

5.0

Design | 5.1 Design Evolution: Viable Upper Level Residential

Many of the massing principles had been set out in the planning policies for the site, especially in regards to grouping the development into a stepped arrangement of towers.

However through the process there have been a number of massing studies that analyse the relationship between each tower and its context.

The design development has been tested against the key design drivers discussed earlier. In order to deliver a viable scheme above an existing development, the constraints of the existing shopping centre were key.

Units that were on short lease or coming to the end of their lease were considered for the locations of the circulation cores of the blocks. During the development process, the availability of retail space changed over time, which in turn affected the proposals.

Height has been a key design driver in this scheme with reference to the Station Hill Development. Outline consent was given for Station Hill with a suggested maximum AOD of +128m. This has been tested against several massing options for the development site.



September 2016

The initial Massing studies for the 5 sites were based upon available space / core locations at ground level and testing various height options against the Station Hill Outline Consent.



October 2016

Further development of the scheme to provide student accommodation was developed. This involved linking the 3 distinct towers at the lower levels immediately above the car park. It was felt however that this massing option was inappropriate due to lack of permeability through the site from a North South aspect.



November 2016

Taller massing option was redeveloped as private residential with reference to the Station Hill outline consent with a maximum AOD of +128m.



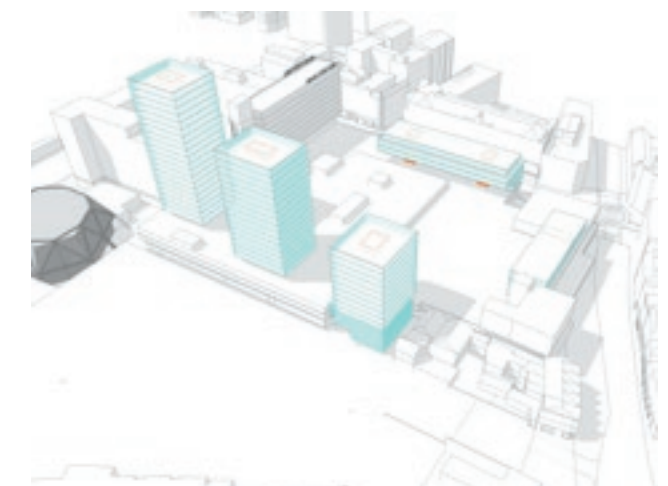
December 2016

The architectural treatment was developed in order to achieve a tall, slender looking 'family' of buildings. The orientation of the cores was also interrogated further.



December 2016 - Twisting of the Towers

The orientation of the towers along Dusseldorf Way was interrogated with options showing the towers rotated slightly in plan which had a negative impact on the existing retail at ground level and was therefore considered unviable.



December 2016 - initial massing proposals

The stepping of the Towers was then reintroduced and the height of the Oxford Road block was reduced, with a set back introduced to mitigate the potential for overshadowing.

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Design | 5.1 Design Evolution: Viable Upper Level Residential

Pre-application discussions including with the Chief Planning Officer and the Deputy Leader of the Council have provided positive feedback in relation to the scale and ambition of the proposals. In particular there has been a clear appetite expressed for taller buildings which can contribute to the regeneration and refurbishment of the Mall and to encourage significant residential provision in the town centre.

So far officers and the Deputy Leader have suggested that buildings rising to a comparable height as Chatham Place may be acceptable but that buildings up to the height of those approved at Station Hill could be acceptable (i.e. not rising taller than the tallest buildings granted consent in Reading).



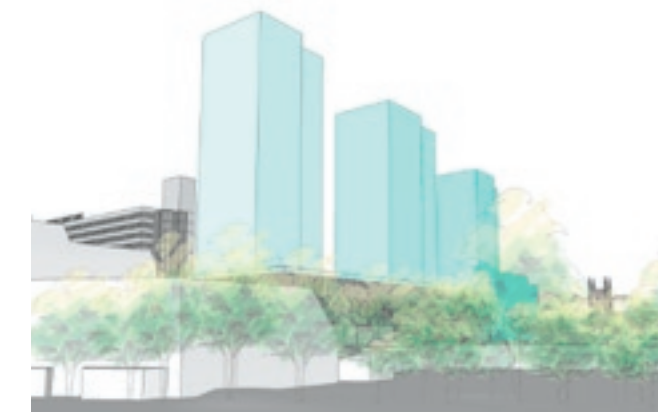
May 2017 - initial massing proposals

The floorplates of the blocks were inset, helping break down the mass and improving the vertical emphasis of the forms. Sites A and B were shown at the same height but with a step in the mass to respond to the adjacent conservation area.



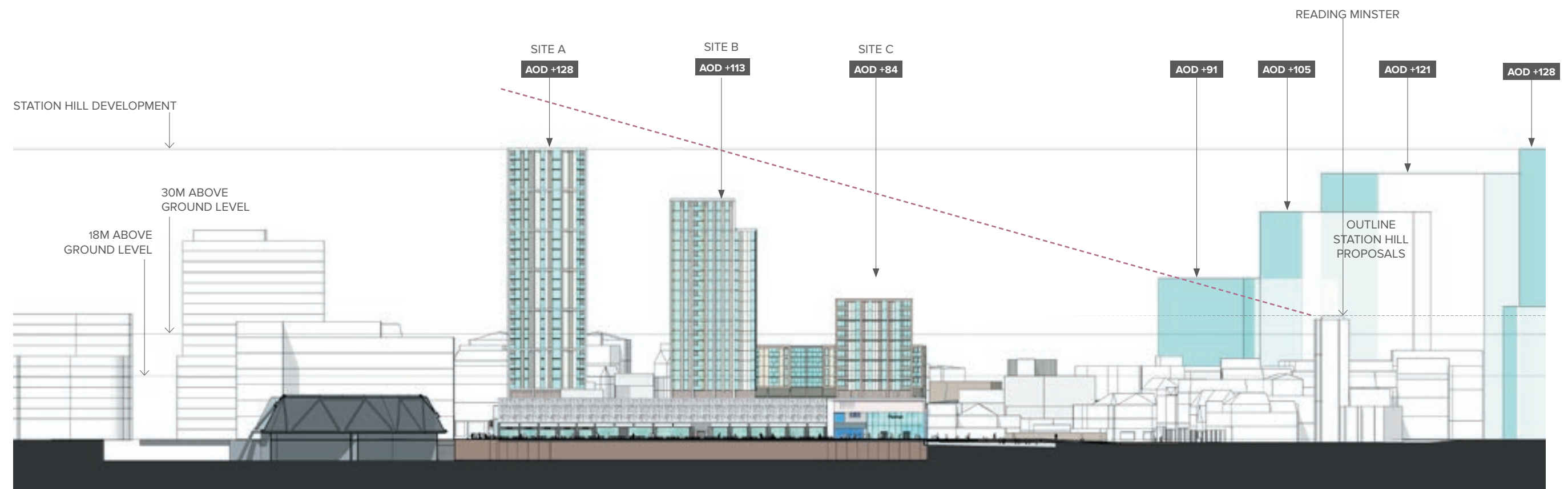
August 2017 - initial massing proposals

The heights of sites A and B were shown similar in height but the architectural treatment was developed further. The massing along Oxford Road was subject to Daylight Analysis. The massing was developed to alleviate overshadowing.



March 2018 - initial massing proposals

The step in the mass and height was retained along Dusseldorf Way. The proposals were subject to structural interrogation which set the height of the first level of residential and therefore the overall height of the building which was 1m above the Station Hill Development.



Massing Study from September 2016 showing the Station Hill Outline Consent in comparison to the initial BSM Development

5.0

Design | 5.2 Application Sites & Phasing

Application Sites

Following an extensive review and pre-application process with Reading Borough Council, we have been able to refine the extent of the application sites as follows:

Sites A & B - Dusseldorf Way

Partial demolition of the existing centre and the construction of 172 and 139 residential homes respectively, with amenity space and retail unit reconfiguration at ground floor level and ancillary space at basement level.

Site C - Dusseldorf Way / Hosier St

Construction of 99 residential homes and new retail unit with ancillary space at basement level.

Site D - Quadrant House

Refurbishment of existing office into 31 residential homes.

Site E - Oxford Road

Partial demolition of the existing centre, loss of one retail unit at ground floor to facilitate the construction of 52 residential homes above the existing centre, with ancillary space at basement level.

Phasing

The scheme is being split into two phases, the first phase of which consists of sites A, B and C. The second phase covers sites D (Quadrant House) and E (Oxford Road).



5.0

Design | 5.3 Proposed Use, Amount & Scale

Use & Amount

The scheme developed into 5 distinct structures outlined below:

Site A - Dusseldorf Way

The provision of **172** new homes with shared Amenity space and reconfigured retail space.

Site B - Dusseldorf Way

The provision of **139** new homes with shared Amenity space and reconfigured retail space.

Site C - Dusseldorf Way / Hosier St

The provision of **99** new homes and retail unit.

Site D - Quadrant House

The refurbishment and extension of existing offices into **31** residential units.

Site E - Oxford Road

The provision of **52** new homes above the existing retail parade.

Scale

The tallest AOD proposed within the Outline Consent for Station Hill was set at +128m AOD. The height of the tallest block within this application site is +129m.

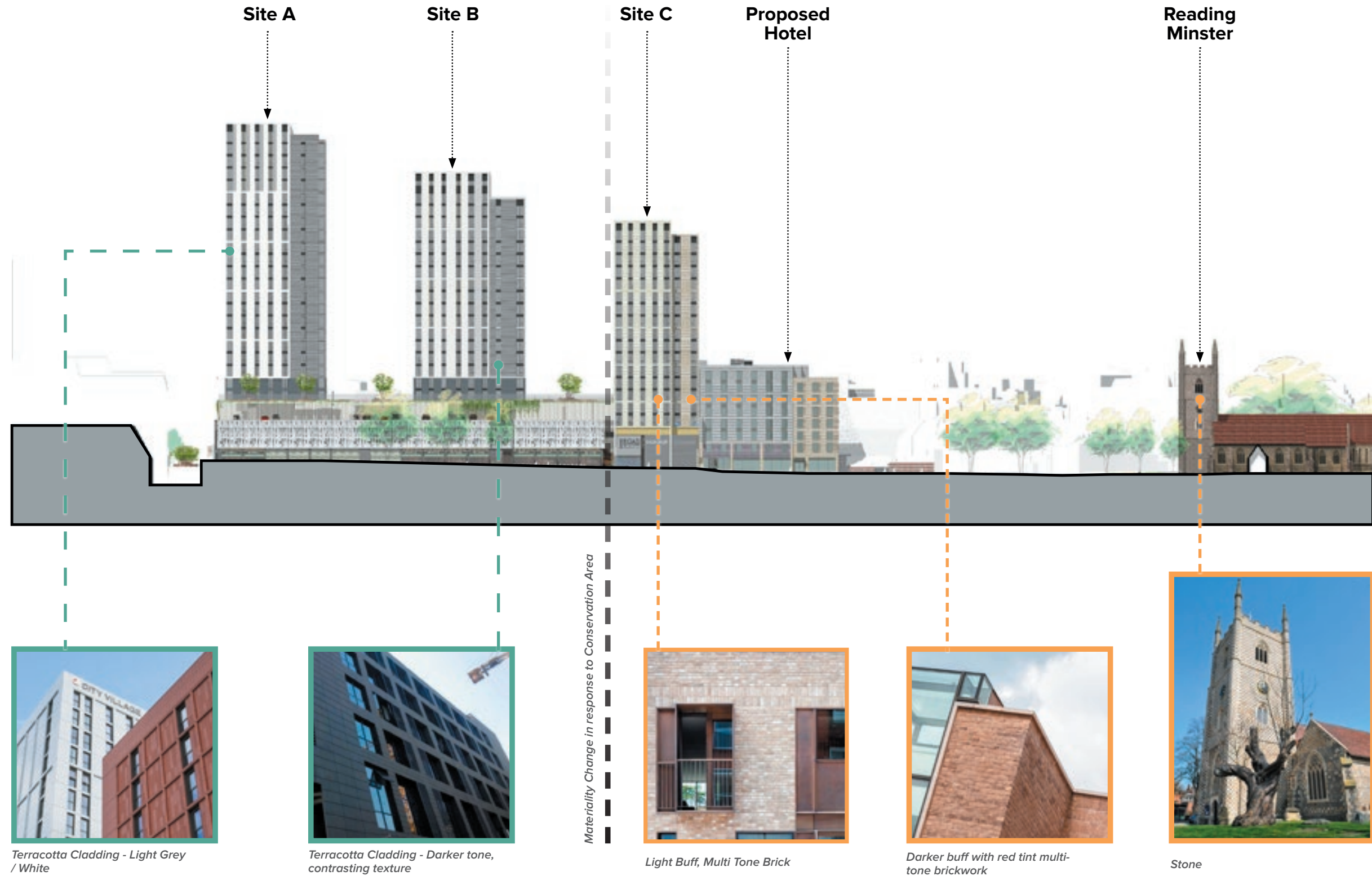
Following detailed development of the proposals with the structural engineers, the AOD of the proposed amenity deck was raised in order to maintain sufficient headroom beneath for the existing car park deck. Furthermore the need for a parapet at a minimum of 1.1m for maintenance personell at rooftop level for each of the blocks raised the AOD's for each tower.

The heights of the proposed blocks are therefore appropriate for the application site.



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Design | 5.4 Materiality: Dusseldorf Way



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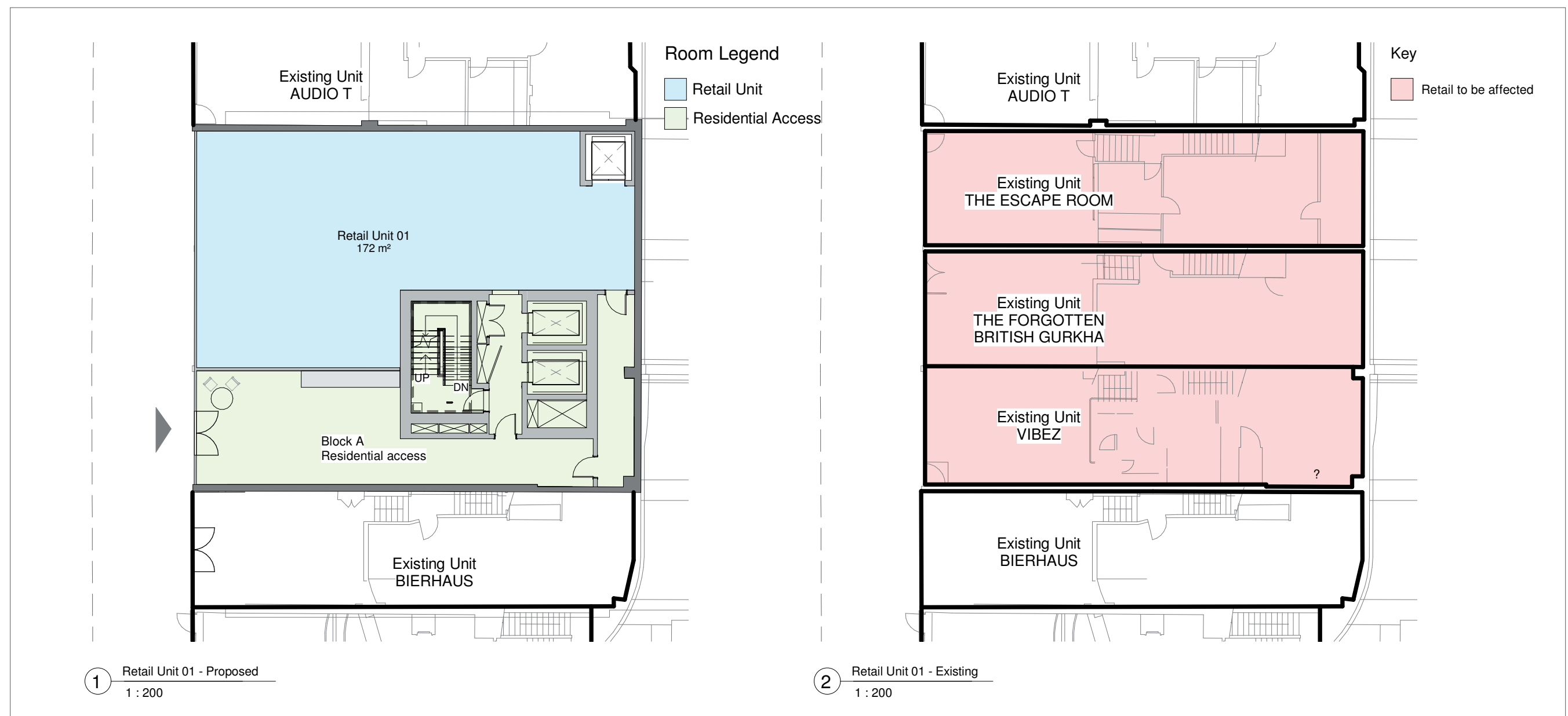
Design | 5.5 Site A - Dusseldorf Way: Layout

The scheme layout has been derived from the available space at ground and basement level of the existing Broad St Mall. Three existing retail units have been reconfigured to make space for the proposed residential core and lobby with the remaining space to become a proposed retail unit.

The ground floor level comprises level access from Queens Walk with entrance lobby for post and a management desk. The proposed width of the residential lobby has been determined by the existing pilasters of the retail frontage along Queens Walk.

This helps provide a generous residential entrance which will be well lit and secure providing natural surveillance along Queens Walk. Entry to and from the residential lobby will be access controlled.

Within the upper levels of the existing Mall, the proposed core is located within the NCP car park however there is no access to or from the residential core from levels A and B except for level C which will be access controlled only.



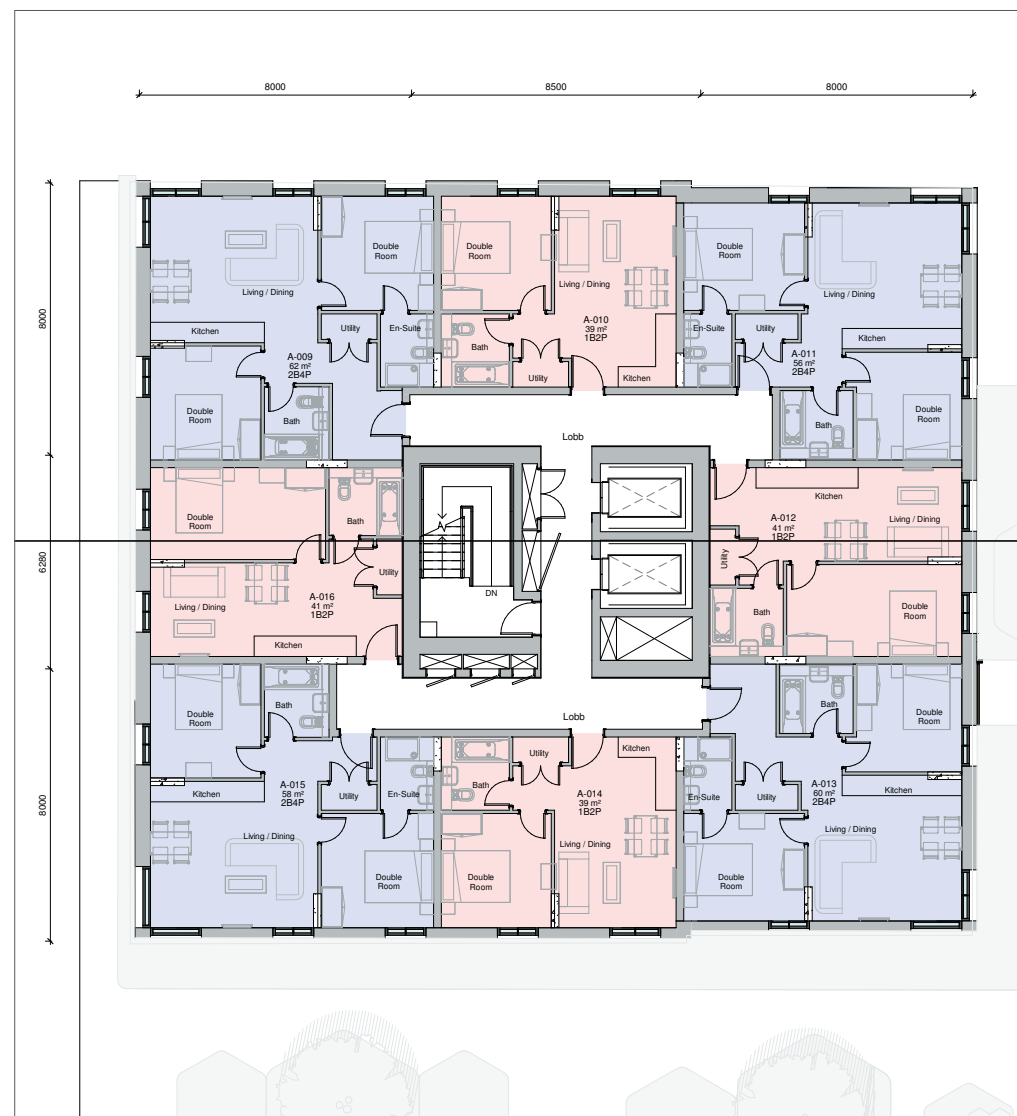
Site A - Dusseldorf Way - Reconfiguration of retail units

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Design | 5.5 Site A - Dusseldorf Way: Layout

The proposed Amenity Deck is accessed by residents only via a common corridor and is located above the existing level C (rooftop) of the NCP car park.

Upper Level residential accommodation is arranged around the core with a range of 1 and 2 bed room apartments, totalling 8 units per floor. The apartments to the corners of the layouts have dual aspect living spaces.



Site A - Dusseldorf Way - Typical Upper Floor Plan



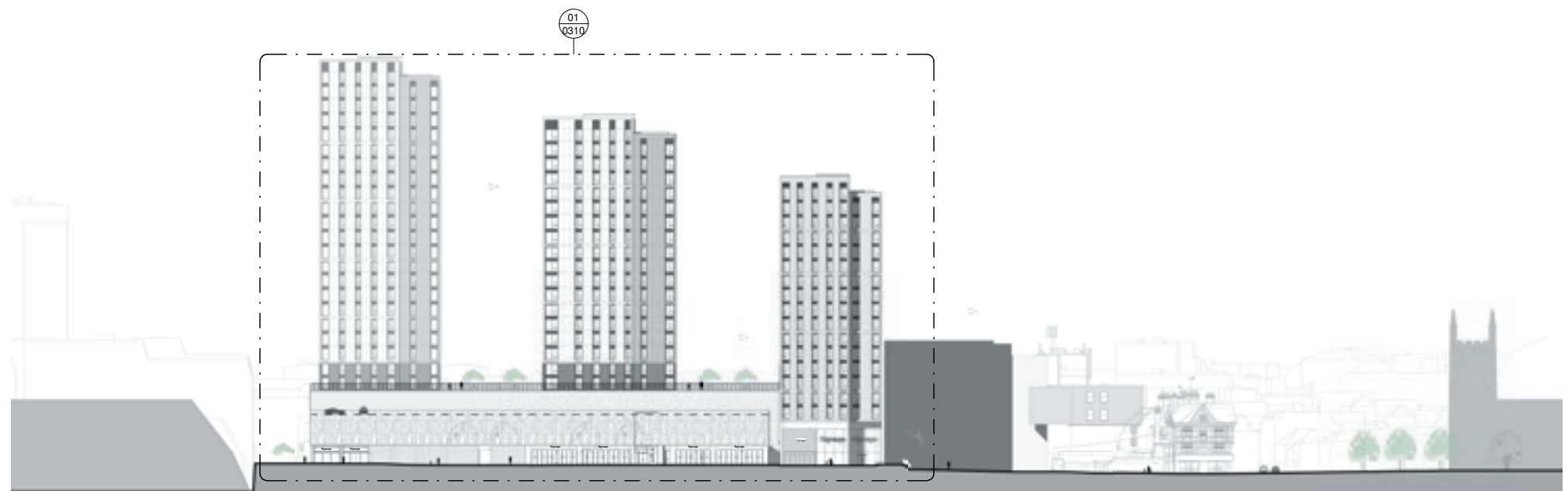
Site A - Dusseldorf Way - CGI of proposed amenity deck

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Design | 5.5 Site A - Dusseldorf Way: Scale

Site A comprises 22 stories of residential accommodation above the existing NCP car park with an additional level to accommodate for the retention of the car park roof level. The first level of accommodation sits 4m+ above the existing rooftop car park level.

This is to accommodate the proposed structural fins holding up the tower but also the maintain a minimum headroom of 2.2m to allow for cars on Level C to park underneath the development. This block is the tallest of the 5 developments within the application site and is considered a land mark opportunity being located on the South Western corner of the site.



Site A - Dusseldorf Way - Dusseldorf Way Street scene elevation extract

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Design | 5.5 Site A - Dusseldorf Way: Appearance

The existing buildings surrounding the site within the conservation area are predominantly brick, with new high-rise buildings under construction within Reading being built with alternative cladding options.

The design has been influenced by the need for enhanced verticality to achieve slender built forms above the centre. As the scheme is visible from key points across the vicinity of Reading, it is important to choose a material that is durable, good quality but also provides variations across the façade treatment. Site A is clad in Terracotta Cladding in an off-white / light grey, smooth and profiled texture.

The elevational treatment on the South Elevation is split in a 1 to 3 ratio allowing for 2 tones of cladding material to help emphasise verticality whilst the use of different textures and finishes provide a subtle variation. The introduction of a bronze anodised metal finish to some of the window reveals adds a playful but subtle distinction across the elevation when moving around the site. The split in the elevation allows for the built form to step up and away from the Minster helping reduce over all mass whilst being sensitive to the adjacent conservation area.



Site A, B & C - Dusseldorf Way - Street Scene Elevation

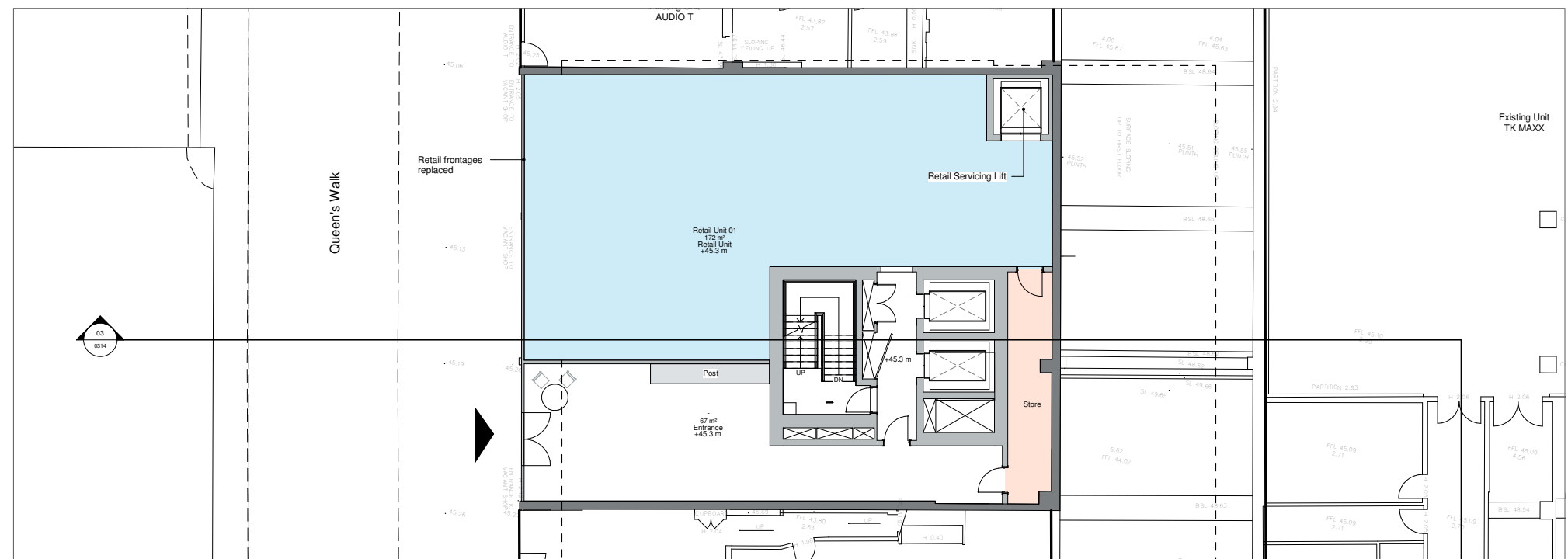


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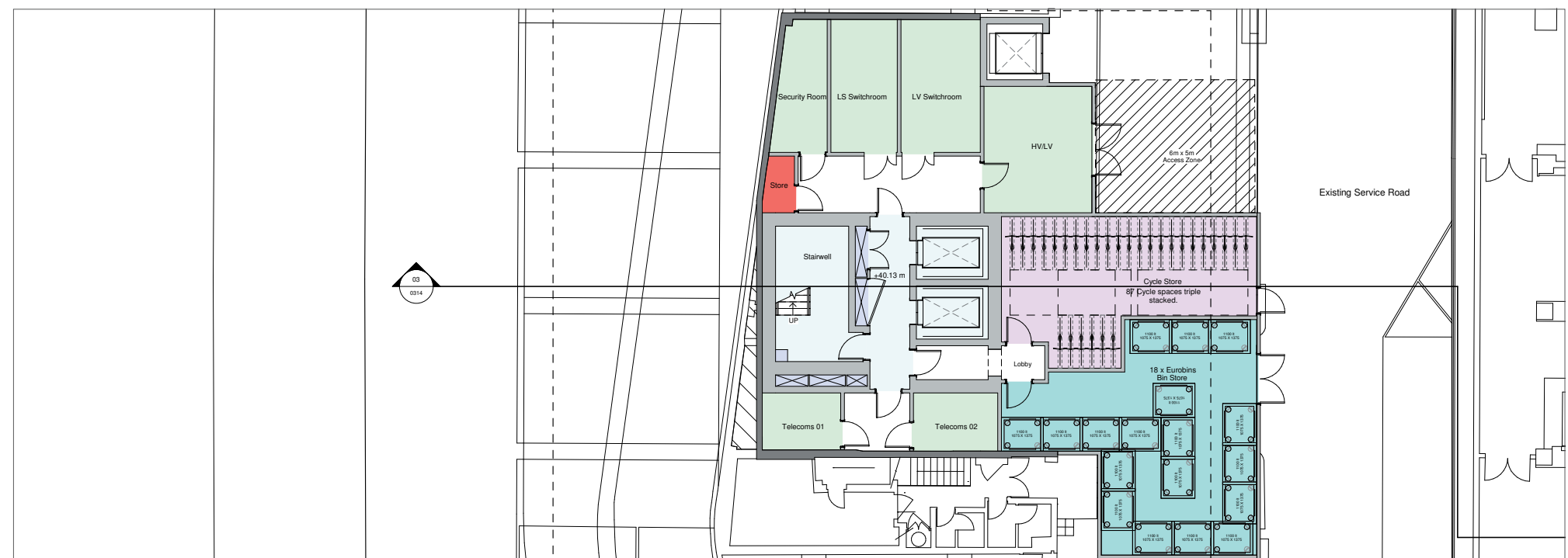
Design | 5.5 Site A - Dusseldorf Way: Access

Access to block A is either by foot at ground level on Queens Walk or via Cycle at basement level through the existing service road.

Both entry points are fully accessible with compliant passenger lifts. Parking for those with limited mobility is provided on the existing rooftop car park level and located nearby to each core where practicable.



Site A - Ground Floor Plan



Site A - Dusseldorf Way - Basement Level Plan

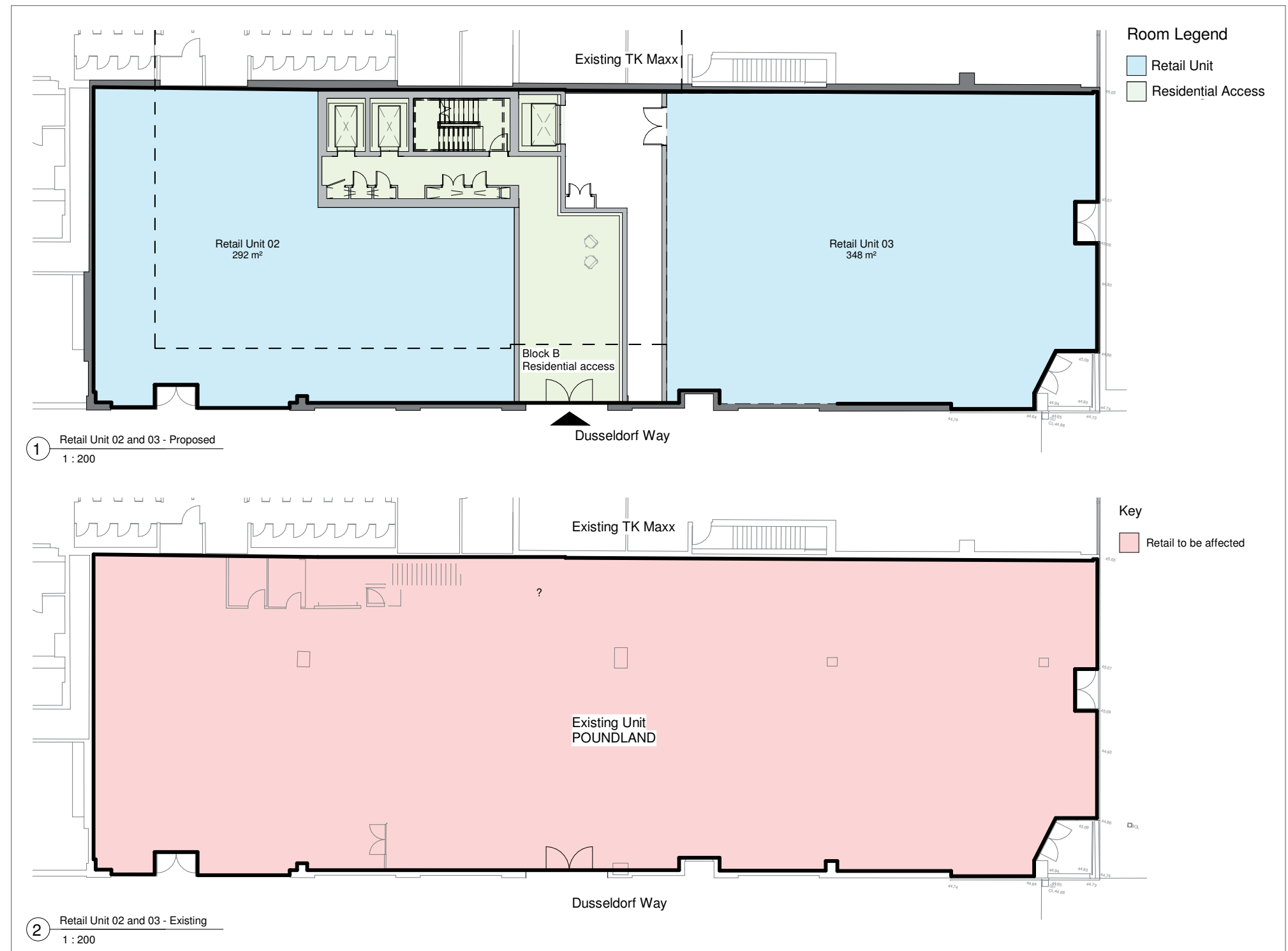
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Design | 5.6 Site B - Dusseldorf Way: Layout

The existing Poundland retail unit will be reconfigured to make space for the proposed residential core and lobby with the remaining space to become 2 nr. proposed retail units (Unit 02 and Unit 03) either side of the residential entrance.

The ground floor level comprises level access from Dusseldorf Way with an entrance lobby for post and space for a management office. The proposed width of the residential lobby has been determined, like Queens Walk, by the existing pilasters of the retail frontage along Dusseldorf Way. Entry to and from the residential lobby will be access controlled. Similarly to Site A, Site B also has access to the proposed Amenity Deck via a common corridor located above the existing rooftop car park.

The upper Level residential accommodation is arranged around the core with a range of Studio, 1 bedroom and 2-bedroom apartments, totalling 8 units per floor. Again, like site A the top most level houses the 3-bedroom apartments with accompanying private terraces.



Site B - Dusseldorf Way - Reconfiguration of retail units

5.0

Design | 5.6 Site B - Dusseldorf Way: Scale

The shape of the residential core has been constrained to the South by the existing service road at basement level and to the North by the existing TK Maxx unit at ground level. These constraints did not allow for a more standard square shaped core therefore the proposed core is more rectilinear in form which in turn gives a more rectangular floor plate.

The form of Site B appears wider than that of Site A and therefore the split in the elevational treatment was key in helping to articulate the verticality of the overall built form to avoid a squat form. The positioning of the core is also further South on plan that that of site A therefore from ground level site B almost appears to be of a similar height and scale despite being 3 storeys shorter from certain viewpoints around the development.



Site B - Dusseldorf Way - Dusseldorf Way Street scene elevation extract



Site B - Dusseldorf Way - CGI looking towards Dusseldorf Way frontage

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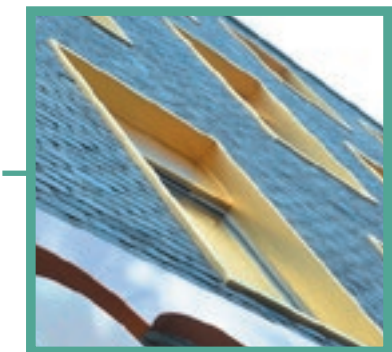
Design | 5.6 Site B - Dusseldorf Way: Appearance

The idea behind the materiality of the towers is that they appear as a family of buildings rather than a repetitive, regimented group of blocks. Site B is also clad in Terracotta Cladding but in a darker tone to Site A.

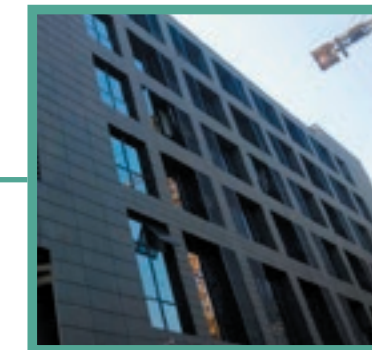
Like with Site A, the elevational treatment to Site B is also split on the North and South elevations as the floor plate steps in slightly, creating a split form to help alleviate the width of the building.



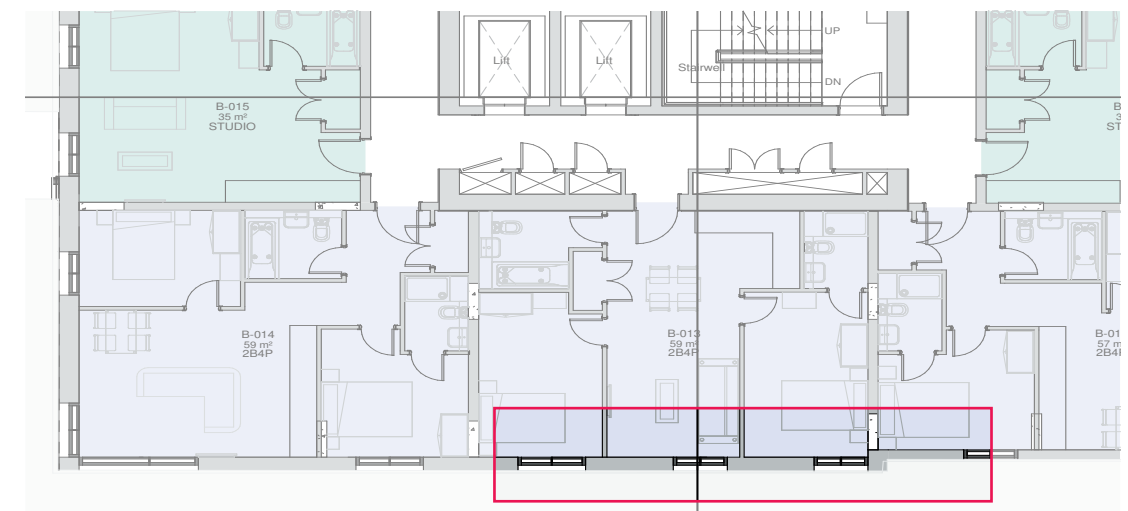
Terracotta Cladding - Light Grey / White



Bloc Hotel, Birmingham



Terracotta Cladding - Darker tone, contrasting texture



Location of detail view of proposed elevation on Dusseldorf Way (Site A & B)

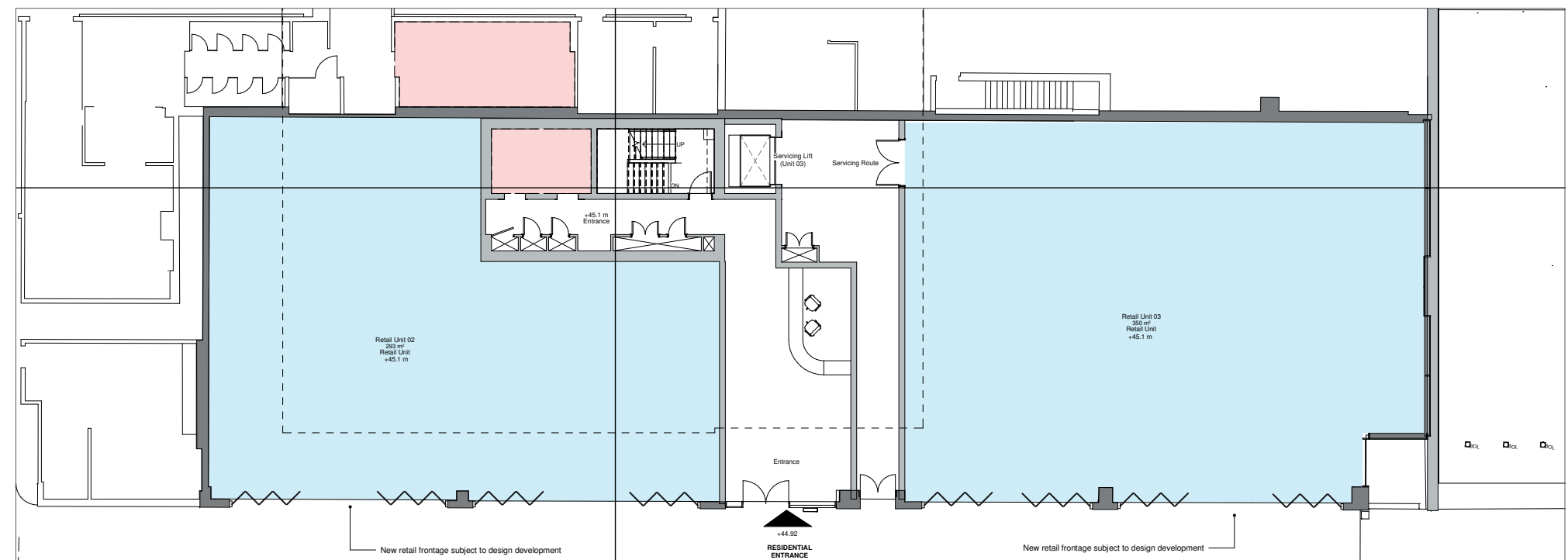
Detail view of proposed elevation on Dusseldorf Way (Site A & B)

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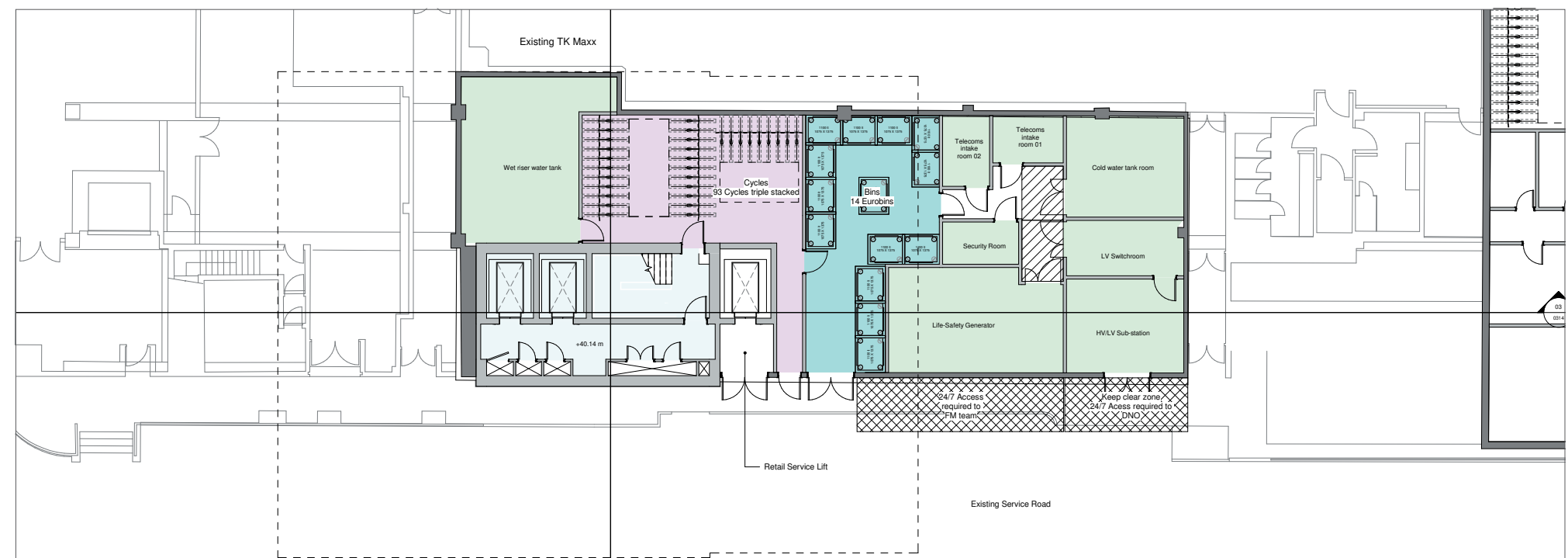
Design | 5.6 Site B - Dusseldorf Way: Access

Access to Site B is either by foot at ground level on Dusseldorf Way or via Cycle at basement level through the existing service road.

Similarly to Site A, both entry points are fully accessible with compliant passenger lifts. Parking for those with limited mobility is provided on the existing rooftop car park level and located near to the core where practicable.



Site B - Dusseldorf Way - Ground Floor Plan



Site B - Dusseldorf Way - Basement Level Plan

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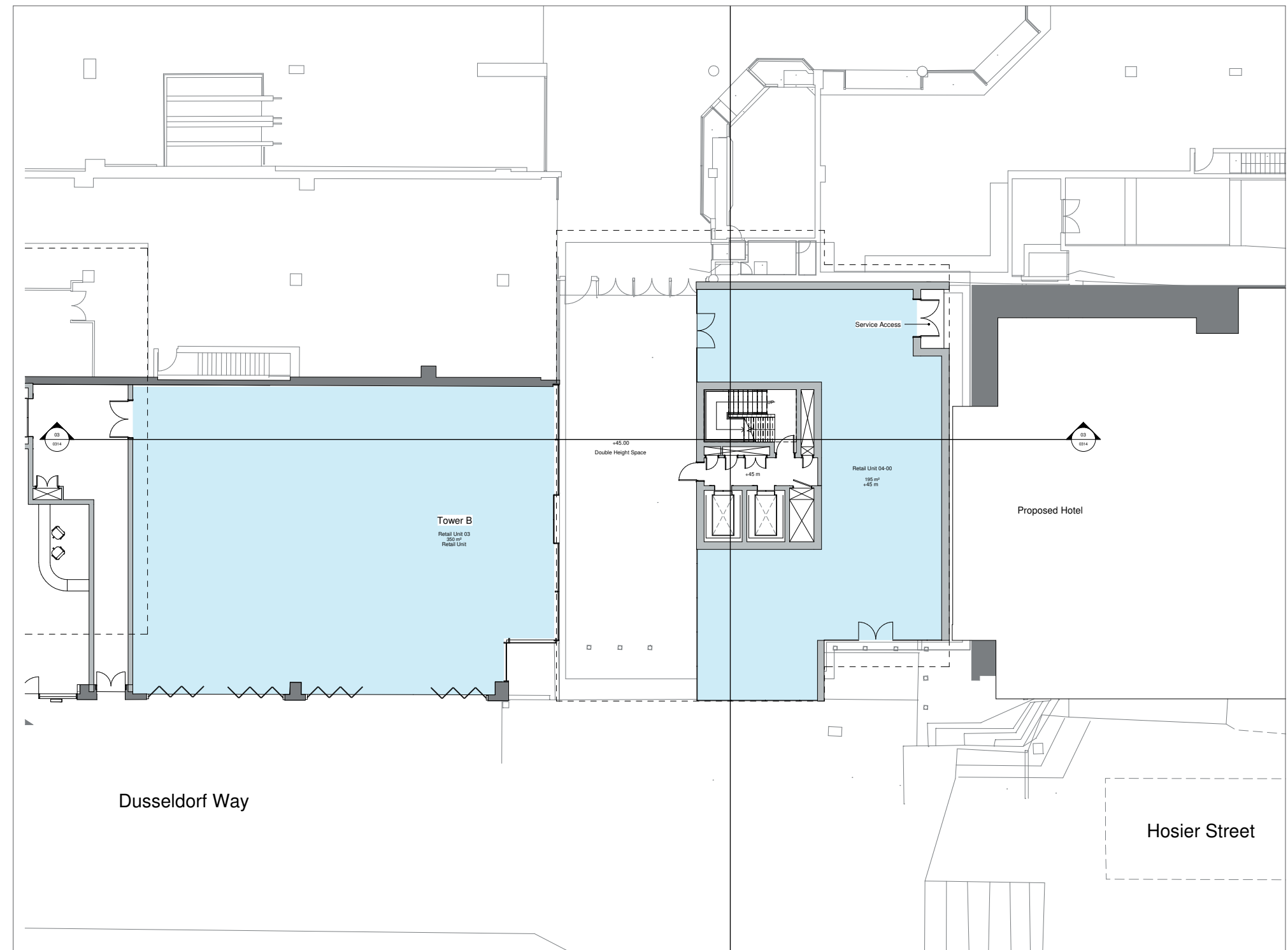
Design | 5.7 Site C - Dusseldorf Way: Layout

The existing South Court is currently a vacant space outside of the Mall. The proposed Site C residential core is located here and is therefore the only block of within the overall development that is 'grounded', the core position of which has been determined by vacant space at basement level.

The proposed retail unit to the ground and first level of Site A wraps around the proposed core, helping to reactivate an otherwise unused, inward facing space whilst maintaining the existing access through to the existing Mall.

The Southern aspect of level 2-3 is the only available aspect for residential provision. The space to the North of the core has been allocated as Social space.

Levels 4 to 7 have not Eastern aspect due to the adjacency of the emerging proposals for the Hotel. Therefore, the layout changes from single aspect 1-bedroom apartments to dual aspect 2-bedroom apartments to accommodate this change in layout.

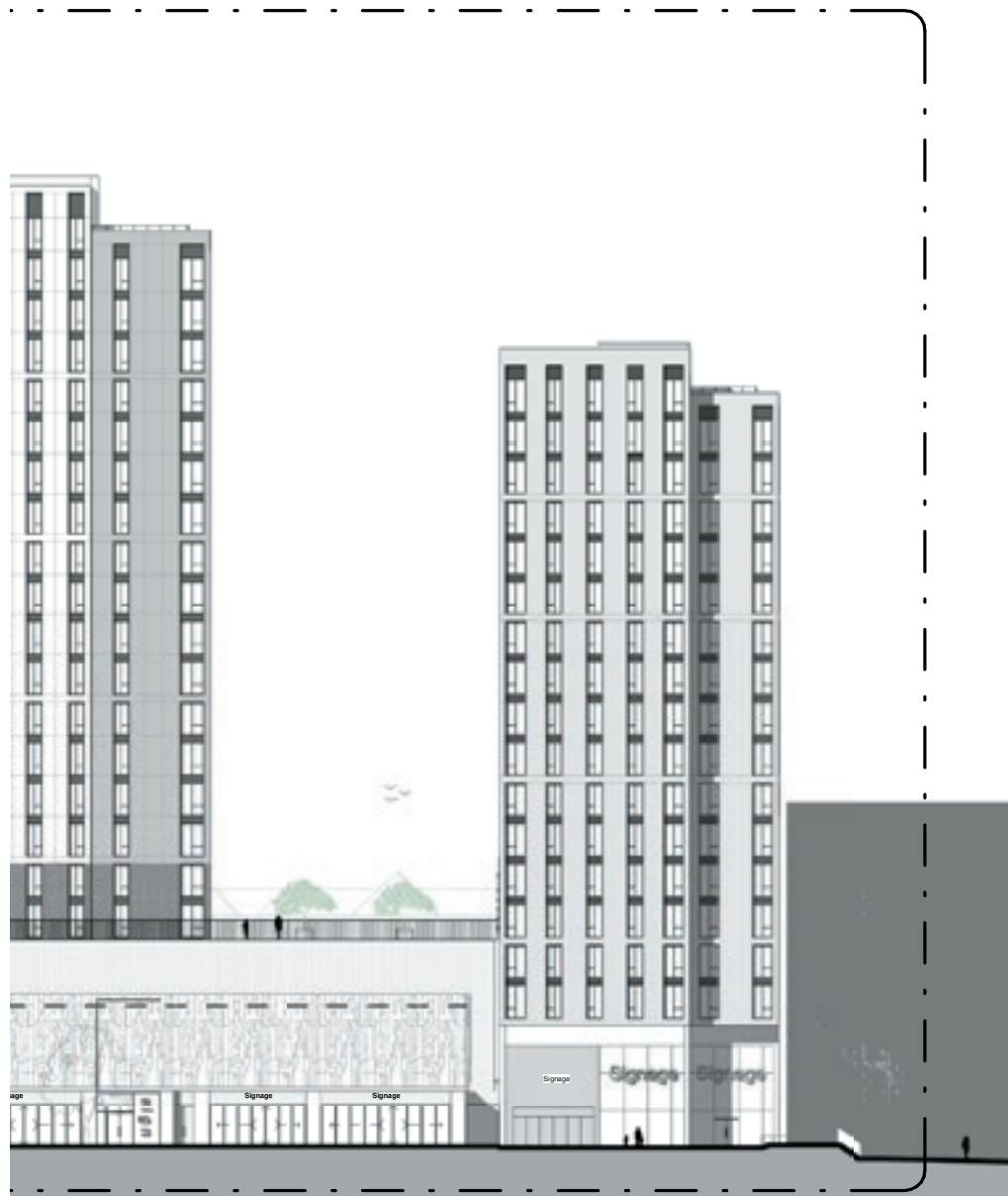


Site C - Dusseldorf Way - Ground Floor Plan

5.0

Design | 5.7 Site C - Dusseldorf Way: Scale

Site C is located above an existing gateway entrance into the centre and therefore acts as a landmark for the Mall. The built form steps down toward the Minster in a similar fashion to sites A and B.



Site C - Dusseldorf Way - Dusseldorf Way Street scene elevation extract

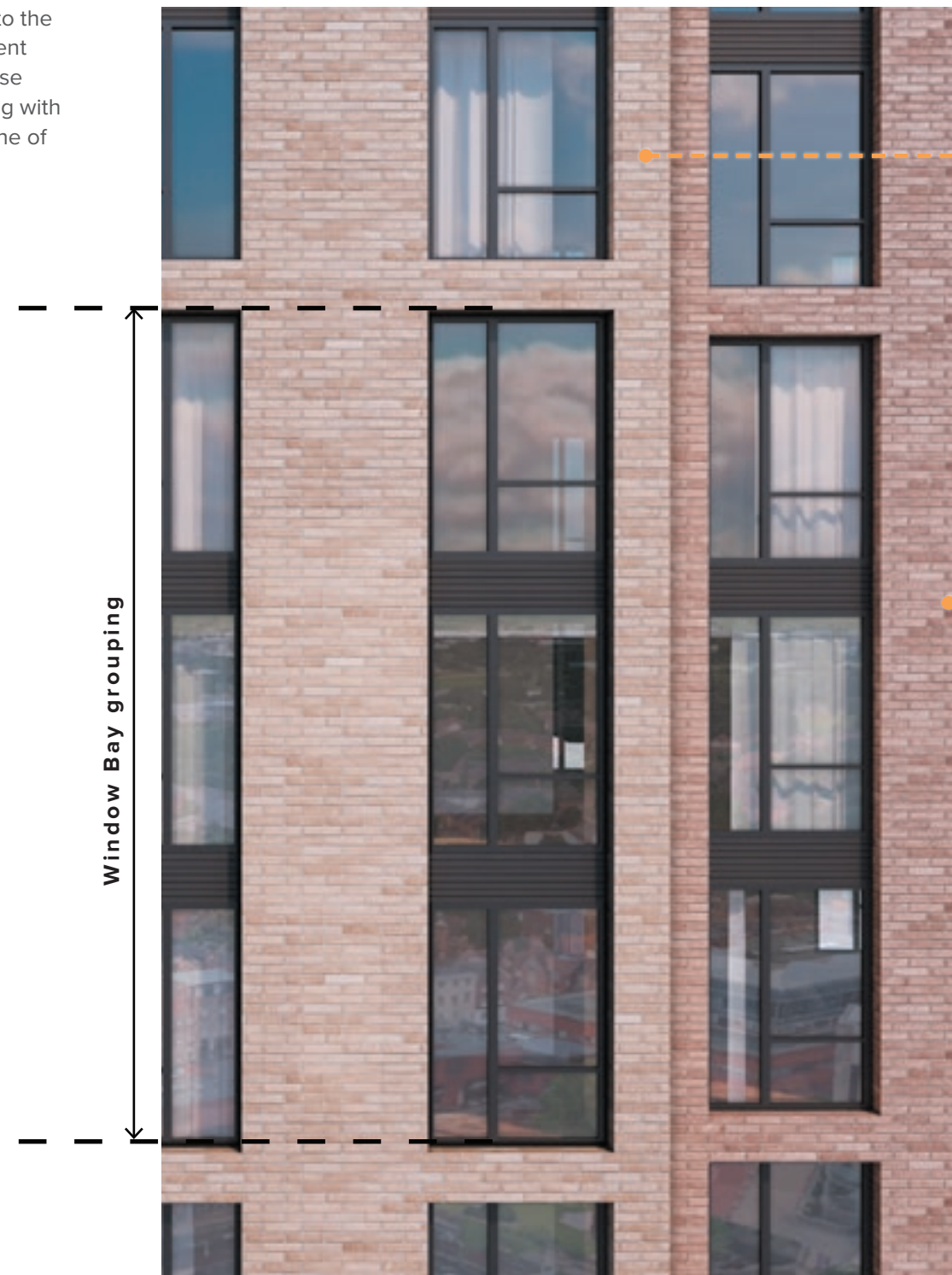


Site C - Dusseldorf Way - CGI looking towards Dusseldorf Way frontage

5.0

Design | 5.7 Site C - Dusseldorf Way: Appearance

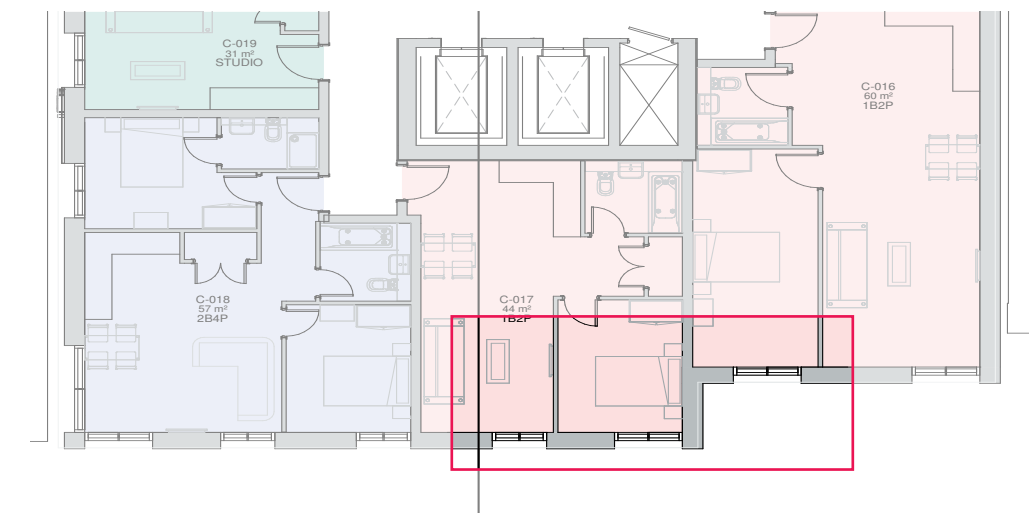
Site C is grounded and given its proximity to the Minster and the proposed hotel development to the East it was deemed appropriate to use Brick as a material choice. This is in keeping with the conservation area and also defines a line of distinction between 'old and new'.



Light Buff, Multi Tone Brick



Darker buff with red tint multi-tone brickwork



Location of detail view of proposed elevation on Dusseldorf Way (Site C)

Detail view of proposed elevation on Dusseldorf Way (Site C)

5.0

Design | 5.7 Site C - Dusseldorf Way: Scale

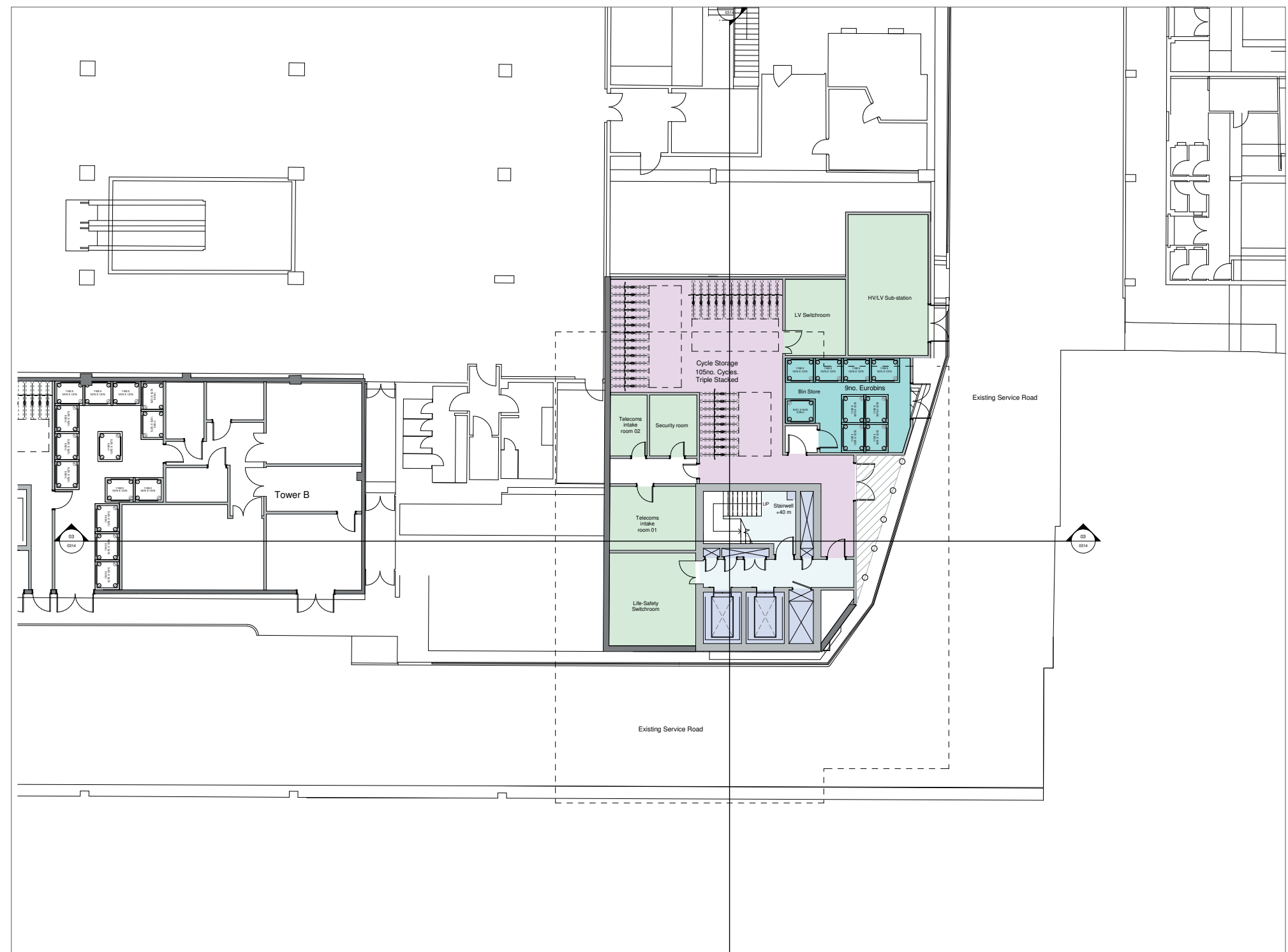


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Design | 5.7 Site C - Dusseldorf Way: Access

Access to Site C is either by foot at ground level from Hosier Street or via Cycle at basement level through the existing service road.

Like Site A and B, both entry points within Site C are fully accessible with compliant passenger lifts. This site does not involve utilising the existing centre and is technically independent of the mall.



Site C - Dusseldorf Way - Basement Floor Plan

5.0

Design | 5.8 Site D - Quadrant House: Layout & Access

Layout

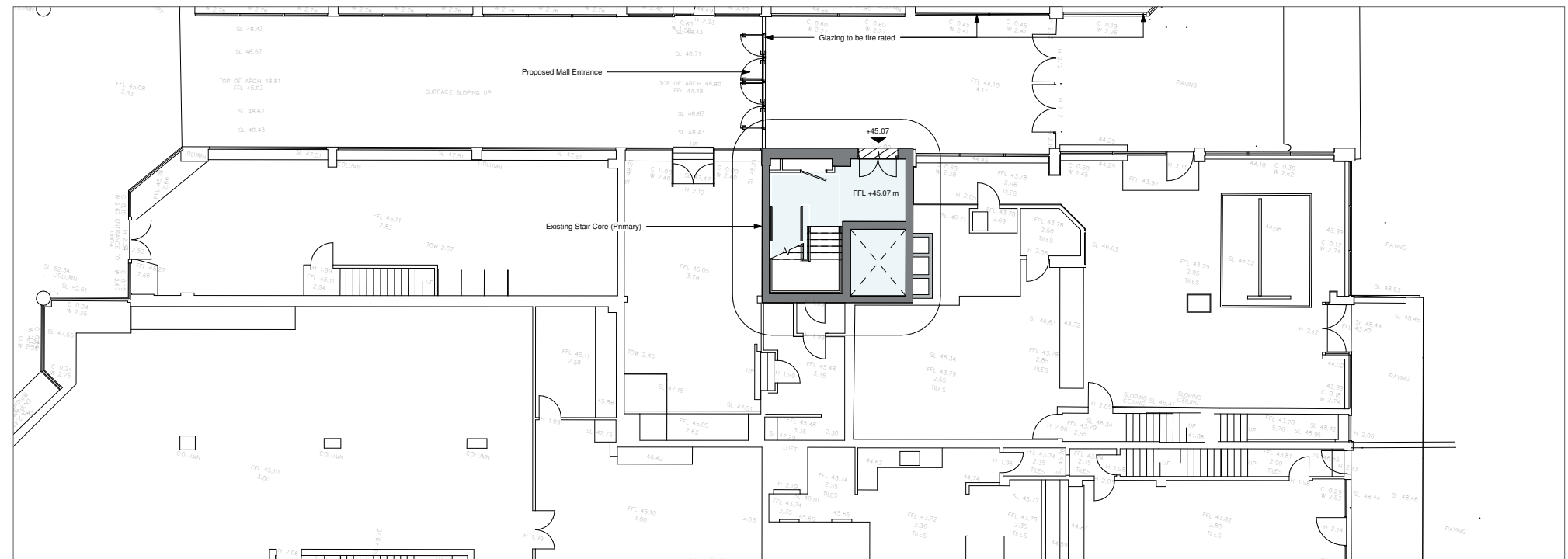
The existing quadrant House access is located within the mall at ground level off St Mary's Butts. The existing circulation core is to be utilised as the proposed residential access with an additional fire escape stair being introduced at upper levels to allow for egress onto the car park route.

The apartments are constrained by the existing width of the block and the existing window positions. Additional windows have been placed within the South façade of the existing block to activate an otherwise blank façade.

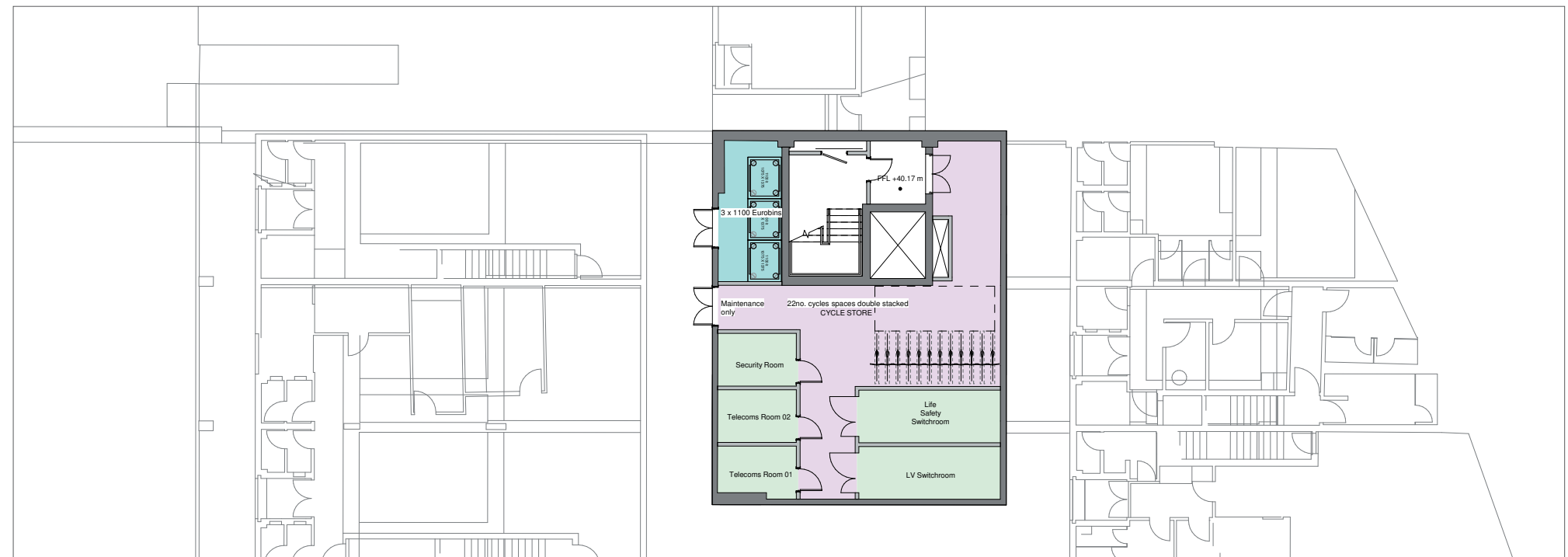
Access

Access into Site D is via an existing stair core at ground level which will be taken down to basement level to facilitate access to the residential bin and cycle storage area.

There is also direct access onto the rooftop car park level from the 1st level of residential accommodation.



Site D - Quadrant House - Ground Floor Plan



Site D - Quadrant House - Basement Level Plan

5.0

Design | 5.8 Site D - Quadrant House: Scale & Appearance

Scale

The proposals include a 2storey extension above the existing Quadrant House which has been determined by structural limitations. Any additional height to this was deemed insensitive to the adjacent conservation area.

Appearance

With the buildings along St Marys Butts predominantly brick the proposals for Quadrant House include a brick slip system with replacement windows.



Site D - Quadrant House - CGI looking from St Mary's Butts

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Design | 5.9 Site E - Oxford Road: Layout & Access

Layout

The entrance to Site E (Oxford Road) utilises an existing, vacant retail unit at ground level and basement level.

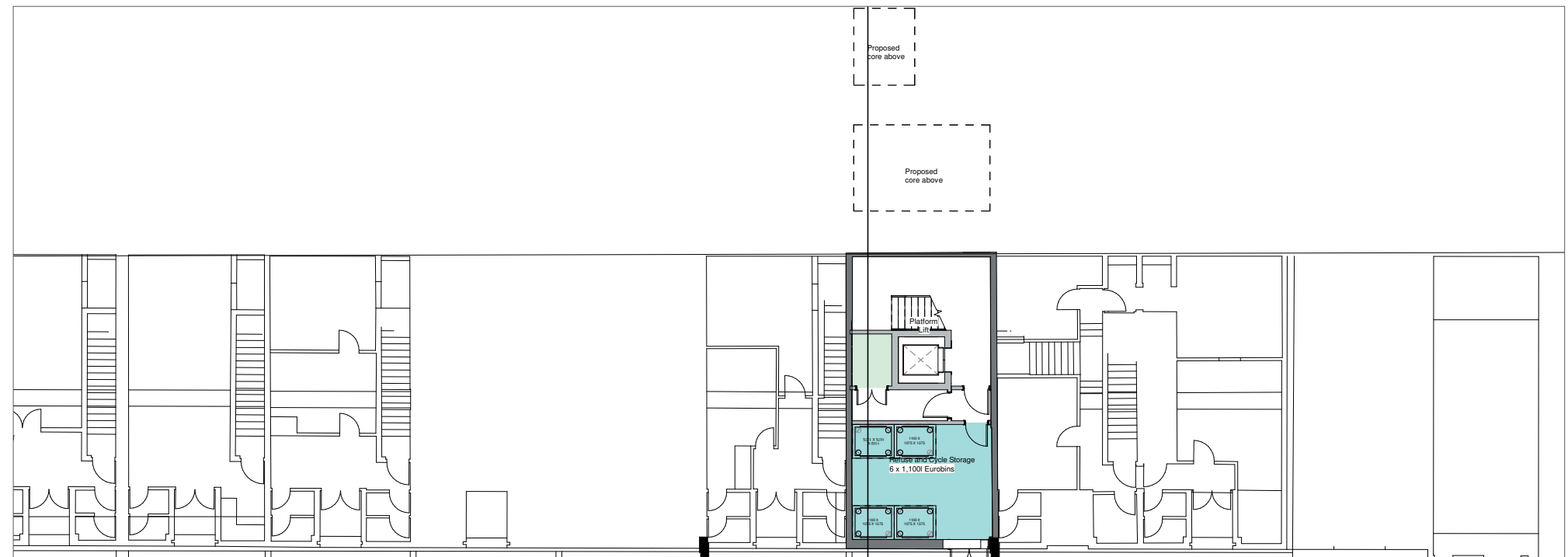
The upper residential levels have 6 apartments to the core, with further units extending South over the existing centre. This site has no north facing units and utilises existing structure within the centre.

Access

Access into Site E is via the residential lobby off Oxford Road. The main circulation core takes residents up throughout the building with a secondary stair core for access to basement level only. This will be used for access to the bin store and cycle store. Both cores will have passenger compliant lifts.



Site D - Ground Floor Plan



Site D - Quadrant House - Basement Level Plan

5.0

Design | 5.9 Site E - Oxford Road: Scale & Appearance

Scale

Given the proximity of the buildings across the road (McIlroys Building) the avoidance of an overpowering mass in this location was key. Sensitivity to the buildings to the North of Oxford Road meant that issues of rights of light along with overshadowing were avoided.

Appearance

The existing McIlroys Building uses red brick and buff along with stone features. It was therefore felt that using a buff brick would be appropriate for the proposals to tie in the with choice of materials for Sites C and D.



Site E - Oxford Road - CGI looking from Oxford Road

6.0 Landscape & Public Realm

Landscaping

For more detailed information, please refer to the Macgregor Smith Landscape and Public Realm Design Statement which forms part of the supporting material for this application.



7.0

Access | 7.1 Pedestrian & Public Transport

Pedestrian

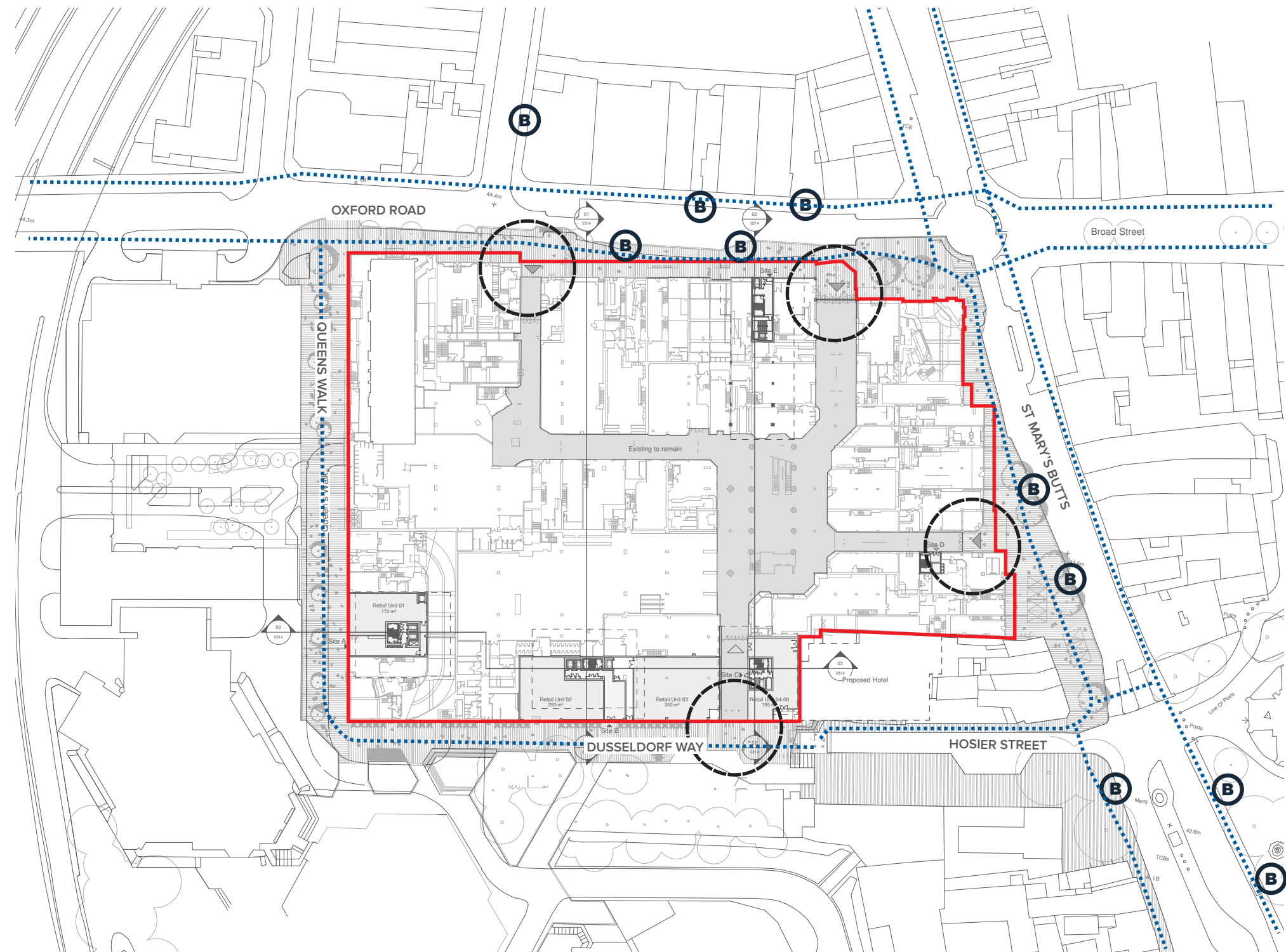
The application site is surrounded by a well-developed pedestrian and cycle network with the main high street foot fall coming from Broad St to the North East. There are a significant number of facilities within walking and cycling range to the site for future residents of the development.

There are 4 existing gateway entrances into Broad St Mall which will all remain. The existing pedestrian access is primarily from St Mary's Butts and Oxford Road. The proposed developments above the mall and the reconfigured retail units along Dusseldorf Way and Queen's Walk, both of which are currently underutilised. The key routes are indicated on the adjacent plan.

Public Transport

There are bus stops directly outside of the application site along St Mary's Butts, Oxford Road, West Street, Bridge Street and Castle Street, with frequent bus services providing easy access to and from Broad St Mall.

Reading Train Station is also located North of the application site and is a 14 min walk away (0.7 miles). The application site will therefore be well served by an already thriving public transport network.



KEY: Application Boundary Pedestrian Routes Gateway Entrance B Bus stops

7.0

Access | 7.2 Vehicular & Cycles

Vehicular

Vehicles currently access the site via Castle Street to the South at basement level, either to use the existing NCP car park above the shopping mall or for servicing of the existing retail units. The existing facilities within the car park such as toilets and information points will remain unaffected by the proposed developments above the centre.

Cycle

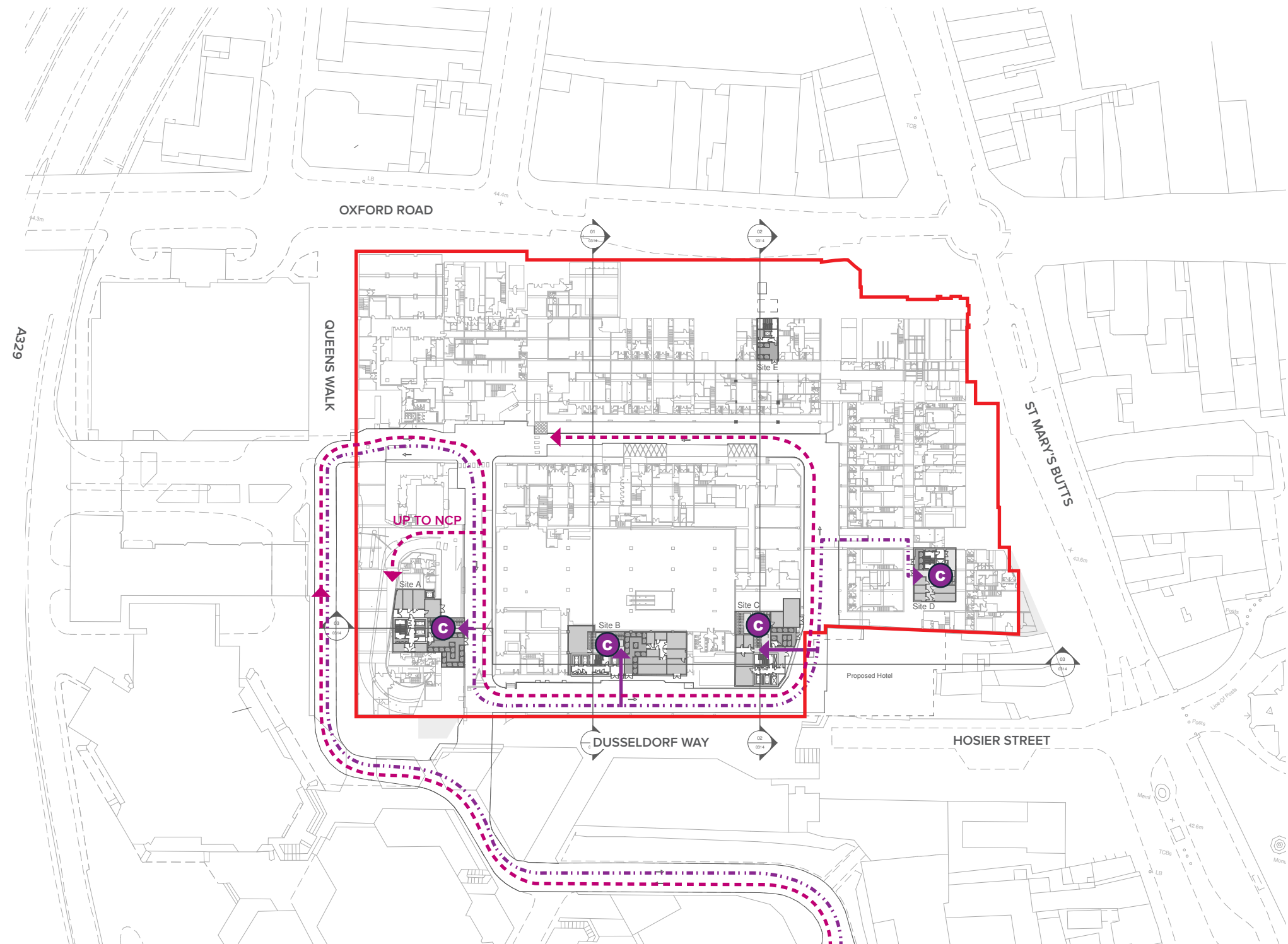
The proposed residences will be provided with secure cycle storage at basement level at a rate of 1 space per 3 bed apartment and 0.5 spaces per 1-2 bed apartment (planning policy). Cycle access and storage will be for the residences of the proposed development above. Public cycle parking will remain unaffected.

Existing Car Park

The existing NCP car park will be reconfigured to accommodate the loss of car parking due to the proposed circulation cores (Sites A, B and E).

No additional car parking spaces will be provided for the residents with the exception of 24 accessible car parking bays for the 5% accessible units across the development. This will involve re-lining some of the existing parking bays.

There will be a total loss of 60 spaces to accommodate the proposals.



KEY: Application Boundary Car Parking Vehicle Access (NCP) Cycle Route / Access Cycle Storage

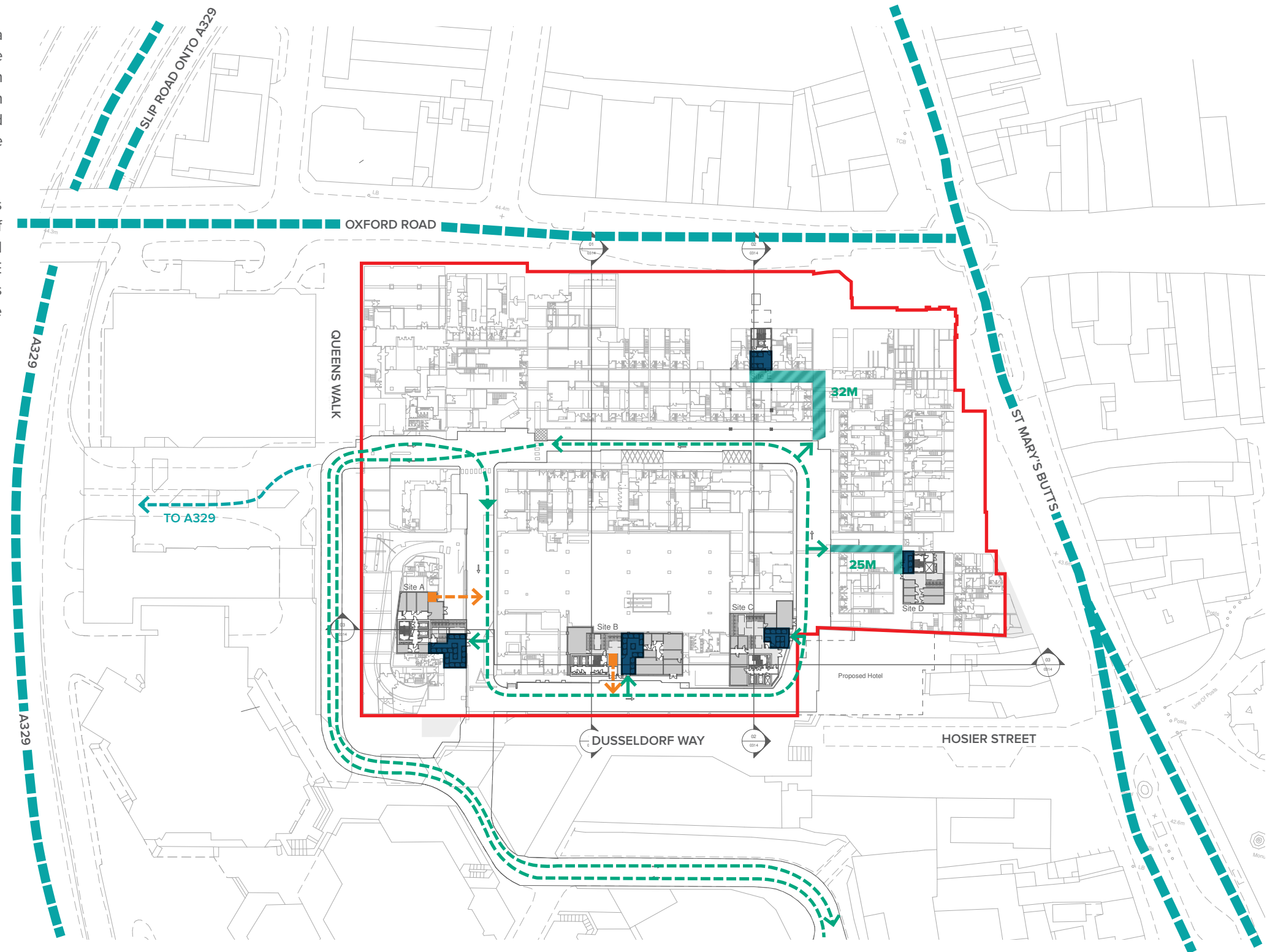
7.0

Access | 7.3 Servicing

Servicing of the proposed development will be via the existing basement level which is access off Castle Street, South of the site. The existing retail units within the Mall are serviced via this route therefore, with an already well-established service route, it is deemed appropriate that the proposed development above the centre is serviced via the same route.

Bin stores for each of the residential developments above the centre are located within available areas of the basement level in close proximity to the residential cores as shown on the adjacent plan. Sites D and E have a proposed servicing corridor as the bin stores are not directly accessible from the existing service road, the drag distance of which is noted opposite.

The amount of bin storage for each of the developments has been established from the "Waste Management Guidelines for Reading V1 2" and assumes a weekly collection of bins to include general waste and recycling. It is anticipated that a waste management company will be responsible for the collection of residential waste.



KEY: Application Boundary Servicing Corridor --> Service Access Bin Stores --> Proposed Retail Servicing

8.0 Inclusive Access

Retail Units

The proposed retail units along Dusseldorf Way have been designed to achieve a level access from street level.

Car Park

The existing car park has accessible parking bays for public use. Additional accessible parking bays will be provided for the proposed accessible apartments within the residential development which will involve relining the existing parking bays.

Residential

All of the residential apartments have been designed to meet Part M requirements with 5% (24 apartments) of the total number of apartments designated as fully accessible. Street level access is provided for all sites along with compliant passenger lifts. Level access to the proposed Amenity Deck between sits A, B and C will also be provided.



9.0 Conclusion

At the core of the proposed development is the desire to regenerate and restore Broad Street Mall. This in turn will strengthen a periphery area which historically was the Reading's centre.

To achieve this goal the development endeavours to align and follow the guidance set out in the emerging Hosier Street Framework.

In addition to this key design objectives such as activating the upper levels, the street and gateways with contemporary residential will not only enhance the Broad Street Mall but will meet the growing demand for housing in the fast-growing south-east hub.

The design team would like to thank the planning team at Reading Borough Council for their input and clarity of thought during the design development stages.



“In this application there is the potential to deliver a scheme that can transform this quarter of Reading centre into a vibrant, attractive place that complements the ambitions of what is already a thriving, forward looking town.”

CORSTORPHINE+WRIGHT
ARCHITECTS

LONDON
WARWICK
BIRMINGHAM
MANCHESTER
GLASGOW
LEEDS
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