

Now Proposed Development: Green Link from Mortlake Green to the River



Now Proposed Development: The new high street (Thames Street)



Now Proposed Development: The new Maltings Plaza

## 7.3

## Structure and Layout

7.3.1 The street structure set out in the masterplan focuses on creation of a new high street (Thames Street) running in an East/West direction and a major new Green Link in a North/ South axis between the River and Mortlake Green. These are the primary public routes through Development Area 1.

7.3.2 There is a clear hierarchy of further routes from the existing Mortlake High Street and Lower Richmond Road to the riverfront. Secondary routes divide the development area into clusters of buildings. On the south of the new Thames Street these secondary routes delineates the end of the Bottling Works Building and break up what could otherwise be a continuous wall of development. To the north of Thames Street the secondary routes define groups of buildings which for the courtyards which both form the street edges and also open up to the riverside.

7.3.3 Between the buildings of the courtyards there are tertiary routes, connecting the new high street with the riverfront through the courtyard gardens. These are mostly orientated north-south or to facilitate visual connection through to the river to assist in producing legible routes permeating the area.

7.3.4 As well as the primary routes through the site there are two major public open spaces, located along these routes, in the form of Bottleworks Square and Maltings Plaza. The former open space is defined by a number of new and existing buildings including the former Bottling Building and Hotel Building (Building 5). The latter is a public space situated on the waterfront adjacent to the former Maltings building. This public space will serve the unique location for hosting audiences of the annual Oxford Cambridge Boat Race and is designed to take reference from that history and suit the adaptive use. Both these public square have active uses clustered around them and provide opportunity for activities and events which are not able to be held at the moment in Mortlake due to the lack of larger areas of hard landscaped open space. These activities could include markets, performances

7.3.5 Street widths and distances between buildings have been carefully considered to create a range appropriately proportioned streets, related to the hierarchy described above. There are several different street widths on the site, from the Green Link which is between 30m and 38m and smaller routes through the site which are 15m generally with some openings between blocks around courtyards narrowing to 10m. The layout of windows in these areas has been minimised and apartments generally have secondary bedrooms or nonhabitable rooms have to ensure adequate amenity and privacy between dwellings (see Section 8.2 on Privacy and Amenity for further details). The number of these areas have been minimised and most apartments overlook much wider courtyards or the Green Link.



Now Proposed Development: Distances between buildings in Development Area 1



Now Proposed Development: Courtyard between Building 7 and 8



Now Proposed Development: Bottleworks Square

## 7.4





Initial sketch for mansion typology



Early stage visualisation of proposed Mansion typology

- the typology.

- Brick gables

A further feature of many examples of mansion blocks is their ability to successfully incorporate variation and asymmetry in their overall composition. This was in part due to 'Arts and Crafts' sensibilities to building facade composition and sometimes a function of the development process with later phases differing to earlier buildings.

# **Building Typologies**

As noted in Section 4.0, to prevent the sizeable masterplan from becoming monotonous and overbearing in its context, a number of building typologies have been developed to provide greater variety and animation throughout the proposal. These typologies are the Mansion Block, the Warehouse, the Standalone Cinema and the Heritage Buildings. They have been chosen for specific reasons related to use and context and the following pages explain how each of the above typologies have been evolved using precedents and commentary from planning officers, the DRP and members of the community to guide the process.

# 7.4.2 Precedents for and evolution of the Mansion Block Typology

As described in the Masterplan section previously the Mansion Block typology was chosen for its ability to achieve appropriate height on the riverside and as there were local examples of its use in this way. A number of other precedents were examined and used as sources of inspiration for the evolution of a new mansion typology that could be applied to Development Area 1. Key elements that were identified within the Mansion typology as of being relevance to a modern interpretation of

- Mansard roof
- Projecting bay windows
- Projecting balconies

## 7.4.3 **Precedents for and evolution of Warehouse Typology**

For more than three centuries the Stag Brewery site has been used for the purpose of brewing and occupied by industrial buildings built for that purpose. The historic photographs on the opposite page illustrate the evolution of brick built industrial buildings on the site.

While the proposal seeks the removal of industrial use, the aesthetic will remain in the two heritage buildings that are to be retained - the Maltings and Bottleworks Buildings.

It seems inappropriate to re-provide warehouse type buildings that compete with those buildings in the view from the riverside so a Warehouse typology has instead been developed for use on the buildings that line Mortlake High Street and Lower Richmond Road. The unique features of a warehouse typology that have been identified to influence the design are :

- Vertical emphasis with strong horizontal cornicing at top and base.
- Smaller regular windows set within solid brickwork walls
- Vertical strips of glazing with projecting balconies emulating the historic warehouse platforms for receiving goods

The Warehouse Typology has been carefully evolved to create a typology that suits the residential accommodation that it will contain. Balconies, a variety of window openings and ground floor flexible use spaces must be provided within the proposal and the typology has been designed to incorporate these features.



Butlers Wharf - adapted former warehouse



Initial sketch for warehouse typology



Early visualisation of Warehouse typology



Evolution of the Warehouse Typology design



Art deco style cinema facade



Fluted facade - Nottingham Contemporary Art Gallery by Caruso St John



Initial sketch study for cinema elevation



View of now proposed cinema and office building

Inspiration was drawn from both historic and modern precedents in terms of overall composition and detailing.

screenings.

# Maltings Building

## 7.4.4 **Precedents for and evolution of stand alone cinema building**

The proposals for the stand alone cinema building have evolved on the basis of specific location, historic precedent and refinement of detail to enhance the definition of elements of the building.

The initial ideas for the building were conceived as a modern interpretation of historic Art Deco style cinemas, which were quite often white fiance tiled in the 'moderne' style, strong building form and clearly defined signage.

Through the evolution of the masterplan the cinema is now sited in a location facing Mortlake Green to the South (looking over Lower Richmond Road) and with a more generous entrance to the proposed new Green Link. The previous proposals for the cinema incorporated a main entrance facing Mortlake Green. With the introduction of the generous entrance area to the Green Link, it was considered that the entrance area would be more appropriately positioned facing the public open space; which could be used as a gathering place before and after film

## 7.4.5 **Evolution of existing building proposals**

The existing Maltings Building is currently being supported structurally by scaffolding that is contained within the building shell. Former upper floor levels have been removed although structural steels are still in place and the ground and basement level floors are the only remaining floors. The proposal seeks to provide new upper levels within the building to accommodate residential apartments. The approach, in terms of intervention within this building, is to retain the brick facade and introduce new windows within the existing boarded up openings. A few new windows will be introduced to the East and West elevations and the lower two storeys of windows in the North elevation will be joined with one another in order to achieve a double height window within duplex apartments. New windows will consist of Crittal type double glazed units with a polyester powder coated finish appropriate to the age and former use of the building. A new area of curtain wall will be inserted in to the East facade overlooking the new Maltings Plaza. This area of glazing will serve to provide access to and views from a new community facility within the ground and first floor level of the building.

## Former Bottling and Hotel Building

The areas of the existing Bottling and Hotel building facade that are proposed to be retained consist of a series of repeated window opening types that have a clear vertical hierarchy. The proposal seeks to draw inspiration from the rhythm of existing windows to create new areas of facade to the east and north that stitch in with the existing southern facade. A modern interpretation of these openings is proposed to be built in matching stock brick but with crisp detailing of arched window openings with recessed surrounds. The new windows will be Crittal style double glazed polyester powder coated units that match in with the industrial aesthetic of the existing building.

7.4.6 The building typologies described above have been further refined in their detailed appearance as described in Section 7.8 below, while still conforming to the characteristics defined above.



View of the now Proposed reconstructed north facade of the Bottleworks Building addressing the new public square.



Now Proposed Development: Residential apartment layout on typical floor

7.5 **Building layouts** Residential building layouts 7.5.1

Proposed new Buildings 2, 3, 6, 7, 8, 9, 10, 11 and 12 will primarily contain residential apartments. The residential apartments will be at all levels above ground floor level and a mix of uses will be contained at ground floor level. The mix of uses at ground floor level will serve to animate the streetscape, grouped around the main centres of activity in the public squares, the new high street and the riverfront terrace. Ground floor level residential apartments will be incorporated within the mansion typology buildings facing on to the river facing courtyards.

layout.

The residential cores and layouts at upper floors have been optimised to increase the number of habitable rooms and remove oversize units, increasing the scheme's ability to deliver a higher percentage of affordable housing by habitable room count.

The proposed cinema will be located facing Mortlake Green and the entrance to the new Green Link. This building will be very visible on approach to the site and a primary consideration for the design of the layout was to ensure the entrance to the building is visually recognisable. By providing an entrance foyer facing the new entry plaza the cinema benefits from a visible and accessible entrance that provides a focal point within its east facade. Internally, the cinema screens have

Residential apartments are not incorporated within the ground floor level of the warehouse typology blocks since these blocks do not face on to any shared amenity space. These blocks will instead incorporate a mix of flexible uses.

Where a mix of uses are provided at ground floor level of a residential building, shared residential entrances that provide access to cores will be provided on the street facing elevations. Secondary access from these cores will be provided from the courtyard side. The primary access from street side of these buildings ensures that access and egress can be provided above the flood level and via a well lit and overlooked streetscape. These

Flexible uses will wrap around main street facades as well as river facing facades at ground floor levels of both of these building types. Locating of refuse, substations and site management offices has been carefully considered within the

## 7.5.2 Cinema (Building 1) Layout

been configured in order to maximise the foyer space and give access to the lower level of cinema. The upper level offices are accessed from Ship Lane providing more active frontage than previously proposed to this facade.

7.5.3 Former Bottling and Hotel Building Layout (Building 5) The re-configuration of the existing former Bottling and Hotel building to incorporate a mix of different uses has largely followed the current building configuration in terms of the subdivision of uses. A new hotel has been located in the part of the building that was originally built to contain this use. Office and flexible use accommodation (suitable for Community Use) are proposed to be incorporated within the remainder of the building. The hotel, office and flexible use will all benefit from views of and access from and to the Bottleworks Square.





Proposed retained Hotel and Bottling building elevation to Mortlake High Street



Diagram showing legibility of proposed scheme with entrances from main routes, accessible landscaped courtyards and security through overlooking



Typical Core layout with a maximum of 8 units per floor

Landscaping plan of typical courtyard with accessible gardens.

KEY
Residentail Courtyards
Courtyard Gardens
Entrances from streets
Entrances from courtyard
Primary routes

Secondary routes

7.6.1

7.6

- enter from.
- Housing SPG.
- Thames Street.

# Housing Quality

## Entrances and Cores

The relationship between entrances to residential buildings and the public realm has been well considered in the proposed development. The layout of the residential courtyards and hierarchy of routes between courtyards has been developed to provide a clear relationship between the primary and secondary movement routes through the site and the main entrances to the residential blocks.

All residential entrances are from the primary or secondary routes and are clearly delineated from the other uses with entrance doorways. The entrances are on well used, active pedestrian streets and are overlooked by the apartments above, providing safe access to the buildings. This ensures that the entrances are legible, secure and accessible and that they relate and reinforce the role and character of the streets they

This achieves the design quality set out in Standard 2 (Defining Good Places) and 8 (Entrance and Approach) of the current GLA Housing Supplementary Planning Guidance 2017 (Housing SPG) relating to the relationship of buildings and their entrances to the public realm

The layout of apartment cores ensures that on each floor, there are no more than 8 apartments per core as recommended in Standard 12 of the GLA Housing SPG. The only exception to this is in Building 3 where there are 9 units per core. Here, the two lifts access different sections of the corridor which is separated by an intermediate door. This provides an element of separation between the two groups of apartments. All cores have two lifts in accordance with Standard 15 and 16 of the

7.6.2 Residential Communal and Private Amenity Space The residential buildings are either built around and overlooking courtyard gardens, or they relate to the primary public realm spaces such as the Bottleworks, Maltings Squares and the new

> The courtyards provide communal gardens for residents but with public access. They are fully accessible and inclusive but raised above the street level which provides an element of separation and quite from the busier streets.

They have been designed to provide good direct sunlight to seating and play areas. They therefore achieve the objectives of Standard 4 of the Housing SPG. The emerging GLA policy document 'Good Quality Homes for All Londoners' also states "Outdoor spaces should benefit from at least two hours of daylight on 21st March into 50 per cent of space in line with BRE guidance." As noted above this is the case for most of the space where seating and play space is located.

All apartments, except for those in The Maltings, have good provision of private amenity space, either in the form of private gardens at ground floor, adjacent to the communal courtyard gardens or in the form of balconies and terraces on upper floors. These meet or exceed the guidance set out in Standard 27 and 28 of the GLA Housing SPG.

The apartments in The Maltings do not have external private amenity space as projecting or recessed balconies would significantly affect the visual appearance of the Building of Townscape Merit. These apartments have additional internal space and large opening windows to provide excellent outlook and natural ventilation.

## 7.6.3 Space Standards and Room Heights

The size of all habitable rooms conform to the Nationally Described Space Standards and therefore Standard 24 of the Housing SPG. Apartments are generally above minimum sizes and noticeably larger in some locations due to the geometry of the buildings. Layouts of furniture and storage has been considered with regard to satisfying Part M and Standard 25 of the Housing SPG is achieved throughout. Plans of the wheelchair user apartments (which are accessible in compliance with Part M4(3)) have been provided which show how these standards are incorporated.

All rooms have a minimum floor to ceiling height of 2.5m with living rooms and bedrooms with floor to ceiling height up to 2.75m. This is more generous in height and exceeds than the guidance in Standard 31 fo the Housing SPG. This ensures that the apartments provide high quality living space internally, with airy and generous rooms. There are some small areas of apartments at the upper floors which have reduced heights at the edge of rooms, where the slope of the mansard roof affects the height and reduces it to a minimum of 1.5m.

Under 'Key Standards' in the emerging GLA guidance 'Good Quality Housing for All Londoners', Section C4.3 Spatial Quality states that "Development proposals should create



Typical two bedroom apartment showing overall size and room dimensions in excess of minimum standards.



Typical apartment section showing living rooms with 2.75m floor to ceiling heightsand a minimum height of 2.5m throughout the apartment.





dens and the river.



Typical view from proposed glazed bay, allowing side view over courtyard gar-



Diagram showing typical floor apartments and their outlook and views



Diagram of typical apartment showing articulated facade which allows views in different directions



View from proposed typical living room showing oblique views through bay windows and balconies.

standard 7.6.4 Outlook and Aspect

> As discussed above, the layout of the masterplan has been developed to allow an excellent outlook for as many of the apartments as possible, including panoramic views of the River Thames. This includes not only views of the river but also outlook over the new green spaces provided in the masterplan, in particular the green link and the courtyard gardens. Other apartments overlook Mortlake Green or the new Bottling Works Square. These are all generous and open landscaped public spaces which enhance the aspect of the apartments.

well-considered layout arrangements within dwellings that improve the lived experience through generosity of floor-toceiling heights, and spatial arrangements that optimise quality of outlook and aspect." These proposals satisfy this quality

In Development Area 1, just over half of the apartments are dual aspect and those that are single aspect take advantage of the masterplan's beneficial layout. On a typical floor, 67% of apartments that are single aspect either have views of the river or green spaces, while 32% have views of streets. The views to the street still provide very good outlook, as they include views over the Bottleworks public square, Thames Street, Ship Lane or one other secondary route. They therefore overlook pleasant tree lined spaces. There are only 4% of apartments that are north facing single aspect and this is a reduction from the 5% in the original Application. This is due to the layouts being optimised to reduce increase the number of dual aspect apartments and reduce the number of north facing apartments in the now proposed scheme.

The single aspect apartments that remain are mostly one or two bed apartments, shallow in plan and generous in frontage. The frontage in the mansion block typology also benefits from the articulation of balconies and bay windows that is inherent to the typology. The typical layout of apartments incorporate projecting glazed bay windows, which while they do not qualify as dual aspect, do provide much wider views from inside the apartment, improving the aspect significantly. In addition, the recessed balconies, which are located to the side of living rooms, provide views obliquely from the living room through glazed doors. This gives two very different directions of view, as shown on the adjacent typical plan.

There are a small number of three bedroom single aspect apartments (5% of all single aspect apartments in total) which also have the benefits of outlook noted above.

The GLA housing SPG states, in section 2.3.40, "Good single aspect one and two bedroom homes are possible where limited numbers of rooms are required, the frontage is generous, the plan is shallow, the orientation and or outlook is favourable, and care is taken to mitigate the potential for overheating without the need for mechanical cooling". The apartments as described above exceed this criteria.

The emerging GLA guidance 'Good Quality Housing for All Londoners', follows very similar wording and allows single aspect (by exception) when the apartments are of high quality and adequate natural ventilation, privacy, daylight and thermal comfort. The following sections provide further information on these other criteria.

## 7.6.5 Ventilation and Noise

All apartments have openable windows that can provide natural ventilation. Most apartments have either crossventilation or partial cross-ventilation through the apartment. However, as the site is located under the flight path to Heathrow, to achieve acceptable acoustic levels especially at night in bedrooms, windows will have to be closed at certain times. In these circumstances, ventilation will need to be provided mechanically to provide acceptable fresh air. As all apartments in Development Area 1 will have the option of mechanical ventilation adequate ventilation can be provided at all times, even when external noise levels are problematic.

## 7.6.6 Daylighting

Good levels of daylight and sunlight are achieved in apartments throughout the scheme due to most apartments facing east and west and the relationship of depth of apartments and size of windows. The layout of apartments maximises daylight within living rooms and they are always on the facade line and often with projecting bays as described above. Bedrooms have been located at the rear of recessed balconies, in order to prioritise daylight and sunlight to main living spaces, whilst still providing important external amenity space.

The current GLA Housing SPG states in Standard 32 that "All homes should provide for direct sunlight to enter at least one habitable room for part of the day. Living areas and kitchen dining spaces should preferably receive direct sunlight". 96% of apartments have an element of sunlight in terms of APSH (BRE sunlight Criteria) and that this is commensurate with a multi-block development of this nature with many east and west facing dwellings. In addition, 66% of south facing living/ dining rooms a meet the APSH criteria from BRE.

Although some apartments have lower levels of sunlight, they have good outlook and aspect as many are looking north to landscaped green spaces and the River Thames beyond as noted above. Further to this, the small number of northfacing units have been design to have fully compliant levels of daylight, as suggested in the BRE Guidance.

In addition, the emerging GLA policy in 'Good Quality Homes for All Londoners' states that "New dwellings should achieve a minimum average daylight factor (ADF) target value of 1% for a bedroom and 1.5 per cent for a living room". In the proposed development 90% of habitable rooms meet these ADF target values and for the 10% that don't meet the criteria, they are generally only marginally below and or limited by overhanging balconies which are providing important external amenity space. Additionally, of the deviations, only 2% occur in living rooms where daylighting is more appreciated.

## 7.6.7 Privacy and Overlooking

The privacy of all apartments has been carefully considered to avoid overlooking and a full examination of this is provided in Section 9.2, referring both to the GLA Housing SPG and the emerging policy in 'Good Quality Homes for All Londoners'.

## 7.6.8 Overall Housing Quality

The above explanation shows that both the design from the level of the masterplan to individual dwellings has produced high quality dwellings that exceed the standards set out Nationally and by the GLA for housing quality (as set out in the National Design Guide, the Technical Housing Standards, the current GLA Housing SPG and the emerging GLA document 'Good Quality Homes for All Londoners'). The quality of the masterplan in terms of well-considered layouts, legibility and the relationship of dwellings to public space provide the basis for a strategy for 'bolder change' in terms of height and density, when compared to the immediate surrounding context. The design of the apartments, with superior outlook and a generosity of floor to ceiling height, mitigate the number of single aspect apartments, the great majority of which have excellent views, amenity space and accommodation.



Now Proposed Development: Development Area 1 building heights



Now Proposed Development: Prominence of The Maltings preserved



Now Proposed Development: The view from the corner of Mortlake High Street and Sheen Lane with the Hotel and Bottling Buildings and Building 10 obscured and less dominant beyond.



Now Proposed Development: The view from Mortlake High Street looking west with Building 10 with height located away from Building 5 and the step in height reduced by the added height at that end of Building 5.

## 7.7

of the site.

Mansion blocks along the waterfront have some variation in their overall heights and their articulation of massing in their detailed appearance outlined below, provides further variation, and creates an animated view of the site from the opposite side of the river.

# Height and Massing

7.7.1 The heights of the buildings in Development Area 1 have evolved to the heights illustrated in the diagram opposite and the principles of the masterplan, as outlined in Section 5.3. These heights follow the principle of the Stag Brewery Planning Brief, which aims at reducing heights to the perimeter

> Buildings along Mortlake High Street / Lower Richmond Road have been generally set at lower heights that more closely respond to the height of existing built context and especially the adjacent BTMs. Buildings 6 and 9 have remained either the same or only increased in part by one storey. The height of Building 10 has been raised by two storeys in comparison with the original Application. However, the top floor has been set back away from the adjacent Bottling Building (Building 5). At it's current height the parapet is at six storeys which aligns with the height limit shown in the Planning Brief for this location. The massing of Building 10 is also separated from Building 5 by a tree-lined street, reducing the impact of the height difference between Building 10 and the Building on Townscape Merit. When viewed from the corner of Mortlake High Street and Sheen Lane, the Hotel and Bottling Buildings are still dominant and walking towards the east, along the High Street, this will continue as Building 10 will largely be hidden behind the existing frontage of the Bottling Building until the street between them. From further down Mortlake High Street, looking west, the tallest point of Building 10 is located away from the Bottling Building, which itself increases in height at the end adjacent to Building 10.

The building heights are set to carefully avoid challenging the significance of the Maltings Building, which remains distinct from the massing of the new buildings. This follows the advice given by the DRP and LBRuT officers. The variety of roof heights is increased by the inclusion of two 'cupola' features at the corner's of Building 2 and 7, which rise a further storey and terminate in a domed roof. These also serve to frame the entrance to the new Green Link and improve legibility of the

# 7.8 Appearance and Detailing

## 7.8.1 Mansion Block Design Development

The detailed language of the Mansion Block buildings have incorporating consistent features of mansard roofs, projecting bay windows, projecting balconies and brick gables. These are all elements that can be found with great variation in terms of design in historic precedents. The attributes of these elements offer several benefits in terms of design:

- Mansard roof configuration can diminish the massing of upper building levels since they are set back from the lower building line within the sloping roof enclosure.
- Gable elements can be distributed in a manner that provides variety within both buildings and groups of buildings within a streetscape. They also break through the roofline, lessening the impact of a large roof mass at the top of the building.
- Projecting bay windows can provide opportunity for oblique views - such as towards the river Thames as well as creating vertical elements to balance with horizontal balconies.
- Projecting balconies can break up the massing of facades and provide depth to building facades

Several iterations of the mansard roof element have been considered in combination with the design of the gable elements. The aim of the various designs was to provide an elegant gable form that transitioned between the lower building parapet height and the upper mansard roof element.

Double storey mansard options have been avoided as these were considered too dominant in appearance. Split level mansard roof configurations were also rejected because the appearance became to busy in terms of appearance.

The gable elements - which are typically dominant elements in mansion block facades - have also evolved to a flat topped gable form, that springs from the penultimate level of the building (lower, main parapet level) and forms the termination of a projecting element of the single storey mansard roof form. Double gable elements have also been evolved.

7.8.2 Proposed Mansion Block Appearance

The final mansion block typology applies to Buildings 2,3,7,8, 11 and 12 and as described above has been developed to consist of a series of components that can be replicated and



View of Mansion Block showing gables, bays and balconies





Bay initial concept



Double Bay initial concept



Bay study of proposed Mansion Block



Bay study elevation of proposed single bay



Bay study elevation of proposed double gable



1 Single Gable - Elevation

Bay study elevation of proposed single gable

used in various combinations in order to avoid monotony in the design of these building facades. The five key components consist of the following:

Gable of the gable.

Double Gable

Single bay

Double bay

Banding above.

This consists of a brick gable element that incorporates a contemporary version of a projecting bay window above first floor level and terminating with a two storey pair of recessed windows that provide a clear diminishing hierarchy at the top

Similarly to the single gable but with two adjacent projecting bay windows. These stop before parapet level with a recessed windows above each bay and above that, as the gable narrows, two deeply recessed, smaller windows separated by a feature brick panel. A large recessed lintel sits over these and a further feature brick panel is placed above this. The increased refinement of the detailing at the gable creates a focus which breaks up the massing of the wider gable form. The wider double gables are mostly located on the longer north-south elevations and their wider scale breaks up the length of the elevation successfully. More frequent narrower gables along these facades would have emphasised their length and made the facade repetitive.

This consists of a vertical bay with a rectangular top and a single column of repeated paired windows above first floor level. Projecting balconies are provided at the base of each pair of windows in order to provide a clear definition of the rhythm.

The above elements can be used in combination with one another around building facades and separated by balconies that provide significant external amenity space to residents.

The facades have been broken up vertically with the introduction of a white cast-stone band of masonry which runs horizontally around the facades. It forms the edge of recessed balconies and the spandrel of projecting bays. The bands define the two storey base, groupings of two floors above and the attic story and parapet at the top of the facade. These bands break up the massing of the facades, creating a horizontal emphasis which contrasts with the vertical emphasis of gables and bays noted

It is proposed that the mansion blocks are built from a high quality, varied red brickwork as this is both appropriate to the mansion block historically and also will contrast with the London stock brickwork of the Maltings Building, ensuring it has a clear identity.

Different shades of red brick are proposed while metalwork and roofing materials will be consistent throughout. It is proposed that the roofing is generally metal cladding and that the finish to window frames and metalwork is metallic powder coated finish.

The images opposite show the three brick combinations that are proposed to the three courtyard clusters of mansion buildings. Within these colourway options, the detailing of metal balustrades and detailed brickwork texture will also be varied to provide a richer diversity within the development.

## 7.8.4 Specific Detailing to Mansion Blocks

It is envisaged that each of the three mansion block courtyards will have detailing which is specific to that courtyard. This will be in the form of brick detailing to the heads and surrounds of the windows, especially at the gable windows. There would also be individual designs to each courtyard's metalwork in the balustrades. This detailing would draw on the history and context of the site: making reference to the angular boats of the Oxbridge rowing team or making reference to the barrels of the brewery. These details have been developed in concept and would be elaborated following consent through the approval of conditions.

## 7.8.5 Variety between Mansion Blocks

The variation in brick colouring, distribution of gables and bays, specific detailing to different courtyards and the marking of key points with cupulas all add richness and depth to the building across Development Area 1. The combination of the features described above, which vary from building to building and between courtyard groupings, ensures a high degree of variety across the mansion blocks while still ensuring they are read as a grouping of buildings of the same typology.

## 7.8.6 Relationship of mansion typology buildings with River Thames

The six mansion buildings (2, 3, 7, 8, 11 and 12) are distributed along the northern perimeter of the site facing the River Thames. The relationship with the river has been carefully considered relative to the riverfront context in order to provide variation in height and roof profile as well as set back from the towpath in order to ensure the buildings are not overbearing.



Bay Study showing variation in brickwork colour - Courtyard 2



Bay Study showing variation in brickwork colour - Courtyard 3







Bay Study showing development of detail in facade to be confirmed by condition.

Brick detailing would vary between courtyards



Now Proposed Development: Riverside elevation showing variation in height and height diminishing to the east edge of the site.



Proposed Warehouse Buildings 9 and 10 on Mortlake High Street

7.8.7

building.

The increase in height to Building 10 has been able to be accommodated within the design principles noted above, maintaining the banding and vertical division in the same way

Bay Study of proposed Warehouse Building

The northern riverfront elevations of each mansion type building are varied in their approach in terms of distribution of gable elements and balconies as well as the modelling of the upper levels of the buildings and their overall height.

A minimum of 5.5m is achieved between each building footprint and the site ownership boundary/ edge of towpath, although the distance to the rivers edge is much greater. The openness of the courtyards to the riverside walkway ensure that there is good sunlight provision to this area.

# Warehouse Typology Appearance and Detail

The detailed massing of the Warehouse typology buildings has evolved, in particular in relation to the adjoining BTMs and neighbouring building at Boat Race House. Height has been redistributed and set back, with floors located to minimise the impact on views of these buildings.

This typology has been evolved to provide a rhythm of repeating vertical piers that are crossed by horizontal reconstituted stone bands at key levels of the buildings in order to clearly denote change of use and/or building hierarchy. These horizontal bands will project above first floor level to provide balconies to apartments. Brick lintels above window openings will be recessed from the piers and will incorporate a contrasting brick bond that provides animation to the streetscape. There is a strong cornice line at the top of the brickwork which terminates the facade parapet.

A setback penthouse level will be provided with contrasting appearance. This accommodation will be enclosed within a reconstituted stone framing with glazed curtain wall infill.

The curtain wall will incorporate a number of back painted spandrel panels with a grey blue colour that makes them difficult to discern from the clear glazed elements. Recessed textured reconstituted stone panels will sit between the paired stone columns that form the frame to the penthouse level.

Brick texture, balustrade and stone panel details will be varied between the Warehouse Typology Buildings 6, 9 and 10 in the same way as the mansion blocks in order to provide a richer diversity to the development and an individual identity to each

as the other Warehouse buildings despite being of greater height.

## 7.8.8 Cinema Building (Building 1) Appearance and Detail

In the original Application, Building 1 only incorporated the cinema. This provided the opportunity for a grand proscenium arch which marked the entrance at ground floor, across several floor levels. However, it also meant that, as with most standalone cinema buildings the provision of auditoria adjacent to external walls meant that it was difficult to offer animation to the façade in the form of fenestration and the facades were animated by the scalloped detailing to reduce the impact of this issue. Each fluted panel was designed as separated by a vertical bronze element that further defines the rhythm of the façade. These fluted panels and bronze elements still span from first to second level of the building between two horizontal bands at first and second floor levels. The lower band will form a frieze that may be decorated with a unique motif and the upper band will be a more subdued cast stone termination to the fluted rhythm.

With the introduction of office use to the upper levels of the building and the sinking of the cinema use to ground and basement levels, there is a much greater opportunity for windows to all facades and the facades are now much more open while still maintaining the original scallop and bronze fin detailing. The grand proscenium arch has been removed with the introduction of the office to the upper floors, as it would have been inappropriate to have it extend between the two uses. The horizontal band at first floor level serves to distinguish the split between internal functions. The entrance to the cinema is now emphasised by a wider entrance and a more pronounced canopy above, very similar in style to many historic cinema precedents. An inset corner entrance to the office space has been incorporated to closely relate to the entrance to the Jolly Gardeners Pub which sits on the opposite side of Ship Lane.

The top floor of Building 1 is set back and has a faceted part glazed face to all sides. The height of this floor has been reduced to reduce it's impact when seen from street level.









Photograph of existing Maltings building



Proposed short section through Maltings building



One of the monuments to be relocated to the east facade of the Maltings building

The proposal for the former Maltings building incorporates entire internal re-configuration along with several sensitive amendments to the existing building facades.

bedroom areas.

paired windows.

Relocation of memorials and former Stag Brewery sign It is proposed that the existing memorials and Stag Brewery



Proposed north elevation of the Maltings building

## 7.8.9 The Maltings (Building 4)

# Working with existing facade rhythm

Since the building is currently void of internal floors above ground floor level, it is proposed that the interior of the building is entirely stripped out to make way for new floor levels and internal finishes that meet current building control standards.

The existing floor to floor heights of the building are approximately 2.4m. If the historic floor levels were to be re-instated the resulting floor to ceiling height (excluding structure and finishes would be approximately 2m. This would not meet minimum London Plan standards for residential floor to ceiling height. In order to improve on these heights it is proposed that new datums will be set for floor to floor.

These will result in variation in relationship between finished floor levels and existing sill heights but should ensure that a minimum of 2.3m floor to ceiling height is achieved within

In order to achieve more generous living/ kitchen ceiling heights it is proposed that living/kitchens are located facing on to the river and that double height voids are opened up within duplex apartments and that the floor to floor height of levels containing lateral apartments is increased to achieve approximately 4.2m floor to ceiling height.

## Sensitive alterations to facade

Existing north elevation windows within living room areas only, to lateral first and second floor apartments, will be joined vertically to achieve a continuous vertical area of glazing. The window head details will remain as existing within these new

New residential entrance doors will be inserted within the south facade and a new area of curtain wall will be inserted to the east elevation, at the entrance area to the proposed flexible use at ground floor.

A new slate roof will be provided to the existing building. The roof ridge and eaves heights of the proposed roof will match those of the existing roof.

sign are to be re-located adjacent to the ground floor entrance from the Maltings Plaza.

This would be a prominent location for the signs overlooking the new public space and situated on an important historic brewery building.

## 7.8.10 Former Bottling and Hotel building (Building 5)

As described in the previous section of this DAS, the former Bottling and Hotel building was built sequentially to provide a series of separated spaces that served different functions. In addition to this, it is also in a poor state of repair in terms of the internal condition and existing windows. The proposal aims to re-establish a new combination of uses for this building. The new uses include a hotel (in the part of the building formerly occupied by a hotel), office and flexible use suitable for Community use.

## **Facade retention**

Due to the poor condition and quality of the northern elevation of the existing Bottling building facade, it is proposed that the south and west facades of the building will be retained in their entirety and that the north and east facades will be largely demolished and rebuilt to an extended footprint.

## Adaption of existing facade

The new uses have been carefully considered in terms of their location within the existing and proposed building structures in order to optimise use of the existing building facades.

The hotel element is proposed to be introduced within the former hotel building since the proposed hotel rooms can utilise the existing rhythm of windows on the facade without need to alter the existing openings.

The office element is proposed to be located within the former Bottling building element and to utilise the larger scale, industrial type window openings within the retained South facade of this building.

The introduction of these new uses within the existing building envelope will result in very minimal impact on the existing facade.

## Design of new facades

The new façades to the North and East will take their cue from the existing façade rhythms and details. Arched window openings with recessed brick lintels will be repeated on the



Bay study of new North facade to former Bottling Building

FFL +6.03M Ground Floor - Street majority of the façade with the exception of the new section of façade enclosing the hotel. A matching stock brick will be chosen to knit the new extension into the existing fabric of the building. Windows will be of an industrial character that matches the existing window types.

On the new upper floor, the external wall is set back and forms a plant area for the new ASHP system. This wall is brick, matching the new walls to the north and east below, with louvred windows to which match the rhythm of the openings on the existing facade below. A plant enclosure above the office core above this in the south-east corner is enclosed with a metal pitched roof, in keeping with the industrial nature of the existing facade below and similar to the roof proposed to the hotel building at the other end, although that roof will be re-instated as a slate roof, following a similar form to the existing roof.

## 7.9 Parking, Servicing and Refuse

- 7.9.1 Vehicular access to the site is limited to the general public as well as residents. The site is largely pedestrianised with a controlled vehicle access route running along the new high street (Thames Street) for maintenance, delivery, emergency and refuse vehicles only. This route will be for single direction travel in a westwards direction with a controlled entrance at the east end of Thames Street (outside the management/ control kiosk in the ground floor level of Building 12).
- 7.9.2 Resident and visitor parking is proposed within a basement level that will pass beneath Buildings 2, 3, 6, 7, 8, 10, 11 and 12. Access to the car park will be via entrance ramps contained within Buildings 3 and 10 which can be accessed from Mortlake High Street and Ship Lane.
- 7.9.3 Access to the basement will be managed so that vehicles can enter through both entrances during the day without the need for access control. During evening hours the entrance from Mortlake High Street will be closed and the entrance from Ship Lane will be controlled by a secure system. This would ensure the security of residents, visitors, vehicles and buildings at a time when the basement is less likely to be supervised.
- 7.9.4 A series of loading bays have been designated throughout the site to serve refuse, maintenance and delivery vehicles. For more detail of location of and access to these loading bays, please refer to the landscape and highways proposals included within the Landscape and Transport Statements.
- 7.9.5 Residential refuse collection stores will be provided within the ground floor level of buildings 3, 4, 6, 8, 9, 10 and 12. Stores within buildings 4, 6, 9 and 10 will serve residential dwellings within the single building. Waste from buildings 2 and 3, 7 and 8, 11 and 12 will be clustered together within one ground floor level collection store. Waste from these buildings will be collected initially within a basement level store beneath each building and transferred at basement level in to a lift that connects to the ground floor refuse collection store.



Landscaping proposal by Gillespies for the pedestrianised Thames Street



## 7.10

the site.

7.10.2 There are no restrictions to pedestrian movement through the Site, however the gardens in the courtyard area between Buildings 2 and 3 as well as 7 and 8 would be semiprivate; prioritised for the use of all the residents of the development.

document.

## Public Realm Strategy

7.10.1 Pedestrian movement has been considerably increased across the Site in comparison with the existing site configuration which allows very little public access to the river edge through

7.10.3 The generous pedestrian provision proposed across the site is proposed to remain the same as originally proposed. There will be no restrictions to pedestrian movement through the Site. Gillespies have produced detailed landscaping proposals for Development Area 1 and their Landscape DAS explains the access, playspace, materials and planting of the area Green Link, residential courtyards, typical streets including the High Street and the public squares. There are also proposals for the riverside tow path and Bull's Alley, outside the site ownership boundary. The landscaping proposals for Development Area 2 are included in the Design Code

## Access Statement 80

## 8.1 Introduction

- 8.1.1 The proposed development will provide a safe, legible, high quality environment that will be easily used by as wide a range of people as possible without undue effort, special treatment or separation. The objective is to provide a high quality mixed use development that caters for a wide range of people and is designed to be inclusive for all users and visitors. It also confirms compliance of the masterplan proposals with relevant national, regional and local principles and policies.
- 8.1.2 This statement is an overview of access issues relevant to the building design which will be developed at a detailed level to ensure that appropriate standards for accessibility are met to fulfil reasonable expectations for inclusive design and to ensure that the aims of the Equality Act are met.

Relevant legislation includes:

- Equality Act 2010

- The Building Regulations 2000 Approved Document M 2015 Access and use in buildings

Other sources of guidance include:

- BS8300: 2018 Design of Buildings and their Approach to meet the needs of Disabled People

- Guidance on Access Statements (DRC)
- BS999: 2017 Fire Safety in the Design,
- Management and use of Buildings
- The GLA London Plan including Policy D5

- LBRuT Local Plan Policy LP35

## 8.2 Transport

- 8.2.1 The Site is located on Lower Richmond Road, which is accessible from many parts of London by car, bus or train. There are bus stops immediately outside the site and Mortlake Station is within 5 minutes walk of the site.
- 8.2.2 A drop off area is located to the East of the site and can be accessed from Mortlake High Street. The drop-off area is directly adjacent to a new pedestrianised high street (Thames Street) which runs the entire length of the development in an East-West direction.

## 8.3 Approaches to Buildings

- 8.3.1 The landscaping proposals considers all forma of ability in the consideration of the design. Surface treatment, lighting and signage will be equally considered along with wheelchair accessibility. The proposals provide safe, clear and accessible routes through the site to access all aspects of the masterplan and access each building. Any slopes to the public realm areas are designed to a maximum of 1:22 or better for short distances. Slopes are used to accommodate level changes and these are always integrated in to the landscaping design in an inclusive way. Main entrances will have a 'level' threshold approach.
- 8.3.2 The squares, streets and courtyards in the proposals will follow the guidance in the GLA document 'Accessible Landscape -Achieving an inclusive environment' and also 'Inclusive Urban Design - Creating inclusive public spaces'. This will influenced the design of the building approaches, surfaces, materials and signage proposals. Further details of landscaping and accessibility are available in the separate Landscaping Design and Access Statement, submitted with this application.
- 8.3.3 Disabled drop off is possible to all parts of the High Street and main locations in other streets, including to all residential entrances. Disabled parking is at basement levels, located close to cores for access to the buildings above or to street level.

## Approaches to Dwellings 8.4

- 8.4.1 The main entrances will be clearly highlighted using larger areas of glazing and signage and doors will be power assisted. All thresholds will be flush throughout. Entrance halls will be acoustically treated to reduce reverberation time and reception desks designed to be suitable for wheelchair users. Signage indicating the entrances will be incorporated within each building and the entrances will provided with colour contrast allowing visually impaired persons to locate these entrances clearly.
- 8.4.2 In residential blocks, access to vertical circulation is directly from each block's entrance area and clearly visible from the entrance lobby. All routes are a minimum of 1500mm wide and all stairs a minimum of 1000mm wide and compliant with Part M. The lift doors will be colour contrasted and each lift designed to standards in Part M and BS8300-2009 in relation to size, hand rail, finishes and controls. Each level will be clearly identifiable via voice annunciation and LED display.

8.4.3 The means of escape will be provided for all users as stated in the Fire Strategy.

## 8.5 **Circulation within Dwellings**

8.5.1

## 8.6

## 8.7 Safety, Security and Designing Out Crime

- defences.

All apartments within the development have been designed to comply with the National Space Standards. 90% of all new build housing will meet Building Regulation Requirement M4 (2) 'accessible and adaptable dwellings' and 10% of all new build housing is required to meet Building Regulation Requirement M4 (3) 'wheelchair user dwellings'. These have been designed in accordance with the GLA 'Wheelchair Accessible Housing Best Practice Guide'.

# **Access For Emergency Services**

Emergency access is possible to all main public areas and entrances to residential and other uses in the masterplan.

8.7.1 The safety and security of residents and visitors to the development has been carefully considered, with the principles of 'Secure by Design' given full consideration. The Metropolitan Police have been consulted and have provided comments which will be incorporated. All public spaces are well lit, with no dark recesses or planting high enough to conceal would be attackers. Routes are open and clear with signage as required. The public spaces are overlooked throughout the day and evening and there will be on-site security to respond to resident concerns. The public realm will have good quality materials and be an attractive place to walk or sit outside the cafe. There will also be a CCTV system monitoring public realm areas, entrances and each building. Entrances to the apartments and offices are well lit at night

8.7.2 A security presence will be on site in the management kiosk and the access to all apartments and the underground car park will be carefully controlled with secure access.

8.7.3 Flood risk has also been considered, with escape from each building and the basement considered as well as an escape strategy from the site, in the event of a breach of the flood

## Microclimate 9.1

9.1.1 Detailed studies relating to Acoustic, Sunlight and Daylight, Wind and Ecology issues have been undertaken and are provided as separate documents associated with this Planning Application. Following is a brief summary of issues relating to these factors, please refer to the relevant chapters of the accompanying Environmental Statement (ES) for further details.

## 9.1.2 Acoustic

The two main sources of noise that are likely to impact on residents and users of the site are from aircraft (Heathrow flight path overhead) and the traffic flow along adjacent roads (in particular Lower Richmond Road and Mortlake High Street). In addition to these acoustic issues, the development is also likely to impact on acoustic levels both on the site and within the site context. The main sources will be the short term demolition and construction noise and longer term noise from plant serving the development as well as increased traffic flow to the existing road network. In order to mitigate the impact of these above noise sources wherever the potential impact is shown to be significant, a series of approaches have been adopted:

## Construction Noise:

- Use of hoarding during construction period
- Use of modern, quiet and well maintained machinery
- Exhaust silencers to be fitted to construction vehicles
- Works would be limited to the specified hours
- · Liaison with the occupants of adjacent properties most likely to be affected by noise or vibration
- Positioning plant as far away from residential property as physically possible
- · Appropriate plant noise emission limits have been set for building services and plant

**Completed Development Noise:** 

- · Procurement of 'quiet' non-tonal plant
- Locate plant and air vents away from sensitive receptors
- Acoustic enclosures
- In-duct attenuators
- Acoustic louvres
- Isolation of plant from building structures
- · Managing deliveries and servicing requirements of retail, office and leisure tenants
- . Hours of operation of the for any servicing areas and loading bays
- Refuse and recycling collections
- 9.1.3 Sunlight and Daylight

As noted above, In order to optimise sunlight and daylight levels within residential units, the following features have been incorporated:

- Ground floor level units sit flush with outer face of upper level balconies to avoid overshadowing of fenestration
- Living/ kitchen windows provided on outer face of buildings (at all levels) to avoid overshadowing of fenestration by projecting balconies

• Play space where possible has been distributed in landscaped areas that receive greater amounts of light.

The now proposed massing of both detailed and outline massing of Development Area 1 and Development Area 2 have been carefully considered and tested to both understand and mitigate impact on surrounding properties and ensure sufficient levels of daylight and sunlight area achieved within apartments and the proposed landscape. EB7 have provided a full report to explain the performance of the now proposed scheme.

## 9.1.4 Wind

9.1.5 Ecology

Detailed wind studies have been undertaken and the impacts of wind on the proposed development are largely not significant and do not require mitigation. A small number of upper level balconies on buildings 6, 7 and 9 have been identified as requiring mitigation measures. This is because the wind is considered to be too forceful to enable comfortable sitting for long periods of time. The mitigation measure that has been suggested by RWDI is to provide solid areas of glazed balustrade in these specific areas of buildings. The testing of the revised building massing has been updated for the current Application and the report is included in the ES.

Very little ecology exists within the site at present. The industrial use of the site has caused the majority of the site to be occupied by built form and hard landscaping with very few trees on the site, especially in Development Area 1. This offers very little natural habitat for native plants and animals. This proposal aims at increasing habitat in order to enhance the ecosystem in the neighbourhood.

## 8.2 Privacy and Amenity

- 8.2.1 Privacy and overlooking has been carefully considered as part of the detailed design of building layouts. In doing this we have has regard for relevant design standards including initially referring to the GLA Housing Design Guide (2017) but also the emerging policy related to the new London Plan 2021, namely 'Good Quality Homes for All Londoners' issued as a draft for consultation in 2021. This currently carries less weight than the current SPG but may have more relevance at the time of determination.
- 8.2.2 Layouts of both building footprints and apartments have been refined to minimise privacy issues to adjacent buildings. The majority of buildings are separated by 15m or more.

While the GLA's London Housing SPG (2017) at Paragraph 2.3 .36 states that: 'In the past, planning guidance for privacy has been concerned with achieving visual separation between dwellings by setting a minimum distance of 18-21m between facing homes.'

The SPG at Paragraph 2.3.36 acknowledges that in certain circumstances it is necessary to depart from a strict minimum separation distance of 18m: 'These are still useful yardsticks for visual privacy, but adhering rigidly to these measure can limit the variety of urban spaces and housing types in the city, and can sometimes unnecessarily restrict density.' It is on this basis that the new high street (Thames Street) following an east/ west axis, has been designed to 13.5m street width and the narrow flank walls between the courtyard blocks are separated by 10m.

- 8.2.3 In occasional circumstances where building faces are separated by less than 15m, the following techniques have been adopted to ensure privacy is maintained:
  - Habitable rooms have been set back behind balconies (1.5m deep) and balustrades that provide screening.
  - Living rooms have generally been provided in corner locations, where a choice of view is provided along with opportunity to choose to obscure the view from (and into) particular windows if need be.
  - Windows to some of these dual aspect rooms can be strategically obscured to mitigate privacy issues.
  - Where the aforementioned techniques cannot be used, facing rooms have been limited to living rooms facing living rooms and bedrooms facing bedrooms.
  - Internal daylight and sunlight levels have been tested to ensure minimum standards are achieved or improved upon.



Building 6 and relationship with Buildings opposite



Building 10 and relationship with Buildings opposite

- 8.2.4 Particular effort has been made to ensure that buildings lining the southern edge of the new high street (Thames Street) have been configured in a manner that minimises single aspect north facing units, optimises internal natural lighting, provides living rooms with widest possible (and highest quality) aspect and avoids overlooking. As part of the review of the mix for these buildings there are now no 3 bed apartments in these buildings looking north. The plans here demonstrate the relationship of Buildings 5, 6 and 10 with buildings on the opposite side of the street (Buildings 7, 8, 11 and 12).
- 8.2.5 The dwellings in Building 6, adjacent to the hotel building are dual aspect with windows looking towards the hotel. Windows on the hotel wall are either blocked up or made obscure.
- 8.2.6 There are many examples of well designed developments within Greater London that demonstrate a separation distance of 10m (and even less) can be designed in such a manner that this separation distance does not result in overbearing or visually intrusive appearance.

Furthermore, the technical appendix (Overshadowing Analysis prepared by EB7) demonstrates that the gaps between Buildings 7 and 8 as well as 11 and 12 receive adequate levels of sunlight.

We have provided opposite and overleaf a selection of completed projects that Squire & Partners have designed. These examples serve as precedents of buildings designed in close proximity to one another and demonstrate that the relationships work successfully within the built environment.

The Chelsea Creek and Kensington Row projects are of particular pertinence, since they demonstrate the visual appearance of pinch points between tall buildings leading through to wider courtyard spaces beyond. These configurations are very similar to the relationships proposed at Stag Brewery.

Located within the London Borough of Hammersmith and Fulham, buildings within the Chelsea Creek development narrow to separation distances of 10m at specific locations. At these pinchpoints, the building heights of 7 plus one set back level, do not appear uncomfortably overbearing and maintain adequate levels of natural light to windows facing the narrowed gap.

The Kensington Row project sits within the wider Warwick Road Masterplan in the London Borough of Kensington and Chelsea. Separation distances were reduced to as little as



Chelsea Creek - Plan

Chelsea Creek - Photographs



Kensington Row - Plan

Kensington Row - Photographs



5.5m within this tight new urban grain. The tight distances were counterbalanced by strategic distribution of open space - a mixture of generous boulevards and garden squares.

The mixed use development shown above opposite is situated within the London Borough of Lewisham. Utilising a former industrial site, buildings within the Creekside Village West masterplan narrow to separation distances of as little as 6.5m.

Chelsea Barracks masterplan was conceived as residential buildings positioned around a series of landscaped public routes and spaces, drawing in the local community and ensuring that Chelsea Barracks evolves as a natural addition to Belgravia. Spaces between the buildings narrow to 6m between flank walls of (6 plus 1 storey) buildings.

8.2.6 Private amenity is provided in the form of balconies at upper levels of buildings and private garden areas at ground floor level. The balconies and garden areas all have a minimum depth of 1500mm to ensure wheelchair access is possible and follow the .

## **Fire Strategy** 8.3

- 8.3.1 The fire strategy has been reviewed and revised as required for the new building layouts by the Fire Consultant, Hoare Lea, to ensure fire safety measures, in particular safe escape and fire compartmentation, are incorporated in the design at this stage. The principles for fire safety have followed the guidance in Approved Document Part B Volume2 (2019), BS9999:2017 and other relevant documents. The key points are described below.
- 8.3.2 Sprinklers will be provided in every residential building. These sprinkler systems will be designed and installed in accordance with BS 9251:2014.
- 8.3.3 Clear and safe escape from apartments and other uses has been designed in accordance with AD Part B requirements, with appropriate travel distances, exiting at ground floor to the outside. Within the basement,
- 8.3.3 Fire fighting shafts are provided to all buildings over 18m. Emergency escape stairs will be accessed through fire protected common circulation corridors with appropriate mechanical smoke ventilation and/or Double Reversible Mechanical Extract (DRME) system provision.



Creekside West - Plan



Chelsea Barracks - Plan

Chelsea Barracks - Photographs



Creekside West - Photograph





laying distances should be possible within 45m of every point, measured along a route suitable for laying hose.

- 8.3.5 The buildings construction is existing mass masonry construction or new masonry cavity wall construction, with some areas of curtain wall glazing. The external wall construction, and specified attachments including balconies and all insulation, will achieve European Classification A2-s1, d0 or Class A1, with the exceptions noted in Regulation 7(2)/AD Part B Vol2 Section 10.
- 8.3.6 Access to all facades has been provided for emergency use by fire fighting vehicles with easily accessible fire mains to each building, in accordance with Section B5 of AD Part B Vol 2.
- 8.3.7 Hoare Lea are submitting their Fire Strategy for the proposals with this Application, which provides further detail on fire safety provisions. They will also be preparing a Fire Safety Gateway 1 Statement form for submission.

### 8.4 Security

- 8.4.1 Consultation has been undertaken with the Metropolitan Police Secure By Design officers. Their key areas of concern relating to the development include the following:
  - Design and definition of public realm and private areas.
  - Permeable site and controlling non-residents (mainly young people) and anti-social behaviour.
  - Cinema and other retail outlets, use and control of increased footfall
  - Vehicle control / crime

The following notes explain how security is proposed to be implemented within the design.

- 6.4.1 Ground floor level private garden areas will be provided behind railings in order to clearly define private space and to provide a more secure threshold to ground floor level dwellings.
- 6.4.2 The publicly accessible landscaped areas will be designed to avoid areas that are hidden from view. Main entrances to residential buildings will be from well lit main streets and or pedestrian routes through the site.
- 6.4.3 Basement level car parking will have a management strategy that limits access to the basement level during evening hours.

Further security measures include CCTV and access control. 6.4.4

## 8.5 Structural Proposal

8.5.1 Superstructure

> Buildings proposed within the detailed planning application for Development Area 1 are likely to be concrete framed utilising flat slab construction on in situ reinforced concrete columns. Columns are to be spaced at a maximum grid of 7.5m x 7.5m. For cost efficiency, and to maximise headroom height, transfer structures are to be avoided. Reinforced concrete core walls shall be provided for lateral stability to the multi-storey buildings.

# 8.5.2 Substructure

There will be a single storey basement structure under the majority of the site and buildings in Development Area 1. The primary purpose of the basement is to provide car parking and plant space. The area of basement under the cinema has increased in depth by one level.

The retaining walls are to be formed utilising steel sheet piles and a reinforced concrete wall where vertical loads are to be resisted above ground floor level. The latter will require a piled raft along its edge to mitigate differential settlement. No surcharge, from any existing/ proposed buildings, are to be exerted on the proposed basement walls. If applicable adjacent existing buildings will be required to be underpinned to a suitable level, and adjacent new buildings supported off new piled foundations, to mitigate surcharge. If steel sheet piles are to be used, the clutches/joints are to be welded to form a water-tight seal and painted from the inside to resist corrosion. The steel sheet piling wall is to be constructed as a permanent wall. Currently, the Environment Agency requires any new structure to be 4m clear from the flood defence wall for maintenance purposes. The construction sequencing, which should be formed as part of the appointed Contractor's method statement, will require consideration in the detailed design of the sub and superstructure.

It has been proposed to locally build up levels around the basement entrances to the car park as passive flood protection. The flood risk expert and landscape architect are to advise on the build-up levels.

A ground bearing raft is the likely foundation option under the basement structures, where this can be formed at/below the river terrace gravel. Where the substructure cannot be founded on suitable bearing stratum, or will exert a surcharge load onto the basement/undercroft wall, a piled foundation

8.6

pumps.

shall be adopted. It is possible for the low-rise terrace houses to be supported off trench footings which will need to be confirmed at detailed design.

# Services Proposal

The general service strategy has changed significantly with the scheme becoming all-electric and utilising air-source and ground source heat

The Development Area 1 site shall be served by air source heat pumps situated in Building 5 and distributed to all buildings in Development Area 1. Development Area 2 will have two plant rooms located in Building 15 and 18 to serve that side of the development.

The LTHW distribution shall serve the apartments and non residential elements (other than the commercial elements) with both space heating and domestic hot water via plate heat exchangers in each demise.

PVs shall be provided at roof level across the buildings to minimise the electrical consumption of the central/ landlords plant and further reduce the carbon emissions from the site.

Centralised sprinklers shall be provided at basement level to cover the basement and commercial units. Where required the residential units will be provided with sprinklers served from the potable water storage tanks located at basement level. All buildings will be provided with dry risers and smoke extract systems within the cores.