

# **REAP 3 Limited**

# PLOTS 4 AND 5, CENTRAL SQUARE, CITY CENTRE, CARDIFF

Flood Consequences Assessment





## **REAP 3 Limited**

# PLOTS 4 AND 5, CENTRAL SQUARE, CITY CENTRE, CARDIFF

Flood Consequences Assessment

TYPE OF DOCUMENT (VERSION) PUBLIC

PROJECT NO. 0040270.4485

OUR REF. NO. 4485-WSP-XX-XX-RP-EI-000

**DATE: AUGUST 2025** 

#### **WSP**

1 Capital Quarter Tyndall Street Cardiff CF10 4BZ

Phone: +44 2920 769 200

WSP.com



# **QUALITY CONTROL**

Issue/revision	00	00	Revision 2	Revision 3
Remarks	Draft	Final Issue		
Date	July 2025	August 2025		
Prepared by	Richard Curtis	Richard Curtis		
Signature				
Checked by	Jason Pitman	Jason Pitman		
Signature				
Authorised by	Stuart Evans	Stuart Evans		
Signature				
Project number	UK0040270.4485			
Report number	4485-WSP-XX- XX-RP-EI-01 R00	4485-WSP-XX-XX- RP-EI-01 R00		
File reference	0040270.4485			



# **CONTENTS**

1	INTRODUCTION	1
1.1	LIMITATIONS	1
1.2	SITE LOCATION	1
1.3	GEOLOGICAL & HYDROGEOLOGICAL CONTEXT	3
1.4	DEVELOPMENT PROPOSAL	3
2	CURRENT UNDERSTANDING OF FLOOD RISK	6
2.1	FLOOD RISK SUMMARY	6
2.2	NRW FLOOD MAP FOR PLANNING & TAN15	7
2.3	PLANNING POLICY CONTEXT	9
3	CONCLUSIONS & RECOMENDATIONS	12
	FIGURES	
	Figure 1-1: Site Location	2
	Figure 1-2: Proposed Development Plan	4
	Figure 1-3: Proposed Development Section	5
	Figure 2-2: Flood Map for Planning	8



## **APPENDICES**

APPENDIX A
FLOOD MAP PACK
APPENDIX B
DEVELOPMENT PROPOSALS

Plots 4 and 5, Central Square, City Centre, Cardiff Project No.: 0040270.4485 | Our Ref No.: 4485-WSP-XX-XX-RP-EI-000 REAP 3 Limited

PUBLIC | WSP AUGUST 2025



#### 1 INTRODUCTION

WSP (UK) Ltd has been appointed by REAP 3 Ltd to undertake a Flood Consequences Assessment screening study(FCA) to inform the conceptual design (RIBA Stage 2) of the proposed development of Plots 4 and 5, Central Square, City Centre, Cardiff (Postcode circa: CF10 1XR). This Flood Consequences Assessment has been undertaken in accordance with Technical Advice Note 15 (TAN15) and is based on data provided by the client and available online.

To help ensure that the level of detail of an FCA is proportionate to the degree of flood risk, the Construction Industry Research and Information Association (CIRIA) has defined a tiered three-level approach to flood risk assessment as follows:

- Level 1 Screening study to identify whether there are any flooding issues related to a development site which may warrant further consideration;
- Level 2 Scoping study to be undertaken for each potential flood risk issue that is identified as being associated with a site during a Level 1 FCA. A Level 2 FCA involves a qualitative assessment of the flood risk to the site, and the impact of the site on flood risk elsewhere; and
- Level 3 Detailed study to be undertaken if the Level 2 study concludes that quantitative analysis is required to assess flood risk issues related to the development site.

In the case of the currently proposed development site, a Level 1 study is considered sufficient to inform the conceptual design and identify potential risks associated with the development. Notwithstanding this, a Level 2 or 3 FCA will likely be required to support a future planning application.

#### 1.1 LIMITATIONS

WSP has prepared this report in accordance with the instructions of their client, REAP 3 Limited, for their sole and specific use relating solely to the above site. Any person who uses any information contained herein does so at their own risk and shall hold WSP harmless in any event. Whilst this report was prepared using the reasonable skill and care ordinarily exercised by engineers practicing under similar circumstances and reasonable checks have been made on data sources and the accuracy of the data, WSP accepts no liability in relation to the report should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to WSP. In any event, WSP shall not be liable for any loss or damages arising under or in connection to the use of this report.

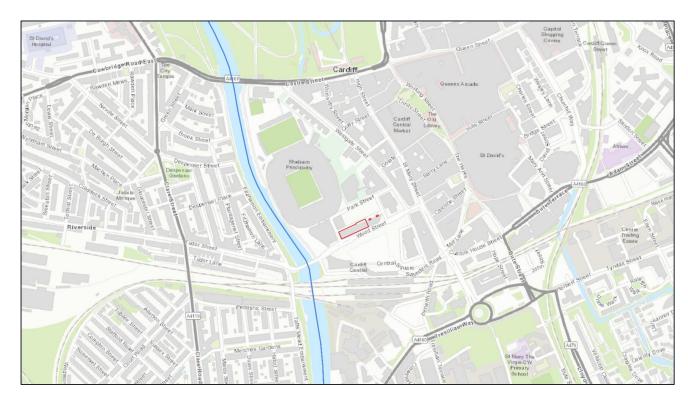
#### 1.2 SITE LOCATION

The Site is located on Wood Street, at an approximate National Grid Reference of 318130, 176020. This locates the site immediately north of Wood Street and south of both Rose Lane and circa 105m east of the Afon Taf. The site has an area of approximately 0.2 hectares.

The site is currently occupied by brownfield land, having recently been used a mixed use 6 storey block demolished in circa 2018.

The site boundary is shown in Figure 1-1 overleaf.





Main River (Afon Taf)Study Area Boundary

Figure 1-1: Site Location

#### 1.3 SITE DESCRIPTION

The site sits within the administrative area of Cardiff Council ('the Council'), who is the relevant Local Planning Authority when determining any planning applications on the site.

The site is 0.21ha and comprises a cleared rectangular plot of land, alongside two smaller parcels of land located to the north of Wood Street within the public realm (these smaller parcels will accommodate public cycle parking spaces). The site is bound by Wood Street to the south, Scott Road to the west, Park Street Lane to the north-west, and a public square to the east. The site was formerly occupied by St David's House, until it was demolished in late 2018.

The site benefits from full planning permission for the following development (Ref: 21/02984/MJR), which was granted by the Council on 2nd May 2024:

'Full planning application for a mixed-use building providing commercial uses at ground floor/mezzanine level (Use Classes A1/A2/A3/B1/D1/D2) and residential accommodation above (Use Class C3 and including non C3 Use Class residential), a pavilion (Use Classes A1/A2/A3), public realm, cycle parking, access, drainage and other infrastructure works required for the delivery of Central Square Plots 4 and 5.'

The site sits within the Cardiff Central Square Masterplan area. Whilst this masterplan was never formally adopted, it has catalysed significant development and has led to the transformation of the



area in and around Cardiff Central Station. The prevailing building heights ranges between 7 to 25 storeys, which includes buildings of a variety of land uses and architectural styles.

The Media Wales office building is located at 6 Park Street, immediately adjacent to the north west of the site. The HMRC building is located immediately adjacent to the north east of the site. The Millennium Plaza leisure complex is located immediately to the west. To the south across Wood Street lies the Cardiff University School of Journalism, Media and Culture, and the BBC Cymru building. The Principality Stadium is located further to the north and can be accessed via Central Square.

#### 1.4 GEOLOGICAL & HYDROGEOLOGICAL CONTEXT

According to the British Geological Survey 50k mapping<sup>1</sup> the site is situated above bedrock from the Mercia Mudstone Group, comprised of Mudstone. The site is overlain by Tidal Flat Deposits, there Clay, Silt and Sand. The mapping also notes Made Ground (undivided) at this location.

According to the Source Protection Zone map provided by the Natural Resources Wales, the site does not lie within any Source Protection Zones (see Appendix A).

The superficial deposits at the site are designated as a low productivity class 2C aquifer.

#### 1.5 DEVELOPMENT PROPOSAL

The development proposals are as follows:

- A landmark 50 storey building with a maximum height of up to 177.85m AOD.
- 528 new homes (Class C3) comprising a mix of 1-bed and 2-beds.
- A pavilion building within Central Square comprising up to 601sqm of flexible non-residential floorspace (flexible Class A1 and A3).
- 2,856.5sqm of high quality internal and external amenity space through provision of roof terraces, lounges, coworking, gym and other wellbeing spaces.
- A basement level providing ancillary residential floorspace.
- A car free development with 528 cycle parking spaces within proposed building, including 5% accessible spaces, and a publicly accessible bike hub and café. Additionally, 52 public cycle spaces are provided within adjacent square provided as Sheffield stands.

The development description is as follows:

"Mixed-use development to provide residential accommodation, flexible non-residential uses, cycle parking, landscaping and other associated works"

The most vulnerable use classification should be used in FCAs, and according to Technical Advice Note 15 (TAN15)<sup>2</sup> the proposed development is considered to be 'Highly Vulnerable'.

Plots 4 and 5, Central Square, City Centre, Cardiff Project No.: 0040270.4485 | Our Ref No.: 4485-WSP-XX-XX-RP-EI-000 REAP 3 Limited PUBLIC | WSP AUGUST 2025 Page 3 of **21** 

<sup>&</sup>lt;sup>1</sup> British Geological Survey, 2025. *50k Geology Bedrock and Superficial Deposits*. Available at: https://mapapps2.bgs.ac.uk/geoindex/home.html. [Accessed July 2025].

<sup>&</sup>lt;sup>2</sup> Welsh Government. (2025) *Technical Advice Note (TAN) 15: development, flooding and coastal erosion*. Available at: https://www.gov.wales/technical-advice-note-tan-15-development-flooding-and-coastal-erosion (Accessed: July 2025).



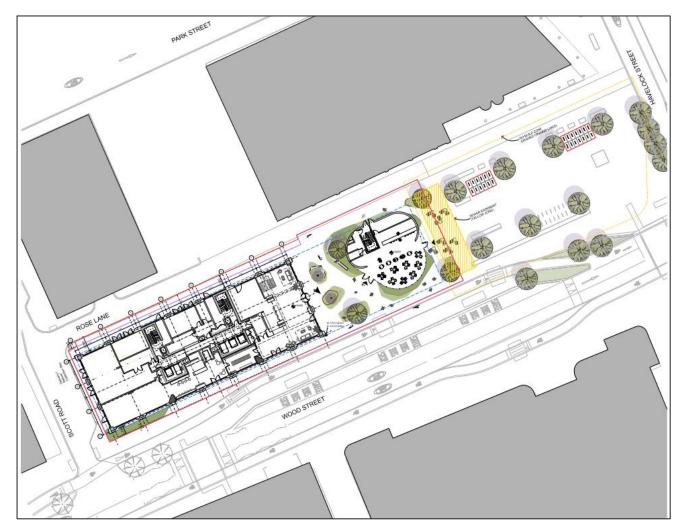


Figure 1-2: Proposed Development Plan<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> 5plus (18/06/25) *Site Plan Proposed Buildings* ref: 06159 5PA-MP-00-DR-A-001200-03



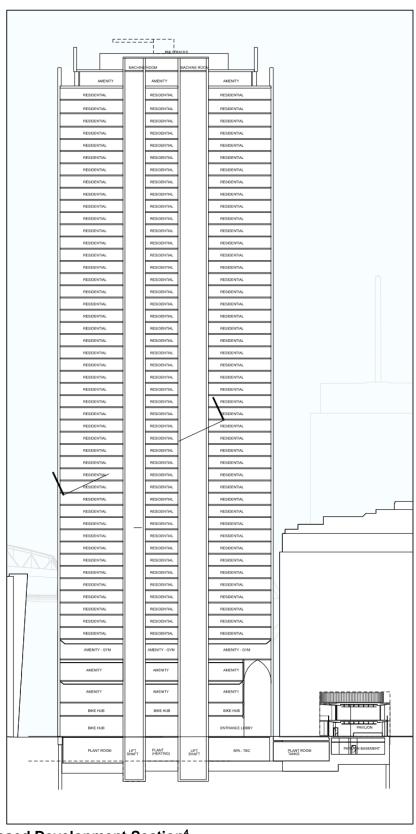


Figure 1-3: Proposed Development Section<sup>4</sup>

 $<sup>^{\</sup>rm 4}\,$  5plus (15/07/25) Proposed Site Section Section AA ref: 06159 5PA-MP-ZZ-DR-A-052201-02



#### 2 CURRENT UNDERSTANDING OF FLOOD RISK

The site is considered to be at a low overall risk of flooding. This section firstly summarises the Flood Maps in Appendix A, before discussing the Flood Map for Planning and its implications under the current TAN15 (§2.2) and concludes with a summary of local policy on flood risk (§2.3).

#### 2.1 FLOOD RISK SUMMARY

This section considers summarises the flood risk as identified by NRW's publicly available flood maps and available information. A full set of flood maps for the site is included within Appendix A.

#### 2.1.1 FLUVIAL

The site is located circa 105 m east of the Afon Taf some 2.5 km upstream of where it discharges in Cardiff Bay. Given the nature of the surrounding floodplain, the flood risk from these sources is linked, available data from NRW identify that the risk of fluvial flooding to the site is generally **Low**, noting this considers defences.

#### 2.1.2 TIDAL

As mentioned, the site is located on the lower reaches of the Afon Taf available data from NRW identify that the risk of fluvial flooding to the site is generally **Low**, noting this considers defences.

#### 2.1.3 SURFACE WATER

Based on information from NRW's Risk of Flooding from Surface Water and Small Watercourses Map, the area alongside the norther edge of the plot is at **Low** risk of pluvial flooding.

As a part of the redevelopment of the site, a surface water drainage strategy for the site is to be developed, this will need to be developed to manage the risk of surface water flooding. No significant offsite surface water flows have been identified and so the drainage strategy should only need to consider locally arising waters. Please refer to the Drainage Strategy Report (Ref: 0040270.4485-WSP-XX-XX-RP-D-000)

#### 2.1.4 GROUNDWATER

The groundwater regime would be anticipated to be dominated by the Afon Taf. Both the basement design and the drainage design should consider the potential of high groundwater levels given the anticipated made ground and the proximity to the river and consider how any exceedance flows can be routed away from areas of higher vulnerability. Groundwater tends to emerge slowly and typically follows drainage networks and flowpaths, thus is unlikely to pose an emergency, and the risk can be considered residual once a suitable drainage design is in place. Based on the findings from the Cardiff

Plots 4 and 5, Central Square, City Centre, Cardiff
Project No.: 0040270.4485 | Our Ref No.: 4485-WSP-XX-XX-RP-EI-000

PUBLIC | WSP AUGUST 2025 Page 6 of **21** 



Flood Risk Management Plan<sup>5</sup>, there is no information on historic groundwater flooding, which suggests that the risk of groundwater flooding across Cardiff Council's area is considered **Low**. This should be reviewed subject to the findings of any ground investigation works.

#### 2.1.5 RESERVOIR & INFRASTRUCTURE FLOOD RISK

The site is within the maximum flood extents in the event of a reservoir failure at either the Beacons Reservoir or the Pontsticill (Taf Fechan) and there are no canals in the vicinity of the site. The other artificial waterbodies, the docks and the dock feeder are not considered currently to be a significant source of flood risk to this site.

#### 2.2 NRW FLOOD MAP FOR PLANNING & TAN15

In September 2021, NRW released the Flood Map for Planning<sup>6</sup> in support of the updated TAN15 which was released this year (2025).

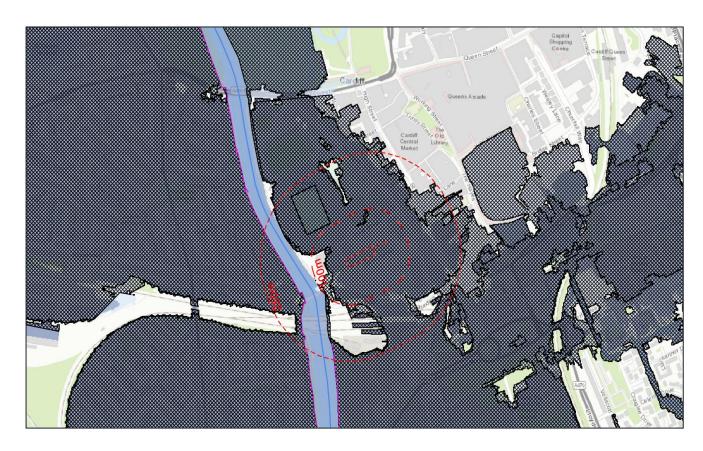
A review of NRW's Flood Map for Planning illustrates the extents of modelled flood risk from surface water and minor watercourses, fluvial sources, and tidal sources. This mapping shows the predicted future level of risk, including the anticipated effects of climate change.

It is worth noting that NRW's Flood Map for Planning identifies that the site is within Flood Zone 3; albeit within a TAN15 Defended Zone (№s 32 &177).

<sup>&</sup>lt;sup>5</sup> Cardiff Council, *Cardiff Flood Risk Management Plan.* (2015). Available at: https://www.cardiff.gov.uk/ENG/resident/Community-safety/Flood-and-Coastal-Erosion-Risk-Management/Documents/Cardiff%20Flood%20Risk%20Management%20Plan.pdf.

<sup>&</sup>lt;sup>6</sup> NRW, 2025. Flood Map for Planning. Available at: https://flood-map-for-planning.naturalresources.wales/. [Accessed July 2025].





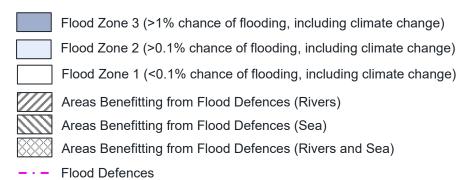


Figure 2-1: Flood Map for Planning

Contains Ordnance Survey Data, © Crown Copyright and Database Right 2025

#### 2.2.1 TAN15

It is noted that TAN15 is a relatively new document having been recently issued, and various points which may be open to interpretation do not have a settled consensus.

Under TAN15, residences are classed as Highly Vulnerable development, but it is noted that, infrastructure associated with Highly Vulnerable development such as those intended for the ground floor and basement levels are classified as Less Vulnerable development.



The flood map for planning on which it is anticipated will inform the new TAN15 shows that the site is within Flood Zone 3, albeit within a TAN15 Defended Zone on previously developed land. Key items for such a development include:

- Should not:
  - over intensify use, nor
  - reduce the area's ability to absorb flood water, nor
  - cause problems with flooding elsewhere.
- Will include flood resilience
- Will meet tolerable conditions (TAN15 §11)

N.B. Tolerable conditions are for the extreme event. This is the event with a 0.1% chance of flooding, including climate change and may include consideration of infrastructure failure or blockages, to the satisfaction of NRW as considered appropriate for the site and development. At time of writing NRW has not responded to our request regarding the definition of the extreme event for this site.

Tolerable Conditions are:

- Flood depths are < 600 mm in the extreme event</p>
- Flood Velocities in the extreme event are:
  - < 0.15 m/s for highly vulnerable development
  - < 0.3 m/s for less vulnerable development</li>

#### TAN15 notes that:

Higher density and mixed-use developments can offer greater potential for resilient design. For instance, ground floor areas may be able to accommodate less vulnerable elements of the development, such as commercial uses, provided that highly vulnerable uses on upper floors have satisfactory access and egress arrangements in the event of flooding.

¶ 13.4

#### 2.3 PLANNING POLICY CONTEXT

This section provides an overview of relevant planning policy.

#### 2.3.1 NATIONAL PLANNING POLICY

#### 2.3.1.1 Planning Policy Wales

Planning Policy Wales (PPW)<sup>7</sup> Edition 12, sets out the Welsh Government's national policies for flood risk and development in a planning context within Wales. PPW states:

'Development should reduce, and must not increase, flood risk arising from river and/or coastal flooding on and off the development site itself. The priority should be to protect the undeveloped

**REAP 3 Limited** 

<sup>&</sup>lt;sup>7</sup> Welsh Government (Feb 2024) *Planning Policy Wales* 12<sup>th</sup> Ed. Welsh Government



or unobstructed floodplain from development and to prevent the cumulative effects of incremental development'.

¶ 6.6.25

#### 2.3.1.2 Technical Advice Note 15

TAN15: Development, Flooding and Coastal Erosion provides technical guidance supplementing PPW and Future Wales, regarding flooding and coastal erosion by providing a framework within which these can be assessed. It also advises on the consequences of these risks and adapting to them. TAN15 does not take precedence over other Technical Advice Notes and should be considered alongside other policies. The requirements of TAN15 have been discussed above in Section 2.2.1.

#### 2.3.1.3 Future Wales: The National Plan 2040

Policy 8 of the *Future Wales: the National Plan 2040 (FWtNP)*<sup>8</sup> concerns flooding, Cardiff is identified as a National Growth Area within the document. When discussing the implications of flooding policy to this region the document states:

Flooding from rivers and the sea is a major issue across the region. Cardiff and Newport are estuarine cities while major rivers flow through all the south Wales Valleys, meaning many communities are at risk of flooding. Large parts of the region's key rail and road infrastructure are on valley floors or coastal locations and reliant on effective flood risk management to remain operational at all times. Places in the region benefit from strong coastal defences, including the Cardiff Bay Barrage and the Gwent levels sea wall, but sea levels are expected to rise more on the south coast than any other part of Wales over the next thirty years. The potential for flooding in the National Growth Area has implications for the delivery of growth in the region. Policy 8 sets out the national strategic approach to flood risk management and will ensure growth aspirations in National Growth Areas are co-ordinated with strategic decisions on managing flood risk.

Pg 167

the priorities and process described are also of interest.

Flood risk management that enables and supports sustainable strategic growth and regeneration in National and Regional Growth Areas will be supported. The Welsh Government will work with Flood Risk Management Authorities and developers to plan and invest in new and improved infrastructure, promoting nature-based solutions as a priority. Opportunities for multiple social, economic and environmental benefits must be maximised when investing in flood risk management infrastructure. It must be ensured that projects do not have adverse impacts on international and national statutory designated sites for nature conservation and the features for which they have been designated.

Policy 8 pg74

and

The Welsh Government favours nature-based flood risk management over engineered solutions wherever possible, working in harmony with aspirations to develop green infrastructure and to provide a net benefit for biodiversity. Flood risk management authorities and other developers

<sup>&</sup>lt;sup>8</sup> Welsh Government (Aug 2019) Future Wales: The National Plan 2040 Rev. Feb 2021. Welsh Government



of flood risk management infrastructure are required to maximise opportunities to develop multiple public benefits including improved public realm, active travel facilities and securing green infrastructure. Places in flood warning areas are considered at risk of flooding from rivers or the sea.

Policy 8 pg75

#### 2.3.1.4 Shoreline Management Plan

This area of Cardiff is covered by SMP19, Policy Unit CAR1. The policy calls for 'Hold the Line' across all epochs. Therefore, the policy suggests that this area will remain protected in the foreseeable future. However, it should be noted that this is an intention of policy only and that there is no guarantee this will not be altered by a future review nor that funding for this policy is assured.



#### 3 CONCLUSIONS & RECOMMENDATIONS

The proposed development site has a degree of both fluvial and tidal flood risk due to the presence of the Afon Taf and Cardiff Bay. It is noted that the site is protected from both of these sources, being situated within a TAN15 Defended Zone

In order to address the surface water criterion of TAN15, a suitable drainage strategy with SAB approval will be required. Please refer to the Drainage Strategy (0040270.4485-WSP-XX-XX-RP-D-000)

The foul water strategy should be developed to the satisfaction of DCWW and should ensure that there is no undue risk of flooding from this source.

It is recommended that in accordance with TAN15, ground floor areas should comprise less vulnerable elements of the development, such as commercial uses and amenity space.

Access and egress to the site is not anticipated to be unduly constrained, so long as the flood defences do not fail nor are exceeded. At time of writing NRW has not responded on whether the design event at this location includes a breach in the defences. In the event of a breach, as the site is in Flood Zone 3, access and egress would be anticipated to be impeded.

Any proposed flood mitigation should be approached in line with the aims of Future Wales: The National Plan 2040, favouring nature-based solutions where possible.

The proposed development should be designed to not over intensify use of the TAN15 defended area.

The proposed development should be designed to not reduce the area's ability to absorb flood water.

The proposed development should be designed to not cause problems with flooding elsewhere.

The proposed development should be designed to meet the requirements of TAN15 regarding tolerable conditions. At time of writing the event definition and the flood data are not available from NRW. Tolerable conditions are considered to be:

- Flood depths < 600 mm in the extreme event</p>
- Flood Velocities in the extreme event are:
  - < 0.15 m/s for highly vulnerable development
  - < 0.3 m/s for less vulnerable development

The proposed development should consider flood resilience and resistance from the onset of the design. Reference should be made to CIRIA's Code of Practice for Property Flood Resilience (C790)<sup>9</sup> and passive measures considered preferentially over active measures<sup>10</sup>. Measures could include but are not limited to:

 Flood-proof doors or inbuilt demountable defence attachment/anchor points (to provide flood resistance up to 600 mm above finished floor level, should the building structure be able to accommodate this),

BS 85500:2015 - improving reoccupation of buildings after a flood.

BS 8102:2009 - prevention & management of water (from surrounds) entering basements & sub-levels.

Plots 4 and 5, Central Square, City Centre, Cardiff Project No.: 0040270.4485 | Our Ref No.: 4485-WSP-XX-XX-RP-EI-000 REAP 3 Limited PUBLIC | WSP AUGUST 2025 Page 12 of **21** 

<sup>&</sup>lt;sup>9</sup> Kelly D, et al, 2020. Code of Practice for Property Flood Resistance. London: CIRIA.

<sup>&</sup>lt;sup>10</sup> BS 851188-1:2019+A1:2021 - installation and retrofit of flood resistance measures.



- Flood water exclusion strategy should be considered up to 600 mm above finished floor level, should the building structure be able to accommodate this,
- Ventilation should be sealable or self-sealing up to the aforementioned level,
- Non-return valves fitted to drains and water in/outlet pipes as appropriate,
- Ground floor walls dry lined using lime-based plaster and draining cavities as appropriate,
- Ground floors to be tiled / hard flooring as opposed to fitted carpets,
- Ground floors to include raised electrical sockets,
- Sensitive equipment or infrastructure kept at an elevated level with freeboard allowance. Ideally
  this level would be above the predicted extreme event over the anticipated lifespan,
- The structural and façade design of any walls, buildings, etc within the flood outline should suitably consider or, if new account for, the predicted flood parameters,
- Any areas predicted to flood should consider how these can be safely and readily evacuated,
- Any areas predicted to flood should consider how these can be designed to safely accommodate flood waters and preclude large floating debris being mobilised,
- Consider use of basement areas and provide adequate entry and exit points at times of emergency;
- Identify areas within basements that can we used as sumps for potential pumping out of water;
- All O&M plans should consider how the building can be made safe prior to an event as well as inspection and remediation post flood event,
- The above considerations must account for: the tidal environment, the potential presence of silts, debris and sewage in floodwater, anticipated loading of floodwaters and the chemical composition of tidal water.

It is recommended that the development includes a Flood Action Plan (FAP, aka Flood Management Plan or Flood Warning & Evacuation Plan).

- Those persons responsible for the site should ensure they are signed up to flood warnings and alerts from the NRW and should or maintain a method by which to convey any warnings or alerts to along the chain of command in accordance with the FAP.
- The FAP should consider how the facility can remain safely operational within acceptable parameters and rapidly recommence operation to best continue to serve the community; with consideration also given to access to and from the wider area.
- The FAP should continue to be regularly reviewed, practiced and revised as appropriate.
- The FAP must have a robust procedure for closing the site in advance of a predicted tidal flood event.

Inductions for employees should describe the flood risk and any access procedures in accordance with the FAP.

These recommendations should be revisited and revised as necessary as additional studies conclude, including, but not limited to: NRW's data response, any ground investigations providing additional information on groundwater risk and the drainage strategy.

# Appendix A

**FLOOD MAP PACK** 





# FLOOD RISK PACK



Client: REAP 3 Limited

Project Reference: 0040270.4485

Site Reference: Plots 4 and 5, Central Square, City Centre, Cardiff

**Site Location 318115**, **176016** 

Site Area: 0.2 hectares

Map Scale: 1:5000

#### **CONTENTS**

Page 1 - Site Location

Page 2 - Flood Map for Planning

Page 3 - National Flood Asset Database

Page 4 - Risk of Flooding from Rivers

Page 5 - Risk of Flooding from the Sea

Page 6 - Risk of Flooding from Surface Water

Page 7 - Flood Alert & Warning Areas

Page 8 - Historic Flood Map

Page 9 - Source Protection Zones

Page 10 - Aquifer Designation

Page 11 - Internal Drainage District Assets

CONTAINS OS DATA © CROWN COPYRIGHT AND DATABASE RIGHT 2024

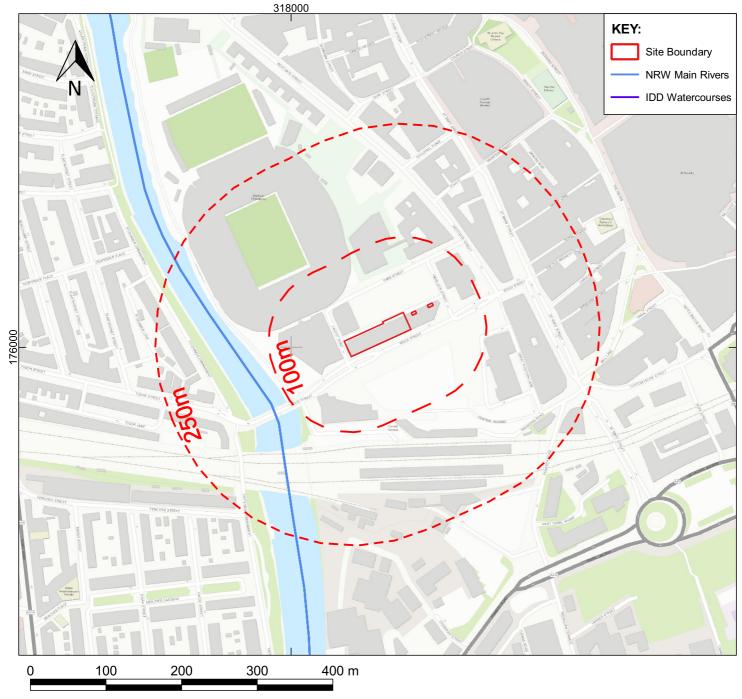
https://www.ordnancesurvey.co.uk/business-and-government/licensing/using-creating-data-with-os-products/os-opendata.html

NATURAL RESOURCES WALES INFORMATION © Natural Resources Wales and Database Right. All rights Reserved. 2024. - http://nationalarchives.gov.uk/doc/open-government-licence/version/2/
BRITISH GEOLOGICAL SURVEY MATERIALS © NERC 2024 - http://www.bgs.ac.uk/help/terms\_of\_use.html

Created by: UKJXA054 - 2025-07-30 17:21:12

\\corp.pbwan.net\global\GB\Projects\UK0040xxx\UK0040270.4485 - Plots 45 Central Square\03 WIP\CV Civil Engineering\05 Reports\FloodMapPack\4485 - CardiffCentralTower 250721.qgs.qgz





In Wales 'main rivers' are legally designated by Natural Resources Wales, they are typically larger streams and rivers but do include some smaller watercourses. Where works, either temporary or permanent, are proposed: in or near a main river, or in a flood plain or flood defence (including a sea defence), an application for a Flood Risk Activity Permit (FRAP) will usually be required.

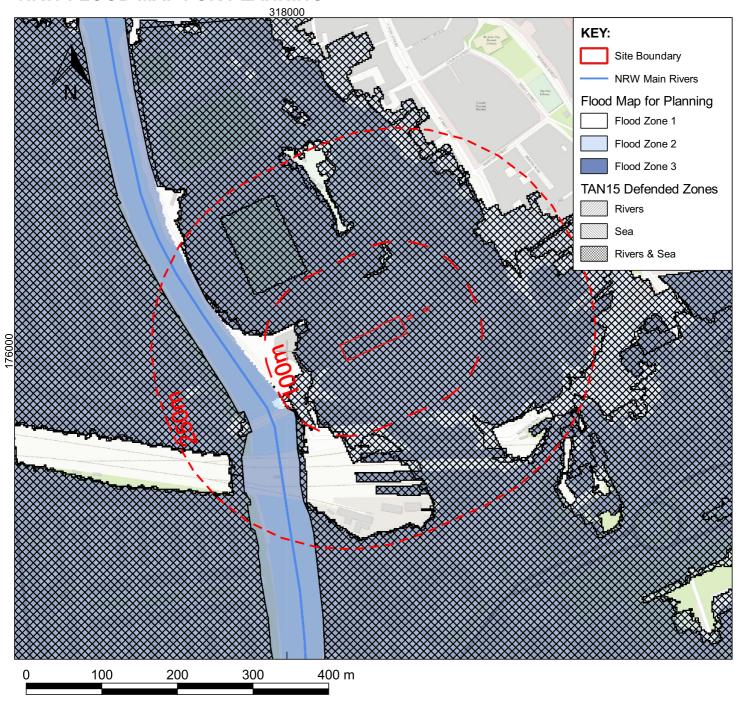
All other watercourses in Wales are known as ordinary watercourses and are the responsibility of the Lead Local Flood Authority or Internal Drainage District. Where works, either temporary or permanent, are proposed on or near an ordinary watercourse either an ordinary watercourse consent (LLFA) or land drainage consent (IDD) may be required from the relevant authority.

CONTAINS OS DATA © CROWN COPYRIGHT AND DATABASE RIGHT 2020 -

https://www.ordnancesurvey.co.uk/business-and-government/licensing/using-creating-data-with-os-products/os-opendata.html
NATURAL RESOURCES WALES INFORMATION © Natural Resources Wales and Database Right. All rights Reserved. 2020. - http://nationalarchives.gov.uk/doc/open-government-licence/version/2/



### NRW FLOOD MAP FOR PLANNING



Flood zone maps are modelled using local and national river and sea data. This information provides an indication of the likelihood of flooding and is intended for planning use only.

Flood Zone 1 - Land having a less than 1 in 1,000 annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map - all land outside Zones 2 and 3).

Flood Zone 2 - Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding. (Land shown in light blue on the Flood Map)

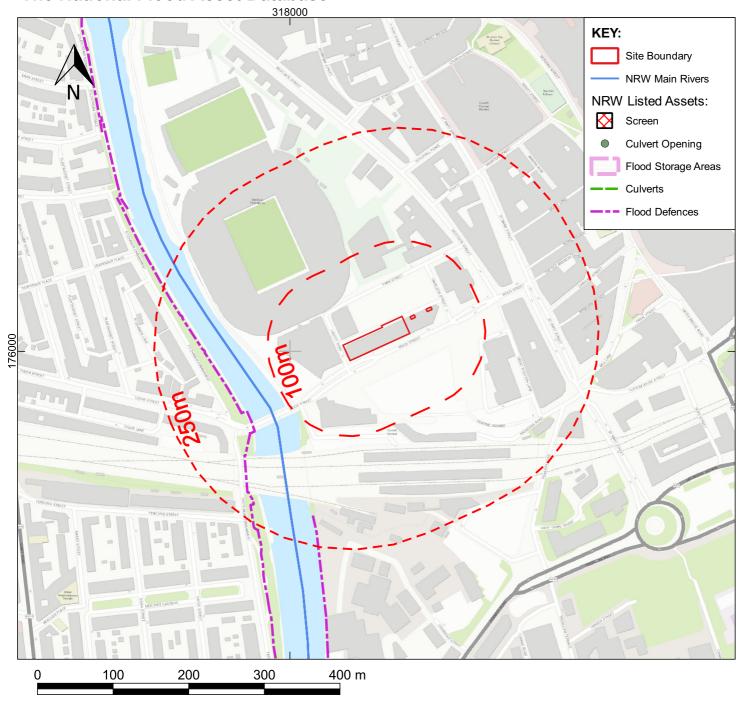
Flood Zone 3 - Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding. (Land shown in dark blue on the Flood Map)

Contains Natural Resources Wales information @ Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2020. Land & Property Services © Crown copyright and database right.

Created by: UKJXA054 - 2025-07-30 17:21:27 \\corp.pbwan.net\global\GB\Projects\UK0040270.4485 - Plots 45 Central Square\03 WIP\CV Civil Engineering\05 Reports\FloodMapPack\4485 - CardiffCentralTower 250721.qgs.qgz



#### **The National Flood Asset Database**



The National Flood Asset Database records flood infrastructure in Wales managed by Lead Local Flood Authorities and Natural Resources Wales. It includes many embankments, walls, flood gates, culverts, and inlet screens (which catch debris); however, it does not include all flood infrastructure maintained or owned by these parties nor does it include all other assets (e.g. informal assets or those under private or other onwership). This infrastructure has been constructed to help manage the risk of flooding buts does not remove the risk of flooding as they can be overtopped, blocked, or fail etc. These features may be owned or maintained by an entity other than NRW (e.g. the local authority) or both owned and maintained by said entity

NRW will regularly update the database to improve the accuracy of the data. The position of flood assets is for general guidance only. Currently:

Some of the data may be inaccurate or out-of-date

Some of the underground assets might not be known or recorded accurately

NRW are currently not able to show information for the following local authorities: Flintshire and Newport.

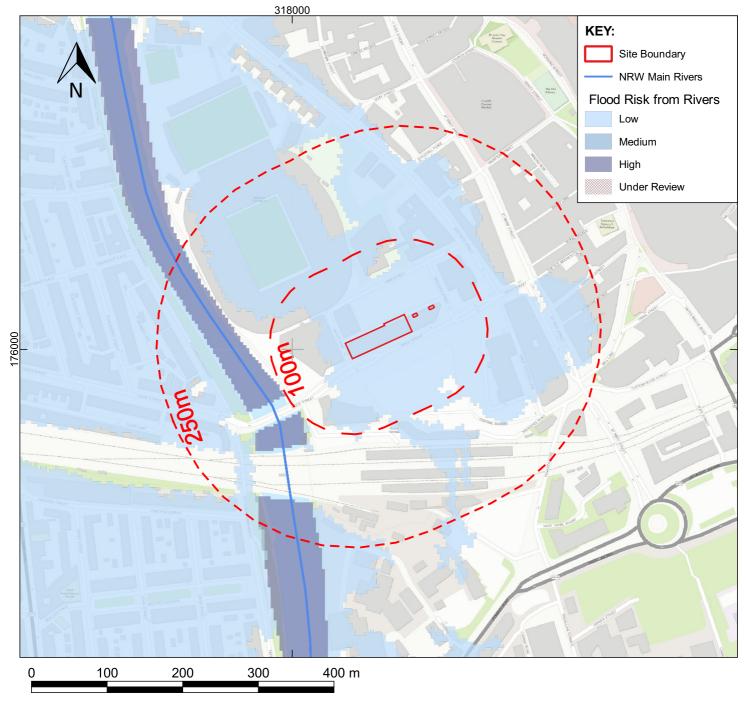
Contains Natural Resources Wales information @ Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2020. Land & Property Services © Crown copyright and database right.

Created by: UKJXA054 - 2025-07-30 17:21:35

\corp.pbwan.net\global\GB\Projects\UK0040xxx\UK0040270.4485 - Plots 45 Central Square\03 WIP\CV Civil Engineering\05 Reports\FloodMapPack\4485 - CardiffCentralTower 250721.qgs.qgz



### NRW RISK OF FLOODING FROM RIVERS



High risk means that each year this area has a chance of flooding of greater than 3.3%.

Medium risk means that each year this area has a chance of flooding of between 1% and 3.3%.

Low risk means that each year this area has a chance of flooding of between 0.1% and 1%.

This takes into account the effect of any flood defences in the area. These defences reduce but do not completely stop the chance of flooding as they can be overtopped, or fail.

Based on national scale modelling, this should be viewed at a maximum zoom scale of 1:5000 to give context.

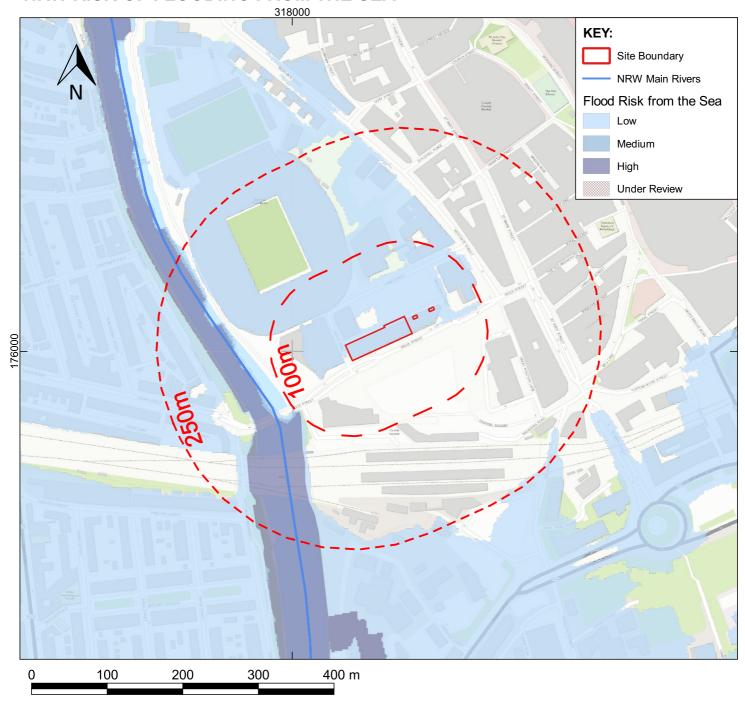
Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2020. Land & Property Services © Crown copyright and database right.

Created by: UKJXA054 - 2025-07-30 17:21:42

\\corp.pbwan.net\global\GB\Projects\UK0040xxx\UK0040270.4485 - Plots 45 Central Square\03 WIP\CV Civil Engineering\05 Reports\FloodMapPack\4485 - CardiffCentralTower 250721.qgs.qgz



### NRW RISK OF FLOODING FROM THE SEA



High risk means that each year this area has a chance of flooding of greater than 3.3%.

Medium risk means that each year this area has a chance of flooding of between 0.5% and 3.3%.

Low risk means that each year this area has a chance of flooding of between 0.1% and 0.5%.

This takes into account the effect of any flood defences in the area. These defences reduce but do not completely stop the chance of flooding as they can be overtopped, or fail.

Based on national scale modelling, this should be viewed at a maximum zoom scale of 1:5000 to give context.

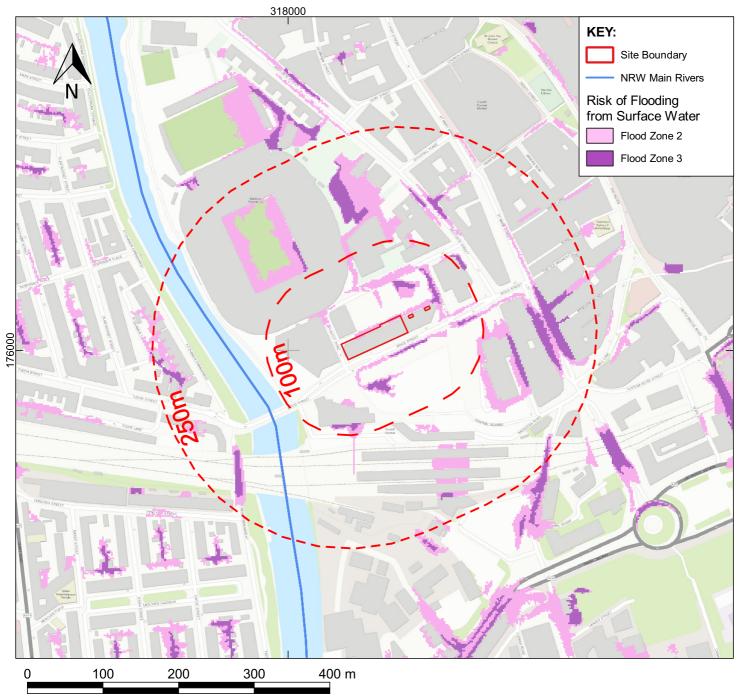
Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2020. Land & Property Services © Crown copyright and database right.

Created by: UKJXA054 - 2025-07-30 17:21:48

\\corp.pbwan.net\global\GB\Projects\UK0040xxx\UK0040270.4485 - Plots 45 Central Square\03 WIP\CV Civil Engineering\05 Reports\FloodMapPack\4485 - CardiffCentralTower 250721.qgs.qgz



#### NRW RISK OF FLOODING FROM SURFACE WATER & SMALL WATERCOURSES



Flood Zone 2 means that each year this area has a chance of flooding of between 0.1% to 1% from either surface water, small watercourses or both when including the effects of climate change

Flood Zone 3 means that each year this area has a chance of flooding of greater than 1% from either surface water, small watercourses or both when including the effects of climate change

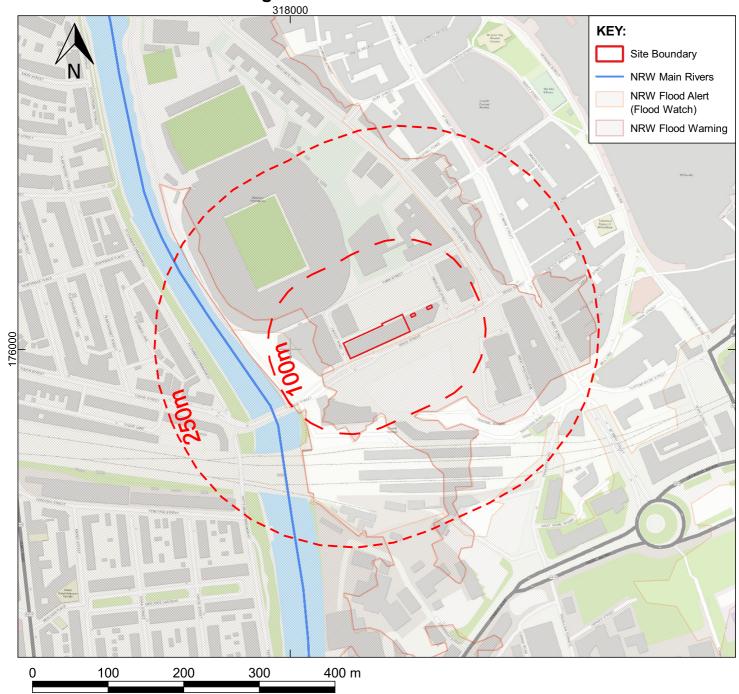
Flooding from surface water is difficult to predict as rainfall location and volume are difficult to forecast. In addition, local features can greatly affect the chance and severity of flooding.

Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2020. Land & Property Services © Crown copyright and database right

<sup>©</sup> CNC/NRW and Centre for Ecology & Hydrology © NERC (CEH)



## **NRW Flood Alerts & Warnings**



The Flood Warning Areas are areas where NRW expect flooding to occur and where NRW provide a Flood Warning Service. Flood Warning Areas generally contain properties that are expected to flood from rivers or the sea. Specifically, Flood Warning Areas define locations within the Flood Warning Service Limit that represent a discrete community at risk of flooding. A discrete community is a recognised and named geographical community. The purpose of Flood Warnings is to alert people that flooding is expected and they should take action to protect themselves and their property.

Flood Alert Areas are areas where it is possible for flooding to occur from rivers or the sea. A single Flood Alert Area may cover the floodplain within the Flood Warning Service Limit of multiple catchments of similar characteristics containing a number of Flood Warning Areas. A Flood Alert Area may also match that of a corresponding Flood Warning Area and warn for the possibility of flooding in that area. In some coastal locations a Flood Alert may be issued for spray or overtopping and be defined by a stretch of coastline. Practical and administrative factors may also influence the exact extent of a Flood Alert Area.

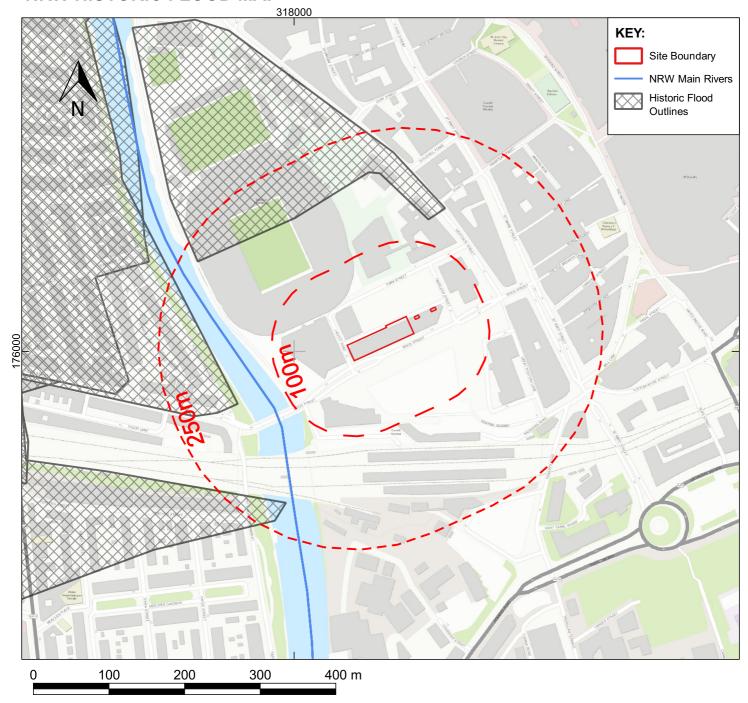
Contains Natural Resources Wales information @ Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2020. Land & Property Services © Crown copyright and database right.

Created by: UKJXA054 - 2025-07-30 17:22:02

\corp.pbwan.net\global\GB\Projects\UK0040xxx\UK0040270.4485 - Plots 45 Central Square\03 WIP\CV Civil Engineering\05 Reports\FloodMapPack\4485 - CardiffCentralTower 250721.qgs.qgz



#### NRW HISTORIC FLOOD MAP



The hatched areas are those that have been recorded to have flooded in the past. The records come from a number of evidence sources including Natural Resources Wales, its predecessors or other Risk Management Authorities.

They may show flooding from rivers, the sea or surface water. Where they show flooding from rivers or the sea, and deemed of an appropriate quality they form part of Flood Zone 2.

The absence of coverage by the Historic Flood Map for an area does not mean that the area has never flooded, only that we do not currently have records of flooding in this area. It is also possible that the pattern of flooding in this area has changed and that this area would now flood under different circumstances. The Historic Flood Map will take into account of the presence of defences, structures, and other infrastructure where they existed at the time of flooding. It will include flood extents that may have been affected by overtopping, breaches or blockages. Flooding shown to the land and does not necessarily indicate that properties were flooded internally.

CONTAINS OS DATA © CROWN COPYRIGHT AND DATABASE RIGHT 2020 -

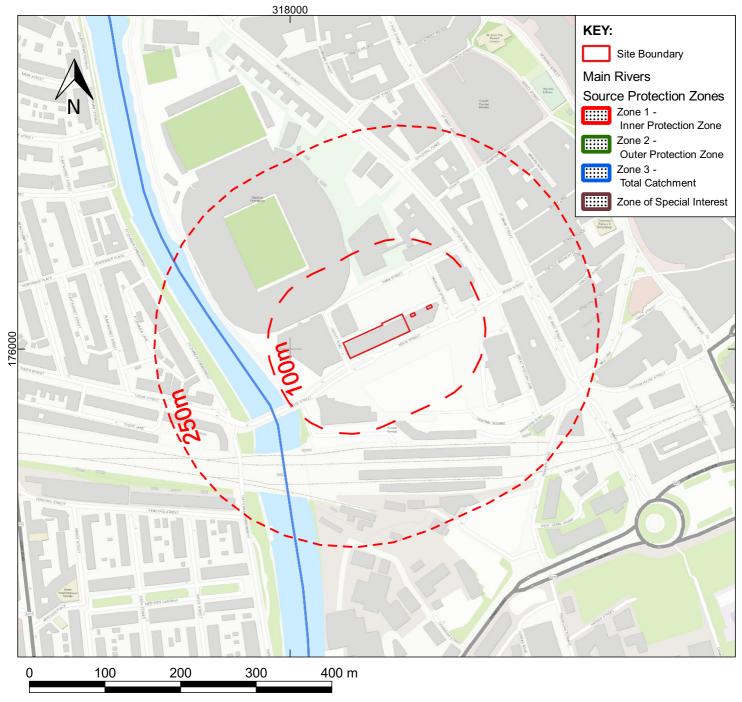
https://www.ordnancesurvey.co.uk/business-and-government/licensing/using-creating-data-with-os-products/os-opendata.html Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved.

Created by: UKJXA054 - 2025-07-30 17:22:07

\\corp.pbwan.net\global\GB\Projects\UK0040xxx\UK0040270.4485 - Plots 45 Central Square\03 WIP\CV Civil Engineering\05 Reports\FloodMapPack\4485 - CardiffCentralTower 250721.qgs.qgz



#### NRW SOURCE PROTECTION ZONES



Inner zone (Zone 1) - Defined as the 50 day travel time from any point below the water table to the source. This zone has a minimum radius of 50 metres:

Outer zone (Zone 2) - Defined by a 400 day travel time from a point below the water table. The previous methodology gave an option to define SPZ2 as the minimum recharge area required to support 25 per cent of the protected yield. This option is no longer available in defining new SPZs and instead this zone has a minimum radius of 250 or 500 metres around the source, depending on the size of the abstraction;

Total catchment (Zone 3) - Defined as the area around a source within which all groundwater recharge is presumed to be discharged at the source.

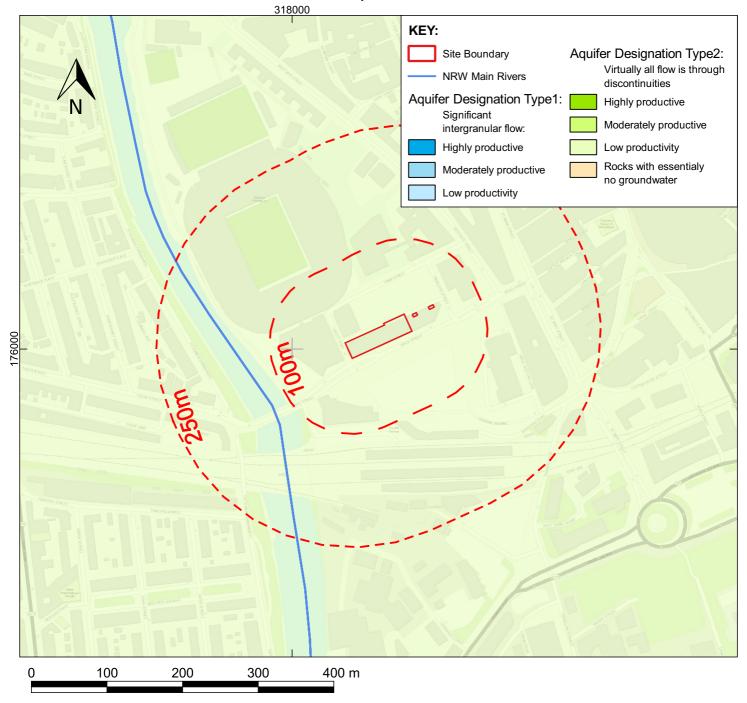
Special interest (Zone 4) - A fourth zone SPZ4 or 'Zone of Special Interest' was previously defined for some sources. SPZ4 usually represented a surface water catchment which drains into the aquifer feeding the groundwater supply (i.e. catchment draining to a disappearing stream).

CONTAINS OS DATA © CROWN COPYRIGHT AND DATABASE RIGHT 2020 - https://www.ordnancesurvey.co.uk/business-and-government/licensing/using-creating-data-with-os-products/os-opendata.html BRITISH GEOLOGICAL SURVEY MATERIALS © NERC 2020 - http://www.bgs.ac.uk/help/terms\_of\_use.html

Created by: UKJXA054 - 2025-07-30 17:22:14 \\corp.pbwan.net\global\GB\Projects\UK0040270.4485 - Plots 45 Central Square\03 WIP\CV Civil Engineering\05 Reports\FloodMapPack\4485 - CardiffCentralTower 250721.qgs.qgz



### BRITISH GEOLOGICAL SURVEY 1:625,000 SCALE AQUIFER DESIGNATION



The hydrogeological map indicates aquifer potential in generalised terms using a threefold division of geological formations:

- 1. those in which intergranular flow in the saturated zone is dominant
- 2. those in which flow is controlled by fissures or discontinuities
- 3. less permeable formations including aquifers concealed at depth beneath covering layers

Highly productive aquifers are distinguished from those that are only of local importance or have no significant groundwater. Within each of these classes the strata are grouped together according to age or lithology.

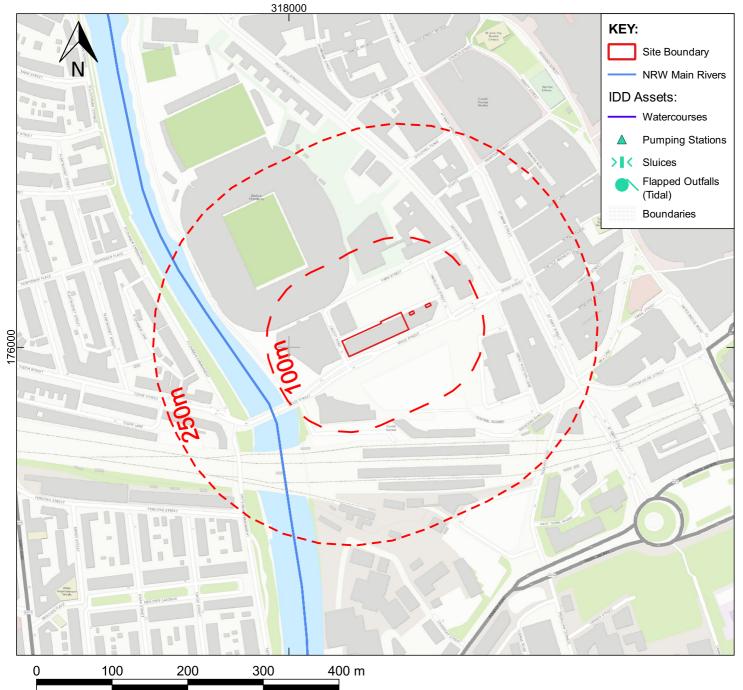
The 1:625 000 scale data may be used as a guide to the aquifers at a regional or national level, but should not be relied on for local information.

CONTAINS OS DATA © CROWN COPYRIGHT AND DATABASE RIGHT 2020  $https://www.ordnancesurvey.co.uk/business-and-government/licensing/using-creating-data-with-os-products/os-opendata.html \\ BRITISH GEOLOGICAL SURVEY MATERIALS © NERC 2020 - http://www.bgs.ac.uk/help/terms_of_use.html \\$ 

Created by: UKJXA054 - 2025-07-30 17:22:16 \\corp.pbwan.net\global\GB\Projects\UK0040270.4485 - Plots 45 Central Square\03 WIP\CV Civil Engineering\05 Reports\FloodMapPack\4485 - CardiffCentralTower 250721.qgs.qgz



### **Internal Drainage District Assets**



Drainage districts are typically found in low-lying land, whose boundaries are determined by physical, not, political attributes. Districts vary in nature and size, from the mainly agricultural to the semi-urban.

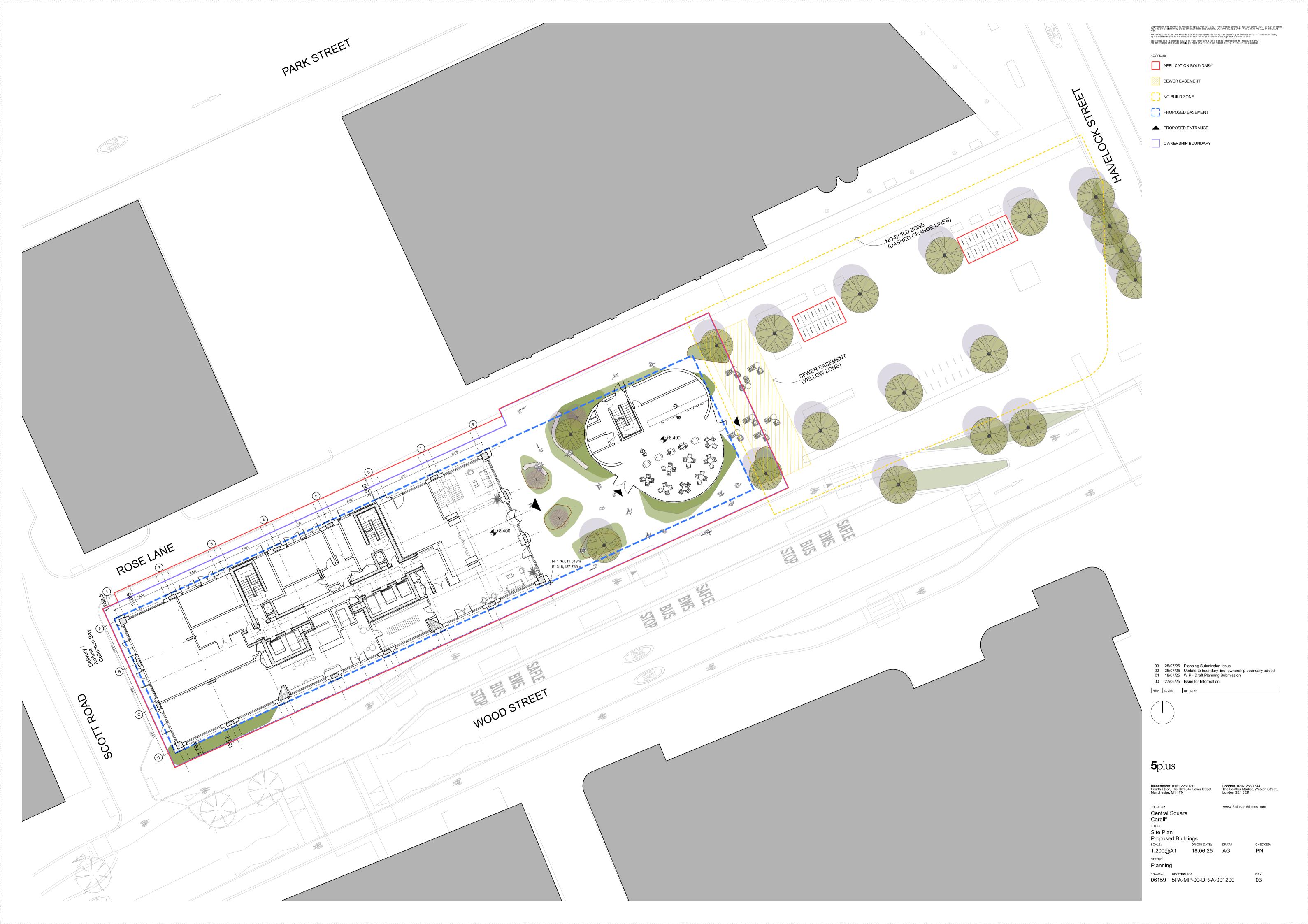
Drainage districts are at risk from various sources of flooding. Without water management, drainage districts would be unsuitable to live in and would not support the variety of agricultural land, utilities and transport networks that have been developed.

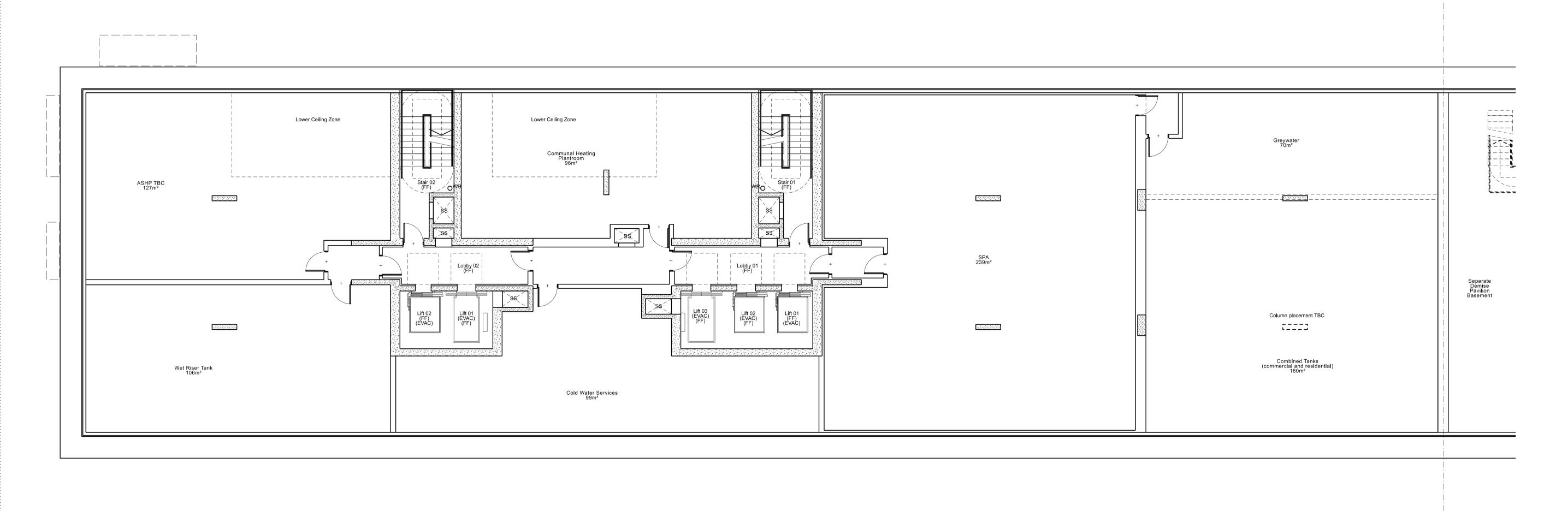
Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2020. Land & Property Services © Crown copyright and database right.

# **Appendix B**

**DEVELOPMENT PROPOSALS** 







03 25/07/25 Planning Submission Issue
02 18/07/25 WIP - Draft Planning Submission Issue
01 07/07/25 WIP Issue for information REV: DATE: DETAILS:



# **5**plus

London. 0207 253 7644 The Leather Market, Weston Street, London SE1 3ER

www.5plusarchitects.com

ATa

03

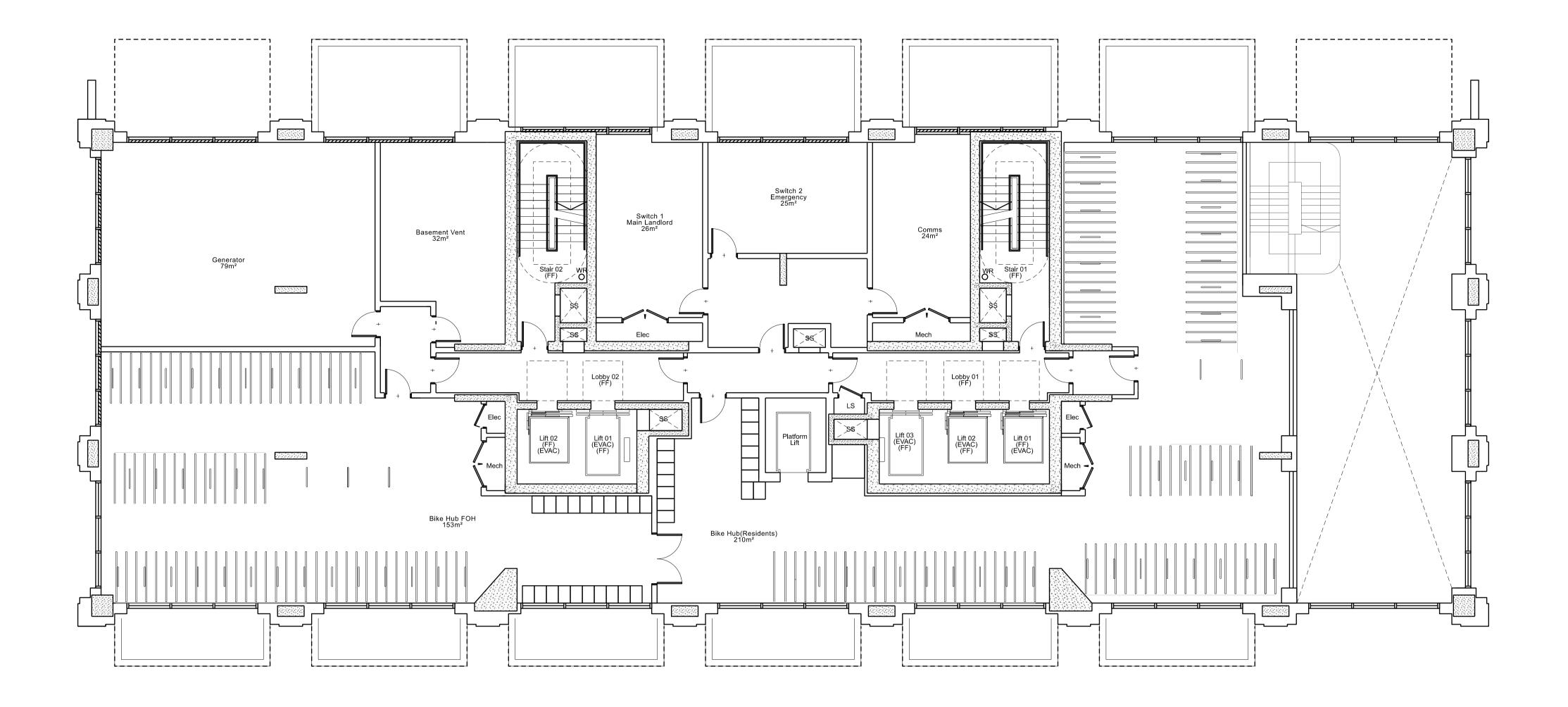
PROJECT: Central Square Cardiff

Proposed General Arrangement
Basement
SCALE: ORIGIN DATE: DRAWN ORIGIN DATE: DRAWN:

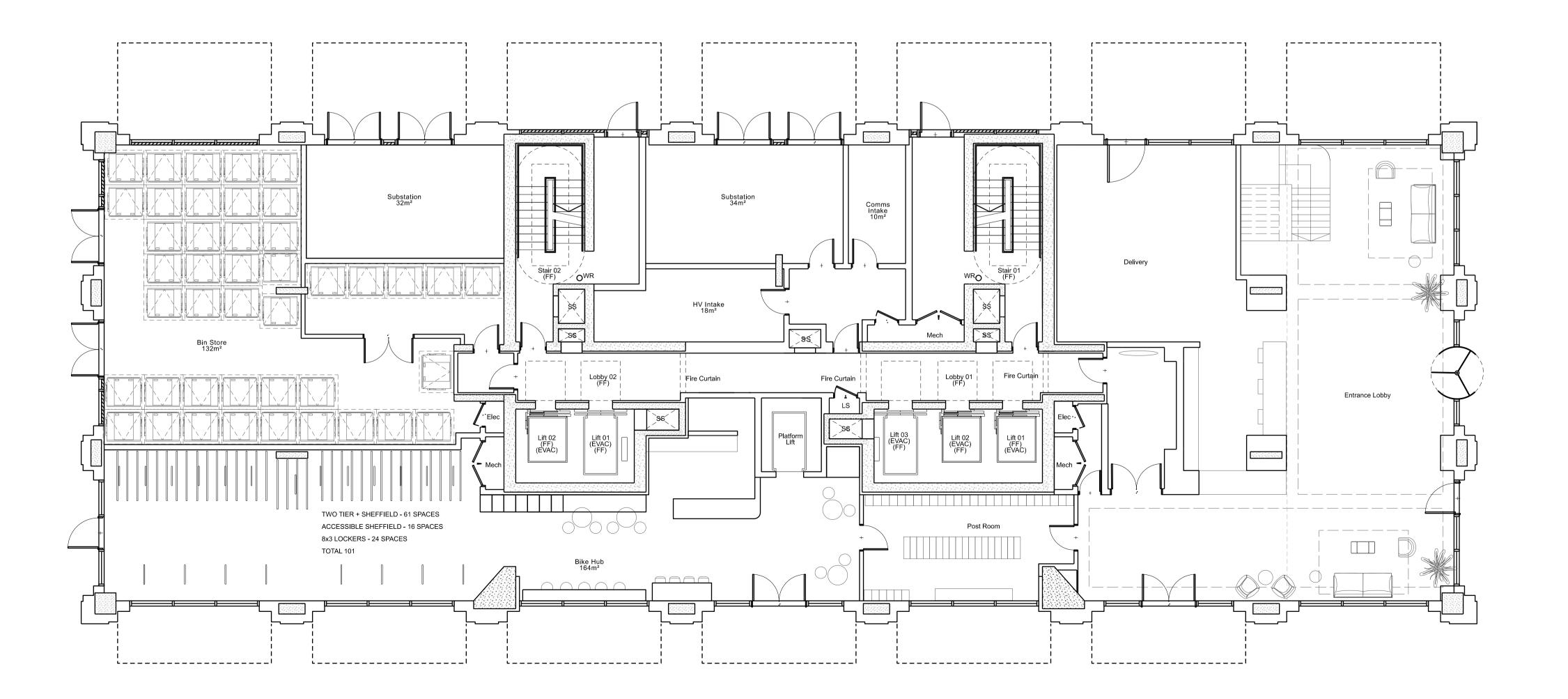
1:100@A1

01.07.25 AG status: Planning Submission PROJECT DRAWING NO: 06159 5PA-B1-B1-DR-A-022200

KEY PLAN:



## MEZZANINE FLOOR



03 25/07/25 Planning Submission Issue
02 18/07/25 WIP - Draft Planning Submission Issue
01 07/07/25 WIP Issue for information
0 01/07/25 WIP Issue for information



REV: DATE: DETAILS:

## **5**plu

PROJECT:

Manchester. 0161 228 0211
Fourth Floor, The Hive, 47 Lever Street,
Manchester. M1 1FN

London. 0207 253 7644
The Leather Market, Weston Str

www.5plusarchitects.com

ATa

Central Square Cardiff

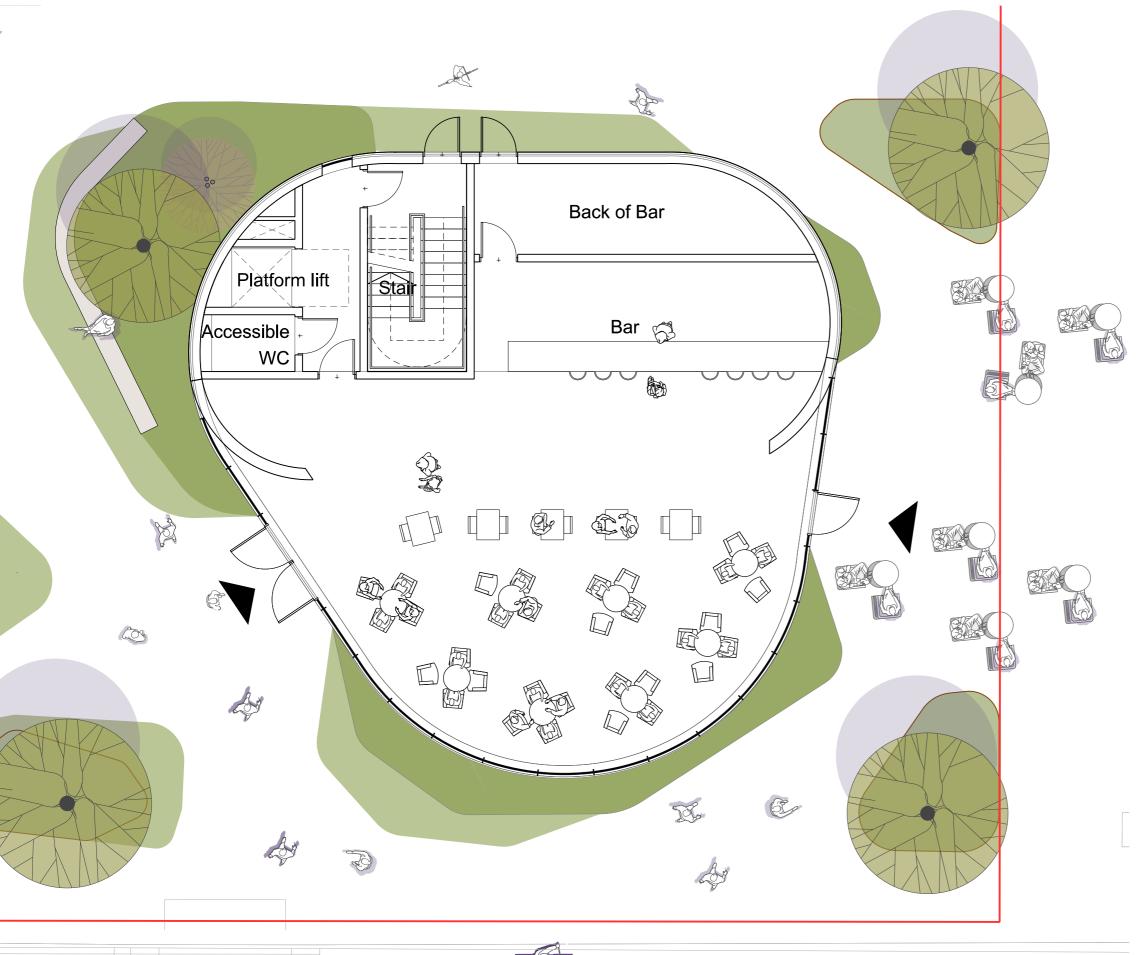
TITLE:

Proposed General Arrangement
Ground Floor and Mezzanine
SCALE: ORIGIN DATE: DRAWN:

1:100@A1 01.07.25 AG

STATUS:
Planning Submission

PROJECT DRAWING NO: R
06159 5PA-B1-XX-DR-A-022200 0



Copyright of this drawing is vested in Splus Architect and it must not be copied or reproduced without written consent. Figured dimensions only are to be taken from this drawing, DO NOT SCALE OFF THIS DRAWING ....., IF IN DOUBT ASK

Electronic data/ drawings issued as 'read only' and should not be interrogated for measurement. All dimensions and levels should be 'read only' from those values stated in text, on the drawings

03 25/07/25 Planning Submission Issue 02 18/07/25 WIP - Draft Planning Submission Issue

01 15/07/25 Issued for information

REV: DATE: DETAILS:

**5**plus

Manchester. 0161 228 0211 Fourth Floor, The Hive, 47 Lever Street, Manchester. M1 1FN

London. 0207 253 7644 The Leather Market, Weston Street, London SE1 3ER

PROJECT:

www.5plusarchitects.com

Central Square Cardiff

TITLE:

Proposed General Arrangement Ground Floor

SCALE: ORIGIN DATE: DRAWN: 1:100 @A3

CHECKED: 15.07.25 BP ATa

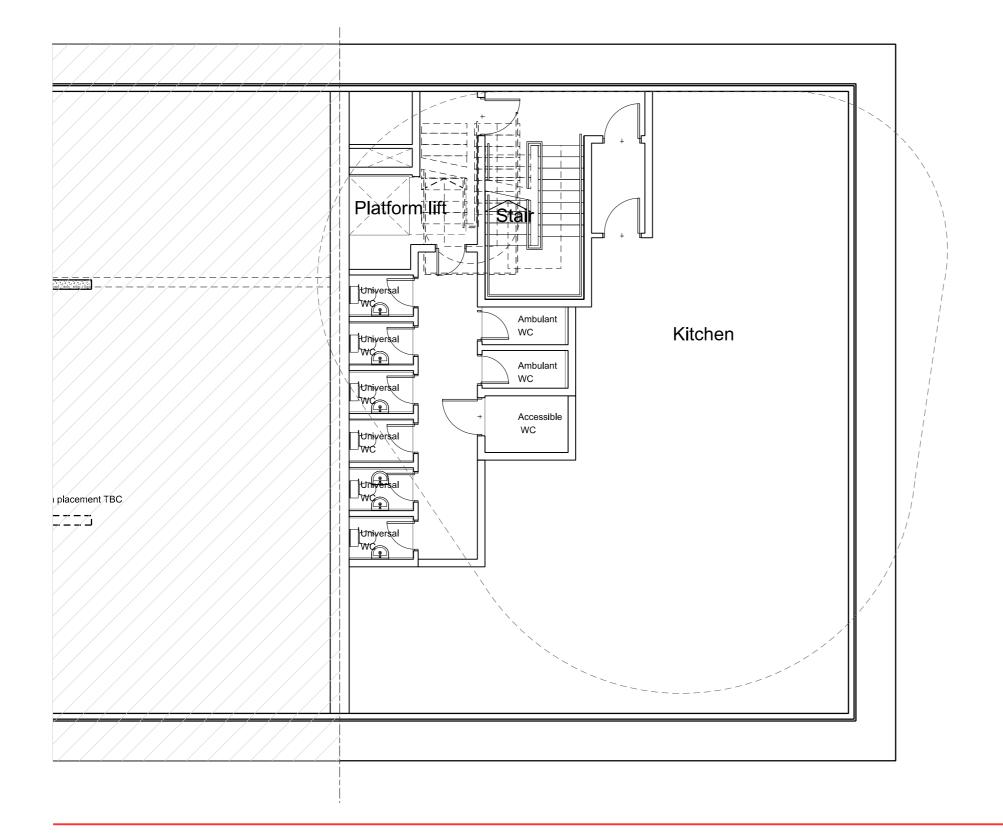
STAT**U**S:

Planning

PROJECT DRAWING NO: REV: 06159 5PA-B2-00-DR-A-022200 03







Copyright of this drawing is vested in Splus Architect and it must not be copied or reproduced without written consent. Figured dimensions only are to be taken from this drawing, DO NOT SCALE OFF THIS DRAWING...... IF IN DOUBT ASK

All contractors must visit the site and be responsible for taking and checking all dimensions relative to their work. 5plus architects are to be advised of any variation between drawings and site conditions.

Electronic data/ drawings issued as 'read only' and should not be interrogated for measurement. All dimensions and levels should be 'read only' from those values stated in text, on the drawings

03 25/07/25 Planning Submission Issue

02 18/07/25 WIP - Draft Planning Submission Issue

01 15/07/25 Issued for information

REV: DATE: DETAILS:

# **5**plus

Manchester. 0161 228 0211 Fourth Floor, The Hive, 47 Lever Street, Manchester. M1 1FN London. 0207 253 7644 The Leather Market, Weston Street, London SE1 3ER

PROJECT:

www.5plusarchitects.com

Central Square Cardiff

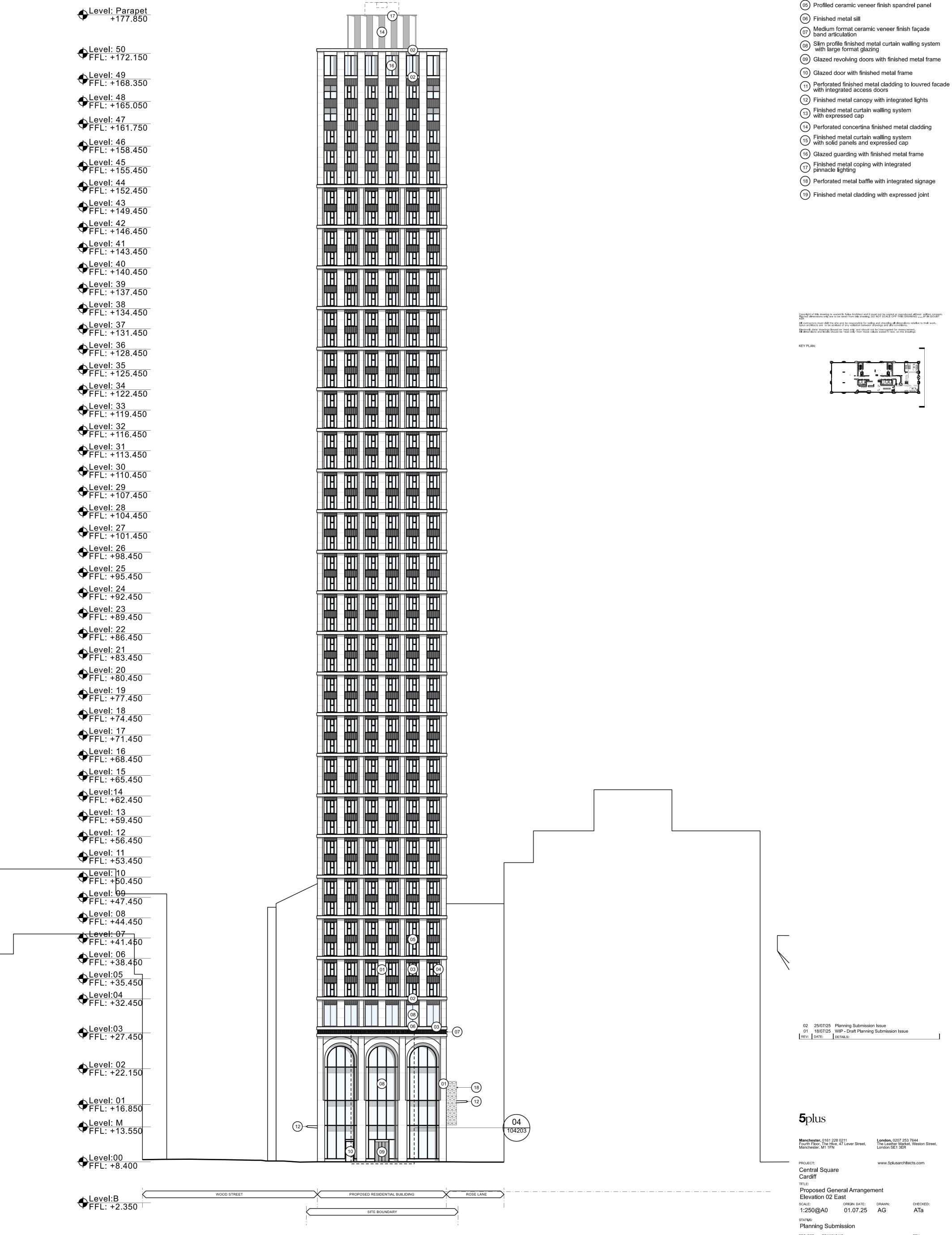
TITLE:

Proposed General Arrangement Basement level

STAT**U**S:

Planning

PROJECT DRAWING NO: REV: 06159 5PA-B2-00-DR-A-022199 03



Key:

01) Large format ceramic veneer finish façade

Large format ceramic veneer finish façade, horizontal band

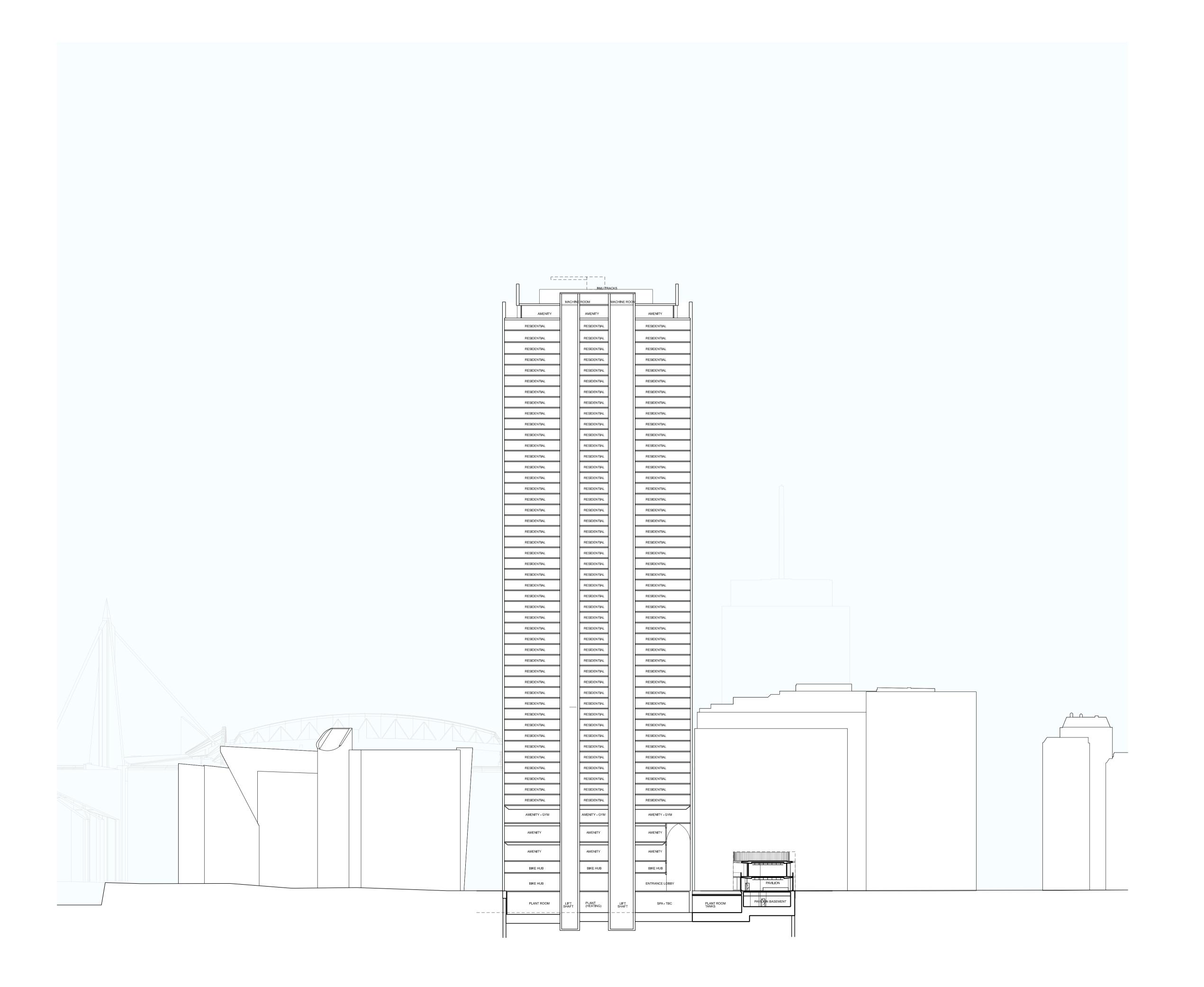
O3 Slim profile finished metal window system, colour to match facade surround of the window

Medium format ceramic veneer finish window surround

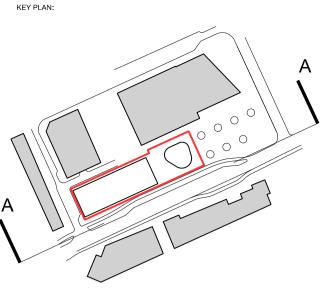
Copyright of this drawing is vested in 5plus Architect and it must not be copied or reproduced without written consent Figured dimensions only are to be taken from this drawing. DO NOT SCALE OFF THIS DRAWING ...... IF IN DOUBT

02

06159 5PA-B1-ZZ-DR-A-042202



Copyright of this drawing is vested in 5plus Architect and it must not be copied or reproduced without written consent. Figured dimensions only are to be taken from this drawing. DO NOT SCALE OFF THIS DRAWING ..... IF IN DOUBT All contractors must visit the site and be responsible for taking and checking all dimensions relative to their work. Splus architects are to be advised of any variation between drawings and site conditions. Electronic data/ drawings issued as 'read only' and should not be interrogated for measurement. All dimensions and levels should be 'read only' from those values stated in text, on the drawings



# 02 25/05/25 Draft Planning Submission Issue 01 18/05/25 WIP - Draft Planning Submission Issue

REV: DATE: DETAILS:

PROJECT: www.5plusarchitects.com Central Square Cardiff

Proposed Site Section
Section AA
SCALE: ORIGIN DAY

1:500@A1 ATa Planning

PROJECT DRAWING NO: 06159 5PA-MP-ZZ-DR-A-052201 02

**S**plus +177.850 BMU TRACKS Level: 50 FFL: +172.150 MACHINE ROOM MACHINE ROOM AMENITY AMENITY AMENITY Level: 49 FFL: +168.350 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 48 FFL: +165.050 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 47 FFL: +161.750 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 46 FFL: +158.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL ◆ Level: 45 FFL: +155.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 44 FFL: +152.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 43 FFL: +149.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 42 FFL: +146.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 41 FFL: +143.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 40 FFL: +140.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 39 FFL: +137.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 38 FFL: +134.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 37 FFL: +131.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 36 FFL: +128.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL ◆ Level: 35 FFL: +125.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 34 FFL: +122.450 RESIDENTIAL RESIDENTIAL Level: 33 FFL: +119.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 32 FFL: +116.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 31 FFL: +113.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 30 FFL: +110.450 RESIDENTIAL **RESIDENTIAL** RESIDENTIAL Level: 29 FFL: +107.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 28 FFL: +104.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 27 FFL: +101.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 26 FFL: +98.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 25 FFL: +95.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL ◆Level: 24 FFL: +92.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 23 FFL: +89.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 22 FFL: +86.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 21 FFL: +83.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 20 FFL: +80.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 19 FFL: +77.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 18 FFL: +74.450 RESIDENTIAL **RESIDENTIAL** RESIDENTIAL Level: 17 FFL: +71.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 16 FFL: +68.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL ◆Level: 15 FFL: +65.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level:14 FFL: +62.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 13 FFL: +59.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL <u>Level: 12</u> FFL: +56.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 11 FFL: +53.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL ◆Level: 10 FFL: +50.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL ◆Level: 09 FFL: +47.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 08 FFL: +44.450 RESIDENTIAL **RESIDENTIAL** RESIDENTIAL Level: 07 FFL: +41.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level: 06 FFL: +38.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level:05 FFL: +35.450 RESIDENTIAL RESIDENTIAL RESIDENTIAL Level:04 FFL: +32.450 AMENITY - GYM AMENITY - GYM AMENITY - GYM Level:03 FFL: +27.450 **AMENITY AMENITY AMENITY** Level: 02 FFL: +22.150 **AMENITY AMENITY AMENITY** Level: 01 FFL: +16.850 BIKE HUB BIKE HUB BIKE HUB Level: M FFL: +13.550 ENTRANCE LOBBY PAVILION **BIKE HUB** Level:00 FFL: +8.400 PAVILION BASEMENT PLANT (HEATING) PLANT ROOM TANKS LIFT SHAFT LIFT SHAFT PLANT ROOM SPA - TBC ← Level:B FFL: +2.350

London, 0207 253 7644 The Leather Market, Westc London SE1 3ER



1 Capital Quarter Tyndall Street Cardiff CF10 4BZ

wsp.com