Plots 4 & 5 Central Square Cardiff Design and Access Statement

4 & 5
Sgwâr Canolog Caerdydd
Datganiad Dylunio a Mynediad

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Introduction

1.1 About Us

The Applicant

The Applicant is REAP 3 Limited who are a subsidiary of Bluecastle Capital. Bluecastle Capital is a fully integrated real estate development, asset management & investment business. Collectively, the principals have structured and asset-managed property transactions worth over £3 billion, and are able to draw upon specialist, in-house legal, financial and real estate expertise. Bluecastle's investor base includes a wide range of private and institutional sources, as well as its own principal investment funds. Bluecastle controls the full value chain of the BTR asset lifecycle, from the initial sourcing all the way through to operational ownership via its long-term institutional BTR fund.

5plus Architects

We are a design-led practice and we recognise the intrinsic social and commercial value of good quality design. Our work is engaging, considered and rigorous, and always specific to our client, the brief, and the site. We strive to maximise site potential and deliver the best possible outcomes at all times, and we have a proven successful track record across the UK delivering compelling solutions for many building typologies.

As a national practice we have worked in numerous locations throughout the UK across a variety of project types, for clients ranging from investors and developers to public and private sector bodies. We are committed urbanists and we recognise that the spaces around and between buildings are as important as the spaces within them. Sustainability is embedded in our ethos and is a central pillar to our work.

Our collective experience and knowledge is shared to develop, design and deliver places and spaces with purpose. We are immersed in work which benefits local communities and the wider public, including projects to create workplaces for local government, hotel and residential projects in town centres and cultural and educational facilities for local and national institutions.

Selected Awards

2025	Insider Property Yorkshire Best Large Residential	Soho Yard, Sheffield
2024	Mixology North Award	Five St Philips Birmingham
2024	Insider Property Yorkshire Future Ambition Award	Bradford City Village
2024	BCO Regional Award	Merseyway Innovation Centre Stockport
2023	Guildford Design Award	Bankside Student Living Guildford
2023	EG Regional Deal Award	West Bar Sheffield
2023	Green Apple Environment Awards	The Corn Exchange Manchester
2023	The Yorkshires Commercial Real Estate Disrupter Award	West Bar Sheffield
2023	Insider NW Residential Property Awards	Mount Yard Manchester



5plus architects, Meadowside. Manchester



5plus architects, Meadowside. Manchester



5plus architects, Local Crescent. Salford



5plus architects, farm road, Sheffield (Bluecastle Development)

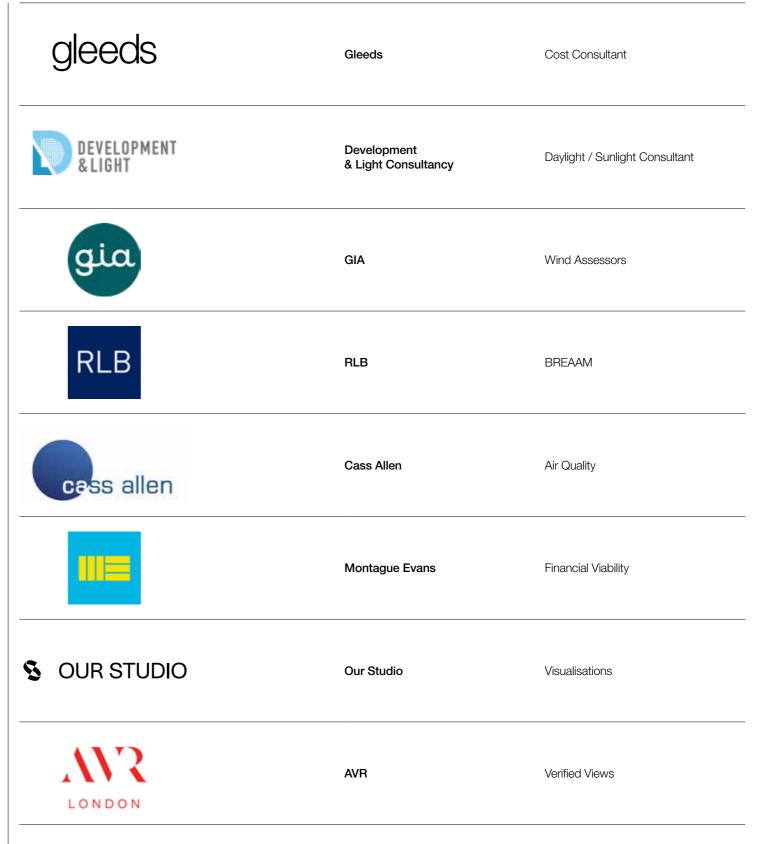


5plus architects, Axis, Manchester

1.2 Project Team

An experienced and dedicated design team has been appointed to ensure the best possible scheme is delivered for this unique project,

₩ BlueCastle Capital	Bluecastle Capital	Client
5 plus	5plus	Architecture
iceni	Iceni Projects Ltd	Planning / Townscape / Heritage
wsp	WSP UK Ltd	Structural Engineer / Civil Engineer / MEP Engineer / Sustainability / Transport / Ecology / Noise / Flooding / Ground Conditions
C Layer.studio	Layer Studio Ltd	Landscape Architects / Green Infrastructure
Artec	Artec	Fire Engineer



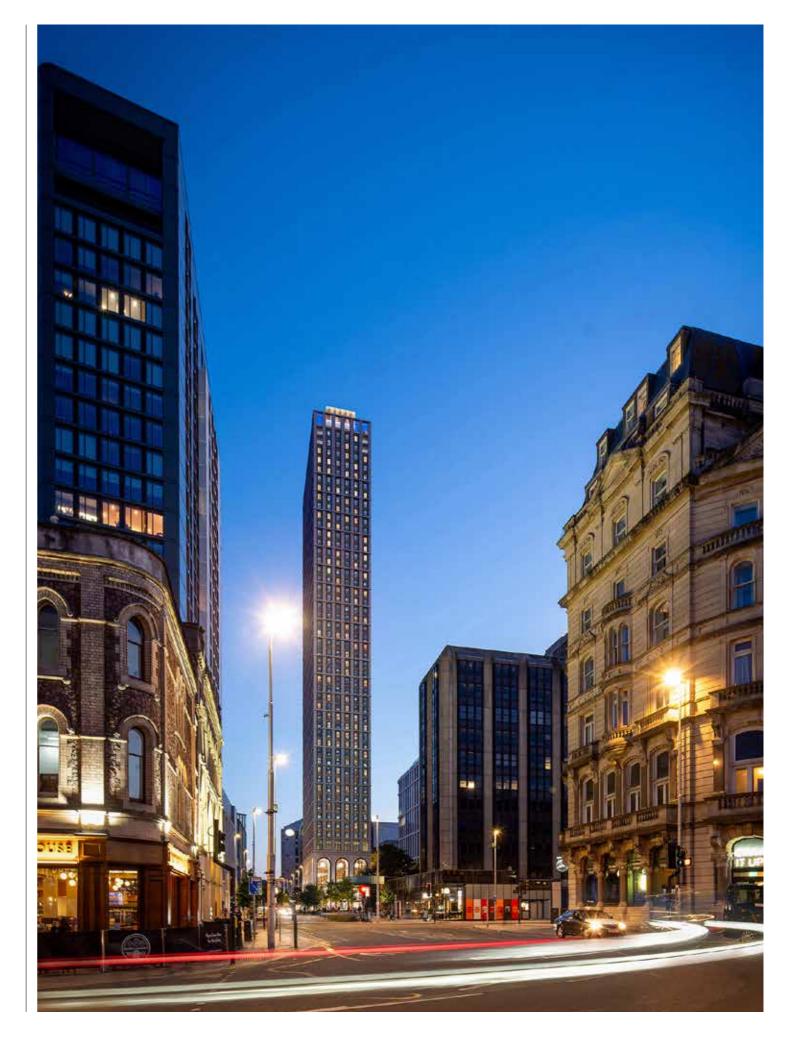
1.3 Introduction

This Design and Access Statement has been prepared by 5plus Architects on behalf of BlueCastle Capital to support the planning submission to Cardiff City Council.

Three pre-application consultations have been undertaken leading up to the submission of this application, carefully and respectfully reflecting on the feedback received each time and developing our proposals to ensure a well-considered scheme for the site and the broader context of Cardiff.

Since the second pre-application presentation, delivered by our concept architects, Maccreanor Lavington (MLA), BlueCastle Capital engaged 5plus Architects to develop the initial concept into a fully deliverable scheme.

This submission documents the proposals for a 50 storey tower on the same site of a previously consented scheme. It includes a twostorey Pavilion and public realm improvements to Central Square creating and activating a new destination for Cardiff City Centre.



1.4 The Site

Location

The site is located in central Cardiff, between the Principality Stadium and Cardiff Central Station. The proposed development, on the final unbuilt plot within the Central Square masterplan, addresses Wood Street. It will occupy the vacant site where the prominent St. David's House office building stood from 1976 up until its demolition in 2018 and will complete this key area of the city centre.

Key

Site Boundary

11 Principality Stadium

12 BBC Cymru Wales

13 Cardiff Bus Interchange

14 Cardiff Central Station

15 Cardiff Castle

16 St David's Hall

17 St David Shopping Centre

18 Utilita Arena Cardiff

19 University of South Wales

Cardiff City Centre





1.5 Brief

Project Aspirations

Bluecastle Capital

Bluecastle Capital focuses on investing in, developing, and operating institutional-scale Build-to-Rent (BTR) properties, with the goal of establishing its development as the premier BTR offering in Cardiff.

A high-quality amenity offering is central to Bluecastle's vision which is keenly focused on resident experience and fostering a sustainable, cohesive community. Social and physical wellbeing are central to the design which aims to have a wide appeal to a diverse demographic inclusive of all generations. Apartments vary in size to appeal to single people through to larger families, but all have full access to a broad range of amenities, which form a fully integrated lifestyle.

Quantum and Size

Although no minimum number of apartments has been set, targeting approximately 500+ units will support the project's viability. A previous consent on the site for 364 units provides an indication of acceptability, however Bluecastle aim to deliver additional homes for the region. Fundamental to the changes from the consented scheme is Bluecastle's need to deliver their own BTR product, focused on market-leading amenity provision and generously sized apartments.

Sustainability Brief

The client aims to create a sustainable, low-energy building, targeting the following:

- BREEAM New Construction UK Residential for the residential tower with a target of 'Excellent' rating
- BREEAM New Construction UK for the pavilion with a target of 'Excellent' rating
- Fitwel MultiFamily Residential with a target 3 Stars (maximum available)
- Future General Contractor and Sub-Contractors to be registered with Considerate Construction Scheme

Sustainable systems and material selection will be prioritised throughout the development:

- · Target a minimum EPC rating of B for all apartments
- Net Zero Carbon strategy to be aligned to the UK GBC Net Zero Carbon Pathway and LETI Climate Emergency Design Guide with targeted Energy Use Intensity (EIU) - 35 kWh/m2/yr

Programme

The target for submitting the planning application is September 2025, with construction expected to commence in 2026 and complete by late 2028. RIBA Stage 3 will follow planning consent, with Stage 4a expected to progress later in 2025.

Active Frontage

The lowest floors of the building should be active and promote animation and street level visibility". The building combined with the pavilion will provide a hive of activity around street level, creating a new destination for Cardiff providing an exciting new thoroughfare to the Principality Stadium.

Resident Experience

The success of the project will rely heavily on the quality of both the service provided and the environment created. High standards of design and finishes will be complemented by the thoughtful arrangement of spaces to enhance the resident experience. The entrance will be designed to ensure a secure, high-quality entry experience.

Biophilia, natural light, acoustic comfort, and materiality will all be key considerations as the design progresses.

Amenity Spaces

Amenity spaces will be generous and inviting, with staff on hand to maintain a hospitality-like atmosphere. Key features will include:

- · Minimum 3.5m floor-to-ceiling heights on the amenity floors:
- A first floor level dedicated to shared amenities, including lounge areas and a residents club room including entertainment suites complete with kitchens, dining and socialising spaces
- A high quality workspace area will be provided on the second floor including meeting rooms, call-booths and open plan desks
- A well-equipped gym with studio space for classes will be contained on the floor along with a spa in the basement.

Overall, our vision is to create a development that not only meets the needs of Cardiff's residents but also enhances the surrounding urban area.



Precedent - Co-working and lounge



Precedent - Contemporary interiors



Precedent - Fitness classes



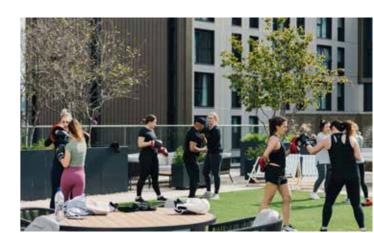
Precedent - Workspace



Precedent - Private Dining



Precedent - Contemporary interiors



Precedent - Group fitness



Precedent - dining amenity

Context

2.1 Consented Scheme

Overview

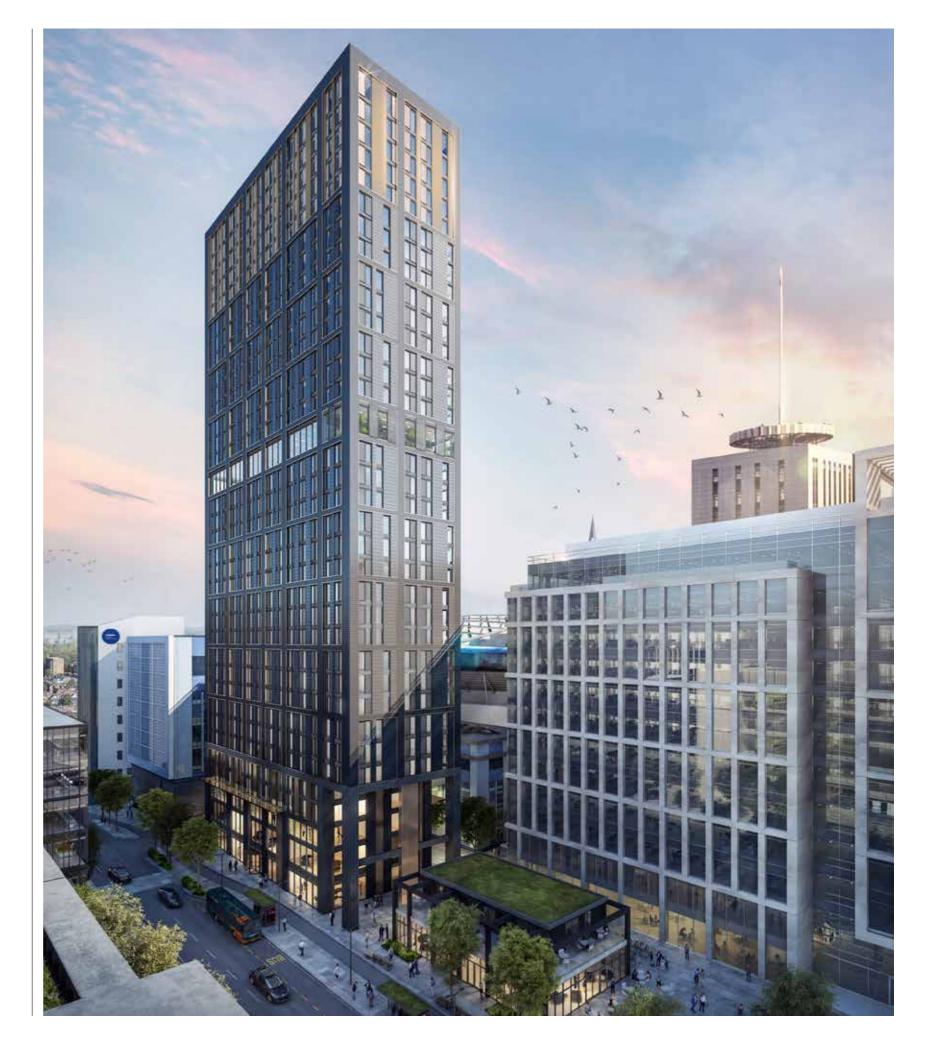
Full planning consent was granted in 2021 (ref. 21/02984/MJR) for a mixed-use scheme designed by Scott Brownrigg for Rightacres Property Company. The proposals included the following key elements:

- Ground floor and mezzanine commercial use Use Classes A1/ A2/A3/B1/D1/D2
- · Upper floors of residential accommodation Use Classe C3
- · Pavilion Use Classes A1/A/A3
- · Public Realm
- Cycle Parking

Access, drainage and other infrastructure works required for the delivery of Central Square Plots 4 and 5 were also included in the consented scheme.

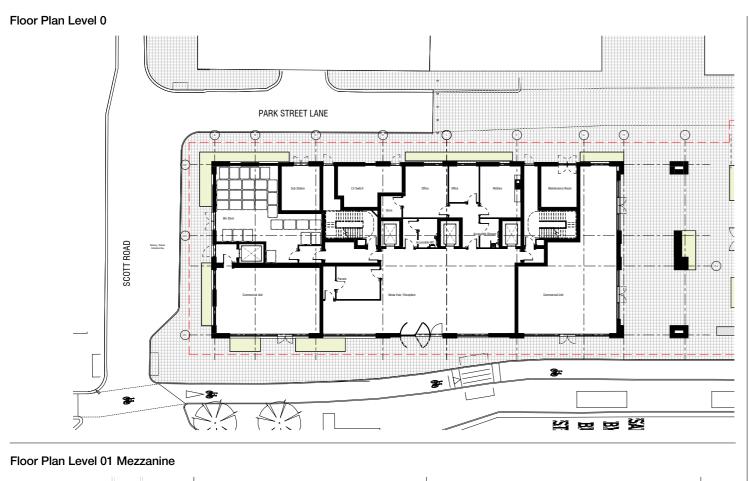
Whilst the consented scheme has many positive aspects, the submission of a full new application provides the opportunity to improve and optimise key elements:

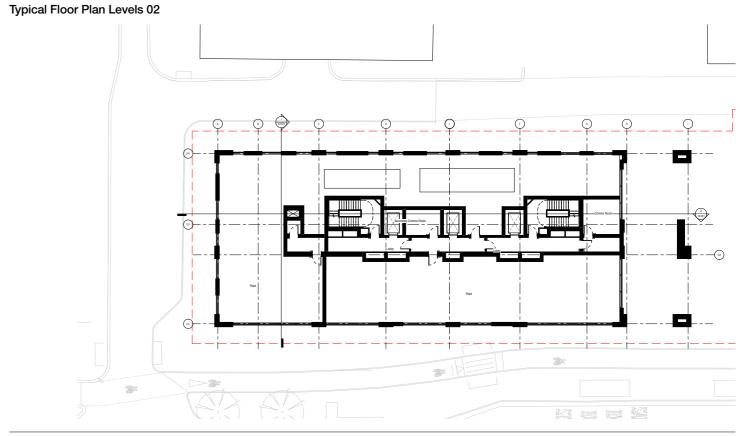
- · Expand and optimise the amenity provision to align with the Bluecastle brand
- Optimise the height and improve the character of the building to provide it with the landmark status worthy of the site
- Enhance the energy performance and sustainability of the building
- Develop the design of the pavilion, increase the amount of public realm space around the building and create a true destination for the city



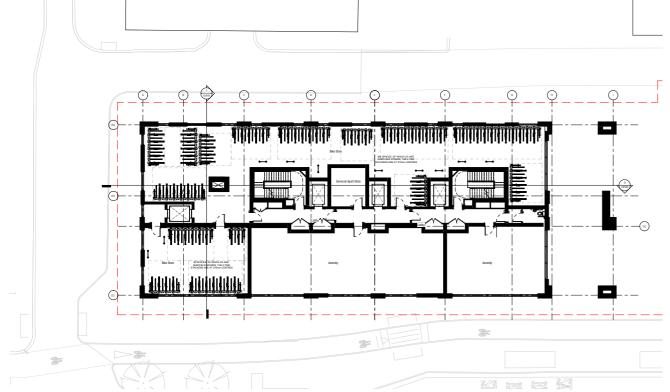
2.2 Consented Scheme

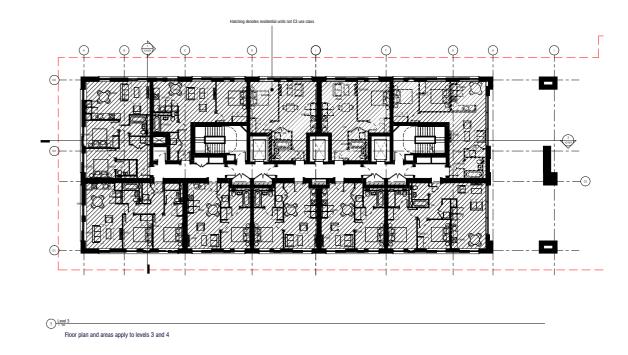
General Arrangement





Floor Plan Levels 03-04





2.2 Consented Scheme

General Arrangement

Floor Plan Levels 05-07



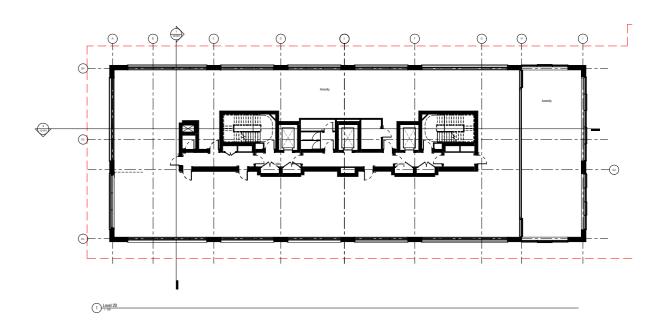
Floor Plan Level 08



Typical Floor Plan Levels 09-19, 21-33



Amenity Floor Plan Level 20



2.3 Pre-Application Planning Advice

Feedback and Actions

Actions Arising from PPA 1

- 1. Dispense with dual-track approach of Section 73 application and new planning application
- 2. Focus design development on full new planning application
- 3. Look at the architectural identity of the tower, its form and expression
- 4. Develop Pavilion design for a further PPA meeting
- 5. Progress landscape and public realm design in general for a further PPA meeting

Actions Arising from PPA 2

- 1. Develop transport and cycle parking strategy
- 2. Progress the design of an appropriate 'crown' for the tower
- 3. Appraise the lift provision for optimum user experience
- 4. Develop layouts for the amenity levels at the base of the tower
- 5. Progress pavilion and landscape design
- 6. Continue to test for daylighting, overheating and wind etc.
- 7. Agree a list of AVR viewpoints with Cardiff City Council
- 8. Arrange a further PPA meeting to cover cycle parking and landscape

Actions Arising from PPA 3

- 1. Explore the design within the long views and review the design the building top and crown.
- 2. Review the design and materiality of the pinnacle.
- 3. Explore the name and branding of the building and square, including how to introduce a cultural element to the scheme.
- 4. Develop the Green Infrastructure Strategy.
- 5. Progress townscape and heritage assessment, including the additional view points agreed with the Council.



Pre App 1 Concept CGI



Pre App 2 Concept CGI



Pre App 3 Concept CGI

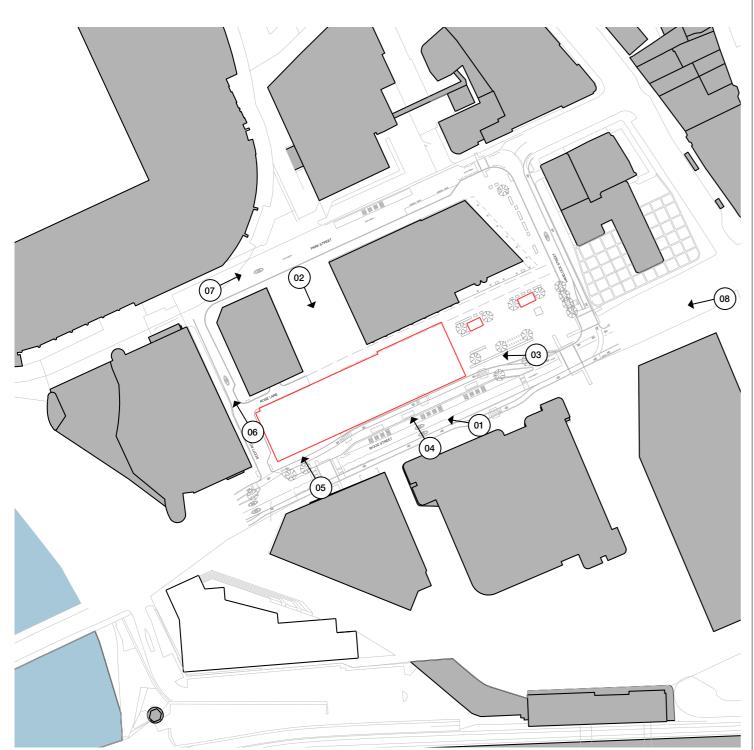
The Site

3.1 Site Photographs

Locations

Key

Site Boundar











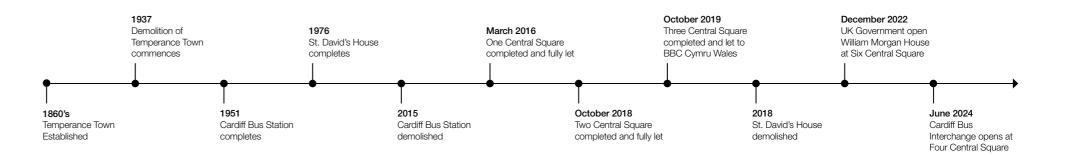








3.2 HistorySite Chronology



1875-1882

This Ordnance Survey map shows the site within the old Temperance Town, located near the centre of Cardiff. It was established in the mid-19th century by Jacob Mathews. He leased the land from Colonel Edward Wood, who did not approve of alcohol and prohibited the sale of alcohol within the lease.

The main street running from east to west was named Wood Street, with the residential streets of Eisteddfod Street, Gough Street, Scott Street and Havelock Street running north to south towards the rail station.

1937

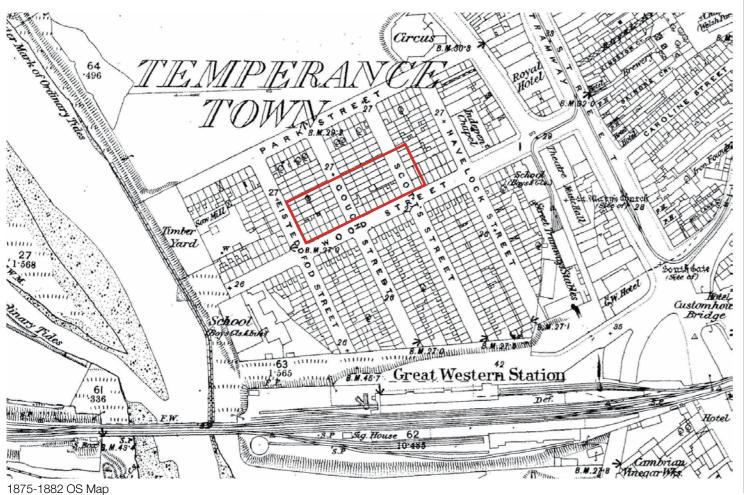
In 1937 demolition began on the housing in Temperance Town to make way for the new Cardiff Bus Station. The station remained until 2015 when it was demolished as part of the wider redevelopment of Central Square.

1976

St David's House office building completes on the site of what is now Central Square. In 2019 demolition begins to enable the current development.

Key

Site Boundary





View looking from the application site down Gough Street to Cardiff Train Station



View looking south across Temperance Town



Cardiff Bus Station



St David's House

3.3 Site Analysis

Environmental and Movement

Environmental Analysis

The site is surrounded by few trees, mainly near Park Street and Cardiff Central Station, limiting the sites connection to nature. The sun path shows good daylight exposure, especially around the south face of the proposal. Key views from the proposed building include those onto Wood Street, towards the River Taff and to the square and Pavilion below.

The River Taff is 200m west of the site. NRW flood maps show that the site is in Zone 3, which means that it is safe during a 1 in 100 year flood but is at risk during a 1 in 1000 year event. The site benefits from nearby river and sea flood defences.

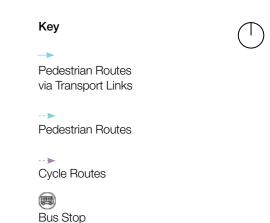
The major noise source in this part of the city is from events at the Principality Stadium. More constant noise sources are from road traffic on Wood Street with background noise from the trains arriving and leaving Central Station."

Key Sun Path ✓ Vegetation → Views Out Potential Flooding Noise

Movement Analysis

The site is well connected by multiple modes of transport. The main pedestrian routes from Cardiff Central Station and Cardiff Bus Interchange are shown with red arrows, indicating high footfall along Wood Street and adjacent streets. The site sits directly along a key pedestrian route, which links the stadium and our site to St Mary Street and beyond.

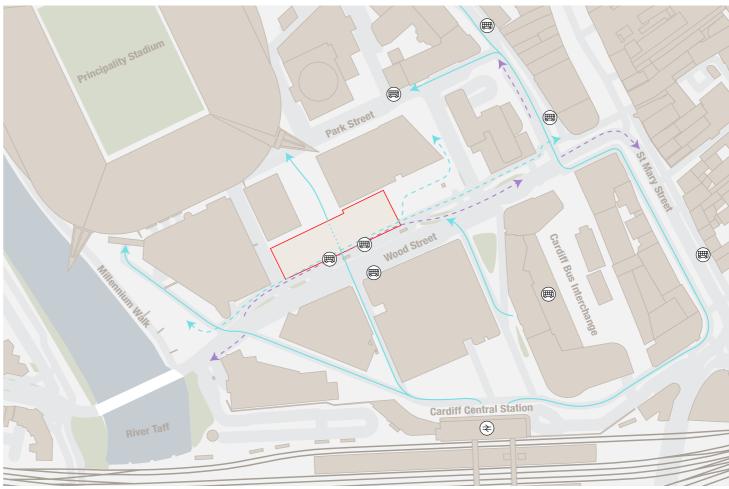
A designated cycle route also runs past the site, enhancing accessibility for cyclists. Several bus stops and Cardiff Central Station are located within a short walking distance from the site, making it highly accessible and well-integrated into the wider transport network.



 \Rightarrow

Train Station





3.3 Site Analysis

Constraints and Opportunities

Constraints Diagram

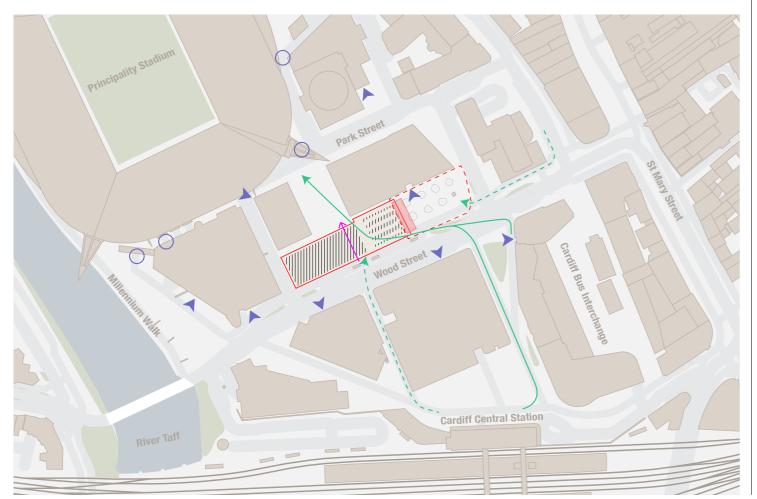
The constraints diagram identifies key spatial pressures around the site. Multiple entrances to surrounding buildings and stadium ticket gates suggest heavy pedestrian movement, particularly during events. The primary pedestrian route runs directly through the site, with secondary routes converging nearby, potentially creating a bottleneck between the proposed building and its neighbour. A key view corridor cuts through the site, which has been a major consideration throughout the design process. The adjacent no-build zone further restricts development flexibility and may limit options for access during and post construction.

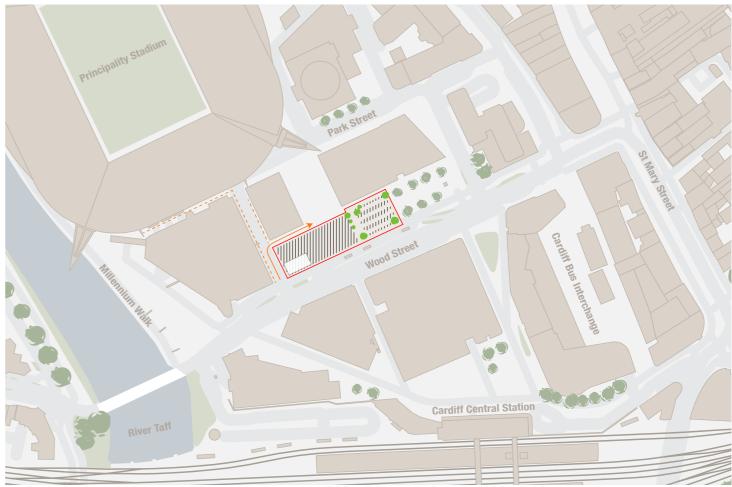
Rey Building Entrances Stadium Ticket Gates No-Build Zone Primary Route Secondary Routes Indicative Tower Zone Indicative Pavilion Zone

Opportunities Diagram

The opportunities diagram highlights several features that can enhance the site. Existing trees and proposed vegetation provide the chance to improve biodiversity, create shaded areas, and soften the urban landscape within the square. The proposed bike store aligns with the adjacent cycle path, encouraging sustainable travel and allowing easy access for those riding bikes. A dedicated service route for the new building links efficiently to the current service access for the neighbouring buildings, minimising disruption. Together, these elements support a well-connected, green and functional development strategy.







3.3 Site Analysis

Building Heights and Uses

Building Heights

The building height diagram illustrates the varied urban fabric surrounding the site. Most of the adjacent structures are relatively low-rise, ranging from 3 to 6 storeys. A few medium-rise buildings (7–10 storeys) and high-rise buildings (11–14 storeys) are dispersed across the area, while very tall developments are limited, with only isolated instances of green (15–18 storeys) and yellow (18+ storeys).

In contrast, our proposed development significantly exceeds these heights, establishing a vertical landmark. The intention is to create a bold centrepiece that anchors the surrounding urban landscape and enhances the area's visual identity.

Key 3-6 Storeys 7-10 Storeys 11-14 Storeys 15-18 Storeys 18+ Storeys Indicative Build Zone

Building Uses

The area around the site includes a mix of uses. Leisure buildings sit near the stadium and further up the street towards St Mary Street, providing entertainment and recreational spaces. Commercial offices are spread throughout the area. Government buildings are located nearby, offering civic services. Key infrastructure, including Cardiff Central Station and the Bus Interchange, ensures strong transport connectivity. Retail spaces are located near the train station, which is beneficial as it captures high footfall from commuters and visitors, boosting economic activity in the area.

The major noise source in this part of the city is from events at the Principality Stadium. More constant noise sources are from road traffic on Wood Street with background noise from the trains arriving and leaving Central Station







Concept

4.1 Design Overview

Key Principles



Activating the Base of the Building

We will create active frontage onto Wood Street with a publicly accessible bike hub and associated coffee bar. The generous resident's amenity offering over the lower floors will provide passive activation onto the surrounding streets. Moving the intermediate amenity floor into the lower floors creates a connected amenity offer which encourages a higher sense of community. The entrance to the building is to be set into a 4 storey tall 'loggia' space creating an impressive frontage to the square, suitable for a tall building.



Massing and Form

The consented scheme establishes the principle of a rectangular and slender tower on the site, addressing the city as a landmark in this key location. Our thorough design development has led us to the proposal of a 50 storey tower, embracing a tripartite arrangement of base, middle and top.



A Dynamic Addition to the City Skyline

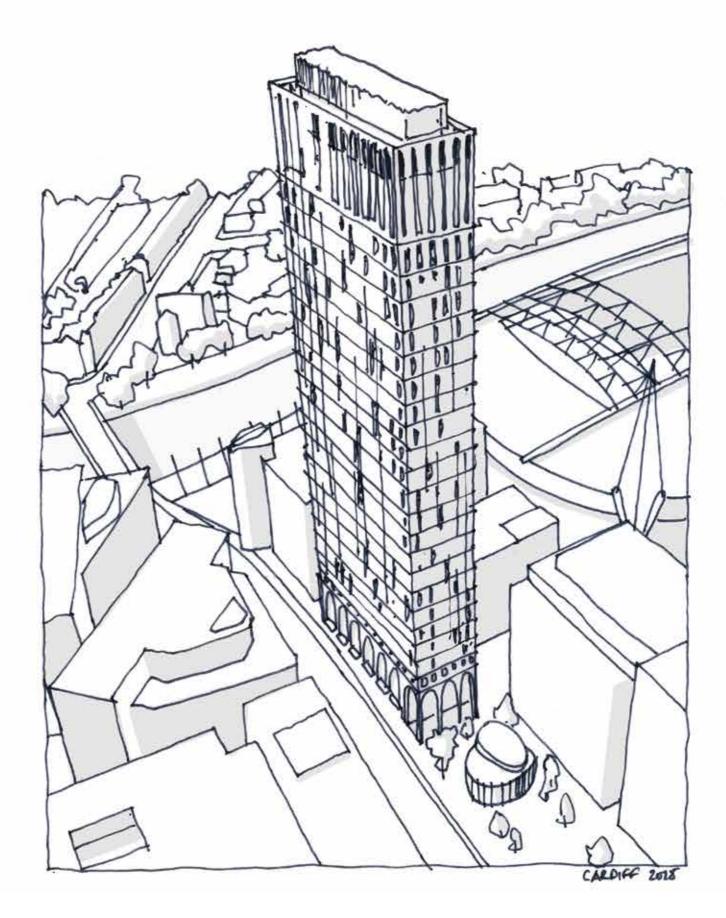
The tower will be highly visible from not just the city centre, but further afield, and the façade must balance a contextual response with a well mannered and ordered proposal. The top of the tower is an opportunity to create a crown on the façade with a central 'pinnacle' that will be illuminated when dark, creating a beacon on the city's skyline.



Creating Quality Accommodation

As part of a premium offer the brief is to create well-proportioned and sized apartments, where all rooms feature large windows and excellent natural daylight levels. All apartments will benefit from excellent views out across the city and far beyond creating a wonderful and uplifting place to live.

Concept Sketch



4.2 Site Response

Overview

Whilst the position and footprint of the tower was ostensibly established in the consented scheme, the developed design has ensured an appropriate contextual response at the street interface.

A clear service/served strategy utilises the secondary Scott Road and Rose Lane for services access whilst the public entrance to the Bike Hub is off Wood Street and the main entrance faces onto the public Central Square.

The main processional routes across and through Central Square towards the Principality Stadium are improved with the position and footprint of the Pavilion helping to guide the flow through the landscaped public realm. Ground floor dining in the Pavilion activates this key element of the square, whilst the key vista of the stadium is framed by the glazed four-storey entrance loggia of the tower.

Key



Main Route

View Through Tower

Services Access

Services Exit Points



Bicycle Store



Cores

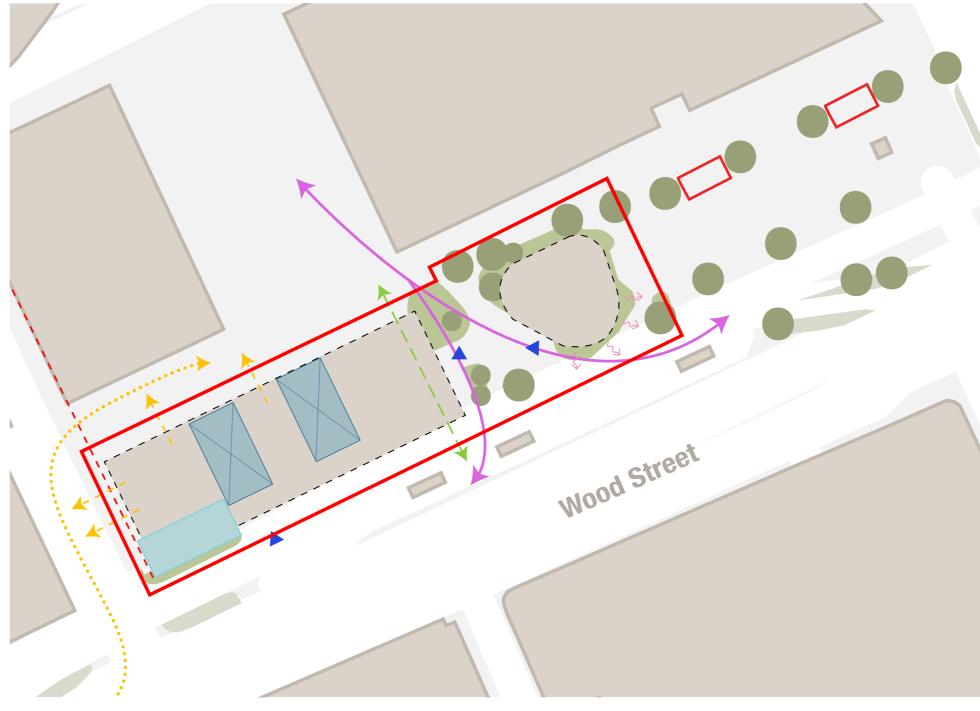


Entrances



Views Out

Plan









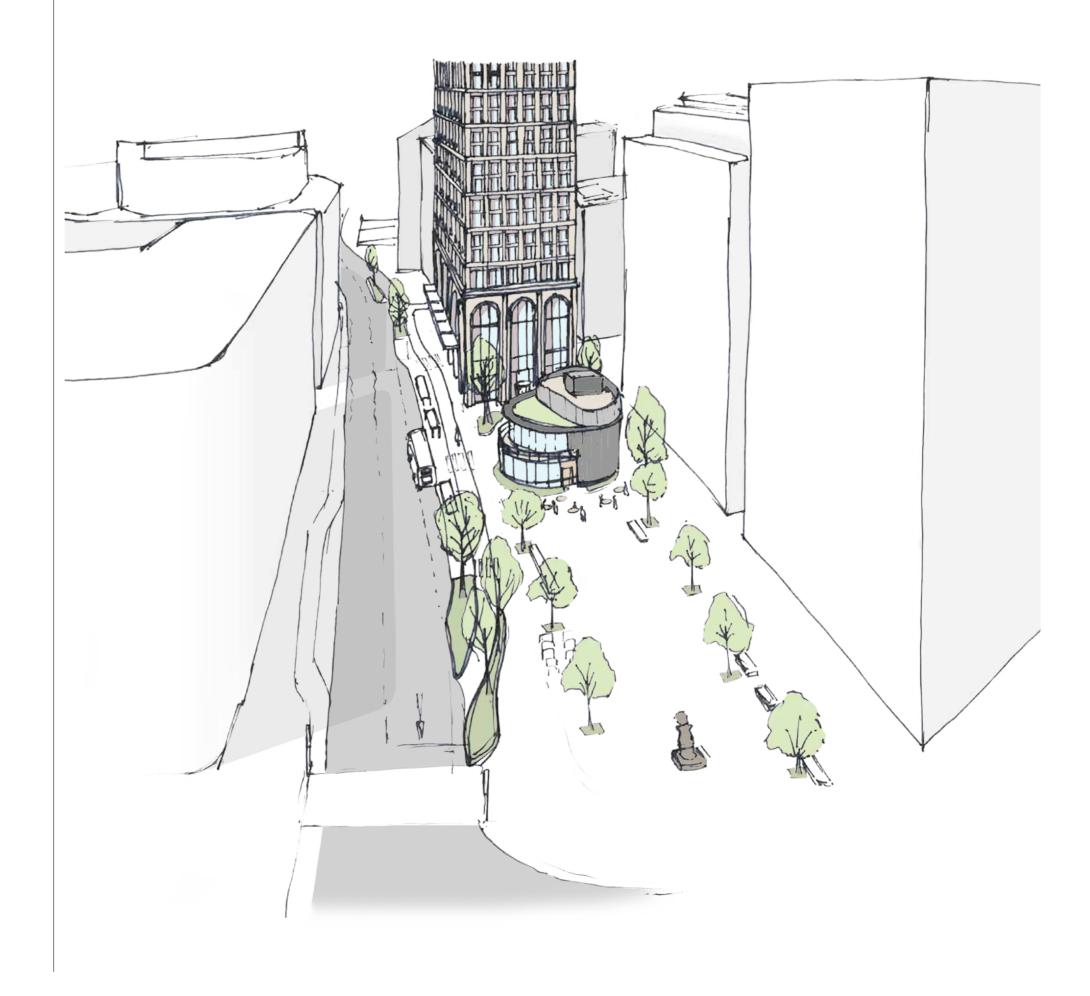


4.3 Urban Composition

Project Components

While the tower is a central feature, the project comprises three key components: the tower itself, the pavilion, and the surrounding public realm of Central Square. The success of the development depends not only on the tower's design but also on how these elements interact - the relationship between the two buildings and their integration with the landscape is essential to shaping this part of the city.

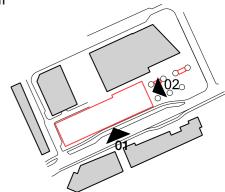
Uniquely, the tower presents its narrow end to the square, which effectively becomes its main façade. The pavilion must complement this orientation, ensuring it neither obstructs views toward the tower nor hinders movement through the square. Although the previous pavilion design mirrored the tower's aesthetic, it felt disconnected from the space. We believe the pavilion could adopt a distinct architectural language - one that differs from the tower and surrounding buildings - provided it supports a coherent and well-considered public space.



4.3 Urban Composition

Townscape Sections

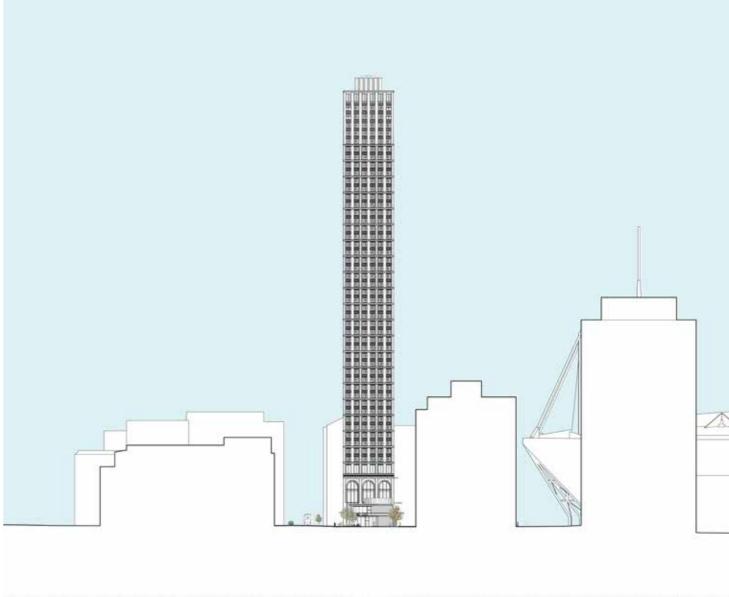




Proposed Site Elevation 01







4.4 Concept

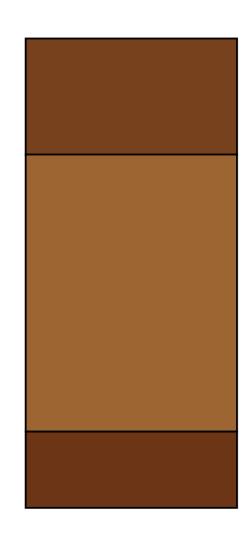
Layering of Ideas

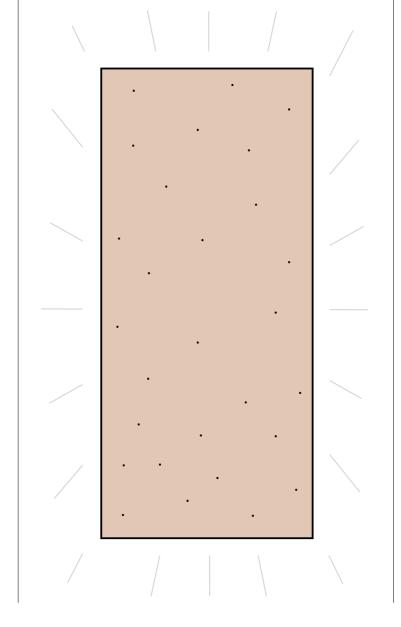
A classical architectural order featuring a distinctly defined base, a structured and proportioned middle, and a crowning top, conveying a strong sense of weight, permanence, and historical tradition.

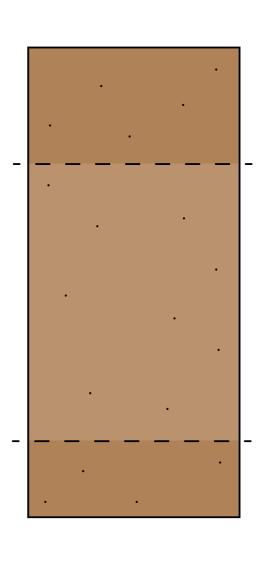
An abstract modernist form characterised by homogeneous façades that evoke a sense of weightlessness and reflect the influence of emerging technologies and innovative construction methods.

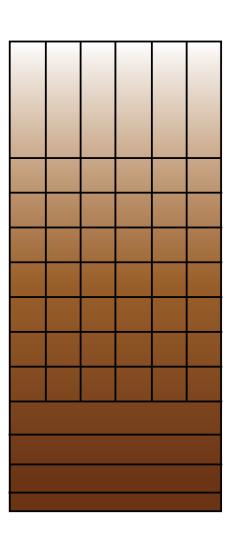
Striving to achieve a balance between the traditional vertical hierarchy of classical architecture and the innovative forms, materials, and techniques of contemporary design and construction.

Articulating and adding character to the architectural language while exploring opportunities to integrate advanced construction technologies and modern building practices.









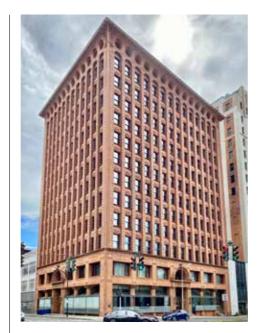
4.5 Research

Neoclassical skyscrapers combine the verticality and modern function of early high-rise buildings with the style of classical ancient architecture. These buildings often have a clear structure with three main parts: a pronounced base, a relatively simple middle section and a decorative and ornate 'crown'. Decorative detailing is typically concentrated at the top and bottom of the façade and around the windows, adding visual interest and reinforcing the building's classical proportions - this composition mirrors the structure of a classical column. These buildings often have symmetrical façades, strong vertical lines and classical elements such as columns, pilasters and cornices. Materials like stone or terracotta are used to give the buildings a solid and permanent look. Examples like the Empire Building and the Equitable Building demonstrate how this style creates a grand, formal appearance. These skyscrapers were often used for banks, offices or government buildings to give a sense of importance, trust and stability.

Book extracts from Sullivan's city of the meaning of ornament for Louis Sullivan, by David Van Zanten, photographs by Cervin Robinson.















4.6 Façade Development

This series of sketches illustrates the evolution of the proposed building, reflecting both aesthetic refinement and functional adjustments. The initial design was a shorter, 35-storey scheme characterised by a grid façade and a strong horizontal band at midheight marking a dedicated amenity level. A 'crown' element defined the top of the tower, while a pronounced, wrap-around entrance at the base anchored the building within its context.

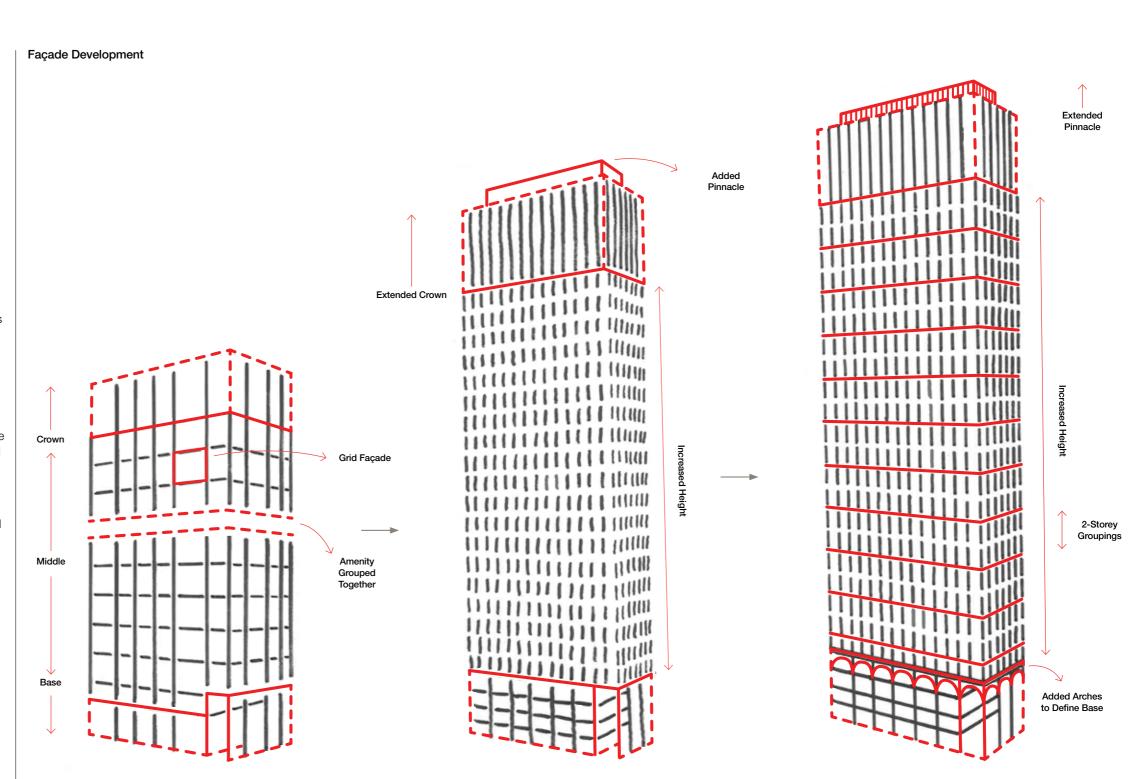
In the second iteration, the building's height was increased, and the grid façade was replaced with a more vertical expression, enhancing the tower's slenderness. Key features such as the crown and base were retained.

The final design development saw a further extension to 50 storeys, reinforcing the tower's role as a landmark. A tall, central element was added at the top, acting as a new architectural pinnacle. The façade 'bay' was further articulated to create visual interest and change with light and shadow through the day. At the base, arches were added to the entrance band, grounding the building and balancing its proportions. Visual transparency through the tall entrance space was preserved, maintaining a connection to the stadium beyond.

In the third pre-app, we set out our updated thinking on the tower's general layout, with particular emphasis on providing generous resident amenity spaces, developed in collaboration with our interior architect Squire and Partners, including a large rooftop terrace offering exceptional views. We also presented developed ideas for the pavilion design, aiming to create a building that complements Central Square.

At ground floor level, we presented two changes. First, the introduction of a publicly accessible Bike Hub in place of the previously proposed large commercial unit, featuring a workshop and establishing a new focal point for cycling in the city centre. Second, we propose glazing the loggia facing Central Square, retaining its generous scale and visual permeability while creating a spacious atrium-style lobby that responds more effectively to its context.

We have worked closely with our wider consultant team, including WSP on lifts, MEP, and structural elements, as well as Artec on fire strategy, to carefully assess and determine the optimal building height. This collaborative process has allowed us to refine the design to maximise quality, resident experience, and buildability. As a result, we are now proposing a 50-storey development comprising 528 apartments.



4.7 Tripartite Elevational Treatment

The elevation is composed by the use of Tripartite formation with a clearly defined base, middle and top.

The base of the building is emphasised by a 4 storey Colonnade, topped with the Bressummer. The middle is characterised by the double order subdivision of the elevation, and the top of the building is characterised by a 5 storey band, framing a crown with a central Pinnacle above.

This proportional treatment of the façade is a traditional hierarchy stemming from classical architecture, that can be seen on many tall listed buildings.

The Equitable Building in New York is an important example of early tall-building architecture, which employs this tripartite arrangement. This is done so through the use of diverse materials and varying levels of architectural detail.



Equitable Building, by Earnest R Graham

Pinnacle Top Crown Body Double Order Subdivision Middle Bressummer Base Colonnade

5plus 28 Central Square Cardiff

Elevation of the Proposal

4.8 Ground PlaneDeveloped Design

Our original design intent for the base was to create a tall, open colonnade at the entrance to frame and preserve important views through to the Principality Stadium — a key aspiration identified in early discussions with stakeholders.

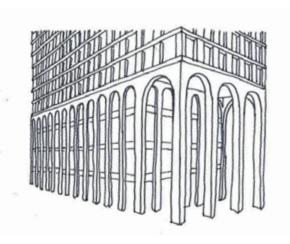
Following further development, we now propose to enclose the loggia with full-height glazing. This approach retains the visual connection to the stadium and wider cityscape while transforming the open loggia into a spectacular glazed atrium. This enclosed space provides a dramatic visual feature from Wood Street and protects the view while creating a safe, weather-protected environment that can be enjoyed year-round.

Enclosing the loggia helps to mitigate safety and crowd management concerns identified during match days, where an open, unprotected colonnade could become a safety hazard or create barriers that might detract from the building's setting.

In addition to enclosing the loggia, we have refined the base of the building to respond more sensitively to its scale and urban context:

- The building entrance has been repositioned to align with the new composition, enhancing symmetry and legibility.
- A thicker stone band now defines the transition between the active ground-floor spaces and the floors above, helping to articulate the building's proportions.
- New brise-soleils have been introduced between the lower levels to help reduce wind flows and enhance pedestrian comfort while adding visual interest.

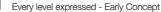
Overall, this updated approach preserves the original intention to maintain views toward the stadium but delivers a safer, more elegant, and more usable space that integrates fully with the building's architectural language.





Preferred Option







Narrow, tall arches - Early Concept

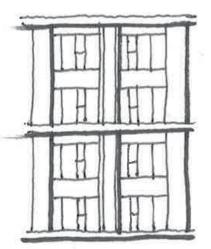


Consistent arches, wider bays - Early Concept

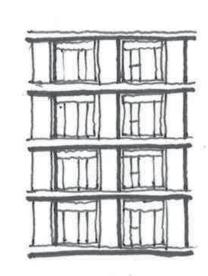
4.9 Main Body

Developed Design

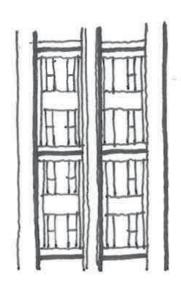
Early sketch responses explore different subdivisions and expression of the façade elements.



Flat spandrels and double order subdivision



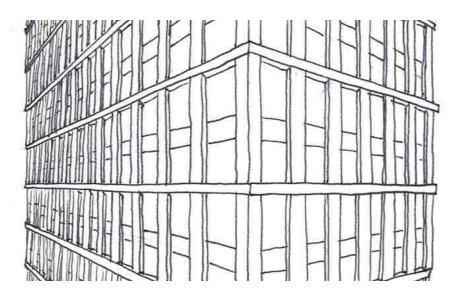
Maximise windows and single storey expression



Vertical emphasis



Horizontal projections and relief to spandrel



Turning the corner

Exploration of different methods of articulating the façade elements leads to different rhythms and accents for the tower, such as single storey punched windows, recessed and projecting elements. A holistic view of these elements must inform the final design decisions.



The Bryant, New York





Maximised window openings



ouble order sub-division



Horizontal elements recessed

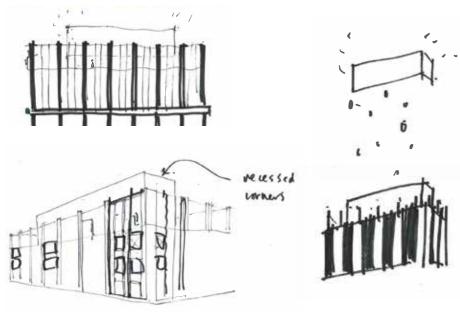


4.10 Crown and Pinnacle

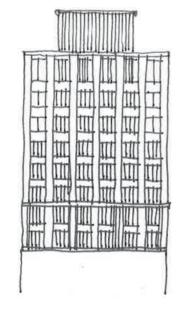
Developed Design

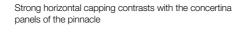
Layering of the crown and pinnacle

Early sketch responses look at how the top section of the tower can be differentiated through plan changes, layering, materiality and



Recessed corners to top floors

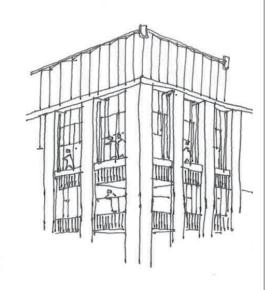




Flat Panel

Concertina

Horizontal Coping



Exploration of different methods of articulating the crown and pinnacle allows for consideration of how changing the order subdivision can accentuate the top of the



The Bryant, New York







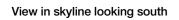
Triple level in combination with double lower order



Single bay Roman arches with conventional parapet



4.11 Façade Composition





View looking west along Wood Street from St Mary Street



Design Proposal



5.1 Scheme Overview

Use and Amount



Built to Rent

528 Homes (subject to design development)

344	1 Bedroom Apartments
184	2 Bedroom Apartments

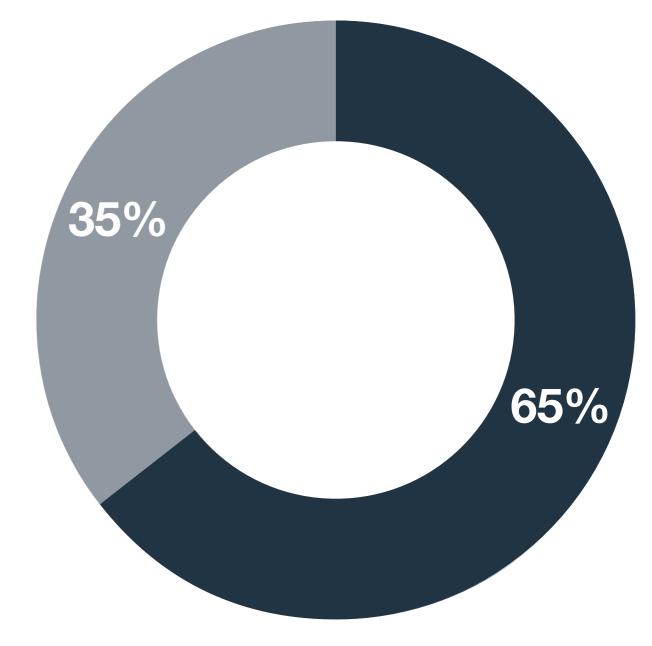
- 431m² shared roof terraces
- 2425m² shared internal amenity space
- 5.4m² amenity per home
- Residents' garden with southern aspect
- Private inset balconies for 12no. 2-bed apartments on upper floors
- 184 apartments with dual aspect
- Well-designed, spacious homes

528 Homes



Apartment Split - See chart below

Туре	%	No.
1 Bed	65%	344
2 Bed	35%	188



Storeys

5.1 Scheme Overview

General Arrangement

The current proposal, shown here, is in essence much the same as presented at PPA 3 incorporating the increase in the building's height to fifty storeys.

The typical residential plan now has five lifts instead of four, not just to service the additional height but to optimize the experience of residents. The mix of one and two-apartments per level remains.

A large Bike Hub, accessed from Scott Road and Wood Street to the south west of the site, provides publicly-accessible cycle storage, with the remainder of the cycle storage located on a mezzanine floor above. This area also acts as the residents cycle parking provision.

In the section to the right you can see how the loggia/colonnade space is shown as being glazed in, turning the lobby as it fronts Central Square into a four-storey tall atrium that preserves views to the stadium.

In terms of amenity, there is a three-storey stack above ground floor offering a huge range of functions as detailed later in this document. The mid-level amenity level that formed part of the consented scheme is replaced with a rooftop terrace accessible to all residents, with fully equipped residents' rooms.

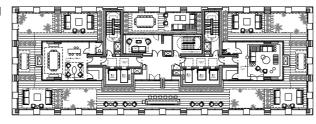
Amenity/Wellness Area

Internal Amenity	2,425 sqm (4.6 sqm per unit)
External Amenity	431 sqm (0.8 sqm per unit)
Total Amenity	2856 sqm (5.4 sqm per unit)

Number of Apartments in the Updated Scheme

2 Bed – 4 Person	184
Total	528

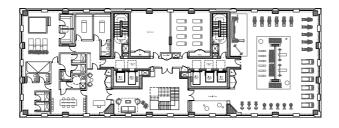




Typical Residential Level



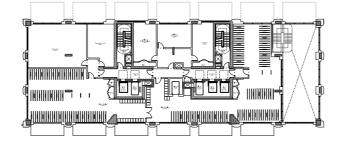
Third Floor



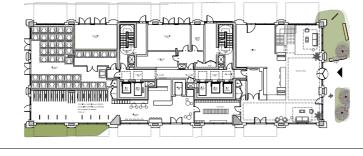
First-Second Floor



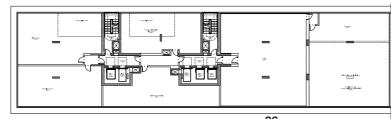
Mezzanine

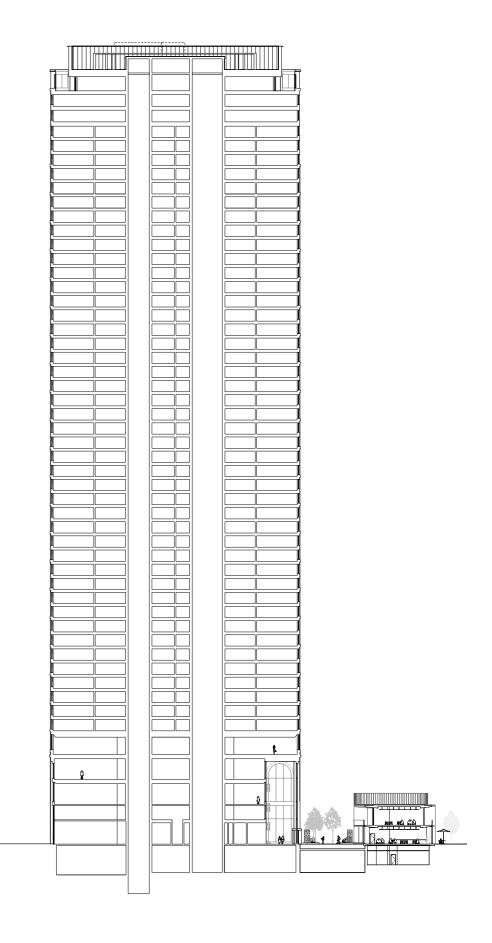


Ground Floor



Basement



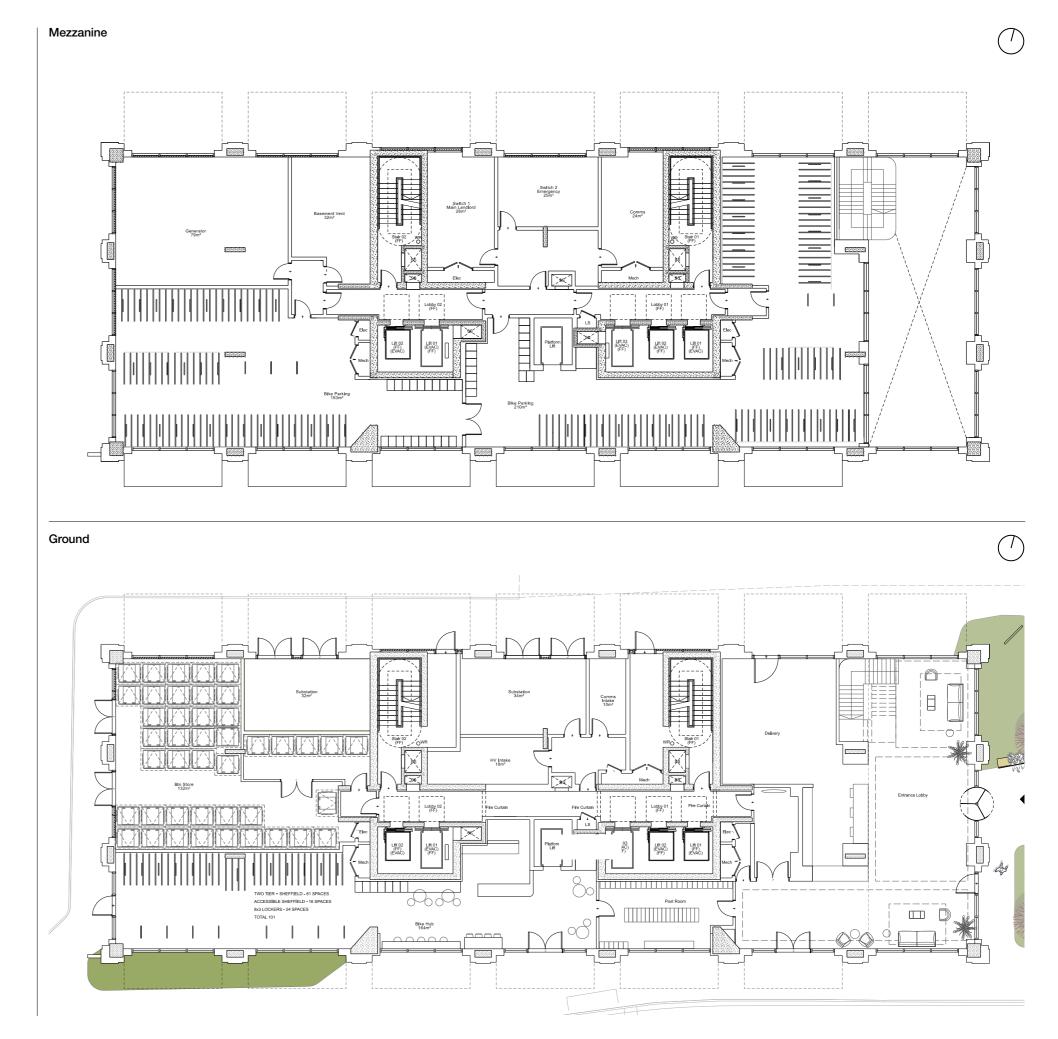


5.2 Ground and Mezzanine

General Arrangement

The ground floor plan will accommodate the following:

- · Re-sized plant room accommodating the required substations and generator rooms that are required at the ground floor.
- The re-sizing of the bin provision / collection regime for a taller building.
- An enhanced residents entrance lobby within a triple height atrium that also provides no obstructive views of the Principality Stadium.
- New residents facilities (postroom, parcel stores etc) for a taller building with an additional lift.
- A bike hub is proposed that will be accommodated on the ground and mezzanine floor level. More detail on the bike hub can be found on the following page



5.2 Ground and Mezzanine

Bike Hub

A bike hub is proposed that will be accommodated on the ground and mezzanine floor level. This will provide both public and private residents bike parking in a managed and secure space. The public will be able to access the bike hub at ground floor from an entrance fronting Wood Street. We see the area at ground and mezzanine level as a vibrant bike hub that can provide a social meeting space with opportunities for bikes to be repaired and maintained. Within the proposed hub, a café for both the public and residents adds a commercial element to the frontage.

The mezzanine includes a large bike hub with spaces to accommodate the residents of the tower with any unused spaces made available to the public. At both the ground floor and mezzanine there is a range of Sheffield stands, stackers, folding bike lockers and large accessible bike parking spaces to choose from, with a platform lift connecting the levels.

The intent is to provide a bike maintenance workshop and coffee counter at ground floor to make this a vibrant and well-used local spot.

Precedents







Look Mum No Hands, Old Street



Two-tier bike racks, Utrecht Central Station



Proposed CGI

Bike Spaces

Two-Tier Racks (Sheffield Stands at Lower Level)	70%	370
Folding Bike Lockers	25%	132
Accessible Spaces	5%	26
Total Spaces		528
External Visitor Spaces (Sheffield Stands)		52

5plus Square Cardiff

5.3 Lower Amenity Floors

1st Floor General Arrangement

The amenity floors on levels 01-03 will provide generous and inviting amenity spaces, with staff on hand to maintain a hospitality-like atmosphere.

Key features of 1st floor will include:

- · Minimum 3.5-metre floor-to-ceiling height
- Shared amenities, including lounge areas and a residents' club room including entertainment suites complete with kitchens, dining and socialising spaces





Look and Feel

1st Floor

5.3 Lower Amenity Floors

2nd Floor General Arrangement

The amenity floors on levels 01-03 will provide generous and inviting amenity spaces, with staff on hand to maintain a hospitality-like atmosphere.

Key features of 2nd floor will include:

- · Minimum 3.5-metre floor-to-ceiling height
- A high quality workspace area will be provided on the second floor including meeting rooms, call-booths and open plan desks

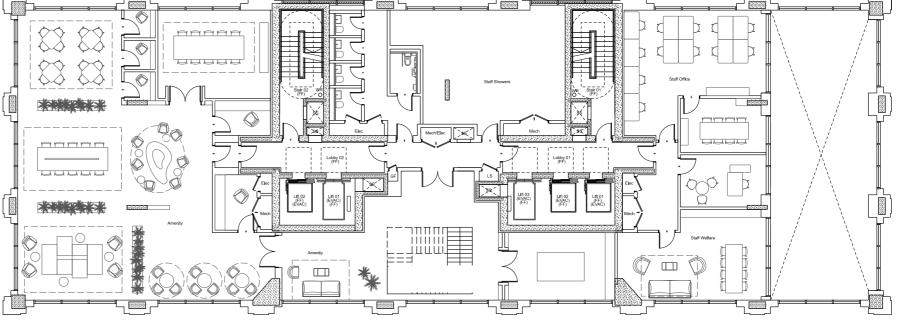




Look and Feel

2nd Floor





5.3 Lower Amenity Floors

3rd Floor General Arrangement

The amenity floors on levels 01-03 will provide generous and inviting amenity spaces, with staff on hand to maintain a hospitality-like atmosphere.

Key features of 3rd floor will include:

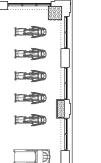
- Minimum 3.5-metre floor-to-ceiling height
- A well-equipped gym with studio space for classes will be contained on the 3rd floor along with a spa in the basement.

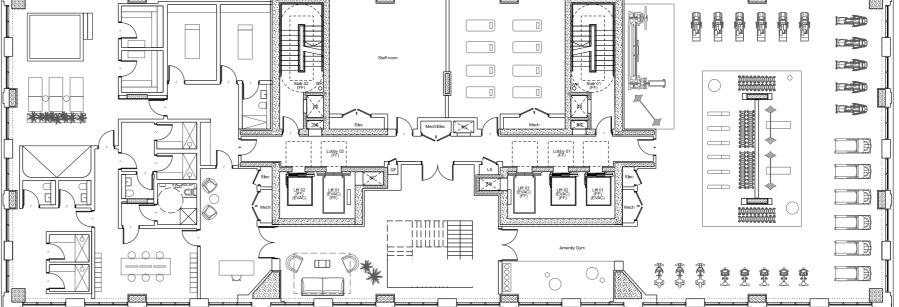




Look and Feel

3rd Floor





5.4 Upper Floors

General Arrangement

The upper floors, levels 04 - 48, provide all of the apartments. The plan is served by two separate cores, the tower is served by two staircases and five lifts.

Core 1 Contains:

- · 2no. 13 person passenger lifts (dual function firefighting and evacuation)
- 1no. 17 person passenger lift (dual function firefighting and evacuation)
- · 1no. firefighting stair with wet riser
- · services risers
- smoke control system

Core 2 Contains:

- 1no. 13 person passenger lifts (dual function firefighting and evacuation)
- 1no. 17 person passenger lift (dual function firefighting and evacuation)
- · 1no. firefighting stair with wet riser
- services risers
- smoke control system

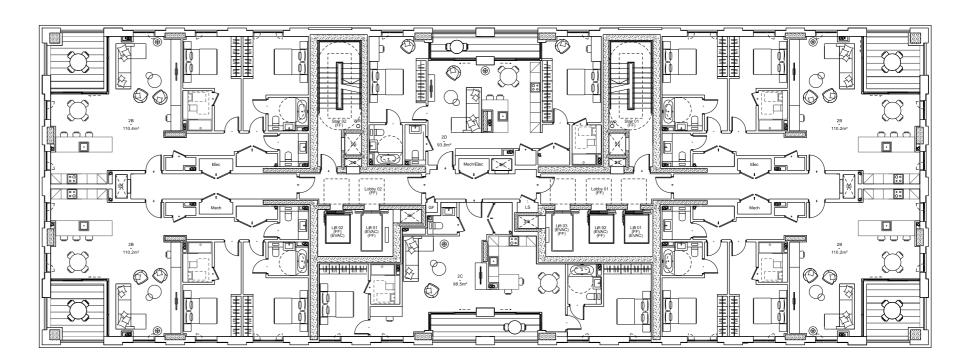
All apartments located on a corner of the floorplate are dual aspect.

12no. upper floor apartments have inset balconies with roofs, providing shelter and reducing wind turbulence, and so the continuous terrace is unencumbered.



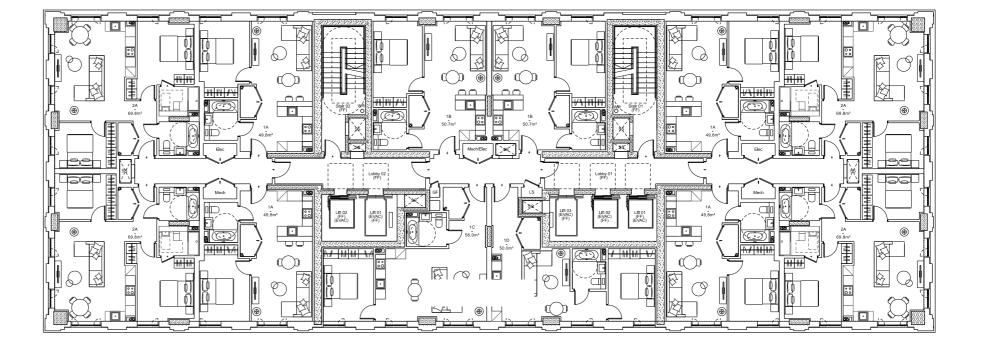
Look and Feel

Typical Floors 47th - 48th



Typical Floors 4th - 46th





5.5 Top Floor Amenity Internal and External

The roof level at the 49th floor provides shared residential amenity space, both internal and external. There are three internal amenity spaces, all of which open out onto roof terrace space. The two larger spaces are bookable dining / entertaining suites, fully glazed to three sides to visually connect inside and outside.

The central spine of accommodation is set back to all sides creating a 360 degree terrace with views in all directions. The roof terrace is enclosed on all sides by large glass screens framed by the solid piers that are an extension of the architecture below. These are not just to provide safety but to afford a sense of enclosure. The rooftop terrace not only provides a truly outstanding viewing deck but also a meaningfully large external amenity space of 431 sqm. Residents will be able to access this shared external amenity space at all times, complimenting the extensive internal offer focused on the lower floors.

The central spine of accommodation includes rooftop plant and a BMU for façade access and cleaning. This is all enclosed within a tall 'Pinnacle' element, clad in a folded screen that will be illuminated during darker hours, creating a highly visible beacon for Cardiff City Centre from long range views.







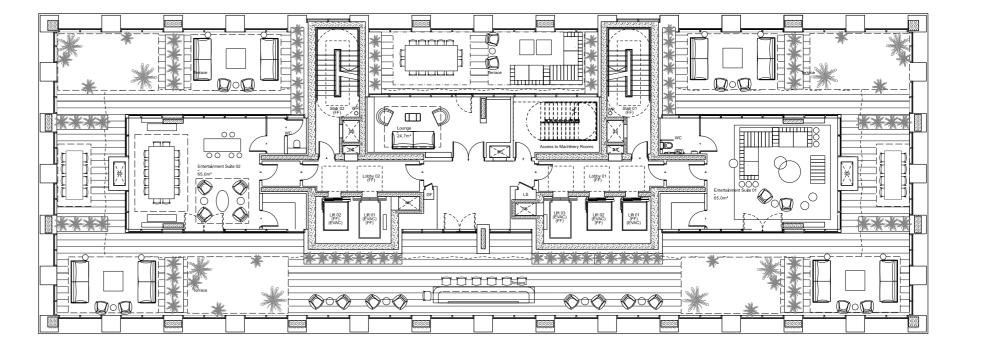
Precedent images - Residents' Terrace

Residents' Terrace Indicative View

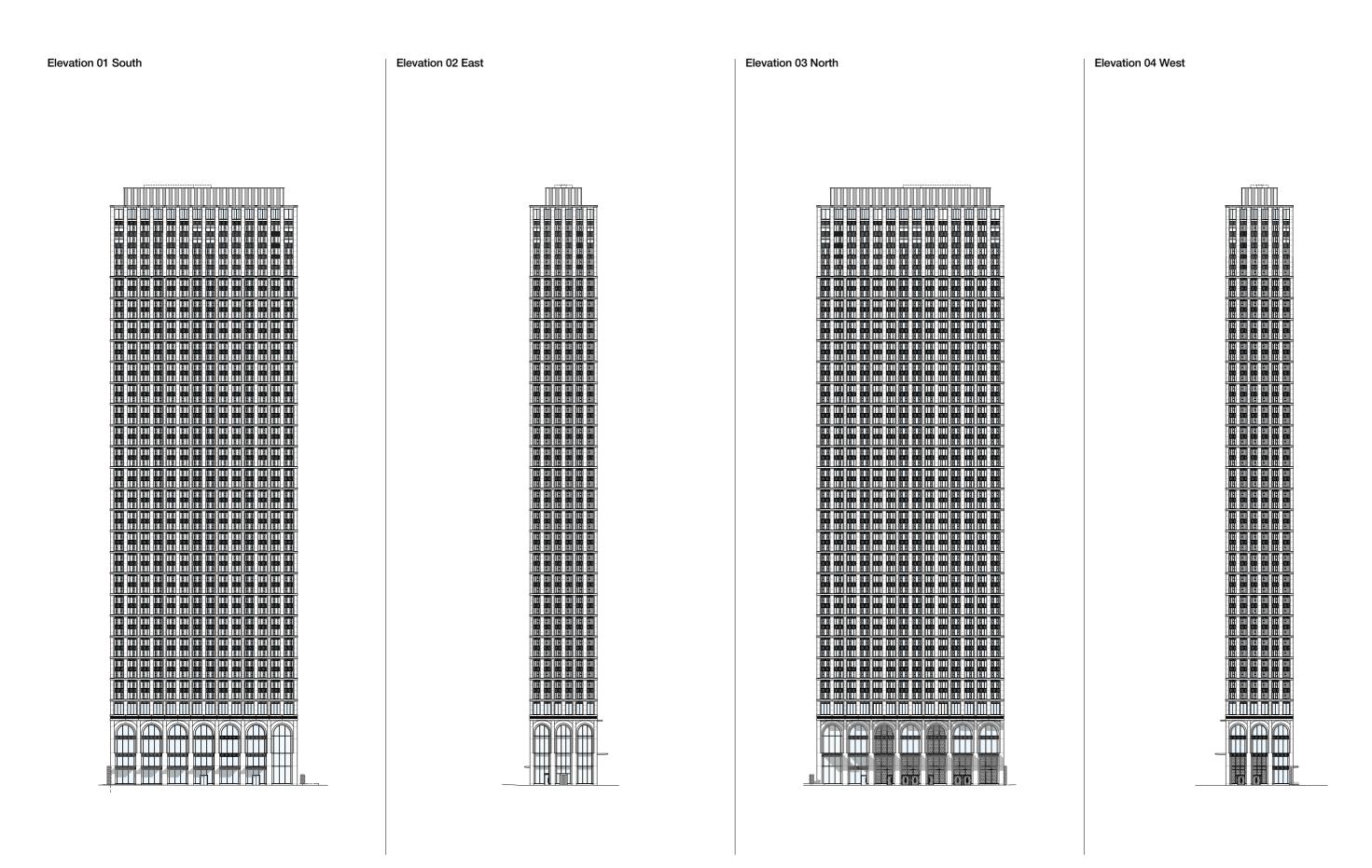


49th Floor Roof Terrace





5.6 Proposed Elevations



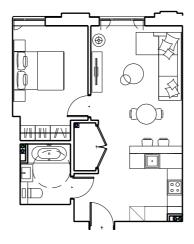


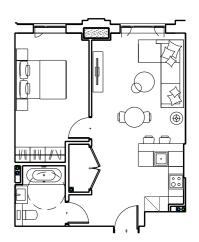
5.7 Apartment Types

1 Bed Apartments

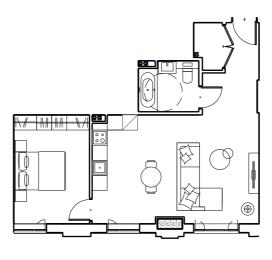
A range of 1 bedroom apartments are available within the building. They vary in size, orientation and outlook and offer 1 and 2 person occupancy.

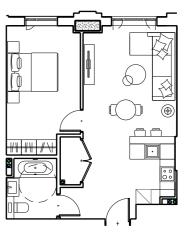
Type 1A Type 1B





Type 1C Type 1D





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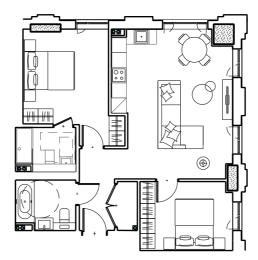
5.7 Apartment Types

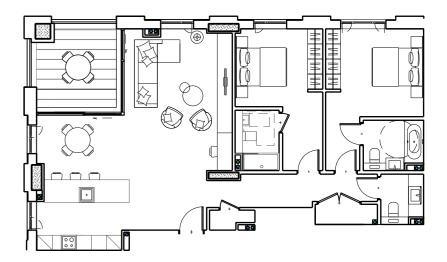
2 Bed Apartments

A range of 2 bedroom apartments are available within the building. They vary in size, orientation and outlook and offer 3 and 4 person occupancy.

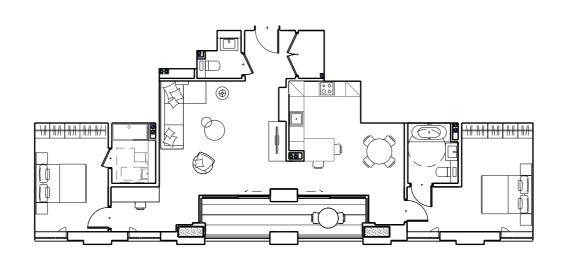
Some larger upper floor apartments benefit from external private terraces, as can be seen on the general arrangement plans.

Type 2A Type 2B





Type 2C Type 2D



5.9 Sustainability Strategy



Bio-Diversity



Bio-diversity net gain with soft landscaping



Biophilic design solutions



Health and Wellbeing



Sustainable location, short walk to vast range of amenities and transport network



Residents shared social and co working amenities



Residents gym



Residents shared roof terrace



Openable windows for natural ventilation



Generous apartment sizes, reducing overheating risk from high density occupation



Safe and secure development



Enhanced views out



Modern Methods of Construction



High recycled material content



High air tightness and thermal bridges avoided



Off-site prefabricated



Cradle to cradle accreditation to internal finishes where possible



High levels of insulation minimising heat loss



Embodied Carbon



Development of a brownfield site



Efficient building, optimising cores and lifts



Good form factor (efficient wall to floor ratio)



Green Mobility



Close proximity to city centre



Cycle store



Cycle maintenance area



Car free development



Operational Energy



Low energy lighting



PIR sensors minimising unnecessary lighting



Highly efficient appliances



MVHR minimising ventilation heat loss via heat recovery



All electric



Water Management



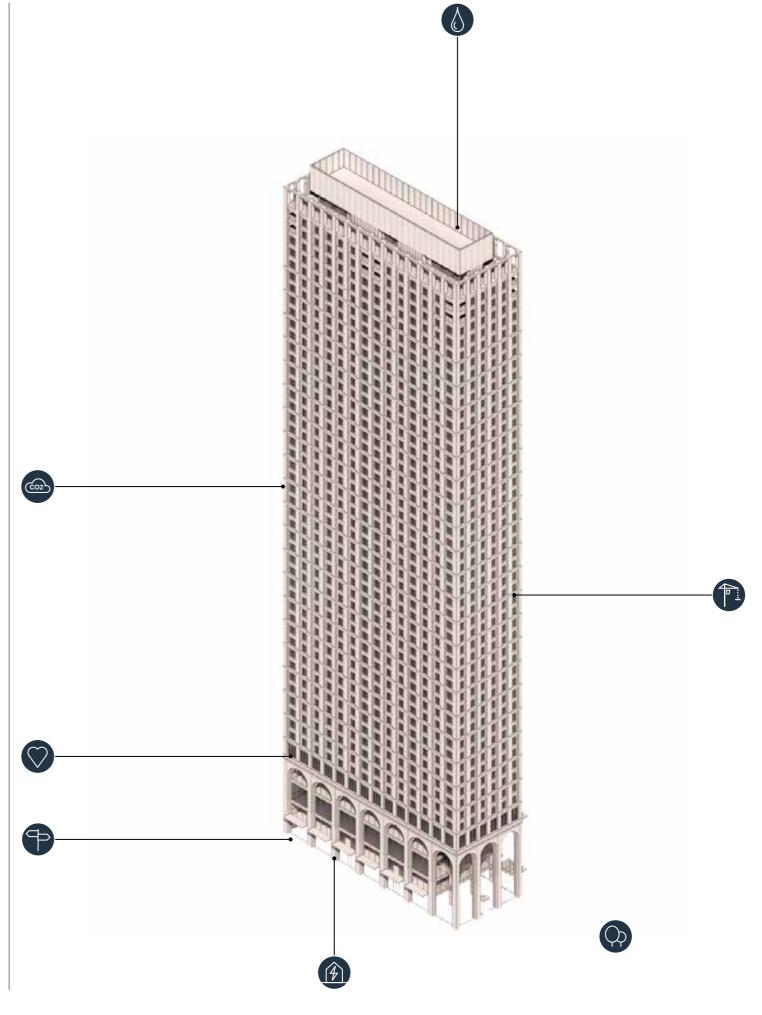
Water efficient appliances and sanitaryware



Native, drought resistant planting



Sustainable urban drainage system



5plus 48 Central Square Cardiff

5.10 Proposed Heating Strategy:

Ambient Loop with Central ASHP

Ambient Loop with Central Air Source Heat Pumps

We have been working closely with our MEP consultants, WSP, to review and develop the heating, hot water and cooling strategy for the proposed scheme. Following this review, we have progressed with a strategy based on an Ambient Loop system, powered by a central Air Source Heat Pump (ASHP). This approach offers a highly efficient, all-electric solution that aligns with our low-carbon and long-term sustainability goals.

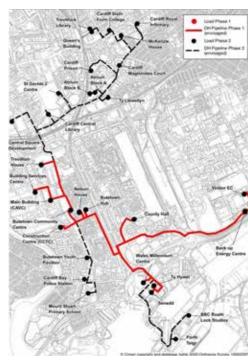
In parallel, we are actively exploring opportunities to incorporate a Ground Source Heat Pump (GSHP) as a complementary or alternative source of low-carbon heat. In addition, we are monitoring the potential expansion of the Cardiff District Heat Network, which could provide a future-proofed connection to local low-carbon energy infrastructure, subject to availability and timing.

This flexible strategy ensures the development is resilient, scalable, and aligned with both current and emerging energy infrastructure opportunities in Cardiff.

Category Benefits High system efficiency (SCOP>4.0) Sustainability Fully electric; supports decarbonisation goals Compatible with PV/battery integration **Environmental Impact** Lower operational carbon vs decentralised EAHP Lower primary energy demand (SAP 10.2) Future Homes Standard ready Residential Experience Faster DHW recharge (ideal for peak demand) Quieter homes (no in-unit compressors Reducing in-flat servicing High-Rise Suitability Efficient vertical distribution via water risers Avoids long refrigerant runs Centralised plant simplifies maintenance Lifecycle Performance Better long-term energy performance Smart billing and heat metering supports fair usage Reduced whole-life cost

Policy and Sustainability Alignment - Cardiff Council

The Ambient Loop system has been selected not only for technical merit but to support Cardiff's climate, housing, and infrastructure goals over the next 25+ years. The benefits include:



Cardiff Heat Network Proposals

Hov	v the Ambient Loop System Supports Compliance
	Fully electric solution supports national decarbonisation strategy
	Aligns with Net Zero Carbon design principles Supports sustainable place-making
	High-performing ASHP system achieves low regulated CO ₂ emissions
	Designed for full compliance low carbon heat + electrical grid compatibility
	Promotes long-term health, clean air and energy resilience
	Integration potential with local renewable energy (e.g. District Wide Heat Network)

5plus Central Square Cardiff



Appearance and Materiality

5plus 51 Central Square Cardiff

6.1 Cardiff Precedents

Historical and Contemporary

We have taken tonal references from the city skyline, civic buildings and the adjacent buildings within Central Square. White Portland Stone features on several of Cardiff's significant civic buildings and many of the taller city centre buildings feature light tonal façade elements. Our façade and material proposals must sit comfortably within the city context and also provide a well mannered façade when viewed from a distance.

We are particularly focussed on maintaining the long term appearance of the façades especially with the high number of rainfall days in the region. Smooth and polished finishes will avoid dirt settling on the surfaces, be easier to clean and maintain their original appearance better.











St Mary Street Historical Architecture:
Pastel colours / bold colours
Brickwork / render
Projecting entrance / recessed entrance
Bays / flat façades
Dormer windows / pitched roofs
Arched windows / flat windows









6.1 Cardiff Precedents

Local Materiality

Located at the junction of Customhouse Street and Hayes Bridge Road in Cardiff, The Golden Cross is a Grade II listed public house dating back to 1849.

Rebuilt in 1903, the façade and interiors incorporate glazed ceramic tiles, including the glazed tiled mural of Cardiff Castle and the original ceramic bar - the only one remaining in Wales.

Listed in 1975, the pub survived potential demolition in 1978 when the county council was persuaded to reconsider a new ring road scheme which would see its loss.

The warmth and richness of the ceramic tiles are a striking example and act as a strong contextual reference for our materiality analysis.

Grade II Listed Building Status

History

Public house; circa 1903 (date on tiles in bar).

Interior

Saloon bar on ground floor at west end; walls lined with polychrome tiles; tiled floral frieze in relief. Bar with hard wood top and with external covering of tiles with grotesque pattern in relief. Engraved glass in doors and screen. Walls of entrance lobby, larger one of Cardiff Castle, dated 1903 and smaller one of Cardiff Town Hall; both by firm of Craven, Dunhill and Co, Salop.

Exterio

Two-storey public house. South east front of 6 bays (L bay is broader), plus splayed corner bay to R; 2 bays to sides. Red brick with yellow brick pilasters, aprons etc. 2 windows with curved heads to each bay on first floor with single cornice and aprons over; parapet above. On ground floor, elaborate tiled pub front with Venetian windows; green and gold tiling with raised lettering to fascias, tiled panelling to pilasters and stall risers.

Reason for Listing

Striking public house, well-preserved, with particularly good tiles to façade and interior.

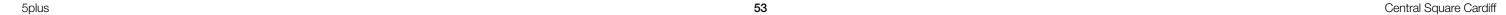












6.2 Material Studies

Material exploration using different accent colourways against the large format ceramic veneer finish to the base and upper floors, inspired by local mixed materiality as explored above.

Further studies have included using contrasting colours and tones to accentuate tripartite arrangement of the building. This approach has also been tested with the accent colours and materials framing the fenestration.

These studies have helped develop the selected materiality choices for the proposals, ensuring we maintain the original concept of layering ideas by adding character and architectural language to subtly enhance the homogeneous facade.







6.3 Contemporary Precedents

Façade Materiality and Composition

Key

- 1. Large scale arches spanning multiple levels as part of unifying base
- 2. Primary façade rhythm reinforced with sculpted piers
- 3. Ceramic surface material applied in large format, visually unifying colour and material palette shared across the building
- 4. The classical and neoclassical architectural references employed in the composition of the building's façade serve not only as formal structuring devices but also as a means of fostering a deeper cultural connection between people and place. Traditionally, a frieze is a decorative horizontal band, often sculpted or ornamented, that forms a key element of the entablature, situated above columns and arches. This familiar architectural language can be reinterpreted in a contemporary context, allowing the façade to carry forward Welsh cultural narratives in a meaningful and visually resonant way. Within this framework, the frieze zone will feature subtle references to Welsh Celtic symbols, drawing inspiration from the nation's rich visual heritage and identity. The detailed design and execution of these elements will be secured by planning condition.



1. Wells House, Orma



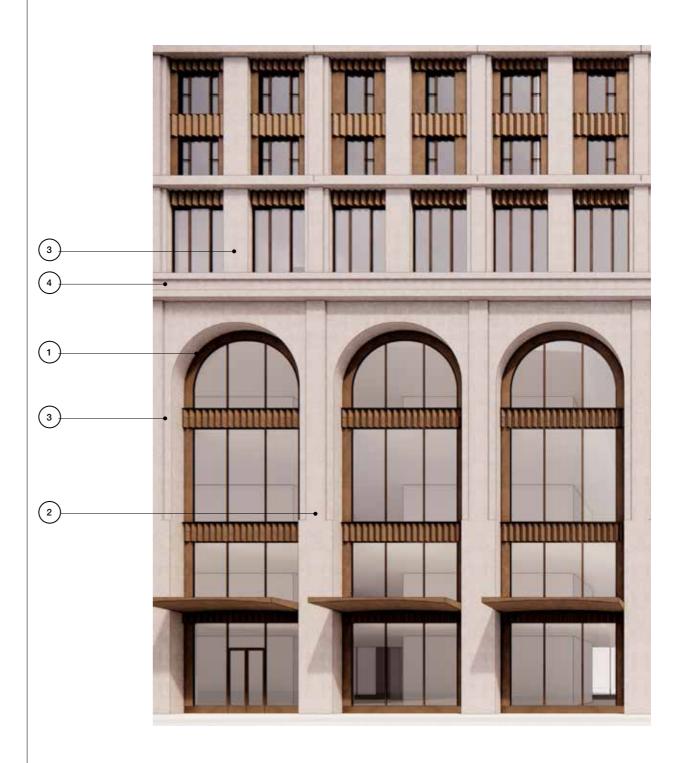
2. Whitworth Street, Sheppard Robson



3. Luton Library, Moses Cameron Williams



4. Wales Millenium Centre, Percy Thomas Architects



6.3 Contemporary Precedents

Façade Materiality and Composition

Key

- 1. Visual change to the spandrel panel, introducing finer grain of detail
- 2. Horizontal bands arrange the façade into double storey expressions
- 3. Ceramic surface material applied in large format, punctuated with accent colour
- 4. To contrast with the scale of the primary façade grid, finer rhythmic detail surrounds the windows



George Street, Hoskins Architects



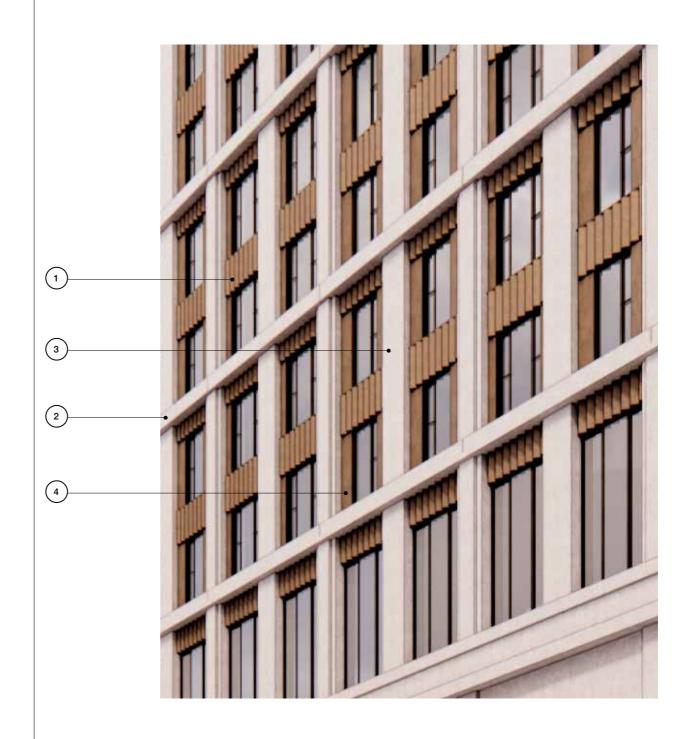
2. Lucent (One Sherwood Street), Fletcher Priest



3. Fen Court, Eric Parry Architects



4. Norton Folgate, AHMM, Stanton Williams



6.3 Contemporary Precedents

Façade Materiality and Composition

Key

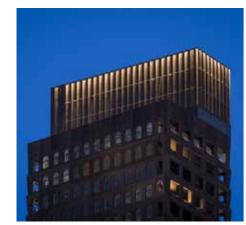
- 1. Pinnacle expression completes the tower, finished in perforated concertina metal cladding
- 2. Panoramic views from residents' sky lounge enclosed by distinctive crown
- 3. Further considerations to be given to celebrating the pinnacle as a new landmark through a lighting scheme
- 4. Ceramic surface material applied in large format, continuing into and completing the crown



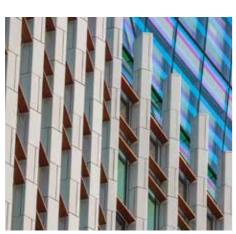
1. The Bryant, David Chipperfield Architects



2. The Park Loggia, Skidmore, Owings & Merrill



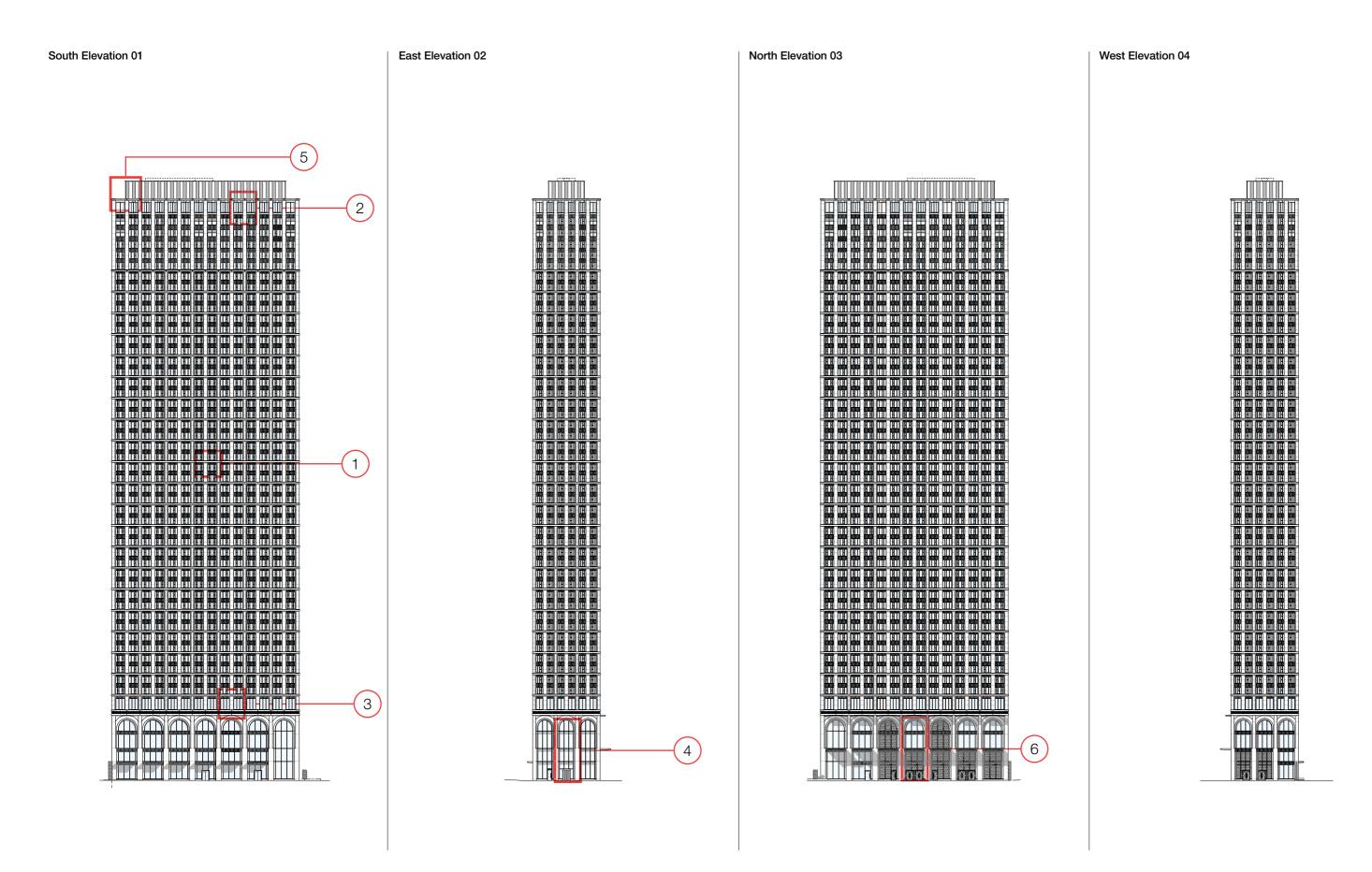
3. 130 William, Adjaye Associates



1. Fen Court, Eric Parry Architects



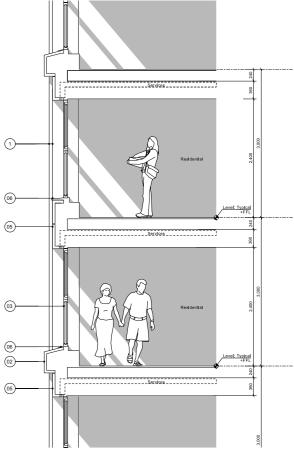
Elevation Key



1 - Typical Window Bay

- 1. Large format ceramic veneer finish façade
- 2. Large format ceramic veneer finish façade, horizontal band
- 3. Slim profile finished metal window system, colour to match façade surround of the window
- 4. Medium format ceramic veneer finish window surround
- 5. Profiled ceramic veneer finish spandrel panel
- 6. Finished metal sill
- 7. Medium format ceramic veneer finish façade indicative motif, detail to be secured by condition
- 8. Slim profile finished metal curtain walling system with large format glazing
- 9. Glazed revolving doors with finished metal frame
- 10. Glazed door with finished metal frame
- 11. Perforated finished metal cladding to louvred façade with integrated access doors indicative motif, detail to be secured by condition
- 12. Finished metal canopy with integrated lights
- 13. Finished metal curtain walling system with expressed cap
- 14. Perforated concertina finished metal cladding
- 15. Finished metal curtain walling system with solid panels and expressed cap
- 16. Glazed guarding with finished metal frame
- 17. Finished metal coping with integrated pinnacle lighting
- 18. Perforated metal baffle with integrated signage
- 19. Finished metal cladding with expressed joint



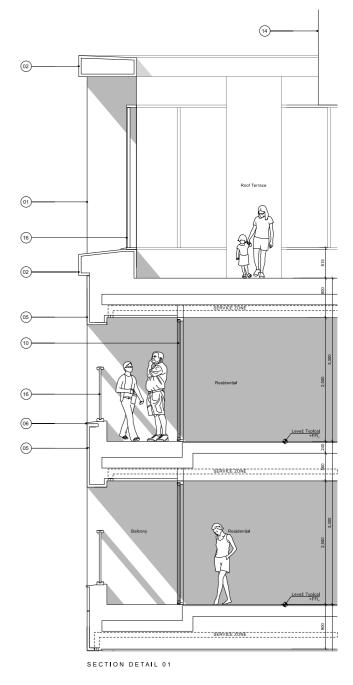


SECTION DETAIL 0

2 - Typical Upper Floor Bay

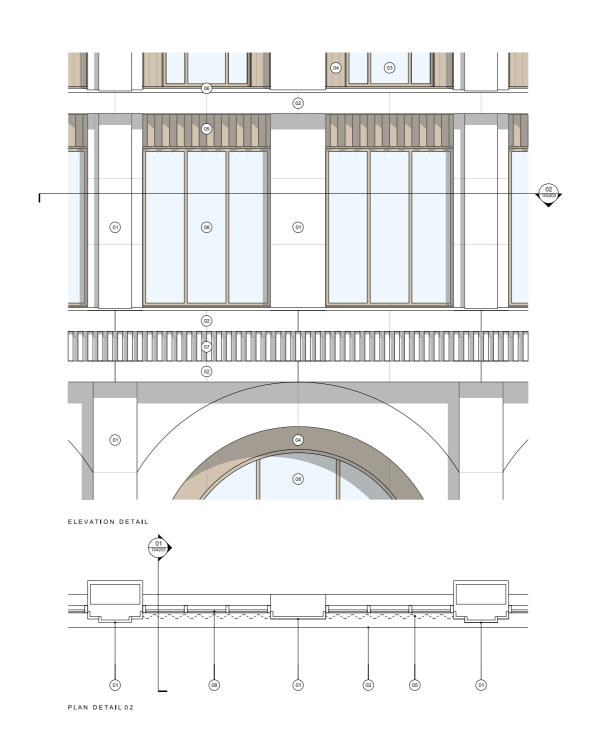
- 1. Large format ceramic veneer finish façade
- 2. Large format ceramic veneer finish façade, horizontal band
- 3. Slim profile finished metal window system, colour to match façade surround of the window
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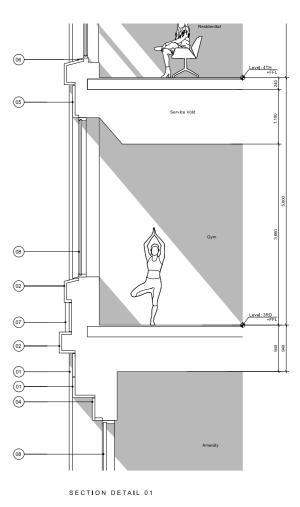


3 - Typical Window Bay 3rd Floor

- 1. Large format ceramic veneer finish façade
- 2. Large format ceramic veneer finish façade, horizontal band
- 3. Slim profile finished metal window system, colour to match façade surround of the window
- 4. Medium format ceramic veneer finish window surround
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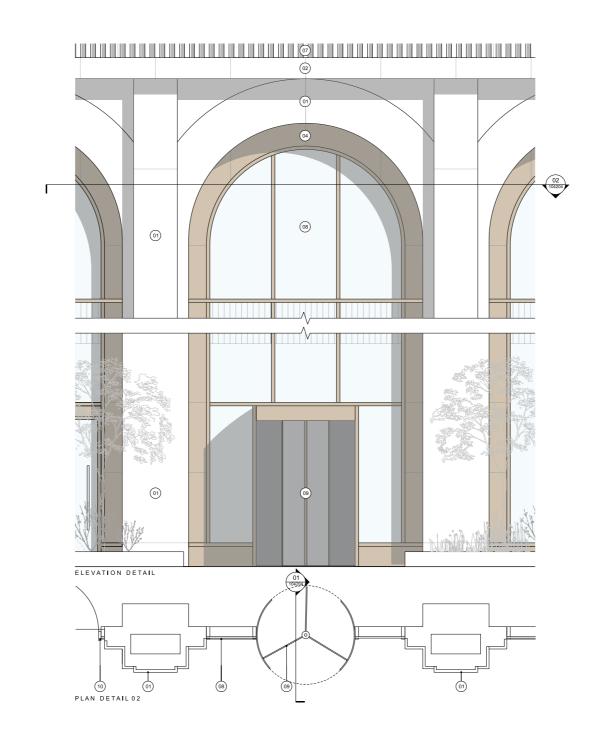
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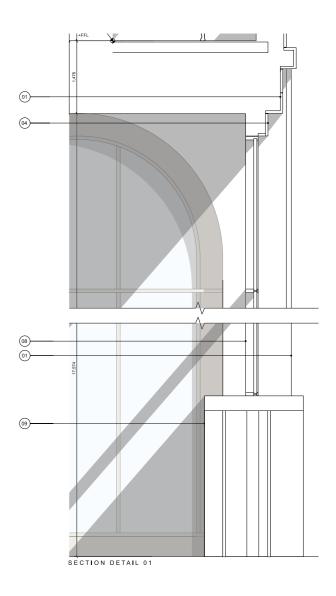


Central Square Cardiff

4 - Ground Floor Entrance

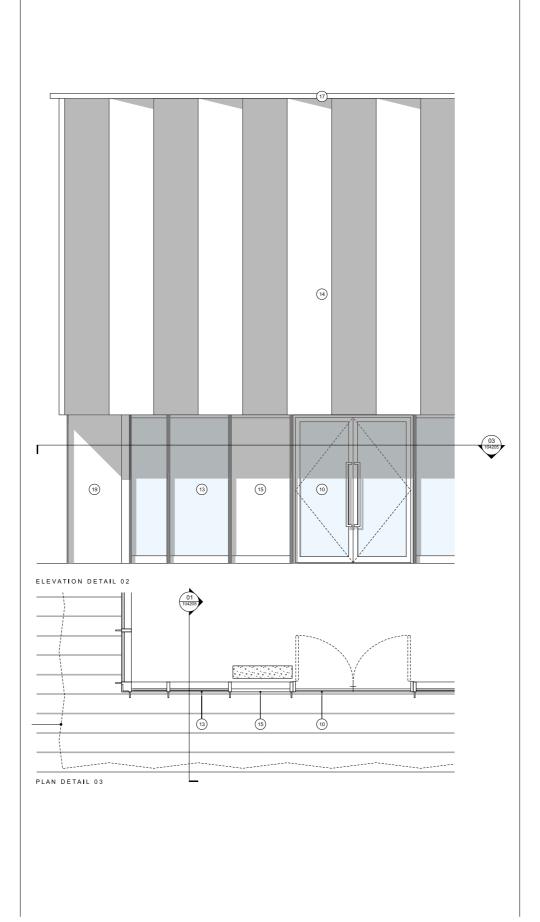
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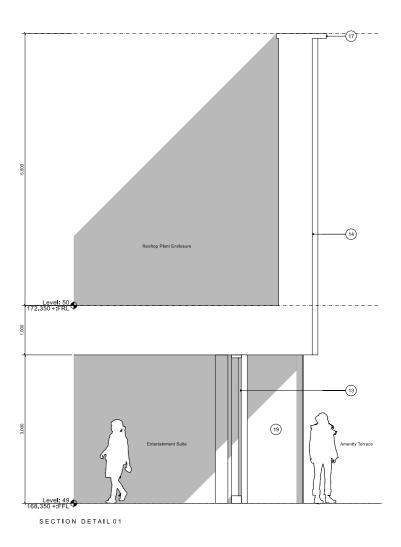




5 - Pinnacle

- 1. Large format ceramic veneer finish façade
- 2. Large format ceramic veneer finish façade, horizontal band
- 3. Slim profile finished metal window system, colour to match façade surround of the window
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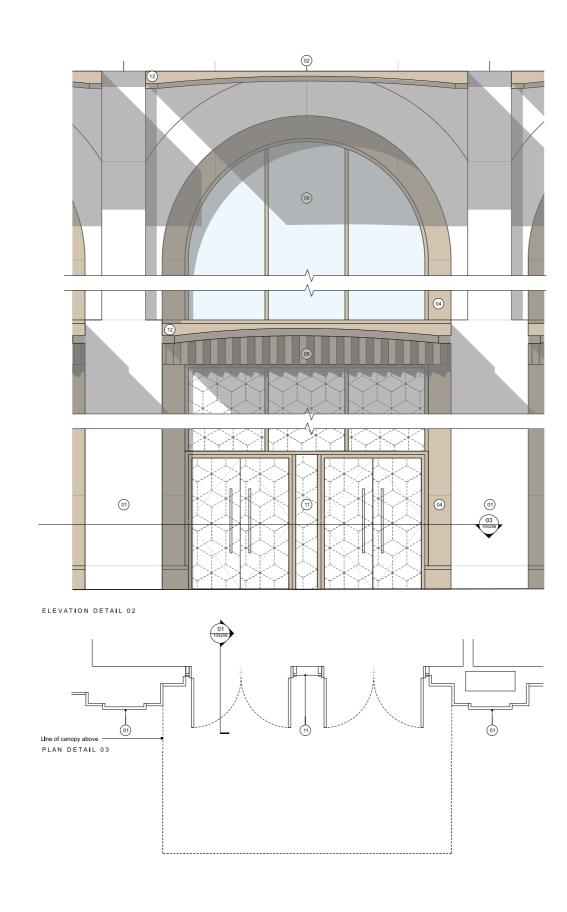


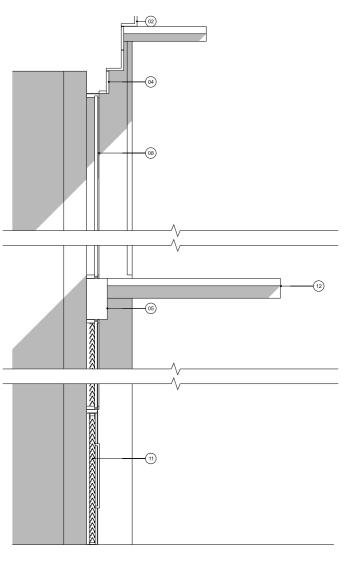


Line of soffit over-

6 - Plant Room Access

- 1. Large format ceramic veneer finish façade
- 2. Large format ceramic veneer finish façade, horizontal band
- 3. Slim profile finished metal window system, colour to match façade surround of the window
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SECTION DETAIL 01



Interior Design Concept

7.1 Interior Design

Squire & Partners

Introduction

Squire & Partners is an international architecture and interior design studio with a reputation for using storytelling to produce beautifully crafted design. We create highly sustainable, enduring buildings and places that speak to the community they are in.

Our designers create tangible value and exceed expectations for the physical, social and commercial needs of its clients and communities.

As designers, developers, communicators, innovators, place makers and crafters, we actively promote collaboration with experts in all disciplines of the built environment, to deliver a world-class product. We create distinctive, enduring and thriving places that are sensitive to their context and connect architecture with community.



Interior Approach

We listen carefully to our clients' needs and bring together the design team to find the best solutions for a successful shared outcome. We design without ego, and endeavour to think not just as designers, but like developers and wider stakeholders to create social and commercial value.

Our designers are inspired by context, history, culture and the need to respond in a meaningful way to the current climate issues we all face. We are passionate about the hand-drawn and traditional elements of the design process, while also using forward-facing technology, and collaborate with experts in craft and manufacture to deliver a rigorously detailed product.







Notable Awards

2021 X+Why Colmore Row 2023 The Broadway 2021 Island Point BCO Regional Award Mixology Award Housing Design Award British Homes Award



The Broadway



One St. John's Wood



Colmore Rov



Lancer Square



The Nexus Club



ndmark Pinnacle

5plus 67 Central Square Cardiff

7.1 Interior Design Squire & Partners

Amenities Design

Split across several floors, the building will offer a thoughtfully curated suite of amenities designed to enhance modern urban living. On arrival, residents are welcomed by a luxurious ground floor reception and concierge area, featuring a striking staircase that leads to the first-floor bar and residents' lounge — a refined social hub perfect for informal gatherings or evening relaxation. A variety of lounge spaces throughout the building provide both comfort and flexibility, including beautifully appointed hirable suites ideal for private entertaining or hosting guests.

For those embracing hybrid or remote working, a dedicated work zone is equipped with communal desks, private offices, and fully serviced meeting rooms to support productivity and focus. Wellbeing is central to the lifestyle offering, with a dedicated wellness floor housing a state-of-the-art gym, studio space for classes, and spa facilities for relaxation and recovery. Crowning the development is a rooftop lounge complete with landscaped external gardens, offering a serene escape and panoramic views over the city — the perfect blend of luxury, functionality, and community.

Design Ethos



ESG & Well-being: Incorporating sustainable materials, energy-efficient systems, and design elements that promote health and wellness.



Community Building: Fostering meaningful connections through communal dining areas, coworking zones, and communal spaces.

Meaningful Amenities: Designing intuitive, accessible, and purposeful spaces that enhance daily living, offering a generous amount of amenity space per unit.







High Standards: Creating a sophisticated, exclusive atmosphere inspired by leading

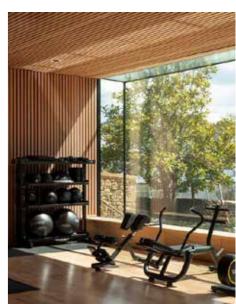
private clubs and high-end hospitality.















7.1 Interior Design

Squire & Partners

Apartment Design

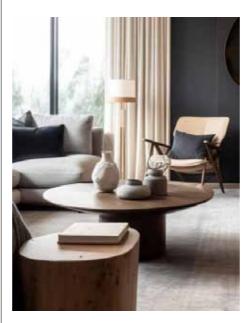
The apartments will offer design that balances timeless quality with everyday practicality, using enduring materials and components selected for both performance and aesthetic appeal. Natural textures and finishes — such as timber, stone, and brushed metal — bring warmth and authenticity to each space, while the overall palette provides a refined, neutral backdrop that is both calming and versatile. Every element, from the cabinetry to the flooring, will be chosen not only for its durability but for its crafted, tactile character that elevates daily living.

With an emphasis on flexibility and comfort, the layouts have been carefully considered to suit the rhythms of modern life — offering intuitive storage, efficient spatial planning, and room to adapt as needs evolve. Crucially, each home is designed to be a canvas, allowing residents the freedom to personalise their space with artwork, furnishings, and objects that reflect their individual style. The result is an environment that feels both purposeful and personal — a place to settle, express, and thrive.



Indicative Material Palette

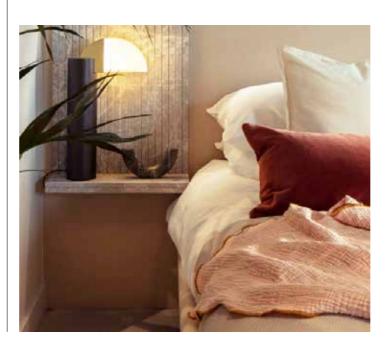
Indicative Look and Feel















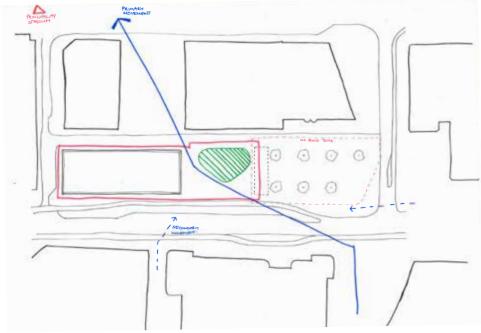


The Pavilion

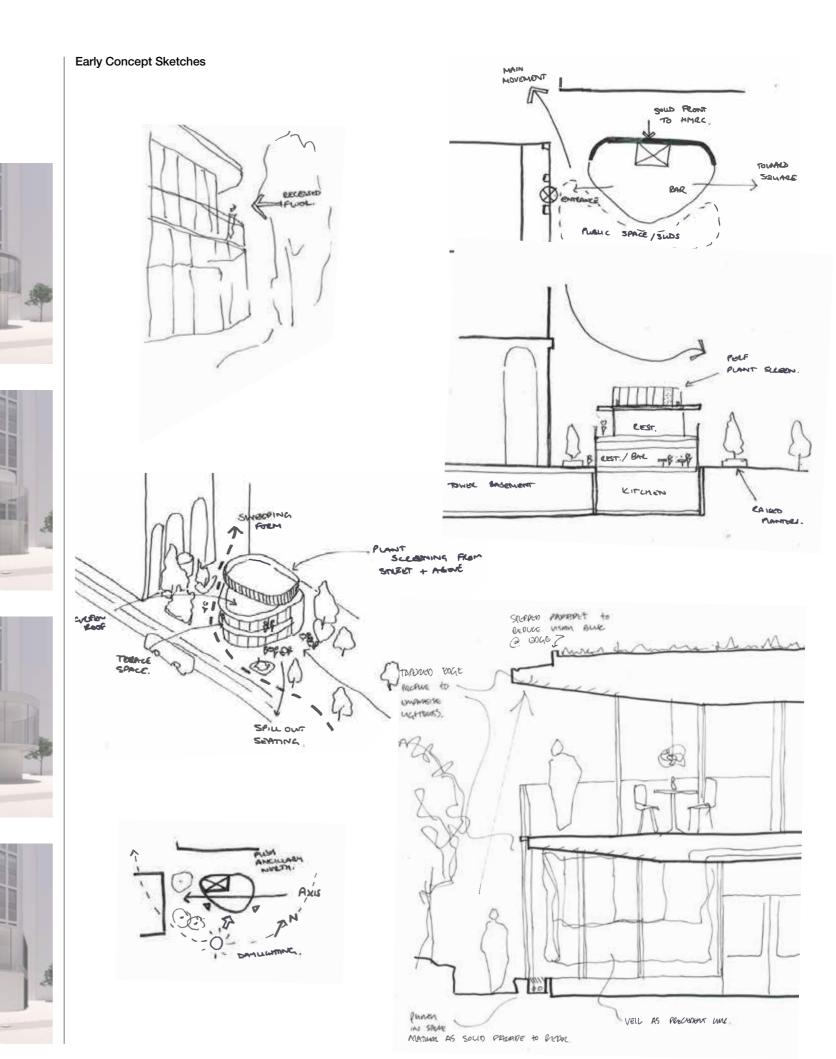
8.1 Design Development

Site Context

The brief for the pavilion included the creation of a sculptural building defined by the desire paths across the site boundary. The buildings position and curved form mimics and accentuates the flow of movement while also providing space for a public square, greenery and spill out activity at its base. Building on the outline design the pavilion takes on a different form and material expression from its surroundings reflecting its position as an object in space.



Site Movement Diagram



Early Massing Options

8.2 Contemporary Precedents

Façade Materiality and Composition

Some of the material considerations in the pavilion design

- 1. Timber soffit to each floor slab
- 2. The perforated metal cladding creates screening and translucency
- Large format glazing inviting the connection to the external landscape
 Black glazed brickwork to clad solid areas referencing the coal industry



1. Apple Park Visitor Centre



2. Myo New Street Square

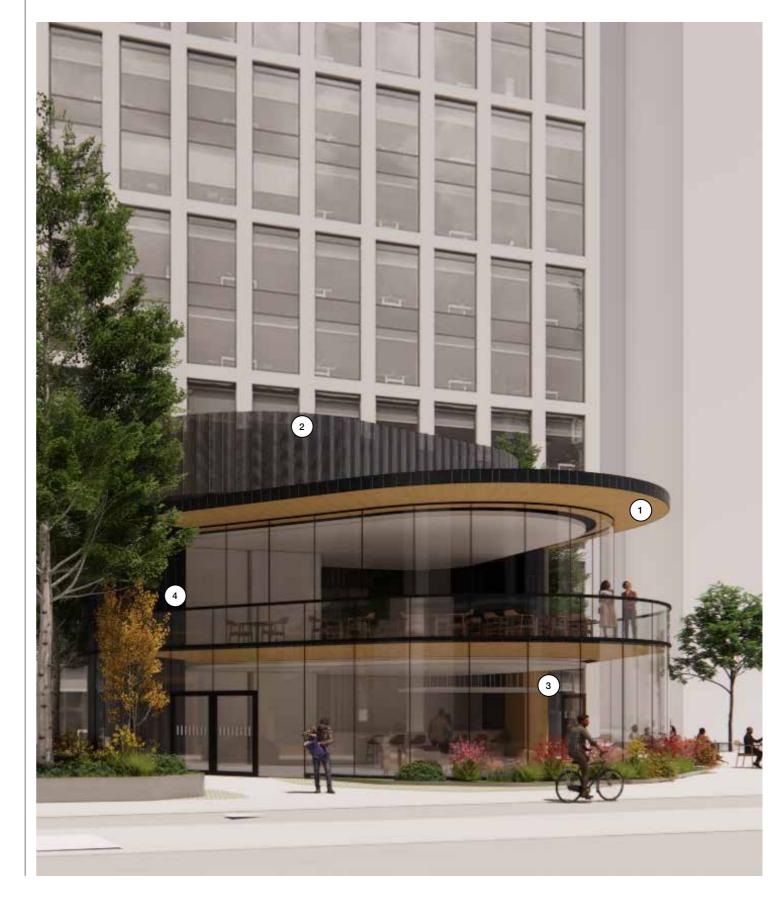


3. Yale University study centre



4. Jerwood Gallery

View from Wood Street



8.3 Contemporary Precedents

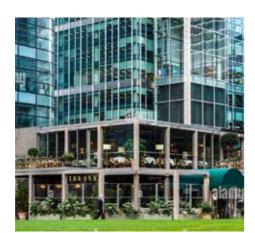
Form and Composition

Some of the material considerations in the pavilion design

- 1. Consideration of how the plant is viewed from ground and also from above in the surrounding office floors
- 2. Creating the opportunity for terraces and external space
- 3. Fluid form to retain desire lines
- 4. Inclusion of greenery to the pavilion and landscape



Vardo Restaurar



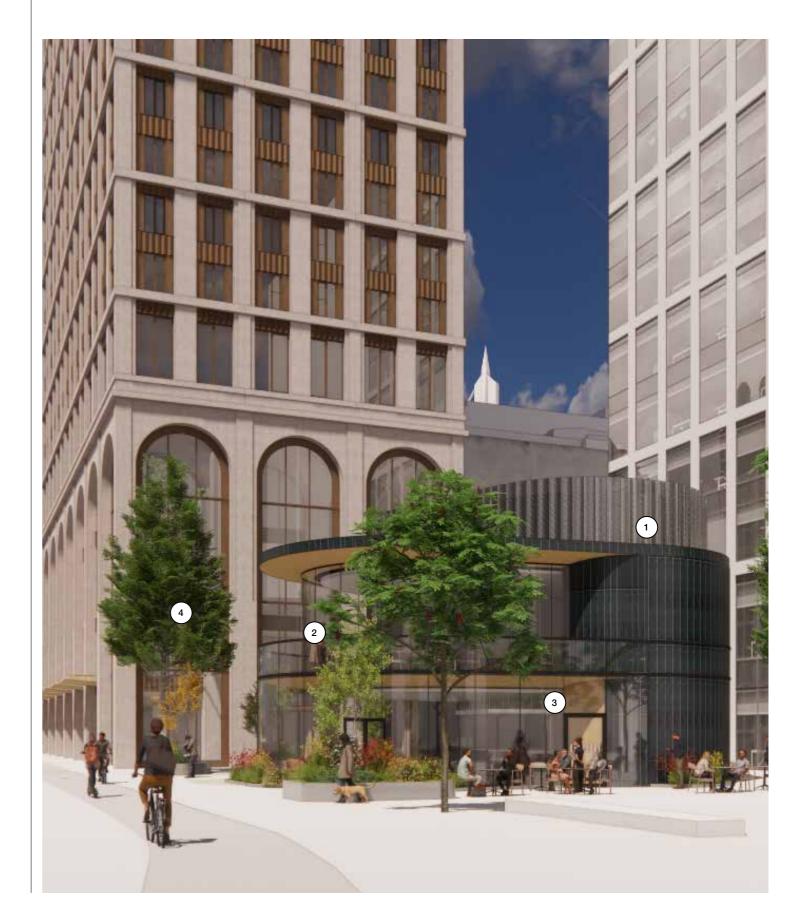
2. The Ivy, Canary Wharf



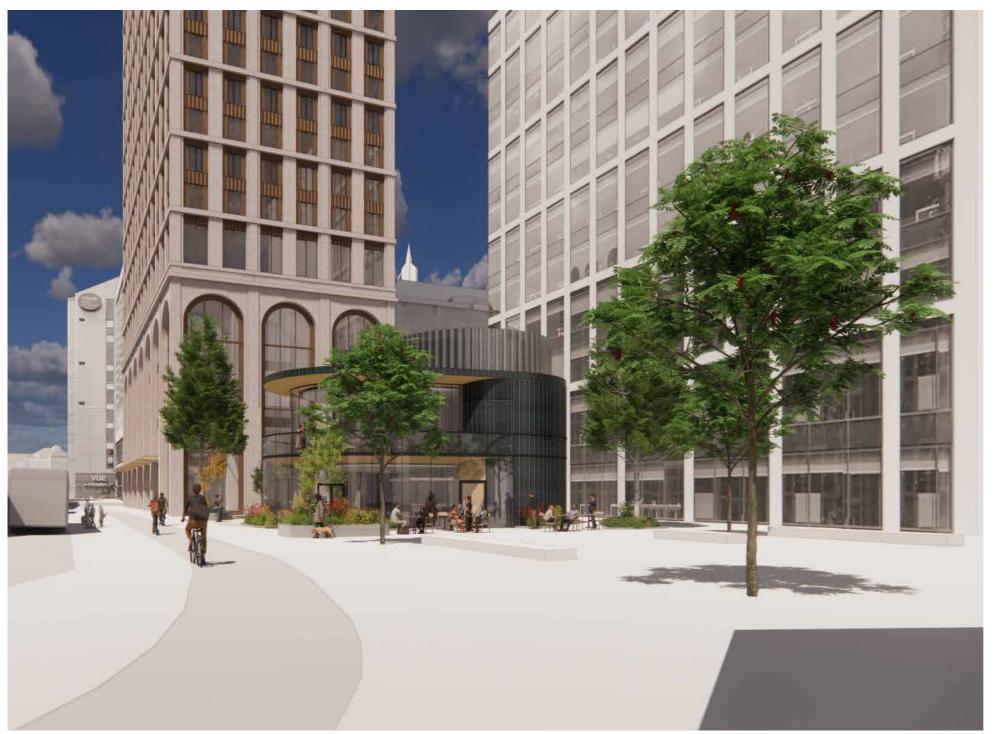
3. Yacht club de Monaco



4. The Ivy, Manchester



8.4 Proposal





Pockets of greenery urban drainage surrounds the pavilion



Minimal frontage to HMRC building

View - Approach along Wood street

8.5 Floor Plans

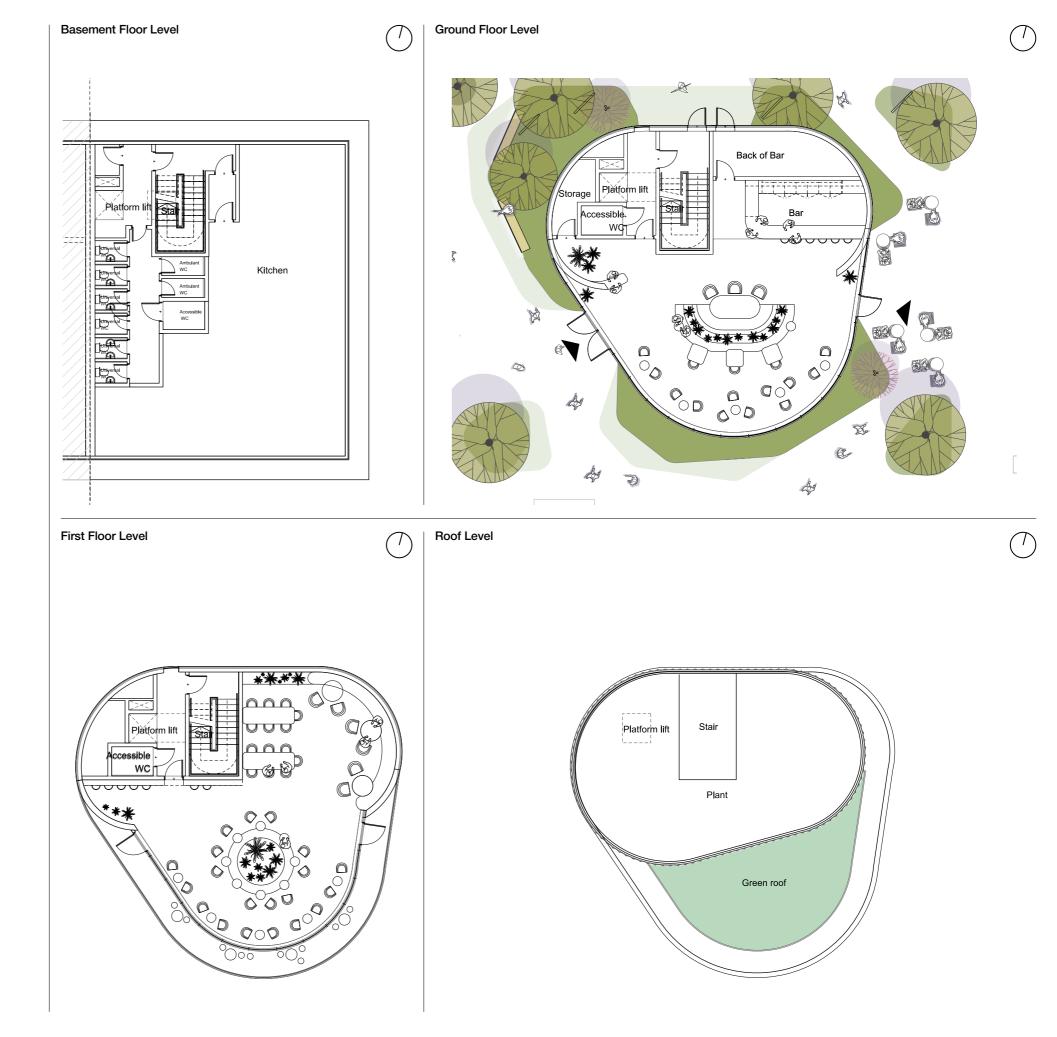
General Arrangement

General Arrangement

The Pavilion consists of Basement, Ground, First and Roof levels.

Kitchen and WC provision is on Basement level, with the main restaurant, bar and dining provision on Ground Floor. There is additional dining and external terrace to First Floor, with screened plant space to the roof, surrounded by semi-intensive green roofing.

The Gross External Area of The Pavilion is 601 sqm



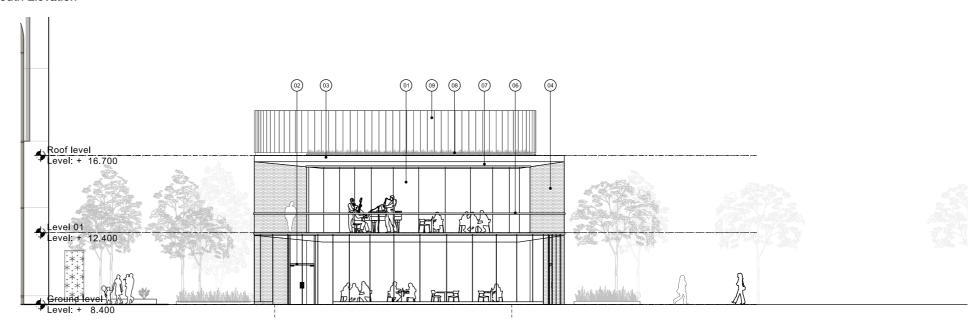
8.6 Proposed Elevations

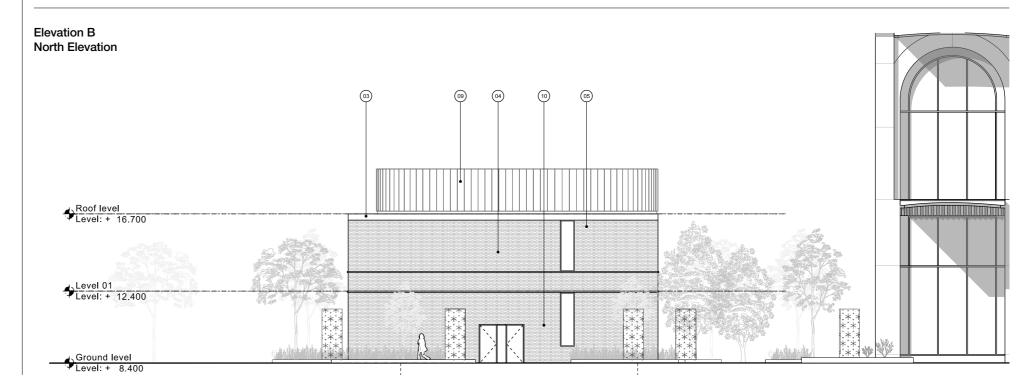
South and North

B and a second

- 1. Curtain wall glazing with silicon joint
- 2. Full height glazed curtain wall doors integrated into surrounding curtain walling system.
- 3. Folded aluminium copings and flashings in black anodized finish
- 4. Glazed ceramic facade with black finish
- 5. Aluminium window framed glazing with black anodized finish
- 6. Glazed balustrade with metal black finished handrail
- 7. Timber finish to soffit
- 8. Semi intensive green roof system
- 9. Perforated and profiled metal plant screening
- 10. Metal external doors and panel in black anodized finish

Elevation A South Elevation



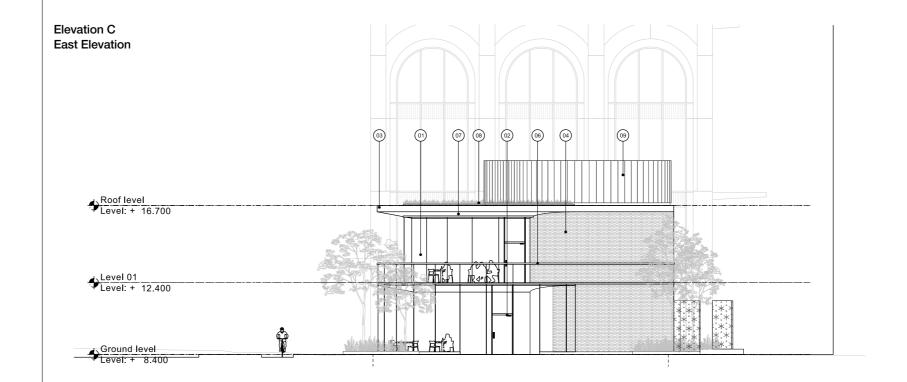


5plus Central Square Cardiff

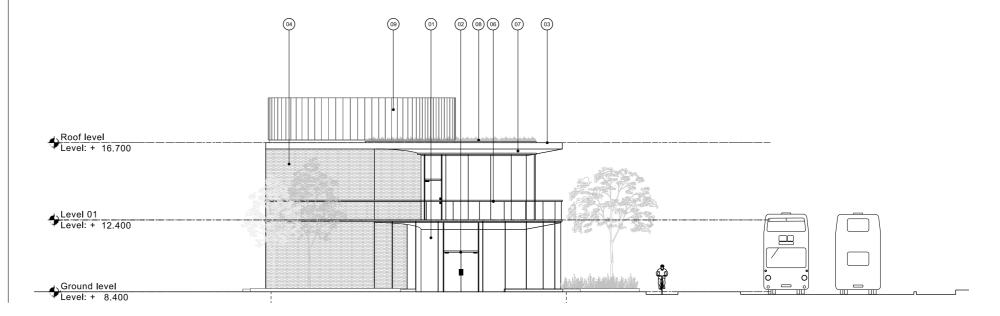
8.7 Proposed Elevations

East and West

- 1. Curtain wall glazing with silicon joint
- 2. Full height glazed curtain wall doors integrated into surrounding curtain walling system.
- 3. Folded aluminium copings and flashings in black anodized finish
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- 5. Aluminium window framed glazing with black anodized finish
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- 7. Timber finish to soffit
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- 9. Perforated and profiled metal plant screening
- 10. Metal external doors and panel in black anodized finish



Elevation D West Elevation





Access and Maintenance

9.1 Design Principles

Security and Access



Design for Security

The development has been designed with reference to best practice guidance for security: Secure by Design: Homes Guide 2024.

The 24-hour concierge is located in the entrance lobby, overlooking the arrival plaza. Access control will be utilised to control resident and management access at all external doors. CCTV will be monitored all around the site.

From the ground floor up to the third floor amenity level, active frontage is prioritised, with large areas of glazing providing passive surveillance to all external areas of the site. Apartments from fourth floor upwards will overlook all areas of the development, providing additional surveillance. The numerous neighbouring buildings also provide additional passive surveillance around the building.

Plant room, substation and other back of house external access points are provided to the rear of the building and will be protected by access control, CCTV and security doors.

Recycling and refuse storage will be securely contained within building footprint. Cycle storage is provided within the building's footprint, with a dedicated entrance for public users that is securely separated from the rest of the internal areas.

Vehicular and Pedestrian Access

The scheme is car free. Deliveries and service vehicles access the site utilising the one-way system, turning north off Wood Street onto Scott Road for the refuse collection layby or continue east onto Rose Lane for deliveries or substation access. Cardiff Central Train Station and Cardiff Bus Interchange enclose Central Square to the south and east respectively, with local bus stops directly outside the site. As such, most residents will approach the site on foot from one of these transport nodes. Approaching from the southern part of Central Square, visitors will cross Wood Street and proceed to the main building entrance which faces east onto the public realm and new Pavilion.

Key --> Vehicular Access

Pedestrian Access

Primary Entrances



Bike Hub Entrance



Management Controlled Access



Loading Bay



5plus Central Square Cardiff

9.1 Design Principles

Cycle Storage and Fire Strategy

Cycle Access

Cyclists' access to both the public bike hub and the residents' cycle store is via a dedicated entrance on Wood Street, adjacent to the new cycle lane. The public external access will have access control and during opening hours the hub will be operated by staff. Residents have secure, direct internal access to the cycle store from the lift lobby. The cycle store will provide 528 cycle parking spaces, comprising a mixture of double-tier racks, Sheffield stands, folding bicycle lockers, and accessible spaces. Split over the ground floor mezzanine levels, a dedicated platform lift is provided to facilitate access between the levels.

Additionally, the proposals include for 52 cycle parking spaces to the east of the site within the pedestrianised area to the south of the HMRC building. Further information on the bike hub and cycle storage is available in the Transport Statement (CSC-WSP-XX-XX-RP-TP-000001) which accompanies this application.

Key

Day d

Route to Cycle Store with Bicycle

 \rightarrow

Route to Cycle Store without Bicycle

Sociar

Secure Cycle Storage

Public Cycle Spaces

| Fire Strategy

Fire service access and egress routes have been designed and coordinated with the project fire engineer. Further commentary on fire strategy principles is available in the Fire Safety Strategy which accompanies this document (00556-ART-XX-XX-RP-FE-0001).

Principally, there are two firefighting cores, each with a firefighting stair and dual-function firefighting and evacuation lifts. The development is protected with sprinklers throughout. Smoke control is provided to the lobbies and corridors as per the fire strategy.

Egress from the cores at ground floor level is direct to the outside space to the north of the site, along Rose Lane.

Fire tender location, fire service access point and wet riser inlet access is via the same access/egress locations along Rose Lane.

Key

→

Fire Escapes

→ Fine

Fire Fighting Access

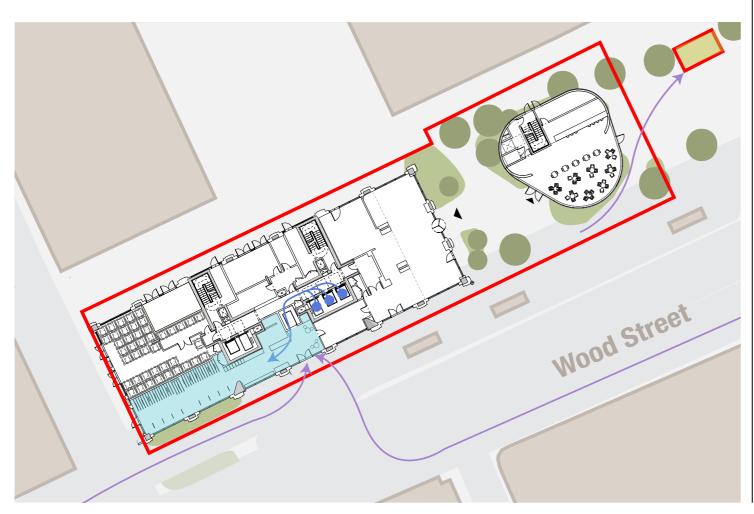
Fire Curtain

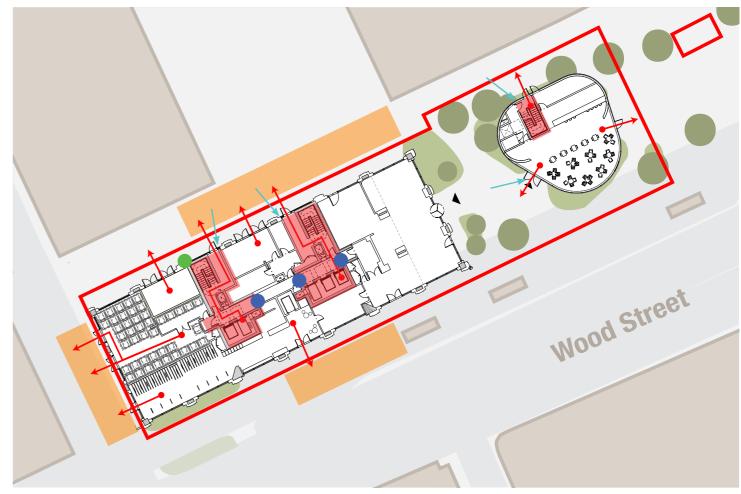
Wet Riser Tank Refill

Fire Fighting Shaft

Tax

Tender Access





9.1 Design Principles

Servicing

Access to Back of House

Back of house areas with direct access to the street (Scott Road or Rose Lane) include the recycling and refuse store, and the two substations.

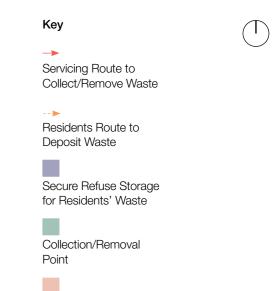
Given the limited footprint of the building vs its overall volume, several plant rooms (primarily tank rooms, heating plant and water services) will be provided at basement level. At mezzanine level the generator will be provided to the north-west corner of the building along with a few smaller rooms providing ventilation, LV switch rooms and comms. Plant rooms at this level are all accessed internally from lobbies off the main lift lobbies. Larger items of plant will be replaced by dismantling the equipment and removing through removable louvred panels in the façade.

Delivery and service vehicles are provided with a drop-off bay to the west of the site on Scott Lane.

Key Route to Plant Areas Plant Areas

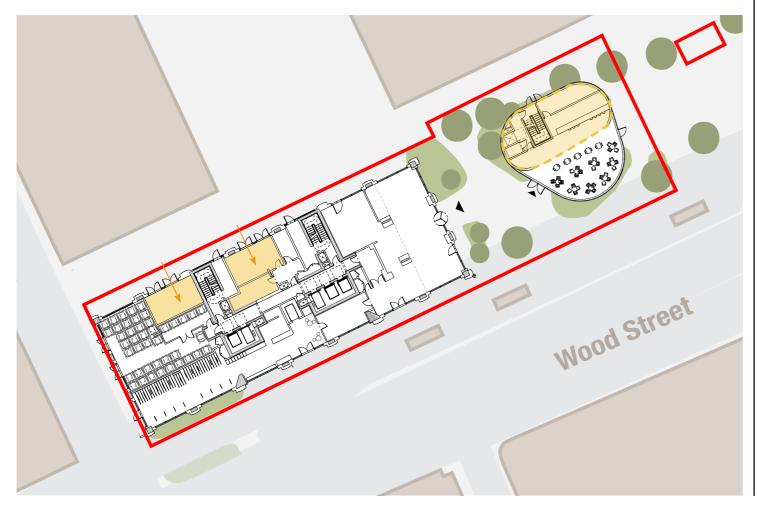
Waste Management

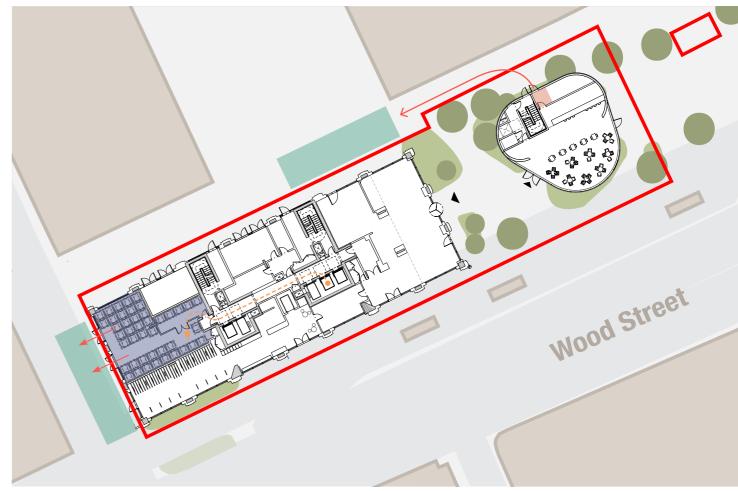
All recycling and waste materials will be stored on-site. Residents will have internal access to secure recycling and refuse areas on the ground floor, which they can access from the lift lobby. For collection, the facility management team will transport recycling and refuse containers from the store to the refuse collection bay immediately outside on Scott Road. After collection, containers will be returned to the refuse store. Recycling and refuse is anticipated to be contracted to a private service provider.



Storage for Pavilion

Waste





9.2 Accessibility

Design Principles

Design for Accessibility

The buildings are designed to meet the requirements of the Building Regulations 2010. The guidance provided in Approved Document M will be used to achieve the requirements, where applicable.

Requirement M1: Access and Use, applies to the Pavilion and communal areas of the tower. The key relevant provisions concern:

- a) accessible entrances from the site boundary
- b) elements of the building do not constitute a hazard to users
- c) accessible facilities at any storey of the building
- d) communication aids for people with an impairment of hearing or sight
- e) accessible sanitary accommodation

Requirement M4: Sanitary conveniences in dwellings, applies to the residential units in the tower and primarily concerns:

- a) Accessible entrances
- b) Access into and within the apartment
- c) WC provision within the apartment

The general guidance of Part M states that:

In the Secretary of State's view the requirements of Part M will be met by making reasonable provision to ensure that buildings are accessible and usable.

People, regardless of disability, age or gender, should be able to:
(a) gain access to buildings and to gain access within buildings and use their facilities, both as visitors and as people who live or work in them:

(b) use sanitary conveniences in the principal storey of a new dwelling. The provisions are expected to enable occupants with disabilities to cope better with reducing mobility and to 'stay put' longer in their own homes.

The provisions are not necessarily expected to facilitate fully independent living for all people with disabilities.

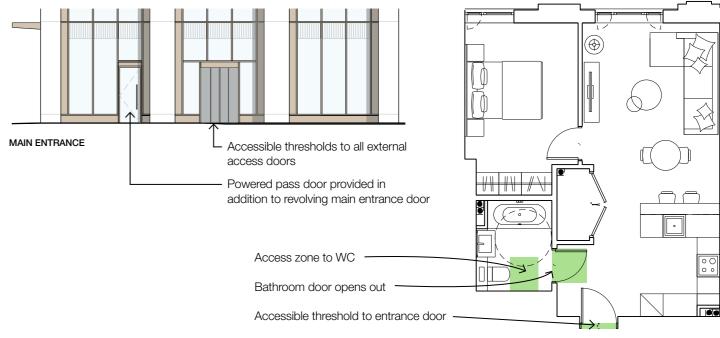
For further guidance beyond the scope of Approved Document M, BS8300:2018 can be utilised.

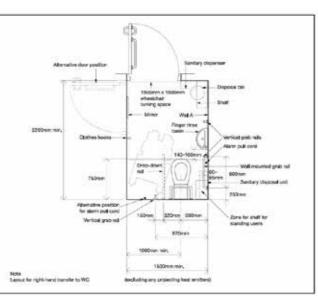
Part M Key Strategies Communal Areas

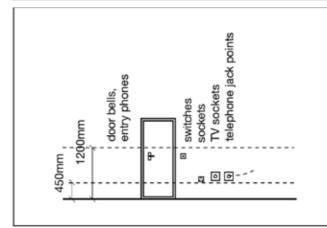
- Level approach comprising accessible gradients and widths to any approach route to an external entrance
- Clearly identified, well-lit principal entrance with power-assisted door of suitable width for wheelchairs, double-pushchairs, people with assistance dogs etc (min. 1000mm). A powered swing door is provided in addition to the main entrance revolving door.
- Weather-protected level access thresholds at all communal entrances and roof terrace areas
- Any ramps required to be designed in line with Table 1 of M1 and the requirements for Ramped Access
- · Accessible intercoms incorporating video
- Suitable wheelchair accessible, slip resistant floor finishes including recessed matwells
- · Manifestation to glazed screens, where required
- Wheelchair accessible concierge desk design and hearing enhancement system
- Internal doors to have suitable width, vision panel, opening force, visual contrast
- Internal corridors to have suitable width and visual contrast, with no obstructions
- Wheelchair accessible passenger lifts to provide access and evacuation to all storeys providing residential or communal accommodation
- · Audio and visual lift information in the lift cars and lift lobbies
- Accessible facilities in the communal areas including wheelchairaccessible unisex toilet and changing facilities, refreshment facilities, workstations including switches and socket, cinema room, terraces etc.

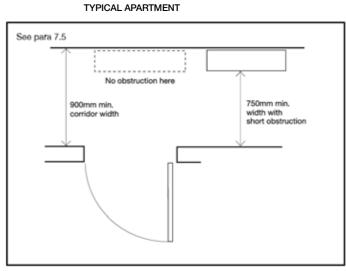
Apartments

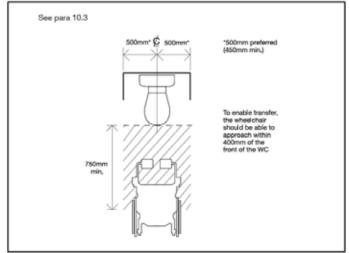
- Level approach and accessible threshold to the apartment with suitable width door for wheelchair user (min. 775mm clear opening width)
- Wheelchair-accessible corridor widths and internal door widths without obstructions. Where possible, passageways are avoided and open-plan layouts are preferred to maximise accessibility.
- · All apartments are single storey to enhance accessibility
- All switches, sockets and door and window ironmongery located at wheelchair-accessible height
- WC provides a clear space for wheelchair users to access and the door opens outwards











9.3 Cleaning, Access and Maintenance Façade

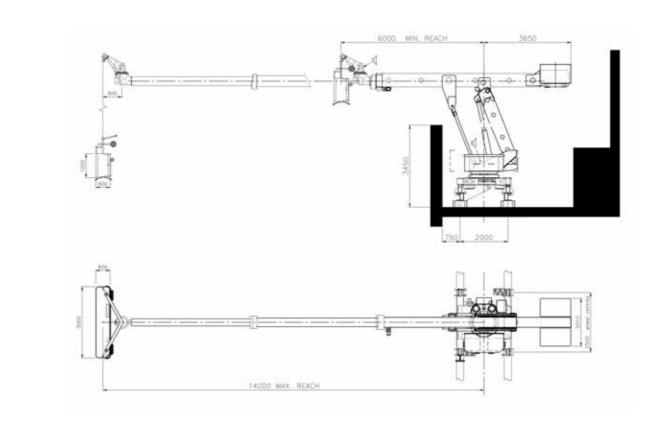
Façade Cleaning and Maintenance

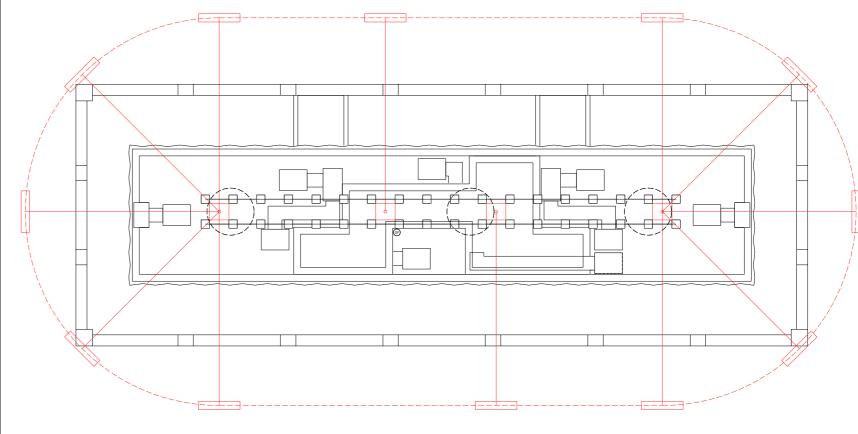
Façade cleaning is achieved via a combination of reach-and-wash for the lower floors and pinnacle and BMU cradle cleaning for the upper floors

BMU cradle access will also be used for façade maintenance.

The BMU tracks are located on top of the pinnacle and the reach of the arm unit is sized to accommodate all four façades from the central track.

Roof Plan with BMU Reach Applied





Notional reach of indicative BMU

BMU Cradle Cleaning



9.4 Flood Resilience Strategy

Executive Summary

As the site is located in a flood risk area (Flood Zone 3), guidance will be followed to ensure a flood-resilient design. A Flood Consequences Technical Note has been prepared by WSP and included in this application which identifies that the overall risk of the site flooding is low and suggests appropriate mitigation measures to be included in the developed design (report reference 4485-WSP-XX-XX-RP-EI-000). A Drainage Strategy has also been prepared by WSP for the SAB application, (report reference 4485-WSP-XX-XX-RP-D-000), which identifies how SuDS drainage methods will be implemented to provide a suitable surface water drainage strategy that mimics the natural catchment processes as closely as possible.

Key design guidance includes:

- · CIRIA Code of Practice for Property Flood Resilience (C790)
- BS8102:2009 Prevention & management of water (from surrounds) entering basement & sub-levels
- BS851188-1:2019+A1:2021 Installation and retrofit of flood resistance measures
- BS85500:2015 Improving reoccupation of buildings after a flood

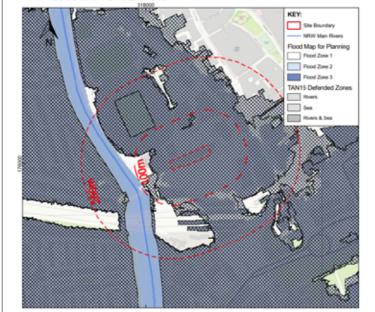
Key mitigation strategies could include:

- Ground floor comprising less vulnerable spaces such as cycle storage, refuse storage etc
- \cdot Residents' amenity spaces and all residential units at upper levels
- Flood-proof doors or inbuilt demountable defence attachment points, to provide flood resistance up to 600mm above finished floor level
- Non-return valves fitted to drains and water inlet/outlet pipes where required
- · Ground floor finish to be tiled or similar resilient hard surface
- · Ground floor storey to include raised electrical sockets
- Sensitive equipment to be kept at an elevated level with freeboard allowance
- · Any sump and pumps required to be provided
- Flood Action Plan covering management, warning, and evacuation strategies

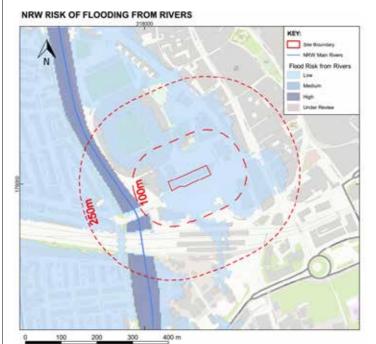
Flood Map

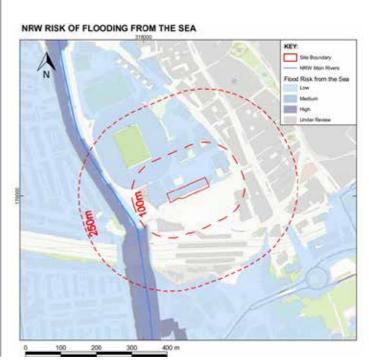
Risk Of Flooding From Rivers

Risk Of Flooding From The Sea



NRW FLOOD MAP FOR PLANNING





5plus 86 Central Square Cardiff

9.5 Wind Mitigation Strategy

Executive Summary

A comprehensive wind mitigation strategy has been integrated into the design of the 50-storey tower to improve pedestrian comfort at ground level, particularly along the long elevations facing Rose Lane and Wood Street.

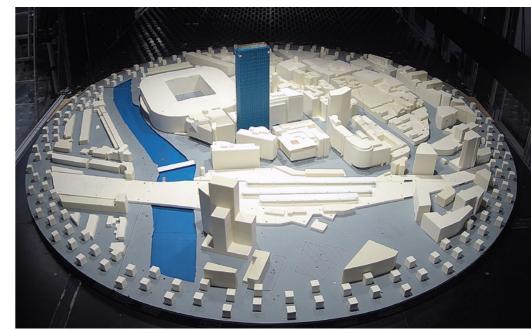
Key architectural features include:

- A 3-metre deep, full-length canopy (split by bay) on the north elevation along Rose Lane, located at 10 metres height, helping to deflect downdrafts from the tower façade.
- A 1.5-metre deep canopy running the full length of the Rose Lane elevation at the "shelf" level, aligning with the top of the colonnade, providing additional wind buffering.
- A 1.5-metre deep canopy on the south elevation along Wood Street, extending from the colonnade to the south-west corner at a height of 5 metres, offering localised protection from prevailing winds.

In addition to these canopy structures, smaller-scale wind mitigation elements have been incorporated into the landscape design. These include strategically placed trees and baffles along Wood Street and within the adjacent public square next to the pavilion, which contribute to wind dispersion and enhance the microclimate around the base of the building.

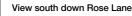
GIA Model Images





Wind mitigation integrated into the architectural design







View east down Wood Street



View west towards Rose Lane

5plus Central Square Cardiff

Landscape



01 Introduction Understanding the Local Context

The site is located at a key junction in Cardiff city centre, positioned between Cardiff Central Station and the Principality Stadium. It forms part of a major pedestrian route connecting transport, retail, and civic destinations, and experiences extremely high footfall, especially on matchdays when the stadium hosts up to 80,000 visitors.

This prominent setting places strong demands on the public realm to be resilient, legible, and welcoming, supporting both everyday use and peak crowd conditions. The proposal responds by embedding nature-based solutions, enhancing wayfinding, and delivering a landscape that supports climate resilience, biodiversity, and cultural identity.

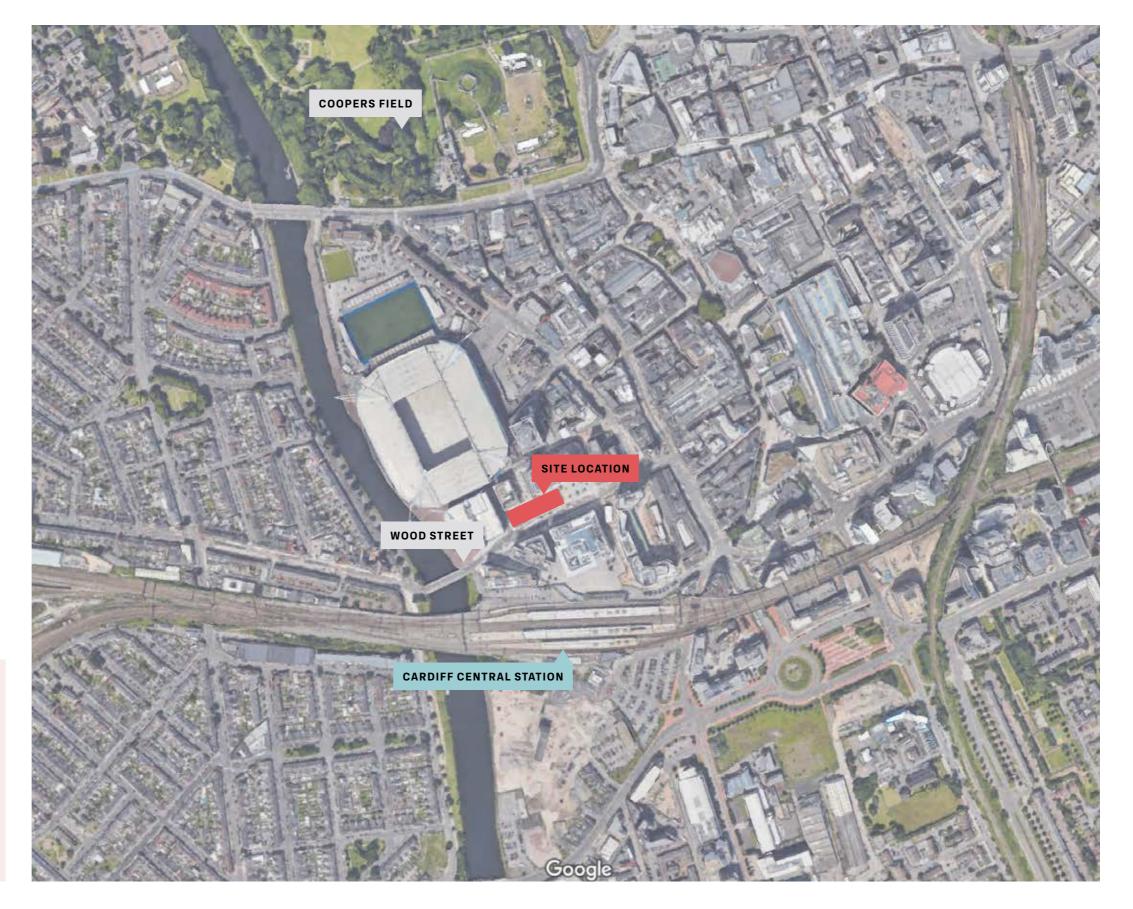
Neighbourhood Context

Plots 4 & 5 sit within Central Square, a major regeneration area reshaping Cardiff's city centre gateway. Surrounded by key developments including BBC Cymru Wales, HMRC, and the new transport interchange, the site is part of a high-intensity, evolving urban core.

The scheme supports the wider masterplan vision by delivering a connected, green, and walkable public realm that enhances civic identity and links key infrastructure.

Design considerations:

- Support high footfall and matchday movement
- Reinforce wayfinding and arrival experience
- Integrate nature-based, climate-adaptive design
- Create a robust, inclusive and accessible public realm
- Embed local identity through materials and public art



01 Introduction Place, Purpose, Potential

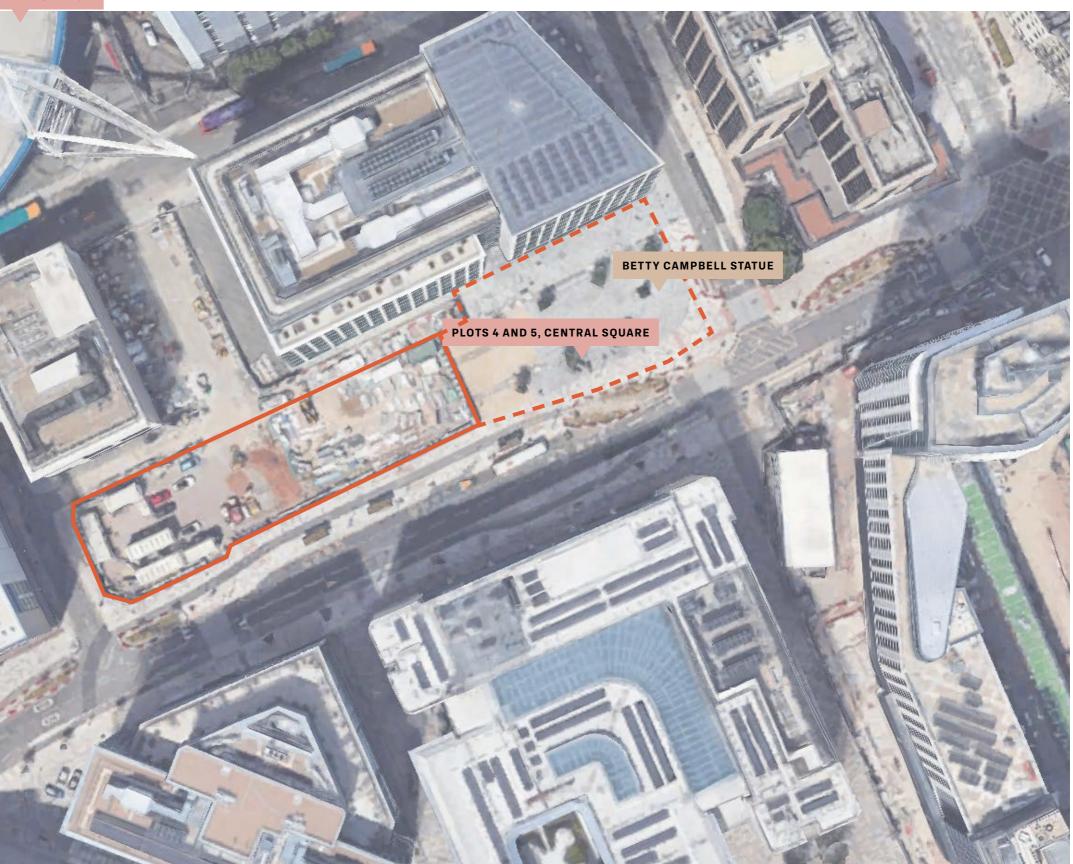
PRINCIPALITY STADIUM

Plots 4 & 5 form part of the consented Central Square masterplan and sit at a crucial civic junction between Cardiff Central Station and the Principality Stadium. The site is highly accessible by rail, bus, and bike, and directly intersects with key pedestrian routes through the city. It currently presents limited green infrastructure and is impacted by stadium noise, movement bottlenecks, and environmental pressures such as urban runoff and solar exposure.

The consented scheme includes mixed-use development with residential, commercial, and pavilion uses. The updated application provides an opportunity to refine public realm quality, enhance the pavilion's destination value, and deliver a resilient, high-performing landscape in support of the site's landmark potential.

Design considerations:

- Highlight key entrances with coordinated planting and surface materials.
- Enhance microclimate using shade trees and green infrastructure along sun-exposed edges.
- Support pedestrian flow with clear, robust surfaces and soft thresholds.
- Celebrate the pavilion as a civic anchor through seating, planting, and lighting.
- Screen service and access zones using integrated, unobtrusive landscape elements.
- Create a civic-scaled public realm that balances movement, gathering, and identity.

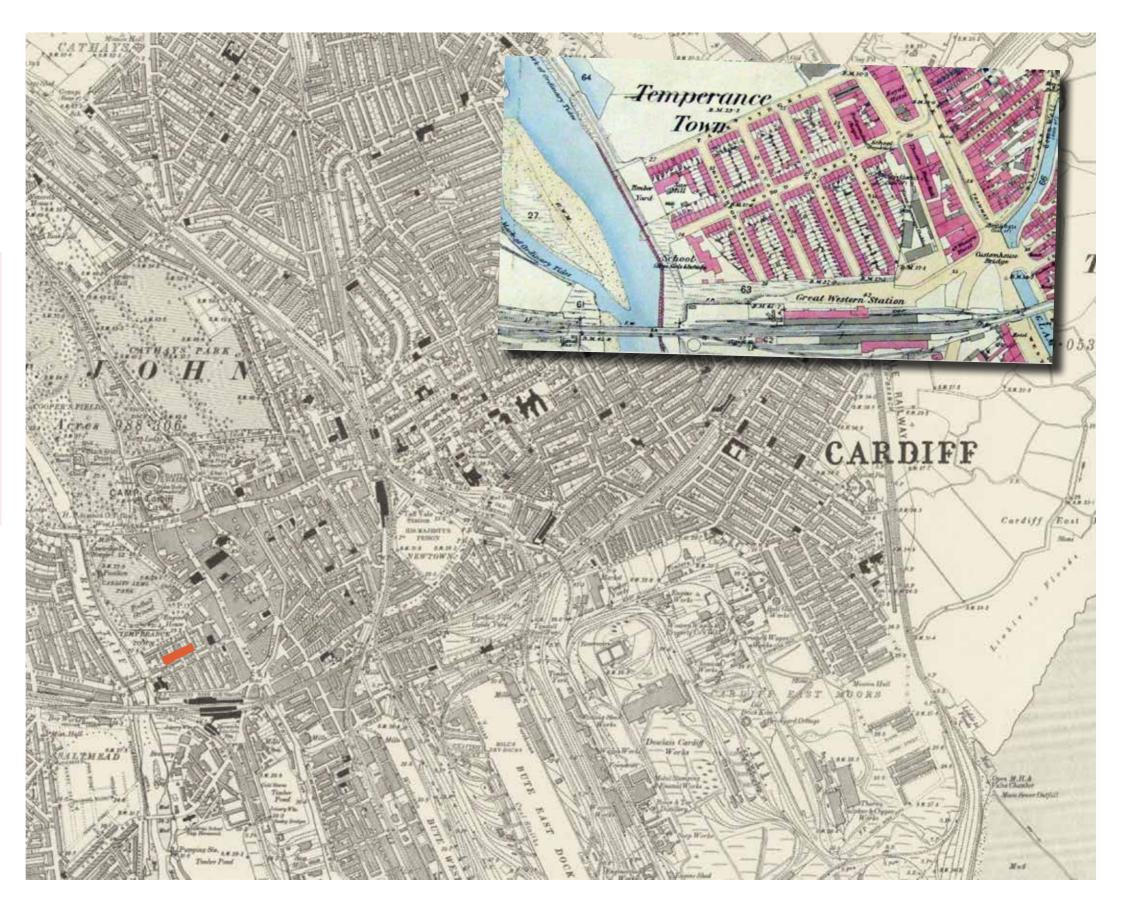


02 Analysis From Temperance to Transformation

The site has shifted from a 19th-century residential grid (Temperance Town) to 20th-century transport infrastructure, and is now part of Cardiff's civic heart. Historically, Wood Street was a key east—west axis lined with streets, homes, and later the Cardiff Bus Station and St David's House. The area has always been a connector, between neighbourhood, city, and station, and is now evolving into a key piece of public realm infrastructure.

Design considerations:

- Reference historic street patterns and layering in surface treatments or alignment.
- Celebrate the site's transitional civic role with flexible, adaptable space.
- Balance movement and memory, create legible routes and places to pause.
- Use robust materials suited to infrastructure legacy and high footfall.
- Embed Cardiff's identity and history subtly through planting, public art, and interpretation.



02 Analysis History, Language, Place

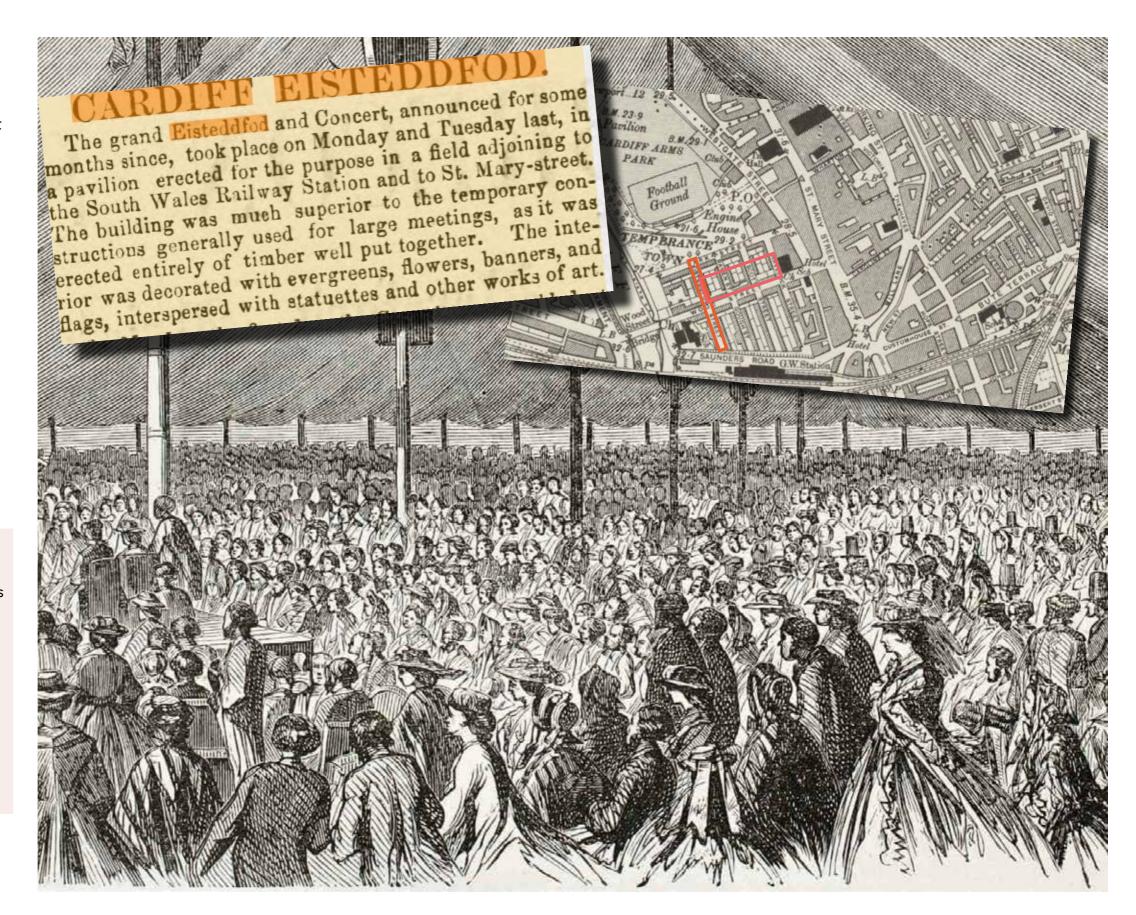
The word "Eisteddfod" from eistedd (to sit) and fod (to be) translates as "sitting together", reflecting a deeply rooted Welsh tradition of gathering, creativity and cultural expression. Historically, Eisteddfodau brought people together to share stories, poetry and music in a spirit of civic celebration and cultural pride.

This legacy is embedded into the landscape strategy through integrated public art, wayfinding and gathering spaces that reflect the site's role as a place of convergence between station and stadium, past and present. Subtle references to language, performance and storytelling will be woven into surfaces, markers and seating, offering a layered experience that connects everyday activity with Welsh identity.

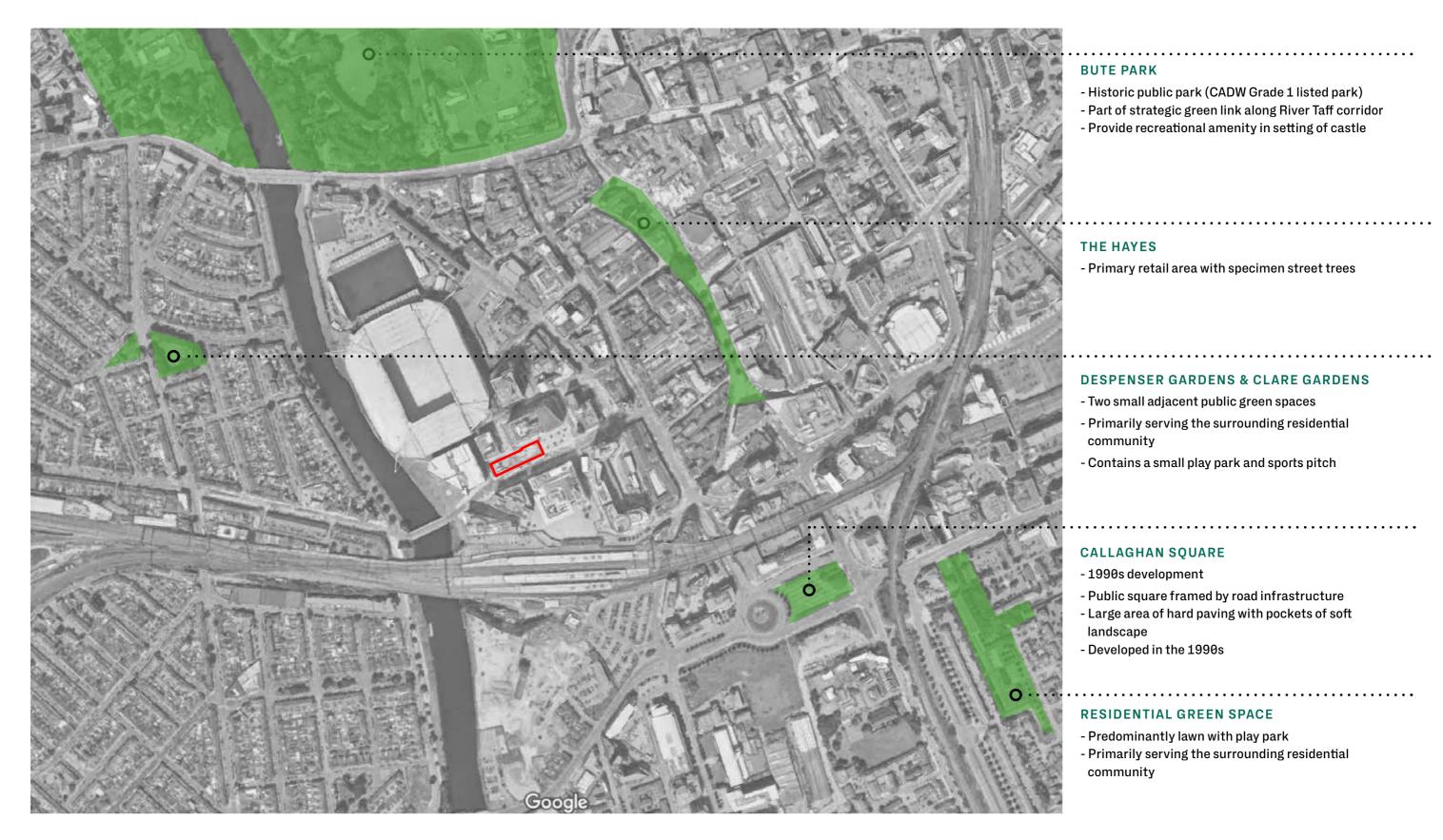
By drawing inspiration from the Eisteddfod, the public realm becomes more than a thoroughfare, it becomes a platform for culture, connection and place-making at the heart of the city.

Design Considerations:

- Use Welsh language in wayfinding, paving inlays or interpretive features.
- Create spaces for gathering that reflect the Eisteddfod's spirit of "sitting together."
- Incorporate poetry, storytelling or music references subtly into materials or signage.
- Collaborate with local artists and cultural partners to shape narrative-led interventions.
- Design elements to be inclusive, bilingual and accessible, celebrating cultural identity in everyday moments.



02 Analysis Greening the City Centre



02 Analysis Supporting a Green Cardiff



Plots 4 & 5 are located in one of Cardiff's most intensively developed areas, surrounded by infrastructure, civic buildings, and dense commercial development. While the wider city benefits from significant green assets such as Bute Park and the River Taff corridor, the immediate city centre lacks accessible, high-quality green and public open space.

Nearby spaces like Callaghan Square, The Hayes, and Clare Gardens offer some relief but are fragmented, hardscaped, or serve a more limited local function. In this context, the site presents a key opportunity to:

- Contribute meaningfully to city centre greening
- Support health, wellbeing, and urban biodiversity
- Reinforce Cardiff's strategic green infrastructure network

This responds directly to Planning Policy Wales (Edition 12, 2024) and the Environment (Wales) Act 2016, which call for compact urban development to be balanced by green, accessible and multifunctional spaces that support the resilience of ecosystems and communities alike.

Public Green Space

Cardiff city centre has limited accessible green space, with nearby areas like Callaghan Square and The Hayes offering fragmented or hardscaped public realm. Bute Park provides larger green space but sits outside the immediate core. This highlights the need for high-quality, accessible green space within the city centre itself to support daily use, wellbeing, and biodiversity.

Local Ecology & Biodiversity

An ecological appraisal (WSP, July 2025) confirmed the site has low existing ecological value, comprised of hardstanding and ephemeral vegetation typical of vacant urban land. It does not support protected species and has limited foraging potential due to poor connectivity. There are no anticipated impacts on nearby designated habitats or wildlife corridors.

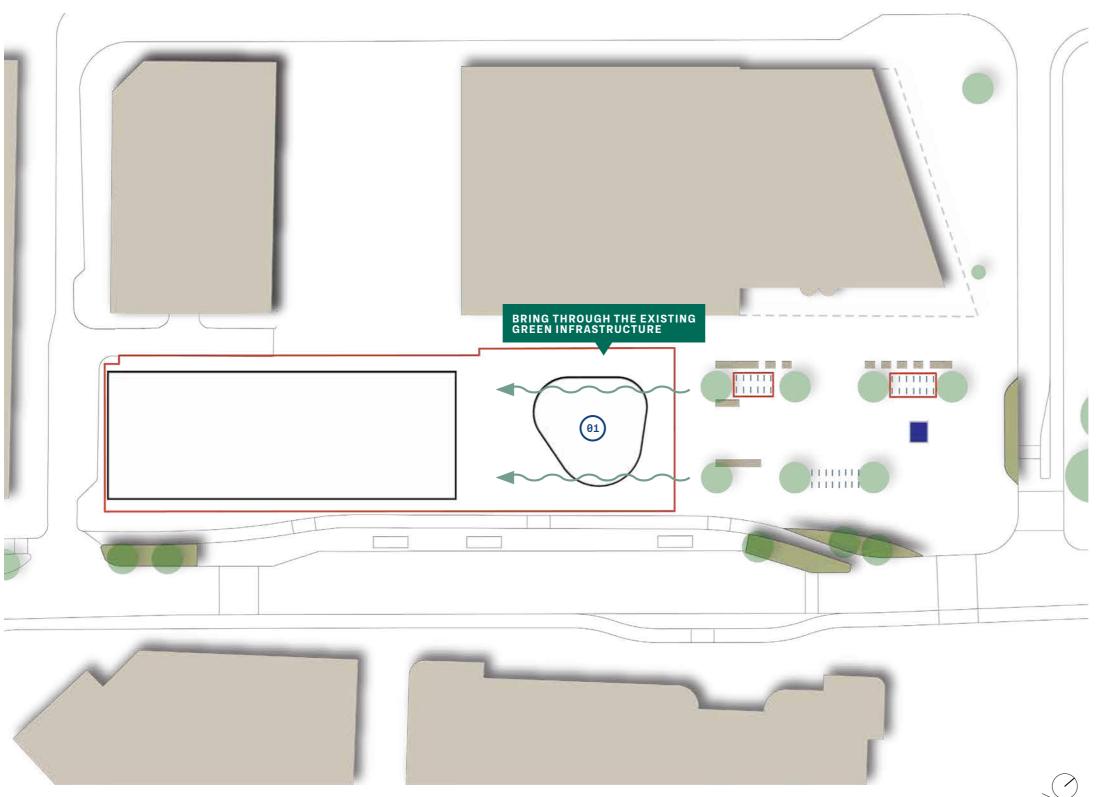
Instead, the ecological importance lies in what can be delivered:

- Green roofs and planting for pollinators
- Habitat features such as bird/bat boxes and invertebrate hotels
- Native and climate-adapted species to support urban ecology and biodiversity net benefit

Design Considerations

- Introduce high-quality green infrastructure within the public realm to address a local shortfall.
- Provide accessible, attractive green space that supports wellbeing, shading, biodiversity and social interaction.
- Align with the goals of the Well-being of Future Generations (Wales) Act and PPW12, supporting a Resilient Wales through multifunctional, connected and sustainable design.
- Position the site as a key node in Cardiff's evolving green infrastructure network, not just a through-route but a place to pause and connect.

02 Analysis A Need for Green



Green Infrastructure

The site and surrounding public realm include formally planted single-stem trees arranged in a grid within a predominantly hard-surfaced civic square. Recent infrastructure improvements, such as cycle enhancements to Wood Street, have introduced additional planting to the area, offering a valuable starting point for a more connected green network.

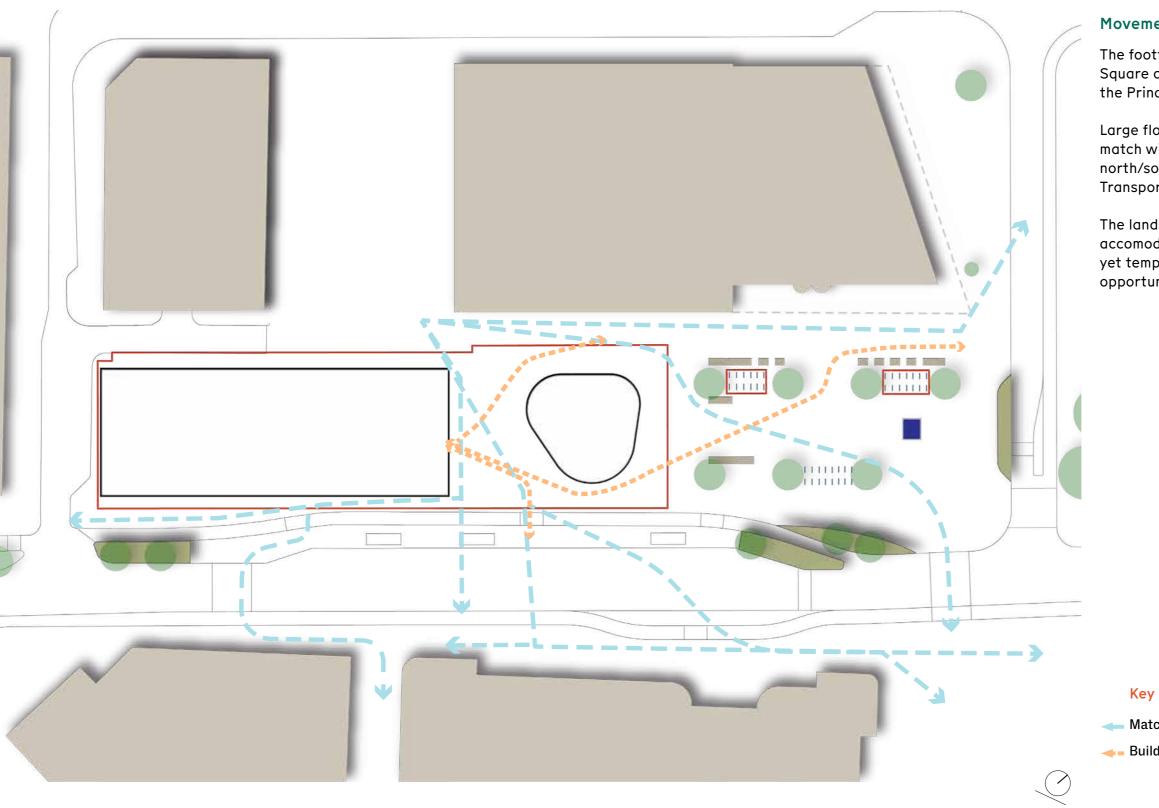
Currently, green infrastructure remains limited, fragmented, and low in ecological function. In line with Planning Policy Wales (Edition 12) and the Well-being of Future Generations (Wales) Act, the proposal seeks to capitalise on existing planting, enhance biodiversity, and deliver a more multifunctional and resilient green public realm.





VIEW TOWARDS SITE FROM BETTY CAMPBELL STATUE

02 Analysis A Gateway of Constant Flow



Movement

The footfall and pedestrian movement through the Square changes dramatically during match day at the Principality Stadium to the North of the site.

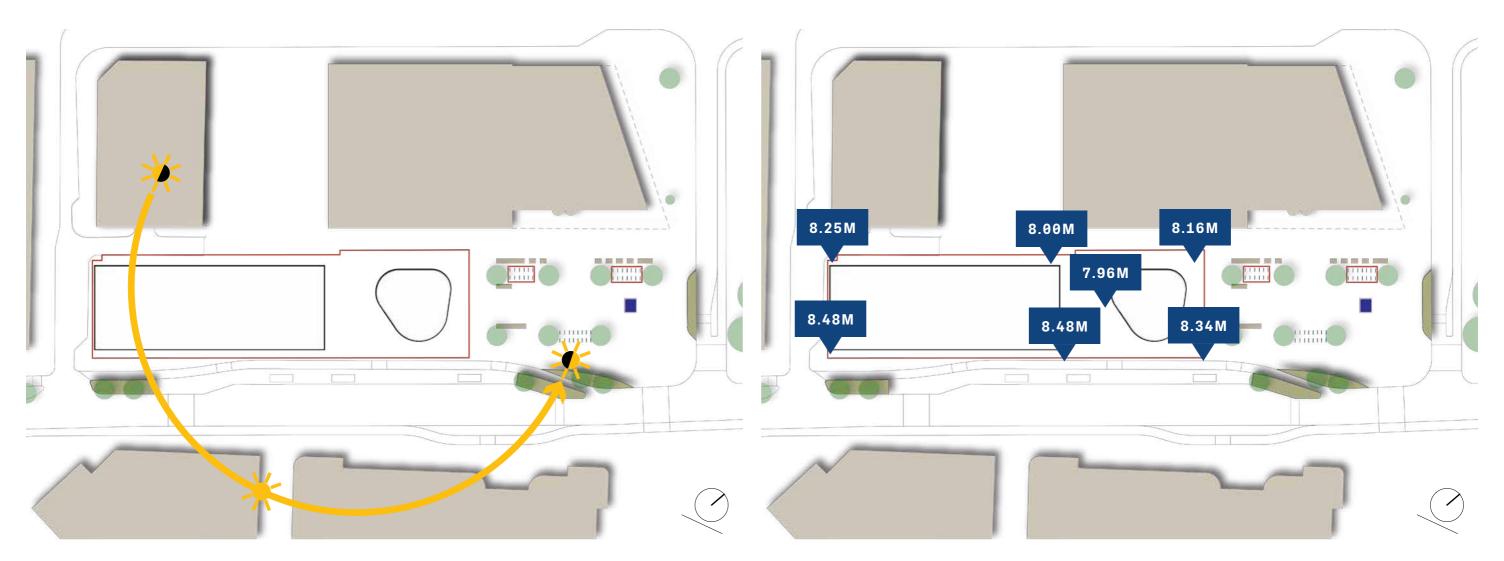
Large flows of movement at the start/end of a match will see high numbers of pedestrians moving north/south through the space to access the Transport Hub, located to the South of the site.

The landscape design and planting must accomodate and be robust to cope with this large, yet temporary footfall, whilst still maximising the opportunity for greening the space(s).

Match Day Movement

Building Movement

02 Analysis Sheltering the Square



Sun Path

A detailed microclimate assessment has been undertaken by GIA to inform the environmental performance of the proposed public realm. The sun path analysis indicates that the site benefits from good southern exposure, particularly to the south and southeast edges. However, due to the height of the proposed tower, there will be significant shading in front of the tower entrance after midday, especially outside of summer months.

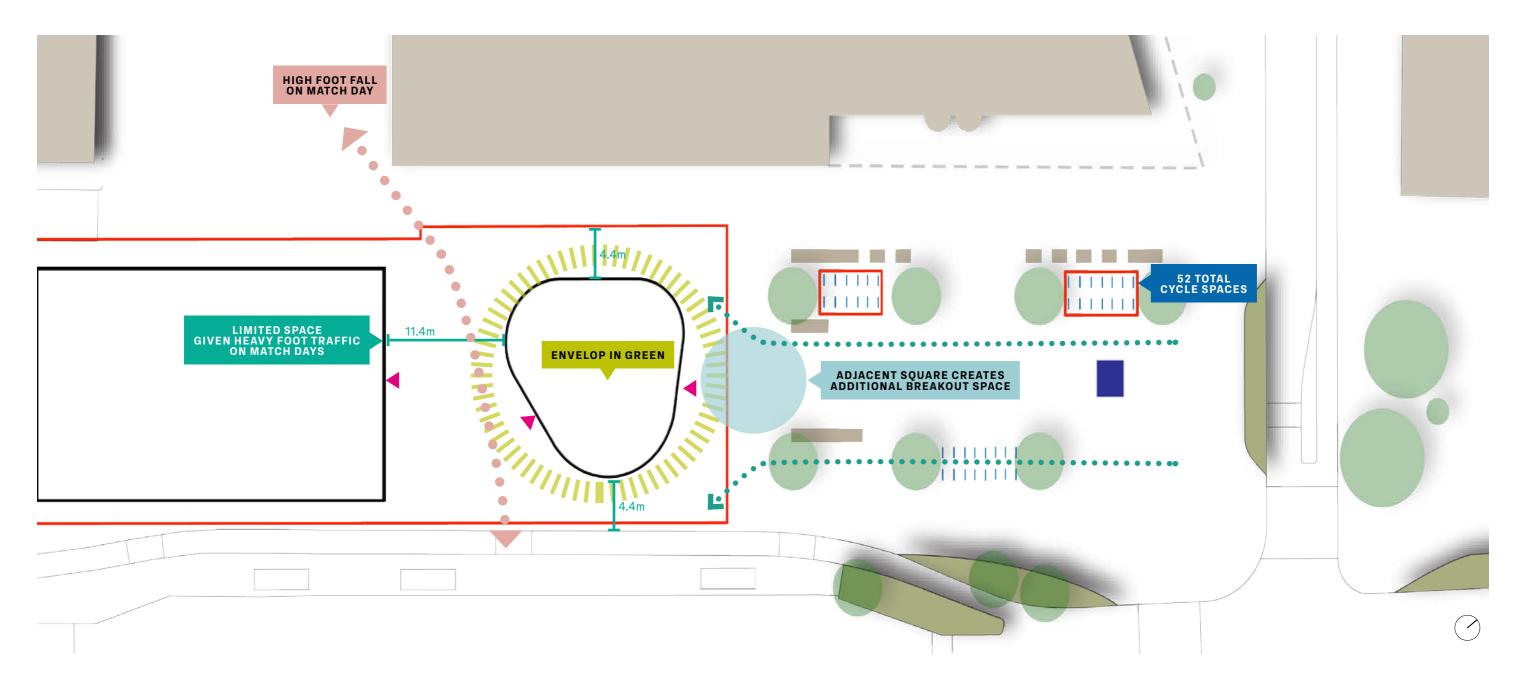
There may be a short window of direct light to the pavilion in late afternoon, as sun passes between buildings, while areas further from the tower will receive more consistent sunlight, particularly during high summer. To respond to this, the landscape strategy includes:

- Canopy trees and soft landscaping to provide shading and cooling in sun-exposed zones
- Strategic planting and layout to moderate wind flow and enhance user comfort
- Integration of climate-adaptive green infrastructure to support thermal regulation

Existing Levels

The site is relatively level, with minor gradient variations. The public realm will incorporate a passive surface water strategy, directing runoff into planted rain gardens and soft edges, reducing pressure on drainage infrastructure and supporting SuDS compliance in line with Welsh planning policy.

02 Analysis Shaping a New Public Realm



Constraints & Analysis Summary

The site is heavily constrained by its civic location, footfall pressure, and spatial limitations. High pedestrian volumes, particularly on match days, create pinch points along key desire lines, especially between the stadium and station. The narrow corridor between the tower and pavilion limits flexibility and requires careful management of movement and green infrastructure.

The pavilion must be wrapped in planting while maintaining clear circulation routes (minimum 4.4m). The adjacent square provides critical breakout space, and the design must balance functionality with comfort and identity. Landscape elements must enhance flow, absorb pressure, and introduce greening without obstructing key movement routes.

03 Landscape Concept Vision Statement

The public realm will be a space of movement and meaning, where the flow of daily life meets moments of pause, reflection and connection. Rooted in the Welsh spirit of Eisteddfod, it draws on local culture, language and materiality to create a landscape that is both resilient and expressive.







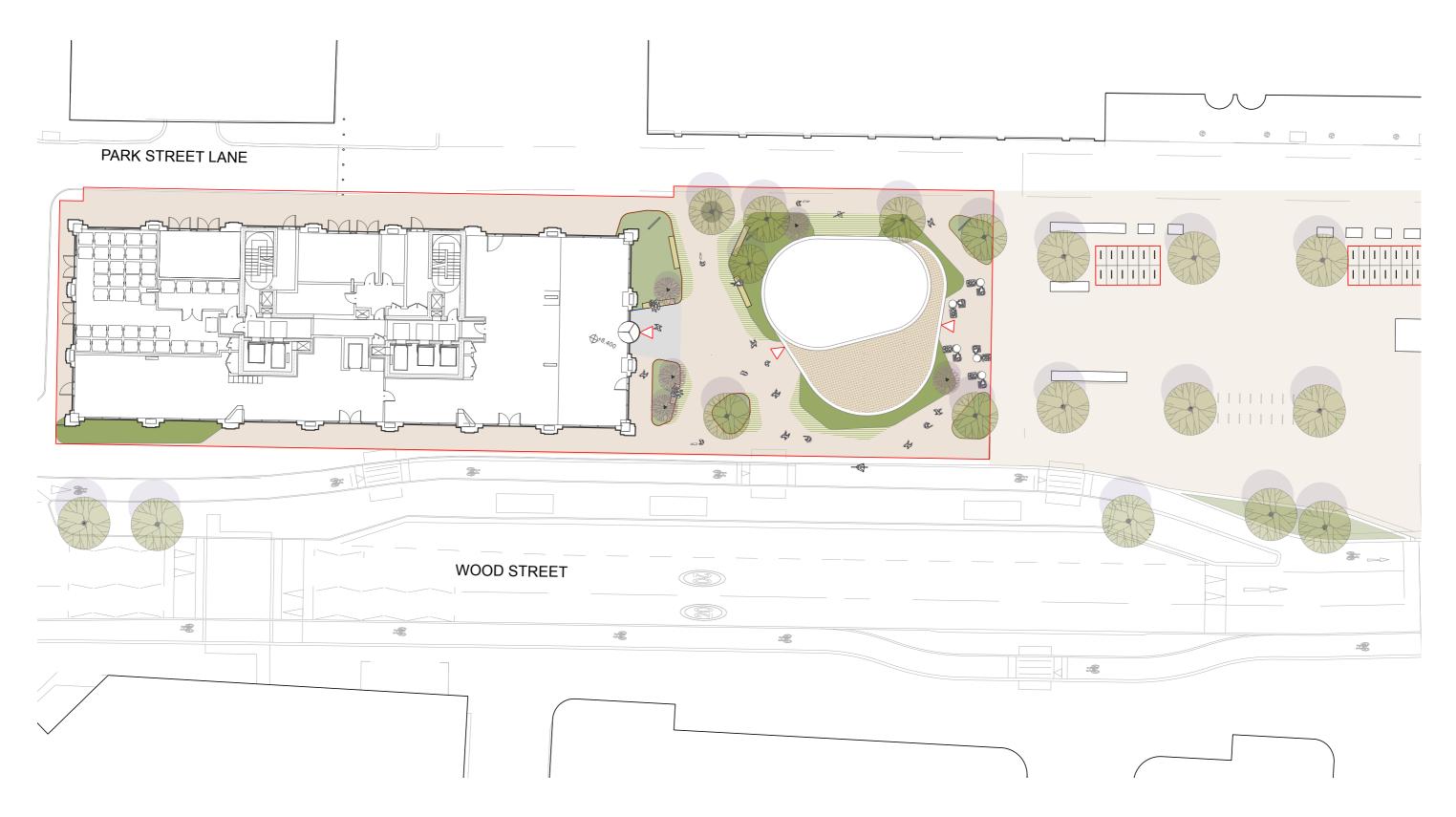






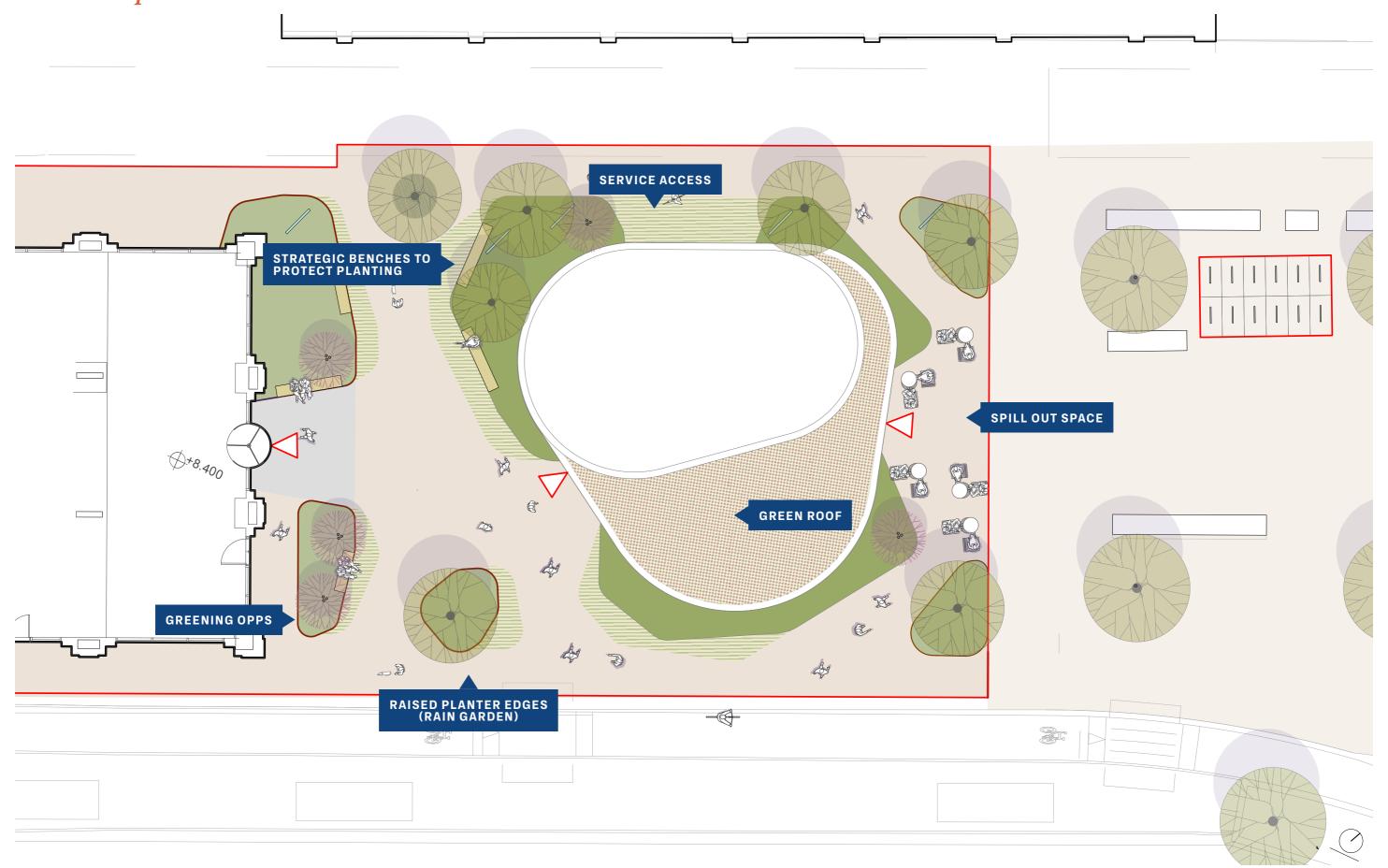
Throughtrees, planting, crafted surfaces and integrated publicart, it offers shade, comfort and identity within a civic setting, complementing the architecture while welcoming people to move, dwell, and belong.

03 Landscape Concept Wider Concept Plan



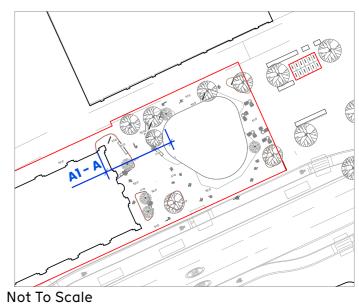


03 Landscape Concept Concept Plan



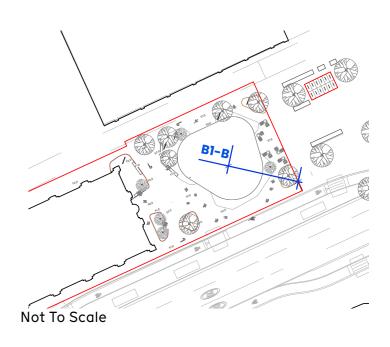
03 Landscape Concept Section A1-A





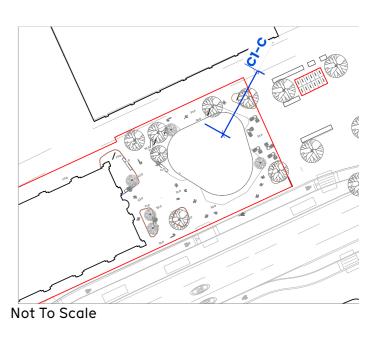
03 Landscape Concept Section B1-B





03 Landscape Concept Section C1-C





03 Planting & Ecology Enhancing Biodiversity

Ecological Baseline and Context

An ecological walkover survey, carried out by WSP in July 2025, identified the site as having low existing ecological value, comprising hardstanding and a sparse mosaic of ephemeral/short perennial vegetation. The habitat was typical of cleared urban plots, with limited vegetation dominated by species such as butterfly bush (Buddleja davidii) and rosebay willowherb. No invasive plant species were identified.

The survey confirmed:

- No suitable habitat for nesting birds or roosting bats on site
- Very limited foraging or commuting potential due to lack of connectivity and vegetation structure
- No anticipated impact on statutory sites, with Cardiff Bay Wetland LNR and Bute Park AWI parcels beyond typical zones of influence

Given these conditions, no further ecological surveys or supervision were required, but the report strongly recommended integrating ecological enhancement measures to support net benefit for biodiversity (BnG) in line with Welsh legislation.

Policy Compliance

The proposals respond directly to Welsh policy frameworks including:

- Planning Policy Wales (Edition 12, 2024): Emphasising the role of green infrastructure and ecosystem resilience in sustainable placemaking
- Environment (Wales) Act 2016: Requiring public bodies and developers to maintain and enhance biodiversity through development
- **Technical Advice Note (TAN) 5:** Promoting biodiversity conservation as an integral part of the planning process
- Well-being of Future Generations (Wales) Act 2015: Supporting a 'Resilient Wales' by embedding biodiversity and natural capital into urban design





Biodiverse green roofs to support and enhance biodiversity

Landscape Strategy & Biodiversity Net Gain Response

The landscape strategy has been developed to respond to the site's ecological limitations while creating a multifunctional public realm that delivers meaningful green infrastructure and urban biodiversity.

Key landscape proposals include:

- **New tree planting:** 12–14 large specimen trees to provide canopy cover, shade, and ecological structure
- Raised planters and green edges: Supporting layered planting, with native and pollinator-friendly species to boost invertebrate and bird interest
- Semi-extensive green roof to the pavilion: Planted with a biodiverse mix suitable for shade and urban conditions, including ferns, grasses, and low-growing perennials
- Rain gardens: integrated into the surface water drainage strategy, using planting to attenuate and filter runoff
- Invertebrate habitats and bird/bat boxes: incorporated discreetly into the built form and planting zones

Stepwise Approach to Net Benefit

A separate Green Infrastructure Statement is submitted alongside this document, outlining how the proposals address the stepwise approach to achieving biodiversity net benefit, as advised by Natural Resources Wales. This includes:

- Avoidance: Locating planting to avoid key circulation and event pressure zones
- Mitigation: Enhancing the minimal baseline through increased vegetation and habitat
- Compensation: Introducing targeted features such as green roofs and ecological furniture
- Enhancement: Delivering overall biodiversity uplift through native planting, habitat creation and ecosystem connectivity

The GI Statement sets out detailed planting specifications and confirms that the scheme delivers a net biodiversity benefit in line with planning expectations and policy duties.

O3 Planting & Ecology Species



Planting Strategy

The ground level planting strategy focuses on resilience, biodiversity and visual richness, using a robust mix of shade-tolerant ferns, ornamental grasses and flowering perennials. Designed to thrive in urban conditions, the palette provides seasonal interest, supports pollinators, and introduces texture and movement to soften hard edges. Planting is layered to reinforce spatial definition, enhance microclimate comfort, and contribute to the site's overall green infrastructure and biodiversity net gain.

Plant List

- 01. Hakonechloa macra
- 02. Deschampsia cespitosa 'Gold Tau'
- 03. Luzula nivea
- 04. Libertia chiliensis
- 05. Asplenium scholopendrium
- 06.Polystichium polyblepharum
- 07. Dryopteris erythrosora
- 08. Hosta
- 09. Astrantia major
- 10. Geranium pheum 'Lily Lovell'
- 11. Heleborus orientalis
- 12. Aster divaricatus

03 Planting & Ecology Biodiverse Green Roof / Semi Shade



Biodiverse Roof Design

The pavilion features a semi-extensive green roof planted with species selected for shade tolerance and drought resilience, reflecting afternoon shading and limited substrate depth (150 - 200mm). The mix includes hardy ferns, ornamental grasses, and flowering perennials to maximise biodiversity, deliver seasonal variation, and support pollinators. This low-maintenance system enhances thermal performance, contributes to urban greening, and aligns with local and national policy objectives for biodiversity net gain and green infrastructure.

Plant List

- 01. Geranium macrorrhizum
- 02. Luzula nivea
- 03. Briza media
- 04. Calamintha nepeta
- 05. Asplenium scholopendrium
- 06. Carex montana
- 07. Erigeron karvinskianus
- 08. Achillea millefolium 'Salmon Beauty'
- 09. Linaria purpurea
- 10. Leucanthemum vulgare
- 11.Euphorbia amygdaloides var robbiae
- 12. Scilla siberica

05 Materials & Finishes
Plots 4 & 5, Central Square







Paving

Paving will comprise locally sourced natural stone or a high-quality alternative, chosen to reflect the character and tones of Cardiff's built context.

Fractures and joints in the surface will be planted with resilient groundcover, allowing nature to break through and softening the public realm. Materials will be low carbon, with potential for recycled content, and will meet all slip-resistance and durability standards.

The public realm will include a mix of benches, tables, and integrated seating, using natural materials such as

FSC-certified timber and powder-coated steel to balance warmth with durability. Colours and finishes

will be used to add vibrancy and identity while maintaining robustness in a high-footfall urban











Furniture

environment.



Lighting

A contemporary lighting strategy will be integrated within the landscape to balance safety, accessibility, and atmosphere. It will include path downlighting, tree up-lighting, and subtle feature lighting to create a relationship between nature and people at night. All proposals will be developed further in collaboration with a specialist lighting designer.

05 Materials & Finishes Navigating Through Story and Space

Wayfinding Through Story and Structure

The landscape is shaped not only by routes and edges, but by the stories it carries. Our approach weaves public art and wayfinding into one, using crafted totems and interpretive structures to anchor culture in place. These elements are inspired by the spirit of the Eisteddfod, a celebration of poetry, song and gathering, and become markers that reveal the voices of the past. Language, memory and material combine to offer quiet moments of reflection, encounter and belonging. These are not just objects of navigation, but whispers of what was once, etched into the city's future.

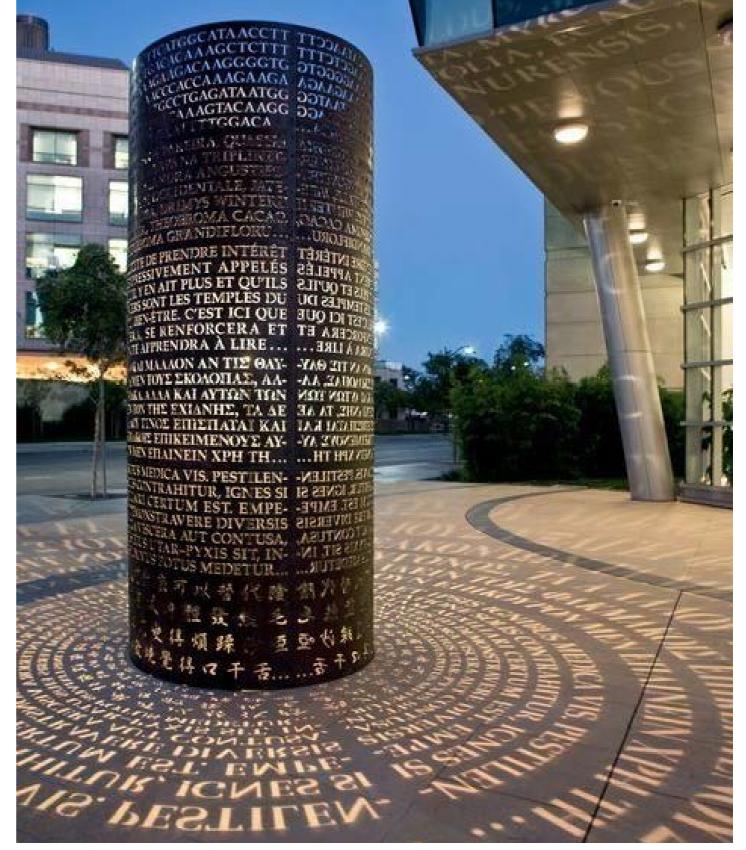
Approach

A series of totemic wayfinding structures integrated throughout the landscape, forming a narrative trail between key spaces.
Constructed from natural FSC-certified timber and Corten or powder-coated steel, they reflect both the natural character of Wales and Cardiff's industrial past. These vertical elements will:

- Incorporate Welsh language and cultural references through engraved poetry, place names, and historical fragments
- Serve as both functional markers (e.g. directional cues, arrival points) and interpretive features
- Be placed strategically to guide movement, invite pause, and reinforce spatial identity
- Feature a tactile and human scale, with materials chosen for longevity, legibility, and sensory engagement
- Together, these structures create a landscape that is navigable, meaningful, and deeply local, a public realm where culture is not just referenced, but physically embedded.







Visualisation

















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