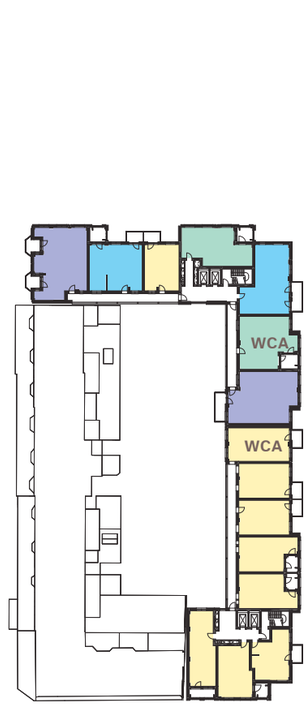
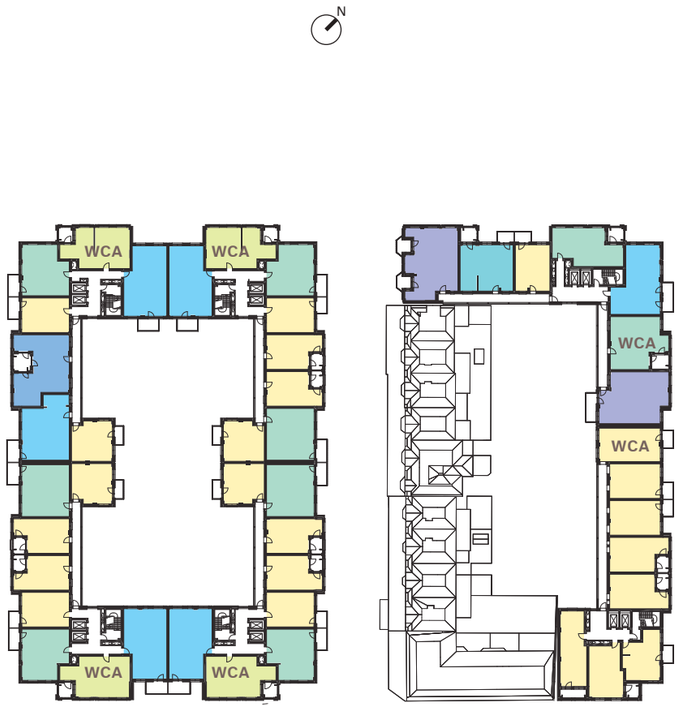
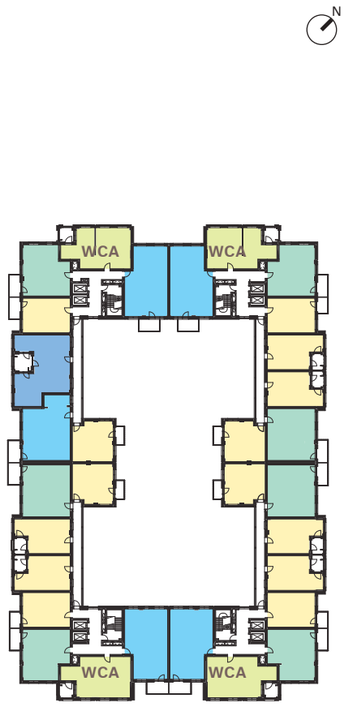


Second Floor

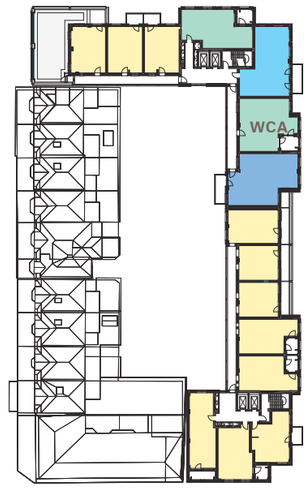


Third-Fifth Floors

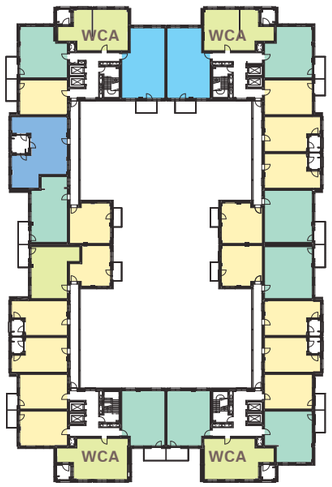


Sixth Floor

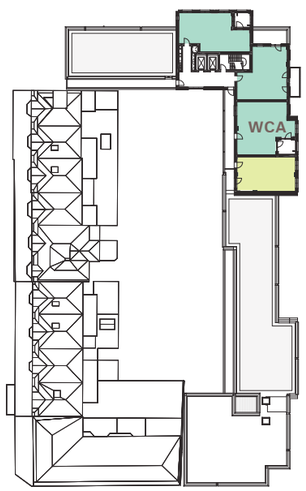
5.7 Typical Upper Floors

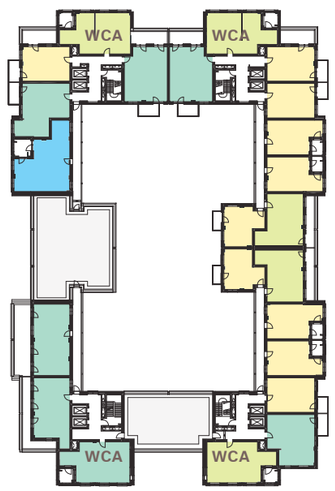


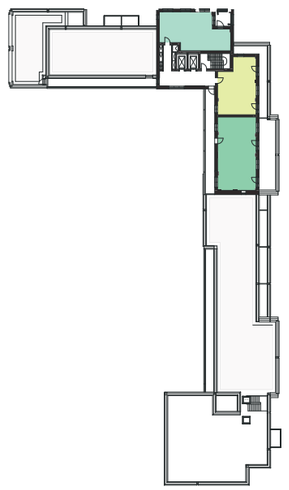
Seventh Floor



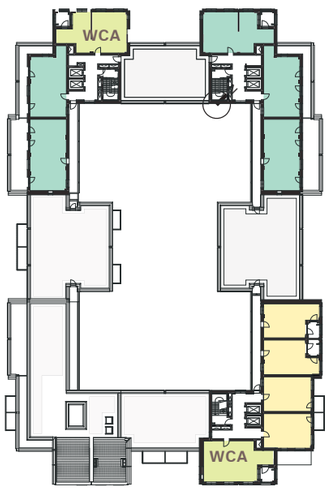
Eighth Floor



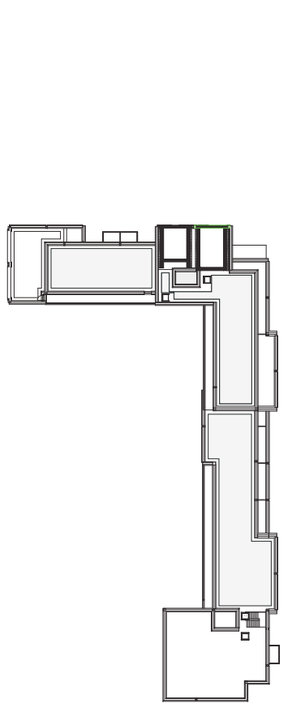




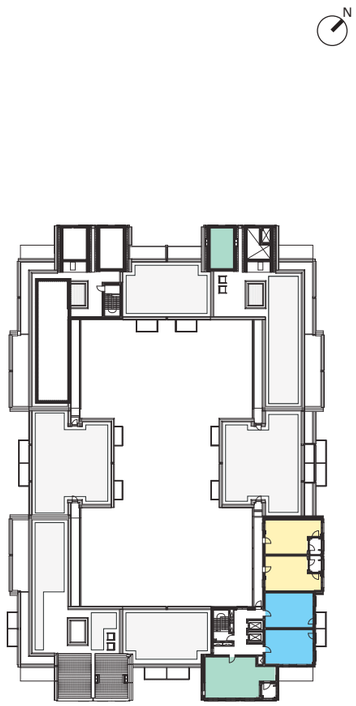
Tenth Floor



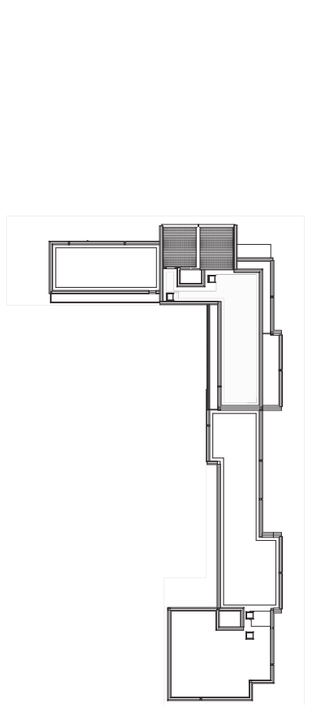
- Residential 1B/1P
- Residential 1B/2P
- Residential 2B/3P
- Residential 2B/4P
- Residential 3B/4P
- Residential 3B/5P
- Residential 3B/6P
- Residential 4B/6P
- Residential 5B/7P



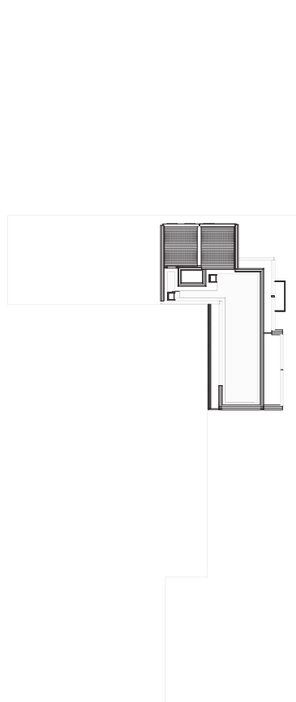
Eleventh Floor

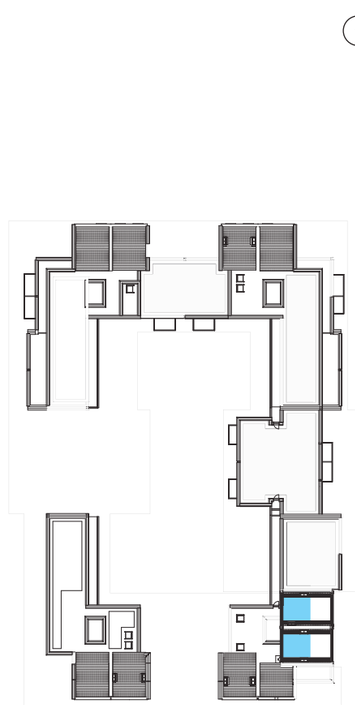


Twelfth Floor



Thirteenth Floor





5.8 Flat Plans

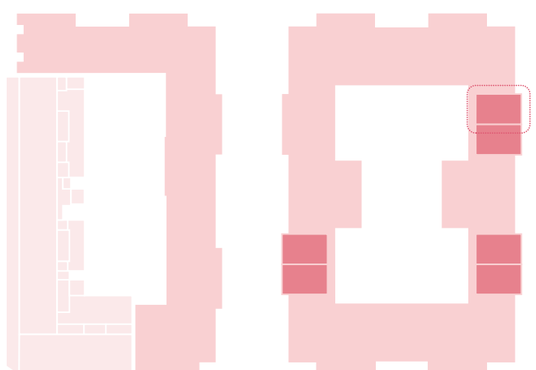
Flats have been designed to have rational, efficient and usable layouts that make the most of being dual-aspect to provide excellent daylight, aspect and amenity. All dwellings have been designed in accordance with the Technical Housing Standards. All flats have been designed in accordance with the M4(2) Category 2: Accessible and adaptable dwellings as set out in Approved Document M of the Building Regulations and in excess of 10% of dwellings have been designed in accordance with M4(3) Category 3: Wheelchair user dwellings as set out in Approved Document M of the Building Regulations.

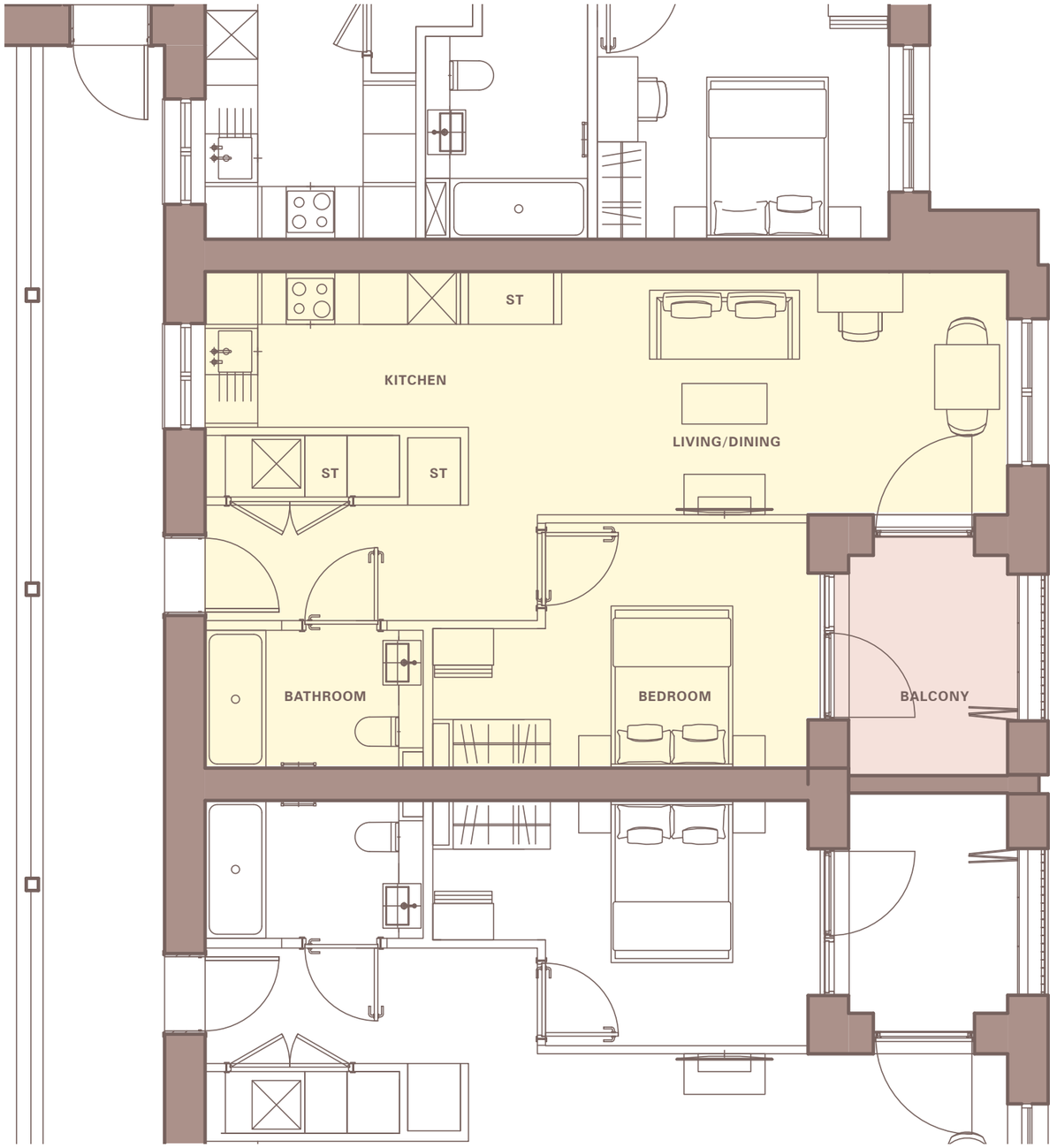
All the flats will benefit from sprinklers which presents the opportunity for open plan, light and spacious layouts with a variety of views, cross-ventilation and excellent daylight. Flats have been designed to be tenure-blind in terms of their layout. Flats benefit from generous floor to ceiling heights with a minimum 2.6m height in living rooms and bedrooms, and 2.4m in kitchens, bathrooms and hallways to accommodate the additional services required. These generous ceiling heights will contribute the quality of daylight and spaciousness within the dwellings.

Each flat has access to a generously proportioned balcony, terrace or garden giving on to the adjacent street or communal garden.

The flats served by core A2-2 comprise entirely 1-bed 2-person flats as these constitute the reprovision of the existing sheltered accommodation currently within Lambourne House on Site A. These flats are approximately 10% larger than other 1-bed flats to allow for increased circulation and space requirements appropriate for the changing needs of older residents.

The plans on the following spreads show the layouts of a selection of flats across the scheme.

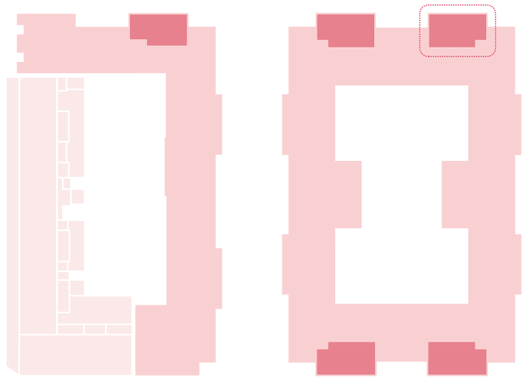


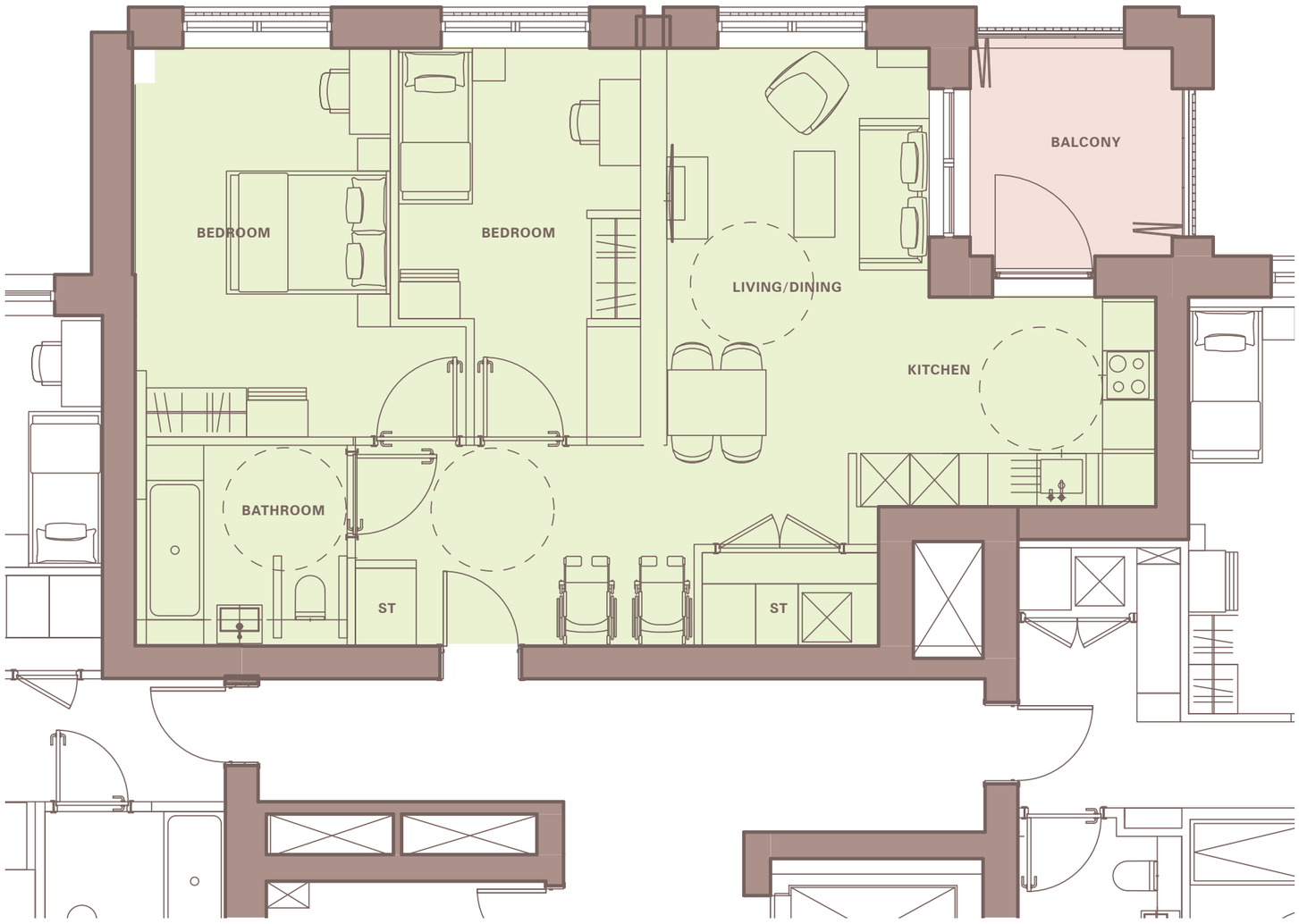


Typical 1-Bed / 2-Person flat

Wheelchair-accessible flats have been designed in accordance with M4(3) Category 3: Wheelchair user dwellings of Approved Document M of the Building Regulations. For ease of access most of these flats are lateral flats without any change of level and include the following;

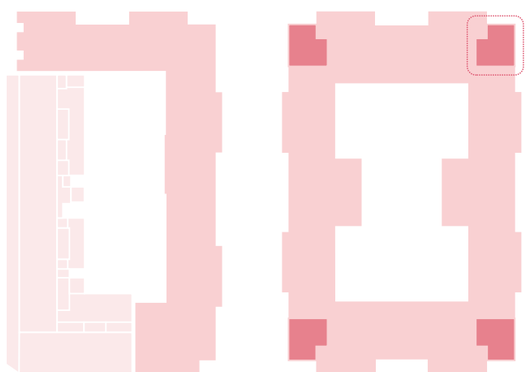
- Level access to the dwelling with a 1500mm clear turning circle within the entrance. The door will have a clear opening of 850mm with a 300mm nib adjacent.
- An 1100mm x 1700mm wheelchair transfer and storage space adjacent to the entrance with a power socket for charging.
- 1200mm wide corridors with 1500mm clear turning circles and 750mm wide access routes in every room. 1200mm x 1200mm clear access space to bedrooms and 1000mm wide access zones around beds.
- Every door to have a clear opening width of 850mm with 300mm/200mm nib adjacent to the leading edge and following edge of the door respectively.
- Kitchen and bathrooms that can be adapted to be fully wheelchair accessible with level access showers if required. Walls to bathrooms to be strengthened to be capable of taking grab handles if required.
- The potential to install a ceiling hoist capable of carrying a load of 200kg to every bedroom and bathrooms.
- Controls, switches and handles will all be set at the appropriate height in accordance with the regulations.
- Private amenity space will have level access and a 1500mm clear turning circle.

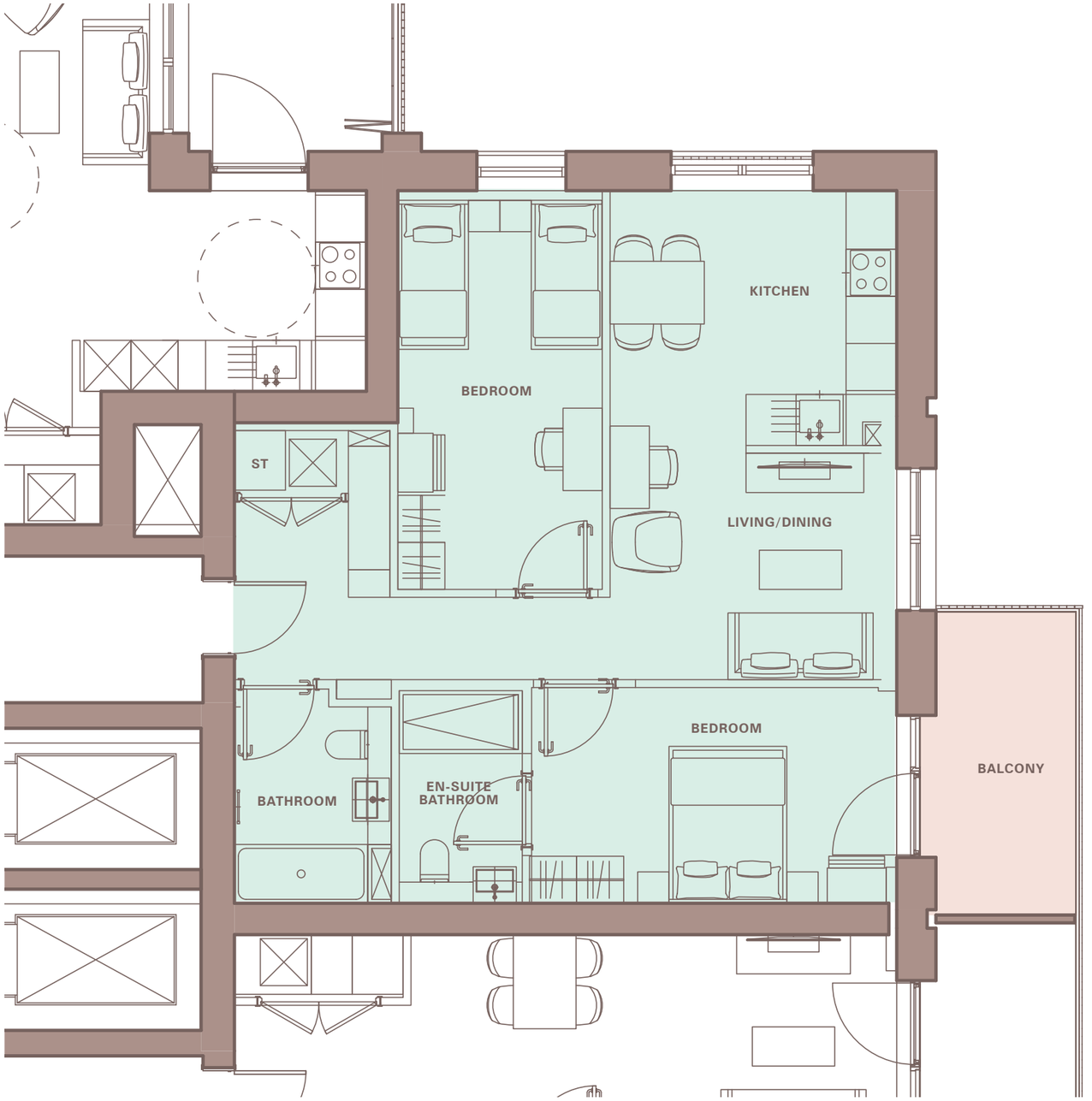




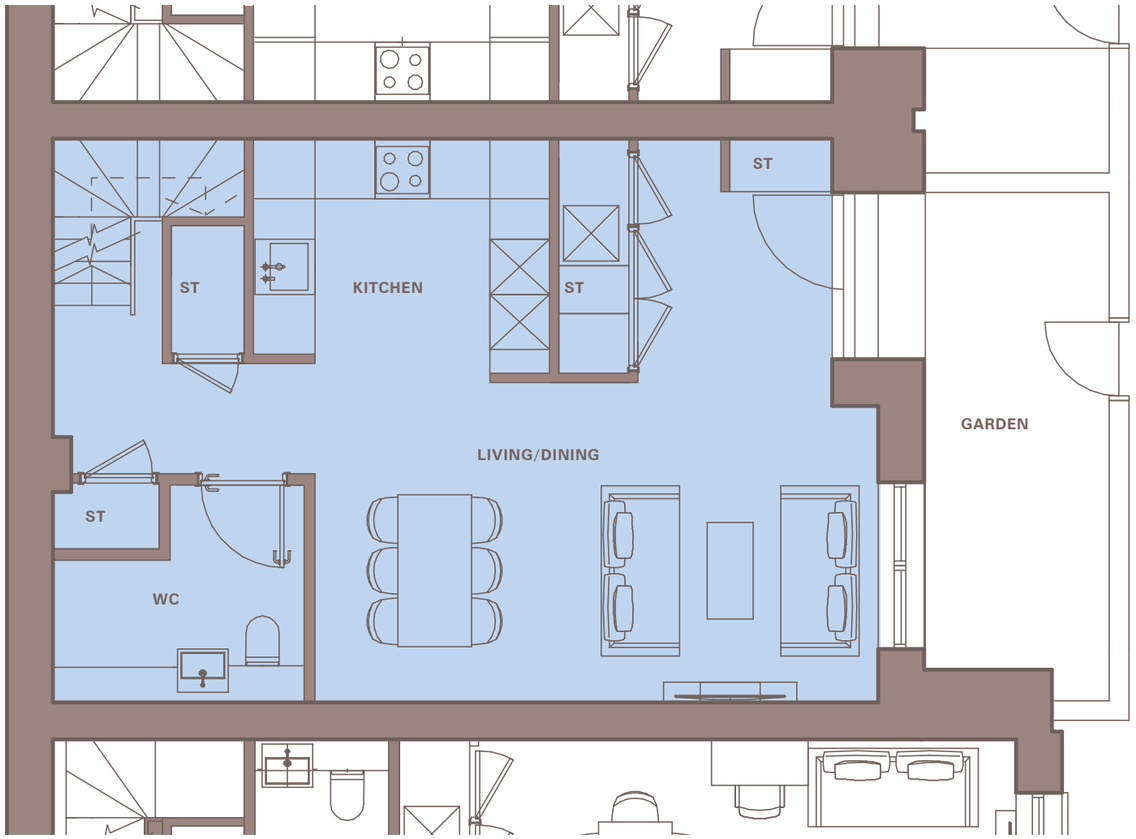
Typical 2-Bed / 3-Person wheelchair-accessible flat

5.8 Flat Plans

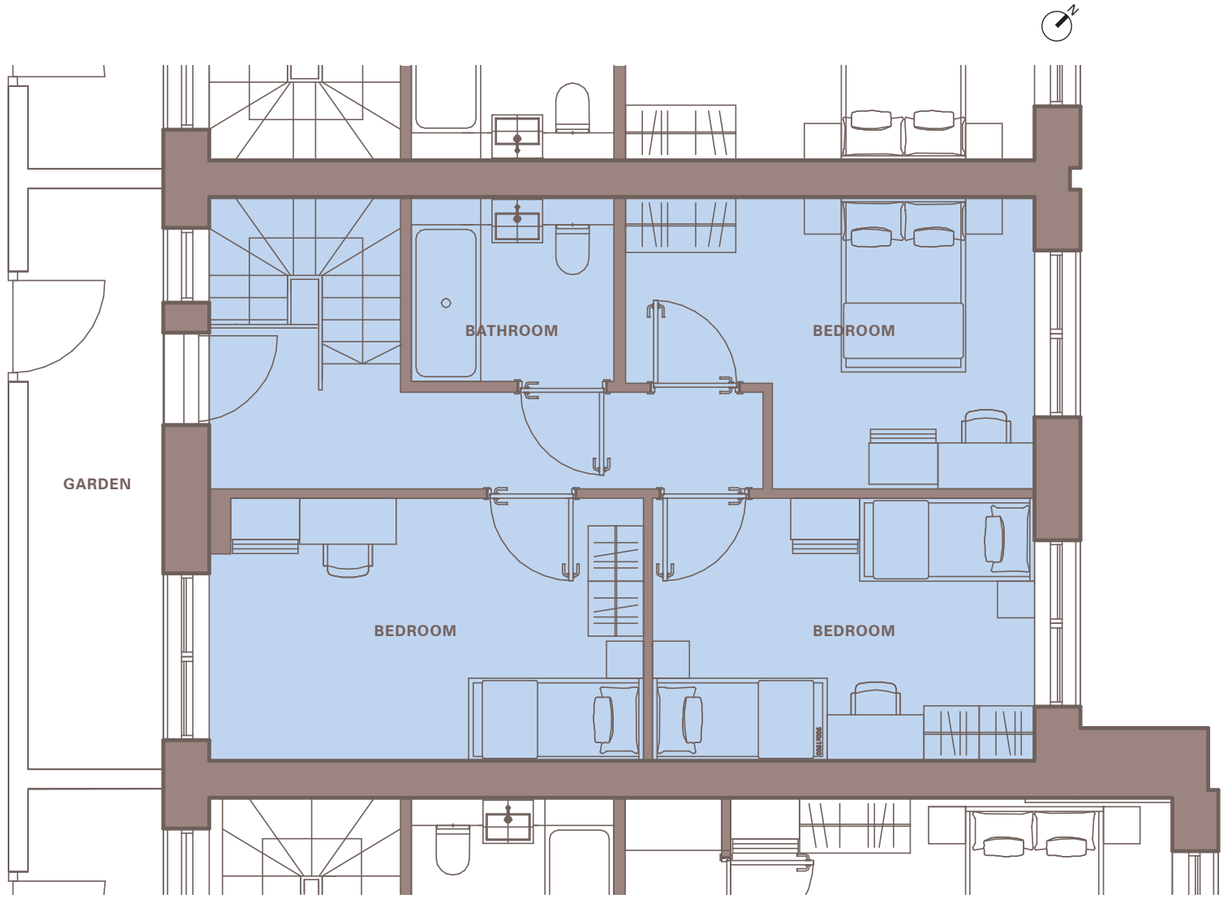




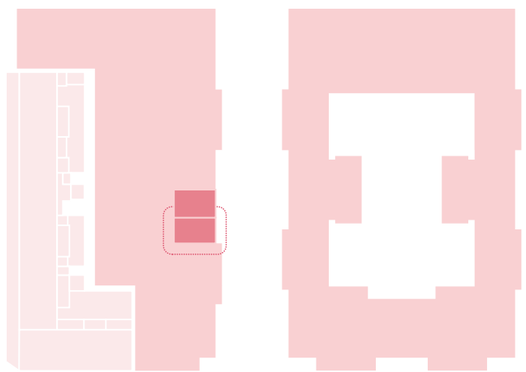
Typical 1 Bed / 2 Person flat



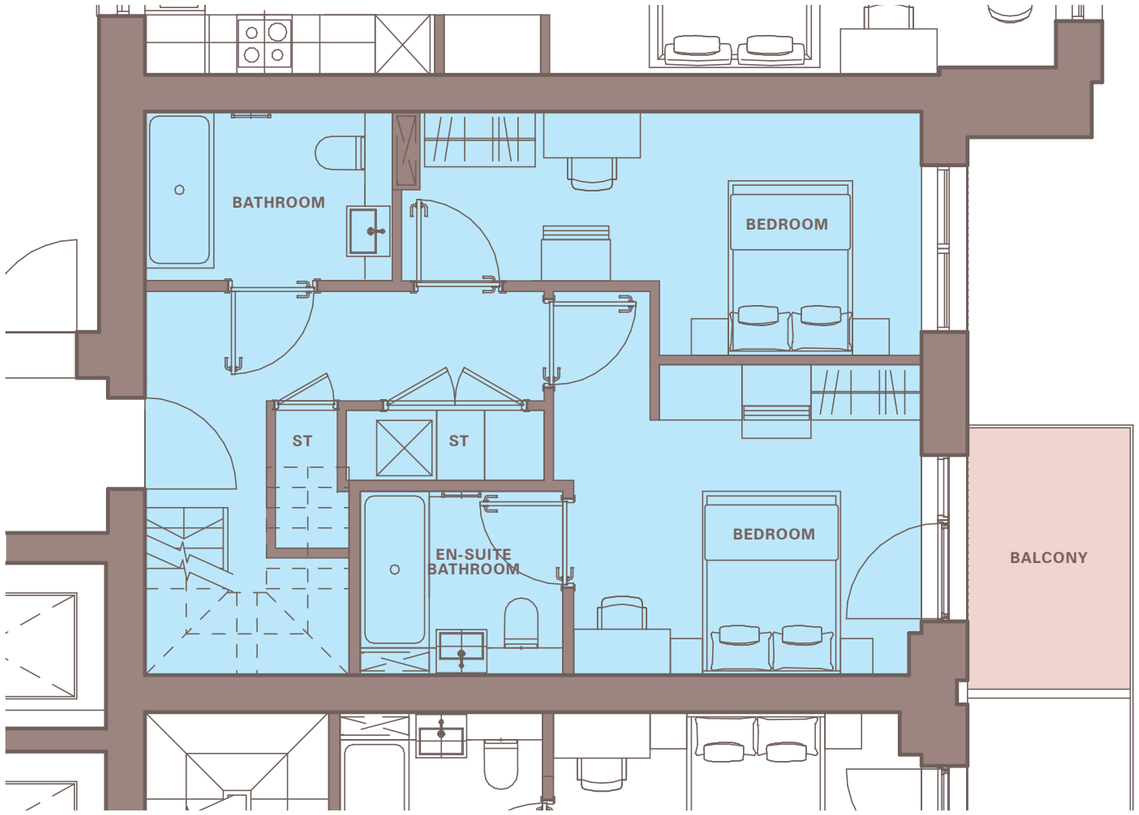
Typical 3-bed / 5-person duplex flat (Ground floor)



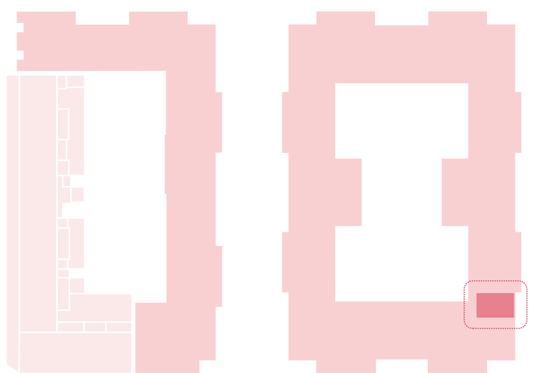
Typical 3-bed / 5-person duplex flat (Mezzanine floor)

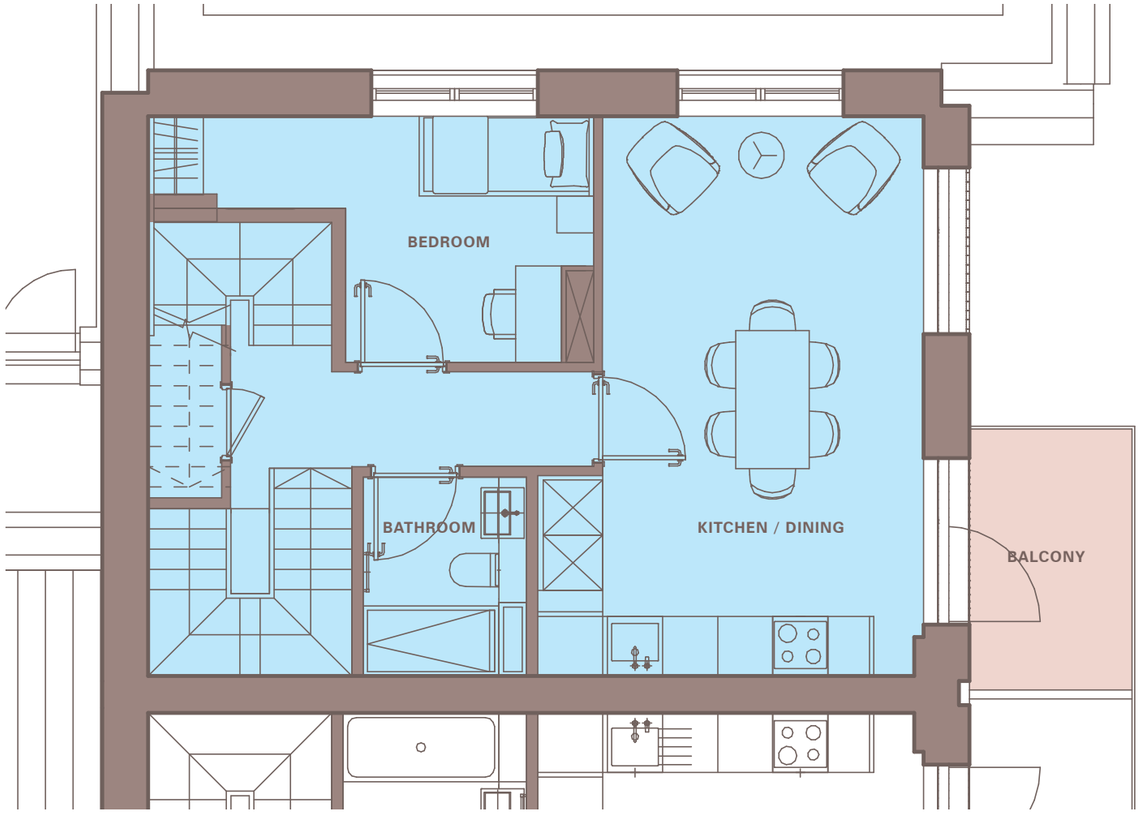


5.8 Flat Plans

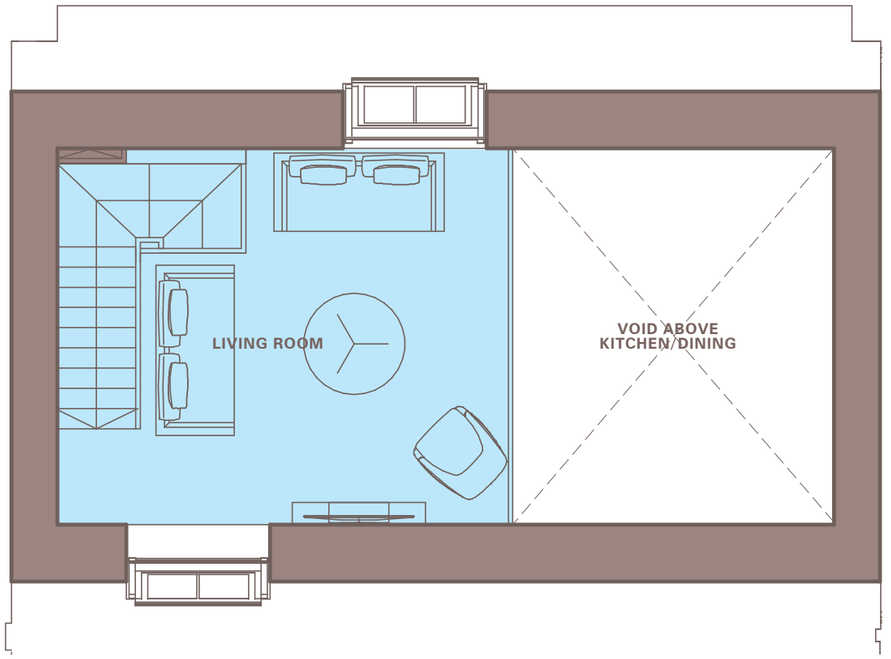


Typical 3-bed / 5-person triplex flat (Eleventh floor)





Typical 3-bed / 5-person triplex flat (Twelfth floor)



Typical 3-bed / 5-person triplex flat (Twelfth floor mezzanine)

5 Proposed Development: Site A

5.9 Height and Massing

Height and massing has been considered across the three Sites to create a harmonious streetscape with a degree of variation and localised points of modest height where appropriate.

The height has been considered in relation to the impact of daylight and sunlight, wind, the visual impact on surrounding streets, spaces and heritage assets and feedback from the local community and stakeholders whilst seeking to optimise the number of new homes that can be delivered.

The proposed development seeks to make an appropriate transition from the height and scale of Paddington Basin towards Marylebone.

The use of projecting and recessed bays, together with variation in height and the use of set-backs on the upper floors seeks to reduce the perceived mass of the building.

The heights on Site A are generally 9-11 storeys.

On Church Street the height is 10 and 11 storeys reducing to 8 storeys on the Edgware Road frontage. The 10-storey elements have two-storey set-backs on the upper floors to reduce their impacts whilst the 8-storey element is significantly set back from Edgware Road so that the Edgware Road frontage is effectively 7 storeys.

There is a localised point of height of 14 storeys on the corner of Broadley Street and Penfold Street adjacent to Broadley Gardens.

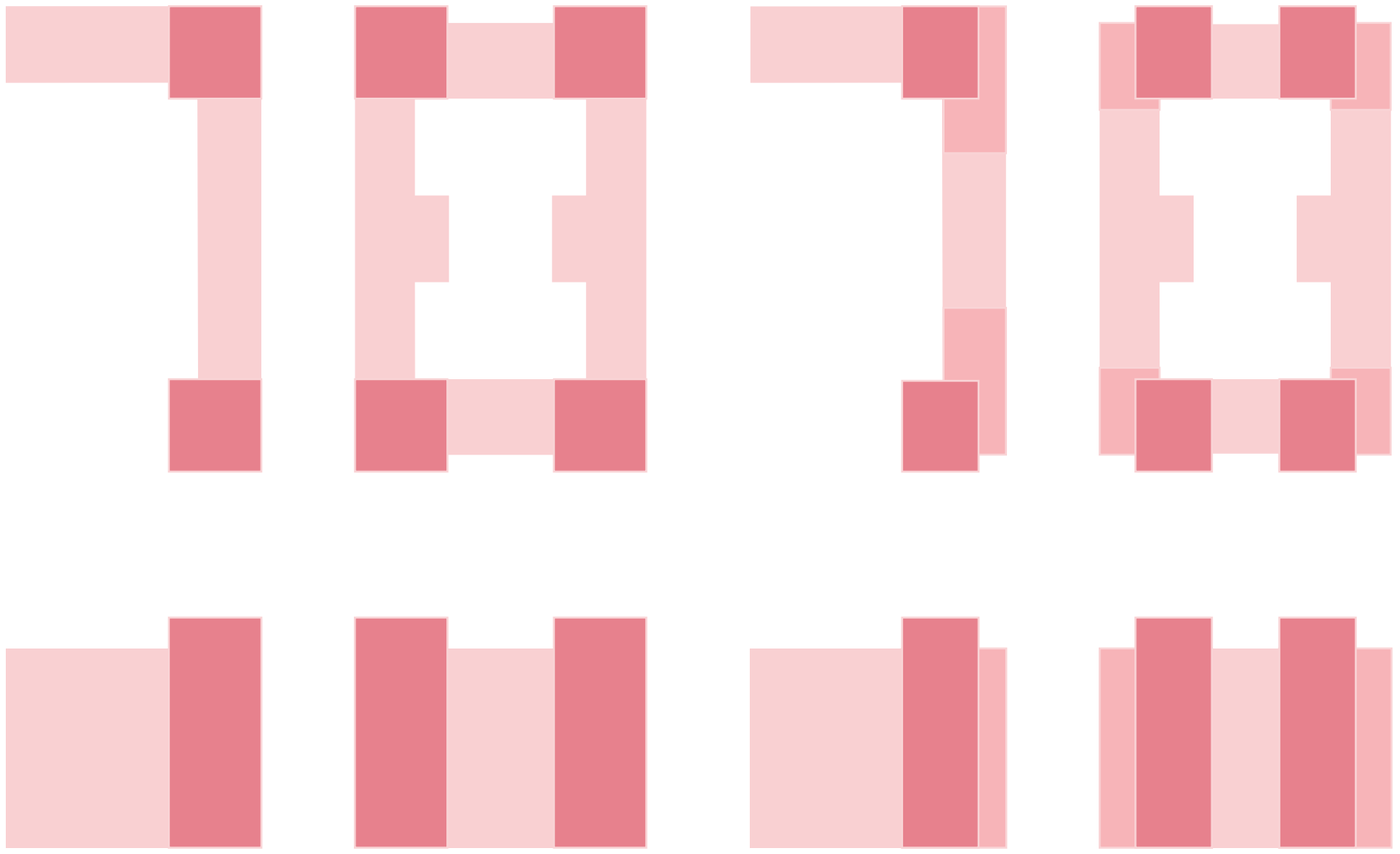
Proposed aerial perspective of masterplan

The proposed building marks the corner facing towards Broadley Gardens with a point of increased height

5.10 Massing Concepts

The design seeks to reduce the perceived bulk and mass of the proposed buildings and respond appropriately to the local area.

Dividing the site into two separate blocks, contributes greatly to reducing the perceived scale of the building. In addition, the diagrams on the following spreads illustrate an approach to elevations and massing which breaks down the mass still further to add visual interest, variation and richness and incorporate moments of emphasis expressed in different materials, articulation or richness of detail where appropriate.

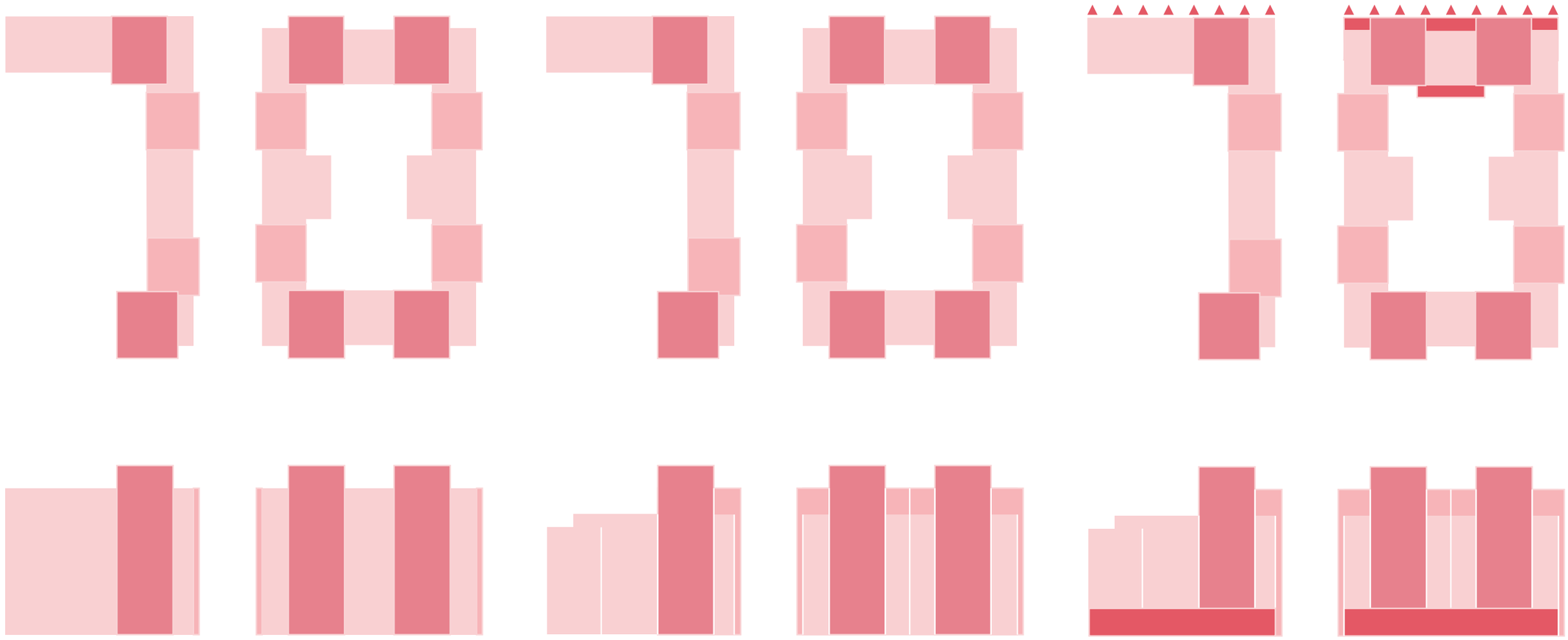


Base Condition

- Moments of height located at corners of block
- Emphasises height and width of block

Moments of height inset from corners

- Reduces perceived height and width of block
- ‘Softens’ corners of block with shoulders that are lower in height and set back



Add bays to secondary elevations

- The addition of projecting bays on the secondary elevations establishes an A-B-A rhythm around the building's perimeter.
- This adds variation, interest and reduces the scale of the building that replicates the finer grain of the surrounding area.

Add vertical articulation

- Break block down into series of vertical elements
- Finer grain is more in keeping with surrounding context

Retail and library plinth to Church Street

- A plinth to Church Street responds to the retail use and is an opportunity to add richness and detail at the human scale

5.10 Massing Concepts

Stafford Mansions, Stafford Place, Westminster

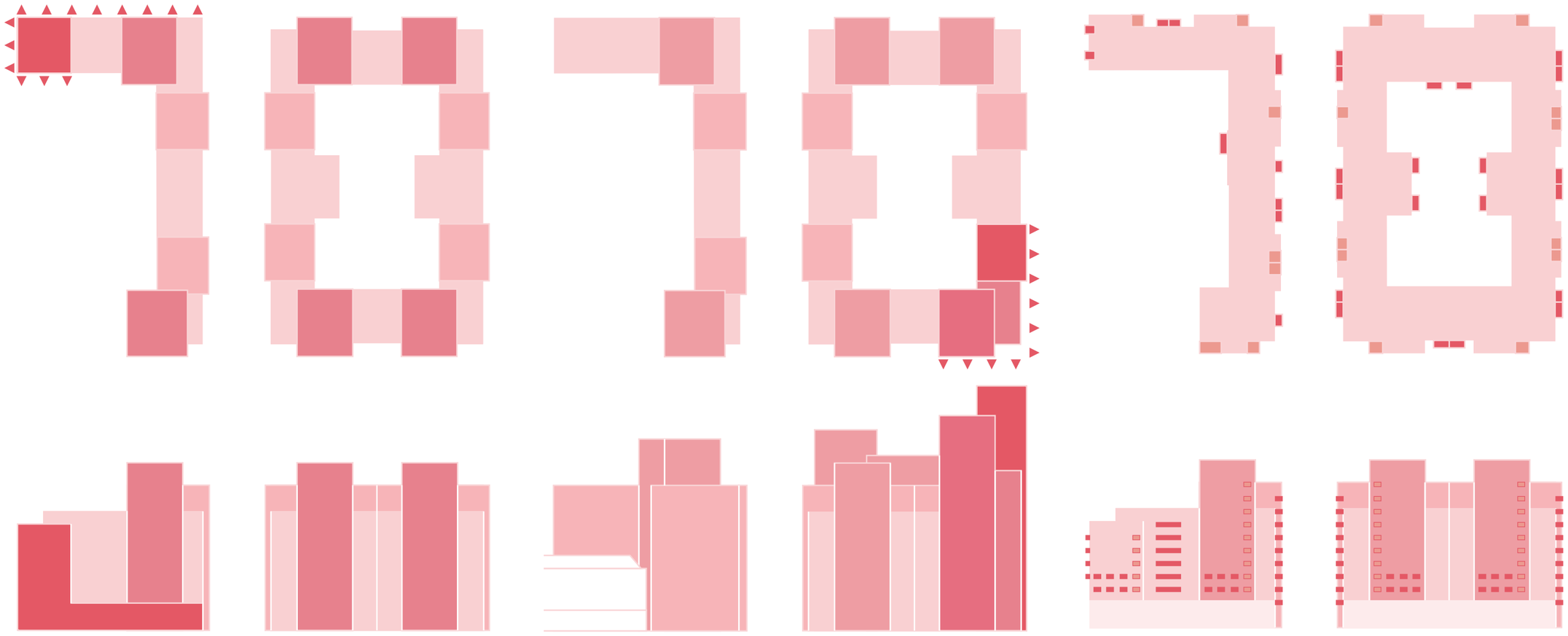
Ashley Gardens, Thirleby Road, Westminster

Ashley Gardens, Emery Hill Street, Westminster

Westminster is rich in historic examples of high density mansion blocks which achieve similar heights and densities to our proposals for Sites A, B and C.

Looking at these blocks in more detail, there are some general rules which have informed the proposed elevation design:

- Ground floors generally stand out through materiality and/or use
- Clear definition of base, middle and top
- Strong bay rhythm, expressed through horizontal stepping of the facade to form decks and balconies
- Use of red brick combined with white or cream-coloured stucco, plaster or stone to striking visual effect
- Distinctive roofscapes



A landmark on Edgware Road

- Greater architectural emphasis to Edgware Road signalling the entrance to Church Street
- Emphasis is through richer detail and visual interest, rather than height

A moment of height on Broadley Gardens

- Greater architectural emphasis to this corner signalling its prominence in relation to Broadley Gardens
- Fewer neighbouring dwellings therefore potential for more height where there is less impact on amenity
- Corner building broken up into cluster of slender towers to reduce visual impact

Balconies

- A mix of projecting and inset balconies further soften mass of building adding layering, shadow and delicacy.
- The mix of projecting and inset balconies reinforce the A-B-A design of the elevations
- Balconies offer opportunities to introduce pattern, detail, material quality and delight
- Recessed balconies have additional fully opening folding / frameless glazing on the outer edge to allow them to be used all year round.

5.11 A Sense of Place

Church Street is a unique and vibrant area of Westminster with its own distinctive character that sets it apart from the rest of the borough. Like much of London it has a rich and fascinating history, but layered over this area diverse, and often contradictory, influences that contribute to its particular flavour. The design has been developed as a specific response to Church Street, drawing inspiration from the distinctive flavours of this place whilst seeking to connect it to the broader context of Westminster.

Church Street exhibits an extraordinary breadth of cultural and ethnic diversity. This is reflected in census data that demonstrates the high proportion of BAME residents and the high proportion of households where English is not the first language. Analysis of languages spoken at home highlights the number of households of Arabic origin with Albanian, Bengali and Kurdish also well-represented. This diversity is expressed through the food sold in cafes, the signage in Arabic, the shop names, the goods sold in the shops and markets, the clothes worn and the languages heard as one strolls around the streets.

Portman Market, a covered hay market, opened to the north of Church Street in the 1830s. It expanded to include vegetables and general goods a few years later. In 1906 the site was sold and traders set up their stalls in the street instead.

The current church of St. Mary on Paddington Green, designed by John Plaw, was built in 1791. It is the third church to have occupied the site and was once the focal point of Paddington and Lilestone villages. Church Street (north-east of Edgware Road) was historically known as New Church Street, distinguishing it from the older Church Street which extended south-west of Edgware Road to Paddington Green.

Church Street feels something like an island, set apart from the rest of Westminster. This is due in large part to the combination of physical barriers that surround it; Regents Canal to the north - for much of its length a wonderful amenity, but in this area of London impenetrable and unattractive; Lisson Grove, Edgware Road and the Marylebone Flyover to the East, West and South - noisy, congested and unpleasant; railway lines into Marylebone, Edgware Road and Paddington Stations; and the substantial and abrupt change in ground level to the north of Church Street as a result of the historic goods yard. There are also less-tangible, qualitative barriers. The area is surrounded by attractive and affluent neighbourhoods; Marylebone, Paddington, St. John's Wood and Warwick Avenue, constituting some of the wealthiest areas in London. Some of the great estates; the Portman Estate, the Eyre Estate and the Hyde Park Estate lie in close proximity. The contrast in the quality of streets and buildings is clear adding further definition to the limits of the Church Street area.

Nevertheless, the clearly defined boundaries of Church Street gives rise to strong community cohesion and a powerful identity which makes it distinctive within Westminster.

The rich layering of colours, textures, history and culture that makes up Church Street


CLAY GRILL
Chtaura Restaurant
LOVE VENEZIA CAFÉ
(ITALIAN COFFEE SHOP)
AYBNA
Arabic Cuisine
KURDISTAN
Mediterranean, Oriental & Continental Food
ASIAN
ILIPINO
O-CARIBBEAN
KURDSTAN
CAFE
RAYHANA
SUPERMARKET
اسواق ريحانة
020 7724 9555


Dior
ROBERTO CAVALLI
ARMANI


SIDNEY'S

5.12 Sources of Inspiration

The proposed design takes inspiration from the history, context, materiality and vibrancy of Church Street in order to find a language which is rooted in its location whilst being modern and forward-looking.

Church Street is notable for its fabrics due to the historic association with Joel and Sons, as well as the fabrics sold from a number of market stalls. The colours, variety and patterns of these exhibit wonderful richness and beauty.

Brick is the dominant material in the local area, displayed in a remarkable variety of tones, colours, patterns and detail. Some of this patterned brickwork adds richness, detail and visual interest and resembles the warp and weft of fabric.

In many ways the market is the constant that defines Church Street. It is the social hub, the historic continuum and the focal point for the community. The design seeks to reflect the vibrancy, colours and life of the market.

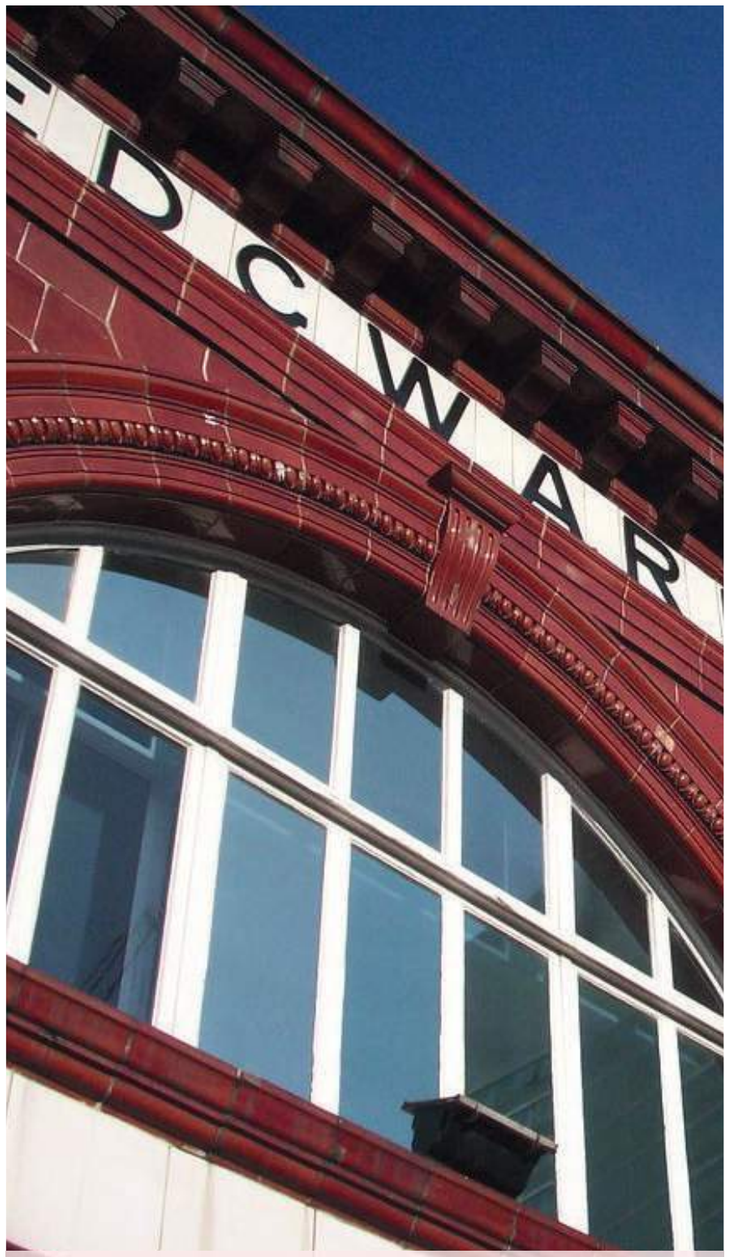
Much of the architecture of Westminster is defined by the mansion blocks constructed by the great landowners of the Victorian and Georgian era. Whilst Church Street sits apart and is distinct from much of Westminster, and we want to produce a design that is contemporary and forward-looking that is still a great deal to draw from these historic developments.

Fabrics, Joel & Sons

Stafford Mansions, Stafford Place, Westminster

Fruit and vegetables, Church Street Market

Patterned brickwork, The Ray (AHMM Architects)



Edgware Road Station

5.13 Brickwork Design

Prefabricated patterned brick panels being prepared for The Ray, Farringdon, London (AHMM Architects, Thorp Precast)

Taking inspiration from the historic mansion blocks that are so typical of Westminster and inspired by the use of brick that dominates the surrounding context, it is proposed that brick is used as the dominant material for the proposed building.

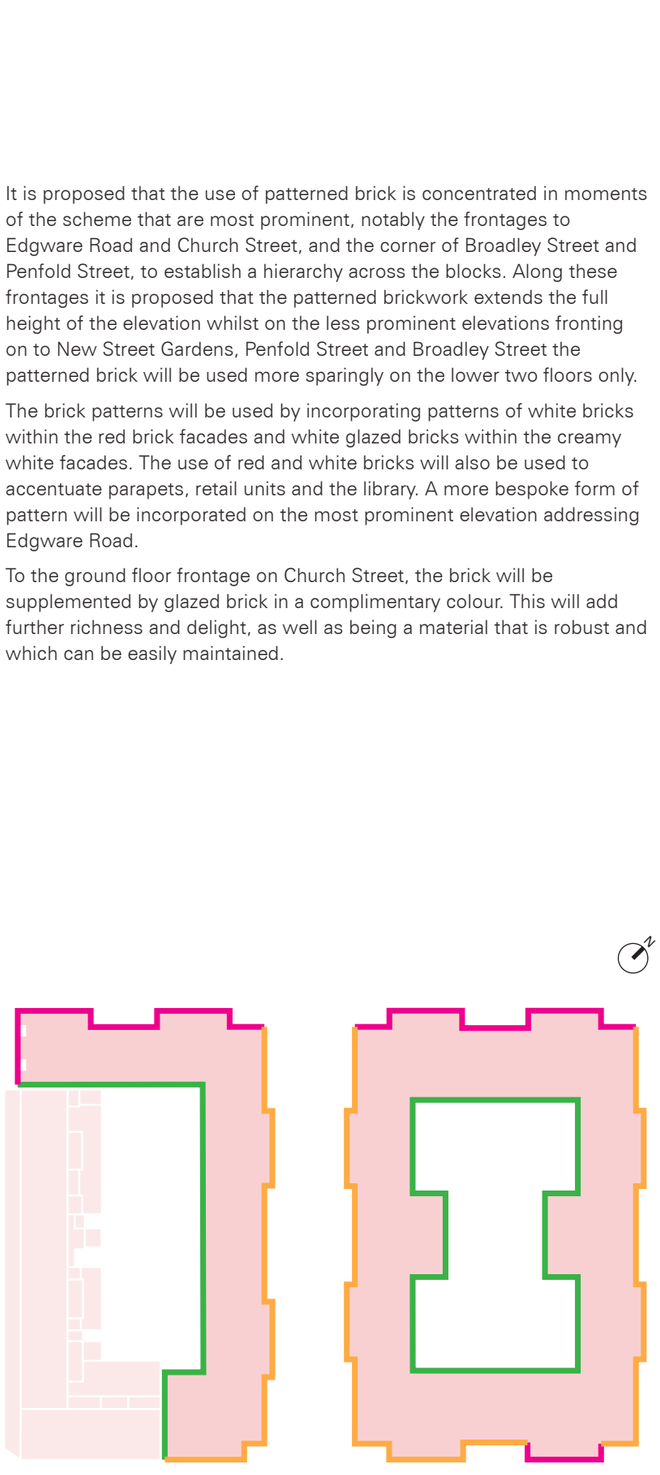
This use of brick will embed the proposed building within the surrounding context which sees the extensive use of brick spanning, Victorian, Georgian, post-war and contemporary buildings. It is proposed to use a combination of red stock and creamy-white brick to accentuate pairs of bays on the facades. The bays that project will be in red brick, with the recessed bays in a creamy-white, brick resulting in an attractive A-B-A rhythm across the façade.

The use of patterned brick is proposed to add interest, delight and hierarchy within the facades. The use of patterned brick draws on references of brick patterning and details found in the local area as well as visually echoing the warp and weft of fabrics thereby drawing on the strong association the area has with the fabric trade.

It is proposed that the use of patterned brick is concentrated in moments of the scheme that are most prominent, notably the frontages to Edgware Road and Church Street, and the corner of Broadley Street and Penfold Street, to establish a hierarchy across the blocks. Along these frontages it is proposed that the patterned brickwork extends the full height of the elevation whilst on the less prominent elevations fronting on to New Street Gardens, Penfold Street and Broadley Street the patterned brick will be used more sparingly on the lower two floors only.

The brick patterns will be used by incorporating patterns of white bricks within the red brick facades and white glazed bricks within the creamy white facades. The use of red and white bricks will also be used to accentuate parapets, retail units and the library. A more bespoke form of pattern will be incorporated on the most prominent elevation addressing Edgware Road.

To the ground floor frontage on Church Street, the brick will be supplemented by glazed brick in a complimentary colour. This will add further richness and delight, as well as being a material that is robust and which can be easily maintained.



Brick pattern extends the full height of the elevation

Brick pattern extends over the lower two floors only

No brick pattern

5.14 Brickwork Precedents

The design of the building, rigorously organised into regular bays offers the potential for brick facades to be constructed using precast panels constructed off-site and craned into position. This has distinct benefits including speed of construction, negating the requirement for scaffolding, improved quality and improved health and safety. The use of patterned brickwork to provide visual interest, variation and delight is well suited to this form of construction.

Using different tones and colours of brick arranged in different patterns and bonds is a traditional device going back to Tudor times. The revival of brickwork during this period, having largely been unused in the UK since Roman Times, is thought to have been a result of a shortage of stone. The brick revival was accompanied by a exploration of the potential of brick seen in the twisted chimneys and diapering patterns seen most vividly at Hampton Court Palace. However, it was during the Victorian era when the use of patterned and coloured brickwork took off. The potential to transport bricks from different regions using different clays enabled architects to utilise different colours and tones of brick to create amazing varieties of pattern and tone.

Recently, brick has found favour again, as a robust, durable and cost-effective construction material. The potential for offsite panelised construction has given architects further opportunities to explore the potential of the material with two-dimensional and three-dimensional patterns being utilised to great effect. Recent examples of this in London include South Gardens, Elephant Park in Southwark by Maccreanor Lavington and The Ray in Farringdon by AHMM.

Examples of patterned brickwork

Keble College Chapel, Oxford
(William Butterfield, 1870)

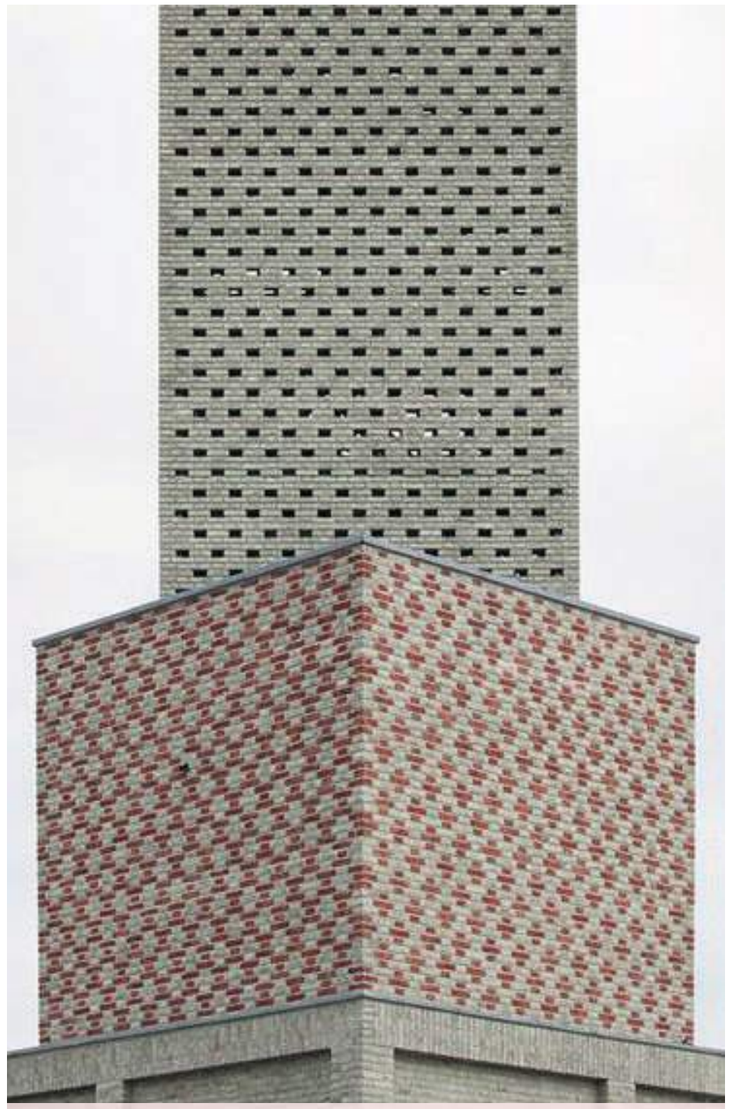
The Bishop's Palace, Ely (15th Century)

The Ray, Farringdon, London (AHMM Architects)

Victorian housing, Osney Town, Oxford

All Saints, Margaret Street, London
(William Butterfield, 1850-59)

South Gardens, Elephant & Castle, London (Maccreanor Lavington Architects)



Landmark, Nieuw Bergen, The Netherlands (MONADNOCK architects)

Finkenau Baugruppe, Hamburg, Germany (Adam Kahn Architects)

5.15 Proposed Materials

A complimentary palette of materials has been selected for their quality, longevity, ease of maintenance, robustness and appropriateness for the context.

Brick has been chosen as the predominant material. This is the dominant material in the local area and is a low maintenance, robust, attractive, modestly priced material that gives a strong sense of solidity and weathers well preserving a high quality appearance for the future. The brick will be in two colours; a red and a creamy-white, which echoes the use of red brick and creamy-white stucco on typical Westminster mansion blocks and also found in the adjacent frontage at 354-380 Edgware Road. Deep reveals to doors and windows will enhance the sense of quality and solidity. Brick will typically be used in stretcher bond except at each floor and at parapets where soldier courses will add subtle interest in the brickwork.

In prominent locations brick patterns are introduced by using creamy-white bricks in areas of red brick, or by using a glazed creamy-white brick within areas of the typically matt creamy-white brick.

Within courtyards only the creamy-white brick will be used to maximise the light reflected and to enhance the quality of daylight within the courtyards.

On the lower floors in certain areas, such as around retail and communal entrances, a glazed red brick is used. This adds heightened visual interest and prominence to these areas as well as providing a more robust and easily maintainable finish. This is a similar approach to that found on the facades of Victorian pubs and Underground Stations such as the frontage to Edgware Road.

Above and below the windows will be a cream-coloured precast concrete panel. This will elongate the window proportions, lighten the brickwork and recall the interplay between brick, stucco and limestone found on typical mansion blocks.

Metalwork including railings, balustrades, perforated metal screens, balcony fascias, balcony soffits, window frames, door frames and rainwater goods will be colour coated either in an anodised or metallic powder coated finish.

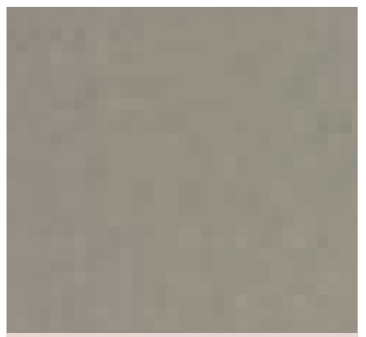
The barrel vault roofs will be finished in standing seam zinc which offers a high quality visual finish and for longevity and robustness.

Glassfibre reinforced concrete cladding panels are proposed for the facades adjacent to the access walkways. This is a robust and durable, high quality finish suitable for this potentially vulnerable location. The panels will be in creamy-white to match the precast concrete used elsewhere on the building.

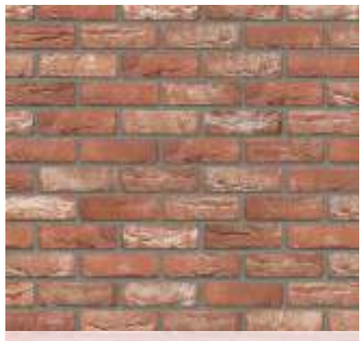
Brick type 1:
Lima by Vandersanden (or similar)

Precast concrete: Cream

Precast concrete: Cream



Metalwork & windows:
RAL 7006 (or similar)



Brick type 2:
Cayenne by Vandersanden (or similar)

Glazed bricks to Church Street:
Burgundy Red by Ibstock (or similar)

GRC cladding to external walkways:
Fibre C by Pura Facades (or similar)

5.16 Retail and Library Frontage

The ground floor retail and library frontage facing on to Church Street and Edgware Road has been designed with semi-circular arched bays that march along the facade with a distinctive personality inspired by arches found in existing buildings nearby, notably Edgware Road Underground Station. The arches extend along Church Street, with a pair of arches returning on to Edgware Road. An arch extends around the corners on to Penfold Street and New Street Gardens respectively to activate the corners.

The frontage is designed to provide extensive glazing and generosity to the retail and library frontage but with a sense of solidity. The red brick frontage is enhanced with the use of red glazed brick to the reveals which adds an additional visual quality and a robust material in areas that could be susceptible to damage. This is similar to the way that Victorians used glazed bricks for frontages to Underground Stations and pubs.

Signage, canopies and mechanical plant is discretely accommodated within the elevation to ensure consistency. Retractable fabric awnings on the Church Street elevations are integrated just above the retail unit / library doors with integral signage and louvres above. Any intake or extract services that the retail units or library require, with the exceptions of kitchen flues, can be connected into the back of this bank of louvres without detrimentally impacting the visual appearance.

Extract flues serving kitchens in food and beverage outlets are already accommodated within the building negating the need for unsightly flues to discharge on to the building facades.

Detailed elevation of the retail frontage on Church Street

1. Facing brick - Red brick stretcher bond
2. Facing brick - Red glazed brick
3. Facing brick (patterned) - Red and white brick
4. Facing brick - Red brick soldier course
5. Facing brick - Red and white brick soldier course
6. Facing brick - White and red glazed brick soldier course
7. Facing brick - Red and red glazed brick soldier course
8. Facing brick - Vertical recess
9. Shopfront glazing with metal frames, PPC finish
10. Integrated retractable awning
11. Aluminium rainwater pipe, PPC finish
12. Metal louvre, PPC finish
13. Signage zone

Edgware Road Station

Broadley Studio, Broadley Terrace

Lyon House, Broadley Street

The street frontage to Church Street will be distinctive, attractive, robust and animated with shops and the new library

5.17 Residential Entrances

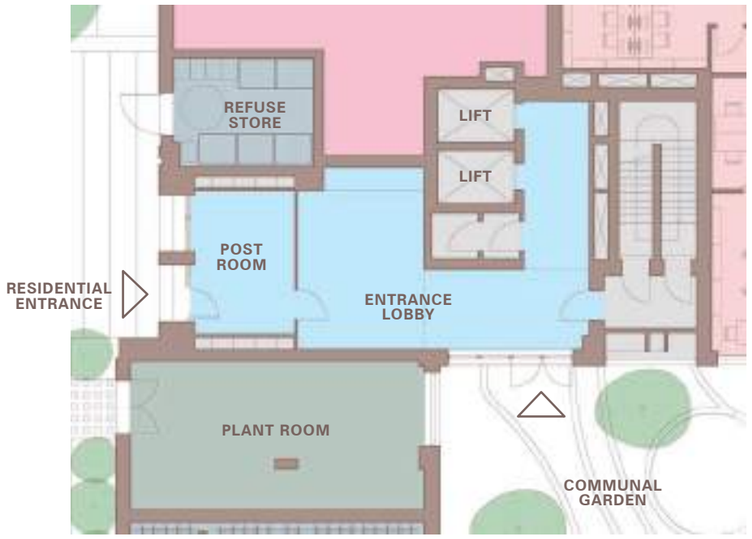
Communal Residential Entrances

There are six communal residential entrances providing access to the upper floor flats. These are arranged to be legible, rational and accessible and are located on the corners of the respective blocks with two on Penfold Street, with the remaining four entered from New Street Gardens. These entrances will be equivalent in appearance, location and quality regardless of tenure served with the exception of the entrance to core A1-3 located opposite Broadley Gardens. This entrance will include a concierge serving the block and will have an enlarged lobby that incorporates parcel storage to allow for the parcel deliveries.

The entrances have been designed to be generous and welcoming with wide, glazed frontages, high ceilings and distinctive finishes. The entrances to block A1 will have views and access through to the central communal garden and will be flooded with natural light. The entrances to block A2 will have access to the communal garden from the first floor. Each entrance, except for the concierge entrance, will have a postal lobby. This will provide a secure and discrete location for mailboxes which will negate the requirement for them to be located on the façade. The entrances are recessed to provide a degree of shelter from inclement weather.

The communal entrances are distinguished by a pair of arched openings with patterned brickwork to their reveals. The concierge entrance adjacent to Broadley Gardens is distinguished by having a taller and wider arched opening.

Refuse stores and cycle stores are located on the ground floor immediately adjacent to each entrance for ease of use. Additional cycle storage is located in the basement of Block A1.



Typical communal entrance plan

Communal entrances will be spacious, flooded with natural light and with views to the communal gardens

Private Residential Entrances

Entrances to duplex flats are located on the ground floor on New Street Gardens, Penfold Street and Broadley Street adding activity and animation to the street. The duplex entrances are accessed via planted front gardens that provide defensible space. There will be no qualitative difference in the entrances regardless of the tenure.

Where possible, entrances are arranged in pairs or threes to provide a pleasing rhythm on the façade. Entrances are recessed to provide shelter from inclement weather and incorporate a glazed side panel and overpanel to the front door to increase daylight to the dwelling.

1. Facing brick - Cream brick stretcher bond
2. Facing brick - Red brick stretcher bond
3. Facing brick (patterned) - Cream and white brick
4. Facing brick (patterned) - Red and white brick
5. Facing brick - Red brick soldier course
6. Facing brick - Red and white brick soldier course
7. Facing brick - Cream and white brick soldier course
8. Facing brick - Vertical recess
9. Metal balustrades, PPC finish
10. Precast concrete - Cream
11. Triple glazed windows with timber/aluminium composite frames, PPC finish
12. Aluminium rainwater pipe, PPC finish
13. Solid front door with triple-glazed side and top panel
14. Steel-framed, fully glazed entrance door, PPC finish

Detailed elevation of the residential frontage on New Street Gardens

5.18 Private Amenity Space

Every flat is provided with private amenity space in accordance with the London Housing Design Guide (5sqm for 1-bed flats, 6sqm for 2-bed flats and 7sqm for 3-bed flats). Amenity space is generously proportioned with a minimum width of 1.5m that will easily accommodate a 4-person table and chairs. Private amenity space will be provided in the form of a projecting balcony, inset balcony, terrace or garden.

The combined use of projecting and inset balconies has been considered in relation to the surrounding townscape and the visual impact of balconies balanced against the benefits that projecting balconies bring in terms of form factor and simpler construction that contributes to the thermal performance of the building.

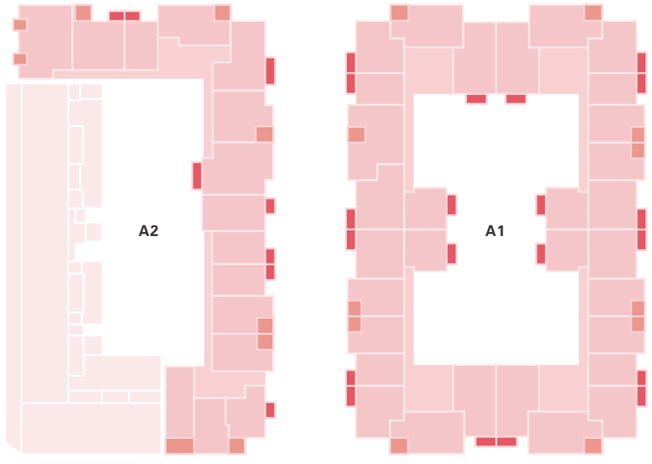
On a typical upper floor balconies are arranged in accordance with the following principles;

Edgware Road - A combination of Part inset, part projecting balconies with the projecting element echoing the form and proportion of the projecting window bays on the adjacent 354-380 Edgware Road frontage.

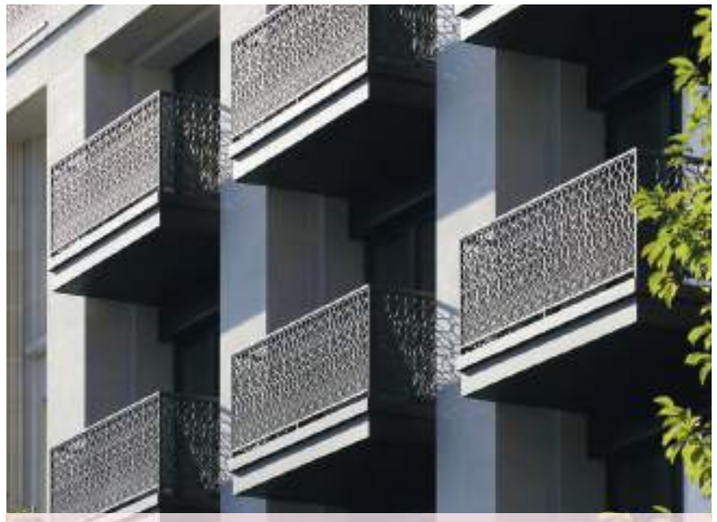
Church Street and Broadley Street - Inset balconies to reduce the extent of visual clutter to these prominent elevations.

Penfold Street and New Street Gardens - Inset balconies to projecting bays and projecting balconies to inset bays reinforcing the A-B-A rhythm established by the projecting and recessed bays. Locating projecting balconies between projecting bays reduces their visual impact on the streetscene.

Courtyards - Projecting balconies simplify the building envelope improving the thermal performance of the building and maximises the width of the courtyard.



Balcony arrangement



Chelsea Barracks (Squire & Partners)

Chelsea Barracks (Squire & Partners)

55 Victoria Street, Westminster (Stiff + Trevillion)

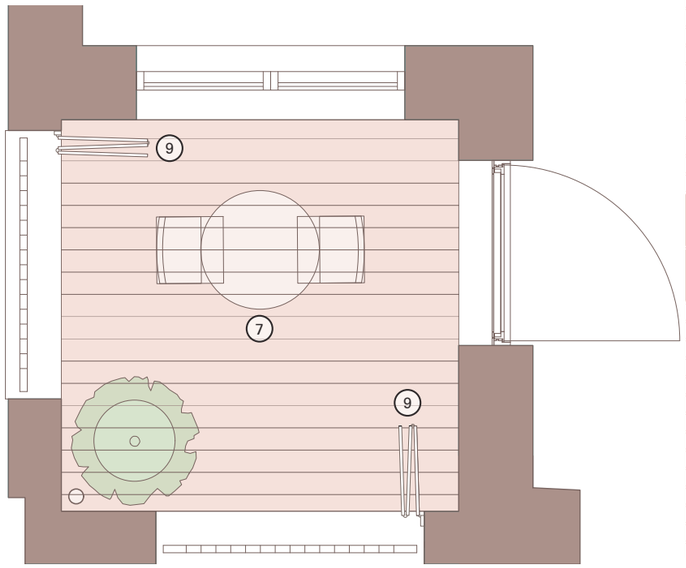
Churchill Park, Leiden (Hans van der Heijden Architects)

The design of the balustrades aims to find a balance between maximising views, light and sense of space and maintaining a reasonable degree of privacy. One also needs to be mindful of the clutter that can accumulate on balconies that can detrimentally impact the visual appearance of the building. The balustrades have been designed in light of these requirements.

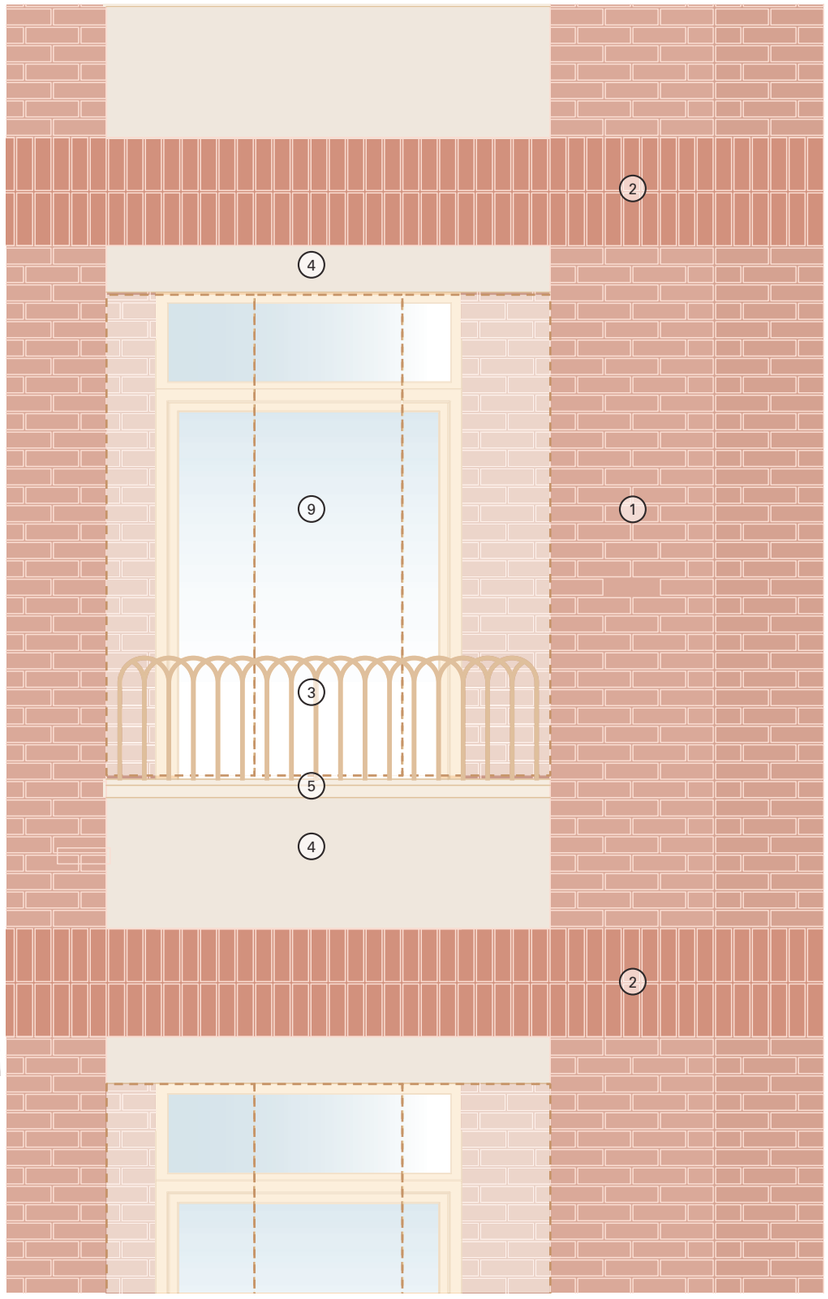
Inset balconies and roof terraces have brickwork up to 675mm above floor level with a 300mm high metal balustrade above that.

Additionally on inset balconies, a set of fully opening folding and frameless glazing is provided to the inside face of the balustrade (as per number 9 below). This allows the balcony space to be used all year round, and in all weather conditions, as an additional amenity space.

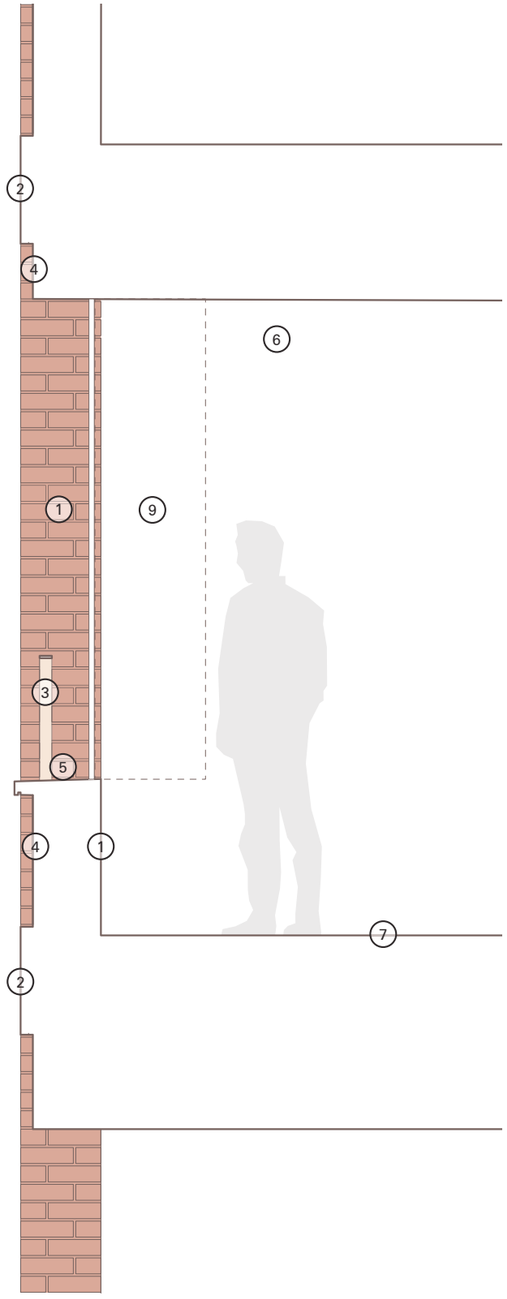
1. Facing brick - Red brick stretcher bond
2. Facing brick - Red brick soldier course
3. Metal balustrades, PPC finish
4. Precast concrete - Cream
5. Precast concrete cill - Cream
6. Metal soffit panel on suspended metal frame, PPC finish
7. Non-combustible decking
8. Triple-glazed windows with timber/aluminium frames, PPC finish
9. fully opening folding and frameless glazing



Typical inset balcony plan



Typical inset balcony elevation



Typical inset balcony section

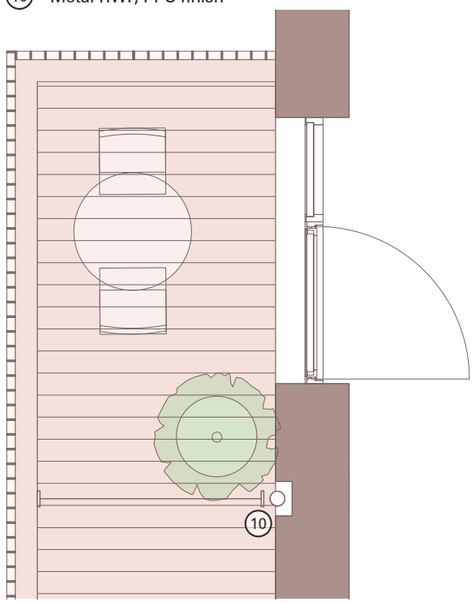
5.18 Private Amenity Space

Projecting balconies will have 1100mm high metal balustrades. These will have perforated metal screens up to 800mm. The perforated metal screen maintains privacy and visual appearance but also provides a degree of transparency. The balustrades and perforated screens take inspiration from the semi-circular form of the arches and barrel vaults with a curved design that adds interest and delight. The underside of projecting bays will incorporate a metal soffit and metal fascia that matches the balustrades.

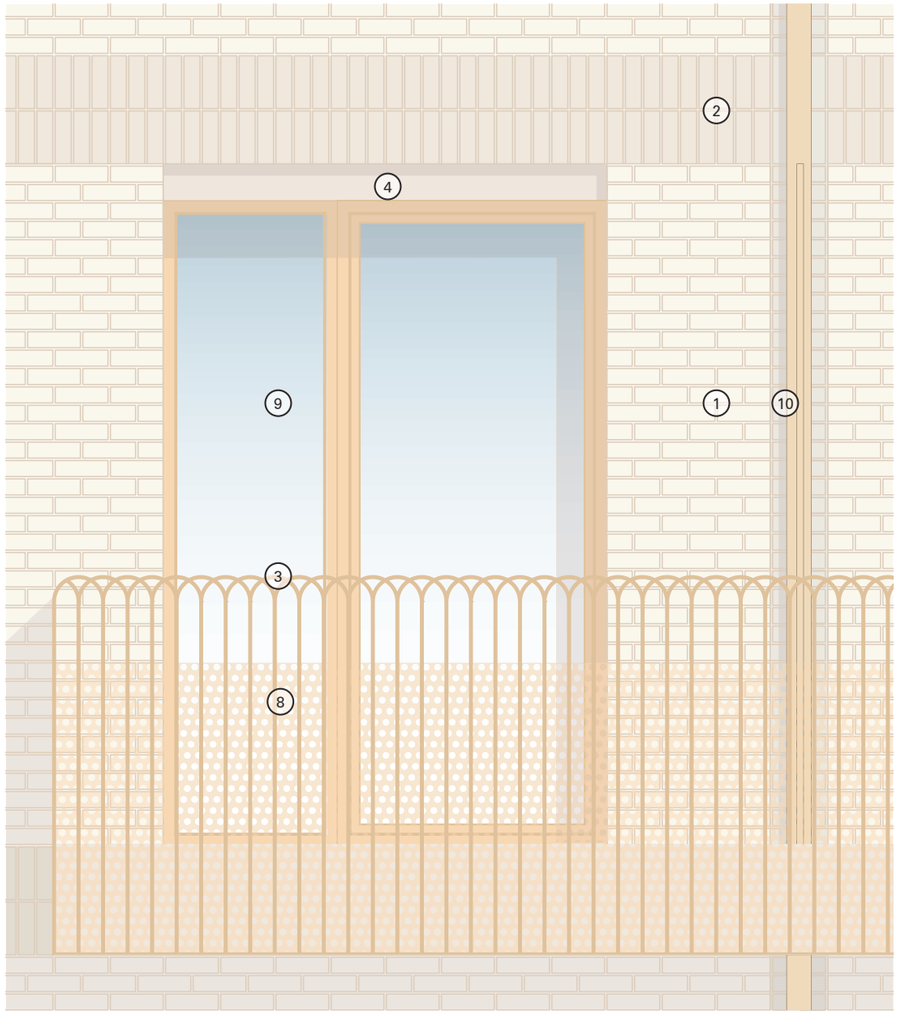
All of the balconies will be drained. Projecting balconies will drain into a rainwater pipe discretely recessed into the shadow gaps between bays.

Ground floor flats on Block 1A and duplex flats on Block 1B will have private gardens addressing the central communal gardens.

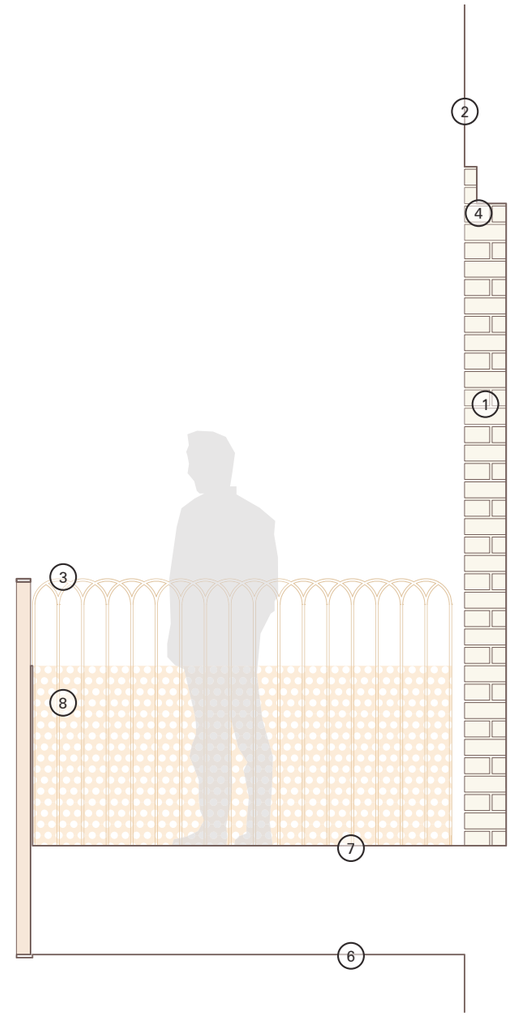
1. Facing brick - Cream brick stretcher bond
2. Facing brick - Cream brick soldier course
3. Metal balustrade, PPC finish
4. Precast concrete - Cream
5. Precast concrete cill - Cream
6. Metal soffit panel on suspended metal frame, PPC finish
7. Non-combustible decking
8. Perforated metal panel, PPC finish
9. Triple-glazed windows with timber/aluminium frames, PPC finish
10. Metal RWP, PPC finish



Typical projecting balcony plan



Typical projecting balcony elevation



Typical projecting balcony section

Typical inset balcony

Typical projecting balcony

5.19 Roofscape

The roof needs to accommodate a complex series of functional requirements including the incorporation of PV panels, integration of mechanical plant, lift over-runs, sustainable urban drainage and provision of a green roof contributing to urban greening factor. For this reason, the majority of the roof is flat. The areas of flat roofs have parapet walls to provide protection for maintenance operatives in a way that avoids low quality railings.

Nevertheless, the design seeks to provide variation and moments of interest through the use of set-backs, variation in height and barrel vaults located in prominent locations.

The semi-circular barrel vault form echoes the curved form of the arches on the ground floor and is evocative of the way that arches or pitched gables are used to punctuate Victorian mansion blocks, for example at Albert Palace Mansions in Battersea, but here used in a contemporary way that avoids being derivative or resorting to pastiche.

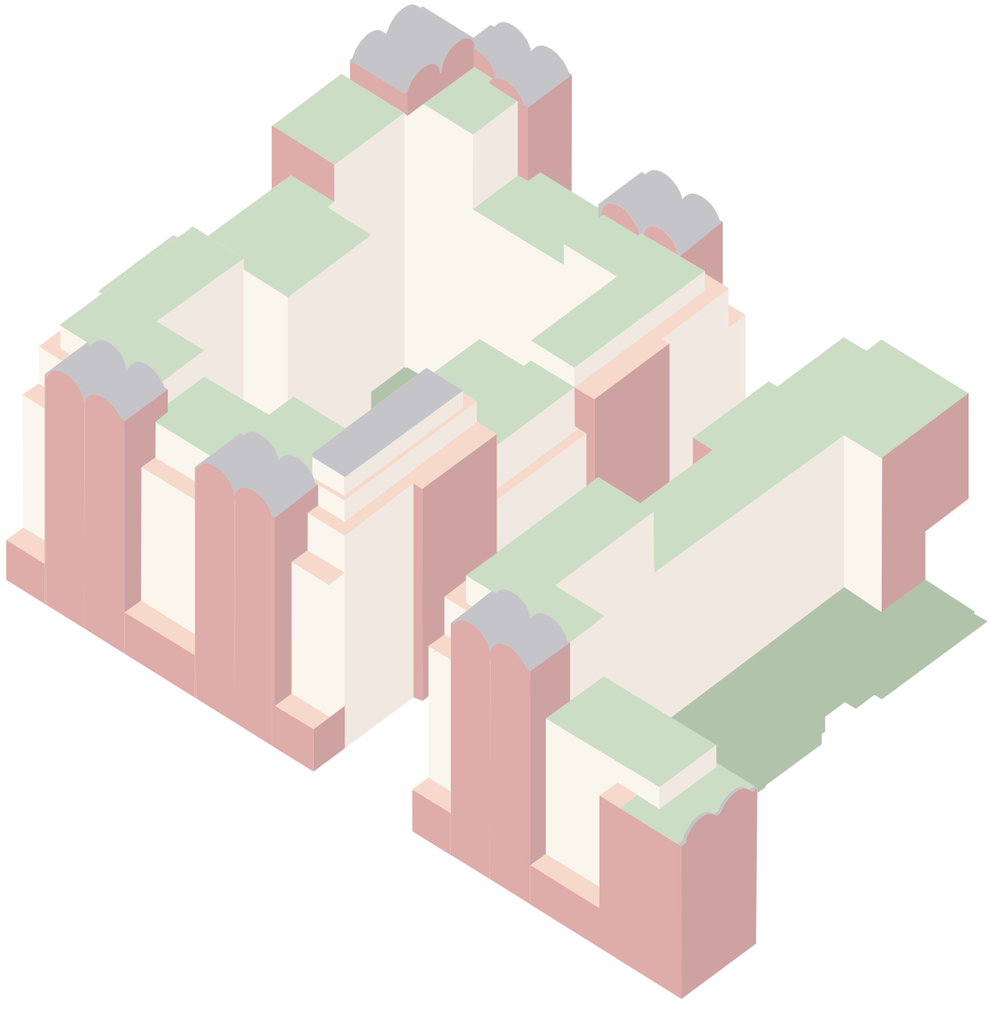
The barrel vaults are located to signify or add emphasis to particular moments or views and to further break up the roofscape. Specifically, these are located where they can be viewed from mid or long distance vantage points;

Edgware Road – A pair of arched parapet walls add interest, signal the entrance to Church Street, echo the rhythm of pitched roofs on the adjacent frontage and contribute to the variety of buildings at 354-380 Edgware Road.

Church Street and Broadley Street – Three pairs of projecting bays on Church Street and two projecting bays on Broadley Street incorporate barrel vaults contributing to the rhythm of bays along the street. These contribute to the views from Church Street and Broadley Gardens respectively.

Penfold Street – The highest point of the development, located at the eastern end of Penfold Street incorporates a pair of barrel vaults adding interest and prominence to this important local node adjacent to Broadley Gardens.

Where possible the opportunity has been taken to create special flats that utilise the additional, distinctive space offered by the curved form of the roof. Similar examples of this can be seen in The Barbican in the City of London.



Barrel vaults and patterned brickwork will be used to add emphasis at key moments

Barrel vault precedents

The Barbican, City of London

Albert Palace Mansions, Battersea

Barrel vaults will add visual interest, punctuating the roof line

Proposed view of Site A from Church Street

The richness and detail of Westminster mansion blocks

Boulting & Sons, Riding House Street, Westminster

Ashley Gardens, Thirleby Road, Westminster

5 Proposed Development: Site A

5.20 Elevations

Church Street

The Church Street elevation varies from seven storeys on the Edgware Road frontage to ten/eleven storeys along the majority of the frontage. The impact of this height is mitigated by two-storey set- backs on the upper floors and a rhythm of projecting and recessed bays.

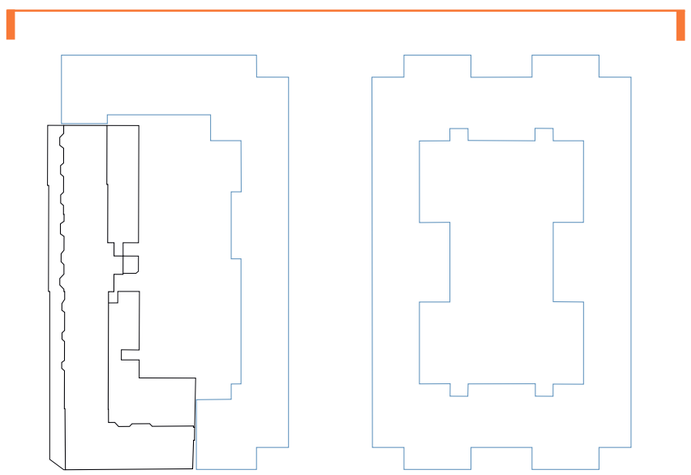
The retail and library frontage on the ground floor is distinguished by a distinctive facade with semicircular arches with decorative red brick surrounds.

The residential upper floors are divided into equal bays of patterned brick cladding in alternating red (projecting) and creamy-white (recessed) bays. The frontage of Block A1 has a more formal, symmetrical arrangement than the other elevations to express its importance on Church Street with the library, and the library entrance centred in relation to the facade.

Barrel-vaulted roofs are located on the pairs of projecting red bays.

Balconies are generally inset on the corner of bays lightening the corners and adding animation. On Block A2 flats in the recessed bays have projecting balconies. Flats within recessed bays on the first floor and 8th floor benefit from terraces.

Flats in projecting bays on the second and third floors have full height french windows to allow increased daylight to be drawn into those flats that might not benefit from as much daylight as the upper floor flats. This variation also helps to create a degree of hierarchy between the lower and upper floors.



SITE B

Penfold Street

BLOCK A1

New Street Gardens

BLOCK A2

Edgware Road

5 Proposed Development: Site A

5.20 Elevations

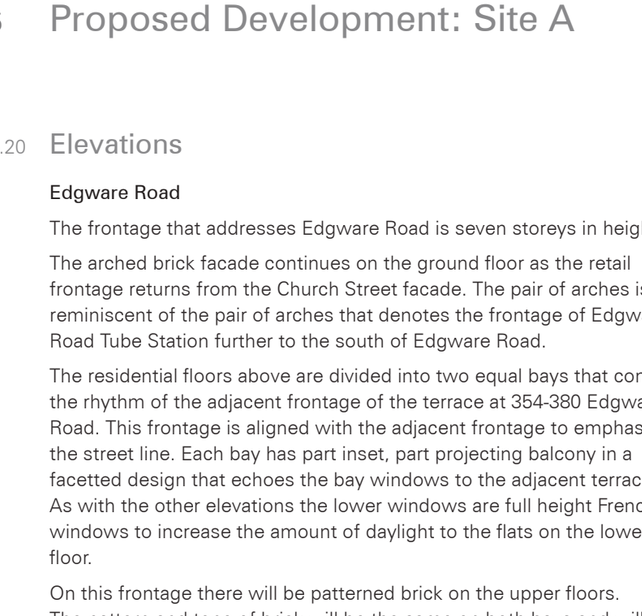
Edgware Road

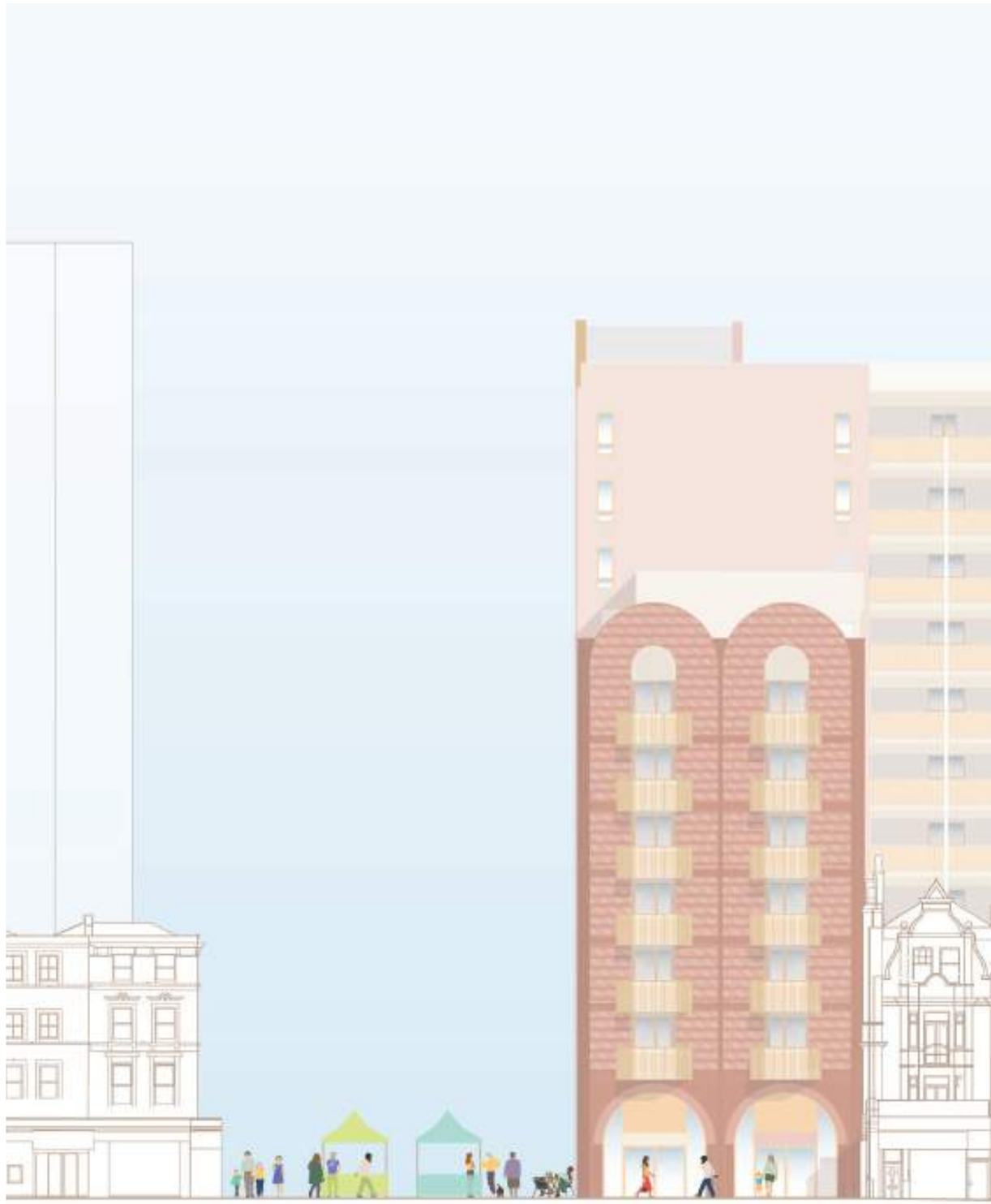
The frontage that addresses Edgware Road is seven storeys in height.

The arched brick facade continues on the ground floor as the retail frontage returns from the Church Street facade. The pair of arches is reminiscent of the pair of arches that denotes the frontage of Edgware Road Tube Station further to the south of Edgware Road.

The residential floors above are divided into two equal bays that continue the rhythm of the adjacent frontage of the terrace at 354-380 Edgware Road. This frontage is aligned with the adjacent frontage to emphasise the street line. Each bay has part inset, part projecting balcony in a facetted design that echoes the bay windows to the adjacent terrace. As with the other elevations the lower windows are full height French windows to increase the amount of daylight to the flats on the lower floor.

On this frontage there will be patterned brick on the upper floors. The pattern and tone of brick will be the same on both bays and will be designed to match the colours of the adjacent terrace and to be a respectful, distinctive and appropriate marker to the start of Church Street.





Edgware Road elevation

354-380 EDGWARE ROAD

Broadley Street

5 Proposed Development: Site A

5.20 Elevations

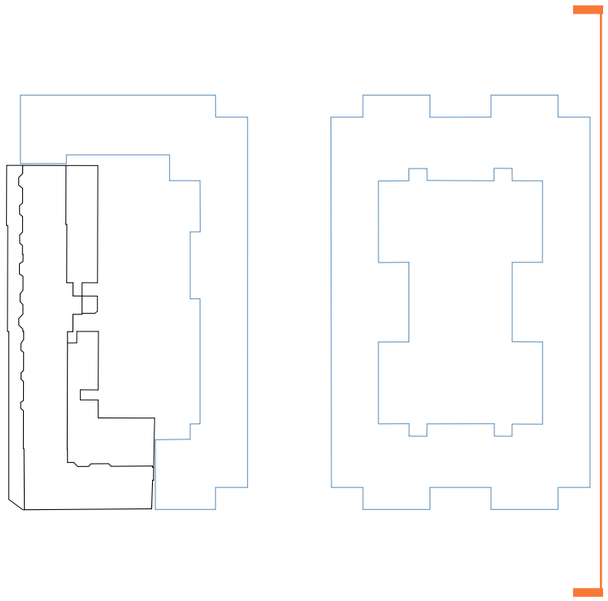
Penfold Street

The principles established on the other elevations continue on the frontage facing Penfold Street. On this elevation the height varies from ten to fourteen storeys. The impact of this height is mitigated by set-backs on the upper floors.

The rhythm of projecting bays in red brick with inset balconies alternating with recessed bays in creamy-white brick with projecting balconies extends across the elevation helping to break down he scale of the building.

At the northern end the retail frontage with its arched brick frontage returns around the corner. The arched motif appears again in the residential communal entrances that appear at either end of the elevation. Entrances to the duplex flats on the ground floor activate the frontage..

On this elevation the patterned brick is used on the lower two floors except at the southern end where it rises though the full height of the bays to denote the importance of the corner addressing Broadley Gardens. It is here that the building rises to its highest point, extending up to fourteen storeys marking the corner addressing Broadley Gardens with the use of the distinctive barrel vaults denoting the importance of this point.



Penfold Street elevation

BLOCK A1

Church Street

KENNET HOUSE

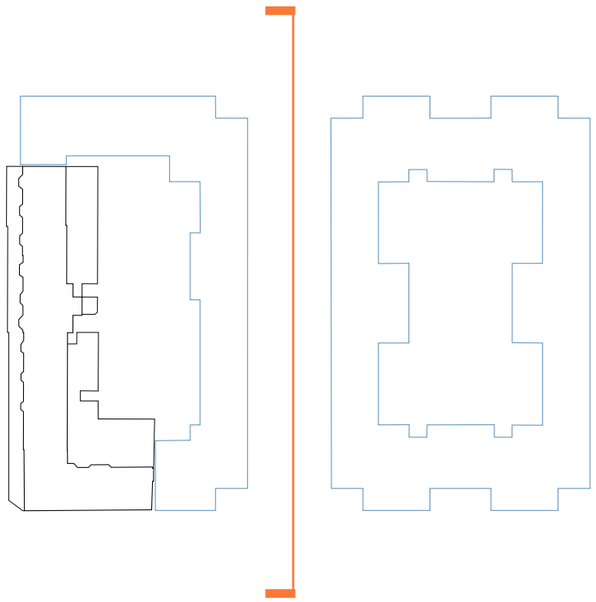
5 Proposed Development: Site A

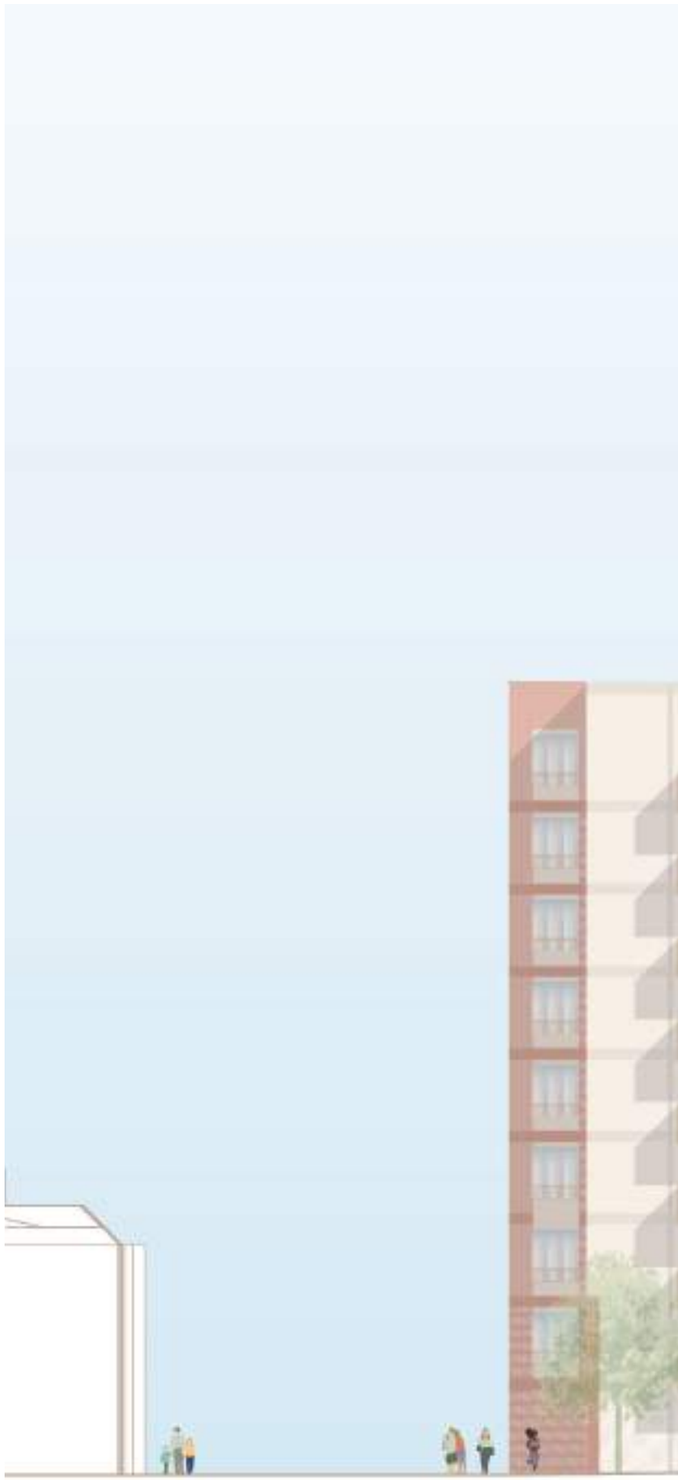
5.20 Elevations

New Street Gardens

The two elevations facing on to New Street Gardens are similar to the elevation facing on to Penfold Street but without the moment of height at the south-eastern end. The impact of the building's height is mitigated by set-backs on the upper floors.

As with the Penfold Street elevation, the façade maintains the A-B-A rhythm of alternative projecting and recessed bays. The patterned brick is used to add interest on the lower two floors with arched openings at either end denoting the communal residential entrances.





New Street Gardens elevation

Broadley Street

BLOCK A2

Church Street

5 Proposed Development: Site A

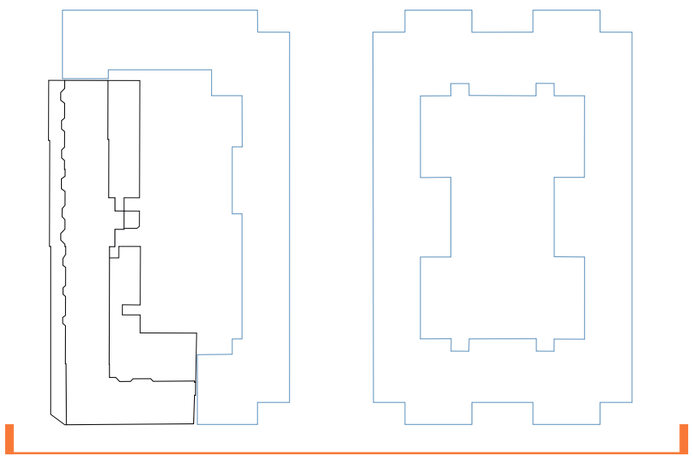
5.20 Elevations

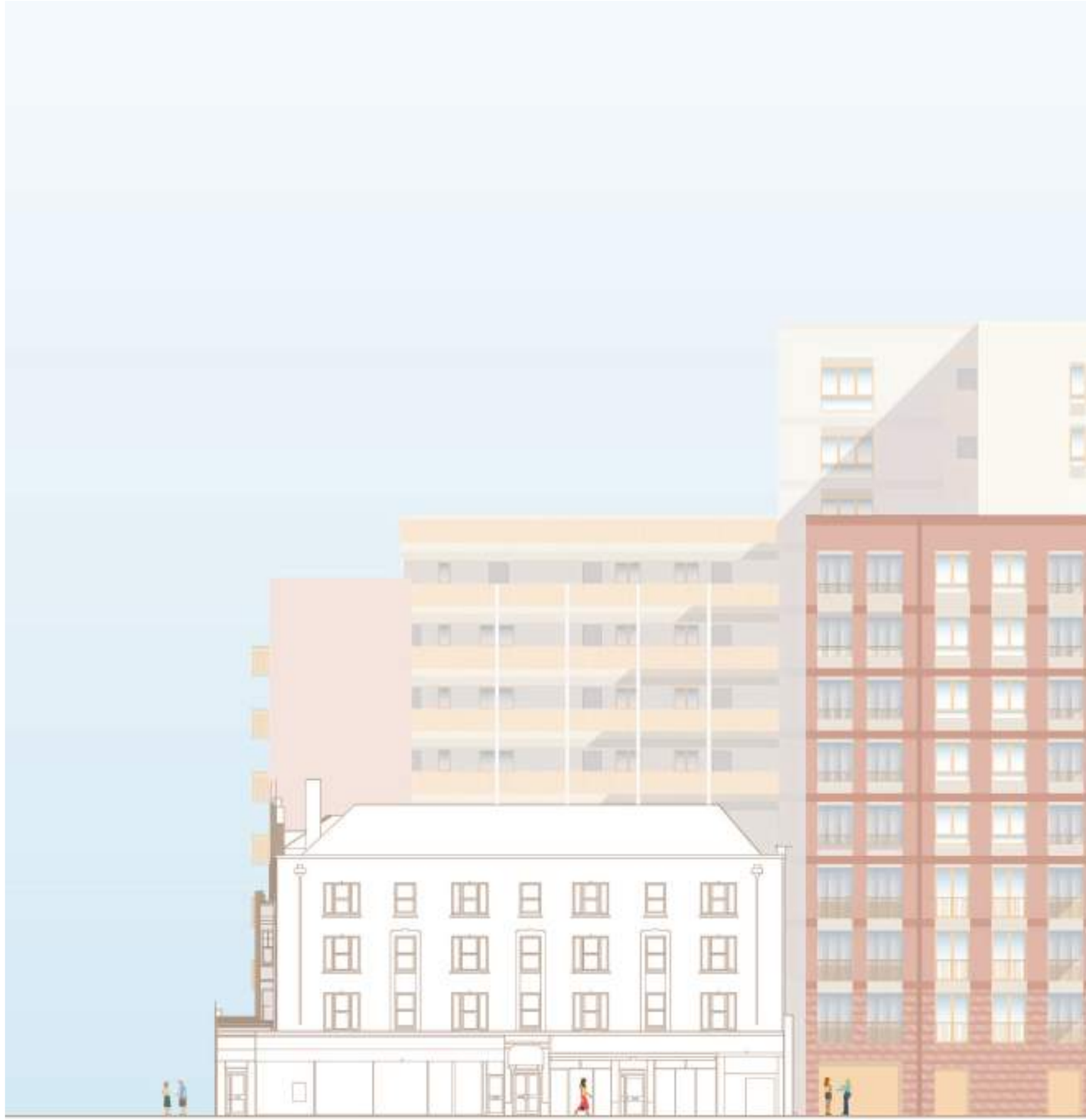
Broadley Street

The elevation fronting on to Broadley Street is similar in nature and tone to the elevation fronting on to Penfold Street varying in height from nine to fourteen storeys. The impact of this height is mitigated by set-backs on the upper floors.

The residential frontage extends down to ground floor with patterned brick used on the lower two floors¬ except on the corner of Broadley Street and Penfold Street where it extends the full height of the elevation to demarcate this important corner.

At the southern end of the site, the vehicular entrance to the market infrastructure can be seen, discretely located under the building.





Broadley Street elevation

Edgware Road

BLOCK A2

New Street Gardens

BLOCK A1

Penfold Street

SITE B

5 Proposed Development: Site A

5.21 Sections

Section Through Edgware Road, New Street Gardens and Penfold Street

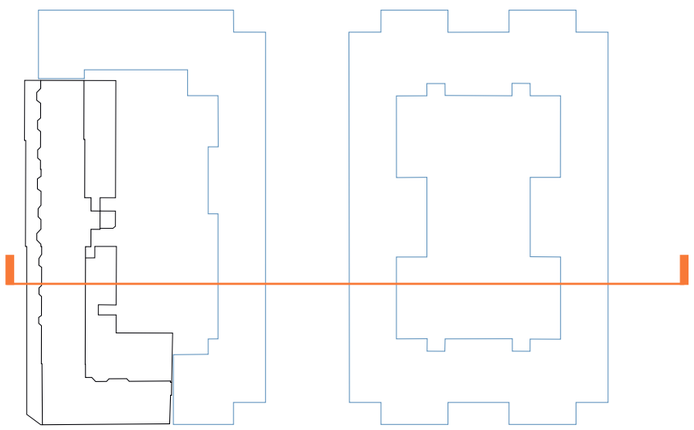
This section shows the relationship between 354-380 Edgware Road and Block A2 with the market traders' service area on the ground floor with the communal podium garden for residents above.

The section cuts through New Street Gardens showing the relationship between the two blocks either side of the street, the duplex flats with provide active frontages to the street, and cuts through Block A1 showing the basement, communal garden and the relationship with Penfold Street which is similarly addressed with duple flats on the ground floor.

The section shows the set-back upper floors demonstrating how these will be virtually concealed from street level.

The access points serving the premises comprising the Edgware Road fronting properties adjacent to Site A are to be blocked up with the podium garden extending to the edge of the site boundary.

The properties fronting Edgeware Road comprise a mixture of commercial at ground floor and residential above, with primary points of access located along Edgware Road. However, the servicing for these properties is through the western part of Site A. The proposed development will alter the servicing of these properties to the existing Red-Route loading bays on Broadley Street and Edgware Road, as confirm within the accompanying Transport Assessmen



Section A-A

New Street Gardens BLOCK A1 Penfold Street SITE B

5 Proposed Development: Site A

5.21 Sections

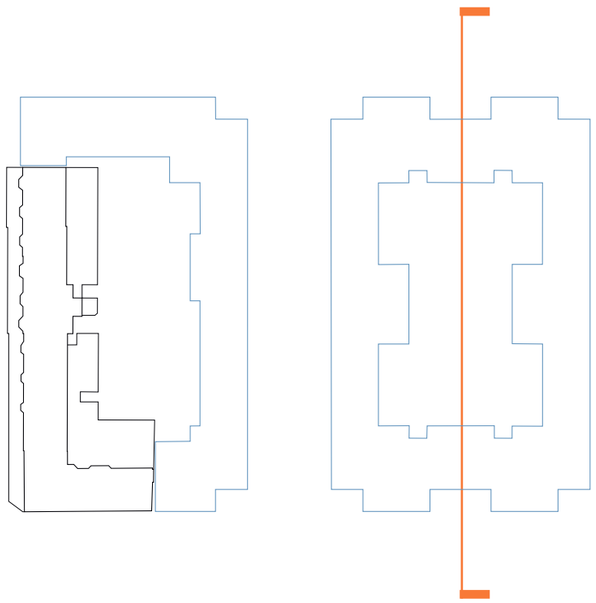
Section Through Church Street, Block A1 and Broadley Street

This section cuts through Block A1 between Church Street and Broadley Street showing the relationship between Church Street, the new library, the library garden to the rear and the communal garden for residents.

The section shows the gentle slope of the communal garden with the basement parking below and the way in which this relates to the ground floor duplex flats to the southern end of the block. It also shows the internal elevation to the courtyard including the walkways and use of creamy-white brick to maximise the sense of light and spaciousness.

The section shows the way that the central portion of Block A1 is set back from Church Street and the way that the set-backs on the upper floors reduce the perception of the building's height.

Section B-B



C h u r c h S t r e e t

BLOCK A1

Broadley Street

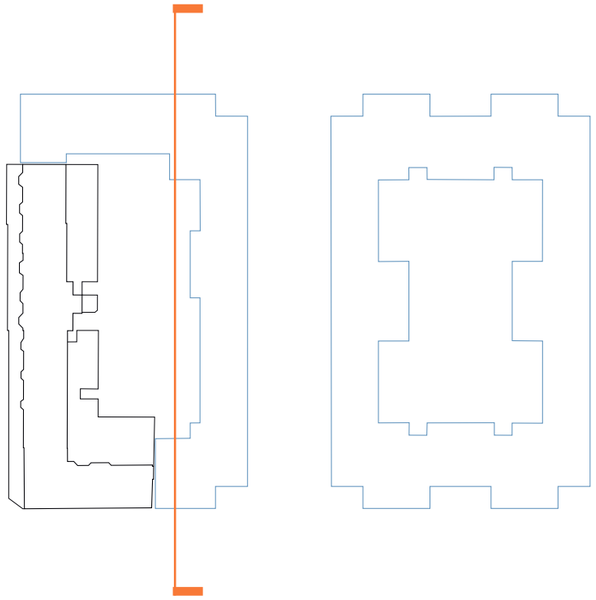
5 Proposed Development: Site A

5.21 Sections

Section Through Church Street, Block A2 and Broadley Street

This section cuts through Block A2 between Church Street and Broadley Street showing the relationship between Church Street with retail units fronting on to it, the service area providing infrastructure serving the street market with the vehicular entrance off Broadley Street and the communal garden for residents above.

The section shows how the communal garden slopes to engage with dwellings on the first floor adjacent to Church Street and with dwellings on the mezzanine floor adjacent to Penfold Street. It also shows the internal elevation to the courtyard including the walkways and use of creamy-white brick to maximise the sense of light and spaciousness.



Church Street

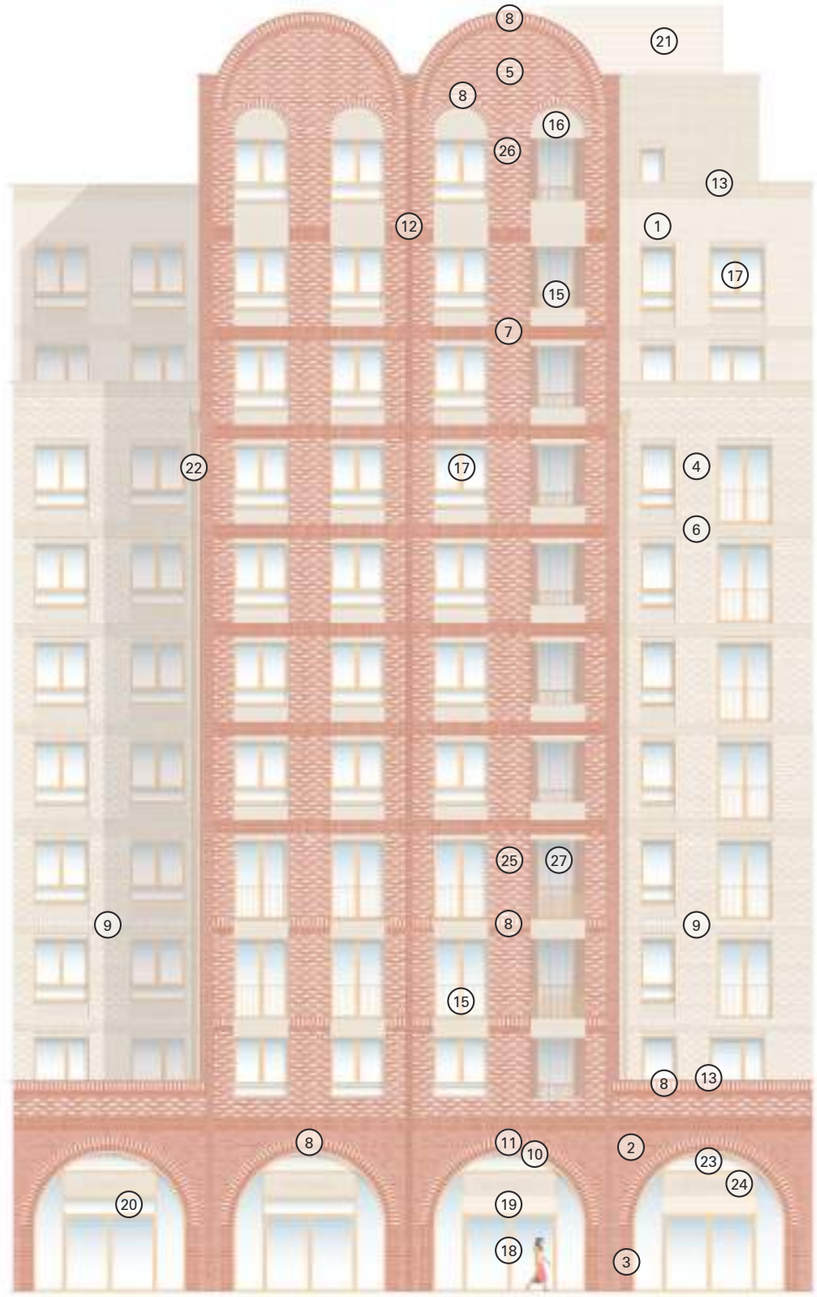
BLOCK A2

Broadley Street

5.22 Bay Study

Church Street

1. Facing brick - Cream brick stretcher bond
2. Facing brick - Red brick stretcher bond
3. Facing brick - Red glazed brick
4. Facing brick (patterned) - Cream and white brick
5. Facing brick (patterned) - Red and white brick
6. Facing brick - Cream brick soldier course
7. Facing brick - Red brick soldier course
8. Facing brick - Red and white brick soldier course
9. Facing brick - Cream and white brick soldier course
10. Facing brick - Red and red glazed brick soldier course
11. Facing brick - White and red glazed brick soldier course
12. Facing brick - Vertical recess
13. Precast concrete coping
14. Metal balustrades with metal mesh behind, PPC finish
15. Metal balustrades, PPC finish
16. Precast concrete - Cream
17. Triple-glazed windows with timber/aluminium composite frames, PPC finish
18. Shopfront glazing with metal frames, PPC finish
19. Integrated retractable awning
20. Projecting metal canopy, PPC finish
21. Metal louvre acoustic plant enclosure, PPC finish
22. Aluminium rainwater pipe, PPC finish
23. Metal louvre, PPC finish
24. Signage zone
25. Integrated bird box
26. Integrated bat box
27. Fully opening folding and frameless glazing above balcony balustrade



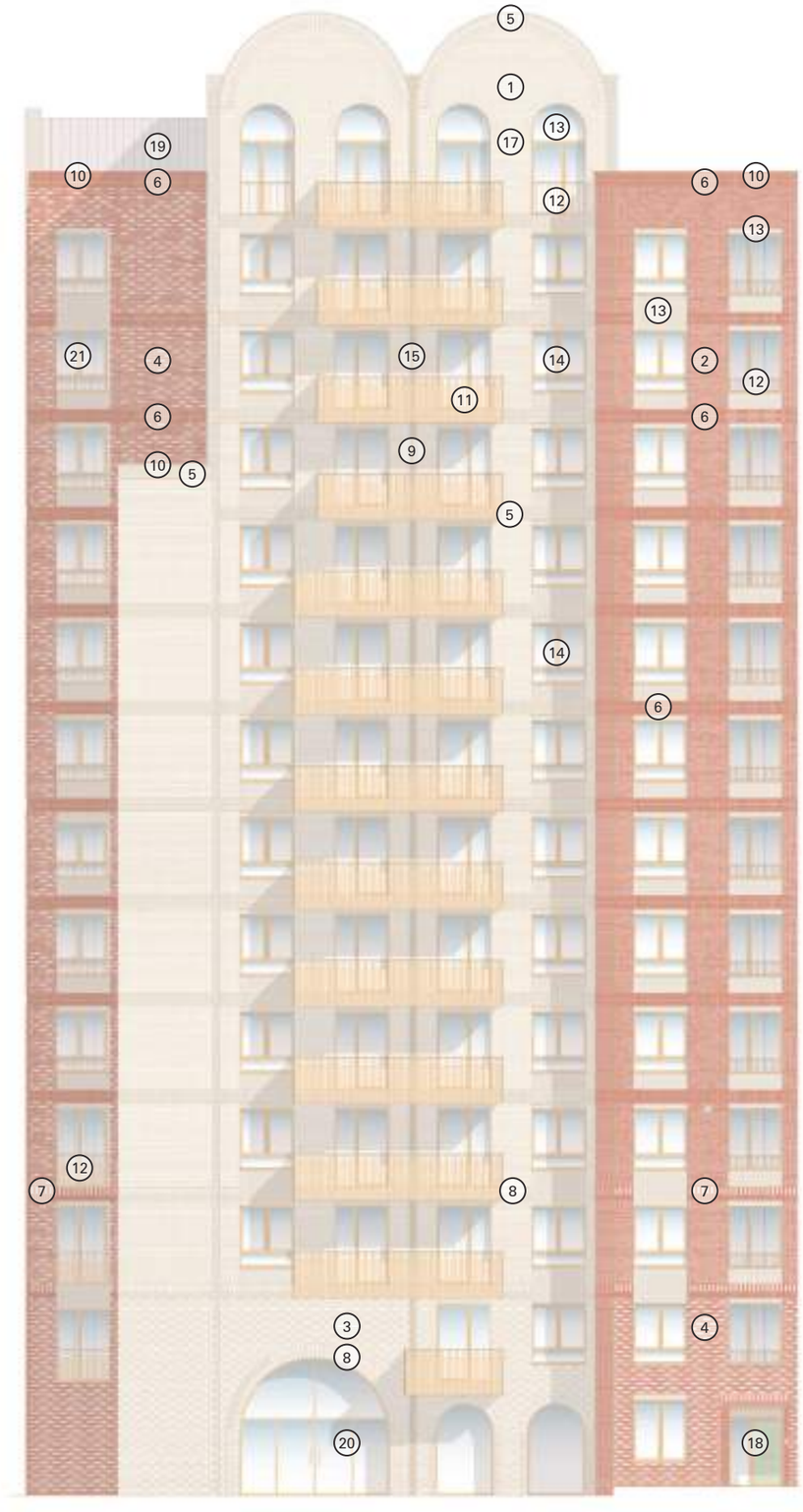
Proposed view of Site A from Church Street

5 Proposed Development: Site A

5.22 Bay Study

Penfold Street

1. Facing brick - Cream brick stretcher bond
2. Facing brick - Red brick stretcher bond
3. Facing brick (patterned) - Cream and white brick
4. Facing brick (patterned) - Red and white brick
5. Facing brick - Cream brick soldier course
6. Facing brick - Red brick soldier course
7. Facing brick - Red and white brick soldier course
8. Facing brick - Cream and white brick soldier course
9. Facing brick - Vertical recess
10. Precast concrete coping
11. Metal balustrades with metal mesh behind, PPC finish
12. Metal balustrades, PPC finish
13. Precast concrete - Cream
14. Triple-glazed windows with timber/aluminium composite frames, PPC finish
15. Aluminium rainwater pipe, PPC finish
16. Integrated bird box
17. Integrated bat box
18. Solid front door with triple-glazed side and top panel
19. Metal standing seam roof
20. Steel-framed, fully glazed entrance door, PPC finish
21. Fully opening folding and frameless glazing above balcony balustrade



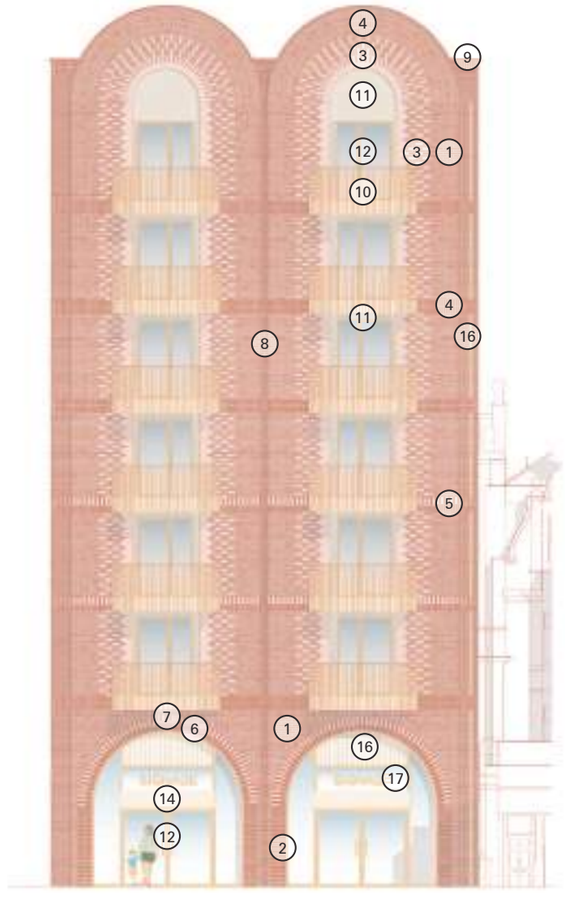
Proposed view of Site A from Broadley Gardens

5 Proposed Development: Site A

5.22 Bay Study

Edgware Road

1. Facing brick - Red brick stretcher bond
2. Facing brick - Red glazed brick
3. Facing brick (patterned) - Red and white brick
4. Facing brick - Red brick soldier course
5. Facing brick - Red and white brick soldier course
6. Facing brick - Red and red glazed brick soldier course
7. Facing brick - White and red glazed brick soldier course
8. Facing brick - Vertical recess
9. Precast concrete coping
10. Metal balustrades with metal mesh behind, PPC finish
11. Precast concrete - Cream
12. Triple-glazed windows with timber/aluminium composite frames, PPC finish
13. Shopfront glazing with metal frames, PPC finish
14. Integrated retractable awning
15. Aluminium rainwater pipe, PPC finish
16. Metal louvre, PPC finish
17. Signage zone



A pair of bays continue the rhythm of the adjacent terrace

Fenestration is arranged with similar proportions to the adjacent terrace

Arched parapets, arches and brick details add richness and visual interest

Projecting balconies echo the adjacent projecting bays

The Edgware Road elevation on Site A is designed as a contemporary response to the adjacent terrace

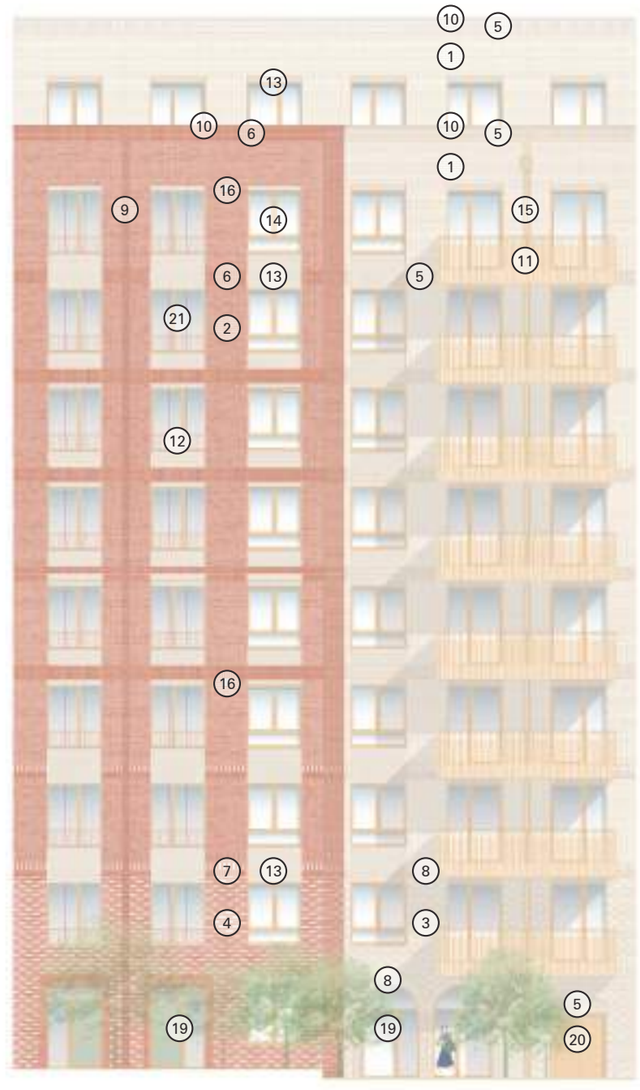
Proposed view of Site A from Edgware Road

5 Proposed Development: Site A

5.22 Bay Study

New Street Gardens

1. Facing brick - Cream brick stretcher bond
2. Facing brick - Red brick stretcher bond
3. Facing brick (patterned) - Cream and white brick
4. Facing brick (patterned) - Red and white brick
5. Facing brick - Cream brick soldier course
6. Facing brick - Red brick soldier course
7. Facing brick - Red and white brick soldier course
8. Facing brick - Cream and white brick soldier course
9. Facing brick - Vertical recess
10. Precast concrete coping
11. Metal balustrades with metal mesh behind, PPC finish
12. Metal balustrades, PPC finish
13. Precast concrete - Cream
14. Triple glazed windows with timber/aluminium composite frames, PPC finish
15. Aluminium rainwater pipe, PPC finish
16. Integrated bat / bird box
17. Solid front door with triple-glazed side and top panel
18. Metal standing seam roof
19. Steel-framed, fully glazed entrance door, PPC finish
20. Metal louvred doors, PPC finish
21. Fully opening folding and frameless glazing above balcony balustrade



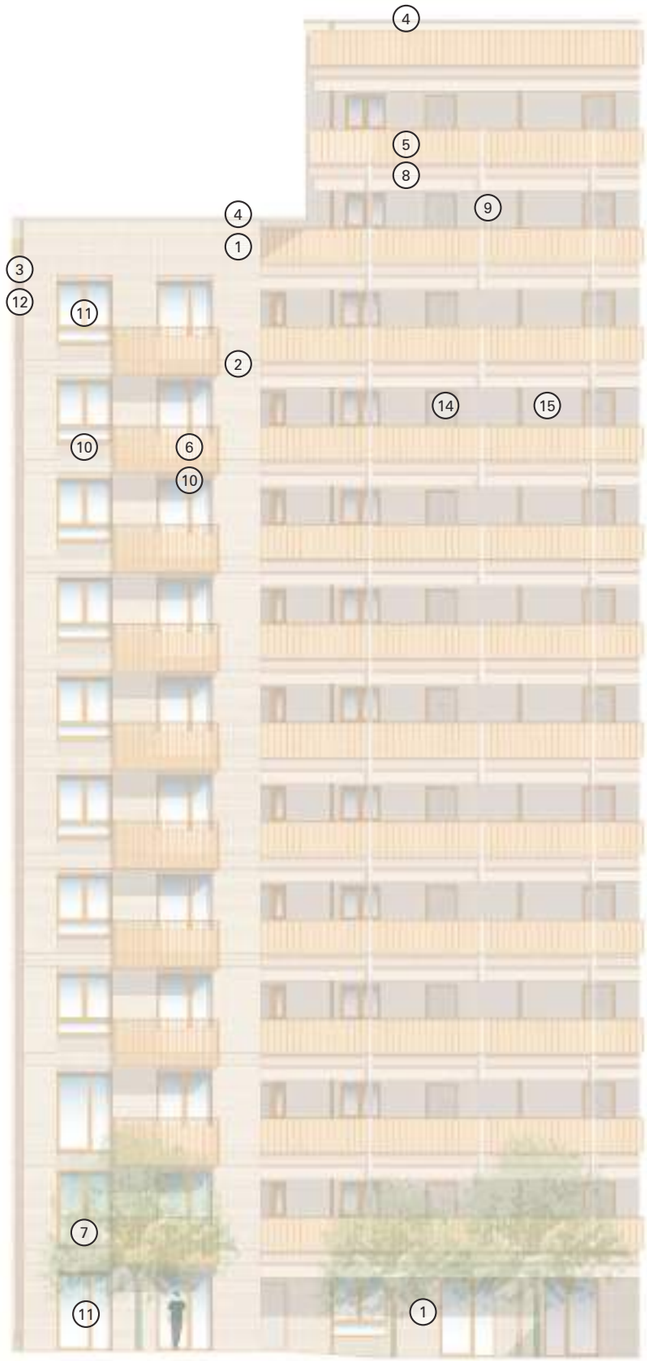
Proposed view of New Street Gardens

5 Proposed Development: Site A

5.22 Bay Study

Courtyard

1. Facing brick - Cream brick stretcher bond
2. Facing brick - Cream brick soldier course
3. Facing brick - Vertical recess
4. Precast concrete coping
5. Metal balustrades with solid metal panel behind, PPC finish
6. Metal balustrades with metal mesh behind, PPC finish
7. Metal balustrades, PPC finish
8. Metal fascia, PPC finish
9. Metal column, PPC finish
10. Precast concrete - Cream
11. Triple glazed windows with timber/aluminium composite frames, PPC finish
12. Aluminium rainwater pipe, PPC finish
13. Integrated bird box
14. Solid front door
15. Panellised Glass Reinforced Concrete - Cream



Proposed view of Site A communal garden

5.23 Inclusive Design

The design has been developed to facilitate ease of access for all residents and visitors to the buildings to create a development that is inclusive and accessible for all.

The main access standards and regulations referred to in the scheme development are:

- The Building Regulations 2010 (2015 edition incorporating 2016 amendments), Access to and use of Buildings, Volume 1: Dwellings, Approved Document M, HM Government, 2016;
- The Building Regulations 2010 (2015 edition incorporating 2020 amendments), Access to and use of Buildings, Volume 2: Buildings other than Dwellings, Approved Document M, HM Government, 2016;
- British Standard 8300:2009 (Amended 2010) Design of Buildings and their Approaches to Meet the Needs of Disabled People - Code of Practice, British Standards Institution, 2010.

Car Parking

Twenty-two allocated blue badge car parking spaces are provided for wheelchair residents within the basement. These are located close to the core entrances so that they are within 50m of the dwelling entrances.

The spaces each measure 2400 x 4800mm with 1200mm access zone to both sides and rear.

Entrances

The main communal residential entrances to the building will be clearly identifiable and will have secure controlled entry. The principal main entrance door to the building will be power assisted, with emergency breakout and accessible secure entry systems.

Details of automatic and power assisted entrance doors, sizes, glazing manifestation, accessible secure entry and exit systems, materials and finishes, lighting and acoustics will be reviewed at the next stage of detailed design.

All communal entrance doors will be maintained and available for people to use at all times without requiring assistance. Each principal entrance will be designed to meet Building Regulations Approved Documents M and K and other relevant standards and include:

- Weather protection;
- Manifestation to glazed screens and doors, dependent on their detailed design, with entrance doors providing at least one metre clear opening width;
- Any intercom will be located to suit all users (including wheelchair users) and have a speech reinforcement system and visual indication for users with hearing loss;
- A large easily traversable flush fitted solid mat (or similar) to remove water and dirt from shoes, wheelchairs and buggies; and
- Highly reflective internal finishes will not be specified.

The communal entrances to the respective blocks of flats will have level thresholds. The communal gardens are accessible via secondary entrances to the entrance lobbies. The communal gardens will be set at the same level as the floor level to provide level access.

Horizontal Circulation

Corridors to main common circulation areas will be level access throughout. Corridors are a minimum of 1200mm wide (generally 1500mm wide) and there is a generous lift lobby on all floors with views to the communal garden.

Details of décor, surfaces, lighting and acoustics will be reviewed at the appropriate stage of design development.

Switches and sockets to communal areas are to meet Approved Document M and BS8300 with regard to location, height and contrast, subject to detail design.

All internal doors are to meet Approved Document M regarding clear opening width, operating force, ironmongery and colour contrast. All doors will be to appropriate clear width and will have a 300mm unobstructed return to the pull side.

Vertical Circulation

Within the blocks of flats each core will have two accessible passenger lifts. These duplicated passenger lifts provide back-up to all residents in the event of routine maintenance or breakdown and reduce waiting times for disabled users at peak periods.

Lift car sizes will be not less than 1100mm x 1400mm in accordance with Approved Document M.

One lift in each core will be a fire fighting lift and will also be used for evacuation. Fire fighting lifts will be to the same internal dimensions as the main passenger lifts.

All stairs will be to Approved Documents M and K, suitable for ambulant disabled users. It is noted that not everyone can use lifts and stairs may be preferred.

Details of lifts, stair nosings, finishes, handrails and lighting will be reviewed to ensure these meet best practice requirements.

Dwelling Layouts

Dwellings have been designed to be functional and adaptable to meet the changing needs of residents throughout their lives.

All flats have been designed in accordance with the M4(2) Category 2: Accessible and adaptable dwellings as set out in Approved Document M of the Building Regulations and in excess of 10% of dwellings have been designed in accordance with M4(3) Category 3: Wheelchair user dwellings as set out in Approved Document M of the Building Regulations.

The wheelchair dwellings provided are a mix of sizes; 1-bed 2-person flats, 2-bed 3-person, 2-bed 4-person and 3-bed 5-person flats. An example flat layout is shown in Section 5.8.

Non-Residential Uses

Non-residential uses will be provided as a shell only to be fitted out by others. Nevertheless they have been designed to be accessible and inclusive to all from first principles.

All retail, community and library spaces are provided on a single level for ease of access with level access from the street. The library will have level access to the library garden.

Entrances will be clearly identifiable and allowance will be made for entrance doors to be either power assisted or automatically controlled by sensors. The minimum clear effective width of external doors will be 1000mm.

Manifestation will be incorporated to glazed doors and screens where required.

Public Space

The new green link at New Street Gardens is a pedestrian area and designed to be an inclusive space for the whole local community. It is step free with seating, play facilities ad planting.

Aside from the New Street Gardens, the vast majority of public space within the planning application area is public highway, so will be designed in detail under the S278 process, led by WCC Highways, according to their design standards regarding accessibility and inclusivity. This will include designing the market to find the right balance between inclusivity, market operation and vehicle access to make a safe and appealing destination.

Communal Gardens

The secure communal gardens are for the residents who live in each block. Every core opens into the garden so all parts of the garden and all the facilities are fully accessible to all residents of that block. All the private gardens which surround the communal gardens have a step free gated access directly into the central area. the surfacing is mostly resin bound aggregate, which is smooth, non slip and easily maintainable. The plan layout gives plenty of space for wheelchairs, pushchairs and maintenance access.

These gardens include substantial changes in level in response to basements and surrounding street levels. The gardens are laid out with all paths at shallow gradients (less than 1 in 20) so that all residents can move around all parts of these spaces using the main circulation routes. The changes in level contribute to the informal visual character and playability of the spaces. There are incidental stepped connections in some places, which can also be use as seating terraces and play features.

In addition to the many opportunities for informal seating, there are many seats with backs and arm rests. The gardens will contain play facilities for children of varying abilities and ages.

5.24 Crime Prevention Statement

The development has been designed in consultation with the Metropolitan Police Crime Prevention Officer and with in accordance with Approved Document Q: Safety, dwellings of the Building Regulations to ensure a safe and secure environment for residents, building users, visitors and the local community, to enhance perceptions of safety and reduce crime and anti-social behaviour in the local area.

Meetings were held with the Crime Prevention Officer in May 2019 and November 2020 to review the emerging design and the recommendations provided have been incorporated into the design as it has evolved.

The layout of the development has been designed from first principles to follow established town planning best practice to improve safety and security;

- Active frontages comprising communal residential entrances, private front doors, retail and library frontages to the perimeter to increase passive surveillance.
- Public realm and playspaces will be overlooked discouraging anti-social behaviour.
- Inactive frontages and blind corners are minimised resulting in good sightlines.
- Clear definition of public and private space with conventional perimeter blocks and defensible space to ground floor dwellings.

Residential Entrances

Residential entrances are set apart from commercial entrances to avoid interaction between the uses.

The communal residential entrances will have security-rated doorsets in accordance with Approved Document Q and will have audiovisual access controls. Doors will be single leaf to minimise the risk of failure. Every communal entrance incorporates a postal lobby so that post can be delivered securely without compromising the security of the block.

Front doors to ground floor duplexes will be from the street to increase animation and activity, with the exception of flats A1.4-D 0A.08 and A1.3-D 0A.01 which are accessed via the communal courtyard.

All flat entrance doors will be security-rated doorsets in accordance with Approved Document Q and will incorporate door viewers and door chains or limiters.

Appropriate lighting will be provided to all entrances.

Ground floor and accessible windows on upper floors will be specified to PAS24/2016 in accordance with Approved Document Q.

Basement, Car Parking and Cycle Parking

Access to the basement will be controlled by fob entry restricted to residents with car parking spaces only.

Bike storage areas in the basement are accessed directly from the accommodation cores negating the need for residents to access the car park.

Bike store doors will have security-rated doorsets in accordance with Approved Document Q and will have appropriate lighting.

Market Infrastructure

Access to the market infrastructure area will be carefully designed to prevent unauthorised access;

- Two sets of secure doors will be provided to Church Street to discourage opportunistic entry.
- Data logging of access / fob use will be employed. Encrypted fobs will be used to stop unwanted replicas being made.
- Security rated storage units will be specified.
- The use of CCTV, locations and coverage will be reviewed as the design progresses.
- Market infrastructure welfare facilities will be secure and will not be accessible to the public
- The vehicular entrance will be secure and controlled by fob access.

Non-residential Uses

The Church Street frontage has been designed as a flat frontage to minimise recesses that could create hidden spaces and attract crime or anti-social behaviour.

All entrances to retail spaces and the library will be LPS 1175 B3 rated.

Whilst it is noted that the design of the library is illustrative, the indicative layout locates WCs centrally where they are well overlooked to maximise surveillance and prevent unauthorised use.

The boundary wall between the communal garden in Block A1 and the library garden will be a minimum of 1.8m high. Planting on both sides of the wall will be incorporated to discourage climbing.

Secured by Design in External Spaces

All of the external space is designed to be as safe as possible and to feel safe to everyone using these spaces. This is a priority for everyone living, visiting and working in this part of Westminster and is fundamental to how the proposals will help to support community cohesion. The external space and architecture are fully integrated, for example the residential entrances are prominently located on the main pedestrian thoroughfares. The plan layouts avoid recessed entrances concealed corners. There is good visibility between internal lobby space and external public space. Furthermore, the public and communal spaces are very much overlooked by windows from habitable rooms and balconies, giving a good level of passive surveillance. The planting design includes low level planting with trees at a higher level, allowing good visibility in between at eye level. The lighting will provide good facial recognition and appropriate lighting levels to all areas, with a focus on main routes and entrances.

5.25 Energy

Energy in use

An energy strategy has been developed for the development which meets the net zero carbon target for both the domestic and non-domestic portions of the development. At least 35% of the reductions beyond the minimum requirements of Part L 2013 of the Building Regulations are achieved on site, and shortfall to achieve zero carbon emissions is met through a cash-in-lieu contribution. In achieving CO2 reductions, a series of measures have been adopted incorporating the energy hierarchy comprising of Be Lean, Be Clean, Be Green and Be Seen measures.

Demand reduction measures include passive enhancements such as enhanced fabric U-values, improved air tightness and active enhancements such as Mechanical Ventilation with Heat Recovery (MVHR) and low energy lighting. These measures deliver a building that has a low energy demand.

With energy demand reduced, supplying energy efficiently and cleanly to reduce CO2 emissions has been considered. No opportunities to connect to an existing or planned heat network in the area have been identified and use of combined heat and power (CHP) was considered unviable due to the clients brief requirement to avoid fossil fuels.

A building level heat network designed to reduce distribution losses is proposed with provision to connect to a future area-wide district heating network or a site-wide heating as the site evolves across the phasing program.

On site renewable energy technologies have been considered and the development is proposed to have a low carbon Ambient Loop Heat Pump (ALHP) system comprising of central Air Source Heat Pumps (ASHP) and individual Water Source Heat Pumps (WSHP). In addition, solar PV is proposed on appropriate areas of roof to maximise on-site renewable energy generation, resulting in on-site CO2 savings in excess of the minimum requirements.

The overall effect of these measures is that the regulated carbon emissions are reduced by 65% for domestic and 35% for non-domestic, giving a site wide improvement of 63% over Building Regulation Part L 2013 minimum requirements. The remaining CO2 emissions for the residential and commercial schemes would be met through a payment to the Westminster City Council's carbon offset fund.

In order to achieve Westminster City Council's commitment to be carbon neutral by 2030 the building is being designed to achieve Net Zero Carbon as defined by the UK Green Building Council. This requires that reductions of in-use energy consumption should be prioritised over all other measures and that this consumption should be calculated and publicly disclosed on an annual basis. In order to achieve this the heating and whole building energy targets set by the London Energy Transformation Initiative (LETI) are being used to design against.

This includes U-values for building fabric, window design, thermal bridging, ventilation strategy and airtightness.

Sustainability

The Applicant's sustainability brief is in line with the net zero carbon as defined by the London Plan, Policy SI2 - 'Minimising greenhouse gas emissions' requirements, addressing the circular economy (London Plan, Policy SI7 – 'Reducing Waste and Supporting the Circular Economy') and health and wellbeing. This section summarises the project team's response to the key requirements of the GLA and Westminster City Council. Full details are provided within the Sustainability Statement.

Energy and As Built Performance

The proposed development follows a fabric first approach in line with the Passivhaus principles. It is fossil fuel free site, where communal heating is supplied via air source heat pump led ambient loop, which also supplies heating, cooling and hot water to each dwelling. The scheme incorporates solar PV installation of 87kWp. As a result, the proposed scheme achieves approximately 63% improvement over Part L 2013 regulations, which is a significant improvement over the 35% reduction required by the London Plan.

The applicant is committed to follow through the design intent through delivery by implementing all of the requirements set out within BREEAM (Man 04) for Commissioning and Handover. This involves detailed design scrutiny and on site monitoring of installation, testing and Inspecting Building Fabric On completion and training of the facilities management for efficient operation. As per the London Plan's Be seen requirement the applicant will monitor energy consumption data for the first 5 years after occupation and report performance. The applicant has also committed to undertaking a Post Occupancy Evaluation (POE) one year after building occupation to gain building performance feedback.

Climate change risk adaption

Future climate risk for the development is mainly overheating in more extreme weather conditions. This has been addressed on both building and public realm level through high performing facades, cooling, self-shading components such as balconies and urban greening.

Extreme weather conditions and rise in temperature will also affect natural habitats and biodiversity, therefore the Applicant will meet the BREEAM requirement for long term Ecology Management and Maintenance. A landscape and ecology management plan, or similar, will be developed in accordance with BS 42020:2013 covering as a minimum the first five years after project completion

Flood modelling has been carried in developing the drainage and external levels strategy proposed for the site has been designed to mitigate the risk of surface water flooding for all storms up to the 100% Annual Exceedance probability (AEP) plus allowance for 20-40% climate change

Health and Well-being

Both noise and air pollution impact assessments have been undertaken for the proposed development with mitigation measures specified as required. Proposed Development is therefore considered to be in accordance with the air quality neutral requirements and the New London Plan.

The proposed development is has been designed in accordance with Secured by Design principles and BREEAM Hea06 credit requirements. A Security needs assessment (SNA) has already been produced at concept design. Feedback has been obtained from the design out crime officer (DOCO) on the proposed design and security controls. This led to further refinements regarding design of the site perimeter, detailed design of doors and gates and security systems in line with Secure by Design principles. All of these measures ensured alignment with SBD principles and local needs.

All flats have been designed in accordance with the M4(2) Category 2: Accessible and adaptable dwellings as set out in Approved Document M of the Building Regulations and in excess of 10% of dwellings have been designed in accordance with M4(3) Category 3.

The external lighting strategy has been developed in accordance with the required Westminster City Council planning documentation, Secured By Design principles and relevant lighting industry guidance.

Daylight & Sunlight

For detailed analysis please refer to the Daylight Sunlight Assessment Report. The proposed development is aimed at delivering an appropriate form and a density which is suitable for the area. Although the results confirm that the proposed development does not fully comply with the BRE numerical guidelines, considering the constraints of the urban context the results are considered to be acceptable.

Nature, Landscape and Biodiversity

The Urban greening factor of 0.437 has been achieved for Site A as per the London Plan requirements. The indicative masterplan scheme for the outline elements of the scheme at Sites B and C are anticipated to also deliver a UGF of over 0.4, which is set out in the London Plan as the target for residential led schemes. In site A, this was delivered through extensive green roof (1720m2), intensive green roof (836m2), green wall, trees, permeable paving, a landscaped residential courtyard, and New street gardens.

- A centrally located Communal Garden, providing a range of passive and active facilities (quiet seating areas, children's play & nature area
- The new green link at New Street Gardens is a pedestrian area and designed to be an inclusive space for the whole local community. It is step free with seating, play facilities and planting.
- Elements of play have been spread across the courtyard to allow playable space throughout.
- Seating areas have been located in the sunniest areas.
- 110 new trees being planted across the site.

Water and Surface Water Run-off

The development is targeting a maximum residential mains water consumption of 105 litres/person/day through a fittings-based approach. The 'Drainage Hierarchy' has been applied and a number of SuDS features are proposed including self-infiltrating permeable surfaces, blue podium roof and underground attenuation tanks. To satisfy the London Plan (2021) and other relevant policy requirements, surface Water Discharge Rate from Block A, B and C to be limited to 1.5-2.0l/s per connection for all storms up to and including 1 in 100years plus climate change.

Whole Lifecycle Carbon

The Whole Lifecycle Carbon (WLC) performance of the proposed Sites A,B and C development is 1136 kgCO2e/m2. This is at the higher end of GLA WLC benchmarks (which excludes modules B6 and B7) for typical residential development, and outside the GLA WLC Aspirational Benchmark (630-740kgCO2e/m2). 43% of WLC impact is from construction impact and 29% from operational energy use, over a reference study period of 60years.By targeting high impact elements [structural concrete, internal finishes] with the following potential improvements WLC emissions could be reduced by another 18%:

- Higher recycled content in concrete such as GGBS,
- Reduce the area of suspended ceiling systems & plasterboard

Other innovative opportunities include specification of Cemfree concrete products, which will enable the project to meet the GLA aspirational targets. At delivery stage this specific aspect will be investigated by the development partner, subject to technical viability and deliverability.

Circular Economy

The proposal commits to the following to meet the London Plan policies on minimising waste and supporting the circular economy. This is subject to viability and deliverability on appointment of the Development Partner/ main contractor;

- Recycled content: Deriving at least 20% of the total value of materials in major building elements from recycled and reused content in the products and materials selected
- Construction, Demolition, and excavation waste: Reusing/ recycling/ recovering 95 per cent of construction and demolition waste, and putting 95 per cent of excavation waste to beneficial use;
- Municipal waste: Targeting 65% of municipal waste to be diverted from landfill by 2030;
- Whole lifecycle carbon: Carrying out embodied carbon modelling to inform the design development and material specification.

The following key circular economy strategies have been developed for Site A. A number of these will be developed at the Technical design stage by the Development Partner/main contractor:

- Design for longevity, adaptability and flexibility of internal structure and services
- Design to minimise resource use and avoid waste through efficient design
- Circular material specification through recycled content and responsible sourcing
- Design for disassembly for shorter lifespan (<25years) building elements
- Design for disassembly for longer life span (>25years) building elements
- Reuse/recycle existing structures in landscaping and construction
- Minimise construction, excavation and demolition waste being sent to landfill.
- Provision of adequate waste storage space to enable recycling of municipal waste

Materials and construction

The proposed development aims to divert 95% (either by volume or tonnage) of all demolition, construction and excavation waste from landfill to be reused and/or recycled. A Resource Management Plan (RMP) will be developed to monitor and track waste generated during the construction process. This will be benchmarked against a target of ≤ 7.5m^3/100m^2 of G.I.F.A (≤ 6.5 tonnes/100m^2 of G.I.F.A) [BREEAM Wst 01 Construction Waste Management].

The material specification for the newbuild aspires to incorporate:

- The primary reinforced concrete construction to incorporate 30-35% of GGBS cement replacement, 20% (by weight) coarse recycled concrete aggregates and approximately 100% recycled steel content
- A 20% total material by value are responsibly sourced against BES 6001 certification (or equivalent)
- All timber will be FSC certified and legally sourced,

Construction impacts

The contractor will follow responsible construction practices in reducing construction impact on the neighbours as well as the environment, by following the Considerate Construction Scheme and aspire for a 4 star or above rating.

Transport

The transport strategy for the development has been developed following the Healthy Streets approach by prioritising walking and cycling and minimising and managing trips by motorised vehicles.

The majority of the residential units in Site A are proposed to be car free, with the exception of wheelchair accessible units (22 no) and additional 21 parking spaces. Please refer to the active travel plan within the Transport assessment for the justification and reasons behind the provision of parking spaces.

WCC City Plan 2019 – 2040 requires at least 50% parking spaces to have active electric charging provision. Of the 43 parking spaces, 22 spaces will have active provision for electric vehicle charging and the remaining 21 spaces will provide passive provision for future use.

Cycle parking (690 no long stay and 10 short stay spaces) at site A will be provided in accordance with the New London Plan and London Cycling Design Standards.

BREEAM

Westminster City Plan requires new major developments to achieve BREEAM 'Excellent'. A pre-assessment has been undertaken for the Library and retail units that form part of Site A. The assessment illustrates a route to achieving BREEAM 'Excellent' with all relevant minimum requirements met.

A targeted score of 73% has been established with a further 11% identified as potential, the feasibility of which will be reviewed as the design develops with the aim of achieving a targeted score of at least 75% to provide the assessment with a healthy buffer as it moves through design and construction.

Overheating

The building has been designed in accordance with the London Plan policy SI4 to minimise impacts on the urban heat island through design, layout, orientation, materials and the incorporation of green infrastructure.

The development has been designed to mitigate overheating risk, reducing the potential for internal overheating and reducing the reliance on air conditioning by following the cooling hierarchy set out in the London Plan. The building form helps to mitigate overheating risk, with self-shading, overhanging balconies, deep window reveals and solar control glass reducing solar gains entering internal spaces. The use of low temperature ambient loop heat network avoids unwanted heat gains. All dwellings are dual aspect maximising passive ventilation. Due to the high external noise levels from the adjacent Edgware Road, natural ventilation is not possible for some dwellings, and so cooling is required to some dwellings. The viability of the scheme relies on increased sales values by including cooling to private sale dwellings, and to meet the brief requirement for the scheme to be tenure blind, cooling is provided to all dwellings.

A detailed overheating risk analysis has been carried out for the development undertaking dynamic overheating modelling in accordance with CIBSE TM59, and the report containing modelling inputs, assumptions and results can be found appended to the Energy Assessment prepared as part of this planning application.

5.26 Lighting Design

The lighting strategy has been developed in accordance with the required Westminster City Council planning documentation, Secured By Design standards and relevant lighting industry guidance. The external lighting scheme for Site A comprises of three key elements:

- Lighting of the residents shared podium gardens within Blocks A1 and A2.
- Lighting of the balconies of private residential properties within Blocks A1 and A2.
- Lighting of the private public realm that runs through Site A, in between Blocks A1 and A2.

All fittings across the scheme will be LED, to minimise operational energy use, operational cost and reduce the maintenance requirement. The fittings will all be 3000K and will have an Ra>60, in line with the WCC 'Lighting Master Plan 2020-2040' document. Fittings are being selected to minimise upwards light spill and reduce night time light pollution, in line with the requirements of the ILP 'Guidance Notes for the Reduction of Obtrusive Light:2020' guidance.

The private public realm illuminance levels have been designed to meet the recommendation of BS 5489-1 and BS EN 13201-2, in line with the WCC Lighting Master Plan document. Illuminance levels for all private areas have been designed to meet the recommendations of BS EN 12464-2 and CIBSE SLL Lighting Guide LG6.

The detailed design process will require further collaboration between the architectural design, landscape design and the external lighting design, to ensure a well-coordinated and complimentary scheme.

Lighting of the Resident's Shared Podium Gardens

The design for the resident's shared podium gardens utilises low-mid level fittings to provide adequate lighting of the communal pathways, seating areas and play equipment. For the pathways, recessed wall lighting incorporated into the edge of the raised planters to provide adequate illumination for wayfinding. Keeping the light at low level in these areas minimises obtrusive light spill into the adjacent residential flats. Additional pole mounted luminaires (with a height of 3m or less) are located adjacent to play equipment and seating areas, to provide additional illuminance locally where required. The location of these has been determined based on avoiding obtrusive light spill into the adjacent properties. Having the light source slightly higher up in these areas provides a better cylindrical illuminance on pedestrian's faces, increasing their feeling of safety if occupying these areas for a longer duration. Wall mounted fittings are proposed above all main entrance doors to/from the podium gardens, to ensure they are easily identifiable.

Lighting of the Private Balconies

A wall mounted fitting outside of the door from each residence is proposed, with an additional wall fitting further down each balcony to ensure adequate and uniform coverage of each private balcony.

Lighting of the Public Realm 'New Street Gardens'

The lighting for the main central pathway/road through the public realm is to be lit using medium height column fittings (with a height of around 5m). At the more open paved 'plaza' style areas adjacent to the interface between the public realm and Church Street to the north-west, and with Broadley Street to the south-east, façade mounted fittings are proposed, to minimise obstructions for pedestrians and cyclists. There are small seating areas within the public realm which are lit with medium height bollards (2.2m height) to avoid clashing with the tree canopies and provide a more subtle lighting to these areas, whilst giving some light to people's faces to increase the feeling of safety. As with the podium gardens, wall mounted fittings are proposed above all communal entrance doors to/from the public realm from Blocks A1 and A2, to ensure they are easily identifiable.

Care will be taken to coordinate column locations with proposed tree locations, to avoid tree canopies adversely affecting light distribution wherever possible. Bespoke fittings are not proposed for the scheme.

5.27 Noise and Vibration

The noise environment around the proposed Church Street Site A development is dominated to the south west side by the busy Edgware Road, with noise levels gradually falling away somewhat along Church Street and Broadley Street. Noise levels in the more shielded areas, including the pedestrian link between Church Street and Broadley Street, and the enclosed courtyards, will enjoy lower noise levels – appropriate for good quality outdoor amenity space.

Acoustic ratings of the glazing elements (windows and doors) to flats will be rated appropriately to provide good internal noise levels (with windows closed), as required by national standards and local planning conditions.

The residential flats are provided with mechanical ventilation, and Fan Coil Units which provide heating and cooling as required. Thus, even in the warmer months, residents will not need to open windows if they prefer not to, thus providing good acoustic comfort whenever required.

Sound insulation between dwellings will be at least 5 dB better than Part E Building Regulations minimum requirements, with higher isolation provided over the ground floor commercial and Library spaces.

Vibration from underground trains or similar sources is not an issue at the site, as nearest Tube tunnels are over 50 m from the site boundary.

Plant noise is designed with appropriate attenuation to avoid annoyance. For example, the Air Source Heat Pumps that serve the whole of Site A are sited on the roof, with a deep acoustic louvred enclosure mitigating noise to the surrounding flats.

5.28 Flood Risk and Drainage

The proposed development is at low risk of flooding. The site is in Flood Zone 1 Low Probability' less than a 1 in 1000 (0.1%) Annual Probability of flooding from rivers and sea. This also represents the risk of tidal flooding. The site lies outside of an area at risk of reservoir flooding. Therefore, there is no risk associated with this flood source. Based on the draft SFRA the risk of flooding from groundwater is very low. The existing surface water discharge from the site will be reduced significantly as a result of the proposed development and therefore this should further alleviate the risk of flooding from existing sewers. Whilst the majority of the site is considered as being at a 'Very Low' susceptibility to surface water flooding, there are some small local areas within the site which are shown to be at a greater risk. The finish floor level of the proposed buildings will be set above the existing ground levels and the building accesses will be set to fall way towards landscaped areas and/or existing roads. The existing roads levels and subsequently exceedance flood routes will be retained as existing. Furthermore, as it is good practice, linear threshold drains will be provided across all access thresholds of the proposed buildings.

Surface water runoff from the development is proposed to be managed through a combination of Sustainable Drainage Systems (SuDS), including biodiverse green roofs, blue roofs, permeable / porous pavement, water butts and below ground attenuation tanks (geocellular crates) before discharging into the existing public combined sewers. It is proposed that the surface water runoff from the development will be limited to the greenfield runoff rates of 1.5-2.0l/s per connection. Thames Water have already confirmed that there is capacity in these sewers to accept the proposed surface water discharge rates from the proposed development.

In order to safeguard against the risk of flooding of basement in Block A1, it is proposed that a drainage network equipped with a sump pump is provided in this basement. The sump pump will drain into the proposed foul water drainage network at ground level and outfall into the existing public combined sewers.

The surface water runoff from the biodiverse green roofs, podiums and permeable/porous paving (at ground floor) will undergo one level of water quality treatment before discharging into the existing combined sewers. In addition to the SuDS detailed above, the use of catchpits and trapped gullies and drainage channels will help prevent ingress of oils, debris and sediments into the drainage system.

Foul water drainage from the development is proposed to drain into the existing public combined sewers within or in the immediate vicinity of the site. Thames Water have already confirmed that there is capacity in these sewers to accept the foul water flows from the proposed development.

5.29 Car Parking

In accordance with the residential car parking standards set out it in the London Plan (2021), sites within PTAL of 5-6b are to be car-free developments. The majority of the residential units in Site A are proposed to be car free, with the exception of wheelchair accessible units and a small proportion of market sale units.

The London Plan states that for disabled parking *"residential development proposals delivering ten or more units must, as a minimum ensure at least one designated disabled persons parking bay per dwelling for 3% of dwellings is available from the outset"*.

Site A will seek to provide 22 residential disabled parking spaces on-site (provided at 5% of number of units) and 21 standard residential car parking spaces. The residential car parking spaces are to be provided within the basement of Site A and accessible via two car lifts situated on Penfold Street.

The electric car charging provision required in accordance with the WCC City Plan 2019 – 2040 is for at least 50% parking spaces to have active provision, with a passive provision for the remaining spaces. Therefore, of the 43 parking spaces, 22 spaces should have active provision and the remaining 21 spaces will provide passive provision for future use.

The current levels of parking are considered appropriate because of the following considerations:

- The current car ownership ranges from 26% to 31% in the super output areas containing the site and is based on a combination of off-street and on-street parking permits and within an unmanaged scenario.
- This is confirmed by the current parking permit information which shows that of the total 512 residential units across the three sites and only 183 have car parking permits, 150 of those are for on-street locations.
- The WCC car parking survey from 2015 shows that there is a spare capacity of 287 spaces or 23% in the Church Street ward. Current residents from Sites A, B and C make up a significant proportion of the vehicles parked. The 5% parking ratio will help reduce the reliance on-street parking freeing up space for essential public realm enhancements.
- The development sites will provide a Travel Plan with stringent monitoring regime in place and agreements preventing applying for new car parking permits as part of lease agreements. Although not prevalent in WCC, it is a common practice to reduce car ownership in developments.

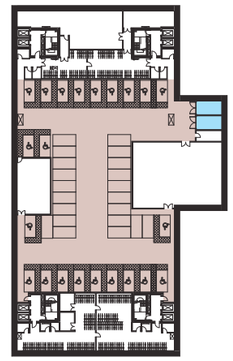
A Car Park Management Plan (CPMP) has been produced, which sets out the principles that will underpin the management of the on-site parking, which will include residential parking, disabled parking and van parking. The overriding objective of the CPMP is to ensure the effective management of all on-site parking in order to minimise risks associated with potential overspill parking from the development onto the surrounding highway network and to prevent queuing back on the highway.

- The following elements will be covered in the CPMP:
- Allocation of residential parking permits and signage.
- Means of control to enter and leave the car park
- Enforcement
- Monitoring utilisation of residential car parking spaces (including disabled spaces and spaces with electric charging points)
- Preparation of annual monitoring reports to be made available to the Council.
- Communication on parking matters with the overall development to include both residents and non-residents.

The plan drawings adjacent present the location of the vehicle parking and cycle lift for the ground floor and basement levels respectively.

The development proposals include provision of lifetime membership for car clubs for all residential units. There are car clubs present in the vicinity of the site however if on discussions with Car Club operator, it is identified that any additional spaces would be required, then suitable locations will be identified in liaison with WCC highways.

Ground floor plan



Basement plan

Van parking
Car parking
Car lift

5.30 Cycle Parking

Cycle parking at Site A will be provided in accordance with the standards set out in the New London Plan (2021) and London Cycling Design Standards (LCDS, September 2016). It is proposed that the cycle parking will be providing in mix of Sheffield stands, double stacker stands accessible spaces and cycle lockers for folding bikes.

The cycle parking standards and proposed provision for Site A is provided in the table below.

No. of Beds	Long Stay		Short Stay	
	Minimum Standards per Unit	Proposed Provision	Minimum Standards	Proposed Provision
Studio	1 space	11	1 space per 40 units	0
1	1.5 spaces	257		4
2	2 spaces	276		3
3	2 spaces	120		2
4	2 spaces	22		0
5	2 spaces	4		0
Total		**690**	**Total**	**10**

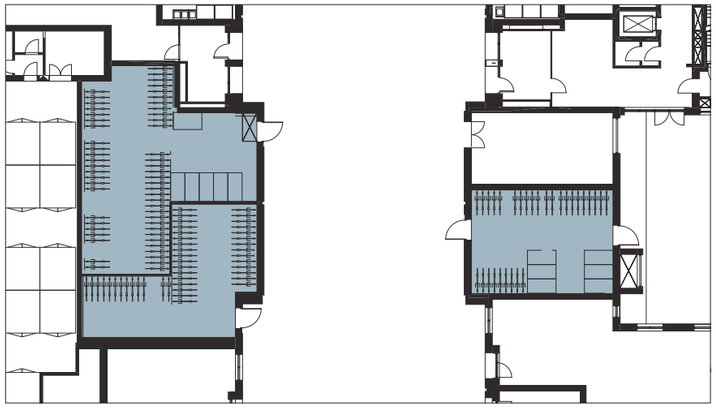
Proposed cycle parking standards

The detailed design of Sites B and C have not been finalised yet but the detailed design will follow the principles laid out for Site A. The designs will incorporate policy compliant cycle parking, disabled vehicle parking and further facilities for the Church Street market.

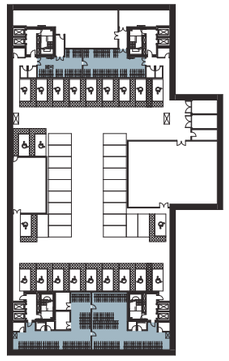
The cycle spaces will be designed and implemented in accordance with The London Cycling Design Standards (LCDS), published in September 2016 sets out the requirements and guidance for the design of cycle-friendly spaces. Chapter 8 of the LCDS focuses on the design of cycle parking spaces, which states the recommended and minimum spacing between Sheffield stands should be 1.2m and 1.0m respectively. These dimensions will be met in the design of the cycle parking. Additionally, the minimum and recommended bay width (length of cycle parked on a stand) should be 2m.

The cycle stores are presented in the adjacent plans located at the ground floor and basement level respectively. The detailed plan adjacent presents the detail layout of one of the cycle stores to demonstrate compliance with LCDS standards.

Ground floor plan



Detail of ground floor plan showing cycle parking



Basement plan

Cycle parking

5.31 Refuse and Waste

Estimated Waste Arisings

Household waste arising from Site A will be collected twice a week by WCC, the approach has been agreed by WCC's waste team.

The Facilities Management Team (FMT), for the private flats, will provide a highly managed service and will rotate bins within the bin stores on the basement levels to avoid overflowing bins. The bins will be transported between the basement levels to ground floor levels via a dedicated bin lift which operates from the bin stores directly into the appropriate holding store by the FMT. The FMT will be responsible for taking out and replacing the bins from the holding store to the collection point, at the agreed time of collection. For the affordable flats there will not be the same level of management, but the design will ensure they are as self-managed as possible.

The refuse collection strategy is in accordance with Westminster's Recycling and Waste Storage Guidance (January 2019). The waste storage for residential land use is based on the number of bedrooms per unit.

Residential units within the development have been designed to incorporate appropriate spaces to enable a large proportion of the waste arising to be separated for recycling and as a result reducing the amount of waste requiring disposal.

In accordance with the requirements set by WCC, bins for general waste and communal recycling will be allocated for:

- Paper and Cardboard – 20l per bedroom.
- Glass – 20l per bedroom.
- Plastic/ Cans – 20l per bedroom.
- General Waste – 30l per bedroom.
- Food Waste – 10l per bedroom.

Based on the above, the adjacent table sets out the estimated waste volumes for Site A.

Storage Requirements

The recycling storage requirements have been calculated in accordance with the Buildings Regulations 2010 Drainage and Waste Disposal H6 and are also in accordance with WCC Recycling and Waste Storage Requirements. The following recycling storage requirements have been considered within this Strategy and the design process for the residential units.

The design process for the residential units refuse store rooms have assumed the provision of 1,280 litre Eurobins for the storage of refuse waste and 240 litre bins for food waste.

An appropriate amount of storage will be provided assuming twice weekly collection and a bin capacity of 1280l for refuse / general waste and 240l bin for food waste.

It is proposed that the refuse vehicle will enter the site from Church Street to access the bin stores located on the northern boundary. It is assumed that refuse collection at this location will not take place when the market is in operation. Regarding the remainder of the bin stores, located on the Broadley Street and Penfold Street section of the site, it is proposed that refuse vehicle will park on-street and drag the bins to the road.

The following are considered as part of the refuse collection strategy:

- Site A has been designed to incorporate appropriate spaces to enable a large proportion of the waste arising to be separated for recycling and as a result reducing the amount of waste requiring disposal.
- Double yellow lines and/ or "keep clear loading only" road markings to be provided adjacent to refuse collection points.
- The maximum distance from a refuse collection vehicle to the refuse store to not exceed 20m.
- The collection points will consider pedestrian safety and conflicts and refuse will not be stored on public highway.
- Separate recycling bins and general waste bins will be allocated for general waste, mixed paper, card & carton recycling bins and mixed container recycling bins for plastic, tins and glass. Pairs of recycling bins will be sited together so that residents can easily access both streams of recycling.
- Sufficient clearance to allow full opening of bin lids.
- Refuse storage rooms is provided within each block on the ground floor of the development. The refuse store for the residential units will be locked and only accessible by residents and the Facilities Management Team (FMT).
- Household waste arising from the development will be collected twice weekly by WCC. The Facilities Management Team (FMT) and WCC Waste Team will liaise to coordinate the refuse and recycling collection process and agree the collection days / times and process.
- All of the bin stores are within the 10m collection distance from where the rear of the refuse lorry can safely stop, as required by WCC.

	General Waste	Paper	Glass	Packaging	Food	Total
A1-1	4,110	2,740	2,740	2,740	1,370	13,700
A1-2	3,810	2,540	2,540	2,540	1,270	12,700
A1-3	4,320	2,880	2,880	2,880	1,440	14,400
A1-4	3,450	2,300	2,300	2,300	1,150	11,500
A2-1	4,500	3,000	3,000	3,000	1,500	15,000
A2-2	2,220	1,480	1,480	1,480	740	74,700

Estimated waste volumes for Site A

5.32 Servicing and Logistics

WCC is keen to reduce the impact of the development on the surrounding streets, in particular impacts arising due to deliver and servicing trips. In accordance with WCC City Plan, the development aims at providing consolidated facilities for servicing and deliveries in accordance with London Plan policy. The City Plan further stresses that the net loss of existing off-street facilities will be resisted. As such the development proposals aim at no or reduced net loss of on-street parking and residential amenity. Figure 7 presents the location of refuse stores and delivery facilities for Site A. These details will be resolved for Sites B and C but the principles established for Site A will be carried forward for the outline elements.

The DSP will specifically aim to ensure that the servicing of the development can be carried out safely, legally and efficiently, without creating any negative impacts on the local highway network, neighbouring businesses, local residents and the environment.

It is likely that a variety of vehicle types will visit the Site, which include:

- Motorcycles (couriers).
- Cars and vans, up to 5.5 tonnes (Light Goods Vehicles (LGVs)).
- Medium/ Heavy Goods Vehicles (HGVs) over 3.5 tonnes, including box vans and 10m rigid vehicles.
- Large 3-axle refuse vehicles (9.86m).

Regular reviews of delivery and servicing vehicle activity will be held by the site management team and as part of the Framework Travel Plan (FTP). Any issues identified will be raised at the Steering Group meetings and dealt with accordingly through existing processes.

The facilities manager will be responsible to ensure that the DSP is functioning correctly. Meetings, reports and liaison will be carried out in accordance with any requirements that will be devised in the detailed DSP, during post planning stage.

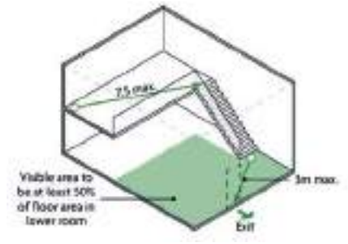
Ground floor plan

5.33 Fire Safety Strategy Summary

The proposals outlined below demonstrate a level of fire safety of the Church Street Site A development equal to or greater than the general standard implied by compliance with the recommendations in Approved Document B Volumes 1 and 2 (2019 editions including 2020 amendments). This level of safety therefore satisfies the functional requirements of Part B of the Building Regulations 2010 (plus amendments). This list will be updated as necessary as the design progresses.

The fire safety strategy for Church Street Site A can be summarised as follows:

- Means of escape in the residential areas will be based on 'defend in place' strategy where the apartment of fire origin will evacuate only. The remainder of the building will stay put (unless occupants choose to escape or are directed by the attending fire and rescue service);
- The car parks and ancillary areas across basement and ground will each operate under a simultaneous evacuation procedure and therefore if a single sprinkler head, detector or manual call point is actuated in any of these areas, a full evacuation of that area will be initiated. The remainder of the building will stay put (unless occupants choose to escape or are directed by the attending fire and rescue service);
- The retail units on ground floor will each operate under a simultaneous evacuation procedure and therefore if the alarm activates, a full evacuation of that area will be initiated. No other areas will evacuate (unless occupants choose to escape or are directed by the attending fire and rescue service);
- Sprinklers are required to be provided throughout the buildings, the system designed and installed in accordance with BS 9251:2021. Sprinklers are also required to non-residential areas (i.e. car parks, market storage, ancillary areas, retail units, library, the system designed and installed in accordance with BS EN 12845:2015 + A1:2019;
- The following fire detection and/or alarm systems are required to be provided as a minimum:
  – Within apartments – grade D1 category LD1 (BS 5839-6:2019);
  – Residential common corridors – category L5 (BS 5839-1:2017) this is to be a silent system and only linked to the buildings' ventilation system;
  – Car park, ancillary rooms, library – category L2 (BS 5839-1:2017);
  – Retail units – category M (BS 5839-1:2017) this is required to be confirmed upon fitout;
- Duplex flats, where consisting of a gallery floor: at least 50% of the lower floor must be visible from the gallery floor and the bottom of the staircase should be no more than 3m from the flat exit. If not, the internal stair is required to be a fire separated shaft (leading to the exit) or alternatively, each floor is required to be provided with an exit;
- Triplex flats, where consisting of a gallery floor: at least 50% of the lower floor must be visible from the gallery, with all floors except the gallery floor provided with an exit. Where this does not occur, the internal stair is required to be a fire protected shaft leading to the exit;
- Escape signage is required to be provided in accordance with BS EN ISO 7010:2020 and BS 5499-4:2013;
- Emergency lighting is required to be provided in accordance with BS 5266-1:2016;
- Loadbearing elements of structure are required to achieve a minimum of 120 minutes fire resistance;
- Compartmentation is required to be provided in accordance with the adjacent table;
- External walls within 1m of the boundary are required to achieve 120 minutes fire resistance in both directions;
- External walls located more than 1m from the boundary are required to be assessed for external fire spread and may require fire rating (this will be carried out as the design progresses);
- The external wall build-up, including balconies, is required to achieve at least Class A2-s1,d0 or better;
- Each residential core is required to be a firefighting shaft from ground floor and above, consisting of a firefighting stair with dry fire main (with an outlet on every floor including ground and basement), firefighting lift and ventilated firefighting lobby/corridor;
- The following ventilation is required:
  – Residential lobbies: naturally ventilated via a 1.5m2 automatic opening vent (AOV) on the external façade, designed and installed in accordance with BS EN 12101-2:2017;
  – Residential stairs: 1.0m2 AOV provided at the top storey, designed and installed in accordance with BS EN 12101-2:2017;
  – Basement car park: proposed to be mechanically ventilated providing no less than ten air changes per hour;
  – Ground floor van park: naturally ventilated (the aggregate free vent area equalling no less than 2.5% of the floor area with at least half provided equally on opposing walls).
  – Lobby connecting above ground stair with below ground stair: 0.4m2 permanent natural ventilation.
- The fire safety strategy (FSS) for the Church Street Site A development complies with Approved Document B Volumes 1 and 2 with the exception of the following departures:



NOTES:

1. This diagram does not apply where the gallery is provided with one of the following:
   i. An alternative escape route
   ii. An emergency escape window (where the gallery floor is not more than 4.5m above ground level).
2. Any cooking facilities within a room containing a gallery should comply with one of the following conditions:
   i. Be enclosed with fire resisting construction
   ii. Be remote from the stair to the gallery and positioned such that they do not prejudice escape from the gallery.

Means of escape to duplex flats

Location	Fire Resistance Rating (minutes)			Application of Fire Resistance Rating	Fire Doors
	Loadbearing Capacity	Integrity	Insulation		
Floors, excluding upper floors in duplex/triplex flats	120	120	120	From the underside	N/A
Upper floors in duplex/triplex flats	30	15	15	From the underside	N/A
Walls separating: firefighting shafts (including routes into which they discharge, leading to outside) from rest of building	120	120	120	Each side separately	FD60S
firefighting stair, firefighting lift and firefighting lobby	60	60	60		FD30(S)[i]
Walls separating risers	120	120	120	Each side separately	FD60
Walls separating flats from each other and from internal lobbies/corridors	60	60	60	Each side separately	FD30S
Walls separating: car parks market storage area retails units refuse stores	60	60	60	Each side separately	FD60
Walls separating: places of special fire hazard[ii] protected lobbies	30	30	30	Each side separately	FD30
Walls separating: - substations - rooms housing life safety equipment	120[iii]	120[iii]	120[iii]	Each side separately	FD60[iii]

NOTES:

(i) 'S' denotes smoke seals. Smoke seals are not required to lift car doors.
(ii) Places of special fire hazard include oil-filled transformer rooms, switch gear rooms, boiler rooms, rooms housing fixed internal combustion engines, storage spaces for fuel or other high flammable substances.
(iii) This is the minimum fire rating required for substations and may be required to be higher by the supplier.

Compartmentation requirements

- Single stairs serving upper residential floors open into the same ground floor lobby as the basement stairs, which is not compliant with ADB guidance (separate stairs should be provided between basement and ground floor). However the above is considered acceptable provided the basement stair is ventilated with 0.4m2 permanent ventilation, and the basement car park is provided with a mechanical smoke control system (providing at least ten air changes per hour) consisting of impulse jet fans which will be located to ensure that smoke is directed away from stair lobby doors. Computational Fluid Dynamics (CFD) modelling will be required to be carried out to demonstrate the stairs remain smoke free during means of escape;
- The open-plan apartments are larger than 8m x 4m (32m2) and have open kitchens, which is not compliant with BS 9991:2015 guidance. Heat radiation calculations are proposed to be carried out in the next stage in demonstrating means of escape from these apartments remains tenable. Note additional fire safety measures may be required to be provided;
- The worst-case travel distance within the residential stair lobby is approximately 9m (from the furthest flat to the stair door), 2m more than the maximum recommended by ADB. However, this is considered acceptable based on sprinklers being provided, the grade D category LD1 automatic fire detection and alarm system and less than 2 seconds being added to the escape time;
- Some bike store rooms on ground floor are proposed to store greater than 60 bikes but have a single means of escape (ADB requires alternative escape where the occupancy is greater than 60). However, this is considered acceptable based on the intermittent use of these store rooms with it being highly unlikely that more than 60 persons will be in the room at any one time.

The above departures are required to be discussed and agreed with the relevant approving authorities.

The following further analyses are required to be carried out as the design progresses, which will be detailed in the next stages:

- Radiation calculations in assessing hob locations within open-plan flats;
- CFD modelling of the proposed basement mechanical smoke ventilation;
- External fire spread in assessing permitted unprotected areas on the façades;
- Fire brigade access.

The following assumptions have been made which are required to be confirmed as the design progresses:

- The basement car park will be for use by residents only (and not the public). The ground floor van park will be for use by market traders only and not the residents;
- There will be no onsite concierge or security present 24/7.

5.34 Structural Design and Demolitions

Structural Design

The superstructures to all sites typically comprise of in-situ RC frames with traditional RC flat slabs, supported on columns and shear walls. The foundations across the scheme consist of pile caps and secant piled walls. 250mm thick flat slabs have typically been identified for the residential floor plates across the scheme. Some localised thicker transfer slabs have been proposed in areas where column grids vary above and below. Maximum spans of the flat slab typically vary between 5.5m and 6.5m. Shorter spans are required in some locations due to the irregular shape of the façade, typically from the inset balconies.

The general aim for columns / walls positioning, is to provide a direct vertical load path from roof level down to the foundations. However, given the mixed use across the development, where this is not feasible RC transfer structures will be provided. Shear walls in general are provided to stack from roof down to foundation level to provide the most efficient stability system.

The foundations to the scheme consist of localised pile caps at column and wall locations except along the basement extent where 750mm diameter secant pile walls are proposed. Bearing piles are typically 600mm diameter and extend up to 25m in length from foundation level. The piles proposed to be formed using a CFA piling approach. The basements to Sites A and B are single level with the secant piled wall propped through the ground floor slab. The existing and proposed basements to Sites A and B overlap, this requires a careful construction methodology to maintain stability of the existing basement following the demolition of the building superstructures while the new structure is formed.

Demolition

The superstructure of the existing RC framed blocks are to be demolished down to ground floor slab level, over the existing basement. The demolition should in general be carried out in a logical top down fashion. To minimise impact on the adjacent public highways and utilities, a proposed demolition and construction strategy has been outlined by Stantec within their 'Structural Method Statement - Basement Impact Assessment'.

5.35 Daylight and Sunlight

Chapter 11: Daylight, Sunlight and Overshadowing of the ES presents the findings of an assessment of the likely significant effects of the Proposed Scheme on daylight, sunlight and overshadowing alterations at sensitive receptors within the surrounding area. The assessment considers daylight and sunlight amenity at 90 and 39 buildings respectively surrounding the Application Site.

Low existing daylight and sunlight levels can be attributed to the dense urban location and architectural features such as balconies, large roof overhangs and recessed windows. These reasons may reduce a property's daylight availability, resulting in low existing daylight and sunlight levels. Owing to these low existing levels, any development on the site would lead to disproportionate adverse effects.

Demolition and Construction Phase Effects

During the construction phase, a number of tall temporary structures are likely to be present on-site. In some cases, scaffolding, cranes and hoarding would marginally increase the size of the Proposed Scheme's maximum massing, however this would be temporary and is unlikely to result in additional noticeable effects due to the scale of these structures and their transient nature. The effect in terms of solar glare would range from being negligible effects during demolition, gradually increasing as construction works progress and the facades of the Proposed Scheme are installed.

The effects have the potential to be adverse on neighbouring residential receptors. It is considered that the effects would be temporary and not be any worse that those presented by the completed Proposed Scheme without mitigation.

Therefore, the effects would range from Temporary, Direct, Short Term and Negligible to Major Adverse as per the completed Proposed Scheme in relation to potential daylight, sunlight, overshadowing and solar glare effects.

Completed Development Effects

In terms of daylight, of the 90 existing buildings assessed, the 27 buildings highlighted would experience little to no impact (less than 20% alteration). The other remaining 63 buildings have impacts which range from Negligible to Major Adverse.

In terms of sunlight, of the 39 existing buildings assessed, 20 would experience little to no impact (less than 20% alteration). The other 19 buildings experience effects ranging from Negligible to Major Adverse.

In terms of overshadowing, of the 13 areas assessed, areas 3 to 7 would see a reduction greater than 40% in the total area seeing at least 2 hours of sun, which is considered a Major Adverse effect. All the other areas experience negligible effects.

For solar glare, viewpoints travelling south along Church Street, and south along Mulready Street experience Minor Adverse effects. All other viewpoint experience negligible effects.

Mitigation and Monitoring

During the design process expert advice was given on alternative massing options, which were technically assessed to understand how the daylight, sunlight and overshadowing effects could be reduced and mitigated.

After a number of technical iterations, the analysis of the results achieved with different massing options has informed the final designs of the residential buildings and massing parameters for the outline components.

The potential for solar glare has been considered throughout the design process and as such, solar glare mitigation is embedded within the design. This includes considerations such as orientation of the reflective elements on the façade, reducing large areas of glazing or reflective cladding and façade features such as fins.

The design of the Proposed Scheme inherently considers the impacts upon provision of daylight, sunlight and overshadowing through the positioning, orientation and massing of the Proposed Scheme, thus naturally reduces significant impacts upon neighbouring receptors.

Given the hybrid nature of this application, the daylight, sunlight and overshadowing effects of the Proposed Scheme could potentially be reduced through design at the reserved matters stage for Sites B and C.

Whilst significant effects have been identified as potentially occurring , the Application Site is located within Church Street Housing Renewal Area, which is inherently designated for growth and regeneration. As such, the surrounding sensitive properties are not experiencing significant effects, beyond what would be expected within a regeneration area. It is therefore considered that on balance, the Proposed Scheme complies with local and regional policy.

5.36 Wind Impact

Chapter 16 of the ES presents the findings of an assessment of the likely significant effects of the Proposed Scheme on the wind microclimate of the Application Site and surrounding area. The assessment considers impact on the wind microclimate around the Site as a result of the proposed Westminster Church Street development.

In the Baseline scenario off-site pedestrian throughfares on Newcastle Place adjacent to the existing Westmark Tower, around the south-western corner and south of the vacant Paddington Green Police Station on Harrow Road, between Blocks A-D of the Paddington Green scheme, at the north-western corner of the existing building at the intersection of Paddington Green, Hall Place and Church Street and at the north-western corners of Braithwaite Tower and Hall Tower are windier than suitable during the windiest season. Potential safety concerns would be expected at these locations.

Additionally, off-Site entrances between 340 Edgware Road and 352 Edgware Road and the bus stop fronting Harrow Road (Edgware Road (Stop EX)) have windier than suitable conditions. All other locations, onsite and offsite, have suitable wind conditions for their intended use.

Demolition and Construction Phase Effects

The introduction of the Proposed Scheme would not materially change the wind conditions on site with all locations remaining suitable for sitting to strolling use during the windiest season. The activity onsite during this time (i.e. construction activity) is less sensitive to wind conditions than when the Proposed Scheme is complete and operational. In addition, there would be appropriate health and safety measures implemented to ensure that the construction workers were adequately protected. These wind conditions would represent a negligible effect both onsite and offsite during the demolition and construction phase of the Proposed Scheme.

Completed Development Effects

The majority of locations within the Proposed Scheme would have acceptable wind conditions for their intended use.

The easternmost entrance to the retail unit at the northern corner of Site A, the top two south-western facing external walkways/balcony locations of Block A2, the top two north-eastern facing balconies at the northern corner of both Block A1 and Block A2 would be windier than suitable for their intended use, representing minor adverse effects (significant). However, following implementation of the mitigation below, the effect would be downgraded to negligible.

All other onsite locations would have suitable conditions for their intended use with no safety exceedances due to strong winds expected, representing negligible effects.

Windier than suitable offsite locations in the baseline scenario would not be made windier by the introduction of the Proposed Scheme. All other offsite locations would have wind conditions suitable for their continued use. All offsite locations would therefore have negligible residual effects (not significant).

Mitigation and Monitoring

Mitigation measures would be required for the easternmost entrance to the retail unit at the northern corner of Plot A2. Measures likely to improve wind conditions could consist of screens or planting extending 1.5m from the building facade and 2m tall, or through recessing the entrance by 1.5m.

The windier than suitable external walkways/balcony locations could be mitigated be implementing balustrades at least 50% solid and 1.5m in height or alternatively, using side screens at least 1.8m in height on their upwind side.

6 Landscape and Public Realm: Site A

6 Landscape and Public Realm: Site A

6.1 Detailed Landscape Plan

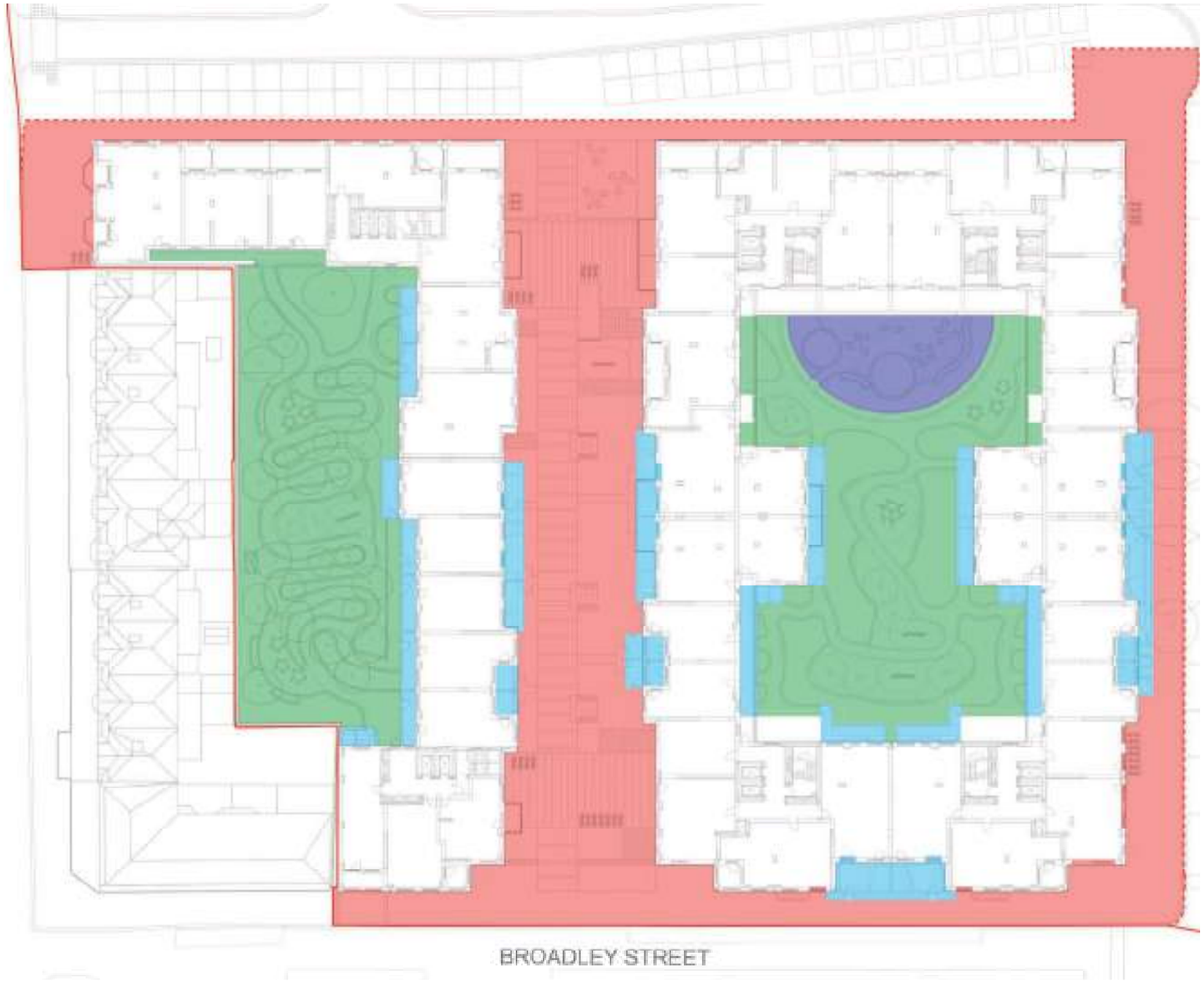
Site A consists of three distinct spaces; the 'New Street Gardens' which is a new area of public realm that is pedestrian dominated and located away from highways land (allowing it to be as green as possible with core entrances, private front gardens, play spaces and seating areas); the ground level courtyard and library garden, encased within building A1, which consists of secure communal play and seating spaces, private rear gardens and a public managed library garden that attaches directly onto the new Church Street Library; and finally, a podium level secure communal courtyard which uses the same principles as the ground level courtyard. All spaces are fully accessible and have been considered against play, UGF and amenity requirements.

1. 'New Street Gardens'
2. Ground Floor Secure Communal Courtyard
3. Library Garden / Multifunctional Managed Outdoor Space
4. Podium Secure Communal Courtyard
5. Play Areas
6. Communal Residents Vegetable Beds
7. Private Terraces

Site A - Landscape Plan

6.2 Landscape Arrangement and Hierarchy

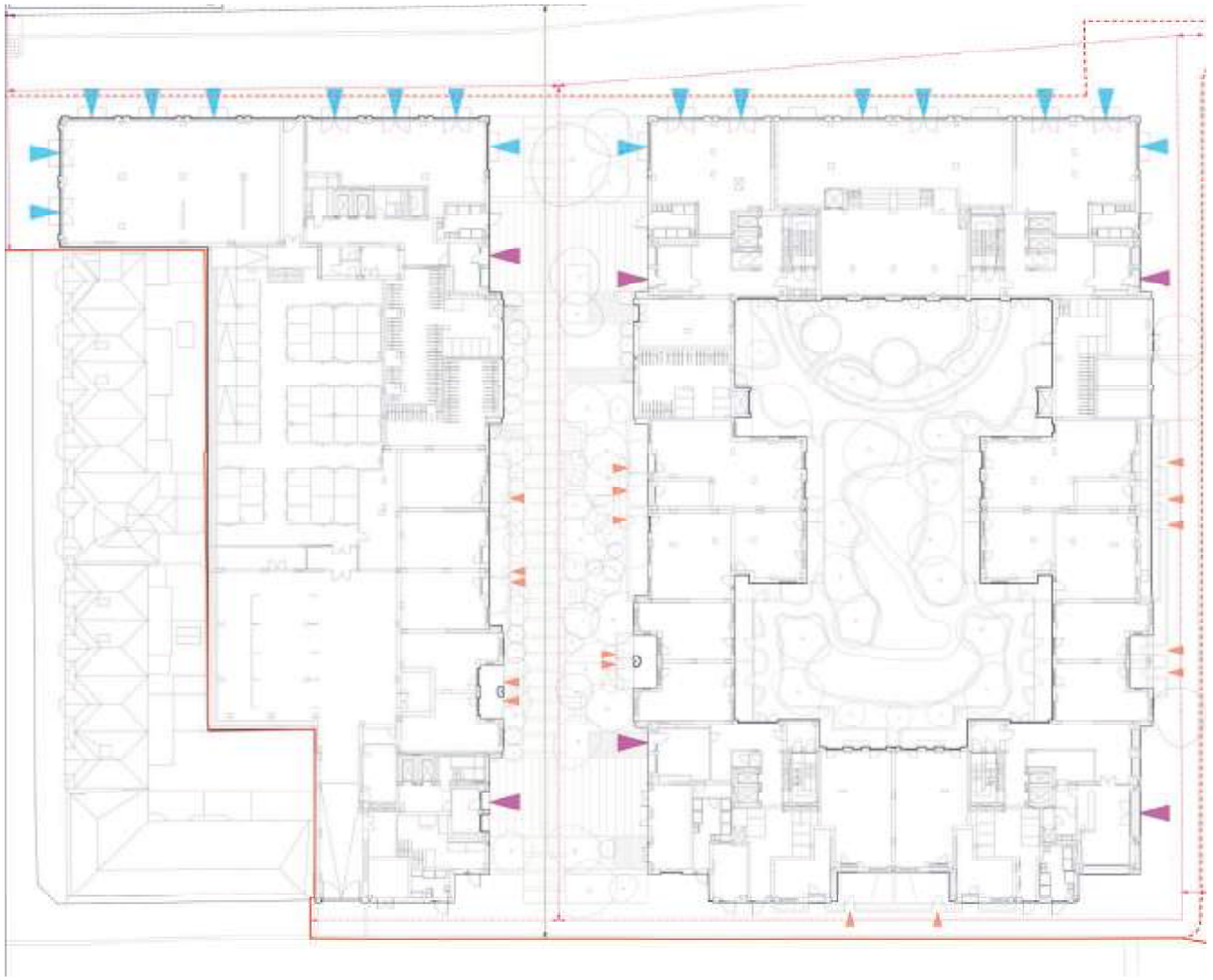
Site A is split into several key spaces that are distinctly different in terms of use; the 'New Street Gardens' space is a public realm area that has access to private front gardens; building A1 has a public managed library garden space that is directly adjacent to a ground level secure communal courtyard with access to private rear gardens and the podium space; and the podium of building A2 has a secure communal courtyard with access to private rear gardens.



Site A - Landscape Hierarchy

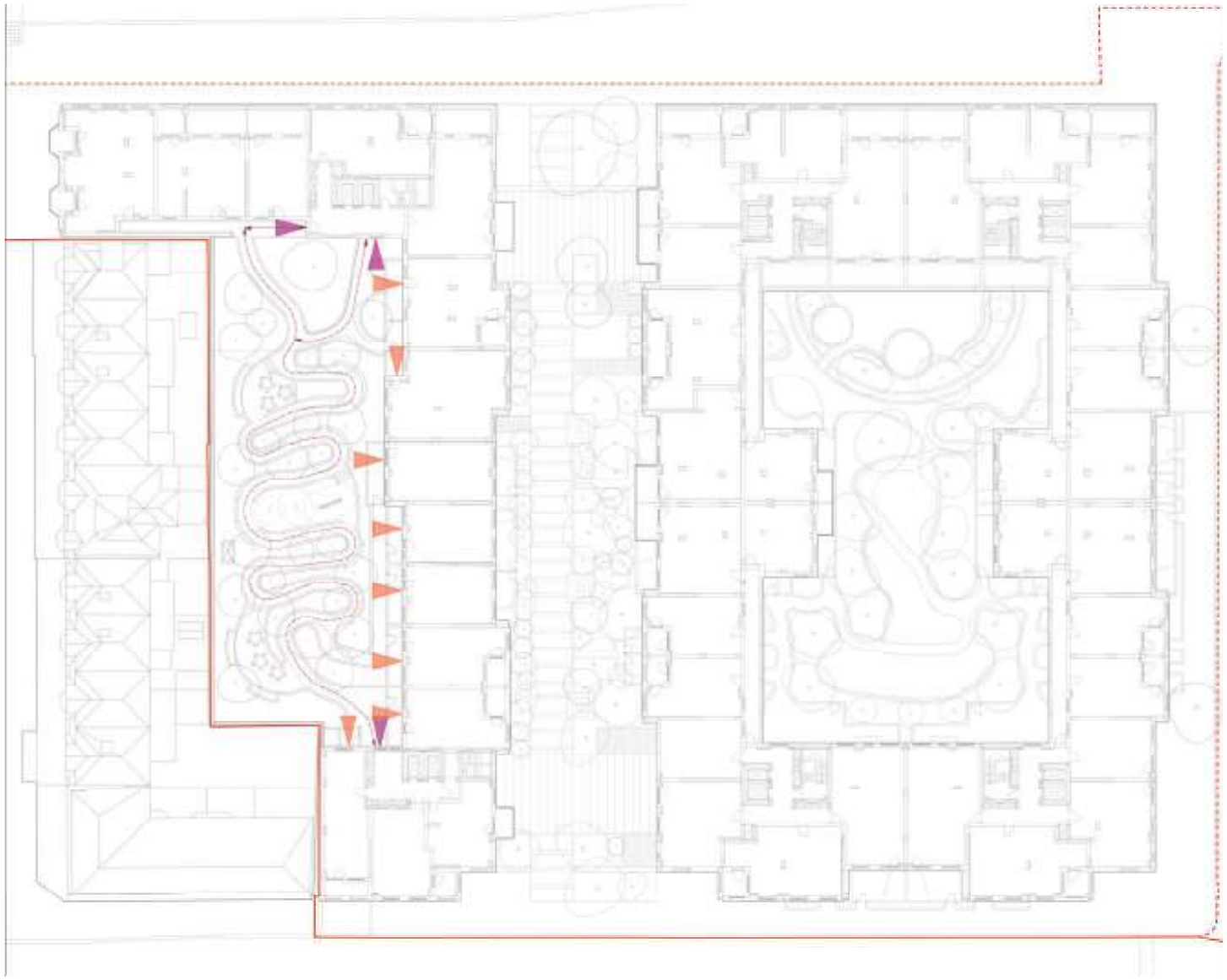
6.3 Movement and Access

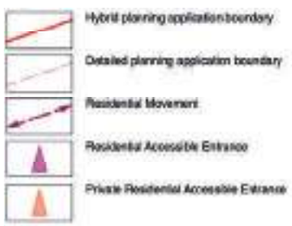
Movement around Site A is pedestrian dominated with both residential entrances and commercial entrances dotted around the ground level facade. This feeling has been enhanced and entrenched in the 'New Street Gardens' design to ensure residents of the scheme and the wider public have clear and easy access to public green space. Due to the length of the blocks, access has been provided down 'New Street gardens' for intermittent use by fire tender, maintenance and refuse vehicles.



Site A - Ground Level Movement and Access Diagram

Movement across the secure podium space is for residents only and is accessed via core entrances to both sides. Across the podium there are several private rear gardens that are all accessed from the podium path network. The path network itself is fully accesible to all across the entierty of the podium space with stepped access to provide alternate routes.





Site A - Podium Movement and Access Diagram

6.3 Movement and Access

Active travel has been encouraged in the Church Street Ward and adjacent projects such as the Green Spine Project have put this into effect within their scheme. The aim within Church Street Sites A, B and C is to encourage this further and connect in with the wider plans. The updated design of Site A allows travel to and from the scheme to come directly through the public green space meaning residents and public alike get the health and well-being benefits of the space but also offers a place to stop and reflect before moving on.

The pedestrian space through the centre of the site is wide enough that if fire tender, servicing, or refuse collection access is required, this is be possible with 'in and out' access, meaning no turning heads are required within the space.

Coordinated refuse access


Ease of pedestrian movement


Active travel - ease of cycle movement

Servicing and deliveries

THIS PAGE IS LEFT INTENTIONALLY BLANK

6.4 Play Provision

The propose Site A play space provision exceeds the London Plan's target requirements. Both formal and informal playable spaces/areas will be inclusive in design, both in ability and age range.

- Play space requirement: 1997 m2
- Play space provision by proposal: 1852 m2

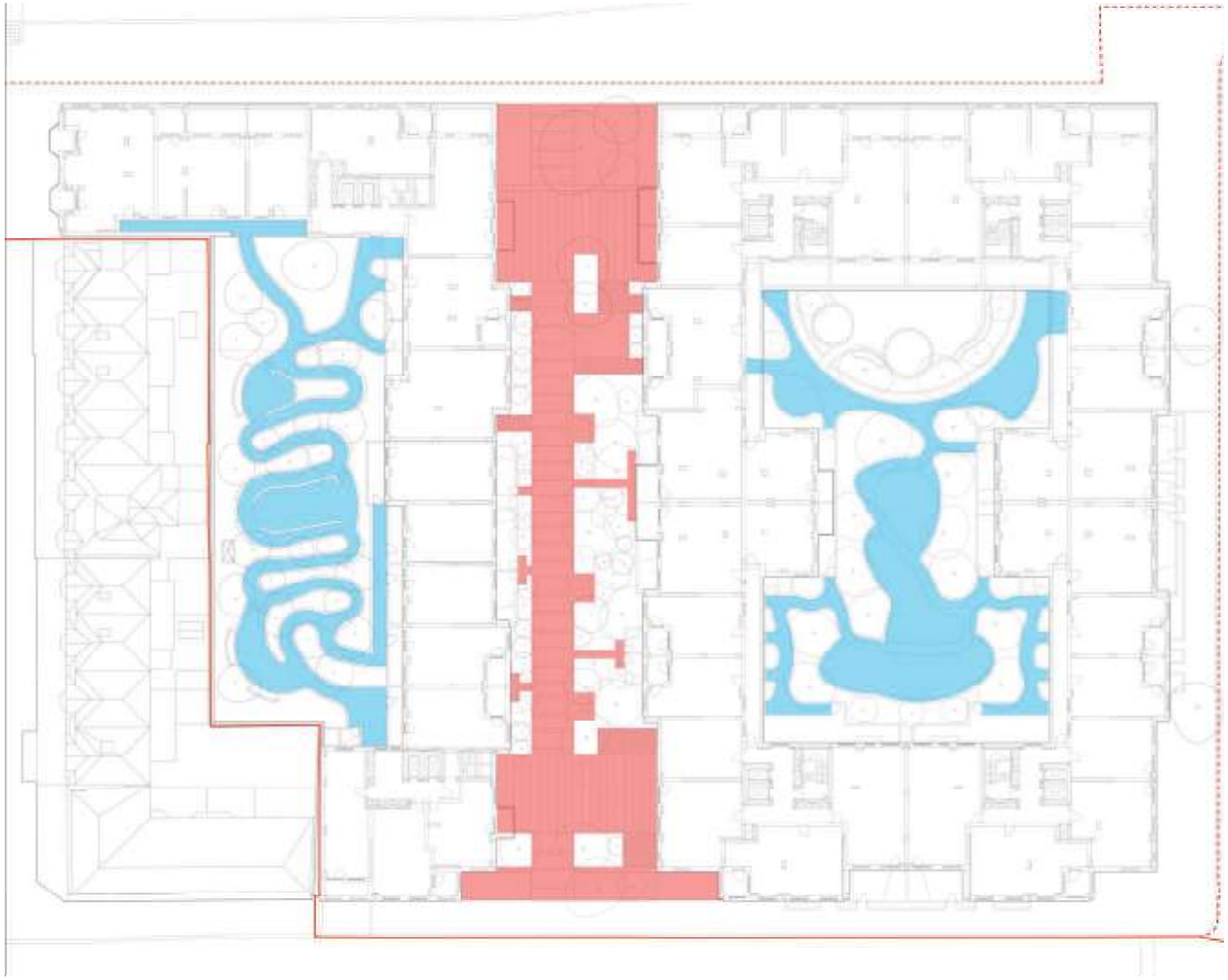
	Requirement for playable space based on child yield (m2)	ESTIMATED PLAY REQUIREMENTS: Playable area provided by the development (m2) — Doorstep playable space	Local playable space	Neighbourhood playable space	Youth space (provided in the form of internal spaces and investment in off site facilities)	Total provision
Under 5 years	822	902				
Age 5 - 11 years	657		950			
Age 12 - 15 years	518					
	1997					**1852**

Hybrid planning application boundary

Detailed planning application boundary

Doorstep Play Provision

Local Play Provision



Site A Play Yield Diagram

Play and exploration through the public realm and managed communal spaces will be inspiring, interesting and safe, with a good level of natural surveillance.

Ground floor and communal courtyards are designed to be accessible and interactive landscapes, with both formal and informal play provision, yet balanced with areas for privacy and relaxation.

- Learning and play through nature with the presence of stimulating sensory planting (touch, smell and sound) and the provision of areas for communal vegetable growing.
- Versatile naturalistic timber play features sensitively placed to blend with the setting of both public realm and communal courtyard landscaping.
- FSC timbers and sustainably sourced materials will be ensured throughout the play feature designs.
- Designed to cater for all ages and abilities, ensuring an inclusive play environment.

Informal play and learning with nature

Stimulating minds with sensory landscapes

Challenging elements to encourage development

Imaginative, naturalistic play features blend with the landscape

6.5 Ecological Enhancement

The ecological enhancements around Site A have been worked through closely with the Ecologists to provide a significant upgrade to the existing condition. All areas of planting within Site A will increase biodiversity with a plant mix that is both native and fit for purpose to each space with shade, drought and pollution absorption in mind.

Bird and bat boxes have been considered and located on the building facade in various locations, insect houses have been placed within raised planters in the communal courtyards and invertebrate log towers have been located on all green roofs.

Site A -Summary of Ecological Enhancement

The development will deliver species rich habitats to encourage diverse flora and fauna. A net gain in biodiversity at this site is certain. A quantified metric can be calculated once planting proposals are finalised.

- Flowering and fruiting trees encourage a diverse ecosystem through pollination, nesting and roosting habitat and food provision
- Rain gardens create seasonal localised wetland habitats ideal for amphibians/reptiles and a water source for a variety of fauna
- Use of climbing plants and the provision of invertebrate and bird boxes which can be affixed to buildings (as advised by Ecological Consultant)

Invertebrate log piles on Nomura HQ green roof, London

Swegler bird and bat boxes to be attached to architecture

Essex Rd Rain Gardens - Waltham Forest Council

Grey to Green Rain Gardens Sheffield

6.6 Sustainable Urban Drainage

A series of SUDS systems have been provided site-wide with the aim of reducing pressure on an already overloaded sewer network. As much external soft landscape as possible has been provided at both ground floor and podium levels, as well as green roofs. Natural attenuation of rainwater runoff allows maximum evapotranspiration through all soft landscapes, but swales in particular.

Permeable materials have been used wherever possible, including clay pavers laid on permeable system along New Street Gardens and permeable resin bound over retentive drainage systems where above structures.

Site A - SUDS Strategy Diagram

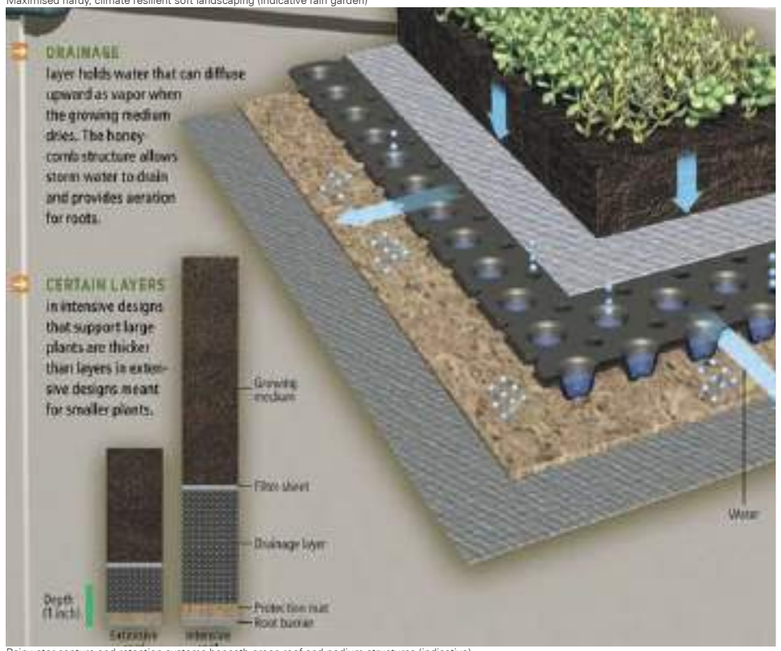
The sub-base material beneath permeable paving contains almost no fines, resulting in a high proportion of void spaces within the material. These voids store water filtrated through the pavement surface. This collected water can then be diverted before being returned to the natural environment, usually via a SUDs installation.

Regular jet-washing of infiltrable systems can be used to keep joints and voids clear, but designs tend to assume that some silting and reduction in capability will take place over time.

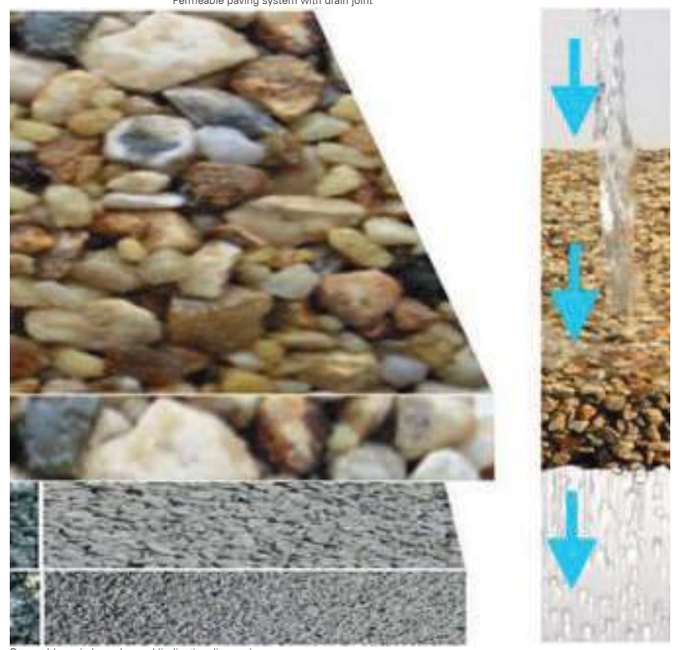
The permeable geo-textile between the pavers bed and the sub-base should be construction grade, not weed membranes or landscape fabrics which do not have the shear strength or puncture resistance to perform as required

Maximised hardy, climate resilient soft landscaping (indicative rain garden)

Permeable paving system with drain joint



Rainwater capture and retention systems beneath green roof and podium structures (indicative)

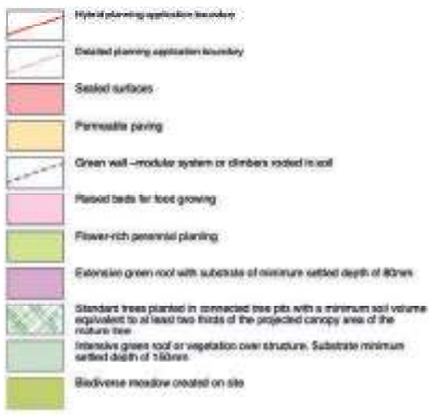


Permeable resin bound gravel (indicative diagram)

6.7 Urban Greening Factor

The Urban Greening Factor calculations are based on the London Plan Guidance 'Urban Greening Factor' 2021. Being predominantly residential, the proposed development has a target score of 0.4 and after assessment against the London Plan UGF calculations, it exceeds this target with a result of 0.437.

Given the site's existing low biodiverse value and lack of green infrastructure, the proposal offers a significant net gain in biodiversity and urban greening. This uplift helps contribute to building a wider climate resilient landscape for the Borough, assisting to slow and reduce rainwater runoff and discharge to natural waterways and the Mains Drainage System.



Site A - Urban Greening Factor

Surface Cover Type	Factor	Area (m²)	Contribution	Notes
Semi-natural vegetation (e.g. trees, woodland, species-rich grassland) maintained or established on site.	1	263.347	263.347	Biodiverse meadow created on site
Wetland or open water (semi-natural; not chlorinated) maintained or established on site.	1		0	
Intensive green roof or vegetation over structure. Substrate minimum settled depth of 150mm.	0.8	942.094	753.675	Lightweight growing medium minimum depth 150mm
Standard trees planted in connected tree pits with a minimum soil volume equivalent to at least two thirds of the projected canopy area of the mature tree.	0.8	1207.381	965.905	Projected canopy as per Landscape Masterplan
Extensive green roof with substrate of minimum settled depth of 80mm (or 60mm beneath vegetation blanket) – meets the requirements of GRO Code 2014.	0.7	1703.68	1192.576	
Flower-rich perennial planting.	0.7	180.095	126.0665	
Rain gardens and other vegetated sustainable drainage elements.	0.7		0.000	
Hedges (line of mature shrubs one or two shrubs wide).	0.6	15.286	9.172	Raised beds for food growing
Standard trees planted in pits with soil volumes less than two thirds of the projected canopy area of the mature tree.	0.6		0.000	
Green wall –modular system or climbers rooted in soil.	0.6	326.61	195.966	Climbers creating canopy over structure and to grow over boundary wall
Groundcover planting.	0.5		0	
Amenity grassland (species-poor, regularly mown lawn).	0.4		0	
Extensive green roof of sedum mat or other lightweight systems that do not meet GRO Code 2014.	0.3		0	
Water features (chlorinated) or unplanted detention basins.	0.2		0	
Permeable paving.	0.1	2142.782	214.278	Includes retentive drainage layer on courtyard and podium
Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone).	0	3274.092	0.000	
Total contribution			**3720.9853**	
Total site area (m²)			8521.161	
Urban Greening Factor			**0.437**	

Wetter winters / seasonal extreme flood events

- High proportion of soft landscape = greater natural rainwater attenuation and ground infiltration to water table and river systems.
- Planted swales and rain gardens with water logged tolerant species assist with attenuation and evapotranspiration of excess water.

Dryer, warmer summers

- Drought resilient species should be located in areas of expected low water retention / attenuation.
- Shading from widely dispersed tree coverage reduces evaporation from ground and low level plant habitats.
- Hardy low maintenance species should be used for reduced reliance on sustained irrigation and energy consumption from mechanical maintenance.
- Introduction of rainwater capture / usage / surplus storage where practical, for natural irrigation (increasing likelihood of sustained supply through periods of drought).


Interception and attenuation of rainfall by increased planted canopy


Assisting solar heat and light gain to built architecture


Hardy drought resistant planting


Natural shade cools urban 'heat island effect'

6.8 Hardscape

Materiality across Site A has been chosen to align with sustainability targets while also being fit for purpose to each individual space and celebrating the culture and community of Church Street sites A, B and C.

Site A - Ground Level Areas of Hard Surface

The podium materiality is informed by the requirement for drainage above the structural slab. Resin bound aggregate has been chosen to allow the design to move away form finished level drainage systems and instead rely on the permeability of the hardscape.

Site A - Podium Areas of Hard Surface

6.8 Hardscape

Clay pavers have been chosen for the wide variety of colours, sizes and patterns available so that an intricate and interesting design can be provided that also includes colour palettes and designs that mimic the cultural diversity of the area.

Resin bound aggregate is being used on all areas above structural slab to provide a greater permeability and allowing the design to move away from finished level drainage runs.

EPDM safety surfaces are being utilised within all play areas across the site to provide the required safety surface ratings while allowing the flexibility to complement colour palettes with the resin bound.

Natural stone flags are being used within all areas of public highway with the main purpose being a robust and easily cleanable surface for the market pitches which extends around to all public highway areas for continuity.

Distinct clay paving patterns through 'New Street Gardens' public realm

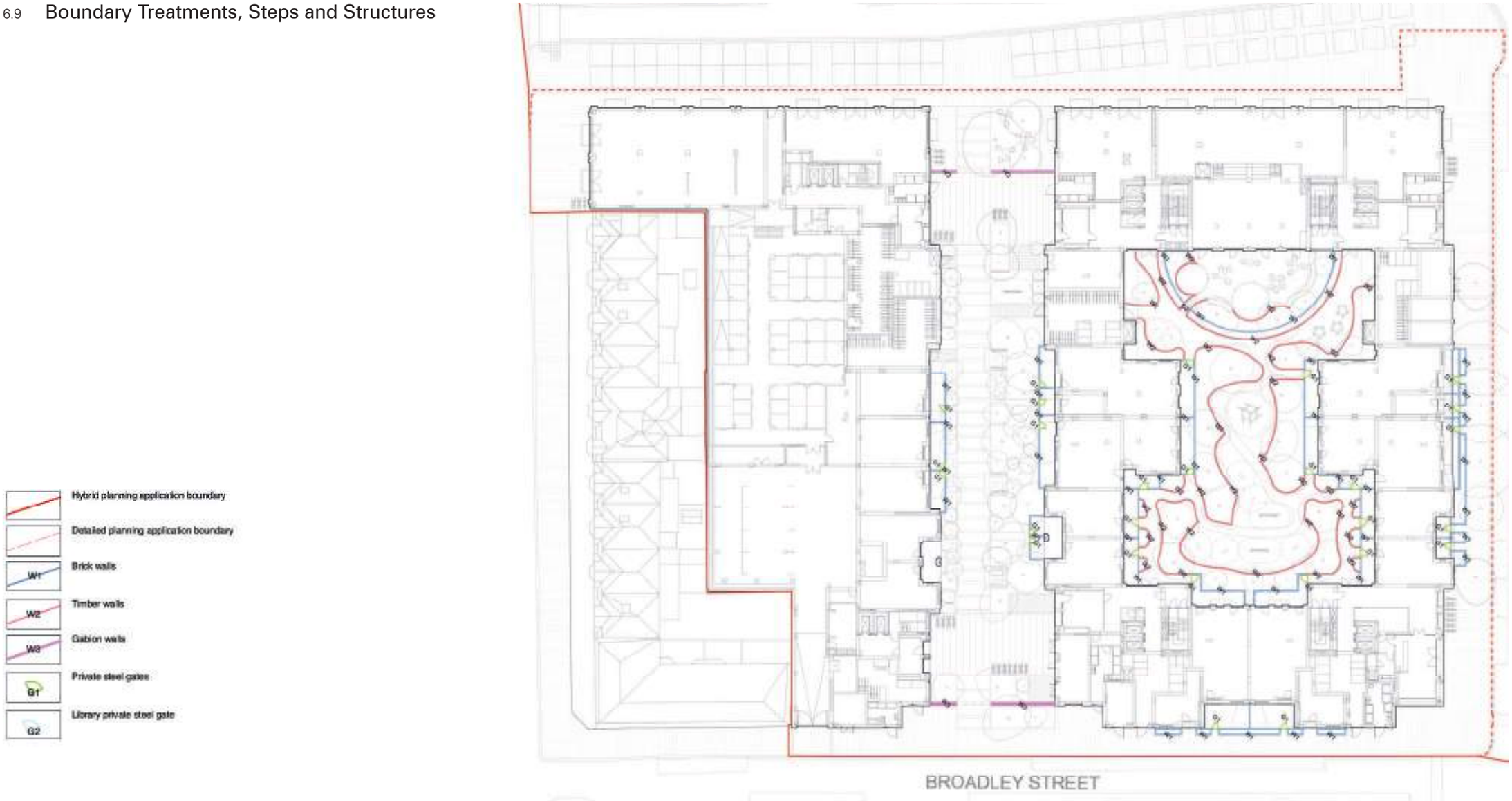
Permeable resin bound gravel through secure communal courtyards

EPDM permeable safety surfacing for play features

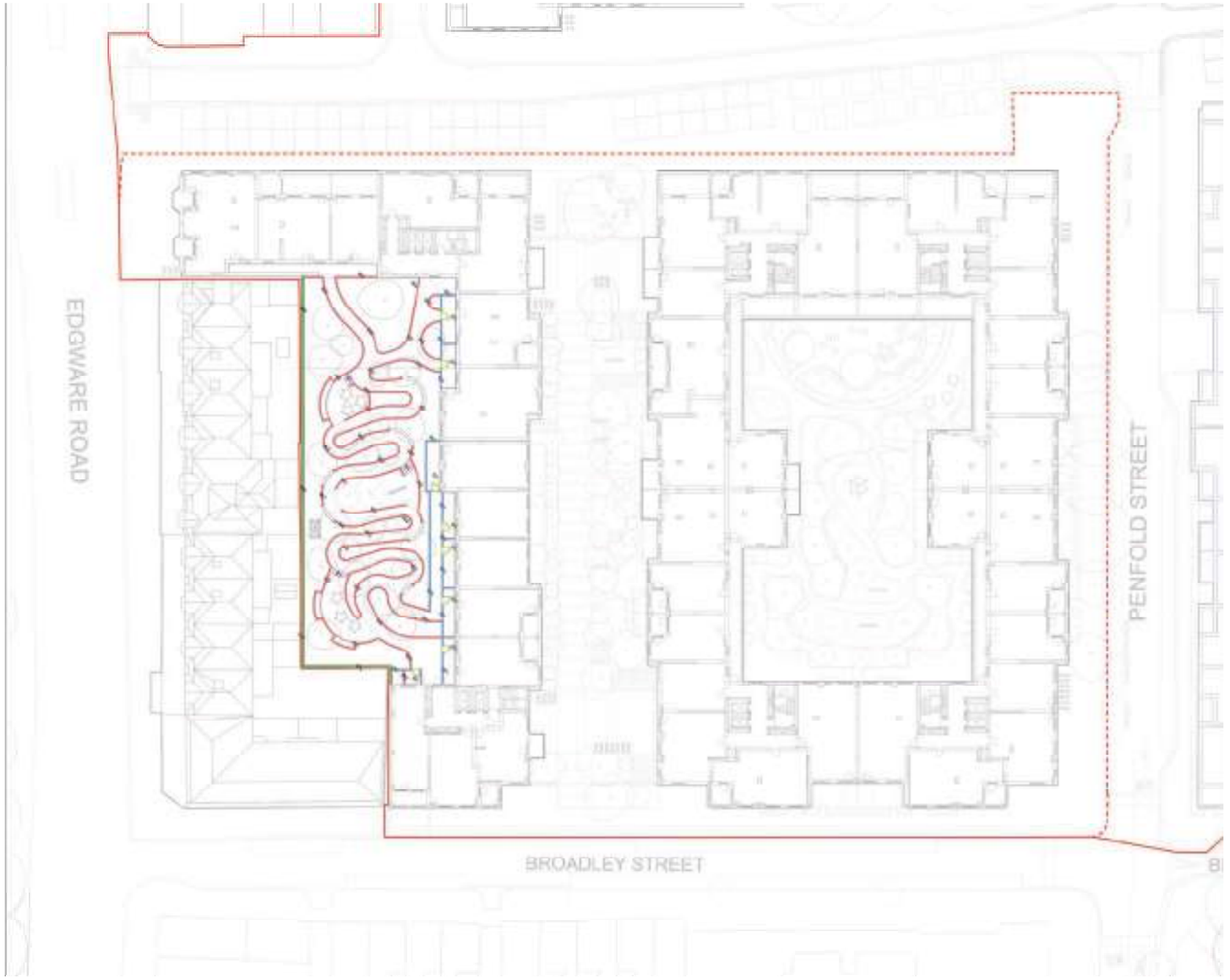
Natural stone through connecting public realm

THIS PAGE IS LEFT INTENTIONALLY BLANK

6.9 Boundary Treatments, Steps and Structures



Site A - Ground Level Boundary Treatments, Steps and Structures



Site A - Podium Boundary Treatments, Steps and Structures

Boundary treatments around Site A are provided to separate spaces and demarcate when you move from public to private and vice versa.

All areas within the secure communal aspect of the courtyards will have raised planters in timber, accentuating the focus on green space and sustainability. Private gardens both front and rear will have brickwork walls at least 1.1m high to denote privacy with gates to match.

In the 'New Street Gardens' space, seat high gabion walls with timber bench toppers will be provided to highlight where you move from the market or street-scape spaces into the public garden.

Each of these treatments has been considered against security, privacy, sustainability and functionality.

Curved timber raised planter edges through communal courtyards (indicative)

Brick walls to private residential space within commual courtyards (indicative)

Gabion dividing walls between public realm and private residential (indicative)

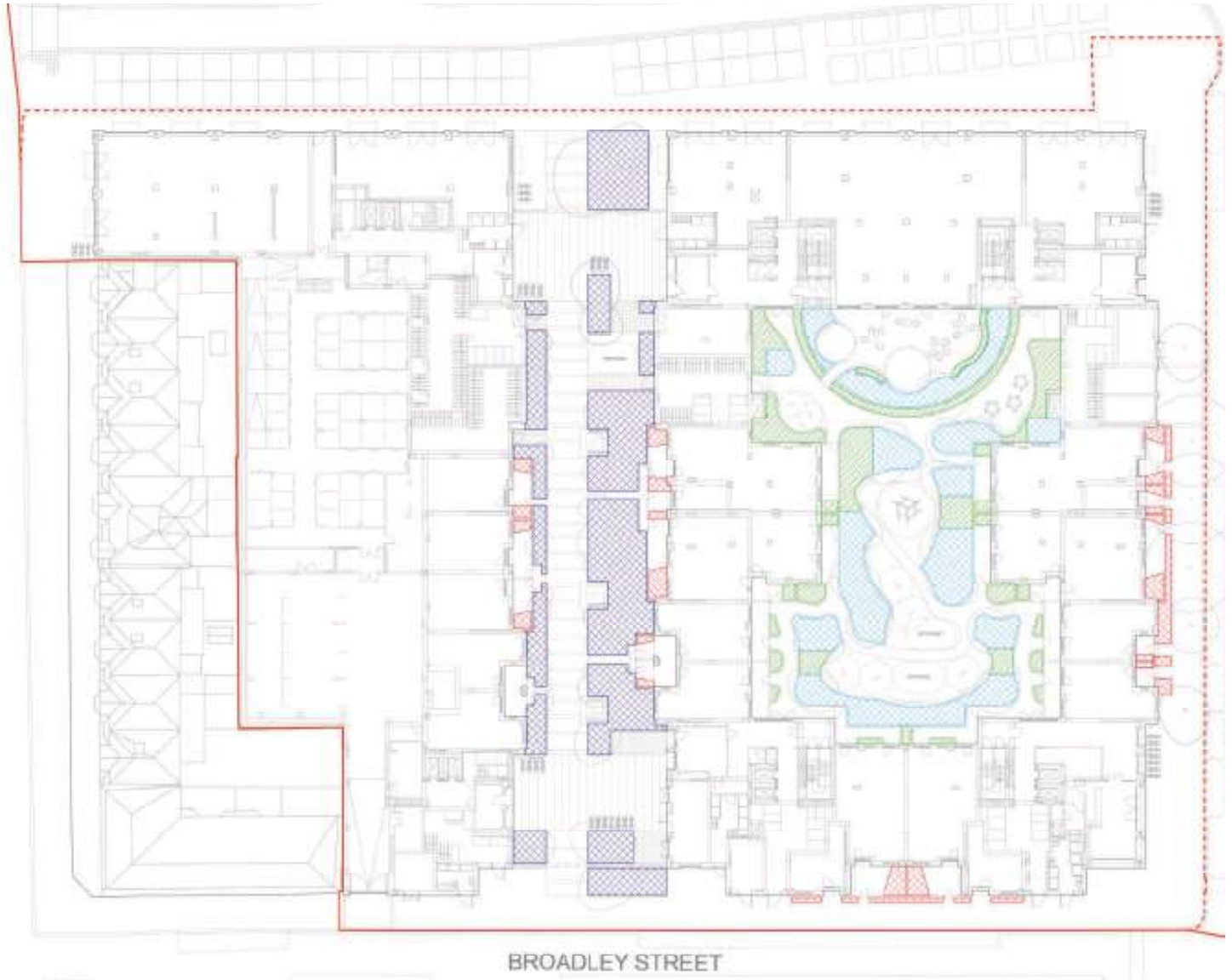
Steel access gates (indicative)

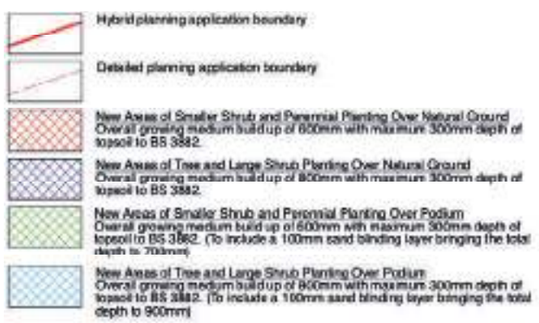
THIS PAGE IS LEFT INTENTIONALLY BLANK

6.10 Growing Medium Formation Plan

The growing medium depths throughout the development are established in order to achieve viable and healthy tree and plant growth. The minimum growing medium depths are determined by the Urban Greening factor quality requirements.

The recommended topsoil and subsoil depths should be revised at detailed design.





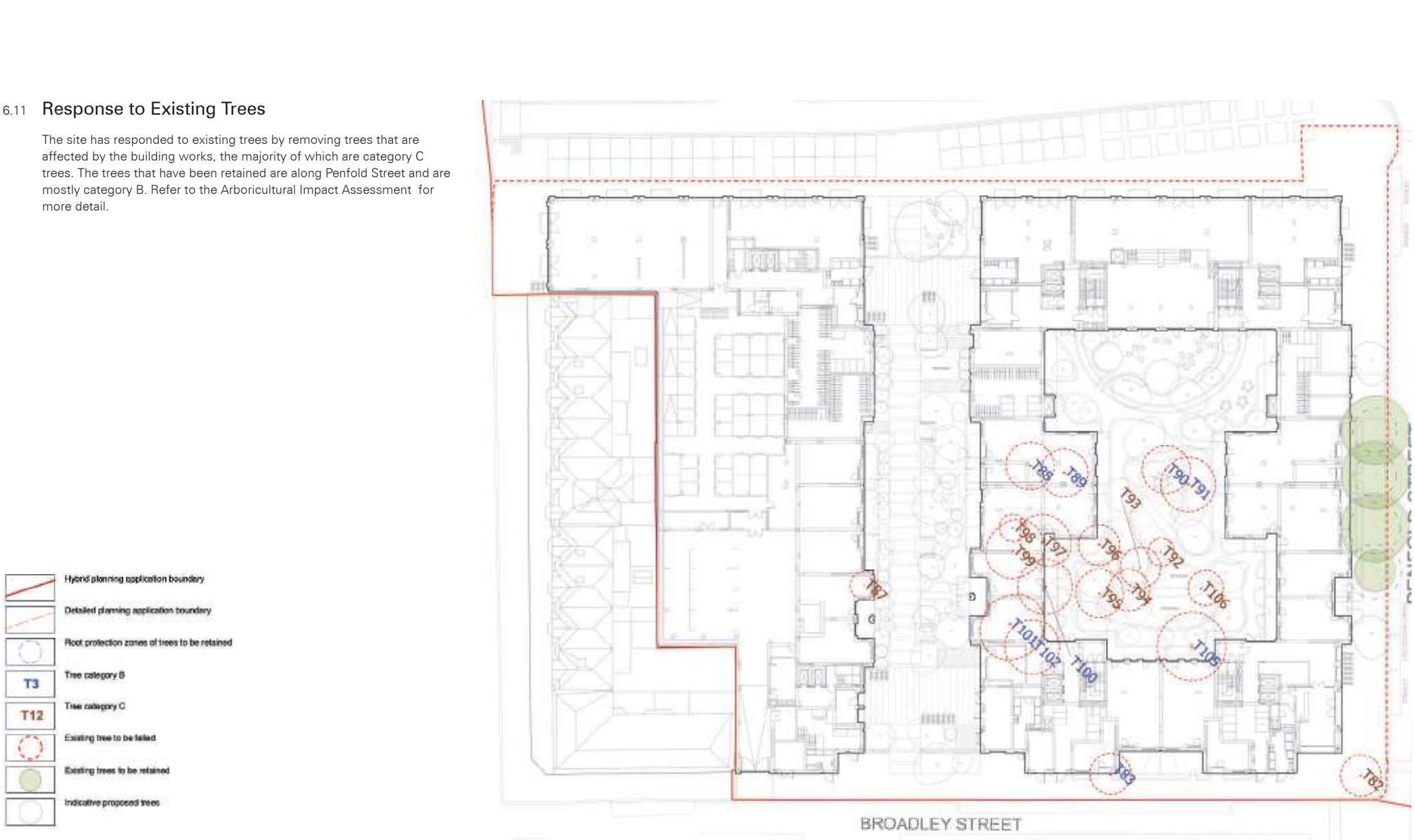
Site A - Ground Level Growing Medium Formation Plan

The growing medium on the podium has been split into different depths to align with loading requirements, depths avilable above the split slab and requirments for the different planting solutions.

Site A - Podium Growing Medium Formation Plan

6.11 Response to Existing Trees

The site has responded to existing trees by removing trees that are affected by the building works, the majority of which are category C trees. The trees that have been retained are along Penfold Street and are mostly category B. Refer to the Arboricultural Impact Assessment for more detail.



Site A - Response to Existing Trees

THIS PAGE IS LEFT INTENTIONALLY BLANK

6.12 Tree Planting Plan

Potential indicative tree species have been selected for the following qualities

- Tolerant of urban pollution, both airborne and run-off from the highway
- Deciduous (to maximise internal daylight)
- Tolerant of wet growing conditions (in the swale planters)
- In keeping with adjacent site tree strategies
- Striking autumn colour

All trees will have a minimum clear stem of 2m.

Tree species and quantities are indicative only, to be confirmed in detailed design.

Site A - Ground Level Tree Planting Plan

Hybrid planning application boundary

Detailed planning application boundary

Proposed Tree To Be Planted (85no. Total)

ID	Scientific Name	Stock Size	Quantity
Bn	Betula nigra	18-20cm girth, 2m clear stem	18
Bp	Betula pubescens	18-20cm girth, 2m clear stem	8
Td	Taxodium distichum	25-30cm girth, 2m clear stem	9
Sa	Sorbus aucuparia	18-20cm girth, 2m clear stem	20
Mt	Malus tschonoskii	18-20cm girth, 2m clear stem	3
Pc	Pyrus communis	18-20cm girth, 2m clear stem	3
Ag	Alnus glutinosa	18-20cm girth, 2m clear stem	7
Ap	Acer palmatum	18-20cm girth, 2m clear stem	17

Hybrid planning application boundary

Detailed planning application boundary

Proposed tree to be planted (25no. total)

ID	Scientific Name	Stock Size	Quantity
Bn	Betula nigra	18-20cm girth, 2m clear stem	7
Td	Taxodium distichum	25-30cm girth, 2m clear stem	4
Sa	Sorbus aucuparia	18-20cm girth, 2m clear stem	5
Mt	Malus tschonoskii	18-20cm girth, 2m clear stem	2
Pc	Pyrus communis	18-20cm girth, 2m clear stem	4
Ap	Acer palmatum	18-20cm girth, 2m clear stem	3

Site A - Podium Tree Planting Plan

Betula nigra (River Birch)

Taxodium distichum (Swamp-Cypress)

Sorbus aucuparia (Rowan / Mountain Ash)

Alnus glutinosa (Common Alder)

Betula pubescens (Downy Birch)

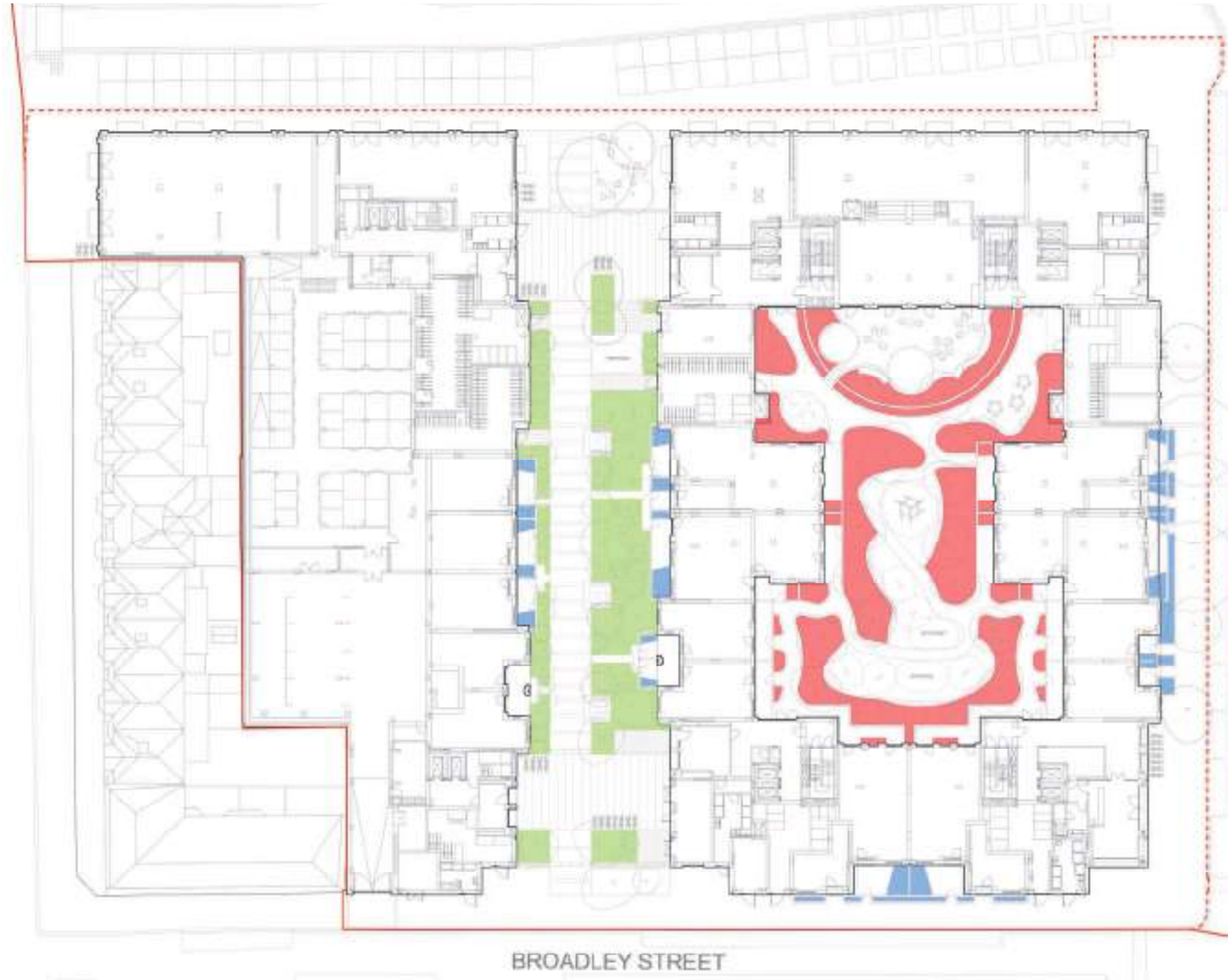
Acer palmatum (Japanese Maple)

THIS PAGE IS LEFT INTENTIONALLY BLANK

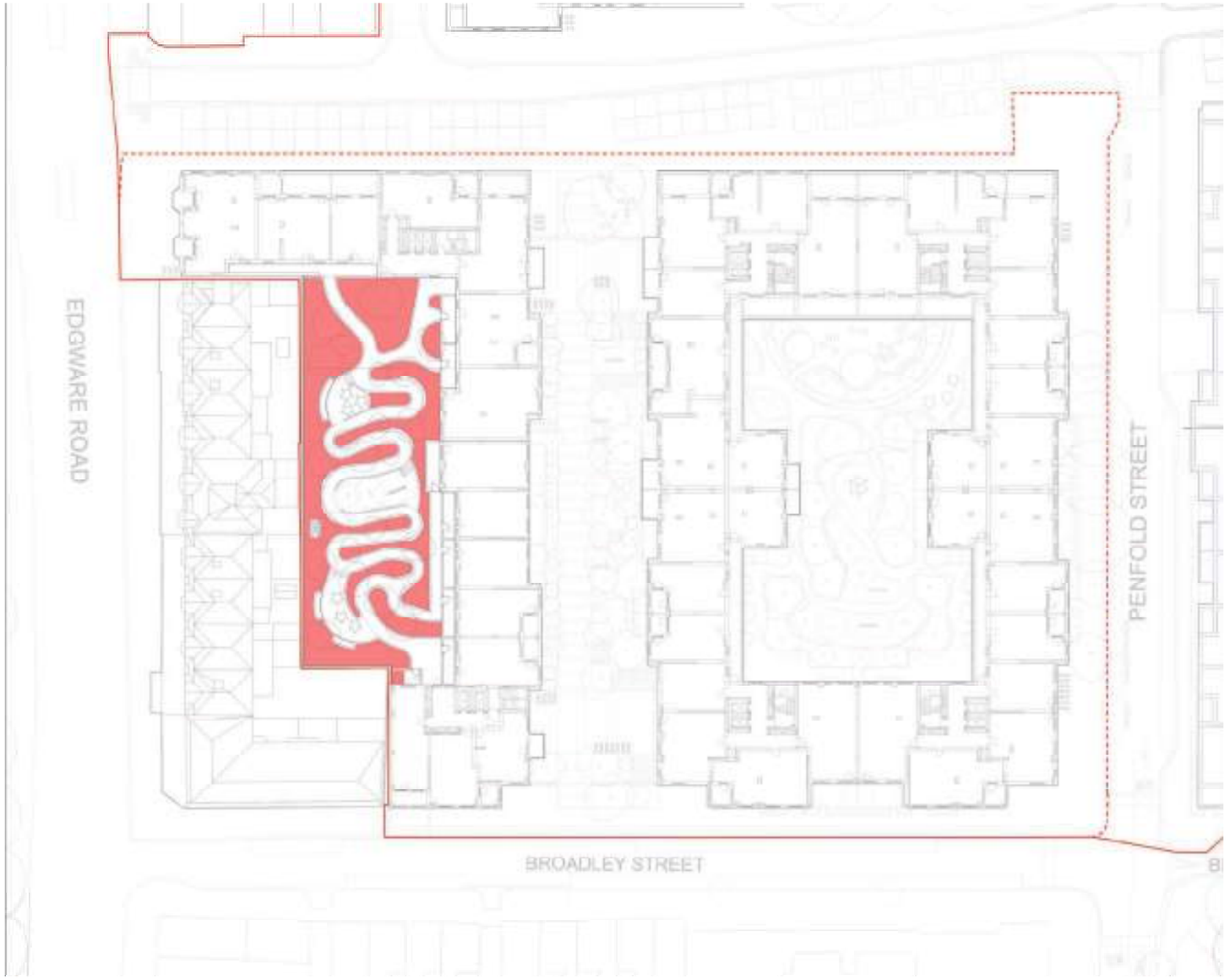
6.13 Softscape

Nature Based Planting

Hardy and drought tolerance is essential for all planting areas, for low maintenance (no auto or manual irrigation) and resilience to warmer, dryer summers. Taking reference from nature, the planting schemes will be influenced by natural habitat, such as Prairie Steppe (drought tolerant, with seasonal rains) for the Rain Gardens, and classic woodland understorey and emergent species (shade tolerant) for the Courtyards. The benefit in choosing predominantly natural habitat typologies, brings a degree of self regulation and therefore low maintenance.



Site A - Ground Level Planting Plan



Hybrid planning application boundary

Detailed planning application boundary

Hardy shade tolerant and low irrigation planting - shrubs, bulbs and mixed perennials

Site A - Podium Planting Plan

Rain Gardens - drought and flood tolerant species mix (Indicative)

Wetland meadow species

Achillea millefolium (Yarrow)

Geranium pratense (Meadow Cranes Bill)

Primula veris (Cowslip)

Leucabthemum vulgare (Oxeye Daisy)

Hardy herbaceous perennials

Rubeckia fulgida

Iris sibirica (Tropic Night Iris)

Verbena

Calamagrostis brachytricha (Korean Red Feather Grass)

Persicaria affinis

Alchemilla mollis

Podium Courtyard Gardens - hardy shade tolerant and low irrigation species mix (Indicative)

Woodland understorey bulbs and perennials

Galanthus (Snow Drops)

Allium ursinum (Wild Garlic)

Fritillaria meleagris (Snakes Head Fritillary)

Helleborus orientalis (Lenten Rose)

Shade and partial shade loving plants to build shape and form

Blechnum spicant (Ferns various)

Euphorbia amygdaloides Purpurea (Purple Euphorbia)

Acanthus mollis (Bear Breech)

Hakonechloa macra aureola (Forest Grass)

Alchemilla mollis

Mahonia oiwakensis lomariifolia

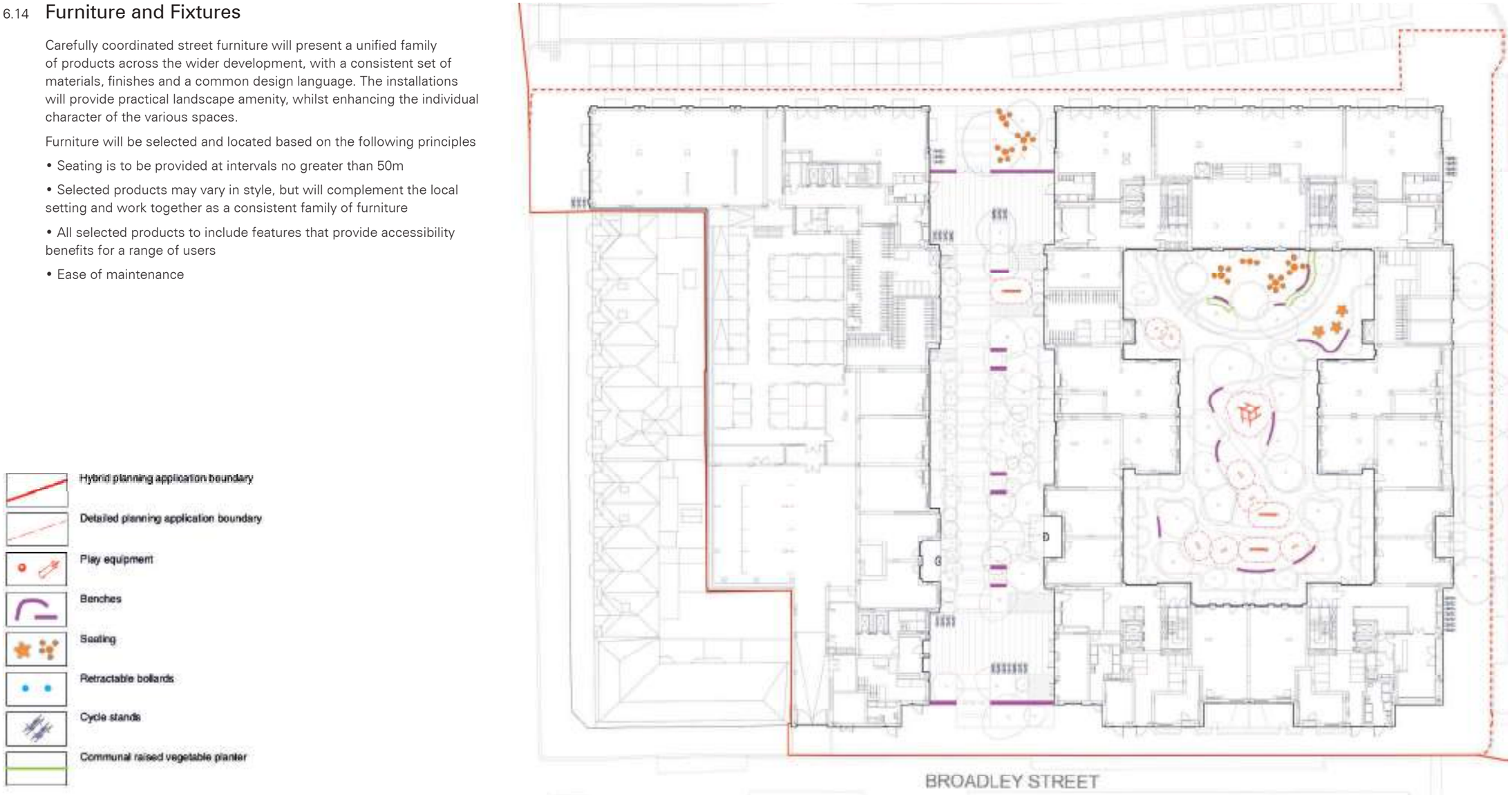
THIS PAGE IS LEFT INTENTIONALLY BLANK

6.14 Furniture and Fixtures

Carefully coordinated street furniture will present a unified family of products across the wider development, with a consistent set of materials, finishes and a common design language. The installations will provide practical landscape amenity, whilst enhancing the individual character of the various spaces.

Furniture will be selected and located based on the following principles

- Seating is to be provided at intervals no greater than 50m
- Selected products may vary in style, but will complement the local setting and work together as a consistent family of furniture
- All selected products to include features that provide accessibility benefits for a range of users
- Ease of maintenance



Site A - Ground Level Furniture & Fixtures Plan

Site A - Podium Furniture & Fixtures Plan

Naturalistic play equipment

Timber benches with steel powder coated fixings

Free standing indicative seating for Library and Communal Courtyard

Retractable bollards (indicative)

Street cycle parking stands (indicative)

Communal raised vegetable planters

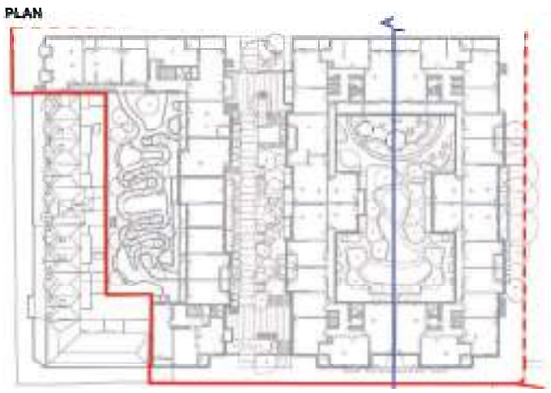
THIS PAGE IS LEFT INTENTIONALLY BLANK

6.15 Ground Floor Secure Courtyard Section A

Section showing trees and dense ornamental planting providing strong visual interest and biodiversity. The planting provides privacy between the communal spaces and private terraces.

A wall with climbing plants divides the communal area for residents and the library garden.

Ground Floor Secure Communal Courtyard Section AA
Scale 1:100



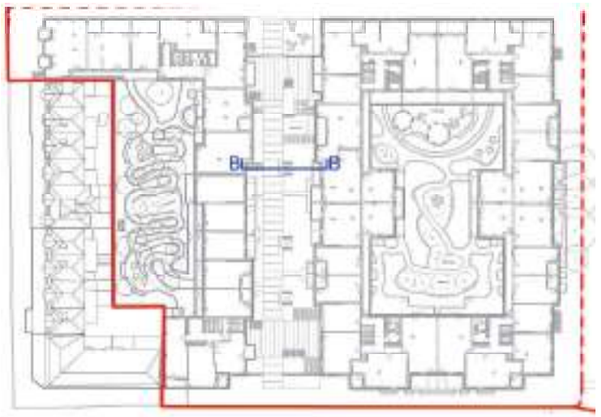
Ground Floor Secure Communal Courtyard Plan
Scale 1:100

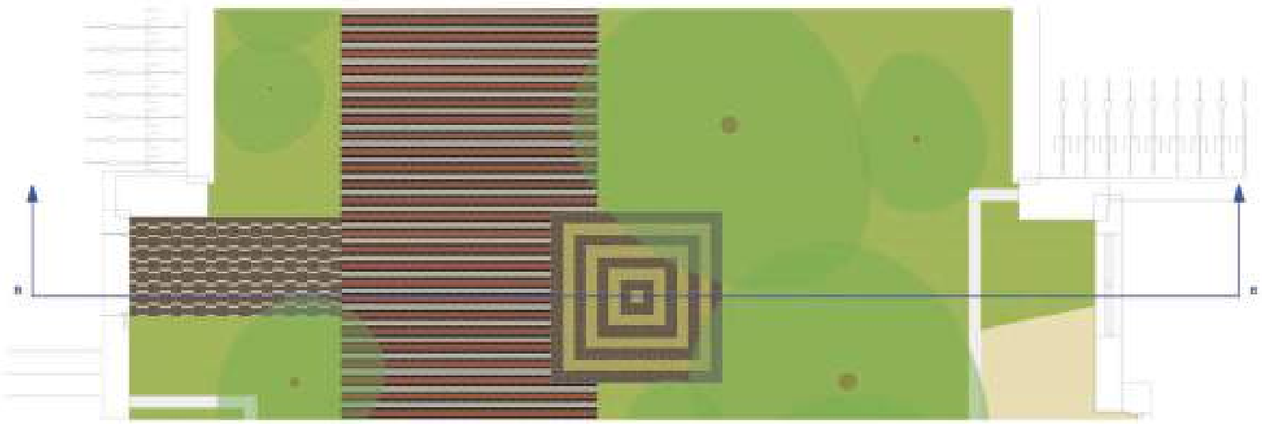
6.16 Ground Floor Public Realm Section B

The public realm at New Street Gardens creates a verdant atmosphere highlighted by the presence of trees and biodiverse wild-flower meadow planting. The planting also provides separation between the public realm and the private front gardens.

The paved area showcases varied paving patterns and colours allowing enough space for users to walk through, play, sit, socialise and relax.

'New Street Gardens' Section B
Scale 1:50



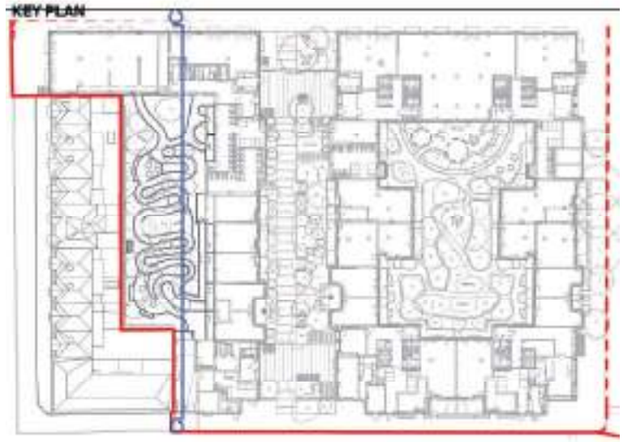


'New Street Gardens' Plan
Scale 1:50

6.17 Podium Level Section C

This section shows the scale of the podium and the extent of trees and ornamental planting. It also shows how the space is subdivided creating space for different activities including play, socialising and community growing.

The level difference is mitigated by a winding path making the podium accessible to all. The section also shows the depth of growing medium to support proper development of trees over time.



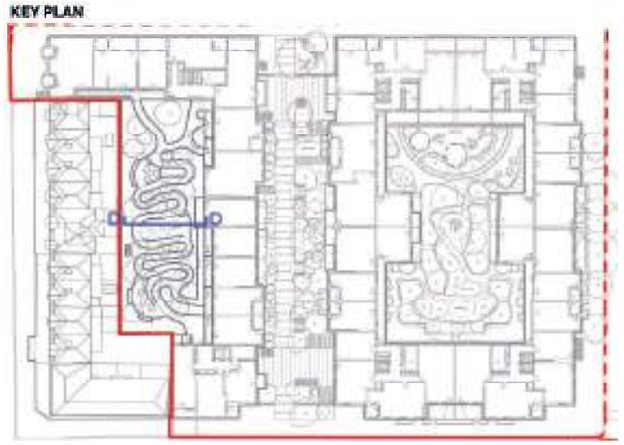
Secure Communal Podium Section C
Scale 1:100

Secure Communal Podium Plan
Scale 1:100

6.18 Podium Level Section D

This section shows the relationship between the private terraces and the communal garden with raised planters providing privacy.

The planting design based on native species provides biodiversity and strong visual interest. Residents from upper levels will look onto tree canopies and raised beds of seasonally changing colours.



Secure Communal Podium Section D
Scale 1:50

Secure Communal Podium Plan
Scale 1:50

7 Area Schedules

7 Area Schedules

7.1 Existing Areas

Existing Areas by Use Class

SITE A

Use class		Building name	Area (GIA) sqm	Area (GIA) sqft
B8	Storage or distribution	n/a	2,736	29,450
C3	Residential	Blackwater House	4,507	48,513
		Pool House	2,248	24,197
		Cray House	596	6,415
		Lambourne House	3,878	41,742
		Ingebourne House	2,238	24,090
E	Retail (shops)	n/a	1,749	18,826
E	Retail (food & drink)	n/a	240	2,583
E	Offices	n/a	505	5,436
	Sui generis	95 Church Street	174	1,873
	Sui generis	382-385 Edgware Road	159	1,711
			19,030	**204,837**

SITE B

Use class		Building name	Area (GIA) sqm	Area (GIA) sqft
C3	Residential	Eden House	2,837	30,537
		Roding House	590	6,351
		Lea House	1,642	17,674
		Wandle House	1,508	16,232
		Ravensbourne House	2,942	31,667
		Medway House	1,704	18,342
		Basement plant	217	2,336
E	Retail (shops)	n/a	2,444	26,307
E	Retail (food & drink)	n/a	214	2,303
E	Medical & health services	n/a	120	1,292
F	Learning & non-residential institutions	Church Street Library	848	9,128
n/a	Sui generis	n/a	4,310	18,826
			19,376	**208,561**

SITE C

Use class		Building name	Area (GIA) sqm	Area (GIA) sqft
C3	Residential	Colne House	744	8,008
		Darent House	536	5,769
		Windrush House	1,158	12,465
		Mole House	1,158	18,718
		Isis House	1,739	24,090
		Derry House	419	4,510
E	Retail (shops)	n/a	611	6,577
E	Offices (migrant resource centre)	Derry House ground floor	137	1,475
			6,502	**69,987**

TOTAL

Use class		Building name	Area (GIA) sqm	Area (GIA) sqft
B8	Storage or distribution		2,736	29,450
C3	Residential	Affordable	18,083	194,644
		Market	12,578	135,387
E	Retail (shops)		4,804	51,710
E	Retail (food & drink)		454	4,887
E	Offices		642	6,910
E	Medical & health services		120	1,292
F	Learning & non-residential institutions		848	9,128
n/a	Sui generis		4,469	48,104
			44,734	**481,512**

7 Area Schedules

7.2 Proposed Areas: Illustrative Masterplan

Proposed Areas by Use Class

SITE A

Use class		Area (GIA) sqm	Area (GIA) sqft
B8	Storage or distribution	1,124	12,099
C3	Residential	36,302	390,751
E	Commercial, business & service	711	7,653
F	Local community & learning	541	5,823
n/a	Parking	1,511	16,264
n/a	Plant & service spaces	2,102	22,626
		42,133	**453,515**

SITE B

Use class		Area (GIA) sqm	Area (GIA) sqft
B8	Storage or distribution	3,562	38,341
C3	Residential	40,647	437,520
E	Commercial, business & service	1,139	12,260
F	Local community & learning	302	3,251
n/a	Parking	5,144	55,370
n/a	Plant & service spaces	2,292	24,671
		53,086	**571,412**

SITE C

Use class		Area (GIA) sqm	Area (GIA) sqft
B8	Storage or distribution	0	0
C3	Residential	20,949	225,493
E	Commercial, business & service	1,236	13,304
F	Local community & learning	0	0
n/a	Parking	1,479	15,920
n/a	Plant & service spaces	676	7,276
		24,340	**261,993**

TOTAL

Use class		Area (GIA) sqm	Area (GIA) sqft
B8	Storage or distribution	4,686	50,440
C3	Residential	97,898	1,053,764
E	Commercial, business & service	3,086	33,217
F	Local community & learning	843	9,074
n/a	Parking	8,134	87,554
n/a	Plant & service spaces	5,070	54,573
		119,559	**1,286,921**

Proposed Unit Mix

Notes:

1. Illustrative unit mix only for Sites B and C.
2. Market sale includes leaseholder reprovision.

SITE A

Tenure	Unit Type									Total	
	1B/1P	1B/2P	2B/3P	2B/4P	3B/4P	3B/5P	3B/6P	4B/6P	5B/7P		
Market sale[2]	6	107	30	53	0	19	0	0	0	215	50.1%
Social reprovision	0	60	3	13	6	3	0	11	2	98	22.8%
New social	2	10	2	10	0	13	8	1	0	46	10.7%
New intermediate	0	24	10	17	0	12	7	0	0	70	16.3%
	8	**201**	**45**	**93**	**6**	**47**	**15**	**12**	**2**	**429**	**99.9%**

SITE B[1]

Tenure	Unit Type									Total	
	1B/1P	1B/2P	2B/3P	2B/4P	3B/4P	3B/5P	3B/6P	4B/6P	5B/7P		
Market sale[2]	19	84	17	93	0	23	0	0	0	236	50.8%
Social reprovision	0	50	10	3	0	1	21	0	0	85	18.3%
New social	7	5	2	28	2	0	11	0	0	55	11.8%
New intermediate	8	30	3	45	3	0	0	0	0	89	19.1%
	34	**169**	**32**	**169**	**5**	**24**	**32**	**0**	**0**	**465**	**100%**

SITE C[1]

Tenure	Unit Type									Total	
	1B/1P	1B/2P	2B/3P	2B/4P	3B/4P	3B/5P	3B/6P	4B/6P	5B/7P		
Market sale[2]	10	42	14	35	8	6	1	0	0	116	51.1%
Social reprovision	0	24	9	4	3	4	1	0	0	45	19.8%
New social	0	5	6	7	1	7	0	2	0	28	12.3%
New intermediate	0	18	3	17	0	0	0	0	0	38	16.7%
	10	**89**	**32**	**63**	**12**	**17**	**2**	**2**	**0**	**227**	**99.9%**

TOTAL

Tenure	Unit Type									Total	
	1B/1P	1B/2P	2B/3P	2B/4P	3B/4P	3B/5P	3B/6P	4B/6P	5B/7P		
Market sale[2]	35	233	61	181	8	48	1	0	0	567	50.6%
Social reprovision	0	134	22	20	9	8	22	11	2	228	20.3%
New social	9	20	10	45	3	20	19	3	0	129	11.5%
New intermediate	8	72	16	79	3	12	7	0	0	197	17.6%
	52	**459**	**109**	**325**	**23**	**88**	**49**	**14**	**2**	**1,121**	**100%**

7 Area Schedules

7.3 Proposed Areas: Site A

Proposed Accommodation Schedule

CORE 1-1

Floor	Unit Type									Total
	1B/1P	1B/2P	2B/3P	2B/4P	3B/4P	3B/5P	3B/6P	4B/6P	5B/7P	
	WCA	WCA	WCA	WCA	WCA	WCA	WCA	WCA	WCA	
Ground										0
Mezzanine										0
First		2	1	1		2	1			7
Second		2	1	1		2	1			7
Third		2	1	1		2	1			7
Fourth		2	1	1		2	1			7
Fifth		2	1	1		2	1			7
Sixth		2	1	2		1	1			7
Seventh		2	1	2		1	1			7
Eighth		1	1	2		1				5
Ninth		1	1	2		1				5
Tenth			1	2						3
Eleventh										0
Twelfth										0
	0 0 **0**	16 0 **16**	0 0 10 **10**	15 0 **16**	0 0 0 **0**	14 0 **14**	7 0 **7**	0 0 **0**	0 0 **0**	**62**

CORE 1-2

Floor	Unit Type									Total
	1B/1P	1B/2P	2B/3P	2B/4P	3B/4P	3B/5P	3B/6P	4B/6P	5B/7P	
	WCA	WCA	WCA	WCA	WCA	WCA	WCA	WCA	WCA	
Ground										0
Mezzanine										0
First		4	1	2		1				8
Second		4	1	2		1				8
Third		4	1	2		1				8
Fourth		4	1	2		1				8
Fifth		4	1	2		1				8
Sixth		4	1	2		1				8
Seventh		4	1	2		1				8
Eighth	1	4	1	1	1					8
Ninth	1	4	1	1	1					8
Tenth					3					3
Eleventh										0
Twelfth										0
	2 0	36 0	2 9	19 0	0 0	7 0	0 0	0 0	0 0	75
	2	**36**	**11**	**19**	**0**	**7**	**0**	**0**	**0**	

7 Area Schedules

7.3 Proposed Areas: Site A

Proposed Accommodation Schedule

CORE 1-3

Floor	Unit Type									Total
	1B/1P	1B/2P	2B/3P	2B/4P	3B/4P	3B/5P	3B/6P	4B/6P	5B/7P	
	WCA	WCA	WCA	WCA	WCA	WCA	WCA	WCA	WCA	
Ground		3		1		1	1			6
Mezzanine		4		1		1				6
First		4	1	2		1				8
Second		4	1	2		1				8
Third		4	1	2		1				8
Fourth		4	1	2		1				8
Fifth		4	1	2		1				8
Sixth		4	1	3						8
Seventh		4	1	3						8
Eighth	1	4	1	1	1					7
Ninth	1	4	1	1						7
Tenth		4		1						5
Eleventh		2			1		2			5
Twelfth										0
	2 0	48 0	2	10	20 0	0	0	9 0	1 0	0 0 0 0 **92**
	2	**48**	**12**		**20**	**0**		**9**	**1**	**0** **0**

CORE 1-4

Floor	Unit Type									Total
	1B/1P	1B/2P	2B/3P	2B/4P	3B/4P	3B/5P	3B/6P	4B/6P	5B/7P	
	WCA	WCA	WCA	WCA	WCA	WCA	WCA	WCA	WCA	
Ground		3		1		1	1			6
Mezzanine		4		2		1				7
First		4	1	2		1				8
Second		4	1	2		1				8
Third		4	1	2		1				8
Fourth		4	1	2		1				8
Fifth		4	1	2		1				8
Sixth	1	4	1	1	1					8
Seventh	1	4	1	1	1					8
Eighth					3					3
Ninth										0
Tenth										0
Eleventh										0
Twelfth										0
	2 0	35 0	2	7	18 0	0	0	7 0	1 0	0 0 0 0	72
	2	**35**	**9**	**18**	**0**	**7**	**1**	**0**	**0**	

7 Area Schedules

7.3 Proposed Areas: Site A

Proposed Accommodation Schedule

CORE 2-1

Floor	Unit Type									Total
	1B/1P	1B/2P	2B/3P	2B/4P	3B/4P	3B/5P	3B/6P	4B/6P	5B/7P	
	WCA	WCA	WCA	WCA	WCA	WCA	WCA	WCA	WCA	
Ground										0
Mezzanine										0
First		1		1	1	1	1	2		7
Second		1		1	1	1	1	2		7
Third		1		1	1	1	1	2		7
Fourth		1		1	1	1	1	2		7
Fifth		1		1	1	1	1	2		7
Sixth		1		1	1	1	1	2		7
Seventh		3		1	1		1	1		7
Eighth			1	2	1					4
Ninth			1	2	1					4
Tenth			1	1			1			3
Eleventh										0
Twelfth										0
	0	0	9	0	3	0	12	9	6	0	8	0	1	0	12	0	0	0	**60**
	0		**9**		**3**		**21**		**6**		**8**		**1**		**12**		**0**		

CORE 2-2

Floor	Unit Type																				Total
	1B/1P		1B/2P		2B/3P		2B/4P		3B/4P		3B/5P		3B/6P		4B/6P		5B/7P				
		WCA		WCA		WCA		WCA		WCA		WCA		WCA		WCA		WCA			
Ground													5								5
Mezzanine			3																		3
First			7	1																	8
Second			7	1																	8
Third			7	1																	8
Fourth			7	1																	8
Fifth			7	1																	8
Sixth			7	1																	8
Seventh	2		6																		8
Eighth																					0
Ninth																					0
Tenth																					0
Eleventh																					0
Twelfth																					0
	2	0	51	6	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0		**64**
	2		**57**		**0**		**0**		**0**		**0**		**5**		**0**		**0**				

8 Summary of Benefits

8 Summary of Benefits

Health and Wellbeing

Increase in amount of public and communal open space with more planting contributing positively to biodiversity air quality and wellbeing. Streets and parks have been shaped to enable access to high quality public amenity and open space for all.

Increase in amount of play spaces with a variety of different play opportunities of different scales and types for different ages.

All homes will have views over and access to high quality green communal courtyard spaces improving health and wellbeing.

Healthy lifestyles will be promoted through provision of easily accessible cycle storage and a focus on a walkable streetscape with shops and services provided locally.

The development will provide social places to learn, meet and play with new shared spaces for leisure such as New Street Gardens.

Homes

There will be a significant increase in the number of homes provided with up to 1,121 new homes delivered.

Delivery of 50% affordable homes including social rent reprovision

The new development will be safe and secure through the incorporation of Secured by Design principles, passive surveillance and street lighting.

Homes will be accessible with level access to every home and 10% wheelchair-accessible homes achieving a range of unit sizes in both private and affordable units that meets local needs

Every home will have access to generous private external amenity space.

Low energy buildings will reduce energy bills and minimise the environmental impact.

Homes will be spacious, functional and light-filled. Homes will be designed to be dual aspect, maximising natural ventilation, having attractive aspects and high levels of daylight to enhance wellbeing and comfort.

The existing community has the opportunity to be retained by ensuring that every existing household has the potential to return to a new home within the development.

Optimising brownfield land in a highly accessible location and maintaining its existing PTAL ratings of 6a and 6b

Market and Enterprise

The development will deliver a rich mix of improved commercial, retail and enterprise space that supports local needs and provides employment opportunities.

The character of the existing neighbourhood will be enhanced and reinforced through an appropriate mix of uses.

The increased number of homes will help to support the local economy, increasing footfall and helping businesses to thrive.

The importance of the market as the heart of the community will be reinforced with a better layout, new finishes, areas of seating and planting and provision of electrical and water infrastructure.

The market infrastructure will be improved with parking, storage and welfare facilities reducing local congestion, improving facilities for traders and minimising the impact on local residents.

New community use adds to the rich mix of local amenities and leisure on offer in the neighbourhood.

A purpose-designed flexible and accessible new library and library garden will be a focal point for the community on Church Street. The new library will be designed to suit the needs of the local community.

Making Connections

New connections will be established through the site and the quality of existing ones improved. These has been informed by the historic street pattern to restore a more consistent, active and successful urban character.

Streets have been designed with a pedestrian focus to encourage walking and cycle use with health and environmental benefits and increased social interaction.

Active frontages to streets will increase activity, provide natural surveillance and add vitality to the street scene.

Increased planting, street lighting and finishes will greatly enhance the quality of the streetscene and experience for pedestrians with improved safety and accessibility.

High quality architecture with durable, robust, attractive finishes will enhance the visual appearance of the street scene.

BELL PHILLIPS ARCHITECTS

Unit 305, Metropolitan Wharf
70 Wapping Wall
London
E1W 3SS, UK

t: +44 (0)20 7234 9330
w: www.bellphillips.com