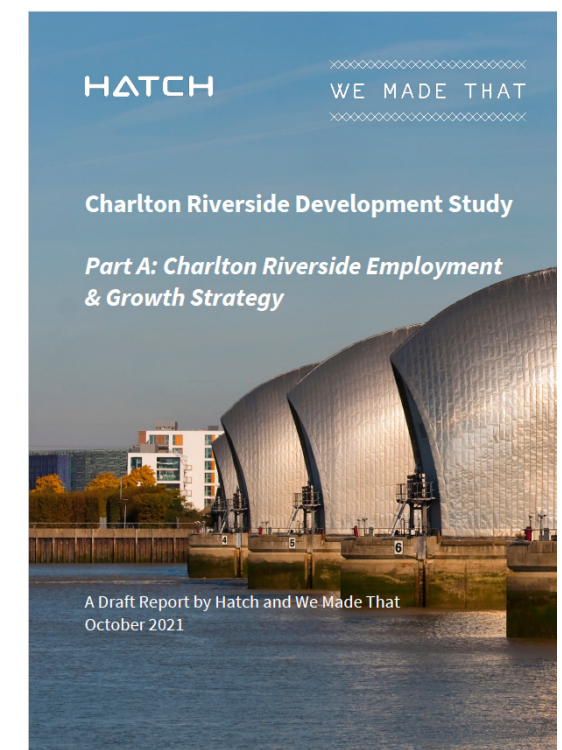
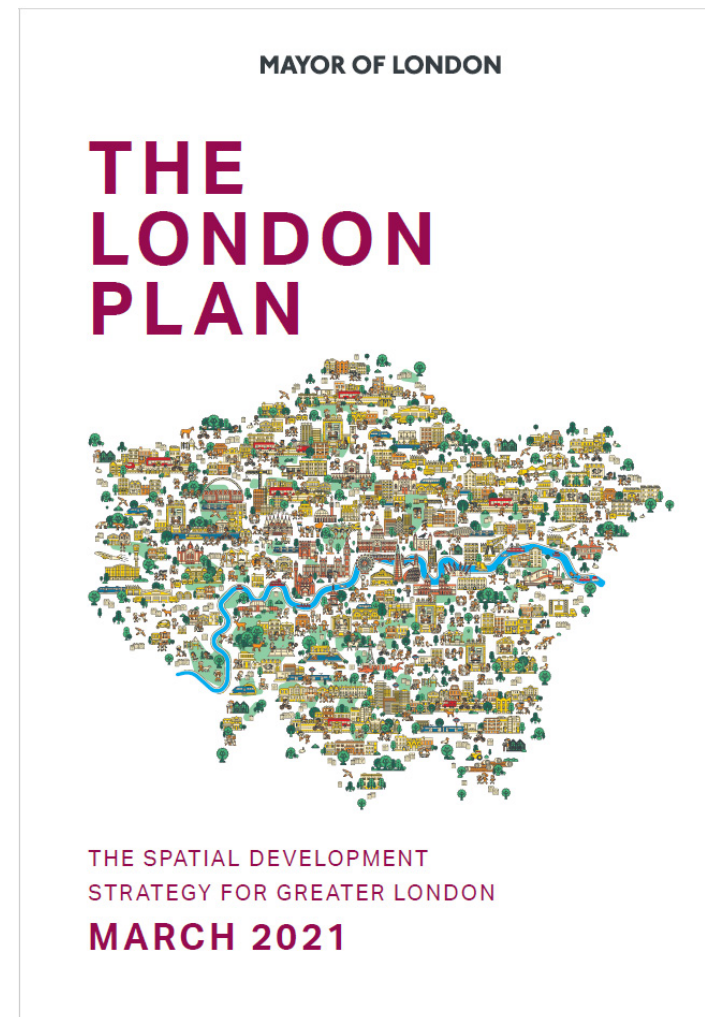
- Maximizes residential across the site to test GLA's capacities of 8,000 new homes. As per London Plan 2021.
- Promote co-location with industrial uses where appropriate
- Ensure appropriate massing and scale responding to the site's context and aspirations
- New development to have a design-led density approach
- Provide tall buildings in key locations to act as landmarks, following the potential for tall buildings identification from RBG Tall Buildings assessment 2023

Community

- Provide an appropriate quantum of community facilities for existing and new residents
- Ensure new buildings and outdoor spaces are inclusive and safe, following Good Growth by Design guidances

Deliverability







- Consider existing landownership boundaries when developing design scenarios
- Identify key elements/infrastructure that will unlock or support future development



2.3 PHYSICAL CONSIDERATIONS

During Stage 0 and Stage 1, the design team undertook a thorough analysis of the area including multiple site surveys. The information obtained from the analysis as well as the feedback from the multiple engagement sessions with key stakeholders helped the team define the key physical elements that need to be considered and potentially retained across Charlton Riverside.

These physical considerations defined the starting point of the emerging masterplan spatial strategies:

-  **Strategic Industrial Land:** As per Policy E5 from the London Plan, SILs need to be retained with potential for some industrial intensification
-  **Safeguarded Wharves:** The three protected wharves in the area should be retained where possible. But as per London Plan Policy SI 15 Water Transport, there is a possibility to review this particularly within Opportunity Areas, therefore Riverside Wharf has the potential to be de-designated as a protected wharf for the wider benefit of the area. (See delivery strategy for more information)
-  **Locally Listed Buildings:** Retain and enhance them when possible
-  **Metropolitan Open Land:** Protection of MOL areas is supported and encouraged by the Mayor. There is potential to improve and expand this area in Charlton Riverside.
-  **Storm Sewer & Gas Main:** Building on top of these underground infrastructures should be avoided. A minimum buffer of 1.5 from the external edge should be allowed, with preferably a 3m buffer. (see LHE Stage 1 report for more information)
-  **Land ownership boundaries:** Consider them when defining the emerging plots and layouts to support the delivery strategy

Flood Risk: The majority of the area is in Flood Risk Zone 3. Following guidance from the Environmental Agency, some residential uses are acceptable at ground level, but no bedrooms should be placed under breach level (+6.5m AOD). The river path will have to be raised to meet this level too. More information on flood mitigation can be found in LHE's Stage 2 report

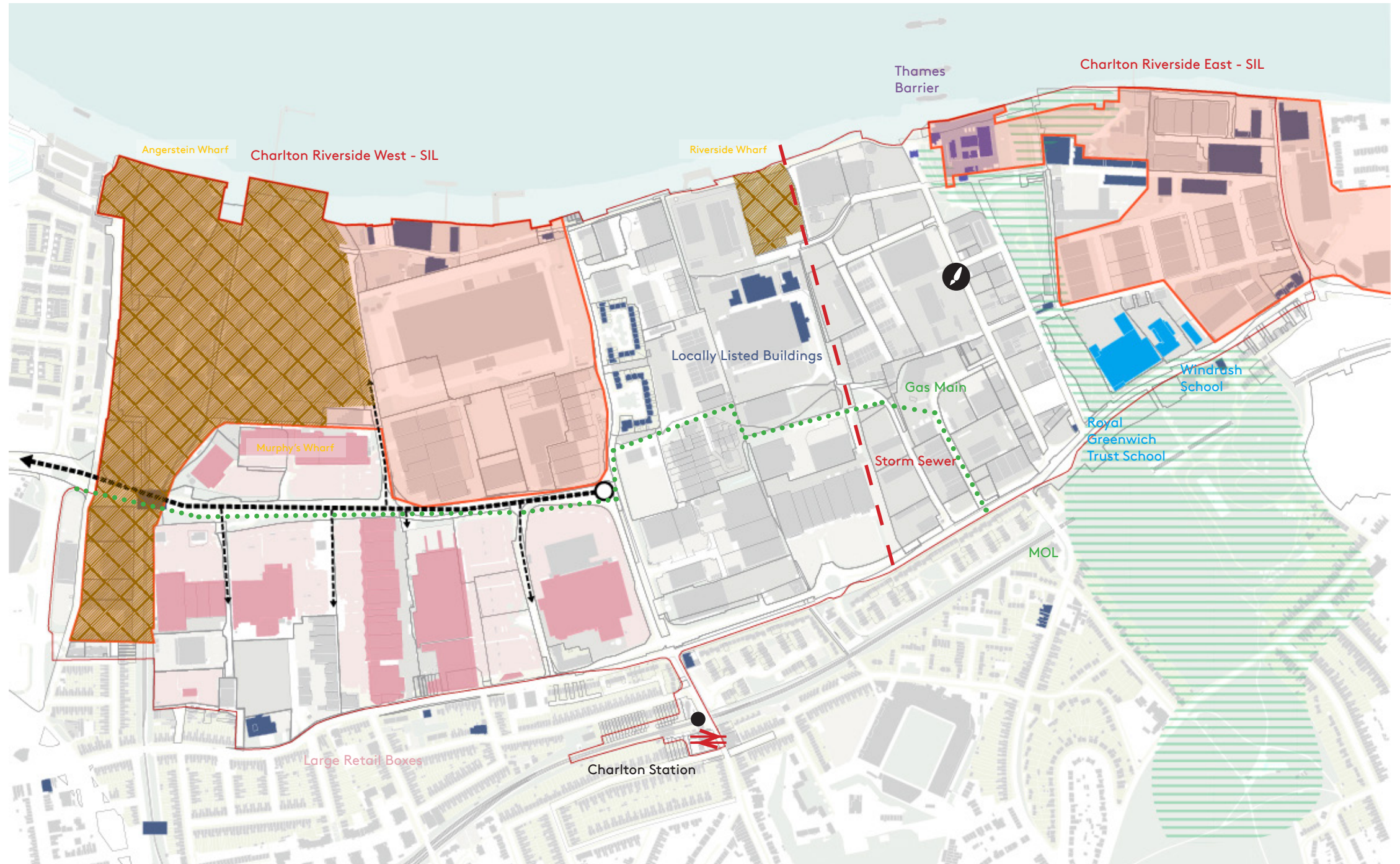






Diagram with physical considerations across Charlton Riverside

 **Thames Barrier:** This is a major piece of infrastructure for London, and needs to be retained and protected. Following engagement with the Environment Agency, it is important to respect security and access to the building. Buildings around the area will need to be carefully design to avoid overlooking the yard, and roads will need to be designed to meet emergency access requirements.

 **Bugsby Way:** This is the main access from Blackwall Tunnel to the site, providing service access to most of the industrial and retail uses in Charlton Riverside. It is also a key connection for the wider borough as well as a road with multiple bus routes. This busy road needs to be retained.

 **Large Retail Boxes:** Very likely to stay in the area in the short to medium term, there is potential to re-locate them towards Bugsby Way providing an active frontage as well as freeing up areas along Woolwich Road for other uses.

 **Banksy mural** This piece of art needs to be retained and protected. It brings the opportunity to become a catalyst for other types of public art in the area.

2.4 ASPIRATIONS

Charlton Riverside was designated an Opportunity Area by GLA with an indicative capacity of providing 8,000 additional homes and 1,000 additional jobs. This brings an opportunity to create a unique neighbourhood that will retain its current Employment Hub character whilst also becoming a welcoming residential neighbourhood.

Based on that, the design team identified the following aspirations for Charlton Riverside:

An Active & Inclusive Neighbourhood:

There is an opportunity to create a neighbourhood that promotes active travel, outdoor activity and social interaction. A robust public realm strategy will ensure people in the neighbourhood have access to high quality and safe outdoor spaces. A range of spaces that cater for all types of people will make this place welcoming and inclusive

An Employment Hub:

Charlton Riverside has historically been an industrial area, and it is currently a very important employment hub for RB Greenwich. The emerging development must retain this character promoting a mix of industrial spaces whilst ensuring they can operate in proximity to residential areas.

The masterplan will provide a range of industrial typologies to encourage a mix of businesses types, responding to current trends whilst also affordable workspaces.

A Thriving Community:

Charlton Riverside is a unique location in London. The Thames edge and the industrial history of the site provide a unique character that could be enhanced with a mix of employment and residential creating a mixed and thriving new neighbourhood in the area.

The emerging masterplan will ensure a mix of building typologies that will promote a diverse community, catering for all types of people. It will also provide access to multiple community and commercial facilities as well as affordable employment spaces encouraging a mix of uses and spaces.

The aspiration for Charlton Riverside is to become a place where people can live, work and spend their spend time.

Safe & Accessible:

Charlton Riverside is currently dominated by cars and large vehicles accessing the industrial areas. Permeability within the site is quite poor, making access to the river not very welcoming.

A revision of the area brings the opportunity to improve connections to the wider context by improving the river path and access to the station, as well as increasing access to public transport.

There is also an opportunity to create an internal street network that is safe and welcoming, promoting walking and cycling across the site, and providing clear routes to the river.

To ensure a functional employment hub as well as successful residential area it is important to consider how larger industrial uses will be accessed and serviced. Clustering some of these uses will prevent large vehicles moving across the residential areas compromising the quality and safety of new streets.

Sustainable & Resilient:

Pillars: Environmental, Social & Economic

Charlton Riverside has the opportunity to become an exemplar neighbourhood that embeds sustainability on each of the three pillars; economic, environmental and social.

The emerging development will provide a network of green spaces, increasing biodiversity, improving flood defences and providing sustainable urban drainage systems to prevent surface water flooding, making the area more resilient to climate change.

It will also promote the use of renewable energies as well as minimise its carbon footprint.

There is an opportunity to build a community that can live, work and thrive in Charlton Riverside, with access to affordable homes and multiple types of community facilities that cater for all types of needs. The area has also an opportunity to boost the local economy by maximising retention of existing types of employment, as well as promote other types of industries to flourish in the area.

2.5 AN ACTIVE AND INCLUSIVE NEIGHBOURHOOD

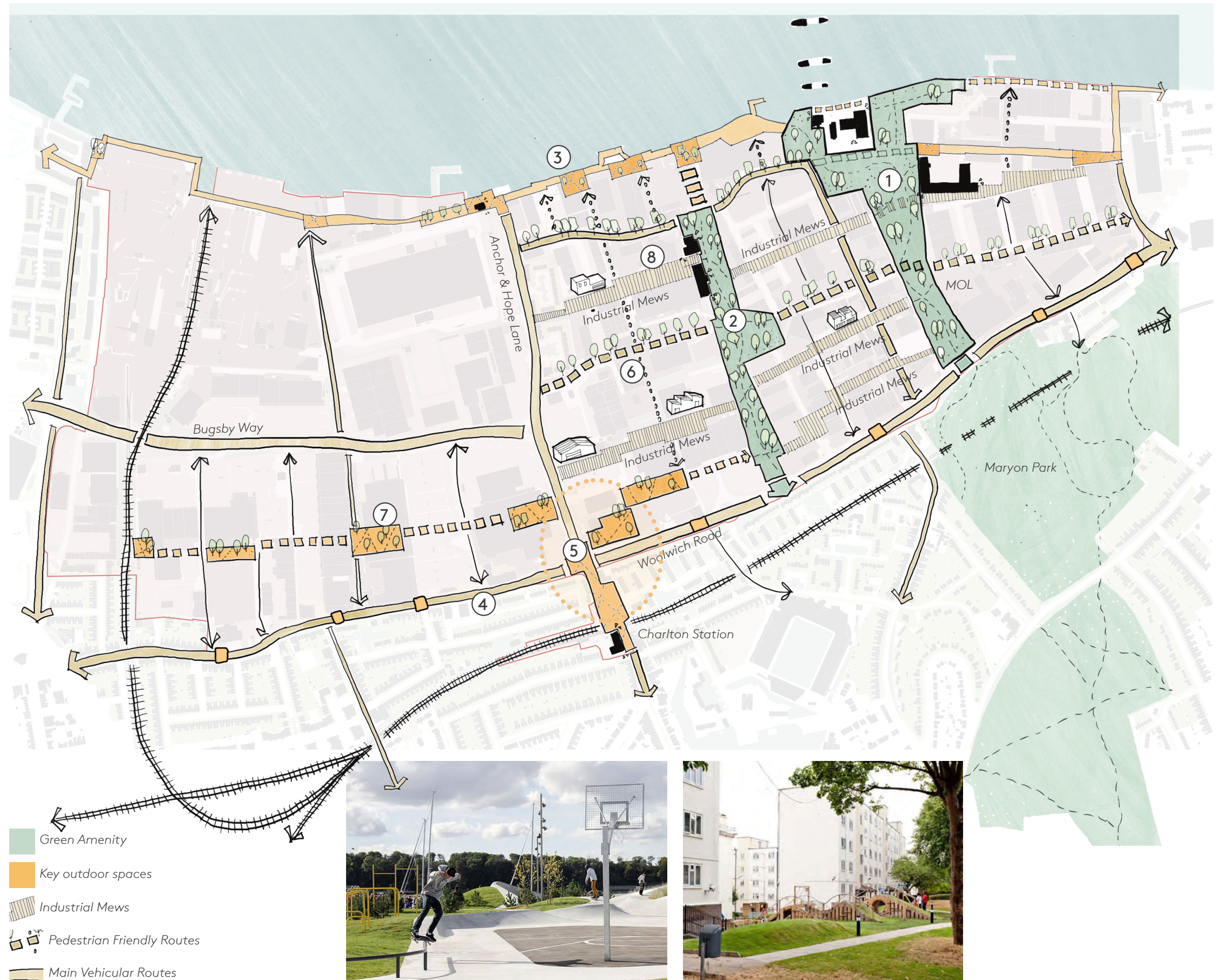
Public Realm Strategy

A robust public realm infrastructure is key to promote a active lifestyles and create welcoming environment.

The key considerations for this strategy are:

1. Increasing and improving the Metropolitan Open Land (MOL). There is potential to re-locate the existing non-residential uses in Eastmoor Place and re-aligning Eastmoor Street. These changes would help create a continuous green space that connects Woolwich Road, and Maryon Park beyond, with the river.
2. Provide a new green space aligned with the existing storm sewer connecting Woolwich Road with the river and celebrating the historical industrial buildings like Stone Foundries along the route.
3. Improve the River path to be safer and more welcoming. There is potential to celebrate key areas along the path like the area around the Anchor & Hope pub amongst others. Due to the existing flood risk, the path will need to be raised. More information can be found on LHE's Stage 2 report (Appendices section)
4. Improve Woolwich Road, including the provision of significant public realm improvements on the journey from Charlton Station into the site. Improvements to crossings and cycle lanes are being carried out by TfL.
5. Celebrate a potential new gateway from Charlton Station to the neighbourhood by providing significant public realm improvements that will act as a meeting point and a destination for new and existing residents.
6. Provide a network of east-west and north-south pedestrian links encouraging active travel across the site
7. Ensure a range of outdoor spaces types that cater for a mixed community, including play spaces for all ages and outdoor amenities that promote social interaction and an active lifestyle
8. Potential to retain the industrial character across the site and make public realm the space where different uses can co-exist

The diagram opposite is a summary of the public realm spatial strategy, but more detail of these can be found on the Stage 2 report by Studio ONB (Appendix).



Examples of outdoor amenity spaces

Play Space Strategy & Typologies

The proposed intent for the play strategy definition is based on the Supplementary Planning Guidance to the London Plan 2011, Shaping Neighbourhoods: Play and informal recreation.

The play space is a combination of formal and informal play located within dedicated areas, whilst incidental playable space can be found within a bigger areas forming the public realm.

Following this basis, the landscape will develop as a cluster of dedicated playable spaces interconnected by green links of multifunctional open space that will weave the fabric of the new neighbourhood together.

Using GLA's Child Yield Calculator, the design team developed a play space strategy that ensures good access to outdoor amenity throughout the masterplan. The diagram below shows indicative locations for different types of play using one of the design scenarios from the capacity study (next chapter) as a base.



2.6 RETAIN & PROMOTE AN EMPLOYMENT HUB

Industrial & Employment Strategy

An exemplar employment hub

Charlton Riverside is currently a key employment hub within the Royal Borough of Greenwich (RGB), providing over 5,000 jobs across a broad range of industrial sectors. The area also plays a significant role within the Borough in terms of business rates generation.

The London Plan 2021 places a strong emphasis on maintaining the supply of industrial land and suggests that there is potential for an additional 1,000 jobs at Charlton Riverside over the next 20-25 years. Local Authorities are required to test these targets and relay their findings to the Greater London Authority.

To realise the area's potential and growing it as an employment location alongside the delivery of new housing, Charlton Riverside will need to become a leading exemplar of industrial intensification.

Current context and future predicted demand

Charlton Riverside currently counts 5,317 jobs and 660,796 sqm of employment floorspace (2021 estimate).

There are several typologies of employment and industrial space. The current floorspace mix sees a high proportion of industrial yards (activities carrying outdoor operations such as construction, waste, aggregates facilities), large retail boxes and small-to-medium sized industrial units.

Based on the analysis of future growth potential (Charlton Riverside Employment and Growth Strategy, 2021), it is likely that Charlton Riverside will continue to see demand from spaces such as medium and large scale industrial spaces, small industrial units, workshops. It should also be noted that Charlton Riverside is not a supported office location according to the London Plan 2021.

Stage 1 key findings

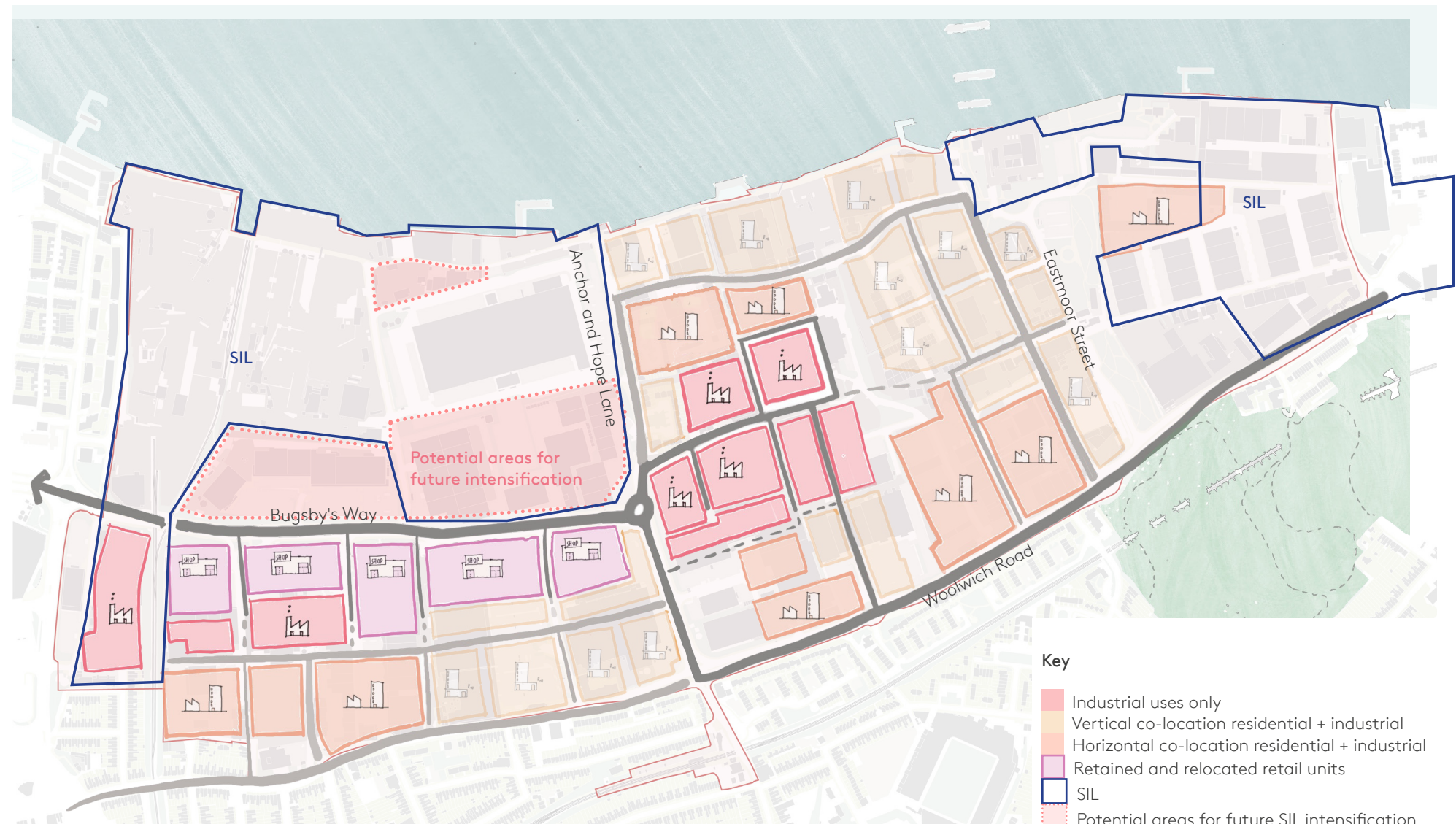
The masterplan seeks to deliver a net increase of 1,000 jobs. This would mean that Charlton Riverside will need to deliver a total of 6,317 jobs.

Stage 1 capacity testing demonstrated that the emerging masterplan could accommodate the target number of jobs, providing that there is an increase in high density typologies such as workshops and small industrial spaces, and that some stacked industrial units are delivered to increase jobs density and floorspace.

Industrial strategy (refer to Appendix for full strategy report)

The industrial strategy has been developed to inform how Charlton Riverside will be able to successfully retain and deliver jobs, co-locating them within a new mixed-use neighbourhood. The strategy looks at:

- Defining the approach to co-location between industrial and residential uses
- Establishing the appropriate mix and distribution of workspaces
- Testing the capacity of the masterplan, the jobs and employment floorspace generated, and the need to deliver stacked industrial units
- Providing design guidance on the key industrial typologies and co-location with residential, through general guidance and specific model sites testing.



Plots identified for industrial uses and co-location between residential and industrial space

Approach to co-location between industrial and residential uses

Charlton Riverside will need to safeguard a range of industrial and employment uses which have different degrees of compatibility with residential use.

The plan above shows the plots which have been identified for:

- Industrial uses only - suitable for activities less compatible with residential (such as utilities or construction) which generate higher level of noise and may require 24h access as well as servicing routes suitable for HGVs.
- Vertical co-location of industrial and residential - suitable for businesses within the creative, digital and services sectors requiring smaller sized units, or for workshop spaces.
- Horizontal co-location of industrial and residential - suitable for light-industrial uses which don't necessarily need to be located away from residential, but which need dedicated yard spaces and accesses

and careful management of the interface between residential and industrial.

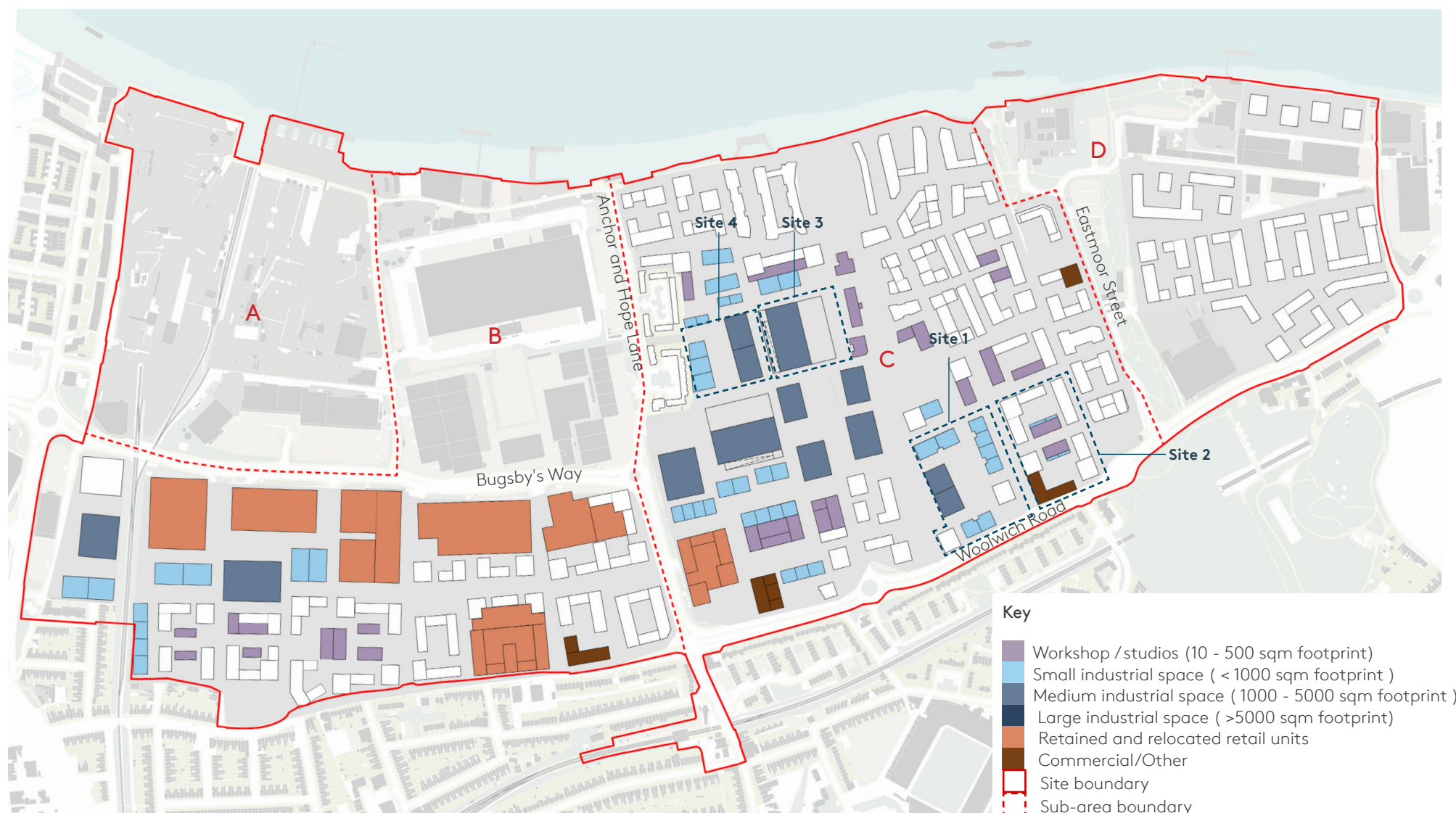
- Plots where large retail units are retained and re-arranged to be co-located with residential and industrial space.

The area for clustered industrial uses is located in adjacency with Anchor and Hope Lane and Bugsby's Way. This frees up the higher value land towards the river front for residential uses, and allows the area to be easily accessed via dedicated industrial routes.

The area along the river front, along Eastmoor Street and to the west of Charlton station will be primarily dedicated to vertical co-location typologies, where the ground floors of residential buildings can host commercial and workshop/studio spaces.

Areas for horizontal co-location will be located around Penhall Road / Westmoor Street, to the east of the Neighbourhood Centre and along the western part of Woolwich Road.

Lastly, the large 'big-box' retail plots currently sitting alongside Bugsby's Way have been re-configured to be intensified and host large retail uses alongside light industrial or residential spaces.



Distribution of proposed workspace typologies

Establishing the appropriate mix and distribution of workspaces

To keep growing as an employment location, it is recommended that Charlton Riverside retains a mix of small to medium industrial units, to be provided alongside studio/workshop spaces. These are key typologies that the masterplan will need to preserve to meet future demand and accommodate growth sectors within the manufacturing, logistics and creative uses, as suggested with the Charlton Riverside Employment and Growth Strategy (2021).

The plan above illustrates the proposed workspaces distribution, with commercial and workshop spaces located primarily within the areas for vertical co-location, and the small/medium industrial spaces located within areas for horizontal co-location or industrial uses only.

As illustrated within the Capacity Study in the next chapters of this document, the overall proposed floorspace mix retains a similar quantum of these key typologies (workshop, small and medium industrial) to what is currently present at Charlton Riverside.

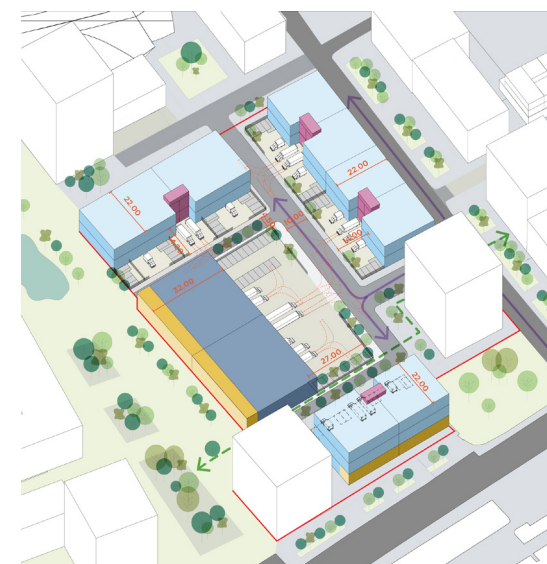
Testing the capacity of the proposed masterplan

The capacity study illustrated in the following pages shows the testing of the quantum of jobs and employment floorspace that can be delivered by the proposed masterplan Scenarios 1 and 3, and how many stacked industrial units are required to achieve the job target of additional 1,000 jobs. Scenario 2 has not been tested, as the proposed employment space doesn't differ from that proposed within Scenario 1. For Scenario 1, three employment 'sub-scenarios' have been explored to understand required level of stacking in order to achieve the jobs target:

- Scenario 1.1 - Minimum stacking of industrial units
- Scenario 1.2 - Medium stacking of industrial units
- Scenario 1.3 - Maximum stacking of industrial units

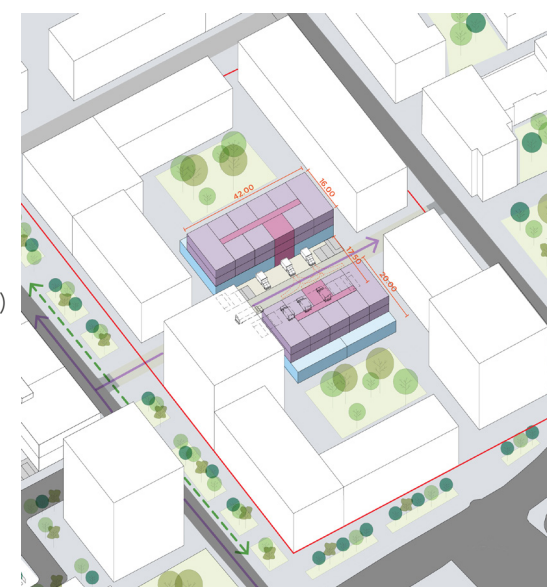
For Scenario 3, the 'maximum stacking' employment scenario only was tested.

Model sites and key industrial typologies



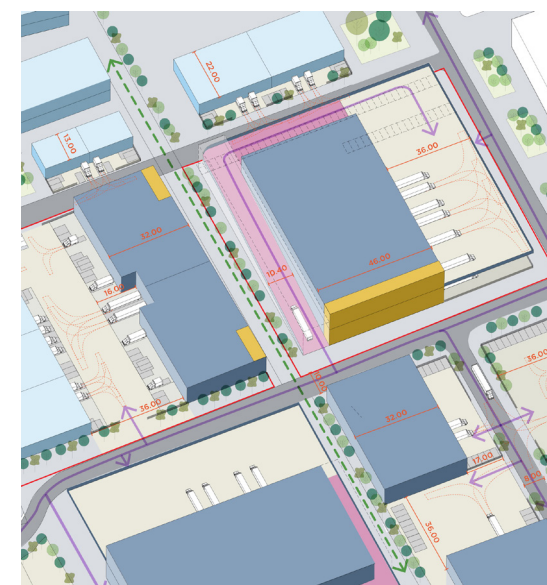
Site 1 - Horizontal Co-location of small and medium industrial uses with residential

- Stacked small industrial units and single storey medium industrial shed
- 169 new jobs
- Small industrial space: 8,950 sqm
Medium industrial space: 2,220 sqm
Plot ratio: 0.7



Site 2 - Horizontal co-location of small industrial and workshops with residential ("industrial mews")

- Ground floor small industrial units and stacked workshops on upper floors
- 70 new jobs
- Small industrial space: 1,440 sqm
Workshop/studios: 2,460 sqm
Plot ratio: 0.25



Sites 3 and 4 - Standalone Industrial

- Industrial sites with single storey units and stacked medium industrial sheds.
- 182 new jobs
- Model Site 3:
Medium industrial space: 7,646sqm
Plot ratio: 0.7
- Model Site 4:
Small industrial space: 1,850 sqm
Medium industrial space: 3,000 sqm
Plot ratio: 0.6

2.7 A THRIVING COMMUNITY

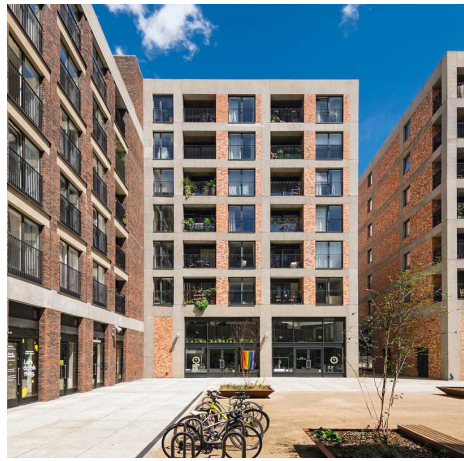
Promoting a mix of uses

Land Use Strategy Aims:



- Avoid residential uses in SIL and adjacent to heavy industrial sites
- Maximise residential along the river edge, Woolwich Road and MOL edge
- Promote co-location of housing with other types of uses including industrial, commercial and community facilities.
- Provide a transition from industrial-led area to residential-led areas through the introduction of light industrial and small employment areas co-located with residential
- Provide a mix of typologies that cater for a wide range of residents
- Improve permeability by introducing new east-west and north-south connections promoting walking and cycling.
- Maximise active frontages along key streets.
- As per Environment Agency's current guidance for Flood Risk Zone 3, some residential uses at ground floor are accepted, these include entrances, living rooms and kitchens

Co-location Aims

- Provide a variety of typologies including residential with employment at ground level, and industrial adjacent to residential
- Provide outdoor spaces that encourage residential and industrial users to mix and share facilities where possible
- Encourage a separation of service vehicles and other types of transport and movement



Faircharm & Hackney Wick, examples of horizontal & vertical co-location

-  **Vertical Co-location**
Residential buildings with potential to have non residential ground floors including workshops and other types of employment.
-  **Horizontal Co-location**
Light industrial buildings adjacent to residential. The design team has identified which types of industrial are more appropriate for this type of co-location. These zones act as a buffer between industrial areas and residential-led areas.

Local Centres, Destinations & Community Infrastructure

Local Centres

The new neighbourhood covers ca 121 hectares and will provide ca. 8,000 new homes and ca 6,000 jobs (including existing and new). The emerging spatial strategies suggest a number of local centres that will cluster multiple activities like commercial, residential and community ensuring access to these facilities within walking distance across the masterplan (~5 minutes walking distance).

1 The primary centre is the Neighbourhood Centre along Woolwich Road. This area will provide new residential buildings with a range of non residential spaces at ground level around a significant public realm intervention that will create a gateway from Charlton Station.

As shown in the diagram, other locations have been identified to provide access to community and commercial facilities across the neighbourhood.

Destinations

Charlton Riverside has multiple elements that should be celebrated, including the river path, the Thames Barrier, the historical industrial buildings and the Anchor & Hope Pub.

Regeneration has an opportunity to do that through public realm and architecture. The improved and new green infrastructure will celebrate part of these areas, and new buildings can act as land marks of other key locations.

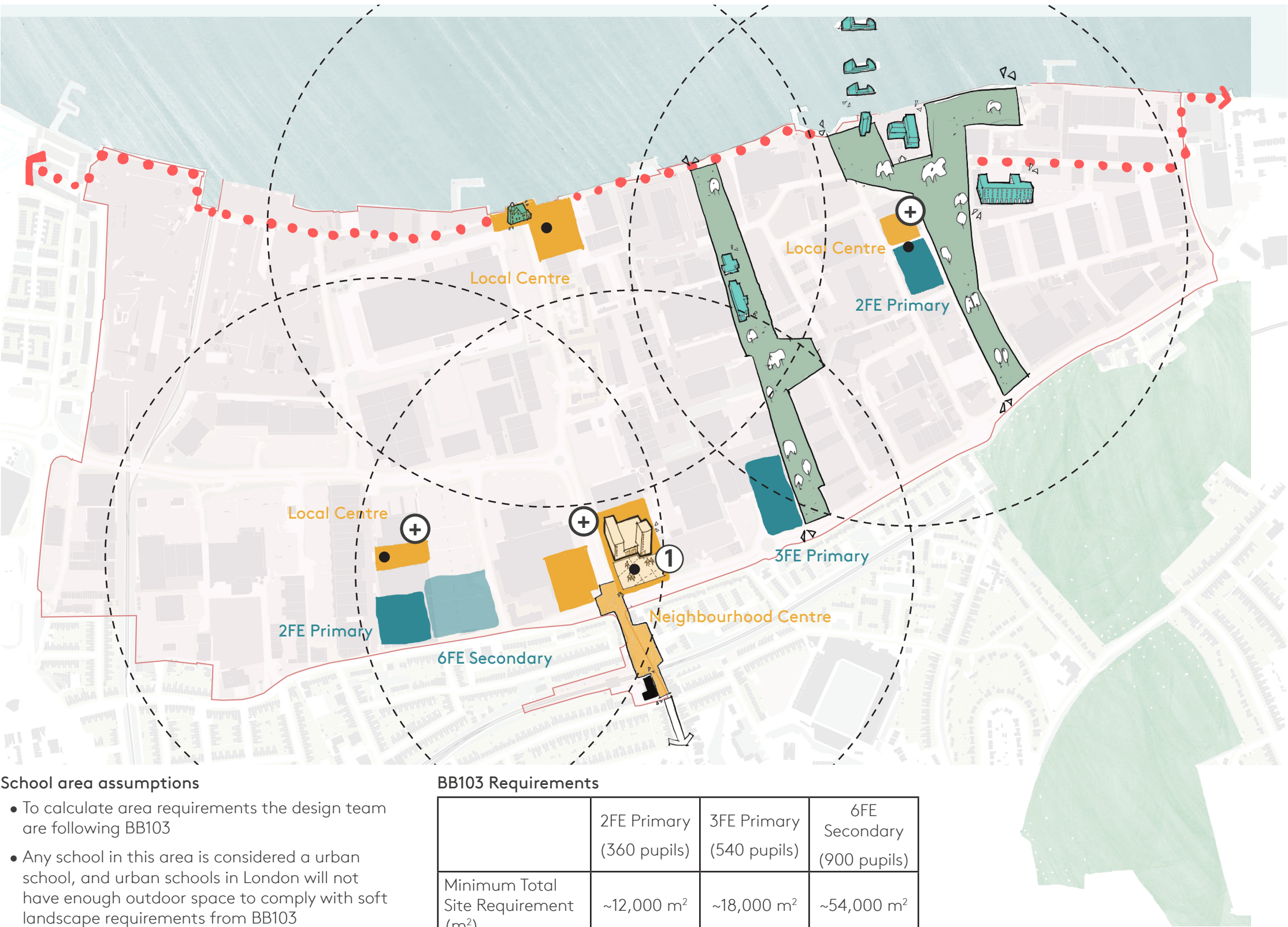
There is an opportunity to raise the heights of buildings along the river path creating a robust frontage along the river.

+ Community Infrastructure

The new development will deliver circa 8,000 new homes which will require the provision of community infrastructure.

NHS & RBG education team have advised the design team on the indicative quantum of community facilities required in this area:

- 12 primary care rooms (in the order of 1,000-1,100 sqm)
- 400sqm for mental health care rooms and intermediate care
- 1,200sqm of additional acute floor space
- 7FE Primary school (2x2FE & 1x3FE)
- 6FE Secondary School



School area assumptions

- To calculate area requirements the design team are following BB103
- Any school in this area is considered a urban school, and urban schools in London will not have enough outdoor space to comply with soft landscape requirements from BB103
- Despite not complying with BB103 RBG planning confirmed that some soft landscape should be provided.
- It is likely that any new school in the area will have residential development on top

BB103 Requirements

	2FE Primary (360 pupils)	3FE Primary (540 pupils)	6FE Secondary (900 pupils)
Minimum Total Site Requirement (m²)	~12,000 m²	~18,000 m²	~54,000 m²
Soft Area	~7,000 m²	~11,000 m²	~37,500 m²
Total area required (excluding soft area)	~5,000 m²	~7,000 m²	~16,500 m²

Massing & Density

There is an opportunity to deliver significant new homes with medium to high density typologies that are respectful to the surrounding context.

Based on previous experience and following high quality examples from around the world, we believe Charlton Riverside can become a neighbourhood that encourages multiple life styles providing a range of building types with heights ranging from 4 to 20 storeys.

The overall approach is to have a constant shoulder height of 6 storeys buildings across the whole site with taller buildings in key locations, marking corners, junctions or significant destinations.

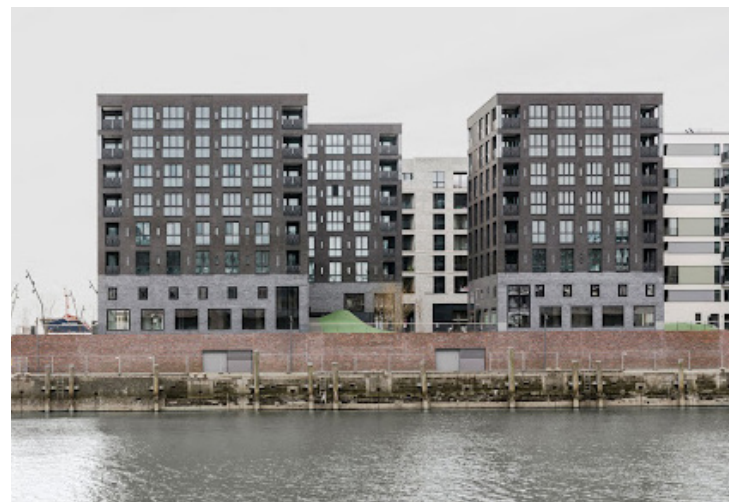
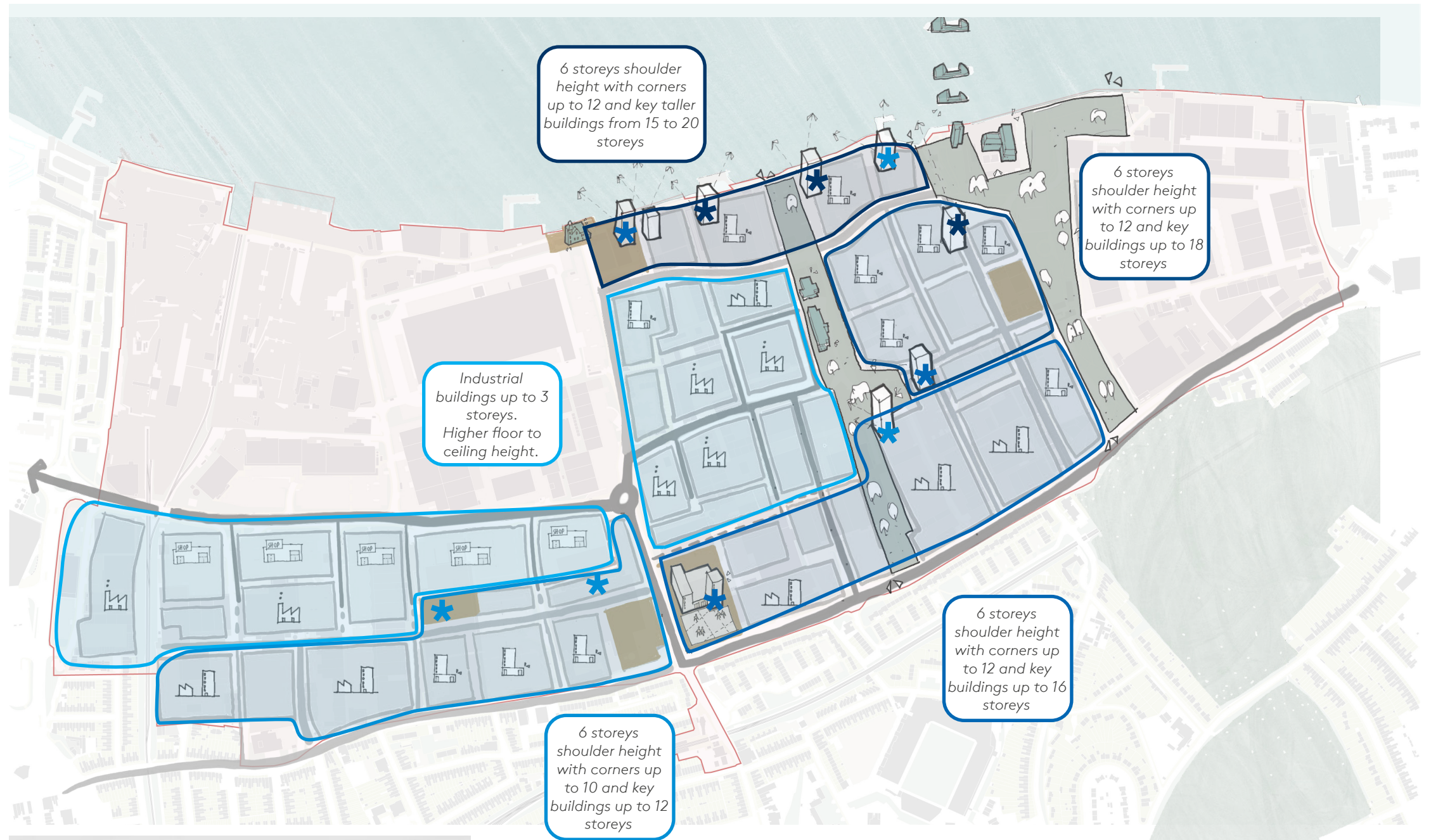
Tall buildings will range from 10 to 15 with some 18 and 20 storeys buildings along the river and on the new linear park. The approach is to place tall buildings always adjacent to more generous public realm.

The digram opposite identifies potential areas for taller buildings within the 6 storey shoulder height datum.

The site sits within Flood Risk Zone 3, and as per EA's advice the development will maximise active ground floors including some residential uses, but excluding bedrooms below breach flood level (+6.5 AOD)

Maximise Residential

- Promote residential development along the river and MOL edges
- Provide a range of building typologies
- Promote a design-led approach to density, with building heights that respond to the surrounding and emerging context
- Potential to provide a shoulder height of 6 storeys with some taller buildings in some key locations



- * Key Building up to 12 storeys
- * Key Building up to 15 storeys
- * Key Building up to 20 storeys



HafenCity - Potential similar massing for Charlton Riverside, with a shoulder height of 6-8 storeys and taller buildings on key corners and locations

Tall Buildings

The overall strategy is to have a continuous shoulder height of 6 storeys across the site with taller buildings in key locations.

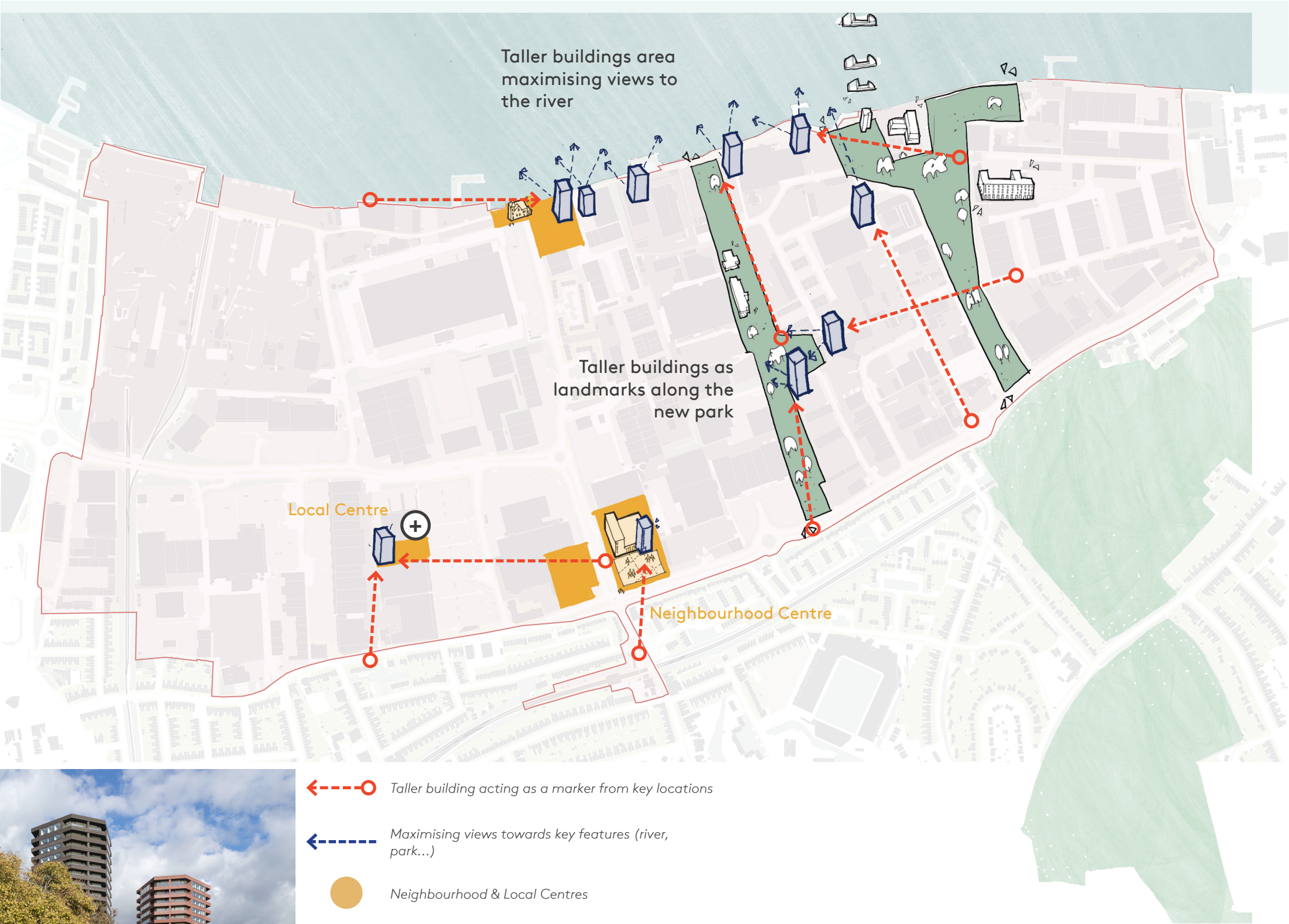
The location and types of taller buildings respond to a design-led approach as well as a delivery strategy.

The design team has identified two types of taller buildings:

- **Building from 10 to 12 storeys:** Marking key corners on most of the plots
- **Buildings above 12 storeys:** Tall buildings acting as markers to be placed adjacent to key destinations or outdoor amenity spaces.

There are 3 areas identified as appropriate for tall buildings above 12 storeys:

- **Riverside Edge:** Taller buildings to maximise views towards the river, and act as markers along the river path, as well as from Woolwich Road
- **Neighbourhood Centre & Local Centres:** Potential for taller buildings to frame new public realm spaces or act as gateways to the site
- **Green Infrastructure:** As the main north-south routes, tall buildings in key locations along the green spine provide a series of landmark towards the river.



NSDM Amsterdam - Potential similar massing for Charlton Riverside



Hoxton Press towers adjacent to Shoreditch Park, KCA

2.8 A SAFE & ACCESSIBLE NEIGHBOURHOOD

Improving Permeability

Permeability is a key issue in the Charlton Riverside, and new roads are required to improve movement across the area. The design team has developed a strategic street network that will improve access through the site as well as ensure the different uses in the area can operate appropriately.

There is an opportunity to link Herringham Road with Anchor and Hope Lane to create a new east-west pedestrian and vehicular route with potential to accommodate a new bus route.

Aside from this new connection, the design team has identified a series of new north-south and east-west links to improve permeability through the site

More information on the details of the movement strategy and impact on existing PTAL can be found on the Stage 2 document prepared by Velocity (Appendix xx)

Route types:

Main roads with bus routes

Primary vehicular routes with multiple bus routes. These also include wide pavements and some parking spaces as well as tree planting along the edges.

Maximise active frontages with entrances to industrial and retail buildings as well as residential communal entrances.

Roads to access industrial areas

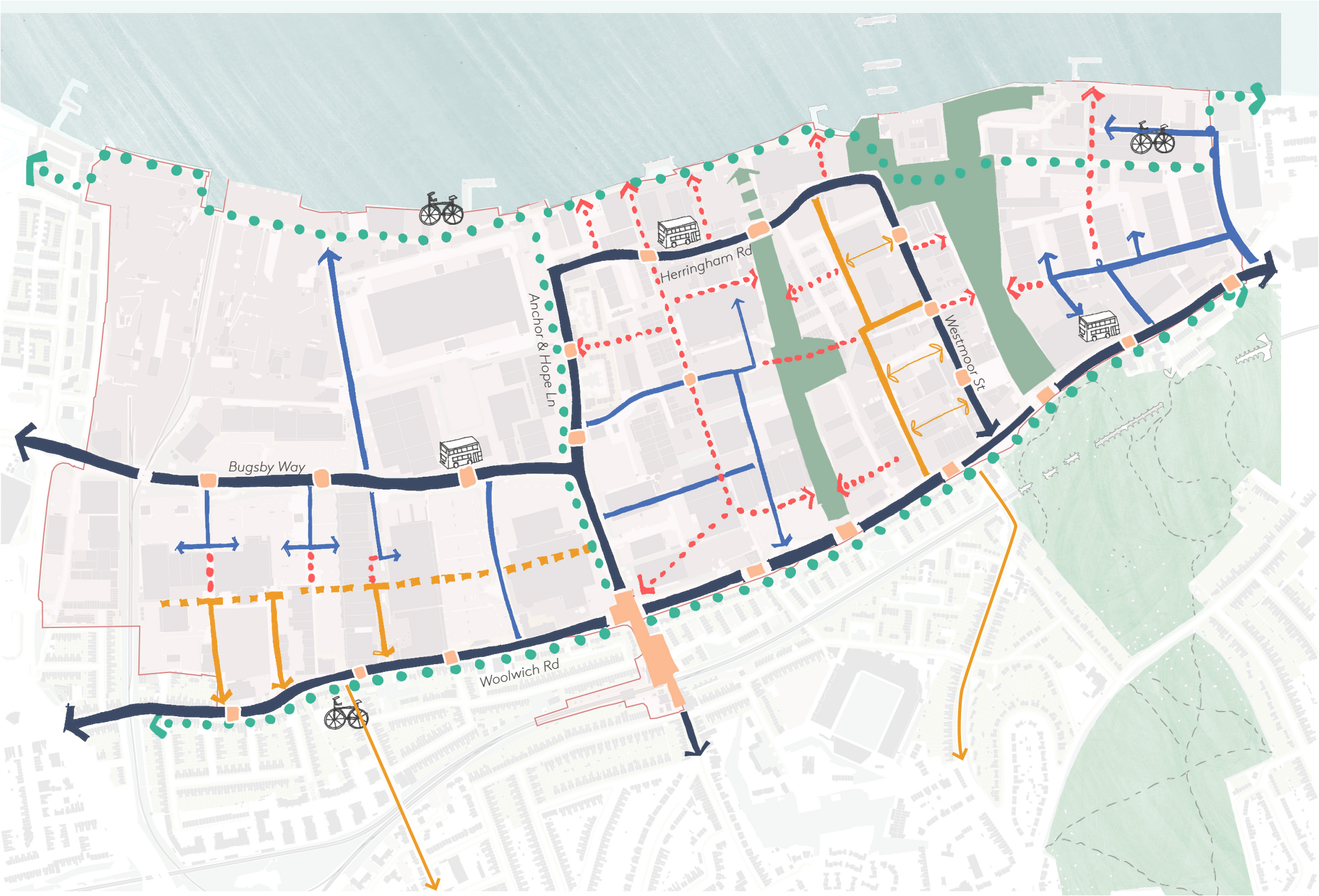
Roads dedicated to provide access to industrial areas. These should be pedestrian friendly with wide pavements and street planting. Avoid creating routes through for industrial vehicles. Maximise active frontages like entrances to industrial buildings or windows facing the street.

Residential streets

Traditional residential streets with active frontages on both sides, including individual and communal entrances as well as other types of uses. These will be pedestrian friendly with wide pavements, crossing points and lighting.

Residential streets with pedestrian priority

Pedestrian priority streets that allow for vehicular access for emergency and services to residential areas.



Pedestrian and cycle only routes

Paved routes providing east-west and north-south permeability for pedestrians and cyclists. These routes will be safe and welcoming with good levels of lighting and potential active frontages on the ground floors of the surrounding buildings.

Cycle routes

Existing and extended cycle routes. These need clear designation of the lanes.

Key crossing points

2.9 A SUSTAINABLE & RESILIENT NEIGHBOURHOOD

Sustainability Strategy

A holistic framework for assessing sustainability for the masterplan is outlined below, covering a range of Social, economic and environmental issues. Where relevant, KPI's and targets have been set, taken from policy documents, as well as industry guidance and certification standards. This should be used as a guidance for the masterplan and development within it.

SOCIAL SUSTAINABILITY pillar objectives:

- Encourage community engagement and skills building;
- Promote ongoing community stewardship;
- Improve well-being, safety, equality, diversity and inclusion throughout the estate.
- Developments should enhance local communities with high-quality public spaces and accessible parks and exercise facilities to promote healthy lifestyles. Public consultation is vital to align proposals with resident needs, incorporating affordable housing across mixed tenures per local policies. Additionally, equality, diversity, and inclusion training for staff and supply chains should foster a socially equitable environment.

ECONOMIC SUSTAINABILITY pillar objectives:

- Seek to deliver whole life value from any proposed development
- Promote economic sustainability
- Boost the local economy.
- Developments should prioritize local employment and upskilling through apprenticeships and training, using local workforce and suppliers. Generating long-term employment and meeting diverse social needs with varied use types can drive economic prosperity. Implementing best environmental practices ensures resource-efficient buildings, reduces fuel poverty and water consumption, and supports local SMEs via a Sustainable Procurement Plan.

ENVIRONMENTAL SUSTAINABILITY pillar objectives:

- Enhance biodiversity;
- Reduce risk of surface water flooding and demand on local sewers;
- Reduce energy consumption and carbon emissions;
- Minimise overheating risk;
- Retain the residual value of existing materials;
- Design out waste;
- Promote active transport; and
- Create a healthy local environment, all contributing to increased climate resilience.

Focus on the London Plan Energy Hierarchy, implement circular economy principles, and conduct pre-redevelopment audits to minimize waste and embodied carbon. Promote biodiversity through habitat creation and green roofs, ensure water efficiency, and support Sustainable Urban Drainage (SuDS). Encourage sustainable transport via bike storage and electric vehicle charging, and achieve high environmental standards like BREEAM certification to enhance climate resilience and well-being.



Net Zero Strategy

Net zero is achieved by reducing the operational energy demand and embodied carbon emissions associated with a building construction and operation to such a level that it can be met by low carbon or renewable energy on site and through a decarbonised grid. Operational carbon emissions are those associated with the energy used to run the building (heating, cooling, hot water generation, lighting, lifts, equipment etc). Embodied carbon emissions are those associated with the building materials and products including the production, construction, replacement, demolition and disposal stages.

The net zero strategy for the masterplan should be to aim to minimised both operational carbon and embodied carbon. This should be done by deploying the principles, strategies and targets outlined in the following sections of this report.

OPERATIONAL CARBON accounts for all the operational energy used in the building during its life cycle. Operational emissions should be minimised, through efficient design, provisional of low carbon energy and installation of renewable technology. The route to minimising operational carbon is outlined in the Energy Strategy.

“When the amount of carbon emissions associated with the building’s operational energy on an annual basis is zero or negative. A net zero carbon building is highly energy efficient and powered from on-site and/or off-site renewable energy sources, with any remaining carbon balance offset.”

UKGBC Net Zero Carbon Buildings Framework Definition – ‘Net Zero Carbon – Operational Energy’

“A ‘Net Zero Carbon Operational Energy’ asset is one where the no fossil fuels are used, all energy use (Module B6) has been minimised, meets the local energy use target (e.g. kWh/m²/a) and all energy use is generated on- or off site using renewables that demonstrate additionality. Direct emissions from renewables and any upstream emissions are ‘offset’.”

LETI Net Zero Definitions (Net Zero Operational Energy)

EMBODIED CARBON accounts for the carbon emissions resulting from product manufacture, transport to site and construction activities involved in the construction of a building, maintenance and replacement of components and the disposal or recycling of the building materials at the end of life. The initial stages of product manufacture, transport and building assembly are typically associated with the highest proportion of a development’s embodied carbon emissions. When minimising embodied carbon, it is important to consider whole life carbon, as certain design decisions that may lead to lower embodied carbon, may in turn increase the whole life carbon of the development. The route to minimised embodied and whole life carbon is outlined in the Whole life Carbon section of this report.

“When the amount of carbon emissions associated with a building’s product and construction stages up to practical completion is zero or negative, through the use of offsets or the net export of on-site renewable energy.”

UKGBC Net Zero Carbon Buildings Framework Definition – ‘Net Zero Carbon – Construction’

“A ‘Net Zero Embodied Carbon’ asset is one where the sum total of GHG emissions and removals over an asset’s life cycle (Modules A1 – A5, B1 – B5 and C1 – C4) are minimised, meets local carbon targets (e.g. kgCO₂e/m²), and with additional ‘offsets’ equals zero.”

LETI Net Zero Definitions (Net Zero Embodied Carbon)

WHOLE LIFE CARBON (WLC) encompasses the total carbon emissions associated with a building during its lifetime, including embodied and operational carbon.

“A ‘Net Zero (Whole Life) Carbon’ asset is one where the sum total of all asset related GHG emissions, both operational and embodied, over an asset’s lifecycle (Modules A1 – A5, B1 – B7 (plus B8 and B9 for infrastructure only), C1 – C4) are minimised, meet local carbon, energy and water targets, and with residual ‘offsets’ equals zero.”

LETI Net Zero Definitions (Net Zero (Whole Life) Carbon)

Energy Strategy

XCO2 recommends that the SPD is updated to reflect the latest policy guidance, with Energy Strategies meeting London Plan targets required for Major development. XCO2 also recommends consideration of applying these targets and requirements to minor development

To support the Net Zero strategy, consideration should be given to the implementation of more stringent aspirational targets outlined in this report, taken from the RIBA 2030 Climate Challenge and the LETI CEDG.

EXISTING SITE REVIEW

Emerging developments within the masterplan boundary are at a range of stages. The developments have emerged over a period of changing planning conditions, meaning they take different approaches, have different targets and are measured against different baselines. Most of the developments are residential led, mixed used development. All the developments rely on heat pumps to provide heating and hot water for residential areas, with some providing gas boiler hybrid systems. The majority of residential schemes use a communal system, in line with GLA requirements, given the sites location within a Heat Network Priority Area.

BE LEAN

Building form factor should be minimised, with compact simple building shapes. Glazing ratios should be considered at an early-stage, balancing overheating and daylighting concerns. All development should have a highly efficient building fabric, with low U values, meeting and exceeding guidance in Part L and the London Plan. Improvements in airtightness will significantly reduce heat loss, with a typical value of 3 m3/m2/hr needed for residential buildings in London, and lower standards required for Passivhaus. Thermal bridges should be eliminated where possible, by minimising building complexity, ensuring insulation continuity. Active measures should also be deployed, with efficient lighting, sufficient controls and monitoring capability to allow occupants to accurately monitor and reduce their energy consumption. Heat recovery technology, such as MVHR and WWHR should be considered to recover waste heat from development.

BE CLEAN

The primary energy strategy for the Masterplan should be to connect to the Riverside Heat Network, currently developed by Cory Group and Vattenfall, powered by two Energy from Waste facilities. The main transmission will run down Woolwich Road, adjacent to the Charlton Riverside Masterplan site, expected to reach the site in Phase 2 (2030). An initial workshop with Vattenfall, the operators of the network, confirmed that plans for the first phase of the network are highly developed, and that the network may be able to reach the site as early as 2028. However, in order to further develop the network, they would require some guaranteed capacity of connection at Charlton Riverside. Continued engagement with Local Authority Energy Officers and Network Operators is recommended to discuss timescales and requirement to connect.

A site-wide energy network can serve as an interim strategy, easing the development of low-carbon solutions and facilitating connection to the Riverside Heat Network when available. Previous studies by the Royal Borough of Greenwich found that a WSHP system is preferable for its significant potential capacity, though it requires complex stakeholder engagement. A combined GSHP and ASHP system is also feasible. Greenwich are currently undertaking a Detail Project Development plan, attempting to build a business case for a network in the area. An initial workshop was set up with its external contractors, to discuss the progress of the DPD, which is currently in its early stage. It is recommended that continued engagement with the Royal Borough of Greenwich regarding their DPD, to support them in identifying a potential energy centre site, and accounting for the capacity of the proposed masterplan.

BE GREEN

All development should look to maximise opportunities for producing, storing and using renewable energy on site, regardless of whether the 35% reduction has already been made through the Be Lean and Be Clean stages. All development within the masterplan shall conduct a site-specific analysis of suitable low and zero carbon technology, for its suitability for implementation. In line with GLA guidance, all sites should maximise suitable roof space for Solar Photovoltaic where appropriate, regardless of what previous targets have previously been achieved.

Whole-Life Carbon Strategy

XCO2 recommends that the SPD is updated to reflect the latest policy guidance, with WLC assessments required for referable development, in the line with the London Plan.

XCO2 also recommends consideration of requiring WLC assessments for smaller development. WLC should follow the methodology outlined in the London Plan, demonstrating how the principles outlined are implemented, and reporting against the London plan targets. Consideration should also be given to reporting against the aspirational targets outlined in this report, taken from the RIBA 2030 Climate Challenge and the LETI CEDG.

To lower whole life carbon, the masterplan should follow these 16 principles from the GLA Whole Life Carbon Guidance:

1. Reuse and Retrofit.
2. Use Recycled Materials
3. Material Selection
4. Minimise Operational Energy
5. Reduce Water Use Emissions
6. Disassembly and Reuse
7. Efficient Building Shape
8. Regenerative Design
9. Durability and Flexibility
10. Balance Operational and Embodied Carbon
11. Building Life Expectancy
12. Local Sourcing
13. Minimise Waste
14. Efficient Construction
15. Lightweight Construction
16. Circular Economy

Development should conduct a WLC assessment, in line with the Royal Institute of Chartered Surveyors (RICS) professional statement (PS) and London Plan Guidance on Whole Life-cycle Carbon Assessments for undertaking detailed carbon assessments. The life cycle stages covered by the RICS methodology refer to EN 15978, which includes a modular approach to a built asset’s life cycle, breaking it down into different stages, as shown in the table below.

The WLC assessment at an early stage, so that it can inform design decisions. Provisional results should be compared to benchmarks, to identify areas that may be significantly contributing to whole life cycle emissions.

Circular Economy Strategy

XCO2 recommends that the SPD is updated to reflect the latest policy guidance, with Circular Economy assessments required for referable development, in the line with the London Plan.

XCO2 also recommends consideration of requiring smaller development to complete Circular Economy statements. All circular Economy statements should follow the methodology outlined in the London Plan, demonstrating how the principles outlined are implemented, and reporting against London Plan targets. Consideration should also be given to aspirational targets for material selection, taken from the LETI CEDG.

Development within the masterplan should look to follow the core guiding principles and commitments, as identified in the GLA's 'Circular Economy Statement: Guidance':

1. Building in Layers:
2. Designing Out Waste: Designing for Longevity.
3. Designing for Adaptability or Flexibility
4. Designing for Disassembly
5. Using Systems, Elements or Materials that can be Reused and Recycled.

Design approaches should be designed for both existing buildings on development sites, and new buildings. Design approaches should be defined for each building layer. These decisions should be guided by the GLA's Circular Economy decision trees.

A review of buildings in the masterplan area identified key materials for reuse but didn't quantify them. Developments should conduct pre-demolition audits to quantify materials, identify waste streams, and explore reuse or recycling opportunities. Most buildings are commercial, including retail, warehouses, and offices. Concrete, steel, and bricks are the primary materials expected in the waste.

Concrete:

Can be reused for paving, lintels, or coping stones, and panels can be sold. Most concrete is crushed for recycled aggregates, used in new concrete mixes either onsite or offsite. Onsite reuse is preferred to minimize transport emissions.

Steel:

Sourced mainly from structural members, reinforcement, cladding, and fencing. Steel portal frames can be reclaimed, while reinforcement bars are typically recycled. Steel is valuable and easily recyclable if reuse isn't possible.

Bricks:

Reclaimed bricks can be used for new construction, feature walls, and landscaping. Lime mortar brickwork is easier to reclaim than sand-cement mortar. If individual bricks can't be reclaimed, brickwork sections can be reused as cladding. Local businesses can process construction waste, reducing transportation emissions, with the London Waste Map identifying waste processing facilities within the masterplan boundary.

Sustainable Drainage Systems

Extent of ambition - an area wide sustainable drainage strategy

We recommend that forthcoming planning policy for Charlton Riverside is equipped with an area wide sustainable strategy, guiding forthcoming development how to meet adopted policy while contributing to a coherent system . In the absence of such a strategy, piecemeal development parcels will interpret the adopted policy in their own way and propose an inconsistent puzzle of techniques and features to comply.

A coherent strategy would better enable networks of SuDS systems to work together, compounding their ability to draw nature into the urban environment and positively contribute to the changing character of Charlton Riverside. Moreover, the strategy could better respond to the wide flow paths of surface water flood risk, as clearly identified by the EA flood risk maps.

In principle, the strategy could identify the role of each land use in contributing towards the SuDS strategy and make recommendations to how that is achieved.

General principles

Drainage hierarchy

The drainage hierarchy of Building Regulations, The London Plan and RB Greenwich policy will need to be applied to all forthcoming development.

1. Store rainwater for later use
2. Use infiltration techniques, such as porous surfaces in non-clay areas
3. Attenuate rainwater in ponds or open water features for gradual release
4. Attenuate rainwater by storing in tanks or sealed water features for gradual release
5. Discharge rainwater direct to a watercourse
6. Discharge rainwater to a surface water sewer/ drain
7. Discharge rainwater to the combined sewer.

Development parcels stand a better chance of fulfilling the priorities of the drainage hierarchy if contributing to an areawide sustainable drainage strategy.

Surface water treatment: Source control SuDS features help to filter pollutants from urban runoff and reduce the harm on receiving watercourses.

The sustainable drainage strategy will help developers meet the standards of the SuDS management train, allowing them to benefit from water treatment in the area-wide system where appropriate.

Peak rate of runoff: In line with planning policy, the peak rate of runoff from development sites would typically need to be restricted to the greenfield runoff rate, though some riverside development may be to obtain special permission for un-restricted discharge to the River Thames.

Volume of runoff: Collectively across Charlton Riverside, the development proposals are likely to increase the amount of green space and so reduce the catchment area of the drainage systems. In turn, this reduces the overall volume of runoff.

SuDs should be considered in multiple elements of the design including:

- Roads and streets
- Large green spaces and corridors
- Small green spaces and pocket parks
- Small green spaces and pocket parks between development
- Residential and civic buildings
- Industrial and commercial buildings and yards.

More information on considerations for these can be found on the Stage 2 Report by LHE (Appendix)



2.10 EMERGING VISION

CELEBRATING LOCATION AND CHARACTER

Charlton Riverside enjoys a prime location along the river Thames and incorporates the iconic Thames Barrier and the old Siemens Brothers factory.

The area has a long and proud history as a important centre of industry, from producing the early trans-continental telegraph cables in 1874 and the PLUTO undersea fuel pipeline during the second world war, to Europe’s largest marine aggregates terminal at the Angerstein and Murphy’s wharves.



Site Area

121 Hectares

Strategic
Industrial
Land

34 Hectares
36% of Site Area

RBG Land

7.6 Hectares (6%)
of the site is owned
by RB Greenwich



RETAINING AND DIVERSIFYING EMPLOYMENT

The area is an important employment centre for Greenwich and a distribution hub for London with a long industrial history.

The revised masterplan creates a neighbourhood that embraces industry, maximises the retention of existing types of businesses, incorporates new types of employment space whilst also providing high quality homes, safe streets and welcoming outdoor spaces.

The careful co-location of new homes with appropriate industrial uses provides a re-interpretation of the traditional mixed-use neighbourhoods with pockets of small industrial spaces seen all over London, creating a buffer between more residentially focused areas and the larger, less sociable industrial uses and aggregate wharves.

Existing

5,317 jobs and 660,796m² of employment floorspace (2021 estimate).



Proposed

Up to 6,322 FTE Jobs (up to 1,005 net gain)
556,538m² intensified floorspace



GROWING A THRIVING COMMUNITY

Charlton Riverside sits at the heart of a changing area and will become a key link between the emerging developments on the Greenwich Peninsula and at Woolwich, creating a new distinct neighbourhood that combines employment with up to 10,000 new homes.

New, high-quality and mixed tenure homes will be at the heart of the masterplan, providing a significant number of affordable, family-sized homes for the residents of Greenwich.

PH1

Central Area
~6,000 new homes



PH2

Retail Area
~2,500 new homes
Total: ~8,500



PH3

Additional Sites
(Westminster Estate)
~1,500 new homes
Total: ~10,000

Total

10,000+ New Homes



ACTIVE & INCLUSIVE NEIGHBOURHOOD

Improvements to the public realm, new local centres and better connections to the river edge will create a welcoming and accessible neighbourhood with shops, community facilities and public infrastructure to support new and existing residents, making Charlton Riverside a mixed and thriving community, a place to live, work, learn and spend time.



Local Centres New Neighbourhood Centre and 3 New Local Centres

Health New Medical Centre
12 Primary Care Rooms,
Mental Health Care Rooms, and
Acute Floor Space

Education 3 New Primary Schools (7FE Total)
New 6FE Secondary School

Community New Shops, Cafes,
Community Centres etc

SAFE & ACCESSIBLE STREETS

New bus routes through the area, improved connections to the train station and a clear street network will improve connectivity and access, promoting an active sustainable lifestyle with walking and cycling routes and playable landscapes.

Charlton Riverside is currently dominated by cars and large vehicles accessing the industrial areas. Permeability within the site is quite poor, making access to the river not very welcoming, easy or obvious.

Reconfiguring the area brings the opportunity to improve connections to the wider context by improving the river path and access to the station, as well as increasing access to public transport.

There is also an opportunity to create an internal street network that is safe and welcoming, promoting walking and cycling across the site, and providing clear routes to the river.

Public
Transport

**New And Diverted
Bus Routes, New Pier
For Ferries**

Active
Travel

**New Network Of
Off-Road Pedestrian
And Cycle Links**



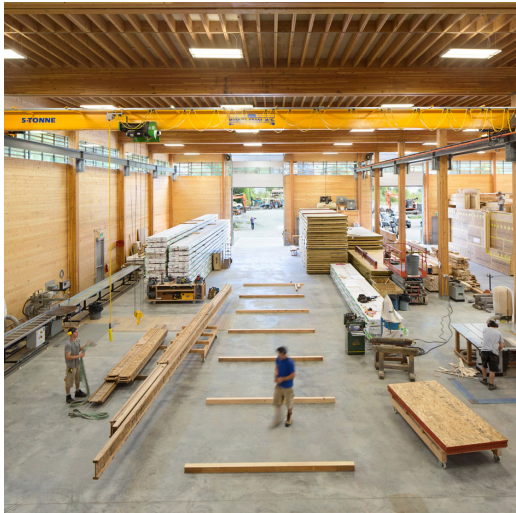
SUSTAINABLE, RESILIENT & VIABLE DEVELOPMENT

The new outdoor spaces will provide large areas for recreation, increased tree canopy cover, better access to the beautiful Maryon Park, greater biodiversity, improved Thames path with tidal flood defences and sustainable urban drainage systems to prevent surface water flooding, making the area more resilient to climate change.

Considered phasing and mutually beneficial development agreements will allow projects to be brought forward in a way that maximises development values and returns to all partners. This will also remove the problem of the first mover not benefiting from the improved values.



Mayfield Park, Studio Egret West



Passivhaus Factory, Hemsworth Architecture



Manor Works, Architecture 00



Walthamstow Industrial Estate



Danton Pantin, Paris, Avenier Cornejo

Environmental

- Biodiversity Net Gain
- SUDs
- Improve Flood Defence
- Decontamination of contaminated sites
- Improve & increase access to green spaces
- Reduce car use, promote cycling and walking
- District Heating Network
- Increase use of renewable energy sources

Social

- New Community Facilities
- Mix of homes types
- Walkable & permeable
- Improve access to public transport
- Playable landscape
- Potential connection to the other side of the river
- Improve wider connections (i.e. River Path)

Economic

- Retain and increase employment
- Promote new commercial uses
- Affordable workspaces
- Increase supply of affordable housing

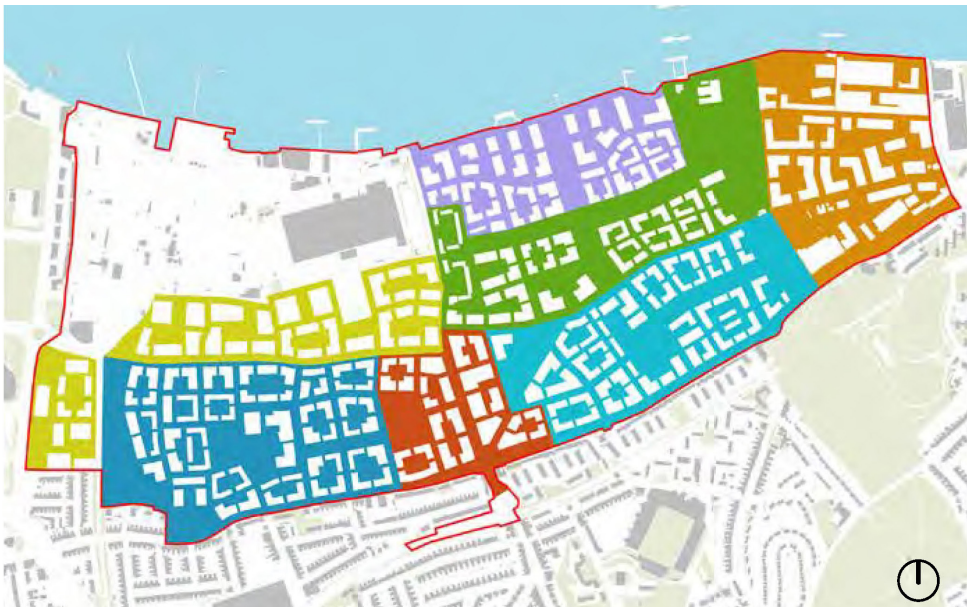
3.1 CONTEXT

SPD Capacity

- The SPD set a capacity of 7,500 new homes and 10,000 jobs.
- It defined character areas and an indicative delivery strategy as per the diagram and tables below
- The proposed buildings ranged from 3 to 6 storeys with some 10 storey buildings in key locations
- Based on a model test by KCA, the SPD proposal assumed an approximate average dwelling size of ~64 m2 (NIA) and ~91.25 m2 (GIA), which is an average 2bed flat allowing for a mix of 1beds, 2beds and 3beds. The design team has used a similar figure on the capacity study to be able to compare it with the SPD.

Key Considerations:

- Land ownership boundaries were not considered by the masterplan
- According to the Employment Growth Study by Hatch (2021), high density employment types like office space is required to achieve the SPD capacities. Following engagement with GLA and RBG Planning Authority is was clear that office space should not be the main employment type in this area.
- The SPD has little consideration to retaining existing types of business
- Multiple multi-stack employment buildings required on Bugsby Industrial Area to meet the SPD capacities. These typologies help densify employment areas and, unless they are office spaces, can be difficult to deliver as well as to find occupiers for. Some stacking will be beneficial in the area but should not be the predominant typology.



Homes by Area:

Character Area	Number of Homes
Neighbourhood Centre	2,500 homes
Villages West	
Village East	
Charlton Park	4,800 homes
Riverside	
Westminster Estate	200 homes
Bugsby's Industrial	-

Jobs by Area:

Character Area	Type of Proposed Employment Activity	Existing number of jobs, approximately	Indicative number of jobs*	Net Gain
Neighbourhood Centre	Managed Workspace, office, retail, leisure, community, health & education	300	1,100	800
Villages West	Start-up and grow-on space, small scale manufacturing, retail, leisure, community health & education	1,600	2,500	900
Village East				
Charlton Park	Advanced manufacturing, office, start-up/grow-on space	800	1,300	500
Riverside	Retail, leisure, studios	500	900	400
Westminster Estate	Small scale manufacturing, creative industries, managed workspace	1,200	1,500	300
Bugsby's Industrial	Range of B class uses	1,000	2,500	1,500
Wharves		200	200	
		5,600	10,000	4,400

Baseline

As part of the Stage 1, the design team updated the baseline information, with the most up to date figures shown in the table below:

	Existing Employment		Existing Housing
	Floorspace	Indicative Jobs	Number of homes
A	137,178 m²	206	-
B	192,510 m²	1,938	98
C	211,311 m²	1,691	76
D	119,797 m²	1,374	
Not Geolocated		108	
Total	660,796 m²	5,317	174

Aspirations

- SIL areas are not appropriate for housing
- Retail area is very unlikely to move in the short-medium term, but there is potential for consolidation of these uses along Bugsby Way, allowing intensification of the site with residential and employment
- All residential buildings across Charlton Riverside are to be retained
- As an initial approach it has been assumed that all emerging development will be delivered following their current design proposals
- For this exercise, the site has been sub-divided in 4 areas, as per the Employment & heritage Study by WMT (2021).
- Area C is most likely the area that will accommodate more changes

Indicative Capacity

LONDON PLAN 2021
The area was identified as an opportunity area by GLA with a capacity as per the table below:

GLA Capacities	Jobs		Homes
	?	+ 1,000	+8,000

Assumptions based on GLA's capacities

Based on the SPD strategy, and as a starting point, the design team has split the GLA's capacity across the site as per the table below:

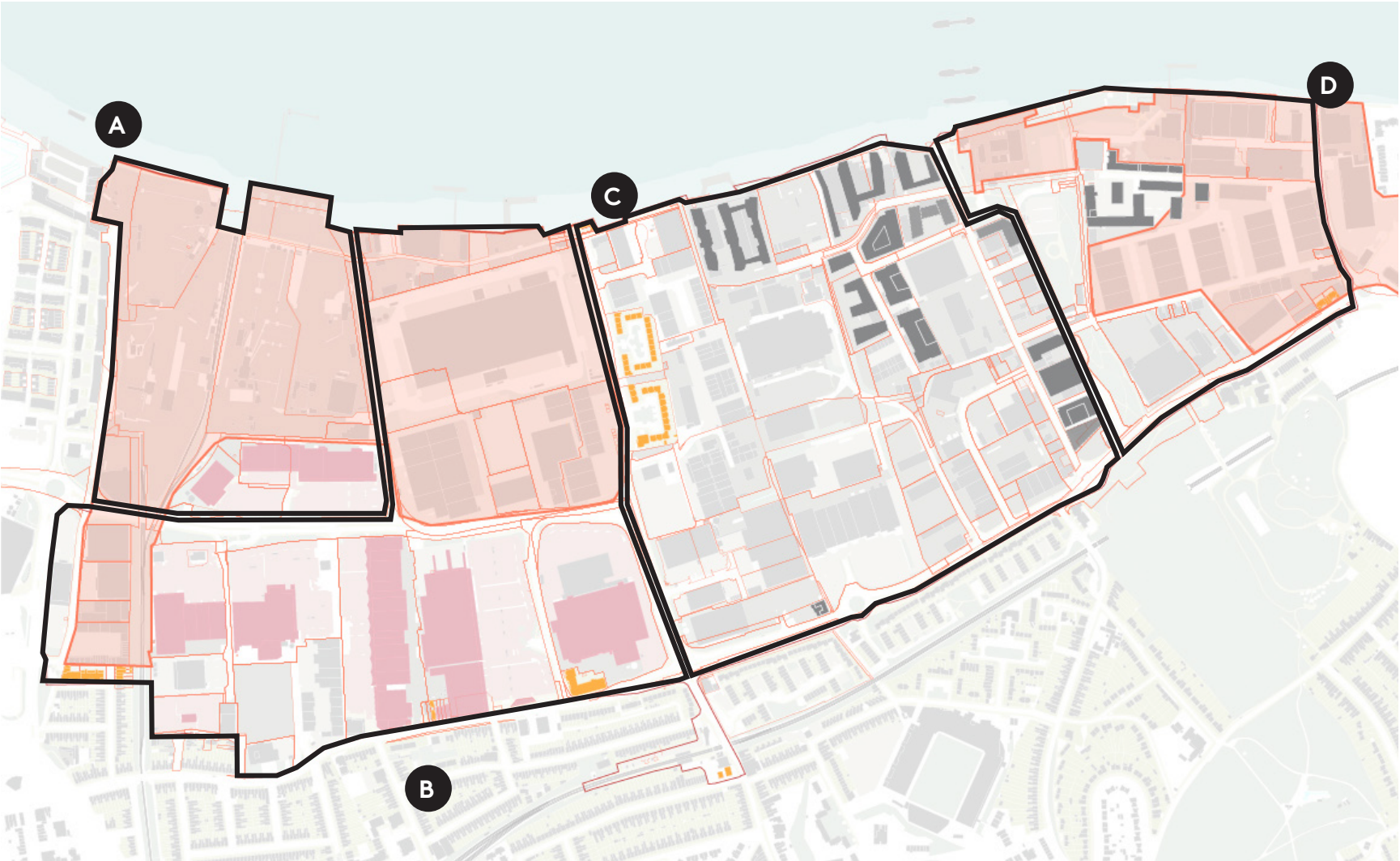
	Employment		Housing
	Floorspace	Indicative Jobs	no. of homes
A		+500	+2500
B			
C		+500	+5500
D			
Total		+1,000	+8,000

Overall Capacities

The table below adds baseline figures and indicative capacities to understand the overall quantum of homes and jobs to be provided across the site.

Floorspace has not been considered for this table as there is no specific target, but it has been considered on the emerging design proposals.

	Employment		Housing
	Floorspace	Indicative Jobs	no. of homes
A		2,644	-
B			+2,598
C		3,565	+5,576
D			
NG		108	
Total		6,317	+8,174



Forthcoming Development

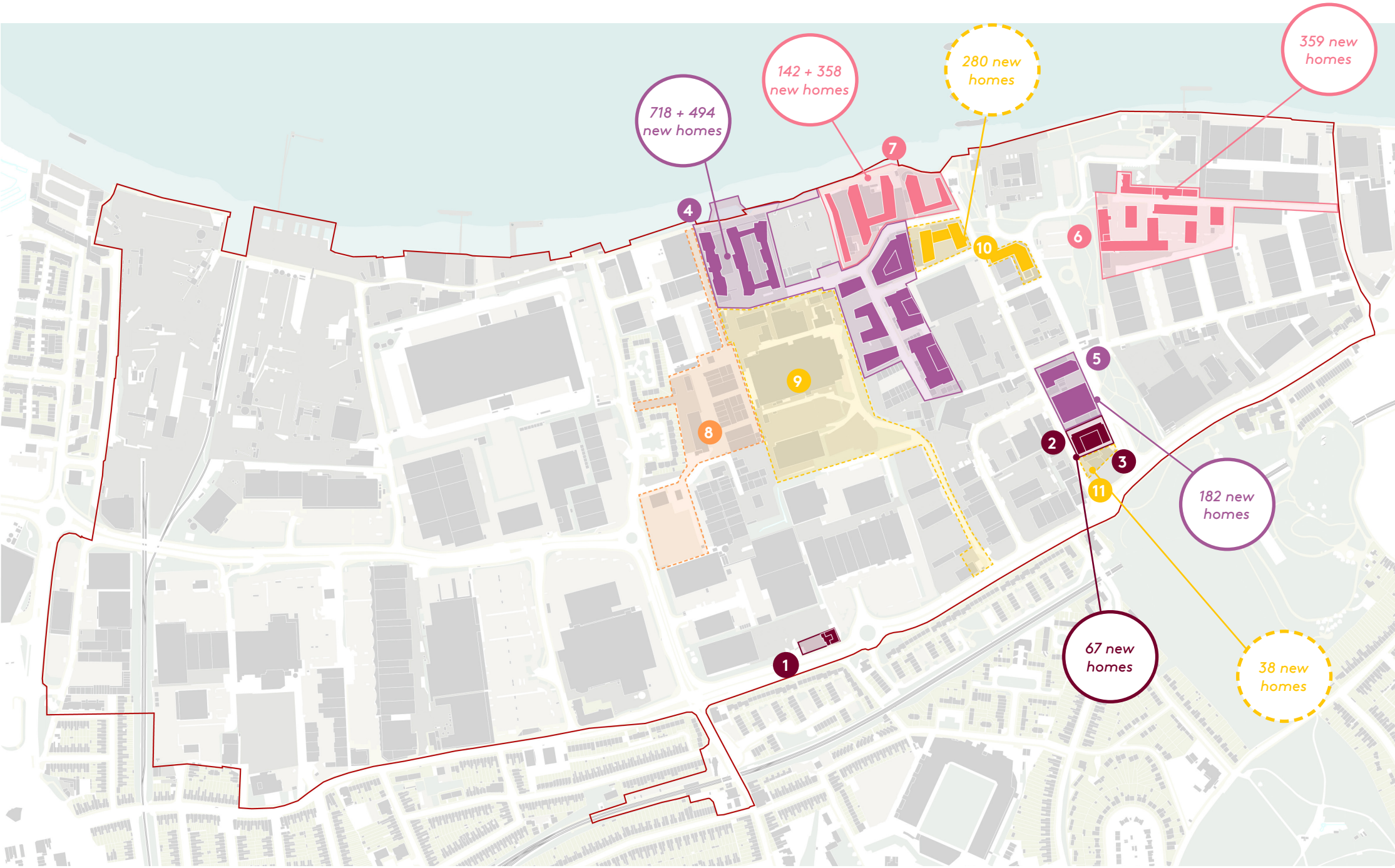
The area hasn’t changed much since the SPD was adopted in 2017, but landowners are coming forward with multiple schemes across the site.

As of November 2024, there were three sites recently built or that were currently on site, two sites with planning approval and another two sites with planning applications being determined.

There were also multiple sites in pre-application discussions with RBG.

The diagram highlights the locations of, and the proposals for, these sites and the table below summarises the number of homes that would be delivered by each site.

Status, Name & Land Owner	Number of Units
Recently Built - On Site	
1. Charlton Workstack	N/A
2. Evelyn House - Optivo	67
3. The Victoria Pub refurb & extension*	1
Sites with Planning	
4. Herringham Gardens - Hyde Site	1,212
5. Eastmoor Street - Aitch Site	182
Sites submitted to planning	
6. Faraday Works - U+I/Royal London	359
7. Flint Glass Wharf - Komoto Site	500
TOTAL	2,320
*The Victoria pub site has recently submitted planning application for an extension with 5 additional dwellings	
Sites in pre-app	
8 & 9. GLI site	
10. Komoto - Westmoor Street	280
11. Ades Food - Westmoor Street	38
TOTAL	318
TOTAL	2,638



Herringham Quarter



Herringham Quarter Riverside Area



Eastmoor St






Evelyn House



Faraday Works

Emerging Development Considerations

Name Land Owner	Evelyn House Optivo	Herringham Gardens Hyde	Eastmoor Street Aitch Site	Flint Glass Wharf Komoto	Faraday Works U+I/Royal London
Typical Floor plans	Recently Built - On Site	Planning Approved 2021	Planning Approved 2022	In Planning	In Planning
					
Building Regulations	<ul style="list-style-type: none">Under construction.	<ul style="list-style-type: none">Fire Regulations (Approved Document B) have been amended and so the application could need a planning amendment for second staircases.	<ul style="list-style-type: none">Fire Regulations (Approved Document B) - Buildings were amended in 2023 to include a second staircase.	<ul style="list-style-type: none">Fire Regulations (Approved Document B) have been amended and so the application could need to be withdrawn and redesigned.	<ul style="list-style-type: none">Design amended to comply with latest Fire Regulations (Approved Document B)
Housing Mix	<ul style="list-style-type: none">1B 27%2B 51%3B 15%4B 4%	<ul style="list-style-type: none">1B 22%2B 36%3B 42%	<ul style="list-style-type: none">Studio 3.3%1B 42%2B 42%3B 12.6% <p>Average unit size (GIA including ancillary): 96 m²</p>	<ul style="list-style-type: none">Average unit size (GIA): 80m² (from detailed planning submission)	<ul style="list-style-type: none">Average GIA 97.7m² (from planning submission)
Others Considerations		<ul style="list-style-type: none">The advice from the Environment Agency (EA) has changed and so the application could now incorporate ground floor (non sleeping) residential.Protected wharf adjacent to site compromises design		<ul style="list-style-type: none">The advice from the Environment Agency (EA) has changed and so the application could now incorporate ground floor (non sleeping) residential.Protected wharf adjacent to site compromises design	<ul style="list-style-type: none">Currently on hold

3.2 ASSUMPTIONS & AREAS OF STUDY

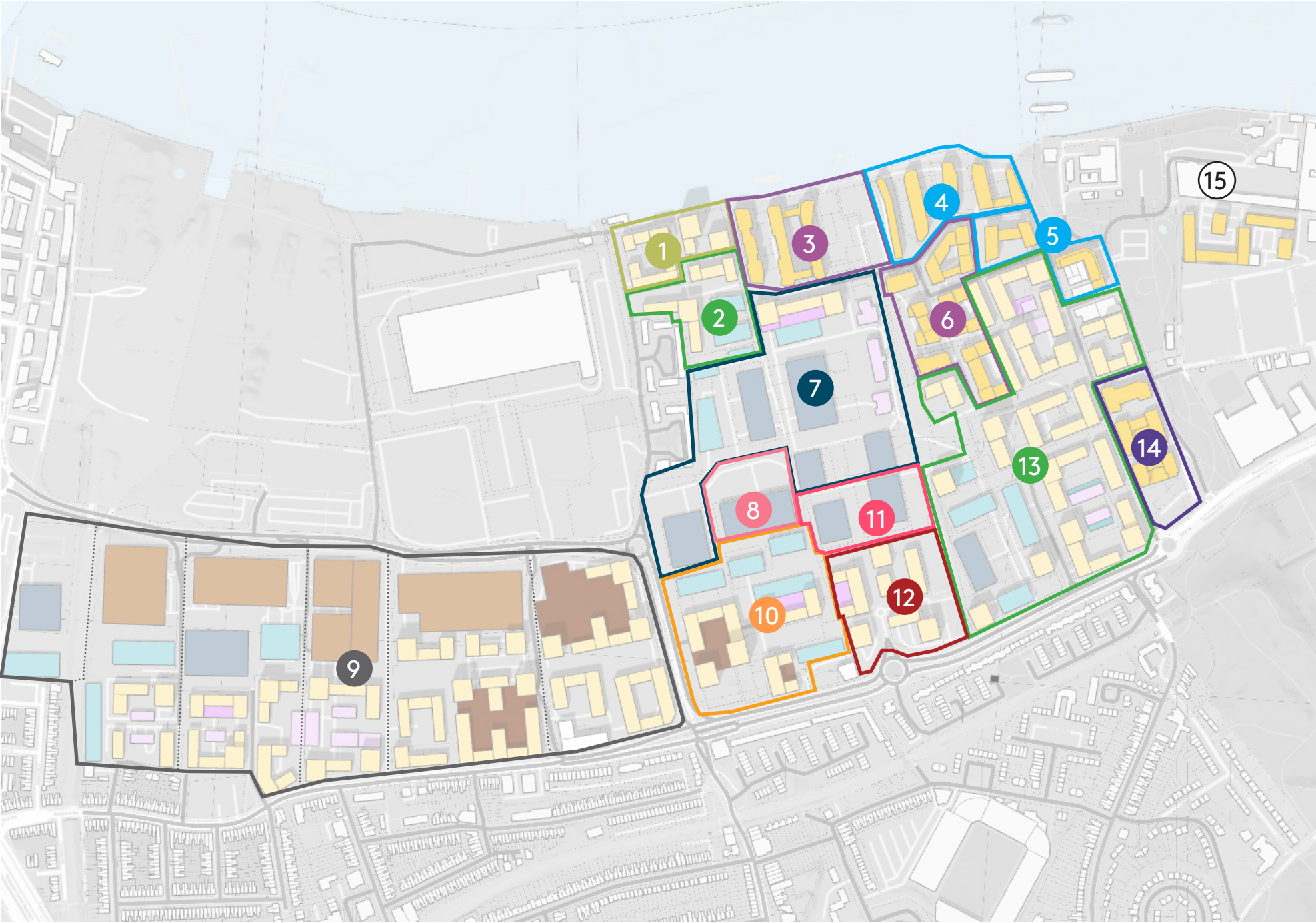
Assumptions

- The design team modelled the masterplan using KCA's typologies as a reference for residential buildings and WMT's typologies for industrial buildings
- A design-led approach to density has defined locations for taller buildings
- Appropriate locations for taller buildings are along the river edge, in the neighbourhood centre and along the green spine acting as markers and ensuring tall buildings sit in proximity of large outdoor spaces
- Building alignment responds and respects current landownership boundaries
- 90% from GEA to GIA has been assumed
- A high level test on layouts has been carried out to determine the average unit size
- An average unit size of 91.25 m2 GIA has been assumed to calculate the capacity study

Ares of Study (Land Ownership Boundaries)

- The area has been divided in development plots that align with current land ownership boundaries.
- Some sub-sections group multiple landowners.
- The design proposal follows these divisions to promote deliverability
- The capacity study includes figures per area as well as overall total figures
- The sub-divisions have the potential to become character areas

- | | |
|------------------------------|--|
| 1. Multiple Owners Riverside | 9. Retail Area (Multiple Land Owners) |
| 2. RBG - Anchorage Point | 10. Neighbourhood Centre (Multiple land owners) |
| 3. Hyde Riverside | 11. JP Morgan |
| 4. Komoto Riverside | 12. Weybourne |
| 5. Komoto 2 | 13. RBG - Penhall Rd |
| 6. Hyde New Lydenburg | 14. Aitch & Optivo |
| 7. GLI | 15. Faraday Works (U+I & Royal London) |
| 8. RBP | |

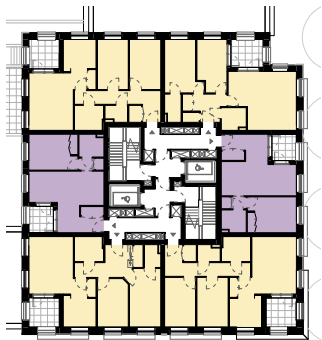
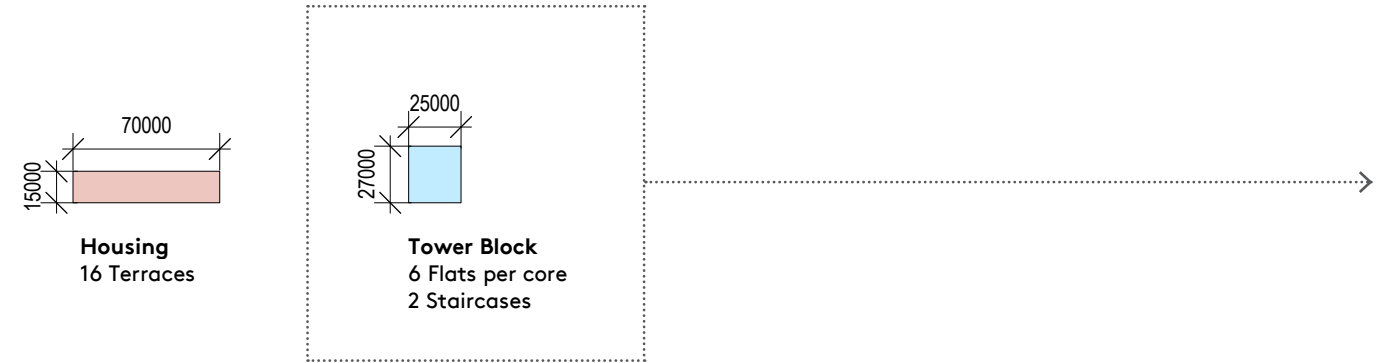


3.3 METHODOLOGY & APPROACH

KCA Housing Typologies

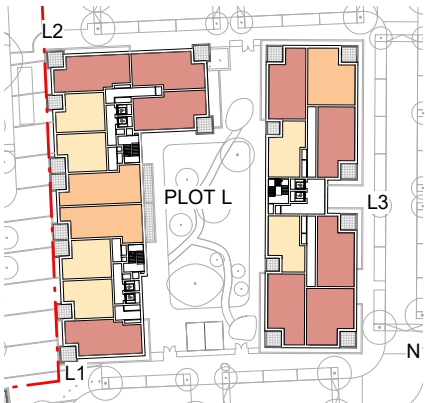
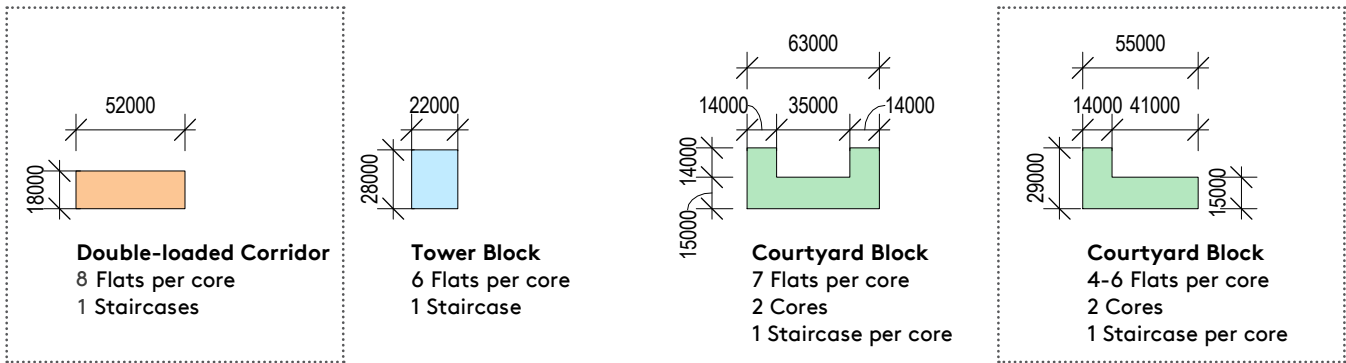
Typology	Tower Block
GEA	610 m ²
GIA	530 m ²
Efficiency	86%
Average unit size (GIA)	83 m ²

Hereford & Exeter



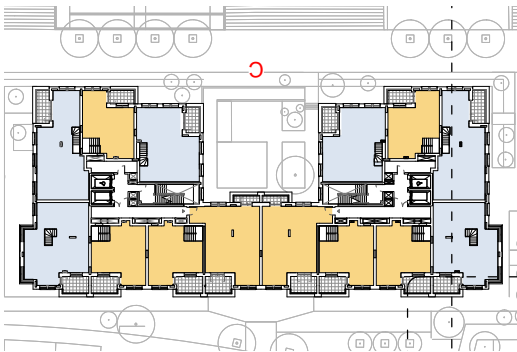
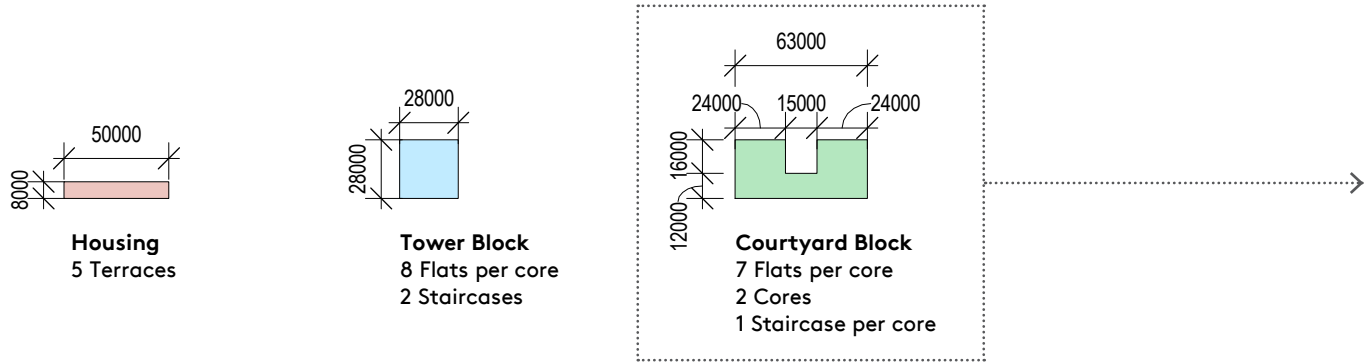
Typology	Double-loaded Corridor
GEA	936 m ²
GIA	770 m ²
Efficiency	82%
Average unit size (GIA)	96.25 m ²

St Ann's



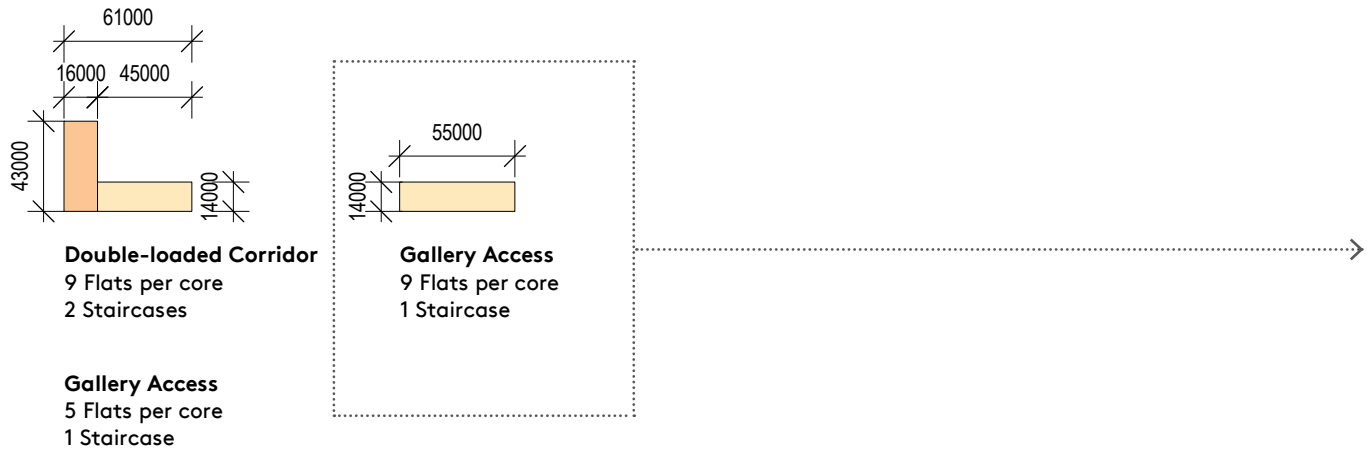
Typology	Courtyard Block
GEA (excl balconies)	1,227 m ²
GIA	1,114 m ²
Efficiency	90%
Average unit size (GIA)	80 m ²

South Thamesmead



Typology	Gallery Access
GEA	770 m ²
GIA	
Efficiency	%
Average unit size (GIA)	

Broadwater Farm



3.4 SCENARIO 1: CAPACITY STUDY

Approach

Scenario 1 retains existing emerging development (with planning approval, waiting for decision and in pre-planning discussions)



Massing



Scenario 1 massing diagram indicating some number of storeys and types of uses

Central Area Capacity - Residential



Assumptions for residential development:

- GEA to GIA: 90%
- Average Unit Size GIA: 91.25 m²

Assumptions for industrial development:

- Typical small industrial: 20x40m with 16 m yard
- Typical medium industrial: 40x80m with 27 m yard

**Emerging development areas have been extracted from a 3d model built by KCA using the information from the planning submission and is therefore a rough approximation.*

1. Riverside (Multiple Land Owners)			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av.91.25 m² GIA)
Residential	45,182 m²	40,664 m²	446

2. RBG - Anchorage Point			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av.91.25 m² GIA)
Residential	20,340 m²	18,306 m²	200

Emerging Development Site

3. Hyde Riverside (As per planning submission) *			
Type of Use	Total GEA*	Total GIA (90%)*	No. of Homes
Residential	39,063 m²	35,157 m²	500

Emerging Development Site

4. Komoto Riverside (As per planning submission)*			
Type of Use	Total GEA*	Total GIA (90%)*	No. of Homes
Residential	46,504 m²	41,853 m²	500

Emerging Development Site

5. Komoto 2 (As per pre-app)*			
Type of Use	Total GEA*	Total GIA (90%)*	No. of Homes
Residential	21,577 m²	19,420 m²	280

Emerging Development Site

6. Hyde - New Lydenburg (as per Planning Submission)*			
Type of Use	Total GEA*	Total GIA (90%)*	No. of Homes
Residential	58,057 m²	52,251 m²	712

7. GLI			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av.91.25 m² GIA)
Residential	15,400 m²	13,860 m²	152

8. RBP			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av.91.25 m² GIA)
Residential	0		0

10. Neighbourhood Centre			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av.91.25 m² GIA)
Residential	50,301 m²	45,271 m²	496

11. JP Morgan			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av.91.25 m² GIA)
Residential	0		0

12. Weybourne - Dyson			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av.91.25 m² GIA)
Residential	44,449 m²	40,003 m²	438

13. RBG Penhall Road (Multiple Landowners)			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av.91.25 m² GIA)
Residential	185,543 m²	166,989 m²	1,830

Emerging Development Site

14. Optivo & Aitch + Ades (As per Planning)*			
Type of Use	Total GEA*	Total GIA (90%)*	No. of Homes
Residential	27,149 m²	24,434 m²	287 (249 + 38)

Emerging Development Site

15. Faraday Works (As per planning submission)*			
Type of Use	Total GEA	Total GIA	No. of Homes
Residential	31,225 m²	28,103 m²	359

CENTRAL AREA - NEW BUILDINGS

Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	361,468 m²	325,321 m²	3,565

EMERGING DEVELOPMENT

Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	*223,578 m²	*201,220 m²	2,638

SC1 - CENTRAL AREA TOTAL

Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	585,047 m²	526,542 m²	6,203

South-west Area Capacity



Assumptions for residential development:

- GEA to GIA: 90%
- Average Unit Size GIA: 91.25 m²

Assumptions for industrial development:

- Typical small industrial: 20x40m with 16 m yard
- Typical medium industrial: 40x80m with 27 m yard

9. xxx			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m ² GIA)
Residential	-	-	0

9A. Prudential + xx + xxx			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m ² GIA)
Residential	20,565 m ²	18,508 m ²	202

9B. ASDA			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m ² GIA)
Residential	45,942 m ²	41,347 m ²	453

9C. Blackrock			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m ² GIA)
Residential	31,868 m ²	28,681 m ²	314

9D. Barclays			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m ² GIA)
Residential	82,435 m ²	74,191 m ²	813

9E. MAKRO			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m ² GIA)
Residential	71,760 m ²	64,584 m ²	707

TOTAL RETAIL AREA - New Buildings			
Type of Use	GEA (m ²)	GIA 90% (m ²)	No. of Homes
Residential	252,570 m ²	227,313 m ²	2,491

Overall Figures

SC1 - CENTRAL AREA TOTAL			
Type of Use	GEA (m ²)	GIA 90% (m ²)	No. of Homes
Residential	585,047 m ²	526,542 m ²	6,203

SC1 - RETAIL AREA TOTAL			
Type of Use	GEA (m ²)	GIA 90% (m ²)	No. of Homes
Residential	252,570 m ²	227,313 m ²	2,491

OVERALL TOTAL SCENARIO 1			
Type of Use	GEA (m ²)	GIA 90% (m ²)	No. of Homes
Residential	837,618 m ²	753,856 m ²	8,694

Scenario 1 Aerial View



Scenario 1 - Aerial Sketch View

3.5 SCENARIO 2: CAPACITY STUDY

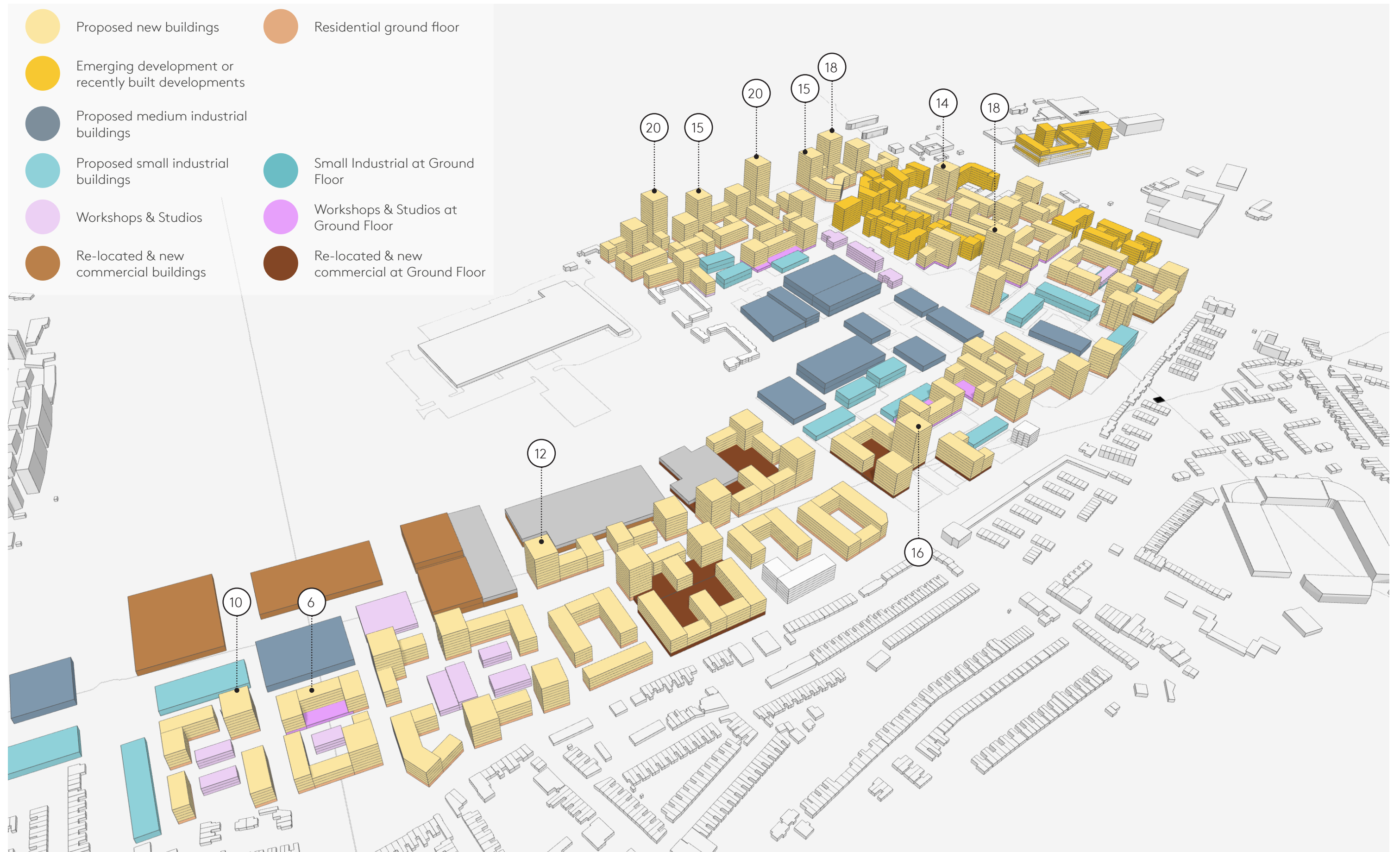
Approach

Scenario 2 partially retains existing emerging development (with planning approval, waiting for decision and in pre-planning discussions)

This scenario explores an alternative layout and massing along the river edge (Komoto's and Hyde's sites), and retains Hyde's & Komoto's proposals to the south of Herringham Road and the emerging developments along Westmoor Rd



Massing



Scenario 2 massing diagram indicating some number of storeys and types of uses

Central Area Capacity



Assumptions for residential development:

- GEA to GIA: 90%
- Average Unit Size GIA: 91.25 m²

Assumptions for industrial development:

- Typical small industrial: 20x40m with 16 m yard
- Typical medium industrial: 40x80m with 27 m yard

**Emerging development areas have been extracted from a 3d model built by KCA using the information from the planning submission and is therefore a rough approximation.*

***Note: Despite increasing GEAs, the total number of homes looks similar because emerging development proposals (by Hyde & Komoto) have different assumptions, like lack of allowance for a second staircase.*

***Unit mix on revised plots could be redefined to have more 1Beds*

1. Riverside (Multiple Land Owners)			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	45,182 m²	40,664 m²	446

2. RBG - Anchorage Point			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	20,340 m²	18,306 m²	200

Emerging Development Site

3. Hyde Riverside (REVISED)			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes
Residential	69,100 m²	62,190 m²	681

Emerging Development Site

4. Komoto Riverside (REVISED)			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes
Residential	51,539 m²	46,385 m²	508

Emerging Development Site

5. Komoto 2 (As per pre-app)*			
Type of Use	Total GEA*	Total GIA (90%)*	No. of Homes
Residential	21,577 m²	19,420 m²	280

Emerging Development Site

6. Hyde - New Lydenburg (as per Planning Submission)			
Type of Use	Total GEA*	Total GIA (90%)*	No. of Homes
Residential	69,660 m²	62,694 m²	712

7. GLI			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	15,400 m²	13,860 m²	152

8. RBP			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	0		0

10. Neighbourhood Centre			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	50,301 m²	45,271 m²	496

11. JP Morgan			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	0		0

12. Weybourne - Dyson			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	44,449 m²	40,003 m²	438

13. RBG Penhall Road (Multiple Landowners)			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	185,543 m²	166,989 m²	1,830

Emerging Development Site

14. Optivo & Aitch + Ades (As per Planning)*			
Type of Use	Total GEA*	Total GIA (90%)*	No. of Homes
Residential	27,149 m²	24,434 m²	287 (249 + 38)

Emerging Development Site

15. Faraday Works (As per planning submission)*			
Type of Use	Total GEA	Total GIA	No. of Homes
Residential	31,225 m²	28,103 m²	359

CENTRAL AREA - NEW BUILDINGS			
Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	482,107 m²	433,897 m²	4,755

EMERGING DEVELOPMENT			
Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	*134,257 m²	*120,831 m²	1,638

SC2 - CENTRAL AREA TOTAL			
Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	616,365 m²	554,728 m²	6,393**

Overall Figures

Scenario 2 retains the same approach on the Retail Area, so the overall figures are the following:

SC2 - CENTRAL AREA TOTAL			
Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	616,365 m²	554,728 m²	6,393**

2 - RETAIL AREA TOTAL			
Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	252,570 m²	227,313 m²	2,491

OVERALL TOTAL SCENARIO 2			
Type of Use	GEA (m²)	GIA 90%(m²)	No. of Homes
Residential	868,936 m²	782,042 m²	8,884



Photograph of physical model showing illustrative proposals for the Central Area in Scenario 2.

Key Changes

Scenario 1

Emerging Development Site

3. Hyde Riverside (As per planning submission) *			
Type of Use	Total GEA*	Total GIA (90%)*	No. of Homes
Residential	39,063 m²	35,157 m²	500

Emerging Development Site

4. Komoto Riverside (As per planning submission)*			
Type of Use	Total GEA*	Total GIA (90%)*	No. of Homes
Residential	46,504 m²	41,853 m²	500

Scenario 2

Emerging Development Site

3. Hyde Riverside (REVISED)			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes
Residential	69,100 m²	62,190 m²	681**

Emerging Development Site

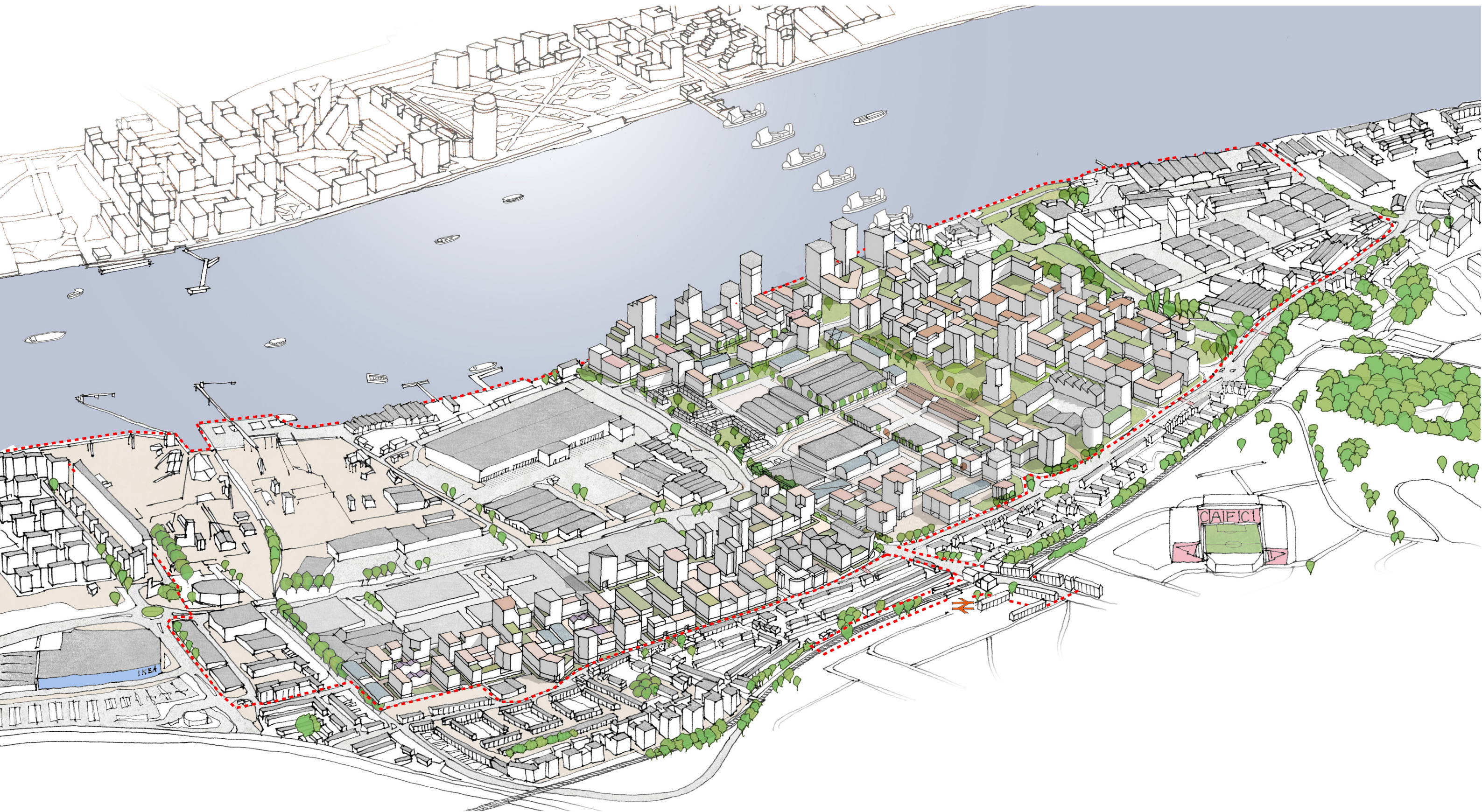
4. Komoto Riverside (REVISED)			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes
Residential	51,539 m²	46,385 m²	508**

**Emerging development areas have been extracted from a 3d model built by KCA using the information from the planning submission and is therefore a rough approximation.*

***Note: Despite increasing GEAs, the total number of homes looks similar because emerging development proposals (by Hyde & Komoto) have different assumptions, like lack of allowance for a second staircase.*

***Unit mix on revised plots could be redefined to have more 1Beds*

Scenario 2 Aerial View



Scenario 2 - Aerial Sketch View

3.6 SCENARIO 3: CAPACITY STUDY

Approach

Scenario 3 combines the land ownership areas along the river edge and Westmoor Street providing a comprehensive masterplan layout for the area marked in red

This scenario will require a partnership between land owners or significant land acquisition

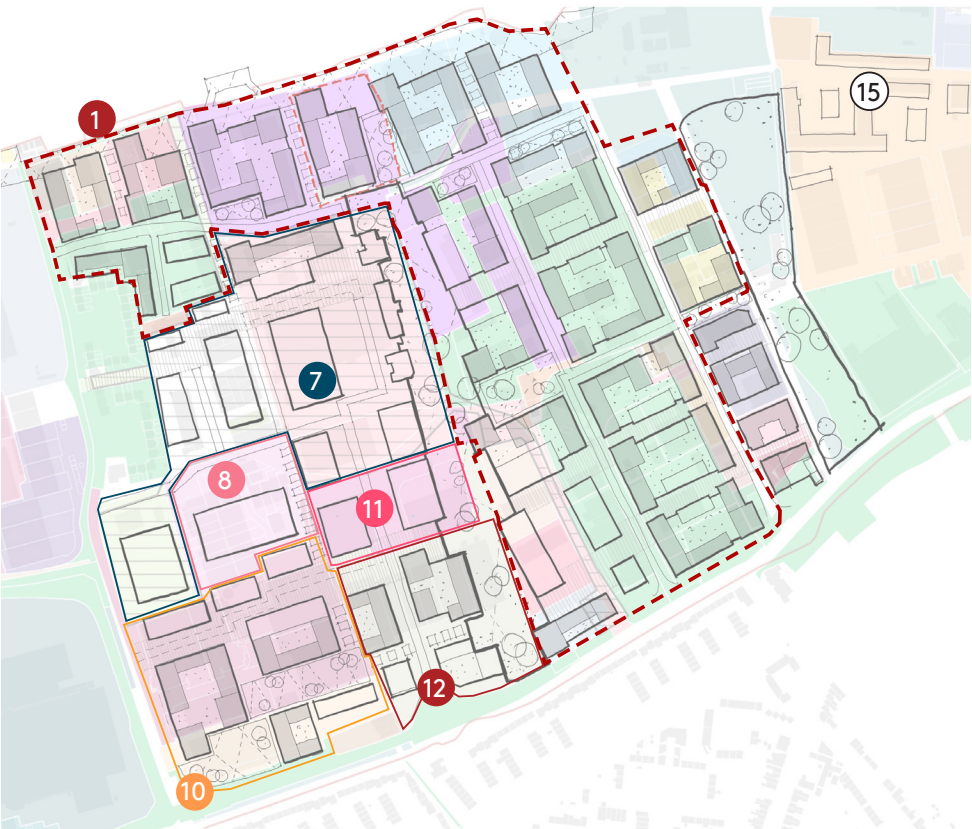


Massing



Scenario 3 massing diagram indicating some number of storeys and types of uses

Central Area Capacity



Assumptions for residential development:

- GEA to GIA: 90%
- Average Unit Size GIA: 91.25 m²

Assumptions for industrial development:

- Typical small industrial: 20x40m with 16 m yard
- Typical medium industrial: 40x80m with 27 m yard

1. Comprehensive Land Assembly - Partnership			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	445,631 m²	401,068 m²	4,395

7. GLI			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	15,400 m²	13,860 m²	152

8. RBP			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	0		0

10. Neighbourhood Centre			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	50,301 m²	45,271 m²	496

11. JP Morgan			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	0		0

12. Weybourne - Dyson			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	44,449 m²	40,003 m²	438

Emerging Development

Emerging Development Site

14. Optivo & Aitch + Ades (As per Planning)*			
Type of Use	Total GEA*	Total GIA (90%)*	No. of Homes
Residential	27,149 m²	24,434 m²	287 (249 + 38)

Emerging Development Site

15. Faraday Works (As per planning submission)*			
Type of Use	Total GEA	Total GIA	No. of Homes
Residential	31,225 m²	28,103 m²	359

CENTRAL AREA - NEW BUILDINGS

Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	555,550 m²	499,995 m²	5,481

EMERGING DEVELOPMENT

Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	*58,375 m²	*52,538 m²	646

SC3 - CENTRAL AREA TOTAL

Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	614,156 m²	552,740 m²	6,127**

*Emerging development areas have been extracted from a 3d model built by KCA using the information from the planning submission and is therefore a rough approximation.
**Note: Despite increasing GEA, the total number of homes looks similar because emerging development proposals (by Hyde & Komoto) have different assumptions, like lack of allowance for a second staircase.
**Unit mix on revised plots could be redefined to have more 1Beds



Photograph of model showing illustrative proposals for Central Area.

Overall Figures

Scenario 3 retains the same approach on the Retail Are, so the overall figures are the following:

SC3 - CENTRAL AREA TOTAL			
Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	614,156 m²	552,740 m²	6,127**

SC3 - RETAIL AREA TOTAL			
Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	252,570 m²	227,313 m²	2,491

OVERALL TOTAL SCENARIO 3			
Type of Use	GEA (m²)	GIA 90% (m²)	No. of Homes
Residential	866,727 m²	780,054 m²	8,618



Photograph of physical model showing illustrative proposals for the Central Area in Scenario 3.

Key Changes

Scenario 1

Addition of all plots within the Comprehensive Land Assembly area, including sites 1, 2, 3, 4, 5, 6 & 13.

Scenario 1 - Comprehensive Land Assembly Area*			
Type of Use	Total GEA*	Total GIA (90%)	No. of Homes
Residential	416,266 m²	374,639 m²	4,468

Scenario 2

Addition of all plots within the Comprehensive Land Assembly area, including sites 1, 2, 3, 4, 5, 6, & 13.

Scenario 2 - Comprehensive Land Assembly Area*			
Type of Use	Total GEA*	Total GIA (90%)	No. of Homes
Residential	462,941 m²	416,646 m²	4,657**

Scenario 3

1. Comprehensive Land Assembly - Partnership			
Type of Use	Total GEA	Total GIA (90%)	No. of Homes (Av. 91.25 m² GIA)
Residential	445,631 m²	401,068 m²	4,395**

**Emerging development areas have been extracted from a 3d model built by KCA using the information from the planning submission and is therefore a rough approximation.*

***Note: Despite increasing GEAs, the total number of homes looks similar or reduced because emerging development proposals (by Hyde & Komoto) have different assumptions, like lack of allowance for a second staircase.*

***Unit mix on revised plots could be redefined to have more 1Beds*

3.7 CONCLUSIONS

- The figures in this capacity study are indicative and area-based, the design team has used typical floor plans from other built projects as reference, but the designs will need to be refined further.
- The masterplan also assumes an average unit size that will change once the mix is defined.
- The first 2 scenarios include emerging development proposals that should be reviewed following recent changes to the building regulations e.g.. a second staircase for buildings over 6 storeys.
- These updates will have an impact on the number of units, and/or building footprint.
- Because of these required updates, Scenario 3, by only retaining the development currently being built along Eastmoor Street, is the most realistic.
- Scenario 3 combines multiple land ownerships in a comprehensive land assembly approach, and this should be considered from a delivery perspective.
- Together with Deloitte, the design team is developing a delivery strategy, explained later in this report, and it was agreed that a consolidated approach in the central area would be most beneficial.
- Deloitte have worked on a potential land assembly options for the central area as part of their scope, separate from this document.



Photograph of physical model showing illustrative proposals for the Central Area in Scenario 3.

Scenario 3 Aerial View



Scenario 3 - Aerial Sketch View

4. CAPACITY STUDY – EMPLOYMENT

4.1 APPROACH

Capacity study structure

The Stage 2 industrial capacity study aimed to validate the assumptions made in Stage 1 and test employment floorspace and job numbers generated by the Stage 2 concept masterplan Scenarios 1 and 3. Scenario 2 was not tested, as employment space was the same as the one proposed within Scenario 1.

Overall, the capacity study aimed to determining the minimum quantum of stacking required to meet the job targets, and which is the appropriate mix of workspace typologies that need to be retained to support Charlton Riverside's growth as an employment location.

For concept masterplan Scenario 1, three levels of stacked industrial provision were been tested:

- Scenario 1.1 - Minimum stacking
- Scenario 1.2 - Medium stacking
- Scenario 1.3 - Maximum stacking

Scenario 3 retains most of the industrial spaces proposed as part of Scenario 1, therefore only one test has been carried out for this Scenario ('maximum stacking').

Each Scenario indicates the areas where stacking and intensification are recommended in order to meet the target of additional 1,000 jobs.

Methodology and assumptions

The following assumptions were made to calculate the job numbers generated by proposed development.

Employment numbers

Net additional employment was estimated by dividing NIA by floorspace per FTE from HCA employment density guide:

- Workshops/studios:
E(g) (iii): 40 FTE
- Small industrial:
B2/B8/E(g) (iii): 47FTE
- Medium industrial:
B2/B8: 70 FTE

Floorspace ratios

- GEA to GIA: 0.95
- GIA to NIA: 0.8
- Note: the HCA's employment density guide suggests a ratio of 0.85 to convert GIA into NIA. To ensure that numbers are not over-estimated, a ratio of 0.8 was used instead.



Proposed concept masterplan Scenario 1 considers that the mixed-use developments proposed as part of the ongoing planning applications along the river front are retained.



Proposed concept masterplan Scenario 3 proposes a redesign of the areas currently undergoing planning process, in favour of a more comprehensive redevelopment of the river front (highlighted in red above).

4.2 SCENARIO 1: CAPACITY STUDY

Scenario 1.1 - Minimum stacking

This scenario assumed that all the small and medium industrial units are single storey units.

Only workshop spaces, which are easily 'stackable', have been considered stacked across three storeys (with the exception of those located to the ground floor of residential blocks).

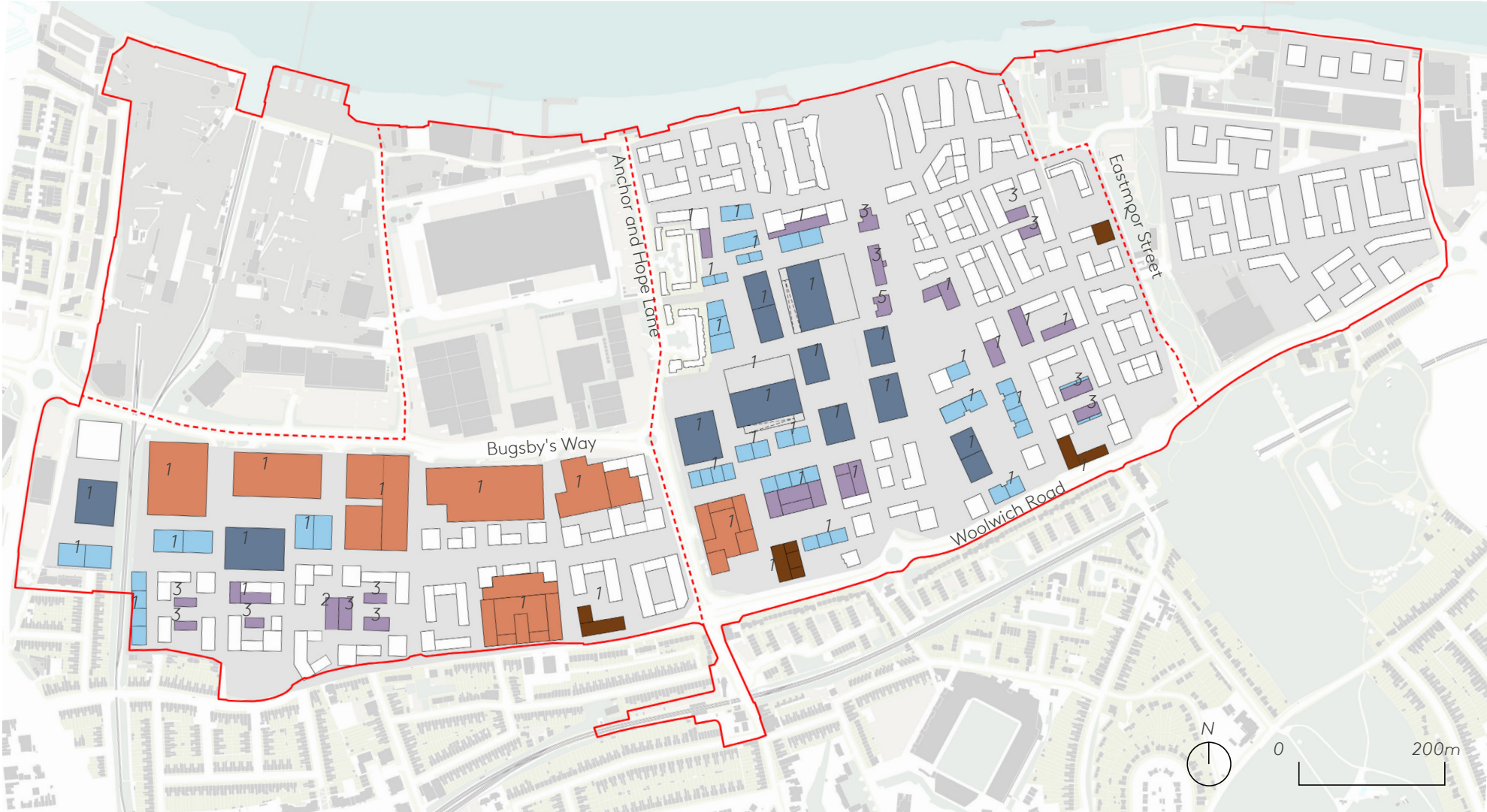
Small and medium industrial units across one storey are typologies usually delivered by the market - this employment scenario represents a viability-oriented option.

The capacity testing demonstrates that the proposed mix of employment space typologies does not meet the job numbers target defined in the London Plan 2021.

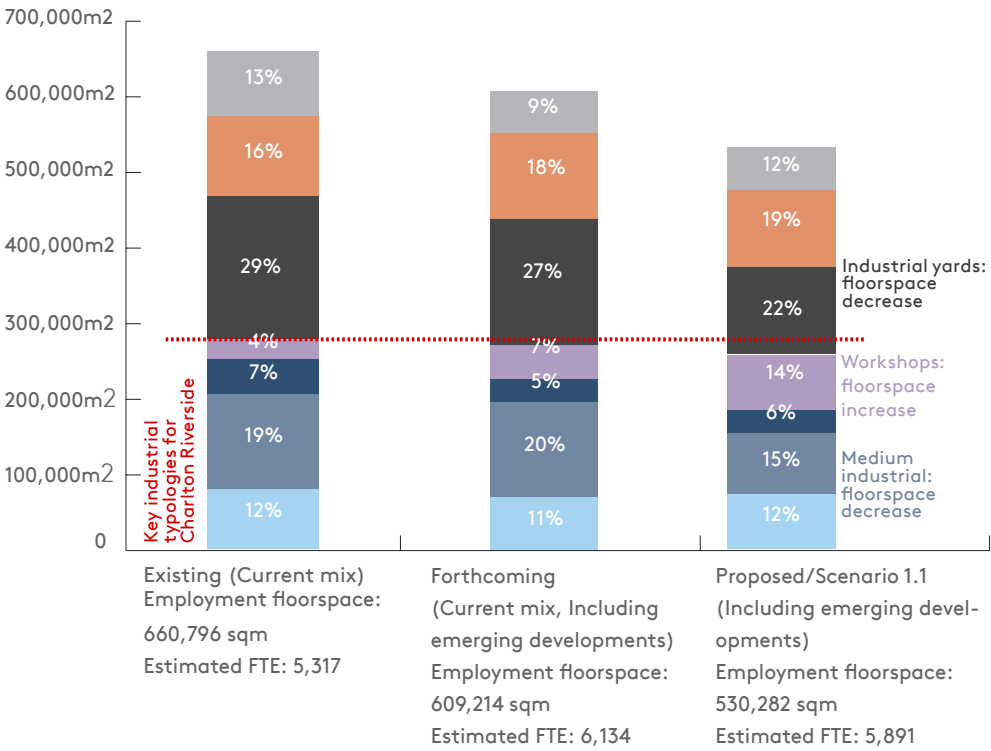
There is also an overall net loss of employment floorspace from the existing provision, primarily through loss of industrial yards (considered less suitable to be co-located within/in proximity of residential areas) and through some medium industrial spaces.

The overall floorspace of key typologies for Charlton Riverside (small, medium, large industrial and workshop spaces) sees a slight decrease from existing provision, and the mix is rebalanced in favour of workshop spaces, which typically deliver higher density employment than small and medium industrial spaces.

A further floorspace increase of small to medium industrial spaces would be desirable to respond to current and future market trends and industrial space needs, as highlighted within the Charlton Riverside Employment and Growth Strategy (2021).



Proposed distribution of workspace typologies



- Key**
- Workshop / studios (10 - 500 sqm footprint)
 - Small industrial space (< 1000 sqm footprint)
 - Medium industrial space (1000 - 5000 sqm footprint)
 - Large industrial space (> 5000 sqm footprint)
 - Retained and relocated retail units
 - Commercial/Other
 - 3 Number of floors
 - Site boundary
 - Sub-area boundary

Proposed new jobs
2,399 FTE
163,937 sqm

Overall proposed jobs (including existing and planning applications)
5,891 FTE
(426 shortfall to target / 831 net gain)
530,282 sqm

Area	Large ind	Medium ind	Small ind	Workshop	Big box Ret	Commercial	TOT FTE	TOT GEA
Multiple-Riverside	0	0	0	0	0	0	0	
RBG Penhall Rd	0	2,220	6,960	7,725	0	2,065	414	
Weybourne	0	0	0	1,748	0	0	33	
JP Morgan	0	4,440	0	0	0	0	63	
Neighbourhood Centre	0	0	6,018	2,765	5,970	1,800	314	
RBP	0	4,300	0	0	0	0	61	
GLI	0	13,688	3,126	11,319	0	0	443	
RBG Anchorage Point	0	0	2,643	560	0	0	53	
Retail Area	0	4,680	6,700	9,996	58,595	1,170	934	
Retail Area (west)	0	3,250	2,200	0	0	0	82	
TOT GEA	0	32,578	27,647	34,113	64,565	5,035	2,399	163,937

Summary of proposed new employment space by area

Scenario 1.2 - Medium stacking

In this scenario, the provision of small and medium industrial spaces was increased by stacking units in industrial-led areas.

Stacking was provided for:

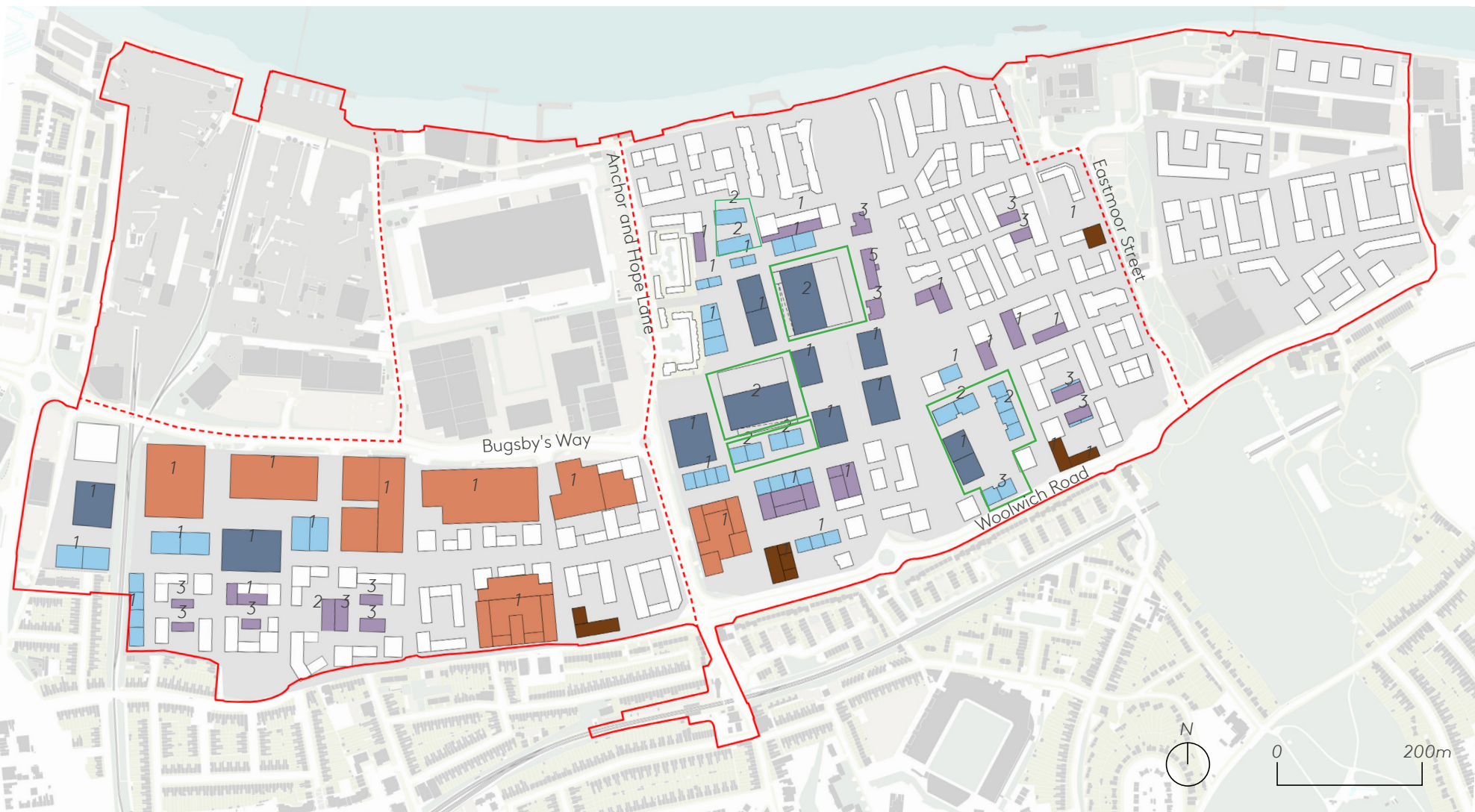
- Larger units which could be serviced by an HGV ramp
- Small units which are more easily serviced by a goods lift
- For larger units, where stacking would not be in close proximity with residential buildings.

The capacity testing demonstrates that the proposed mix of employment space provides additional 257 jobs to Scenario 1.1, getting significantly closer to the jobs target (169 jobs shortfall).

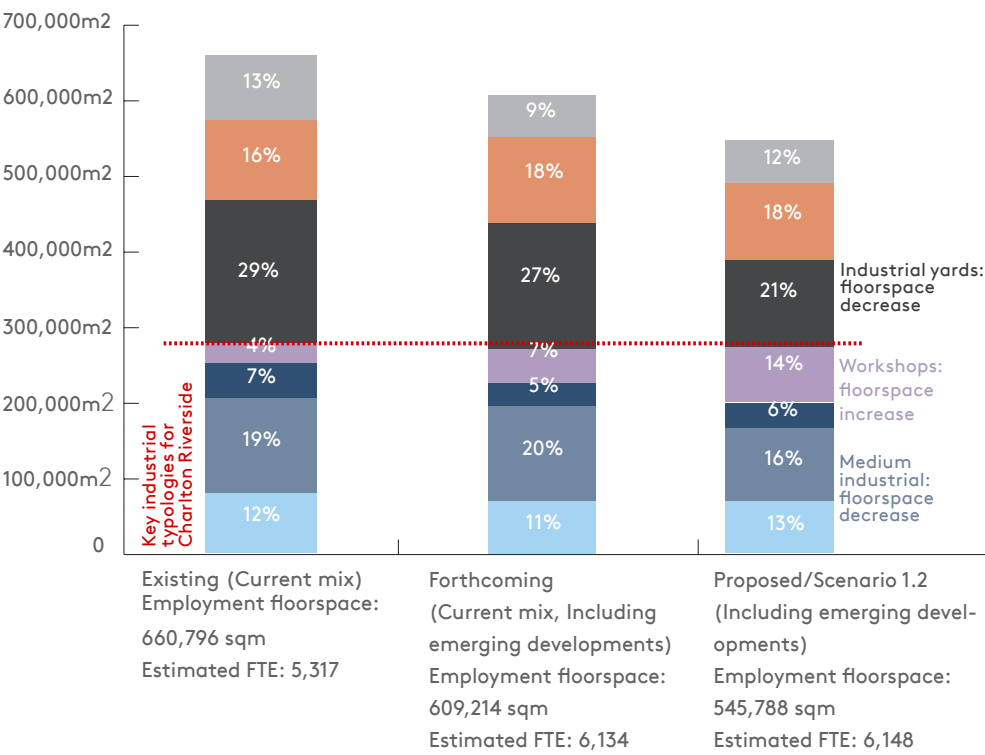
There is also an overall loss of employment floorspace if comparing this scenario to the existing condition, primarily through loss of industrial yards (considered less suitable to be co-located within/in proximity of residential areas) and some medium industrial spaces.

The floorspace of key typologies for Charlton (small, medium, large industrial and workshop spaces) is similar in overall quantum if compared to the existing condition, but it is strongly rebalanced in favour of workshop spaces. Despite the growing demand for this typology, further increase of small and medium industrial spaces would be needed to provide flexibility to the type of uses that can be accommodated.

If compared with the previous scenario (1.1), scenario 1.2 sees an increase of medium industrial spaces, which makes the overall typology mix more favourable than the previous scenario. This is due to the addition of stacked units within medium industrial sites. Nonetheless, a further increase of small and medium typologies would be desirable.



Proposed distribution of workspace typologies



Comparison of industrial floorspace quantum and breakdown by typology

- Key**
- Workshop / studios (10 - 500 sqm footprint)
 - Small industrial space (< 1000 sqm footprint)
 - Medium industrial space (1000 - 5000 sqm footprint)
 - Large industrial space (>5000 sqm footprint)
 - Retained and relocated retail units
 - Commercial/Other
 - Number of floors
 - Areas for intensification
 - Site boundary
 - Sub-area boundary

Proposed new jobs
2,656 FTE
180,793 sqm

Overall proposed jobs (including existing and planning applications)
6,148 FTE
(169 shortfall to target / 831 net gain)
545,788 sqm

Area	Large ind	Medium ind	Small ind	Workshop	Big box Ret	Commercial	TOT FTE	TOT GEA
Multiple-Riverside	0	0	0	0	0	0	0	
RBG Penhall Rd	0	2,220	11,920	7,725	0	2,065	494	
Weybourne	0	0	0	1,748	0	0	33	
JP Morgan	0	4,440	0	0	0	0	63	
Neighbourhood Centre	0	0	6,648	2,765	5,970	1,800	346	
RBP	0	8,600	0	0	0	0	123	
GLI	0	17,511	3,126	11,319	0	0	498	
RBG Anchorage Point	0	0	4,435	560	0	0	82	
Retail Area	0	4,680	6,700	9,996	58,595	1,170	934	
Retail Area (west)	0	3,250	2,200	0	0	0	82	
TOT GEA	0	40,701	35,029	34,113	64,565	5,035	2,656	180,793

Summary of proposed new employment space by area

Scenario 1.3 - Maximum stacking

In order to increase overall employment floorspace provision and meet the job number target, this scenario assumed that the provision of stacked industrial units was maximised across the whole site.

In addition to the locations identified with scenario 1.2, further units within the GLI area and within the Retail Area West were stacked.

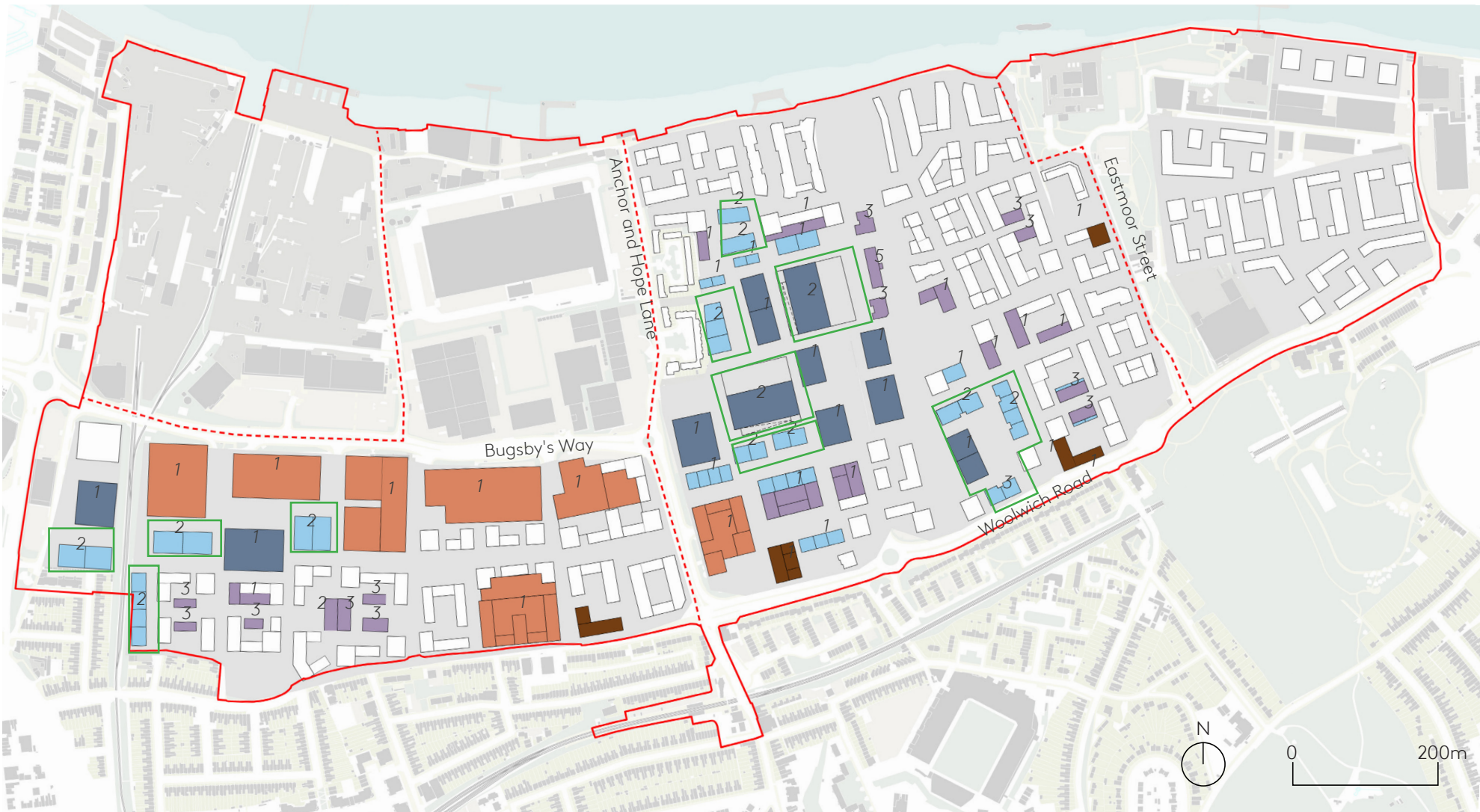
The capacity testing demonstrates that the proposed mix of employment space meets the jobs target.

However, this scenario would be challenging in terms of viability and delivery, given the high amount of stacked industrial units. These are relatively 'high-risk' and new industrial typologies which require increased levels of initial investment due to higher construction costs and are often less attractive to businesses due to high rents, despite their high level of efficiency in providing industrial floorspace and being very suitable for industrial intensification.

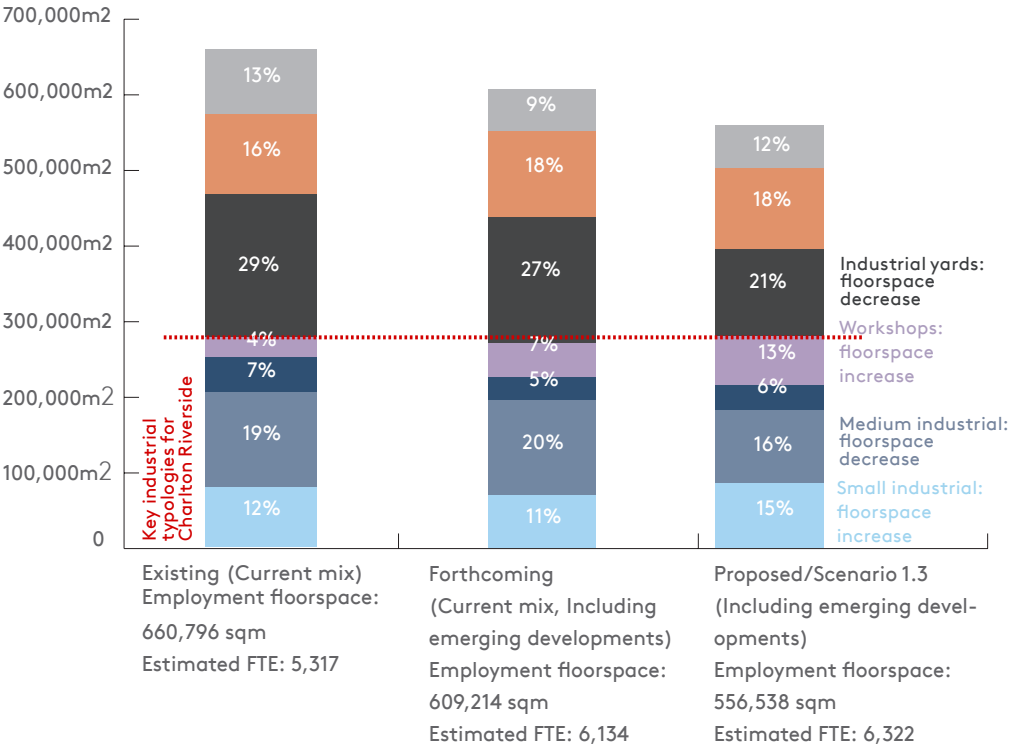
This scenario sees an overall loss of employment floorspace if compared to the existing condition, primarily through loss of industrial yards (considered less suitable to be co-located within/in proximity of residential areas).

The overall floorspace of key typologies for Charlton Riverside (small, medium, large industrial and workshop spaces) is approximately the same if compared to the existing, but it is rebalanced in favour of workshop spaces.

If compared with Scenario 1.2, Scenario 1.3 sees a further increase of small industrial spaces, resulting in a favourable typology mix. This is due to the addition of stacked units within small industrial plots to the west of the site.



Proposed distribution of workspace typologies



- Key
- Workshop / studios (10 - 500 sqm footprint)
 - Small industrial space (< 1000 sqm footprint)
 - Medium industrial space (1000 - 5000 sqm footprint)
 - Large industrial space (>5000 sqm footprint)
 - Retained and relocated retail units
 - Commercial/Other
 - Number of floors
 - Areas for intensification
 - Site boundary
 - Sub-area boundary

Proposed new jobs
2,830 FTE
191,543 sqm

Overall proposed jobs (including existing and planning applications)
6,322 FTE
(Jobs target met /1005 jobs net gain)
556,538 sqm

Area	Large ind	Medium ind	Small ind	Workshop	Big box Ret	Commercial	TOT FTE	TOT GEA
Multiple-Riverside	0	0	0	0	0	0	0	
RBG Penhall Rd	0	2,220	11,920	7,725	0	2,065	494	
Weybourne	0	0	0	1,748	0	0	33	
JP Morgan	0	4,440	0	0	0	0	63	
Neighbourhood Centre	0	0	6,648	2,765	5,970	1,800	346	
RBP	0	8,600	0	0	0	0	123	
GLI	0	17,511	4,976	11,319	0	0	528	
RBG Anchorage Point	0	0	4,435	560	0	0	82	
Retail Area	0	4,680	13,400	9,996	58,595	1,170	1042	
Retail Area (west)	0	3,250	4,400	0	0	0	118	
TOT GEA	0	40,701	45,779	34,113	64,565	5,035	2,830	191,543

4.3 SCENARIO 3: CAPACITY STUDY

Scenario 3 - Maximum stacking

Similarly to scenario 1.3, this scenario assumed that the provision of stacked industrial units was maximised across the whole site.

The testing demonstrates that, with maximised provision of stacked industrial space, the job numbers target established in Stage 1 is almost met, with underprovision of 300 jobs.

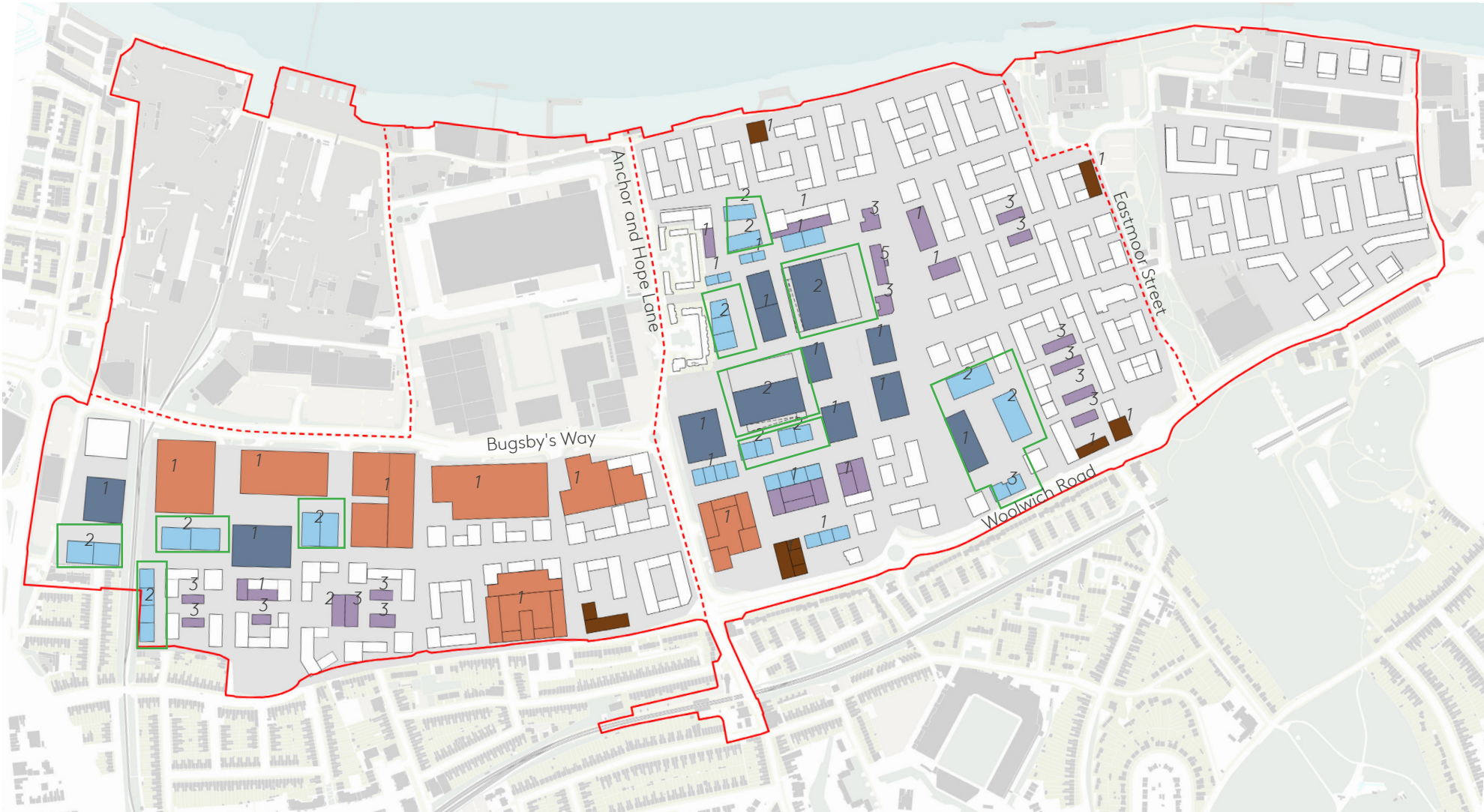
Differently from masterplan scenario 1, despite maximising the amount of stacking, masterplan scenario 3 doesn't fully meet the additional 1,000 jobs target. This is because this scenario proposes a reallocation of a portion of workspaces in favour of more residential space particularly along the river front.

In terms of industrial typology mix, this scenario proposes a similar mix to scenarios 1.1, 1.2, 1.3, but with a slight decrease in workshop space (due to the proposed changes of forthcoming planning applications in favour of more residential space).

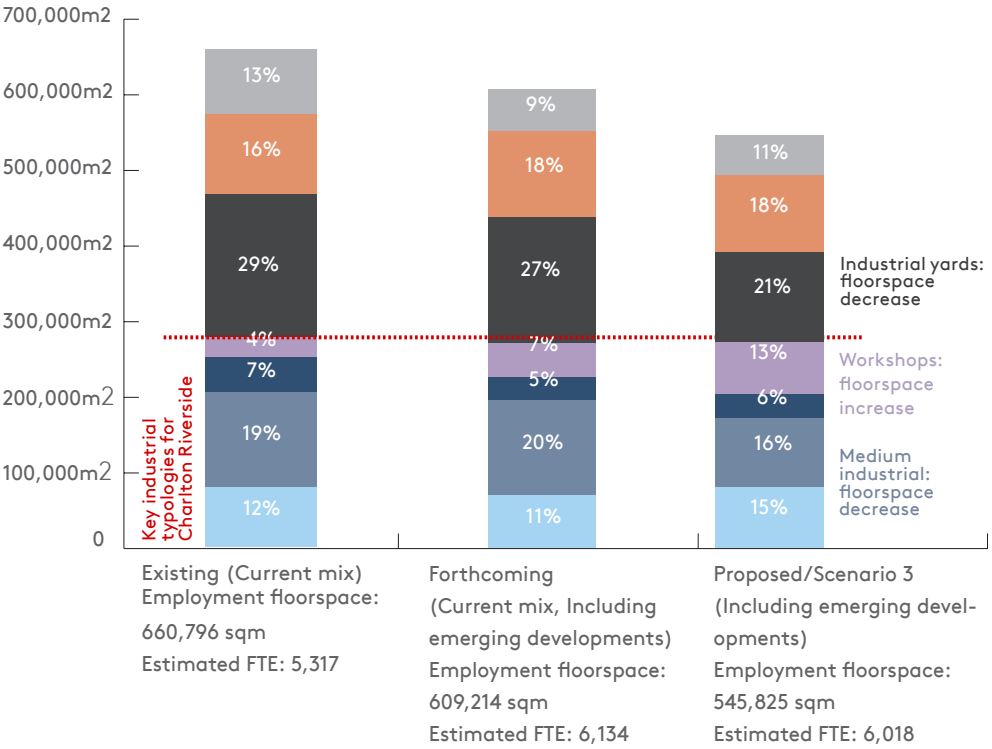
Scenario 3 sees an overall loss of employment floorspace if compared to the existing, primarily through loss of industrial yards (considered less suitable to be co-located within/in proximity of residential areas).

The overall floorspace of key typologies for Charlton (small, medium, large industrial and workshop spaces) is approximately the same if compared to the existing, but it is rebalanced in favour of workshop spaces.

If compared with Scenario 1.3, Scenario 3 sees a slight decrease of small industrial spaces.



Proposed distribution of workspace typologies



Comparison of industrial floorspace quantum and breakdown by typology



Proposed new jobs

2,927 FTE
195,437 sqm

Overall proposed jobs (including existing and planning applications)

6,081 FTE
(299 shortfall to target / 701 net gain)
545,825 sqm

Area	Large ind	Medium ind	Small ind	Workshop	Big box Ret	Commercial	TOT FTE	TOT GEA
Hyde Riverside + Komo	0	0	0	0	0	1,600	101	
RBG Penhall Rd	0	2,220	11,720	10,310	0	1,974	535	
Weybourne	0	0	0	1,748	0	0	33	
JP Morgan	0	4,440	0	0	0	0	63	
Neighbourhood Centre	0	0	7,998	2,765	5,970	1,800	346	
RBP	0	8,600	0	0	0	0	123	
GLI	0	17,511	4,976	11,319	0	0	528	
RBG Anchorage Point	0	0	4,435	560	0	0	82	
Retail Area	0	4,680	13,400	9,996	58,595	1,170	998	
Retail Area (west)	0	3,250	4,400	0	0	0	118	
TOT GEA	0	40,701	46,929	36,698	64,565	6,544	2,927	195,437

Summary of proposed new employment space by area

4.4 CONCLUSIONS

Conclusions and recommendations

Stage 1 and Stage 2 comparison

Stage 2 proposals have seen an overall reduction in the number of jobs and employment floorspace if compared to Stage 1 proposals. Comparing the design development of the two stages, it is apparent how certain areas have been challenged by the need of balancing the homes targets with the jobs targets.

The areas highlighted to the side, show the main areas where there has been a significant reduction in the provision of small and medium industrial space. This explains the lower numbers in terms of FTE and employment floorspace that are achieved with Stage 2.

Despite the overall employment floorspace loss, the quantum of the typologies identified as key for Charlton Riverside's growth as an employment hub (workshops and small to medium industrial units), have been maintained across all scenarios, if comparing the proposals to the existing.

Meeting the job targets

The medium-stacking of Scenario 1.2 seems to offer a better balance between delivering against job targets and a viable proposition which does not rely solely on stacked industrial spaces.

In order to meet the job targets and increase overall industrial floorspace, Scenario 1.2 should either:

- **Re-allocate residential space.** To meet the job targets, an area equivalent to approximately 3ha (illustrated opposite) would need to be reallocated, or
- **Increase the amount of stacking in suitable areas,** moving towards Scenario 1.3.

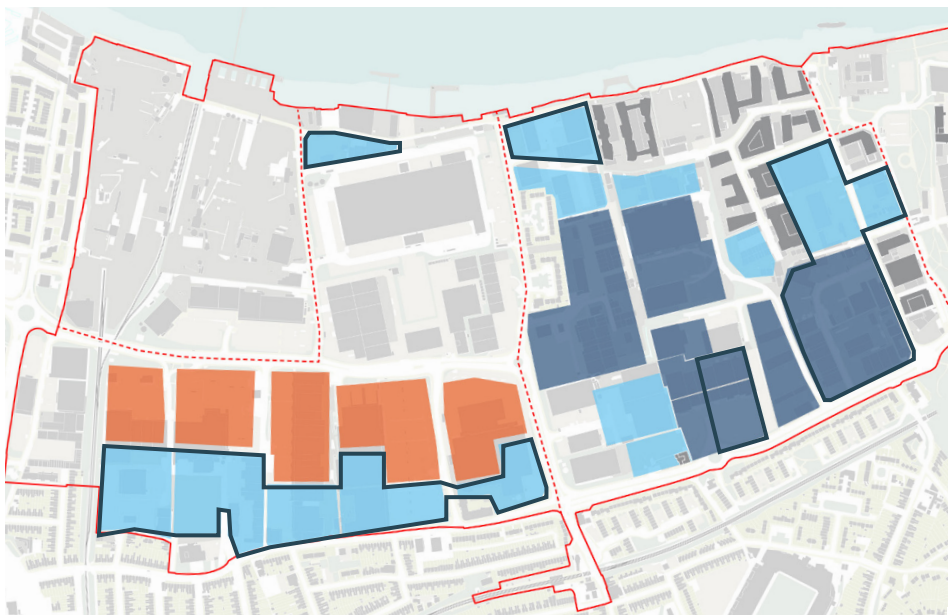
In the longer term, the masterplan could retain flexibility to determine the appropriate approach to delivering employment, depending on market and political conditions, and whether moving towards further stacking (Scenario 1.3) or towards reallocation of residential space.

Next steps

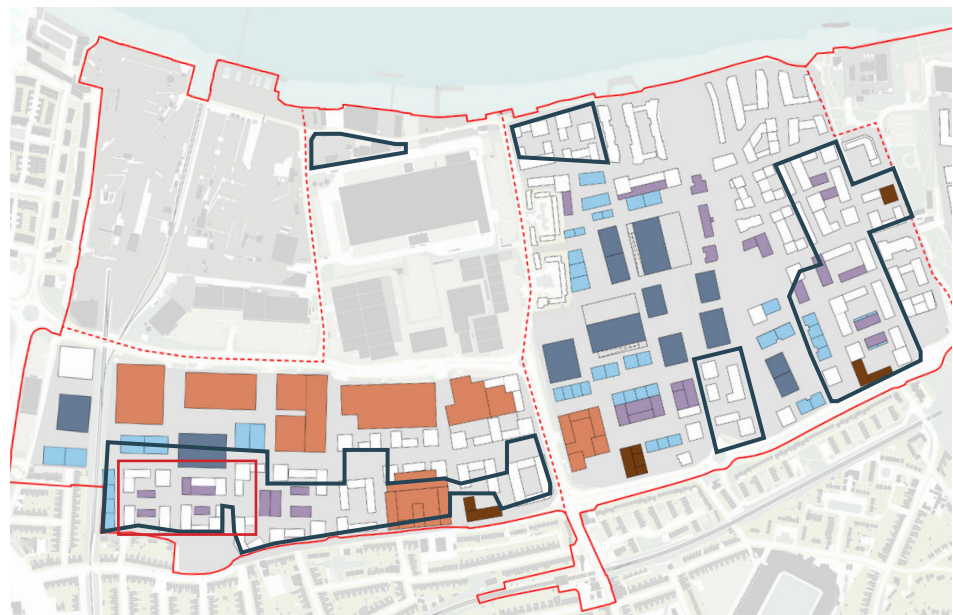
It is recommended that RBG undertakes the following next steps:

- Undertake a revised audit of the existing businesses to gather the latest data in terms of job numbers and employment floorspace, and revise the concept masterplan accordingly
- Consider the implementation of a Locally Significant Industrial Site (LSIS) within the proposed development in phase 1, to protect the delivery of the core industrial-led plots
- Undertake a feasibility study to test the relocation of Riverside Wharf
- Undertake a borough-wide strategy for decant and relocation of industrial uses that are not appropriate for co-location
- Develop the Phase 1 masterplan to further level of detail (RIBA 2) to test the proposed design.

Stage 1 and 2 comparison



Proposed distribution of new built workspace typologies as part of Stage 1 (new proposed developments only)



Workspace typologies distribution proposed as part of Stage 2 - Scenario 1.2

- Areas identified for industrial uses within Stage 1 that saw a high proportion of space reallocated to residential use during Stage 2
- Approximate area which should be reallocated to industrial uses in order to meet the job targets

Scenarios summary

Scenario 1.1 (minimum stacking)

5,891 FTE
426 jobs target shortfall
574 jobs net gain

The employment space delivered by single storey industrial units across the area is significantly lower than the London Plan targets.

However, this scenario reflects more deliverable - market-facing typologies (single storey industrial sheds).

To increase the employment space and job numbers delivered, there would need to be a significant reallocation of the proposed residential space into larger industrial-led areas.

Scenario 1.2 (medium stacking)

6,148 FTE
169 jobs shortfall
831 jobs net gain

This scenario proposes stacked industrial space in key locations, to increase the quantum of light/medium industrial typologies and the job numbers.

The job number target is still unmet, however the provision of a number of stacked units in the short term would seem a sensible solution to safeguard job numbers and small to medium industrial spaces and respond to the projected industrial space demand.

Scenario 1.3 (maximum stacking)

6,322 FTE
Jobs target met
1005 jobs net gain

To meet both housing and employment targets, a scenario where most of the industrial space is stacked is needed.

This scenario presents the most desirable option in terms of workspace typologies mix and jobs delivered, however, it could be challenging in terms of viability and deliverability.

Scenario 3 (maximum stacking)

6,018 FTE
299 jobs shortfall
701 jobs net gain

Despite maximising the provision of stacked units, if compared to scenarios 1.2 and 1.3, this scenario sees a decrease in job numbers due to the loss of some commercial and workshop space.

This is due to the introduction of a comprehensive residential area which replaces the forthcoming developments under planning application, and related reallocation of some commercial and workshop spaces into housing.

5.DELIVERY STRATEGY

5.1 APPROACH

The design team in collaboration with RBG and Deloitte refined a delivery strategy for Charlton Riverside including the following:

1. Revision of the infrastructure requirements and costs listed in the SPD to understand which are still relevant and which should be redefined
2. Identify a development area that could be delivered first including significant quantum of homes and employment as well as the delivery of key infrastructure that would unlock or encourage future development in the area.
3. Define an indicative phasing strategy

In parallel, Deloitte have looked at the delivery strategy from a viability perspective looking at land assembly opportunities. Their work has informed the preferred strategy presented in this report, but any decision on land assembly assumptions will have an effect on the delivery strategy.

The design team also identified potential early interventions and meanwhile uses as a potential, less interventionist delivery strategy.

Stockdale developed a high-level cost study for key infrastructure within the development area. This costing exercise only included external works and infrastructure, and will be included as an appendix to this report.

Development costs including any works done within building plots (including residential and non residential buildings) were covered in Deloitte's report.

5.2 SPD INFRASTRUCTURE REQUIREMENTS

The SPD included some site-wide key interventions with indicative associated costs.

The team has reviewed these as follows:

Infrastructure requirements		Approx. cost
New Primary Road infrastructure, including upgrades and improvements to Woolwich Road and the delivery of the East-West Route	1 2	£10.5m*
Flood defence improvements, as per TE2100 document, including an enhanced Thames Path	3	£7m
Education provision, including 2 new primary schools and 2 secondary schools	4	£105m
Green infrastructure	5	£26m
Green connection between Maryon Park and Charlton Riverside Park	6	£0.75-12m
New Thames Clipper Pier	7	£3m
Utilities, including off-site reinforcement of the networks	8	£54m
Drainage, including surface water and foul	9	£14m
Community investment, including health provision, sports and leisure, early years' education, waste management	10	£98m
Total		£318m-330m

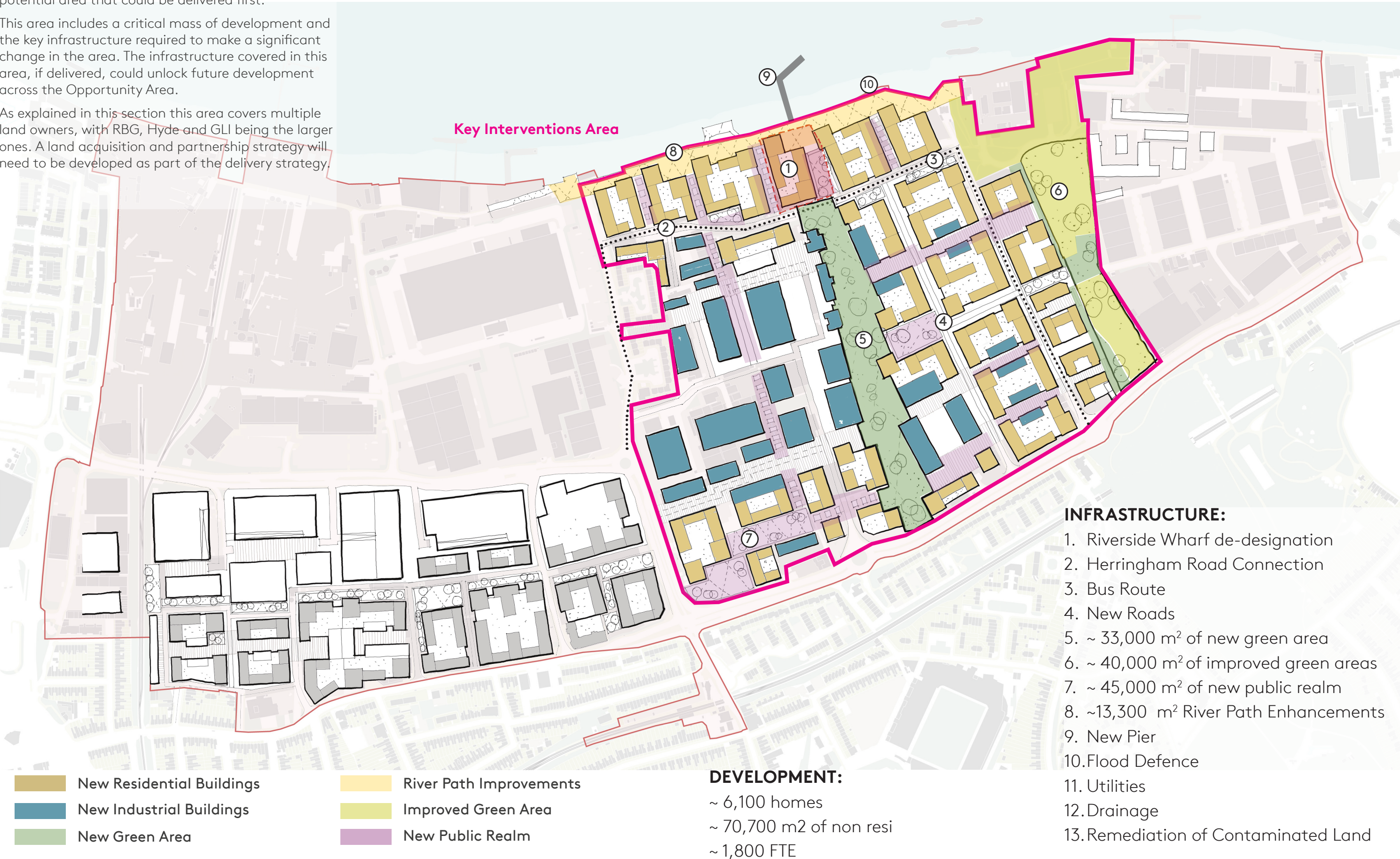
1. Central East-West Road is no longer required as defined in the SPD. Herringham Road to be the primary East-West route. Costs should include extension & improvements of the road as well as a new bus route infrastructure & service.
2. Woolwich Road Improvements being delivered by TfL
3. These will be included and re-costed for the updated masterplan
4. Education provision has been confirmed by RBG, see page 19 of this report for more detail
5. Green Infrastructure requirements explained in the following pages
6. Green Connection between Maryon Park and Charlton Riverside Park (bridge) not required
7. Becket Rankine has reviewed the indicative cost of a new pier and estimated it ca. £12M
8. Utility requirements as per LHE report (see Annex)
9. Drainage Requirements as per LHE report (See Annex)
10. NHS confirmed required provision for the emerging masterplan, see page 19 for more information

5.3 KEY DEVELOPMENT SITE

The Design Team together with Deloitte identified a potential area that could be delivered first.

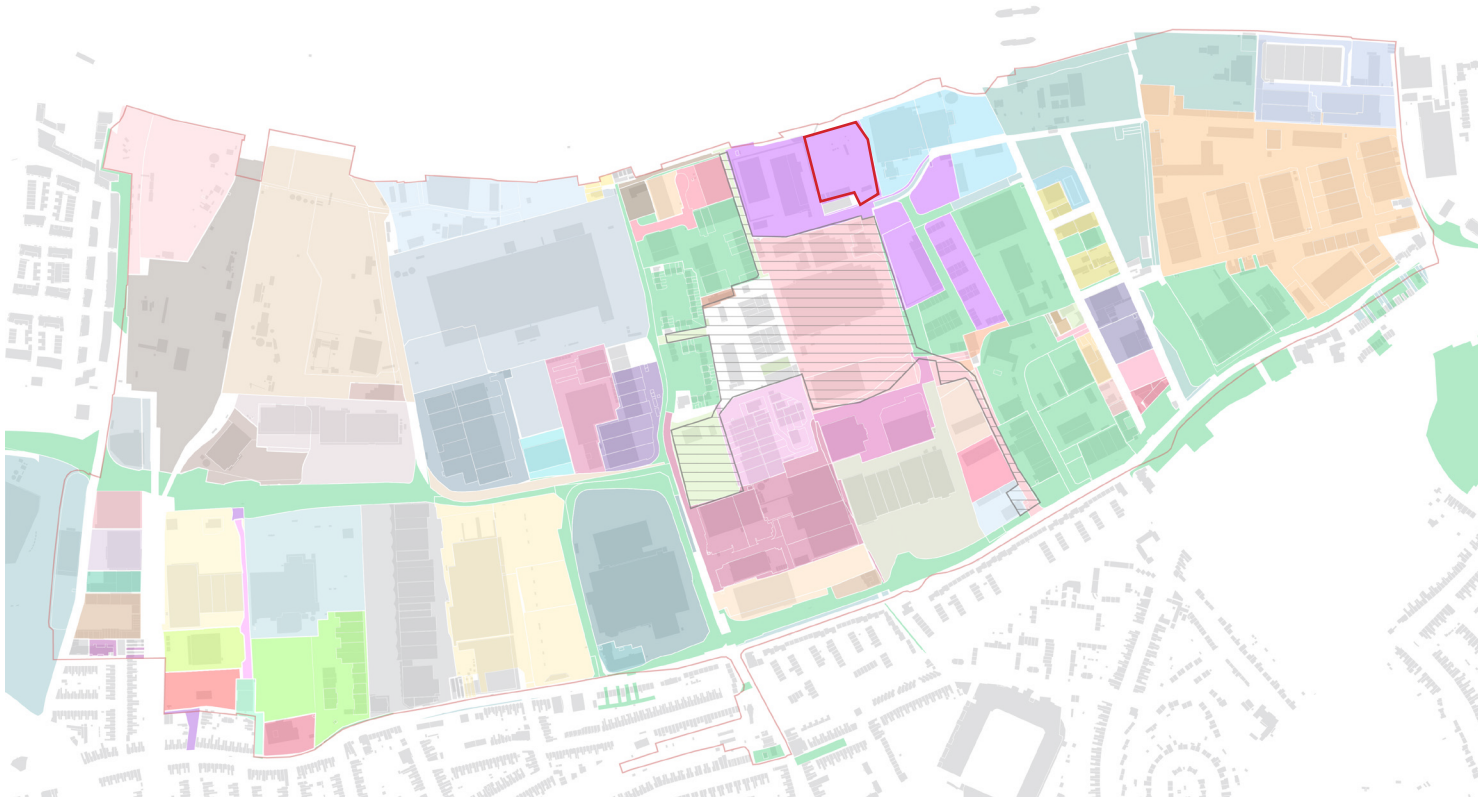
This area includes a critical mass of development and the key infrastructure required to make a significant change in the area. The infrastructure covered in this area, if delivered, could unlock future development across the Opportunity Area.

As explained in this section this area covers multiple land owners, with RBG, Hyde and GLI being the larger ones. A land acquisition and partnership strategy will need to be developed as part of the delivery strategy.



5.4 INFRASTRUCTURE: RIVERSIDE WHARF

Description



RIVERSIDE WHARF

Description:

- Owner: Homebuilding Partnership (HYDE)
- Area: 8,609 m²
- No direct access to the water
- Located in a future residential area

Consideration: Potential de-designation

The wharf sits at the heart of a designated opportunity area, dividing and compromising potential opportunities for residential development and public realm improvements.

The wharf is likely to become vacant in the following 2 years, so there is an opportunity to de-designate it as protected wharf allowing a residential development that provides continuity and pedestrian priority along the river path and ensuring maximum quality along the river edge.

LPA also confirmed that London Plan Policy SI 15 Water transport has a clause related to wharves that is relevant to this project:

The Mayor will keep the network of safeguarded wharves under regular review. Boroughs should protect existing locations and identify new locations for additional waterborne freight. There may be opportunities to consolidate wharves as part of strategic land use change, in particular, within Opportunity Areas; these will need to ensure that the existing and potential capacity and operability of the safeguarded wharves is retained and where possible expanded.

The design team also suggested the potential of re-locating the protected designation to other active wharfs in the area. Both approaches need to be discussed with GLA and PLA as a priority.



Aerial Photograph showing protected wharf location

5.5 INFRASTRUCTURE: ROADS & BUS ROUTES

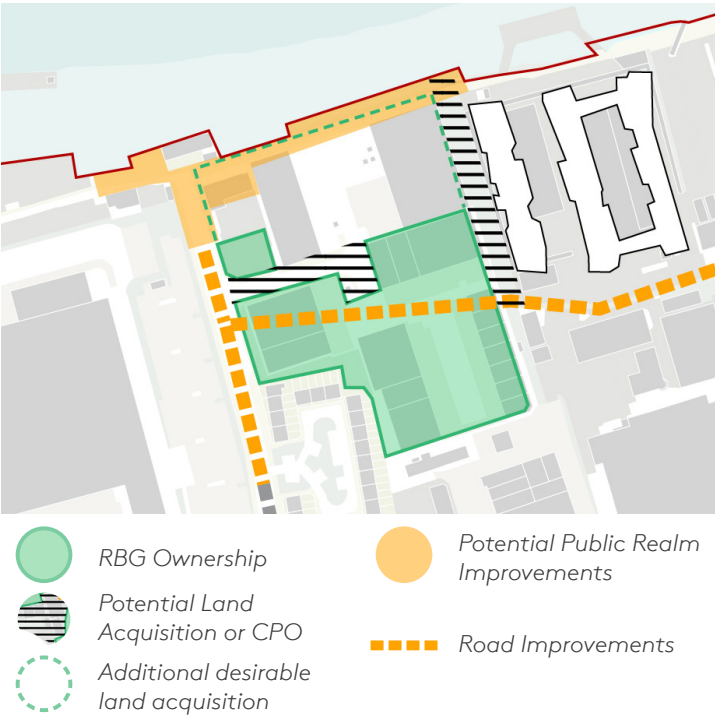
Herringham Road Extension & New Bus Route

Herringham Road has the potential to become the main east-west link between Anchor & Hope Lane and Westmoor Street.

This route could be connected through RBG's land with minimal land acquisition required, immediately improving the site's permeability and opening the possibility to introducing access to public transport.

There is an opportunity to introduce a bus route along this road to improve access and PTAL on the northern edge of the site, which has been also identified as the area with the most potential for higher-density residential developments.

Delivering this infrastructure early would encourage new development as well as improve the quality and accessibility of the site.



Street network (New & Improved Roads)

The emerging development requires the delivery of new roads, as well as improvements of existing roads.

The character of the roads in the area is not appropriate for pedestrians, making the area feel unsafe and unwelcoming.

New and improved streets should ensure wide pavements, on-street parking, planting, crossing points and lighting.

The diagram below shows which new roads will be introduced and improved within the key development area.

Green areas, streets and public realm areas have the opportunity to include SUDs

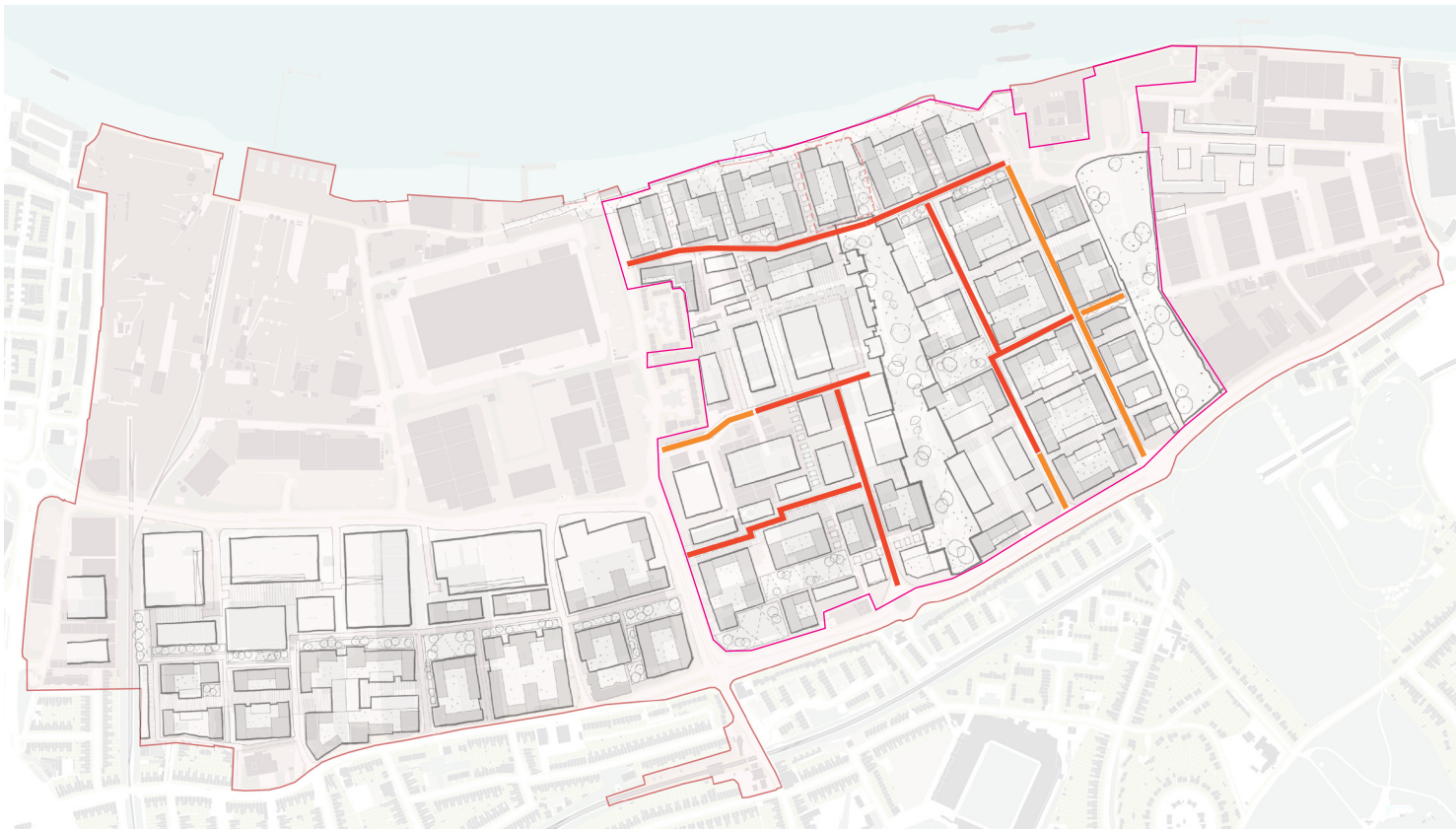


Westmoor Street



CONSIDERATIONS

- Land acquisition or CPO
- Turning point between Herringham Road & Westmoor Street might need re-alignment to ensure a good circulation of buses and other vehicles. It is currently owned by Komoto
- Re-think access to wharf (if retained)
- Funding for infrastructure and for running the service
- Timescales - should this be delivered before or after the residential development.



CONSIDERATIONS

- Land acquisition or CPO
- Underground Utilities
- Street requirement for different types of uses like bus routes, service to industrial buildings and residential

5.6 GREEN INFRASTRUCTURE & PUBLIC REALM

Improved New Green Spaces

Providing high quality green infrastructure is key for a successful neighbourhood.

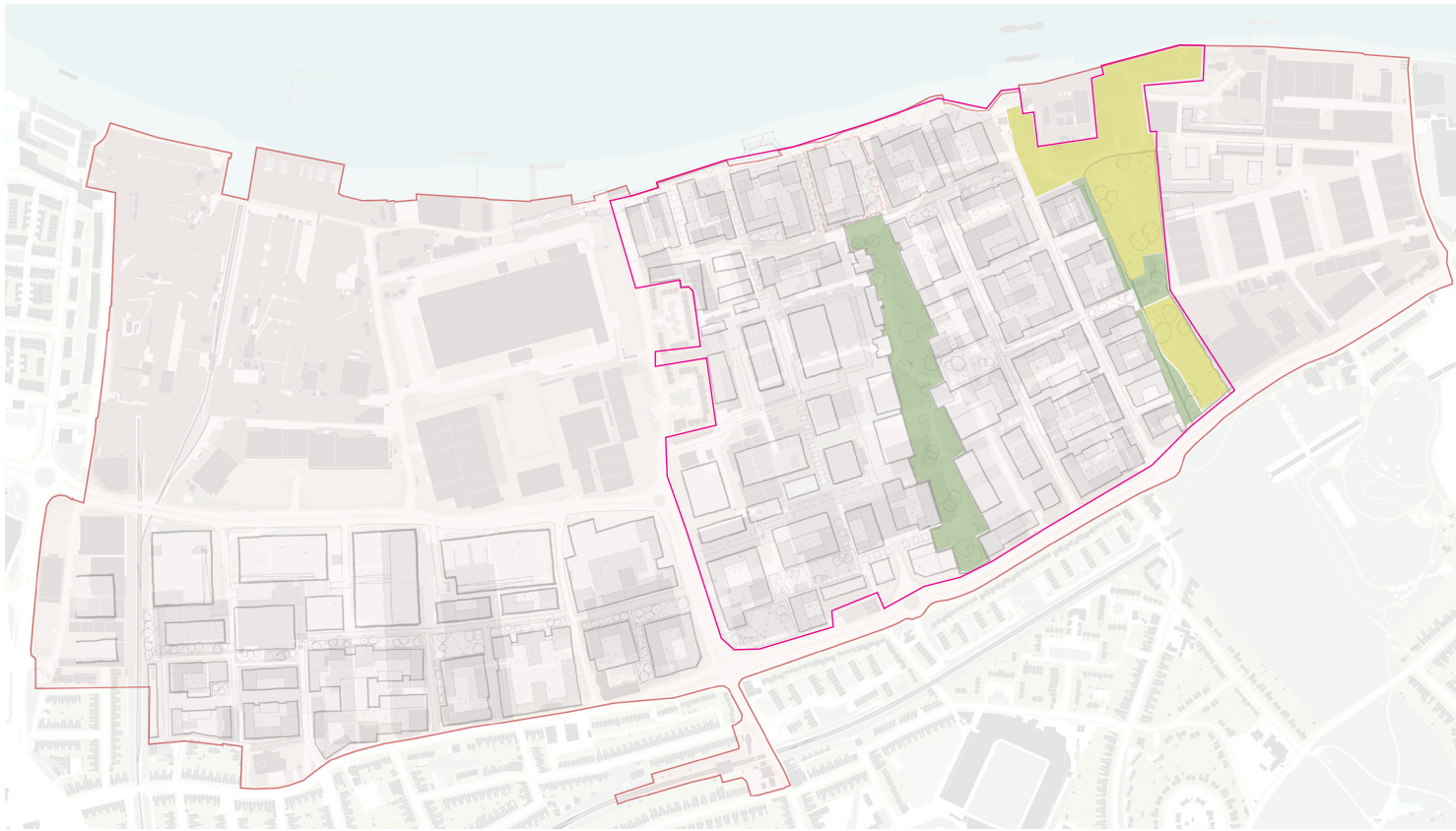
There is a limited quantum of existing green space, and this feels underused, so there is an opportunity to improve it by extending it and adding new amenities.

The proposed masterplan also includes a new large outdoor space that could be delivered if this area was developed first.

This intervention would deliver the following:

- ~ 33,000 m² of new green area
- ~40,000 m² of improved green areas

Green areas, streets and public realm areas have the opportunity to include SUDs



Improved Green Area

New Green Area

CONSIDERATIONS

- Potential extension of MOL land
- Re-location of existing residential uses along Eastmoor Place
- Potential re-alignment the access to Thames Barrier from Eastmoor Street to Westmoor Street
- Areas used for parking
- Feedback from engagement with school and Youth Council to inform the type of improvements

Public Realm

The development area brings the opportunity to deliver significant amount of public realm including multiple pedestrian only routes to the river and connections between the two green areas.

These areas are mainly hard surface with potential for some planting and some incidental play areas in key locations.

Some of the public realm areas will be yard mews that would also provide access to workspaces and light industrial buildings.

This development area would deliver:

- ~ 45,000 m² of new public realm

Green areas, streets and public realm areas have the opportunity to include SUDs



CONSIDERATIONS

- Development considers land ownership boundaries, and public realms aligns with that, but a coordinated approach across the site might be required
- There is a strong argument for a specific public realm design code for Charlton Riverside to aid development

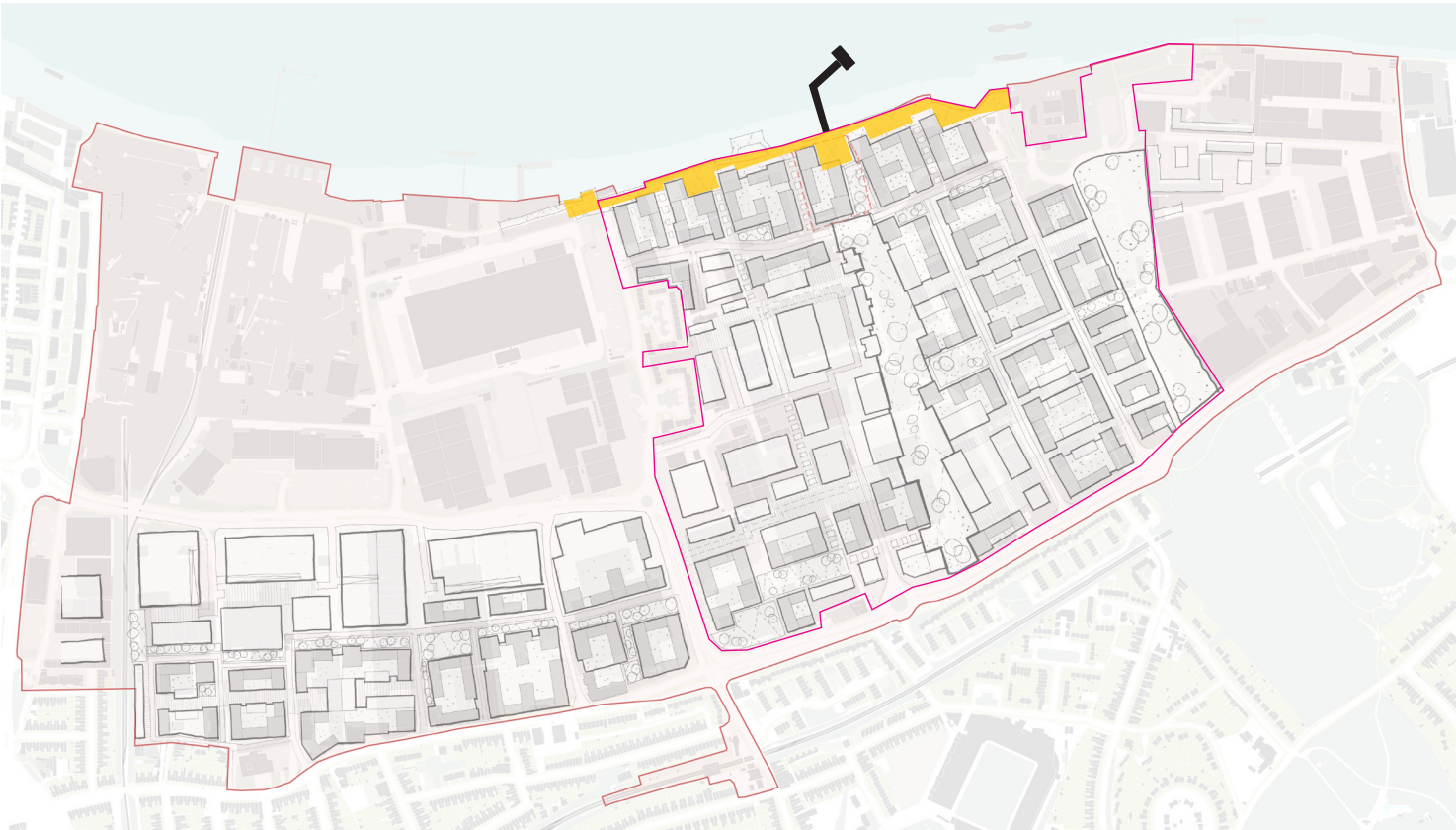
5.7 INFRASTRUCTURE: RIVER PATH ENHANCEMENT & FLOOD

River Path Enhancement & New Pier

- Raise level to meet TE2100 requirements, with levels above +6.2m AOD, as per Hyde Development planning submission
- Re-paving with clear marking of cycle lane providing an accessible and welcoming route
- Improve lighting to make it safe & inclusive during day time and night time
- Wall improvements to provide flood mitigation as per diagram opposite
- Potential new pier for Thames Clipper stop or electric ferry crossing

Additional Flood Mitigation Requirements

- Breaking out existing flood defence wall
- New flood defence wall; assume sheet piling
- Secondary wall to form intertidal planting zone
- Capping beams to flood defence wall and secondary wall
- Intertidal planting zone; including build up and planting



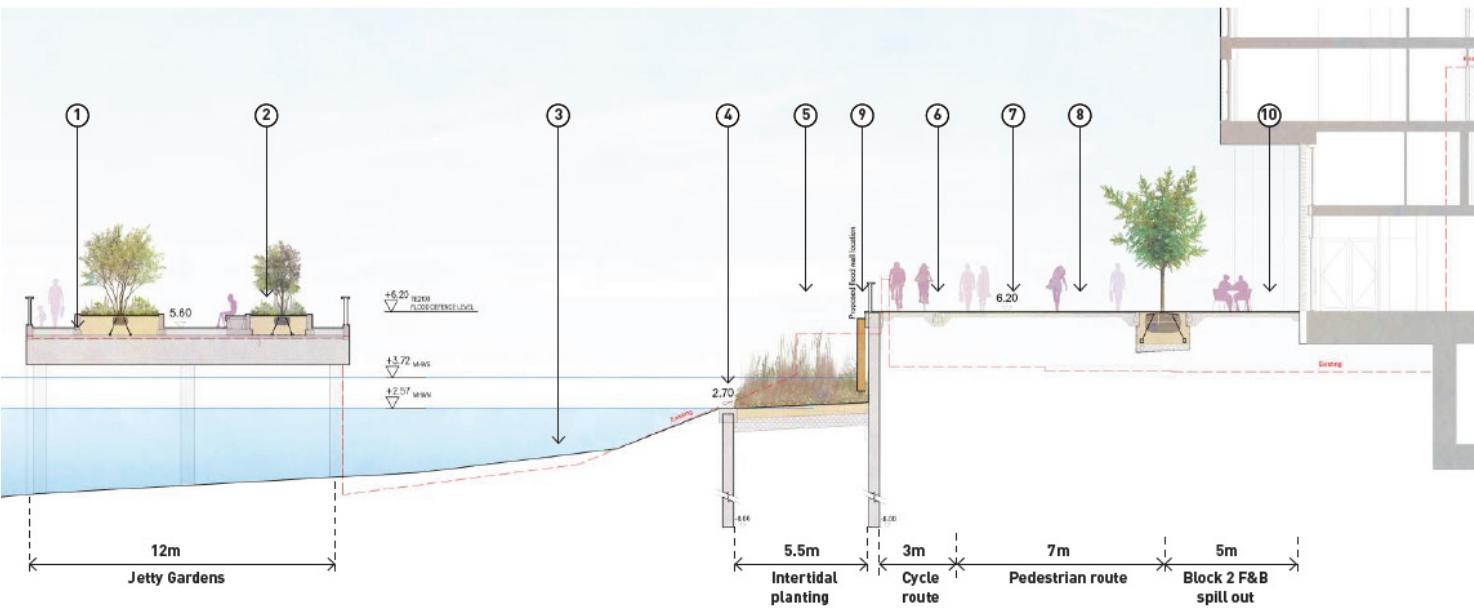
River Path Improvements Area

New Pier

CONSIDERATIONS

- Development needs to happen holistically to ensure a good response to flood defence.
- Identify exact location of new pier as well as distance to the edge
- Need to clarify timescales and funding for this to be delivered

Flood Mitigation and wall improvements extracted from Hyde Planning Submission for reference



Legend

- | | |
|--|---|
| 1. Jetty public realm with raised timber deck area | 6. Dual lane riverfront cycle route - 3m wide |
| 2. Jetty planter with multi- stem trees | 7. Pedestrian route |
| 3. Riverfront bed | 8. Public realm tree planting |
| 4. Existing river wall - to engineers details | 9. TE2100 flood wall |
| 5. Intertidal planting | 10. Site A retail spillout areas |

5.8 OTHER INFRASTRUCTURE REQUIREMENTS

Utilities

LHE Stage 2 report includes detailed information on existing utilities and what is required for future development.

The report includes the following:

- Electricity Supply: analysis of existing sub-stations against the three design scenarios identifying which sub-stations might need to be re-located and which could be re-used.
- Water Infrastructure: The report anticipates that very little re-alignment of water supplies will be needed, and it indicates initial assumptions of new supply requirements.
- Telecoms Infrastructure: Given existing telecoms cables appear to follow the main roads retained within the masterplan scenarios, no major telecoms diversions are anticipated to be required, however new infrastructure including fibre broadband will be vital for this development.
- Gas Infrastructure: No major gas main diversions are anticipated to be required. The emerging energy strategy promotes the extension of the Riverside Heat Network to serve Charlton Riverside’s heating demands, but may require a local energy centre if a connection cannot be made to the Riverside Heat Network from the outset of development. The temporary local energy centre may require a gas supply and could draw from the existing low pressure or intermediate pressure gas networks.

Drainage

LHE Stage 2 report includes detailed information on existing drainage and what is required for future development.

The report includes the following:

- Foul Drainage Infrastructure: No major sewer diversions are anticipated to be required however if existing sewers are found to be as shallow as the records suggest, there is a high likelihood that development sites will need to include allowances for pumping stations in foul drainage strategies.
- Surface Water Drainage: Thames Water asset plans do not reveal many surface or combined water sewers within Charlton Riverside. It therefore remains unclear how surface water currently drains from the site. No major sewer diversions are anticipated to be required. New development should aim to discharge surface water runoff into the site’s existing drainage systems where they can be retained.
- Sustainable Drainage: There is an ambition for Charlton Riverside to include SUDs within new development proposals. A coherent strategy would better enable networks of SuDS systems to work together, compounding their ability to draw nature into the urban environment and positively contribute to the changing character of Charlton Riverside

Decontamination of Land

- Considering the industrial history of the site, is very likely that the land is contaminated, therefore some works of de-contamination might be needed to make the area developable.

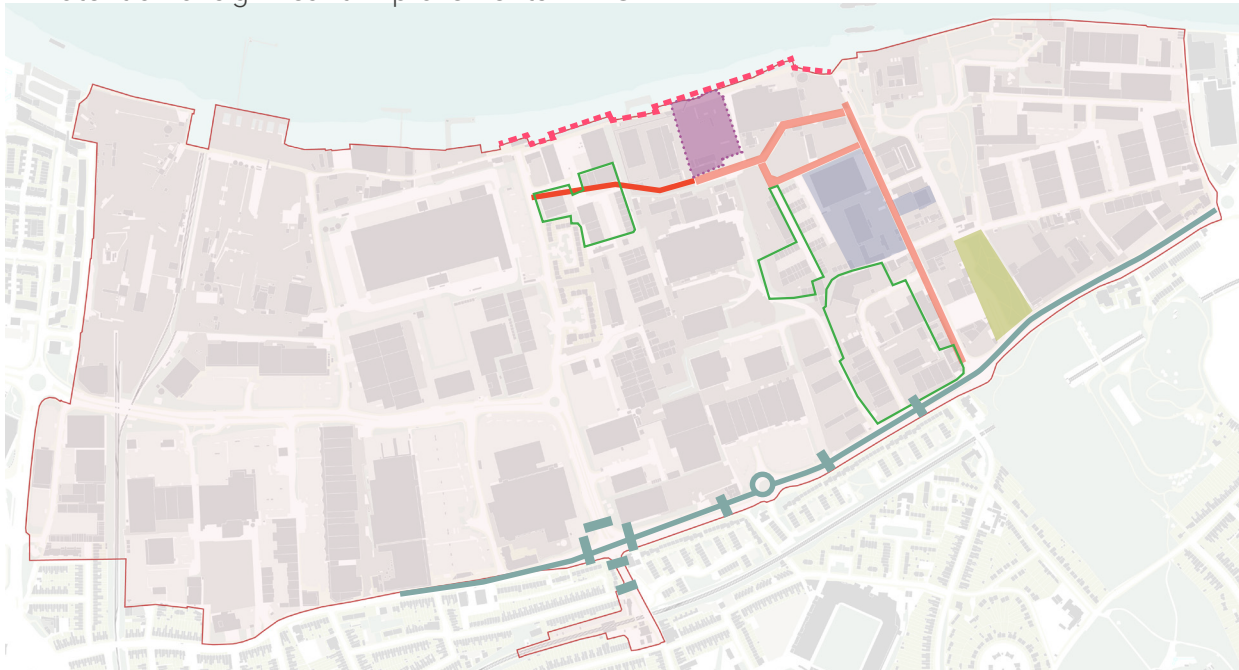


Photograph of physical model showing illustrative proposals for the Central Area in Scenario 3.

5.9 INDICATIVE PHASING STRATEGY

0 to 5 years: Infrastructure to Unlock Development

- De-designate Riverside Wharf
- Improve River wall and potentially river path to ensure good flood mitigation
- Extension of Herringham Road
- Potential for significant improvements in MOL
- Potential for decanting RBG sites and using vacant spaces for meanwhile uses
- It is assumed that in the next 5 years improvements along Woolwich road by TfL will also be delivered



5 to 10 years: Key Development Area

- Start delivering new buildings and key infrastructure within the key development area



10 to 15 years: Neighbourhood Centre Area

- In the next 15 years there is potential for the Neighbourhood Centre Area to be delivered, providing a gateway into the new neighbourhood
- This area would complete the delivery of the green space connecting Woolwich Road and the river



15 to 20 years: Retail Area

- Because of the existing uses within the retail area, this is seen as the latest phase of development, and the one that could accommodate more changes based on the emerging needs of the wider area



5.10 ALTERNATIVE ENABLING STRATEGY

Approach

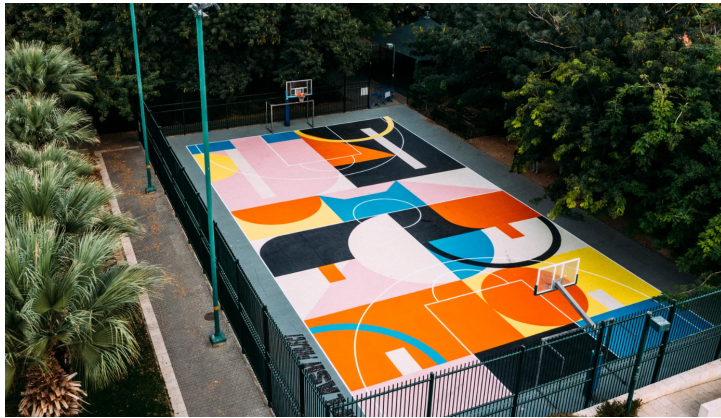
Charlton Riverside has a lot of potential to become a thriving neighbourhood, but because of its character and the current land ownership situation, this might take a while to be fully delivered.

The design team has identified some potential early interventions as an alternative delivery strategy. These could improve the area and encourage future development, and these have been grouped based on the indicative timescales that could be delivered.

Other interventions that have been considered as part of this sections are meanwhile or temporary interventions. These can help activate certain areas of a development while it is being built.

Meanwhile spaces can also be used to temporary re-locate existing uses, freeing up other part of the site for development whilst promoting the retention of local businesses.

Examples of potential early interventions and meanwhile uses:



Short Term Interventions

The design team has identified improvements that could be carried out immediately.

These interventions are needed, and they would improve the area, but very unlikely would be a catalyst to unlock future development.

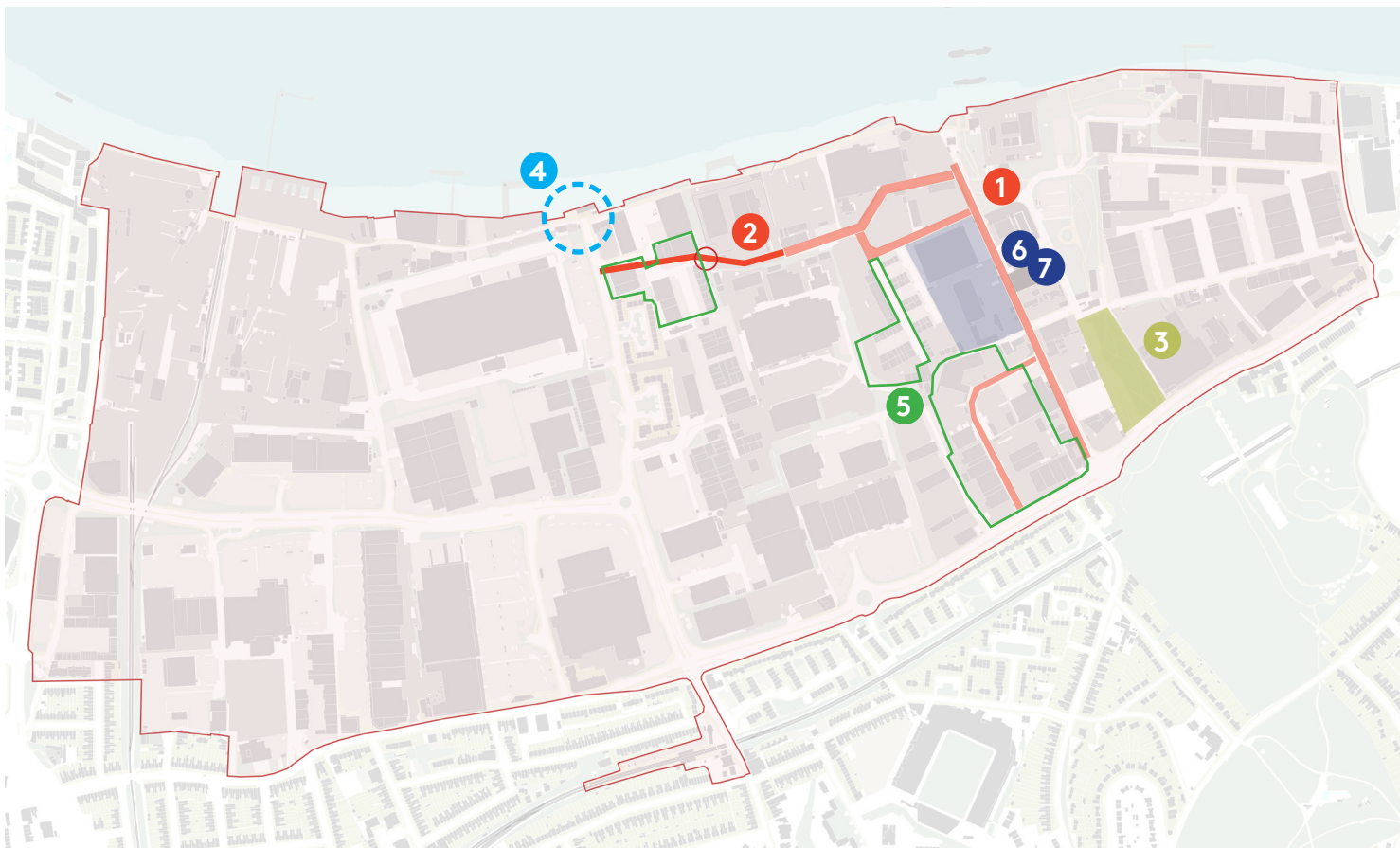


- 1** General Street Improvements including parking restrictions & enforcement, clear pavements, road repairs, road marking refreshed, lighting & wayfinding (Anchor & Hope Lane, Eastmoor Street, Westmoor Street, Bugsby Way & Warspite Road)
- 2** Light touch improvements along River path including resurface where needed, parking restrictions & cycle lane improvements
- 3** New crossing points and cycle lane along Woolwich Road (as per TfL plans)

Medium Term Interventions

These type of interventions could start immediately but would probably take longer to be delivered.

Some of these would potentially unlock or promote future development.



- 1** High intervention road improvements like: significant repairs, resurface & changes to alignment (Westmoor Street, Herringham Road, New Lydenburg Street & Penhall Road)
- 2** Connecting Herringham Road with Anchor & Hope Lane (land acquisition required)
- 3** MOL improvements including removing fence, wayfinding, paving & new amenities + Re-think Eastmoor street access to potentially extend MOL (depending on EA agreement)

- 4** Improve public realm around Anchor & Hope Pub, celebrating a key moment in the area.
- 5** Identify vacant spaces within RBG sites to potentially re-locate existing uses to help unlock development
- 6** Provide a meanwhile space for night-time and other types of entertainment, keeping businesses in the area (i.e. GoKarting, Paintball, night clubs...)
- 7** Potential use of vacant land as a tree nursery for future development

Longer Term Interventions

These interventions require some agreements between existing land owners and other stakeholders, but if delivered would create a significant improvement in the area, encouraging future development.



- 1** New Bus route along Herringham Road (Land acquisition on the corner on Komoto's land or re-alignment of the road might be required)
- 2** Potential activation of the southern edge of the river path along the Sainsbury's site edge (for industrial uses)
- 3** Station area improvements including public realm and station infrastructure (depending on TfL bus turning requirements)
- 4** Partially or fully deliver the new green amenity along the existing storm sewer (multiple landowners involved)



Photograph of physical model showing illustrative proposals for the Central Area in Scenarios 2 and 3.



Street view of the central green space along refurbished locally listed industrial buildings, new industrial buildings and residential development

Royal Borough of Greenwich

670-KCA-XX-XX-RP-A-000402-STG_Stage2

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