Potato Wharf – Blocks 3 & 4



Design and Access Statement – January 2017

lendlease

WEEDON architects

1. **Introduction**
   - 1.1. Proposal Introduction
   - 1.2. Design Process
   - 1.3. Aims
   - 1.4. The Team

2. **Site Analysis**
   - 2.1. Location
   - 2.2. Historic Context and Character
   - 2.3. Site Photographs
   - 2.4. The Site

3. **Planning Policy and Relevant Planning History**

4. **Design Opportunities and Constraints**
   - 4.1. Design Opportunities
   - 4.2. Design Constraints
   - 4.3. Conclusion

5. **Design, Concept and Proposed Scheme**
   - 5.1. Site Concept and Layout
   - 5.2. Building Concept
   - 5.3. Proposed Scheme
     - 5.3.1. Use
     - 5.3.2. Amount
     - 5.3.3.Scale
     - 5.3.4.Appearance
     - 5.3.5. Landscaping
     - 5.3.6.Security
     - 5.3.7. Sunlight / Daylight Penetration and Wind Analysis
     - 5.3.8.Sustainability
     - 5.3.9.Management and Maintenance
     - 5.3.10. Refuse Strategy
     - 5.3.11. Listed Building Considerations

6. **Access**
   - 6.1. Multi-modal connectivity
   - 6.2. Foot / Bicycle
   - 6.3. Metrolink / Rail / Bus
   - 6.4. Private Car
   - 6.5. Car / Cycle Parking
   - 6.6. Approach to the buildings
   - 6.7. Emergency Access and Egress
   - 6.8. Emergency Vehicle Access

1. Introduction

1.1. Proposal Introduction

This Design and Access Statement is being submitted in support of a new full application for the next two apartment blocks at the Potato Wharf development, Castlefield, Manchester. This design and access statement has been prepared by Weedon Architects for Lendlease Residential (North West).

The application follows on from the recently completed (Spring 2015) Block 2, Potato Wharf (application ref: 082244/FO/2007/C3), and the previously completed Block 1, Potato Wharf (application ref: 082244/FO/2007/C3). Block 3 & 4 were originally approved in November 2015 (application ref: 109335/FO/2015/C1) when the scheme was proposed as a traditional Open Market Sale scheme (OMS).

This application proposes two further residential blocks to the west of Blocks 1 and 2 on land that is currently used as a concrete works, as well as a link building, to join the two blocks on the ground and first floor. The two blocks along with the link building will form a Build to Rent scheme. The two blocks referred to as Block 3 & 4 will provide a mix of residential accommodation (1 and 2 bed apartments and a 2 bed Townhouse) in buildings that will complement the existing block's in terms of scale, massing and architectural treatment. The link building will house the Build to Rent required communal facilities such as a gym, multi-function room and a lounge/club room area.

It is proposed that car parking for residents will be located under the viaducts and the existing in-filled railway arch will be maintained and used for cycle parking for the development.

The application for planning permission is described as:

"Application for Full Planning Permission for the demolition of existing buildings and plant; construction of two residential buildings (Use Class C3) with ground floor residential amenity areas, public realm and landscaping, access and servicing arrangement, car parking and associated works; and Listed Building Consent for works within the curtilage of a Listed Structure associated with the creation of surface car park and secure bicycle store"

The purpose of this statement is to describe in detail the site, surroundings, relevant planning and design policy and guidance and the concepts and principals behind the development of the site.

This statement should be read in conjunction with the submitted drawings and associated reports.

1.2. Design Process

The design process involved an appraisal of the existing site constraints and context, a study into the remediation of any contamination on site and a study and appraisal of the local character of the area. Drawing on the design strengths, quality and principals from the existing apartment blocks, the design has evolved following dialogue with the relevant City Council departments and local public consultation undertaken over recent months.

1.3. Aims

The project aims to deliver a high quality, sustainable Build to Rent development that is sensitive to the historic context of Castlefield and the surrounding areas. The project aims to ensure that the new buildings are carefully integrated within the surrounding context to create a sensitive transition between the existing viaducts, canals and existing apartment block's.

The key aims of the development are as follows:

- To achieve an integrated development, compatible with the immediate existing pattern of development
- To provide a greater level of amenity and opportunity for social interaction, as part of the Build to Rent scheme
- To build upon the character and sense of place established on previous phases
- To create an attractive place for people to live and enjoy and to foster a strong sense of community
- To encourage cycle use with a high degree of cycle (and pedestrian) permeability across the site
- An emphasis on quality and designing places for people
- The efficient use of land
- To re-use previously developed land, bringing it back into use to make a positive contribution to its surroundings.

1.4. The Team

1.4.1. Client

Lendlease Residential (North West) Ltd.

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Contact: James Amos

1.4.2. Architect

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31 Blackfriars Road Salford Manchester M3 7AQ

Contact: Rachel Devine

1.4.4. Planning Consultant

Deloitte LLP

1 City Square, Leeds, West Yorkshire LS1 2AL

Contact: Peter Gleave

1.4.5. Other Consultants

- Structure & Infrastructure (incl. Flood Risk)- Shepherd Gilmour
- Mechanical & Electrical Engineers– Hulley & Kirkwood
- Ecology (incl. tree survey) – WSP / AECOM
- Microclimate – Urban Microclimate
- Daylight and Sustainability – Hulley & Kirkwood
- Heritage Statement - Stephen Levrant Heritage Architecture Ltd / Turley Heritage

2. Site Analysis

The proposals are based on a thorough assessment of the site's immediate and wider context, undertaken through desk based research, site visits and observations and consultation. The key findings of this work are set out below.

2.1. Location

The site is situated in the historic Castlefield area of Manchester. The site is close in proximity to the A57 to the west, a major arterial road linking the City centre to the national motorway network. Chester Road and Deansgate are in close proximity to the south of the site. Liverpool Road is located to the north east of the site – all these roads lead into Manchester City centre which is within walking distance (approx. 0.8 miles to St Peter's Square). The site therefore is well located in relation to pedestrian and vehicular routes into the city centre.

The site is well served by Public Transport, with local bus stops situated on Regent Road and a local train station / tram stop in nearby Deansgate. All local Public transport is accessible with a 10 minute walk from site.



Fig A. Site Location Plan

2.2. Historic Context and Character

Castlefield is an area of historic importance, the centre of the development of the Industrial Revolution in the late 18th and 19th century. It is an area of architectural importance, containing the site of a Roman Fort, Victorian viaducts and canal structures, many of which are listed (nationally and locally).

The site is located within the Castlefield Conservation area. This area has evolved sequentially over a significant period of time where a range of building's and engineering innovations have proliferated,

The Roman's originally built a Fort in Castlefield due to it being elevated ground and protected by the River's Irwell and Medlock. These rivers made it easier to build the later canal's as these natural rivers could be diverted to maintain water levels. Canal basins and wharves were built to satisfy the demands of the Industrial Revolution with Castlefield being an important junction of canal's and connections to the rivers. Canals, basins and wharves became so numerous that the only practical method of introducing railway transport through the area was by building viaducts – both brick and cast-iron. The result which is still present today is a multi-level environment of Victorian infrastructure that is unique in the world.

By the 1850's there were distinct zones in the area dedicated to housing, warehouses and transport. Liverpool Rd was an important highway, sloping gently down to the River Irwell, whilst the area that was previously the Roman road connecting the fort with the north was redeveloped for other uses and was to become Deansgate.

Although the variety of building materials used in Castlefield is very wide, they tend to be more rugged with an industrial / warehouse character especially when compared to other parts of the City Centre. Brick, Stone and slate are extensively used, with this traditional palette broken up with the use of cast iron and metalwork. The most impressive building components in relation to the site are the large cast-iron columns that support the cast iron lattice beam railway viaduct above.

The external surfaces were originally required to be very durable due to extensive loading, unloading and transporting of goods. Granite setts were used extensively as they were the most durable material available at the time. After many years of use, the top surfaces of these granite setts have become smooth and rounded.





Fig B. Historic Photo





Fig C. Photo of viaducts

2.3. Site Photographs

The following photographs describe the wider context of the site.

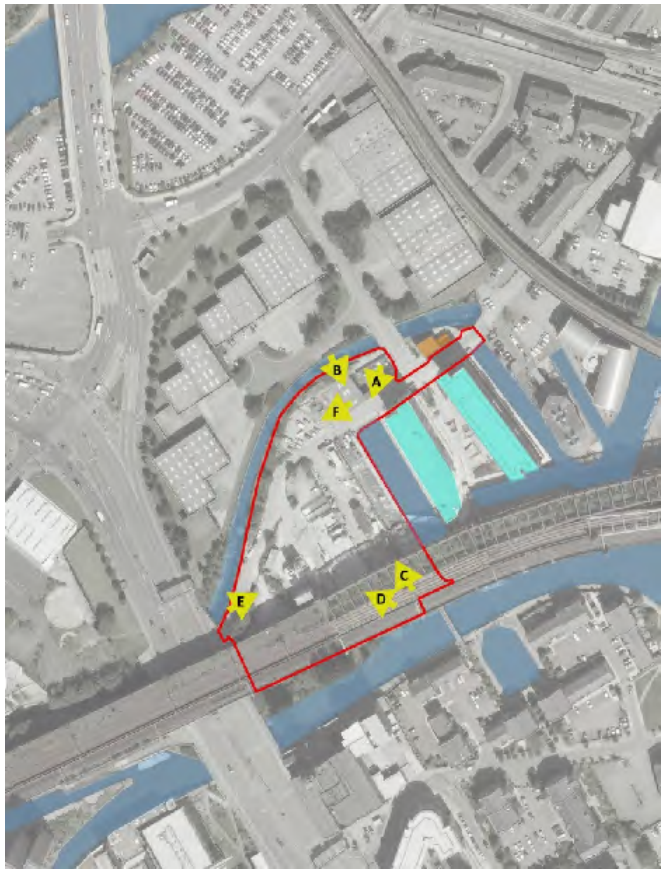


Fig D. Site Photograph Location Plan



Fig D.A Site Photo A



Fig D.B. Site Photo B



Fig D.C. Site Photo C



Fig D.D. Site Photo D



Fig D.E. Site Photo E



Fig D.F. Site Photo F

2.4. The Site

The site itself is bounded by the River Medlock to the north, the Bridgewater canal to the south, the A57 to the west, and a canal basin (connected to the Bridgewater canal) and earlier phases of Potato Wharf redevelopment to the east. The southern part of the site is spanned by three viaducts –two are in use (Metrolink and National Rail) and one is redundant. The area of the site is approximately 3.01 acres / 1.21 hectares.

Currently there is an existing concrete works on site, a small two storey building that was originally used as the offices of a builder's merchants and the three Victorian viaducts that cross the southern portion of the site. Two of these viaducts are constructed from brickwork and one from iron work. The iron viaduct is a Grade II listed structure. The site is currently accessed from Potato Wharf.

Much of the site is hardstanding, with a mixture of tarmac, original granite setts and concrete. The Canal basin is edged in stone and there is a brick wall forming the edge against the River Medlock. The River Medlock is considerably lower than the surrounding ground level.

The site is generally level and is classed as Flood Risk Zone 2 necessitating flood alleviation measures as part of the proposed scheme.

The area between the viaducts and the Bridgewater canal has a number of tree's present and is currently open space. It is not intended that this part of the site forms part of the application.

There are a number of trees on site, none are considered mature and are not subject to Tree Preservation Orders. However they are protected by virtue of their location within the Conservation Area. Refer to the accompanying tree survey prepared by for more information (Tree Survey and Constraints Advice).



Fig E. Aerial Photo showing application boundary

3. Planning Policy and Relevant Planning History

Refer to the accompanying Planning Statement prepared by Deloitte for further details.

4. Design Opportunities and Constraints

Following a detailed appraisal of the site, key opportunities and constraints have been identified for the development of the site.

The context and earlier developments have a significant impact on the proposals put forward in this application.

4.1. Design Opportunities

- Unique location with regard to its historical context and waterside location
- Views and vistas of Victorian viaducts and canal structures
- Site is within easy walking distance of commercial, leisure and administrative centre of Manchester
- A suitable underused brownfield site that can be brought back into more active use.
- Provide more activity in the area during the day and evenings
- Open up an underused section of the River Medlock
- An opportunity along with the earlier completed residential blocks to create a new community within Castlefield.
- Re-create (along with Block 2) activity around the canal basin, framing either side of it similar to when the site had industrial activity.

4.2. Design Constraints

Design and site constraints are outlined below:

- Requirement to avoid significant adverse impact on the visual appearance of the adjacent Victorian Railway viaducts and conservation areas (refer to accompanying Visual Impact Assessment by Stephen Levrant Heritage Architecture).
- Flood plain and flooding alleviation measures necessary
- Massing to be complimentary to the existing Potato Wharf Block 1 and 2
- Avoid encroaching on surrounding tow paths, with the River Medlock and viaducts converging making the site narrower.
- Right to enjoy benefits under the viaducts but no development to take place underneath.

4.3. Conclusions

The list below represents the guiding principles that the scheme aims to address.

- Block 3 and 4 to be set out to frame/ respect the viaducts beyond.
- Block 3 is to relate to the position of Block 2 and the canal basin
- The proposed massing is to respond to the viaducts, canals and surrounding Victorian infrastructure, with the link building at a low level to maintain the visual aspect.
- The proposed massing also to relate to Blocks 1 and 2.
- The aesthetic of the building's is to be an evolution of the previous block's so that on completion the four block's all appear related, giving a consistent backdrop / foreground to the listed viaducts.

5. Design, Concept and Proposed Scheme

5.1. Site Concept and layout

The proposed layout seeks to mirror the key principals from Blocks 1 and 2 where there are two large blocks reinforcing the alignment of the canals with a low level link building in-between.

It is proposed that Block 3 sits parallel to the canal basin and along with the existing Block 2 helps to recreate the warehouse relationship that once used to frame either side of these canal basins when the area was a key industrial interchange.

The layout of the proposed blocks and the accompanying landscaping aim to re-connect the area, providing an opportunity for a link back across the canal to the rest of Castlefield should the bridge's owners (not Lendlease) wish to re-open this bridge. The scheme also aims to make walking alongside the River Medlock a more attractive and desirable proposition.

It is proposed that Block 3 straddles the existing road (Potato Wharf) providing a defined end to Potato Wharf, with the access under and through being defined by a double height space clad in glazed bricks, or similar, to juxtapose against the silver grey brick of the rest of the façade. Historical precedents for this are found across Manchester where glazed bricks are commonly used to form the internal finish to railway arches.

Between the two blocks is the low level link building that provides resident community spaces which aims to bring together the residents of both blocks by connecting the building cores and providing opportunity for more social interaction with fellow residents and the building management team. The link also provides access to the private shared garden space.

Car parking will be provided under the three adjacent viaducts to the south of the site. This discrete surface car parking is visually hidden from the main pedestrian thoroughfares whilst still being easily accessible to residents. Ingress and egress is provided along Potato Wharf canal basin, in front of Block 3, providing a traffic free courtyard between blocks 3 and 4.

5.2. Building Concept

Blocks 3 and 4 are conceived as per Block's 1 and 2 as two adjacent forms above a timber plinth. The upper blocks are clad in a silver / grey brick to match Block 1 and 2 ensuring material consistency across the development. The irregularity of this brick in colour adds interest to the façade, contrasting with the solid smooth colour of the feature balcony pods.

The link building will have brick clad areas at the link points to the blocks, with the main central spaces defined by full height glazing to provide a transparency to the building, and view through to the courtyard beyond.

The brick surfaces help the building portray a physical presence responsive to the adjacent viaducts, and surrounding Victorian infrastructure.

The proposed timber bases resonate with the large timber lock gates in the area and the deep recessed windows on the top two floors resonant with the deep slots in the adjacent metal railway viaducts.

The proposed projecting balcony pod's, matching in colour to Block's 1 and 2 have evolved to become an external balcony, allowing the larger apartments to have their own external space. As on the previous phases the justification for these bright vibrant colours is to provide visual contrast with the silver / grey brick and to also reflect the traditional bright primary colours of the historical canal long boats. These vibrant colours will continue through to the link building, highlighting the entrance to the space.

The fenestration of both blocks puts emphasis on verticality in keeping with existing warehouse buildings in the area.

5.3. Proposed Scheme

5.3.1. Use

It is proposed that the scheme is a residential development with additional communal facilities, as well as associated landscaping and car parking

5.3.2. Amount

The proposed scheme comprises the following

- Block 3
    - 29 x 1 Bed Apartments
    - 82 x 2 Bed Apartments
    - 1 x 2 Bed Townhouse
    - Total 112 Dwellings
- Block 4
    - 31 x 1 Bed Apartments
    - 48 x 2 Bed Apartments
    - Total 79 Dwellings
- Both Blocks - Total 191 Dwellings

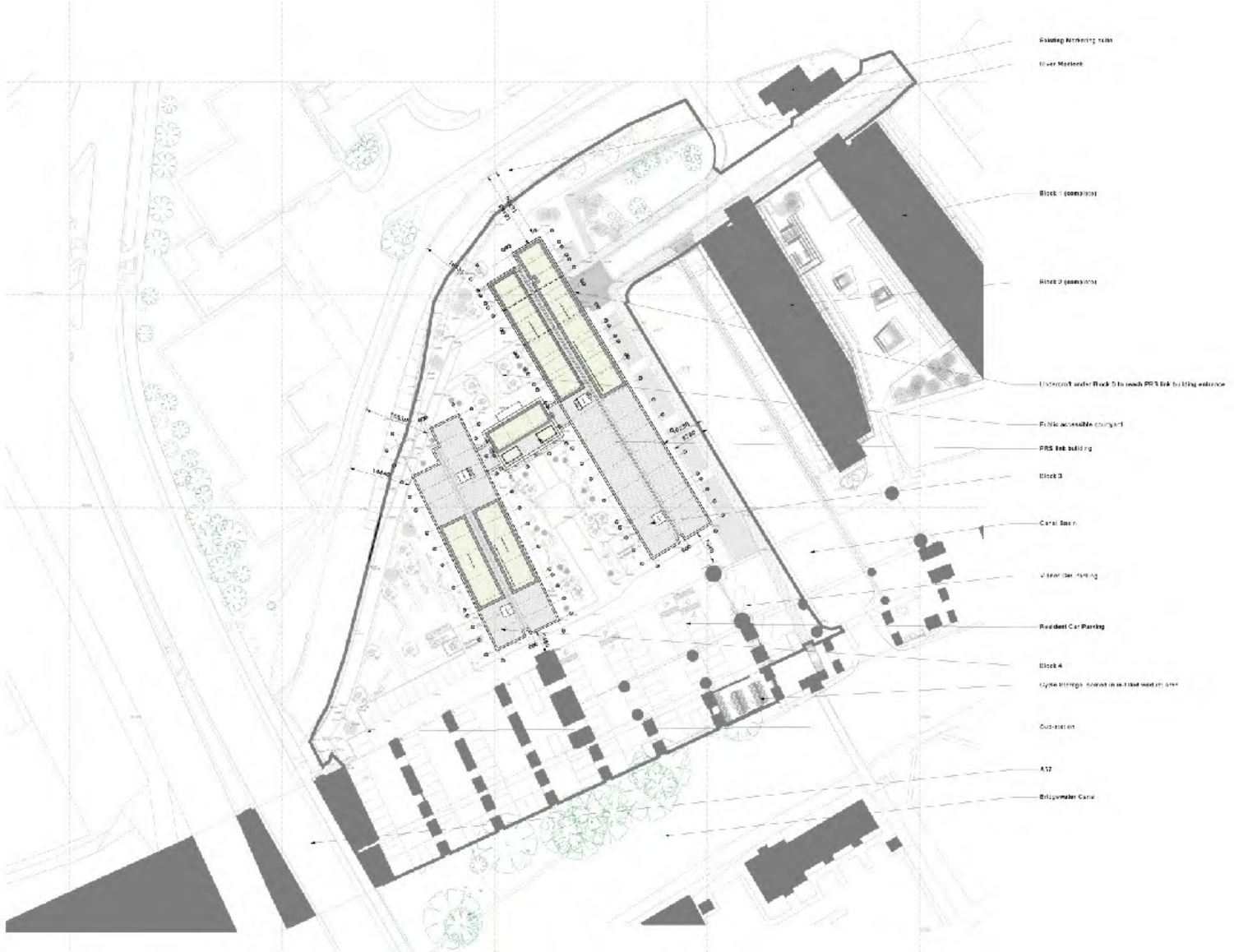


Fig F. Proposed Site Plan

5.3.3. Scale

The scheme seeks to reinforce views along adjacent streets, echo the geometry of the canal basins, reflect the scale of the existing 8 Storey Block's 1 and 2 and provide an appropriate counterpoint to the existing viaducts. The proportions of the blocks also refer to the historic warehouse vernacular of the area.

Therefore both the proposed Block 3 and 4 closely match the height of the existing Block 1 and 2, which are approximately two storeys higher than the closest viaduct to the development.

The width of the proposed blocks is similarly comparative to Block 1 and 2, with the lengths varying to suit the changing shape of the site.

The link building will consist of two storeys, to ensure that the strong linearity of the residential blocks remains and views across the site to the viaducts are maintained. The link building is sub-servient to the scale and massing of the main residential blocks.





Fig F. Photos of the completed Block 2 – showing the relationship between itself and the viaduct – it is proposed that Block 3 and 4 have a similar relationship.

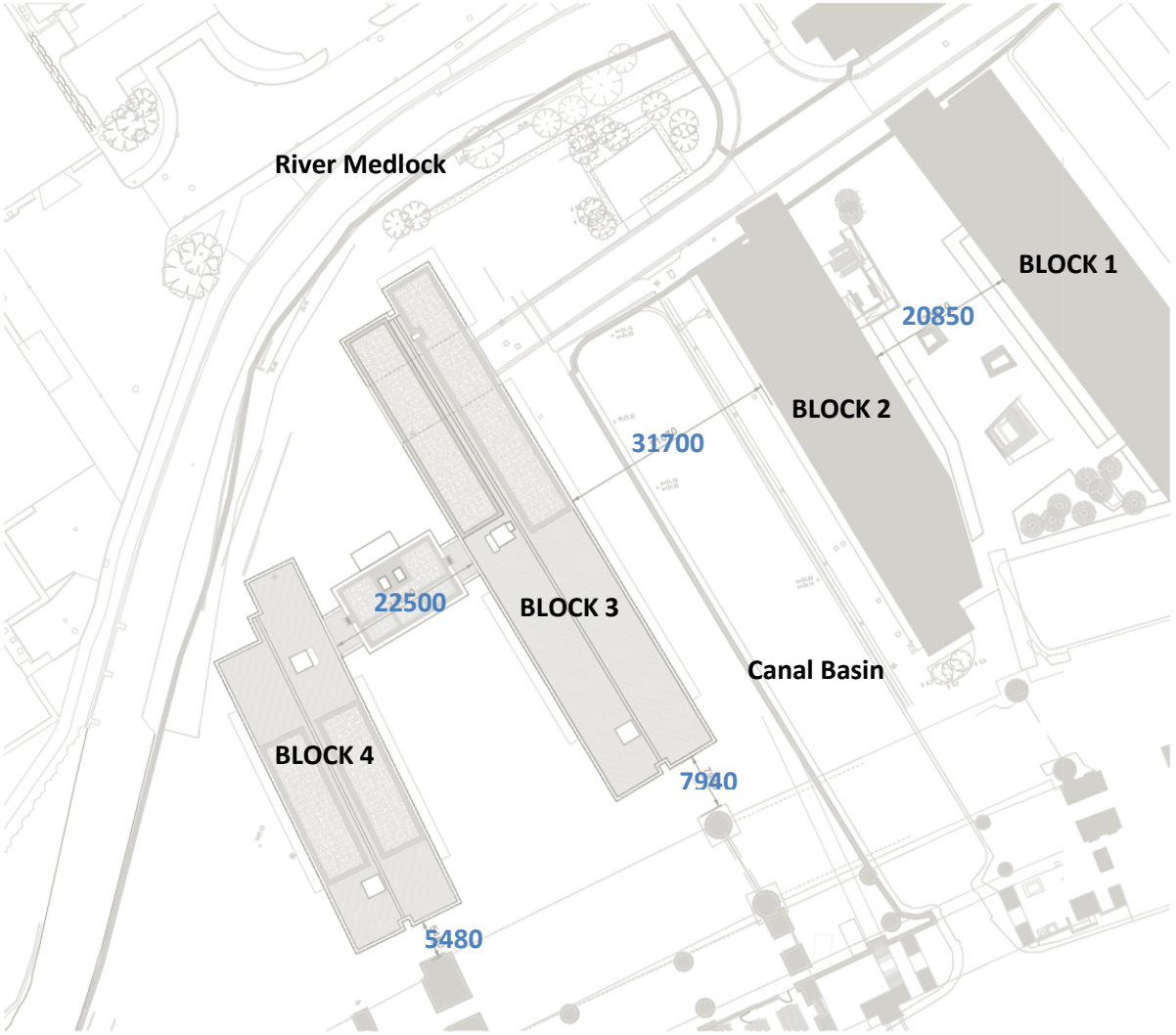


Fig G Site comparison showing the courtyard width of Block 1 and 2 compared with Block 3 and 4.

5.3.4. Appearance

Both block's closely follow the visual precedent set by Block's 1 and 2 –

- timber plinths and terracing on the ground floor providing privacy and security and to give a sense of the building's floating above
- each block is articulated along its major axis, with two readable parts either side of a central corridor. The ends of these corridors are fully glazed allowing a visual connection on all floors to the surrounding area
- the two blocks are slightly mis-aligned so they are relating to the more immediate existing context, Block 3 running parallel to the canal basin / Block 2 and Block 4 sitting at right angles to the viaduct. The mis-alignment as referenced in the original Block 1 and 2 proposals helps reinforce a sense of movement, like two passing canal boats.
- deep window reveals on the upper 2 storeys' relate to the reveals in the metal viaducts and give the building a clear hierarchy.
- deep recessed balconies help break up the mass of the building and helps the colour protruding clad balconies to have more impact.
- all balcony balustrading is metal post and handrail with glass infill panels with simple detailing
- feature colour clad protruding balconies follow a similar theme of Block's 1 and 2 – however these are now external balconies rather than forming part of the apartment itself. This helps provide on a practical level external space for the larger apartments but on an aesthetic level helps give the façade more depth and relief.
- the link building is accessed through a colour clad portico entrance, which protrudes in a similar way to the balconies, to provide a defined threshold to the communal spaces.
- with only the connections back to the blocks clad in brick, the transparent nature of the main communal areas of the link building, with its floor to floor glazing, helps to minimise the buildings impact on the space.
- both blocks will have a bio-diverse roof – which although not easily visible, will be viewable from some of the higher buildings in Manchester and provide biodiversity on the site.
- the link building will have also have a bio-diverse roof, which will be visible from the apartments, allowing the building to blend into the surrounding landscape. Note the roof is not publically accessible and will only be used for plant.

- an expansive single brick type above the timber for the remainder of the building echoes the existing Block 1 and 2 and helps give the building a warehouse type aesthetic and more robust industrial feel that is appropriate for this area. The choice of silver/grey brick was referenced in the original design and access statement for Blocks 1 and 2, and the statement made still applies 'the choice of a silver grey brick responds to the metallic nature of the immediate area – the massive cast iron columns supporting the dark grey lattice beams above.'
- the undercroft under block 3 is a double height space, with the walls partially clad in glazed bricks, or similar material, providing both visual interest and a historical reference to the common Victorian practice of glazed brick lined railway arches.



Fig H Proposed Block 3 Canal side Elevation



Fig I Proposed Block 4 Courtyard Elevation

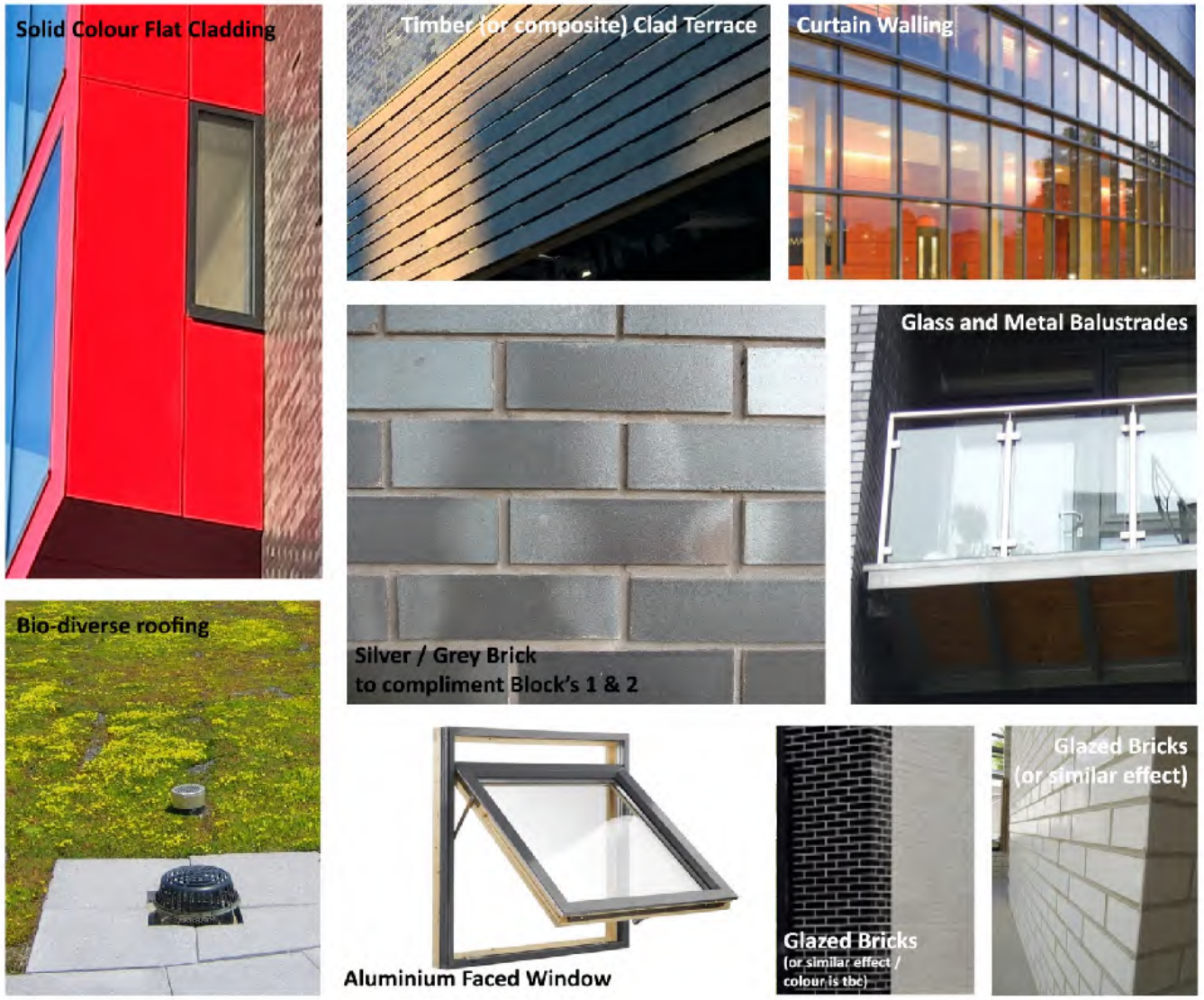


Fig J Material Palette





Fig K Proposed Scheme Visuals

5.3.5. Landscaping

The landscaping of the site is split into distinctive areas depending on its location and hierarchy – public / semi public or private (resident) etc.

- **Riverside footway**



Fig L1 Riverside Footway Location

This existing connection from Regent Road to Potato Wharf route is re-aligned closer to the river wall with a 1m wide planter bed next to the river planted with a mix of native shrub species. A cast iron post and vertical bar railing sited within the planting bed protects the drop. This railing continues along the river to meet the existing railing close to New Elm Road bridge to the north.

The path is resurfaced with Tegula concrete block paving in Charcoal to match the tone of the existing basalt setts, creating a smoother success route for cyclists, wheelchair and pushchair users. Conservation kerbs can be found either side of the route.

Along the footway to the secure boundary of the site a mixture of native shrubs along with other ornamental evergreen shrubs are provided. To the northern end of Block 4 an 800 mm high brickwork planter wall, to match the building, protects the façade and ensures that all parts of the route are open to view by users with no hidden corners.

- **Entrance Courtyard and Turning Head**

Access into the development is made at the western end of Potato Wharf. A short ramp of Yorkstone setts, to match those used on Phase 1; leads onto a raised table with the vehicular route flush with adjacent pedestrian routes. From this table leads the canal side access road, the double driveway to the adjacent townhouse and access to the entrance courtyard through the undercroft. Access through the undercroft is made via drop bollards, which will be controlled by the management company to prevent unauthorised access.

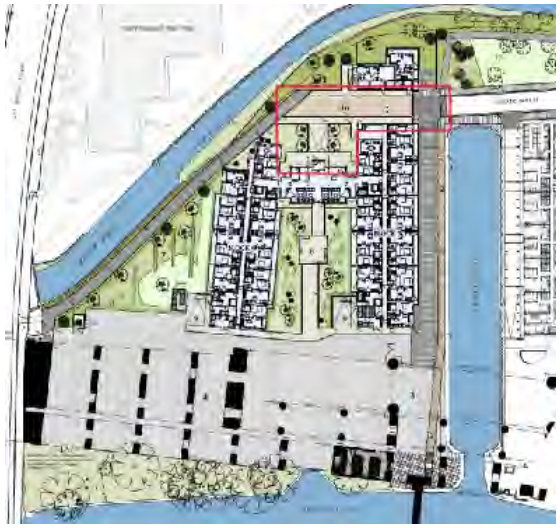


Fig L2 Entrance Courtyard and Turning Head

Through the undercroft is an open square, paved with bands of different tones of Tegula paving and defined with flush Conservation kerbs, with the riverside footway leading off to the west. Drainage will be via porous paving. Access to the link building is defined by a double row of trees within raised planter beds. The facades of the block ends are softened by raised planter beds with evergreen and flowering groundcover shrubs and taller specimen shrubs.

Along the glazed façade of the link building runs a gravel surface planted intermittently with drought tolerant perennial species. A path then connects the fire access doors of the link building to the main entrance. Within this raised podium area provision for visiting cyclists is made with three Sheffield type stainless steel hoops.

Vehicular access to this entrance square will be occasional and limited to essential maintenance vehicles, removal vans etc. The square is designed to allow such vehicles to park without impeding pedestrian flow either to the main entrance or along the riverside footway.

The area adjacent to the townhouse will be planted with native species. To the rear will be an area of grass maintained as meadow. Additional trees will be planted to replace those removed through the construction of Block 3.

- **Car-park and access road**



Fig L3 Car-park and access road.

From the raised table of Yorkstone setts at the entrance to the development, the 4.8m wide car-park access road runs south alongside the canal basin. Vehicular access along the road is via a fob-controlled lifting barrier. The access road will also be used for waste collection and servicing of the delivery bays. The road's layout reflects that of Phase 1 on the opposite side of the basin with Tegula paving banded with riven granite setts. Timber bollards protect the pedestrian route along the canal-side which links Potato Wharf with Castlefield over the Bridgewater Canal footbridge (not owned by the applicant). This 1.5m wide pedestrian route is paved in Yorkstone slab paving to match that used on the Potato

Wharf footway. A cast iron post and rail barrier to match the existing barrier at the head of the canal basin runs the entire length of the footway adjacent to the existing coping. A 1.1m high steel gate at the start of the footway near Potato Wharf enables the route to be closed outside of daylight hours.

The car-park is paved with bitmac surfacing with parking bays marked out in white lines, and numbered with white paint. Low timber bollards are also used to protect pedestrian movement in the car-park, building elevations from reversing vehicles and cars where spaces/routes are in the line of travel close to the Bridgewater Canal or its basin.

The re-located sub-station is accessed from the car-park.

- **Private Courtyard**

The courtyard is accessed from the link building and its position through the link building will ensure that it is a residents' only space.

The courtyard gently slopes down from the link building towards the car-park, its southern end protected from vehicles by a row of timber bollards. A planted boundary to either edge offers privacy to the ground floor apartments. In the centre of the courtyard space is a seating area, which will provide the opportunity for a communal BBQ area.

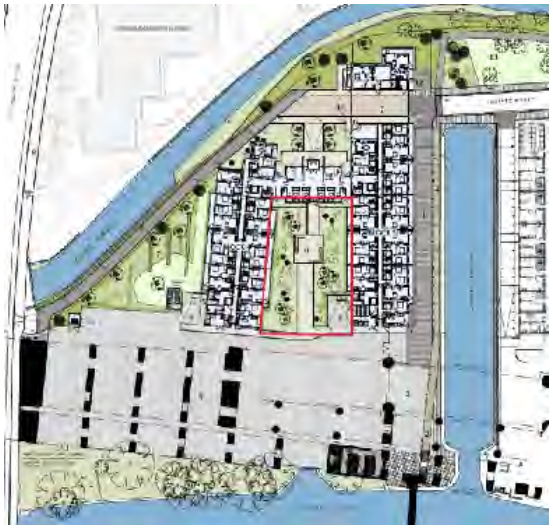


Fig L4 **Private Courtyard**

The courtyard also acts as a main pedestrian route from the car park to the buildings. This pedestrian route is separated from the building facades, in particular the ground floor units by double level planting beds giving interest and privacy.

- **Private Gardens**

To the west of Block 4 is an area of amenity open space. A formal lawn area screened from the car-park by beech hedging offers sitting out opportunity for residents in this south-west facing space. A series of formal beech hedges reflecting the linear geometry of the Potato Wharf Block's against the viaduct, offer planting bays for swathes of flowering perennial and groundcover planting. This area will house the refuse store, as well as the re-located sub-station, which will be screened by a steel framed, timber vertical panel fence approx. 2m high and by a beech hedge on the garden side.



Fig L5 **Private Gardens**

- **Pocket Park**

Implemented as part of the Phase 1 works, this area of green-space on the corner of New Elm Road and Potato Wharf is currently the location for a temporary car-park. Once this is removed during the Phase 2 works, the hard-standing will be converted to a formal lawn and the beech hedging removed.

As part of Phase 1's planning permission, it was proposed that the pocket park have an additional planted bed added with native groundcover and spring flowering bulbs along with additional Alder trees. This is still proposed as part of the Phase 2 works but due to the location of the townhouse element of Block 3, the park is now smaller. The shrub planting to the river edge north of the pocket park is retained with this treatment continued south east along the river wall edge with existing shrub and tree planting removed and replaced with native shrub species and trees. The existing Tegula paved footpath running through the park is re-aligned to that it exits onto the Yorkstone sett table at the undercroft entrance area.



Fig L6 **Private Gardens**



Fig L7 **Material Palette**



Fig L.8 Proposed Landscape Design

5.3.6. Security

It is the intention that the scheme achieves Secure by Design Accreditation.

The scheme has to achieve a balance between providing connectivity across the area, whilst still providing the necessary safety and security for residents and visitors to the site. To achieve this, the following is proposed:

- At the south-east corner of the site is an existing bridge across the Bridgewater canal. This is not under the ownership of Lend Lease and therefore the applicant has no control over whether this bridge is re-opened, however it is the intention to facilitate the re-opening of the bridge as best as possible by providing a public pedestrian pathway along the edge of the canal basin in front of Block 3. This therefore has the potential to provide significant improvements in the connectivity of the area, however due to this being in close proximity to apartments and on the recommendation of the police it is proposed that this route is only open during daylight hours.
- The current route alongside the River Medlock, is not overlooked and is a currently a fly tipping spot. This route therefore is currently not an attractive route for pedestrians, potentially leaving users of this route vulnerable. The proposals aim to make this route more attractive and safer by providing greater surveillance from the proposed apartment block's, providing improved landscaping and restricting access to daylight hours. This is on police advice, with the intention to restrict opportunities for anti-social and criminal behaviour.
- The building will benefit from 24 hour staffing on site, including service managers, night porters and maintenance teams.
- The building managers, concierge and operations spaces are accommodated close to the main entrance with natural surveillance of the central amenity facilities. From this area they have direct views over the residents' garden space and will ensure the efficient delivery of post and parcels.
- The link building also affords a legible entrance to the whole development and would create a stronger sense of security for residents returning late at night.

In terms of additional security features the following is proposed:

- A traffic barrier will be provided at the head of the road to avoid anyone accidentally driving onto the car park access road.
- The car park will be appropriately lit and subject to CCTV coverage.
- Apartments on the ground floor facing the car park access road and public footpath will have alarms.
- Apartment windows on the ground and first floor will be PAS 24 compliant.
- Apartments on the ground floor with timber balconies will have PIR security lighting.
- Glass balustrades and timber balconies on the ground floor will be designed to minimise their climb-ability.
- Cycle parking is located within the in-filled viaduct arch. This will be accessed via resident access only doors, well lit and Secure by Design compliant. The cycle store will not be apparent to the public, with no resident cycle parking visible from public accessible routes. A second cycle store will securely located in Block 3.
- Main routes, entrances to block's and cycle stores will be covered by CCTV, linked back to the existing CCTV currently in use on Block's 1 and 2

5.3.7. Sunlight / Daylight Penetration and Wind Analysis

Careful consideration has been given to the impact of the scheme on day-lighting / sun-lighting / shadowing and wind. Accompanying this application are various specific reports on these items (refer to HK Daylight assessment and the Microclimate report by Urban Microclimate).

The layout of the block's helps to maximise solar penetration into the public realm, minimise overshadowing and prevent wind gusts around block entrances.

In terms of comparison, the current distance between Blocks 1 and 2 is approx. 21.5 m. This compares to 31.1m between Block 2 and 3 with the canal basin between and 23.8m between Blocks 3 and 4.

5.3.8. Sustainability

The proposed development has been designed from the outset with sustainability in mind. The objective of the scheme is to achieve a minimum Code for Sustainable Homes Level 4 in order to provide high quality sustainable accommodation which will improve the health and wellbeing of the occupants. Further details on sustainability are provided in accompanying documentation.

Key sustainable features of the building are as follows:

- A bio-diverse roof to encourage an increase in ecology on site.
- On site Combined Heat and Power equipment
- Fabric first approach – with good levels of insulation and air tightness to reduce energy demands.
- Cycle parking for residents
- Reduced daily water usage
- Responsible sourcing of materials to be used
- A sustainable location to build housing – being close to the city centre on an under-used site
- Code for Sustainable Homes Level 4 scheme

5.3.9. Management and Maintenance.

With this being a Build to Rent scheme; the appointed operator will maintain the high quality environment through the management, servicing and maintenance of the buildings and landscaping.

The site will have 24 hour staffing, with an office created for a concierge within the link building and staff facilities situated in the ground floor of Block 3.

Staff will include service managers, night porters, and maintenance teams, and with a greater surveillance over the site, the staff will be responsible for the management of all gates within the scheme, as well as providing general day to day maintenance and service to residents and ensuring refuse bins are moved to their collection points.

Maintenance teams will also undertake the on-going maintenance of soft landscaped areas, including watering, weeding, plant replacement, mowing and inspection of trees with pruning done when necessary. Snow removal from hard landscaped surfaces, collection of litter and power-washing of surfaces will also be undertaken where necessary.

5.3.10. Refuse strategy

The refuse strategy is based on guidance provided by Manchester City Council. Both proposed Blocks have their own dedicated refuse store that is securely accessible by residents of each block internally.

Eurobins will be provided for general waste and recycling. The number of Eurobins and total refuse capacity is as below:

- Block 3 – based on Manchester City Council standard frequency collections would require a capacity of 26,230 litres split between waste / recycling (pulpaple) / recycling co-mingled and organic waste.
- Block 4 – based on Manchester City Council standard frequency collections would require a capacity of 18,800 litres split between waste / recycling (pulpaple) / recycling co-mingled and organic waste.
- It is proposed that the frequency of collection is doubled subject to agreement between MCC and the building operator.
- This will halve the number of required litres to
    - Block 3 – 13,160 litres (all waste)
    - Block 4 – 9,400 litres (all waste)
- The required number of Bins required for each block is therefore
    - Block 3
        - 10 x 1100 litre
        - 2 x 660 litres
        - 4 x 240 litre (food waste)
    - Block 4
        - 8 x 1100 litre
        - 3 x 240 litre (food waste)
- Space for these bins is located internally in both Block 3 and 4 with an external bin store set in the landscaping (operator access only). Refuse bins will be continually monitored to ensure empty bins are always available in the internal bin stores
- The managing agent will have responsibility for taking the Eurobins from each block to their weekly collection point, which is likely to be the car park on the southern end of the site.

5.3.11. Listed Building Considerations

The proposed alterations to the scheme from that of the approved OMS scheme do not change the intention that the scheme does not affect the setting of the listed viaducts (Manchester South Junction and Altrincham viaduct) or the use around them. It is still proposed that the one arch that is currently infilled with brick is used as the main cycle store for the development (a second cycle store is in Block 3).

The arch was original infilled at an undetermined point in time, with both the Bridgewater canal side and the north side having being infilled with a red brick. The interior of the enclosed arch is an open space.

There are a number of openings on both elevations, and there is evidence of later infilling of some of these openings. The elevation facing the canal appears to have four openings, however all these openings are covered from behind. The elevation facing north has two high-level unglazed window openings. In addition, there is a large, shallow-arched doorway opening on the left (when facing the arch). A horizontal brick projection extends along the face of the brickwork filling the arch at roughly two thirds of the height of the door opening.

It is proposed that a free standing secure metal cage with bike racks will be installed within the arch; however there will be no alterations to the listed structure itself.

It is proposed that the car parking will continue to be located beneath them and that one arch (currently infilled) will be used for cycle parking.

6. Access

6.1. Multi-modal connectivity

Benefitting through ‘a close to city centre location’ the site is well served by a variety of sustainable modes of transport.

6.2. Foot / Bicycle

The layout of the site aims to promote better pedestrian and cycle linkages both across the site and through the wider area. The existing route along the river Medlock is made more attractive, with a greater degree of surveillance and a pedestrian dedicated route is provided between Block 3 and the canal basin allowing the re-opening of the existing pedestrian bridge across the Bridgewater canal should the bridge’s owners wish to do so.

A balance is needed between the improved connectivity across the site and the safety and security of both the residents of the scheme and the public who will pass through the site. It is therefore proposed that all public routes through the site are open during daylight hours only. However this will be reviewed on a regular basis to take into account how people on foot or bicycle will use the site. This approach has been discussed with Greater Manchester Police.

6.3. Metrolink/ Rail / Bus

Deansgate station (for both rail and Metrolink) is within approx. 800m of the site and is accessible by foot/ cycle and offers connections to local and regional destinations. A number of bus stops are in close proximity to the site with stops located on Water Street/ New Elm Road and Liverpool Rd.

6.4. Private Car

The main vehicular access to the scheme is from Potato Wharf, where residents will then drive along a two trafficked access road between Block 3 and the existing canal basin. This route will have an automatic barrier at the junction with Potato Wharf to prevent misuse or any car’s wrongly assuming it is a through route to the A57. The surface treatment will also help both slow traffic and indicate the pro-dominant route to take.

6.5. Car / Cycle Parking

The car-park accessed via this road is located, in the main, under the viaduct. Located under the viaducts enables the car parking not to encroach on any public realm or become an overly dominate feature. The viaducts help screen the car parking and are a suitable use for these underused spaces. It accommodates a total 114 cars, 6 of which are accessible spaces sited closest to the core entrances. There is a further 7 spaces in a secondary car park, and a further 2 spaces are dedicated to the townhouse within its own private driveway. The total number of car

parking spaces is 123. There are also 6 designated motorcycle parking spaces. The secure boundary is provided by a 2m high vertical bar fence to match that of Phase 1 with double vehicular gates at the car-park entrance linked to the fob-controlled access barrier and an adjacent pedestrian gate with keypad access. The car park is fully secure, provided with CCTV coverage, lighting to an appropriate level.

Cycle parking is provided within the secure car park – in the existing infilled viaduct arch and in Block 3 located on the ground floor next to the undercroft. All spaces will be Secure by Design Compliant. 160 cycle spaces are to be provided.

6.6. Approach to the buildings

The approach to all buildings will not be greater than 1:20 and will include level access from the public realm. The raised ground floor level (due to flood protection requirements) is dealt with by a graded access to the link building, which will then provide level access to the cores of the blocks.

All areas of the building are accessible for all visitors. External doors, lift doors and apartment doors will all provide the required clear openings in accordance with Building Regulations.

6.7. Emergency Access and Egress

Within these residential buildings, ‘a stay put’ policy is operated, whereby only the apartment of fire origin needs to be evacuated. This strategy is common within many residential developments of this nature and is also the current policy for both existing Block’s 1 and 2. Apartment layouts are compliant with Building Regulations, and the scheme has been reviewed by a fire engineer, ensuring all escape distances (horizontal and vertical) are workable.

Both blocks are provided with a firefighting shaft which services all levels. This firefighting shaft includes a firefighting stair and lift plus a dry riser main.

6.8. Emergency Vehicle Access

Vehicle access for both blocks is required for access to the dry riser inlets (within 18m from the appliance access point). Access is available through the undercroft of block 3, and doors are found either side of the link building, adjacent to the dry riser and with easy access to the firefighting lift and stairs of each block. This area outside the link building also provides access to the River Medlock should the emergency services or the environment agency require access.

Access to both blocks is also available through the car park and the access road between Block 3 and canal basin.