

Gas Holder Site, Reading

Design and Access Statement

April 2019

17-19 Foley Street
London W1W 6DW

t: 020 7580 3490

e: info@colladocollins.com

w: www.colladocollins.com

ColladoCollinsArchitects

1.0	Introduction Project Description Client Brief Design Team ColladoCollins Consultants	Meeting with Councillors 1 Pre-application meeting 3 Meeting with EA Meeting with Councillors 2 Public Consultation 2 Pre-application meeting 4	Block A Block A - Facade Treatment Block A - Details Block B Block B - Facade Treatment Block B - Details (East Element) Block B - Details (West Element) Block C
2.0	Assessment Physical Context Wider Context Site Analysis Existing Site Local Context Views Transport Context Character Areas Amenities	5.0 Design Development Summary Overview Site Layout Scale and Massing	7.0 Access Overview Vehicular Access Pedestrian Access Access for Cyclists Access for Deliveries & Refuse Fire Strategy Overview Site Access Block A Block B Block C
3.0	Evaluation Constraints Opportunities	6.0 Design Response Overview Amount Masterplan Layout Ground Floor Typical Upper Floor Block A Block B Block C Daylight & Sunlight	8.0 Microclimate
4.0	Involvement Overview Pre-application meeting 1 Public Consultation 1 Design Review Pre-application meeting 2	Landscape Appearance Overview Design Strategy & Principles Character Materials	9.0 Summary

1. Introduction

1.1 Project Description

This Design and Access Statement has been prepared by ColladoCollins Architects on behalf of Danescroft (Kenavon Drive Project Management) LLP to be submitted with and in support of the planning application for a new residential development on the Gas Holder Site at Alexander Turner Close, to the east of Kenavon Drive, Reading.

The site sits within an area which has undergone significant change in recent years. We recognise the strategic importance of this site within the town, its potential as a gateway point and its ability to deliver a large number of homes that will contribute towards Reading's housing needs. Creating a strong sense of place and high quality landscaping to make significant improvements to the public realm have been at the core of the proposal.

The design team has worked hard with the Council and all the consultees to ensure the scheme is of high quality and responds to policy, context and best practice design guidance. The purpose of this document is to summarise all previous discussions about the development of the site, set out the design approach and outline the collaborative process which has led to the final design of the proposed scheme.

The proposal that forms this submission is for:

- Redevelopment of an existing brownfield, contaminated site in a prominent location
- High quality residential development providing 130 new flats with associated parking
- Replacement of the existing, approximately 33m tall gas holder with a new building to mark the gateway into Reading
- Creating a high quality scheme, with a strong sense of place and celebrating the site's heritage
- High quality landscape, significantly improving the public realm and ecological credentials of the site, and maximising the relationship to the river

The setting for this work is a very thorough analysis and understanding of the site and its immediate and wider context. The sketches and illustrations contained within this document seek to demonstrate that a carefully crafted residential scheme can sit well within the immediate and emerging context.

1.2 Client Brief

ColladoCollins has been instructed to develop a new scheme for the site of the existing gas holder at Alexander Turner Close, which is currently operated by SGN as part of its gas infrastructure.

The site is currently operational but the gas holder itself has been taken out of service and is no longer in use. The brief is therefore to:

- Create a deliverable residential scheme that will enable the site to be efficiently and viably redeveloped whilst taking account of existing ground conditions and underground infrastructure
- Provide an attractive and active frontage facing the River Kennet and improve the public realm surrounding the site
- Create a desirable residential proposal through high quality design, responding appropriately to this key gateway location
- Create a high quality landscape scheme, improve the public realm surrounding the site, access to and relationship with the River Kennet and ultimately bring the surrounding communities together



Bird's eye view of the site, looking west towards Reading town centre

1. Introduction

1.3 Design Team

1.3.1 ColladoCollins Architects

Since its formation in 2004, ColladoCollins has embraced the challenges of complex mixed-use design to create successful buildings and urban environments. ColladoCollins secures planning permissions through openness, sensitivity and tenacity to produce commercial schemes that are deliverable.

The practice operates across several sectors, combining a strong design ethos with sound technical strength through every stage of the design process. Unlike many firms who specialise in one particular area, ColladoCollins' unique approach ensures that its designs are informed by experience across a wide range of schemes.

ColladoCollins brings a unique approach to the process of designing and developing buildings, combining a full understanding of the commercial challenges faced by clients with a sensitive, sustainable work method. ColladoCollins works to ensure every building it designs perfectly fits its surrounding area in an environmentally conscious and visually arresting way.



1.3.2 Consultants

Boyer

Planning
Boyer

 **Farrer Huxley Associates**

Landscape
Farrer Huxley Associates

 **MONTAGU
EVANS**

Heritage and Townscape
Montagu Evans

 **wessex
archaeology**

Archaeology
Wessex Archaeology

 **STUART MICHAEL
ASSOCIATES**
CONSULTING ENGINEERS

Highways
Traffic
Air Quality
Noise
Flood Risk and Drainage
Stuart Michael Associates

ATKINS
Member of the SNC-Lavalin Group

Structure
Atkins

wsp

Contamination
WSP

HOARE LEA 

Fire Strategy
Hoare Lea

 **Briary Energy**

MEP, Energy and Sustainability
Briary Energy

Anstey Horne 

Daylight and Rights of Light
Anstey Horne

gleeds

Cost Plan
Gleeds

 **Greenspace
Ecological
Solutions**

Ecology and Arboriculture
Greenspace Ecological Solutions

 **TURNER
MORUM**

Viability
Turner Morum

GMJ

Townscape Views
GMJ



Visuals
Rock Hunter

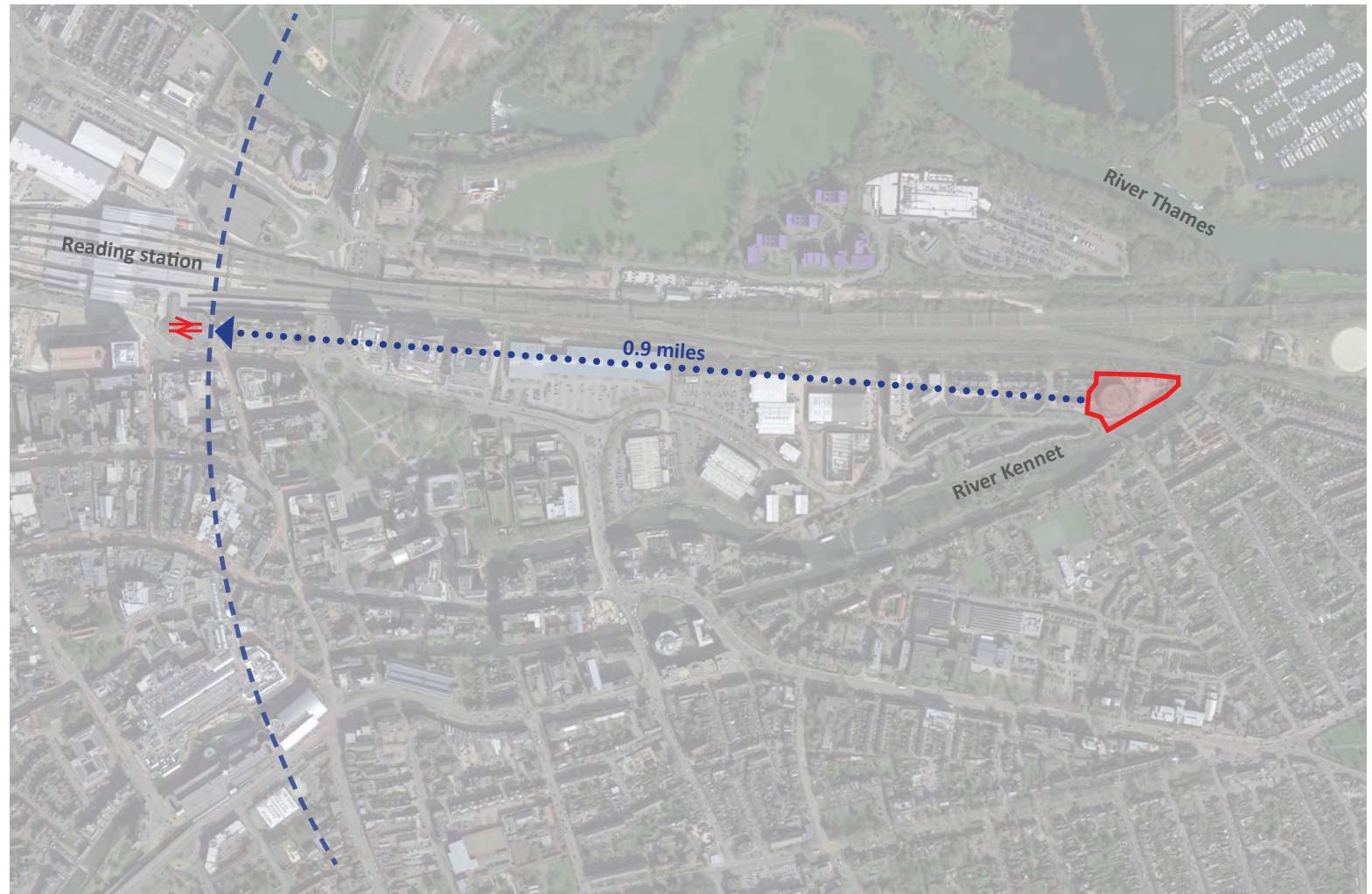
2. Assessment

2.1 Physical Context

2.1.1 Wider Context

Reading is a large town in the county of Berkshire, within commuting distance from London but also a commercial centre in its own right.

The gas holder site is located at the end of Alexander Turner Close, to the east of Reading town centre on the junction where the rail lines to London (Paddington and Waterloo stations) meet the mouth of the River Kennet.



 Site Boundary



Aerial view of wider context; facing page - bird's eye view from south



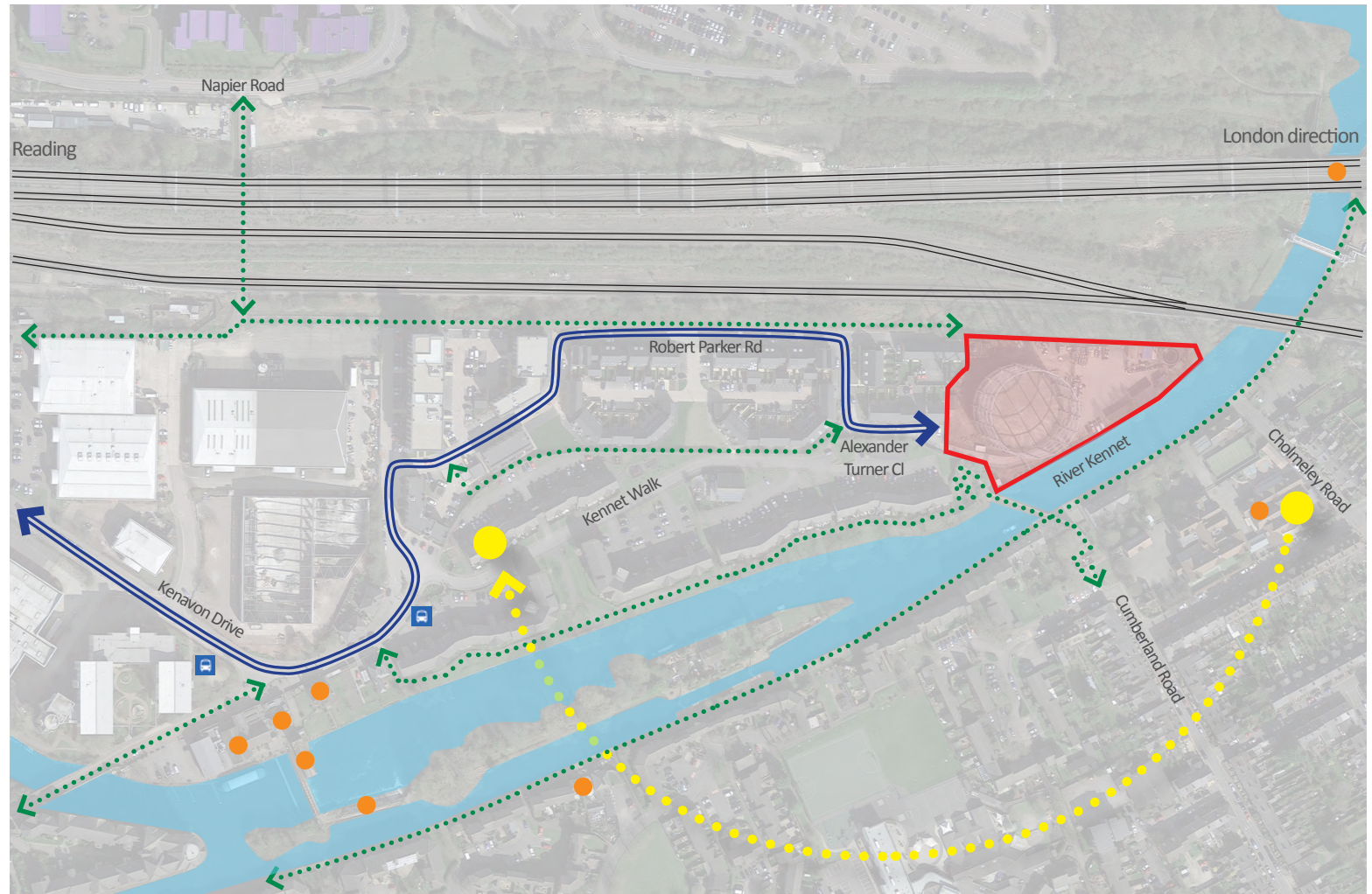
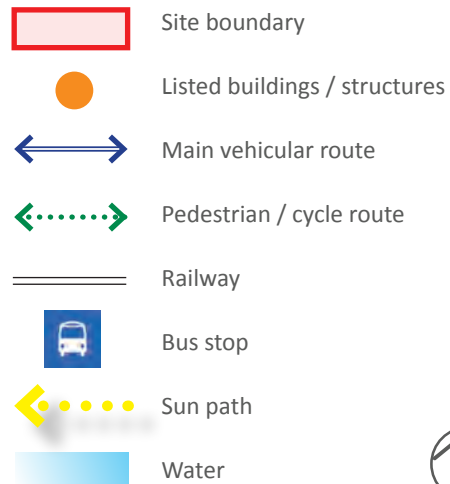
2. Assessment

2.1 Physical Context

2.1.2 Site Analysis

The site area is just over 0.7 hectares and currently houses a single large gas holder, approximately 42m in diameter and 33m in height, as well as ancillary facilities.

The site is at the end of Alexander Turner Close. Vehicular access to the site is provided through the development on Kenavon Drive, via Robert Parker Road. There are a number of footpaths linking the site directly to the town centre and local amenities.



Site analysis diagram; facing page - bird's eye view from west

2.1.3 Existing Site

The views on this page illustrate aerial views of the site from various angles, showing the relationship of the site and prominence of the existing gas holder withing its context.



Aerial view from north west



Aerial view from south west



Aerial view from east



Aerial view from north east

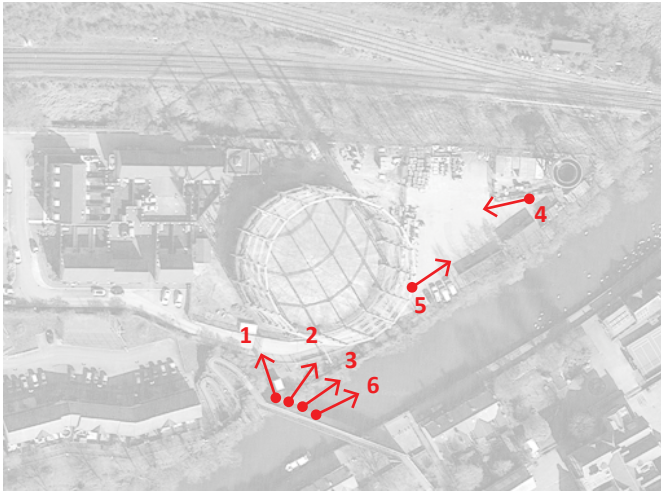
2. Assessment

2.1 Physical Context

2.1.3 Existing Site

The views on this page illustrate the site, the existing gas holder, water tower, boundaries, and the current dilapidated state of the existing structure.

The site is bounded by a metal fence and dense vegetation lines the site on the southern border facing the river and along the northern boundary with the adjacent railway line.



Detail of existing structure



Existing gas holder



1. View from pedestrian bridge towards Alexander Turner Close



2. View from pedestrian bridge over access road, looking east



3. View from pedestrian bridge showing river bank boundary



4. View of existing gas holder from within the site



5. View of existing water tower



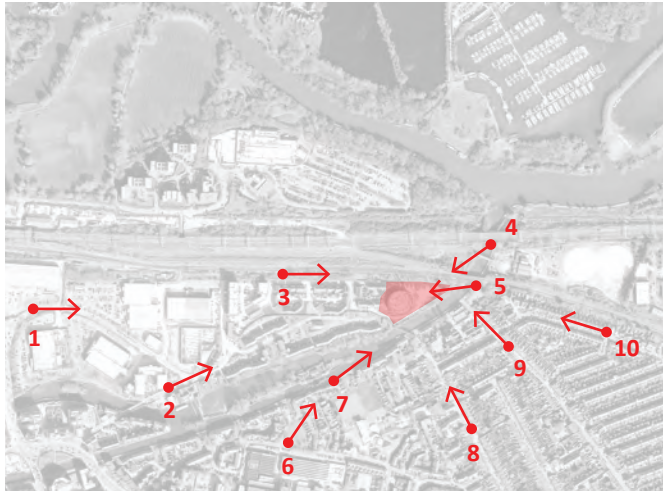
6. View of vegetation along southern boundary

2. Assessment

2.1 Physical Context

2.1.4 Local Context Views

The views on this page illustrate the site and the relationship between the existing gas holder and its surrounding context. These views show the evident scale of the existing structure and its prominence with the local area and wider townscape.



1. View from junction of Forbury Road and Kenavon Drive



2. View from Gas Works Road (Riverside Museum)



6. View from Orts Road



7. View from Kennet Side (looking east)



3. View from Robert Parker Road



4. View from Thames Path (looking west)



5. View from Kennet Side (looking west)



8. View from Cumberland Road



9. View from Cholmeley Road



10. View from Liverpool Road

2. Assessment

2.1 Physical Context

2.1.4 Local Context Views

The views on this page illustrate the site and the existing gas holder within the context of its immediate surroundings.

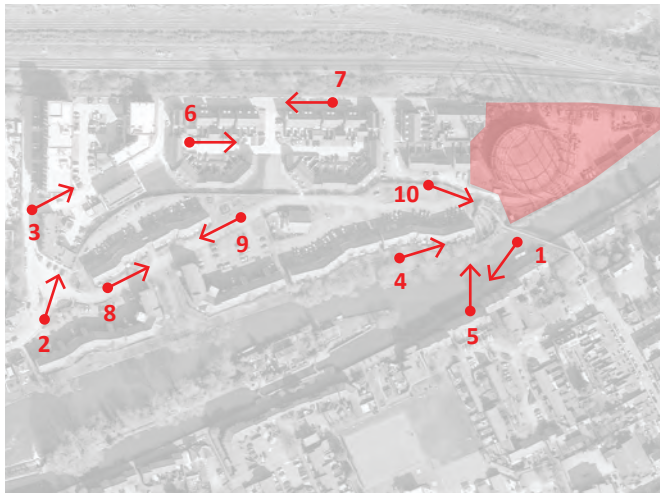
Residential developments to the west include the community on Kennet Walk and recently completed Kenavon Drive development ranging from 2 to 8 storeys.



1. View from pedestrian bridge, looking south



2. View from Kenavon Drive



6. View from Orts Road



7. View from Robert Parker Road, looking west



3. View from Robert Parker Road, looking east



4. View from riverpath, looking east



5. View from Kennet Side, looking north



8. View from Kennet Walk, looking east



9. View from Kennet Walk, looking west



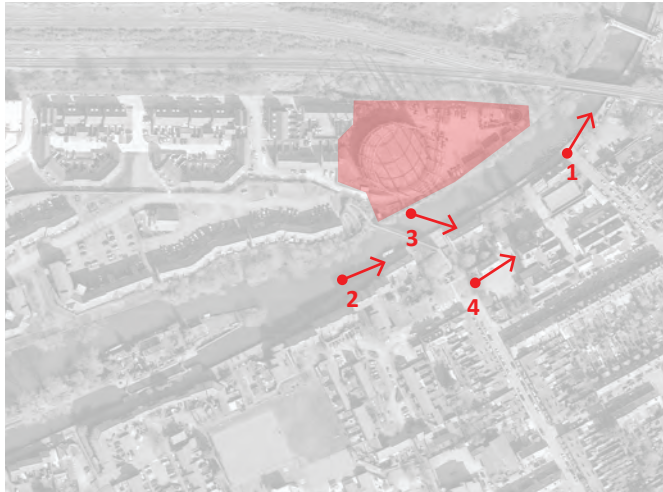
10. View of ramp connection to pedestrian bridge

2. Assessment

2.1 Physical Context

2.1.4 Local Context Views

The views on this page show the surrounding context, particularly the residential area on the south bank of the River Kennet. This area is characterised by C19th Victorian development and C20th low density development.



1. View of listed railway bridge



2. View of pedestrian bridge



3. View of part of Grade II listed New Town Primary School



4. View of Grade II listed New Town Primary School

Brick is the most common material in Reading, used historically as well as in more recent times. The use of a wide range of red brick is most prevalent across Reading, although the use of yellow brick with render has become popular in some more recent developments.

The views on this page show examples of existing brick facades and details found in the surrounding area near the Riverside Museum (former Blakes Local Sewage Pumping Station).



Brick details (Riverside Museum - Grade II listed)



New Town Primary School (Grade II listed)



Remnants of the former Huntley and Palmers factory





Architects

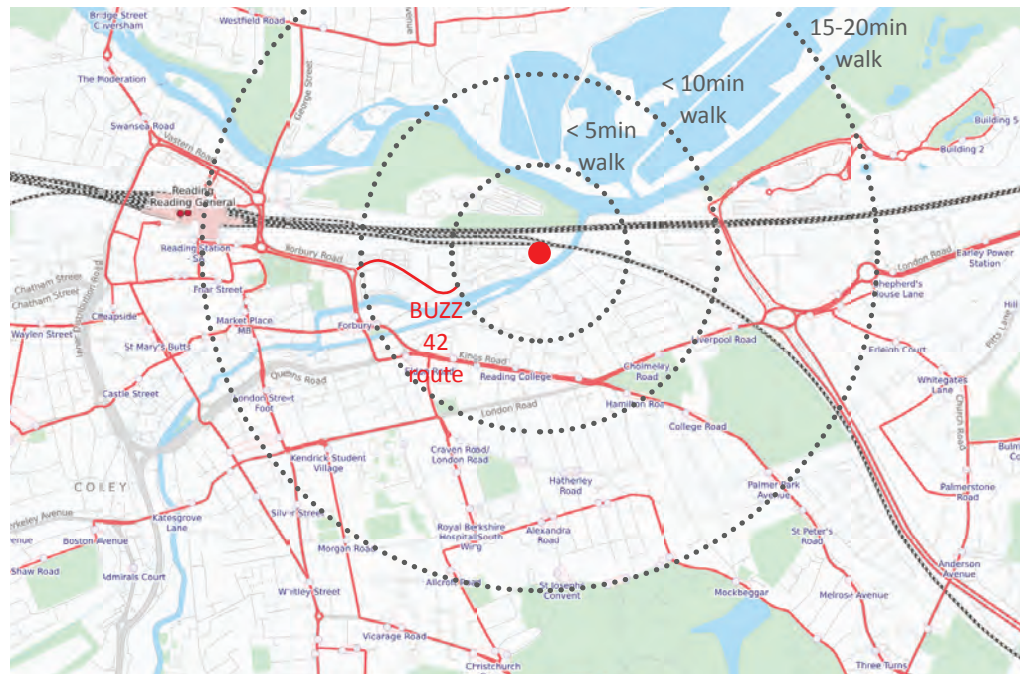
2. Assessment

2.1 Physical Context

2.1.5 Transport Context

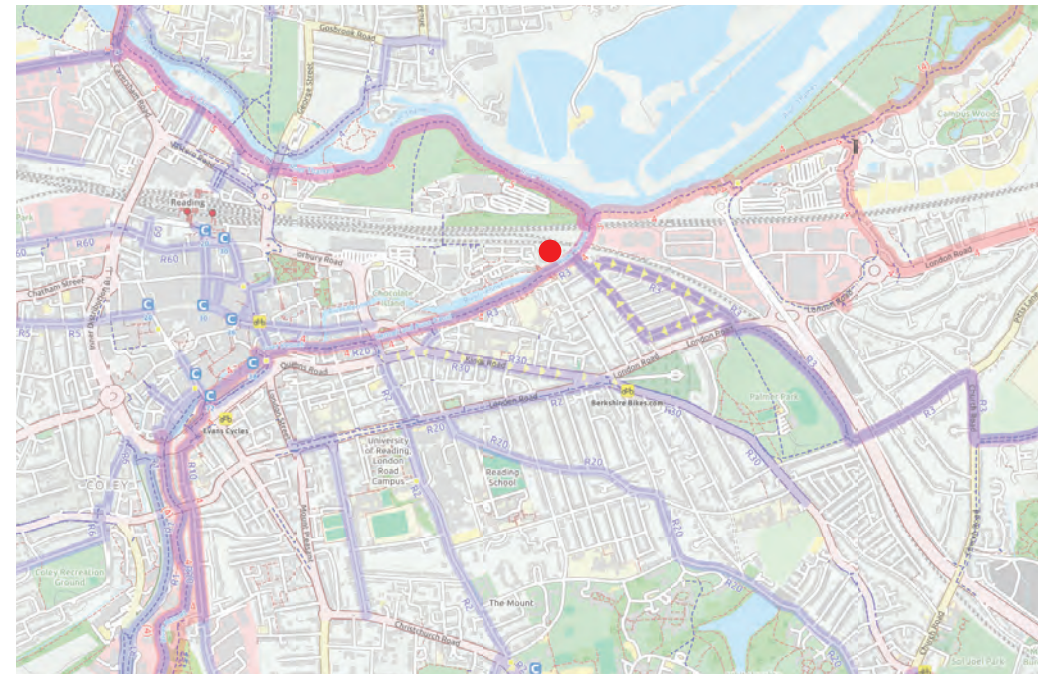
The gas holder site is within a 15-20 min walk from Reading Station. The closest bus service, the new BUZZ 42 route, in operation since October 2017, is less than a 5 min walk from the site with additional bus routes less than a 10 min walk from the site.

The existing gas holder site is conveniently located close to a number of existing cycle routes, providing an easy access to the wider cycle network in the area and beyond.



Reading public transport map

Facing page: bird's eye view from south east



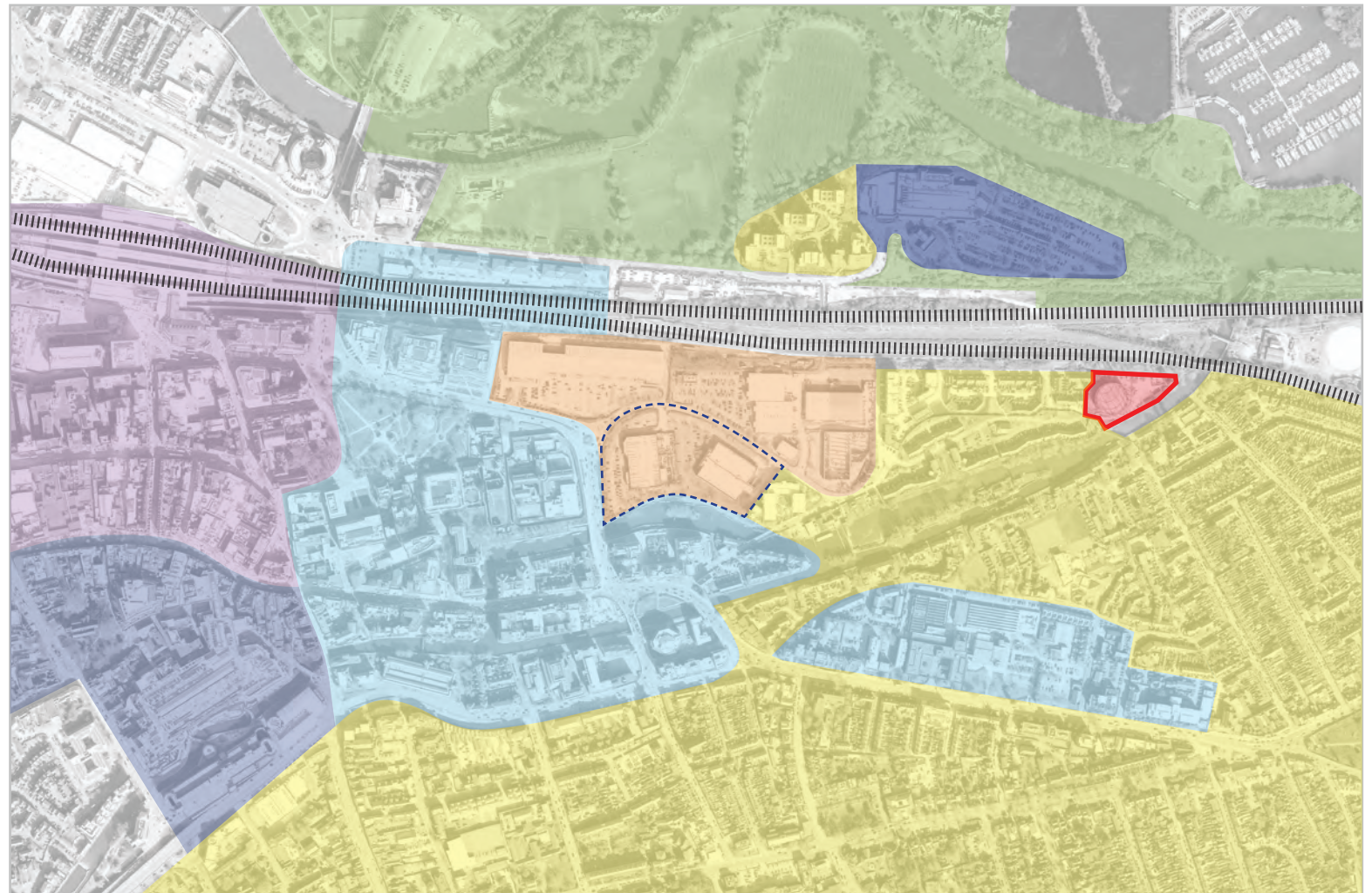
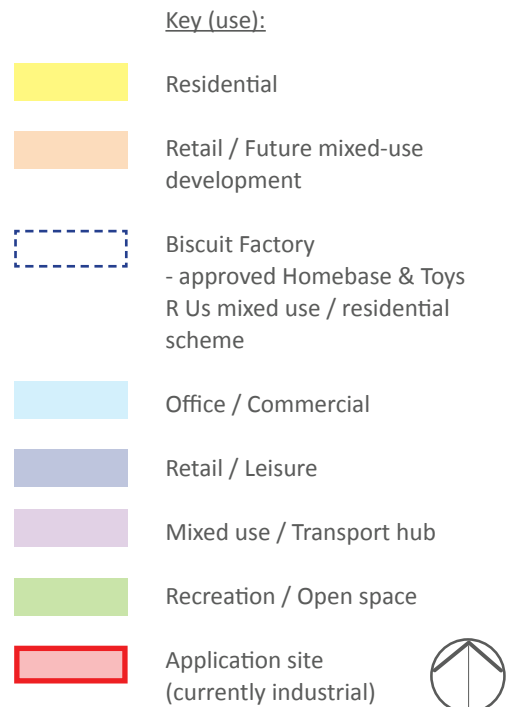
Reading cycling map

2. Assessment

2.1 Physical Context

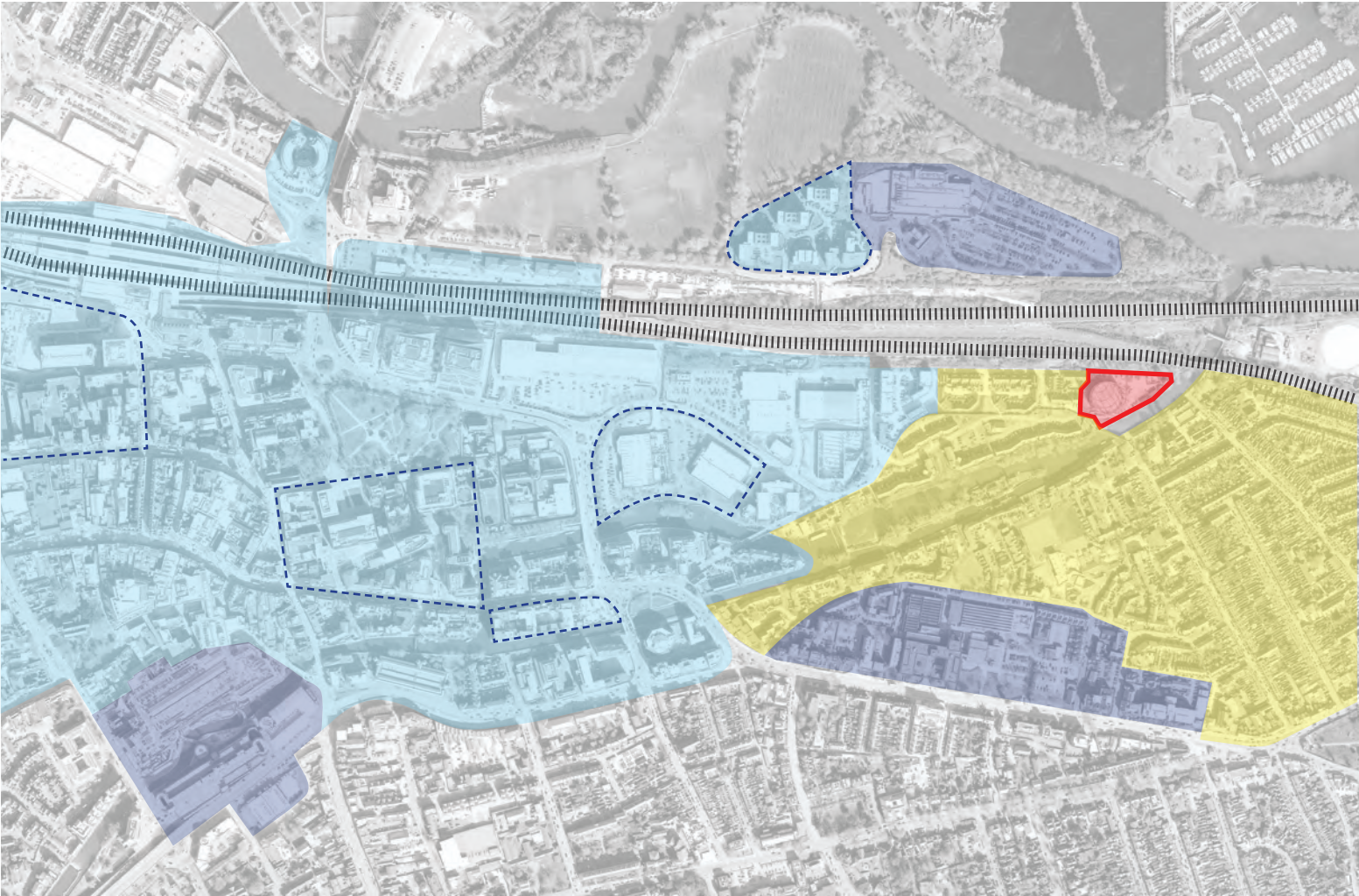
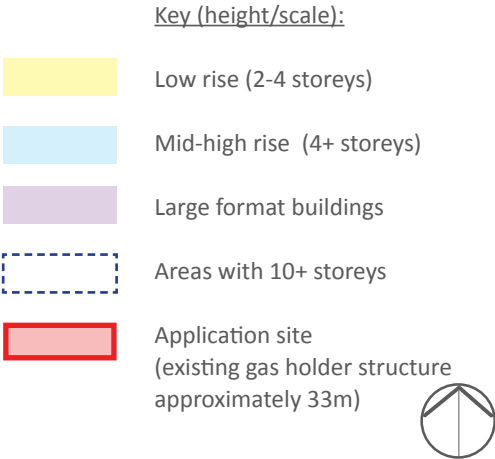
2.1.6 Character Areas

The diagram on this page illustrates the character areas within the wider context in terms of the prevailing use.



Prevailing use diagram

The diagram on this page illustrates the character areas within the wider context in terms of the prevailing scale and height.



Prevailing heights diagram

2. Assessment

2.1 Physical Context

2.1.6 Character Areas

The diagram on this page shows character areas in terms of the prevailing period, architectural style, and quality.



2.1.7 Amenities



Facilities and amenities plan

2. Assessment

2.1 Physical Context

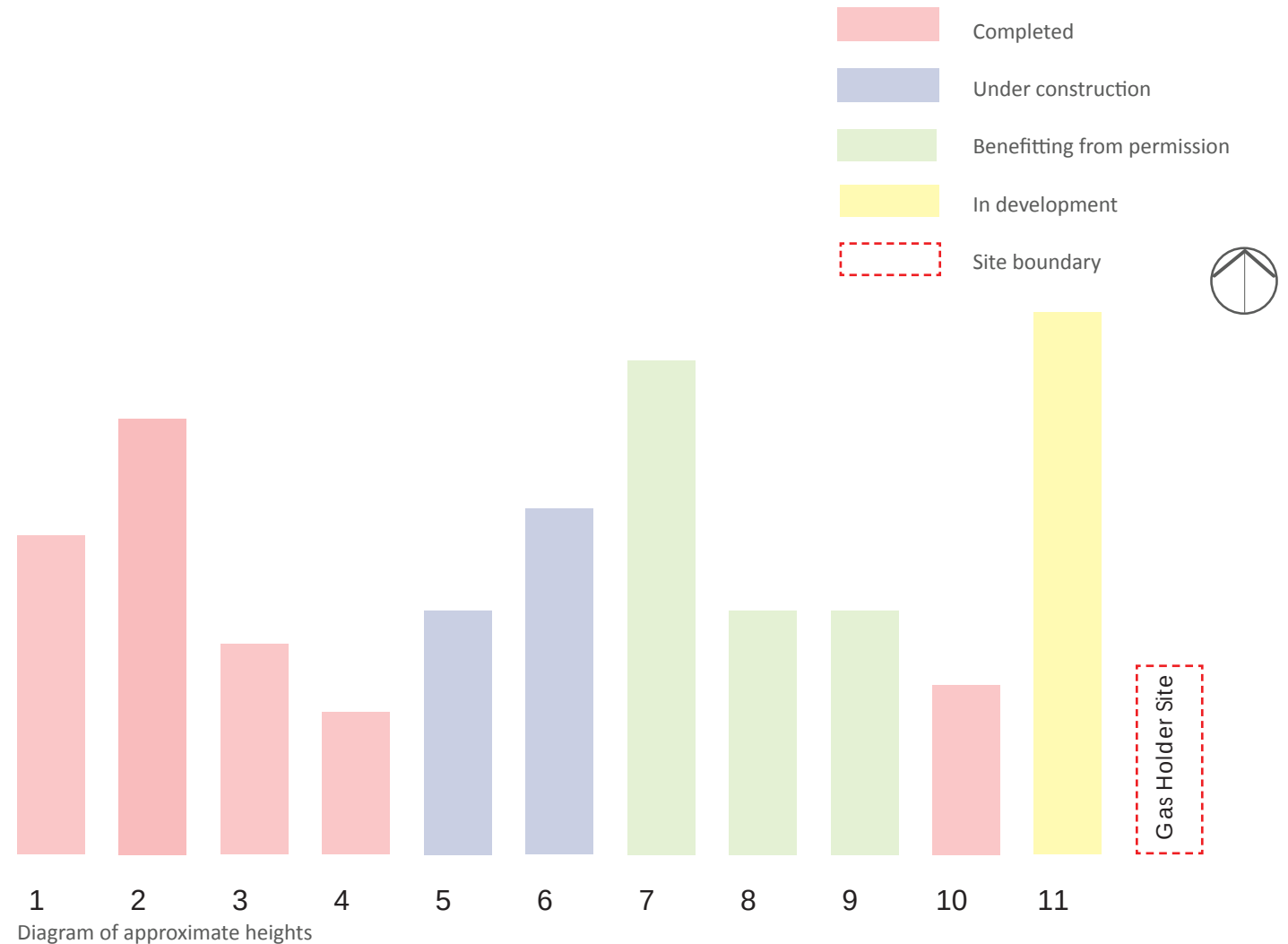
2.1.8 Recent and Emerging Developments

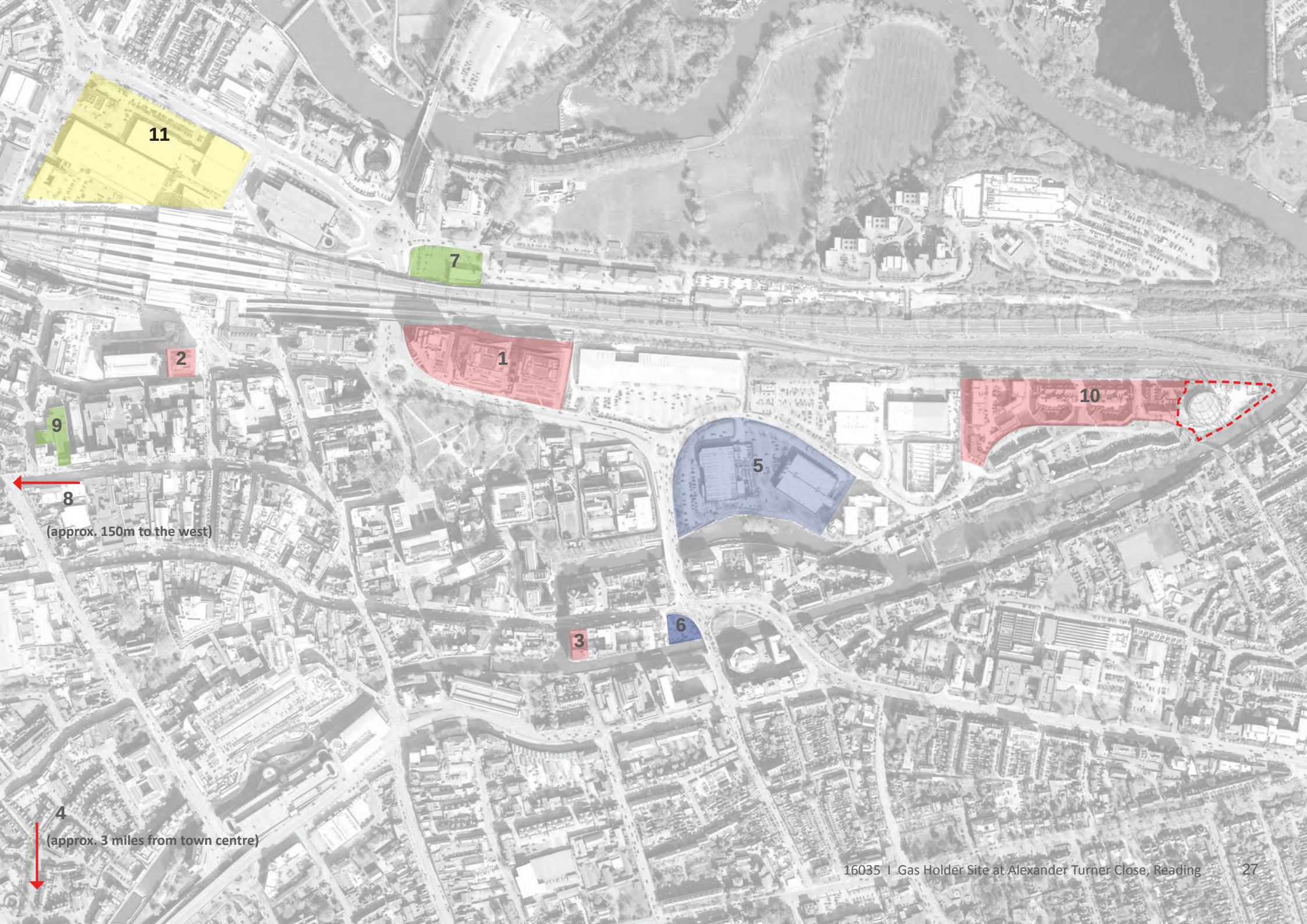
There are a number of residential and mixed-use developments, either recently completed, under construction, or benefitting from a planning permission, that are relevant to the proposals on the application site.

Some examples are illustrated on the following pages with the scheme for the site previously known as 42 Kenavon Drive, now Robert Parker Road (10) and the site of the existing Homebase/Toys R Us buildings (5) being particularly relevant to the proposals on the gas holder site.

Developments

1. No. 1-3 Forbury Place
2. Thames Tower
3. Kennet House
4. Kennet Island
5. Homebase / Toys R us
6. Kings Point
7. Cooper BMW Building
8. Foundry Quarter
9. Sainsbury's
10. Kenavon Drive
11. Royal Mail and Aldi sites





11

7

2

1

9

8

(approx. 150m to the west)

10

5

3

6

4

(approx. 3 miles from town centre)

2. Assessment

2.1 Physical Context

2.1.8 Recent and Emerging Developments



1. No. 1-3 Forbury Place

- Forbury Road
- New commercial buildings
- M&G Real Estate and Bell Hammer
- Aukette Swanke Architects

Relevant points:

- contemporary architecture
- massing
- buildings of scale



2. Thames Tower

- Station Road
- Refurbishment and extension of a 1970s office building
- Landid
- DN-A Architects

Relevant points:

- contemporary architecture
- simplicity of massing
- height



3. Kennet House

- 80 Kings Road
- New residential development
- Crest Nicholson
- Lom Architecture

Relevant points:

- architectural style
- materiality
- massing / scale
- waterfront setting



4. Kennet Island

- Drake Way
- New residential development
- Berkeley Group

Relevant points:

- massing
- materiality
- waterfront setting
- landscaping

5. Homebase & Toys R Us

- Kenavon Drive
- New mixed-use development with 765 flats, restaurants, shops, flexible employment space and new public realm
- London & Quadrant
- PRP Architects

Relevant points:

- contemporary architecture
- massing / scale
- height (up to 11 storeys)
- materiality / character
- waterfront setting



2. Assessment

2.1 Physical Context

2.1.8 Recent and Emerging Developments

6. Kings Point

- Kings Road
- New mixed-use development with 103 flats, commercial space and public realm
- CNME Estates
- Assael Architects

Relevant points:

- contemporary architecture
- massing
- height (up to 17 storeys)
- waterfront setting



7. Cooper BMW Building

- Kings Meadow Road
- New residential development with 315 BTR flats and associated communal facilities
- Canmoor Developments/Lochailort Reading
- Calliston RTKL

Relevant points:

- massing
- height (72.9m tall building)



8. Foundry Quarter

- Weldale Street
- Former Iceland and Wickes site
- New residential development with 429 flats
- Crossmark Developments / Ropemaker Properties
- AWW

Relevant points:

- contemporary architecture
- buildings of scale
- height (up to 12 storeys)
- landscaping



9. Sainsbury's

- Friar Street
- New mixed-use development with 137 flats and flexible commercial space
- CIP Property
- LDA Architects

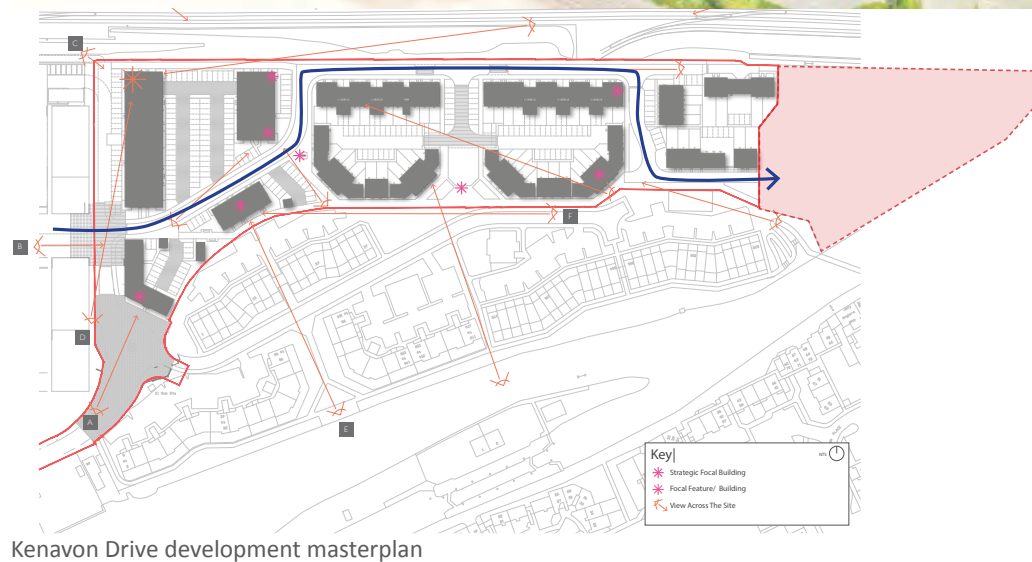
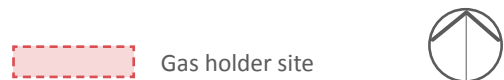
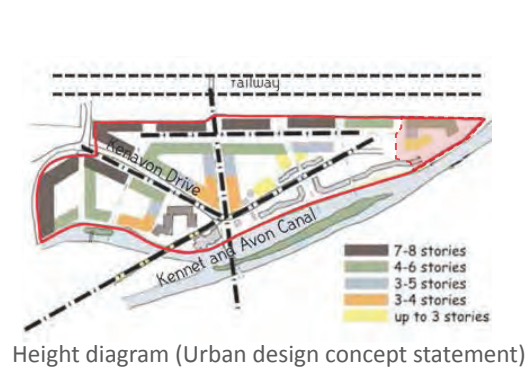
Relevant points:

- height (up to 12 storeys)
- materiality



10. Kenavon Drive Development

To the west of the gas holder site lies the 42 Kenavon Drive Development which has recently been completed. The development comprises 192 dwellings in buildings ranging in height up to eight storeys, including open market properties and 35% affordable housing provision in addition to new landscaping, car parking, and a range of connections to existing and future developments and services within the locale.

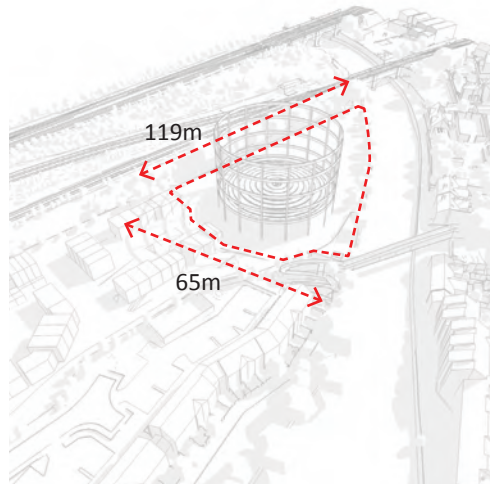


3. Evaluation

3.1 Constraints

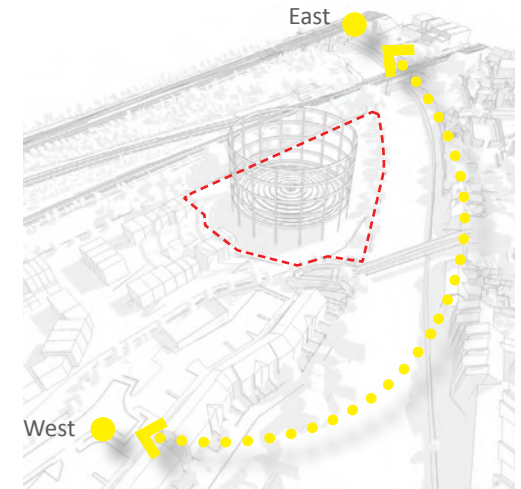
Site Dimensions and Proportions

The site is roughly triangular in shape and measures approximately 119 metres along the railway boundary to the north and 65 metres in its widest area, perpendicular to the River Kennet and facing Kenavon Drive development.



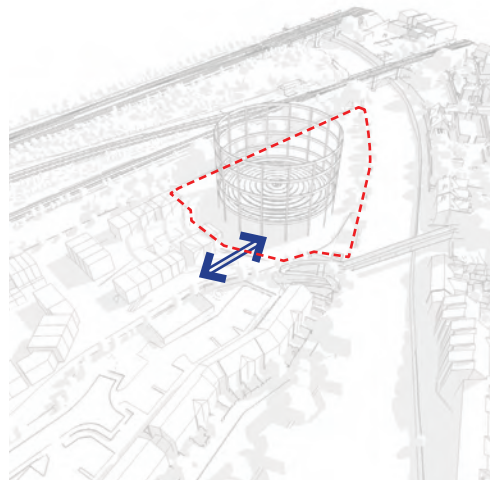
Sunlight and Northern Aspect

Whilst the site benefits from a south facing aspect to the River Kennet, the longest site boundary along the railway faces north.



Access

Vehicular access is available only from a single point in the south-western part of the site, from Alexander Turner Close.



Neighbouring Properties

The site is surrounded by a low to mid rise development. The area is predominantly residential with buildings in the immediate surroundings mainly 2-3 storeys in height.

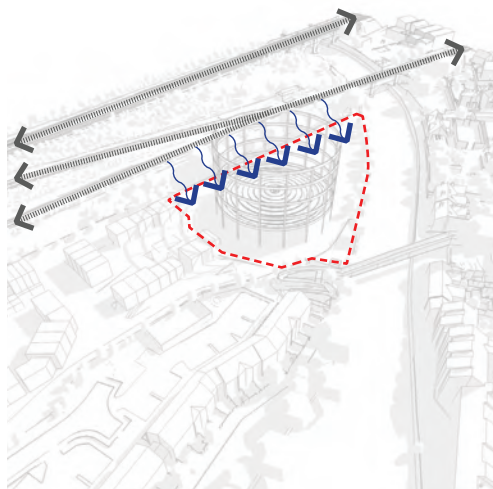
There are also a handful of listed buildings and structures in proximity to the site, the closest being Grade II listed New Town Primary School, across the River Kennet to the south east.



Environmental

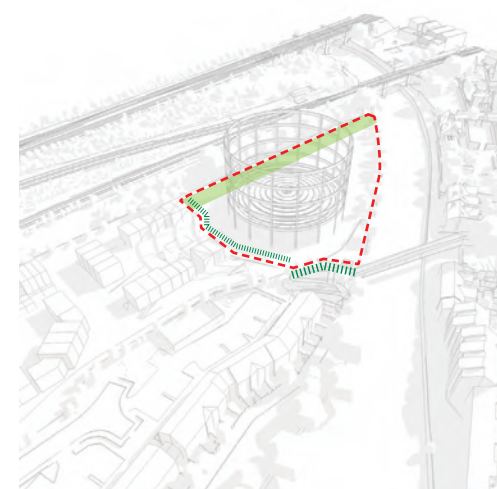
The railway line to the north creates potential noise issues for any residential development on the site. Part of the site also falls within an AQMA, designated due to its proximity to the railway line where it passes through the urban areas.

The site is also in an area of archaeological potential, however, the actual potential is considered to be low given the historic gas use.



Topography

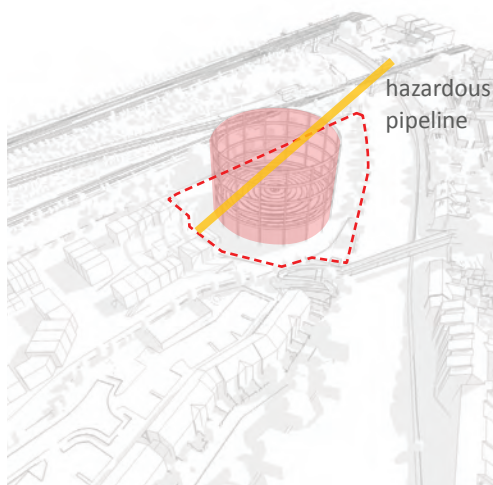
The existing site is approximately 1.5m lower than adjacent development to the west. There is an approximately 3.5m high embankment to the north, running along the boundary with the adjacent railway. There is also a significant difference in levels between the site and the ramped connection to the adjacent pedestrian bridge over the River Kennet.



Previous Use

Given the current/former use, parts of the site are known to be contaminated and there are also a number of buried structures and services. This will require remediation measures and restricts the possible locations of future development.

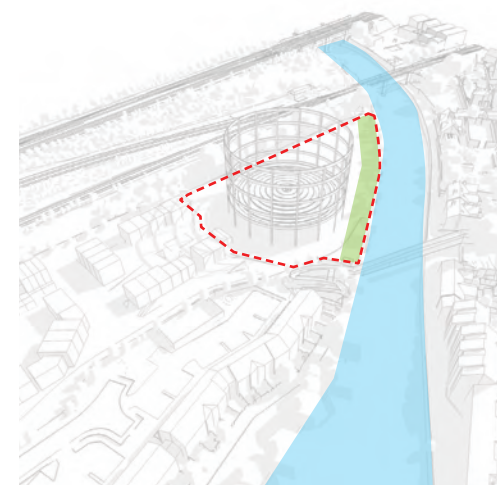
The site is also close to a hazardous pipeline associated with the previous use of the gas holder, which will be redundant once the site is redeveloped.



River Kennet

The emerging Local Plan includes a draft requirement for any development to be set back at least 10m from the bank of the River Kennet.

Given the proximity of the river, the site (and majority of the East Side MOA) also falls within Flood Zone 2.

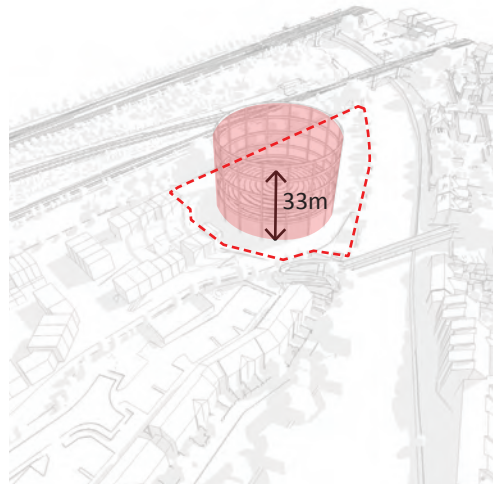


3. Evaluation

3.2 Opportunities

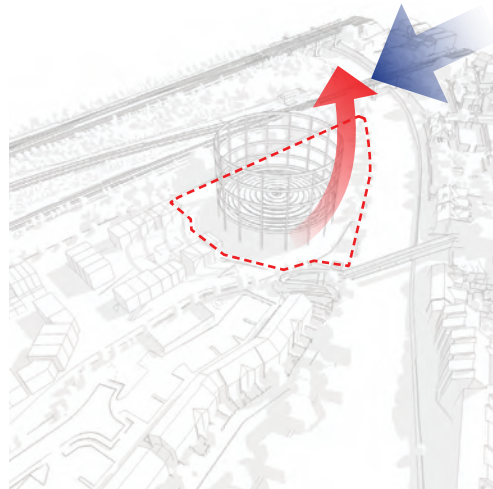
Height

The existing gas holder on the site is 33m in height, a prominent structure in a key location which is visible from a long distance away. The height of the existing gas holder sets a precedent for any future development which suggests that any replacement building could be considerably taller than the adjacent low rise development, subject to detailed design and neighbouring residential amenity.



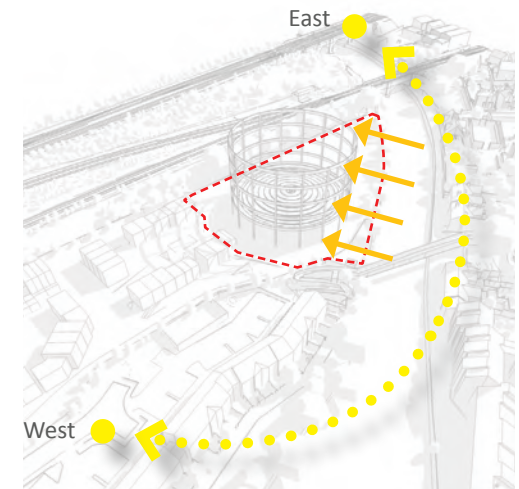
Focal Point

The site is broadly triangular in shape and in a prominent location on the approach to Reading via river and rail. This provides an ideal opportunity to create a focal point to mark the “gateway” into Reading and replace the existing gas holder.



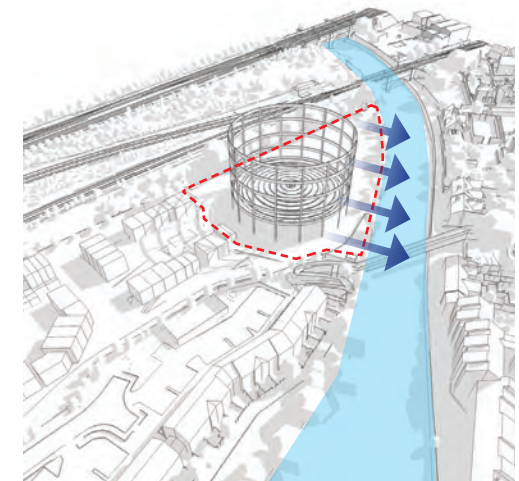
Daylight and Sunlight

The second longest boundary of the site is along the River Kennet and faces almost due south, creating an opportunity to maximise daylight and provide sunlight into each flat and living room.



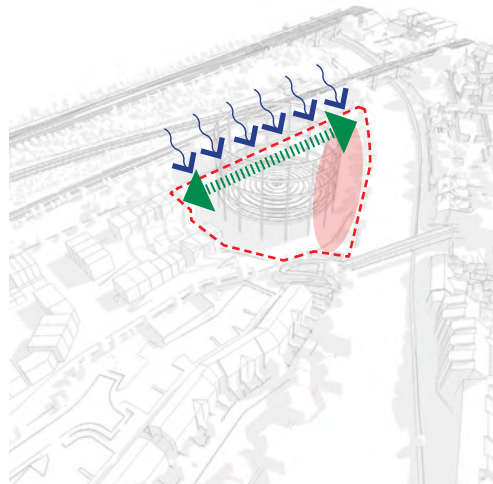
Views

The River Kennet is a very positive attribute to the area despite the range of development quality that lines its banks. The river provides a recreational amenity for walking, running, cycling, waterborne activities, as well as ecological and environmental benefits. The site has a direct frontage onto the river that also provides attractive views.



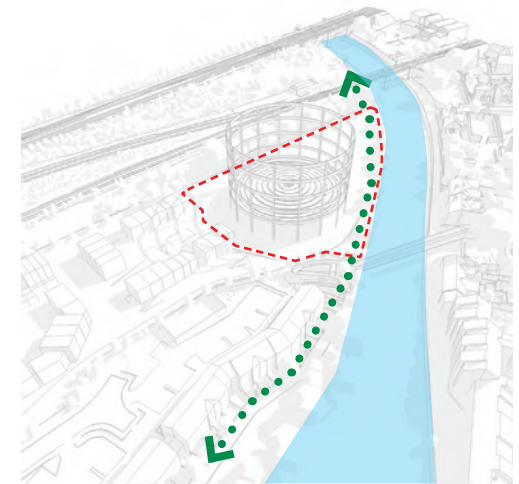
Noise

There is an opportunity to place any new building along the river boundary, set back from the railway to the north, and create a buffer zone to reduce the impact of noise created by the passing trains.



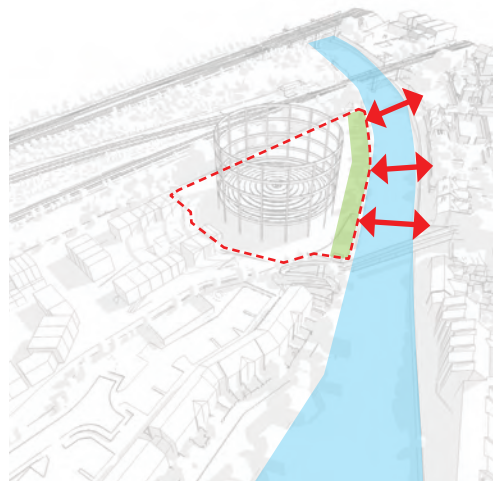
New connections

There is a potential opportunity to open the area along the River Kennet to the public and provide a future connection along the waterfront towards the River Thames (subject to a financial contribution to RBC to carry out the works).



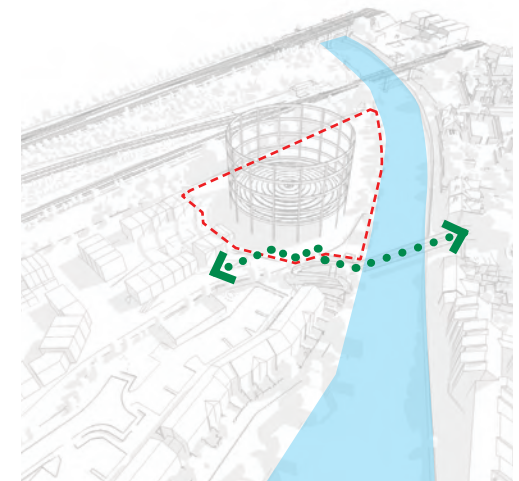
Landscape

The requirement (set out by the EA and the emerging Local Plan) for a 10m setback from the river edge provides an opportunity for a landscaped area fronting the river, improving the relationship with the watercourse and also the buildings on the other side of the river.



Link to existing pedestrian bridge

There is an opportunity for the scheme to make a contribution towards creation of a new link to the existing pedestrian bridge adjacent to the south west corner of the site. This would offer improved access to the site and also enhance permeability of the area.

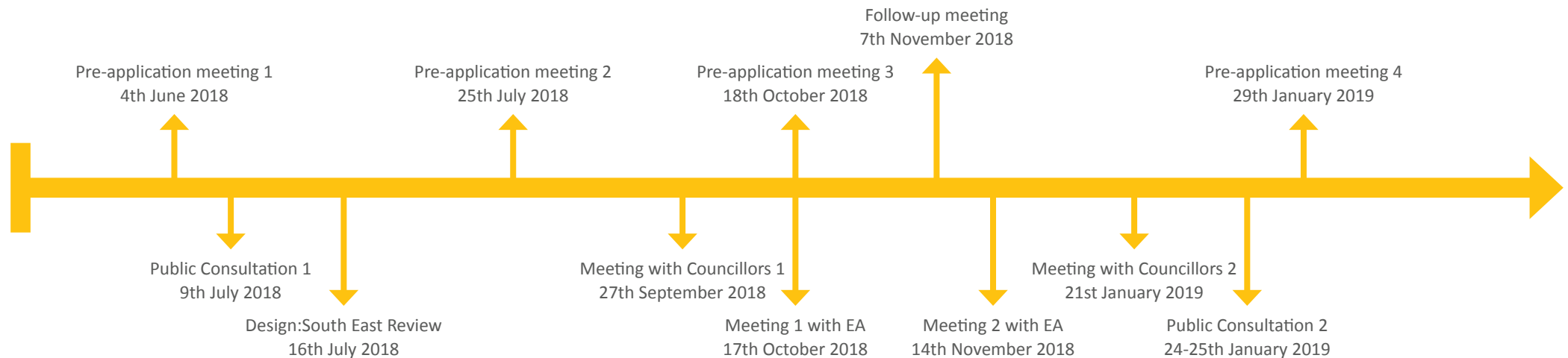


4. Involvement

4.1 Overview

The proposed scheme was subject to an extensive consultation and the design team engaged in numerous discussions with key stakeholders, including the local authority, council members and members of the local community.

The timeline below summarises the consultation process and this chapter illustrates how these discussions influenced and helped to develop the proposed scheme.



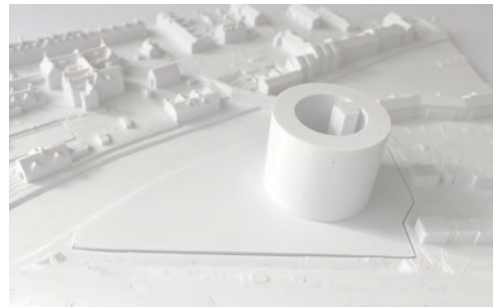
4.2 Pre-application Meeting 1 on 4th June 2018

Following the Planning Performance Agreement (PPA) an initial pre-application meeting was held with Reading Borough Council (RBC) on 4th June 2018. The information submitted provided an overview of the site context, opportunities and constraints and summarised the design evolution, which had taken place to date.

The submitted document illustrated six options that had been thoroughly explored in terms of site layout and massing. These options included a new development housed within the existing gas holder structure, a single building along the northern boundary, two riverside buildings and options with buildings spread across the site to break up the linear form.

Following a thorough analysis, option 6 was considered on balance the preferred choice, which proposed two buildings arranged along an internal access road and three terraced houses. The proposal provided 127 dwellings and was noted to have the following benefits.

- Clear site layout addressing the river
- Improved visual connectivity of the site
- No overlooking or overshadowing
- Positive relationship with the river Kennet
- Increased opportunities for new landscaping and public open space
- An opportunity for a gateway building



Option 1



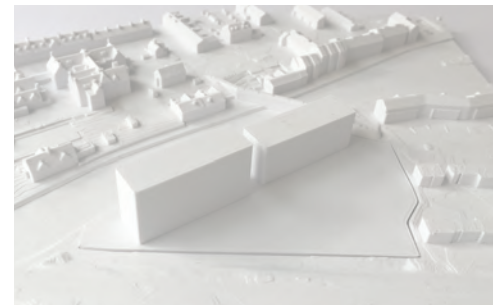
Option 3



Option 5



Option 2



Option 4



Option 6

Feedback on the proposals from the officers can be summarised as follows.

- RBC sought further evidence that the gas holder or some elements of it cannot be retained either in the current location or elsewhere on the site
- RBC agreed that Option 6 was the most mature design option which had the best potential to meet the relevant criteria in adopted and emerging policy
- It was noted that the linkage between the site, the footbridge and the river is important
- The transition between the scale/nature of Option 6 was noted to work well
- Policy references to a gateway building was noted to assist in justifying the proposed design approach in terms of height and massing
- The provision of terraced housing was viewed positively as adding to the richness of housing mix and quality of the development being delivered
- RBC queried whether there was scope to reduce the visual impact of the car park
- Officers confirmed that the design of the public realm would be integral to the scheme

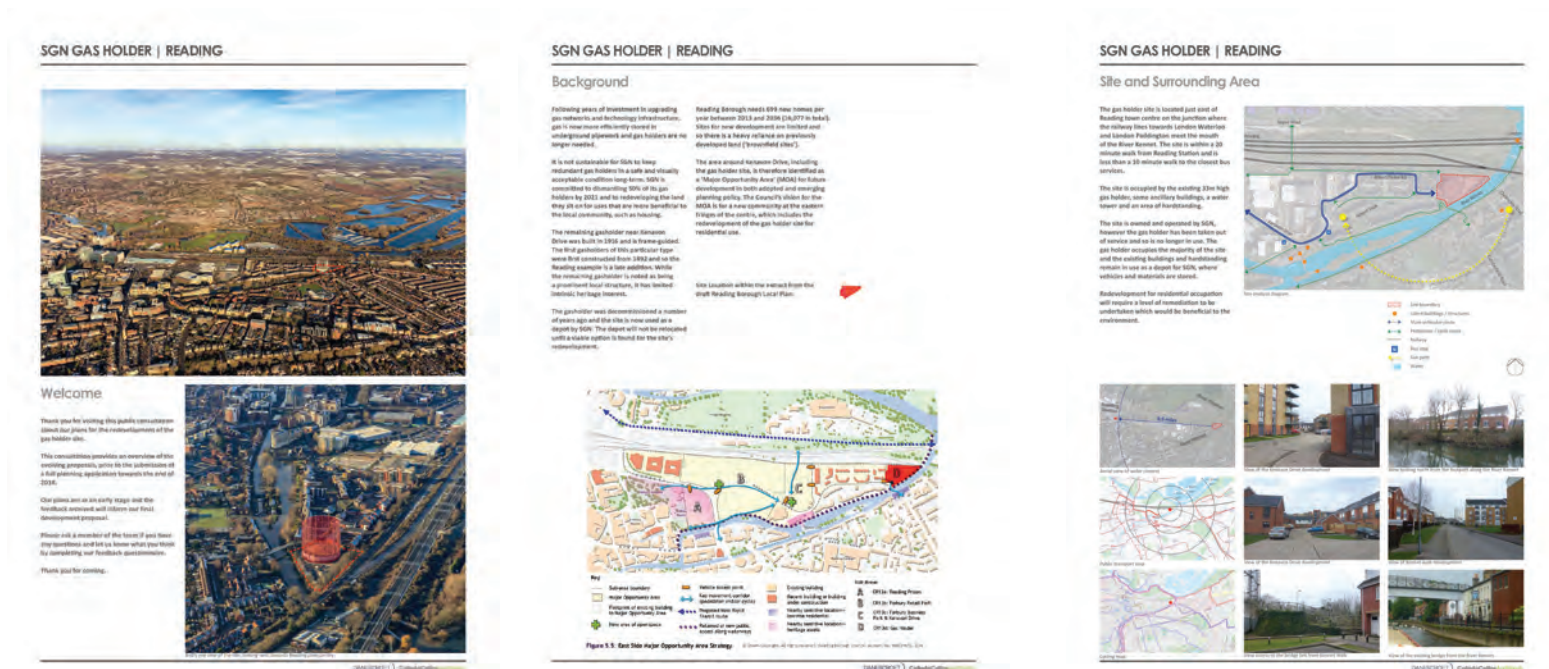
4. Involvement

4.3 Public Consultation on 9th July 2018

A public exhibition was held on Monday 9th July 2018 for local residents, political representatives, interest groups and other members of the public. The exhibition was held at an early stage of the design process to inform people about the initial sketch proposals considered for the site and to provide further details of the preferred sketch before progressing the detailed design further. Seven exhibition boards were displayed at the consultation event itself covering the following topics:

- Welcome and introduction
- Background context
- Site and surrounding area
- Constraints and opportunities
- Design development
- Preliminary proposals
- Precedents and next steps

The exhibition set out the variety of options explored for the site during the design process. The preliminary proposals included approximately 130 homes with a short terrace of houses adjacent to Alexander Turner Close and two separate apartment blocks. It was identified that the apartment block closest to the river would be a lower building with the apartment block adjacent to the railway having the greatest scale.

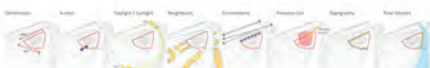
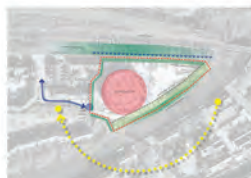


Consultation boards

Constraints

The site's irregular shape and boundaries, adjoining the railway line, River Kennet and existing low to mid-rise development present physical and environmental constraints that need to be carefully considered as part of the design process, and also allow only one point of access to the site.

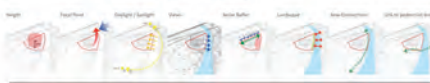
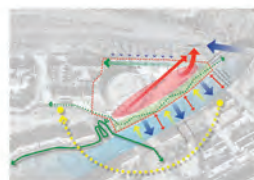
Given the current/former use, parts of the site are known to be contaminated and there are also a number of buried structures and services. This will require remediation measures and restricts the possible locations of any future development and the height of any development above the foundations of the existing gas holder for a maximum of 5 stories.



Opportunities

The site has a prominent location on the approach to Reading via river and rail, and the scale of the existing gas holder offers an opportunity to create new high-quality architecture at this 'gateway' location.

The site's longest boundary directly faces the River Kennet to the south, maximizing views, daylight and sunlight, and would offer views towards Emmerham Lakes to the north-east. The redevelopment of the site would offer an opportunity to provide a new buffer to the railway line, whilst opening up the waterfront to the public by providing new amenity space and biodiversity enhancements.

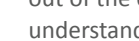
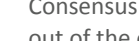
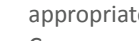
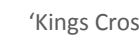
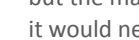
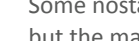
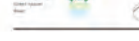


Design Development

Following the initial site analysis, several different layout and massing options were prepared to investigate how the site could potentially be redeveloped.

Once these were tested against all the identified opportunities, constraints and policy objectives for the site, Sketch 6 emerged as the preferred layout for further design development.

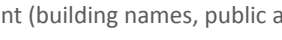
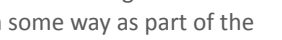
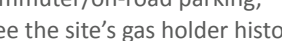
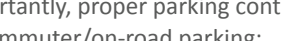
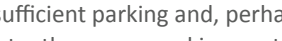
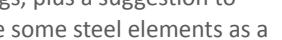
Sketch 1: Concept reference to gas holder in position. Sketch 2: Concept reference to gas holder in position. Sketch 3: Concept reference to gas holder in position. Sketch 4: Concept reference to gas holder in position. Sketch 5: Concept reference to gas holder in position. Sketch 6: Concept reference to gas holder in position.



Preliminary Proposals

Our preliminary proposals include approximately 120 new homes, incorporating a mix of 1, 2 and 3 bedroom homes. The layout provides a welcoming journey home into the site, with a new access road and short service of houses to help integrate the development with the existing houses along Alexander Turner Close. It includes:

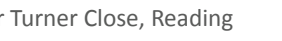
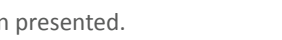
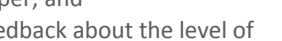
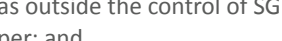
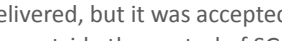
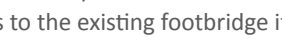
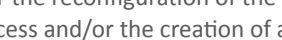
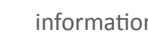
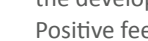
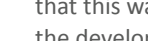
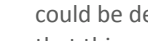
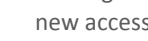
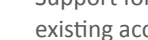
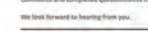
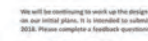
- Two separate apartment blocks to create a visual break and allow for a physical and visual connection between the site and the river.
- Placing a lower building along the river edge to create a positive relationship with the river and opposite bank, whilst maintaining an appropriate buffer to the waterfront and respecting existing residential amenity to the west.
- Placing a taller building at the sharpest point of the site to mark the gateway into Reading.
- Placing parking between the new buildings and the railway to the north, and to encourage areas adjoining the railway embankment to maintain its visual impact.
- Maximising opportunities for landscaping.



Precedents

Our proposals are at an early stage, but these precedents are intended to give an idea of the intended character and quality of the final development based on other examples of successful developments, building housing and form, and design and layout treatments which have informed our preliminary proposals.

Our proposals are at an early stage, but these precedents are intended to give an idea of the intended character and quality of the final development based on other examples of successful developments, building housing and form, and design and layout treatments which have informed our preliminary proposals.



Next Steps

We will be continuing to work up this design of our proposals over the coming months and would welcome your feedback on our initial plans. It is intended to submit a full planning application to Reading Borough Council towards the end of 2024. Please complete a feedback questionnaire and post it in the box provided, or post to:

Reading Gas Holder consultation:
City Mayor
Countryside House
1000 High Street
Reading
RG1 1AA

Comments and completed questionnaires can also be posted to readinggas@reading.gov.uk

We look forward to hearing from you.

Ten written responses were received in response to the public exhibition. The feedback can be summarised as follows:

- General support for the redevelopment of the site;
- Acknowledgement that the development would be a definite improvement to the riverside area and support for new public access to open space in this location;

- Some nostalgia for the gas holder itself, but the majority of people accepted that it would need to be removed, and that a 'Kings Cross' style proposal would not be appropriate and/or viable here;
- Consensus that Sketch 6 was preferred out of the options suggested and an understanding of the approach taken;
- Generally positive response to the precedents presented, particularly

- the suggestion of red brick to reflect surroundings, plus a suggestion to incorporate some steel elements as a reference to the existing gas holder
- Desire for sufficient parking and, perhaps more importantly, proper parking controls to avoid commuter/on-road parking;
- Desire to see the site's gas holder history reflected in some way as part of the development (building names, public art,

- amenity space etc.);
- Support for the reconfiguration of the existing access and/or the creation of a new access to the existing footbridge if it could be delivered, but it was accepted that this was outside the control of SGN or the developer; and
- Positive feedback about the level of information presented.

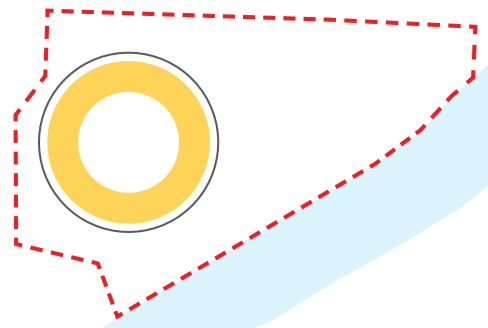
4. Involvement

4.4 Design Review on 16th July 2018

A design review with Design:South-East (D:SE) was held on 16th July 2018 where early concept sketches and options in line with the initial pre-application meeting were discussed.

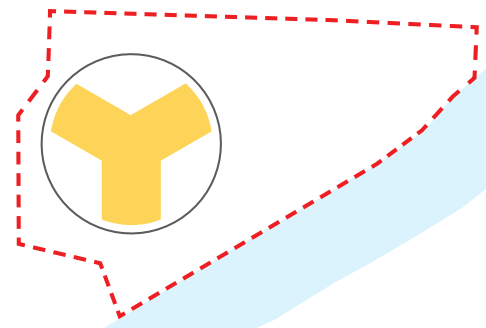
Following the review, a report was prepared summarising the views of the panel and their feedback was as follows.

- The site has some highly positive qualities and the potential for a successful scheme
- The density/height of the proposal is not a significant concern
- There could be better ways to distribute accommodation throughout the site to create a greater sense of place
- Recommendation to continue the street from Alexander Turner Close into the site
- Consideration could be given to using the carpark as a screen to railway noise, creating more active frontages and establishing a clear hierarchy of buildings
- Further consideration could be given to how a memory of the gas holder could be retained possibly through a landscape
- The relationship with the river could be further exploited
- A landscape architect should be included within the design team at the earliest opportunity as landscaping could have the potential to drive forwards the design of the scheme



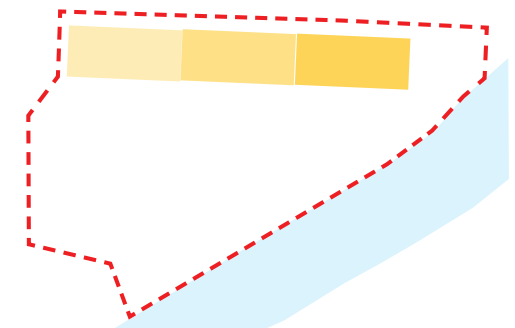
118 Units / 98 Parking Spaces

Option 1 - retention of existing structure



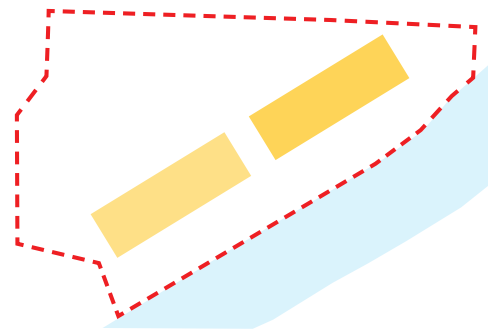
118 Units / 98 Parking Spaces

Option 2 - alternative to option 1



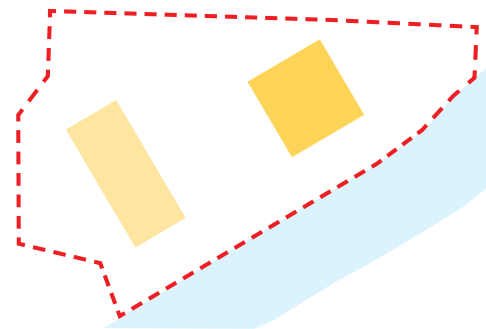
121 Units / 95 Parking Spaces

Option 3 - linear building along railway



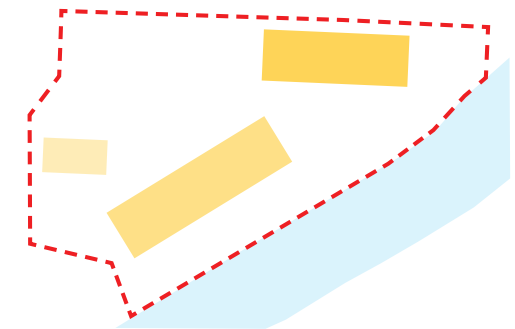
120 Units / 100 Parking Spaces

Option 4 - linear development along river



124 Units / 104 Parking Spaces

Option 5 - split blocks



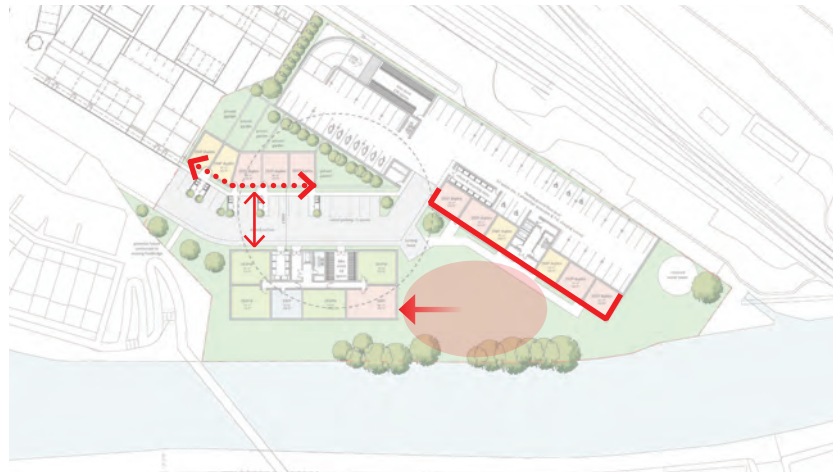
127 Units / 119 Parking Spaces

Option 6 - preferred scheme

4.5 Pre-application Meeting 2 on 25th July 2018

A second pre-application meeting with RBC was held on 25th July 2018. In advance of this meeting, a revised scheme was submitted to the Council. The key revisions included the following.

- Rearranging the layout to include five terraced houses at the entrance to the site
- Reducing the size of block A and increasing the size of block B to create a larger public space adjacent to the river
- Reducing the height of the proposed houses to two storeys, block A to four storeys and Block B to eleven storeys
- Projecting the ground and first floor of Block B to accommodate duplex units facing the public space and providing additional active frontages
- Re-arranging the car parking layout to increase the overall quantum of car spaces
- Delivering a significantly larger area of public open space facing the river
- Increasing the distance between Block A and the houses behind to 15 metres; and
- Amended housing mix to comply with Policy RC9



Ground floor plan



Typical upper floor plan

Feedback on the proposals from officers at RBC can be summarised as follows.

- Officers confirmed they were comfortable with the level of car parking provided but noted that this would need to be justified as part of the application
- Officers recommended that the alternative options suggested by D:SE panel for the site be explored and that it be made as explicit as possible why these options cannot be delivered
- It was noted that further consideration needed to be given to the spaces being created within the site
- Officers noted that careful consideration needed to be given to the impact of the proposed apartment building on the adjacent neighbouring properties in terms of height and noise
- It was noted that consideration needed to be given to the amenity space and cycle and refuse storage space provided for the terrace houses
- Officers queried whether three bedroom apartments were suitable on the top floors of the tallest building

4. Involvement

4.6 Meeting with Councillors on 27th September 2018

The project team met with local ward members (Cllr Page, Cllr Rowland and Cllr Ayub) on 27th September 2018 to provide an overview of the emerging proposals for the gas holder site and the feedback received from the public exhibition and meeting with Design South East.

The latest proposals were explained, including amendments such as a continuation of the terraced housing at the entrance of the site, a four storey apartment building to the west and a larger eleven storey apartment building to the east.

It was noted that the design of the proposed development would be high quality, simple and industrial in character with pitched roofs proposed throughout.



View along the river Kennet, looking east



View along the railway, looking west



View from entrance, looking east



View along the railway, looking east

Feedback received from the three Councillors can be summarised as follows.

- Councillors noted that the scheme was 'on the right path', they were 'very encouraged' by what had been presented and they were keen to learn more about the proposed landscaping for the scheme
- It was noted that if roads within the development were not adopted then a rigorous management company would be required given existing parking issues within the local area
- Councillors were supportive of the proposed warehouse style apartments, noted a preference for metal rather than glass balconies and were also supportive of the brick façade chosen for the buildings but noted that further articulation on the end elevations of the apartment buildings would be beneficial
- Councillors were keen for public information boards explaining the history of the site and the surrounding area to be included within the scheme
- Councillors encouraged the applicant to explore the potential for a roof terrace
- It was noted that a roof to the car parking area would be preferable to limit the visual intrusion of the cars

4.7 Pre-application Meeting 3 on 18th October 2018

As part of the submission prepared for the third pre-application meeting with RBC a thorough review of the existing gas holder structure was undertaken. This assessment sought to inform the decision as to whether or not the existing gas holder could be retained and what the effect of any such retention would have on the site.

The gas holder at Alexander Turner Close is considered as a non-designated heritage asset because of its age and prominence in the local area. It is not statutorily designated as a listed building and it is not located in a conservation area. The gas holder does not demonstrate the high level of design and technical interest that is evident at Kings Cross, for example, where the Grade II listed gas holders are of a much finer quality and architectural detailing. A detailed heritage assessment is provided in the report by Montagu Evans, which explains that the Alexander Turner Close gas holder is a late and unexceptional example of its type. Notwithstanding its limited historical and architectural interest, the opportunity to retain the structure has been carefully considered in the development of the emerging proposals with the support of the specialist heritage advice from Montagu Evans.

Notwithstanding the sustainable location of the site, the proposals will seek to meet RBC's

parking standards as far as possible within the existing site constraints. If the existing gas holder were to be converted, the majority of the rest of the site would need to be handed over as car parking, leaving minimal opportunities for open space and structural landscaping, particularly along the banks of the River Kennet, which is a key policy objective. It is often parking and not buildings that create the design challenge (and cost), and so this is something the design is trying to balance very carefully to ensure a deliverable scheme.

Given the extent of site contamination and existing underground structures which will need to be capped, remediated, removed and/or bridged as part of the redevelopment of the site, it is essential to ensure that, whatever the final design solution, it is realistic and deliverable, whilst respecting and enhancing the site's location at a rail and river gateway to Reading. This naturally places a ceiling on build costs which the proposed design will need to work within, to ensure that the application can ultimately deliver the adopted and emerging policy aspirations for the site.

If the existing gas holder were to be retained and a new building erected within or adjacent to it, there would be significant challenges with the scale of the new building in terms of the relationship to its immediate neighbours but

also within the wider townscape, be it privacy, overshadowing or overly dominant appearance.

For these reasons, it is considered that a new development has the potential to give more back to the wider area than retention of the existing gas holder would allow, and also allow a more sensitive design response to existing properties immediately to the west along Robert Parker Road and Alexander Turner Close, which range from 2-3 storeys in height.

In summary, having had regard to all of the matters above it was concluded that the retention of the gas holder was not a feasible, justifiable or necessary option. The preferred option for the site which was presented to the Council at this meeting was divided into three principal elements.

The first element is a row of terraced houses at the entrance to the site. The second is a four storey apartment building adjacent to the river and the final element is an eleven storey building in the eastern section of the site. It was noted that this scheme would deliver a number of benefits, which would not be delivered if the gas holder were to be retained. These benefits include the following.

- A clear, legible access strategy giving rise to a defined sense of arrival
- The successful integration of car parking into the scheme and screened from the public realm
- A greater variety of residential homes
- A clearly defined river frontage with a 10m buffer as required by the Environment Agency
- A significant area of public open space
- Ecological and landscape improvements
- A clear hierarchy of volumes and building heights
- The ability to create a new focal point at this important gateway location

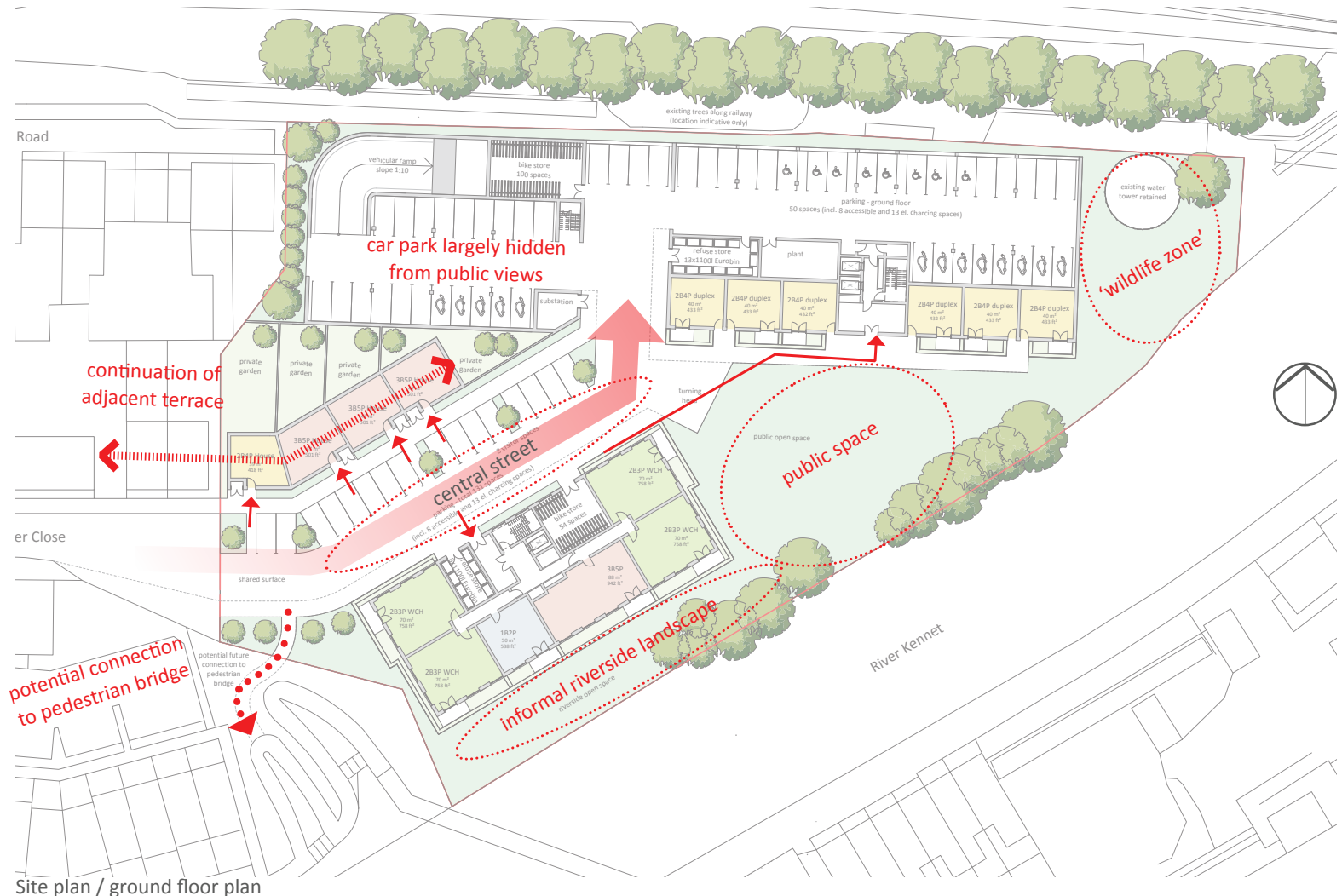


4. Involvement

4.7 Pre-application Meeting 3 on 18th October 2018

Feedback from Officers can be summarised as follows.

- Officers acknowledged the gas holder lacks any noteworthy decorative features and was not an early example of its type
- It was noted the heritage of the site should be reflected in the design of any scheme
- Officers queried the retention of the water tower and noted possible health and safety concerns regarding its future use
- It was noted the site offered opportunities to improve the entrance into Reading
- Officers noted that consideration should be given to the future maintenance of the building adjacent to the railway;
- Officers encouraged additional ecological enhancements to be incorporated into the scheme wherever possible
- The use of brick and the warehouse style of the proposal were considered to be an appropriate response to the area and broadly welcomed by the officers
- Officers queried the use of protruding balconies, which gave rise to a false impression of a converted building
- Officers noted they were not yet convinced by the rationale for the scale of block B and noted the heritage officer had raised concerns about the relationship between the proposals and the listed school building on the opposite side of the river



4.8 Meetings with Environment Agency on 17th October and 14th November 2018

The purpose of the meetings was to discuss the ground conditions, landscape and ecological proposals for the site and in particular along the river frontage. This was a chance to understand the EA's aspirations/recommendations for the riverfront and discuss how these might work with the proposals for the site.

A summary of the comments provided by the EA in relation to ground conditions and land contamination matters are set out below.

- Given adjacent development there was no reason why the principle of development in this location would be an issue
- Additional monitoring may be required following the identification of chlorinated solvents in a borehole
- The outline remediation strategy was considered reasonable but it will need to be substantiated by further investigation and assessments
- It was anticipated that remediation for this site would be similar to the adjacent sites
- Soakaways may be feasible if areas of uncontaminated land are identified within the site
- Appropriate conditions will need to be placed on any future planning permission for this site

The Council's aspirations for creating better access to the riverfront and potential future access beyond was discussed in relation to what the EA might deem acceptable within their buffer area. The EA enquired about the existing condition and materiality of the riverfront and mentioned the Sand Martins sometimes nest in old drains in hard riverfronts. Other habitat suggestions included potential for fisheries along the edge. This has been done elsewhere further down the river. EA to confirm if these have been successful and might be worth considering. The EA also noted that management is key for these areas and that a Landscape and Ecological Management Plan must form part of the submission.

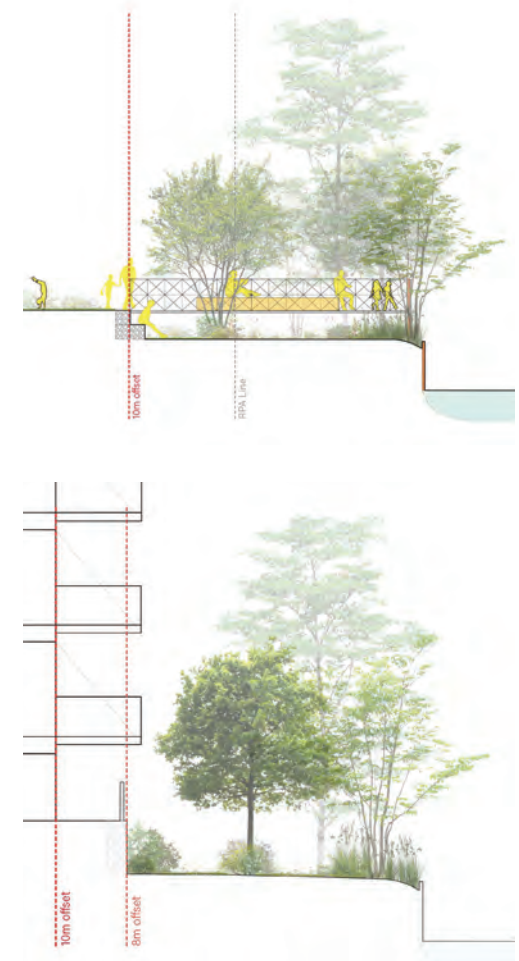
The 10m buffer area was discussed and the EA confirmed that there is flexibility and if reduced in one area, it will need to be increased in another area. Overall the proposals should provide a biodiversity enhancement, an opportunity for habitats and informal opportunity for river access. Any access should be informal and lighting to be low level/directional.

The area in front of Building A was discussed and the EA expressed preference for public access to be discouraged to the front of the buildings. This allows for privacy to the balconies and allow habitats to thrive. Any

future potential access along the river front, should utilise the main site entrance and access through public open space as preference.

Levels were also discussed and the EA noted the levels should not be raised within the 10m buffer area. However ramping and terraces could be accepted in relation to the edge and provide opportunities for informal seating along the edge. The requirement for fencing/railings was also discussed and this need to be explored further with the planners. The notion of protecting the edge with planting is accepted by the EA, but might need temporary protection whilst maturing.

The EA thought that the proposals were encouraging and confirmed they are happy to review proposals further. The landscape proposals have been developed in line with these suggestions and further consultation with the EA post planning is essential to ensure the EA buffer area meets the Council's aspirations, EA's recommendations and the overall aims for the landscape proposals for the site.



4. Involvement

4.9 Meeting with Councillors on 21st January 2019

A follow-up meeting was held with local ward members to provide an overview of the design progress made since the previous meeting. Jonathan Markwell from RBC was also present. A summary of members' feedback is set out below.

- Preference for car parking to be hidden with a green roof over
- Stressed the importance of finding a solution to the existing footbridge arrangements
- Highlighted their support for public access to the river frontage and supported the principle of green space fronting the river
- Supported the design and scale of the proposed development presented at the first meeting and expressed their preference for the initial design rather than the design presented at the second meeting, which had been designed to address officers' comments
- Expressed their preference for articulated roofscapes rather than flat roof buildings
- Recommended that if the provision of affordable housing was proposed to be less than policy requirements owing to viability then these should all be social rented tenure
- Noted the importance of consideration of the construction strategy for the site



Early sketch view of public space, looking west

4.10 Public Consultation 2 on 24th and 25th January 2019

The second public consultation was held over two days in late January 2019. The purpose of this event was to invite local residents, political representatives, interest groups and other members of the public to give their views on the work that had been undertaken to date. Explaining how the project had progressed in terms of design and programme since the previous meeting.

Members of the project team that attended included representatives from Danescroft, ColladoCollins (architects), Boyer (planning), Stuart Michael Associates (highways, flood risk, drainage, air quality and noise) and Montagu Evans (heritage).

44 people attended the exhibition, which included 3 local councillors, local residents (including several who live immediately adjacent to the gas holder site) and representatives from local interest groups, including Berkshire Industrial Heritage Group and the Reading Conservation Area Advisory Committee.

The total of 32 responses were received, including feedback questionnaires handed on the day, sent by email and further written responses outlining residents' views.



Images from the public consultation

The feedback received can be summarised as follows.

- General support for the redevelopment
- Some nostalgia evident for the gas holder but the need for regeneration accepted
- Generally positive response to the site layout, massing and architecture proposed, including positive reaction to the brick aesthetic
- Some suggestion that a more modern design could have been considered
- Mixed responses about the level of car parking to be provided at the site, some attendees considered it an over provision given the sustainable location whilst others thought more should be provided
- A desire for more information regarding the proposed construction strategy in respect of construction traffic
- Some concern regarding the existing access to the site and the potential impact of additional traffic on the local area
- A desire to see the site's gas holder history reflected in some way as part of the development (building names, public art, amenity space etc.)
- Positive feedback about the landscape proposals and the incorporation of new playspace
- A desire to see a greater level of access along the river frontage

4. Involvement

4.11 Pre-application Meeting 4 on 29th January 2019

A fourth pre-application meeting with RBC was held on 29th January 2019. In advance of this meeting, a revised scheme was submitted to the Council. The key revisions included the following.

- Introduction of a split block layout for the marker building, block B, to provide more dual aspect units and also break up the overall massing of the block
- Revision of the massing of block B to vary height and create a dynamic building of 8 and 11 storeys
- Introduction of a roof terrace on the lower part of block B
- Increasing the height of block A to 5 storeys to compensate for the loss of units in block B and provide better transition between the existing buildings to the west and block B
- Revision of the layout and massing of the block C
- Developing the overall design concept and architectural treatment of the scheme
- Developing the strategy and design of the landscape proposals



Early sketch view from the River Kennet, looking east



Early sketch view of central street looking towards public space

Feedback from Officers can be summarised as follows.

- It was noted that the concern regarding the 11 storey element had not been resolved and that the maximum height that would likely be appropriate in this location would be 9 storeys
- It was acknowledged that the current proposal broke up the massing much more effectively and that pitched roofs throughout would tie the scheme together
- The warehouse architecture was positively received and considered appropriate given the water side location, and the detailing considered consistent with previous advice
- Some concern was raised whether the warehouse style is at odds with the height
- It was suggested that some the 'lost floorspace' could be recovered by amending the current terraced houses to include a three storey element
- It was suggested that balcony depth and locations would be reviewed
- It was noted that the base of block B may need further refinement in light of concerns that the base is currently too contrasting and appear too commercial



Early sketch view from railway looking west towards Reading station

5. Design Development Summary

5.1 Overview

As illustrated and summarised in the previous chapter, the design team engaged extensively in discussions with the local planning authority as well as other stakeholders, including local ward members, a design review panel and members of the public. As a result of these discussions, the scheme has evolved and changed considerably. The following pages provide a brief summary of the development of the scheme and how it responded to the last pre-application meeting.

Early sketch view from entrance to the site, looking east



5. Design Development Summary

5.2 Site Layout

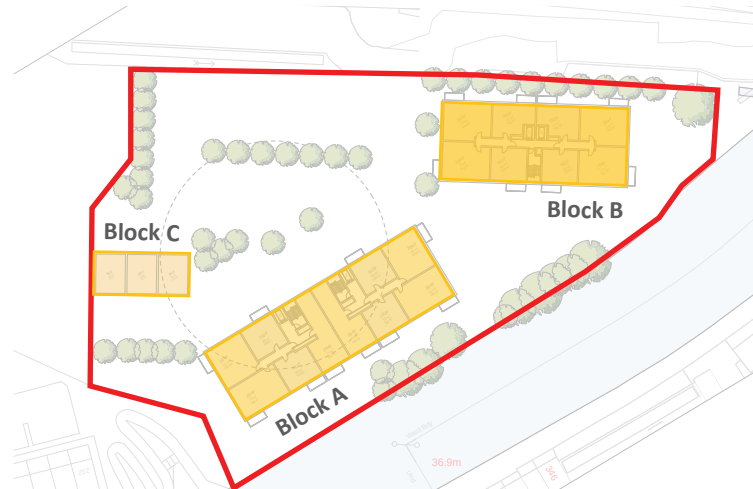
The overall layout remained in line with the preferred option but the site plan has evolved throughout the process as outlined in the previous chapter.

Block A reduced in length and its position changed slightly to maximise the size of the main public space.

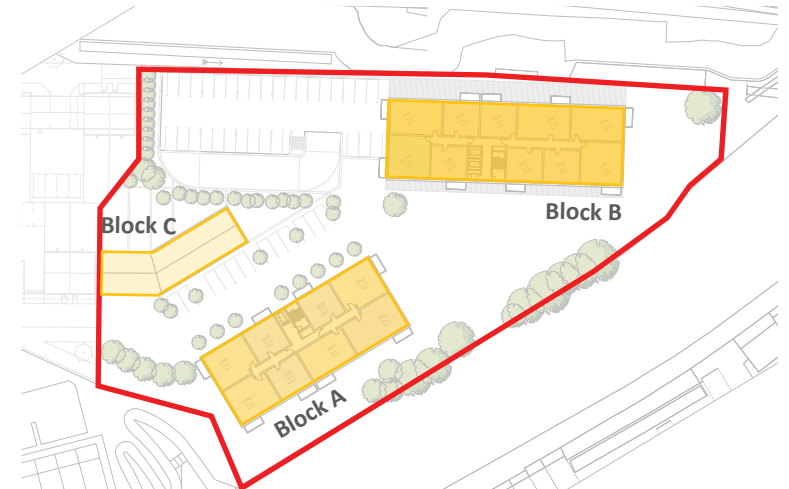
Block B increased in length to maximise the public space and to compensate for the 'loss of floorspace' in block A. Subsequently the building was articulated on the north elevation and eventually redesigned as a split block to break the overall massing and provide more dual aspect units.

Block C started as a small extension of the adjacent terrace. It was then extended to define the arrival route more. Eventually the block was redesigned to line the whole length of the street and provide active frontage for the carpark behind.

At first, the car park was proposed as open and at grade with a split level element. It was then integrated into the buildings to reduce its visual impact and provide a buffer towards the railway to the north.



Sketch site plan - pre-application 1 / D:SE review panel



Sketch site plan - pre-application 2



Sketch site plan - pre-application 3 / meeting 1 with Councillors

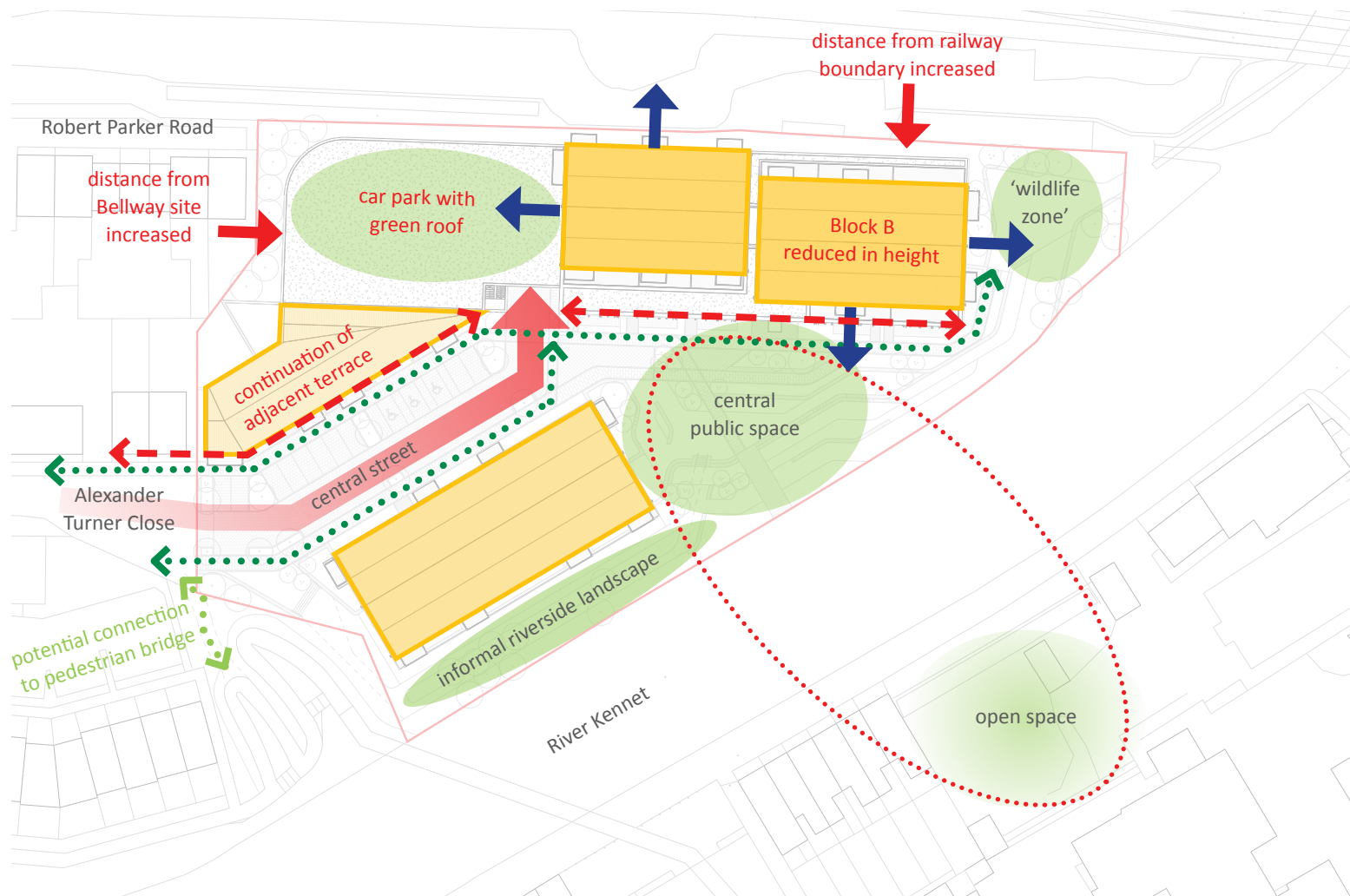


Sketch site plan - pre-application 4 / public consultation 2

The thorough assessment of the site, extensive consultations and design development to date resulted in a site layout that is well considered and create a strong sense of place. Following the last pre-application meeting, the layout was amended to address officer's comments and the key changes included redesigning block C as a block of flats and unifying the ground floor of block B.

The key changes and enhancements of the site layout during the process can be summarised as follows.

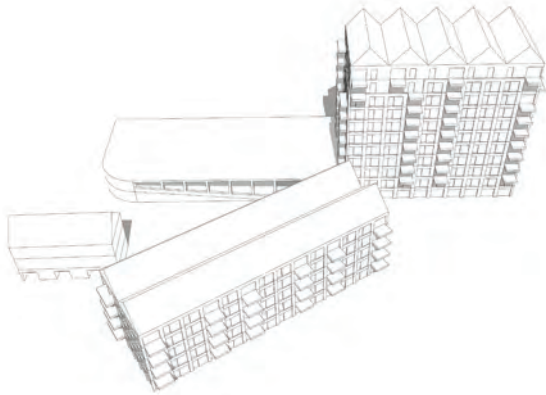
- Distance from Bellway site to the west and the railway to the north increased to improve relationships to the properties and allow easy maintenance
- Central street redesigned to allow for further enhancement of soft landscaping
- Block C extended to create a street fully lined on both sides and provide active frontage for the carpark behind
- Parking structure covered with green roof and fully integrated to reduce its visual impact
- Block B redesigned as a split block to reduce its visual impact, maximise opportunities for dual aspect units and minimise north facing units
- Ground floor of block B redesigned to provide unified frontage towards the public space
- Existing water tower removed to provide further enhancement to 'wildlife' landscape



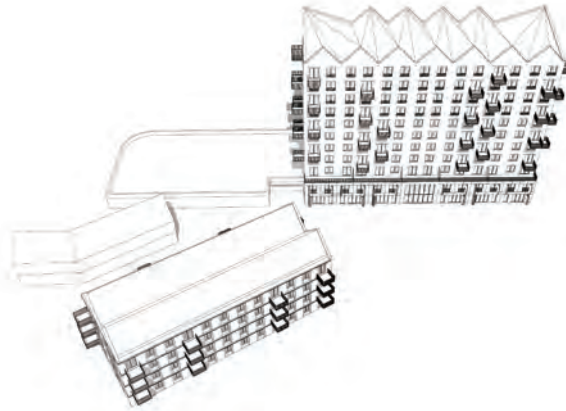
Proposed site plan

5. Design Development Summary

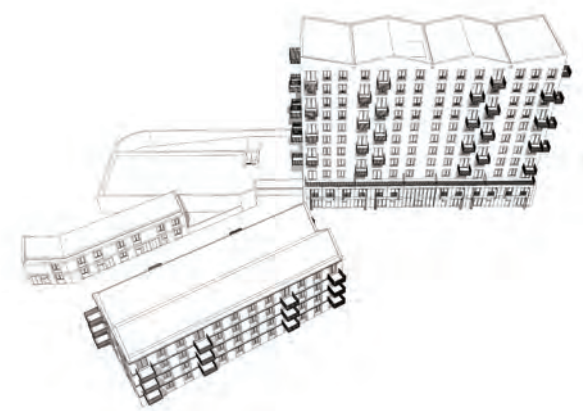
5.3 Scale and Massing



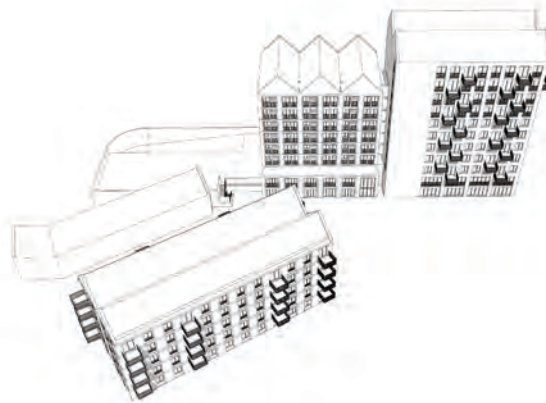
Sketch massing 1 - pre-application 1 / D:SE review panel



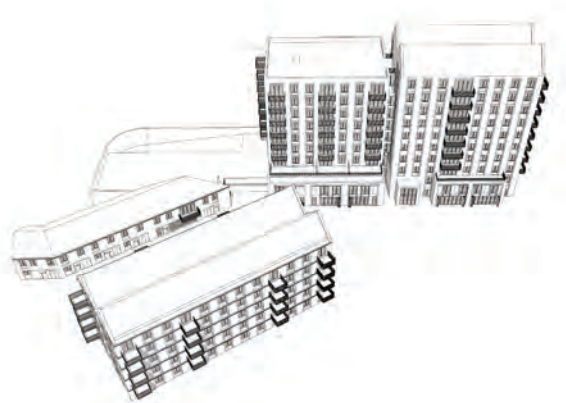
Sketch massing 2 - pre-application 2 / meeting with Councillors



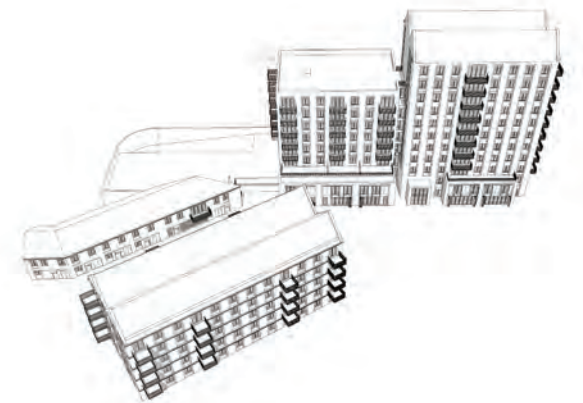
Sketch massing 3 - pre-application 3



Sketch massing 4



Sketch massing 5



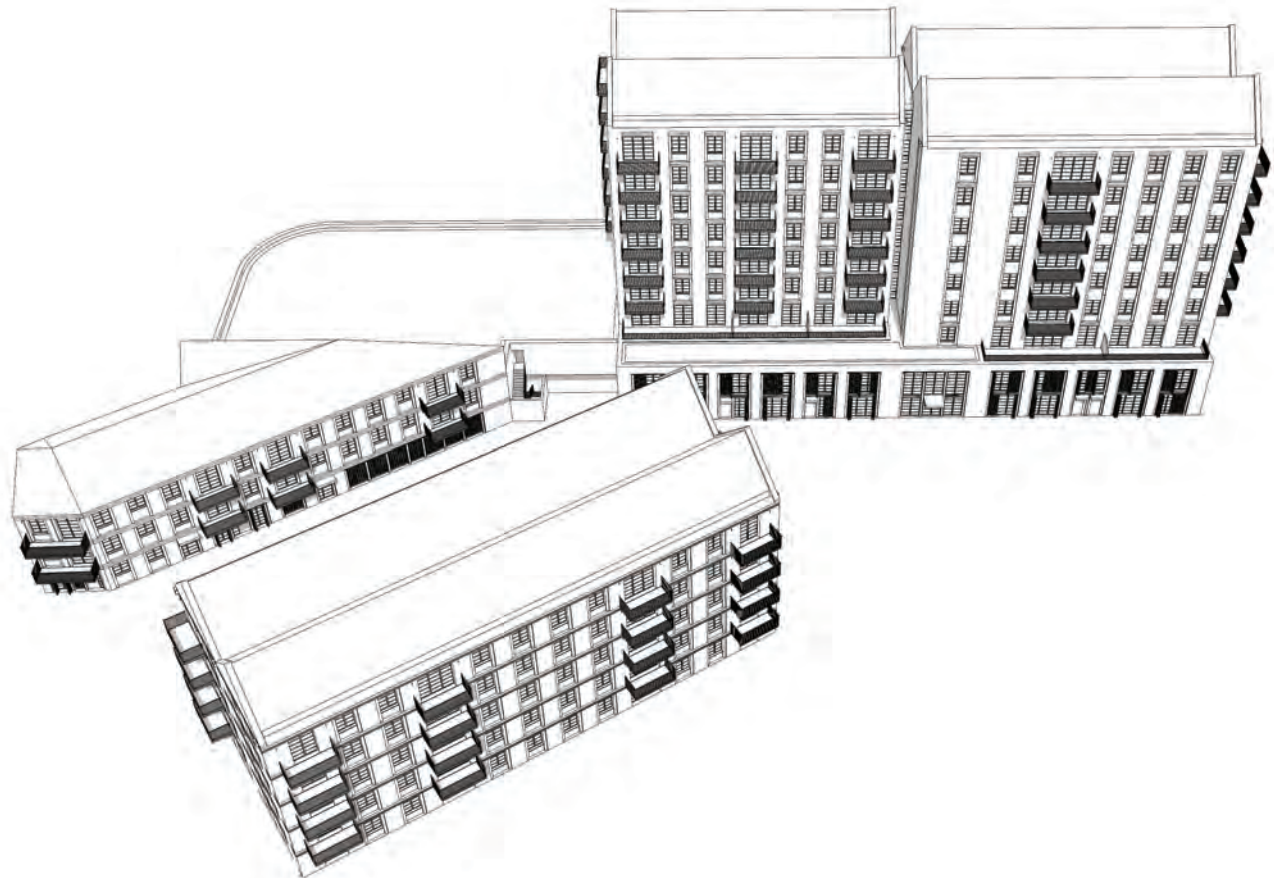
Sketch massing 6 - pre-application 4 - public consultation 2

The overall massing comprises 3 main volumes in line with the preferred option but the scale and finer articulation of the volumes has evolved significantly throughout the process as outlined in the previous chapter.

Block A reduced in length and increased in height to 5 storeys to provide a better transition from the development to the west to the marker building, block B, in the north east corner of the site. There was no change after the last pre-application meeting.

During the design process, Block B increased in length and was redesigned as a split block to break the overall scale, reduce its visual impact, and provide more opportunities for articulation of the massing. Following the feedback from the officers, the height was reduced to 9 storeys and the ground floor redesigned to provide a unified frontage.

Following the feedback from the design review panel Block C was extended to create a longer terrace and properly define the central street. After several iterations and the latest comments from the officers, the building was redesigned as a block of flats and increase in height to three storeys.



Sketch massing 7 - proposed scheme

6. Design Response

6.1 Overview

Following the extensive consultation with key stakeholders, the proposed scheme is a result of thoughtful and thoroughly considered design development as described in the previous chapters.

The proposal is for the redevelopment of the existing brownfield site of the gas holder on Alexander Turner Close and comprises three new buildings to provide 130 new residential units which range in types, sizes and tenures. The scheme will also provide integrated car and cycle parking, central street, and a new public open space with access to the river, for future residents and visitors alike.

The proposed site layout and massing are carefully designed to respond to the context, reducing in height to the west where the site abuts existing terraced houses and rising to the east to mark the gateway into Reading.

Architectural form and language are strongly inspired by the industrial heritage of the site, yet presenting a contemporary response to create a place with its own identity and full of character. The material palette is intentionally restrained and the elevation treatment of all buildings is based on the same principles. Subtle variations in details and their application ensures that each building acquires its own aesthetics and character.

Landscaping has been an integral part of the proposal and is designed to return parts of the site to its former, much more natural character, creating a contrast with the more formal language of the scheme. Providing views and access to the river and the new public space is designed to create a strong identity, sense of space and bring the surrounding communities and the new residents together.

Facing page: view of the central street as viewed on arrival to the site



© 2024 Gas Holder Street Housing Ltd. All rights reserved. Reading, UK

6. Design Response

6.2 Amount

Located at the mouth of the River Kennet, in a key gateway location, and adjacent to several residential communities, the site offers an excellent opportunity to contribute towards the residential provision in Reading.

The scheme delivers a broad range of unit types from one bedroom to large family sized flats.

- 130 dwellings, including:
 - 7 (5.4%) CatM4(3) units in 2bed format
 - 8 (6.2%) family sized units provided in the form of south facing flats and duplexes with direct access to open space
- All units are provided with external amenity, complimented further by generous amount of public open space
- Secure indoor cycle storage with 74 long stay cycle spaces
- 127 car parking spaces

TOTAL	GIA / NSA PROPOSED					
	GEA		GIA		NSA	
	sq m	sq ft	sq m	sq ft	sq m	sq ft
Block A	3,575.3	38,484	3,259.5	35,085	2,539.2	27,332
Block B	7,396.6	79,617	6,622.3	71,282	5,247.0	56,479
Block C	1,122.1	12,078	965.2	10,389	736.7	7,930
TOTAL	12,094.0	130,179	10,846.9	116,756	8,522.9	91,741

percentage of units by type

APARTMENT NUMBERS				
1 Bed 2P	2 Bed 3P WCH	2 Bed 4P	3 Bed 5P	TOTAL
No.	No.	No.	No.	No.
13	3	17	5	38
35	4	41	2	82
0	0	9	1	10
48	7	67	8	130
36.9%	5.4%	51.5%	6.2%	100.0%

48	74	8	130
36.9%	56.9%	6.2%	100.0%

Habitable Rooms	Bed Spaces
No.	No.
106	128
213	256
31	41
350	425

350	425
-----	-----

6.3 Masterplan

The overall site layout has been designed to maximise active frontages, passive surveillance of public areas and to carefully integrate into the surrounding landscape. Wherever possible, ancillary spaces such as parking, refuse storage and plant rooms are generally hidden from public views.

The development is contained within three distinct buildings; a smaller block A fronting the river, a taller block B at the north east end of the site creating a “marker” building and block C, a small scale building designed as a continuation of and transition from the adjacent terrace.

The quality of the residential units and central circulation has driven the overall site layout of the scheme. All entrances are located along the central “street”, providing a clear and attractive way home for future residents. The street leads to the generous, river fronting public space with high quality landscaping.



Overall masterplan with landscape proposals

6. Design Response

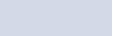
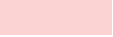
6.4 Layout

6.4.1 Ground Floor

The ground floor has been designed to be as active as possible. Block A comprises 6 dwellings, including wheelchair accessible flats with front garden/terraces and a direct relationship with the open space. The north west elevation includes flats on the corners, an entrance lobby and leaving only a small part of the frontage non-active.

The frontage of block B faces the public space and is fully activated with five duplex apartments with their private front gardens and the main residential entrance. Car parking and ancillary spaces contained within the building are located along the northern boundary facing the railway and hidden from public views.

Block C comprises two large units with their own allocated private gardens to the rear. These units are accessed directly from the street. The frontage is animated further by entrances to the upper floors and the distinct treatment of a cycle store.

	1B2P - min 50m ²
	2B3P - min 70m ² (wheelchair)
	2B4P - min 70m ²
	3B5P - min 86m ²



Ground floor plan

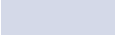
6.4.2 Typical Upper Floor

The plan to the right represents a typical floor plan of the scheme. The upper floors reduce to blocks A and B, of 5 and 9 storeys in height respectively.

Both buildings are designed with typical floor plan layouts, which repeat on each level, with the exception of wheelchair accessible apartments in block B which are substituted with typical 2B4P flats from the fourth floor up.

As illustrated on the plan, a series of standard units has been designed and used across the scheme, ensuring high quality layouts and efficiency. Larger units are located on the corners to ensure dual aspect.

The buildings are rotated in plan providing a minimum distance of 18m between a window and an edge of a facing balcony, which together with the oblique view minimises any potential overlooking issues between the two blocks.

	1B2P - min 50m ²
	2B3P - min 70m ² (wheelchair)
	2B4P - min 70m ²
	3B5P - min 86m ²



Typical upper floor plan

6. Design Response

6.4 Layout

6.4.3 Block A

All buildings on site have their key position within the overall masterplan. Block A marks the entrance to the site, faces the river and comprises 38 dwellings.

A typical floor plan of block A comprises 8 units, accessed off a central core. The circulation benefits from a simple layout, generous lift lobby and natural daylight provided indirectly via the adjacent stairwell.

The units are designed with traditional layouts and protected entrance hallways to comply with fire strategy and escape distances, and are arranged to maximise daylight into living rooms wherever possible.



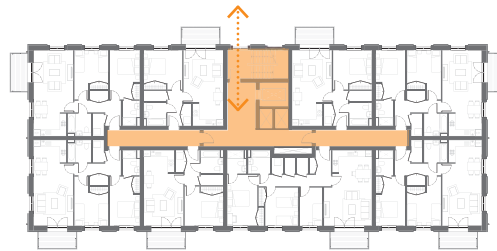
	1B2P - 50m ²
	2B4P - 73m ²
	3B5P - 88m ²



Block A - typical floor plan

Circulation

The building has a central core to minimise the length of the corridors, with natural daylight provided indirectly into the generous lift lobby via the adjacent stairwell.



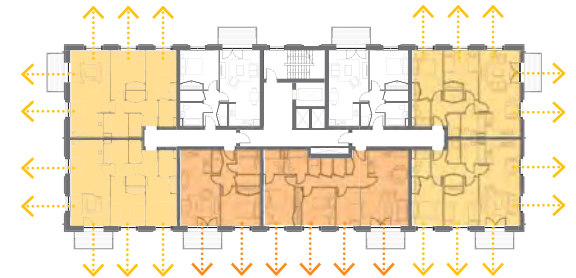
Amenity

Each flat offers generous private amenity in the form of a balcony, or terrace on the ground floor.



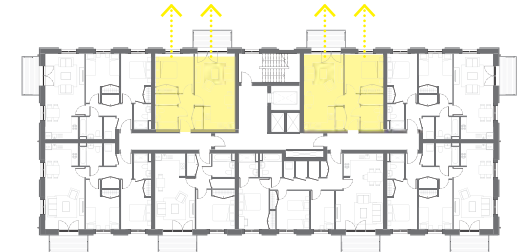
Aspect

The core is located on the north-west elevation to maximise opportunities for dual aspect and south facing units.



North Facing Units

There are no single aspect units facing due north in this block but two 1B2P flats on each floor are north-west facing.



Block A diagrams

6. Design Response

6.4 Layout

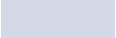
6.4.4 Block B

Block B is the tallest building on site, acting as a marker for the gateway location, and is designed as a split block comprising 82 dwellings.

A typical floor of block B comprises 11 units, accessed off a central core. The circulation benefits from a simple layout, daylight to the centre of the circulation space and also to a generous lift lobby, and views out to the north and south.

The massing is broken down into two elements, creating shorter corridors, providing views from the core and natural daylight assisting with wayfinding.

The units are open plan to maximise internal space, and arranged to provide maximum daylight and the best views out, be it towards the River Kennet to the south or the River Thames and the marina to the north.

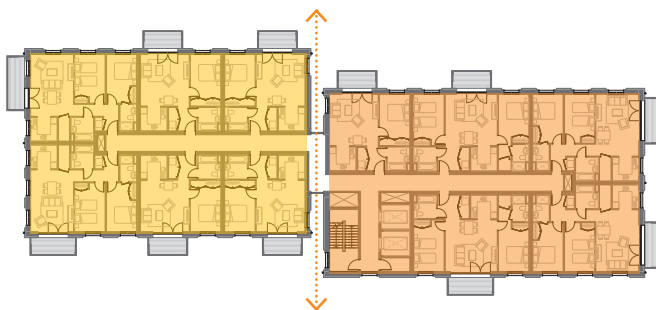
-  1B2P - 50m²
-  2B4P - 71-72m²



Block B - typical floor plan

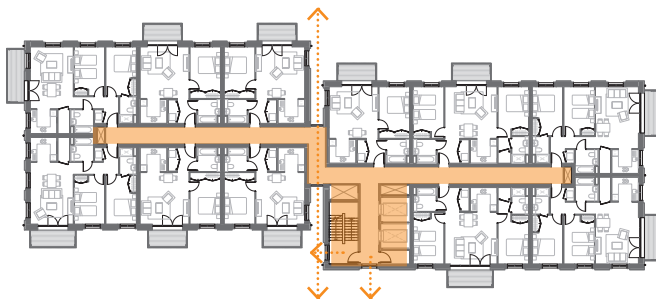
Division

Block B is split in plan into two separate elements, each with its own distinct facade treatment.



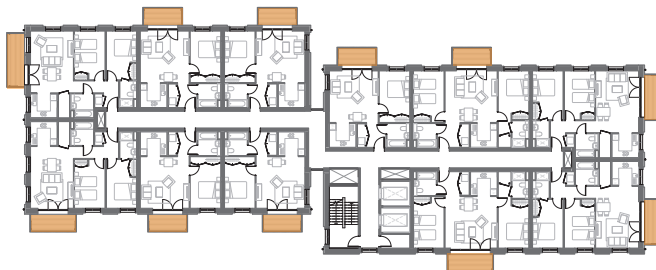
Circulation

The building has a central core which has been designed to minimise the length of the corridors and benefit from natural daylight.



Amenity

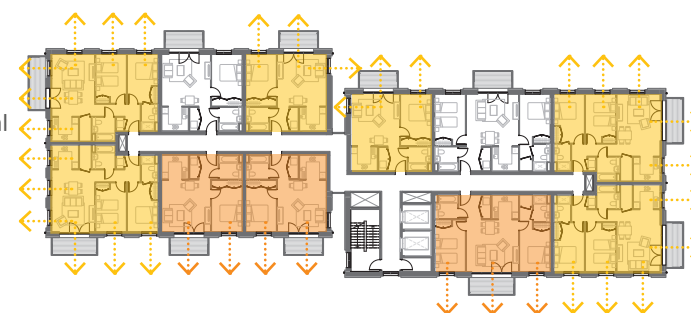
Each flat offers generous private amenity in the form of a balcony, terraces on the second floor or front gardens for the ground floor duplexes.



Block B diagrams

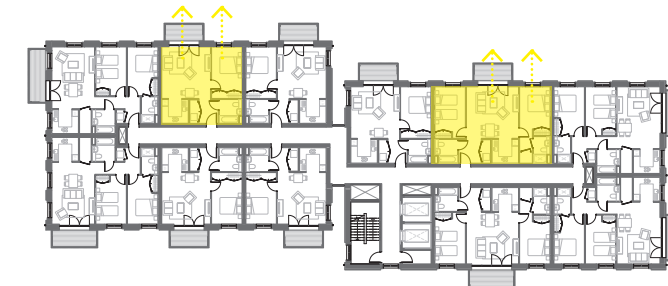
Aspect

The stepping of the massing allows for additional views and maximises opportunities for dual aspect and south facing units.



North Facing Units

The plan form minimises the number of north facing units. Only two 1B2P flats on each floor are facing north.



6. Design Response

6.4 Layout

6.4.5 Block C

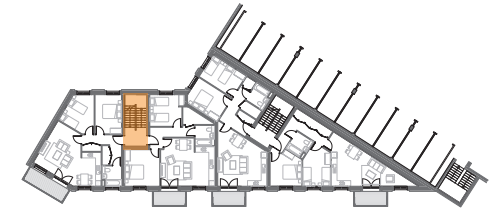
Block C is located at the entrance to the site and provides a transition between the adjacent terrace and the taller buildings on site. The block comprises 10 units. A typical floor plan of block C comprises 4 units, accessed off two separate cores. The units are designed as traditional with protected lobbies.

Except one unit, which is single aspect facing south, all other units are dual aspect to maximise daylight and allow for natural cross ventilation. Generous amenity space is provided to all units, facing south with direct or oblique views of the river and/or the communal public space.



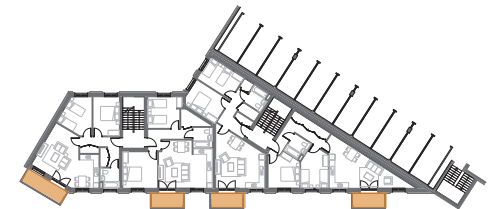
Circulation

The building has two separate stairwells serving only two flats per floor each.



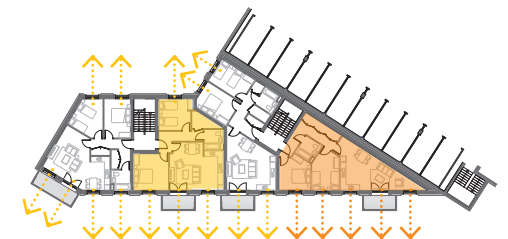
Amenity

Each flat has generous private amenity in the form of a south facing balcony. Ground floor flats have a private garden to the rear.



Aspect

The stepping of the massing allows for additional views and maximising opportunities for dual aspect and south facing units.



Block C diagrams

6.4.6 Daylight & Sunlight

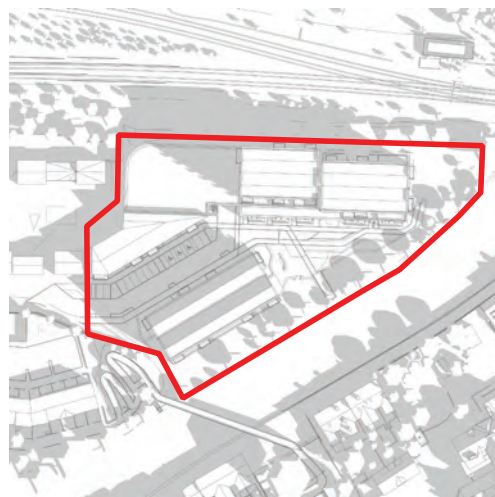
The overall site layout and massing have been considered with daylight and sunlight in mind, both within context of the development and its impact on adjacent properties.

Due to the site's location on the northern bank of the river, between the riverbank and the railway to the north, the only potential impact to consider is on the properties to the west. The height distribution across the site results in minimal impact on the adjacent properties, limited only to the early hours. After 11am in spring and during summer there will be no impact at all.

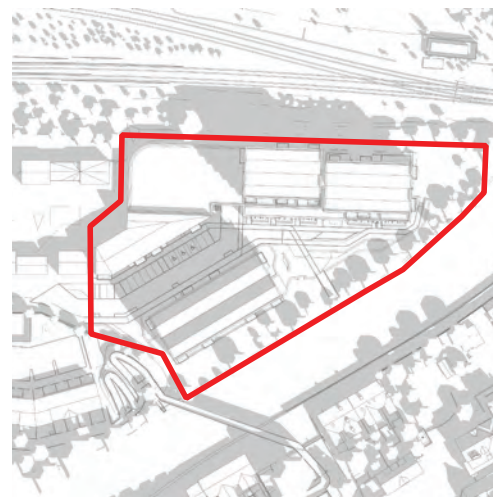
The height of block A is designed in such a way that the smaller block C to the north will be afforded maximum daylight and sunlight. As the images to the right illustrate, the block will have full benefit of sunlight after 10am.

The scheme has been designed to maximise the amount of daylight benefiting the new dwellings, and also to maximise sunlight within the public open space. Due to their southern aspect, the wildlife corridor and the public space will enjoy sunlight throughout the day.

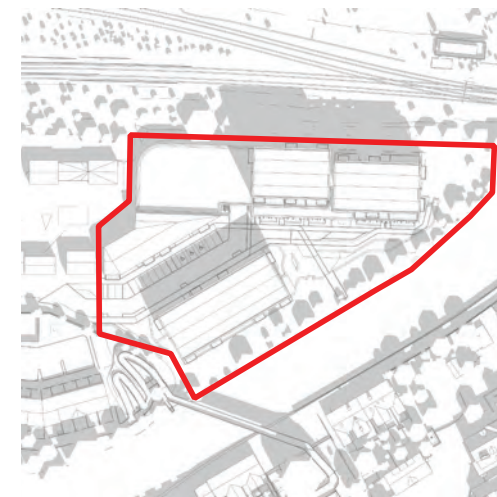
For further details refer to the daylight and sunlight report prepared by Anstey Horne.



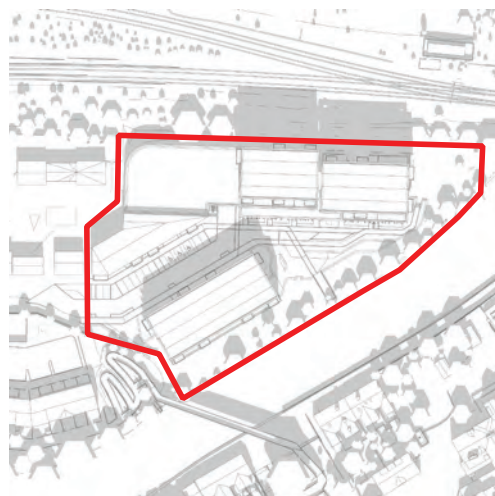
21st March - 9am



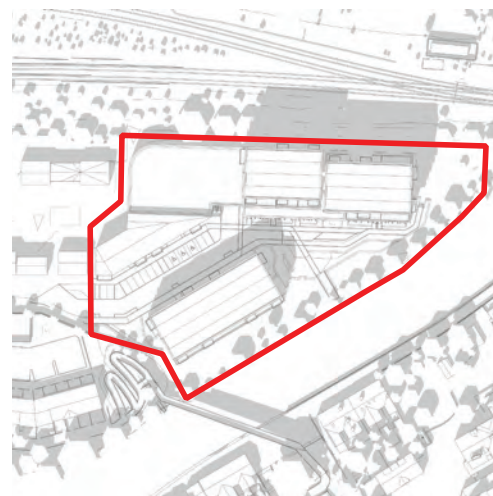
21st March - 10am



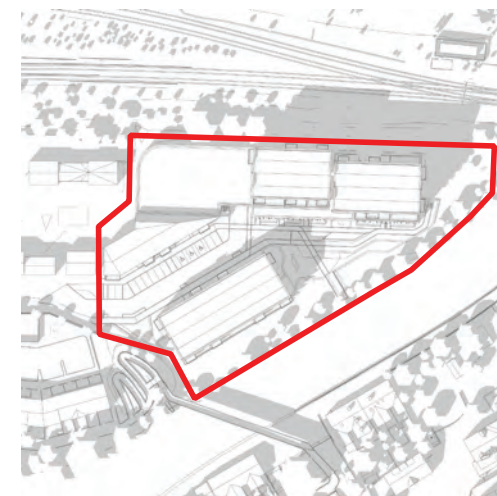
21st March - 11am



21st March - 12pm



21st March - 1pm



21st March - 2pm





6. Design Response

6.5 Landscape

The gas holder site sits at the confluence between the urban and natural, nestled between the railway line to the north and River Kennet to the south. The proposed landscape draws inspiration from these different settings and seeks to connect new residents with their surroundings - bringing together the landscape of the Thames to the north with the adjacent communities to the west and south.

The design celebrates the natural and industrial heritage of the site whilst offering new opportunities for existing and future communities to come together. Visitors and residents will be able to explore the river and railway landscape in an informal and ecologically rich setting.

A new public open space will be created as part of the proposals - a considerate, peaceful and playful landscape which protects, improves and enriches the wildlife and biodiversity of the site. A sensitive landscape design will help to create a distinct place that can be enjoyed by people of all ages.

For further details refer to separate landscape statement prepared by Farrer Huxley.



Axonometric view of the landscape proposals, facing page: view of the riverside landscape

6. Design Response

6.6 Appearance

6.6.1 Overview

The massing of the scheme is arranged in such a way that the buildings rise from the west as a continuation of the existing terrace, to the east where the increased scale marks the gateway into Reading.

The approach was to design modern buildings of high quality to mark this key gateway location but also to be contextual by reflecting and celebrating the industrial heritage of the site; buildings that sit harmoniously with their surroundings rather than create a contrasting feature within the area.

The proposed scheme draws its inspiration from the surrounding area, historic buildings in Reading and industrial buildings in general. Whilst the buildings are new, and should present themselves as such, there are strongly inspired by the form and architectural language of factories, mills and warehouses.

Each building is distinct in its character but the whole scheme is designed to form a cohesive group of buildings. The design incorporates similar forms, architectural language and a limited palette of materials and the desired variation is achieved through details and different application of architectural elements.

Facing page: view of the main public space, looking west towards block A

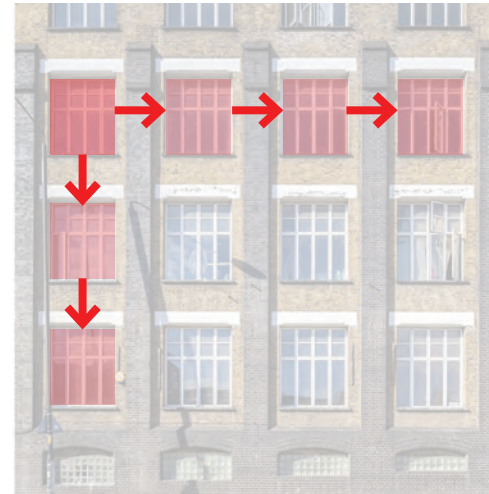


6. Design Response

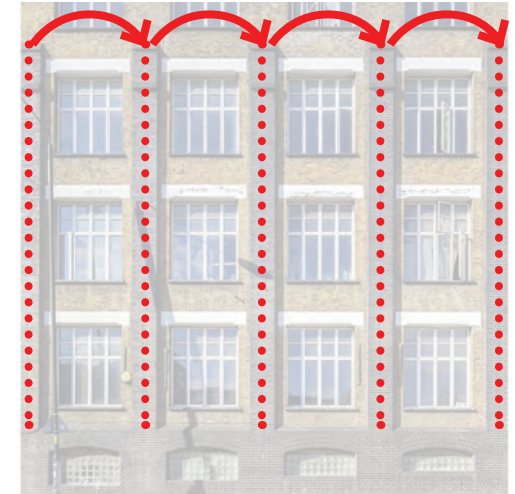
6.6 Appearance

6.6.2 Design Strategy and Principles

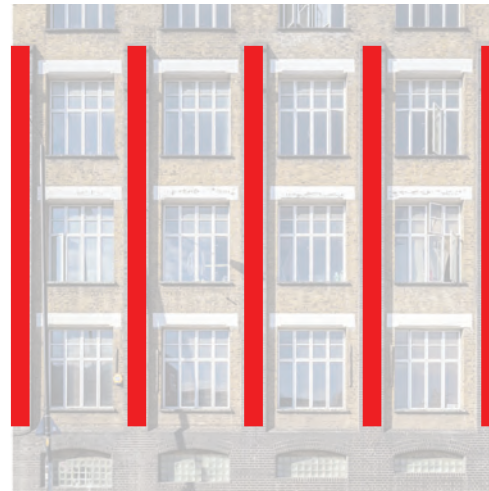
The design concept and inspiration for the scheme is based on the industrial heritage of the site and the typology of warehouses and factories with brickwork as the prevailing material. Common principles utilised in this typology have been explored and applied to the proposed scheme with high level of repetition, ensuring inherent level of efficiency, strong grid, rhythm and hierarchy of vertical and horizontal elements to create buildings with simple detailing yet rich in character.



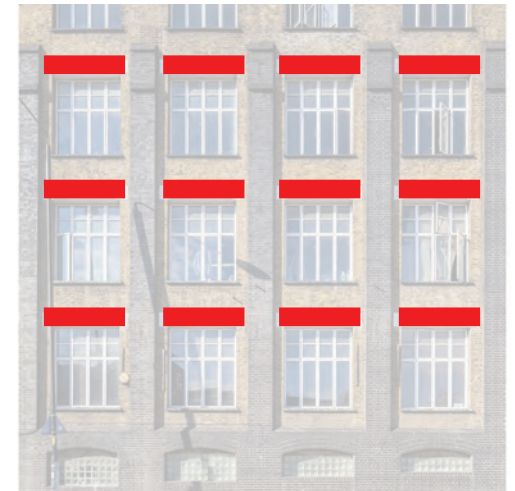
Repetition



Rhythm



Vertical Features



Horizontal Features



Huntley & Palmers Factory, Reading



Bryant and May Match Factory, Bow



Cotton Mill, Ancoats



Hackney Wick, London



Bond Warehouse, Bristol



Butler's Wharf, London

6. Design Response

6.6 Appearance

6.6.3 Character

While the inspiration has been taken from the industrial heritage of the site, it is important when referencing and celebrating the historic character, that the design doesn't become pastiche and too literal.

During the design process, we have researched and explored contemporary precedents to understand how this concept can be approached and how the right balance can be found between the inspiration and contemporary design.

Generally, all facades are very similar in style, inspired by the formality and rhythm associated with industrial typology, but brought to a more residential scale with subtle differences in approach to details and their application to ensure that each building has a distinct character and aesthetic.

Thoughtful selection of a limited palette of materials and details, applied simply but with intent, crisp detailing and repetition will ensure that the final design strikes the right balance and produces buildings that celebrate the history but are modern and will stand the test of time.



De Halve Mae, Mecanoo



Soldier course detail



Harbour house, De Zwarte Hond



Herringbone detail



Neuer Pferdemarkt, Störmer Murphy and Partners



Blossom Street, AHMM



Curtain Hotel, Dexter Moren Associates



Belfast Hotel, McGonigle McGrath



Biscuit Factory, PRP

6. Design Response

6.6 Appearance

6.6.4 Materials

The material palette is purposefully restrained, taking its cues from the surrounding area and the industrial heritage that served as an inspiration for the whole scheme.

Reading has a history as a brick making town and brick is still a widely used material. Brick as the main material is considered to be appropriate for both, its traditional use in industrial typology, and also for its familiarity in residential buildings. It is durable, with low maintenance, creates rich texture and helps to create a sense of place which has been at the core of the scheme.

The main brickwork has been chosen in red hues with rich detailing and accents in grey and white brick. To complement the brickwork and also nod further to the heritage of the site, details such as canopies, balustrades and window frames are proposed in metal and dark grey colours to contrast with the brickwork.



Huntley and Palmers Factory



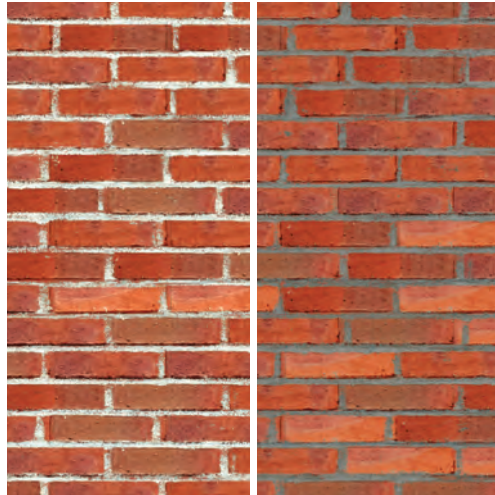
Reading Town Hall



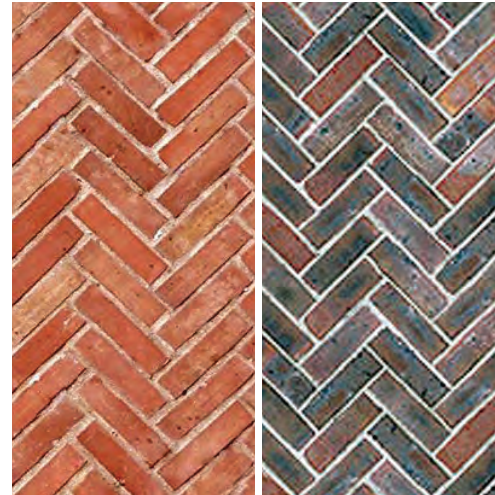
Riverside Museum



Newtown Primary School



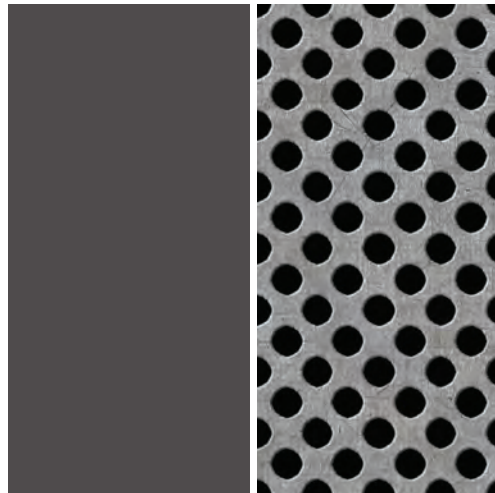
Red brick with light / dark mortar



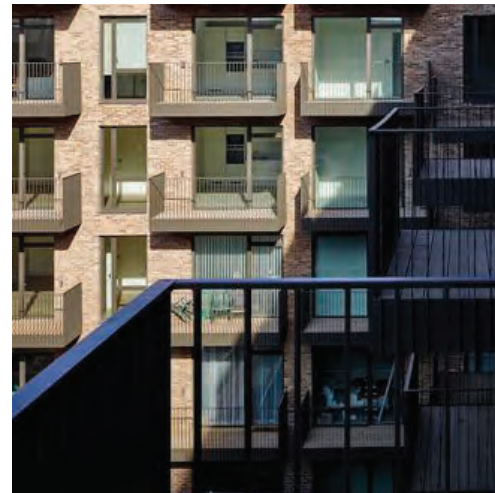
Red / grey brick in herringbone bond



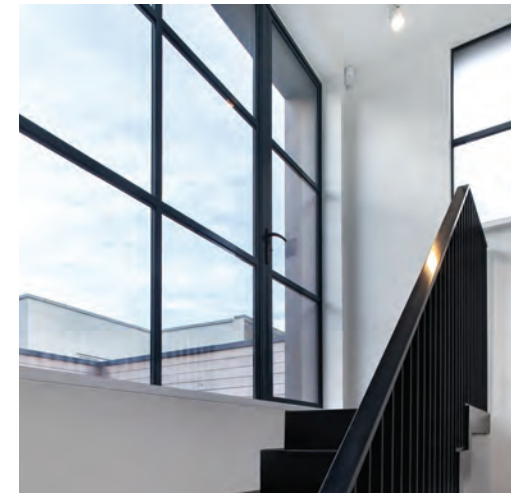
Accent details in white / grey brick



Details in grey metal / perforated metal



Metal fin balustrade



Metal framed windows

6. Design Response

6.6 Appearance

6.6.5 Scale and Massing

Careful composition of the site layout and massing, resulting from extensive discussions with key stakeholders, helps to ground the proposed scheme within its context, sensitively addressing relationships to its surroundings while also ensuring that it marks its key location as a gateway to Reading.

As illustrated on this page, the scheme sits much more comfortably within the wider townscape than the existing gas holder which currently represents an imposing and incongruous feature. Notwithstanding this, the scheme has been sensitively designed to work within the context in its own right, creating harmonious relationships and providing a focal point in various vistas.

The scheme, ranging from three to nine storeys, provides a transition from west to east with the tallest element of the scheme at the eastern corner of the site, marking its key location. The industrial heritage and waterside setting of the site have been key influences in designing the form of the buildings, including expressing the roofscape, a common feature of industrial buildings, all of which is intended to help to create a strong sense of place and character.

For further information regarding townscape refer to a separate document prepared by Montagu Evans.



1. Existing view from Cumberland Road, looking north



1. Proposed view from Cumberland Road, looking north



2. Existing view from Liverpool Road, looking north west



3. Existing view from Kennet Side, looking north east



4. Existing view from Kennet Side, looking south west



2. Proposed view from Liverpool Road, looking north west



3. Proposed view from Kennet Side, looking north east



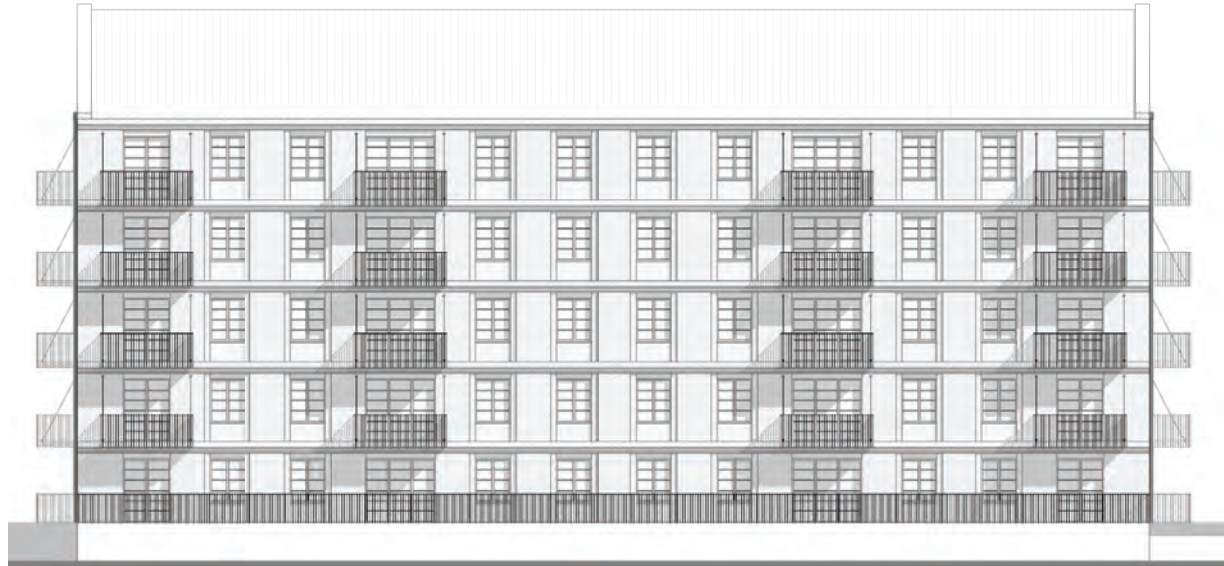
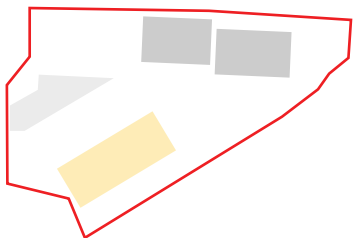
4. Proposed view from Kennet Side, looking south west

6. Design Response

6.6 Appearance

6.6.6 Block A

The river-fronting block A is a mid-rise building of a simple form with a design based on a regular grid of solid elements and openings. The lower height and riverside location are emphasised with a strong horizontal character and the inspiration from industrial buildings is underlined by the overarching principles of repetition and rhythm, helping to create a strong and efficient design. While these principles are at risk of producing a monolithic building and emphasising its scale, the finer grain of the detailing helps to bring visual interest and breaks the overall appearance into smaller elements.



South elevation



Proposed verified view from Kennet Side, looking north east

6. Design Response

6.6 Appearance

6.6.7 Block A - Facade Treatment

The overall massing is a simple volume with a double pitched roof, a common feature of industrial buildings.

The main features of the elevations comprise horizontal bands to emphasise the overall character of the building. The bands include a contrasting grey and white feature inspired by the Huntley and Palmers Factory with a secondary band of a soldier course detail.

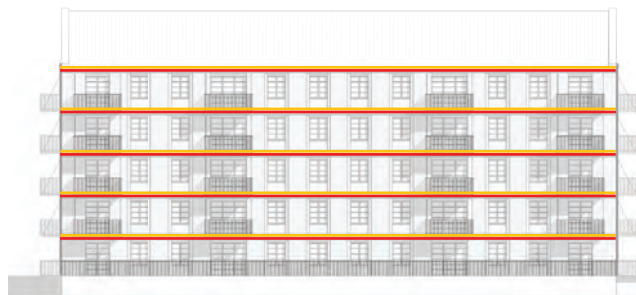
The regular grid of openings creates a rhythm of regular brick piers that create a secondary layer of vertical features, breaking up and articulating the building into smaller, more elegant visual elements. While clearly legible, the contrasting bands ensure that the emphasis remains on the horizontal character.

The finer detail of soldier course reveals and lintels creates yet another texture of the facade, complimented by Crittall-like windows and metal balconies that are carefully designed to align with soldier course banding.

The overall design creates a rich appearance with real depth and character that reflects and celebrates Reading and the industrial heritage of the site. Similar details and principles are developed further through the design of the rest of the scheme.



Facade diagram - massing



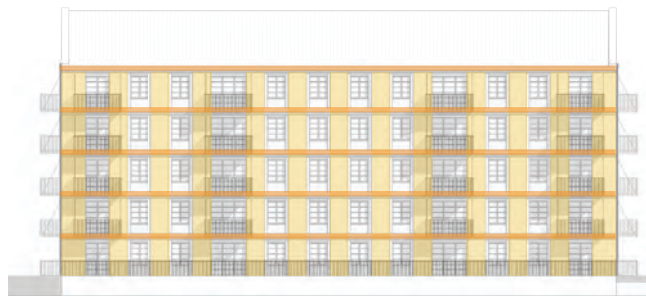
Facade diagram - horizontality



Stadtpark Quartier, KBNK Architekten



Hessenberg, Awg Architekten



Facade diagram - vertical features



Facade diagram - finer detail



Ifflandstraße, KBNK Architekten



Cobalt Place, AHMM

6. Design Response

6.6 Appearance

6.6.8 Block A - Details



Elevation detail



6. Design Response

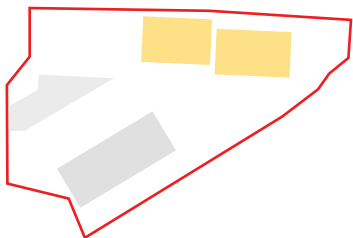
6.6 Appearance

6.6.9 Block B

Block B, as the tallest building within the scheme, is marking the gateway into Reading. As such, it has been designed to emphasise vertical expression. To reduce the visual impact and perceived overall scale, block B has been designed as a split block and the massing has been broken into three principle elements, each with its own distinct character.

There is a strong sense of repetition and rhythm with limited number of window types, a nod to the treatment of old factory buildings. This will provide efficient design to ensure the scheme can be delivered and also help with legibility of the overall concept.

Reveals and brick detailing are designed to add depth and visual interest and similarly to block A, the design utilises materials readily available in the area.



Block B South Elevation

7. Design Response



Proposed verified view from Kennet Side, looking south west

6. Design Development

6.6 Appearance

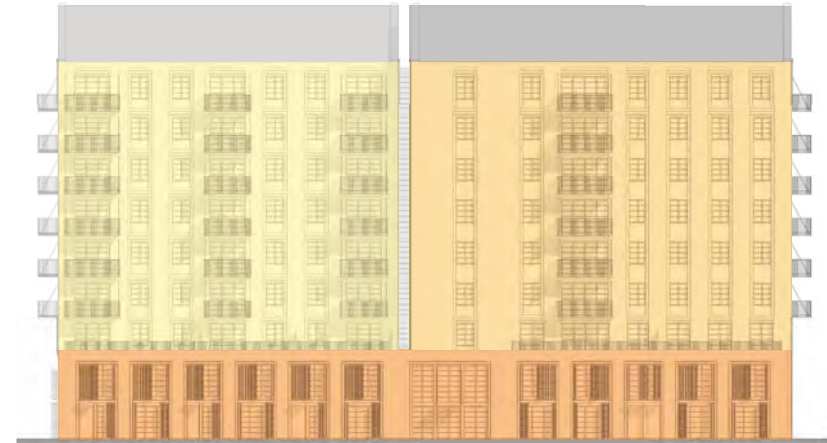
6.6.10 Block B - Facade Treatment

The building has an expressed base in the form of projecting duplex apartments, providing active frontage in front of the carpark arranged behind and also unifying the elevational treatment at ground floor level and bringing human scale to the public space.

As the “marker” building of the scheme, the elevations are designed with vertical emphasis, expressed by rigorous repetition of windows and balconies and underlined further by secondary vertical features such as recessed reveals and soldier course details.

Secondary horizontal features help the two principle volumes have very distinct characters. The soldier course detail repeats on every floor on the western element, creating an appearance of a grid, while this detail occurs only at the bottom and the very top on the eastern element, creating a much more vertical emphasis.

Both elements use the same red brickwork but with different mortar, introducing a subtle change in tonality. Additional details such as soldier coursing, herringbone brick panels and window sills provide visual interest and finer grain of detail to help express the facades and give the buildings character.



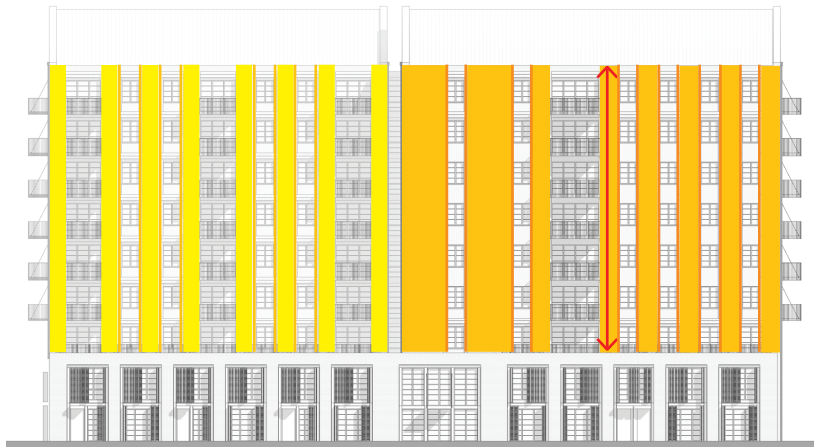
Facade diagram - principle building elements



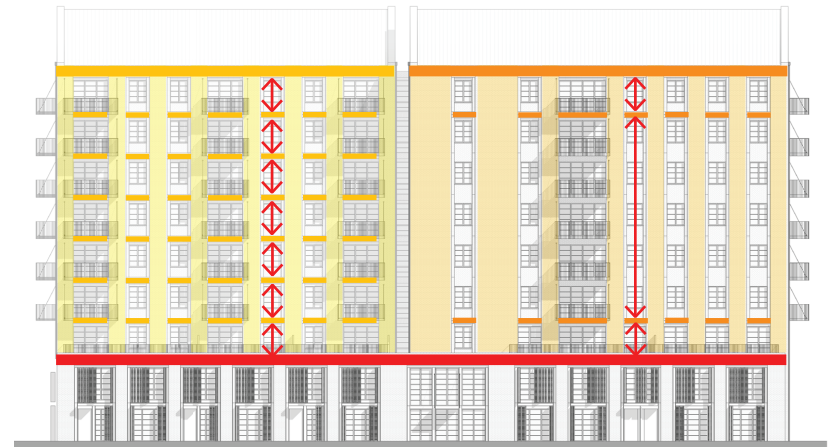
Corner house, DSDHA



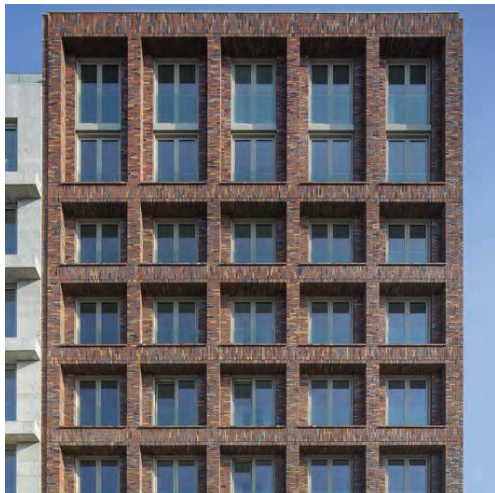
Harbour house, De Zwarte Hond



Facade diagram - verticality



Facade diagram - horizontal features



Houthaven, Marcel Lok Architect



Barts Square, Shepard Robson



New York Village, MSM architecture



Blossom Street, DSDHA

6. Design Response

6.6 Appearance

6.6.11 Block B - Details (West Element)



Elevation detail



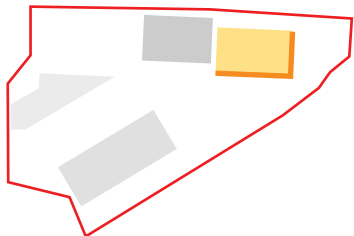


6. Design Response

6.6 Appearance

6.6.12 Block B - Detail (East Element)

- Brickwork with light mortar (red)
- Metal framed window (dark grey)
- Metal sill (dark grey)
- Herringbone brick detail (grey multi)
- Metal framed balcony doors (dark grey)
- Soldier course detail (to match brickwork)
- Balcony with metal fin balustrade and suspension support (dark grey)



Elevation detail

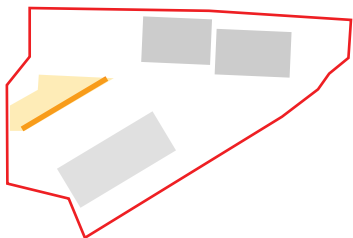
6. Design Response

6.6 Appearance

6.6.13 Block C

The smallest of the three blocks within the scheme is at the north side of entrance to the site, creating a transition from the existing terraces to the west.

The facades are designed using the same elements and principles as used on the other blocks, and simplified to reflect the smaller scale of the building.



South elevation, facing page: elevation detail



7. Access

7.1 Overview

The scheme has been carefully designed in terms of access and movement across the site, integrating vehicles, cyclists and pedestrian in a harmonious way. The principal access route for all is along the central “street” providing a clear and legible way through the site, be it for residents or visitors alike.



7. Access

7.2 Vehicular Access

Access to the site remains in the same place as currently existing, from Alexander Turner Close to the west of the site.

The scheme is designed around a central “street” between blocks A and C, providing easy and clearly legible access throughout the site from the entrance to the integrated carpark.

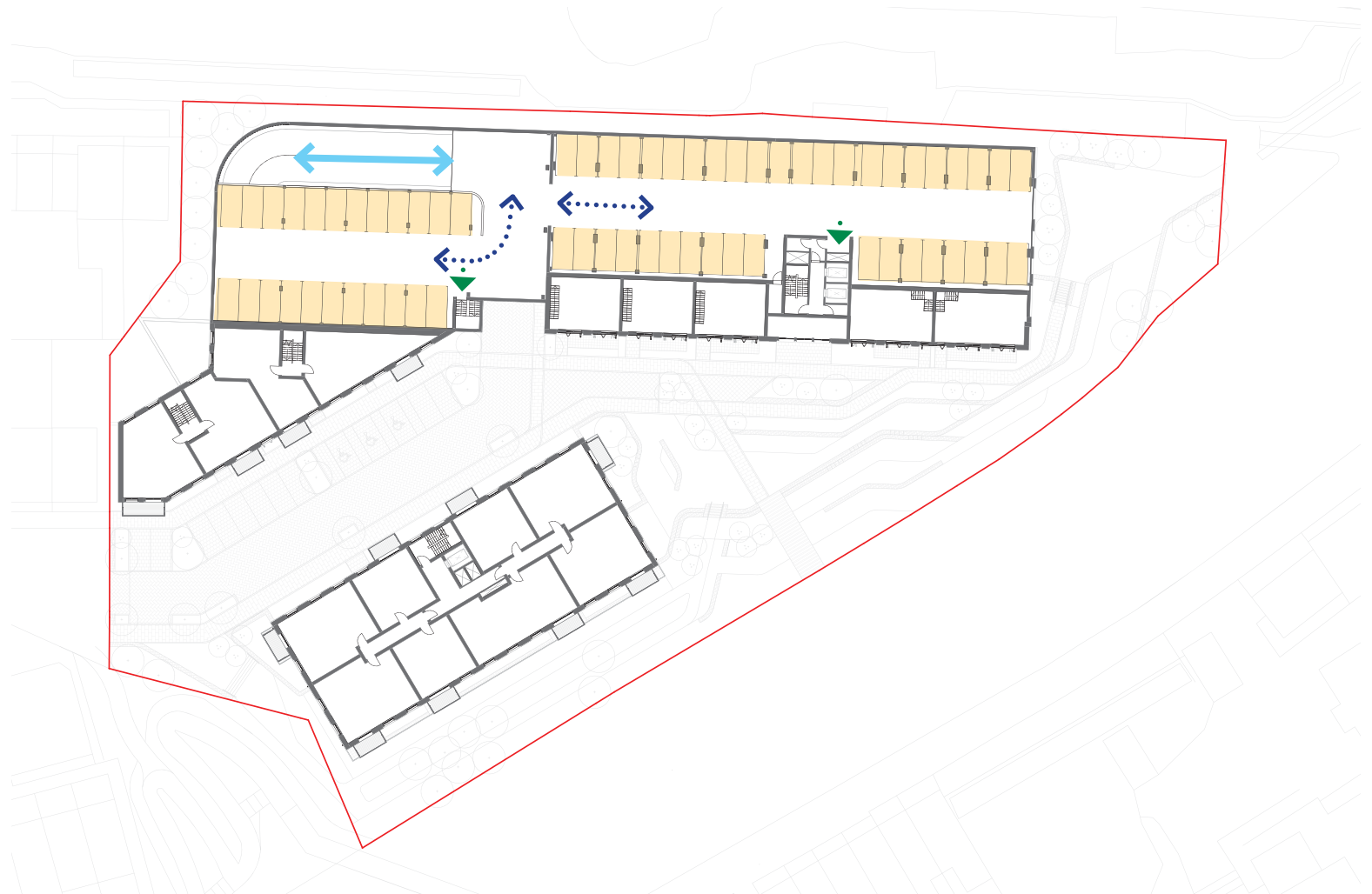
The proposals provide a total of 127 parking space, majority of which are accommodated within the carpark which has been carefully designed to limit the visual impact. The on-street parking is limited to 13 spaces, 3 of which are allocated as wheelchair accessible, serving block A.

The car park is designed on two floors with a ramp located in the north-west corner of the site. The carpark sits along the northern boundary and acts as a buffer towards the railway. There is direct access from the carpark for residents of block B at each of level. All other residents will use a separate stairwell, adjacent to the entrance to the carpark.



Vehicular access diagram - ground floor

-  Central street
-  Car parking space
-  Car parking space (wheelchair)
-  Space with electric charge point
-  Vehicular access
-  Vehicular ramp
-  Residential access



Vehicular access diagram - first floor

7. Access

7.3 Pedestrian Access

Pedestrian movement across the site is designed to be as easy as possible. All main entrances to the individual buildings and directly accessed dwellings are on or clearly visible from the central, tree lined street.

In addition, the public space has a wide range of paths, including potential future routes across and beyond the site in line with the aspirations of RBC.

-  Central street
-  Main pedestrian route
-  Secondary pedestrian route
-  Potential future route
-  Residential block entrance
-  Ground floor flat entrance



Pedestrian access diagram

7.4 Access for Cyclists

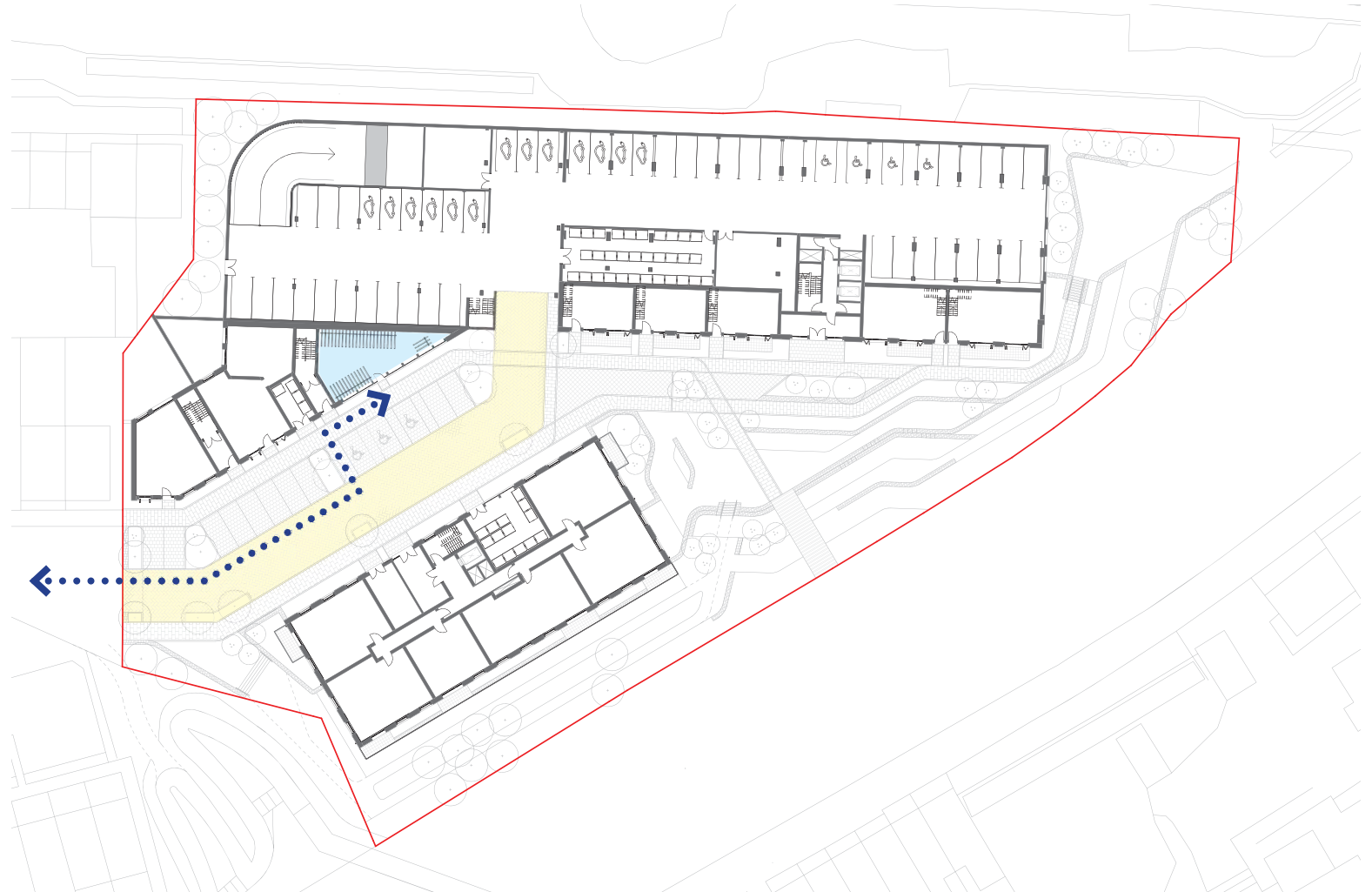
A large emphasis has been placed on providing quality facilities for promoting cycling as a sustainable form of transport.

There is a central cycle store providing secure long stay storage with 74 parking spaces. The store is located in the centre of the site for ease of use by all residents.

- Central street
- Cycle store
- Cycle access



Cycle access diagram



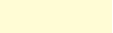
7. Access

7.5 Access for Deliveries & Refuse

The central street is designed with a turning head at the eastern end for ease of movement of vehicles for deliveries and refuse trucks. Each building has a dedicated refuse and recycling store which is easily accessible from respective core.

The number of refuse bins provided is in line with RBC's requirements, and allows for general waste, recycling and food waste.

Block A 15 x 1100l Eurobin (50% for recycling)
Block B 33 x 1100l Eurobin (50% for recycling)
Block C 4 x 1100l Eurobin (50% for recycling)

-  Central street
-  Refuse store
-  Vehicular movement
-  Refuse store access
-  Residential block entrance
-  Ground floor flat entrance



Deliveries and refuse diagram

7.6 Fire Strategy

7.6.1 Overview

The proposed scheme comprises three main residential blocks, and also incorporates a car parking structure with shared access within the scheme, located between block B and C in the north-west corner of the site.

The scale and height of the blocks vary, and so do the flat layouts within the blocks, including apartments with an open plan layout. As a result, each building needs a different strategy to comply with the fire safety requirements (Part B) of the Building Regulations 2010.

As a baseline, it is assumed that the scheme will follow the recommendations outlined in Approved Document B (ADB), and also BS 9991:2015 for open plan apartments.

The fire strategy for the scheme has been carefully considered and Hoare Lea has been consulted throughout the design process to ensure compliance. The details highlighted on the following pages are a summary of the principle fire safety matters which are included within the design.

The maximum travel distance in the car park is 25m in single direction and 45m where travel is possible in more than one direction. A protected and smoke ventilated lobby is needed between the car park and residential block, with smoke ventilation via a 0.4² natural vent or mechanical system. Disabled refuge spaces (900mm x 1400mm) needed where no level access is possible.

External fire spread analysis will be needed to establish if solid/fire rated construction is needed to any elevation close to the boundary.

Smoke ventilations in covered car park is either via mechanical means (10 ACH) or natural (2.5% with 0.625% on opposing sides).

7. Access

7.6 Fire Strategy

7.6.2 Site Access

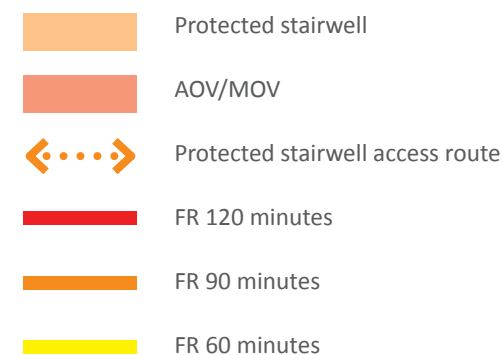
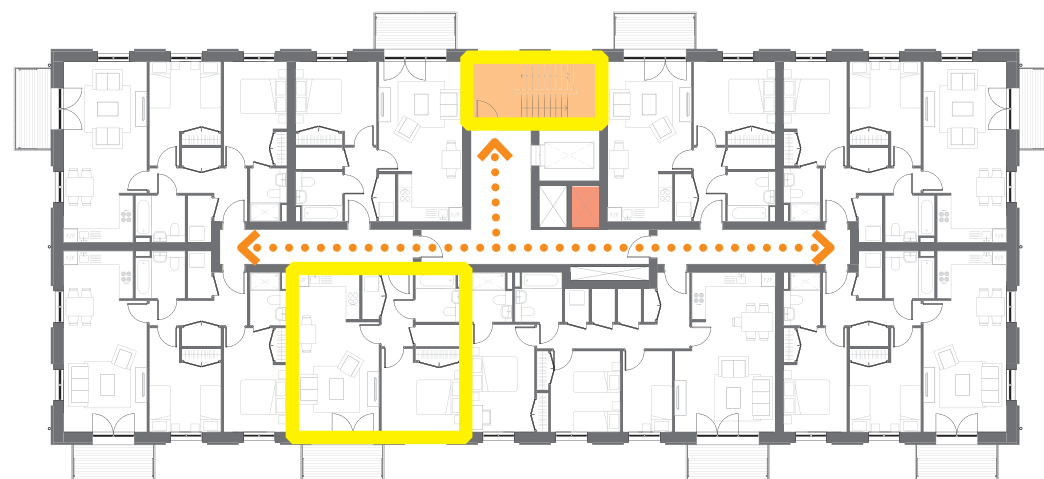
Movement for a fire engine is the same as for deliveries and refuse vehicles, with a turning head allowing for a three point turn.



7.6.3 Block A

The overall height of the block is below 18m.

- The fire resistance (FR) of the main structural elements will be 60 minutes; including partition walls between flats, partitions between flats and common corridor, and also walls enclosing protected stairs.
- All apartment entrance doors will need to be FD30 rated and self-closing.
- Apartments will be provided with protected entrance halls (FR30 walls and FD20 fire doors) and travel distances in the protected halls will be no more than 9m.
- A dry riser will be installed in the stair with outlets at each floor level. This will at all points be visible and within 18m of a fire appliance access location.
- Smoke ventilation will be required within the protected common corridor. The smoke ventilation in this protected lobby will be via a 1.5sqm AOV shaft; or a 0.6sqm mechanical smoke shaft.
- The dead-end corridors with distance of no more than 7.5m do not require smoke ventilation where there is an additional smoke ventilated lobby to the stair.



Typical floor diagram

7. Access

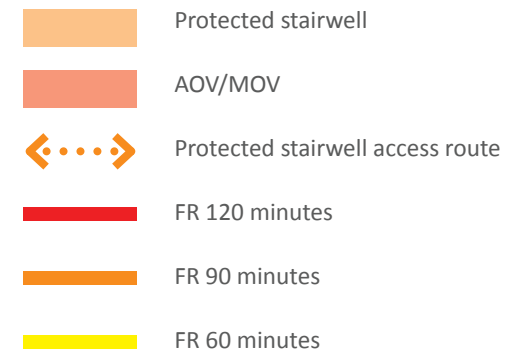
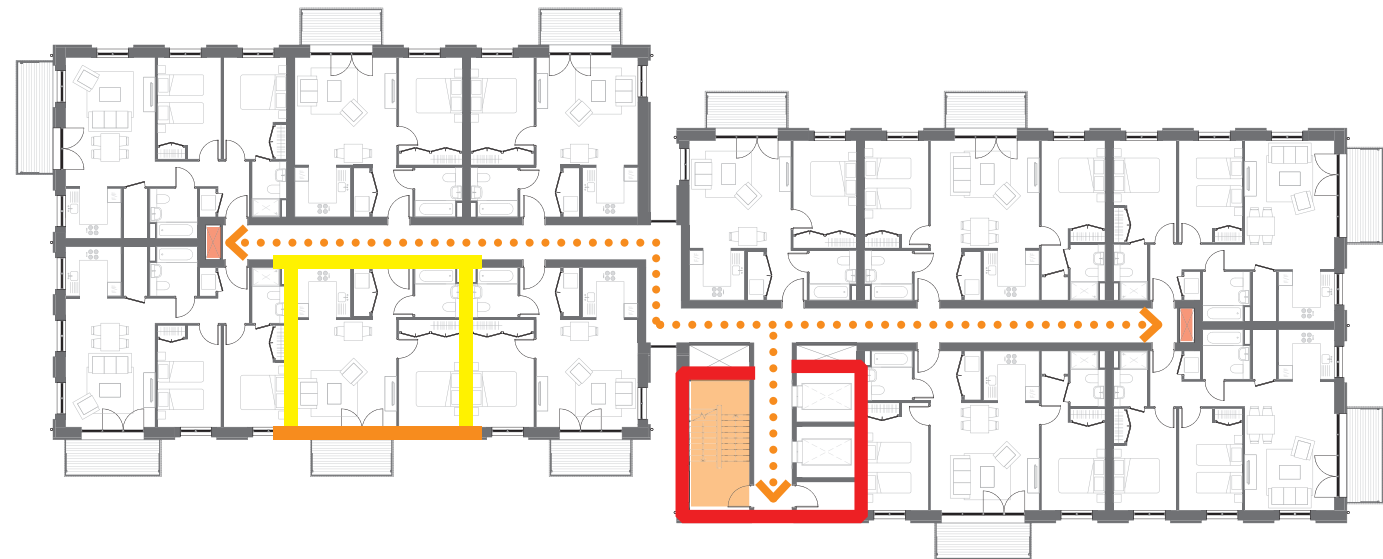
7.6 Fire Strategy

7.6.4 Block B

Height greater than 18m and open plan flat layouts will require a different overall strategy than block A. The points below summarise differences and additional measures.

- The fire resistance (FR) of the elements of the main structure will be 90 minutes.
- A fire fighting stair will be required. As a result FR around this core will be 120 minutes and this firefighting shaft will also require a fire fighting lift.
- There will be a requirement to provide residential sprinklers to BS 9251 and LD1 fire detection system to compensate for the open plan designs. Open plan apartments are to comply either with guidance of BS 9991:2015 or a fire engineered justification is required.
- Maximum travel distance in the common corridors in single direction of approx. 25m are noted. Therefore, a fire engineered smoke ventilation system is needed, comprising 2x mechanical smoke extract shafts provided with reversible smoke fans. These will be subject to detail design by smoke control specialist as the design develops.

Note: Following the recent change to the regulations in December 2018, as the residential premises are >18m the external wall shall be constructed with products that are of European Classification A2-s1, d0 or Class A1, classified in accordance with BS EN 13501-1:2007+A1:2009 entitled "Fire classification of construction products and building elements."



Typical floor diagram

7.6.5 Block C

This building is of limited height, consisting of only three floors and with a height below 18m.

Due to the height of this building there is no requirement for a protected lobby, provided that the apartments have internal protected hallways.

Each apartment is to be accessible within 45m of location of fire appliance access point.



8. Microclimate

The application seeks permission for the erection of new buildings ranging between 2 and 9 storeys in height. At 9 storeys, the tallest element of the proposed development, Block B, would not constitute a tall building when considered against the planning policies of Reading Borough Council. A full wind and microclimate assessment is not therefore, required to accompany this application.

In designing the development consideration has however, been given to the proposed massing of the scheme and the design of the proposed layout has had regard to the need to provide shelter at the pedestrian level, wherever possible, whilst also seeking to avoid deflecting winds down to pedestrian level or channelling winds between the built form. The significant landscaping proposals across the site will also assist in limiting the impact of any wind conditions at the pedestrian level.



9. Summary

The proposal converts an existing brownfield site, contaminated due to its historic use and the last remaining industrial site within otherwise residential area, into a new residential development. The principle of residential use has been supported, both at a local and strategic level, and it is therefore considered that the provision of new homes is appropriate and will contribute to meeting relevant plan targets.

In the course of developing the proposed scheme the project team engaged in extensive consultation process, thoroughly analysed the site context and carefully considered the design of the scheme in terms of its site layout, scale and massing. The scheme has been thoughtfully crafted to address feedback received to ensure that it responds sensitively to its context and delivers on the aspirations of the site to mark the gateway into Reading.

The scheme provides 130 new high quality homes in a range of types, sizes and tenures. In addition, an integrated car park and a secure cycle store are also provided. Contemporary interpretation of architecture inspired by the industrial heritage, active frontages and high quality landscape scheme create a strong sense of place with a rich character.

The proposed scheme delivers a number of benefits which are summarised as follows.

- 130 new high quality homes with a great variety in the mix and sizes, including the provision of affordable housing on site
- 127 car parking spaces, within a fully integrated carpark with a green roof minimal visual impact and
- The three principal buildings are arranged around a central street with a clear access route and a defined sense of arrival
- The site layout allows for a larger public open space that can be enjoyed by the future residents and visitors alike
- High quality landscape scheme providing significant environmental and landscape improvements
- There is a clear hierarchy of volumes, rising from terraced houses to the west to a tall slender element marking the gateway to Reading to the east
- High quality architecture rich in detail, inspired by the local industrial heritage and using locally sourced materials, acting as a focal point at this key gateway location



ColladoCollinsArchitects