

EXPEDITE

Patel Taylor

DESIGN AND ACCESS STATEMENT FOR THE REDEVELOPMENT OF PLOT 5, CARDIFF, CF10 4AA

21.65-EDS-XX-XX-RP-A-1000
Design and Access Statement
Revision 02

Applicant:
Dukes Education



This Design and Access Statement (DAS) has been prepared by Expedite Design Services and Patel Taylor on behalf of Dukes Education in support of a planning application for the creation of a new boarding house accommodation building for Cardiff Sixth Form at Plot 5, Pierhead Street, Cardiff.

This statement supports the information incorporated within the planning application package in order to provide necessary information relating to context, design development, scale and nature of the development proposed.

- Revision 01 - November 2022
Issued for client review
- Revision 02 - December 2022
Issued for pre-application consultation

1. Introduction



2. Existing Accommodation



3. Site Analysis



4. Scheme Development



5. Scheme Concept



6. Scheme Proposal



7. View Analysis



1. Introduction



Project Vision

Cardiff Sixth Form College (CSFC) is currently located in leased accommodation at Trinity Court, 21-27 Newport Rd, Cardiff. The College's overarching aim is to provide a permanent new home for the College's teaching space and boarding accommodation across the two chosen sites in Cardiff Bay.

CSFC intend to sensitively convert and restore the Grade II listed buildings at Merchant Place and Cory's Buildings (Site 1) to provide accommodation that meets the teaching needs, whilst also retaining and preserving the building's heritage significance.

The aim at this site is to provide high quality teaching accommodation for the learners including sports facilities, amenity space, an exam hall and other ancillary facilities. The teaching accommodation will be for a total of 500 pupils of which 400 boarders and 100 will be day pupils. The Applicant is also proposing an innovatively designed auditorium on the roof of the new building which will add interest and provide a landmark for the College.

The land at Plot 5 (Site 2) will be developed to deliver architecturally well designed new build accommodation for 400 boarders, ancillary parking and other facilities to support the education use. The college accommodation buildings will seek to maximise their development potential, whilst responding to the site constraints and wider context. The projects will be brought forward under a separate planning application, although the school will require both sites to be developed to facilitate the move away from their current base.

Site 1 comprises of two adjacent buildings on a rectangular site. The first building is Merchant's Place which fronts on Bute Place and is the former Post Office Building and the second is Cory's Building which fronts on to Bute Street. Both properties were built in the late 1800s. The two buildings are Grade II Listed and form an L shape. They total circa 39,000 sqft GIA of floorspace. To the rear of the buildings is vacant and undeveloped land, which also forms part of the Site.

Site 2, also know as Plot 5, is a vacant undeveloped plot which fronts on to Pierhead Street. It is bounded to the west by a Premier Inn hotel and to the north by a multi-storey car park.

The Project Vision is to:

- Deliver a permanent new base for CSFC within Cardiff, that provides high quality teaching and boarding accommodation for the learners, as well as ancillary facilities to support the education use;
- Sensitively convert and restore the Grade II listed buildings at MP/CB to provide accommodation that meets the teaching needs, whilst also retaining and preserving the building's heritage significance; and
- Provide high quality and architecturally well designed new build accommodation on both Sites that seeks to maximise their development potential, whilst responding to the sites' contexts.



Dukes Education and Cardiff Sixth Form College

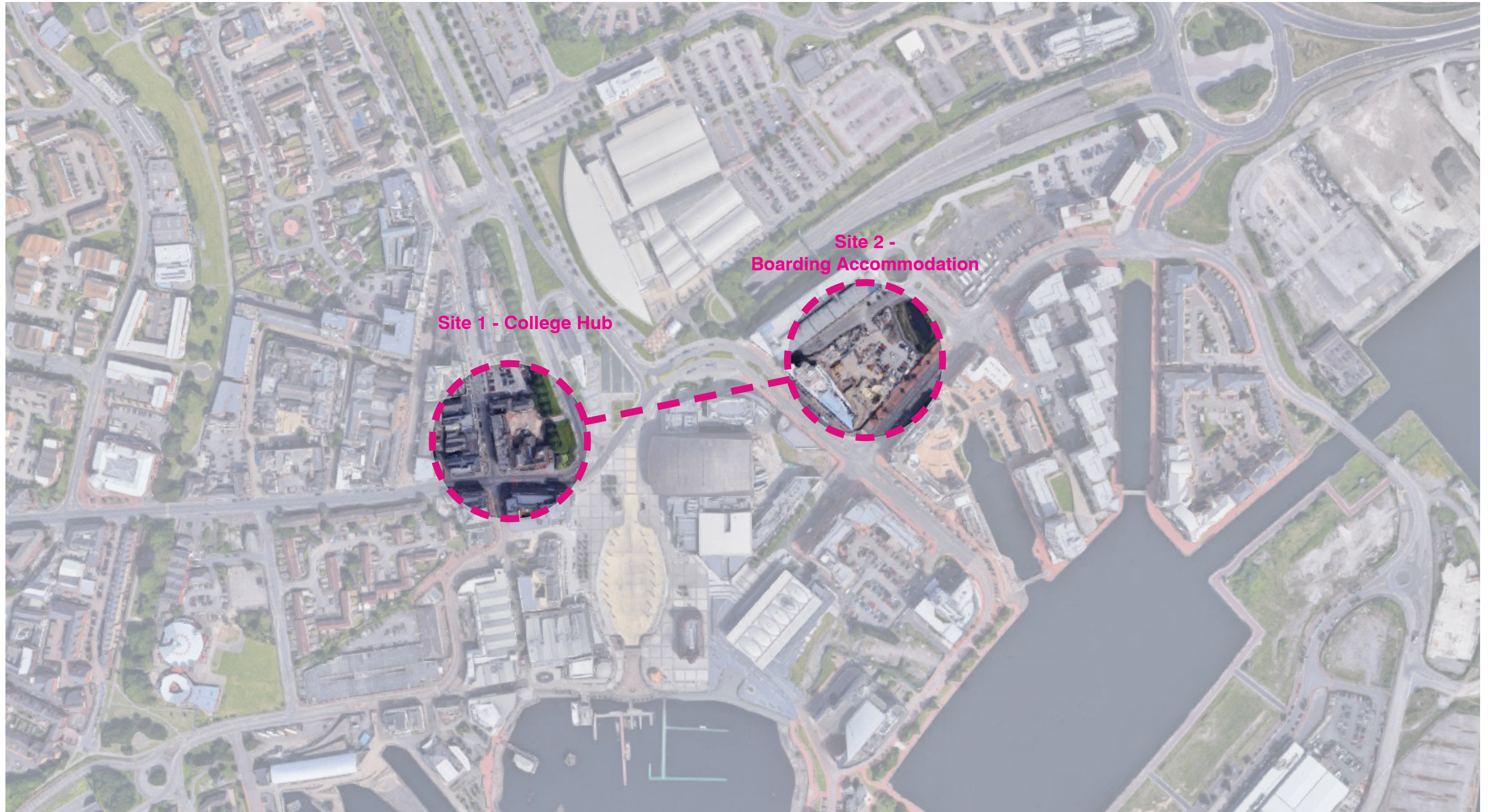
Dukes Education Group Limited was founded in 2015 and is a family of nurseries, schools and colleges in the UK. Dukes Education currently has 23 schools and colleges, and 20 nurseries. All of the schools and colleges in the Dukes Education family have been chosen for their academic excellence and individual character.

Cardiff Sixth Form College is part of this family and is currently located in leased accommodation at Trinity Court, 21-27 Newport Rd, Cardiff. In addition to CSFC, the Group's schools are mainly located in London, with schools also located in Cambridge and Kent.

CSFC has been the top college in the UK for A Level results over the past 11 years and is one of the top A Level schools in the world. Students also enjoy a wide range of extra-curricular activities including debating, sport, music, drama and Duke of Edinburgh. The majority of students currently board in college accommodation in Cardiff.

CSFC and Dukes Education has agreed terms to acquire, subject to planning, the two sites to provide a permanent new home for the College's teaching space and boarding accommodation.





Project Team

Project Programme

Client
Dukes Education / Cardiff Sixth Form College

Project Manager / Quantity Surveyors
Expedite Project Services

Architects
Expedite Design Services
Patel Taylor

Planning Consultant
DWD Property + Planning

Structural & Civil Engineer
Expedite Engineering Services

Building Services Engineer
Expedite Building Services

Ecology
Just Mammals

Fire Consultant
Hydrock

Acoustic Consultant
Hoare Lea

Transport Consultant
Apex Transport Planning



Pre-Application Engagement

From a planning perspective, we have identified design and good place making as one of the key considerations to ensure the new Cardiff Sixth Form College is successful and supported by the Local Planning Authority and local community. As a team we are committed to ensuring the design evolves through consultation with the local planning authority and relevant consultees. To that end we agreed a Planning Performance Agreement with Cardiff City Council to ensure that the ongoing design development is a collaborative process. The scheme is now ready for formal Pre-Application Consultation, but we have already undertaken a number of engagement events with council officers and the Design Commission for Wales as set out below.

Q4 2021: We attended a site visit with the planning officer, heritage officer and placemaking officer to establish the site context, constraints and opportunities. We provided some high-level feasibility studies ahead of the site visit demonstrating what bulk and massing could be achieved, whilst seeking to adhere to the site constraints and complimenting the wider context. Officers confirmed that the principle of development for a new sixth form college across the two sites was acceptable and the Applicant's aspirations to design and build a multi-storey accommodation building for the colleges students and house parents was welcomed.

Q1 2022: Online meetings were held in January to discuss the bulk, massing and design of the building scheme in addition to the energy and

sustainability aspirations for the project.

Q2 2022: Regular online update meetings continued to be held with council officers to keep them up to date with the scheme development. An open public consultation event was held at the Red Dragon Centre which was visited by a range of attendees. This included local residents, potential contractors, local councillors and Senedd members.

Q3: 2022: Following further discussions with the council it was agreed that London-based architectural firm Patel Taylor would join the project team to assist with the elevation design. An in person meeting between the council officers and the design team was held and an amended concept for the facade was agreed.

Q4: 2022: During this period there were further discussions held and the detail of the scheme was refined and finalised for pre-application consultation submission.



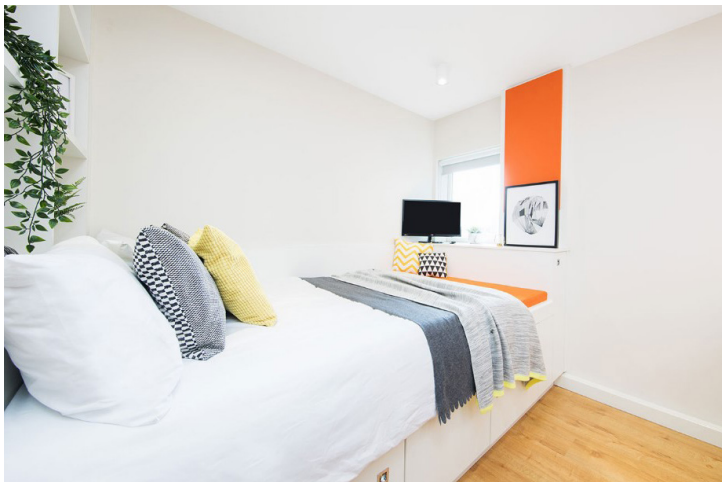
Public Consultation Event at the Red Dragon Centre

2. Existing Accommodation



Existing Boarding Accommodation

Currently the school has three boarding houses split across two sites. Both are a short walk from the college site. These boarding houses were designed for university level students and therefore lack more cohesive communal facilities, external space and only have basic levels of security access.

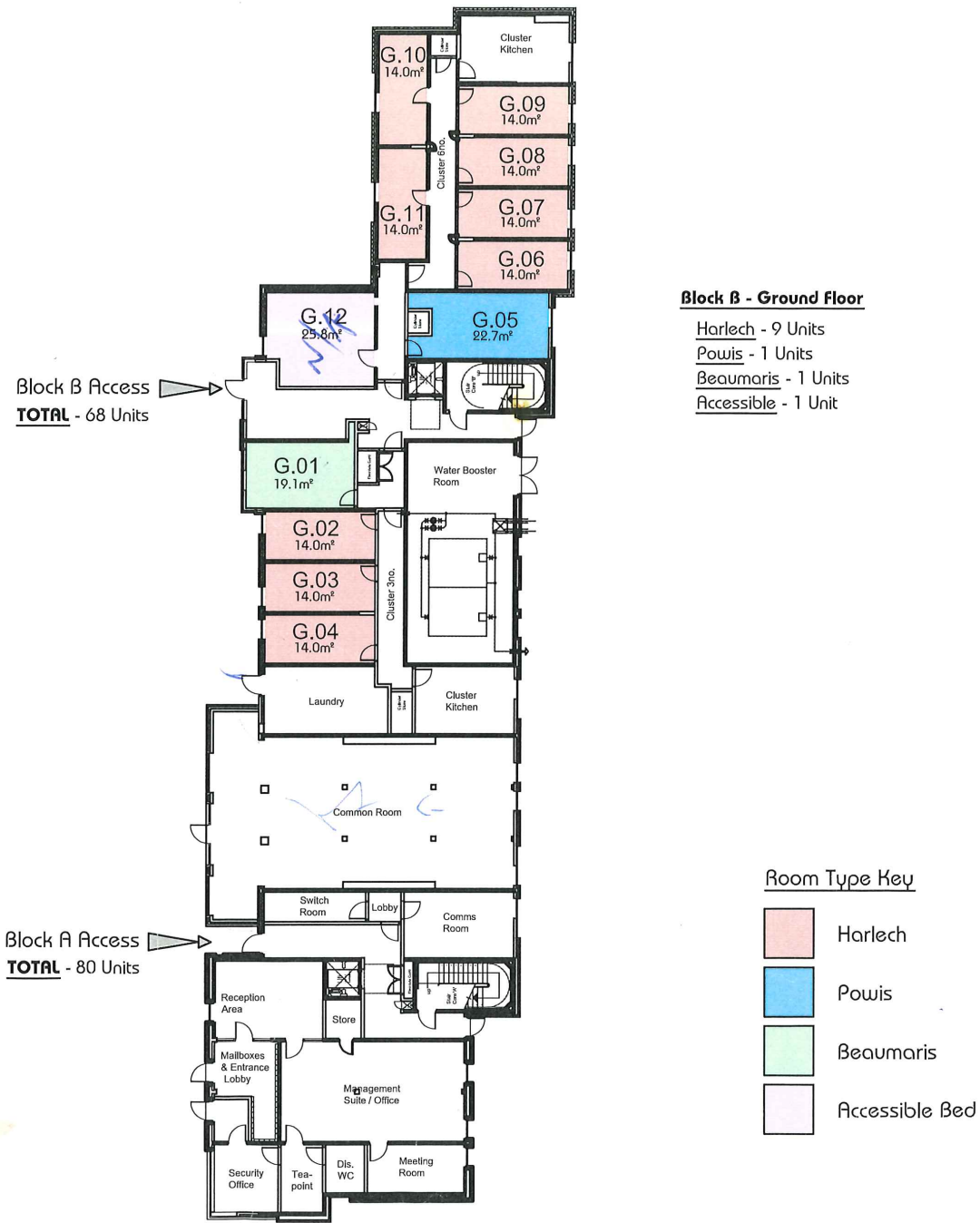
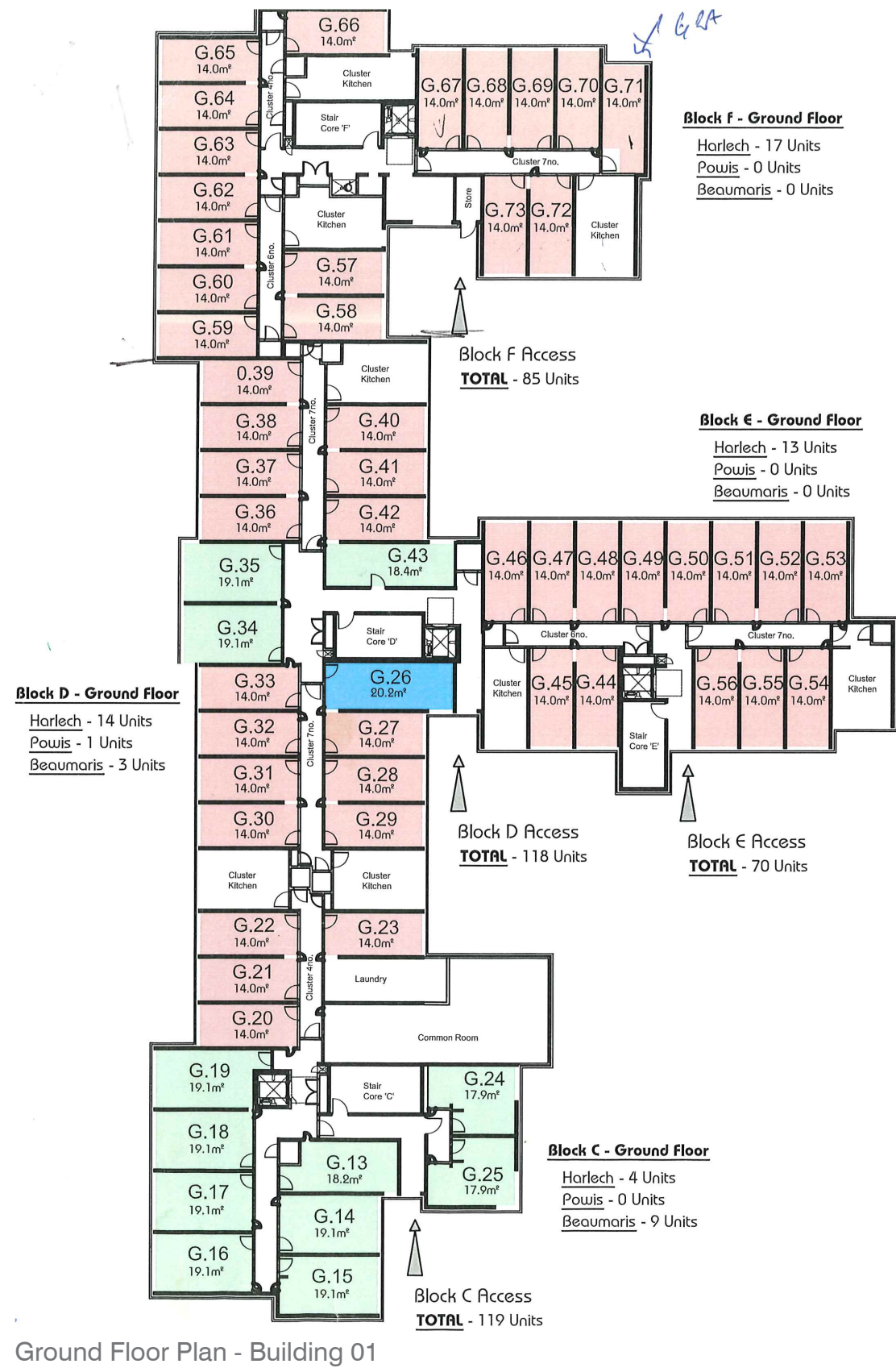


Trinity Court
(Teaching Accommodation)

Shand House
(Boarding Accommodation)

Adam Street Gardens
(Boarding Accommodation)

Existing Boarding Accommodation - Adam Street Gardens

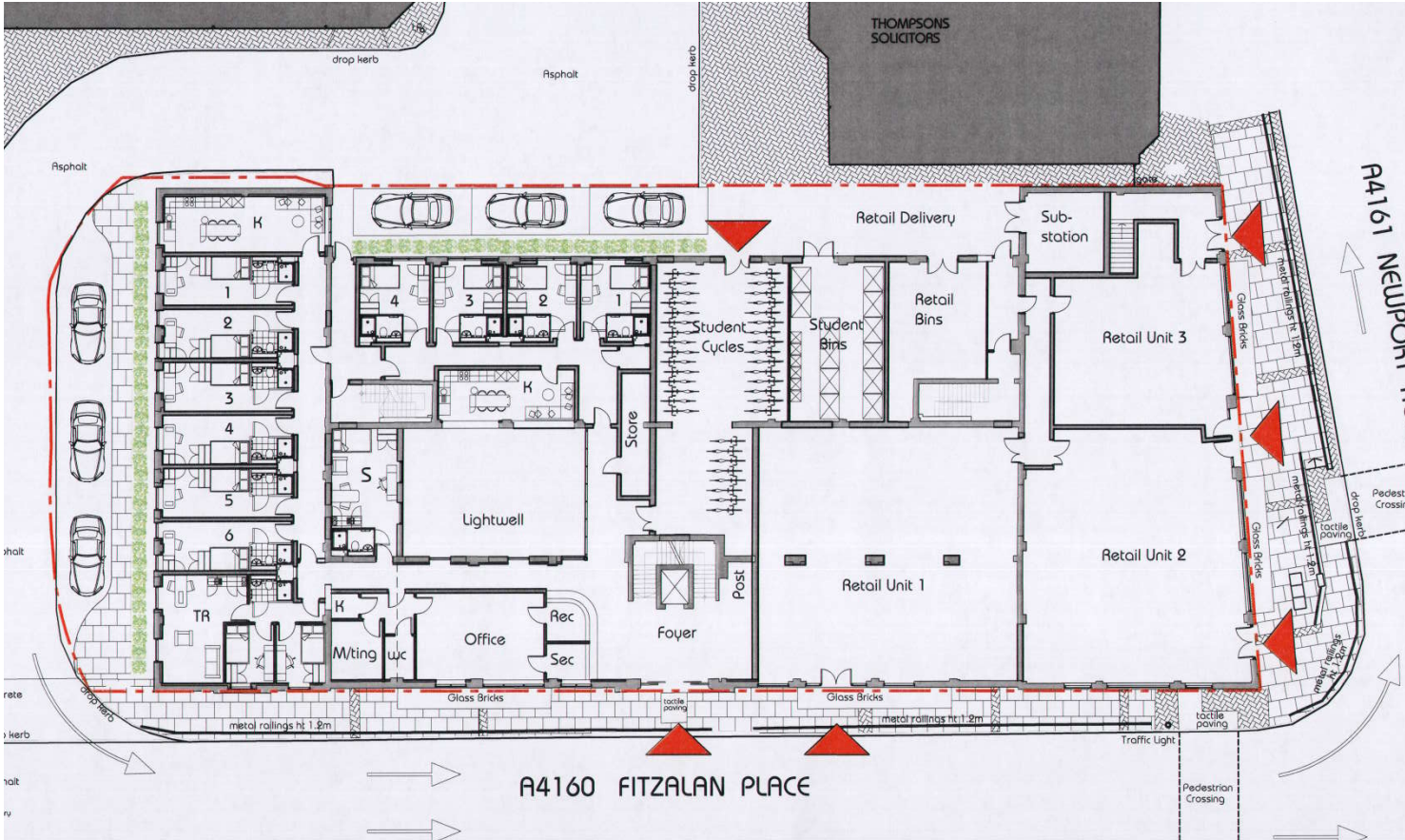


Note: plans not to scale

Existing College Accommodation - Shand House



Overview



Ground Floor Plan



Common Room

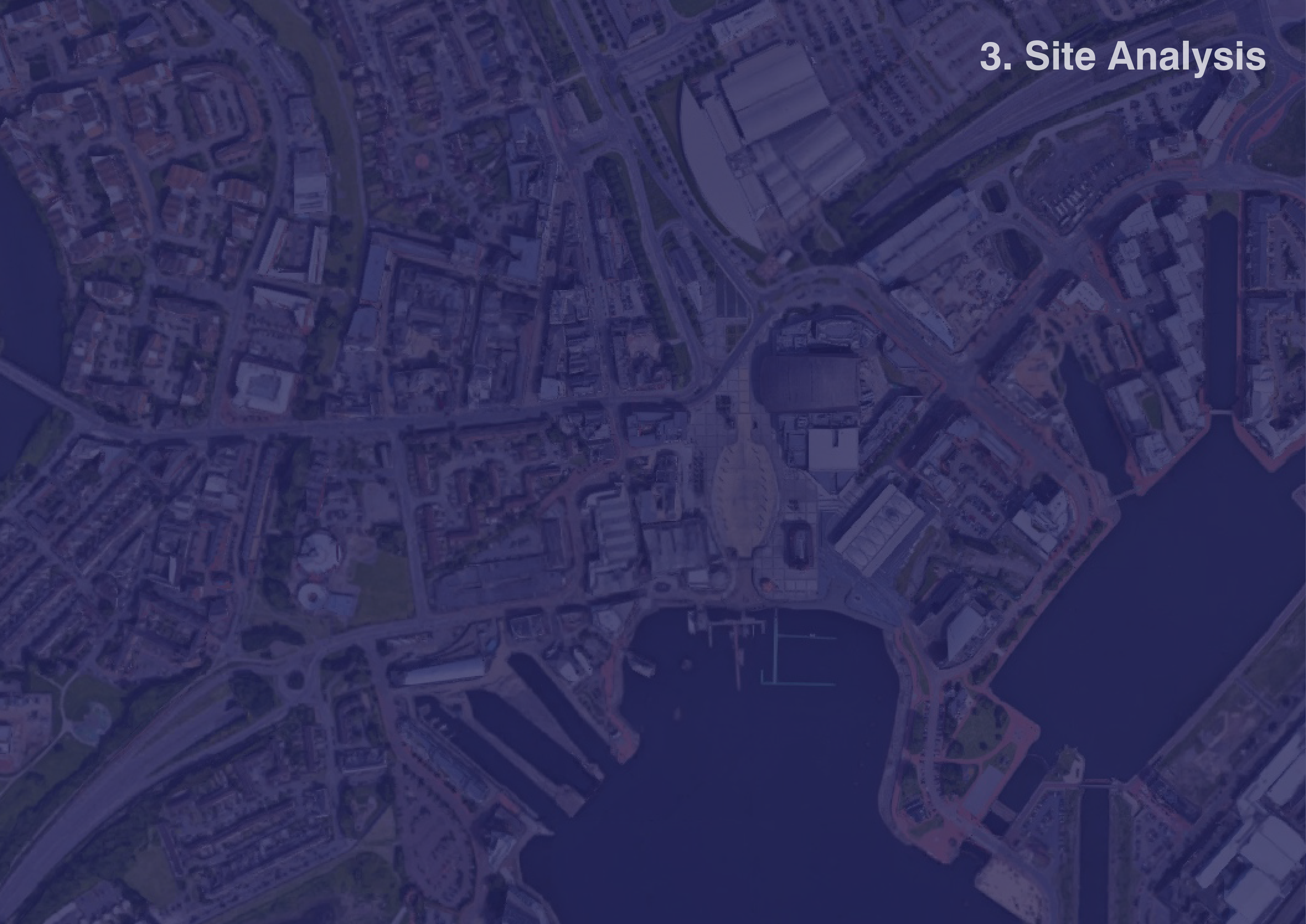


Common Room



Studio Bedroom

3. Site Analysis



Site Location

The redevelopment of Cardiff Bay into a busy and vibrant centre for employment, leisure and living, can be regarded as one of the great urban regeneration success stories in Wales with the construction of several large iconic buildings in the form of the highly successful multiple occupancy performing arts centre, The Wales Millennium Centre, and the Senedd.

The application site is located in Cardiff Bay and within the Central and Bay Business Area as per the Cardiff Proposals Map. This area played a major part in historic Cardiff's development through the export of coal through its docks from the South Wales Valleys to the rest of the world, helping to power the industrial age.

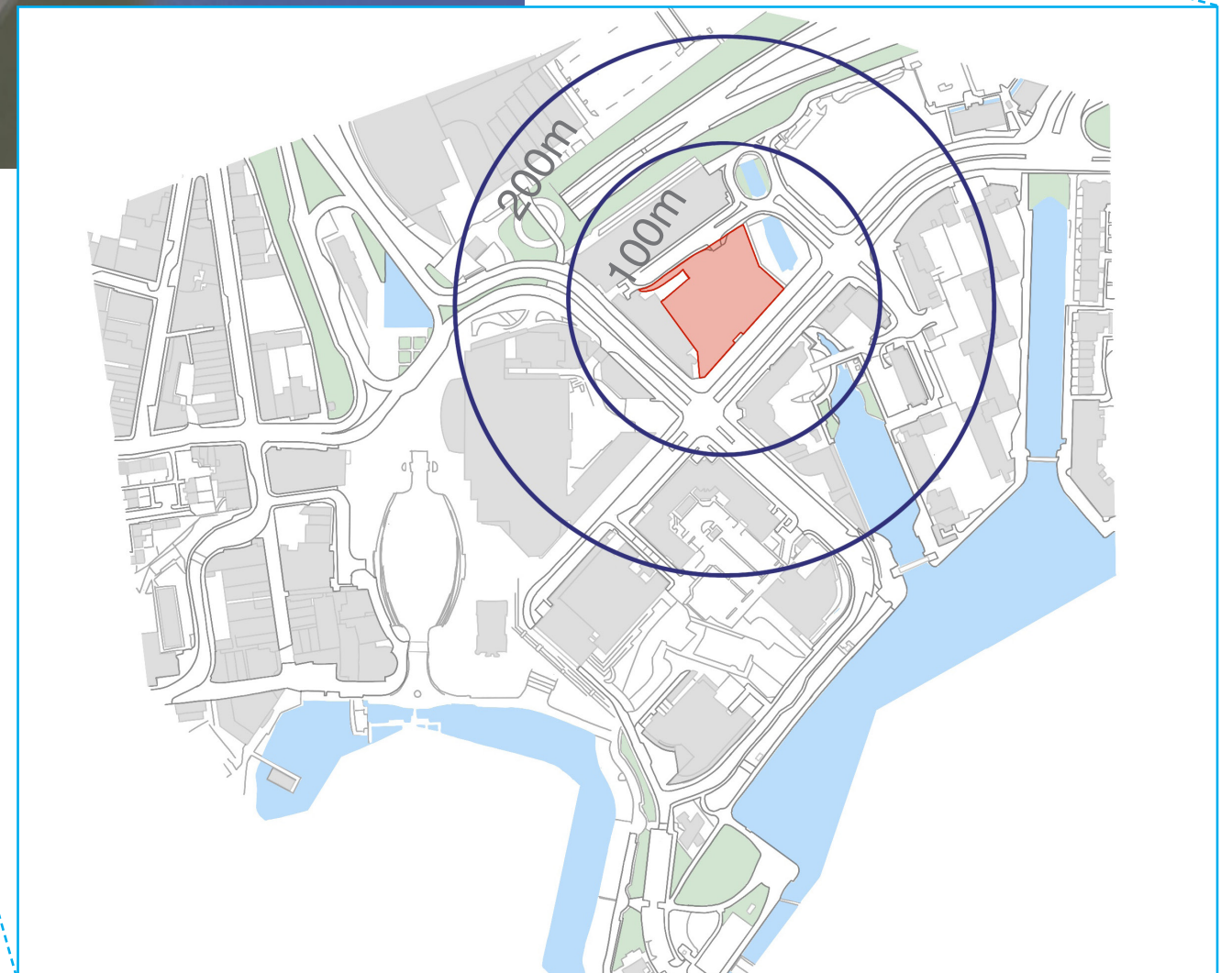
Site 2, Plot 5 is a highly sustainable location within close proximity of rail and bus links to the city centre and beyond. Currently the development site is used as a temporary surface car park for major events held within the wider Cardiff Bay area.

Surrounding the site are fences providing security for the vehicles, with vehicle access to the site gained via the shared rear access road off Pierhead Street running along the eastern and northern boundaries of the site.

Pedestrian links are strong and highly sustainable, with positive access to public transport links.

The Opportunity-

- To create a high quality and environmentally sustainable residential block for 400no. Student beds to house GCSE and A-Level students.
- The student experience will be defined by creating a high quality development, with leading student welfare amenities and accommodation.
- A concierge managed site that will contain private cinema room, gym, reading, music and workrooms, games rooms, common rooms, private laundry.
- The accommodation is designed to help student residents enjoy a great education experience.



Existing Site



The site has a slight gradient sloping from north to south. This is typical of the surrounding area however it is noted that significant developments have occurred in the vicinity throughout the decades, in particular in the 1960's. Site levels are not expected to be natural but as a result of significant development to the Cardiff bay area.

The areas immediately surrounding the building either consists of roadway or paved hard-standing.

There are small parcels of landscaped grass located to the rear in raised beds in front of the buildings.

To the east, is the water basin and dock feeder which is landscaped.

This brownfield site (approx. 1.29 ac) has a recorded nominal fall west to east with the highest point adjoining Pier Street at 9.65 above Ordnance Datum (AOD), and the lowest at 9.00 AOD next to the highway.

Development area available excluding easements and legal boundaries :- 4,042 sqm (1ac)

Site Constraints

The main constraints to the development can be summarized as follows:-

- The site is in a prominent location, that is currently one part of a wider infrastructure development that is currently unrealised,
- The amount of accommodation provided is limited directly to the development boundary and access,
- Ensure that the development does not cause a significant visual intrusion and ensure key public views are not compromised,
- Site is on made up ground and near existing water course.

The main opportunities to the development can be summarized as follows:-

- Regeneration of an inner city Brownfield site,
- Access is readily achieved by main pedestrian and vehicular artery links from the City centre,
- Good pedestrian links to inner City and surrounding Bay area,
- Opportunity to create a high quality development and facility that will enhance the character and appearance of the City,
- Opportunity to improve the visual amenity of the street,
- Opportunity to avoid a derelict site becoming a visual and health risk,
- Opportunity to act on Cardiff City’s vision plan,
- Work with the topographical character of the site, avoiding visual intrusion,
- Enhance ecology and biodiversity within the site,
- To develop a scheme that responds to the climatic conditions and passively take advantage of a south facing orientation and to develop a public realm scheme that responds to this orientation,
- To create a building that positively relates to all street frontages, with quality architectural integrity, using quality materials that reflect Cardiff’s urban grain,
- Provide active street frontage and support pedestrian movements in the area, which will add to the natural surveillance of the street.



- Application Site
- Presumed line of buried Bute Eat Dock Walls
- Existing pumping station
- Existing entrance
- Old electricity sub station
- Existing dock feeder
- Bus stop
- ← Views into the site

Photographic Study



Image 1



Image 2



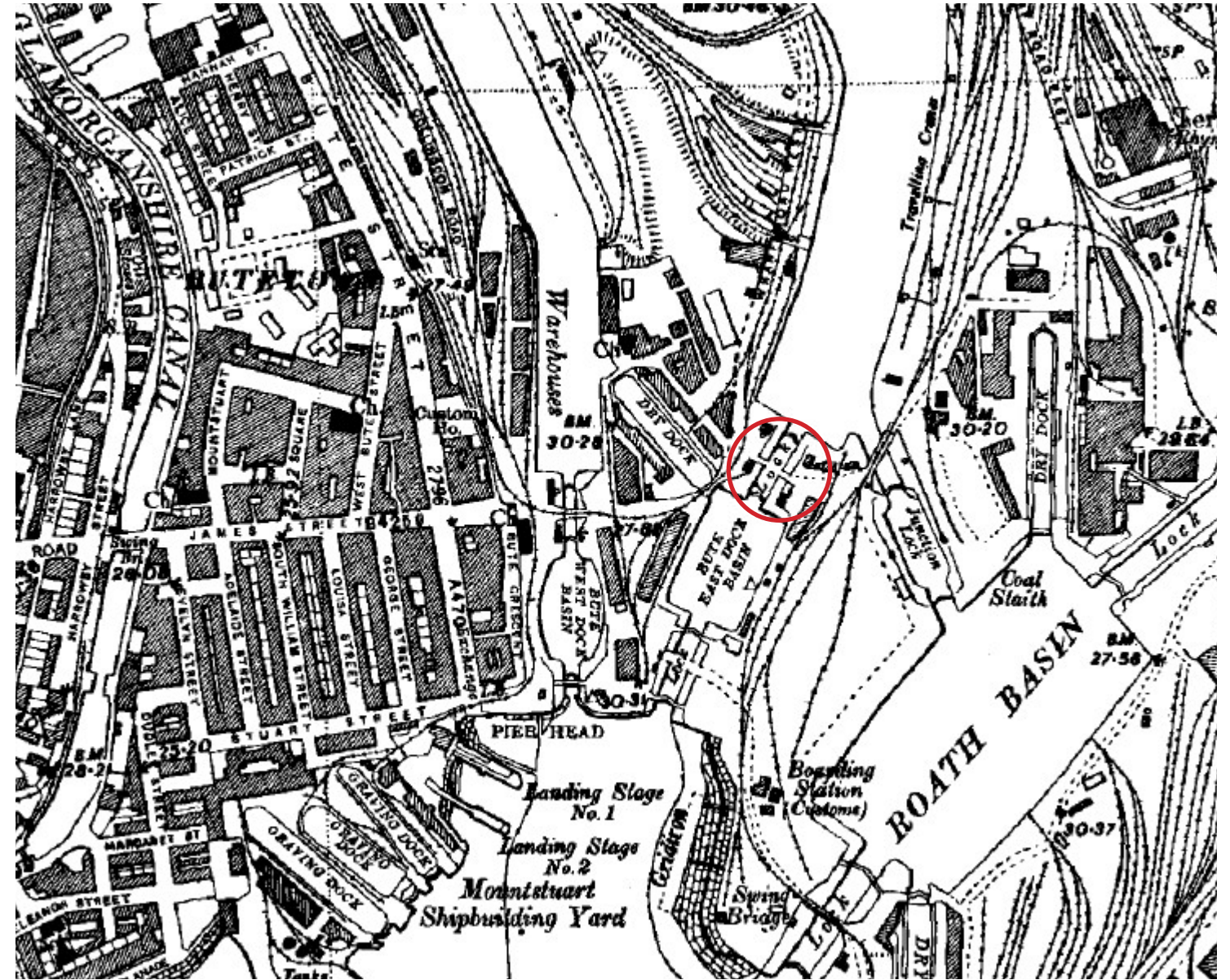
Image 3



Image 4



Image 5



1938 - 1954

Cardiff Sixth Form College - Accommodation

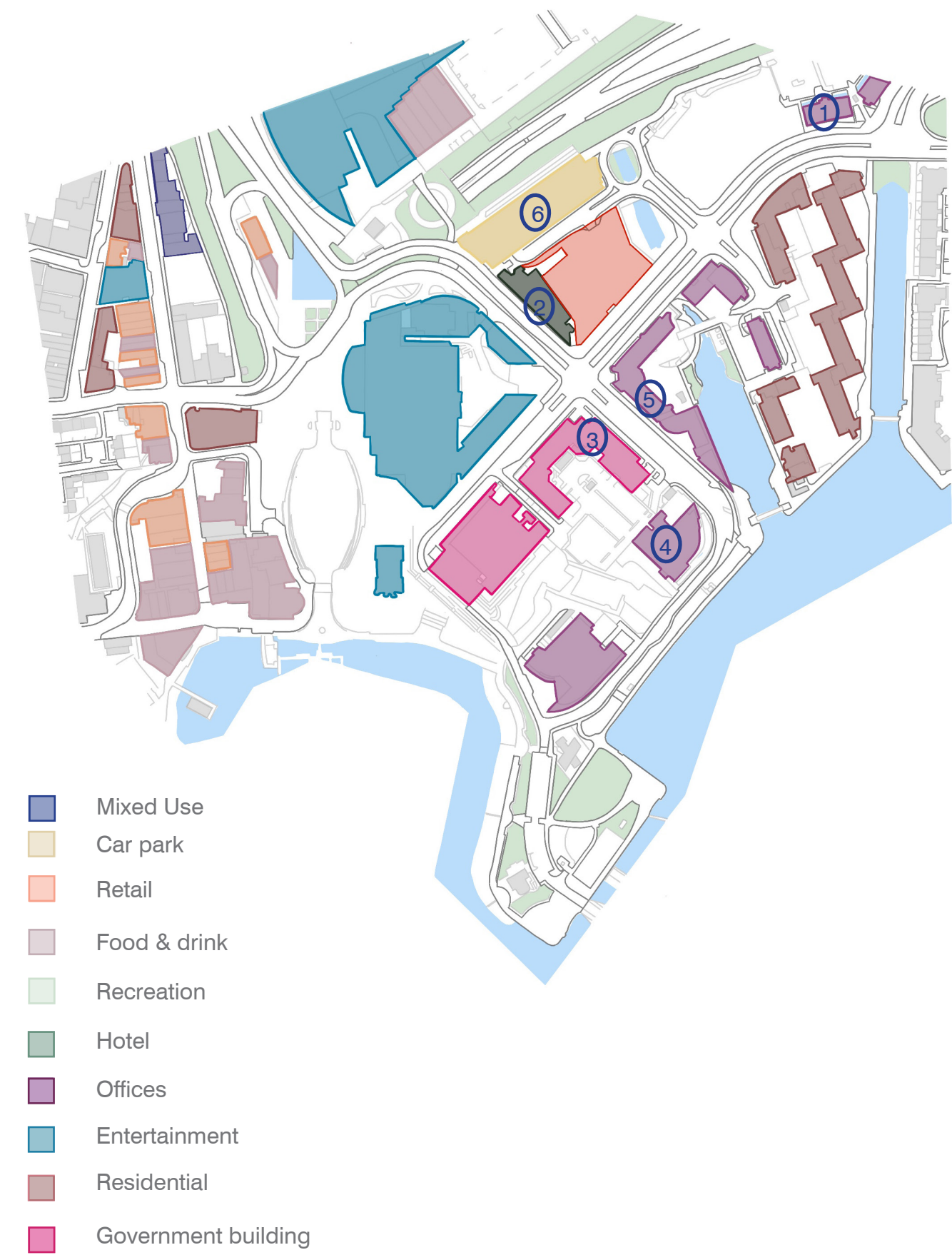


Aerial View of The dock 1930



Aerial View of East Bute Dock, Cardiff, (1983)

Surrounding Building Typology



1



2



3



4



5



6

Building Height Analysis



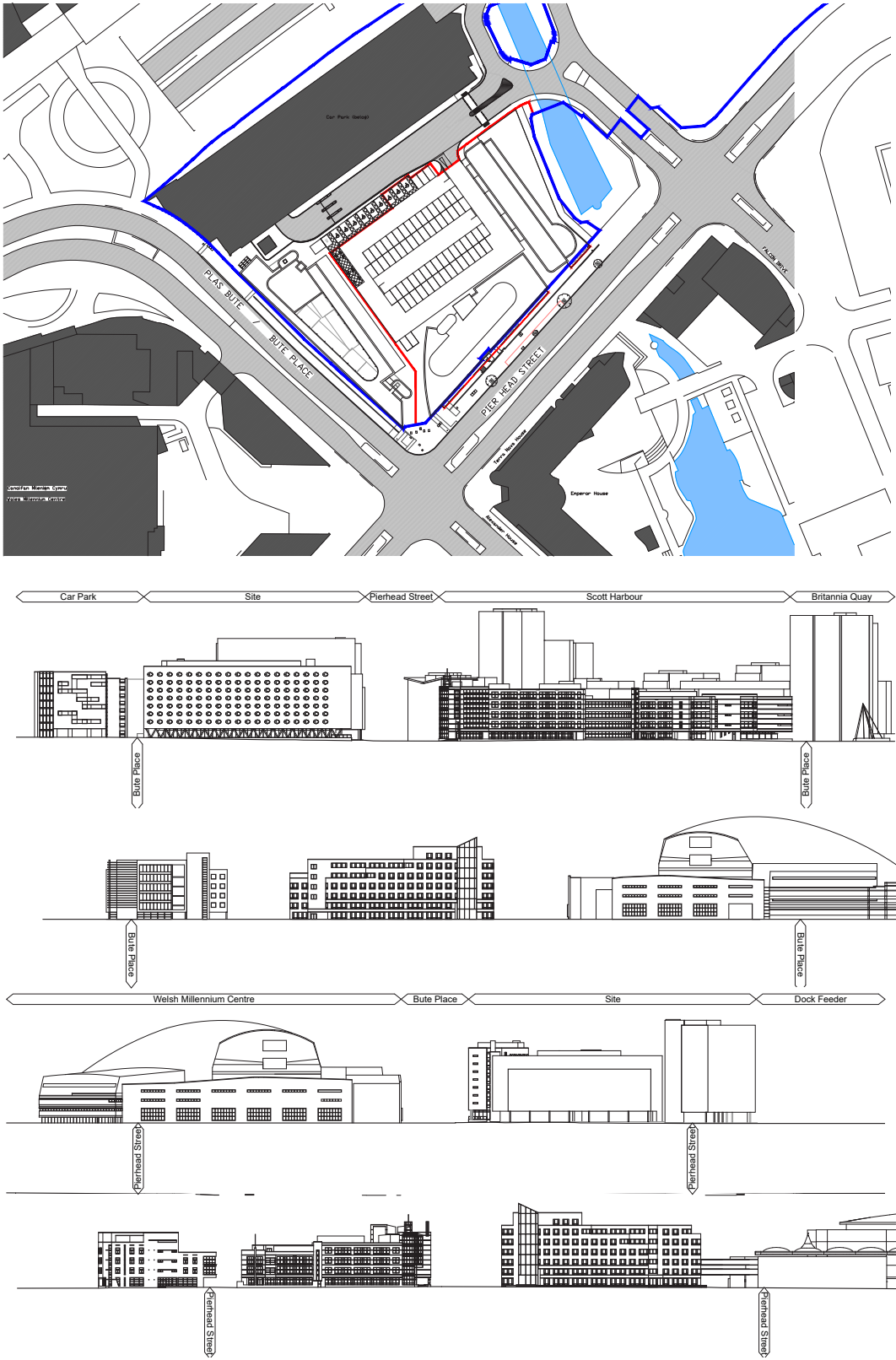
The development site has a mixed character in terms of existing height with much of the local context being between 4 and 15 storeys. It has been observed that the site is earmarked in planning policy as an area suitable for tall buildings, with the local authority being proactive in their support of high quality tall buildings within specific areas of the City through good design.

- APPLICATION SITE
- Q PARK - PARKING - 8 stories.
- PREMIER INN - Hotel - 7 stories.
- SCOTT HARBOUR - Commercial - 5 stories.
- VEGA HOUSE - Commercial - 15 stories.
- ASSEMBLY SQUARE - Commercial - 5 stories.
- GOVERNMENT BUILDING - Commercial - 15 stories.
- REGUS HOUSE - Commercial - 4 stories.
- 4 PIERHEAD - Commercial - 4 stories.
- FALCON DRIVE - Commercial & Residential - 14 stories.

Planning History

Plot 5 previously was given Outline planning permission for 2 multi storey office blocks to be built on the site. This is beneficial to our planning application as this means there has already been approval for a multi story building.

However, the previously approved application never made it to construction stage.



16/00547/MJR

Plot 5, Pierhead Street, Cardiff Bay.

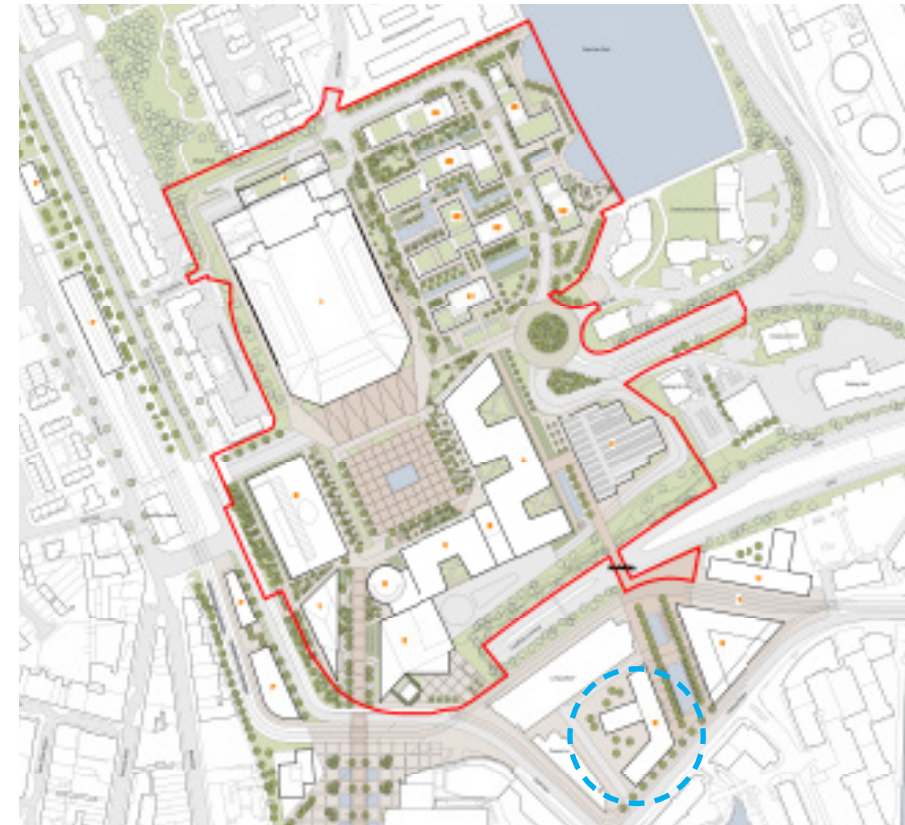
Proposal: Hybrid application of a 210 bed hotel fronting Bute Place. Outline planning application for the erection of two office buildings (Circa 15,687 Sqm Gea) including 106 surface and undercroft car parking spaces with all matters reserved other than means of access.

Arena Masterplan

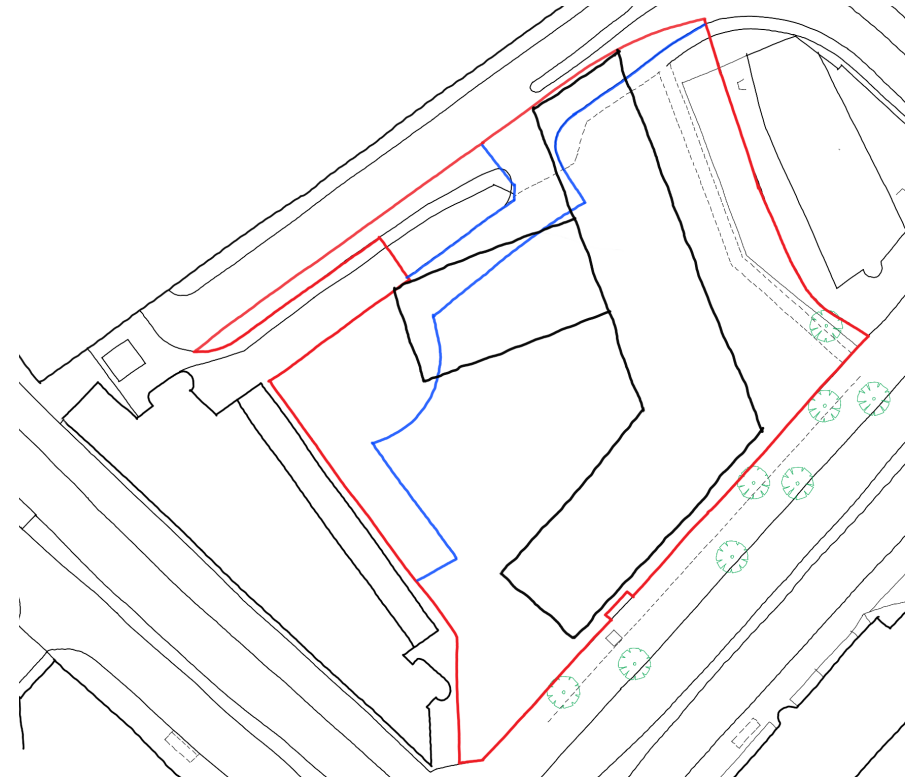
Cardiff Bay has a ten year master plan to develop the entirety of the area from the Arena all the way down to the edge of Caspian Way and Pierhead street, this proposal is going to be named Atlantic Wharf.

The Arena scheme was approved in 2022 and represents the first detailed application as part of the wider masterplan.

The shape of this design doesn't fit exactly within the boundary of the site, also it doesn't make the best use of all the space and therefore we would aim to develop this initial approved scheme to make a scheme which works better with the site boundary and the constraints of the site.



Indicative render image showing Plot 5 (Atlantic Wharf Application)



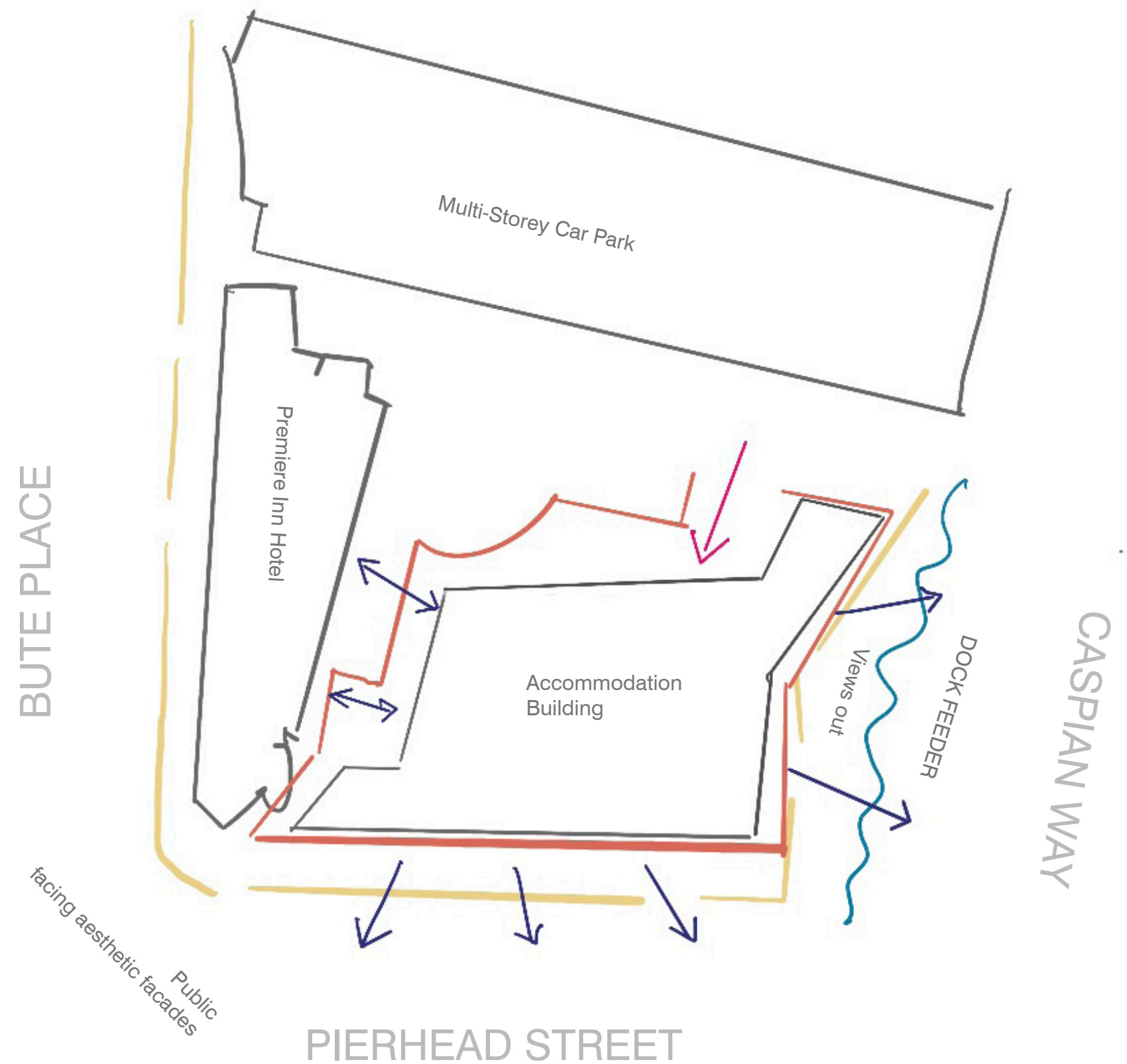
Indicative masterplan block shown overlaid on legal site boundaries and easements.

Site Analysis

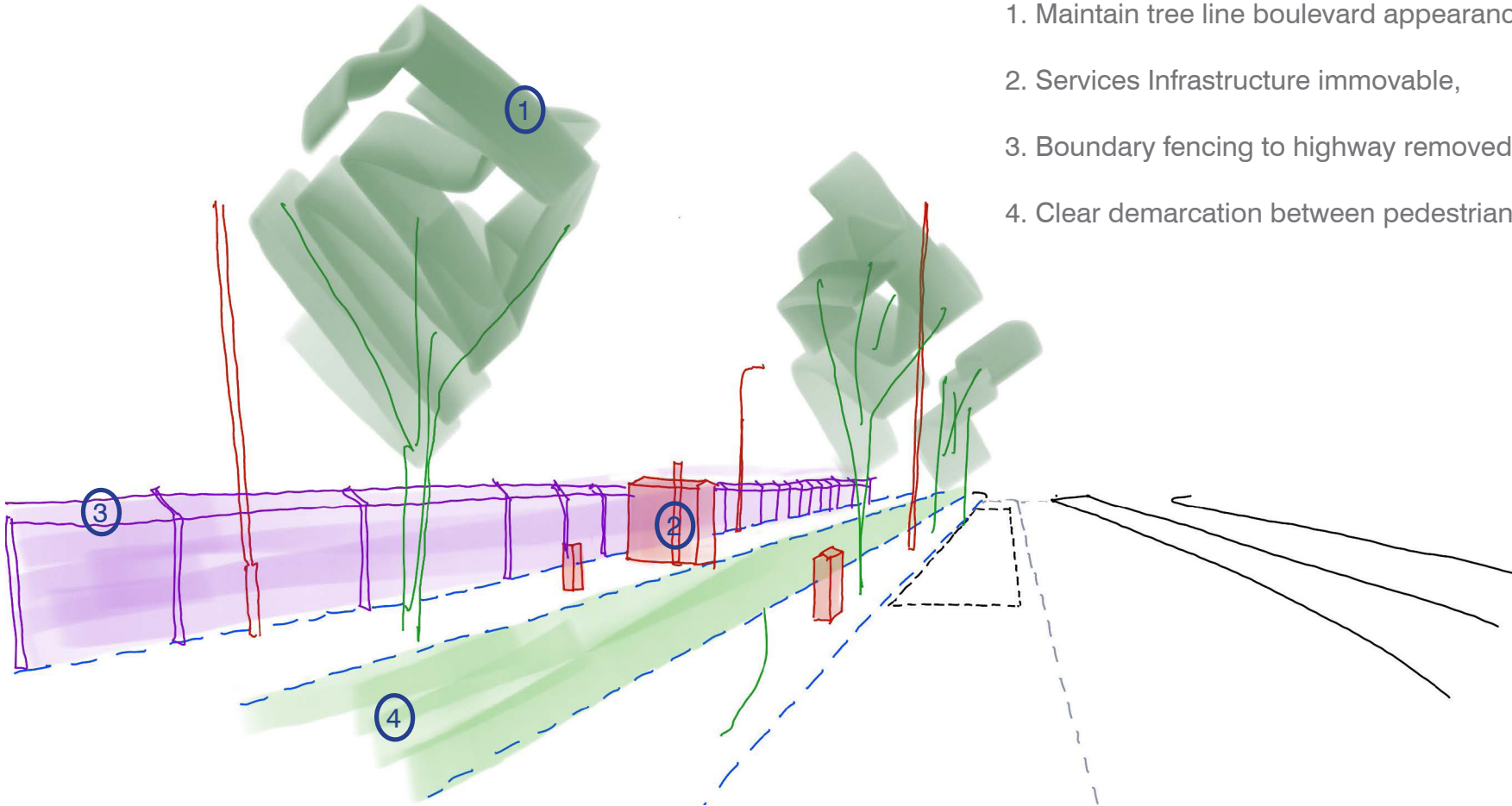
Even though the site is a blank canvas in some terms, it does however have some challenges which need to be considered and resolved. The site sits over the old historic Dock feeder, making the position of the building important so that there are no issues during the construction phases.

Along Pierhead Street and Bute Place the building will face directly onto the office buildings around this area. The rear of the hotel building faces onto the site, this elevation is The rear of these buildings are far more functional in appearance having not been intended to be viewed. The opportunity exists for the new development to screen these functional façades and to 'complete' the wrap of the courtyard by infilling the missing elevation onto Dock Lane.

The historic mapping and photos indicate that this side of the plot was always more functional with a connection to the rail lines and docks. These would have been noisy, dirty areas thus these smart buildings turned their backs onto them. With the infilling of the docks and construction of Roald Dahl Plass and the Wales Millennium Centre, there is an opportunity to connect this side of the plot to the improved public realm.



Photographic Study - Understanding Existing Condition



- 1. Maintain tree line boulevard appearance,
- 2. Services Infrastructure immovable,
- 3. Boundary fencing to highway removed,
- 4. Clear demarcation between pedestrians and cycles.



Site Boundary



Cycleway



Site Boundary

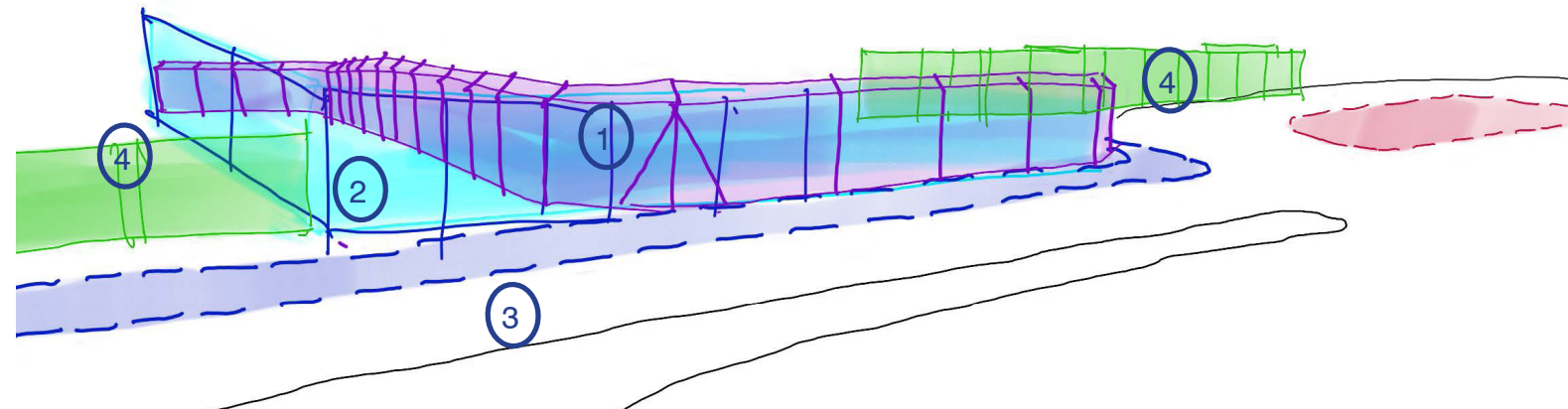


Footway

Photographic Study - Site Opportunities and Constraints



1. Boundary fencing to accommodation block,
2. Student secure amenity and access,
3. Public footway,
4. Existing site boundary fencing.



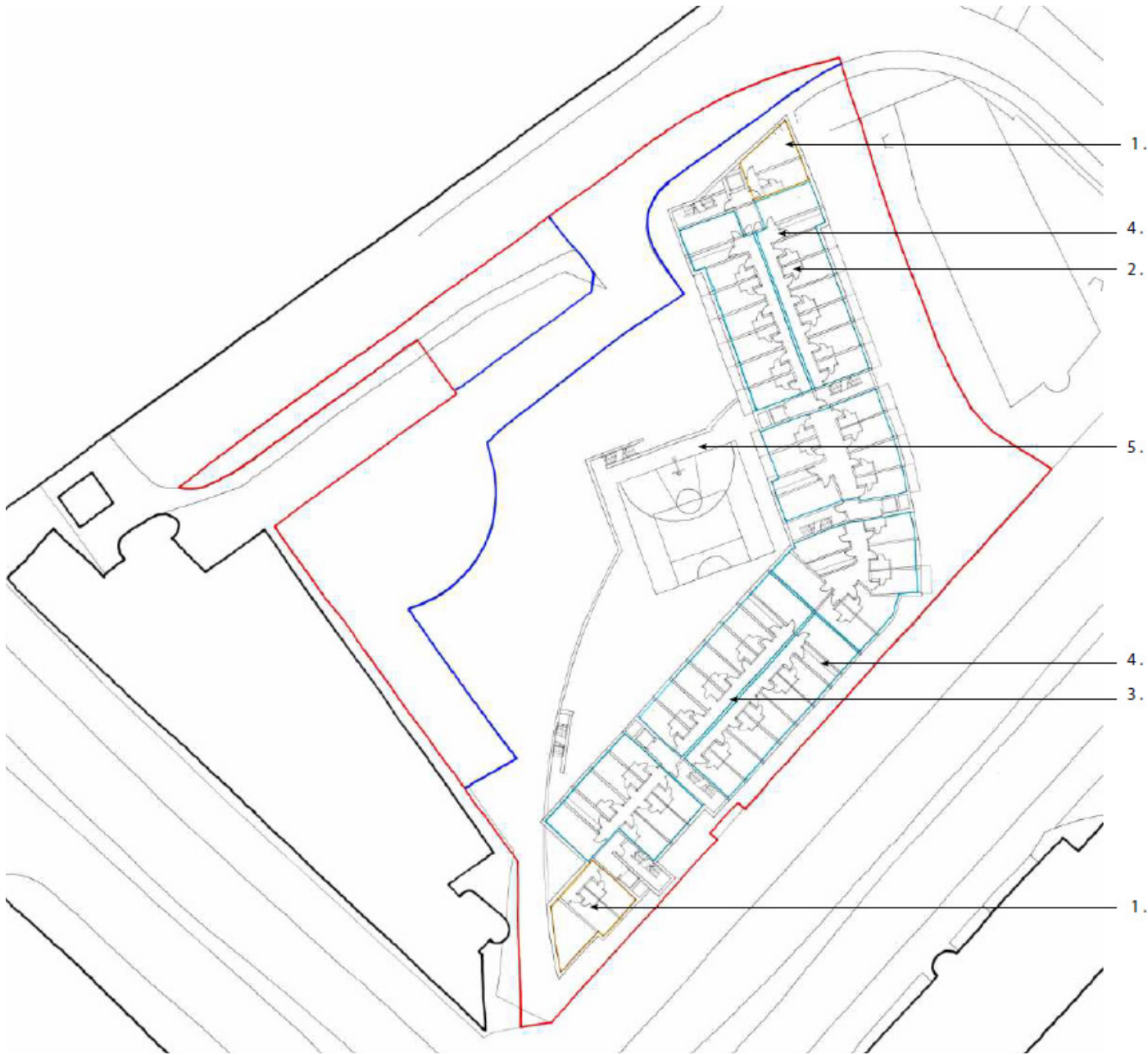
4. SCHEME DEVELOPMENT



Concept 1 - Gold Container 'L-Shape'

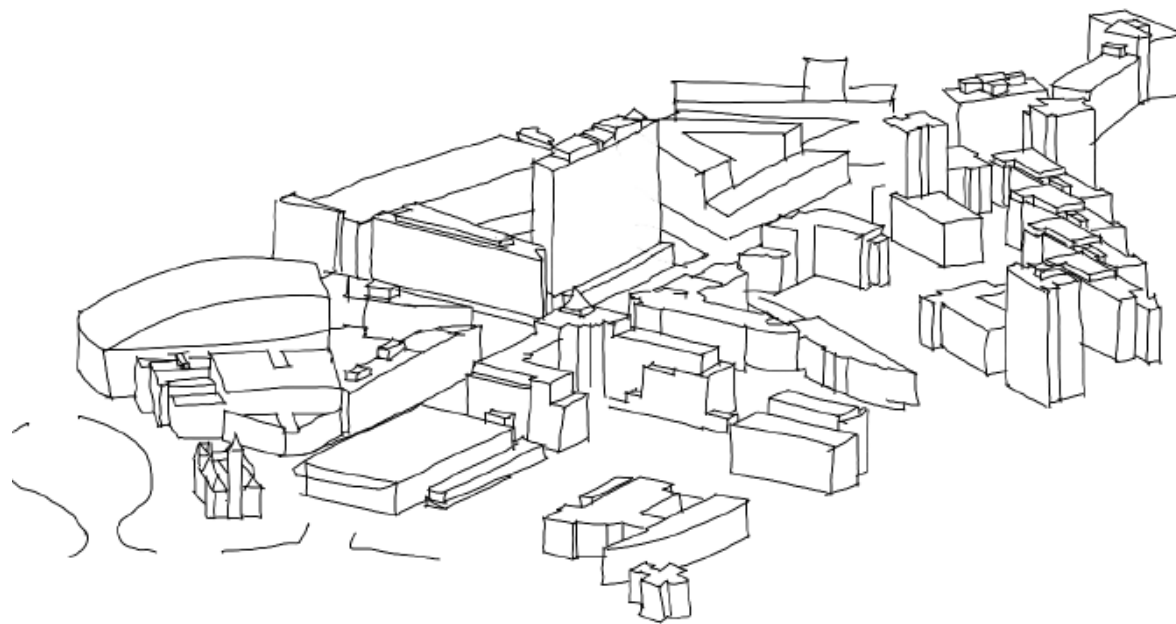
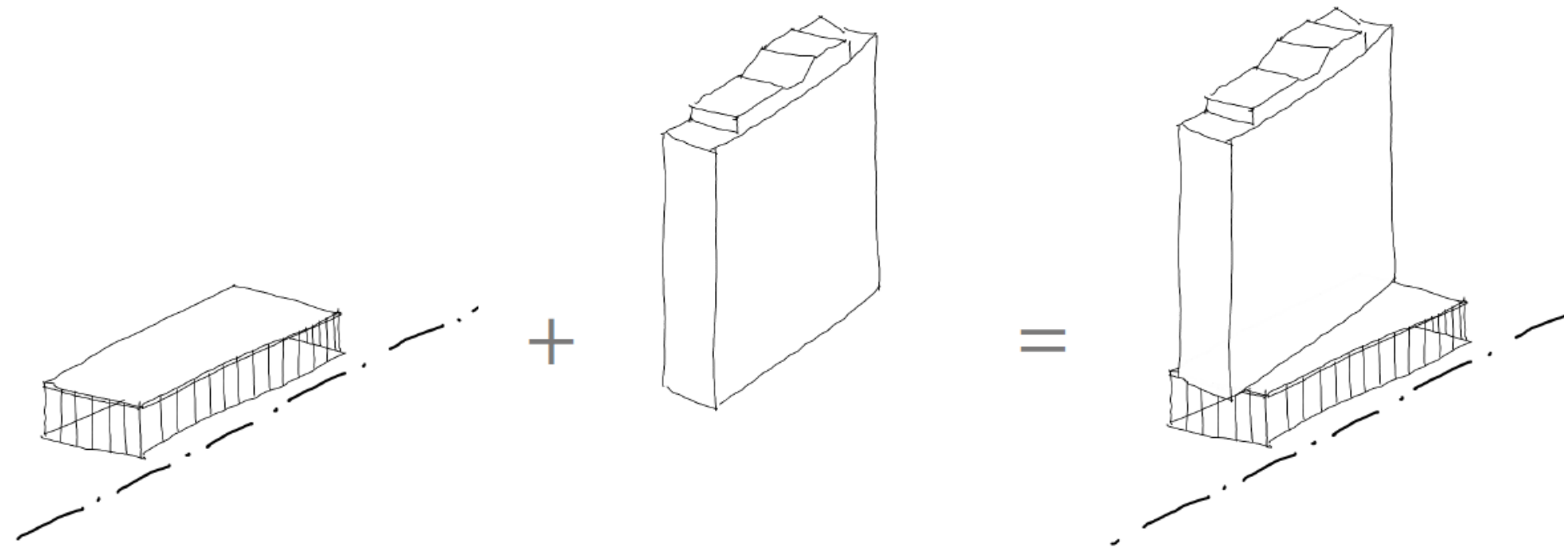
Typical Floor - Linear 6 bed cluster units
42no. Ensuite Beds / typical floor plate.
336no. Beds - Floors 1-14,
114no. Beds - Floor 1-9

- Staff Residential.
- Block 1 (6no. Bed clusters) 24no.
- Block 2 (6no. Bed clusters) 18no.
- Outdoor Sports Amenity Deck.

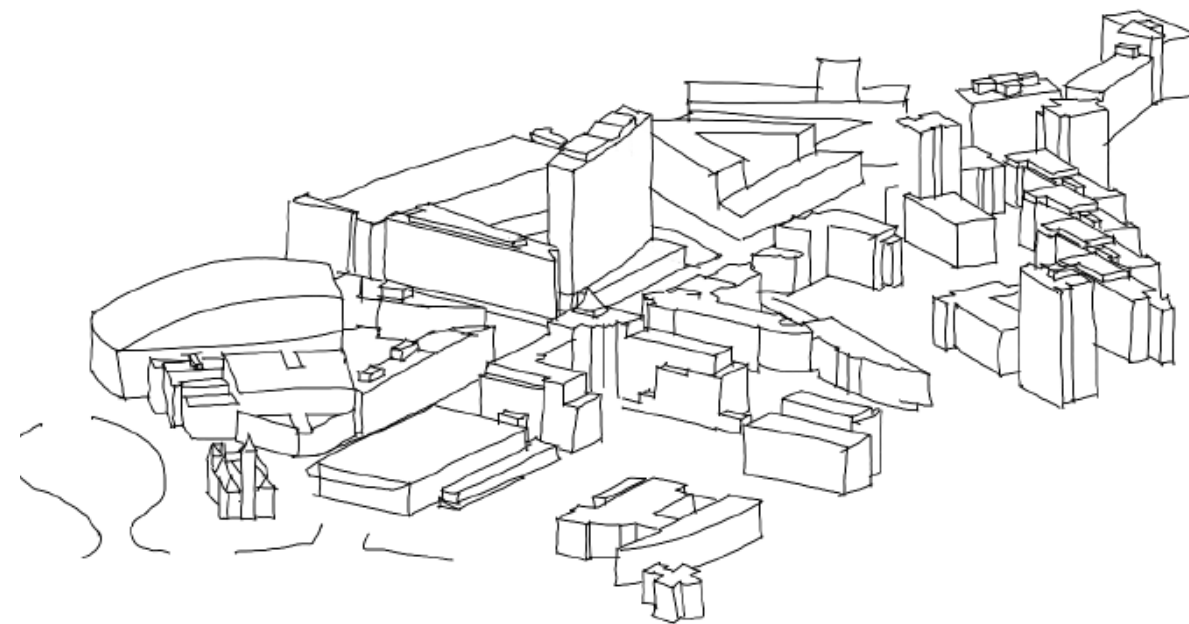


Concept 2 - The Collier

From developed understanding of the history of the site, the initial concept explores bringing to light the historic dock walls which run below the site. The structure would be positioned to align with the walls and it would be designed to represent a Collier Ship coming into dock. The Pavements would be repaved to en-capture the water and the dock walls which are running below the surface.



The Collier with Podium - Aligned to the modern day roads

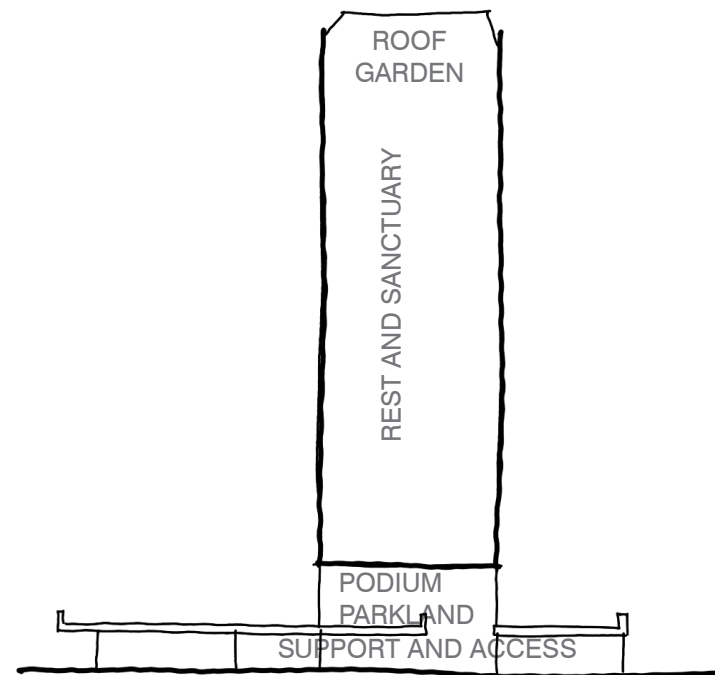
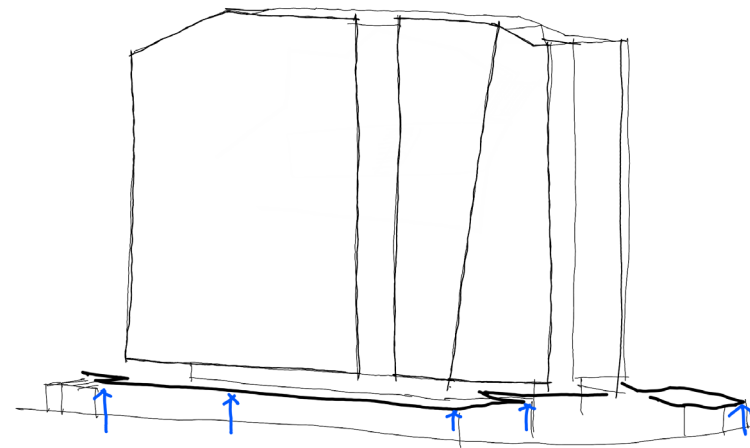


The Collier with Podium - Aligned to historic dock walls below

Concept 3 - Parkland Podium and Tower

Parkland podium providing controlled safe access, place for rest, play, visual amenity and sanctuary. Accommodation living block floating over connected by vertical circulation.

- Benefits the users by having improved visual outlook,
- Semi-private, but secure space,
- Acts as a movement buffer vessel for ingress and egress of population during peak times,
- Organic form to add visual interest to the street scene.



Option 01:



Option 02:

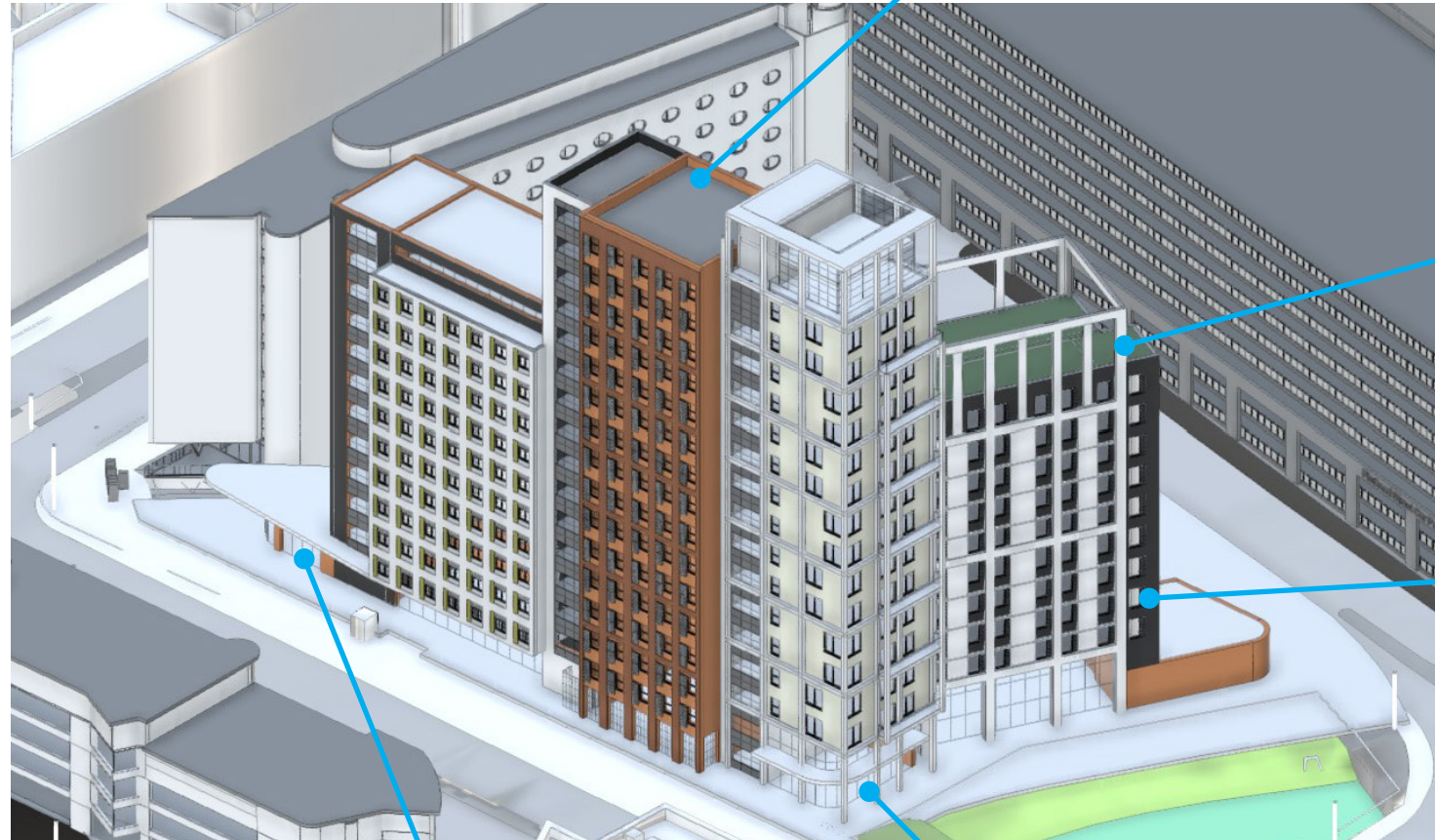


Option 03:

Concept 4 - Stepped L-Shape Scheme

After the LPA meeting with the client and the planners, the feedback suggested that the overall massing and façade of the building needed to be reviewed and developed to better reflect the buildings which are being renovated on site 1.

The floor plate layouts which we have worked up, we would like to maintain as much as possible because they are the most efficient they can be to fit with the clients requirements and the specific needs to meet the brief.



Concept 4 - Facade Development

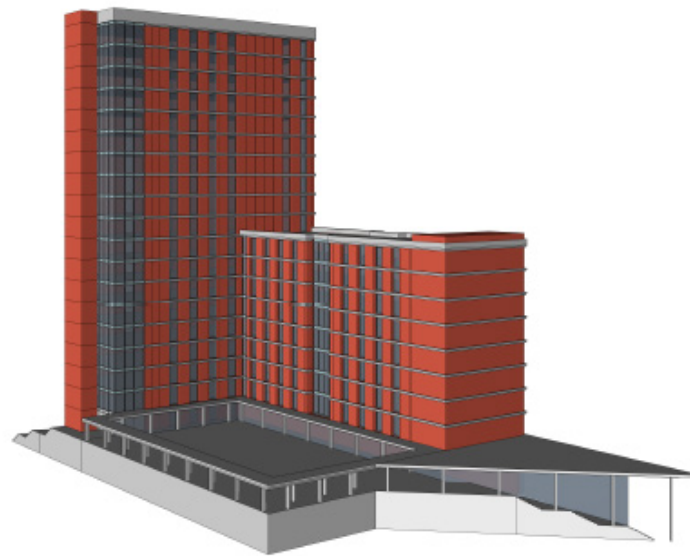
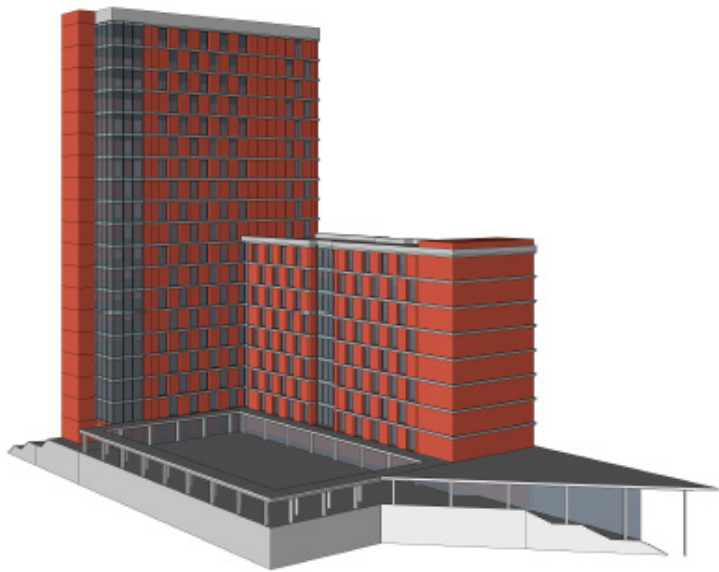
Option 01



Option 02



Option 03



Concept 4 - Material Definition and Facade Articulation

Planners feedback suggested that the red brick banding that spans vertically up the edge of the elevation makes the building too busy.

Positive comments on the overall material choice and the breakdown of the mass of the building. There is a clear and obvious main entrance.

Suggestions were made to explore the window arrangements further and to decide on a shape and position for the columns and openings.



5. SCHEME CONCEPT



Define Street Edges

- The main urban role of any built intervention within the Site is to create legible street frontages along Pierhead Street and the Dock Feeder.
- The currently empty site creates a bleak frontage to Pierhead Street and the Dock Feeder featured by a wire fence.
- Public realm along the site fails to create a clear and legible pedestrian route. The footpath is currently split in the middle by a cycle lane and cluttered with services and trees.
- The proposed design will aim to create an animated urban frontage that helps create a pedestrian friendly environment along Pierhead Street and the Dock Feeder.

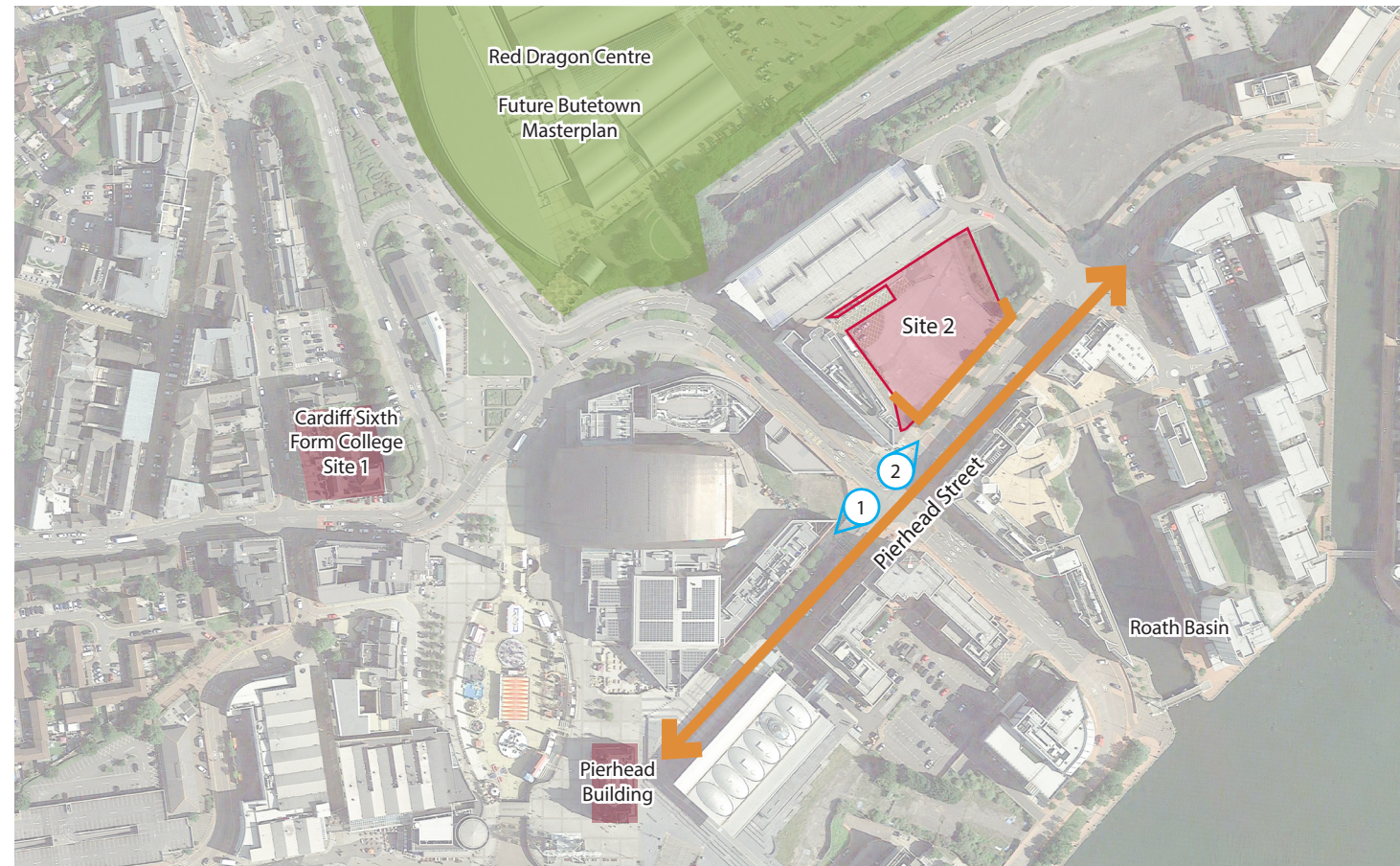


Figure 1.1: Defining a street frontage along Pierhead Street

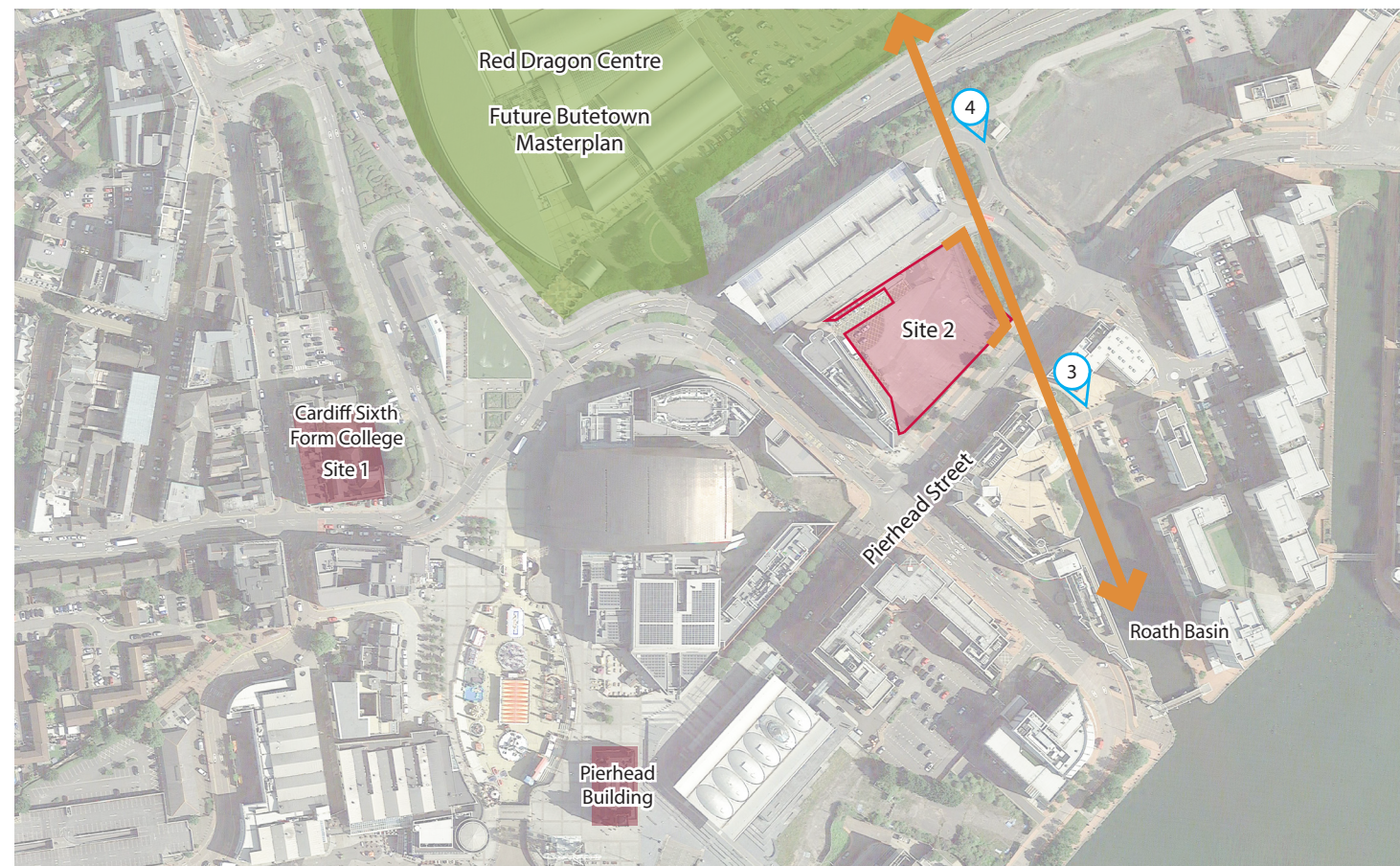


Figure 1.2: Defining a street frontage along the Dock Feeder



Figure 1.3: View of Pierhead Street looking south-west



Figure 1.4: View of Pierhead Street looking north-east



Figure 1.5: View of Roath Basing dock from Pierhead Street looking south

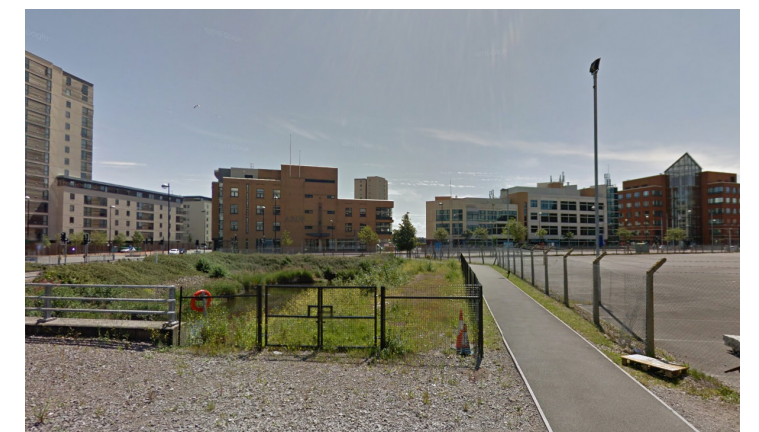


Figure 1.6: View of the Dock Feeder looking south