

Neighbourhoods: Play and Informal Recreation' (2012) sets out that existing off-site play provision for older children can be used to off-set play provision if it within a suitable walking proximity. Within an 800m walking distance of the estate Battersea Park can be reached with a range of play and recreational activities for children aged 12-17yrs via a journey including a signalled pedestrian crossing over the A3216 Grosvenor Road. This impressive facility for play/sports/socialising is a excellent amenity and is felt that the deficit of play for this age group (Figure 17 overleaf) can be successfully offset to this substantial park provision.

There are three locations with play for 5-11yrs aged children within 800m walking distance of the estate which complies with the Mayor's Supplementary Planning Guidance (SPG) 'Shaping Neighbourhoods: Play and Informal Recreation' (2012). This also could potentially supplement a deficit of provision on site indicated by Figure 17.

Proposed play character

Proposals for play within the new community are guided by The Mayor's Supplementary Planning Guidance (SPG) 'Shaping Neighbourhoods: Play and Informal Recreation' (2012). The masterplan will deliver an exciting and diverse range of play experiences to challenge and stimulate children across a range of ages. The play strategy will encourage exploration and discovery and will share a close relationship with the landscape concept for the masterplan. Play value will be considered within the suitable selection of planting palettes, street furniture and paving selections. The over-arching themes of the formal 'canal edge' and naturalistic 'towpath' will resonate within the play proposals with pieces that are evocative of canal side forms (see figures 09 and 11).

The public realm will support a 'ribbon' of play throughout it's length and aside from defined play spaces, landscape proposals should allow children to encounter 'play on the way' to complement walking routes and resting points at community amenities.

Proposed play locations

Play provision for toddler aged children (up to 4yrs) will be provided in good proximity to the doorstep within public realm and first floor podium spaces. These installations will combine fixed play equipment

Key
 Play provision within planting with natural forms
 Play provision associated with formal 'canal edge' landscape character

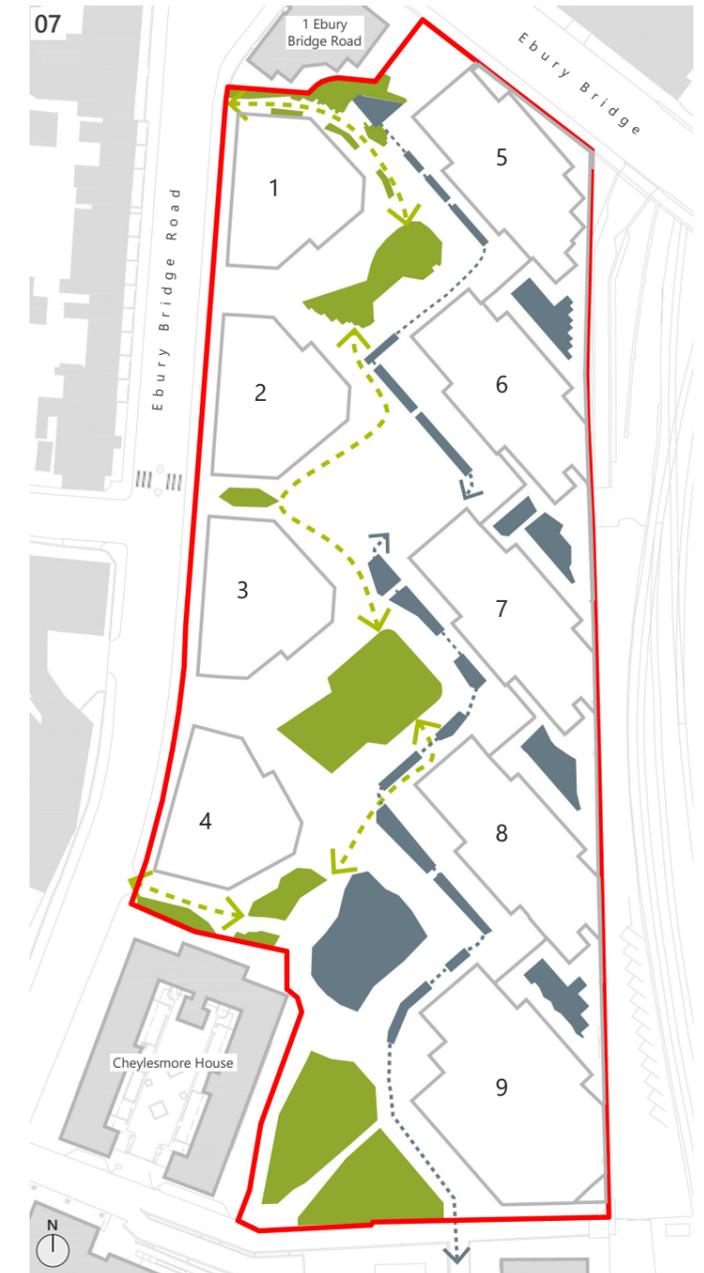
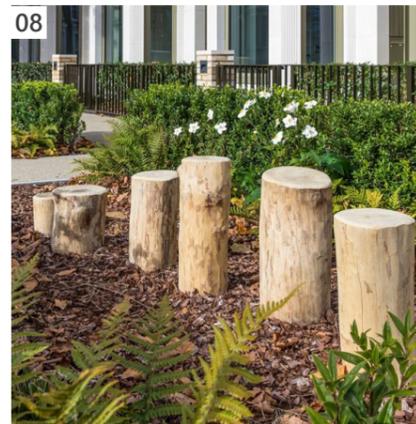


Figure 05: Equipment with timber aesthetic
 Figure 06: Play forms which promote group activity
 Figure 07: Proposed play character diagram (nts)
 Figure 08: Informal play set within planting

Figure 09, 11: Canal side forms to be interpreted within bespoke play pieces
 Figure 10: Playable landscape features for 0-5yrs

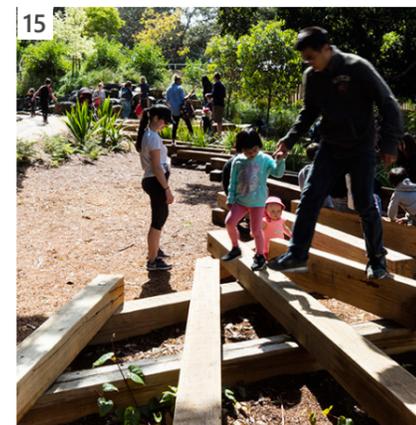
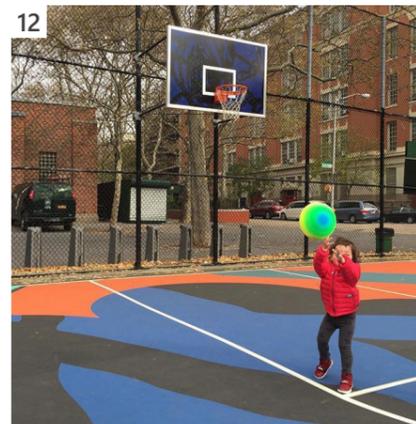
pieces with formal play features such as timber decked stages, balance beams, stepping stones and low proprietary equipment. These areas will be surrounded by planting and surfaced with impact absorbing rubber in natural colours with seating for all residents. A trail of play interventions is intended for 0-5yr children along the line of the pedestrian route following the formal 'canal edge' landscape character. These coincide with raingarden planters and will include stepping stones, smooth boulders and raised/profiled edges to planting beds which offer informal play and seating.

Areas of the public realm at gateway arrival spaces in particular are designed to provide 'playable landscape' with elements such as mounded lawns, planting, meandering pathways, smooth stone boulders and raised seating/walking edges. These are designed to offer play value for children 0-4yrs at a doorstep proximity to home.

For children aged over 5 years, play facilities are located within two of the public squares and within the northern gateway. Within the squares play equipment is envisaged to include large, sculptural play equipment, designed to stimulate the mind and activate the body. Play provisions will be encircled by totem-style fencing with chicane entrance points and a perimeter of planting. Low vehicles will be able to move around these public squares once being admitted to the site from Ebury Bridge Road. Play provision for under 11yrs children is given priority within the masterplan due to the shorter distances over which children can travel to reach playspaces.

The flexible MUGA space is intended to support a range of play uses as well as basketball and small football games. Informal ball games, scooters and running games will be possible which makes the space attractive for a range of different aged children. The flexible MUGA contrasts with the existing provision as it has a more diverse appeal and sits as part of the public realm. It's location is complemented by the non-residential uses within building 9 and this combines to make attractive social spaces for children over the age of 12years. Where the GLA SPG target for 12-17yrs cannot be wholly achieved due to the constrained nature of the site, Battersea Park is within an acceptable walking distance to supplement provision.

The masterplan layout promotes child mobility by creating a sequence of public spaces that can be accessed by children avoiding heavily trafficked roads. This allows a greater level of independence for young children who may be allowed to 'play out' together with friends in spaces where a strong level of natural surveillance is provided. The quality of new play provision will be a significant improvement on the existing installation with an emphasis on door-step provision including a range of contemporary play characters.



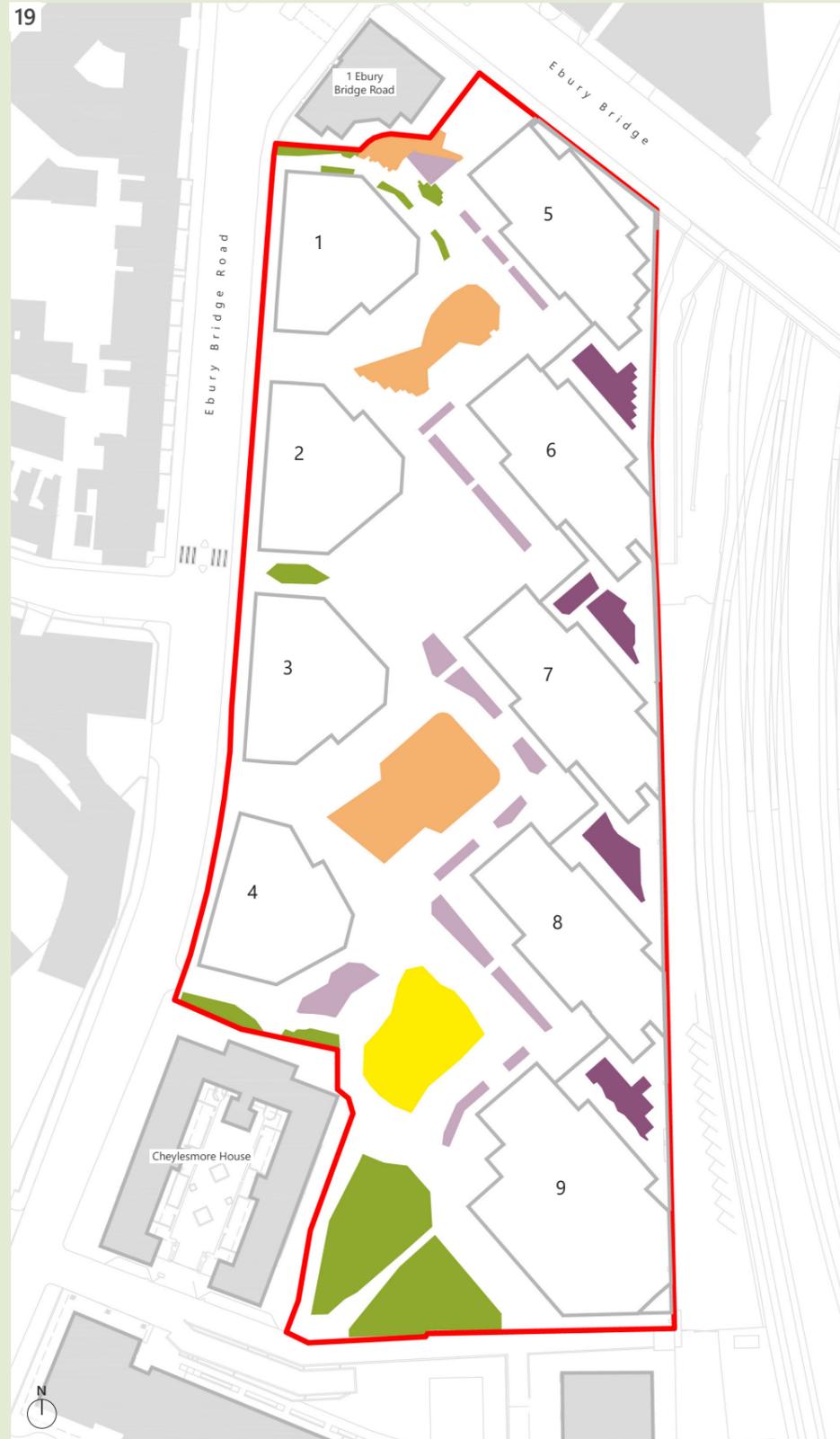
Masterplan-wide play provision	Existing play provision	GLA SPG play target (based on architectural accommodation schedule for masterplan)	Proposed play provision	Comparison between proposal and existing play provision	Comparison between proposal and GLA SPG play target
Play 0-4 yrs	673 m.sq	1,613 m.sq	1,771 m.sq	1,098 m.sq surplus	158 m.sq surplus
Play 5-11 yrs	545 m.sq	1,300 m.sq	730 m.sq	185 m.sq surplus	570 m.sq deficit
Play 12-17 yrs	617 m.sq	1,042 m.sq	403 m.sq	214 m.sq deficit	639 m.sq deficit
TOTAL	1,835 m.sq	3,955 m.sq	2,904 m.sq	1,069 m.sq surplus	1,051 m.sq deficit

Figure 12: Painted MUGA surface
 Figure 13: Play set within planting
 Figure 14: Flexible MUGA space
 Figure 15: Playable landscape features

Figure 16: Diagram to show play locations (nts)
 Figure 17: Schedule to show masterplan-wide play calculation
 Figure 18: Summary of

masterplan-wide play calculation
 Figure 19: Proposed play provision diagram (nts)

Masterplan-wide play provision	GLA SPG play target (based on architectural accommodation schedule for masterplan)	Proposed play provision
Play 0-4 yrs	1,613 m.sq	1,771 m.sq
Play 5-11 yrs	1,300 m.sq	730 m.sq
Play 12-17 yrs	1,042 m.sq	403 m.sq
TOTAL	3,955 m.sq	2,904 m.sq



Key

- 0-4yrs play within public realm
- 0-4yrs play within secure podium terraces
- Play for 5-11yrs
- Flexible MUGA space for 12+ yrs
- Playable landscape spaces

Key play characteristics

- Play areas are to be considered and designed in accordance with the GLA play provision calculations wherever possible.
- Play areas should reflect the over-arching design concepts of the canal heritage with a combination of bespoke and proprietary items.
- Equipment should primarily be constructed in FSC certified natural timber with a limited palette of introduced colour.
- Safety surfaces should reflect fall-heights and free-fall spacings, with naturalistic colours and textures to ensure surfaces do not detract from the overall quality of the landscape setting.
- Playspaces must be designed and constructed in response to the needs of all users, including children, parents and carers of all mental and physical abilities, including appropriate range of seating forms.
- Play spaces are to be strategically located within the masterplan to minimise noise impact to dwellings.
- Play for 5-11yrs within the two public squares will be encircled by a sculptural timber 'totem' style fence max 1100mm high with a gate at entrance points.
- Planting must be safe for exposure to young children, be suitably robust and specified to withstand active use of playspaces.
- Play provision should include appropriate elements of risk and challenge within a safe overall arrangement.
- The playable quality of landscape design should be considered throughout the masterplan to emphasise the value of 'play on the way'.

Justification

- To create public realm spaces that promote the health and well-being of all residents.
- To maintain consistency of approach across the masterplan.
- To promote legibility and way-finding.
- To create a high quality and enduring public realm space.

5.10 HARD LANDSCAPE

Specification aims

The hard materials palette is deliberately constrained and features materials that are low-maintenance, robust and distinctive whilst suitable for a residential setting. Warm colour tones are intended to provide a more soft aesthetic to reference the proposed buildings. The hard materials palette must be fit for purpose, readily available and proven in terms of performance. This may require higher initial capital expenditure for construction but can deliver greater value through reduced costs associated with material lifespans and day-to-day maintenance.

Clear delineation of access rights

The use of different colour units and coursing patterns will provide aesthetic interest whilst also ensuring clarity between different types of spaces. Paving finishes will appear to run into lobby entrances to buildings to infer a continuity in access and materials. Where private terraces exist at ground level these will be surfaced in a way which makes them clearly discernible from the public realm.

Promoting shared-surface principles

Movement routes are clearly embedded within the landscape concept and masterplan. 'Homezone' design principles guide the design of public realm spaces through which vehicles may pass. Detailed designs must consider the use of these type of spaces by pedestrians who have visual impairment, this will include hazard warning paving, contrast colour kerbs, textured surfaces and guidance strips along with considered placement of street furniture and signage.

Integrated approach to public art/wayfinding

Well considered public art and wayfinding proposals are generally seen to be most successful when embedded within public realm finishes rather than being 'stand alone'. Art interventions should focus on interpreting character of the original canal history whilst also being responsive to the community demographic. Traces should be layered across public realm elements such as paving, seating, lighting columns, kerbs, steps and even play features. By following this principle the strategy will be physically robust and feel part of the fabric of the new community.

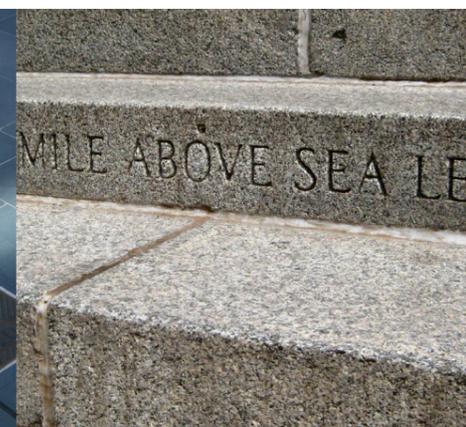
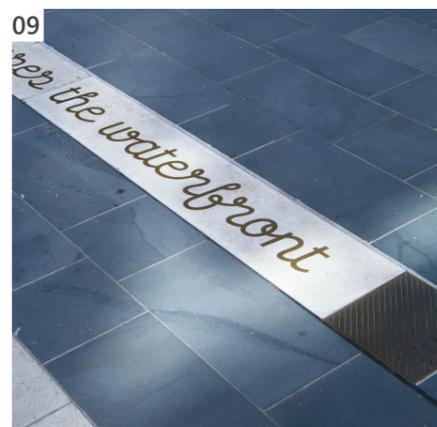
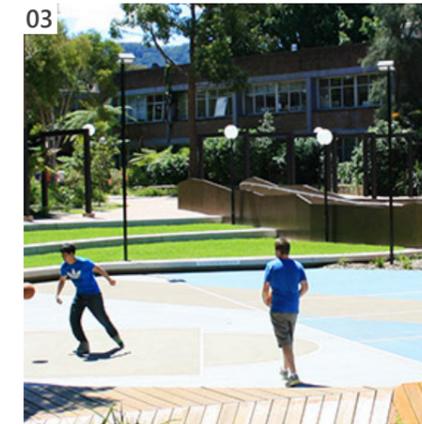
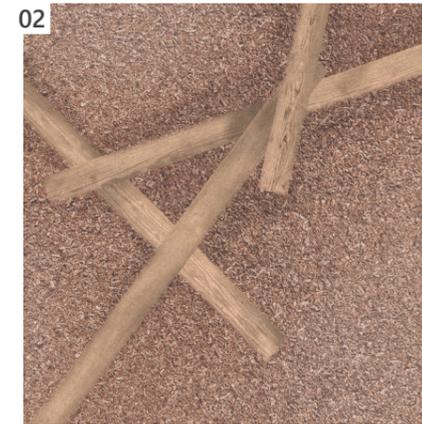
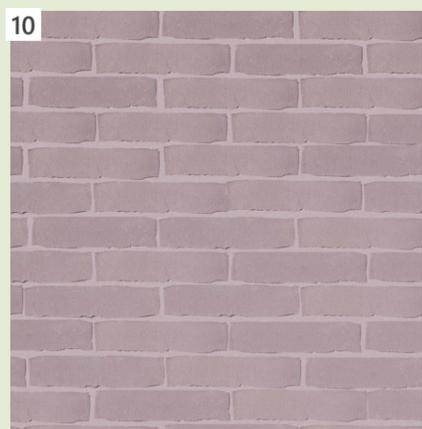
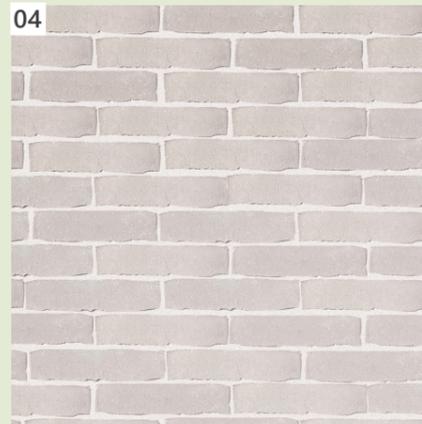


Figure 01: Pinned metal edges to root protection zones
 Figure 02: Rubber/loose bark surfacing to play spaces
 Figure 03: Painted asphalt MUGA surface with limited colour palette

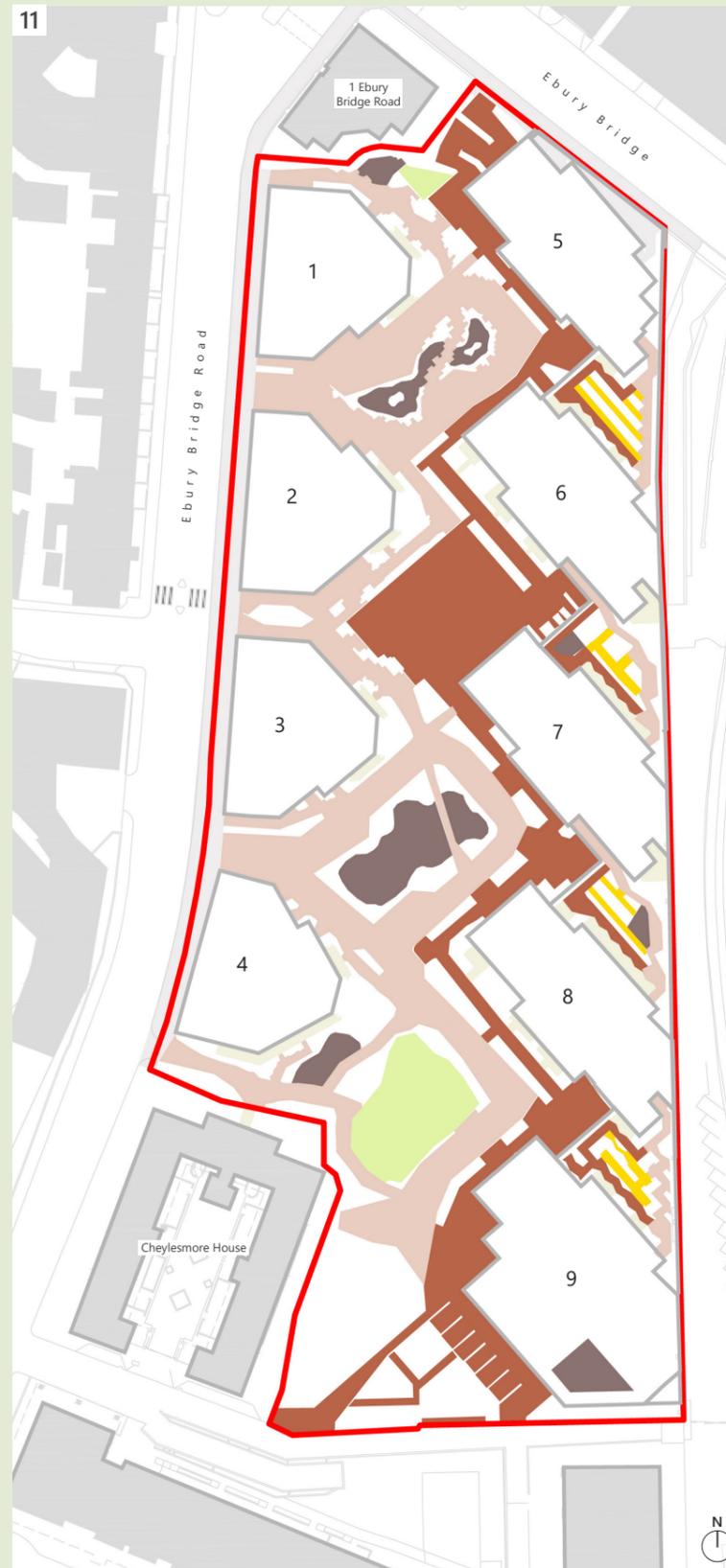
Figure 04: Private amenity spaces - clay pavers pale beige
 Figure 05: Yorkstone kerbs generally
 Figure 06: Resin bound gravel to podiums
 Figure 07: FSC Certified hardwood timber decking with carborundum strips

Figure 08: Public realm spaces 'paving to west' - clay paver mix of light grey
 Figure 09: Integration of public art into hardworks palette

Figure 10: Public realm spaces 'paving to east' - clay paver warm grey
 Figure 11: Diagram to show hardworks layout



Key	
Formal 'canal' paving to east	
Informal 'towpath' paving to west	
Impact absorbing play surfacing	
MUGA painted/patterned asphalt surfacing	
Private residential curtilage paving	
FSC certified hardwood timber decking	



Key proposals relating to hard landscape finishes

- Hard materials will be specified in a consistent manner across the masterplan between phases of the development.
- All timber elements will be FSC Certified hardwood and decking will have inlaid carborundum strips.
- The predominant public realm paving throughout the masterplan (see adjacent diagram) will be a natural clay paver in contrasting colours - coursed/blended to create distinctive palettes with varying degrees of warm colour tone.
- Hard landscape materials will reflect the colours and materiality of the architectural facade treatments to provide a unified, complementary palette of textures, colours and forms.
- No-dig paving constructions will be used within the root protection areas of existing trees.
- Place-specific public art will be integrated into natural stone elements of the hardworks and public realm design.

Justification

- To create a high quality and enduring public realm space.
- To ensure implementation phases are not discernible.
- To maintain consistency of approach across the masterplan.
- To ensure adequate delineation between public and private spaces.

5.11 STREET FURNITURE

Specification aims

The range of street furniture used across the masterplan must reflect a 'family' palette with consideration to low maintenance brushed stainless steel materials to ensure robustness for public spaces. Placement of furniture items should be considered and seek to reduce clutter by using columns to support multiple items - eg litter bin and signage placed on a lighting column rather than the introduction of separate posts. Wherever possible the material and detailed specification of furniture items should reinforce the character areas presented within this report chapter. Drinking water fountains should be strategically located with an emphasis placed on a provision within the Community Hub square. Static bollards will be avoided due to the clutter and maintenance burden they offer.

Seating

Figures 07 to 12 demonstrate precedents depicting the proposed 'formal' and 'informal' seating forms to be employed between the two main character areas of 'canal' and towpath'. Closest to buildings 5 to 9, seating will be constructed in solid pre-cast concrete plinths which reflect the fabric of the building elevation, with FSC Certified timber tops. Within the public squares of the 'towpath' character space, seating will be in timber with more naturalistic, fluid and sloping forms (whilst being fit for the purpose of seating). Approximately 50% of all proposed seating will have arms and backrests to ensure effective use by all residents. Seating will support the key desire lines and walking routes and enable parents and carers to linger in and around playspaces.

Public art integration

The rich and diverse public realm will include traces of public art running strategically through the masterplan offering interpretation of the canal history whilst also aiding wayfinding. For robustness and the demonstration of an integrated approach to landscape and public art, consideration will be given to using surfaces and elements of public realm to embody public art provision.

TfL cycle hire station

An existing cycle hire station to Ebury Bridge will be extended as part of the development proposals with an additional line of twelve cycles located within the redline boundary of the proposed masterplan. The public footway will be unaffected by the proposal and the new stands will be in good proximity to the existing so that they read as 'one'.

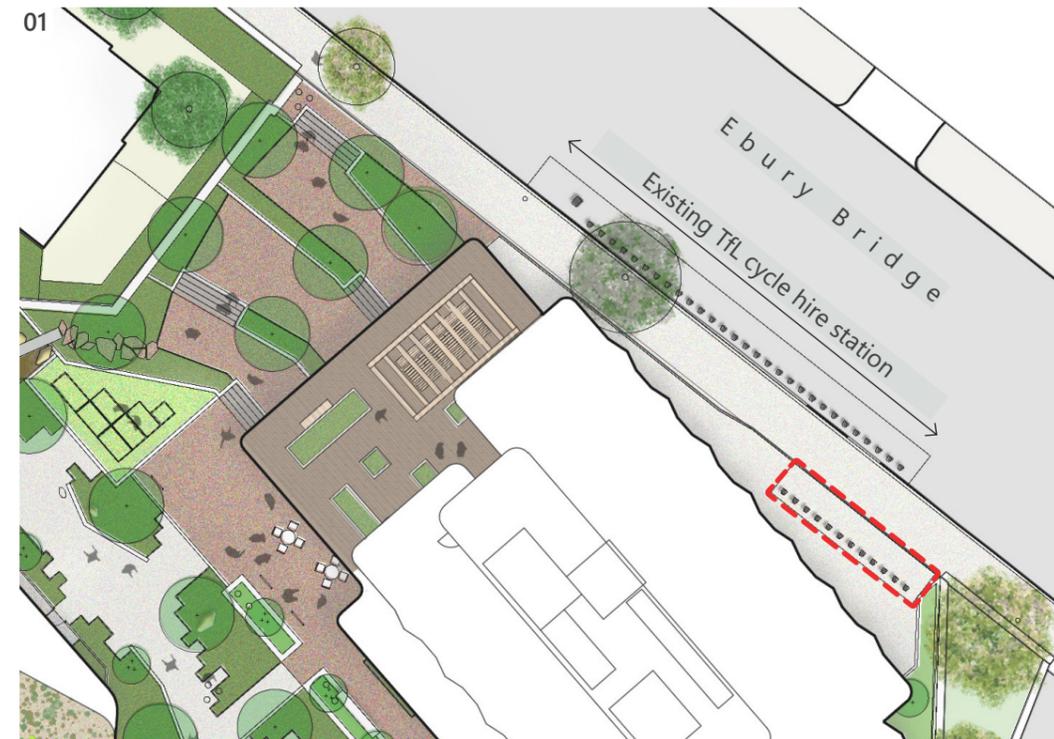


Figure 01: Location of proposed TfL cycle stand extension shown in red (nts)

Figure 02: Photo of existing TfL cycle stand on Ebury Bridge

Figure 03: Access control bollards

Figure 04: Brushed stainless steel cycle stands

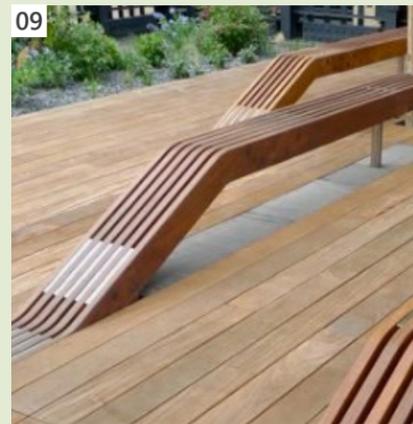
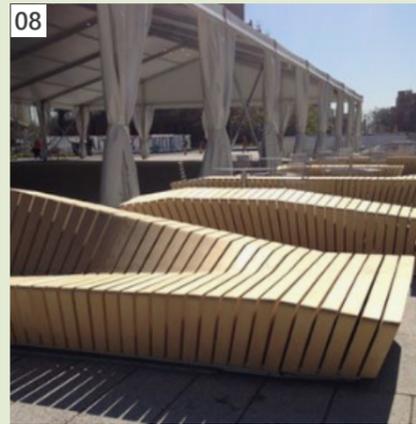
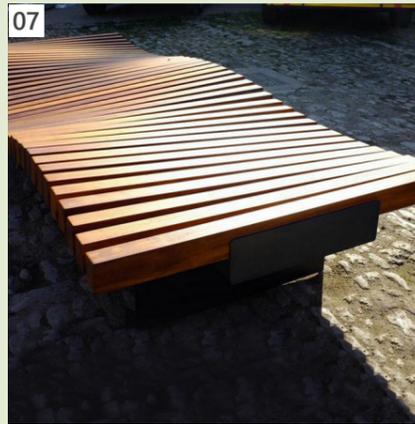
Figure 05: Drinking water fountain to Community Hub square

square

Figure 06: Brushed stainless steel litter bins with recycling option

Figures 07-09: Informal timber seating forms to 'Towpath' character area

Figures 10-12: Formal seating forms to 'Canal' character area



Key proposals relating to street furniture

- The appearance of street furniture will be specified in a consistent manner across the masterplan between stages of implementation of the proposed masterplan.
- All timber elements will be FSC Certified hardwood.
- The approach to design and specification of seating will reflect the two key landscape character areas proposed - formal simplistic bench forms for the 'canal' area (figures 10-12) and naturalistic, timber forms for the 'towpath' area (figures 07-09).
- Street furniture will be arranged in a manner which avoids visual clutter, obstruction to pedestrians and damage by vehicles.
- The key material for street furniture aside from seating will be brushed stainless steel.

Justification

- To create a high quality and enduring public realm space.
- To ensure implementation phases are not discernible.
- To maintain consistency of approach across the masterplan.
- To reduce burden of maintenance.
- To promote pedestrian movement.

5.12 BOUNDARY TREATMENTS

Relationship with Cheylesmore House and 1 Ebury Bridge Road

Significant engagement has been undertaken with the local residents at Cheylesmore House and 1 Ebury Bridge Road and boundary treatments have been devised in conjunction with feedback received.

To the rear of 1 Ebury Bridge Road the proposal for a new boundary treatment includes a retaining wall (up to 3m height) with 1.1m high railings on a brick plinth. To Cheylesmore House rear gardens which sit adjacent to the Southern Gateway will be defended by a 1.8m high brick boundary with a 0.3m timber trellis to provide security to 2.1m height in total.

Both existing boundary conditions will be supplemented by additional planting to ensure a good level of separation from publicly accessible areas.

Play space boundaries

The flexible MUGA space will have sports fencing in sections only to reflect the arrangement of goal ends/basket ball hoops. Fencing will be a mesh style fence of 3-4m in height in a plain dark colour to reduce its visual dominance on the space. Play provision within the public squares will be encircled by a FSC Certified hardwood timber sculptural fence and gates to 1.1m height, set within planting.

Private terrace boundaries

It will be important to achieve a clear level of delineation between private terraces allocated to individual dwellings and areas of public communal access. These type of spaces will be enclosed by a 1.1m high metal railing to match the form and fabric of the architectural fenestration to the building. This will be apparent to private terraces at ground floor, first floor and to the above ground terraces.

At ground floor planting is used to provide a min. of 1m of defensible planting to further provide privacy and security of these spaces

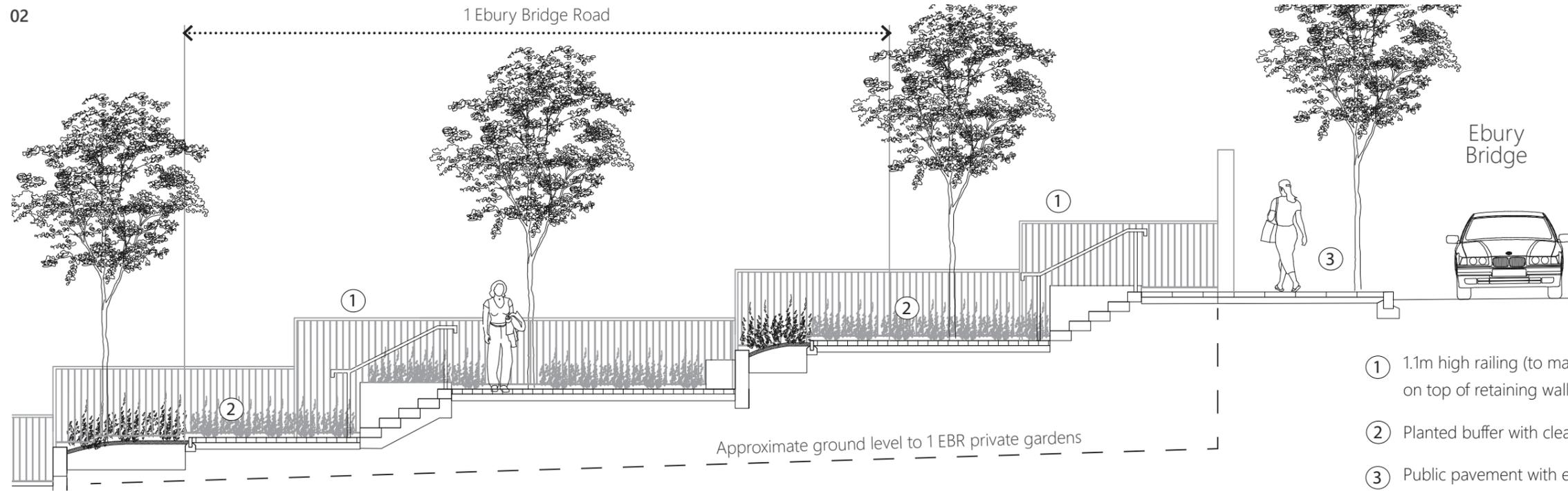
Podium parapet treatment

The podium parapet edge treatment will vary from east to west. Where sunlight enters these amenity spaces from the east, a simple 1.1m railing will be included in a style to match the architectural fenestration. To the west, a 1.1m high planter will be introduced with a flat-face to preclude climbing. This will offer a 'green' planted edge whilst allowing views across the public realm spaces at ground level.

Boundary treatments outside of the detailed application area will be subject to a reserved matters application.



02



- ① 1.1m high railing (to match architectural fenestration) on top of retaining wall up to 3m high
- ② Planted buffer with clear-stem trees to boundary
- ③ Public pavement with existing retaining wall to back of footway

Figure 01: Proposed boundaries diagram (nts)
 Figure 02: Section to show boundary treatment to 1 Ebury Bridge Road (facing west)
 Figures 03: Precedent for hardwood timber sculptural fence to playspace
 Figure 04: Precedent for 1.1m high planter to west podium edge
 Figure 05: Precedent for

boundary treatment to Cheylesmore House gardens
 Figures 06: Precedent to show planting reinforcing boundary treatments to ground floor homes



5.13 LIGHTING

Collaboration

Sound lighting design principles such as sensitivity to ecology, avoidance of nuisance light and the achievement of good uniformity along the pathways will be adopted across the masterplan.

The principles of Secure by Design will be adopted to ensure avoidance of dark corners and to support a network of night-time secure routes. The detailed design process will involve further collaboration between landscape design and lighting design to ensure good co-ordination.

Principles

A combination of light fittings are proposed to achieve illumination across the public realm. Where possible these are integrated with the 'fabric' of the landscape and architectural elements to ensure robustness and an integrated approach. The finish to light fittings reflects the 'family' approach to street furniture palette with a coherent custom RAL paint finish proposed to bollards and columns. Lighting fixtures will employ LED technology ensuring long life, high efficiency outputs and optics with minimal glare.

Lighting design takes a hierarchical approach which accords with the public realm proposals. Lighting along circulatory routes will ensure safe use by pedestrians and vehicles and further emphasis is placed on gateway nodes into the site, residential entrances, changes in level within the landscape and areas of bicycle storage/parking.

At podium level, lighting will include low-level lighting delineating the podium perimeter, building mounted fixtures to core entrances and lighting integrated with seating elements within the communal landscape.

The scale of fittings such as illuminated bollards and lighting mounted on columns no higher than 5m will ensure the character of a pedestrian space is reiterated, rather than using heights associated with a conventional highway-dominated space. This approach will also help minimise the lighting disturbance into residential properties at night.



Figure 01: Light columns which reflect the residential setting

Figure 02: Bollards illuminating pathways

Figure 03: Lighting design to consider bats

Mitigation of lighting on Bat population

Lighting has been designed to avoid unfavourable impact on wildlife at night and to reduce light spill generally. Consultation and co-ordination during the technical design period must continue between lighting design, ecology and landscape/architecture to ensure all phases of the masterplan integrate appropriate measures to minimise disturbance to bats during operation.

Technical design will avoid lighting on the bat boxes and minimises light levels in areas where they are positioned. Lighting design will be developed in accordance with the relevant guidance, reducing skyglow, using warm lighting and maximising the value of proposed landscape design for roosting, foraging and commuting bats.

Key lighting characteristics to consider bats

- **A warm white spectrum 2700 Kelvin to reduce blue light component. Luminaires will feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats.**
- **Use of specialist bollard or low-level downward directional luminaires to retain darkness above on secondary pathways in zones with no vehicular movement.**
- **Column heights considered to minimise light spill and reduce quantum required.**
- **Luminaires with an upward light ratio of 0% and with good optical control to be specified.**
- **Adjustable luminaires will be mounted to shine downward with no tilting above 45deg perpendicular to the ground.**
- **Good optical control is required to all luminaires with accessories such as baffles, hoods or louvres utilised to reduce/direct light spill only where needed.**

Justification

- To ensure design follows GN08-18 Guidance Note 8 *Bats and artificial lighting* (ILP, 2018) and mitigates of effects of lighting on bats.

5.14 ECOLOGY AND BIODIVERSITY

Existing baseline condition

The existing estate area lacks complexity in terms of habitat provision and types of vegetation. The predominant condition is hard-standing with pockets of amenity grassland, shrubs and trees. Management of the site focusses on cleanliness and safety and not the ecological value of the estate. Surfaces are generally impermeable, lighting is inconsistent and makes no consideration to night-time wildlife. The community of existing trees shows diversity in species but quality and condition of trees vary significantly with Category A trees limited to one. Great opportunity exists for an uplift in complexity of planting and habitat creation.

Specification aims

Proposed palettes will be biased towards UK native species wherever possible as it is known that these species offer superior support to wildlife species. Landscape maintenance processes should be developed to consider promotion of wildlife-friendly management approaches with limited uses of pesticides and other COSHH chemicals.

Ecological enhancements

New types of planting will include a complexity of trees, hedge planting, rain gardens, meadow, bulb layering and planting inspired by native woodlands. Plants which produce nectar throughout the year will be incorporated with a framework of shrubs that will offer nesting, foraging and commuting for bird species.

Aside from planting types, other ecological enhancements will include bird boxes, bat boxes and elements of natural timber for wildlife to colonise.

Across the wider masterplan above ground level, opportunities to exploit roof level habitat have been sought with extensive areas of brown roof proposed on buildings 1 to 4 with habitat features including sandy piles, logs and dished areas to temporarily collect rainwater.

Mitigation of lighting on Bat population

Technical design proposals for lighting will be developed in consultation with an ecologist to ensure that design avoids lighting on the bat boxes and minimises light levels in areas where they are positioned. Lighting design will be developed in accordance with the relevant guidance, reducing skyglow, using warm lighting and maximising the value of proposed landscape design for roosting, foraging and commuting bats.



Figures 01-02: Existing estate spaces

Figures 03-04: Landscape design will support species such as bats and threatened bird populations

Figure 05: Habitat structures should be incorporated into planting in appropriate locations

Figure 06: Brown roof areas

Figures 07-12: Species and habitat types that may be supported by the proposed landscape treatments



Key proposals relating to ecology and biodiversity

- The landscape design proposals should inherently enhance the habitat complexity and biodiversity supported by the existing site.
- Development is to consider surrounding green infrastructure with a view to link with existing wildlife corridors - or to create new ones.
- The incorporation of green roofs, planted walls and features that would enhance the habitat biodiversity levels are to be incorporated where practicable.
- Planting palettes should consider a bias towards native and semi-native shrub and herbaceous planting which is well suited to UK climate.
- Habitat structures such as bat and bird boxes should be promoted with locations devised by a suitably qualified ecologist and co-ordinated with landscape/architectural design (reference Environmental Impact Assessment drawings).
- Lighting design must consider promoting wildlife benefit and mitigate impact of light on bats.
- The management and maintenance across new public realm spaces should be coordinated. Regimes for soft and hard-landscape maintenance should be devised to complement objectives for biodiversity.
- Buildings 1 to 4 will include brown roof areas with habitat elements including log piles, sand mounds, coir rope, large stones and small dished areas for rainfall to collect and ultimately evaporate.

Justification

- To support the London Biodiversity Action Plan and mitigate the effects of climate change and the national decline of biodiversity.
- To create public realm spaces that promote the health and well-being of residents.

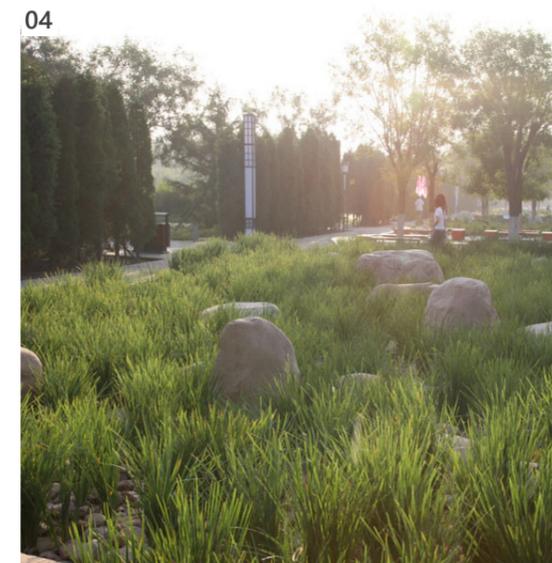
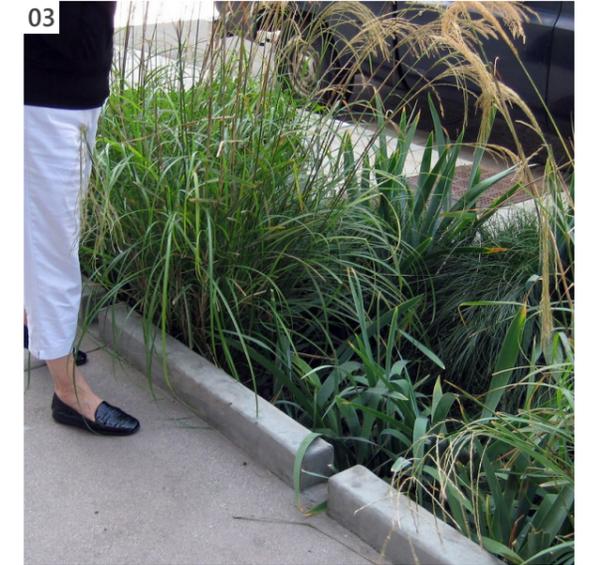
5.15 SUSTAINABLE URBAN DRAINAGE STRATEGY (SUDS)

General SUDs principles

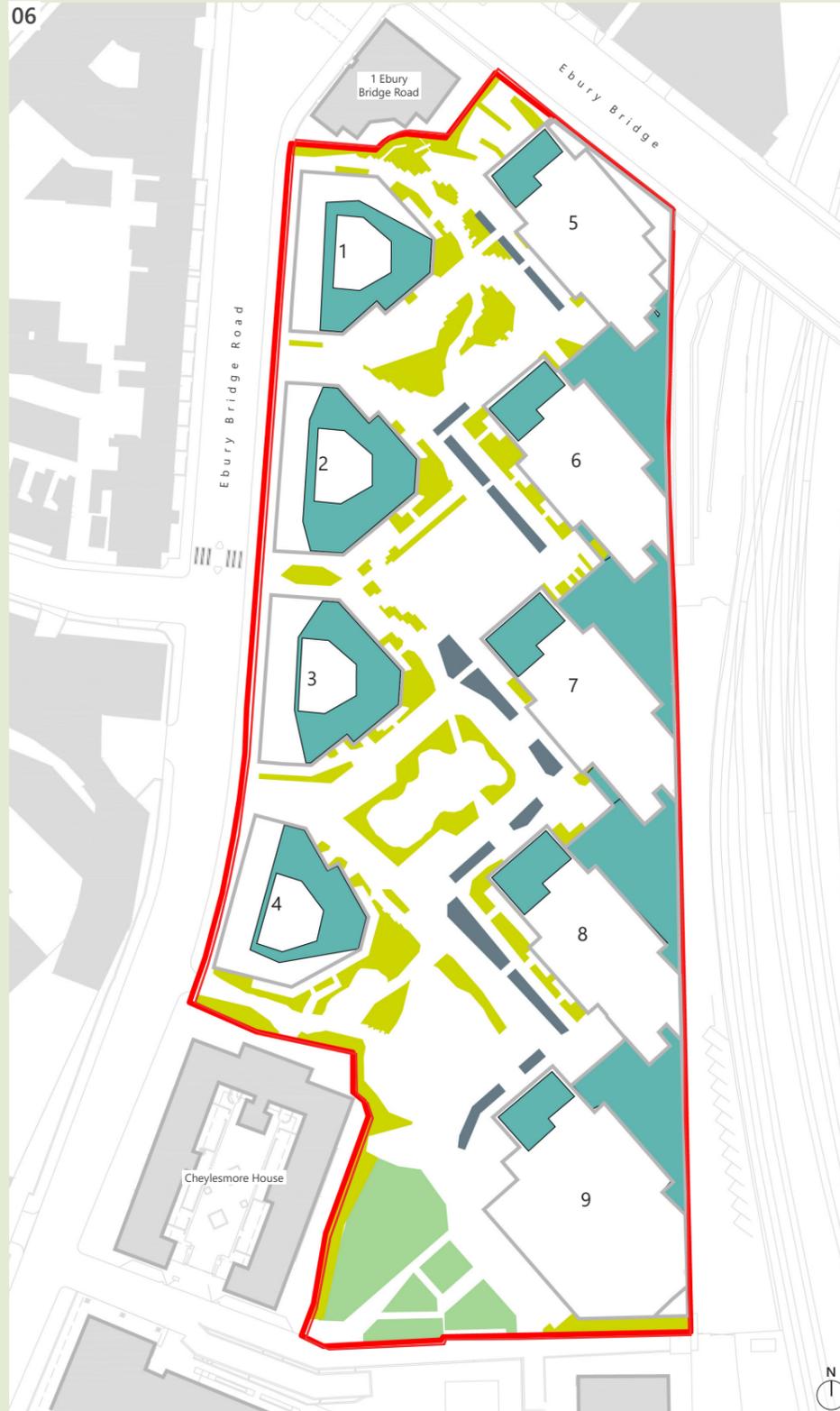
The proposal for sustainable urban drainage across the masterplan includes a linked system that will function effectively across the site. As well as employing large areas of permeable 'soft' planted where surface water will infiltrate, a series of raingardens are proposed to frame the pedestrian route running along buildings 5 to 9. Raingardens are long linear devices within the public realm where cut kerb lines to allow surface water to drain into planting which is design to tolerate ephemerally wet and dry conditions. Planting will be irrigated by surface water and excess water will ultimately be positively drained, slowing the passage of water into the conventional drainage system using a nature-based solution. Raingardens will be an attractive element of the public realm contributing to urban greening and natural biodiversity.

Blue roof cover will be a significant across buildings 1 to 9 and in addition to the tops of buildings, first floor podium terraces and roof terraces will employ blue roof attenuation build-ups.

SUDs proposals outside of the detailed application area will be subject to a reserved matters application.



Figures 01-03: Examples SUDs style planting
Figure 04: Playable landscape features
Figure 05: Timber playable features with habitat value
Figure 06: Proposed SUDs diagram (nts)



Key proposals relating to SUDs

- Rain gardens will form a ribbon running through the masterplan delineating the segregated pedestrian route from areas of vehicular movement.
- SUDs design is to integrate biodiverse planting and trees of species suitable to tolerate the ground conditions.
- Playable landscape features will be layered through the rain gardens with features such as stepping stones, natural stone boulders and raised stepping kerbs edges. Timber features will be designed to also offer habitat value.
- Areas of 'blue roof' for water attenuation will feature on buildings 1 to 9.

Justification

- To support the London Biodiversity Action Plan and mitigate the effects of climate change and the national decline of biodiversity.
- To create public realm spaces that promote the health and well-being of residents.

5.16 TREE STRATEGY

Existing trees to be retained

A survey of existing trees undertaken in accordance with BS 5837:2012 and is available as part of this planning submission. This report identifies 32 existing trees and six groups of trees. A previous planning consent for demolition of part of the Ebury Bridge Estate (19/06951/APAD) included the removal of approximately 32% of the existing trees, the majority of which were identified as being Category B in condition.

The current proposal seeks to retain six of the existing trees - 5no. Category B trees and 1no. Category C. An existing Category A tree within the site (Caucasian Wingnut) is proposed for replacement due to the constrained nature of it's location within the development masterplan. Whilst being of a high quality within it's current setting, the tree has a low canopy spread and suckering growth and it is situated in a location which requires new paving to support vehicular access. The retention of the tree is not feasible and instead a mitigation strategy for it's removal is proposed. Existing trees to be retained will be protected in line with BS 5837:2012 and all future detailing of proposals with potential to impact existing trees should be completed with the input of an arboriculturalist.

New tree planting

The new masterplan provides an opportunity to implement a wholesale new strategy which will ensure tree cover 50+years into the future. The intended framework will focus on 'right plant, right place' principles with sound consideration to space available for future above ground canopy and below ground rooting zones. Tree planting should achieve an overall increase with approximately 229no. new trees anticipated.

Trees will typically be planted into 'soft' areas without the need for intensive tree pits under-sailing paving, excepting the three 'anchor' trees proposed for the Community Hub square. All trees will have irrigation pipes and underground guying with adequate drainage provision. Where over basement slabs, raised edges to planted areas will ensure adequate soil depths. Trees will typically be sized 18-20cm girth at the time of planting with few instances of sizes below this within the public realm to avoid vandalism. There will be limited locations in which new trees will be sized over 18-20cm at planting though the trio of 'anchor' trees proposed for the Community Hub square may be appropriate for planting at a larger size. The wind tunnel studies completed to date do not indicate a need for enhanced planting sizes in any locations.

New tree planting falls into nine broad categories as shown within figure 08. This ensures an appropriate complexity of trees that will achieve large canopy cover, wildlife interest, wayfinding, shading/cooling in summer, seasonal interest, a backdrop to proposed public realm spaces and buffering to private/semi-private spaces. Detailed design should involve further review of species with thrive within the Borough, in line with WCC Tree Officer comment. The palette will be biased towards deciduous trees with a limited range of evergreen specimens. All trees should be planted outside of summer months as rootballed or airpotted stock.

Gateway trees to the north and south will be flowering and medium in size with a form that will offer an appropriate level of consistency for these high-profile locations. Gateway trees to Ebury Bridge Road will be upright and suitable for 'street' settings in a medium size. Proposed trees within podiums and residential private curtilages will be small in scale with strong seasonal interest and a form that is either half-standard or multi-stemmed. The trio of 'anchor' trees to the Community Hub square will be an opportunity for large canopied trees which will hold the space outside of event times.

	Existing trees/groups	Existing trees/groups replaced	Existing trees retained
Category A	1	1	0
Category B	20	15	5
Category C	11	10	1
Total	32	26	6

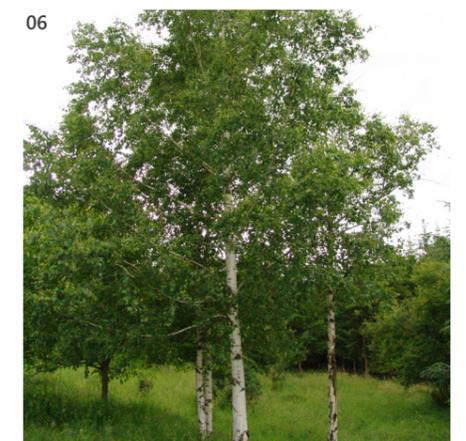
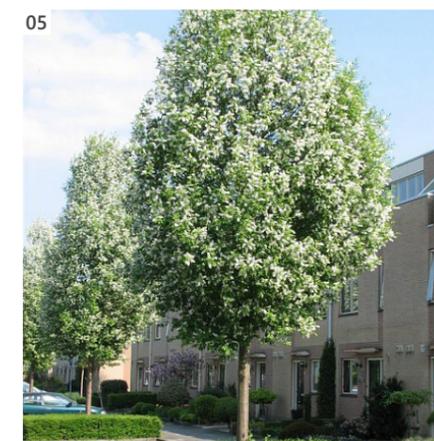
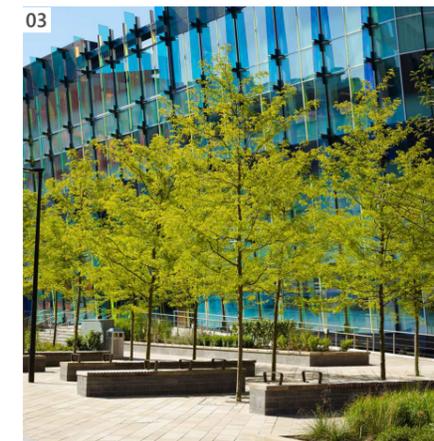


Figure 01: Trees with striking flowers

Figure 02: Trees for autumnal colour

Figure 03: Large species trees within civic spaces

Figure 04: Flowering trees to aid wayfinding

Figure 05: Upright trees which have a compact form alongside buildings

Figure 06: Native tree species

Figure 07: Table to show existing tree removals & retentions on site

Figure 08: Tree strategy diagram



Key

- Existing trees to be retained (see Arboricultural Survey to BS 5837:2012 for trees within redline)
- Proposed trees within podiums, terraces and residential private curtilages
- Proposed trees within rain gardens
- Proposed trees to Ebury Bridge Road gateways
- Proposed trees to northern & southern gateways
- Trio of 'anchor' trees to Community Hub square (with intensive tree pit construction)
- Feature standing tree to public squares
- Proposed medium/large trees to public squares
- Proposed small/medium trees to public squares
- Buffer trees to Cheylesmore House boundary

Key proposals relating to trees

- The palette will be biased towards deciduous trees with a limited range of evergreen specimens and drop fruit should be avoided over public realm spaces.
- In detailed design the locations of trees against building lines should reflect the ultimate canopy size and the need to maintain a clear-zone around the building line of approximately 2m. This will be delivered through a detailed Management and Maintenance strategy.
- Proposed tree locations should avoid clashes with lighting columns, utility inspection covers and balconies. Root barriers should be employed to isolate underground utilities from tree rooting spaces.
- Tree pit details should consider trees being planted into 'soft' with avoidance of intensive tree pit techniques unless strictly required.
- Tree planting should achieve an overall increase in quantum of trees across the estate with an emphasis on 'right plant, right place' principles. New tree sizes at planting within the public realm should typically be 18-20cm girth.
- Existing trees to be retained will be protected in line with BS 5837:2012, all detailing with potential to impact existing trees should be completed with the input of an arboriculturalist.
- Where tree planting is shown over basement slabs, raised edges to planted areas will ensure adequate soil depths (with adequate drainage provision) of approximately 1200mm within public realm spaces and a minimum of 700mm at first floor podium level.
- Detailing/specification will address the issue of soil/subsoil compaction post-construction for all soft/tree planting areas.
- Tree species should be selected with consideration to those included in previous phases to give structure and continuity where appropriate.

Justification

- To support the London Biodiversity Action Plan and mitigate the effects of climate change and the national decline of biodiversity.
- To create public realm spaces that promote the health and well-being of residents.
- To maintain consistency of approach across the masterplan.
- To promote legibility and wayfinding.

5.17 PLANTING STRATEGY

General planting specification aims

New planting will include a range of palettes designed to suit their location and purpose within each area of openspace. The character of public realm spaces will be greatly informed by planting in order to create a residential community with soft and verdant appearance.

Generally, planting will have a bent towards native and semi-native species that will fare well in the UK climate and will typically require a low level of maintenance. Trees with fruit-drop will be avoided near to areas of paving and hedging will require only 1-2 cuts per year. Planting which is excessively spiny is not envisaged for significant use in public realm areas and so litter will be less likely to attach to planting.

Evergreen and semi-evergreen plant species will run through most planting palettes to give year-round mass and scale, particularly where defensive treatments are concerned. Secure by Design principles will be incorporated into detailed design proposals to ensure clear sight-lines across the public realm and a general feeling of safety within all types of openspace. Trees will generally have a 2m clear-stem and planting will typically be maintained to 1m high.

Palettes are devised for both wildlife interest and the benefit of residents and visitors, with an emphasis on seasonal qualities through flower and leaf colour. Planting will complement and reinforce playspace and augment sensory value of the public realm around seating and within above ground amenity spaces.

Planting complexity

Compared with the existing estate condition a wholesale new approach to planting is proposed with a significant qualitative and quantitative uplift. Where existing mown grass predominated at present, new planting will include a complexity of trees, hedges, rain gardens, flower-rich perennials, shrubs, bulbs and areas of productive food growing opportunities. The 'towpath' character area informs planting inspired by native woodlands with a variety of trees and low-level under-planting.

Planting complexity will be balanced with a need to provide planting arrangements which reflect the level of available maintenance. A structure of shrub planting will give structure to planted areas for robustness whilst also reducing the maintenance burden. The balance between shrub and herbaceous areas will vary between areas depending on footfall expected and the defensive treatments involved. Planted areas will be layered with spring flowering bulbs to give additional complexity and wildlife value as well as prominent seasonal displays.

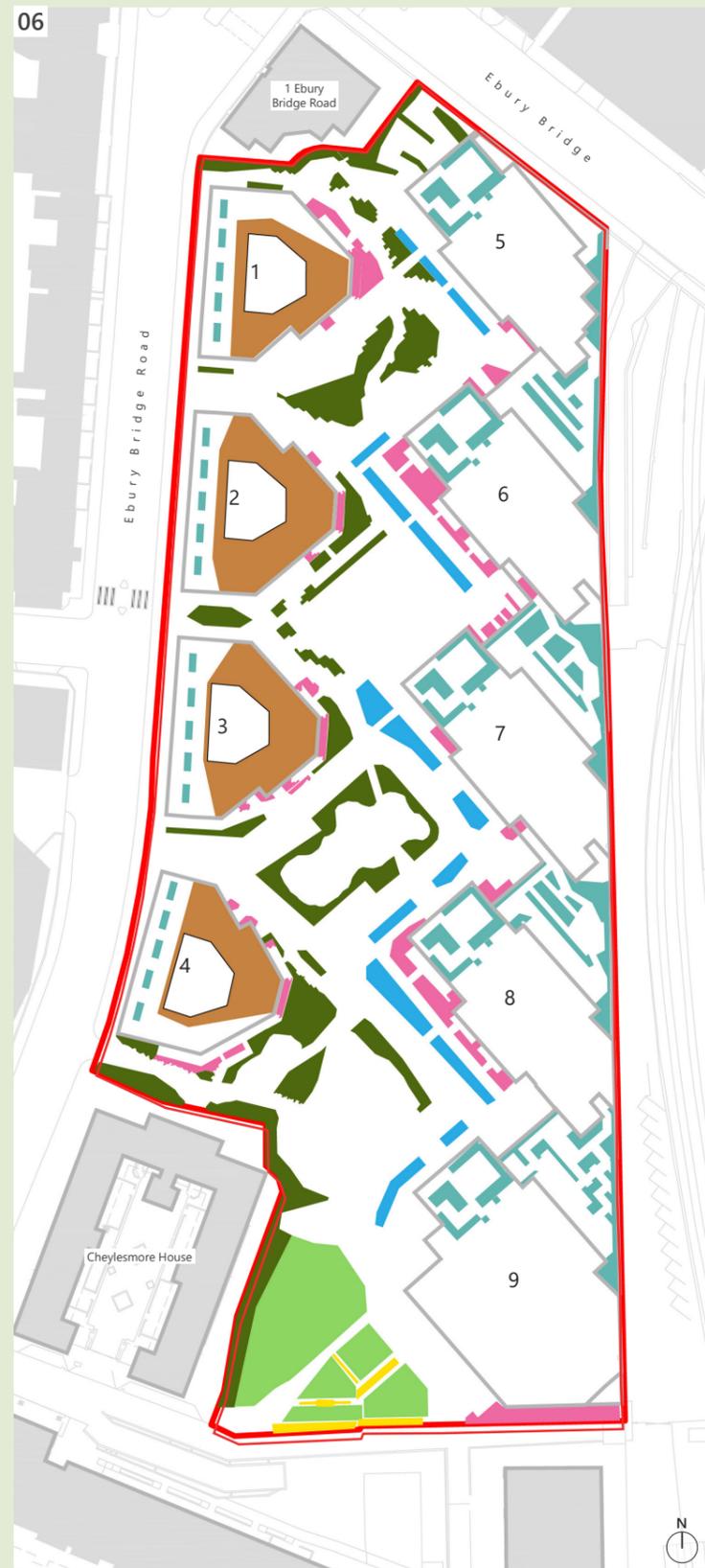
A framework with elements of consistency

Planting across the masterplan is expected to have an element of variation between implementation phases, although the principles of planting should accord with figure 01 adjacent. Colour palettes must be particularly well considered to ensure proposals complement architectural facade colours and so plant colours sit well against each other.

A review of completed planting should take place before further palettes are devised to ensure successes are fed back along with species which may have thrived less within completed areas.



Figure 01: Precedents for woodland style planting
 Figures 02: Precedents for raingarden style planting
 Figure 03: Precedents for sunny aspect planting
 Figure 04: Precedents for defensive planting/private amenity
 Figure 05: Precedents for above ground planting
 Figure 06: Planting strategy diagram (nts)



Key planting characteristics

- High quality planting design will inform the character of all public realm spaces, following the 'canal' and 'towpath' characters described.
- Planting described within the strategy diagram will consider aspect and available sunlight levels as well as expected footfall levels, proximity of play and the need to reinforce residential boundaries.
- Palettes will ensure a balance of shrub and herbaceous planting with a structure of evergreen species.
- Planting to outline masterplan areas within the strategy diagram will be devised having reviewed the successful species of the completed detailed application area.
- Native and semi-native species will lead proposed planting palettes.
- Spring bulbs will be over-planted to all areas of planting including lawns.
- Areas of lawn will be implemented as high quality turf.
- Edibles and areas of productive growing will be included within podium spaces and roof terraces on Buildings 1-4.

Justification

- To support the London Biodiversity Action Plan and mitigate the effects of climate change and the national decline of biodiversity.
- To create public realm spaces that promote the health and well-being of residents.
- To maintain consistency of approach across the masterplan.
- To create a high quality and enduring public realm space.
- To reduce burden of maintenance, ensure plants thrive within the UK climate and to avoid the need for formal irrigation systems.

	Key
Woodland style planting	
Rain garden planting	
Defensive and private amenity planting	
Above ground planting (with productive food growing to first floor podiums)	
Sunny aspect planting	
Brown roof planting	
Lawn with bulb planting	

Opposite: Illustrative view of the public space at the south of the site, looking north. The proposed design improves the connectivity with Grosvenor Waterside estate and creates a fantastic place where the community and public can gather and spend time in nature





06

**DETAILED AREA:
DESIGN PROPOSALS**

6.01 DETAILED AREA: SCHEME SUMMARY

This section explains the character and architectural quality of buildings 7 and 8 as part of the detailed planning application. This first stage of development will set the benchmark for the exemplar estate renewal. The two buildings will re-house the majority of the returning residents and so will set the tone for quality, performance and comfort. The mix of homes types and tenure are set out in the adjacent summary table.

The building will deliver on sustainable goals through:

- sustainable, low carbon design
- high building fabric efficiency for optimal energy performance
- use of heat pumps for energy supply
- mechanical ventilation with heat recovery
- consideration of off-site construction accounting for carbon emissions
- specification of renewable or recycled materials

Further detail of access and logistics is presented in section 7 highlighting the adaptability of the scheme in provision accessible adaptation for residents.

The landscape square shared by building 7 and 8, explained within section 8, is included as part of the detailed application. The landscape supports the architecture and character in defining new public spaces which will set the precedent for quality in the continuing development of the master plan and outline application.

Detailed area: Location

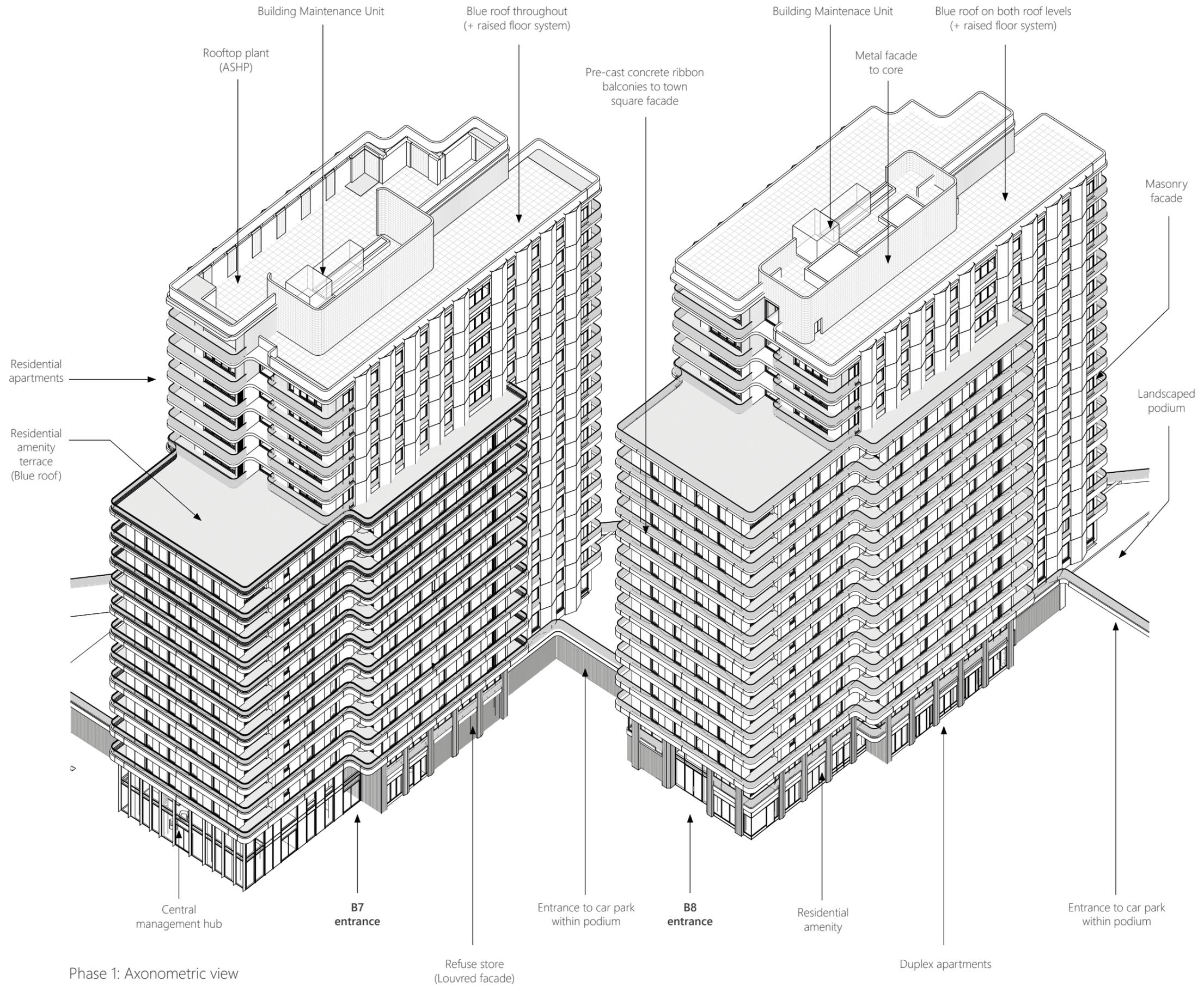
Plan below shows detailed area scope in relation to the proposed masterplan. For further information on outline masterplan, please refer to chapters 4 and 5 of this report



- Detailed area buildings 7 and 8
- Landscape and podiums (Please refer to Chapter 8: Landscape for more information)

Scheme area and mix

Tenure split:	1b1p	1b2p	2 bed	3 bed	4 bed	5 bed	total homes	hab rooms	
Social		15	46	30	6	1	98	324	
Intermediate		24	17	3			44	111	
Market		29	37	18			84	241	
Detailed application total:	0	68	100	51	6	1	226	676	
<i>Detailed application mix by percentage</i>	<i>0.0%</i>	<i>30.1%</i>	<i>44.2%</i>	<i>22.6%</i>	<i>2.7%</i>	<i>0.4%</i>			
Affordable homes								63%	
Family homes								26%	
Density: site area 0.45ha								502 units/ha	
								1502 hab room/ha	
NIA (residential)								16620 sqm	
GIA (residential)								24682 sqm	



Phase 1: Axonometric view

6.02 SETTING OUT

- The buildings have been set out on the site in an orientation that increases the amount of daylight that enters the site
- Orientation has also been designed so that generous town squares are formed between groups of 4 buildings, while not compromising the density of the homes on the site.
- The boundary with the railway service road to the east has been a key consideration. Façades on this edge are stepped, to allow more generous zones in front of the façades for maintenance and cleaning access
- Separation between buildings has been kept at 14m, to mitigate the impact of overlooking between apartments. Buildings have also been stepped in plan so that the windows look past each other rather than being directly opposite

Floorplates and building form

- Building form has been designed to create a narrow end elevation, and to ensure all flats have dual aspect living
- 8 units per core as a maximum, with minimum circulation routes from lift to apartment front door

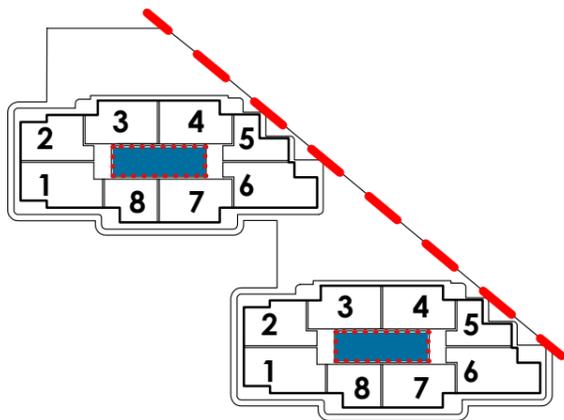
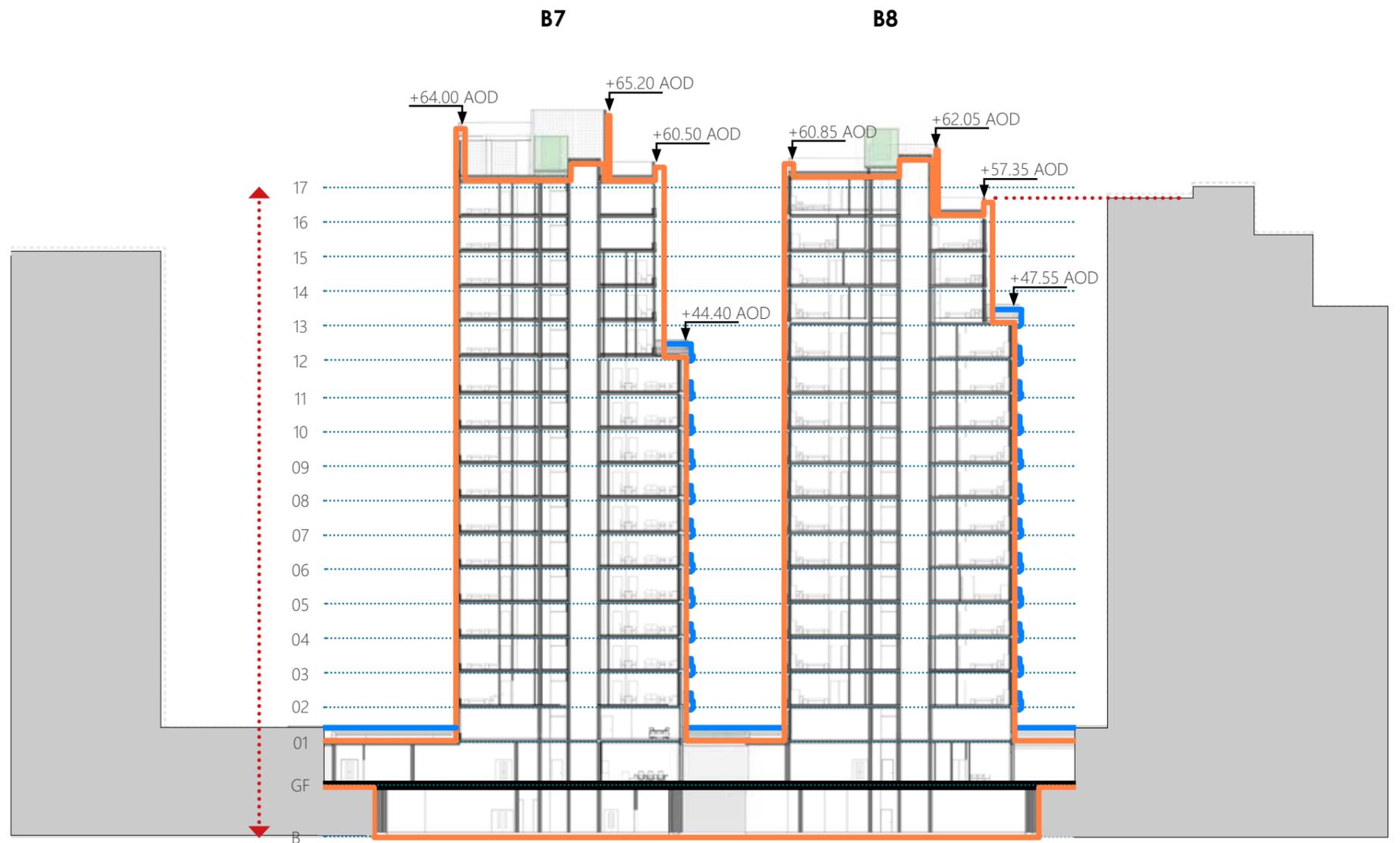


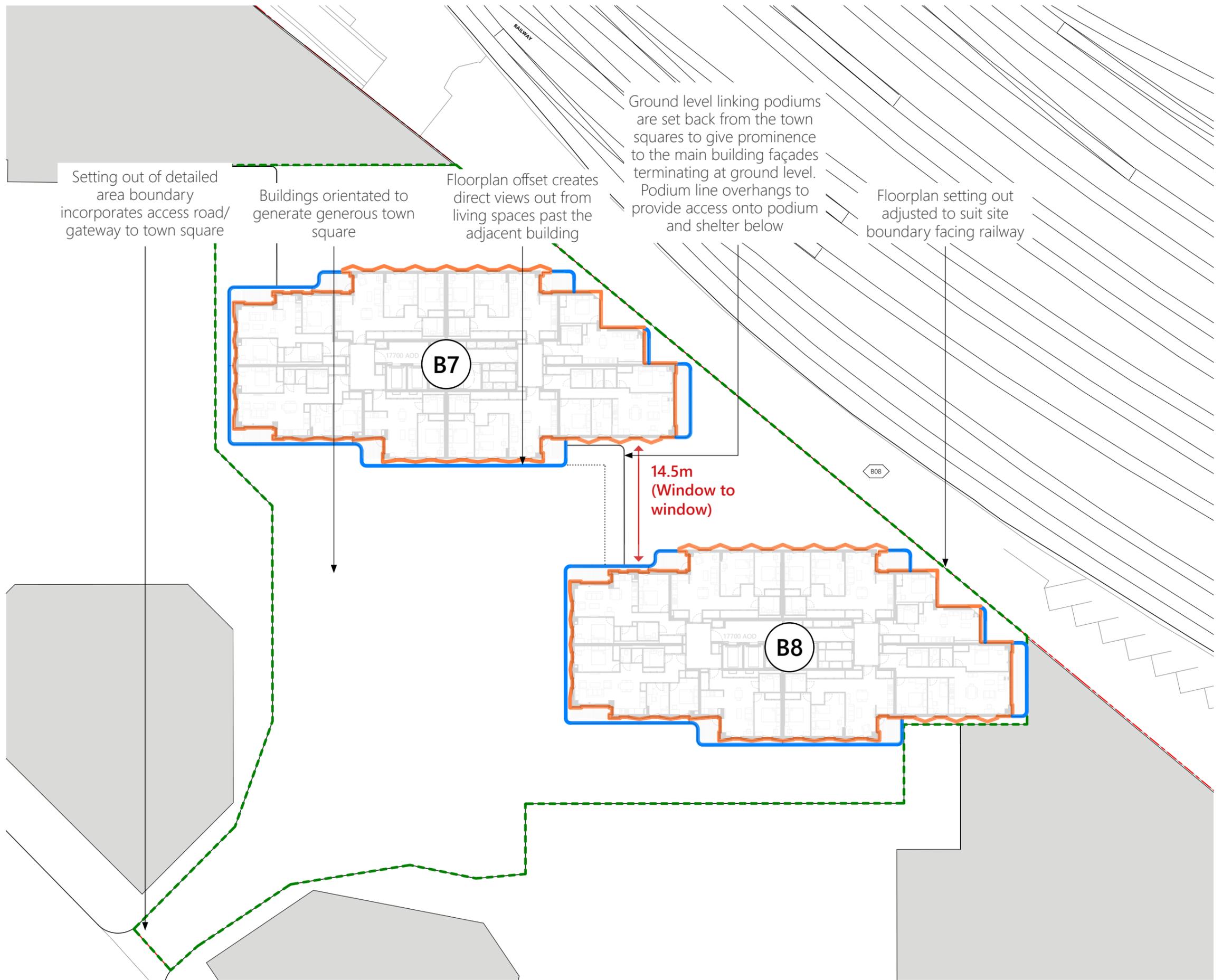
Diagram above showing 8 units per core arrangement on typical floorplates

The following drawings illustrate the building setting out in both plan and section.



North south section showing key heights

- Building outline
- Balcony outline



Setting out of detailed area boundary incorporates access road/gateway to town square

Buildings orientated to generate generous town square

Floorplan offset creates direct views out from living spaces past the adjacent building

Ground level linking podiums are set back from the town squares to give prominence to the main building façades terminating at ground level. Podium line overhangs to provide access onto podium and shelter below

Floorplan setting out adjusted to suit site boundary facing railway

B7

B8

14.5m
(Window to window)

Setting out plan

6.03 BUILDING ORGANISATION

In section, the proposal comprises

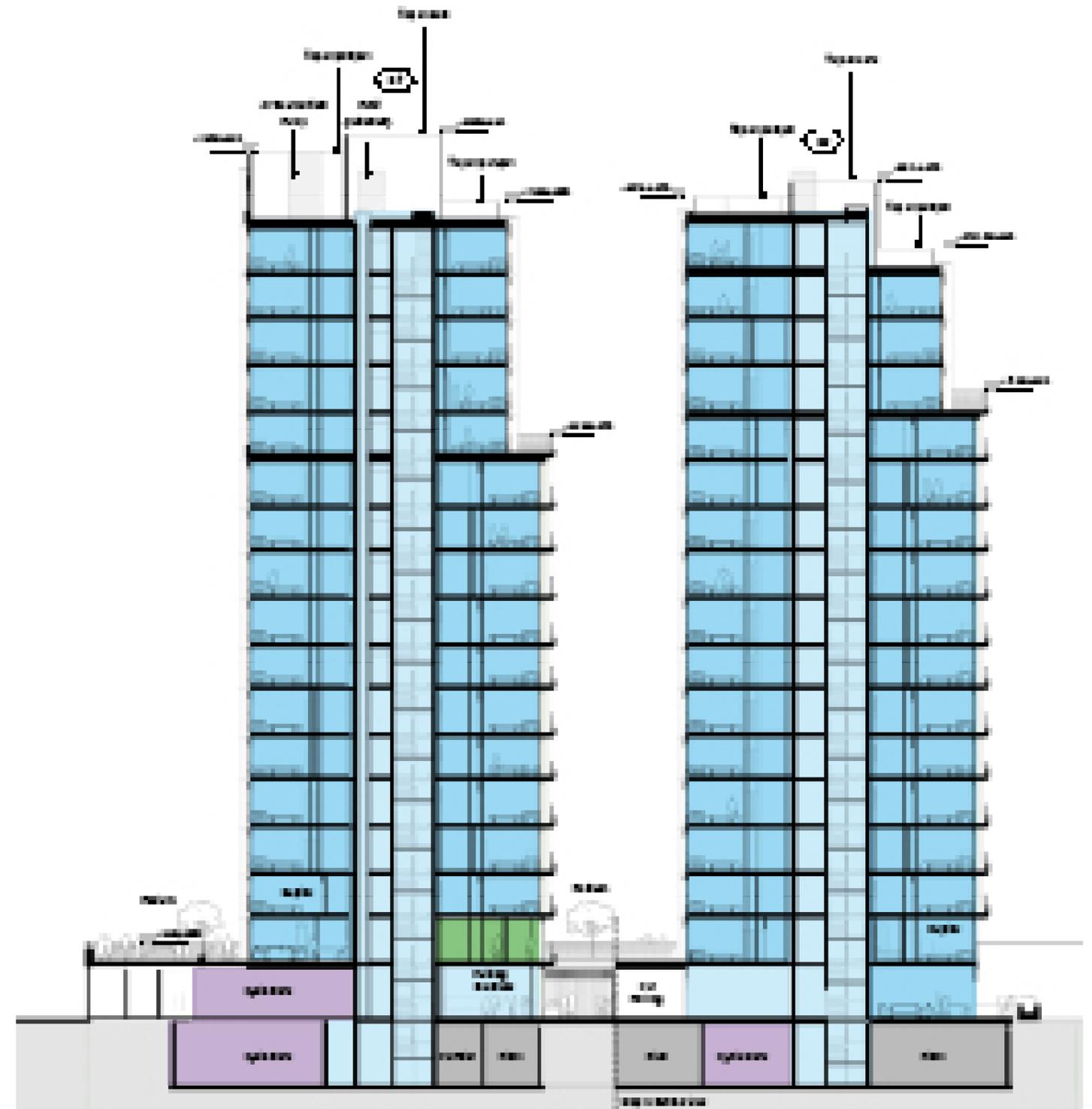
- 16 residential levels
- Resident communal amenity at mid-level terraces
- Plant at roof (B7), ground and basement
- Ancillary residential uses such as an estate management hub and flexible amenity rooms at ground and first floor
- Refuse store and cycle parking
- Car parking at grade under a landscape podium, which is single storey and links the two buildings at the rear of the plan

Residential uses:

- Residential apartments
- Entrances / lobbies / circulation
- Refuse and cycle stores

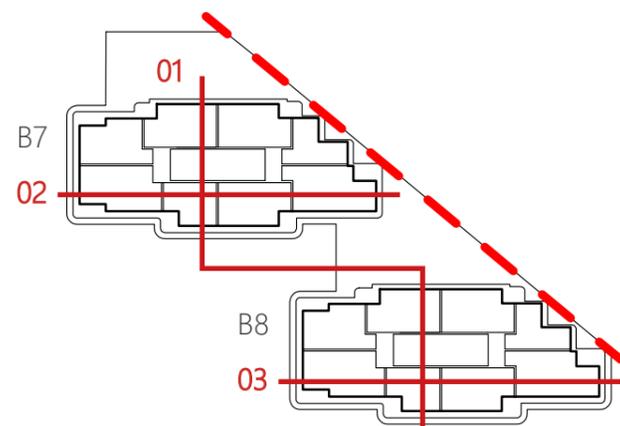
Ancillary:

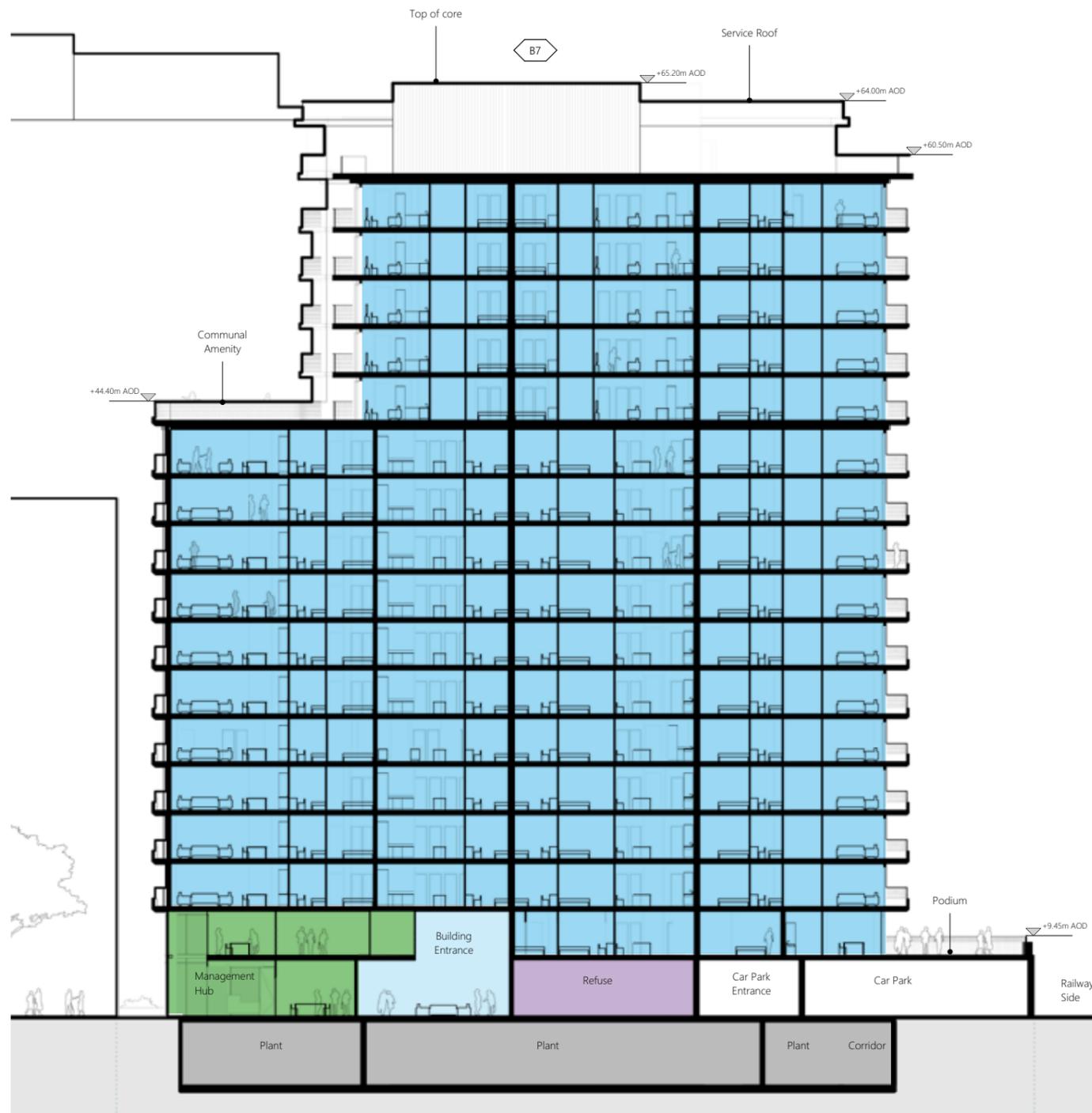
- Estate Management Hub
- Plant
- Car parking



01 Cross-section : Detailed area

Section location key





02 E-W section: Building 7



03 E-W section: Building 8

6.04 TYPICAL FLOORPLANS

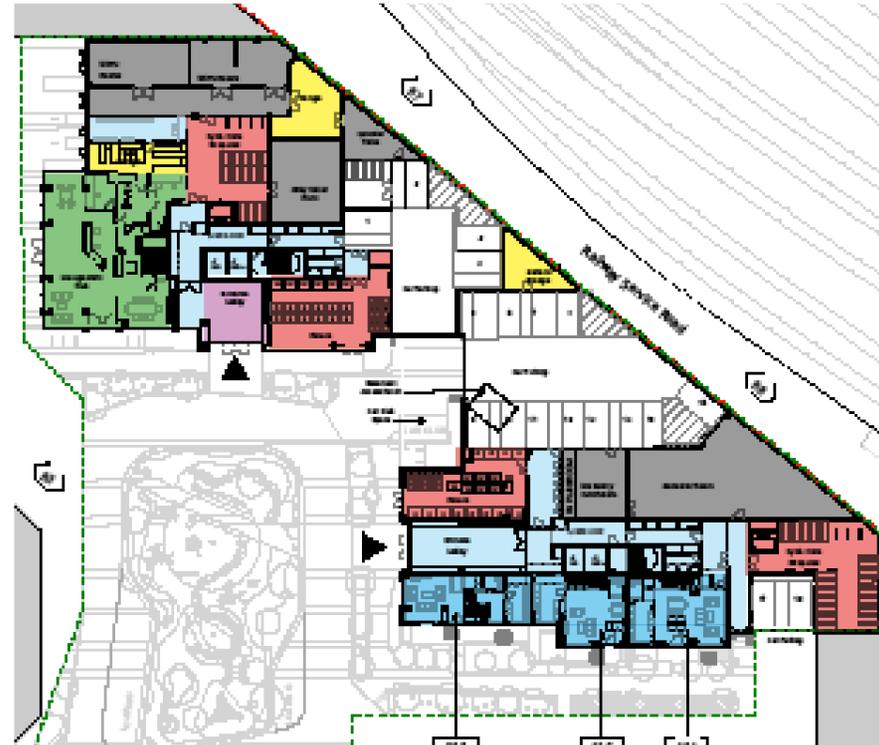
Podium and below

Basement plan



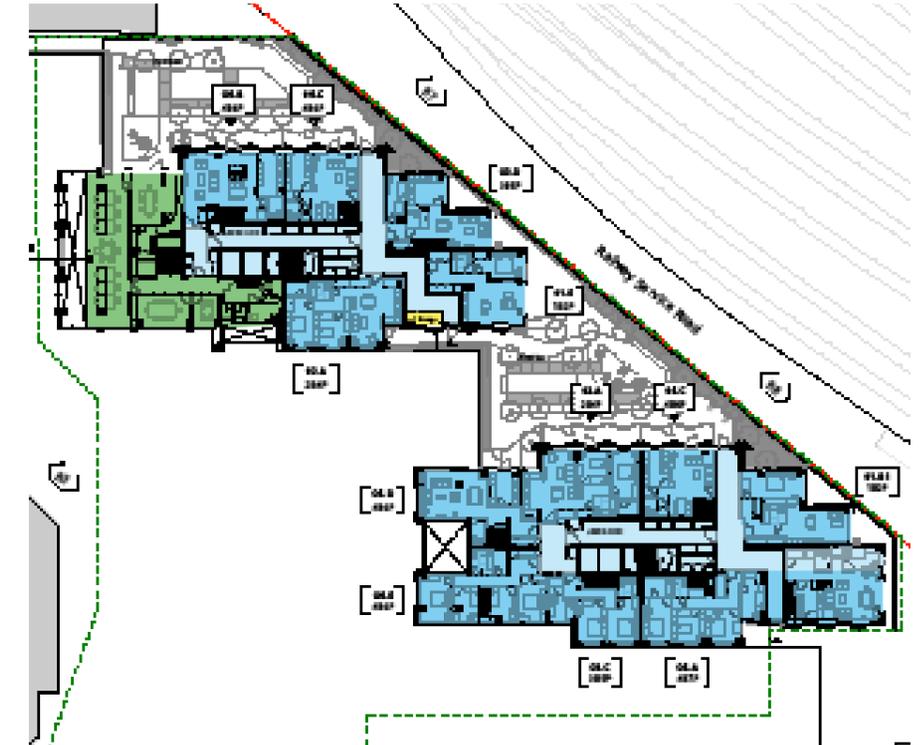
- Combined basement under both buildings
- Set back from railway-side boundary
- Plant and maintenance corridor, with access hatch connecting to B8 car park above for large plant replacement
- Residential cycle stores, with cores extending down to this level

Ground floor plan



- Building entrances and duplex homes facing landscaped public realm. Ancillary residential in Building 7 adjacent to entrance
- Vehicular access to car parking under podium
- Refuse and cycle stores
- Estate Management Hub in Building 7

Floor 01 (Podium level)



- Generally duplex homes with private amenity gardens
- Landscaped communal podiums, accessible by residents
- Estate Management Hub in Building 7

Residential uses

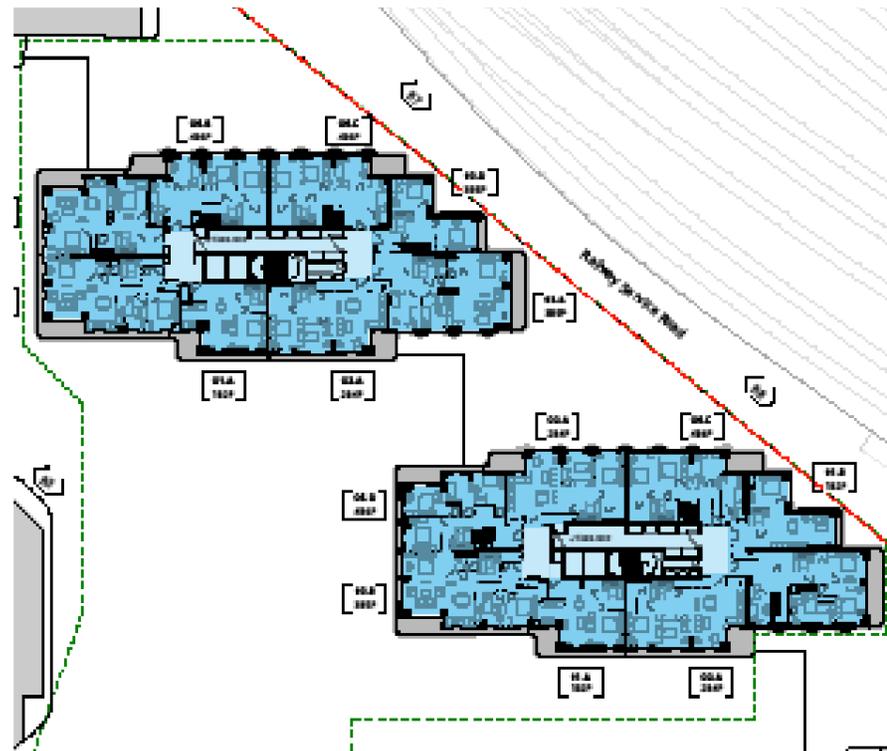
- Residential apartments
- Entrances / lobbies / circulation
- Ancillary residential

Ancillary

- Management Hub
- Refuse and cycle stores
- Storage
- Plant
- Car parking

Upper floor plans

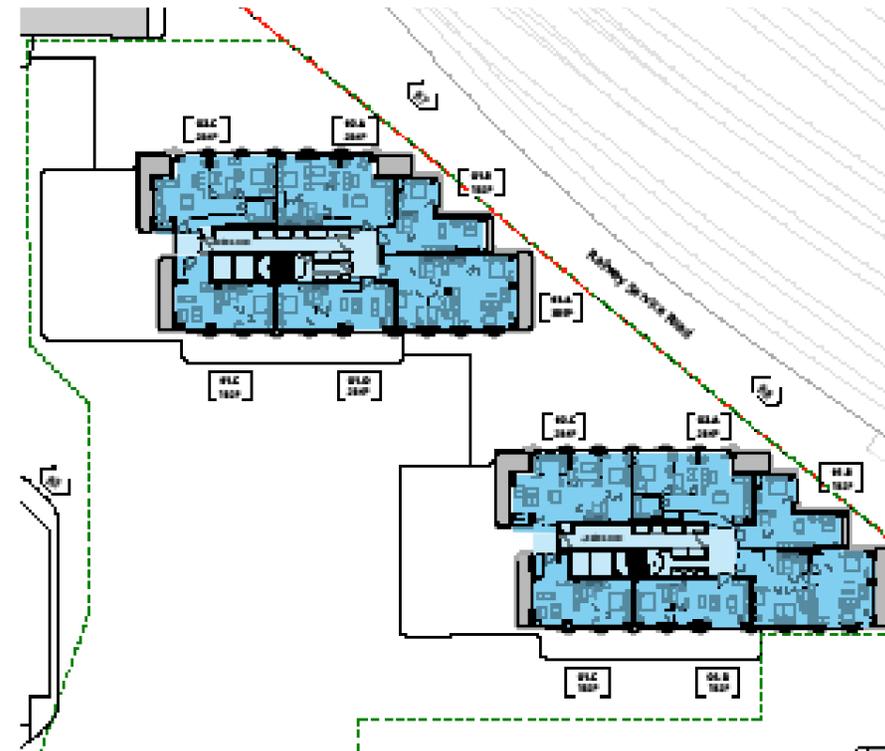
Typical residential floor: Lower



This typical residential floorplate applies to both buildings. Due to the stepped massing across the masterplan, this applies to different levels for each:

- Building 7: Floors 02 - 12
- Building 8: Floors 02 - 13

Typical residential floor: Upper



6.05 GROUND LEVEL

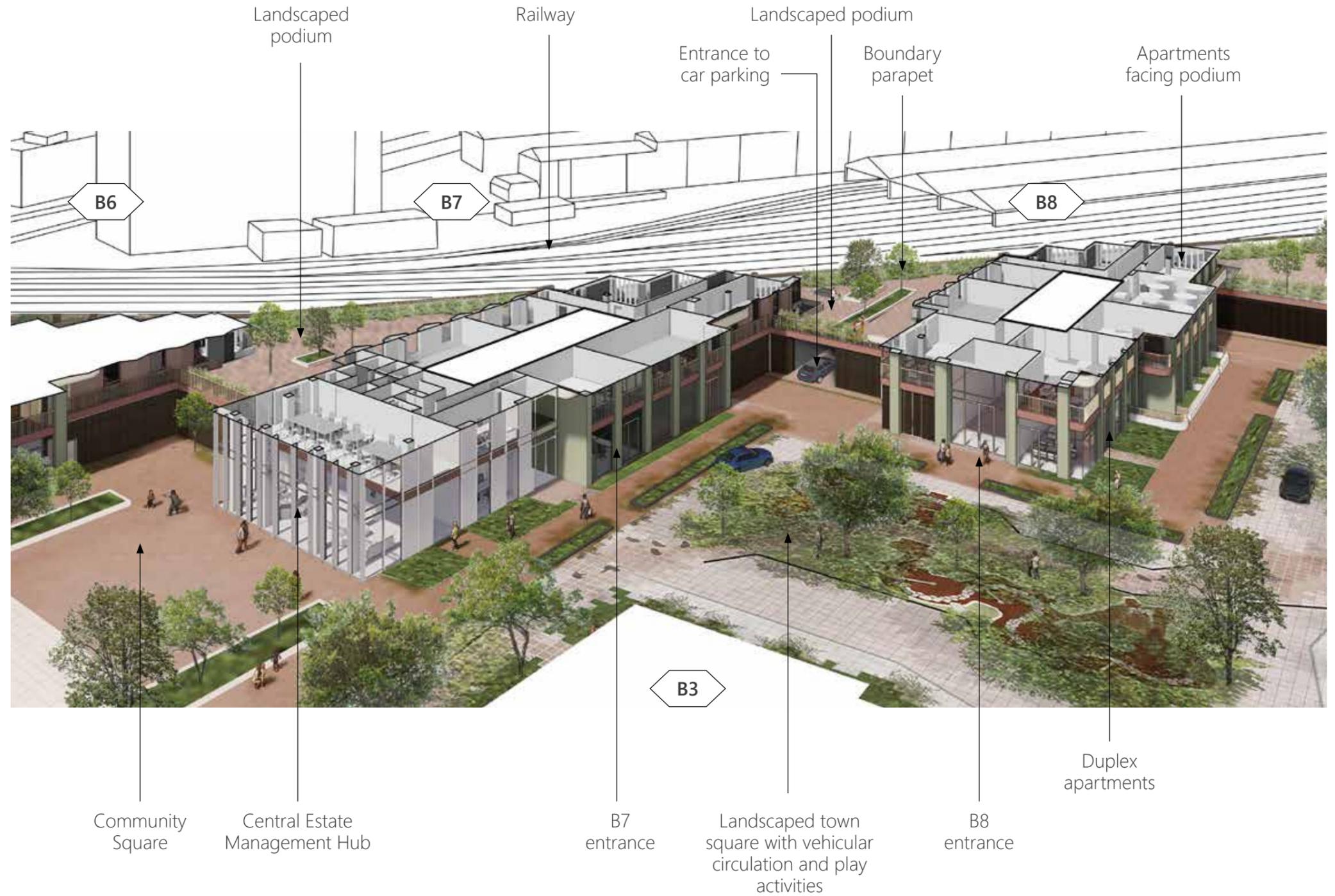
The proposed ground floor of both buildings are linked above ground by a single-storey podium under which car parking and some plant is located.

Generally, the approach has been to maximise the active frontage onto the landscaped public realm to the west. The most prominent functions are therefore Central Estate Management Hub, and the entrances and apartments on B8. The podium has been recessed in plan in order that the car parking entrances are less prominent visually.

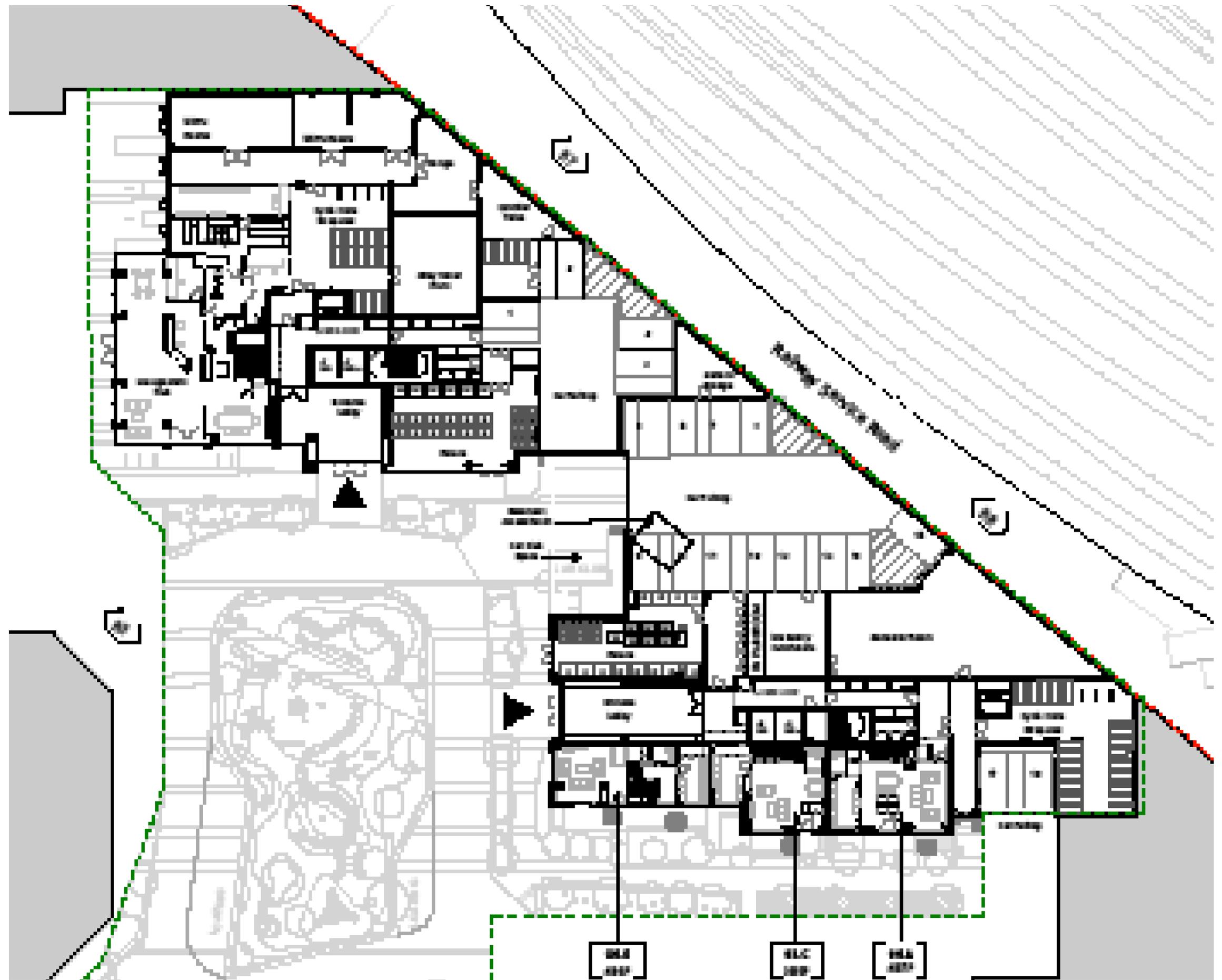
Key functions on ground floor include:

- Resident entrances
- Resident's flexible amenity space (B7)
- Refuse and cycle stores
- Car parking in podium undercroft
- Central Estate Management Hub
- Plant (inc generator and substations)
- Duplex apartments

The two buildings are also linked below ground by a basement, which accommodates plant and cycle stores. For more information see section 6.10



- Detailed area boundary
- Application site boundary



Ground floor plan

6.06 PODIUM LEVEL (FLOOR 01)

At first floor level, the podiums are a green link between the two buildings, providing an area of sheltered resident external amenity and playspace, shared by residents of both adjacent buildings.

Generally, the podiums are hard-paved over a blue roof system, with raised planters and seating to introduce greenery, as well as being a wind-mitigation measure.

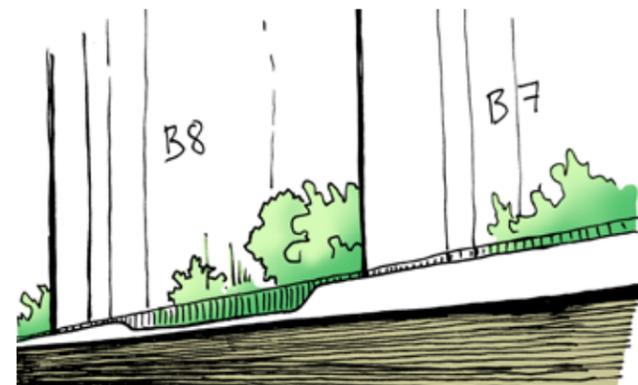
Within the buildings, the first floor generally has duplex apartments, with direct access out onto their own private gardens at podium level. The Central Estate Management Hub also has some accommodation at this level in B7 for the estate management team and staff break-out spaces



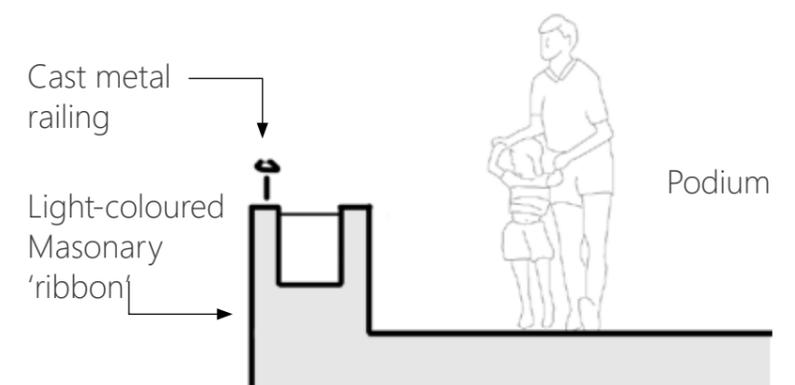
Illustrative view of podium, looking towards railing and parapet on the eastern boundary

Boundary parapet design

Sketches opposite show an illustrative design of the parapet boundary wall. The white masonry cladding creates a visual 'ribbon', which strengthens the composition of the buildings as they hit the ground, as well as matching with the materiality of the string-course and masonry elements on the façades above. The 'ribbon' element is narrower at podiums to allow better views out, while being higher to improve privacy to private gardens.

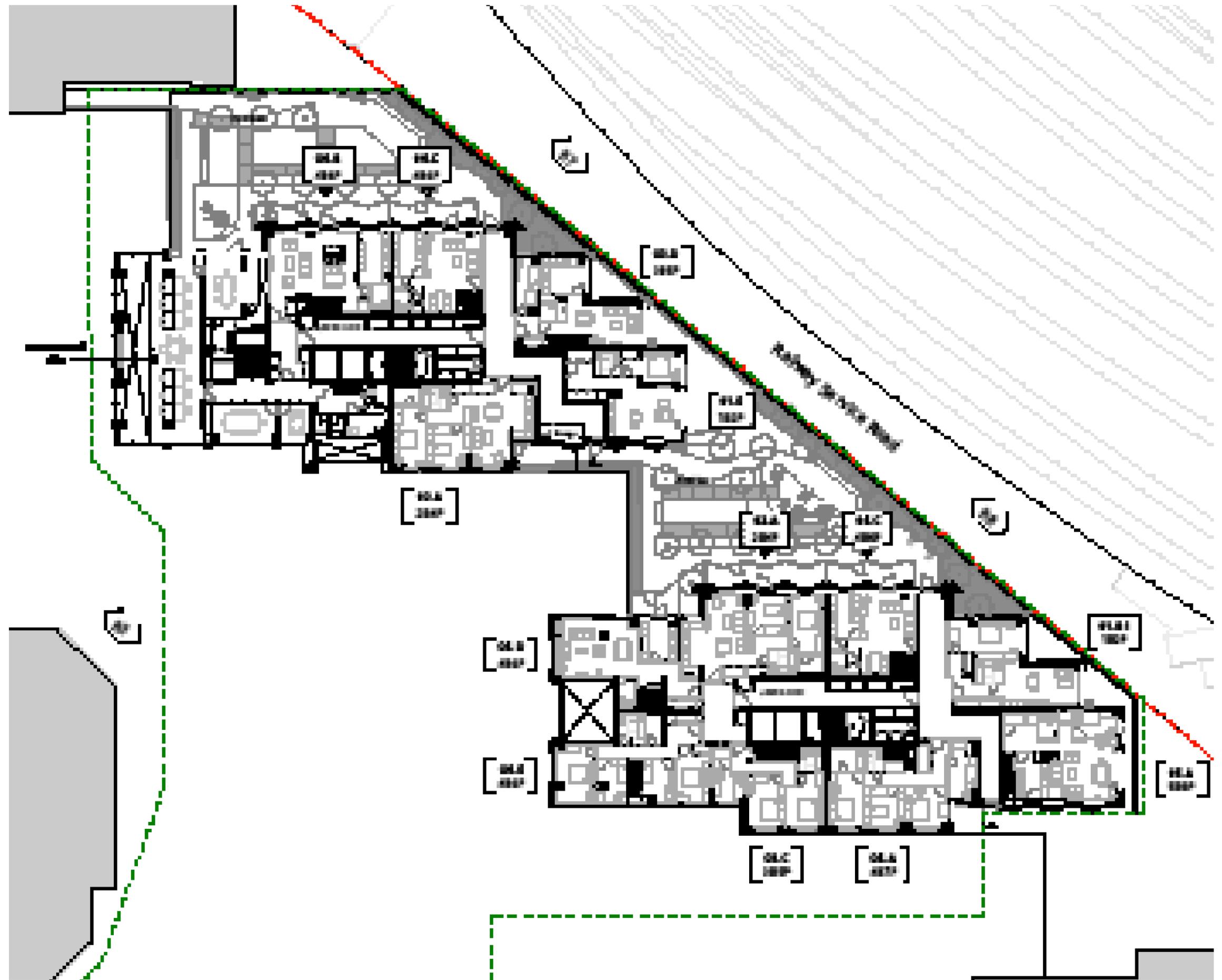


Perspective: The 'ribbon' element narrows when adjacent to podiums, to allow better views out



Section

- Detailed area boundary
- Application site boundary

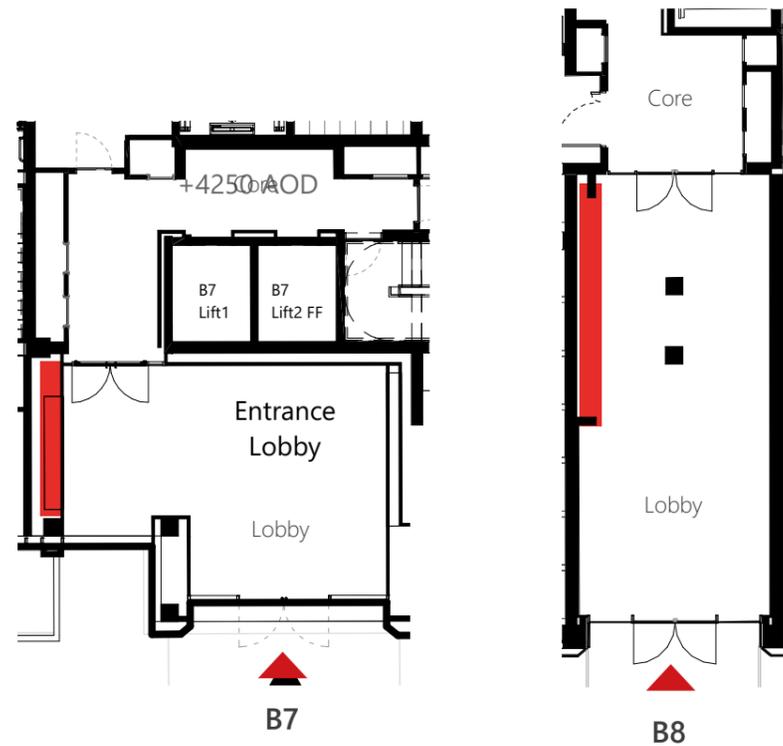


Floor 01 plan

6.07 RESIDENTIAL ENTRANCES

Layout and post

- Comfortably generous spaces
- Robust finishes and high quality materials
- Lobbies have two lines of defence, in line with security advice
- Provision for letters and parcel boxes within the first main door



■ Letter and parcels location

Reference: Integrated fire-rated parcel and post boxes:



Relationship with landscape and public art

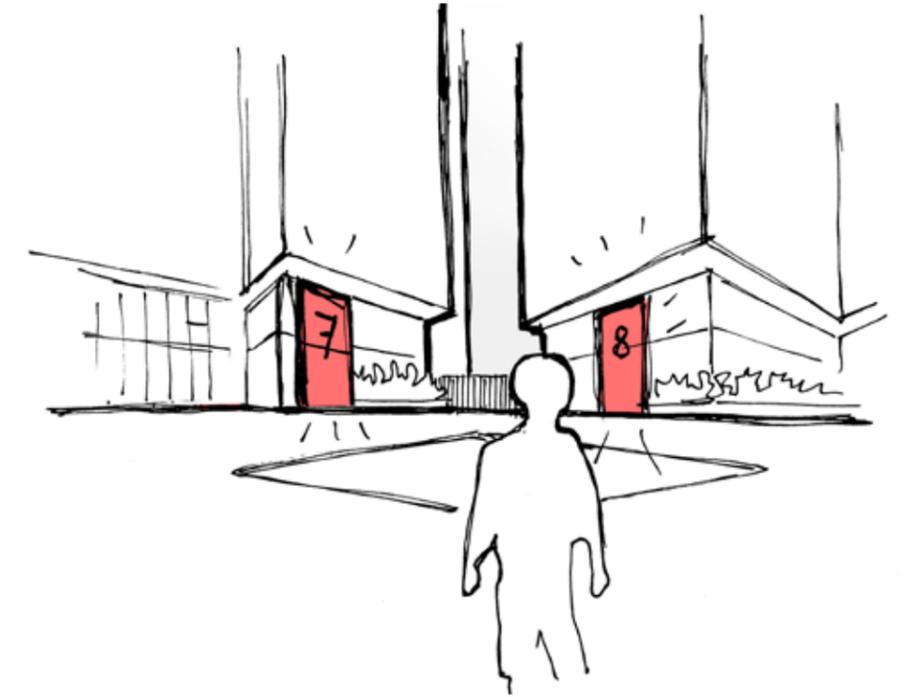
- Double height entrance framed by public art and landscape
- Opportunity for hard landscaping materials (below) and public art design (above) to run through into the lobby interior, providing a basis for lobby furniture design and other fitting



Note: Please refer to public art section in chapters 4 and 5, where the role and scope of public art in the scheme is described in more detail

Wayfinding and approach

- Both entrances are prominent and central on the building facades, helping wayfinding
- Lighting to entrances to be warm, welcoming and enable entrances to be clearly visible when approaching at night



Inclusive design

- For people who are vulnerable or hard of sight, clear and legible wayfinding is essential, particularly in a new environment, or where the public realm is shared with vehicular traffic
- The wayfinding, signage and lighting design will be developed in further detail with these considerations in mind
- The role of public art as a distinct feature in the building design and landscape, could also feature in any design solutions

Opposite: Illustrative view of residential entrance to Building 8, showing relationship with landscape and potential for public art



6.08 DUPLEX HOMES

Duplex apartments are proposed in both buildings, located at either ground level (facing town squares) or at first floor level (facing the landscaped podiums). This ensures all duplexes have access to private amenity gardens, which is important as they are generally family dwellings for 5 or more people.

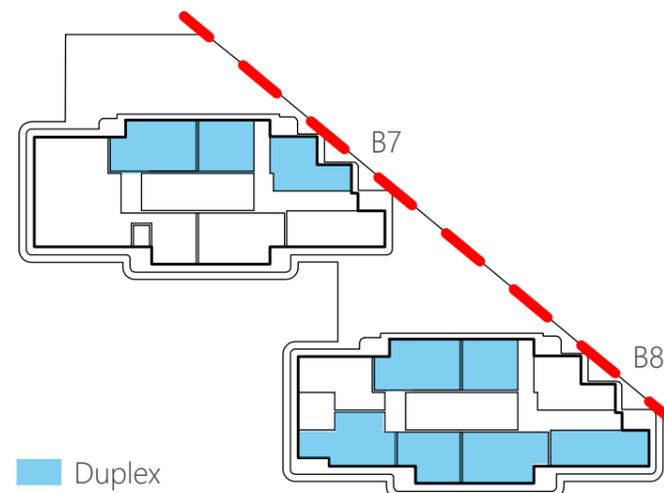
Duplex types in the scheme are as follows:

- 3 bed 5 person (Type 3D)
- 3 bed 5 person (Type 3E)
- 4 bed 7 person (Type 4A)
- 4 bed 6 person (Type 4B)
- 4 bed 6 person (Type 4C)
- 4 bed 6 person (Type 4D)
- 5 bed 8 person (Type 5A)

Privacy is a key design consideration for these apartments. Private amenity gardens have been designed with perimeter boundary walls and planters that help screen residents from passers-by, or activity in the adjacent public realm or shared podiums.

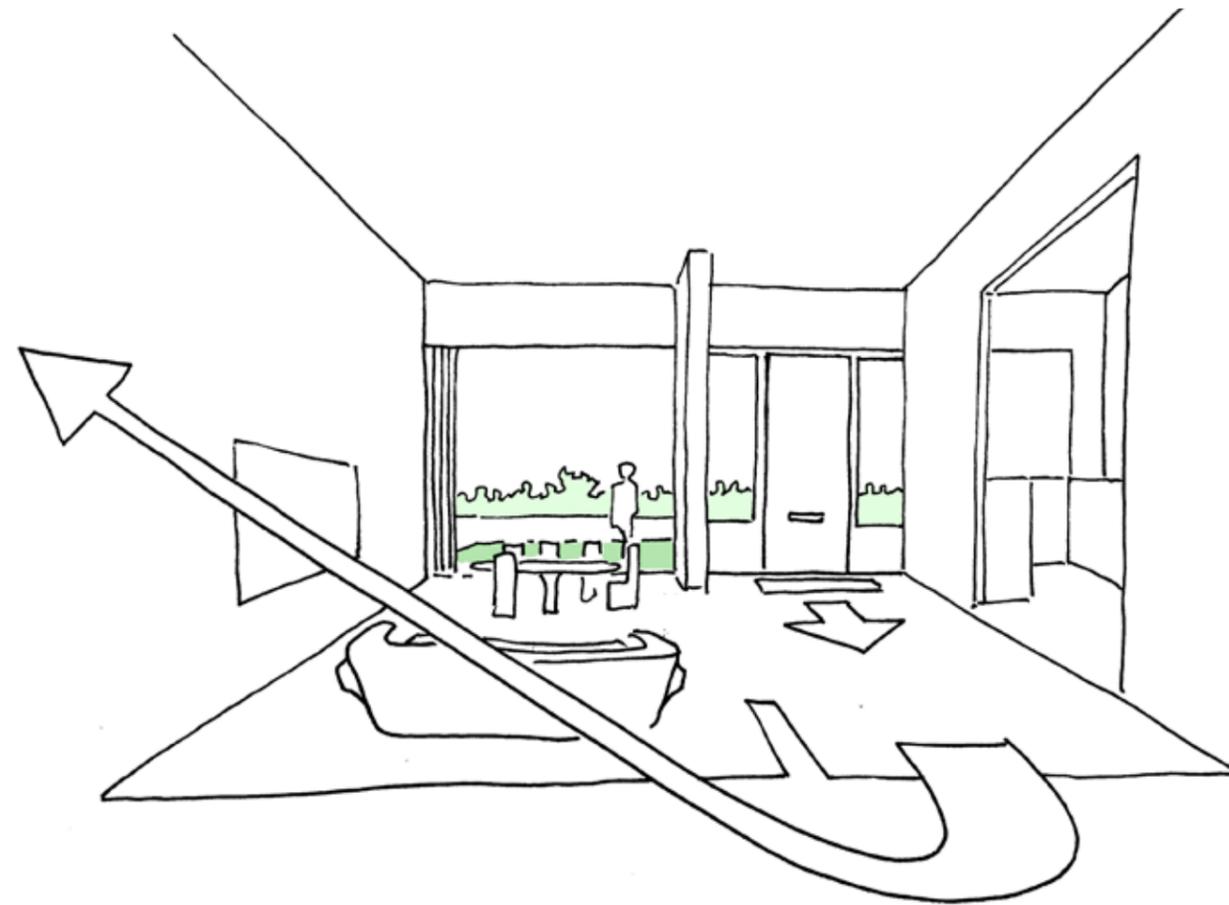
Location

The first floor key plan below highlights the location of duplex apartments in the scheme:



Internal space

- Generously sized living and dining area and high ceilings
- Front door opens into living space, with room for hallway to be partitioned off should the resident desire to do so
- Direct access to front garden via bifolding doors
- Level access
- Stairs to first floor located at rear of plan





Podium

Core

Town square

Car parking and plant

Basement plant

Illustrative section through ground and first floor, showing relationship between duplex homes and landscaped podium and town square

6.09 CENTRAL ESTATE MANAGEMENT HUB

Through workshops and input from Westminster City Council, SAY (Facilities management consultants) and the local authority planning department, a proposal for a centralised estate management facility has been devised. The hub will serve the whole Ebury Bridge Estate throughout all the phases of construction and for the life-time of the buildings. Staff in the hub would have two roles:

1. Estate hosts: Front of house role greeting residents, receiving visitors and deliveries, and hosting meetings
2. Management office: Working on the logistics of managing the estate day to day

Functions:

The hub is comprised of the following functions, as illustrated in the plans adjacent:

Front of house

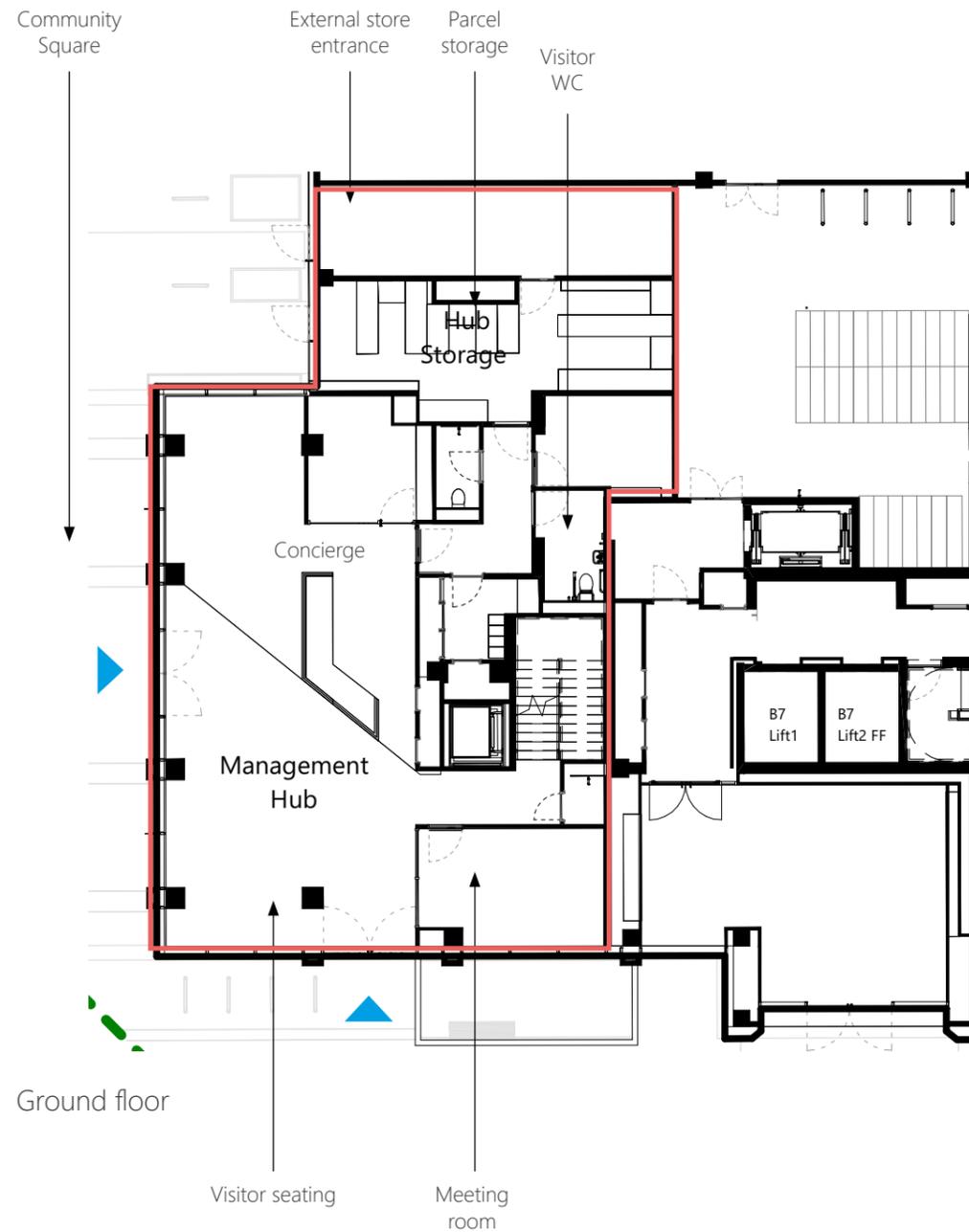
- Entrance / greeting space
- Concierge desk
- Meeting room
- Office for Estate Manager
- Visitor WCs

Management office / back of house

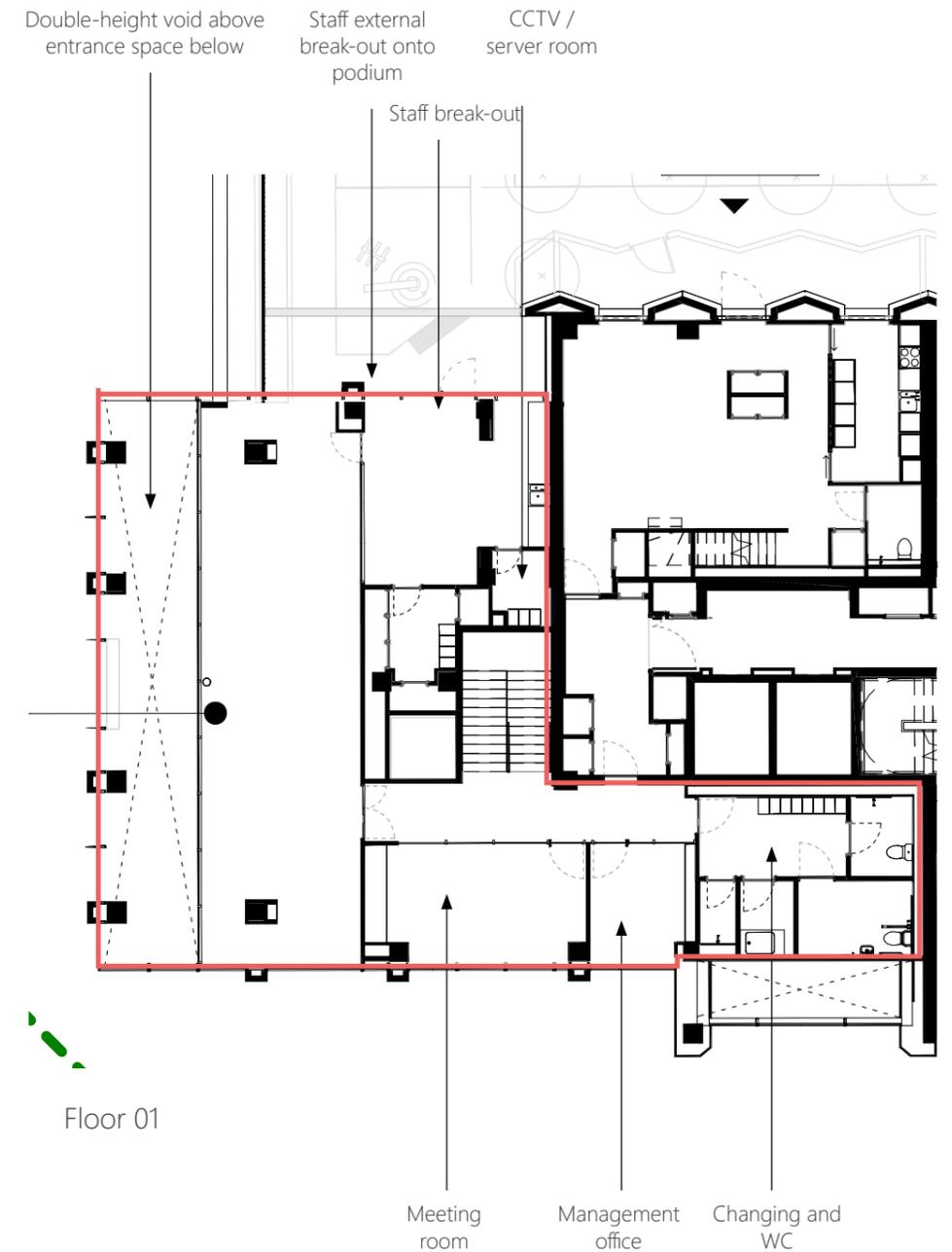
- Parcel storage (Large storage room in close proximity to concierge desk, for overspill and large parcels delivered to the estate)
- General storage for management
- Management office (Located on Floor 01)
- Staff welfare facilities and break out
- Staff meeting room
- Staff WC, showers and lockers
- Control room for fire control panel, server and CCTV)

Floorplans

- Extent of Central Hub
- ▶ Entrance point to Central Hub



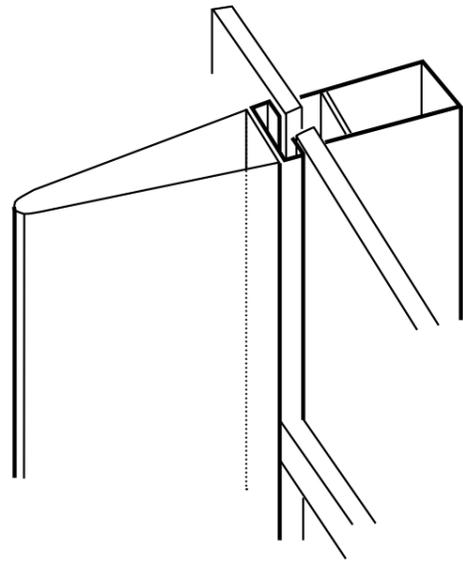
Ground floor



Floor 01

External expression

- Accentuated verticality
- Distinctly different in character from residential frontages
- Double height glazed facade
- Elegant vertical fins reduce solar gain while maintaining an open and welcoming frontage



Elegant fin profile to control solar gain



North west elevation: Front door



Illustrative view of the Central Hub from West

6.10 BASEMENT PLAN

The proposal involves the excavation of one level of basement to accommodate the plant for the scheme, as well as a part of the cycle provision for each building.

Residential cores extend down to this level, and provide access to the cycle store. A dedicated cycle lift is also provided, with a direct route up to the exterior.

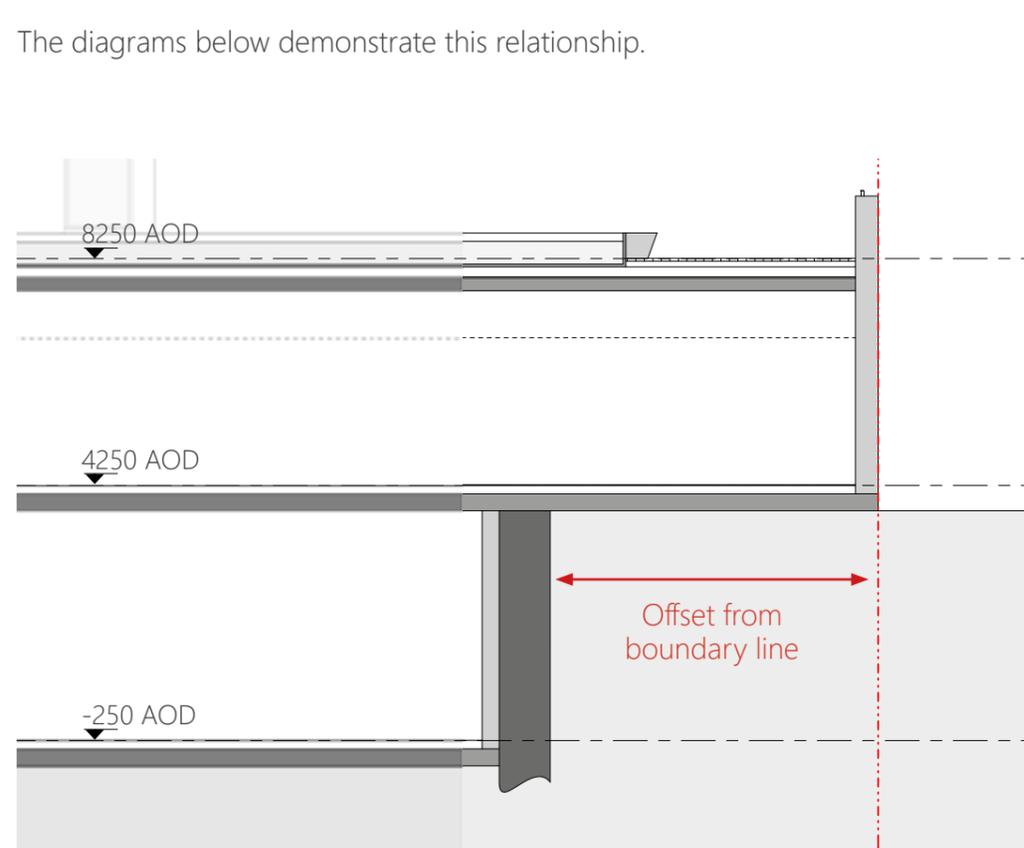
A wide maintenance corridor, which also doubles as the primary route for services, runs along the whole length of the basement, and is only accessible by management or maintenance staff.

Basement setting out

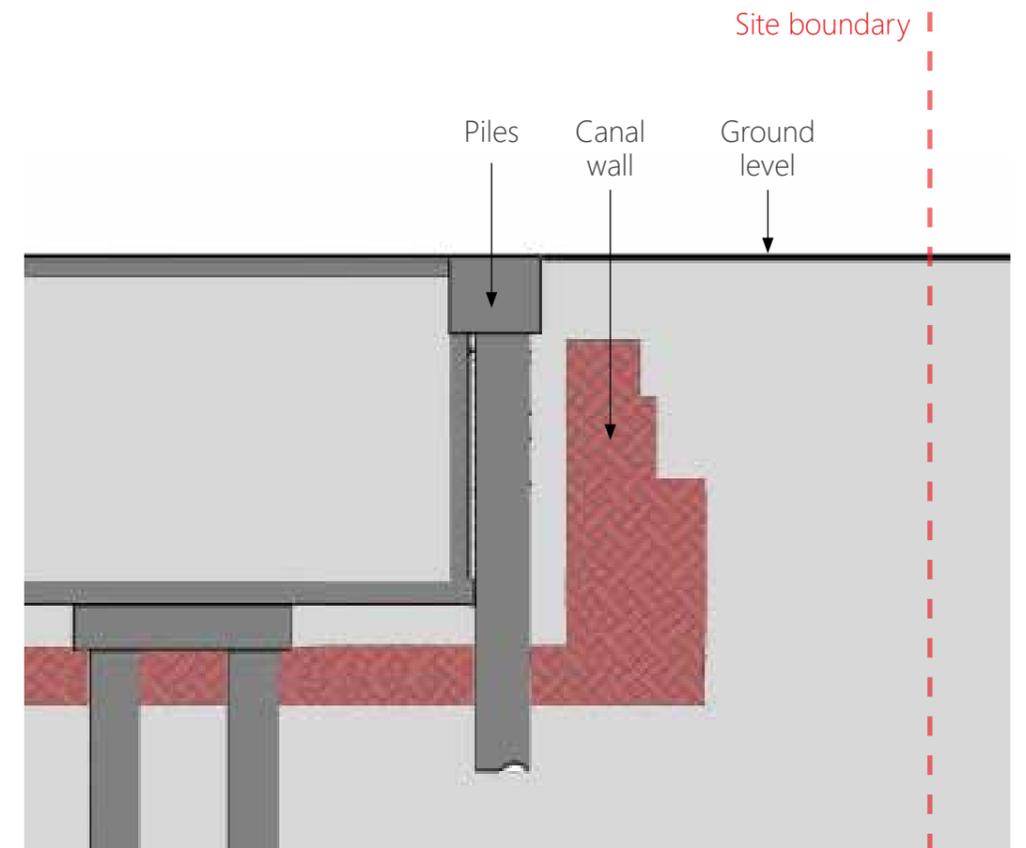
A key parameter in the basement's design is the relationship with the historic canal - piling through it's significant concrete structure may be lengthy and add significant cost and complexity to the project. As such, the team has taken the decision to offset the proposed basement in-board of the eastern boundary to:

- Locate piles in order that they miss the canal walls
- Improve the party wall condition

The diagrams below demonstrate this relationship.



Illustrative cross section through Detailed Area podium and basement, showing the basement retaining wall offset from boundary line to the east



Illustrative section showing design approach to locate piles in a way that avoids clashing with the existing Grosvenor Canal retaining wall below.

- Detailed area boundary
- Application site boundary



Basement floor plan

6.11 UPPER RESIDENTIAL LEVELS: DESIGN PRINCIPLES

The diagrams below explain the key design principles of the floorplan and apartment configurations.

These considerations over and above the minimum requirements have influenced the design and layouts of the apartments.

Design principles and objectives

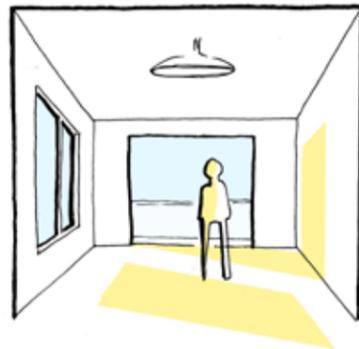
Apartment sizes

Well planned layouts conforming to London Plan standards and Westminster space standards



Wellbeing and daylight

- Generous windows maximising daylight
- Double aspect living rooms
- Facade design responding to orientation and aspect



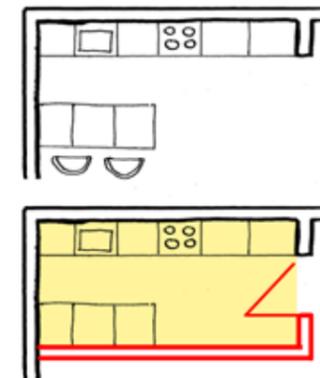
Balconies

Balconies that can accommodate a table and chairs, with sufficient space for occupants and visitors to use



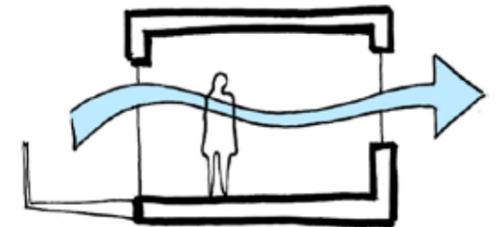
Flexibility

Kitchens can be either open plan or enclosed, without compromising the layout and design



Natural ventilation

A design that encourages residents to use natural ventilation for fresh air, minimising the reliance on mechanical plant and reducing energy consumption

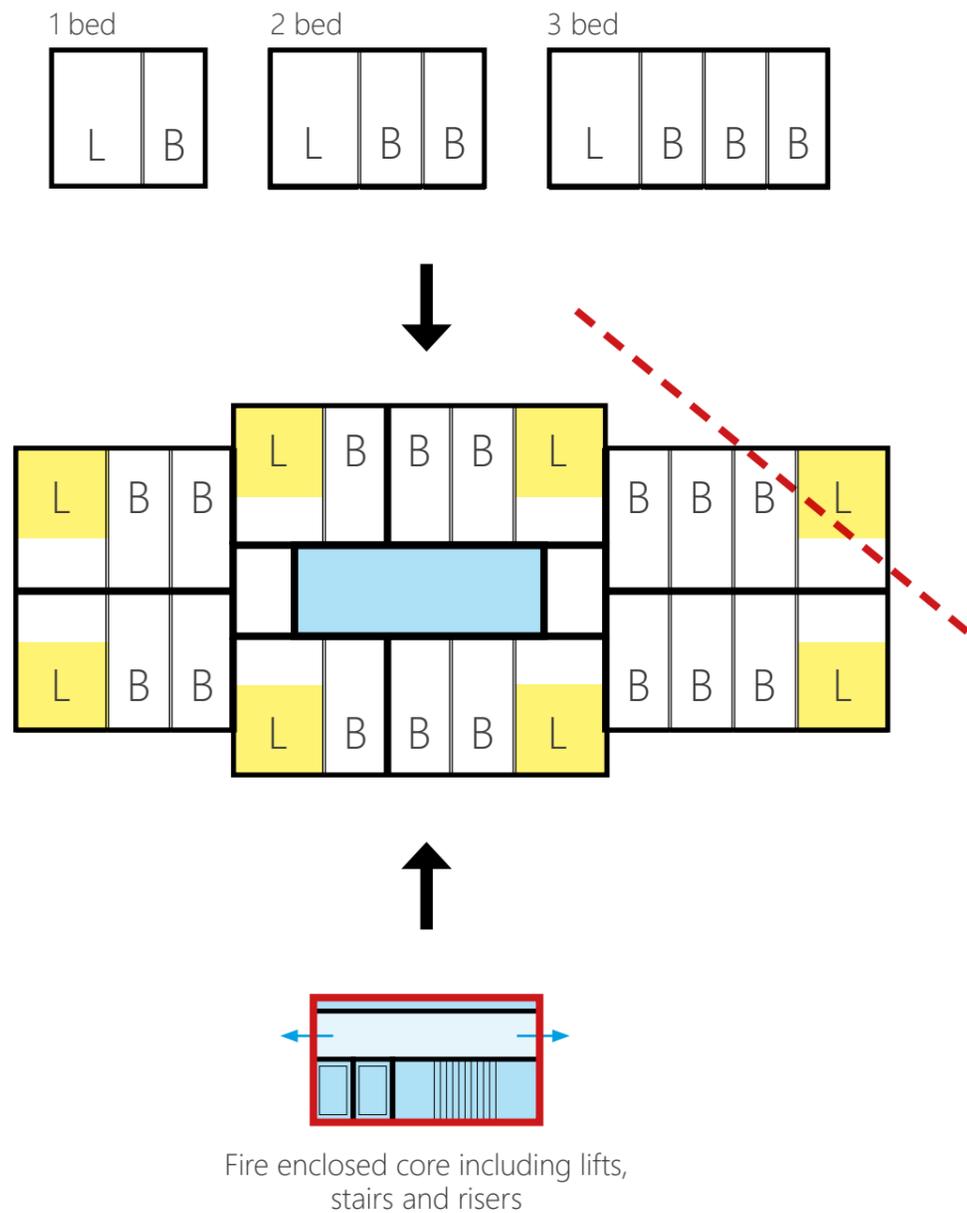


Floorplan principles

There are two key drivers to the composition of the residential floorplans:

1. A robust and fire protected core design
2. Well proportioned rooms that comply or exceed standards

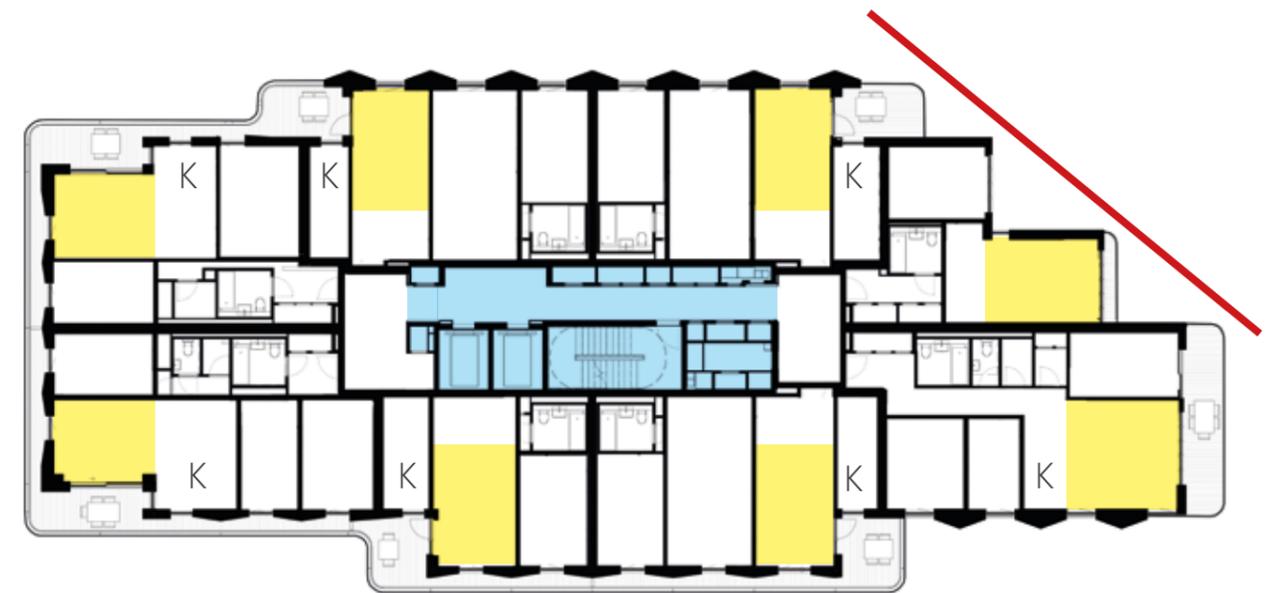
When arranged around a central core, we have sought to shape the plan in order that the majority of apartments enjoy a dual aspect living space, as well as ensuring that there are never more than 8 homes per level



Finalising the Floorplan

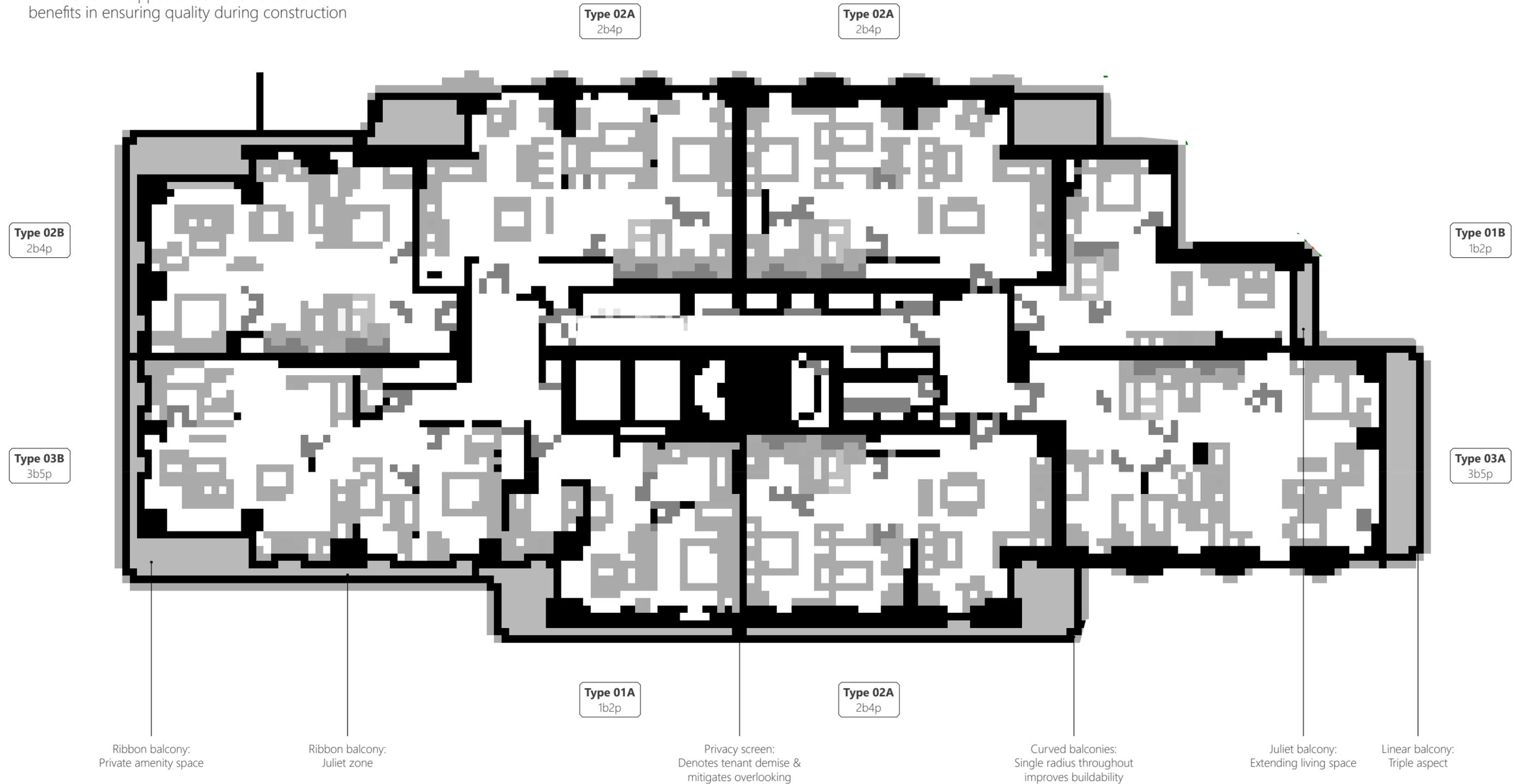
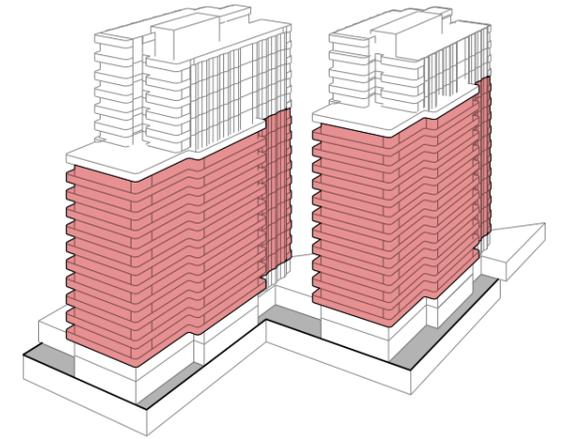
A series of adjustments have been made to ensure the principles outlined opposite can be delivered technically:

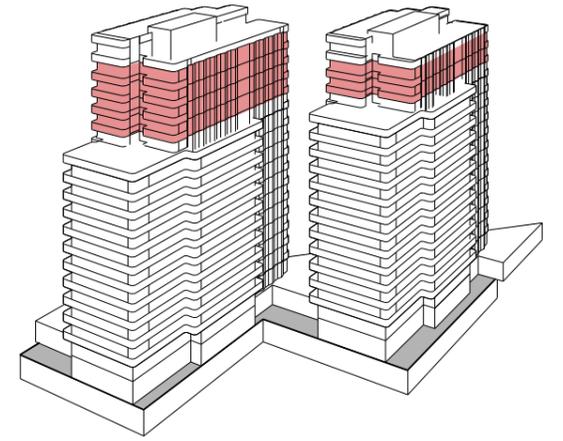
- The plan has been adjusted along the eastern elevation to avoid a clash with site boundary
- Layouts have been developed for kitchens to be easily partitioned off from the living space should the resident require it. In this instance all kitchens will still have window for daylight and views out.
- Maximising dual aspect living (for 97% of apartment across scheme), with no single aspect north-facing apartments
- Minimised circulation space in the core areas and within apartments
- Minimised number of bathroom types



6.12 TYPICAL UPPER FLOORS

- All apartments with two bedrooms or more benefit from dual aspect living and their own dedicated external amenity
- High levels of repetition both internally and in the external appearance considers future benefits in ensuring quality during construction



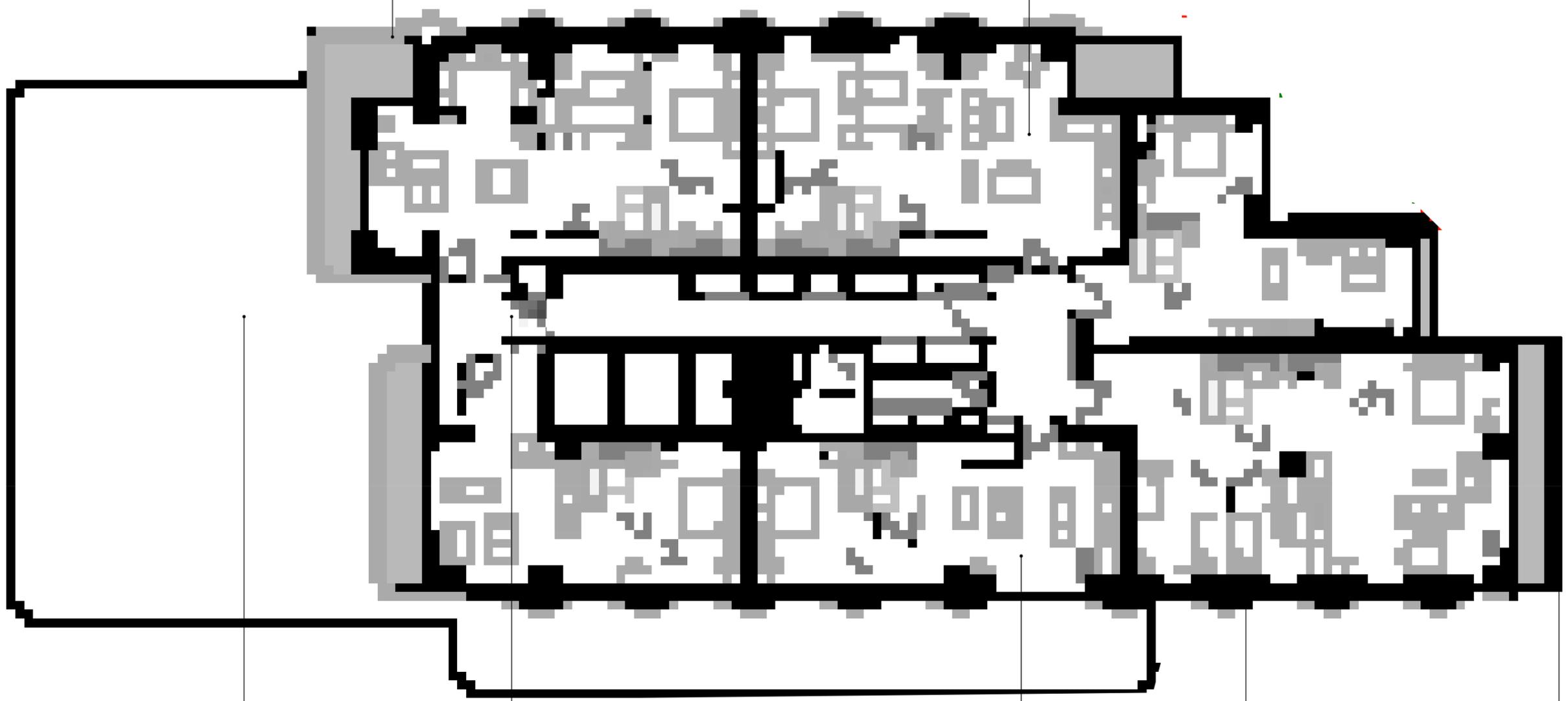


Full height screens to reduce wind flow on balconies, increasing resident comfort

All apartments with 2+ bedrooms continue through from lower levels, for construction efficiencies

Type 02C
2b4p

Type 02A
2b4p



Type 01B
1b2p

Type 03A
3b5p

Type 01C
1b2p

Type 01D
1b2p

Shared terrace below (see next spread)

Hold open doors extend lobby space, bringing in natural light from the NE facade at upper levels

Flat area oversized to subsume external private amenity space

Repeated chevron profile cladding adds character and promotes construction efficiencies

Massing and layout carefully considers the site boundary condition

Private amenity

Homes have been designed to offer well proportioned external amenity to suite residents needs. External private amenity has been designed to compliment internal layouts, providing access and internal views out. 97% of homes have dual aspect living spaces.

Private amenity:

- 85% of homes have been designed with access to private amenity in accordance with policy requirements
- 100% of homes have access to private communal terrace and podium amenity

The 15% of homes with external amenity not in accordance with policy equates to 35 single bed room homes within the scheme. The layout types have been highlighted on the adjacent typical plan.

Lack of private amenity in these cases has been limited by the relationship with the neighbouring Network Rail boundary line and the ambition to maximise public space within the site, as well as considerations of exposure to the environment on balconies. Consideration has been given to both flat types so to mitigate lack of external amenity provision. Mitigation and illustrative views to demonstrate the internal/external relationship can be read opposite.

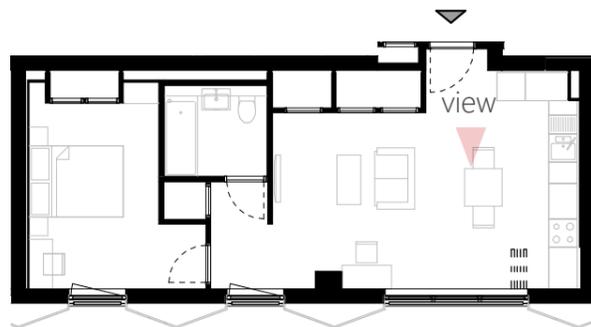




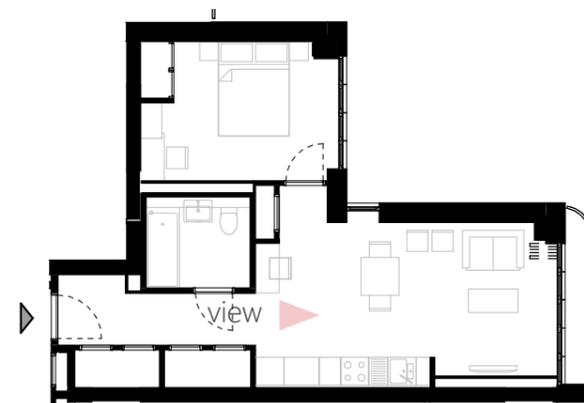
Home internal illustration



Home internal illustration



- 6 x 1bed homes
- Lack of external amenity is compensated by increased internal floor area, integrating 5m2 amenity space along with,
- Large format folding windows designed to provide the benefits of external feel
- Home has south west aspect



- 29 x 1bed homes
- Lack of external amenity is compensated by a smaller 2m2 accessible balcony along with,
- Large format folding windows designed to provide the benefits of external feel
- Home has north east and south east dual aspect

6.13 TERRACE LEVEL: COMMUNAL AMENITY

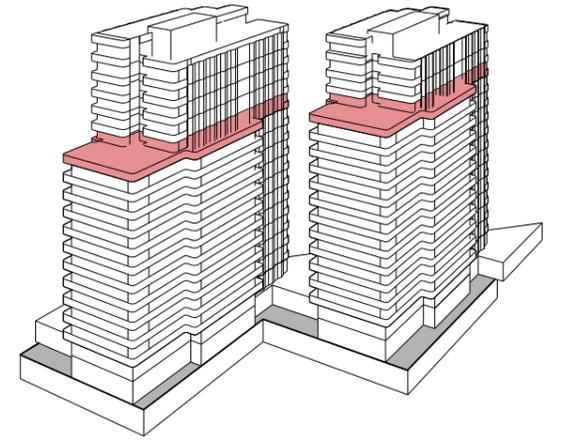
In addition to the podium level landscaped gardens, each building has a shared amenity terrace at mid-level. This is located at floor 12 for B7, and floor 13 for B8.

Key characteristics include:

- Amenity available only to residents of that building, with fantastic views out in all directions over the city
- Access control on door to core lobby
- Seating areas and planting, located away from the terrace edge to mitigate risk of falling from height
- Passive surveillance from adjacent apartment balconies to deter anti-social behaviour
- Discrete low-level lighting in order to not cause light pollution to adjacent flats, while creating a warm, welcoming ambience to users of the terrace at night time



Illustrative view of mid-level terraces



Type 02C
2b4p

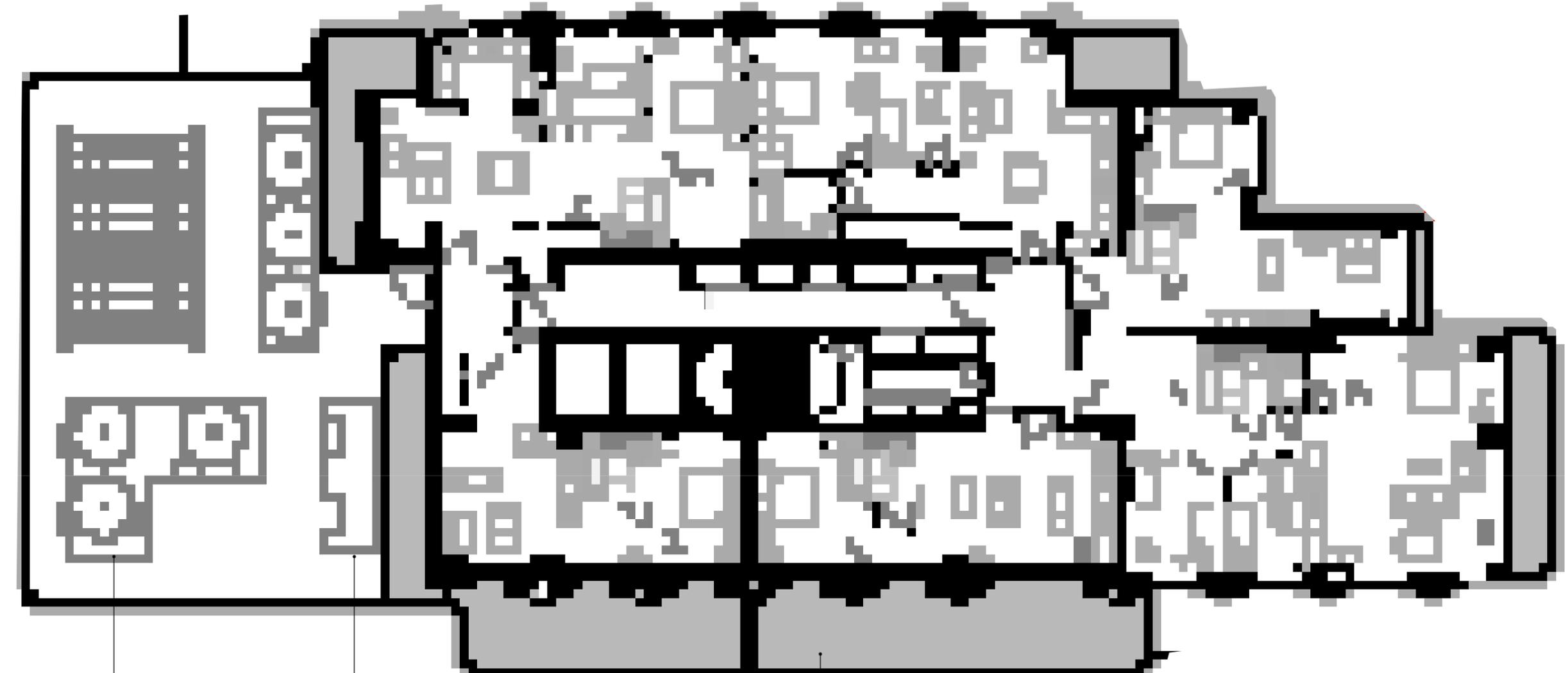
Type 02A
2b4p

Type 01B
1b2p

Type 03A
3b5p

Type 01C
1b2p

Type 01D
1b2p



Shared amenity space for all building residents. West facing for afternoon/evening sun.

Low level planting to create defensible space for private amenity on terraces

More generous external amenity space for apartments on terraces

6.14 INTERIORS

Design principles

- Robust materials specified, to be long lasting and to minimise requirement for maintenance during the life cycle of the project
- Common areas and entrances to incorporate and reference external landscape finishes, in order to have a seamless relationship from outside to in
- A small degree of flexibility of internal finishes for future residents, for apartments to be adaptable for individual tastes or cultural backgrounds
- Light-coloured material palette, to make spaces inside brighter and with more daylight
- Designing for dementia: Consideration to wayfinding, lighting design and choice of colour palettes and signage, in order that those with dementia have a comfortable environment to live in

Common areas

Two categories of common areas:

- Ground floor lobby and circulation
- Core corridors on upper residential levels

Design parameters and challenges

Ensuring the space is designed to be legible, architecturally minimal and navigable by dementia sufferers is a key design aspiration for the design of the core corridors. At ground floor, there is an

opportunity for art elements and feature lighting to be integrated into the design. At upper levels, there is an opportunity for super-graphics or a designed approach to signage on corridor walls and ceiling

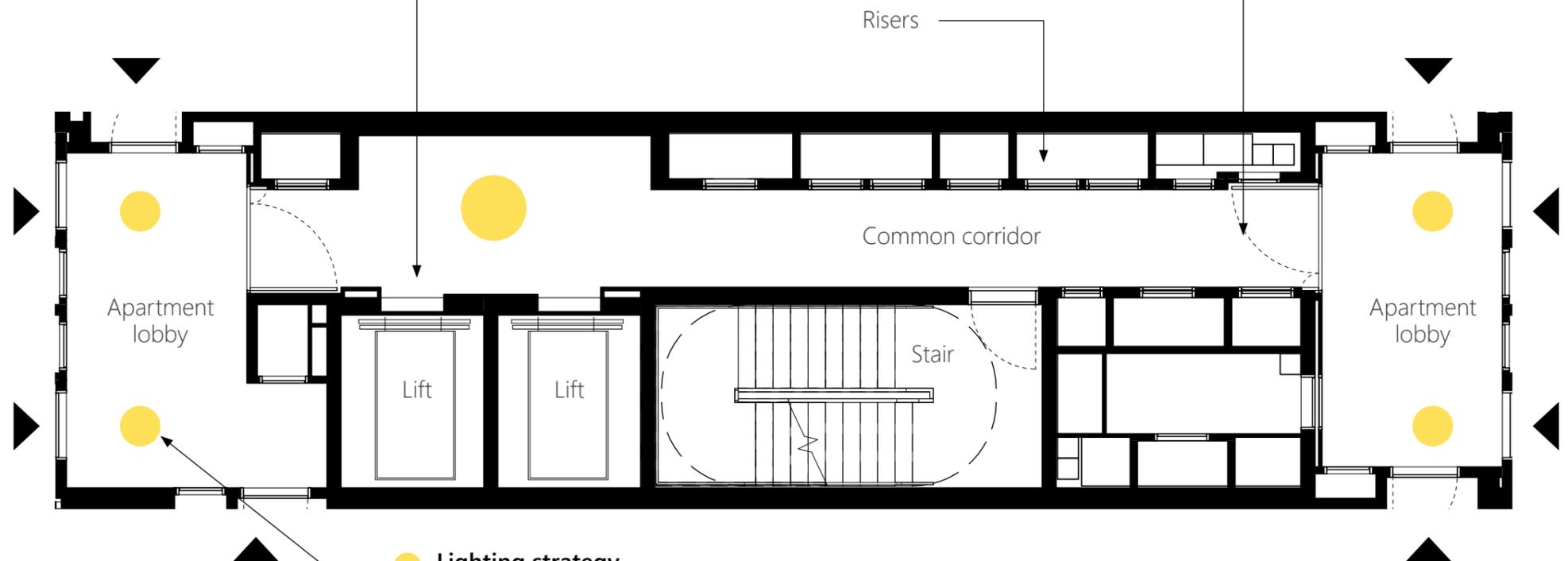
A key design challenge is that any proposal will need to ensure that access to ceiling services and risers in walls will need to be maintained, and visual impact kept to a minimum.

Lift thresholds

Lifts will be provided with a 25mm threshold to avoid water entering the lift shaft during fire-fighting. The level difference will be integrated into the floor finishes

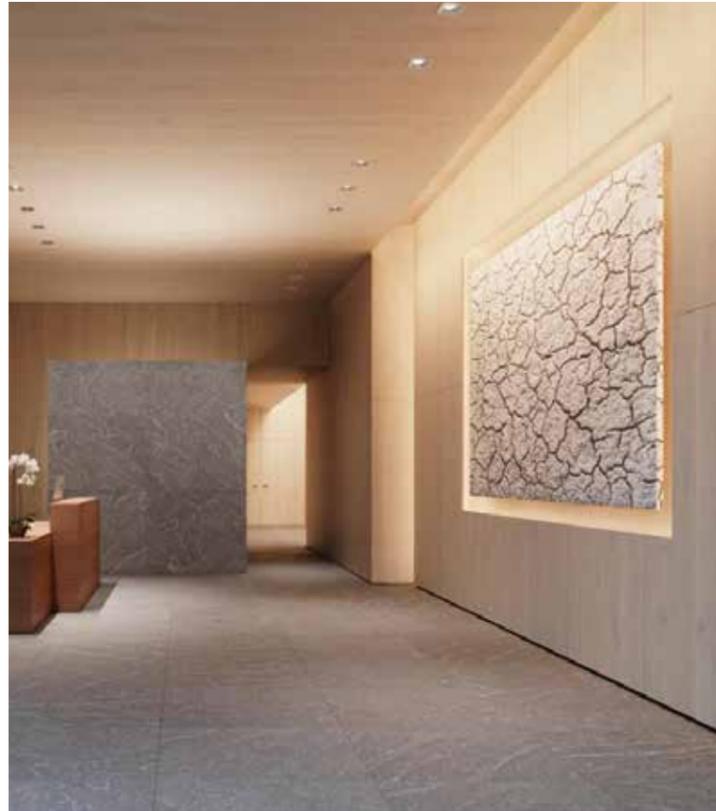
Fire doors

Hold-open fire doors are designed to be integrated flush with the corridor walls, to minimise their visual impact in an every-day scenario



- **Lighting strategy**
Brighter 'accent' lighting at entrances and in front of lifts. A variation in light helps with wayfinding and dementia sufferers, and creates a more homely environment

Mood and finishes



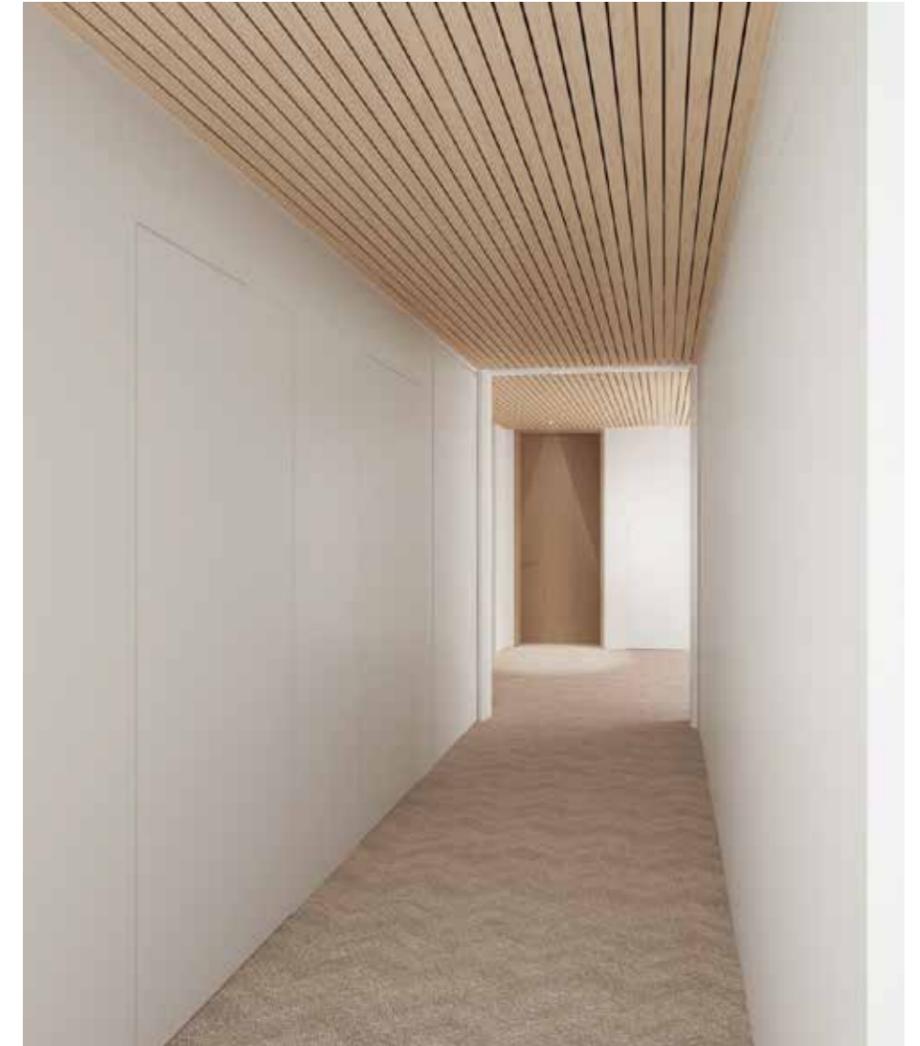
Robust natural materials, warmly lit



Minimal corridor design with visually prominent entrances to help with wayfinding and dementia



Riser doors to be flush with walls, with discrete or no signage. Views above illustrate risers in open and closed modes



Illustrative view showing typical core circulation corridor



Landscape materiality continuing inside the building. A minimal palette of materials



A visually unifying ceiling system, integrating lighting while maintaining access to services



Discrete wayfinding and signage integrated into finishes

Living areas

- Well lit, bright spaces with good levels of natural daylight
- Sustainable materials
- Simple interfaces, easy to clean and maintain
- Lighting located with a flexible layout in mind

Mood and finishes



Minimal material palette. Bright, naturally lit living spaces



Full height windows to balconies



Well-detailed joinery and kitchens



Integrated storage cupboards and simple, robust detailing

Living rooms



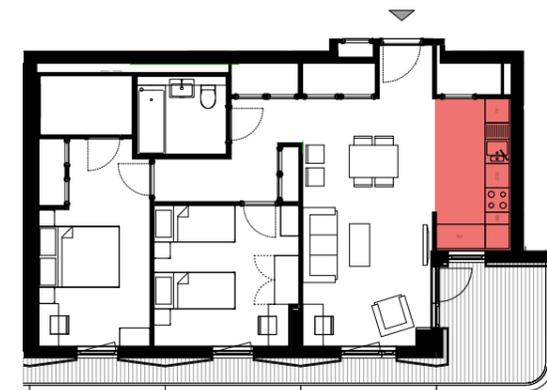
- Dual aspect windows maximise daylight
- Orthogonal dimensions to room for easy and flexible furniture arrangement
- Neutral palette of materials to floor, ceiling and walls
- Clear zone for partition wall with kitchen, should separation be desired by resident



Kitchens



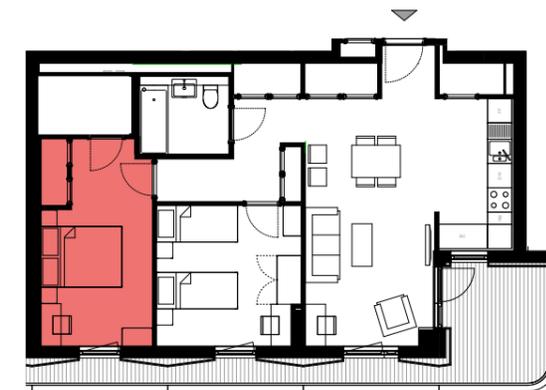
- Natural daylight and openable window
- Integrated storage cupboards
- Splashback colour palette to reference exterior glazed terracotta facade, creating a dialogue between out and in



Bedrooms



- Full height windows, with access onto juliet balcony
- Natural carpet to floor
- Design approach: Diffuse lighting to create a warm ambience



6.15 APARTMENT TYPES

Along Phase 1, there are 17 different apartment types, although 8 of them are the most repeated across both buildings and become more than a 95% of the total number of apartments.

These types have been designed to have the flexibility to have both an affordable and market mode as well as some of them being able to become adapt to M4(3). For duplexes, the stairs have been designed to be wide enough for a chair lift to be added, and have adaptation within them to respond to less-abled residents' needs.

The Detailed Area planning drawings (Series 01-2100) show every level of the scheme, and indicate the location of where each apartment type and tenure is located.

All apartment types except one (01D) are dual or triple aspect. This equates to 96.5% of the total scheme. The impact on the single aspect apartment 01D has been mitigated by locating it on the SW elevation and at high level, where it enjoys good levels of daylight and sun, as well as fantastic views over London.

Apartment type key

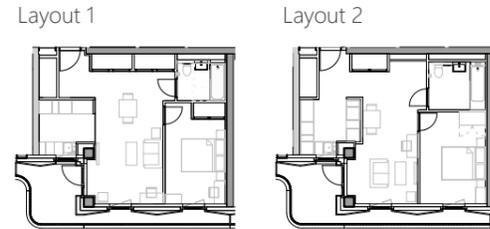
The following key indicates the tenure type that each layout is appropriate or applicable for, as well as which layouts are adaptable

- Social rent layouts
- Market / intermediate layouts
- Adaptable layout

1 bed apartments

01A

Beds: 1b2p
Area: 53sqm
N. units: 21



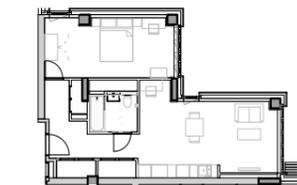
01B

Beds: 1b2p
Area: 51sqm
N. units: 29



01B1

Beds: 1b2p
Area: 57sqm
N. units: 1



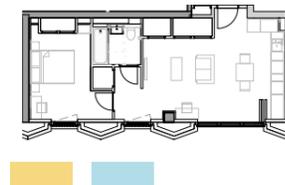
01C

Beds: 1b2p
Area: 51sqm
N. units: 8



01D

Beds: 1b2p
Area: 54sqm
N. units: 8



01E

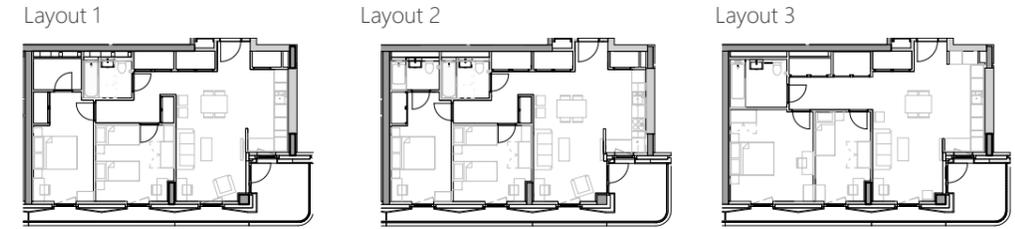
Beds: 1b2p
Area: 63sqm
N. units: 1



2 bed apartments

02A

Beds: 2b4p
Area: 76sqm
N. units: 71



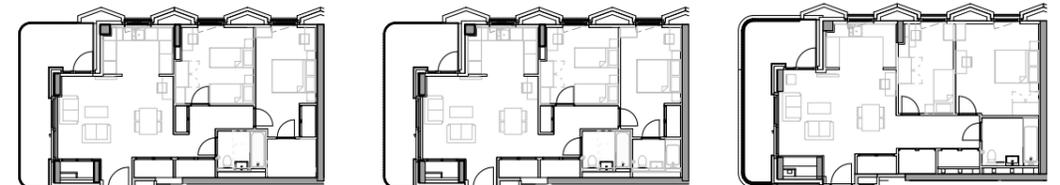
02B

Beds: 2b4p
Area: 72sqm
N. units: 20



02C

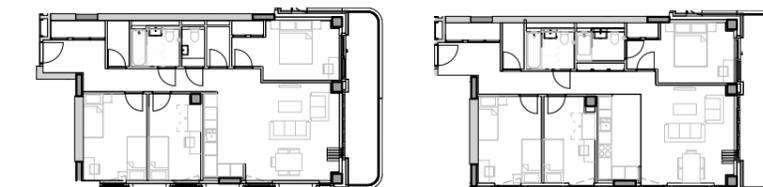
Beds: 2b4p
Area: 76sqm
N. units: 9



3 bed apartments

03A

Beds: 3b5p
Area: 89sqm
N. units: 28



03B

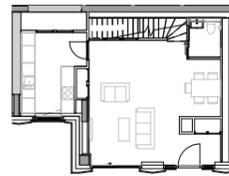
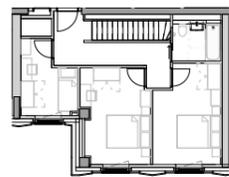
Beds: 3b5p
Area: 88sqm
N. units: 21



3 bed duplexes

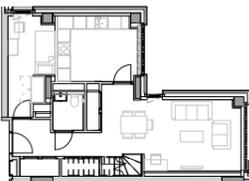
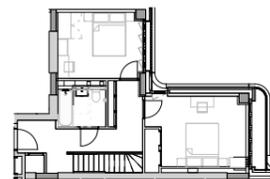
03C

Beds: 3b5p
Area: 106sqm
N. units: 1



03D

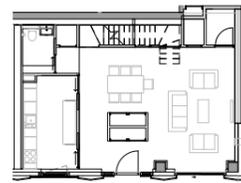
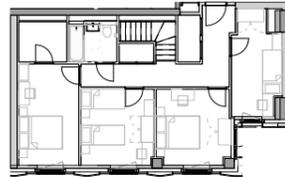
Beds: 3b5p
Area: 104sqm
N. units: 1



4 bed duplexes

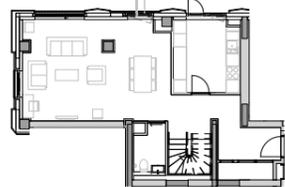
04A

Beds: 4b7p
Area: 135sqm
N. units: 1



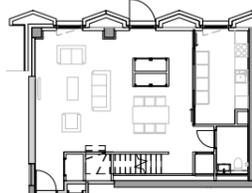
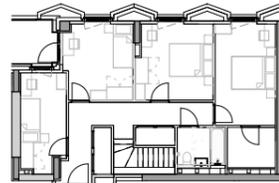
04D

Beds: 4b6p
Area: 136sqm
N. units: 1



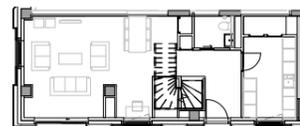
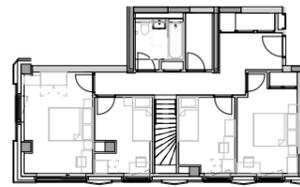
04B

Beds: 4b6p
Area: 135sqm
N. units: 1



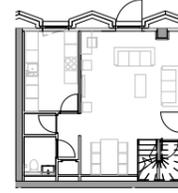
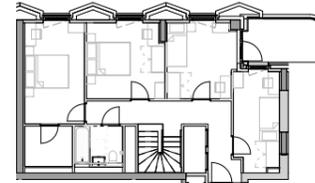
04E

Beds: 4b6p
Area: 131sqm
N. units: 1



04C

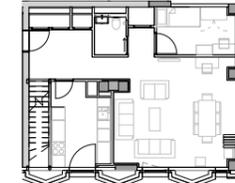
Beds: 4b6p
Area: 117sqm
N. units: 2



5 bed duplexes

05A

Beds: 5b7p
Area: 148sqm
N. units: 1



6.16 TYPICAL APARTMENT PLANS

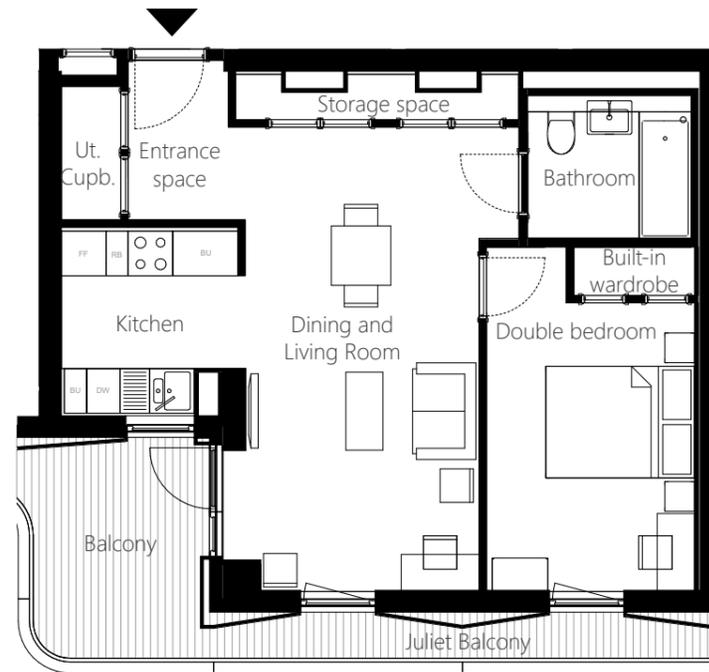
Overview

Majority of the 1, 2 and 3 bed apartments in the scheme are repeated many times throughout the scheme. Family-sized apartments are generally duplexes, and occur a small number of times at lower levels. The plans opposite illustrate 4 typical apartments in closer detail.

Design principles

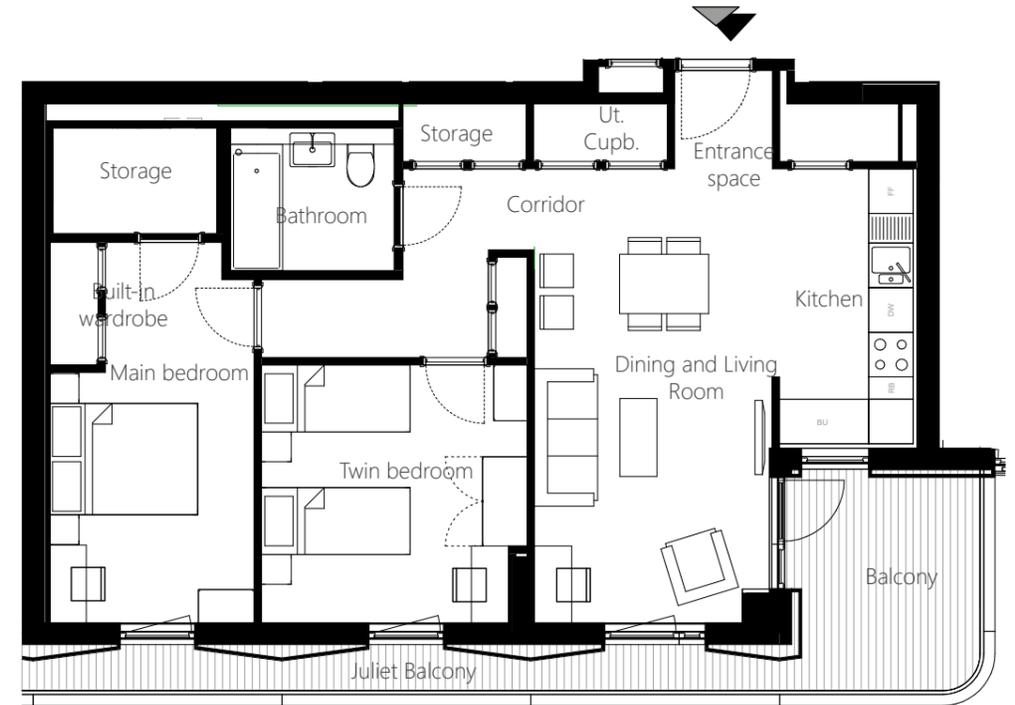
- Route from entrance to living room to be as direct as possible
- Dual aspect living areas
- Minimised circulation and doors
- Adequate storage
- Utility cupboards adjacent to every entrance, housing washing machines and any AV equipment
- Duplexes with internal staircases and a secondary entrance direct to core

Typical 1 bedroom apartment



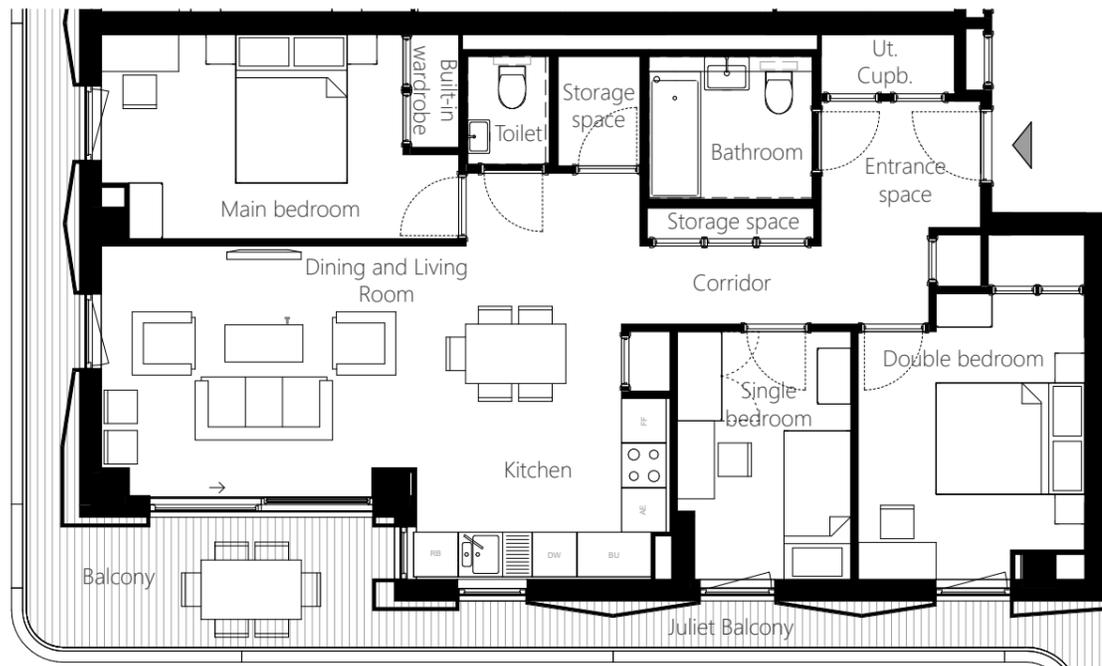
Type	01.A
No. beds/person	1b 2p
Net area	53.1sqm
Location	Typical lower floors
No. Units in Detailed Area	21
Adaptable to M(3)	Yes

Typical 2 bedroom apartment



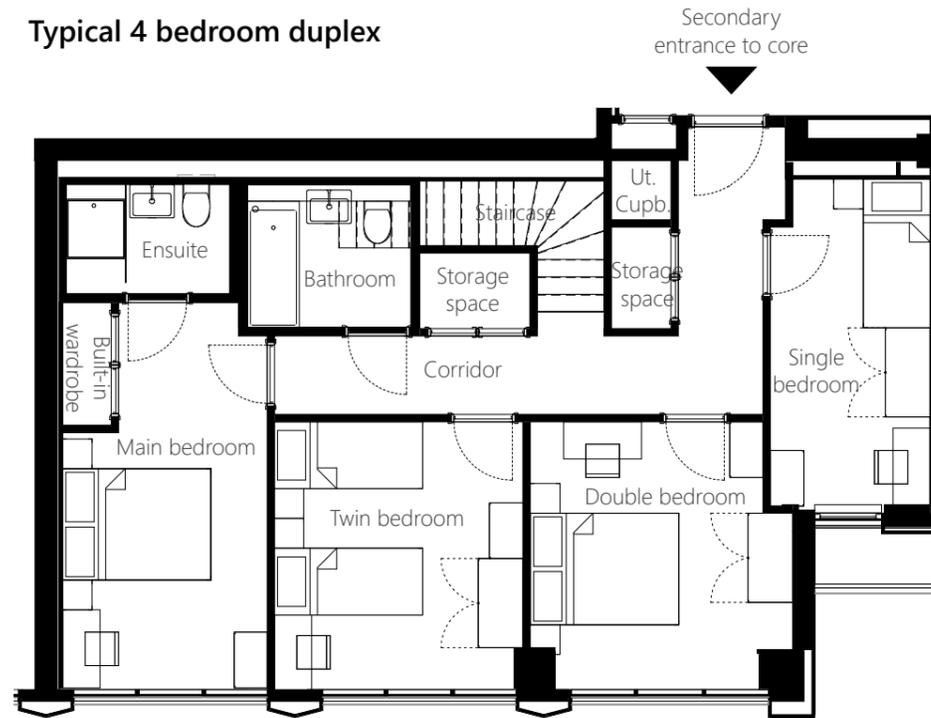
Type	02.A
No. beds/person	2b 4p
Net area	76.3sqm
Location	Typical lower & upper floors
No. Units in Detailed Area	79
Adaptable to M(3)	Yes

Typical 3 bedroom apartment

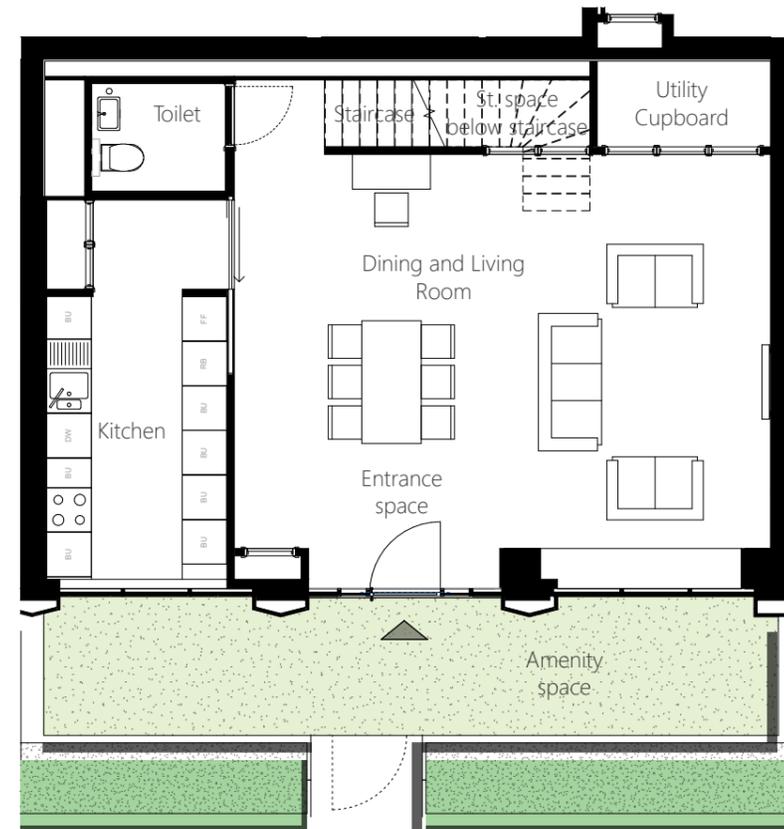


Type	03B
No. beds/person	3b 5p
Net area	88.2 sqm
Location	Typical lower floors
No. Units in Detailed Area	21
Adaptable to M(3)	Yes

Typical 4 bedroom duplex



Floor 01



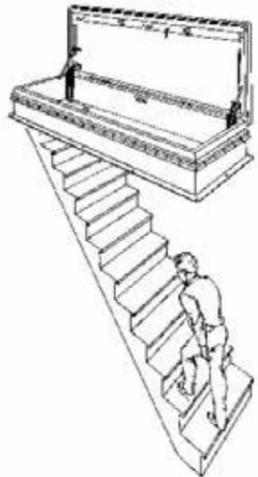
Ground floor

Type	04A
No. beds/person	4b 7p
Net area	137.7sqm
Location	Ground and first floor
No. Units in Detailed Area	1
Adaptable to M(3)	No

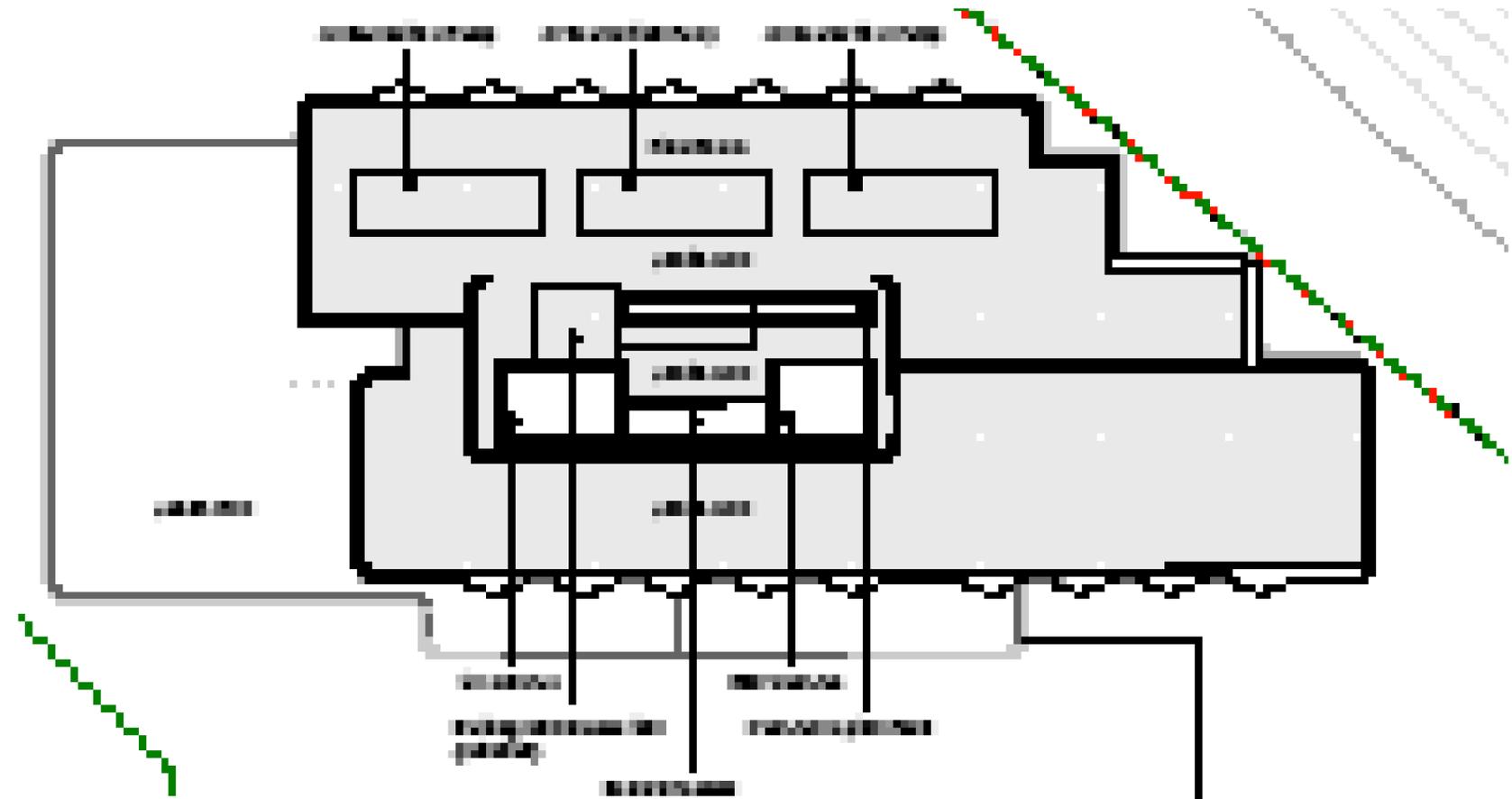
6.17 ROOF LEVELS

Overview

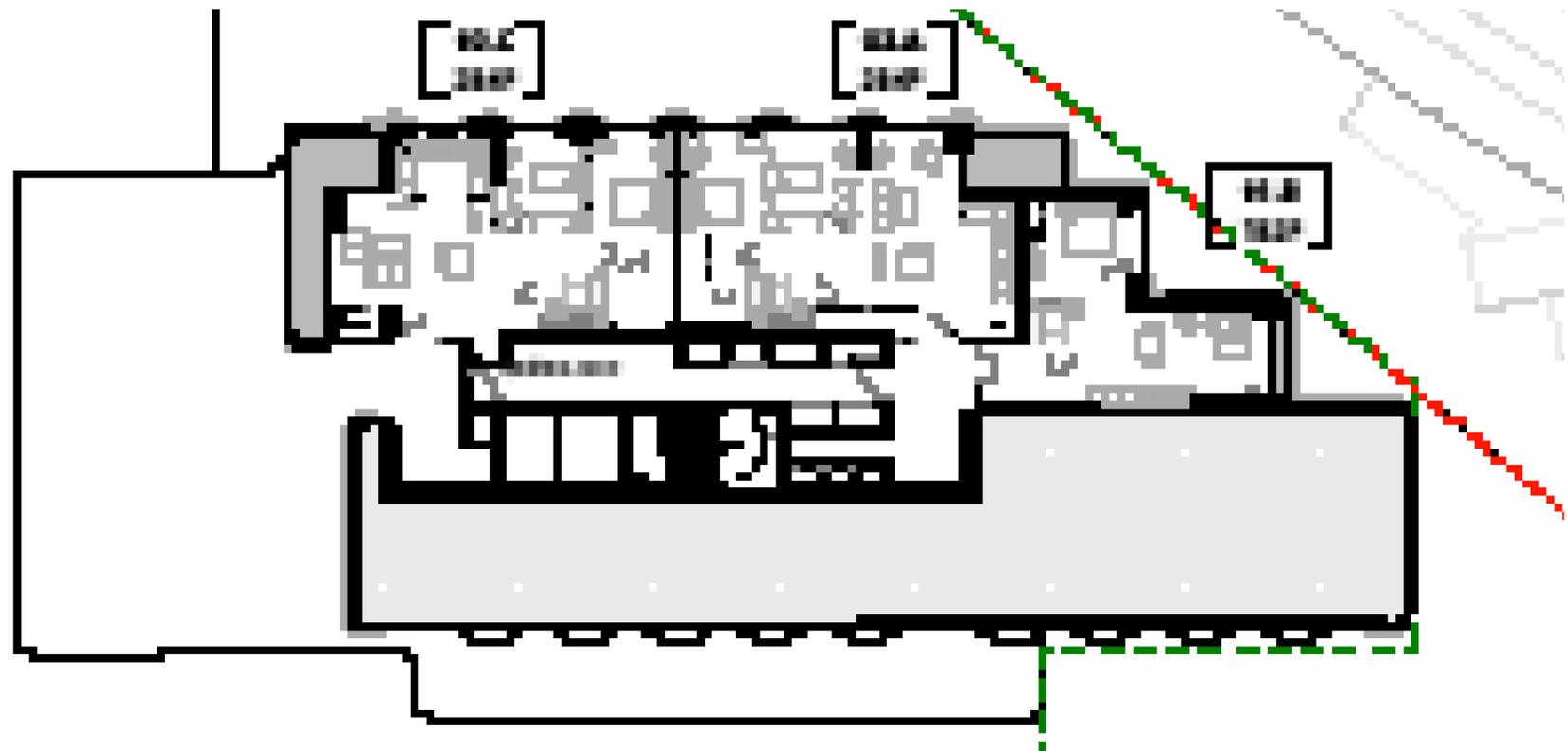
- Both roof levels are stepped in height, with the northern 'half' of the roof one level higher than the southern 'half'
- Building 7: Air Source Heat Pump plant located at this level behind a false facade, to disguise the plant volumes in an architecturally sensitive way.
- Building 8: Roof level comprises 3 apartments,
- Roofs are access via core by maintenance operatives only
- Plan level accessed via access hatch above stair, which also has benefits from a plant replacement point of view
- Core screen is detailed to be architecturally consistent with the other external façades, and hiding the volume of the Building Maintenance Unit from long views



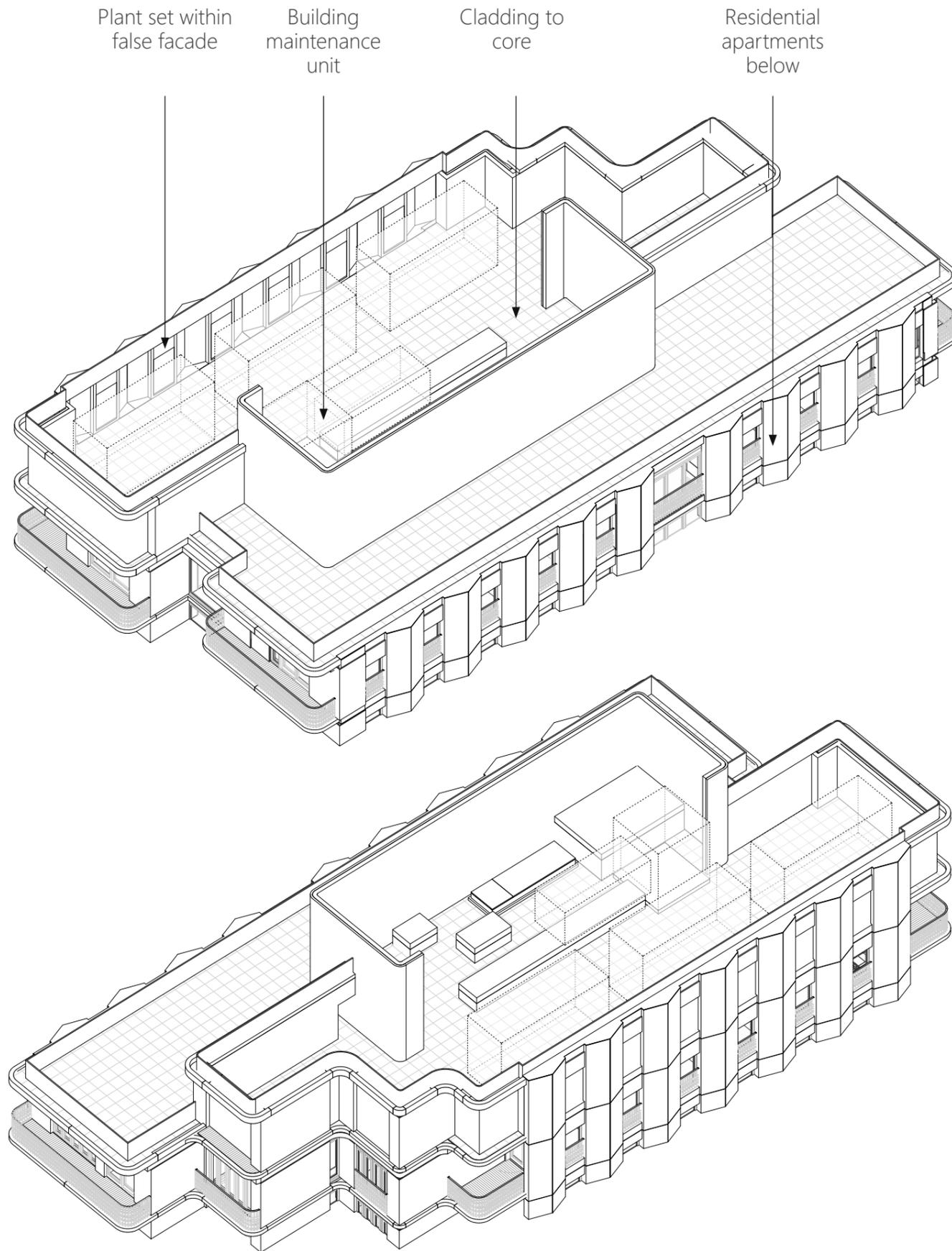
Above: Illustrative images of proposed access hatch
Page 278



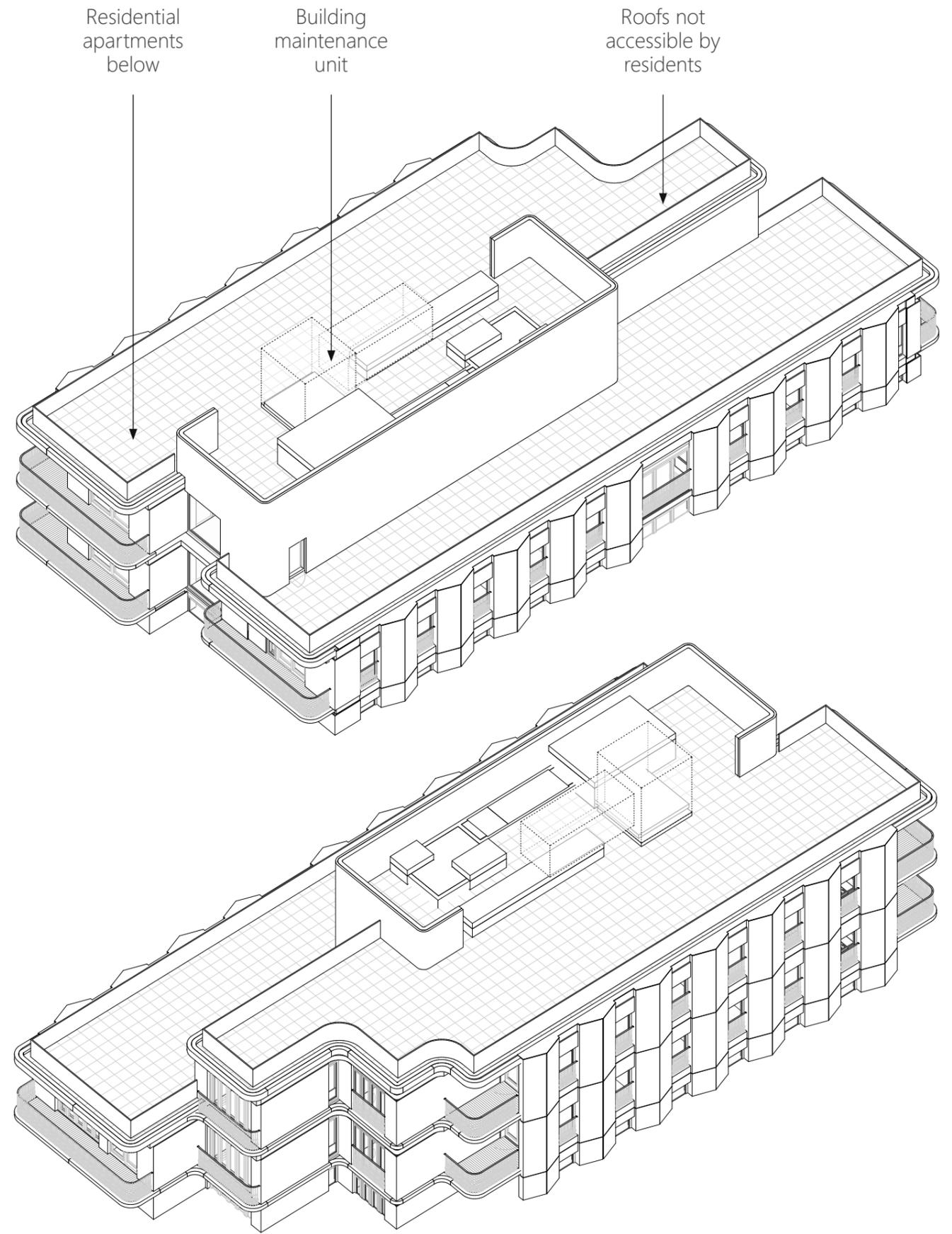
Building 7: Plant level plan



Building 8: Top-most residential level plan



Building 7: Axonometric views (**Top:** From SW, **Bottom:** From NE)



Building 8: Axonometric views (**Top:** From SW, **Bottom:** From NE)

6.18 EXTERNAL APPEARANCE: DESIGN PRINCIPLES

Developing on the principles of the masterplan design codes in Chapter 4, this page spread sets out the principles of the external appearance and character of Buildings 07 and 08 and the associated ground floor podium level.

Building Typology

Both buildings fall under the Rear Block typology set out in the design code. Each building has a larger footprint at lower levels, reducing in massing at higher levels creating a mid-level shared amenity terrace.

Facade Types

The rules developed in the masterplan design code are broken into facade types. See below for a cross reference of the facade types for the detailed application that relate to the design code.



Illustrative perspective view of the detailed area application buildings, looking from the west (town square façades)

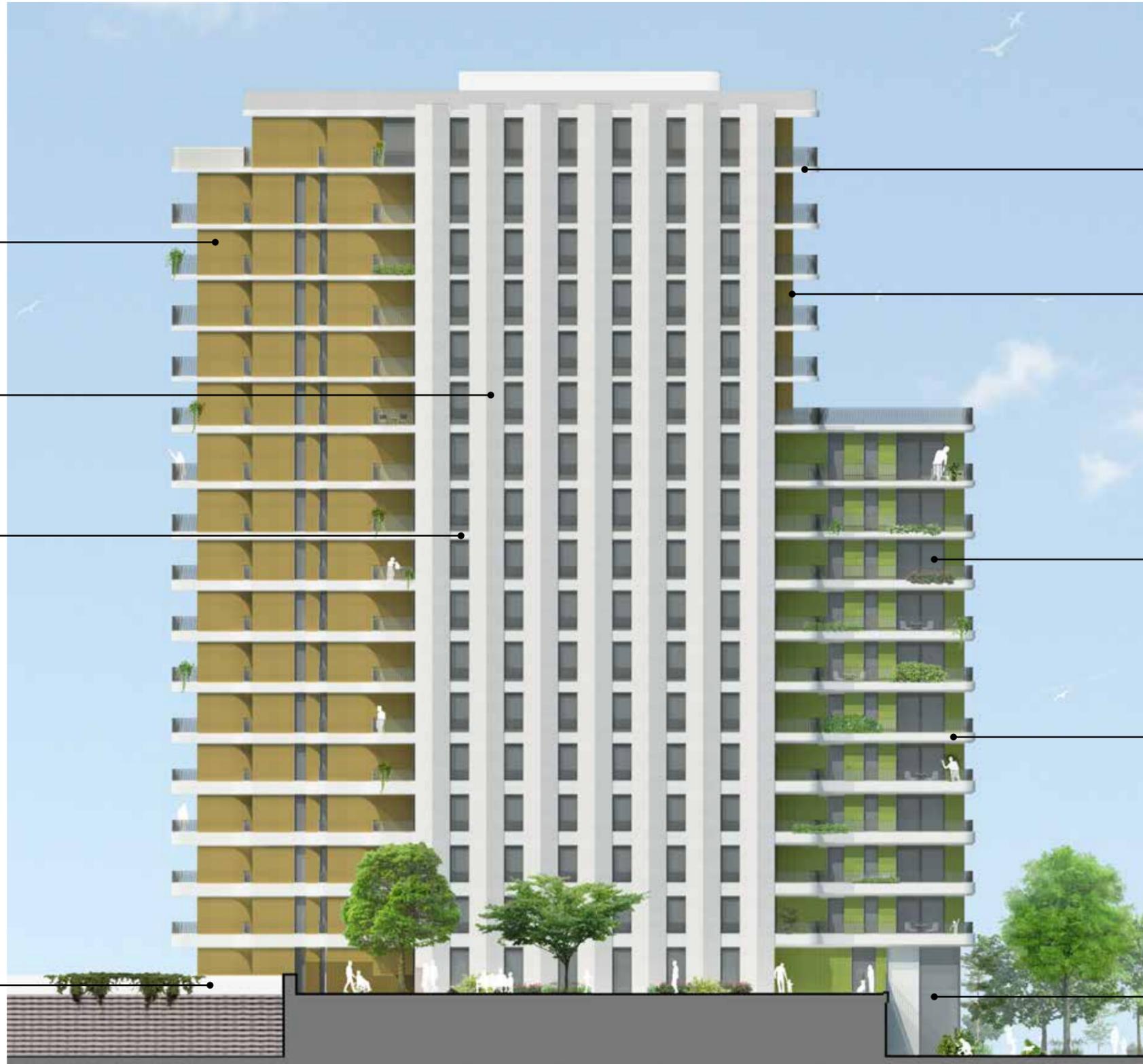
**East:
Facade Zone 3**

Railway facing elevations:
South-east orientated
fenestration to living
spaces, with glazed
terracotta cladding

Longer side elevations:
Continuous vertical mono
tonal cladding. 'Chevron'
shape in plan adds depth
and shadow across the
elevation.

Horizontal expression:
Continuous to railway
facing elevations.
Subordinate to vertical
expression on longer side
elevations.

Railway podium elevation:
Continuous masonry
horizontal expression,
lowering in height between
buildings. Monolithic
louvre cladding below.



**West (upper):
Facade Zone 2**

Horizontal expression:
Linear balconies to living
spaces. Minimum depth
revealing full design of
metalwork.

Cladding:
Materiality and colour
matching railway facing
elevations to respond to
longer distance views

**West (lower):
Facade Zone 2**

Floor-to-floor fenestration
with glazed terracotta
cladding

Horizontal expression:
Continuous ribbon
balconies

Non-residential façades:
Fully height curtain walling
system, glazed to create a
strong relationship between
internal spaces and the
public realm

Illustrative elevation

6.19 MATERIALITY & COLOUR

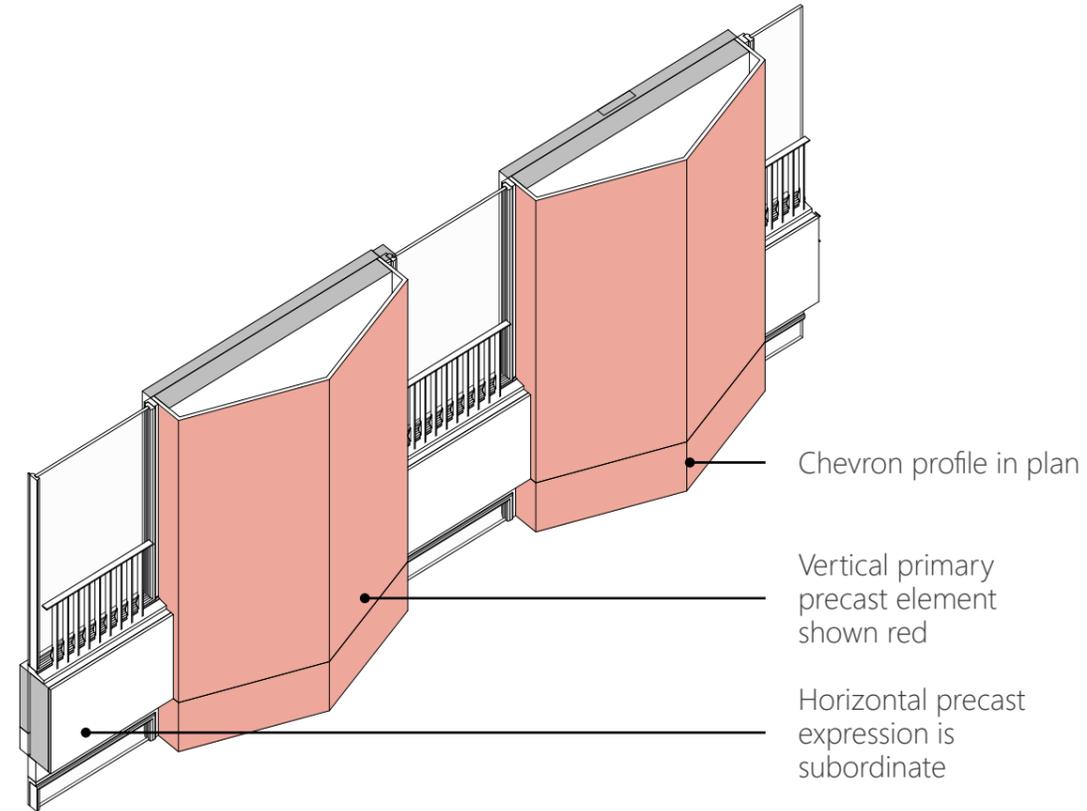
Buildings 7 and 8 are primarily defined by two cladding materials: precast concrete and glazed terracotta. Each has its own unique and contrasting role for the identity of the buildings and the masterplan as whole (See Chapter 4).

Precast Concrete

Precast concrete is a masonry facade material. The manufacturing process uses casting moulds to create prefabricated panels. The repeating nature provides an efficient method to manufacture whilst ensuring robust and quality finish.

Precast facade is proposed on the side elevations of the buildings to provide a light monotone 'framework' to the buildings, creating a simple crisp character and providing a contrast to colour used elsewhere on the façades.

The plan 'chevron' profile adds shadow and visual interest from longer distance views, and the casting manufacture process mitigates visible joints externally.



Facade axonometric view (Side elevations)



Colour precedent: One Blackfriars
Page 282



Precast facade element



Monotone colour options



Precast sample finish

Illustrative rendered visuals showing precast materiality

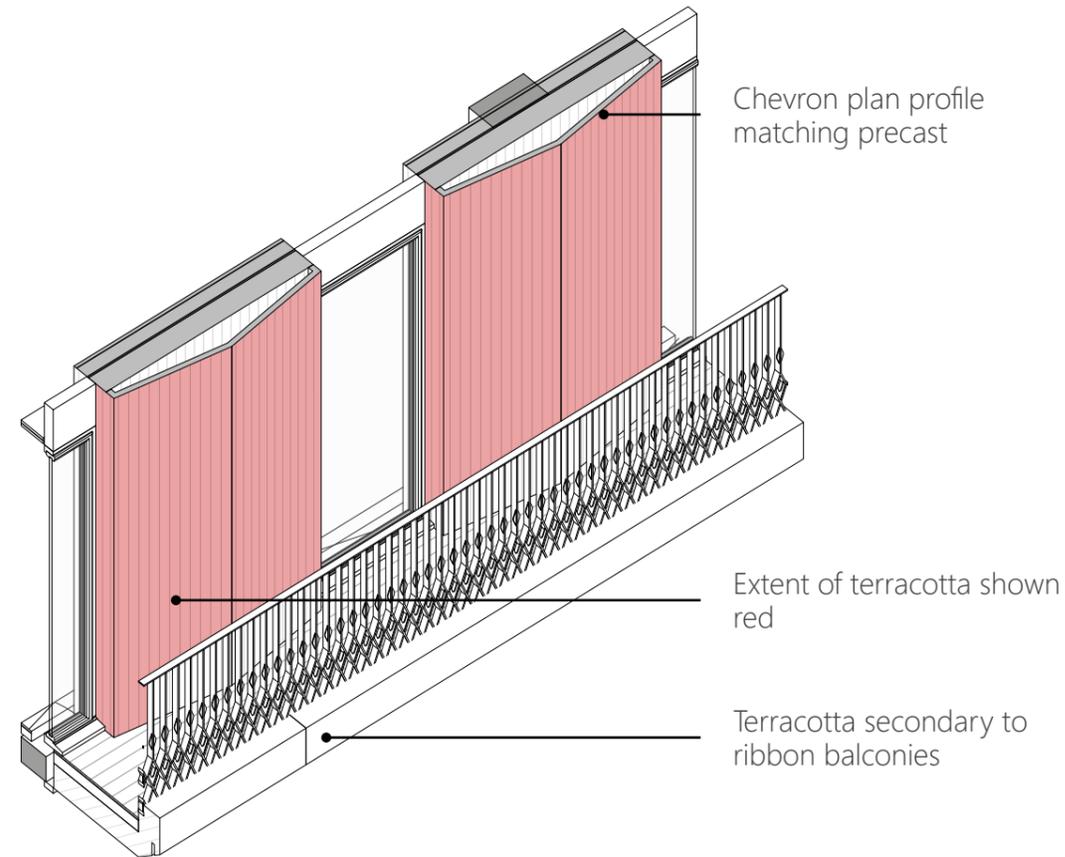
Glazed Terracotta

In contrast to the texture and tone of the precast opposite, the terracotta is chosen to add vibrancy to the design.

The manufacture and glazing process of the ceramic results in a robust product with a large range of colour and finish/glaze options.

Two colour palettes are proposed: differing shades of green to the town square façades, and a 'red-to-champagne' colour range to the eastern and upper levels. This relates the colour schemes to the masterplan landscaping and wider contextual tones respectively.

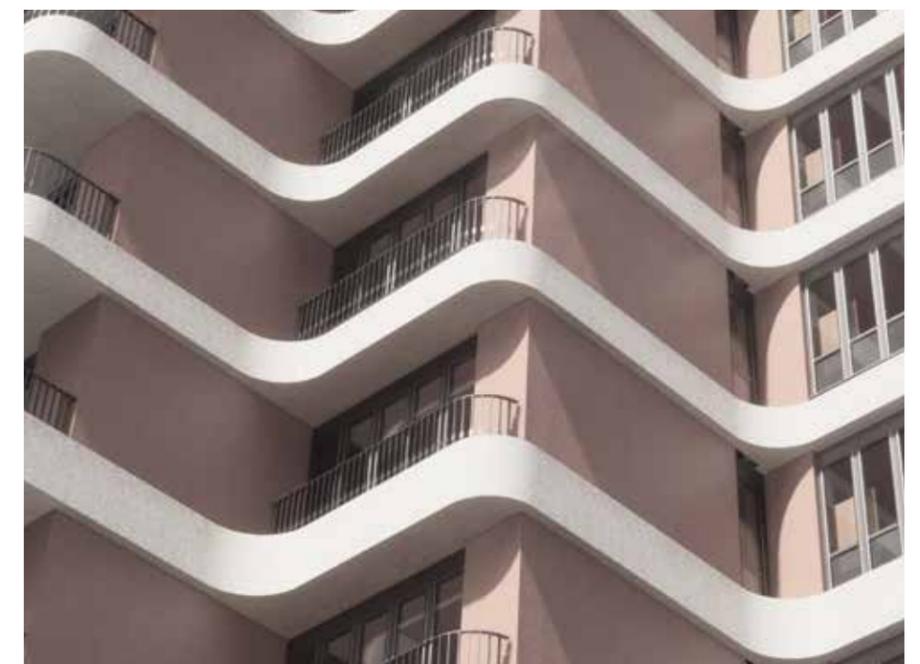
The glaze will add a timeless quality to the material at a granular level, which will contrast with the matt finish of the precast and concrete balconies.



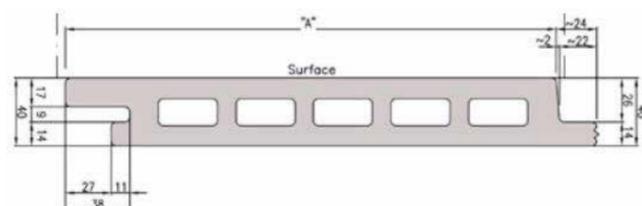
Facade axonometric view (Town squares)



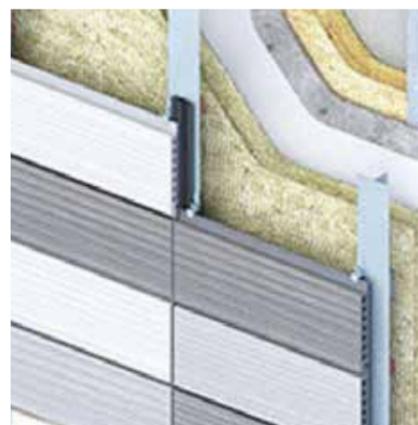
Green Terracotta - Town Squares



Orange Terracotta - Railway facing elevations



Indicative glazed terracotta panel detail



Typical terracotta cladding installation detail

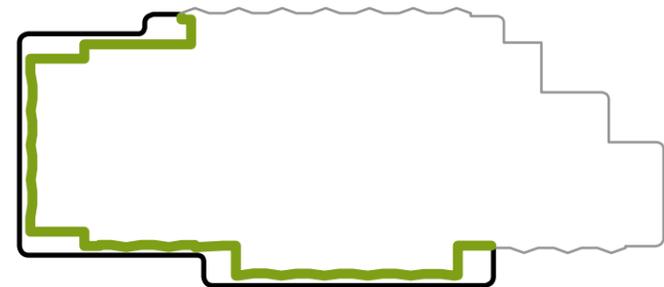


Indicative glazed terracotta colours

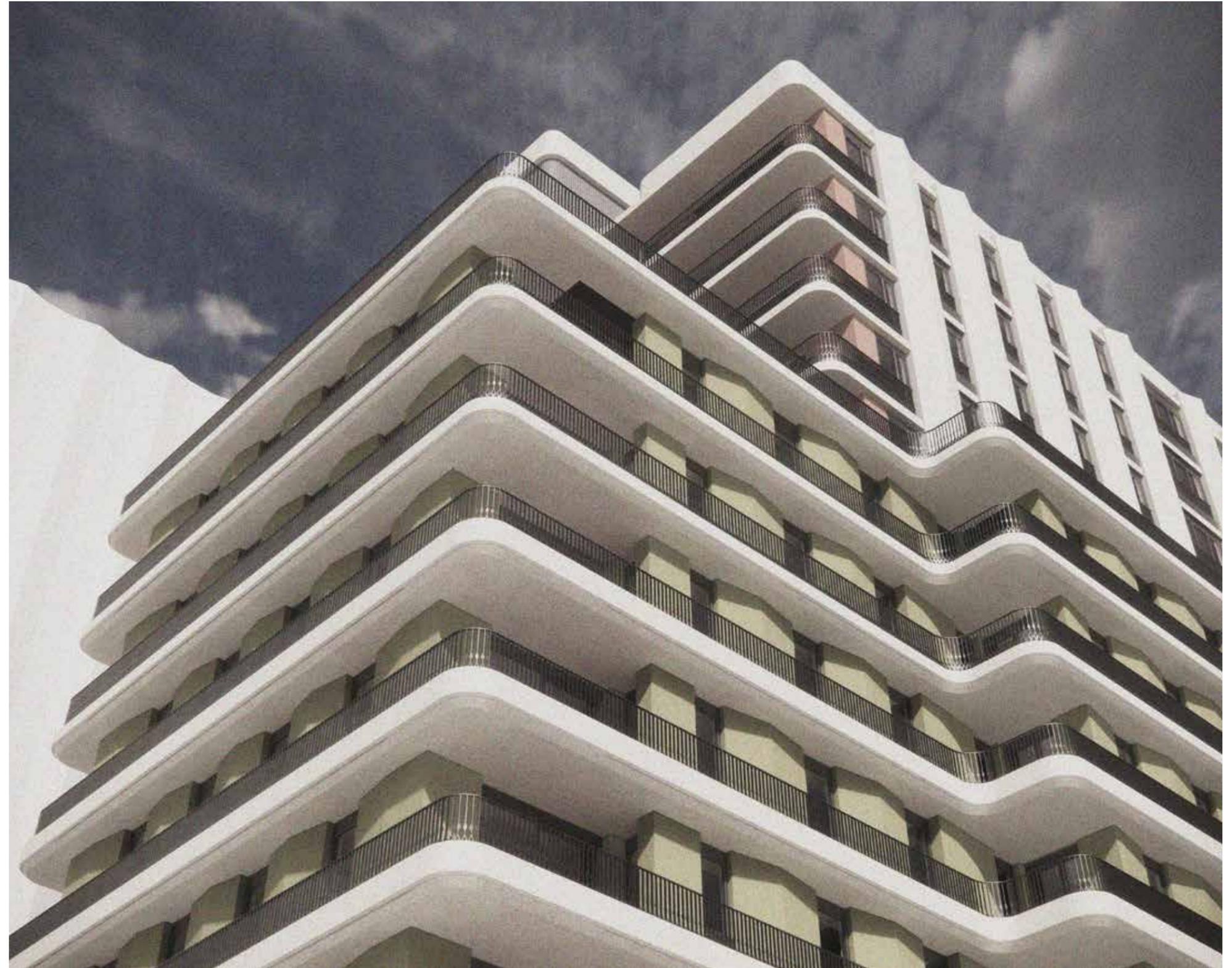
6.20 KEY FACADE TYPES: TOWN SQUARES

The primary facade addressing the new town squares are characterised by the following:

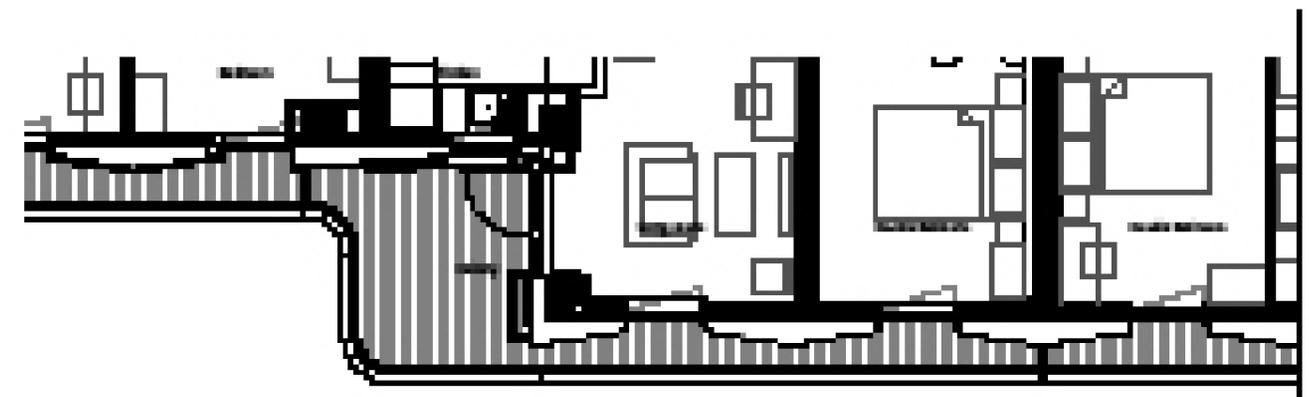
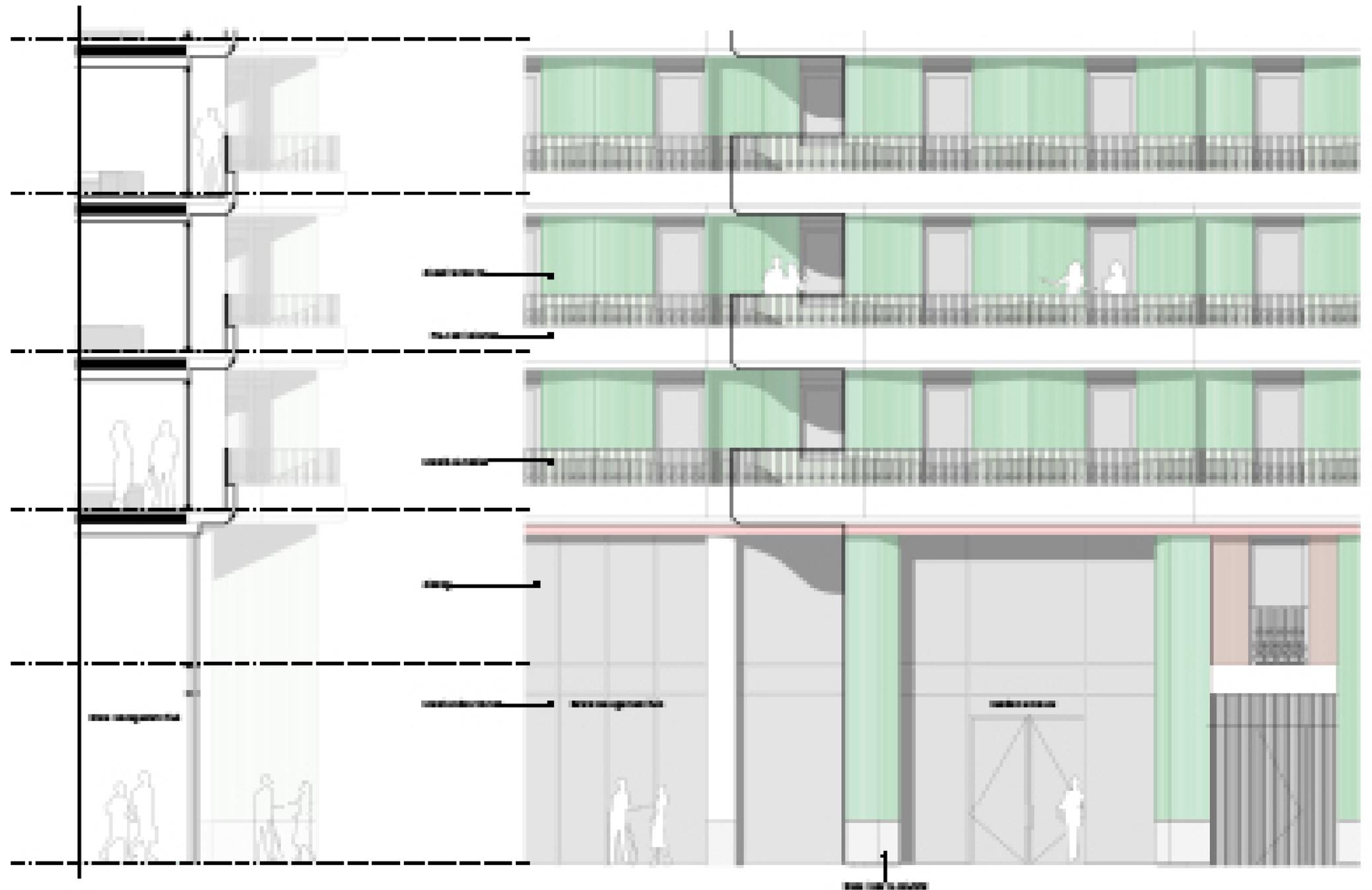
- Continuous masonry 'ribbon' balconies, with gradual a reduction in depth up the buildings
- Green glazed terracotta rainscreen cladding, with a 'chevron' plan profile
- Full height opening windows onto the balconies



Characterised by continuous ribbon balcony and colour



View from ground level of North West Elevations (B8 right)

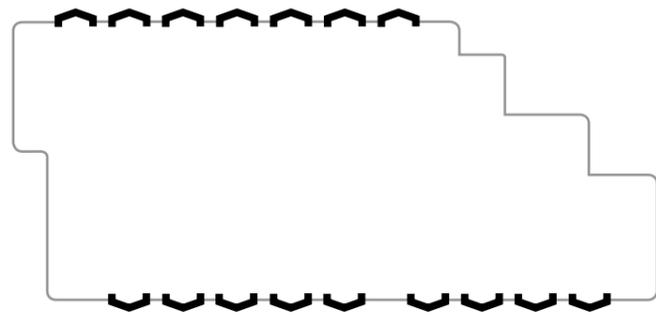


Detailed plan, section and elevation

6.21 KEY FACADE TYPES: SIDE ELEVATIONS

The side elevations are characterised by the following:

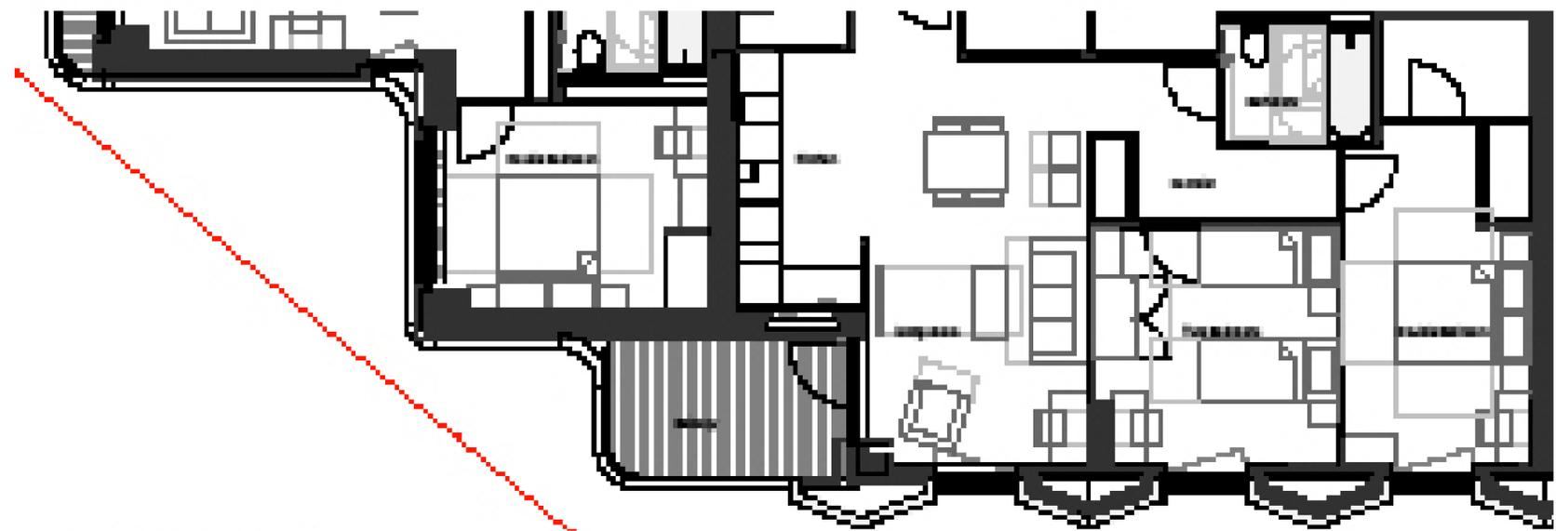
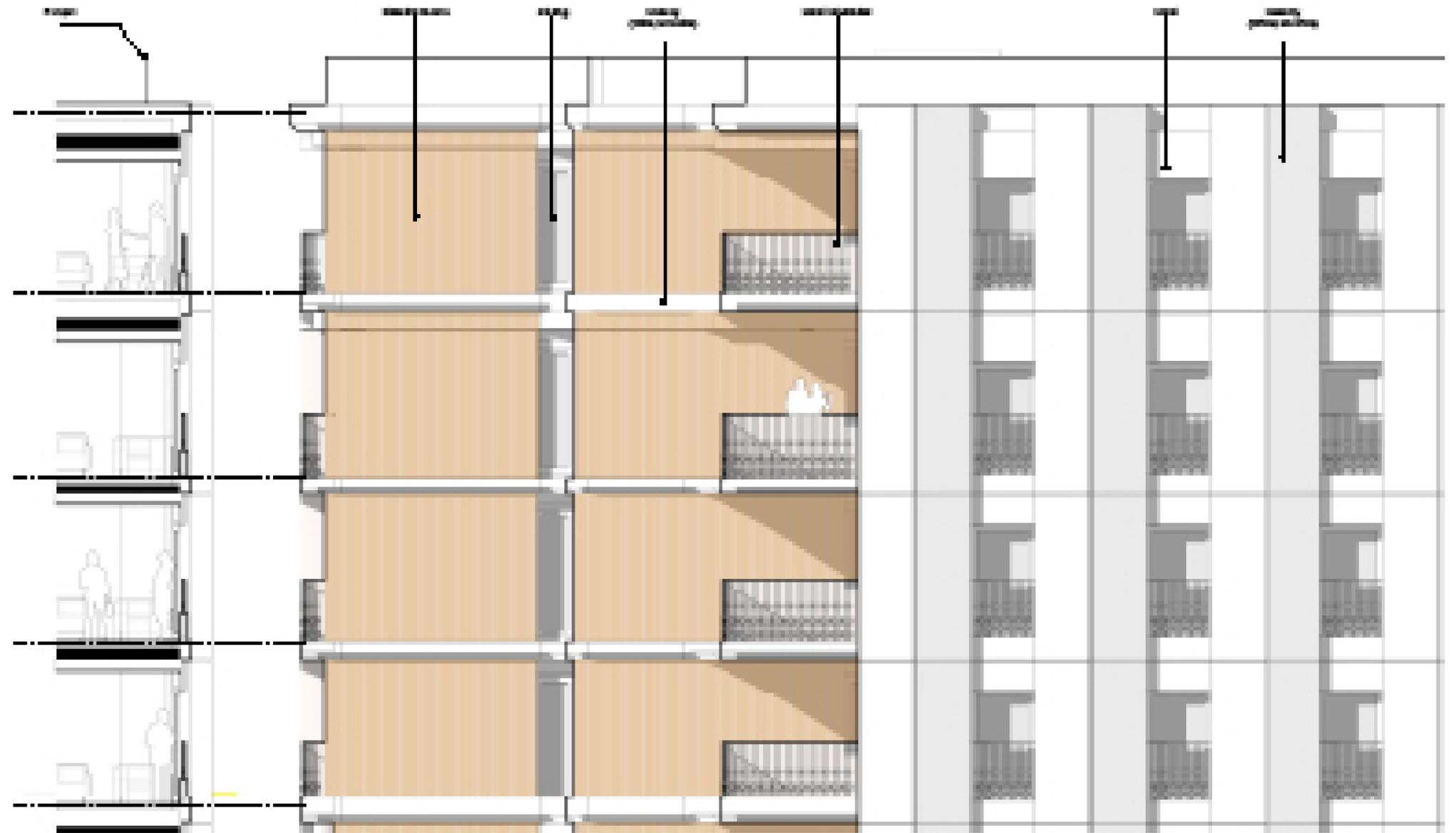
- Vertical masonry cladding panels with matching 'chevron' plan profile to town square elevations
- Subordinate horizontal expression
- 'Juliet' style inward opening half height windows
- Monochrome colour palette, providing backdrop for colour elsewhere
- Detailed to give a monolithic feel to the architecture, with minimal or hidden joints between panels



Repeated 'framework' for colour and curves



View from private balcony looking towards Building 8

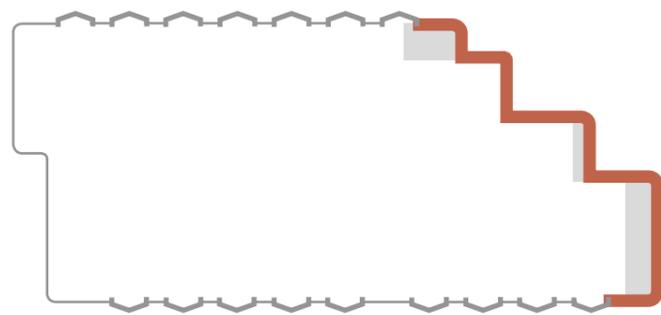


Detailed plan, section and elevation

6.22 KEY FACADE TYPES: RAILWAY ELEVATIONS

Railway facing façades are characterised by the following:

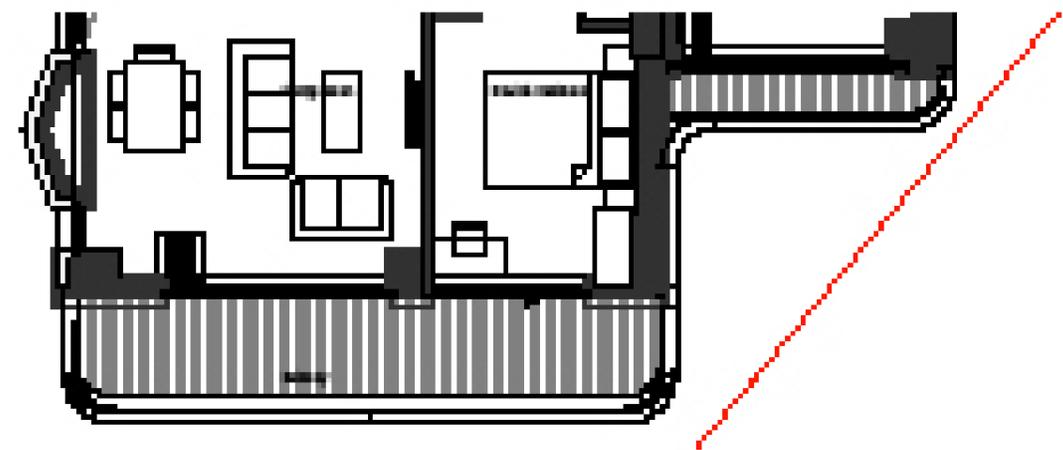
- Strong continuous horizontal expression, reducing in depth up the building
- Horizontal expression steps in and out in plan to create private amenity spaces for apartments
- Orange glazed terracotta adds colour against monotone masonry horizontal expression



Continuous horizontal expression and colour with range of balcony types



External view - Facade type XX

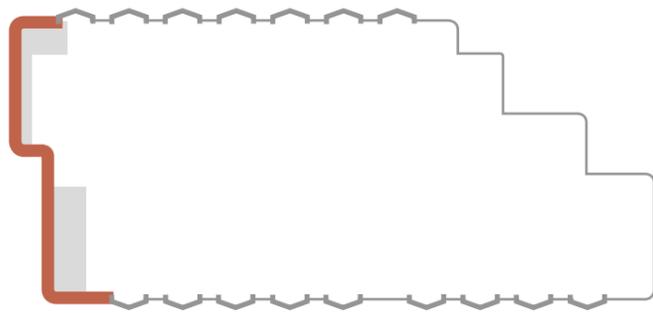


Detailed plan, section and elevation

6.23 KEY FACADE TYPES: UPPER NW ELEVATIONS

These facade are similar in character to the railway elevations, as below:

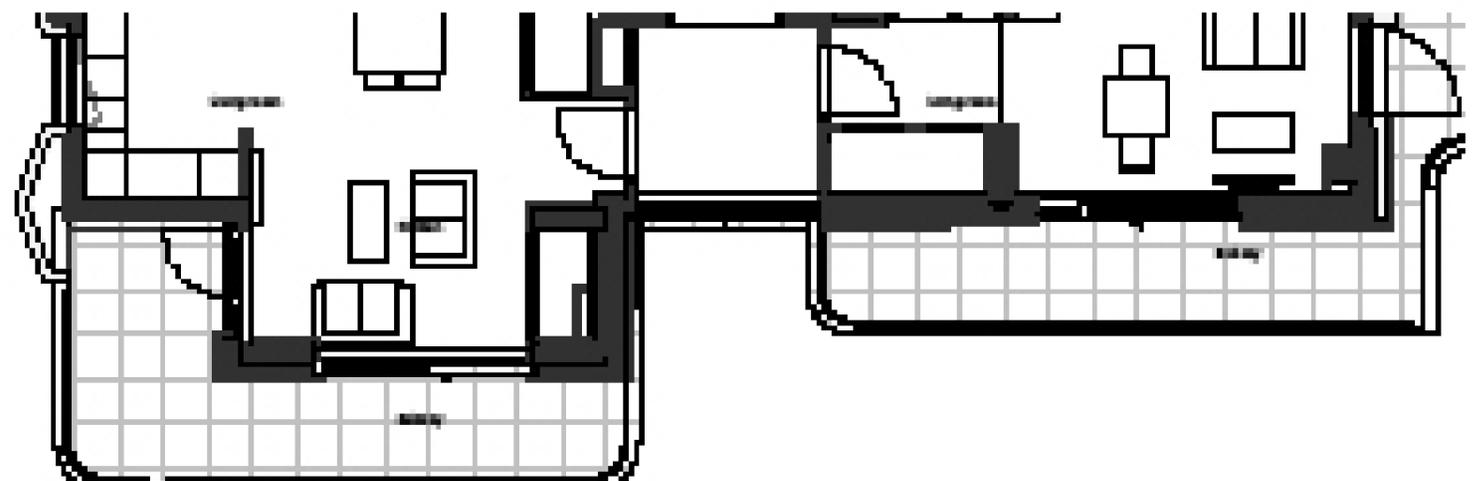
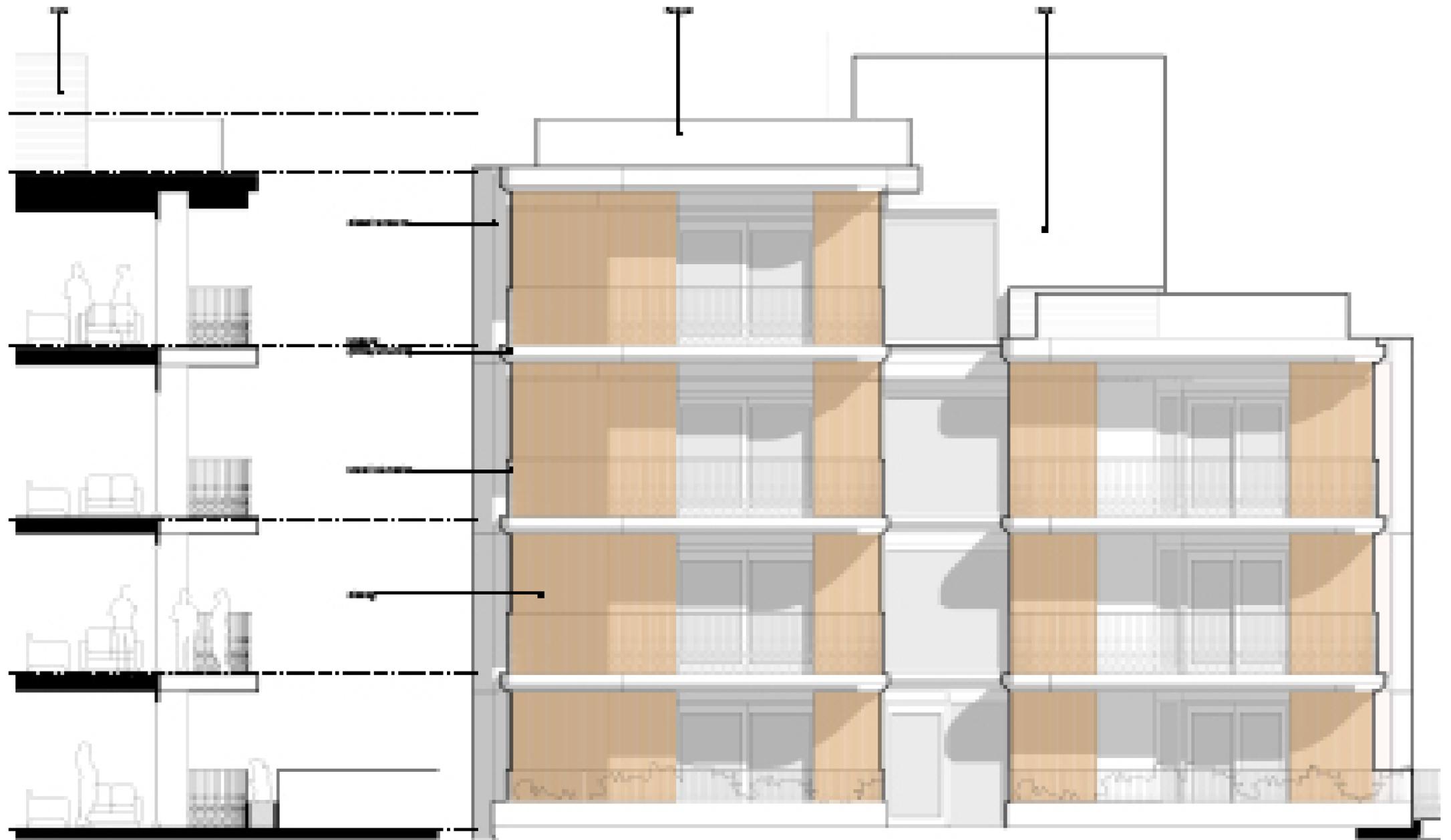
- Strong continuous horizontal expression, reducing in depth up the building
- Horizontal expression steps in and out in plan to create private amenity spaces for apartments, creating full width balconies to each of the apartments
- Orange glazed terracotta adds colour against monotone masonry horizontal expression



Continuous horizontal expression and colour with linear balconies



View from west (Building 7)



Detailed plan, section and elevation

6.24 BALCONIES & METALWORK

The relationship between the balustrades and the masonry balconies is a fundamental detail to the building's character. The lower levels of the buildings have a greater degree of masonry as part of the masterplan strategy to ensure greater privacy from the public realm, with this solidity reducing up the building.

Drawing on local precedents, the metalwork provides the scheme with a level of ornamentation and fine detailing.

Privacy Screens

These are introduced throughout the ribbon balconies with the following objectives:

- Denoting tenant demise
- Increasing privacy for residents

The visual opposite shows how a simple opaque glass screen is integrated seamlessly into the design, complimenting the green terracotta cladding.

Clothes Drying

The facility for residents to dry clothes on their balconies has been considered with the following objectives:

- Discreet fixing points below the height of the balustrade to reduce visibility from ground level
- Permanent fixing points in private amenity space to encourage its use

This can then be fitted with a simple folding device that can be lowered when not in use. See opposite page for design solution.



Local precedent: Chelsea Barracks

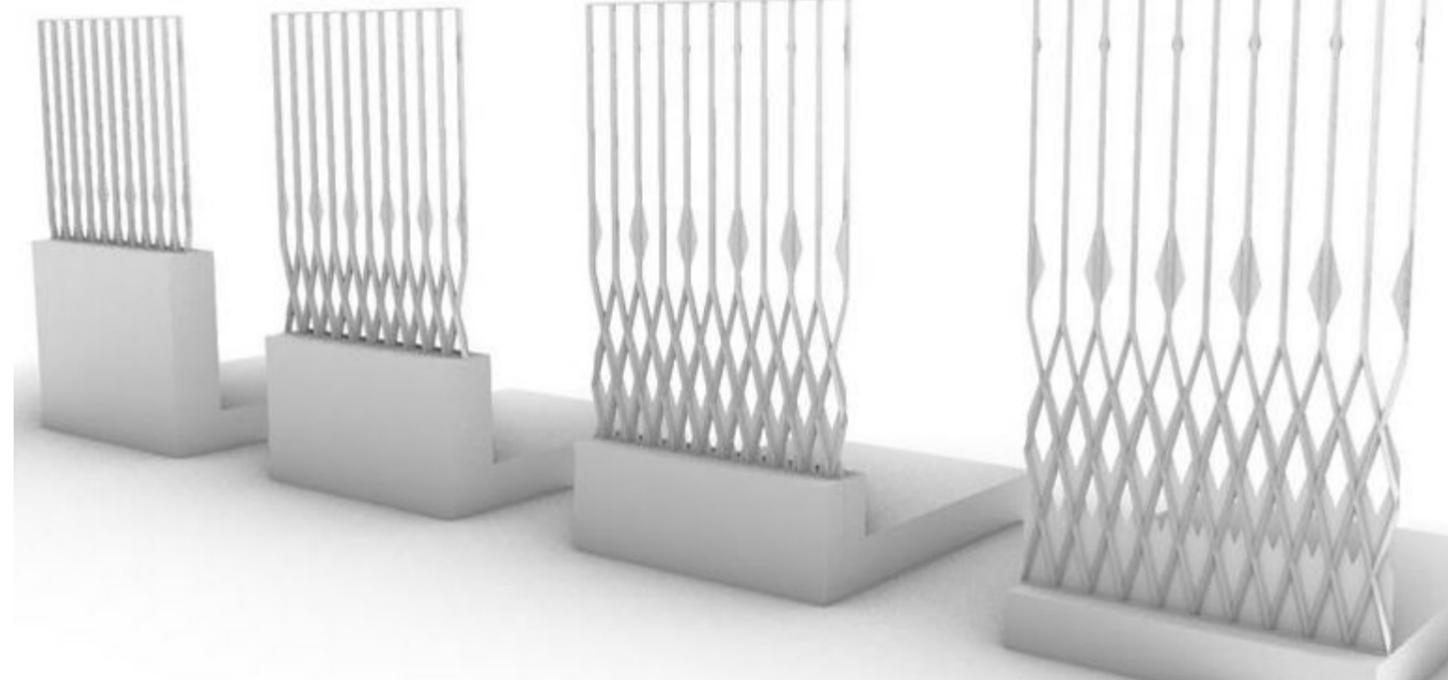


Local precedent: L. Sloane Street



Decorative metalwork

Balcony metalwork conditions



Type A

500mm masonry
700mm metalwork

Type B

300mm masonry
900mm metalwork

Type C

150mm masonry
1050mm metalwork

Type D

Masonry flush with finished floor level
1200mm metalwork

Type C

Type B

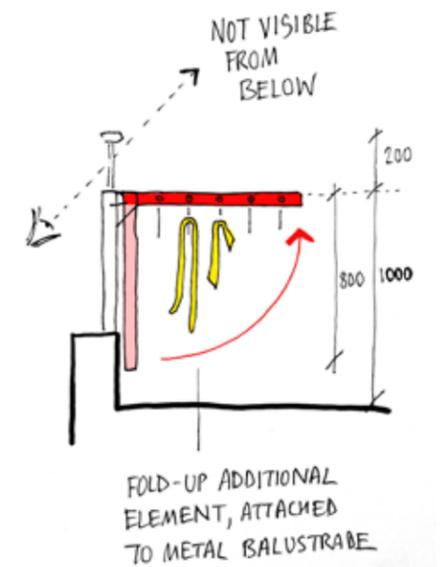
Low level motif restricts views in

Glazed terracotta cladding system

Translucent glass privacy screens between apartments, colour to match terracotta facade



Typical town square balcony - view in



Clothes drying principles

07

**DETAILED AREA:
ACCESS AND LOGISTICS**

7.01 ACCESS AND STRATEGIES

Inclusive Access strategy overview

Access into the site, public realm, home and residential amenity has been well considered to provide an inclusive environment for all to enjoy. The consideration for access and use has gone beyond, to provide a scheme designed to adapt and meet the changing needs of residents and public. An Access statement, in Appendix A1 of this document, has been produced in support of the design and provides further detail.

Inclusive design strategies:

- 90% of homes are provided in accordance with Building Regulation requirement M4(2)
- 10% of homes are provided in accordance with Building Regulation requirement M4(3) adaptable homes, across all tenures
- Further provision of homes have been designed to be adaptable to meet residents changing lifetime requirements and/or local authority housing needs
- Homes and public realm have been designed to provide level thresholds and have robust and contrasting material colours and texture
- Vehicle access is limited to areas of the masterplan to create a safe inclusive environment
- Well-lit external space provides definition and security
- Optional configurations of seating within the masterplan to accommodate needs of users and choice
- Disabled car and cycle parking near to building entrances
- Buildings have an enhanced means of escape as part of inclusive design considerations
- Access and security systems are inclusive to all physical needs
- Communication points to management hub for security and support

Refuse, deliveries and storage



Ground floor plan

Key: Storage and deliveries

- Facilities general storage
- Management Hub storage
- Delivery loading bay
- ▶ Entrance to Management Hub
- Location of concierge: Management Hub
- Letters and parcels: Residential lobbies

Key: Refuse

- Refuse store
- ▭ Indicative location: Refuse vehicle stop point
- ▶ Vehicular route for refuse and deliveries

Scheme strategies

A summary of key scheme strategies is illustrated opposite. These relate directly to the overall masterplan-wide strategies as illustrated in Chapter 4: Illustrative Proposal. Please also refer to the Transport Assessment for more detailed information and analysis, as well as how provision for car parking, refuse and cycles has been calculated.

Refuse

- Refuse vehicles approach and circulate clockwise around the vehicular route in the town square
- Refuse stores are positioned on building frontage, within 10m of a suitable stopping point for the refuse vehicle
- Level access from stores, and suitably dimensioned doors for convenient access

Deliveries and storage

- Delivery vehicles approach and circulate clockwise around the vehicular route in the town square
- 2 x loading bays provided, for vehicles to stop safely and unload if necessary without blocking other traffic
- Post and parcels to be deposited in letterboxes within residential lobbies. Front doors accessed via intercom to estate management
- In event of overspill parcels, or if a delivery is incorrectly labelled, these are brought to the estate management concierge and stored in the management storage area directly adjacent in B7
- Other general storage is provided (for the use by management only) at the rear of the plan, highlighted in yellow opposite.

Car and cycle parking



Basement plan



Ground floor plan

Key: Car parking

- Accessible car parking bays
- Car club parking bays
- E EVC point (Electric Vehicle Charging)
- ▶ Entrance to car parking under podium
- - - ▶ Vehicular route

Key: Cycle parking

- Cycle store
- Lift to cycle store
- ▶ Entrance to cycle store
- Management Hub: Long stay (1 x sheffield)
- Management Hub: Short stay (2 x sheffield)

Required cycle parking provision

Building	Residential	
	Long Stay	Short Stay
7	207	4
8	212	4
Total	419	8

Required car parking provision

Building	Provision
7	4 Accessible bays (of which 2 EVC)
8	14 Accessible bays (Of which 7 EVC)
Car club	1 (In external landscape)
Total	19 spaces (inc. 1 car club)

7.02 COMPLIANCE: PART M4(2) APARTMENTS

ACCESSIBLE AND ADAPTABLE DWELLINGS

All apartments comply with or exceed the standards set out in the National Space Standards and Approved Document M. The following pages include a summary of the key standards complied with, and illustrate how the typical apartment layouts are responding to them.

National Space Standards Requirements

- Single Bedrooms should be at least 2.15m wide and have a minimum floor area of 7.5sqm;
- Double bedrooms should have a minimum floor area of 11.5sqm;
- One of the double bedrooms should be at least 2.75m wide and every other double or twin bedroom is at least 2.55m wide

Part M compliance: Category 2 Accessible and adaptable dwellings

Private Entrance

- Level external landing with a minimum width and depth of 1200mm;
- Entrance door minimum clear opening width of 850mm;
- Minimum of 300mm nib to the leading edge of the entrance door and the extra width created by this nib is maintained for a minimum distance of 1200mm beyond it;
- Maximum of 200mm reveal depth to the leading side of the entrance door;
- Accessible threshold

Circulation and Internal doorways

- Minimum clear width of corridors, halls or landing is 900mm (generally at least 1050mm provided);
- Minimum clear width of doors is 750mm
- Minimum 300mm nib to the leading edge of every door

Private Stairs

- Stairs to have a minimum clear width of 850mm

Habitable Rooms

- A minimum 1200mm clear space is provided in front of and between all kitchen units and appliances;
- 750mm clear access route from doorway to the window on all bedrooms;
- 750mm clear access zone to both sides and foot of the bed on at least one double bedroom;
- 750mm clear access zone to one side and foot of the bed on every other double bedroom (where applicable)
- 750mm clear access zone to one side of the bed on all single and twin bedrooms (where applicable)

Sanitary Facilities

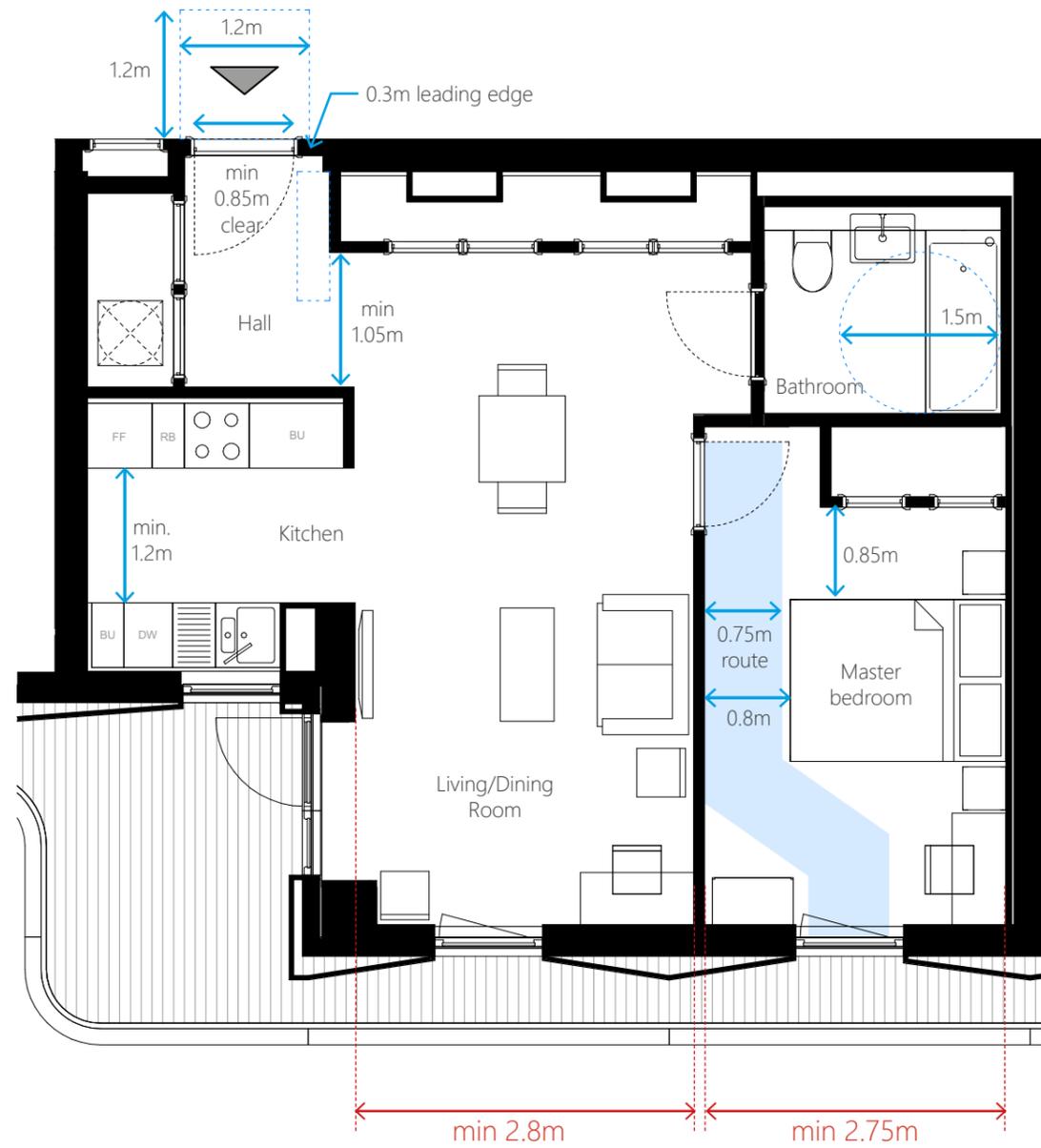
- All walls, ducts and boxing to the bathroom are strong enough to support grab rails, seats and other adaptations that could impose a load of 1.5kN/sq. m;
- All units to provide a room on the entrance storey that provides a WC and a basin;
- In a two or three storey dwelling with 3 or more bedrooms, the room with the WC and the basin allows for the potential installation of a level access shower;
- All doors to sanitary facilities open outwards;
- Provision of level access shower and 1500mm diameter clear turning circle to bathrooms;

Services and Controls

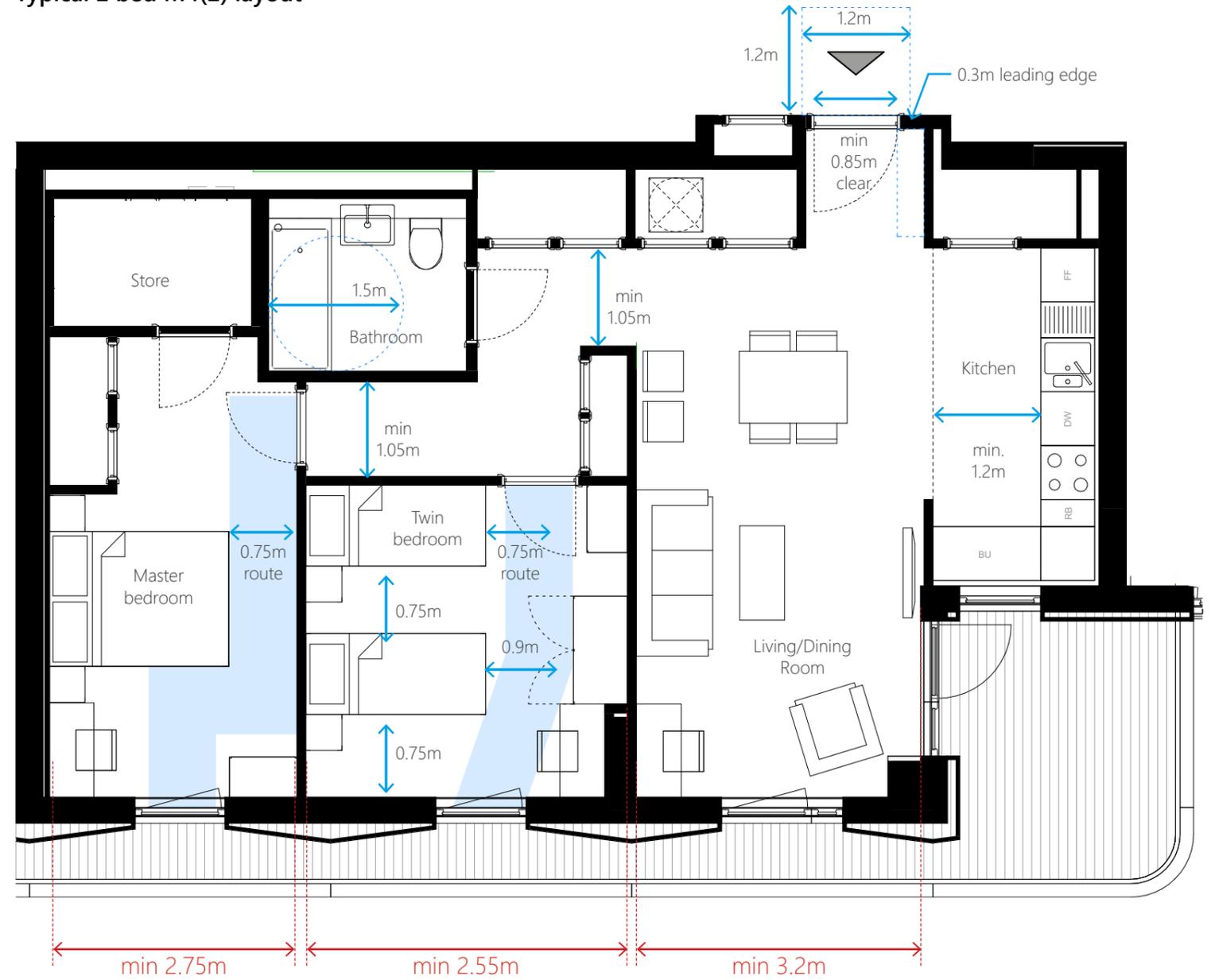
- Consumer units are mounted so that the switches are between 1,350mm and 1,450mm above floor level;
- All switches, sockets, stopcocks and controls have their central lines between 450mm and 1200mm above floor level and a minimum of 300mm (measured horizontally) from an inside corner;
- Window handles are located between 450mm and 1200mm above floor level;
- Boiler timer controls and thermostats are mounted between 900mm and 1,200mm above finished floor level

Typical M4(2) apartment layouts

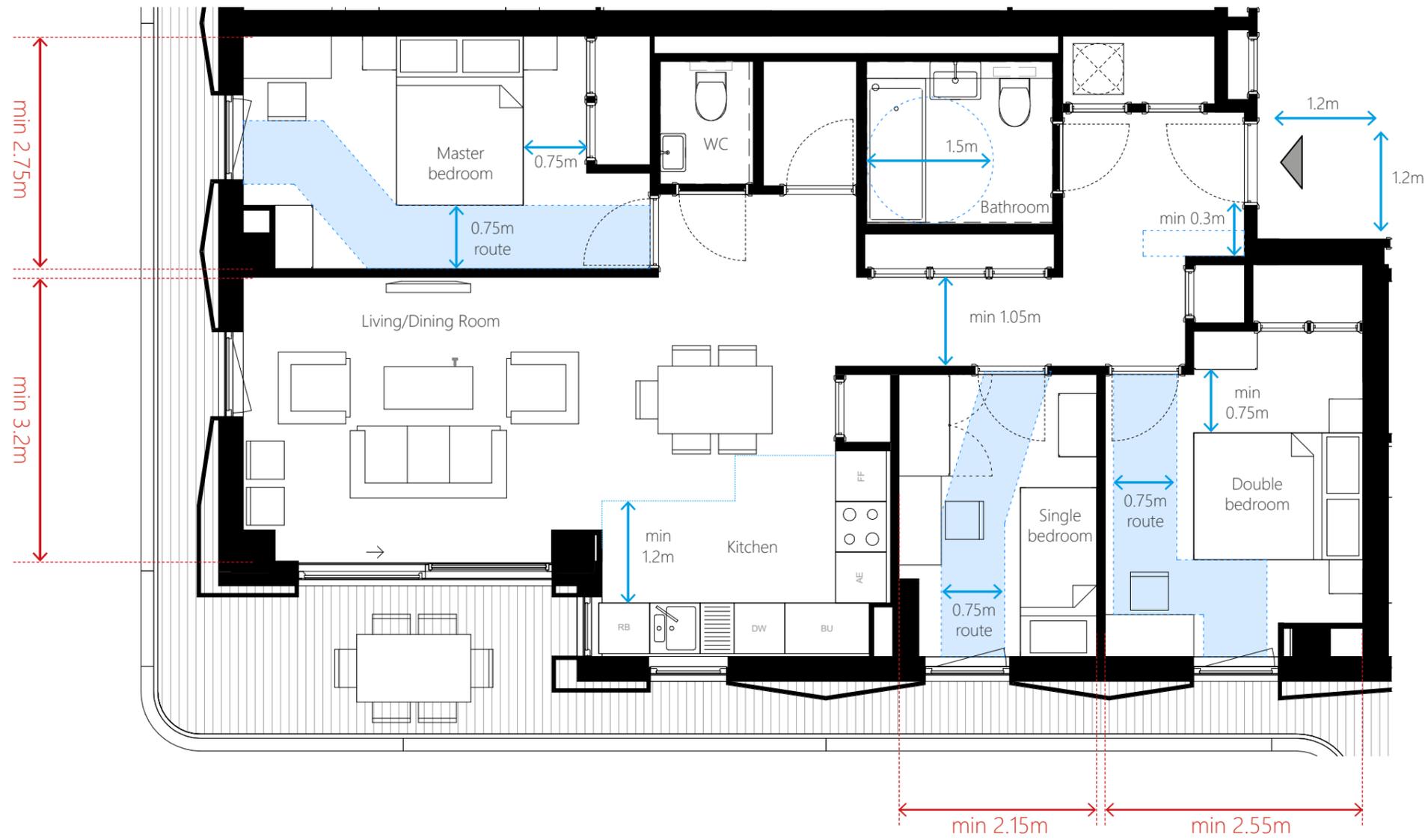
Typical 1 bed M4(2) layout



Typical 2 bed M4(2) layout



Typical 3 bed M4(2) layout



7.03 COMPLIANCE: PART M4(3) APARTMENTS

WHEELCHAIR USER DWELLINGS

The following pages illustrate how adaptable wheelchair user dwellings in the scheme comply with the Approved Document Part M4(3) standards and requirements. There is also an explanation of the location of adaptable homes in the scheme.

Part M compliance: Category 3 Wheelchair user dwellings - Adaptable

Private Entrance

- 1500mm turning circle inside entrance area;
- 300mm nib to leading edge of entrance door and the extra width created by this nib to be maintained for a minimum distance of 1800mm beyond it;
- 850mm clear opening width to entrance door
- Minimum 200mm nib provided to following edge of entrance door and the extra width created by it to be maintained for a minimum distance of 1500 beyond it;
- Accessible threshold;

Circulation and Internal doorways

- Minimum clear width of every hallway, approach or landing is 1050;
- Minimum 1200mm clear width to corridors when approach to doorway is not head-on;
- Minimum 850mm clear opening width to all doors;
- 1500mm turning circle immediately outside outward doors when located close to a corner and another door is located on the return wall;
- Minimum 300 nib to the leading edge of every door;
- Minimum 200mm nib provided to the following edge of every door;

Wheelchair Storage and Transfer Space

- A minimum 1100x1700mm space is available on the entrance storey;
- Wheelchair storage space is accessible from a 1200 clear width space;

Kitchen and eating area

- Minimum 1500mm zone in front of all kitchen units and appliances
- Potential extension of kitchen to meet the provisions of wheelchair accessible dwellings;

Bedrooms

- Minimum 750mm clear access route from doorway to window on all bedrooms;
- Clear 1200x1200mm manoeuvring space inside the doorway;
- The principal bedroom has a minimum floor area of 13.5sqm and is a minimum 3m wide;
- The principal bedroom provides a minimum 1000mm wide clear access zone to both sides and foot of the bed, and a 1200x1200mm manoeuvring space on both sides of the bed;

- Every other double bedroom has a minimum floor area of 12.5sqm and is a minimum of 3m wide;
- Every other double bedroom can provide a 1000mm wide clear access zone to one side and foot of the bed;
- All single bedrooms provide a minimum 1000mm clear access zone to one side of each bed;
- Every single bedroom has a minimum floor area of 8.5sqm and is at least 2.4m wide;

Sanitary Facilities

- All walls, ducts and boxings to the bathroom are strong enough to support grab rails, seats and other adaptations that could impose a load of 1.5kN/sq. m;
- The ceiling structure to bathrooms and WC is strong enough to allow for the fitting of an overhead hoist capable carrying a load of 200kg;
- The door to WC facility on the entrance storey opens outwards;

Services and Controls

- Consumer units are mounted so that the switches are between 1,350mm and 1,450mm above floor level;
- All switches, sockets, stopcocks and controls, except controls to radiators, have their central lines between 700mm and 1000mm above floor level and a minimum of 700mm (measured horizontally) from an inside corner;
- The handle to at least one window in the principal living area is 700-1000mm above floor level;
- Handles to all other windows are 450-1200 above floor level;
- Door handles, lock, latches and catches are fitted 850-1000mm above floor level;
- Private Outdoor Space
- Every outdoor space has a minimum clear width of 1500mm and provides a 1500 level clear turning circle free of any door swing;