



ROYAL ARSENAL RIVERSIDE
THE ROPEYARDS
PLOTS D AND K

DESIGN AND ACCESS STATEMENT

To Support a Reserved Matters
Application

MARCH 2024

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1. INTRODUCTION

The Ropeyards (Plots D and K) forms part of the Royal Arsenal Riverside Waterfront Masterplan.

With a highly contextual and sustainable approach to design, the proposals endeavour to integrate elements of the local vernacular in truly contemporary architecture that will enhance and celebrate the identity, character and historical heritage of The Ropeyards and Royal Arsenal.

PRP

1.1 PURPOSE OF THIS DOCUMENT

This Design and Access Statement has been prepared by PRP Architects and HTA Landscape in support of an application for the approval of Reserved Matters made to the Royal Borough of Greenwich (RBG) by Berkeley Homes East Thames (hereafter referred to as 'the Applicant').

Outline planning permission (OPA) for the Royal Arsenal Riverside Waterfront masterplan was granted in April 2013.

Condition 2 of the Outline permission requires that approval of Reserved Matters of the relevant phase shall be obtained in writing from the Local Planning Authority prior to the commencement of that phase.

This Design and Access Statement provides details of the proposals for The Ropeyards (Plots D and K) of the Royal Arsenal Riverside Waterfront Masterplan. It provides an overview of the site context and urban analysis in relation to the proposals, followed by the design concept, access strategies and principles which form the basis of the proposals.

This Design and Access Statement should be read in conjunction with other supporting documents submitted with the Reserved Matters Application.



1.2 THE APPLICATION TEAM

This application has been prepared by a number of specialists who form the Design Team, including:

- Berkeley Homes East Thames | Applicant
- PRP Architects | Architect and Lead Designer
- HTA | Landscape Architect
- Stantec | Town Planning
- Waterman | Structure/Civil
- Icenii | Transport/Waste
- Sol Acoustics | Acoustics
- Hodkinson | Sustainability/Overheating/Energy/Whole Life Cycle Carbo
- David Bonnett Associates | Access and Inclusive Design Consultants
- Buro Happold | M and E Engineer/Utilities

Berkeley
Designed for life

PRP



Stantec

waterman



HODKINSON

DAVID BONNETT ASSOCIATES
inclusive design consultancy & research

BURO HAPPOLD

- Plowman Craven | Townscape/Visual Impact Assessment
- GIA | Daylight and Sunlight
- Orion | Heritage Consultant
- BIM Technologies | BIM Consultant
- London Bridge Associates | CDM
- BB7 | Fire Consultant
- Herrington Consulting | Flood Consultant
- Lowick | Community Engagement
- Hayes Davidson | CGI
- RWDI | Wind Consultant

Plowman Craven

gia

orion.

BIM. TECHNOLOGIES

lba

BB7

herrington
CONSULTING

Lowick

Hayes Davidson

RWDI
50 YEAR

1.3 EXECUTIVE SUMMARY

1. Royal Arsenal Context

The Ropeyards is located in the 88-acre former Royal Arsenal in Woolwich, one of London's largest brownfield regeneration sites and its transformation into a vibrant mixed-use community is a £1 billion project 24 years in the making so far.

The Berkeley Group was selected to redevelop the Royal Arsenal Riverside area in 2000. Over twenty years later, the masterplan vision has become a beautiful riverside neighbourhood and has helped to drive the growth of Woolwich.

To enable the Woolwich Elizabeth line station, Berkeley Homes agreed to construct and fund the Woolwich Elizabeth line station Box, as part of a partnership with the Royal Borough of Greenwich, Transport for London and the government for the overall delivery of the station.

The Ropeyards are part of the Waterfront Masterplan that has been designed to enable the Elizabeth line tunnels to run through the Royal Arsenal Riverside that enable the Woolwich Elizabeth line station. The design of the extant Maribor Park detailed planning permission follows the route of the Elizabeth line tunnels, creating a linear park that will connect Woolwich Town Centre to the River Thames. The Woolwich Elizabeth Line station is enhancing Woolwich's accessibility across London.

Today, Royal Arsenal Riverside is home to over 10,000 people, is the work place for 650 employees and welcomes thousands of visitors a year to its cafés, restaurants, shops, fairs and farmers' markets. Significant publicly accessible open space has been delivered including Dial Arch and Artillery Square, 1km river walk, the 2.5 acre Wellington Park and forthcoming 4 acre Maribor Park. Over 500 trees have been planted onsite.

Once completed over 5,000 new homes and 45,000 sqm of non-residential uses will have been delivered, rejuvenating and reconnecting the area with the surrounding community through high-quality architecture, publicly accessible open space and local employment.

2. Design Evolution

The Ropeyards benefits from an existing outline planning permission for 7 buildings with 663 new homes, including affordable housing. In 2022, PRP Architects were selected through a design competition to build upon the vision of the Royal Arsenal Riverside masterplan, with HTA Design appointed to develop the design of the associated high quality publicly accessible park, public realm and amenity gardens. The proposal is a result of pre-application discussions held with the Royal Borough of Greenwich, Design Review Panel and local residents.

The Ropeyards is located within the Royal Arsenal Riverside Masterplan. Formerly one of the greatest rope manufactories in the world, The Ropeyards is approximately 2.1 hectares in area, there is existing vehicular and pedestrian access from Duke of Wellington Avenue via New Warren Lane to the A206 and pedestrian/cycle only access from the east via Duke of Wellington Avenue and off Dial Arch Square.

Running through the centre of the wider Riverside masterplan is the proposed Maribor Park, providing a green link between Woolwich Town Centre and the River Thames.

20 years in the making, the Ropeyards seeks to provide a safe and welcoming home, to intertwine with the local community, thriving cultural scene and local employment. The proposal interweaves design with the history of Royal Arsenal and the new public park will locate high quality and low carbon homes within the new nature. The 663 high quality homes and commercial space will support the growing community.



663

High Quality Homes

to be delivered each with dedicated balcony or terrace



Affordable Homes

enabled



Biodiversity Net Gain

Minimum 10% Biodiversity Net Gain above the existing temporary uses



4 acre Maribor Park

Publicly accessible open space, including play areas for all ages



Adapting to climate change

Target to reduce carbon emissions and create places that are resilient to climate change



New Jobs

985 sqm New Employment Space fronting onto Maribor Park, creating new jobs and activated street frontages



1273 Residential Cycle Spaces

Connecting to local and London strategic cycle network



Sustainable Location

Located in sustainable transport location

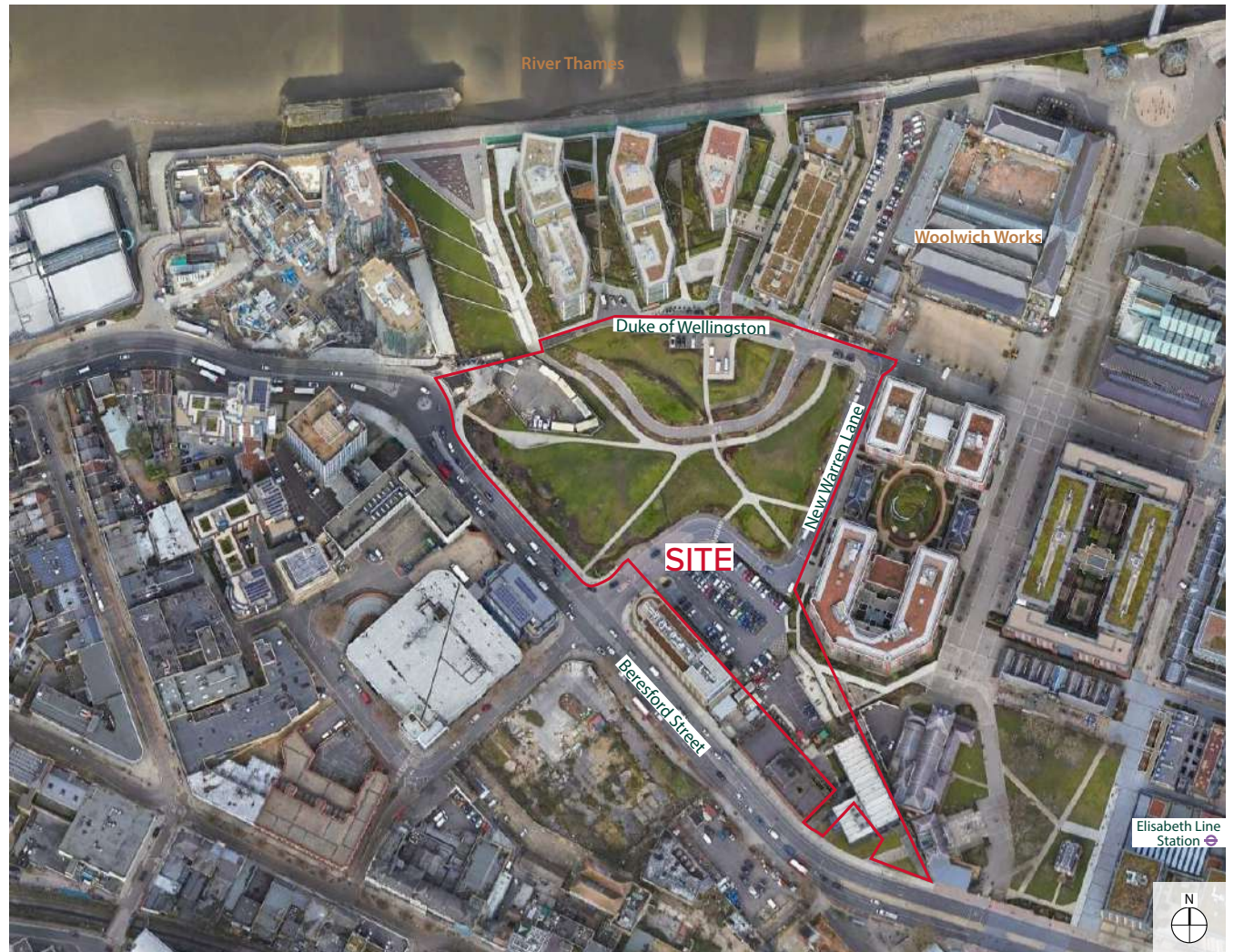
1.4 SITE LOCATION

The Ropeyards

The Ropeyards are located within the Royal Arsenal Riverside Waterfront Masterplan, adjacent to the historic Royal Arsenal.

The 2.3 hectare site is bound to the south-west by Beresford Street, to the north by the Waterfront Masterplan Plots A and B, part of the completed section of Maribor Park along Duke of Wellington Avenue and to the east by New Warren Lane.

The site is currently used as a temporary park, a car park and Berkeley Homes construction site offices.



2. ROYAL ARSENAL RIVERSIDE ROPEYARDS MASTERPLAN

2.1 THE MASTERPLAN

The Royal Arsenal Riverside Ropeyards

Our vision for The Ropeyards is to further enhance the interconnected and vibrant community within Woolwich. With 23 years of delivery at Royal Arsenal Riverside, there are now more than 8,000 residents and over 100 businesses that call Woolwich home.

Community

Community events and activities are held all year round at Royal Arsenal Riverside. There is always something happening, which in the past year has included the biweekly Farmers Market, Summer Festival, Woolwich Contemporary Print Fair and much more.

There is a thriving and established community here, supporting local events, organising social action campaigns and developing community groups. All this helps to foster a real neighbourhood feel.

Supporting Local Employment

Royal Arsenal Riverside has a wide range of commercial occupiers including supermarkets, pubs, restaurants and healthcare. It is also home to London's new landmark creative district, Woolwich Works, and internationally acclaimed impressive theatre company, Punchdrunk.

Berkeley Homes has its permanent divisional office at Royal Arsenal, which makes the business not only a developer but also investor, commercial tenant and major local employer in Woolwich. The business is stitched into the local community, through organising local networking events that create links between small businesses.

Royal Arsenal Riverside has become a beautiful riverside neighbourhood and has helped to drive the growth of Woolwich.



Planning approach

Waterfront Masterplan:

- 2,032 residential units
- 2,442 sqm of commercial space

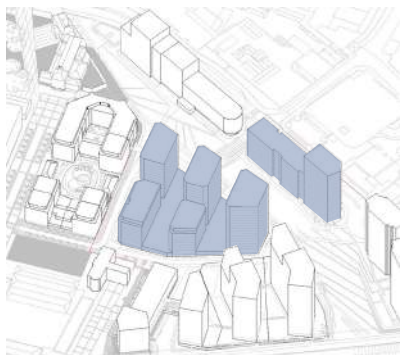
Current S.96a Application for non-material amendments to Outline Parameters and commercial uses in Description of Development.

Plots D and K:

Reserved Matters Application (RMA) for setting, design, landscaping and external appearance.

- 690 residential units remaining
 - Private: 384
 - S106 Affordable Requirement: 306

Plots D and K



S96a Parameter Plan heights



2,032 units consented in the Waterfront Masterplan

2.2 EXISTING CONTEXT

Surrounding architectural context



4. Plot A



5. Plot B



6. Building C1



7. Royal Military Academy



8 Tiger and Europa House



3. SET Woolwich



2. Royal Sovereign House



1. Premier Inn



Plots D and K Site



9. Laboratory Pavilion West



10. Ocean and Thalia House



11. 81-88 Beresford Street (planning permission)

Beresford Street

Neighbouring the site on Beresford Street is the existing Premier Inn Hotel and the existing Catholic Club building.

The adjacent Catholic Club site has planning permission for Purposed Built Student Accommodation that is currently under construction. The Planning Permission CGI is shown in image one.



1. Extant planning permission on adjacent Catholic Club site and existing Brass Foundry building



2. Premier Inn



3. Collis Yard



4. SET Woolwich

Plot A and B

The north of the site, adjacent to the river, is occupied by two plots which are part of the wider Waterfront Masterplan.

- Plot A are the first visible buildings of the Royal Arsenal Riverside. They also playing a key role in defining an active built edge facing the Maribor Park, Woolwich High Street and River Thames.
- Plot B is one of the two plots directly facing the river Thames. It forms the north-eastern edge of the masterplan and neighbours Building C1 to the east and Plot D to the south.



Plot A



Plot A



Plot B



Plot B

New Warren Lane

New Warren Lane is defined by a series of buildings of different periods and nature. The Grade II Listed Laboratory Pavilion West comprises two storeys of Flemish bond brick with stone dressings and a slate hipped roof. It is one of a pair, with Pavilion East, and is the oldest surviving building across Royal Arsenal Riverside.

The proposed material palette for Plots D and K and its tones evoke the mixed and varied nature of the brick built heritage in the Royal Arsenal Riverside area, instilling a degree of permanence to the new scheme. Distinctive architectural features such as the crittal style windows from the Boardroom have informed the architectural design intent of the proposed buildings along New Warren Lane and the Duke of Wellington Avenue.



3 Tiger and Europa House



5. Ocean and Thalia



Building C1



4. Laboratory Pavilion West



2. Boardroom (Royal Military Academy)

3. CONTEXT ANALYSIS



3.1 SITE HISTORY AND HERITAGE ASSETS

Site Historical Timeline and Narrative

The timeline is presented as a horizontal sequence of vertical panels, connected by a thick, coiled rope that runs across the middle. The background is a light beige color with faint historical maps and illustrations. The panels are divided into three main eras: Pre-history - Medieval, Tudor - Stuart, and Victorian - Georgian.

Period	Year / Date	Event / Description
Pre-history - Medieval	Iron Age	Evidence of an Iron Age oppidum - a defensive township - located within the site
	Early 16th Century	Area used to cultivate rabbits for fur and meat in purpose built warrens
Tudor - Stuart	Early 16th Century	Tower Place built by Martin Bowes (Mayor of London)
	14th - 17th Century	Salt glazed London-ware pottery kilns discovered on site. Of national importance being the earliest known example of salt-glazed pottery kiln anywhere in the UK
	1671	Tower Place sold to the Board of Ordinance to create The Arsenal
Victorian - Georgian	1832	Ropeworks continue until 1832
	1834	Rope works demolished, street pattern laid out, Holy Trinity Church erected
	1899	Charles Booth gives the site the lowest classification in this mapping on London; 'Lowest Class: Vicious, semi-criminal'
	1914-1918 and 1939-1945	Women in the workforce boomed during global conflicts
	Late 20th Century	Royal Arsenal closes, program of slum clearance, boundary wall retained
2010s	Maribor Park opens	

Heritage Assets

Around the site there are a number of important listed historic buildings. These buildings are highlighted on the adjacent plan with images below.



6. The Royal Brass Foundry



7. Guard House



8. Dial Arch



9. Verbruggens' House



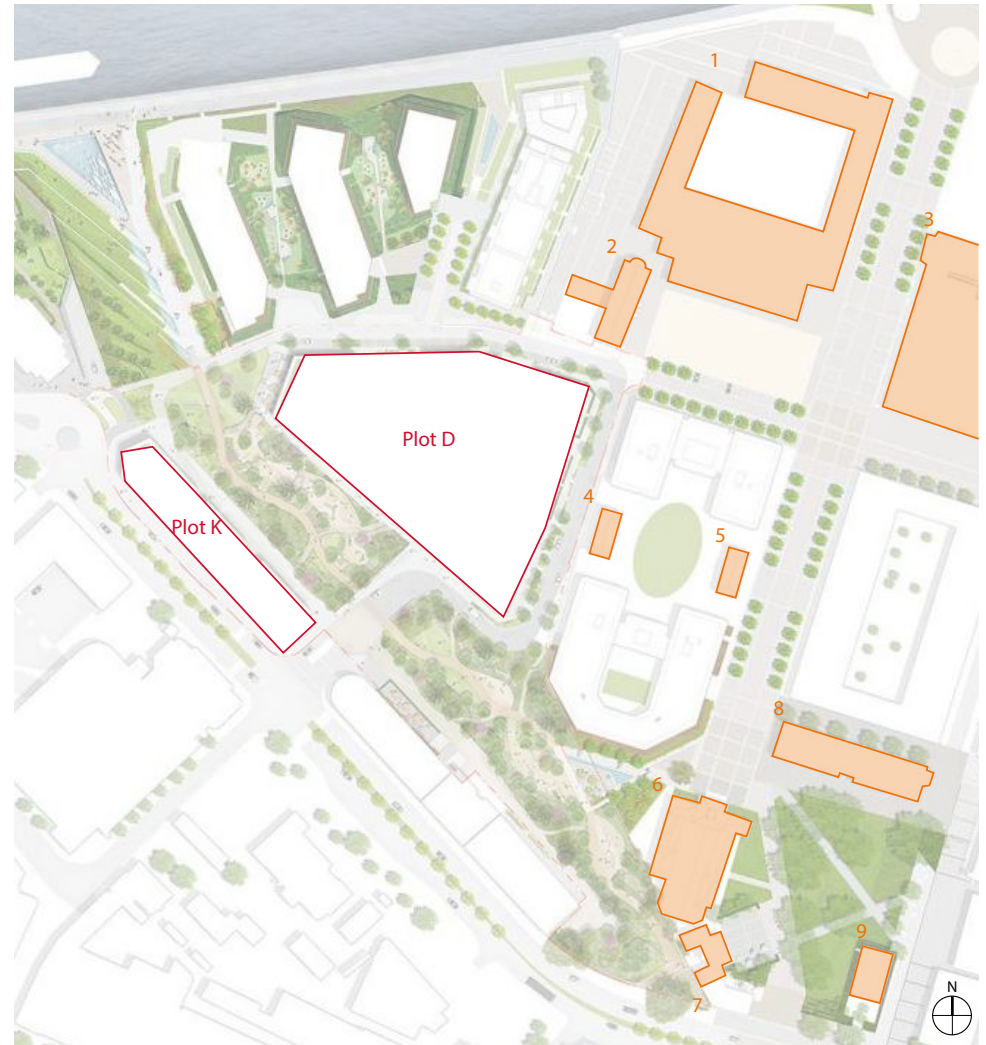
1 Building 41 (Woolwich Works), 2 The Board Room (Royal Military Academy)



3. The Paper Cartridge Factory



4/5. Royal Laboratory East and West Pavilions



3.2 EXISTING CONTEXT ANALYSIS

Access and Movement: Vehicular and Public Transport

The site is highly accessible, with a Public Transport Access Level (PTAL) of 6a.

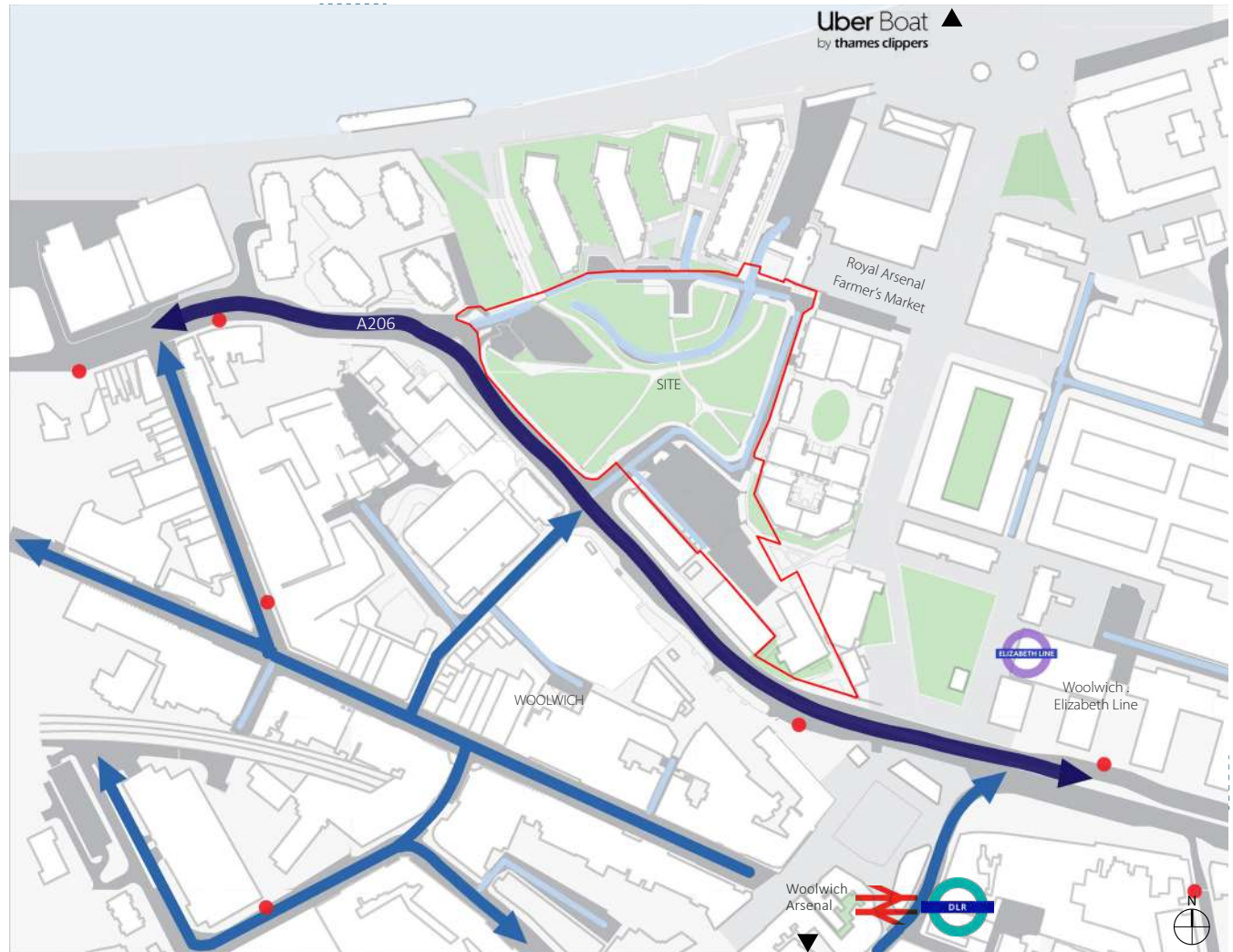
It is located adjacent to the main strategic road (A206 / Beresford Street), with 17 bus routes within 400m. The Woolwich Elizabeth Line Station is within 400m and the Woolwich Arsenal Station (DLR / National Rail) is within 500m. Uber Boat by the Thames Clipper is within walking distance (10 min), providing river services to Canary Wharf, the City and West End.

Vehicular access to the site is from Beresford Street, via New Warren Lane and Duke of Wellington Avenue.

The site introduces a new key pedestrian route through the park, joining up with others from Royal Arsenal Riverside, Woolwich Town Centre and the Thames Path.

KEY

- Site Boundary
- ↔ Primary Vehicular Routes
- ↔ Secondary Routes
- ↔ Tertiary Routes
- Bus Stop



Density and Heights

Building heights to the immediate north are up to 22 storeys along the River Thames and there is significant height along Beresford Street. This surrounding height reflects the outstanding public transport connections.

The existing height of surrounding buildings increases from within the Conservation Area and Woolwich Town Centre towards the River Thames.

KEY

- Site Boundary
- 1 Storey
- 2-4 Storeys
- 5-8 Storeys
- 9-14 Storeys
- 15+ Storeys



Land Use

The site is currently used as a temporary park, temporary car park and temporary refuse store with the associated permission due to expire in July 2025 after which the land would need to be returned back to its previous condition.

Berkeley Homes site office and service yard are located along the southern end of the site by the Royal Brass Foundry.

Surrounding land uses are predominantly residential, including a number of mixed use new developments in the wider area.

Around the site there are a number of important listed historic buildings as well as range of hospitality services such as the Premier Inn Hotel along Beresford Street.

Retail use are clustered around the High Street and the Town Centre.

KEY

- Site Boundary
- Commercial / Retail
- Student accommodation / Worship
- Residential
- Hospitality
- Cultural
- P Car Parking
- Temporary Park



3.3 SITE CONSIDERATIONS

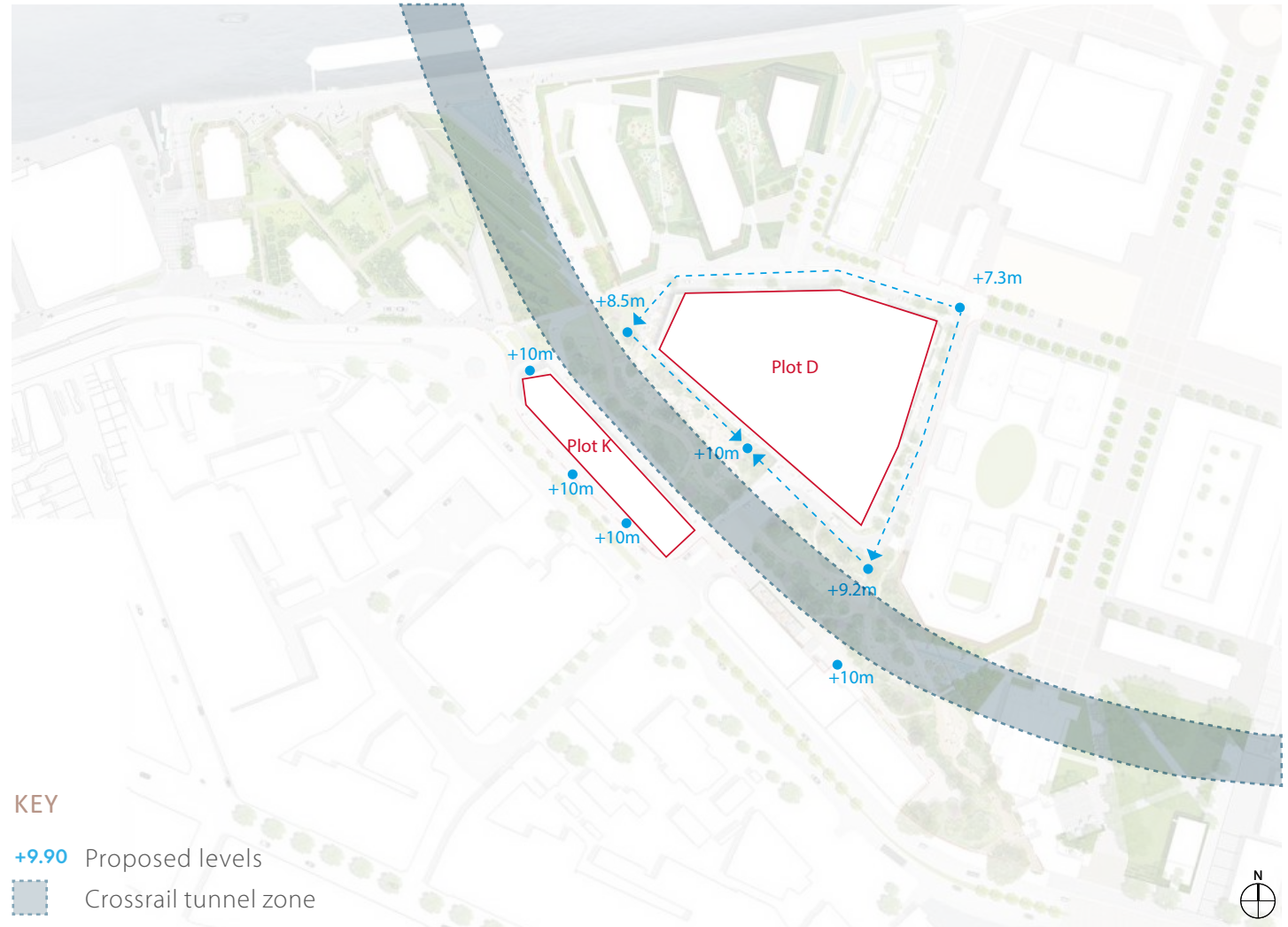
Levels

The site falls west to east from the roundabout on Beresford Street along Duke of Wellington Avenue by around 3m.

Moving from south to north, the site remains level from the former Catholic Club to the Open Lawns, and then steps down in a series of large terraces towards the River Thames.

Crossrail Tunnels

Two Crossrail tunnels run below the site. Any proposed development must ensure that the integrity of the tunnels is preserved.



4. CONSULTATION

4.1 TIMELINE



Stakeholder engagement

Stakeholder engagement has played a fundamental role in successfully shaping proposals for The Ropeyards. The design team has sought feedback on the scheme throughout all design development stages and a comprehensive pre-application consultation process has been undertaken with stakeholders and others including:

- Royal Borough of Greenwich (RBG)
- Design Review Panel (DRP)
- Local community via two in person public exhibitions and one online public exhibition
- Secured by Design Officer (SBD)

Six pre-application meetings were scheduled at key stages of the design to ensure timely feedback from the planning and design officers.

The design team have taken on board feedback from the local community, and worked with RBG to ensure that comments raised by various officers and DRP members have been addressed in the final scheme.



4.2 PRE-APPLICATION PLANNING ENGAGEMENT



Pre-app meeting 1

The initial design concept was discussed during a design focused pre-application meeting in September 2022.

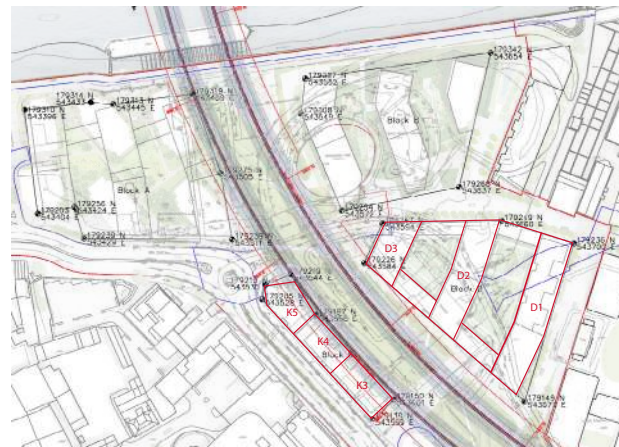
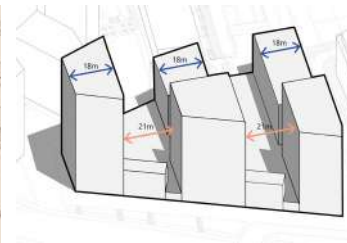
The design team and Berkeley Homes discussed the key site constraints, the approved parameters, the proposed key design moves, the approach to the Environmental Impact Assessment (EIA) and the proposed planning strategy for a Reserved Matters Application.

The key design moves presented to RBG were as follows:

- Removing the lower basement level in Plot D.
- Removing the Plot D link buildings.
- Removing Building K1 and replacing with publicly accessible green space.



Illustrative 2013 Outline Planning Permission Massing Model



Illustrative 2013 Outline Planning Permission with Crossrail Tunnels



2013 Outline Planning Permission Minimum Height Parameter Plan



2013 Outline Planning Permission Maximum Height Parameter Plan



Pre-App Meeting Highways

RBG Comment:

"the dimensions used for the swept path analysis on the plan presented were smaller than the dimensions required by RBG"

Design Response

Larger dimensions had been used, but just not shown in the plan presented. Design team to provide plan using larger dimensions for swept path analysis

RBG Comment:

"further swept path analysis should be undertaken, particularly in areas used for refuse collection and refuse vehicles"

Design Response

Noted. Further swept path analysis has been undertaken.

RBG Comment:

"the Plot A refuse holding area on the ground floor of Plot D appears to be too large and holds too many bins"

Design Response

The design team clarified there are two access points to the refuse store and a facilities manager would be responsible for separating and arranging the different types of bins. Due to these reasons, RBG agreed that the size of the refuse store and number of bins was acceptable.

RBG Comment:

"disabled car parking spaces in the Plot D car park should be more evenly distributed"

Design Response

The locations of the disabled car parking spaces are distributed more evenly, whilst ensuring that they are as close to the residential cores as possible and not on a slope.





Pre-App Meeting 2

RBG Comment:

"The landscaping is engaging and it has a strong concept, including the varying levels throughout the park"

"Play space needs to be more legible"

Design Response

Design team to progress with concept presented.

Design team to define play spaces and identify play areas designated for each age groups.

RBG Comment:

"No objection in principle to the removal of the link Buildings, however would like to see more active frontage on the ground floor of the Plot D, specifically in between Building D4-D5"

Design Response

Design team to ensure there are adequate amount of active frontages and placemaking at ground floor.

RBG Comment:

"Raised that the car park access is opposite an existing car park access, which is not preferable"

Design Response

The design team clarified this is to ensure that the car park entrance and exit is located away form the Grade II Listed Laboratory West Pavilion. The new location also works with the natural lower topography, removing the need for a ramp and additional concrete which the original location required.



Age	Block A	Block B	Plots D and K	Total
0 to 4	All provided within phase	All provided within phase	1,114 sqm	1,114 sqm
5 to 11	All provided within phase	All provided within phase	869 sqm	869 sqm
12+	97 sqm	78 sqm	629 sqm	804 sqm
Required from previous phases of Royal Arsenal Riverside masterplan				2,787 sqm



Pre-App Meeting 3. Context of S96a within masterplan set out

RBG Comment:

"A S96a is challenging above single storey increase in height (both on K3/4 and D3) due to potential EIA impact (wind and daylight sunlight were mentioned)"

Design Response

Design team to progress on the basis that any increase in height should not be above a single storey.

RBG Comment:

"Incorporating Building K2 into the adjacent approved purpose built student accommodation (PBSA) would create a more coherent townscape, fewer building typologies and reduced height close to Woolwich Town Centre. RBG queried whether Berkeley Homes would consider selling Building K2 to the adjacent PBSA landowner. "

Design Response

To be considered. Berkeley Homes agreed with the design benefits of excluding Building K2 from The Ropeyards and instead incorporating into the adjacent PBSA.

RBG Comment:

"The percentage of single aspect units appears to be low and should be improved upon"

Design Response

This has been improved upon from the extant planning permission. This has been achieved by introducing a break between Buildings D1 and D5 and removing the links between Buildings D3, D4 and D4.



Pre-App Meeting 4

RBG Comment:

"Entrance lobbies should be more generous, and the entrances should be celebrated"

Design Response

Design team to explore ways to enlarge the entrance lobbies and create visual interest

RBG Comment:

"White fascia on building D1 looks disjointed. The set back top floor needs more interest"

Design Response

Design team to develop alternative design options and materiality for the fascia and set back level of Buildings D1 and D2

RBG Comment:

"Preference is to maintain second balconies on road side of the Plot K to break up and create interest on the façade. RBG's view that some variation is required for these balconies"

Design Response

Design team to ensure that balconies on Beresford street are maintained. Explore different design solutions for the balustrades

RBG Comment:

"Would like to see creative playspace for all ages, particularly elderly people"

Design Response

Design team to incorporate areas of play within the public realm and podium courtyards suitable for all ages





Design Review Panel Feedback / Our Response

DRP Comment:

“Review coupling of the windows, the coupled window groupings on the upper floors are considered more successful than the lower floors that show single windows. Holistic review of window coupling rhythm and relationship with the surrounding proposed buildings”

Design Response

The design team to explore different window grouping and arrangement to be more in line with the surrounding Plot B



DRP Comment:

“The inspiration of the Royal Arsenal industrial and warehouse heritage worked well and encourage further development of this design”

Design Response

Noted. Design team to progress on with presented design intent



DRP Comment:

“At ground floor of Building D1 residential homes are proposed. DRP considered this an appropriate location for housing, raised that privacy for these residents must be considered in the design”

Design Response

The proposal includes residential outdoor amenity space that will provide privacy through planting





Design Review Panel Feedback / Our Response

DRP Comment:

“The historic Royal Arsenal Wall is integrated into the existing development by way of paving stones and a sign in the Source area of Maribor Park and with change in brick on Pavilion Square (Phase 3)”

Design Response

The proposal to carry this through meaningfully on the podium gardens

DRP Comment:

“Minimise turning head at park entrance. Maximise welcoming landscaping ”

Design Response

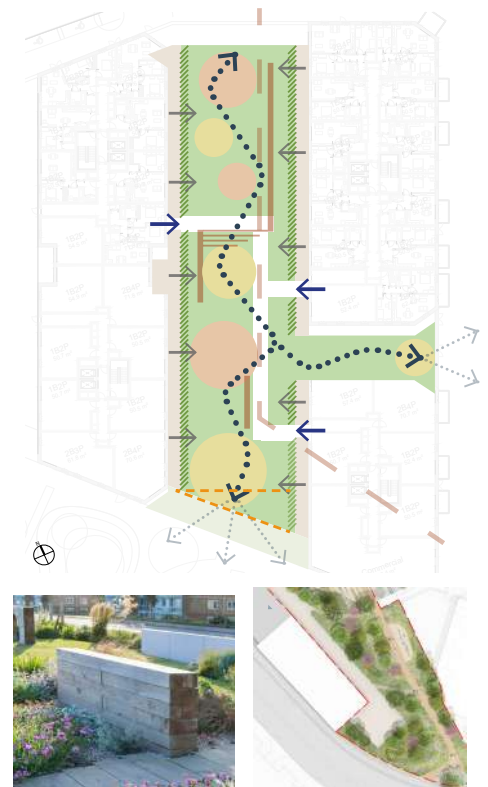
Noted. Design team to look at options to reduce turning head at park entrance, provide planting and lower feature wall to screen this area. Place signage, lighting and planting to announce the entrance into the park

DRP Comment:

“Review pulling back podiums on the park side. Further consider how the podium meets the ground on the D Building elevation facing Maribor Park, which currently sites up against the edge of the park”

Design Response

Noted. Design team to explore options to ground the buildings, pulling the podium links back and potentially using different brick tonality and brick recesses to express the separation between the buildings and the links





Pre-App Meeting 5

RBG Comment:

“Three additional homes have been incorporated on the ground floor of Building D1 to maximise active frontage along New Warren Lane which is positive. The ground floor homes have higher floor to ceiling heights and larger windows, which RBG agreed was a positive feature. RBG likes the top set back floor being in the same brick as the rest of the building. Agreed was a positive feature”

RBG Comment:

“The tops of the Plot D buildings should be celebrated more”
“For Buildings D3 and K5, the top three floors are grouped together after the final band. RBG suggested that this was detailed differently to the rest of the building, such as a white window surround around the top three windows”

RBG Comment:

“Emphasis placed on the preference for visual permeability through the entrance lobbies, from the street to the park on Building K3 /4, as well as larger entrance lobbies”

Design Response

The design team to show the detail of the ground floor terraces and interface with landscaping / pavement at the next pre-app and RMA submission



Design Response

The design team to look at design options that add architectural interest to the top of the focal buildings (D3 and K5). Express articulation with white window surrounds



Design Response

The emerging design will provide generous entrance lobbies with the aim to create the desired visual permeability





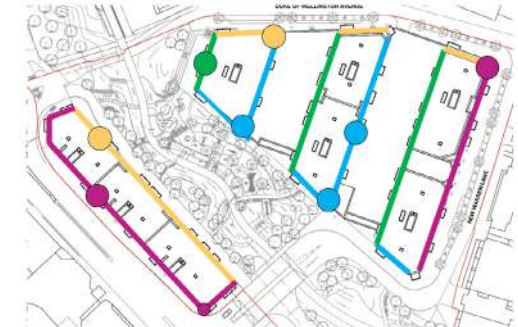
Pre-App Meeting 6

RBG Comment:

“Queried strategy to tackle overheating and meet Part O”

Design Response

Hodkinson explained that all homes pass using passive measures with open windows, however Part O requires noise to be taken into account, which then dictates that the noise levels are too high so the window needs to be closed. As a result, mechanical measures are then required



RBG Comment:

“Queried the quality of the balconies on the K buildings along Beresford Street given the noise constraints”

Design Response

The Design team explained that there is no guidance for measuring noise in residential balconies. Sol Acoustics explained that if other amenity areas are provided that are quieter (on site or offsite) that offsets the impact of residential balconies that exceed noise levels



RBG Comment:

“Queried the daylight and sunlight baseline and whether the initial internal assessment percentage was based on BRE Guidance 2022”

Design Response

The design team confirmed that the reporting was on the baseline (2013) and updated baseline (2024)

At this point in time, the internal assessment is showing 80% - 90% compliance with BRE guidance 2022

4.3 COMMUNITY ENGAGEMENT

An intrinsic part of the design process has been the engagement with the local residents and stakeholders. The engagement periods provided options to participate and give feedback, including in person and online events.

The overall feedback to the proposal was positive, with a few concerns raised over parking, overlooking, the park and the provision of residents facilities at ground floor, such a gym.

In Person Events Webinar

12th December 2023 - Residents In-person consultation event

16th December 2023 - Residents In-person consultation event

21th February 2024 - Residents webinar



The newsletter was distributed to 3,723 residents and business as well as the Royal Arsenal Business Network



853 unique website visits

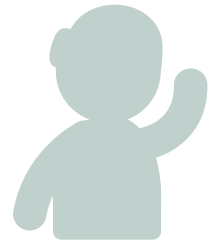


150 people attended the two in person events and 43 joined the webinar session

168 people responded to a questionnaire to provide their feedback

'Include an additional gym to ensure capacity for existing and future residents.'

'Highlighted the importance of green space within the proposals. To date, residents have enjoyed the temporary park and would like its replacement to deliver community value'



'Daylight and sunlight impact to neighbouring properties'

'85% of responders were in favour of the removal of Building K1 and replacement with green space'

"Concierge capacity and future provision"

"Public parking"

You said - we did

Gym

A common suggestion from attendees of the previous public consultation and responders of the questionnaire was to include an additional gym to ensure capacity for existing and future residents



- We have reviewed usage of the existing gym. It is proposed that an additional dry gym is provided in Building D3 to ensure capacity

Parcel Rooms

Feedback received from the previous public consultation highlighted the view that additional homes and residents would place a burden on the existing concierge, in particular the ability of concierge staff to manage an increased amount of parcels



- Dedicated parcel rooms have been included on the ground floor of each proposed building
- Residents of the proposed buildings will still be able to use the existing concierge for other services, however parcels should be delivered to their dedicated parcel room

The park

Overall, responses highlighted the importance of green space within the proposals. To date, residents have enjoyed the temporary park and would like its replacement to deliver community value



The design principles of the park are:

- Play: Create an engaging environment that encourages a range of activities and play opportunities
- Placemaking: celebrates and reveals the rich, site-specific history
- Biodiversity
- Improve climate resilience.
- Tree planting

Public parking

Some responses queried the loss of car parking for visitors, as a public car park is being removed



- The closure of the public car park adjacent to the Hotel will enable the remainder of Maribor Park to come forward
- Berkeley is proposing that the Heritage car park (between Woolwich Works and Building C1) stays open permanently to ensure sufficient public car parking spaces across Royal Arsenal Riverside. A further public car park is located on Station Way (Cannon Square car park)

4.4 SECURITY STATEMENT (SBD)

The Ropeyards proposals have been designed to minimise crime and anti-social behaviour within and around the buildings. Apartments and non-residential spaces integrate secured-by-design (SBD Homes 2023 guide) principles and have embedded advice from secured by design officers who have reviewed the architectural, landscape and public realm proposals. Their design team is working towards achieving Gold.



SBD Officer Observations / Our Response

Design Proposals

The design team explained that Buildings K3 and K4 have been merged into one building, with 10 units served by 2 staircases and 4 lifts

SBD Comment:

'Where residents can gain access to multiple buildings due to them being connected, it can create difficulties locating where the resident / individual causing an issue lives / is going. Nonetheless, the officer said that he didn't view this to be an issue in K3 and K4'

Design Response

No action required

Design Proposals

The design team explained that all the cycle stores have been subdivided and have a maximum of 100 cycles per store

SBD Comment:

'it is positive that the cycle stores have been subdivided and should have a maximum of 100 cycles per store'

'the public should not be able to see into ground floor cycle stores, as this increases the opportunity for bike theft. Any external glass facades to ground floor cycle stores should be obscured'

'that basement cycle stores should be visually permeable, as enabling the public to be able to see into these areas (where offences are more likely to take place) reduce crime'

'there is no requirement for security rated doors on the basement cycle stores'

SBD now has ratings for cycle racks (introduced in 2023)

'Any door into a cycle store needs to have enhanced rating LPS1175 SR2 / BR2. This is the case even if the cycle store is in a job accessed car park'

Design Response

Any external glass facades to ground floor cycle stores to be obscured

The design should ensure that residents only have access to the bike stores designed for their building

<p>Design Proposals</p> <p>The design team presented the podium level floor plan where the communal residential courtyards are located on the Plot D</p>	<p><i>SBD Comment:</i></p> <p><i>'CCTV is required in the internal hallways leading to the podiums to dissuade people from breaking in to the buildings from the podium'</i></p>	<p>Design Response</p> <p>Noted</p>
<p>Design Proposals</p> <p>The design team explained that waste strategy and location and access of the bin stores.</p>	<p><i>SBD Comment:</i></p> <p><i>'The double doors to the refuse, as proposed, are fine. Traditionally this comprised a master door and slave door. The slave doors needed relocking which typically wasn't done, however double doors are now better and self-secure. A single oversized door would be fine as well'</i></p>	<p>Design Response</p> <p>No action required</p>
<p>Design Proposals</p> <p>The design team explained the access and maintenance strategy for the roofs which contain plant equipment and Photovoltaic panels.</p>	<p><i>SBD Comment:</i></p> <p><i>'The proposed roof access is fine, as long as it is locked'</i></p>	<p>Design Response</p> <p>Noted</p>
<p>Design Proposals</p> <p>The design team presented the core arrangement for each building including compartmentation and entrance lobbies</p>	<p><i>SBD Comment:</i></p> <p><i>'The compartmentalisation caused by the core arrangements is positive in terms of security'</i></p> <p><i>'residents should only be able to access the level that they live on, as well as communal floors such as the ground floor and basements'</i></p> <p><i>'it is best to have audio visual call point in the lift itself, as opposed to only outside entrance lobby'</i></p> <p><i>'due to the compartmentalisation on a typical floor (created by the core arrangement), there is a requirement for 4 audio visual call points at the end of protected lobbies. Only fobs are needed at the top of the stair to each typical floor'</i></p>	<p>Design Response</p> <p>Noted</p>

Design Proposals

The design team presented the arrangement for each entrance lobby including post and mail rooms

SBD Comment:

'a separate parcel room is good. Parcels are often stolen, so it is positive that the proposal is for these to be secure. They should be fobbed accesses, but do not require a secure door'
CCTV is required in the parcels rooms. There should be an option to call concierge via the audio visual points to enable the delivery personnel to gain access to the parcel rooms'
'Mail boxes should be TS009'

Design Response

Noted

Design Proposals

The design team presented the arrangement for the commercial units within Buildings D3, D5, K5 and K4

SBD Comment:

'the shell and core needs to be fitted out to secure the buildings'
'Pass 24 doors for commercial is fine'
'Curtain walling - 1) how the glass is held in place (RC3 required), 2) glass within it (P3A minimum)'

Design Response

Noted

Design Proposals

The design team mentioned that CCTV location was to be advised by a CCTV specialist

SBD Comment:

'A CCTV specialist will need to advise how many cameras are required'
'as a guide, the following will need to be covered: all cycle stores internally, postal and parcel rooms internally, podium corridors leading to the residential units, the basement (rough coverage for general observation), and all routes into the building'
'Audio visual call points - the pin hole camera should not store data (it is not CCTV). Data logging for access control needs to store for 30 days only (i.e. so estate management can pin point immediate issues etc.)'

Design Response

Noted

Design Proposals	SBD Comment:	Design Response
The design team gave an overview of the fire strategy across all buildings	<p><i>'LFB have a section of SBD. LFB typically buzz until can get inside. Due to compartmentalised building, there are lots of doors to buzz through. An outlet should be fixed to the building, which would enable them to enable the kill switch'</i></p> <p><i>'Advised that the project team should contact the LFB, and set out current the strategy (i.e. LFB call concierge to get access to building), but SBD officer has advised kill switch required'</i></p>	Noted

Design Proposals	SBD Comment:	Design Response
The design team presented the landscape and public realm proposals across the scheme	<p><i>'Concern that the bunds in the park could obscure natural surveillance'</i></p> <p><i>'The main route through the park should be lit so the public can see though the park and it is visually permeable. The pathway through the park should be kept wide. CCTV may be required in the lower park as obscured on left hand side'</i></p> <p><i>'Both high and low mounted lighting are required in the park, so the lighting does not make it difficult to ID people'</i></p> <p><i>'Lighting should be designed by a Level 4 lighting designer. However, the SBD officer advised that availability of lighting professionals is short currently'</i></p> <p><i>'Benches should be designed to encourage sitting chatting, and discourage daytime drinking and rough sleeping on'</i></p>	Noted

Design Proposals	SBD Comment:	Design Response
The design team explained the landscape strategy around the ground floor of D5 and D1, where there are homes at ground floor whit private amenity patios. The current design is for hedging and railings along those defensible spaces	<p><i>'It is important to not create an opportunity for people to loiter / store drugs / knives etc. Seating and dense foliage should be around entrances. The proposed hedging and railings for all defensible space is positive'</i></p>	Noted

5. SITEWIDE DESIGN STRATEGIES

5.1 THE VISION

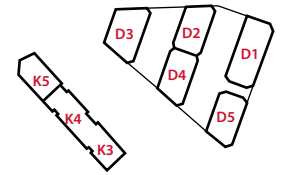
The proposal is aimed to:

- Foster a sense of place within the wider context of the Royal Arsenal Riverside development
- Positively contribute to the existing and emerging local community
- Celebrate and respect the identity of the heritage assets adjacent to the site
- Create a permeable and active neighbourhood
- Adjust the orientation and position of the D blocks to maximise passive design principles and sustainability
- Maximise views towards the river
- Improve sunlight and daylight
- Improve legibility with clearly defined frontages, uses and places of distinction
- Offer a wide range of building typologies
- Reference local architectural proportions and materials palette
- Secure proposals for a mixed and balanced community
- Terracing and escarpments link to geology narrative
- Topography transitions from open terraces to North to playful landforms in South
- Planting typologies developed in response to topography and visual links



Illustrative image

Townscape improvement opportunities



The S96a application to the Outline Planning Permission proposes the removal of Building K1, which would have the following benefits:

- Very significant improvement to the setting of heritage assets in proximity, including Grade 1 Foundry
- Improve connectivity between Woolwich Town Centre and the Thames Path
- Maximise provision of public green space
- Create a clear entrance point from Beresford Street

Building K2 is not included in this Reserved Matters Application and will be incorporated into the permitted adjacent student accommodation scheme, which will result in:

- A more cohesive townscape
- Fewer building typologies along Beresford Street and reduced height close to Woolwich Town Centre



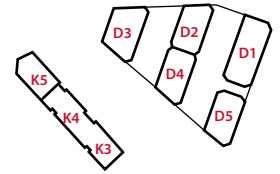
2013 outline permission



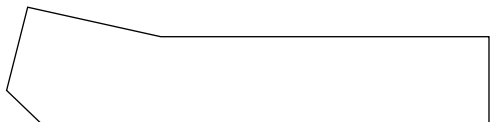
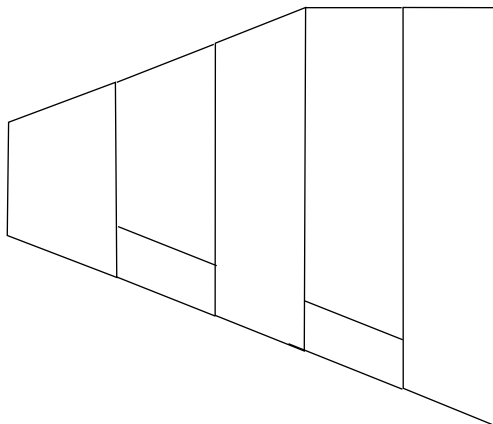
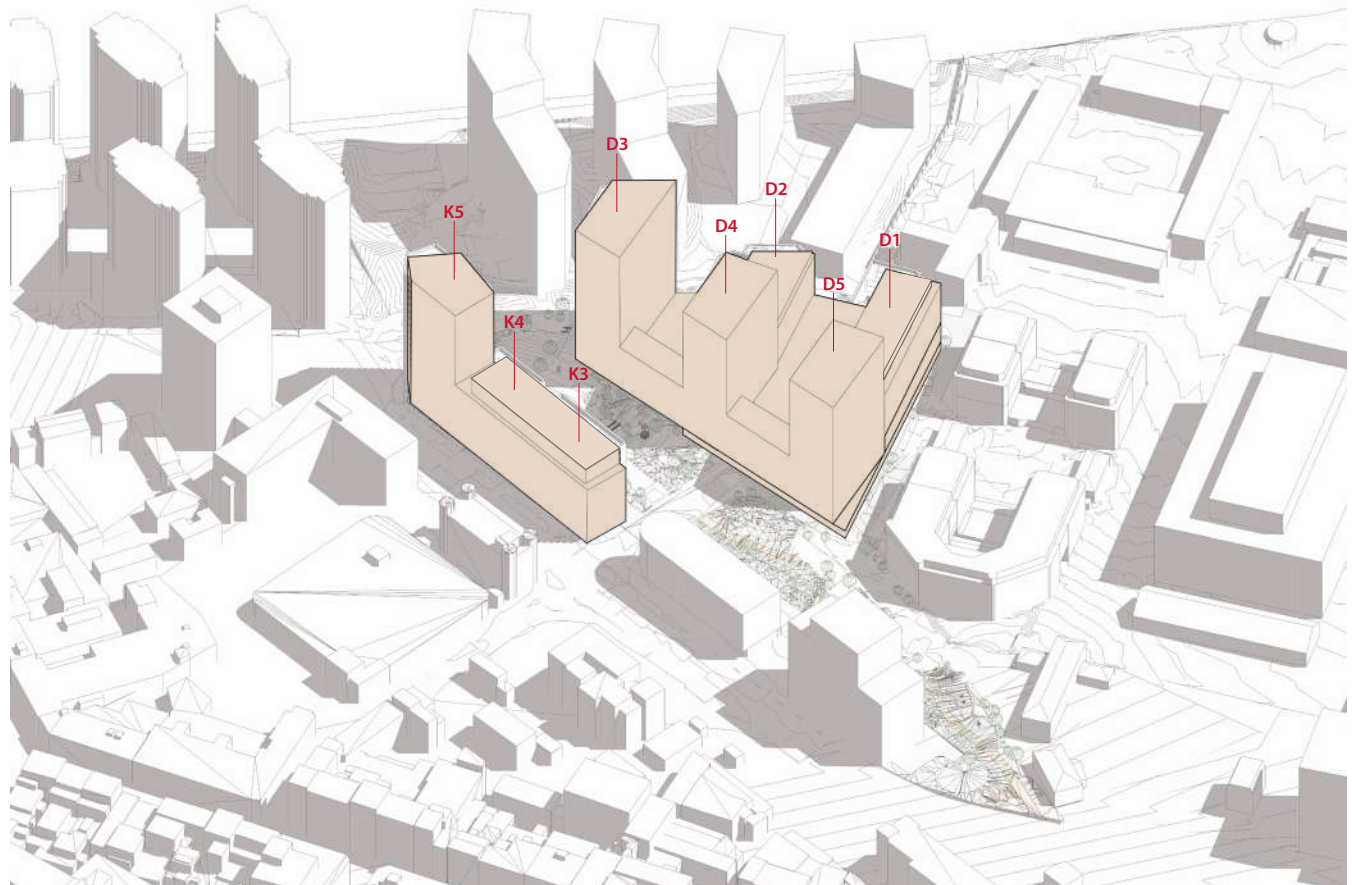
Indicative scheme with Building K1 removed

5.2 SCALE AND MASSING

Outline permission massing (2013)



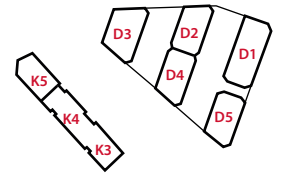
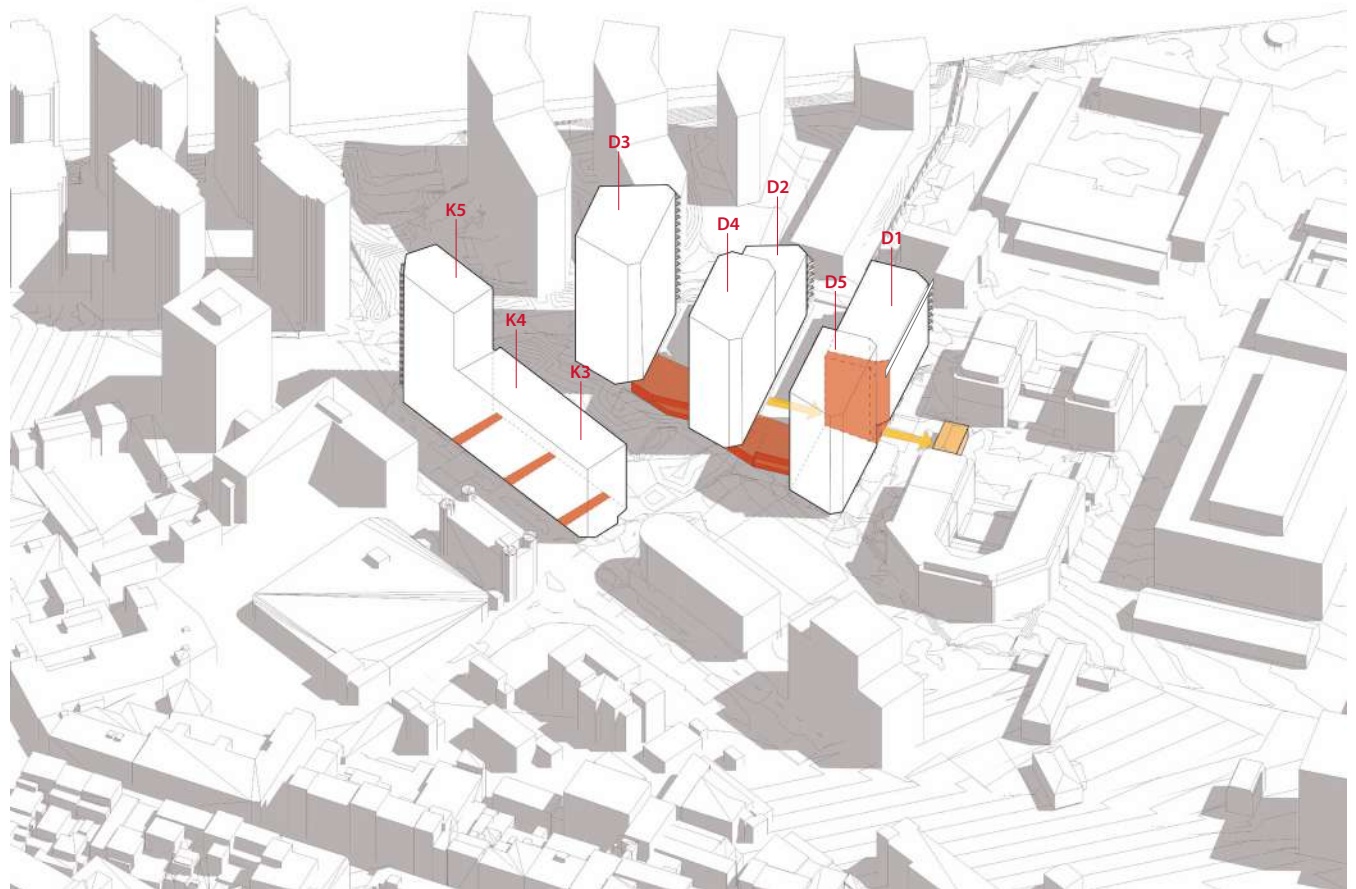
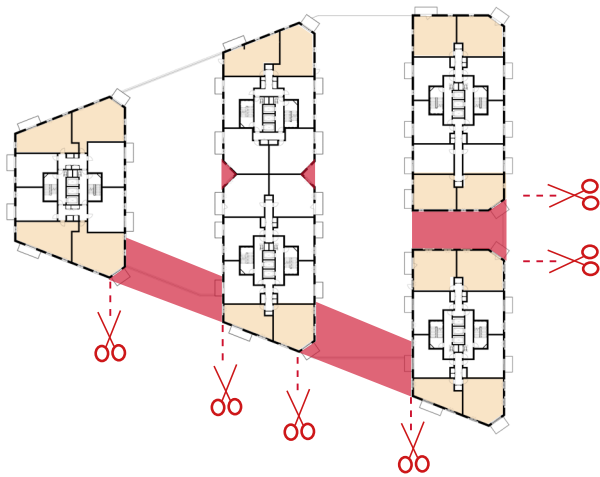
The parameters set out by the outline masterplan for The Royal Arsenal Riverside establish a considered approach to building massing, heights, and scale, responding to the varied character of the surrounding residential and heritage context. Within these parameters, Ropeyards Plots D and K proposed heights provide variety, increased townscape legibility and align with the placemaking aspirations of the masterplan.

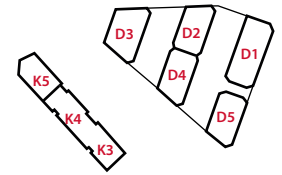


Reserved Matters. Proposed massing

Opening View Towards Heritage and the Park and Increasing Dual Aspect

By removing the lower built form between the Plot D buildings along the park and by splitting Buildings D1 and D5 along New Warren Lane, the resulting massing creates a clear viewing corridor from the public realm towards the podium courtyards and to the heritage asset of the Laboratory Pavilion West.

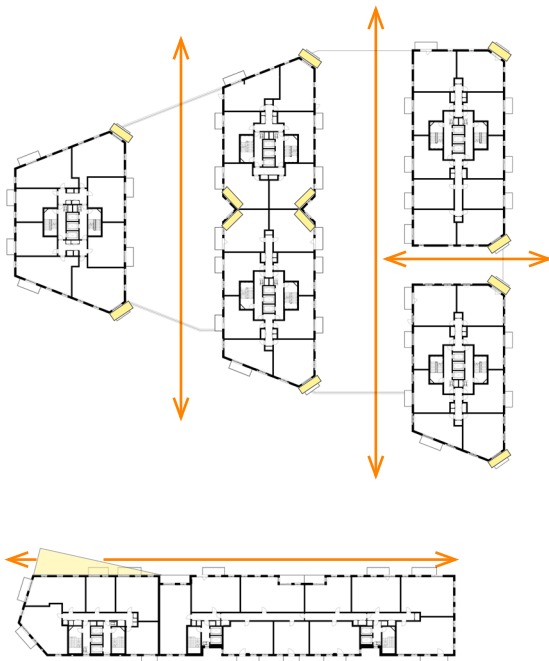
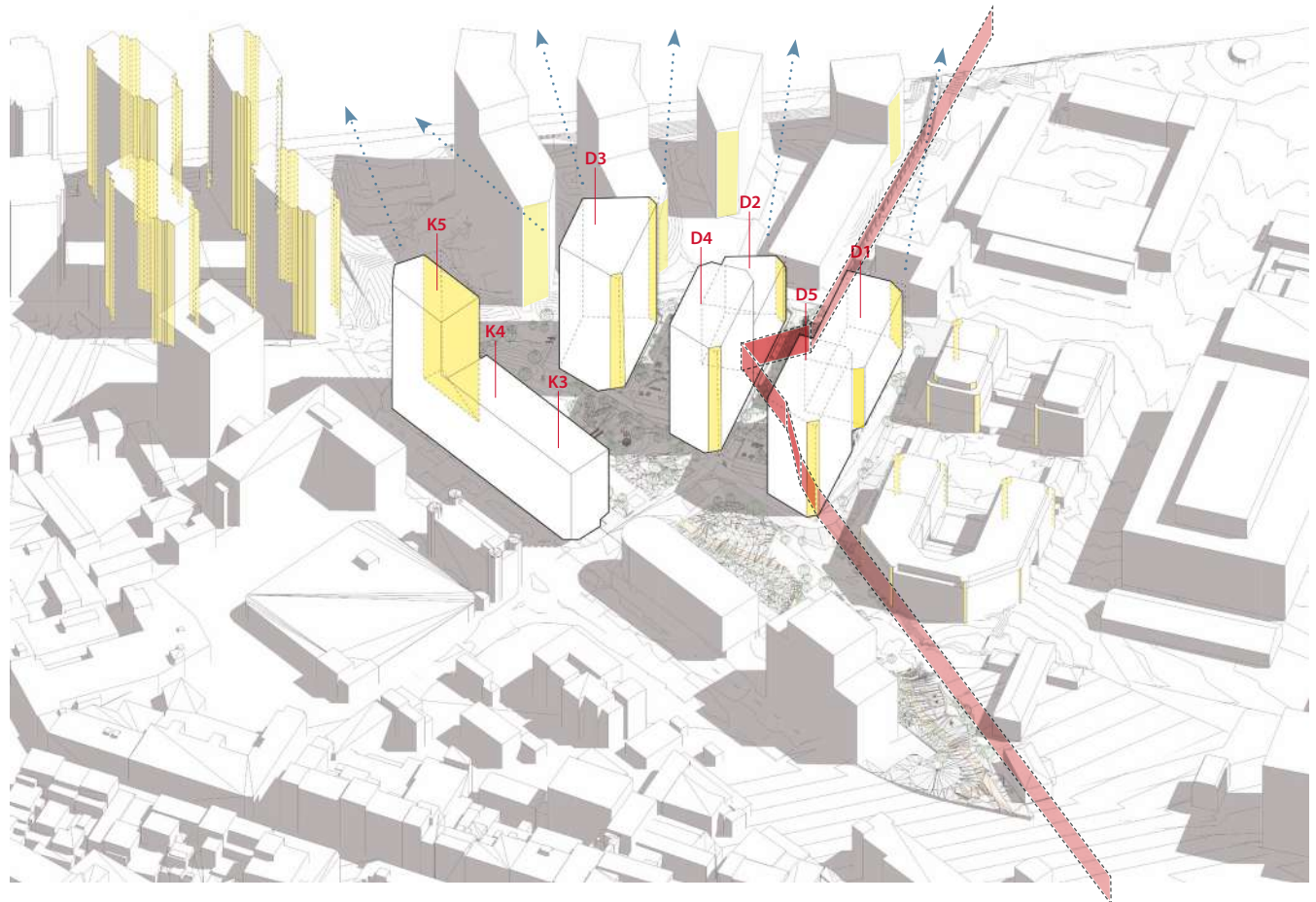




Chamfering of the Mass and Visual Permeability

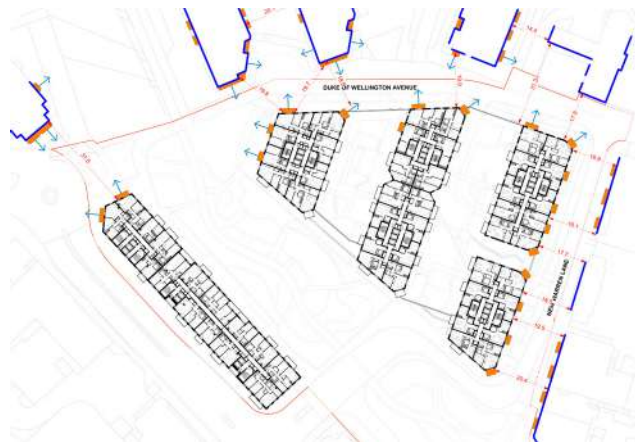
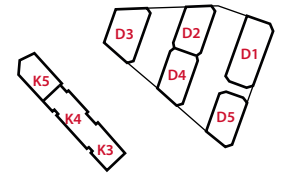
A historic wall marked out the boundaries of Royal Arsenal and the design proposal aims to highlight it as a local landmark.

The architectural proposal relies on the past of this emblematic site. The wall and its angle can be referenced into the chamfer design of the corner elevations and entrance lobbies across Plot D.

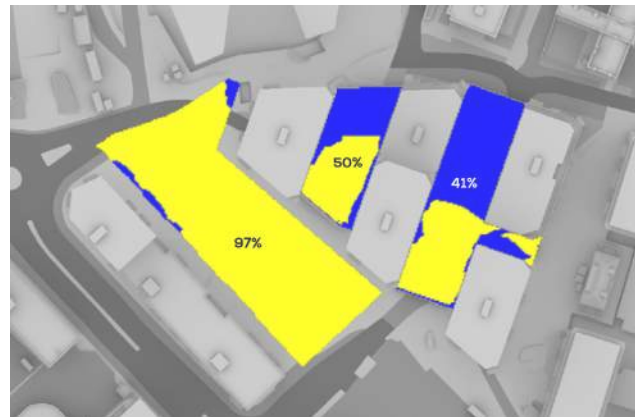


Visual Connection to the Park

Borrowed landscape and improved daylight sunlight

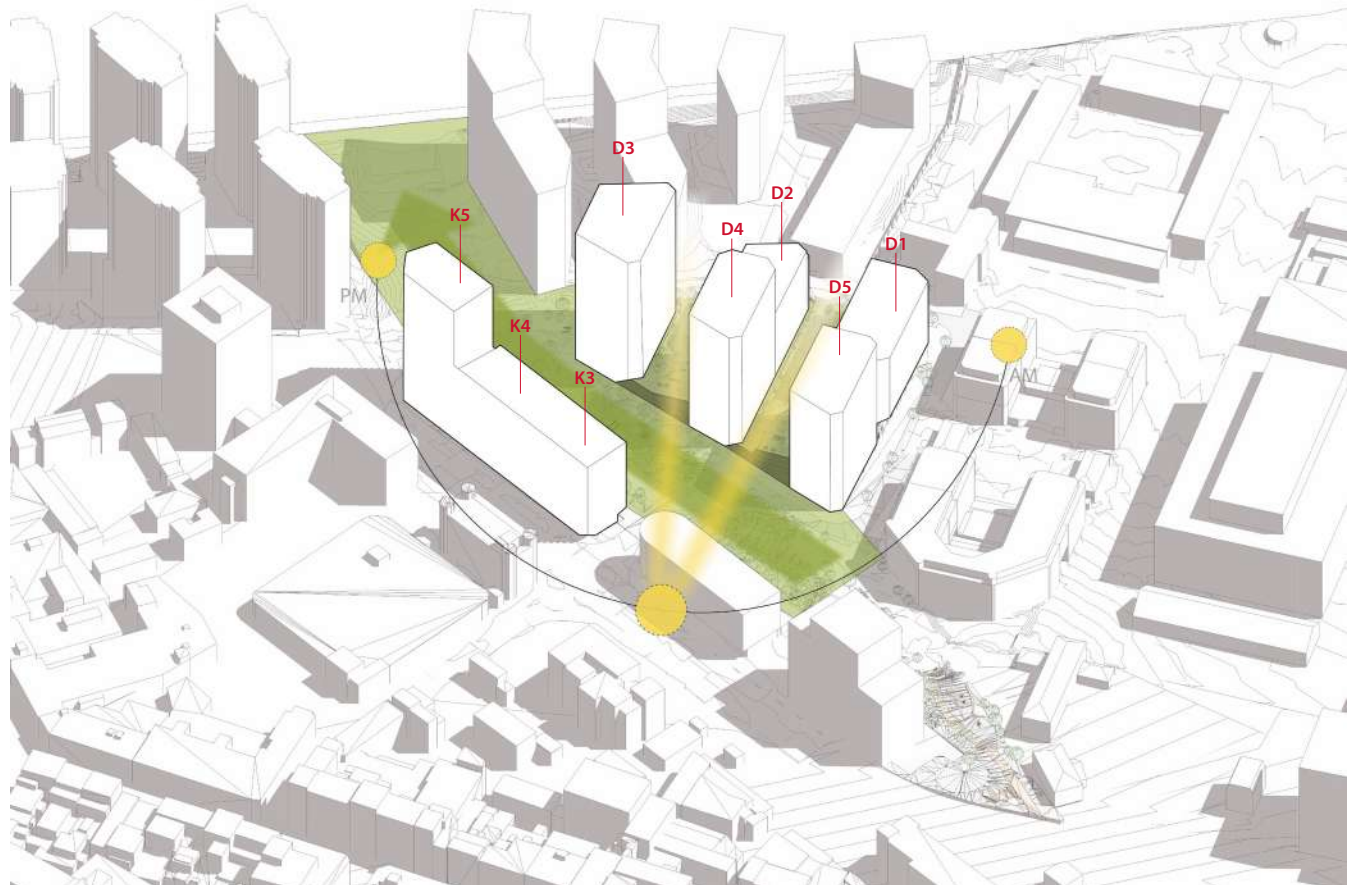


Indicative distances to adjacent buildings



OVERSHADOWING ASSESSMENT - OPEN SPACES
Sun hours on ground - BRE test 21st March

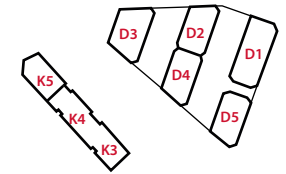
■ <2 ■ 2+



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

5.3 QUANTUM AND MIX

Accommodation schedule



Under the 2017 S106 Agreement connected to the amended S73 Outline Planning Permission, the requirements for affordable housing provision are for a total of 306 (46%) affordable homes to be delivered in this final phase of the Waterfront Masterplan, of which 115 (38%) are Affordable Rent (AR), 101 (33%) Shared Ownership (SO) and 90 (29%) Discount Market Sale (DMS) tenures.

This RMA proposal has been designed to enable compliance with the S106 Agreement, and the affordable housing details will be provided via the relevant S106 provisions.

If approved, the affordable housing would be delivered as follows:

- 281 affordable homes on-site of which 90 are AR, 101 are SO and 90 are DMS, in a variety of sizes and located as follows:
 - Building D1 - 69 DMS
 - Building D2 - 3 DMS
 - Building D5 - 101 SO
 - Building K3 K4 - 90 AR
 - Building K5 - 18 DMS
- 25 affordable homes (3+ bedroom homes) off-site at Kidbrooke Village.

DWELLING PER BUILDING								
Dwelling Type	D1	D2	D3	D4	D5	K3 K4	K5	TOTAL
1B1P	0	1	1	0	0	0	34	
1B2P	51	17	34	75	64	9	0	
1B2PW	0	1	0	1	0	0	0	
2B3P	15	0	33	0	0	9	0	
2B3PW	15	0	0	19	25	9	0	
2B4P	1	29	34	25	12	27	51	
2B4PW	1	0	0	0	0	0	0	
3B5P	0	0	34	0	0	36	0	
Total	83	48	136	120	101	90	85	663



Homes
663 Dwellings



10% **WCH** dwellings provision M4(3)



44.3 % **Dual Aspect** Homes



Residential Cycle Spaces
1273 spaces



Parking
Standard - 120 spaces
Accessible - 22 spaces



Open Space and Public Realm

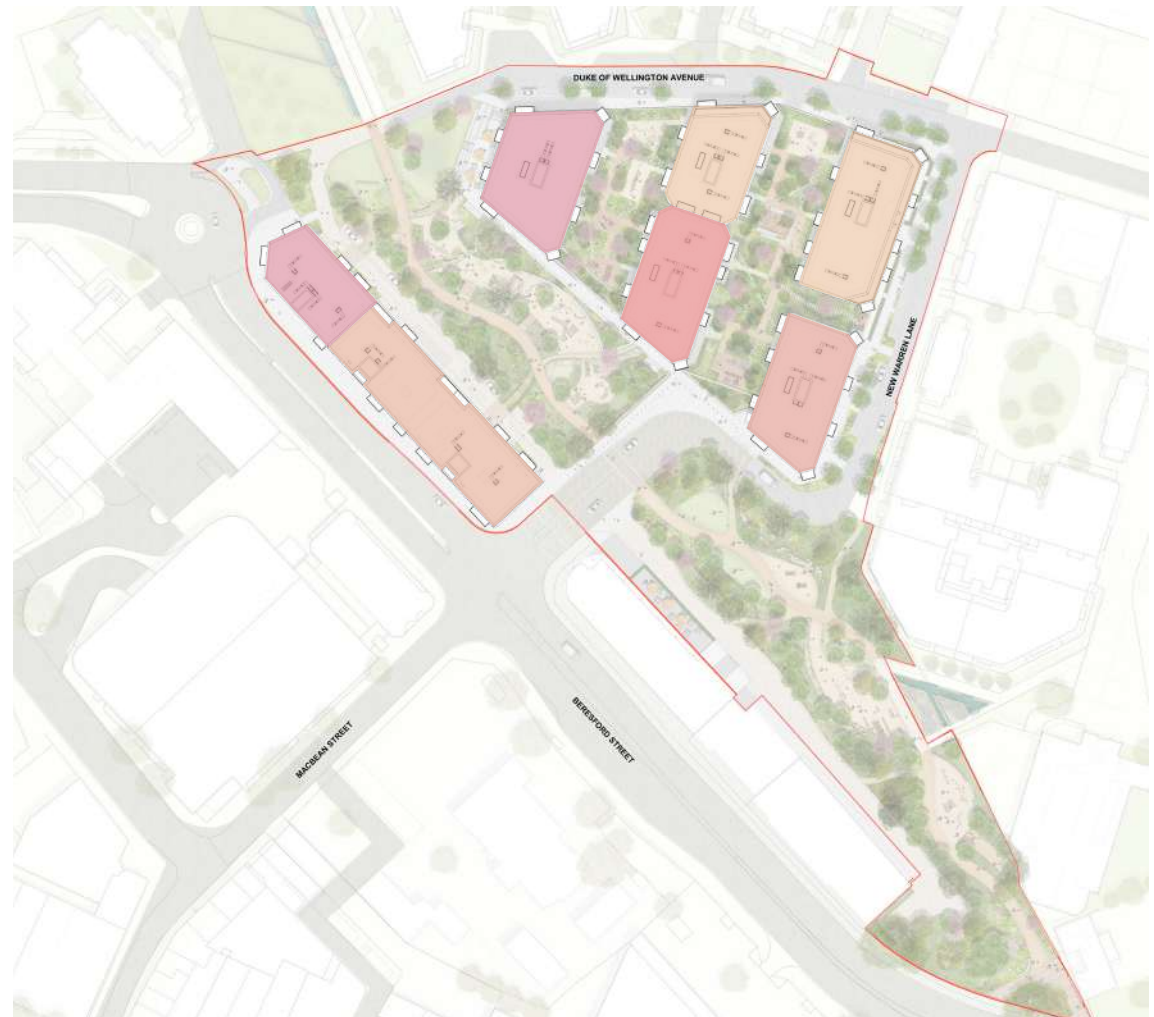
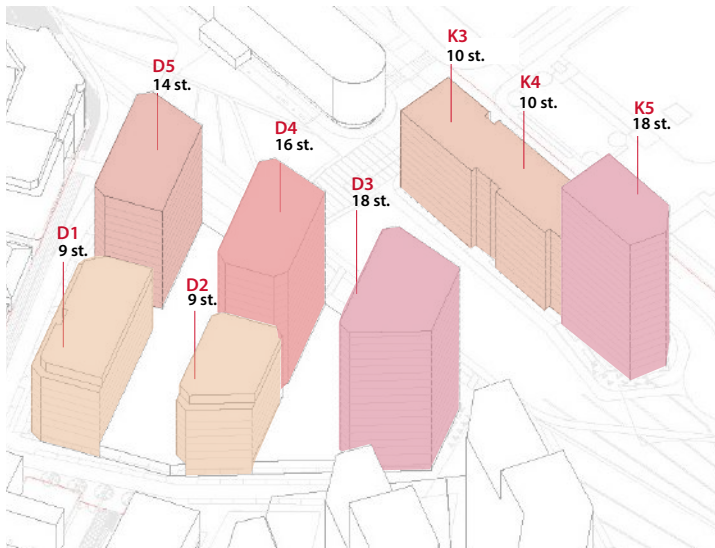
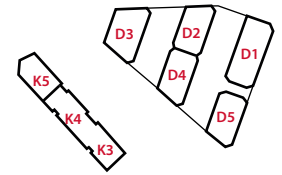


Communal Residential Amenity



Commercial and residential facilities

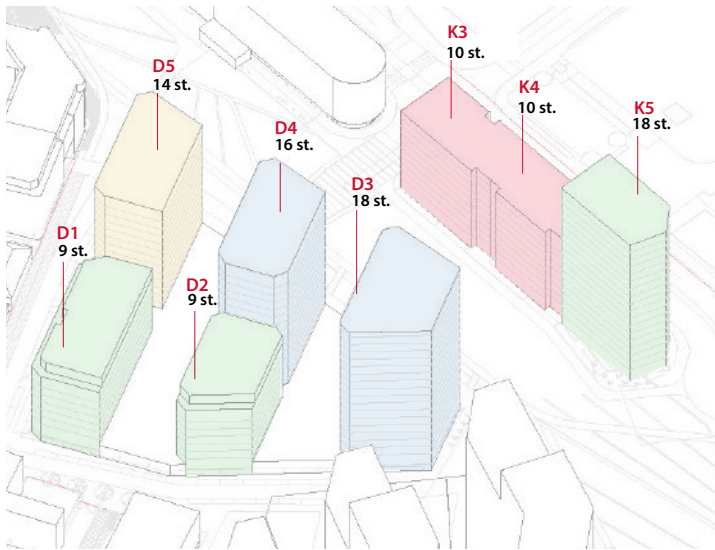
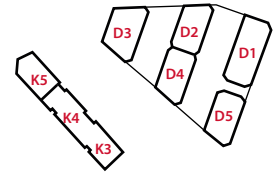
5.4 PROPOSED HEIGHTS



- Site Boundary
- 1 Storey
- 9 Storeys
- 10 Storeys
- 14 Storeys
- 16 Storeys
- 18 Storeys

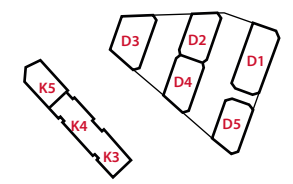


5.5 INDICATIVE TENURE DISTRIBUTION



- Private Sale
- AR
- Disc. Market and Private Sale
- SO

5.6 ILLUSTRATIVE MASTERPLAN



MEET



LIVE AND WORK



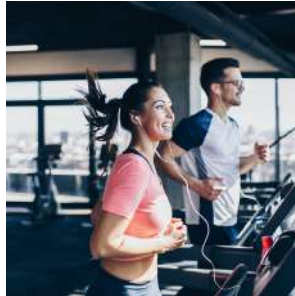
PLAY



RETAIL



GYM



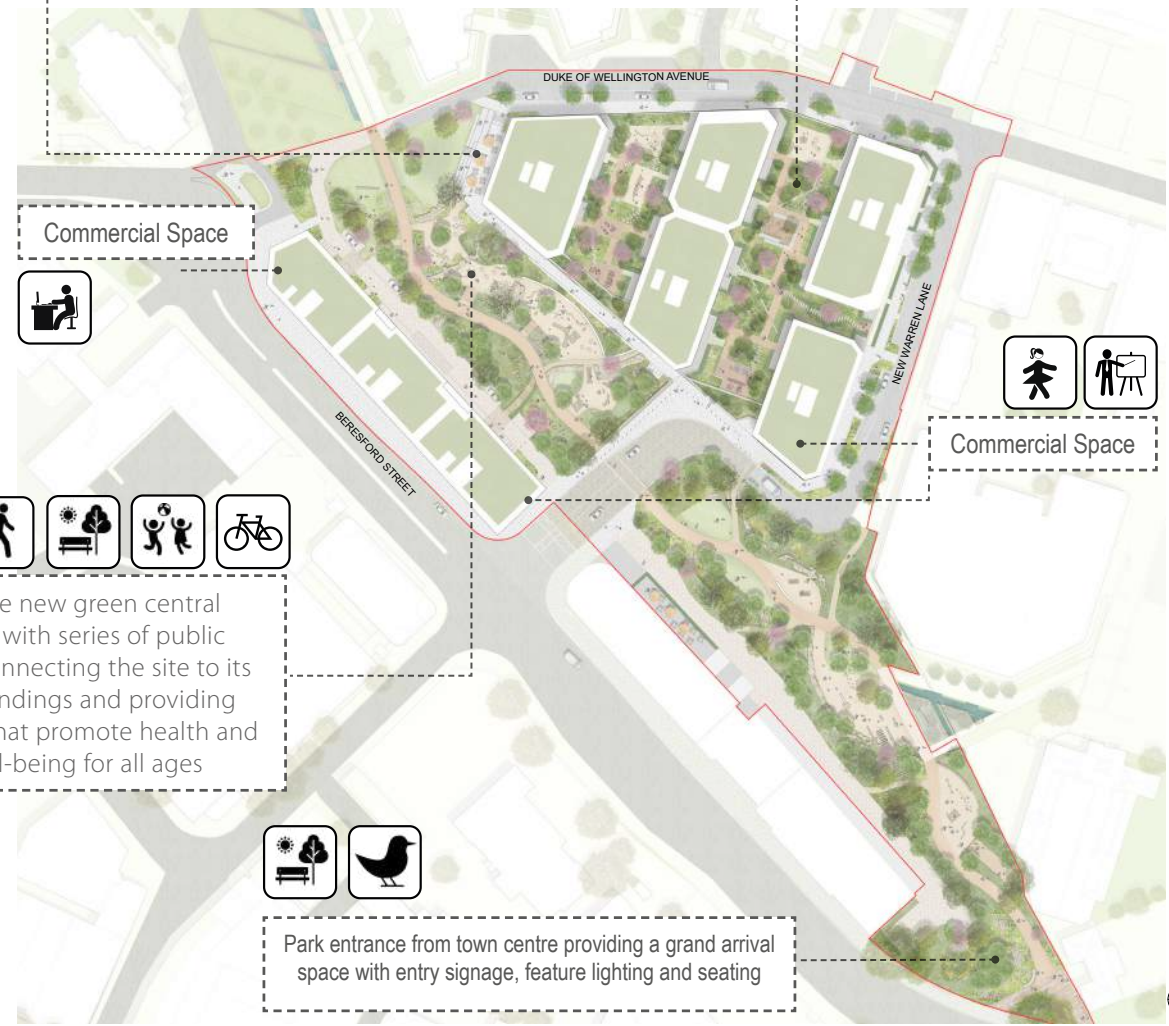
COMMUNITY



Commercial space and residents gym facilities



Secure communal podium gardens and play areas



Commercial Space



Commercial Space



Create new green central route with series of public areas connecting the site to its surroundings and providing spaces that promote health and well-being for all ages

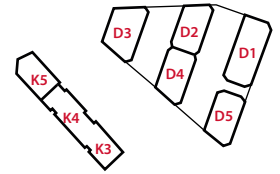


Park entrance from town centre providing a grand arrival space with entry signage, feature lighting and seating



5.7 GROUND FLOOR ACTIVATION

Placemaking



- Commercial
 - Residential Entrance
 - Dwelling
 - Entrance
 - Existing Active Frontage
- 1 The Guard House
 - 2 Beefeater Restaurant
 - 3 Premier In
 - 4 The Yoga Studio
 - 5 Woolwich Works and Punchdrunk Theater
 - 6 Farmer's Market (every other Saturday)
 - 7 The Waterside Club

5.8 RESIDENTIAL ACCESS AND MOVEMENT

Entrance lobbies and circulation

The scheme promotes equal and welcoming access to communal spaces for all residents.

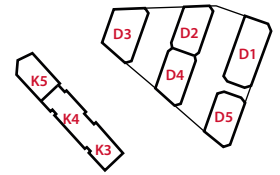
Generous, tall and tenure blind communal lobbies will provide prominent and dignified entrances for all residents, attracting footfall throughout the day and evening and enhancing on street natural surveillance.

Moreover, Plot K entrance lobbies have been designed to enable visual permeability from Beresford street to park.

All buildings on Plot D and building K5 are served by two staircases and three lifts (one fire fighting lift and two evacuation lift).

Building K3 K4 is served by two staircases with two lifts each (one fire fighting lift and one evacuation lift per staircase).

Circulation areas and corridors are treated as an essential part of the resident journey. Apartment doorways are given a special treatment through materials, lighting, ironmongery and recessed area to give each resident a sense of their 'own front door'.

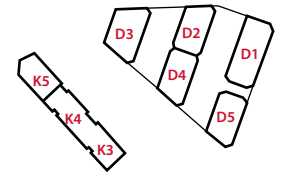


Illustrative image. Entrance lobby of building K3 K4



Illustrative image. Entrance lobby of building D1

5.9 CYCLE AND CAR PARKING STRATEGY



Residential Cycle stores

Cycling is promoted through the design with ample cycle stores including and celebrated via brightly lit and welcoming storage facilities. Residential Cycle parking provision will be provided in accordance with London Plan (2021) standards and London Cycle Design Standards (LCDS)

Residential Cycle parking provision: 1273 spaces

Plot	Two Tier	Sheffield	Locker	Cargo B.	Total
D	73%	20%	2%	5%	895
	655	178	18	44	

Plot	Two Tier	Sheffield	Locker	Cargo B.	Total
K	74%	20%	0%	6%	367
	276	72	0	19	

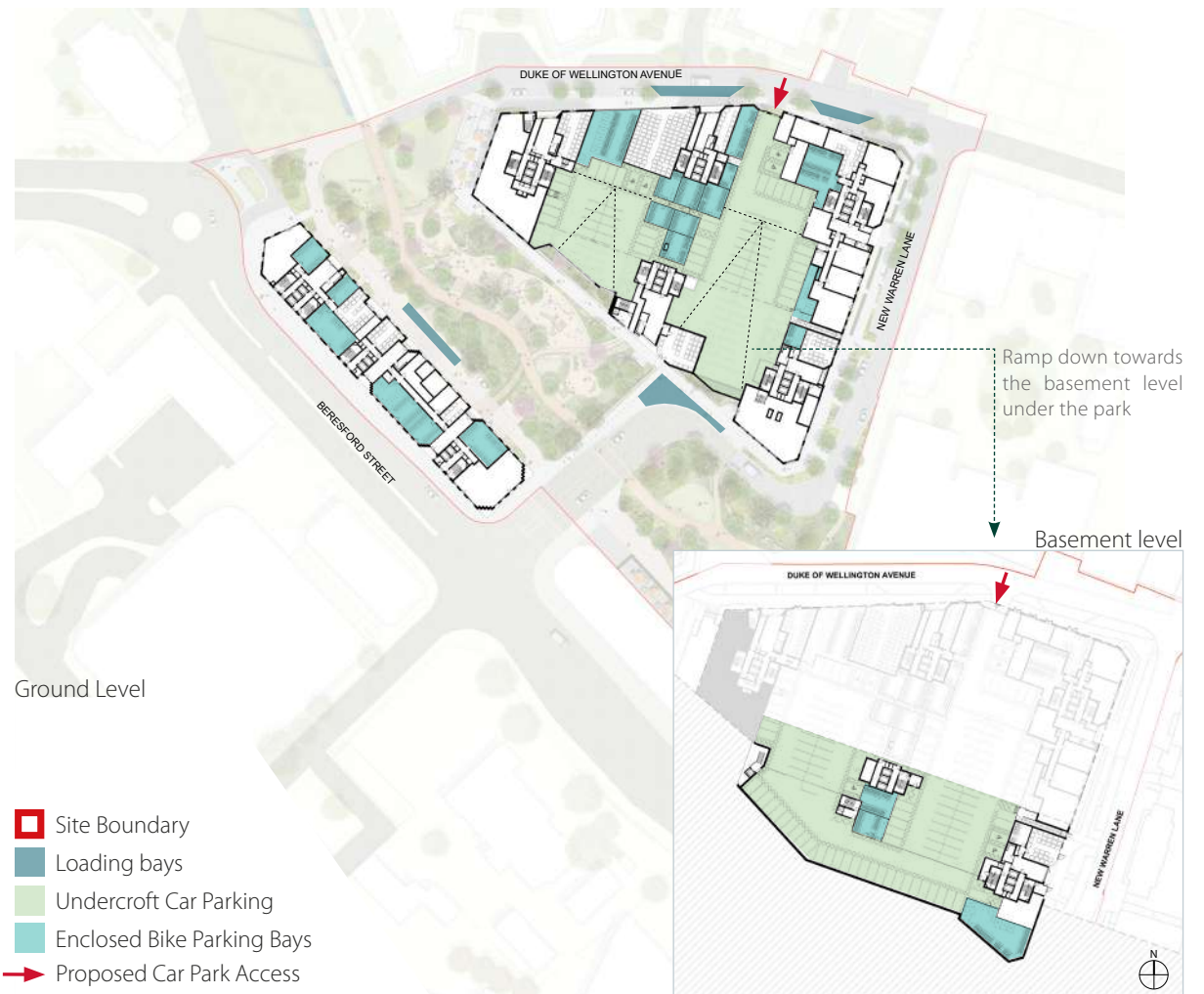
Short stay spaces					11
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Parking Provision

The proposed scheme includes a total of 142 (0.2 ratio) on-site and on-street car parking spaces of which 22 are blue badge bays for the overall site in accordance with the London Plan.

	Standard	Blue Badge	Blue Badge 'on street'	Total
Plot D and K	120	7	15	142
		22 (3.3% out off 663 dwellings)		

Blue badge parking will be provided at a minimum of 3% for residential uses with a further 7% should demand rise in line with the London Plan



Illustrative car parking levels

Section A



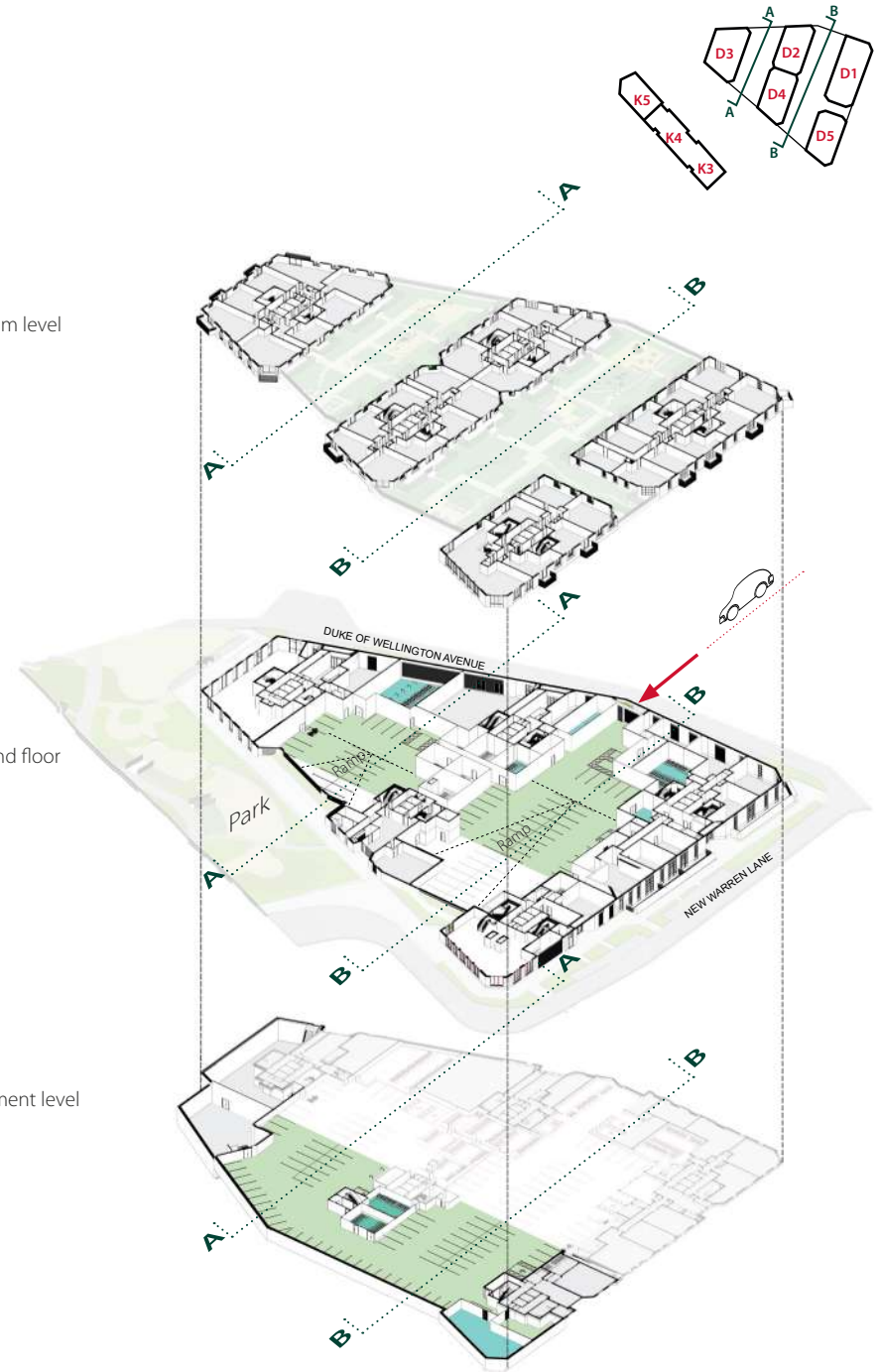
Section B



Podium level

Ground floor

Basement level



- Undercroft Car Parking
- Enclosed Bike Parking Bays
- Proposed Car Park Access

5.10 WASTE STRATEGY

Residential Waste

Refuse storage rooms are located on the Ground floor level for each building. There will be step free access from the passenger lifts to the storage rooms. Each storage room will be under 30m from all apartments and located near residential core passenger lifts to make the use convenient for residents. The refuse stores include general household waste, general recycling, organics recycling, WEEE recycling and textiles recycling.

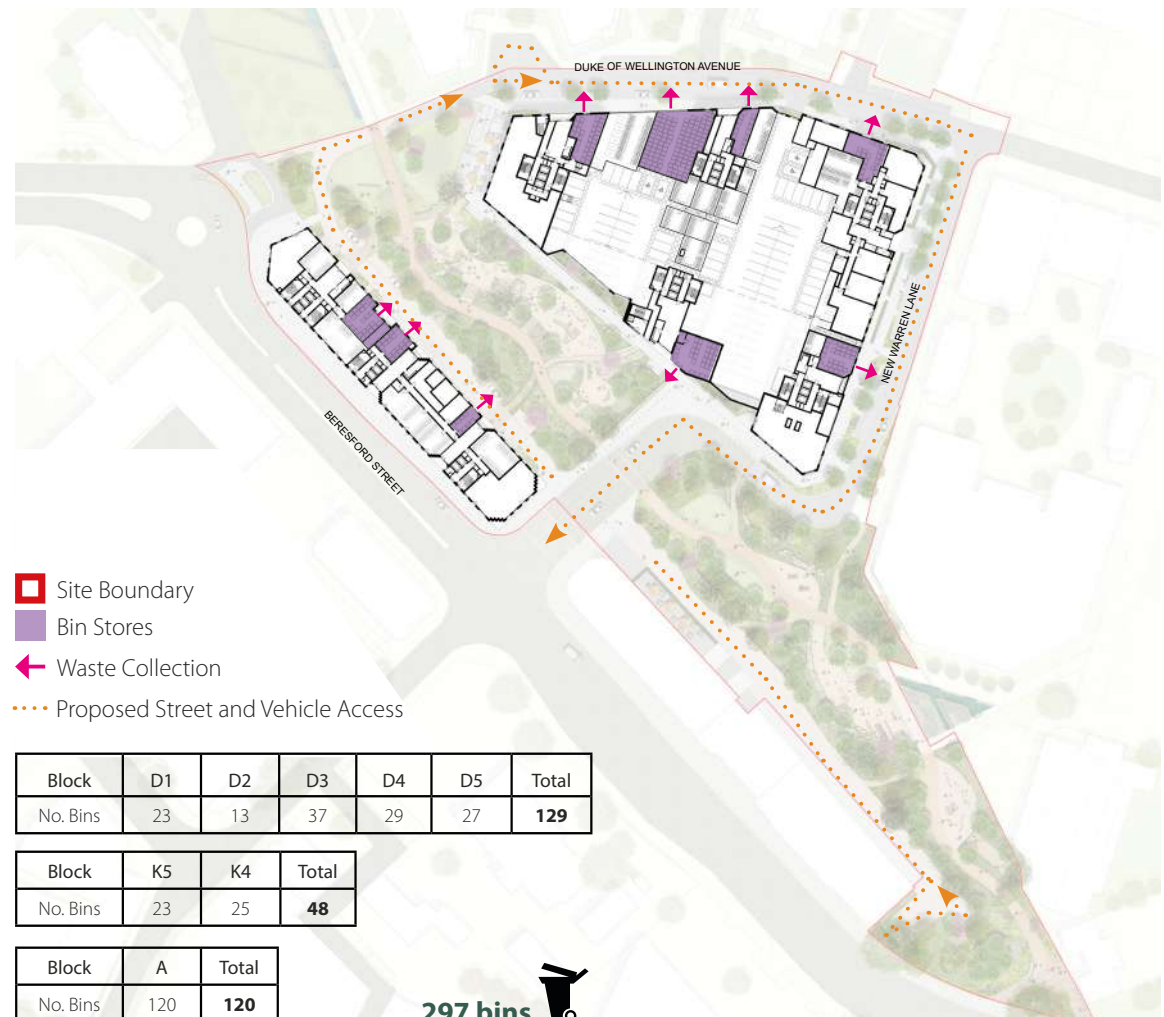
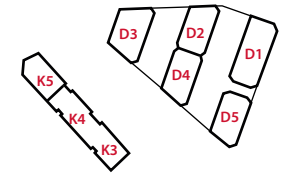
In accordance with RBG’s guidance, provisions for clinical waste and batteries will be provided in a single storage room accessed by all residents. Bulky waste stores have been provided for the building for bulky household items.

Storage areas will well lit and finished with durable materials that can be washed down to ensure a sanitary environment that is easy to maintain. Weekly collections will take place. Plot a refuse will be transported to the dedicated presentation store in Plot D by electric tugs. Onsite management will move the relevant bins on the correct day to and from the refuse storage rooms.

Commercial Waste

Commercial units will manage their own waste. Rather than using one refuse store they will store waste within their back of house areas. The area required will be subject to the use class and size of each unit, this is yet to be confirmed at the time of this application. This can be agreed between Berkeley Homes, tenant and RBG to ensure compliance when confirmed. Each commercial unit will arrange their own collection, with separate collection for general refuse, recycling and food waste. Each unit will have level access from the front or rear of each unit to the street for collection.

Please refer to the Transport Assessment for further tracking details of the refuse vehicle.



5.11 DESIGN STANDARDS

Quality and dual aspect

The scheme is being designed having regard to policy and guidance:

- All homes meet or exceed the minimum space standards / nationally described space standards
- All homes will have private open space
- 100% of 3 bed homes are dual aspect. Single aspect homes are limited to studios, 1 beds and some 2 beds
- All single aspect homes are wide fronted to maximise light
- Internal daylight and overheating studies are being carried out to inform design development
- All homes accessed from spacious lobbies
- Careful balancing of unit mix which control number of people on each floor of each core.
- Maximum of 10 units per floor
- Spacious corridors which are 1500mm width
- The total average units per core would be 8 homes/core
- Purpose built, secure and managed buildings which will have access controls and security measures built in
- Plot D and Building K5 are served by two staircases and three lifts (one fire fighting lift and two evacuation lift)
- Building K3 K4 is served by two staircases with two lifts each (one fire fighting lift and one evacuation lift per staircase)

2024 PROPOSAL

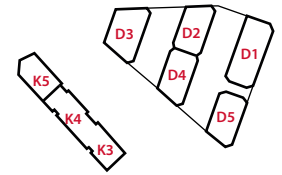


Dual aspect
44.3% homes

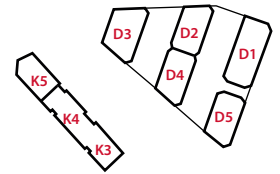
(+ 2.3% compared to OPA)

Including semi dual aspect
49.7% homes

(+ 7.7% compared to OPA)



5.12 INCLUSIVE DESIGN



The detailed design will meet Part M

- Reveals are no greater than 200mm on the leading side of any of the entrance doors
- Any entry system / intercom will be operable at height 750- 1000mm Above Floor level (AFL), have visual contrast (VC) and show visual signal when responded to. Entrance matting will be provided. This will be flush with the floor and non-coir

Entrances – Residential

- All ground floor cores are reached by suitably accessible routes from the outside and will have canopy protection from inclement weather
- Entrances have large doors that will be easily identifiable within the façade and will be easy to operate. All thresholds at the entrances will be accessible
- Any glazing at the communal entrances will have manifestations that will visually contrast in accordance with the requirements of Part M/K

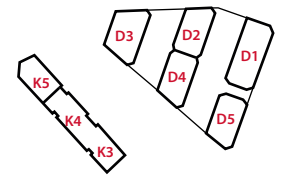
For the general (communal) circulation

- Communal doors throughout the residential parts including at the communal entrance will meet M4(3) requirements. Where the opening force of communal doors exceeds 22.5/30N, they will be power assisted
- Vision panels will be provide to doors across corridors

General communal circulation

- Access to the car parking will be internally via stairs, lifts and platform lifts. Stairs will be detailed to meet the requirements of Part K for 'general access stair'
- Each building has a dedicated refuse store at ground floor accessed from the lift core





- Location of M4(3)a Adapted Homes
- Location of M4(3)b Accessible Homes
- Lifts location (2 / 3no. lifts per core)

71no. Part M4(3) Homes

No. homes per building	K4	D1	D2	D3	D4	D5	Total	%
M4(3)a	9	0	0	0	0	0	9	10%
M4(3)b	0	16	1	0	20	25	62	10%

5.13 ENVIRONMENT AND WELLBEING

In line with the Applicant’s ethos, emerging national environmental policy and society’s expectations, we are looking to create a holistic ‘sustainable’ place at Ropeyards Plots D and K. Our strategic approach to sustainability is built around seven key impact areas and associated goals.

Creating Communities

- We design our places to provide the best opportunity for communities to flourish.
- Community events are held throughout the year, including an established Farmer’s Market.
- Community Action Plan to facilitate thriving communities.

Sustainable Places

- Connecting to a new Air Source Heat Pump.
- Three part refuse and recycling bins for all homes.
- A design that encourages sustainable transport use.

Responsible operations

- We are working to reduce energy, water and paper consumption.
- Working to reduce waste production through design, procurement and behavioural change.
- All of our sites are to be registered with the Considerate Constructors Scheme.

Net Zero Carbon Homes

- We seek to mitigate climate change through the design of our homes and developments.
- Reduction of the basement will significantly reduce the embodied carbon of the proposal.

Adapting to climate change

- We have set independently verified science-based targets to reduce our carbon emissions.
- We seek to create places that are resilient to climate change.
- Smart water strategy and overheating mitigation will be integrated into the proposal.

Net biodiversity gain

- We recognise the importance of protecting and enhancing biodiversity and aim for all new developments to have more nature after completion than before with a minimum 10% Biodiversity Net Gain targeted.

Healthy homes

- To enable our residents to lead healthy and happy lives, we provide walking and cycling routes, cycle storage, implement minimum space standards and enhance biodiversity on our developments.



- 1 FUTURE HOMES STANDARD/PASSIVHAUS
- 2 NET ZERO CARBON OPERATION
- 3 EMBODIED CARBON
- 4 CIRCULAR ECONOMY
- 5 REDUCED CONSTRUCTION IMPACTS
- 6 ECOLOGY AND BIODIVERSITY
- 7 WATER EFFICIENCY
- 8 CLIMATE CHANGE RESILIENCE

- 9 LANDSCAPE RESILIENCE
- 10 OVERHEATING MITIGATION
- 11 HEALTHY ENVIRONMENT
- 12 PUBLIC REALM
- 13 HEALTHY LIFESTYLES
- 14 SAFE, SECURE AND INCLUSIVE
- 15 SUSTAINABLE GROWTH
- 16 COMMUNITY ENGAGEMENT

5.14 ENERGY AND SUSTAINABILITY STRATEGY

Energy strategy

Connection to Royal Arsenal Energy Centre

Royal Arsenal Riverside masterplan already utilises a heat distribution network powered from a central on-site Energy Centre (located on Arsenal Way). The consented masterplan energy strategy is for a CHP led heat network. The Energy Centre has been sized for 4,000 homes, which includes The Ropeyards. The heat network is supplied via a combination of gas fired CHP and gas boilers. The CHP has been sized to supply 70% of the annual heat demand of the existing site, with the gas boilers supplying the remaining 30%.

Decarbonisation

In line with the GLA heating hierarchy, it is proposed that a connection to the existing Royal Arsenal Riverside heat network is made. The future expansion of the capacity of the RAR Energy Centre provides the opportunity for concurrent decarbonisation of the network in advance of any plant replacement cycles. In this way, a single site network is retained and low carbon prioritised. The Energy Centre is located outside The Ropeyards application area.

Be Lean

Energy demands are to be reduced substantially through fabric 'Be Lean' measures in order for the London Plan energy efficiency targets for both residential and commercial uses to be achieved.

Energy efficiency

The development will target a 76.7% reduction in Regulated CO₂ emissions for residential units and 40% reduction in Regulated CO₂ emissions for non-residential units through energy efficiency measures and PV panels.

Sustainability strategy

Through the incorporation of sustainable design and construction methods, energy and water saving measures, sustainable transport methods, waste reduction techniques and measures to enhance the ecological value of the site, a good quality and sustainable development is proposed:

BREEAM

All commercial units will be designed and built to achieve a BREEAM 'Excellent' rating under the New Construction scheme.

Overheating:

The scheme has been designed to ensure overheating risk is reduced to acceptable levels. The following passive mitigation measures are proposed:

- Openable areas of windows have been maximised, to ensure adequate natural ventilation;
- Window casements open inwards to allow maximum openability;
- Guarding heights are 1.1 m from finished floor level enabling windows to be fully open without the need for restrictors;
- External shading is provided to some windows in form of balconies and external reveal depth of 215 mm;
- Highly efficient fabric envelope including concrete floor slabs to provide thermal capacity and high performance solar control glazing with g-values optimised to mitigate overheating risk; and
- A background mechanical ventilation system providing ventilation rates between minimum Part F and 2.0 ACH, depending on the level of overheating risk.

Due to the noise risk in accordance with Part O, those homes affected by external noise are proposed to include some form of cooling provision to mitigate the residual overheating risk. This may be through the use of full comfort cooling or cooling bolt-on units to the MVHR system. The exact system will be determined at detailed design stage and will be suitably designed to ensure that thermal comfort levels can be achieved

Water efficiency:

Flow control devices and water efficient fixtures and fittings will be installed in all dwellings to target a maximum internal daily water consumption of 105 litres/person/day.

Waste and recycling:

Adequate facilities will be provided for domestic and construction related waste, including segregated bins for refuse and recycling.

6. LANDSCAPE AND PUBLIC REALM

6.1 INTRODUCTION

Introduction

This chapter outlines the vision, principles and design concepts which have guided the development of the landscape and public realm proposals for the park, streetscape and communal podium gardens associated with Plots D and K.

The landscape chapter of the Design and Access Statement should be read in conjunction with other chapters, relevant planning reports and associated drawings.

Masterplan 2015

Outline Planning Permission (Ref: 13/0177/O) was secured back in 2013. This established the design narrative for the Waterfront Park, public realm and the Plot D podium gardens.

Subsequently a Reserved Matters Application for the Waterfront Park was submitted and granted consent in 2015 (Ref: 15/0596/R).



- ① Catholic Club building [Existing]
- ② Leisure Centre [Existing]
- ③ Laboratory Square development
- ④ The Riverwalk
- ⑤ The Lawn
- ⑥ Residential Courtyards
- ⑦ The Piazza
- ⑧ The Waterfront - The Delta
- ⑨ Dial Arch Square [Existing]
- ⑩ New Entrance - The Source
- ⑪ The Gardens
- ⑫ The Terraces



Waterfront Park Masterplan 2015

Masterplan 2024

The current Masterplan relating to Plots D and K has evolved in response to the changes in planning legislation and building regulation, however the principles established in the Outline Planning Permission and Reserved Matters Permission for the Waterfront Park are maintained.

The requirements for new schemes to assess Urban Greening Factor and Biodiversity Net Gain created an opportunity for the design to further enhance the landscape and provide a scheme which would support biodiversity, habitat creation and incorporate Sustainable Urban Drainage Solutions within the public realm, park and the podium gardens.

The coming pages in this chapter will present the landscape vision for the current masterplan, the key design principles, site specific influences on the concept, rational behind the design decisions and detailed proposals for:

1. Maribor Park
2. Streetscape
3. Podium Gardens



6.2 DESIGN PRINCIPLES

Landscape Overview

Plots D and K are the final phase of the Waterfront Masterplan and wider Royal Arsenal Riverside. The residential buildings bring forward the last phase of Maribor Park, which will link the already implemented public realm of The Delta and The Source and create a new connection from Woolwich Town Centre to the River Thames.

Maribor Park will be a high quality green open space promoting healthy, active lifestyles for residents and the surrounding community.

The proposals seek to create a rich biodiverse landscape promoting mental and physical health and wellbeing; adapting to the impacts of climate change; improving air and water quality and supporting ecological resilience alongside more traditional functions of green space such as play, sport and recreation.

The landscape proposals build on the site's heritage, referencing the unique geological formation and themes drawing from previous uses or activities of the site. The vision for the park focuses on creating spaces which celebrate these historic themes such as warrens, kilns and ropemaking, details of which is presented over the coming pages.

Recent shifts in planning policy, including the Urban Greening Factor and Biodiversity Net Gain, emphasise the benefit of a mosaic of landscape typologies, which the proposals address.

At ground level this translates in creating a landscape that responds to the topography, attenuation requirements, and fits within the wider existing landscape of the development. Maribor Park provides an opportunity to create and showcase a diverse range of habitats by modifying the topography to include high ground habitats as well as the low lying riparian landscape. This provides ecological biodiversity and a rich biophilic landscape for the residents of Woolwich.

At podium level a prairie/steppe character landscape is proposed. This is resilient on lower soil volumes and reduces the extent of irrigation and maintenance required. This more naturalised approach has the added benefit of creating a biophilic landscape that has the qualities of a garden.

Geological Context

Geology is the bedrock of the proposals.

The site location has a unique geological character. The Woolwich and Thanet Foundations fold upwards at Woolwich. This geological phenomenon provided fertile land that, did not seasonally flood. This anomaly means the area has been inhabited for thousands of years providing opportunities for a range of uses over the years.

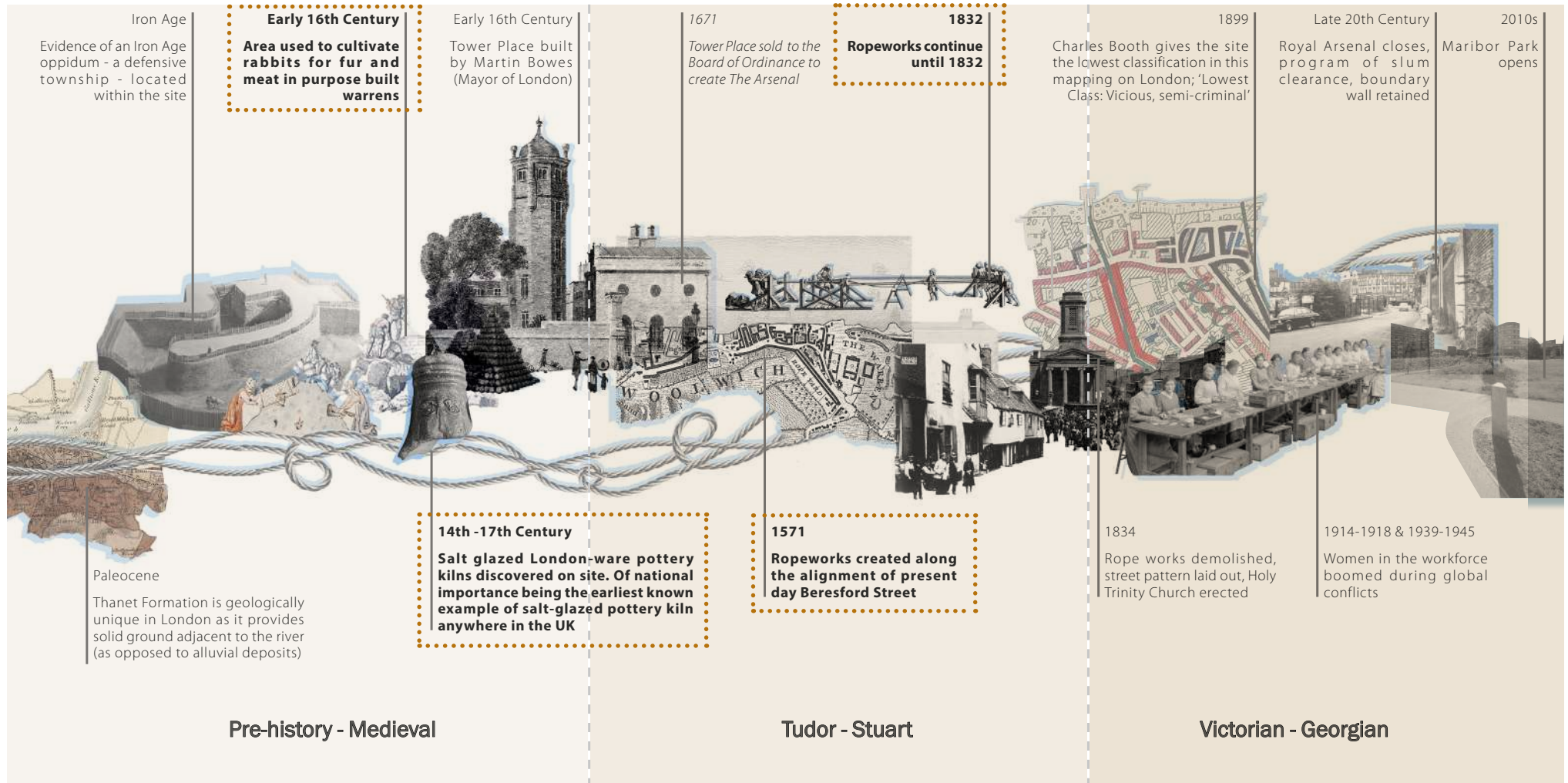
As the underpinning baseline, geology informs the landscape character across all areas and scales.

The timeline on the next page illustrates the use of the site from the pre-historic to the modern times.



Historical Timeline

The rich history of the site is illustrated on the graphic below. It highlights the uses influencing the park narrative.

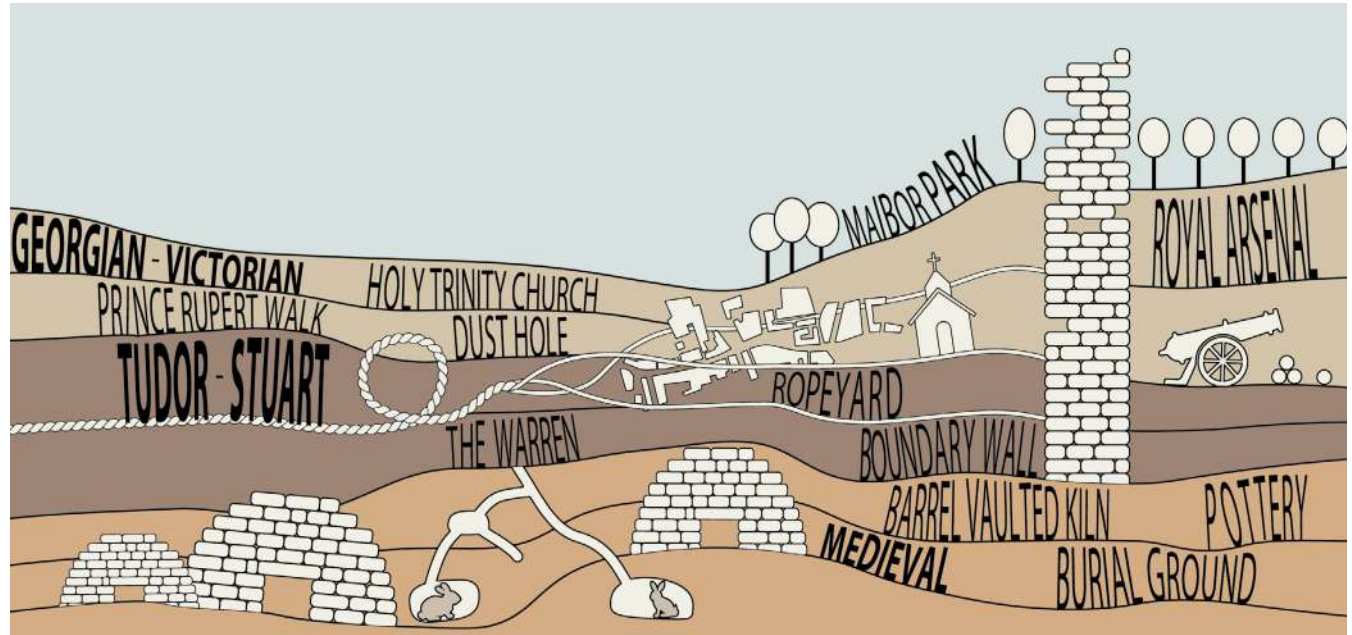


Geology and Historical Layers

The adjacent diagram illustrates in a simplified manner how the site's history is layered within the geological strata.

Key historical themes that have informed the development of the park concept to create a distinctive character are:

1. Ropemaking - intertwining the masterplan, creating routes through the site and connecting spaces
2. The Warrens - carving out spaces, creating areas for gathering and supporting the site's water management strategy
3. The Kilns - creating playful landforms and elevating spaces; using site spoil to create topography



Key Design Principles

The design of the landscape incorporates the identified Historic Themes into the park narrative. The 'wavy rope' traverses the site meandering between the mounds of the Kilns and the depressions of the Warrens, creating a unique and site specific landscape character.

The adjacent diagram illustrates how the three themes work together to create a functional design.

1. Access and Movement

- Movement routes are created, building on the rope narrative
- The main strand of rope creates a distinctive primary route through the park
- Frayed rope strands create secondary routes, picking up desire lines

2. Topography

- Unique underlying geology informs a sculptural approach to the landscape
- Carving out spaces for play, recreation and water retention, referencing the warrens
- Deposited material creates playful landforms that add viewpoints, referencing the form of kilns

3. Water Management

- Seasonal water attenuation designed into the park narrative
- Environmental led approach to how water is used and stored
- Increases biodiversity, creates habitat and improves visual amenity value

