

4. MOVEMENT PARAMETERS

4.1 PEDESTRIAN CYCLE MOVEMENT

The development of the site shall provide legible, permeable streets and spaces, linking into existing access points and spaces adjacent to the site and investigating, where possible the reinstatement of the historic street pattern of the area including the repairing and forming new links to Castle Street. This includes examining the potential to link the development area to the Baker Street/Howard Street residential community to the west of the Inner Distributor Road (IDR). This could be via a new pedestrian/cycle bridge or other form of decking over the IDR provided as part of the development.

The development of the area should also look to enhance links to the west of the IDR for both pedestrians and cyclists to provide better access to the facilities and attractions within the development area by means of

enhancements to crossings at the Police Station roundabout and other improvements to the current junction arrangement. This should provide a legible route from Castle Hill to Castle Street. The development of the area should also look to enhance links to the other parts of the town centre for both pedestrians and cyclists.

Pedestrian/Cycle movement principles should aim to provide the following:

- Access within the area by foot and cycle will be improved and barriers to this improved access will be overcome;
- Provision of an accessible and welcoming street pattern to pedestrians and cyclists, successfully linking and integrating with the surrounding areas, both visually and physically;
- Provide enhanced access to the Hexagon Theatre and its environs;
- The resiting of the present market storage area into storage areas provided by the new development could create an opportunity to open up a new route from Broad Street Mall, southwards to link into Castle Street via the Sun Inn yard area;
- Upgrading of the pedestrian/cycle surfaces and re-surfacing of Hosier Street as a shared surface which acts as an entrance to the Hexagon Quarter linking to spaces and public realm within the development area;
- Provision of an appropriate level of both public and private cycle parking;
- Provide new shared public realm for pedestrians/cyclists at the podium level throughout Hexagon Quarter, providing north-south links to the Mall, Queens Walk and linking through at various points to Castle Street;

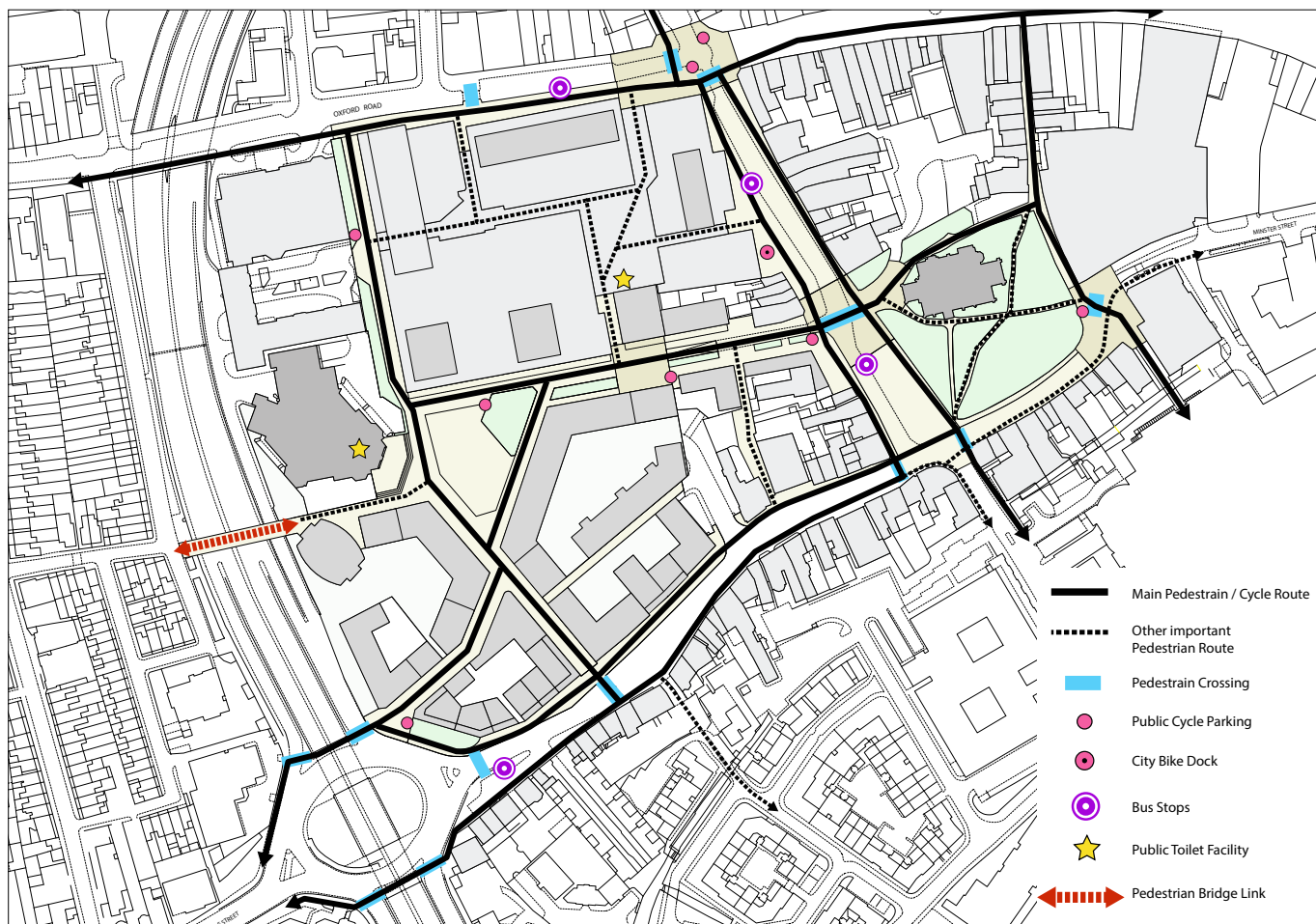


Figure 16 PEDESTRIAN CYCLE MOVEMENT DIAGRAM

- Permitted managed cycle access throughout Hexagon Quarter (certain rules should apply, enforcing pedestrian and wheelchair priority over cyclists).
- Development shall deliver improved pedestrian connectivity between the basement and podium levels, for pedestrians and cyclists and those with mobility difficulties, ensuring that adequate parking for disabled visitors is provided within the scheme at key points.
- The historic connection of Castle Street and Castle Hill as the main route into Reading from the west will be enhanced to provide an attractive gateway for pedestrians and cyclists accessing the town centre.

4.2 VEHICULAR MOVEMENT

The principles for vehicular access build upon the existing routes and access points creating public vehicular access to the edges of the town centre, but limiting vehicular access within the central areas to taxis, buses and servicing/emergency vehicles.

The existing undercroft parking and servicing zones (under the podium level) will be utilised and enhanced to provide residents and customer parking areas and delivery/service zones to cater for the development area. This area will need to be improved in terms of appearance and safety.

Vehicular movement principles should aim to provide the following:

- Development in the area will benefit from and contribute towards forthcoming major transport improvements;

- Provision of a new shared surface enhancement of St Mary’s Butts which remains a primary bus route and dropping off point.
- Integrate bus stops into the public realm in a way that minimises a negative impact onto the environs of public spaces. This is particularly important along St. Mary’s Butts and the space close to Reading Minster.
- The existing access/service road linking Castle Street with the multi-storey car park to the Broad Street Mall and exiting onto the slip road off the IDR should be maintained and enhanced as necessary. Opportunities should be taken to enhance pedestrian access and the environment of the road;
- Limited vehicular access to Hosier Street for servicing and disabled access only. Servicing this way should be limited and only be permitted where it is not possible to service via the Broad Street Mall servicing arrangements.

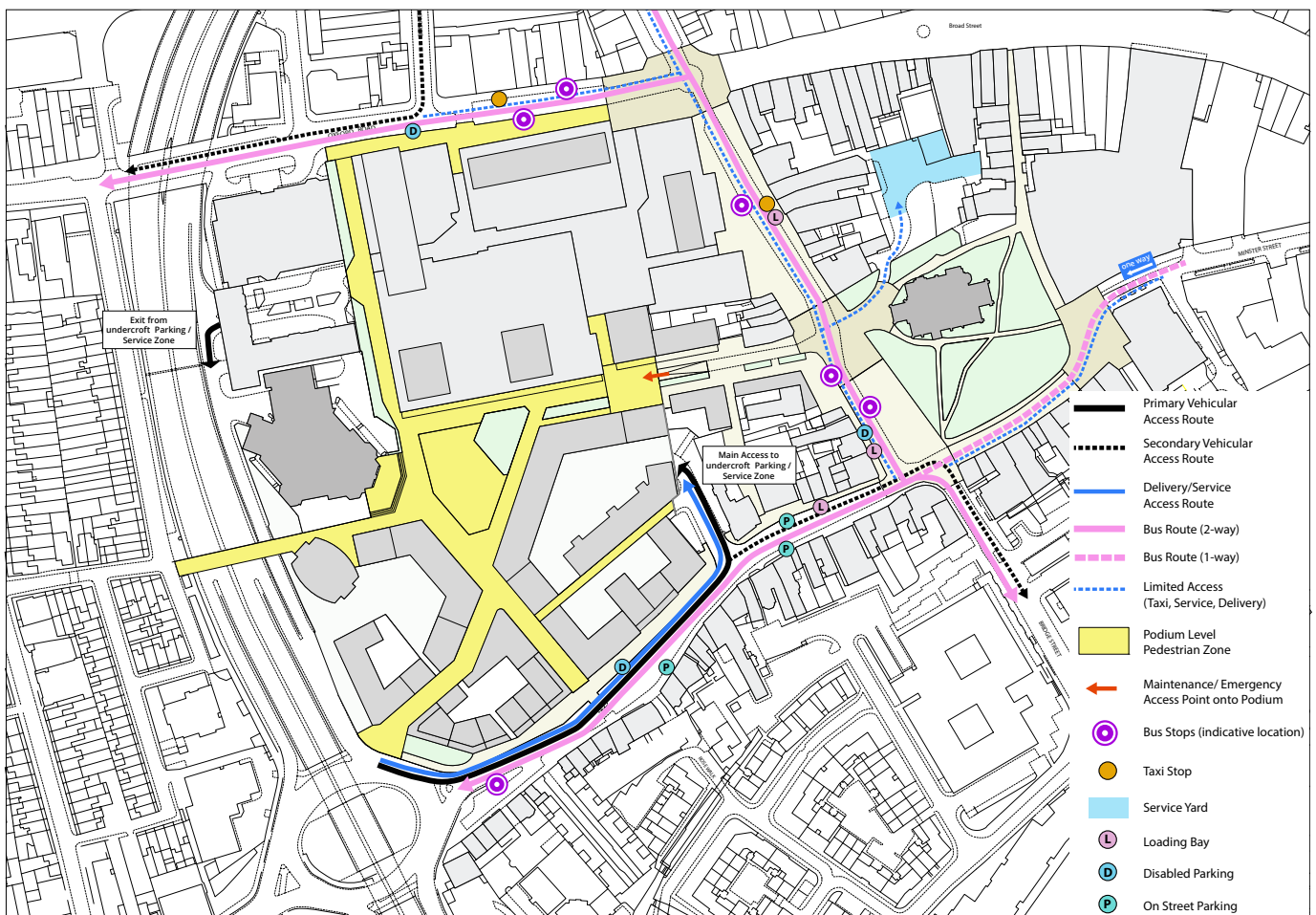


Figure 17 VEHICULAR MOVEMENT DIAGRAM

4.3 PARKING

The area already provides significant numbers of car parking spaces, with the Broad Street Mall Car parking providing important public car parking for the users of the town centre. Being within the town centre, the area is also well served by park & ride services for use by those working or visiting the site.

The Council will be reluctant to see any significant loss of public car parking facilities in this location, albeit the development above the Broad Street Mall will affect spaces within the existing decked car park and the spaces on the roof, most of which will be needed for amenity areas to serve the proposed residential development above. Any loss of public parking must be justified.

New and replacement car parking and motorcycle parking will be required

both to serve existing uses, new proposed commercial and community uses and the significant new residential development that may occur in line with this framework. The following general principles apply:

- New and replacement car parking, in line with the Council’s parking standards, will be provided underneath the existing and any extended podium, and within the current BSM multi story car park (MSCP).
- Utilise the existing vehicular route for access to parking areas
- Where located adjacent to the IDR, these car parking structures should be utilised to provide a barrier to noise, both towards the scheme (eastwards), and by means of vegetation and buffering, to the wider residential areas along Howard Street and beyond

- Car parking areas should be naturally ventilated, and feature natural lighting where feasible.
- Car park areas should be welcoming, finished internally in white painted colours, with wayfinding and directional instructions for drivers and pedestrians
- There should be no parking at or above the existing podium level, save for servicing, emergency vehicles and disabled access.
- Provision of an appropriate level of both public and private cycle parking and motorcycle parking;
- There is a need to continue to provide on-street disabled parking as part of the scheme in addition to the provision of disabled parking within any off-street parking provision.

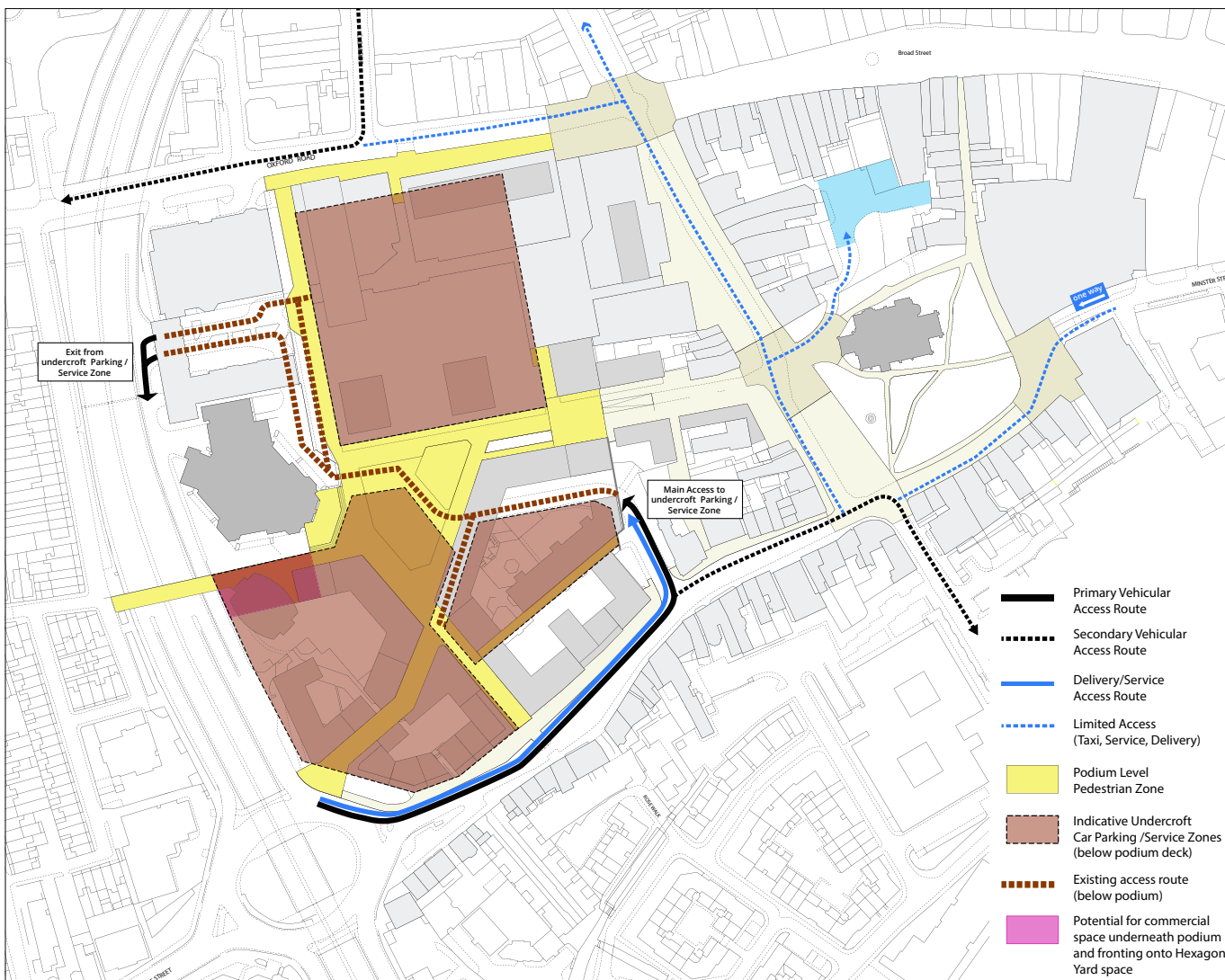


Figure 18 PARKING DIAGRAM (INDICATIVE)

POLICY REQUIREMENT

Car parking for new development should be provided in accordance with Policy TR5 in the Submission Draft Local Plan:

CAR AND CYCLE PARKING AND ELECTRIC VEHICLE CHARGING: *Parking standards are contained in the Council’s Revised Parking Standards and Design SPD¹. This notes that for town centre sites such as in this location, relatively low levels of parking provision will be acceptable. Any additional parking provided to serve new development will need to be carefully designed as part of schemes with access off the lower level access road. The policy also requires that such parking is capable of providing electrical charging points.*

The site lies within Zone 1 of the car parking zonal system where because of the accessibility to the transport hub in the central area, car parking standards can be relatively relaxed. The SPD provides indicative standards for car parking provision but in practice, the council will accept lower levels of provision. The Council will expect any application to be accompanied by a Travel Plan, which will include encouragement of car club vehicle usage with the provision of spaces to accommodate vehicles owned by such clubs. Parking provision should also give consideration to taxi parking and provision for dropping off.

The Revised Parking Standards and Design Supplementary Planning Document also sets out standards for the provision of:

- Delivery and Servicing
- Cycle & Motorcycle/ Moped Parking
- Accessibility Parking including Disabled Parking provision
- General Parking Design and Layout

In addition to the provision of cycle parking in accordance with the Council’s standards, an appropriate level of publicly available cycle parking should be provided within the Framework area. This should be located along Hosier Street / Düsseldorf Way and in other suitable locations to access facilities within the site.

¹ The current version can be found at: <http://www.reading.gov.uk/media/1065/Revised-Parking-Standards-and-Design-Supplementary-Planning-Document-Adopted-October-2011/pdf/Revised-Parking-Standards-And-Design-Supplementary-Planning-DocumentOct11.pdf>

4.4 GENERAL PRINCIPLES

SERVICING AND REFUSE

Developments should provide appropriate storage facilities including appropriate storage for refuse facilities to serve the development and to enable easy and safe collection from the site in accordance with Policy H10 of the Submission Draft Local Plan. Applicants are recommended to discuss refuse disposal at an early stage in the pre application process.

HEXAGON

The Hexagon Theatre will be retained and enhanced as a cultural focus within the master plan. Access for deliveries and coach parking need to be integrated into the new development proposals and remain accessible during construction stages.

MAGISTRATE’S COURT / POLICE STATION

It is likely that the Magistrate’s Court and Police Station may come forward at different development stages. Their access and functionality needs to be maintained during the development.

DELIVERIES

The detailed development proposals will be required to set out a delivery strategy for the various uses within the development framework.

TAXIS

There is currently no taxi rank existing within the vicinity of the framework area. With the proposed increase in mixed uses within the framework area it is proposed to include parking bays for taxis close to development access points for example along Castle Street and Oxford Road.

FIRE AND EMERGENCY ACCESS

Adequate access solutions for fire and rescue and emergency vehicles needs to be demonstrated by the future development proposals. This includes access onto the podium level on Hosier Street/Düsseldorf Way, and along Queen’s Walk.

5. DEVELOPMENT PARAMETERS

5.1 LAND USE AND DEVELOPMENT CAPACITY

LAND USE OBJECTIVES

The area has now lost much of its Civic function with the demolition and resiting of the Civic offices and the likely vacating of the Thames Valley Police Headquarters building in the near future. However, the retention of the Hexagon Theatre (which may in the longer-term involve its replacement or enhancement) and the Magistrates' Courts means that the site retains important public facilities that complement the main attraction provided by the facilities of the BSM.

The development of the site should seek to maximise the value of existing and proposed public open spaces and maintain, where possible, equivalent areas of public space in the public realm as existed before the demolition of the Civic Offices.

These open spaces will provide a focus for additional retail and leisure uses within frontages to the BSM, the Hexagon Theatre and the Magistrate Courts, but also create new spaces from under-utilised public realm in St Mary's Butts and in the churchyard of St Mary's Minster.

The owners of the BSM have recently invested in upgrading the shopping centre and intend to develop those facilities further. It is understood that they have purchased adjoining sites for future expansion. Smaller, locally-owned shops or pop-ups along the ground floors of buildings will be encouraged. In the longer term they intend to provide a cinema and other facilities within and on the edges of the shopping centre.

Furthermore, the owners of the BSM have other ambitious plans for the shopping centre and to develop significant residential development above the mall building and its MSCP. The Council welcomes and supports continued additional retail provision,

with emphasis on restaurants located around the edges of the mall taking advantage of new public realm and open spaces.

Specifically, the need for a new food retailer (supermarket) is supported either, as part of proposals for BSM, or as part of new development in other ownerships coming forward in the area. Careful consideration should be given to the siting of such a unit, and implications of footfall, access to other facilities (e.g. disabled and cycle parking), should inform the location and frontage. Blank frontages for such units onto streets and the public realm should be avoided.

The Council also welcomes and supports additions to the existing leisure provision within the area. The area is an ideal location for additional leisure facilities to serve the growing population of Reading. Facilities for youth and older persons should form part of any proposals coming forward. Some of these may require larger floorspace and this would require careful siting in the area. Opportunities for below podium positions should be explored.

The development of the site will enhance St Mary's Butts as a shared space/public realm in conjunction with the churchyard around the Minster of St Mary's in order to provide an appropriate linking feature and setting between the Minster and the areas of the town towards Chain Street and beyond.

The provision of a space of suitable size, agreed with the Council, for the Charter Market and its storage requirements needs to be incorporated within the development area. It is possible that this might be linked to the open public realm area on the frontage of the site with St Mary's Butts. The position of the market should be within or adjacent to the thoroughfare into the site and to the entrances to the BSM so that it provides a continuous shopping experience linking St Mary's Butts with the mall.

While retaining and enhancing the existing civic, retail/commercial and leisure uses, the development of the site is likely to be largely residential-led although offices remain an appropriate use for this town centre location. Development will support retail uses at podium level, alongside new open space/park, multi-functional civic/market space and associated community facilities.

The upper levels of development will create opportunities for private and affordable housing in the form of flats and possibly duplexes/maisonettes. Vertical integration of different uses in single buildings will be encouraged.

The owners of BSM currently propose the development of various blocks and towers above the existing Mall building. This could include 2/3 towers of increasing height westwards that will continue above the multi storey car park that sits above a large part of the mall building. The site of the former Civic Offices and that of Thames Valley Police are likely to be predominantly developed for residential uses.

In line with the site's inclusion as a location for tall buildings in the adopted Tall Buildings Strategy, carried forward into the Submission Draft of the new Local Plan, opportunities for tall buildings within the area have been considered in various locations.

Constraints in terms of visual impact, daylighting, shadowcasting and composition as a whole have been assessed (see appendix C) and a composition that frames the new Hexagon Square is proposed.

Varying heights are proposed in relation to the external constraints affecting the site including the nearby Conservation Areas. As a result of that assessment up to 4 tall buildings (according to the Council's definition) of varying heights are proposed.

AFFORDABLE HOUSING

Residential uses should provide a range of sizes and tenures of units and meet the Council’s policies in terms of the provision of affordable housing.

There is a high expectation that the development in the area will provide policy compliant levels of affordable housing which include high proportions of social rent and affordable rent dwellings to meet the identified needs of Reading. Developers should seek to meet the requirements in relevant policies and comply with the requirements and considerations set out in the Council’s Affordable Housing Supplementary Planning Document.

HOUSING MIX

The development of the area will provide a mix of different sized units within the development. In accordance with policy CR6 in the Submission Draft Local Plan this should comprise a mixture of one, two and three bedroom units. As a guide, a maximum of 40% of units should be 1-bed/studios, and a minimum of 5% of units should be at least 3-bed units.

COMMUNITY INFRASTRUCTURE

The Community Infrastructure Levy (CIL) is the primary mechanism whereby new development in the town provides contributions to meet the provision of extended and sustainable services for community needs. Development in the framework area will be required to make contributions in line with adopted policy.

Any development will be required to fully provide or fund infrastructure and infrastructure improvements within the site associated with access, parking, other transport matters and the on-site provision of open space and enhanced public realm. Such provision will be made under Section 106 agreements which may include requirements covering the future maintenance of such infrastructure.

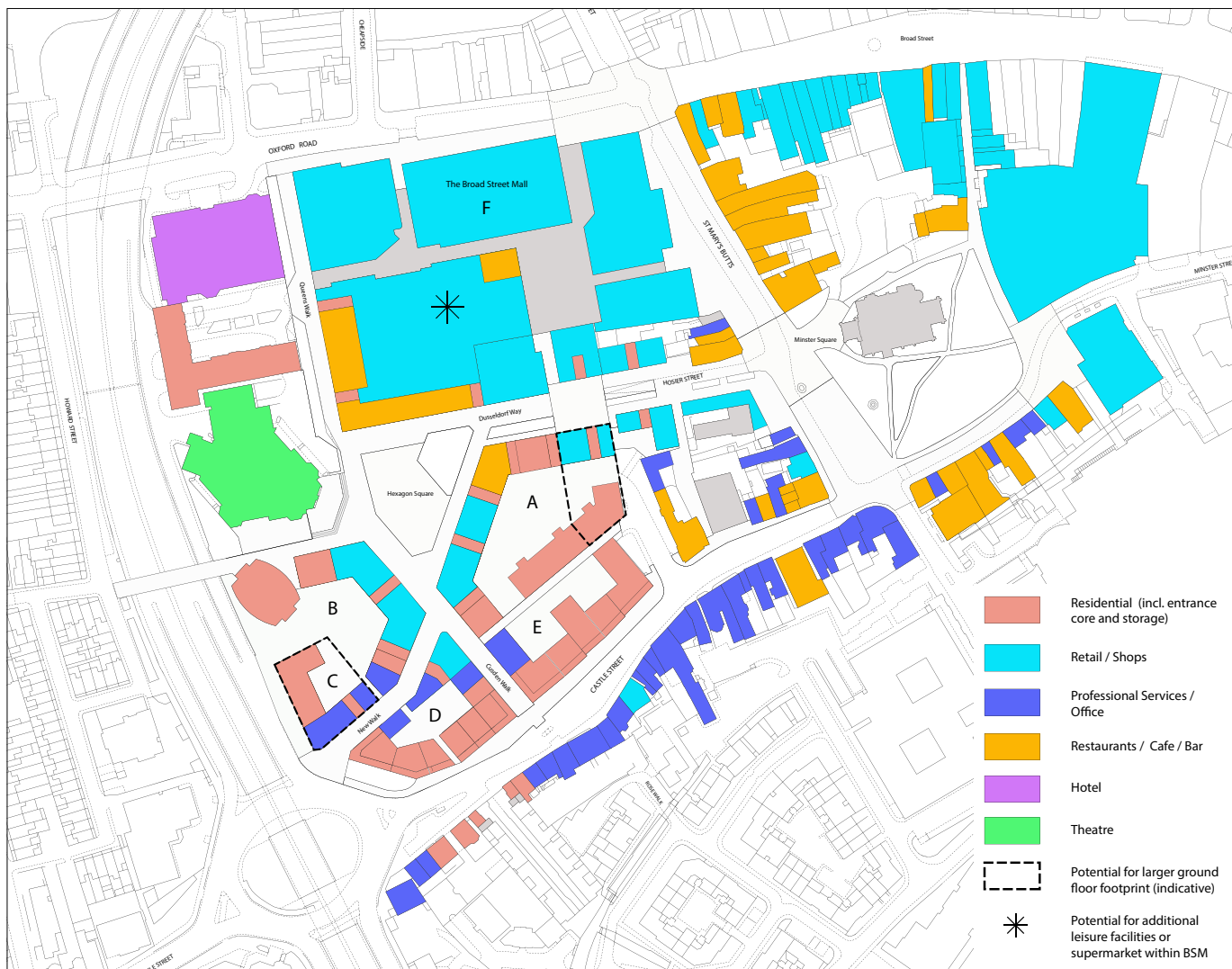


Figure 19 INDICATIVE GROUND FLOOR USES (EXISTING AND PROPOSED)

5.2 FORM, SCALE AND HEIGHT

Existing building heights in, and surrounding the site, have been extracted from accurate LIDAR measurements obtained from independently validated Zmapping data, informing a three dimensional model of the site.

These have been analysed against prevailing building heights to establish a mean building height (in storeys), taller buildings, and 'tall' buildings, in accordance with RBC's definition in the adopted Tall Buildings Strategy which defines a tall building in the town as 12 storeys or more.

In recognition of the "Western Cluster", primarily focused at Chatham Street, and the existence of the 10-12 Storey Fountain House, support is given to tall buildings on this site in accordance with the approved principle that all tall buildings clusters on the town's periphery, are to be subservient to proposed building heights at Station Hill.

The development framework has been based on the principle of accommodating 3-4 tall buildings on the site, one of which falls on the former civic site, whilst the remaining 3 form new towers on the BSM upper podium level.

The massing and orientation of these structures will need to minimise impacts on local views, daylighting and shadowcasting. Orientating new buildings on the Broad Street Mall parallel to the street may provide an appropriate accentuation to an enhanced Düsseldorf Way, whereas a tall building on the former Civic Centre site may need to provide a 'leading edge' in views from Howard Street to reduce its apparent bulk in views from the Conservation Area.

Whilst 20 storeys above podium has been arrived at as an indicative building height limit, in recognition of the height of revised consents at Station Hill, applications should demonstrate that the height, layout and massing of development has been designed to avoid or minimise harm to the character or appearance of the adjacent conservation areas, including impacts on their settings. The quality of architecture, including materials

and detailing should seek to provide an enhancement of views from the conservation area with frontages that positively address the conservation areas rather than directing blank faces towards them.

Applications for tall buildings on the site should be accompanied by 360 degree townscape analysis from viewpoints agreed with RBC planning officers, and should assess impact on skyline, interruption of historic views of Reading's Church Spires, and truncation of existing views at street level. This analysis should also assess impacts on neighbouring Conservation Areas at Castle Street, Russell Street and Castle Hill.

Any proposals for tall buildings will need to demonstrate how the buildings meet the requirements set out in the local plan, in particular the requirements in Policy CR10 once adopted (in the meantime, Policy RC13 of the Reading Central Area Action Plan and other relevant policies in the local plan. Several of those criteria area dealt with below.

A views study will be needed in relation to all proposals for tall buildings to illustrate the impacts that such buildings will have on short, medium and long distance views as well as impacts on local areas and demonstrate that special attention has been given to the desirability of preserving and enhancing the character and appearance of the conservation areas.

Interface with historic buildings, especially St Mary's Minster and the adjacent Conservation Area, will be expected to demonstrate sensitivity and appreciation for historic assets. The dominance or over-bearing of new buildings, in terms of massing, scale and volume, in the immediate and distant sky-scape is to be avoided. The principle of a 'grading down' of scale and massing towards Conservation Areas should be applied where proximities are greatest, i.e. along Castle Street, although the impact of major infrastructure (e.g. the IDR) on the settings of Conservation Areas is considered of importance when determining tall building locations.

The setting back of building mass at upper, or 'shoulder' levels will afford some relief to building dominance and should be used along primary pedestrian and historic streets.

The set-back of the upper storeys of new development (the step-down) north of Castle Street needs to be designed to avoid harmful impacts to the character or appearance of the conservation area and its setting.

TALL BUILDINGS

The specific area of the Minster Quarter Area has been identified as part of the Western Cluster of tall buildings, as set out in planning policy.

The hub and spoke approach to tall buildings in the town assigns pre-eminence and dominance to the central cluster at Station Hill. Consequently buildings on the site will need to perform a supporting function to the central cluster at the station.

This is primarily to be achieved through a capping and monitoring of building heights to ensure that these are subservient to consented buildings at Station Hill. Applicants promoting tall buildings in the site area will be required to provide 360 degree views analysis (from viewpoints agreed with RBC planning officers) to demonstrate the impact on Reading's skyline and fit with adopted tall buildings policy.

Additionally, primacy of a central tall building with supporting tall buildings providing a stepped transition to the high point is the preferred configuration for tall building distribution within the site and takes into account:

- The high percentage of listed buildings locally, especially;
- St Mary's Grade 1 Listed Church and views thereto;
- St Mary's Grade II* Listed Church (on Castle Street);
- Adjacent residential development in the Russell Street/Castle Hill Conservation Area across the IDR;
- Adjacent commercial development (and limited residential above) along the (primarily southern) elevation of Castle Street within the Castle Street Conservation Area;
- Shading and overshadowing of proposed residential development within the site;
- Shading and overshadowing of proposed public realm within the site.



Figure 21 PRINCIPLE OF BUILDING HEIGHTS GRADING DOWN TOWARDS CONSERVATION AREA



Figure 20 INDICATIVE BUILDING HEIGHTS PARAMETERS

PROPORTION OF TOWERS

The proposed concentration of (up to) 4 tall buildings within the site, will require a coordinated approach to building height and form across all applications/land ownerships.

Existing building clusters in the town to the east (Kings Point) and to the west (Chatham Place) currently feature planned/completed buildings of up to 19 storeys. A threshold of 20 storeys above podium is considered the maximum permissible height for tall buildings generally within the site and this should be considered as a maximum to which other buildings step up to.

It is accepted that buildings above the podium on the Broad Street Mall will increase overall building heights above this level. However, an approach which considers the datum for measuring building heights beginning at podium in this location, is considered acceptable and will self-regulate an overall hierarchy of building heights across the wider site.

Within the accepted building height envelope, individual structures should seek to achieve efficient floor plates but avoid excessive mass. Slender building forms are encouraged, for reasons of overall skyline appeal, reduction of overshadowing and improvements to distances between blocks.

All buildings should be designed to meet the ground and express their singularity as building elements, as well as communicate as a group, utilising similar and complementary materials.

STREET WIDTH TO BUILDING HEIGHT RATIO

Prevailing building heights within the wider area generally top out at six to seven storeys.

The default measure for building shoulder heights along street edges should therefore not generally exceed this limit, save for areas fronting onto primary open spaces. Additional building heights are permissible above this level for buildings that are not considered 'tall' in accordance with the RBC definition, but should be set back from the building line to achieve building 'shoulder' set back.

This upper storey set back can be seen on buildings adjacent to the site, notably the upper storey setbacks of

John Lewis on Chain Street, and the crenelated articulation of the upper storeys of the McIlroys building on the Oxford Road.

Consequently, buildings that seek additional height above the accepted street line should provide a rationale for building 'crown' design that relates to local tradition and adds variety and expression to the streetscape.

TOWER SETBACK AND PLINTH

Along Düsseldorf Way, the proposed development framework for the site suggests three towers. The definition of the building plinth (the level up to podium) should be read as a defined retail edge, but not divorce itself from the extended mass of the towers above. Resolving this ambition will ensure that buildings adequately meet the ground.

Double-height scale of the ground floor can provide presence and interface with the street.

Consequently, towers in general should be read as a whole, and not seek to break the vertical flow of the building form, whilst maintaining activity, function and interface with the street.

This approach allows for the exploration of buildings with a bottom, middle, and top (although artificial 'topping off' of tall buildings is to be avoided without a strong and clear architectural rationale and assessment of impact on skyline).

Where tall buildings have a proven relationship with the most sensitive areas of the site, notably the Castle Street area and neighbouring Conservation Areas, where existing buildings achieve a transition of scale and use, new build will be required to deliver similar levels of ground floor articulation, mid-range simplicity and elegant finishing off of the roofscape. Exceptions include where infrastructure corridors (i.e. the IDR) create significant separation between areas which transcend scale and local character.

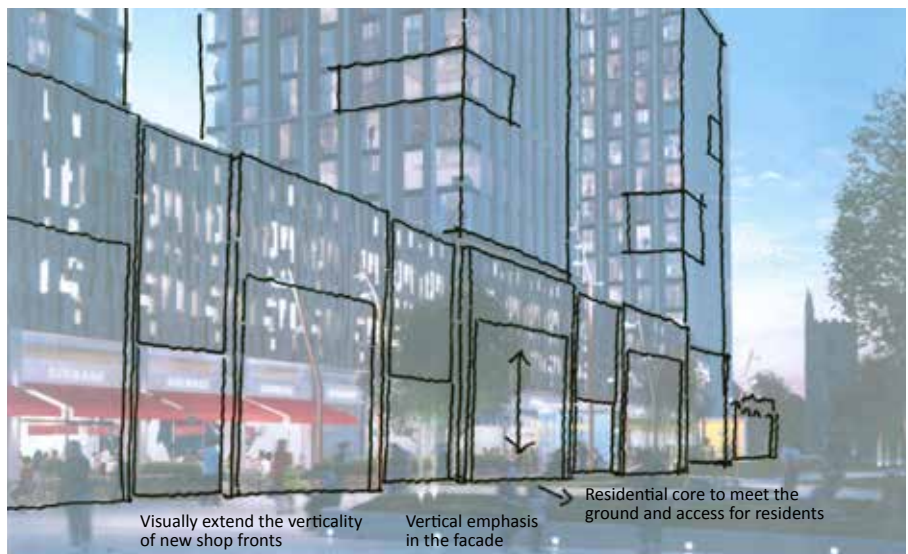


Figure 23 RECONFIGURATION OF BSM PLINTH FACADE

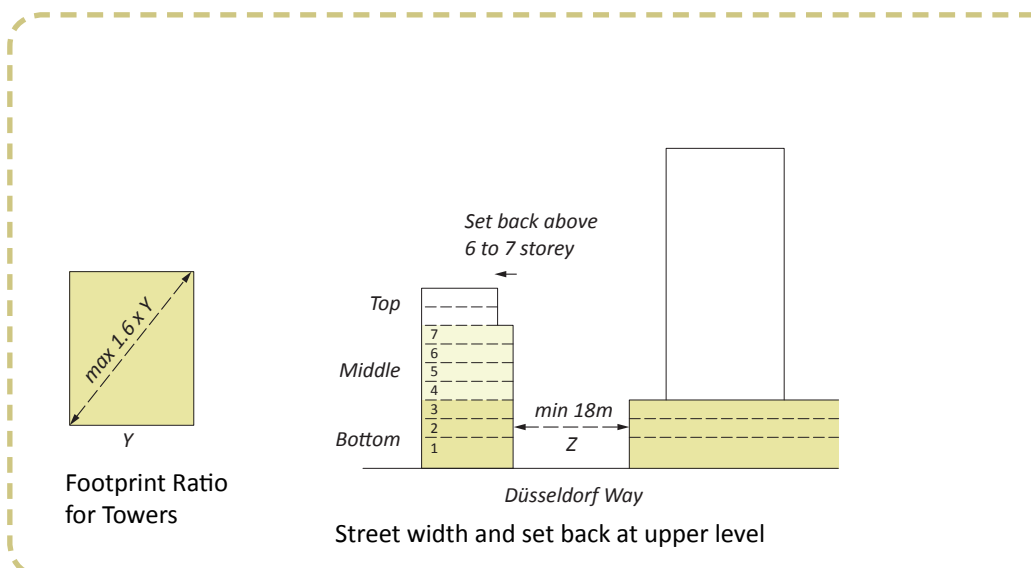


Figure 22 BUILDING PARAMETER DIAGRAMS

The Council recommends applicants consider additional guidance on tall buildings published by Historic England in 2015:

(<https://content.historicengland.org.uk/images-books/publications/tall-buildings-advice-note-4/heag037-tall-buildings.pdf/>)

Page 6 of the guidance makes reference to the need for an urban design framework when promoting tall buildings that can:

1. Identify those elements that create local character and other important features and constraints, including:

- Natural topography
- Urban grain
- Significant views of skylines
- Scale and height
- Streetscape and character assessment (including the history of the place)
- Materials
- Landmark and historic buildings and areas and their settings, including backdrops, and important local views, prospects and panoramas

2. Identify opportunities where tall buildings might enhance the overall townscape

3. Identify sites where the removal of past mistakes might also achieve such an enhancement

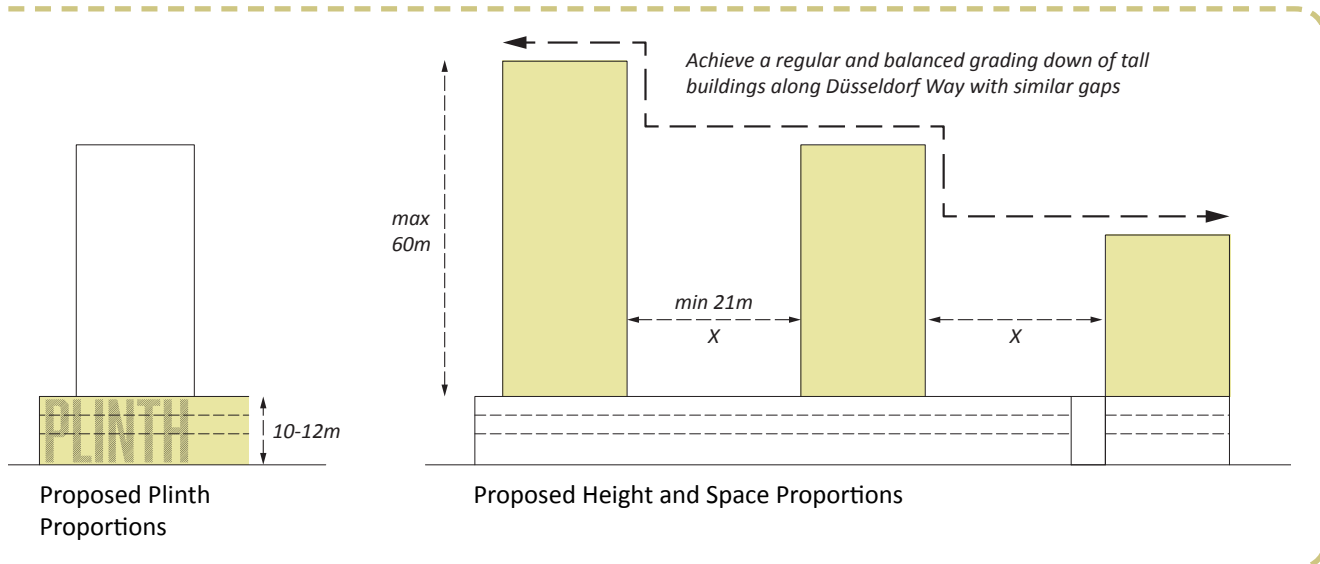
The NPPF Paragraph 130 states:

“Permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions...”

RBC will require all tall building applications to be presented to the Design South East (DSE) Design Review Panel for independent consideration.



Figure 24 BUILDING HEIGHT CLASSIFICATION



5.3 QUALITY AND APPEARANCE

The creation of a new urban quarter will require a specific commitment to quality architecture and design quality in general. The NPPF (chapter 12) states that “the creation of high quality buildings and places is fundamental to the planning process” and that “good design is a key aspect of sustainable development”.

Paragraph 127. sets out a number of guiding principles that are relevant for this development, namely:

127. Planning policies and decisions should ensure that developments:

- a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;
- b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;
- c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);
- d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;

- e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and
- f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users⁴⁶; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.

Consequently, design guidance for the site focuses on the creating of a comprehensive master plan and development strategy, and leaves the creation of architectural detail to applicants and their design teams.

Nonetheless, there is a requirement for coordination of design quality across the wider site, and the Council will require all applicants in the wider site undertaking major schemes, to collaborate on the production of a comprehensive design code that addresses a site wide strategy for the following:

- Street Character
- Architectural character areas
- Building Materials (facing)
- Roofscape
- Interfaces with the Existing Townscape
- Interfaces between Application Areas
- Tall Building Design Rationales
- Skyline and Silhouette

The Council will require all buildings to demonstrate, how they meet high quality design, by means of providing a design rationale that illustrates compliance with the site-wide design code and a response to context.

Design quality is not the sole reserve of tall buildings, although paragraph 4.9 of Historic England guidance sets a requirement for exemplary standards for these structures. (<https://content.historicengland.org.uk/images-books/publications/tall-buildings-advice-note-4/heag037-tall-buildings.pdf/>)

Tall Buildings, Historic England Advice Note 4, Paragraph 4.9:

“Tall buildings need to set exemplary standards in design because of their scale, mass, wide impact and likely longevity. Good design will take the opportunities available for improving the character and quality of an area and respond to local character and history (NPPF paragraphs 58 and 64). It is important that the required high standard of architectural quality is maintained throughout the process of procurement, detailed design, and construction, through the use of conditions and reserved matters.”



Example of quality dense urban living block



Example of tall building



Example of dense urban quarter with tall buildings and high quality public realm

5.4 GENERAL PRINCIPLES

QUALITY OF URBAN LIVING

The design and planning of high density urban neighbourhoods presents specific challenges for the integration of mixed-tenure living, adjacent to public open space, town centre servicing, parking and other mixed uses. Typical planning standards such as overlooking, quantum and composition of public open space, amenity levels and noise, may compete with the desire to create vibrant, and successful urban neighbourhoods.

RBC will adopt a pragmatic approach that will require an evidence based strategy to achieving acceptable standards for urban living that maintain fair and reasonable standards. RBC will engage with application over a quality vs. quantity approach, where efforts to reach high levels of design quality in the public and private realm can be demonstrated to the Council's satisfaction.

PRIVATE/COMMUNAL SPACE

Rear courtyards to residential blocks should be designed to maximise the provision of high quality, flexible spaces that can be enjoyed by all residents without adversely affecting neighbourhood amenity. These may become elevated spaces at first floor or above, where a development rationale for deeper uses for retail or leisure at

ground floor can be demonstrated. However, the purposing of internal block courtyards for parking or services areas at a cost to private amenity space shall not be permitted.

Particular attention should be given to the siting of play equipment, which should generally be avoided within private blocks, and instead accommodated within the public realm to encourage social interaction. Notwithstanding this, stimulating internal landscapes should be designed to encourage community participation.

Ground floor residents should be provided with level access to communal areas and separate defensible private space. Balconies capable of accommodating chairs and tables for all occupants should be provided for all residents.

Where flat roofs of units below can be used as roof terraces, these should be assigned to individual properties. Terraces should seek to maximise the private amenity for residents and minimise space given over to roof level service infrastructure.

Views into and out from residential units should seek to provide a positive outlook and focus on key features in the townscape where possible.

The orientation of balconies and terraces should also consider this alongside orientation, shading and solar gain.

Care should be taken to avoid the cluttering of communal areas with refuse/cycle storage which should be accommodated at sub-podium level.

Internal courtyards should therefore become garden spaces for residents to enjoy and utilise to the full and particular attention should be given to the 'protected' threshold areas between private and communal space.

With appropriate management, a resident consensus, internal block garden spaces may be opened to the wider community on a controlled basis.

PODIUM LANDSCAPE FOR BSM

Where tall buildings are proposed, podium level gardens should be maximised to ensure a sense of 'living in green' is achieved, and generous garden space at residential ground floors is created. Where there is a demonstrable and agreed requirement for utilisation of podium levels for additional uses (e.g. parking and servicing), these should be integrated into a landscape design setting, and include (inter alia):

- Containerised tree planting
- Pergola/arbour's planted with climbing species
- Separate surface treatments for footways and service routes
- Podium level lighting



Residential green courtyard incorporating variety of private and communal outdoor spaces



Residential green courtyard incorporating variety of private and communal outdoor spaces

6. SUMMARY DEVELOPMENT PRINCIPLES

The following summary principles should be carried forward into site-wide design coding and Reserved Matters / Full Planning Applications, especially where these impact on land in two or more ownerships across the site.

A - HEXAGON SQUARE

- Generous, enlarged, civic space with cultural/performance focus, framing the entrance to the Hexagon Theatre and Düsseldorf Way.
- Geometry designed to maximise all-year sunlight penetration and active pavement uses.
- A3/Food and beverage/leisure focus for ground floor uses along square edges with residential cores meeting the ground.
- Animation and activation of formerly blank façades to BSM.
- Retained elements of green where mature trees exist.
- Tribune/amphitheatre seating to facilitate outdoor performance.
- Leading edges fading from predominately hard to soft landscapes to create green corridors along Düsseldorf Way and Queens Walk.
- Integration and retention of heritage and twin town assets.

B - QUEENS WALK

- Linear park landscape with longitudinal soft landscape features focused on low maintenance, drought resistant and prairie planting scheme.
- Along-route animation and inclusion of dwell spaces, seating, play and rest activities to encourage resident adoption.
- Integration of unifying street furniture or street art with a consistent approach to colour to engender scheme identity and distinctiveness.
- Consideration of landscape,

specifically trees and shrubs to reduce 'eddying' of wind at entrances to Queens Walk and at the base of taller towers.

- Emphasis of entrances, pavement spaces and building uses to surrounding townscape to ensure a coordinated design approach for the wider area.

C - DÜSSELDORF WAY / HOSIER STREET

- Inset buildings at street level to occupy previously vacant space at entrance to BSM.
- Continuation of the street scene to provide continuity and enclosure and the creation of a street with active façade uses.
- Stepping down of building shoulder height due mitigate against street 'canyon' effect.
- Application of minimum 18m street width (wider than the narrowest point along Broad Street) to ensure locally familiar street widths. (see also appendix D for width assessment)
- Articulation of building 'crown' architecture with additional detailing and finishing to maintain local tradition of well executed buildings 'in the round'.
- Expression of local twin town symbolism in public art, paving and naming strategies.
- Creation of a shared surface street with provision for emergency access and integrated pedestrian/cycle movement.
- Emphasis on smaller squares and spaces along the route to create a sequence of spaces and reduce linearity.

D - MINSTER SQUARE

- Re-discovery of Reading's earliest sacred space as a purposeful, functional greenspace at the heart of a newly regenerated urban quarter.

- Reparation of the 'civitas' of St Mary's Minster as a monument set within a space of appropriate scale, grandeur and significance.
- Study that seeks better spatial integration to stitch the graveyard into the fabric of the surrounding streets and medieval frontage alignments of St Mary's Butts, Gun Street and Chain Street. Explore potential for steps, seating and low walling of the churchyard enclosure.
- Widescale street surface rationalisation to improve pedestrian/cycle/wheelchair movement and create new opportunities for markets, events and streamlined space occupancy by buses and public transport.
- Deliberate and conscious reconnection of Düsseldorf Way, Hosier Street and Hexagon Square with the wider town through a unifying streetscape, materials palette and newly strengthened alignment of views and spaces.

E - ST MARY'S BUTTS / OXFORD ROAD

- Critical edge treatment to link to the north and east of the town's central area and retail core.
- Requirement for continuity of unifying street scape and furniture.
- Rationalisation of street/pavement surfaces and treatments to create a more flexible and usable environment for pedestrians with priority over vehicular movement through wider pavements and level crossing points.
- Full encirclement of the BSM with refreshed paving is required to ensure better integration of forgotten spaces such as Queens Walk.
- Comprehensive façade improvements needed to the BSM with an emphasis on reintroduction of the principle of 5 entrances and exits.

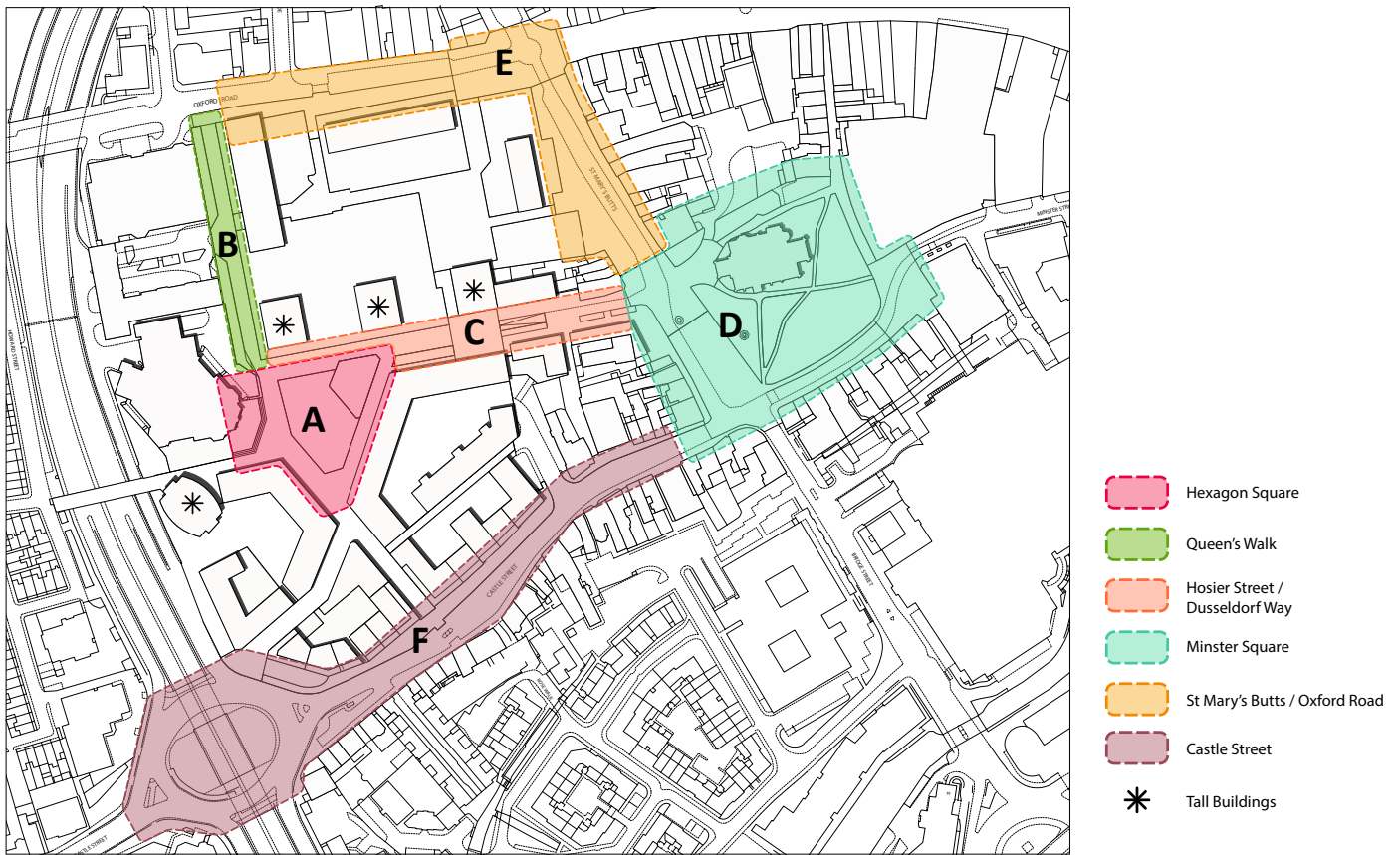


Figure 25 EXTENT OF PUBLIC REALM

- Rarticulation of façade activation and active frontages on all sides of the BSM to reinforce investment in the public realm, especially where tall buildings meet the ground.

F - CASTLE STREET

- Respect and respond to the historic character and appearance of the existing streetscape with an architecture and public realm that enhances the Conservation Area.
- Improve pedestrian/cyclist accessibility and provide an attractive gateway into the town centre.
- New development will need to contribute to restoring an active frontage along the street and provide building forms, proportion, materials and detailing that are appropriate for Castle Street and reflect the existing character principles.

TALL BUILDINGS PRINCIPLES

- Appropriate 360 degree analysis of the impact on tall buildings on key views, both locally and long range on the Reading skyline (as agreed by RBC officers) are to be submitted as part of Reserved Matters or Full Planning Application submissions for all tall buildings. This should extend to climatic analysis determining the localised and strategic impacts of tall buildings on community assets, neighbouring properties and other tall buildings, both constructed and promoted through the planning system. (See Local Plan policies, in particular, RC13 in the Reading Central Area Action Plan, 2009; and CR10 in the Submission Draft Local Plan, 2018)
- Tall buildings should be designed to meet the ground and connect to the streetscape wherever they interface with the public realm and amenity space.

- Material fragility, ability to withstand fire, climatic conditions (e.g. high winds) and natural elemental deterioration should be demonstrated with specific regard to suitability of employment on tall buildings.
- Clarity of building structure, that tall buildings should have an identifiable bottom, middle and top, is to be demonstrated as part of Reserved Matters or Full Planning Application submissions.
- Demonstration of complementarity of material selection, both as part of a cluster of tall buildings, and in context of the wider framework area and local context should be provided as part of planning submissions.
- All tall buildings applications will be required to present to the current RBC design panel mechanism and provide evidence of having satisfactorily responded to panel comments and concerns.

7. IMPLEMENTATION AND DELIVERY

7.1 PHASING

Development phasing in the wider area is anticipated to follow the sequence below:

1. Residential and retail redevelopment of Broad Street Mall and Oxford Road public realm including the frontage along and part of Düsseldorf Way and Queen's Walk 'Highline' public realm.
2. Minster Quarter Area/Düsseldorf Way redevelopment including Hexagon Square and residential development (RBC land).
3. Public realm improvements to St Mary's Courtyard and St Mary's Butts open space and public realm.
4. Police Station redevelopment, Baker Street IDR pedestrian/cycle bridge and Magistrates Court/ Castle Street Redevelopment.

This is a complex site in terms of ownership, access and storage for construction operations with the potential for significant conflicts where more than one development is occurring at the same time. It will be vitally important to consider the construction process at an early stage to ensure that deliveries, storage and construction operations can take place while at the same time public access to car parking and the services and facilities provided by the site and the operations of other users is not detrimentally affected. Full construction plans should be submitted as part of any application.

7.2 SUSTAINABILITY

Developments will be expected to meet the requirements of Policy CC2 in relation to non-residential development and Policy H5 in relation to Housing development in the Draft Local Plan. Note that for residential development, the policy requires that these are designed to achieve zero carbon homes. This will mean as a minimum a 35% improvement over the 2013 Building Regulations plus a contribution of £1,800 per tonne towards carbon offsetting within Reading (calculated as £60 per tonne over a 30 year period).

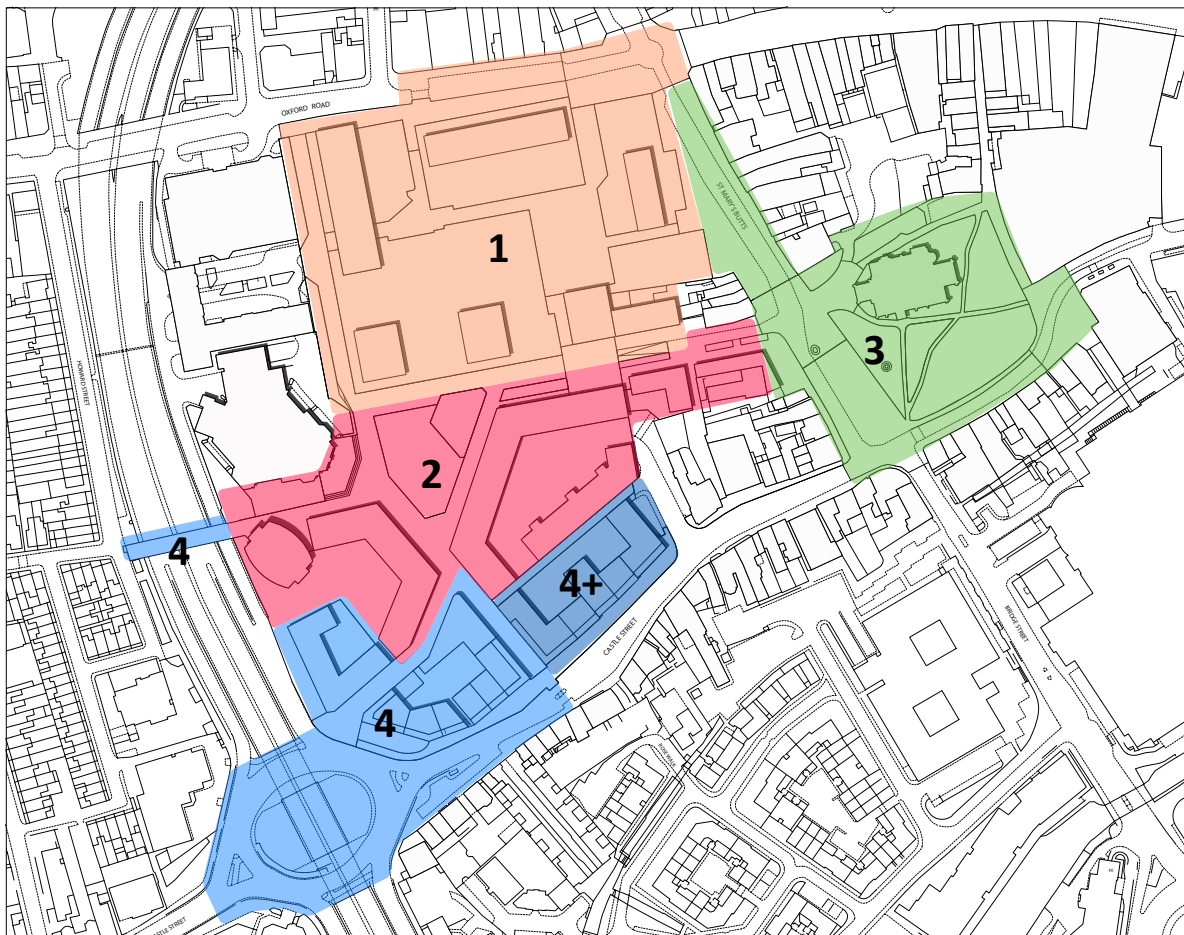


Figure 26 INDICATIVE PHASING PLAN

7.3 APPLICATION REQUIREMENTS

Comprehensive town centre development projects require many interfaces with adjacent land ownerships and a range of uses/stakeholders. With a commitment to tall buildings and a unified palette of public realm materials, Reading has a strong ambition to welcome innovative proposals for the regeneration of the wider site area.

Requirements set out in this document for improvements to the public realm of the wider town-fabric, necessitate a broader approach to redevelopment that may be within the extents of the red line of an individual planning application. Applicants for proposals in the Minster Quarter Area will be required to collaborate with RBC over the production of a site-wide Public Realm Strategy and Design Code to ensure complementarity of materials, public space phasing and building adjacencies, as well as subterranean issues of servicing, access and parking.

The council provides a (paid for) pre application advice service and encourages prospective applicants to make full use of that service prior to the submission of a planning application. Further details on the service and the form can be found at: http://www.reading.gov.uk/media/1190/Pre-Application-Enquiry-Form/pdf/Pre-app_April_2018.pdf

Applicants should view the Councils Validation Checklist to find out what information will be needed to submit with your application. The checklist can be found at: http://www.reading.gov.uk/media/2660/Validation-Checklist-Updated-Dec-2016/pdf/Validation_Checklist_Final_Dec_16.pdf

The information that will need to be submitted as part of any planning application will be reviewed in detail as part of the pre-application advice provided.

ENVIRONMENTAL ASSESSMENT

The scale of probable planning (major) applications within the site area is likely to trigger requirements for an Environmental Assessment. All individual applications will be individually screened, and scoped where applicable.

In the context of tall buildings applications, applicants will be required to provide specific details of the following issues (inter alia):

- Noise (associated with the IDR, public squares and spaces, communal private space and cultural venues)
- Wind (especially effects caused by tall buildings, gusts, drafts and eddying at the base of buildings, as well as cumulative effects of several tall buildings in a single location)
- Heating/cooling (urban heat island effect, solar gain, northern orientation and heating/cooling mechanisms)
- Overshadowing (to adjacent existing residents, between buildings, and onto public open space)
- Townscape Visual Assessment, Skyline and 360 degree View Analysis (with agreed viewpoints, independently verified 3D model and winter/summer views from short and long range sensitive receptors)
- Impacts on the historic environment, particularly listed buildings, and adjacent Conservation Areas
- Compliance with latest safety/fire/emergency access regulations
- Waste storage and disposal strategy
- Servicing and parking strategy taking also into account delivery to private residents/concierge to cater for online shopping delivery.

8. APPENDIX

A - CONSERVATION AREA APPRAISAL MAPS

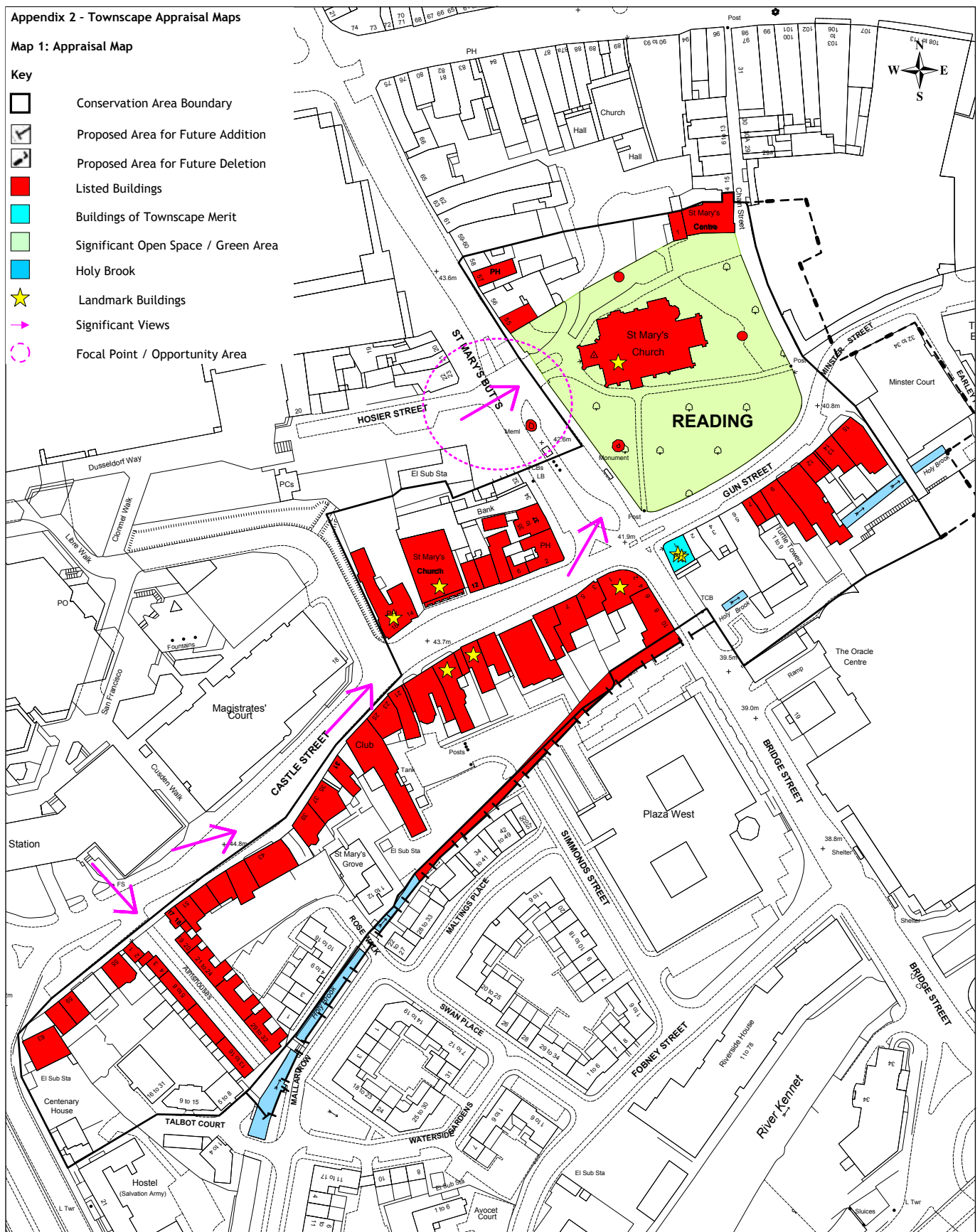


Figure 27 CONSERVATION AREA APPRAISAL MAP (EXTRACT FROM ST. MARY'S BUTTS/ CASTLE STREET CONSERVATION AREA APPRAISAL DOCUMENT)

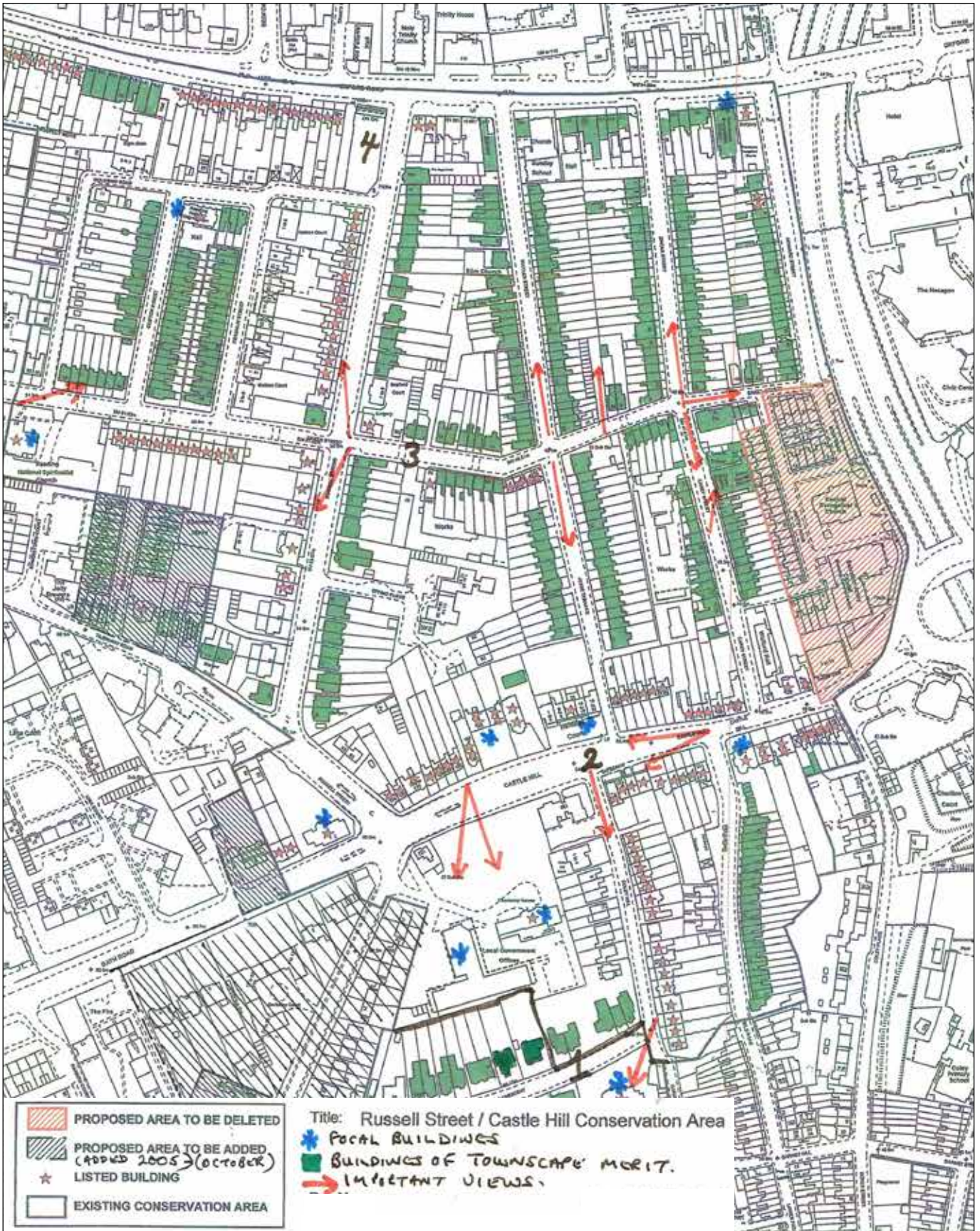


Figure 28 CONSERVATION AREA APPRAISAL MAP (EXTRACT FROM RUSSELL STREET/CASTLE STREET CONSERVATION AREA APPRAISAL DOCUMENT)

B - OPEN SPACE COMPARISON WITHIN HEXAGON QUARTER

The public open space has been assessed for the Hexagon Quarter to quantify the area.

Public open space before redevelopment measures 11,800 sqm. This excludes the interim community garden use on land of the former civic office.

Public open space as proposed within the development framework masterplan measures 11,974 sqm.

The comparison overlay in Figure 28 shows where spaces overlap and where space is lost/gained as open space.

The space in front of the Hexagon has more than doubled in size and has a more usable shape/size as a public square. It also creates an improved entrance situation to the theatre.

In addition to public open space, the proposals require the creation of private amenity space for new residents. This is envisaged as courtyard spaces within building blocks, podium gardens on the BSM, roof terraces at upper level set building backs, and balconies.

As such the proposals will offer a net gain in open space.

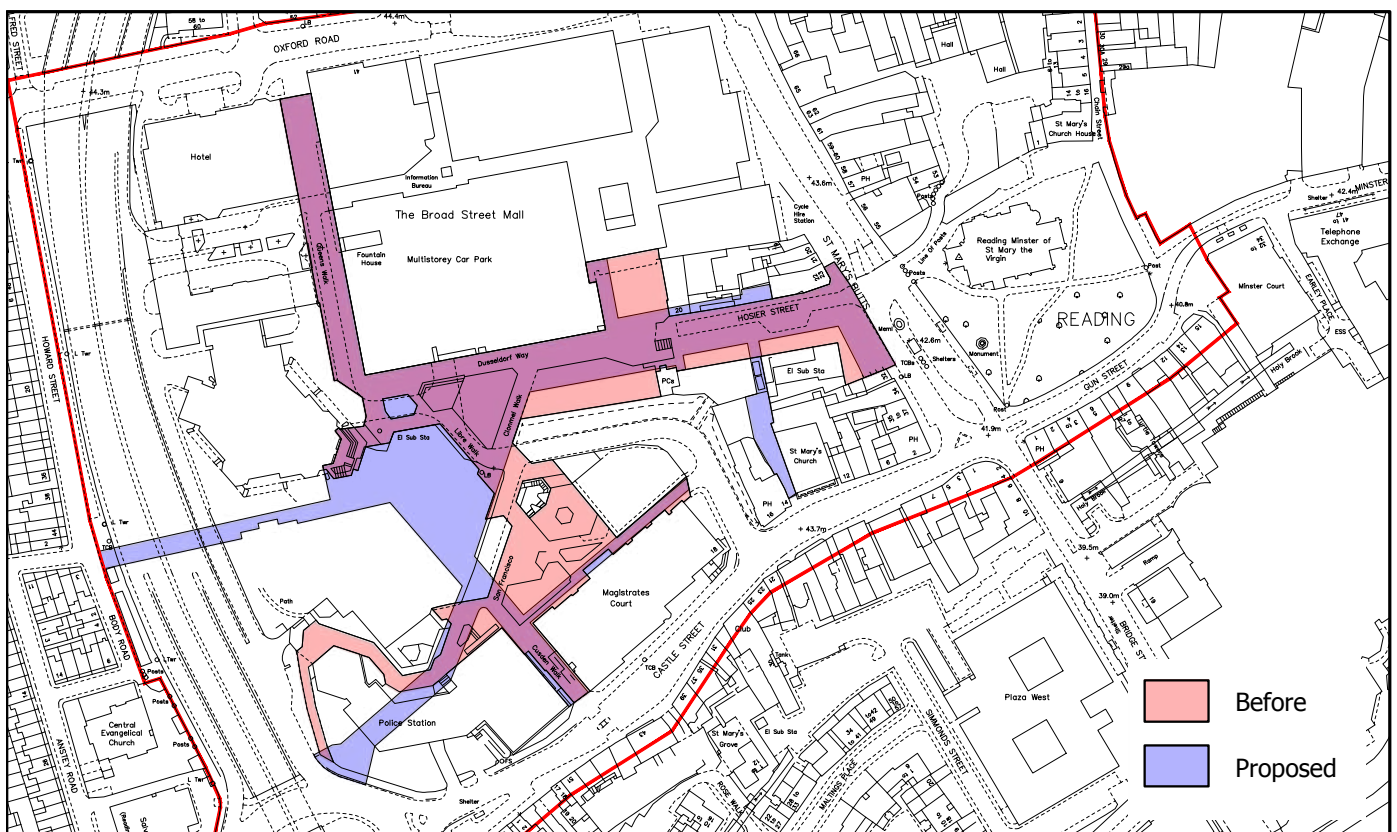


Figure 29 OPEN SPACE/PUBLIC REALM COMPARISON OVERLAY

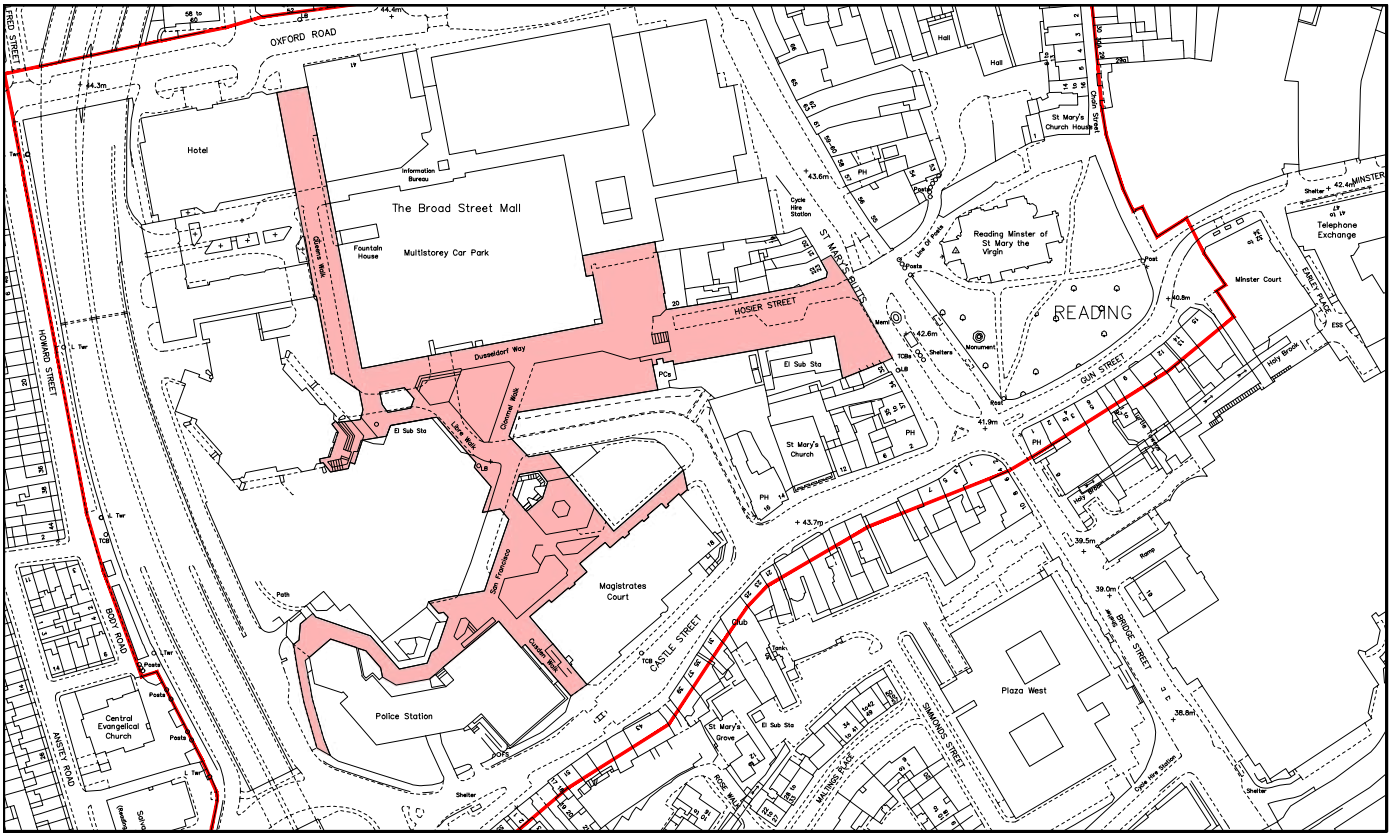


Figure 30 OPEN SPACE/PUBLIC REALM BEFORE REDEVELOPMENT - AREA = 11.800 SQM

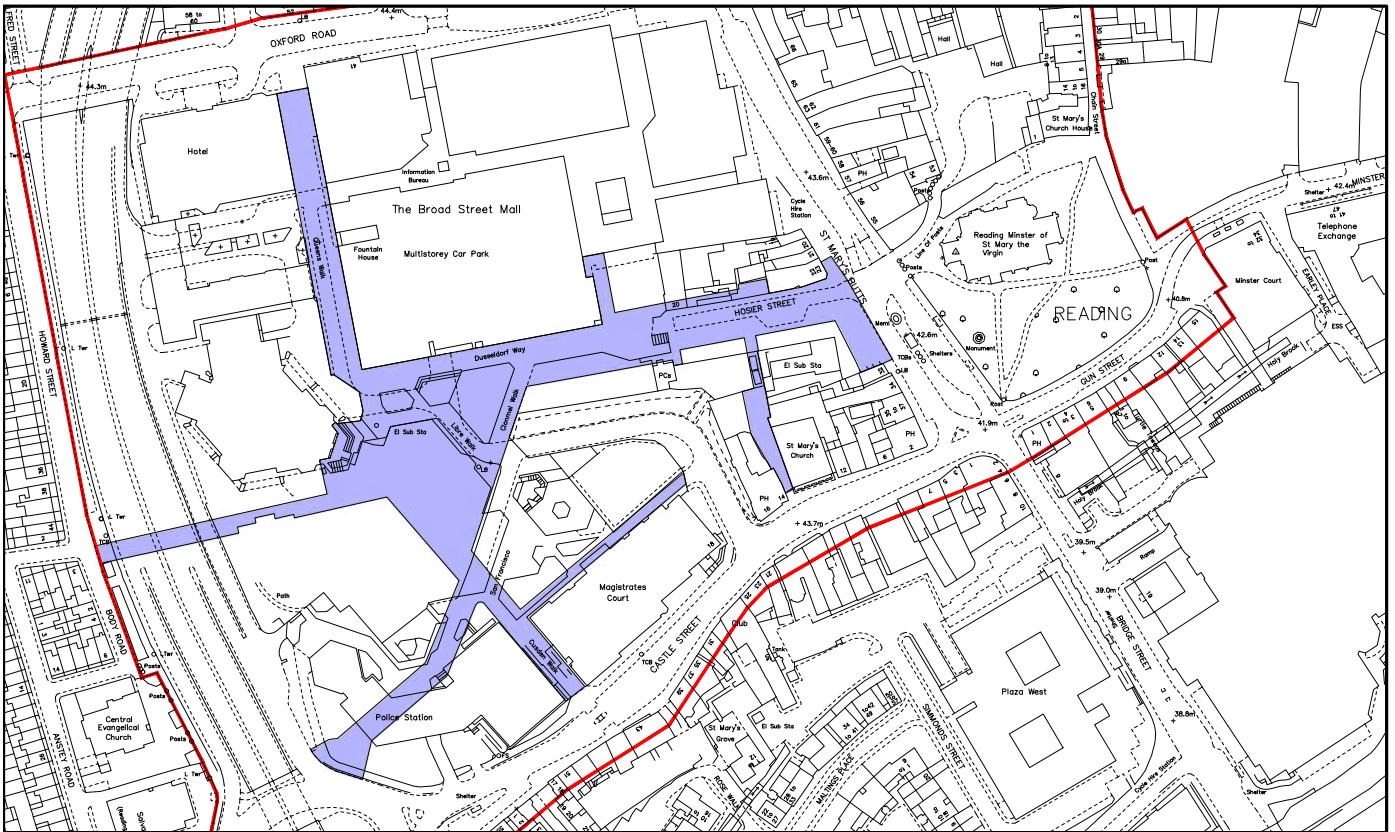


Figure 31 OPEN SPACE/PUBLIC REALM PROPOSED IN DEVELOPMENT FRAMEWORK - AREA = 11.974 SQM

C - TALL BUILDING STUDY SHAPE AND LOCATION OF B2 TOWER

Objective:

- Review and test an alternative form, shape and orientation of the B2 tower in its current location
- Test an alternative location for the tower
- Assess the above in terms of spatial (shadow casting) and visual impact

Assessment:

The following pages show the comparative images for shadow casting and key view points of the tower in 3 positions/angles. These are:

Position 1 - Tower near the IDR, shape changed to elliptical form, N-S axis

Position 2 - Tower near IDR, shape changed to elliptical form, 45° angle

Position 3 - Tower moved to corner of Hexagon Square, shape elliptical

Assessments 1 to 3 on pages 54-59 should be studied first before reading the conclusion.

Conclusion:

The assessments confirm that the tower is better placed near the IDR, where overshadowing and spatial impact on surrounding spaces is significantly reduced. The effects of overshadowing in the central position would not be reduced/avoided by different architectural treatment.

The perceived visual impact on the Baker Street area and other long views can be mitigated by great architecture, making this building a unique landmark that connects Readings neighbourhoods across the IDR.

From the orientation studies that were undertaken, post consultation, it was concluded that the preference is for a building form with softer edges and that is at an angle (as per Position 2) to aid visual interest from various view points.

The framework concludes that position 2 is the preferred location/orientation for B2 tower.



Figure 32 INDICATIVE FRAMEWORK MASTER PLAN FOR REFERENCE



Position 1

Tower near the IDR, shape changed to elliptical form, N-S axis



Position 2

Tower near IDR, shape changed to elliptical form, 45° angle



Position 3

Tower moved to corner of Hexagon Square, shape elliptical

ASSESSMENT 1 SHADOW CASTING - Spring/Autumn

Position 1

Shadow is cast onto the IDR and Hexagon until 2PM, with no impact on residential areas. From 2PM till 4PM shadow is cast onto parts of Hexagon Square.



MARCH/SEPTEMBER - 10 AM

Position 2

Very similar to Position 1, shadow is cast onto the IDR and Hexagon until 2PM, with no impact on residential areas. From 2PM till 4PM shadow is cast onto parts of Hexagon Square.



MARCH/SEPTEMBER - 10 AM



MARCH/SEPTEMBER - 3 PM



MARCH/SEPTEMBER - 3 PM

Position 3

With this more central location the tower has more impact on residential areas. Shadow is cast onto residential block B1 in the early morning, from 9AM till 1PM shadow is cast onto parts of Hexagon Square. From 1PM the residential garden of block A is almost entirely in shadow for the afternoon.



MARCH/SEPTEMBER - 10 AM



MARCH/SEPTEMBER - 3 PM

ASSESSMENT 2 SHADOW CASTING - Summer

Position 1

The impact on surrounding areas is minimal in the summer, with some shadows cast onto the IDR and Hexagon. No shadow is cast onto Hexagon Square.

Position 2

Same as position 1.



JULY - 10 AM



JULY - 10 AM



JULY - 3 PM



JULY - 3 PM

Position 3

Even though the shadows are shorter in the summer, there is still more impact on surrounding residential areas. Shadow is cast onto residential block B1 in the early morning, from 10AM till 12NOON shadow is cast onto parts of Hexagon Square. From 1PM till 3PM shadow is cast onto parts of the residential garden of block A and onto block A2.



JULY - 10 AM

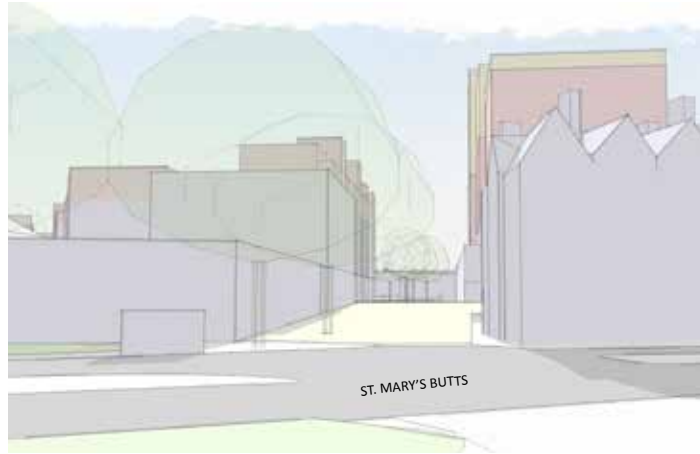


JULY - 3 PM

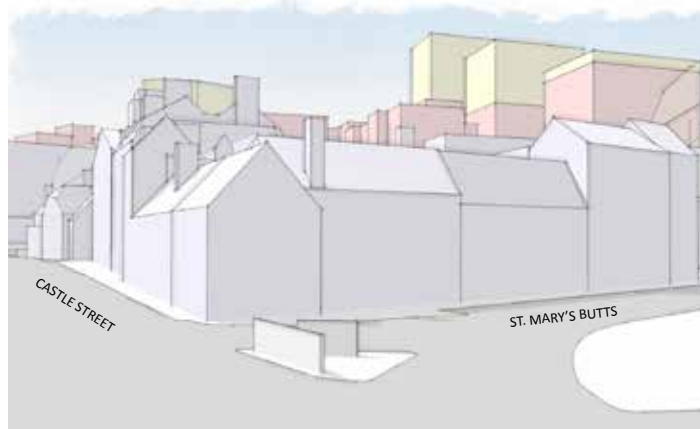
ASSESSMENT 3 KEY VIEWS

Position 1

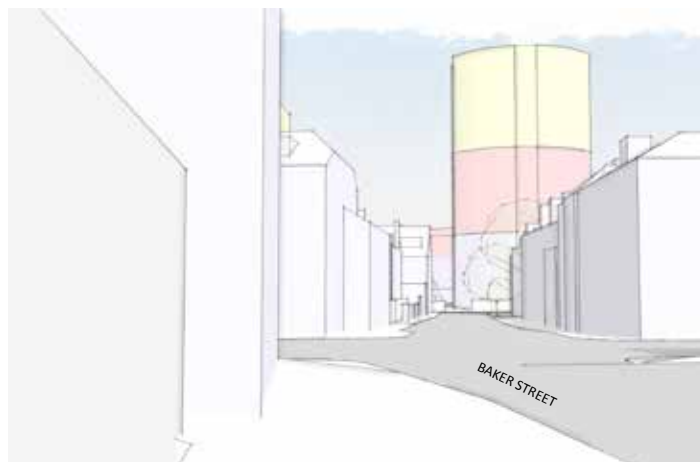
The tower has minimal or no visibility from the Minster and St. Mary's Butts conservation area. From Baker Street the tower is highly visible and presents its wider frontage.



VIEW FROM MINSTER



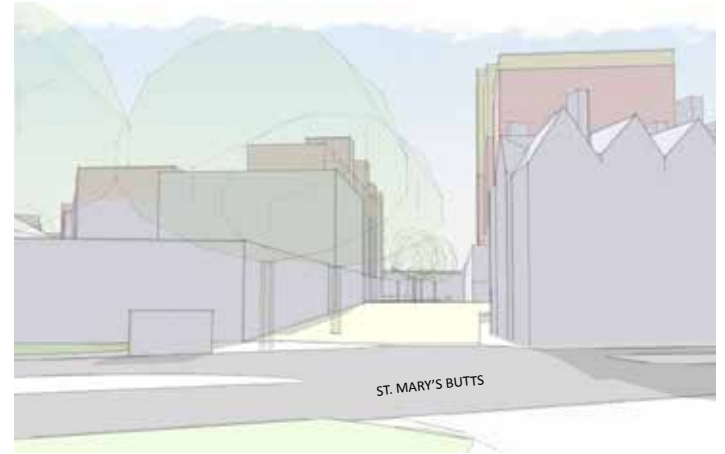
VIEW FROM CASTLE ST / ST. MARY'S BUTTS



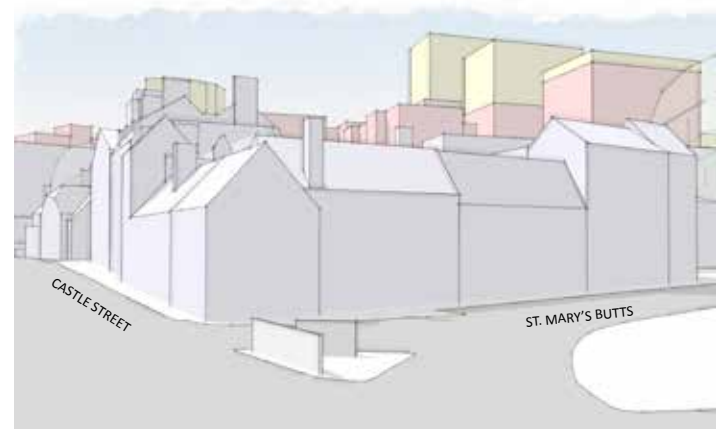
VIEW FROM BAKER STREET

Position 2

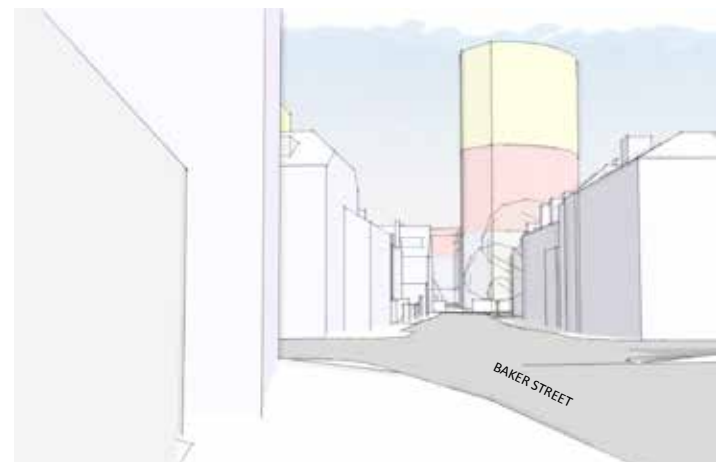
The tower has minimal or no visibility from the Minster and St. Mary's Butts conservation area. From Baker Street the tower is highly visible but rotating the tower changes the angle of the visible edges and results in a more dynamic architectural position.



VIEW FROM MINSTER



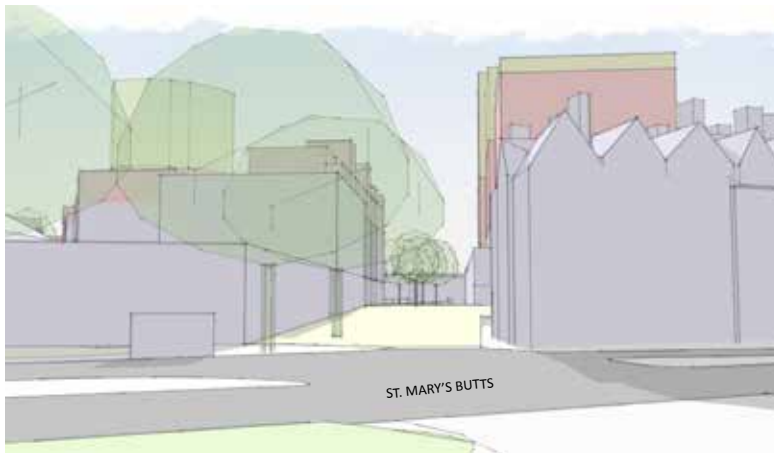
VIEW FROM CASTLE ST / ST. MARY'S BUTTS



VIEW FROM BAKER STREET

Position 3

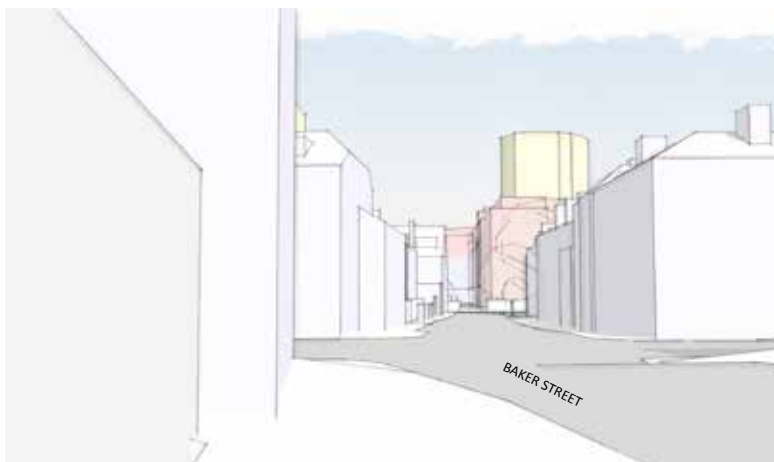
With the central tower location, there is greater visibility from the Minster and St. Mary's Butts conservation area. From Baker Street the visibility is reduced.



VIEW FROM MINSTER



VIEW FROM CASTLE ST / ST. MARY'S BUTTS



VIEW FROM BAKER STREET

D - DÜSSELDORF WAY STUDY SHAPE AND FORM OF BLOCK A1

Objective:

- Review and test an alternative form, shape and massing of block A1 staying within the plot extents of the masterplan
- Assess these in terms of spatial and visual impact
- Retain the overall capacity (no reduction in floorspace)
- Show examples of similar streets in terms of width/heights ratios to assess the spatial quality

Assessment 1:

This page shows the comparative images for 2 options of urban form/massing for block A1. These are:

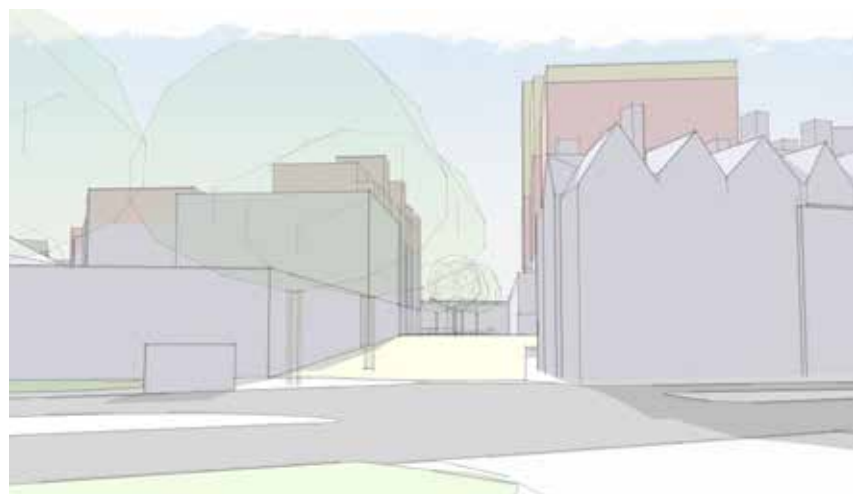
Option 1 - Block A1 as per draft consultation paper. Strong block form at 7-9 storey (2 upper storeys set back) along Hexagon Quarter and Düsseldorf Way

Option 2 - Varied heights within the urban form of block A1 ranging from 5 to 12 storey, reduced heights along parts of Düsseldorf Way

Option 1



AERIAL VIEW (shadow shown at 12noon spring/autumn)



VIEW FROM MINSTER

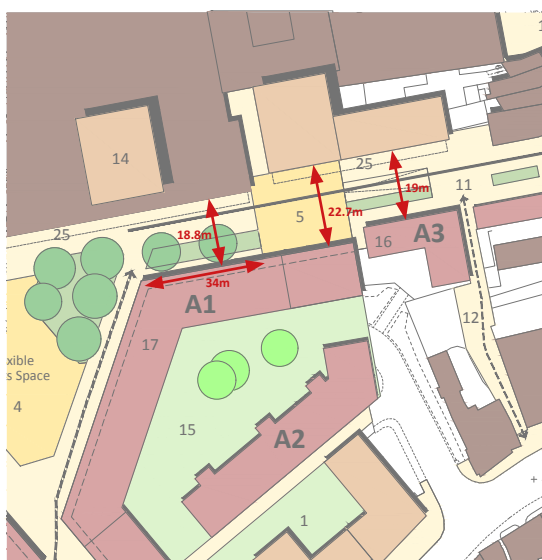


Figure 33 INDICATIVE FRAMEWORK MASTER PLAN FOR REFERENCE INCLUDING DIMENSIONS



SPRING/AUTUMN - 12 NOON

Option 2



AERIAL VIEW (shadow shown at 12noon spring/autumn)



VIEW FROM MINSTER



SPRING/AUTUMN - 12 NOON

OPTION 1 - Assessment:

Block creates a strong edge towards Hexagon Square and Düsseldorf Way with similar heights and massing. Shadow casting onto parts of Düsseldorf Way (ca. 60m length) in varying depths, but not onto the Broad Street Mall edge for most of the year.

Architecture would require internal layout solutions that favour dual aspect units to reduce number of single aspect north facing units.

OPTION 2 - Assessment:

Reshaping of urban form extent to favour an east-west orientation for residential units. Block has reduced heights to 5 storey along parts of Düsseldorf Way to allow more sun light onto the street space.

The loss of floorspace is offset with additional height on corners up to a maximum of 12 storey (limit before a building is classified a tall building) on Hexagon Square and stepping down to 10 storey nearer the Minster.

Shadow casting shows improvement along Düsseldorf Way with more broken patches of shadow.

Conclusion:

Both options have merit and would offer flexibility to developers on how buildings in Block A are developed.

The final form of buildings within Block A has a degree of flexibility as long as the perimeter of the block is defined and does not deviate from the development framework master plan.

The spatial sensitivity towards the Minster needs to be considered in any solution.

ASSESSMENT 2

COMPARATIVE EXAMPLES AND PRECEDENTS

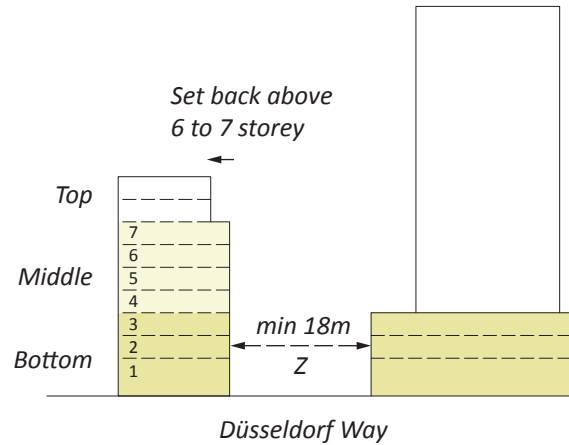
This page shows images of streets with similar width/height ratios as proposed for Düsseldorf Way.

The diagram below references the framework parameters for height and width for Düsseldorf Way as described in the main document on page 42.

It should be noted that the length of the narrowest point (18m wide) is only 34m long in the framework plan (see Figure 33 on previous page). In addition it should be noted that Düsseldorf Way is a pedestrian zone and will not have a road running through it, which will increase the perceived width for pedestrians.

Conclusion:

The assessments and precedent reviews show that the proposed width for Düsseldorf Way of a minimum 18 metres is acceptable.



Düsseldorf Way - min 18m width / 4-9 storeys
Enclosure Ratio (H/W): approx. 1: 1.5 - 0.65



Local example: Broad Street, Reading, section at John Lewis/HSBC - width 19m



Whitehall Court, London - 18m width / 5-8/9 storeys
Enclosure Ratio (H/W): approx. 1: 1 - 0.65



Charles II Street, London - 16.5m width / 6-8 storeys
Enclosure Ratio (H/W): approx. 1: 0.9 - 0.6



India Street, London - 16m width / 8-10 storeys
Enclosure Ratio (H/W): approx. 1: 0.6 - 0.5



Rose Street, E'burgh - 9.5m width / 5-7 storeys
Enclosure Ratio (H/W): approx. 1: 0.65 - 0.4

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