

Albany Street, Newport - Flood Consequences Assessment

Version 1

June 2025

Prepared for:
Lorry Park Newport Ltd
Albany Street
NEWPORT
NP20 5NJ

www.jbaconsulting.com

Document Status

Issue date	June 2025
Issued to	Lorry Park Newport Ltd
BIM reference	PSE-JBA-XX-XX-RP-Z-0001-S3-P01-Albany_Street_FCA
Revision	Version 1

Prepared by	Hannah Booth BSc (Hons) Flood Risk Analyst
-------------	---

Reviewed by	Faye Tomalin BSc (Hons) MSc MCIWEM C.WEM Principal Analyst
-------------	---

Authorised by	Faye Tomalin BSc (Hons) MSc MCIWEM C.WEM Project Director
---------------	--

Carbon Footprint

The format of this report is optimised for reading digitally in pdf format. Paper consumption produces substantial carbon emissions and other environmental impacts through the extraction, production and transportation of paper. Printing also generates emissions and impacts from the manufacture of printers and inks and from the energy used to power a printer. Please consider the environment before printing.

Contract

JBA Project Manager	Samuel Rowley
Address	7-8 High Street, Kings Chambers, Newport, South Wales, NP20 1FQ
JBA Project Code	2025s0631

This report describes work commissioned by Lorry Park Newport Ltd, by an instruction dated 28th April 2025. The Client's representative for the contract was Roland Mason of Lorry Park Newport Ltd. Hannah Booth of JBA Consulting carried out this work.

Purpose and Disclaimer

Jeremy Benn Associates Limited ("JBA") has prepared this Report for the sole use of Lorry Park Newport Ltd and its appointed agents in accordance with the Agreement under which our services were performed.

JBA has no liability for any use that is made of this Report except to Lorry Park Newport Ltd for the purposes for which it was originally commissioned and prepared.

The conclusions and recommendations contained in this Report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested and that such information is accurate. Information obtained by JBA has not been independently verified by JBA, unless otherwise stated in the Report.

Certain statements made in the Report that are not historical facts may constitute estimates, projections or other forward-looking statements and even though they are based on reasonable assumptions as of the date of the Report, such forward-looking statements by their nature involve risks and uncertainties that could cause actual results to differ materially from the results predicted. JBA specifically does not guarantee or warrant any estimates or projections contained in this Report.

JBA disclaims any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to JBA's attention after the date of the Report.

Unless otherwise stated in this Report, the assessments made assume that the sites and facilities will continue to be used for their current purpose without significant changes.

Copyright

© Jeremy Benn Associates Limited 2025

Contents

1	Introduction	6
1.1	Terms of Reference	6
1.2	FCA Requirements	6
2	Site Summary	7
2.1	Site Description	7
2.2	Site Topography	8
2.3	Soils and Geology	9
2.4	Watercourses and flood defences	9
2.5	Development Proposal	10
3	Planning Policy and Flood Risk	12
3.1	Planning Context	12
3.2	Form of Development	12
3.3	Vulnerability Classification	12
3.4	Lifetime of Development	13
3.5	Flood Map for Planning Classifications	14
4	Flood Risk Assessment	17
4.1	Historical Flooding	17
4.2	Flood Risk from Rivers	17
4.3	Flood Risk from Surface Water and Small Watercourses	18
4.4	Flood Risk from Groundwater	18
4.5	Flood Risk from Reservoirs	18
4.6	Flood Risk from Sewers	19
5	Detailed Tidal Flood Risk Assessment	20
5.1	Detailed hydraulic modelling	20
5.2	0.5% AEP plus climate change event	21
5.3	0.1% AEP plus climate change event	21
6	Flooding and the Plan Led System	23
6.1	Application of Flood Zones to Development Management Decisions	23
6.2	Acceptability of Flood Consequences	23

7 Conclusions**26****A Development Proposals****A-27****List of Figures**

Figure 2-1 Site Location	8
Figure 2-2 LiDAR Topographic data from NRW (1m resolution)	9
Figure 2-3 Watercourses and flood defences	10
Figure 2-4 Ground floor plan of the building	11
Figure 3-1 Flood Map for Planning- Rivers	14
Figure 3-2 Flood Map for Planning- Sea	15
Figure 3-3 Flood Map for Planning- Surface Water and Small Watercourses	16
Figure 4-1 FRAW - Flood Risk from Reservoirs	19
Figure 5-1 2072 0.5% AEP flood depths	21
Figure 5-2 2072 0.1% AEP flood depths	22

List of Tables

Table 2-1 Site Summary	7
Table 3-1 Form of Development	12
Table 3-2 TAN-15 Vulnerability Classification	13
Table 4-1 Summary of Flood Risk	17
Table 6-1 Assessment of Acceptability Criteria	23

1 Introduction

1.1 Terms of Reference

JBA Consulting (JBA) was commissioned by Lorry Park Newport Ltd to undertake a Flood Consequences Assessment (FCA) to support a retrospective planning application for a two storey temporary building at Newport Lorry Park, Albany Street, Newport.

This FCA assesses and demonstrates the suitability of the proposed redevelopment and describes the flood mitigation measures recommended to appropriately manage flooding at the site.

1.2 FCA Requirements

This FCA follows the Welsh Government guidance on development and flood risk set out in the Technical Advice Note 15: Development, Flood Risk and Coastal Erosion (TAN-15). TAN-15 states that:

'The prime objective of a Flood Consequences Assessment is to develop a full appreciation of:

- The risks and consequences of flooding on the development; and
- The risk and consequences (i.e the overall impacts) of the development on flood risk elsewhere.'

To achieve this, the FCA should establish if suitable avoidance and mitigation measures can be incorporated, in a manner compatible with the placemaking aims of Planning Policy Wales, within the site design to ensure that development is safe and there is:

- Minimal risk to life;
- Minimal disruption to people living and working in the area;
- Minimal potential damage to property; and
- Minimal disruption to the sustainable management of natural resources.

2 Site Summary

2.1 Site Description

The proposed development site is located at Newport Lorry Park at Albany Street, Newport. The development site is 0.01 ha, and the site boundary is defined by the building for the retrospective planning application. The building is situated in an established lorry park, which comprises car and lorry parking, as well as several portacabins and car washing facilities.

Newport Lorry Park is located to the northern extent of Newport, just south of the M4 motorway which passes in an east-west direction. The lorry park is located within a primarily commercial/light industrial area of Newport. The lorry park is bound by Albany Street to the west and the River Usk to the east.

The Lorry Park is accessible by vehicles from the site entrance located at the north of the site, which connects to Albany Street and by pedestrians from the west of the site on Albany Street. Further information on the site is provided in Table 2-1.

Table 2-1 Site Summary

Parameter	Description
Site Name	Newport Lorry Park
Site area	0.01ha
Existing land use	Lorry Park
Purpose of development	Welfare facilities and a cafe
OS NGR	ST 31367 89790
Local Planning Authorities	Newport City Council
Lead Local Flood Authority	Newport City Council



Figure 2-1 Site Location

2.2 Site Topography

No topographical survey has been made available to inform this FCA. The Natural Resources Wales (NRW) Open Source 1m Light Detection and Ranging (LiDAR) data¹ across the site has therefore been reviewed and is shown in Figure 2-2.

The LiDAR data is based on data gathered in 2022, prior to the new facility being constructed. Therefore, the ground levels identified are representative of the pre-development levels. The site is generally flat with a small decrease in ground levels in a southerly direction of between 8.46mAOD and 8.06mAOD.

¹ LLE Geoportal for Wales: <http://lle.gov.wales/catalogue/item/LidarCompositeDataset/?lang=en>

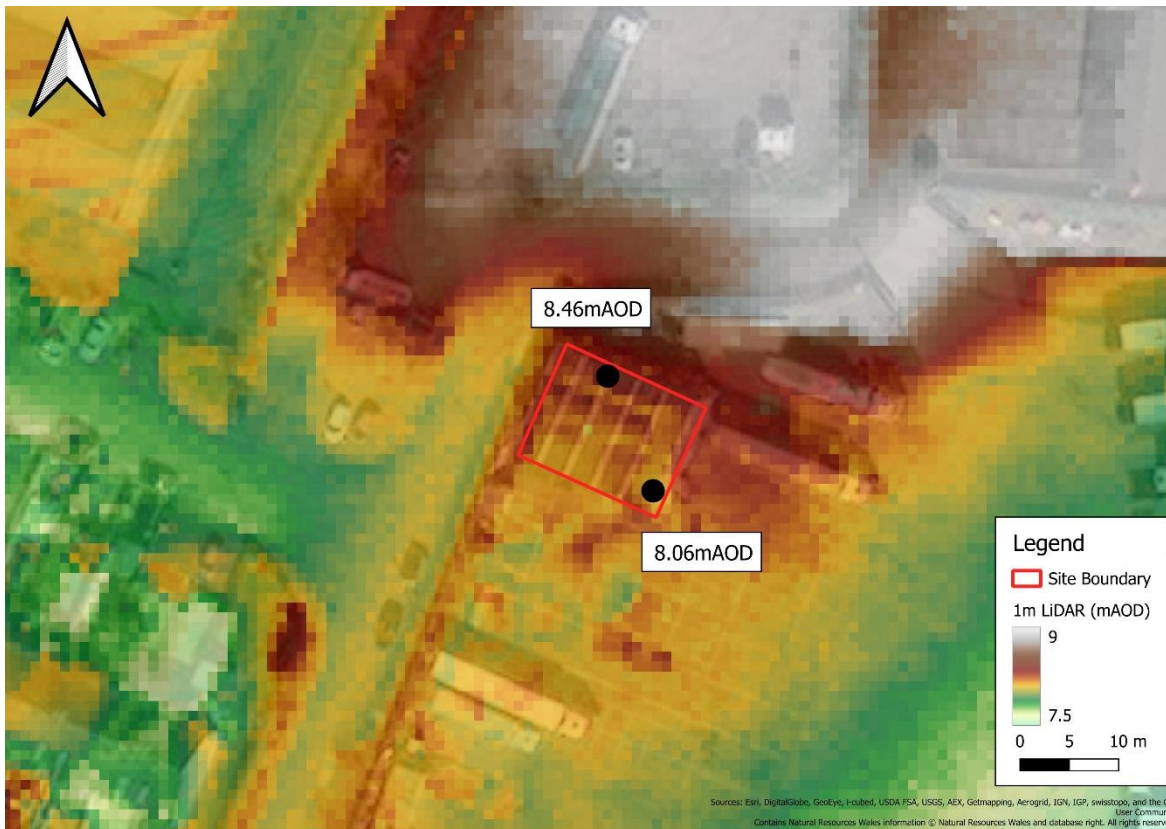


Figure 2-2 LiDAR Topographic data from NRW (1m resolution)

2.3 Soils and Geology

The geology of the site has been assessed using the BGS Geoindex². The bedrock geology is shown to be St Maughans Formation comprised of Argillaceous Rocks and Sandstone, Interbedded. Superficial deposits are Tidal Flat Deposits comprised of clay and silt.

The soils on the site have been assessed using the Cranfield University Soilscape Viewer³ and are shown to be loamy and clayey soils of coastal flats with naturally high groundwater.

2.4 Watercourses and flood defences

No watercourses cross the site, or the wider Newport Lorry Park. Figure 2-3 shows the locations of the nearest waterbodies and watercourses. The site is located 85m west of the River Usk, just upstream of the confluence of the Crindau Pill as it flows into the River Usk. Both of these watercourses are tidally influenced NRW Main Rivers.

Flood defences are present along the western bank of the River Usk and the Crindau Pill. These defences comprise a flood wall which protects the site from tidal flooding and has a standard of protection of 50 years. The site is therefore located within an area benefitting from coastal defences.

² <https://www.bgs.ac.uk/map-viewers/geoindex-onshore/>

³ <https://www.landis.org.uk/soilscape/>

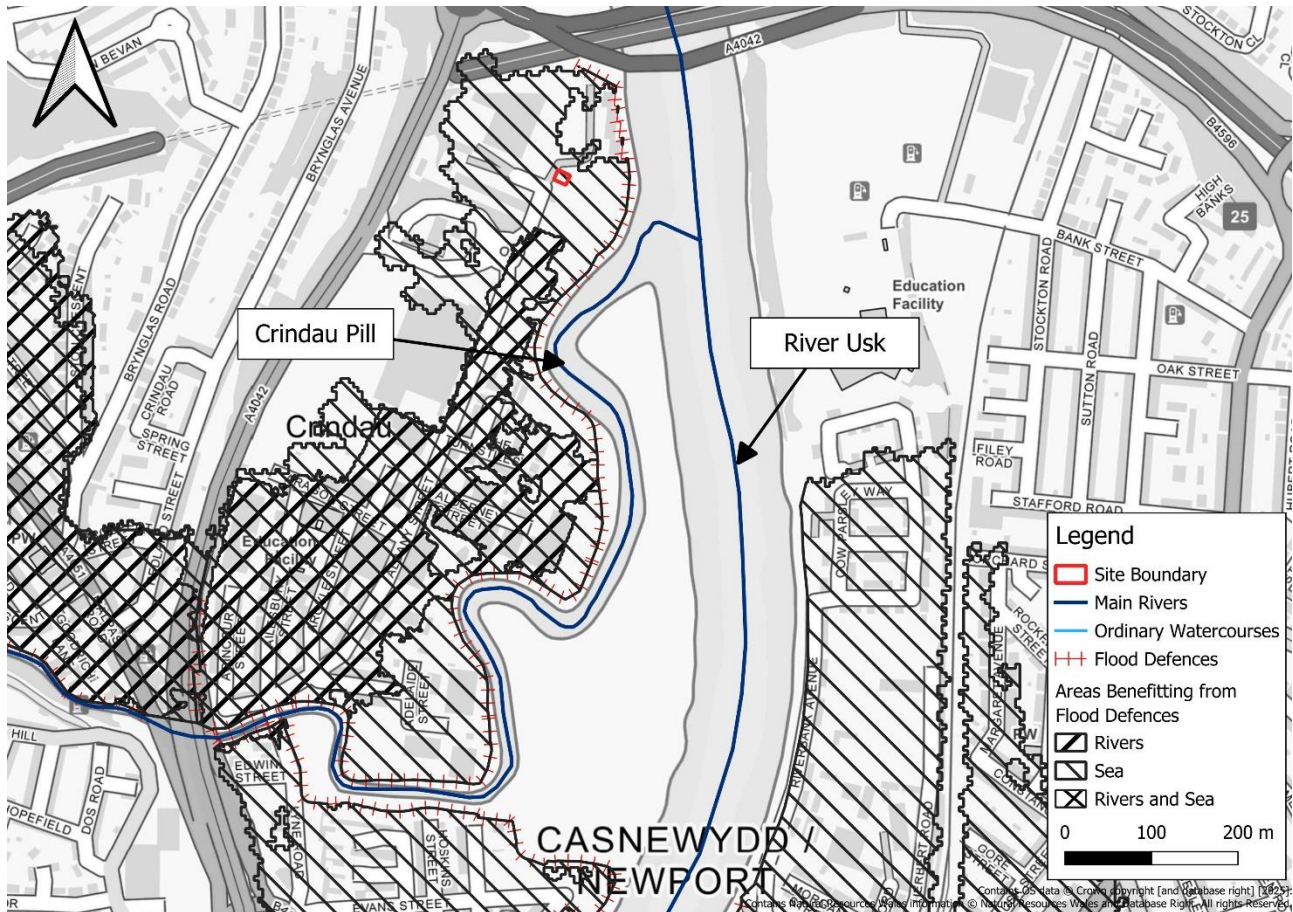


Figure 2-3 Watercourses and flood defences

2.5 Development Proposal

Retrospective planning permission is required for the placement of a two-storey building within the Newport Lorry Park site. The building is a replacement for two portacabins that were formerly present on the site and is demountable in nature. The building is situated on concrete blocks, which is marginally elevated above the existing ground levels on the site. The building serves as an office, toilet/shower facility and café for customers of the lorry park.

The ground floor plan of the building is shown in Figure 2-4 and full plans are contained in Appendix A.

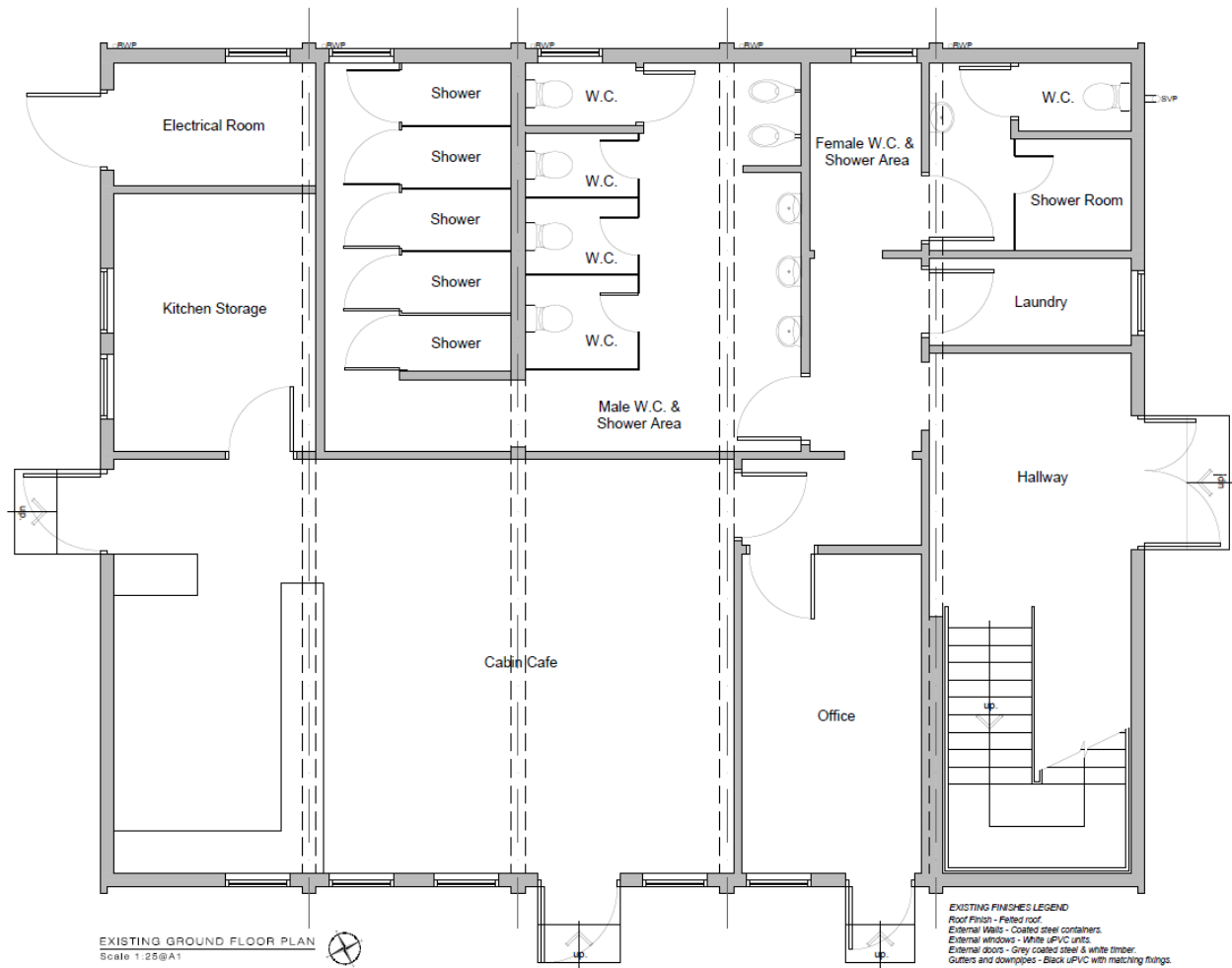


Figure 2-4 Ground floor plan of the building

3 Planning Policy and Flood Risk

3.1 Planning Context

Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs), Welsh Government Circulars, and policy clarification letters, which, together with PPW, provide the national planning policy framework for Wales. These policies aim to make all development in Wales sustainable and improve the social, economic, environmental, and cultural wellbeing of Wales as set out in the Wellbeing of Future Generations Act 2015.

Technical Advice Note 15 (TAN-15), originally introduced by the Welsh Government in 2004 and most recently updated in March 2025, provides technical guidance relating to development planning and flood risk in Wales. TAN-15 provides a framework within which the flood risks arising from rivers, the sea and surface water, and the risk of coastal erosion can be assessed. The approach set out in the most recent update to TAN-15 ensures flooding and coastal erosion are accorded appropriate consideration in plan making and development management decisions.

3.2 Form of Development

TAN-15 recognises two key forms of development: New development and Redevelopment. The definition of both terms is provided in Table 3-1.

Table 3-1 Form of Development

Form of Development	Definition
New Development	Any development on greenfield land
Redevelopment	Any development on previously developed land, as defined in Planning Policy Wales

As detailed in Section 2.5, development proposals are for retrospective planning permission on an already developed and operational site. The proposed welfare facility and café is to be located on an area of existing impermeable hardstanding, previously occupied by portacabin buildings. As such, the development proposals are classified as **Redevelopment**.

3.3 Vulnerability Classification

TAN-15 assigns one of three flood risk vulnerability classifications to developments, as shown in Table 3-2. The development is for commercial use and is consequently classified as **Less Vulnerable Development**.

Table 3-2 TAN-15 Vulnerability Classification

Development category	
Highly vulnerable development	All residential premises (including hotels, Gypsy and Traveller sites, caravan parks and camping sites). Schools and childcare establishments, colleges and universities. Hospitals and GP surgeries. Especially vulnerable industrial development (e.g. power generating and distribution elements of power stations, transformers, chemical plants, incinerators), and waste disposal sites. Emergency services, including ambulance stations, fire stations, police stations, command centres, and emergency depots. Buildings used to provide emergency shelter in time of flood.
Less vulnerable development	General industrial, employment, commercial and retail development. Transport and utilities infrastructure. Car parks. Mineral extraction sites and associated processing facilities (excluding waste disposal sites). Public buildings including libraries, community centres and leisure centres (excluding those identified as in Highly Vulnerable category and emergency shelters). Places of worship. Cemeteries. Equipped play areas. Renewable energy generation facilities (excluding hydro generation).
Water Compatible Development	Boatyards, marinas and essential works required at mooring basins. Development associated with canals. Flood defences and management infrastructure. Open spaces (excluding equipped play areas). Hydro renewable energy generation.

3.4 Lifetime of Development

Section 10.28 of TAN-15 advises that "*Generally, it is appropriate to think of new dwellings as having a lifetime of 100 years. Lifetimes for other types of development will vary, but 75 years is considered a reasonable rule of thumb.*"

The building is demountable in nature and is not a permanent structure, allowing it to be placed and removed easily from the site. Therefore, the lifetime of the development will be limited as the building structure is not designed to withstand a long duration of use. It may be appropriate to consider a lifetime of development of 50 years for such a proposal.

However, given the nature of the structure, it is likely that it shall exceed its lifetime in less than 50 years.

3.5 Flood Map for Planning Classifications

The Flood Map for Planning (FMfP) is the starting point for the consideration of flood risk in the planning system. The map uses flood zones to indicate the degree to which land is at risk of flooding from rivers, the sea, surface water and small watercourses. The main zones are Zone 1, Zone 2, Zone 3 and the Defended Zone. The FMfP displays predicted future flood risk with an allowance made for climate change.

Proposals for development located partially or wholly in Flood Zone 2 or 3 must be supported by a Flood Consequences Assessment (FCA).

3.5.1 Flood Map for Planning - Rivers

The site is situated in Flood Zone 1, as shown in Figure 3-1. Flood Zone 1 represents areas that have a less than 0.1% AEP (1 in 1000 year) chance of flooding.

This source of flooding risk is assessed further in Section 4.2 of the FCA.

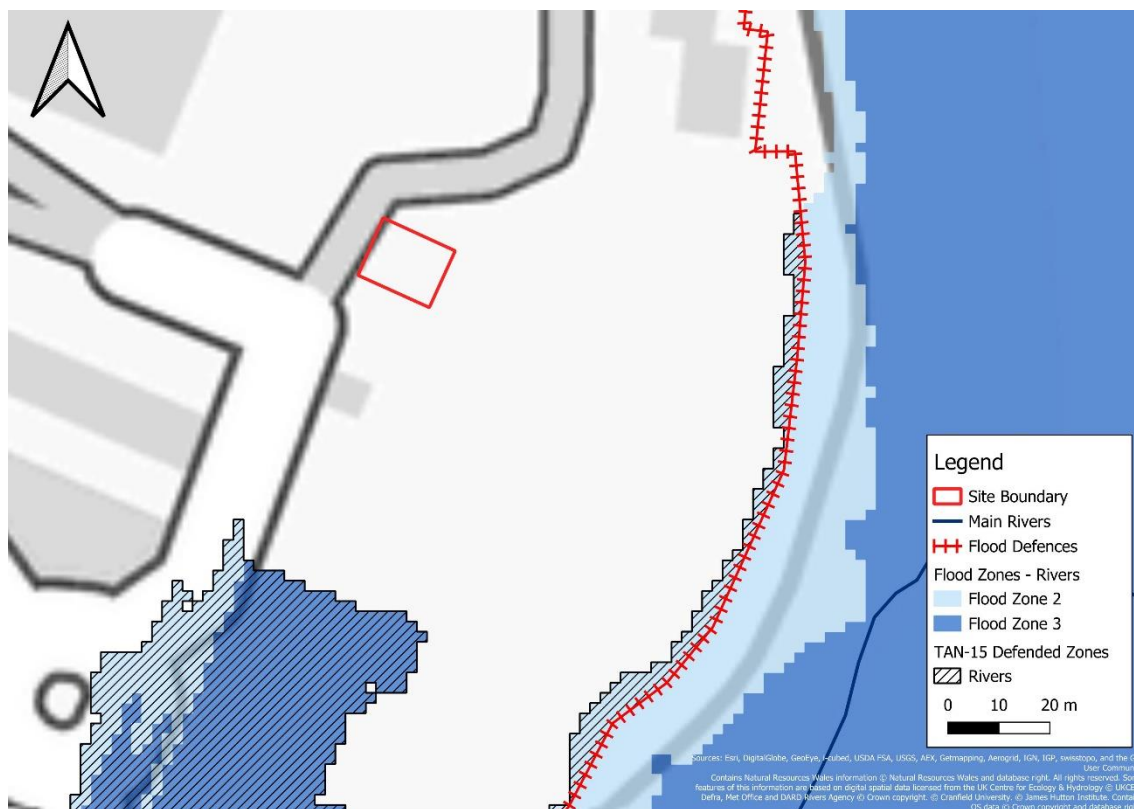


Figure 3-1 Flood Map for Planning- Rivers

3.5.2 Flood Map for Planning - Sea

As shown in Figure 3-2, the site is entirely located in the TAN15 Defended Zone for the Sea. This indicates areas where flood risk management infrastructure provides a minimum standard of protection against flooding from the sea of 1 in 200 years (plus climate change

and freeboard). In the case of the Crindau FAS, it is known that the flood defences are designed to provide a 1 in 200 year standard of protection allowing for 50 years of climate change.

This source of flooding risk is assessed in detail in Section 5 of the FCA.

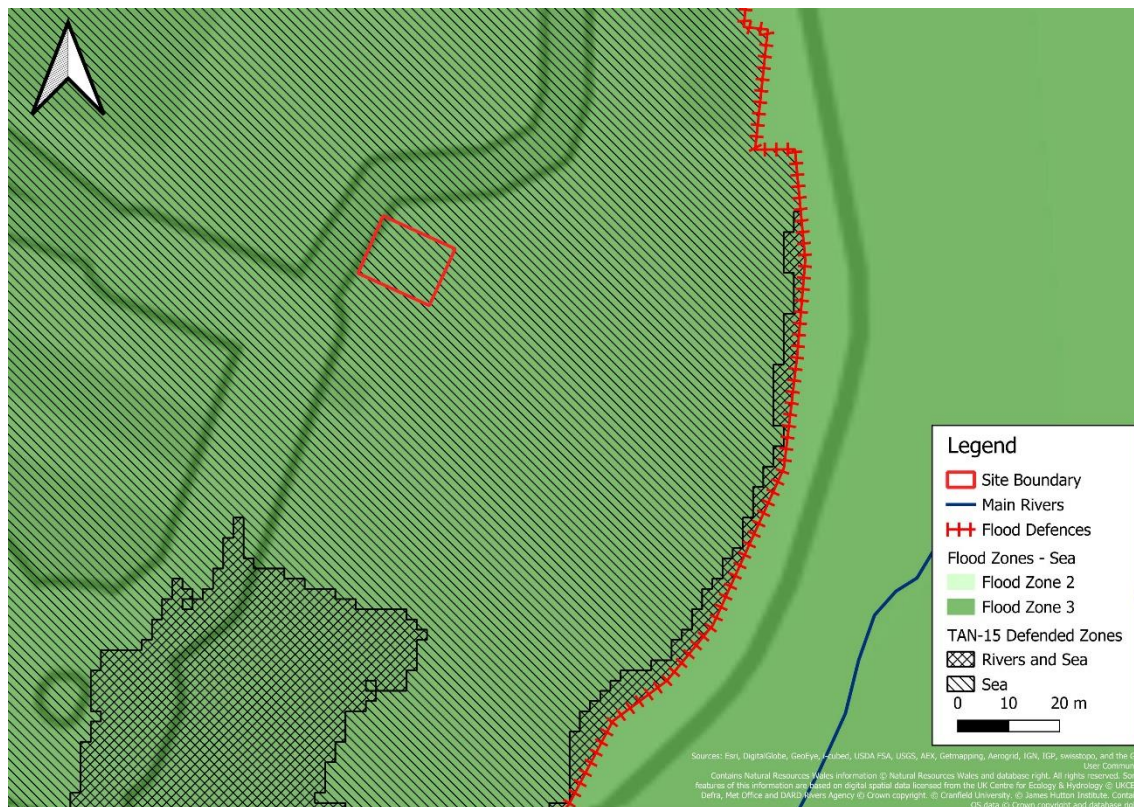


Figure 3-2 Flood Map for Planning- Sea

3.5.3 Flood Map for Planning - Flood Risk from Surface Water and Small Watercourses

Figure 3-3 shows the site to be within Flood Zone 1 of the FMfP- Flood Risk from Surface Water and Small Watercourses. Flood Zone 1 represents areas that have a less than 0.1% AEP (1 in 1000 year) chance of flooding from surface water or small watercourses.

This source of flooding risk is assessed further in Section 4.3 of the FCA.

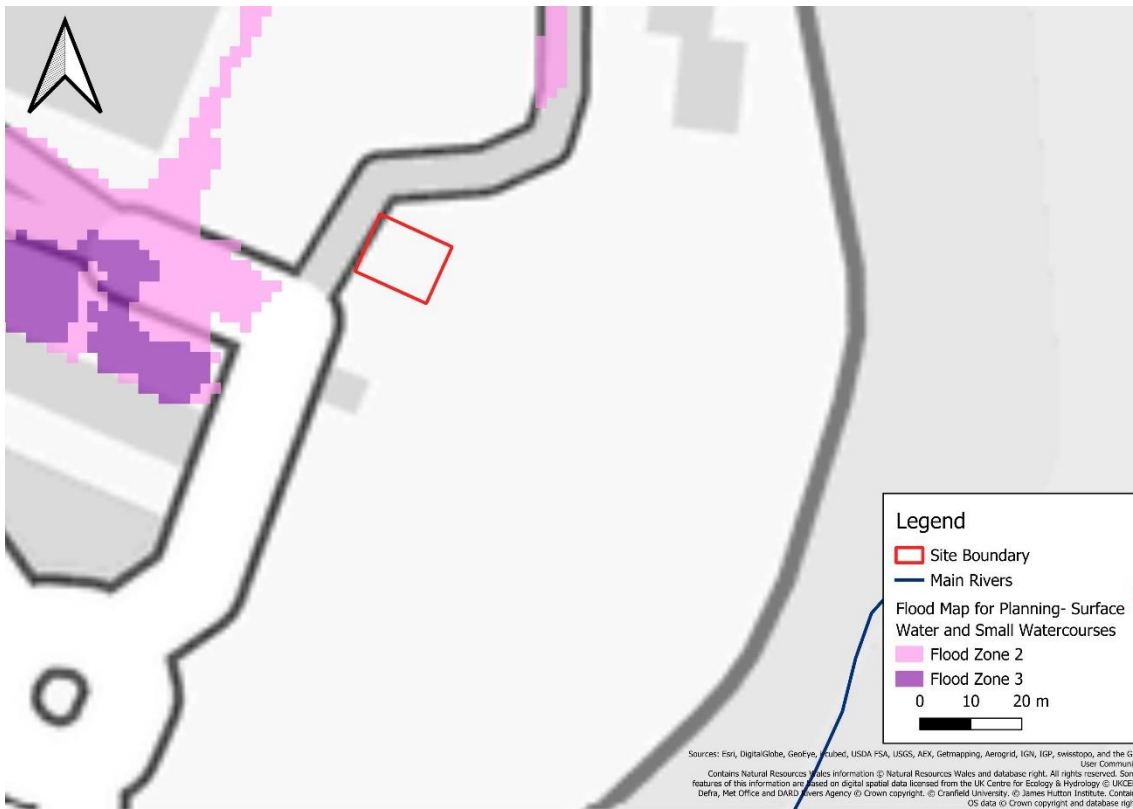


Figure 3-3 Flood Map for Planning- Surface Water and Small Watercourses

4 Flood Risk Assessment

This section has been completed using publicly available information only, including the NRW datasets.

Table 4-1 below provides a summary of the flood risk to the site from all sources of risk.

Table 4-1 Summary of Flood Risk

Source of Flooding	Onsite Presence	Description
Flood Risk from Rivers	✗	Very Low- Located in an area at very low risk of river flooding
Flood Risk from the Sea	✓	Refer to Chapter 5 for detailed assessment
Flood Risk from Surface Water and Small Watercourses	✗	Very Low- The site is at very low risk of surface water flooding.
Flood Risk from Groundwater	✗	Low- The site is at low risk of flooding from groundwater.
Flood Risk from Reservoirs	✓	Very Low- The site is at very low risk of flooding from reservoirs.
Flood Risk from Sewers	✗	Low- The site is at low risk of flooding from sewers.

4.1 Historical Flooding

NRW's map of recorded flood extents shows the site experienced flooding from the Crindau Pill in December 1981. No further information is available within the dataset to inform flood durations or severity to the site. Newport City Council's Local Flood Risk Management Strategy⁴ (LFRMS) does not identify any historic flood events at the site.

4.2 Flood Risk from Rivers

Flood risk should be considered to a site with an appropriate consideration for climate change. Within the available NRW datasets, it is considered that the FMfP provides the most up to date assessment of flood risk, with an allowance for climate change included. As shown in Figure 3-1, the FMfP for Rivers shows that the redevelopment site is at **very low risk** of flooding from these sources (ie. Flood Zone 1). This means that there is a less than 1 in 1000 (<0.1% AEP) chance of flooding in any given year, including with an allowance with climate change.

Therefore, the risk of flooding is concluded to be **very low**.

⁴ <https://www.newport.gov.uk/sites/default/files/media/media-documents/Newport%20Local%20Flood%20Risk%20Management%20Strategy%202024%20-2030%20Draft%20v2.pdf>

4.3 Flood Risk from Surface Water and Small Watercourses

As with fluvial flood risk, the FMfP constitutes the best publicly available source of flood risk information for surface water and small watercourses. As shown in Figure 3-3, the FMfP for Surface Water and Small Watercourses mapping shows that the proposed development site is at **very low risk** of flooding from these sources (ie. Flood Zone 1). This means that there is a less than 1 in 1000 (<0.1% AEP) chance of flooding in any given year, including with an allowance with climate change.

Therefore, the risk of flooding is concluded to be **very low**.

4.4 Flood Risk from Groundwater

Groundwater flooding is caused by unusually high groundwater levels. It occurs as excess water emerges at the ground surface or within manmade structures such as basements. Groundwater flooding tends to be more persistent than surface water flooding, in some cases lasting for weeks or months, and can result in damage to property. The risk of groundwater flooding depends on the nature of the geological strata underlying the site and the local topography.

Newport City Council's Local Flood Risk Management Strategy⁵ (FRMP) notes 'groundwater is not considered to be a significant flood risk and is considered to rise and fall relatively slowly'. It has therefore been concluded that the risk of groundwater flooding at the site is **low**.

4.5 Flood Risk from Reservoirs

The NRW FRAW Flood Risk from Reservoirs map illustrates that the site is at **risk** of flooding from reservoirs, as shown in Figure 4.5. The site is at risk of flooding from the Llandegfedd reservoir. This reservoir is located 8.8km to the north of the site.

However, as a result of regular inspections covered by the 1975 Reservoir Act, it is extremely unlikely that a reservoir would fail. NRW ensure that reservoirs are inspected regularly, and essential safety work is carried out. Should the reservoir fail, due to the location of the reservoir in relation to the site, substantial warning time would be available. Therefore, the risk of reservoir flooding is considered to be **very low**.

⁵ <https://www.newport.gov.uk/sites/default/files/media/media-documents/Easy%20read%20version%20-%20Newport%20Local%20Flood%20Risk%20Management%20Strategy%20v5.pdf>

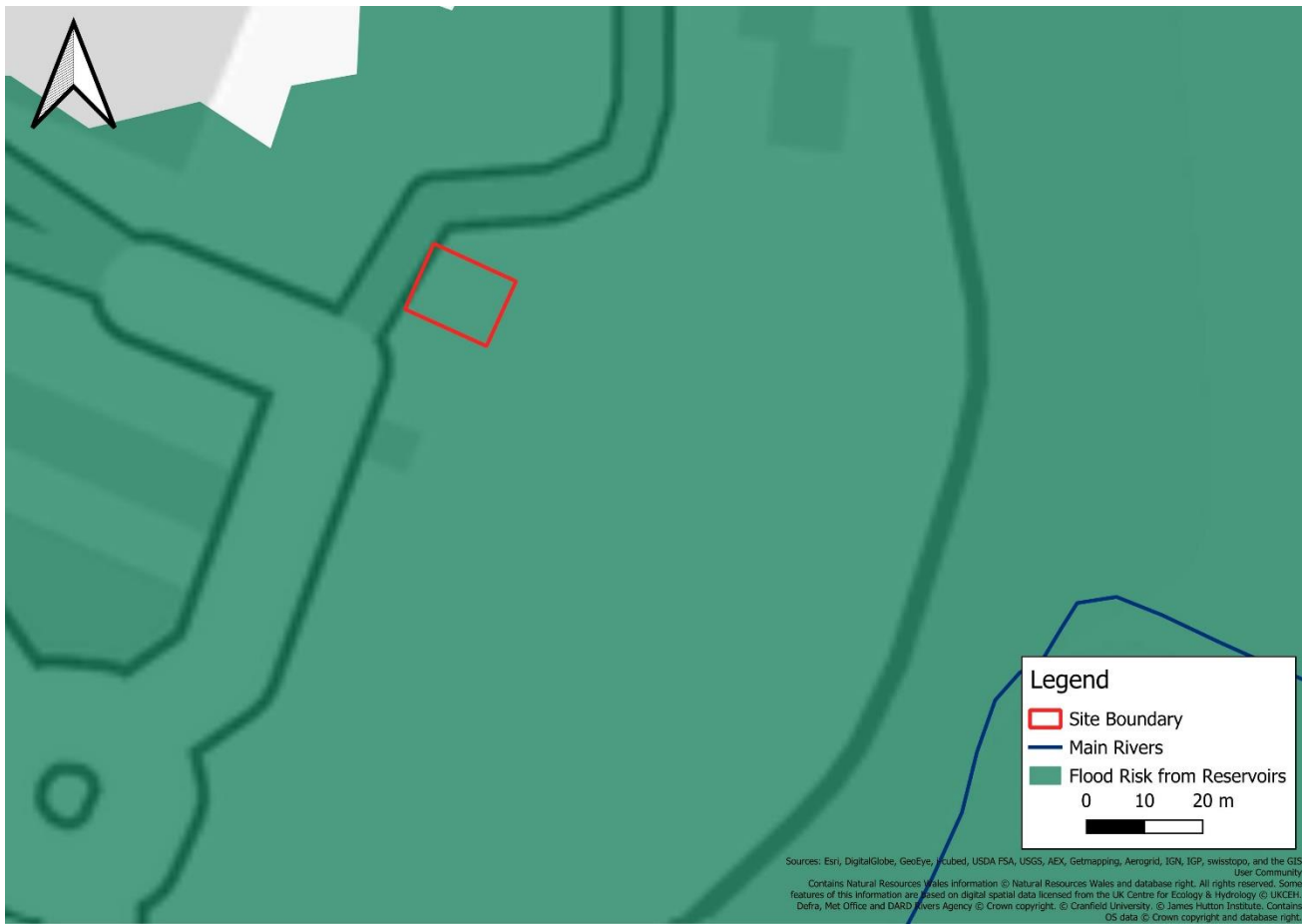


Figure 4-1 FRAW - Flood Risk from Reservoirs

4.6 Flood Risk from Sewers

The Local Flood Risk Management Strategy notes 'DCWW maintains a register of historical property sewer flooding events which shows that there have been 417 incidents of localised sewer flooding within the borough'. No evidence is provided that the site has previously experienced sewer flooding. Therefore, it is concluded that the site has a **low** risk of flooding from sewers.

5 Detailed Tidal Flood Risk Assessment

As identified in Sections 3 and 4, the predominant source of flood risk to the site is tidal. Therefore, to better understand the risk of tidal flooding posed to the site and the potential implications of climate change, further assessment using detailed hydraulic modelling is provided in this section.

The FMfP indicates that the site is located within the TAN-15 Defended Zone, with areas of Flood Zone 3 beneath this. Flood Zone 3 suggests a flood risk of greater than 0.5% AEP, with an allowance for climate change. However, for areas at tidal risk of flooding, climate change is considered over a period of 100 years (100 year lifetime of development). As detailed in Section 10.29 of TAN-15, *'Where new developments will have shorter lifetimes, it is reasonable that the flood consequences assessment focusses on potential risks during the developments lifetime'*.

The redevelopment site is considered to have a Lifetime of Development of less than 50 years, as detailed in Section 3.4 of this report. Consequently, further assessment of tidal risk has been undertaken against this shorter Lifetime of Development.

5.1 Detailed hydraulic modelling

The assessment of tidal flood risk has been based on the best available and updated flood modelling of Newport. This is based on version 7.0 of NRW's Newport Tidal Flood Model (June 2020), which was prepared by JBA Consulting for a successful Flood Map Challenge at the time. The version 7.0 model was subsequently updated in 2022 to incorporate several improvements, including:

- Updating design events to align with a base year of 2022;
- Updating the tidal boundary in line with new climate change guidance; and
- Adding in the recently completed Crindau flood defences to the model.

With this update, the model was run for a range of climate change epochs based on the central (70th) percentile. These epochs include:

- 2022 - present day scenario
- 2062 - 40-year design life
- 2072 - 50-year design life
- 2082 - 60-year design life
- 2092 - 70-year design life
- 2097 - 75-year design life
- 2102 - 80-year design life
- 2112 - 90-year design life
- 2122 - 100-year design life

As the redevelopment site has a lifetime of development of less than 50 years, the 2072 results (as the closest to this epoch) have been used to inform the detailed assessment within this report. This would represent a lifetime of development of 47 years, which the

structure is unlikely to exceed. The model has been used unamended from the 2022 update.

5.2 0.5% AEP plus climate change event

Figure 5-1 below shows the maximum flood depths at the site as a result of the 0.5% AEP plus 2072 climate change event. This shows that the whole site is predicted to be flood free in this event.

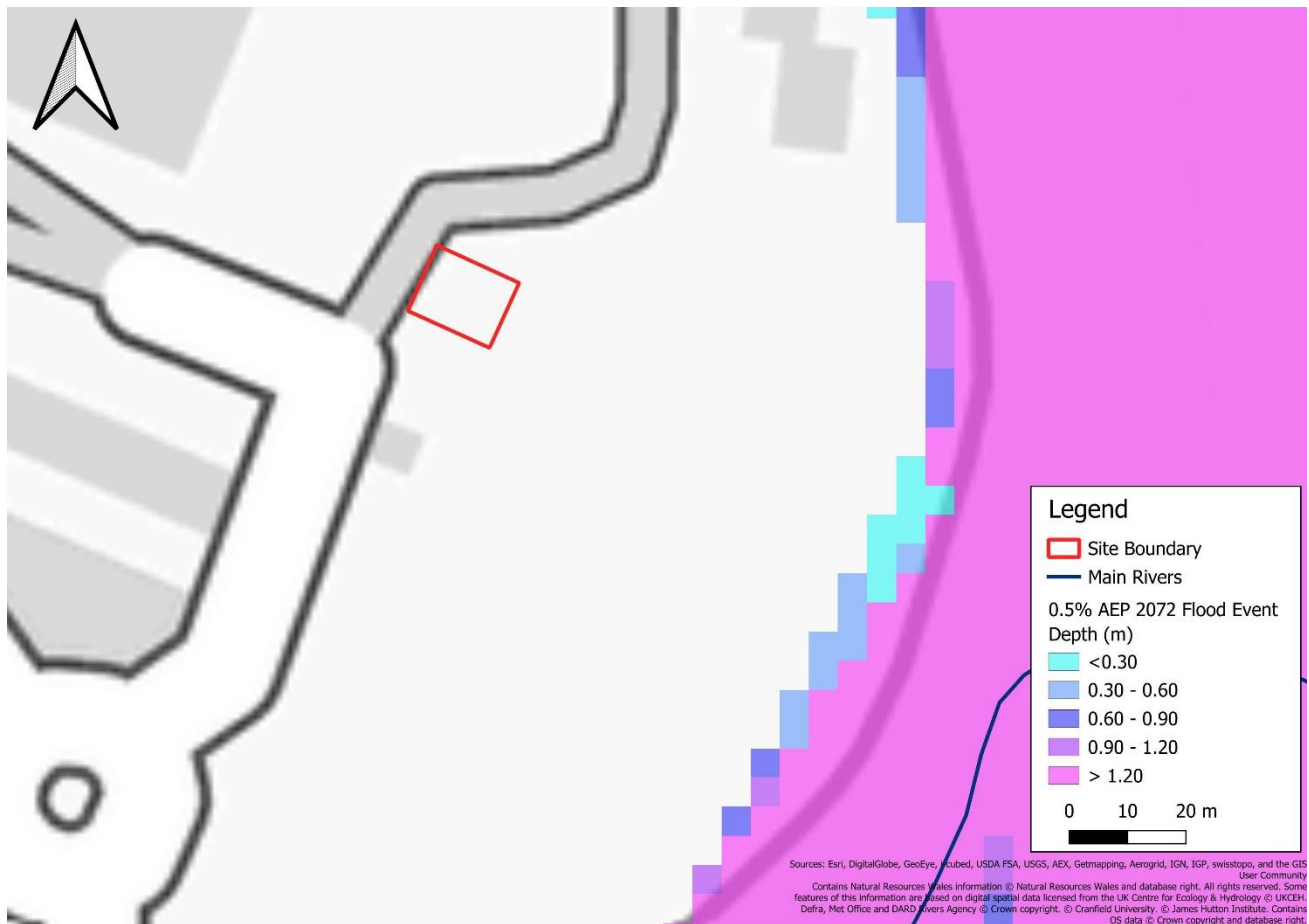


Figure 5-1 2072 0.5% AEP flood depths

5.3 0.1% AEP plus climate change event

Figure 5-2 below shows the maximum flood depths at the site as a result of the 2072 0.1% AEP event. This shows that flood depths are predicted to be shallow and are a maximum of 240mm.

It is also noted that the welfare facility and café is sited on concrete blocks, which will marginally elevate it above the existing ground levels on the site. Consequently, actual flood depths within the structure shall be shallower.

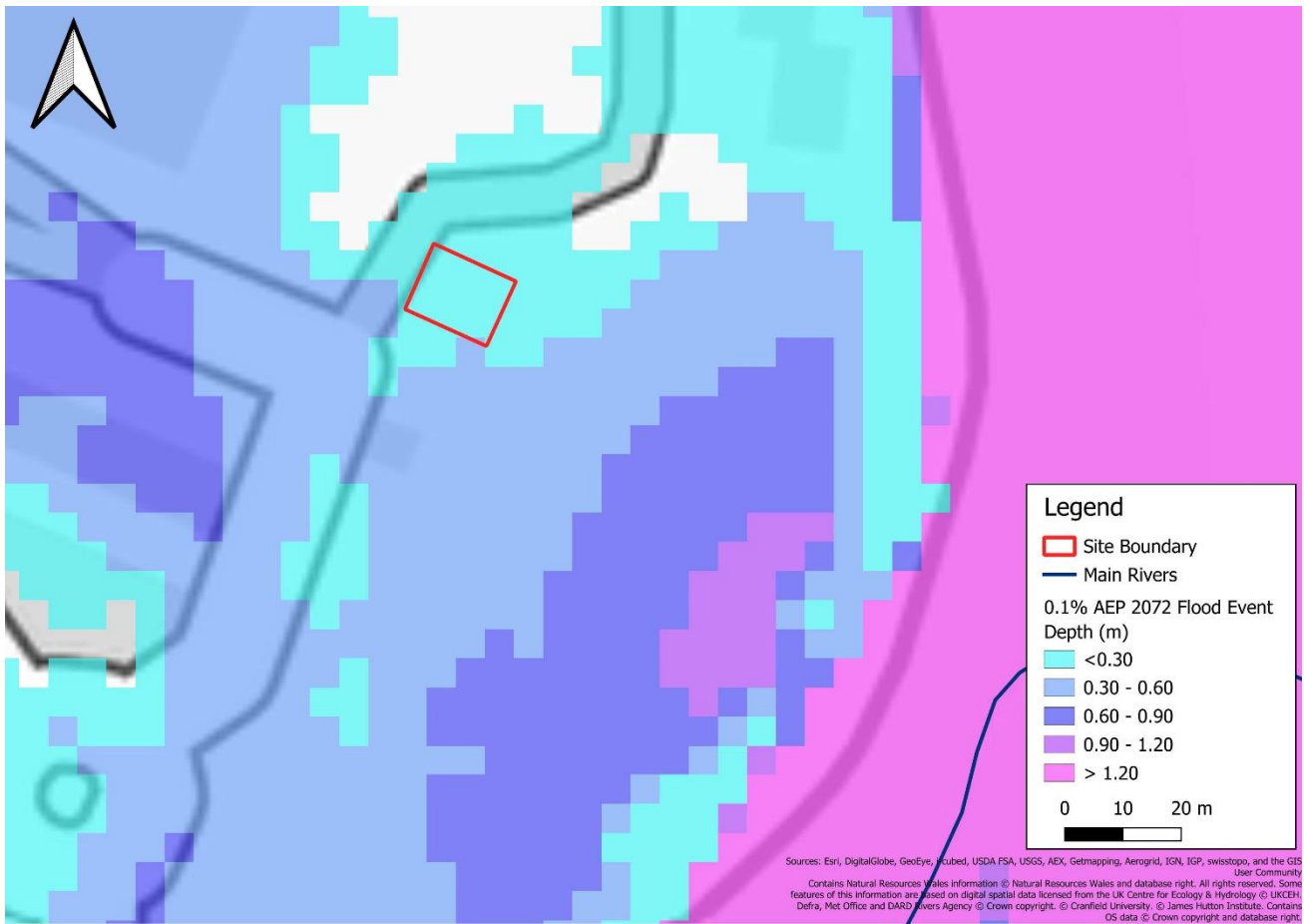


Figure 5-2 2072 0.1% AEP flood depths

6 Flooding and the Plan Led System

6.1 Application of Flood Zones to Development Management Decisions

When considering a site for development, TAN-15 sets out the requirements for the form of development in any given flood zone.

It is understood that the presence of the site within the TAN-15 Defended Zone supplants the sites' location within Flood Zones 2 and 3, regardless of the source of risk. For a proposed redevelopment site within a Defended Zone, Section 10.17 of TAN-15 states:

"On brownfield sites redevelopment proposals should not over intensify use neither should they reduce the area's ability to absorb flood water nor cause problems with flooding elsewhere. All applications should consider opportunities to incorporate flood resilient design as appropriate and any proposal involving highly vulnerable development must be compliant with the tolerable conditions set out in section 11".

The development proposals are for retrospective planning permission of a temporary building, which is a replacement for two portacabins which were formerly situated on the site. The building serves as an office, toilet/shower facility and café for customers of the lorry park. The development proposals will not result in an over-intensification of development within the wider Newport Lorry Park site, as the temporary building is a direct replacement to the existing portacabins on the site. The building is designed to provide additional facilities for users of Newport Lorry Park, an already established use of the wider site the building sits in.

Development should be compliant with the acceptability considerations set out within Section 11 of TAN-15, which is demonstrated in Section 6.2.

6.2 Acceptability of Flood Consequences

Whether a development should proceed or not will depend upon whether the consequences of flooding can be safely managed, including its effects on flood risk elsewhere. Section 11 of TAN-15 sets out the key conditions that should be met to demonstrate that development is appropriate for its location.

6.2.1 Acceptability Criteria

The site has been assessed against the Acceptability Criteria of Section 11 of TAN-15, as shown in Table 6-1.

Table 6-1 Assessment of Acceptability Criteria

TAN-15 Acceptability Criteria	Comments	Achieved
No increase in flooding	Due to the tidal nature of flood risk to the site, it is unlikely that flood waters shall be	Yes

TAN-15 Acceptability Criteria	Comments	Achieved
elsewhere.	displaced by the structure. In addition, the building is raised on concrete blocks which will allow the predicted shallow flood water within the extreme event to flow underneath.	
Occupiers aware of flood risk	The owners of the building will be provided with information on the risk to the site in the form of this report.	Yes
Escape/evacuation routes present	In the 2072 0.5% AEP plus climate change event, the access road is predicted to be flood free. Shallow flooding of up to 440mm is present along Albany Street in the 2072 0.1% AEP event. This access remains unchanged from the existing access road for the Newport Lorry Park. Flood depths are shallow and should allow pedestrian and vehicular users to evacuate if required.	Yes
Flood emergency plans and procedures agreed and in place	Access and egress provision remains unchanged from the existing site use. However, a flood response plan may be beneficial to highlight actions to evacuate in the event of the extreme flood event.	Yes
Flood resistant and resilient design	Due to the temporary nature of the building, it is not designed to withstand significant flooding. Therefore, resilient and resistant design is not suitable for the proposed use.	Yes
Acceptable consequences for type of use	Detailed in Sections 6.2.1 and 6.2.2	Yes

6.2.2 Frequency thresholds: designing development to be flood free

The required design standard for new development is to be flood free during the 0.5% AEP tidal event, plus an allowance for climate change over the lifetime of development. Section 11.8 of TAN-15 states that this threshold may be applied with more flexibility for redevelopment.

As per Section 5 of this report, the proposals meet this frequency threshold.

6.2.3 Tolerable conditions: managing consequences in an extreme flood event

The flood free thresholds relate to very serious but not extreme flood events. During extreme flood events there is recognition that it may not be possible to keep development flood-free. Figure 6 of TAN-15 provides indicative tolerable flood depth conditions for the 0.1% AEP event, including an allowance for climate change. Up to 600mm of flooding is considered tolerable within Less Vulnerable Developments, and it is understood that some flexibility is afforded to this indicative value for redevelopment sites.

As per Section 5 of this report, very shallow flooding of up to 240mm is predicted in the extreme event. This therefore complies with the tolerable conditions as outlined in Figure 6 of TAN-15.

7 Conclusions

JBA Consulting was commissioned by Lorry Park Newport Ltd to undertake an FCA to support a retrospective planning application for a two storey building at Newport Lorry Park, Albany Street, Newport.

Retrospective planning permission is required for the placement of a two-storey building within the Newport Lorry Park site. The building is situated on concrete blocks, which elevates it above the existing ground levels on the site. The structure serves as an office, toilet/shower facility and café for customers of the existing lorry park.

The development proposals are classified as Less Vulnerable development under TAN-15.

The building is situated in the TAN15 Defended Zone for the Sea.

The site is at low risk of groundwater and sewer flooding. There is a very low risk of flooding associated with reservoir failure, rivers and surface water flooding.

Due to the sites location within the TAN15 Defended Zone, a detailed assessment of tidal flood risk has been undertaken.

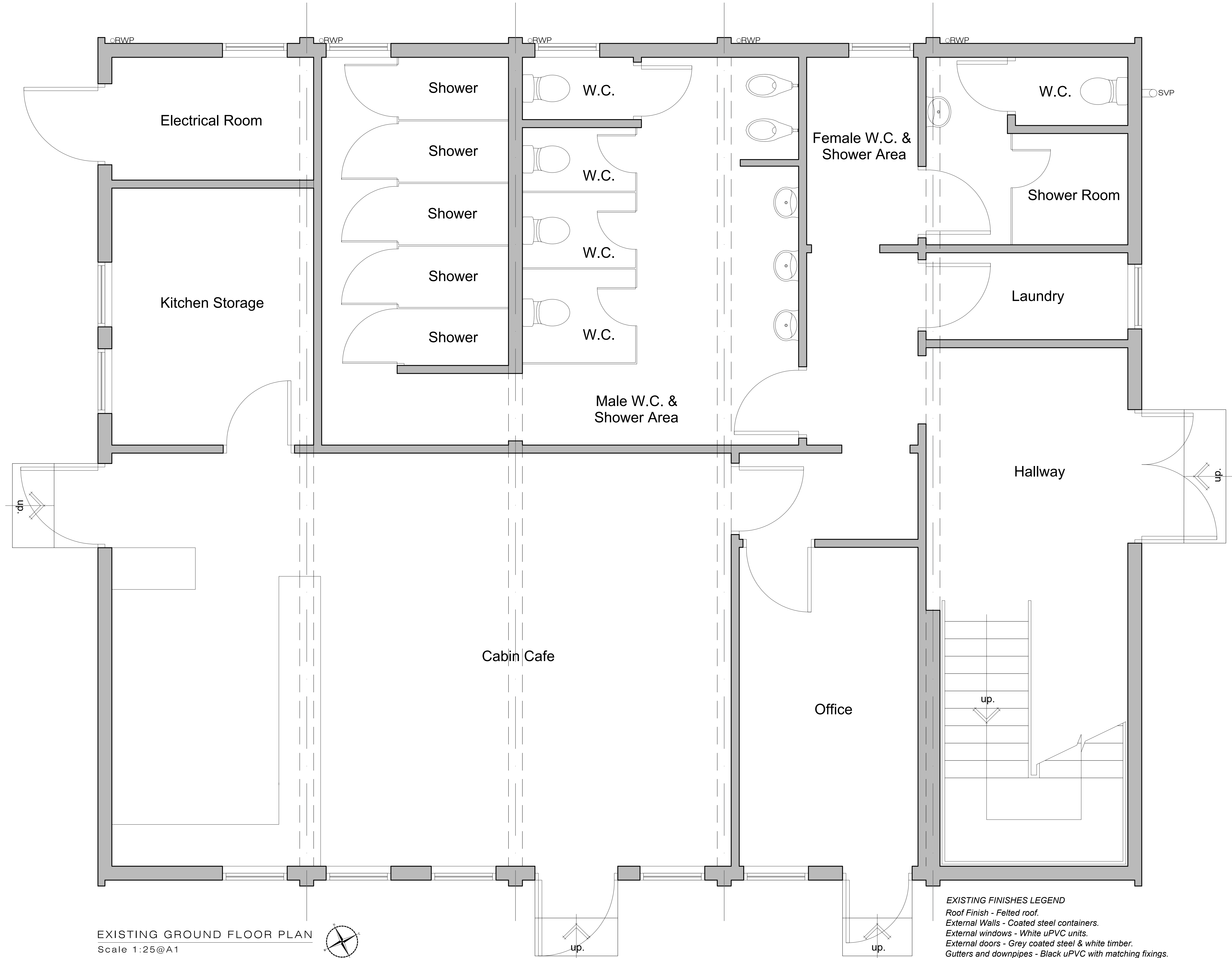
The assessment of tidal risk has been undertaken using JBA's detailed tidal flood modelling of the River Usk and its tributaries, and identifies the risk from a range of climate change epochs. The site is considered to have a lifetime of development of less than 50 years, and therefore an assessment against the 2072 epoch was undertaken.

The building is not predicted to flood in the 0.5% AEP plus climate change event and floods to shallow depths in the 0.1% AEP plus climate change event. Flood depths are up to 440mm and meet the requirements of the acceptability criteria.

In conclusion, the FCA has found that in respect to flood risk, the development meets the requirements set out in TAN-15 and the aims of Planning Policy Wales.

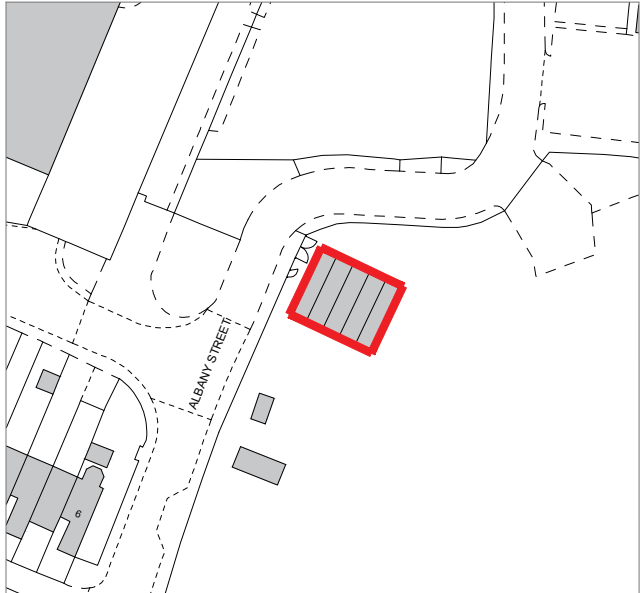
A Development Proposals

FOR RETROSPECTIVE PLANNING PURPOSES ONLY

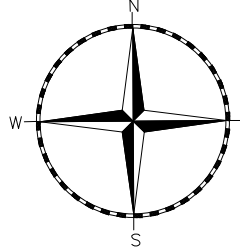


EXISTING GROUND FLOOR PLAN
Scale 1:25@A1

EXISTING FINISHES LEGEND
Roof Finish - Felted roof.
External Walls - Coated steel containers.
External windows - White uPVC units.
External doors - Grey coated steel & white timber.
Gutters and downpipes - Black uPVC with matching fixings.



SITE LOCATION PLAN 1:1250



THE DRAWINGS RELATE TO THE PROPOSED RETROSPECTIVE PLANNING APPLICATION AT CABIN CAFE, ALBANY STREET, NEWPORT, NP20 5NJ.

FOR STRUCTURAL / DRAINAGE DETAILS PLEASE REFER TO CLIENT APPOINTED STRUCTURAL ENGINEERS DESIGN AND FULL SPECIFICATION.

THE DRAWING HAS BEEN PRODUCED FOR RETROSPECTIVE PLANNING PURPOSES ONLY.

CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE, PLEASE NOTE DIMENSIONS HAVE BEEN TAKEN ON SITE WITH A TRADITIONAL MEASURING TAPE.

REVISION NOTE:

DRAWING STATUS:

PLANNING

CLIENT:

ROLAND MASON

PROJECT:

CABIN CAFE, ALBANY STREET,
NEWPORT, NP20 5NJ.

franks + toms
ARCHITECTS

DRAWING TITLE:

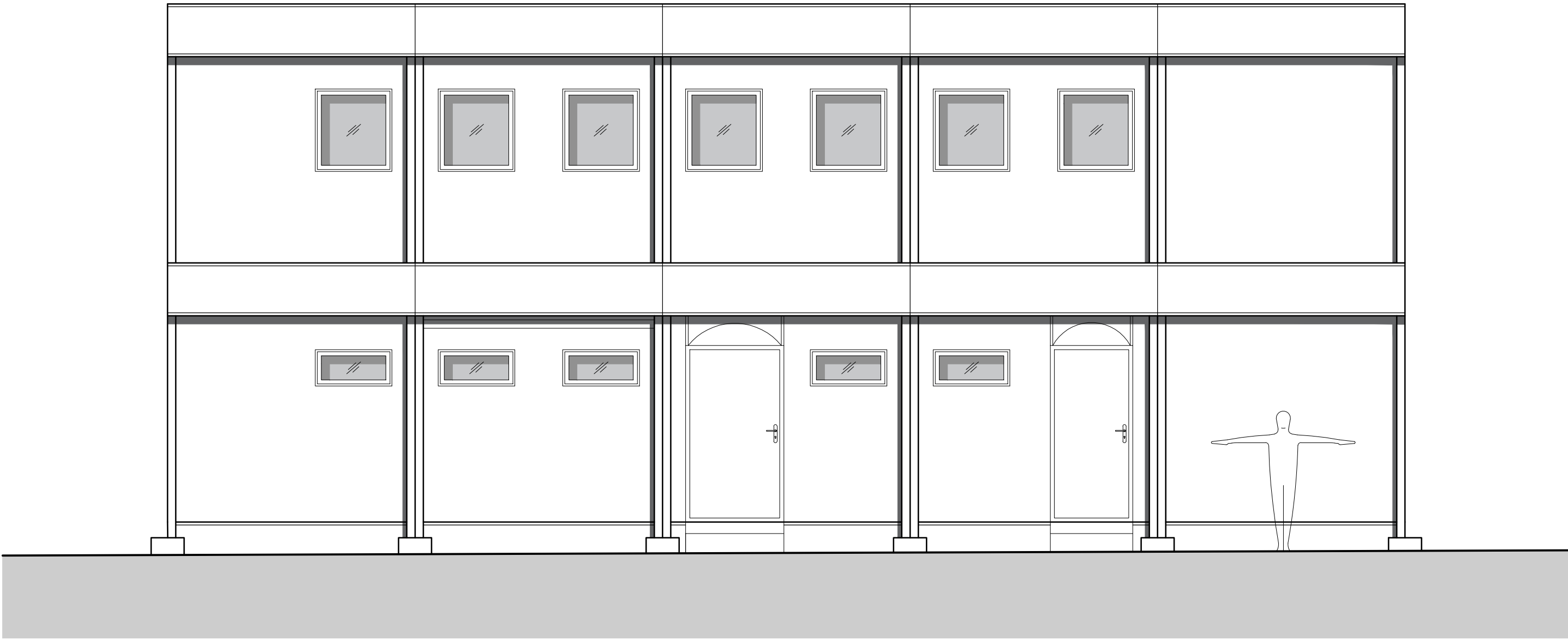
EXISTING GROUND FLOOR PLAN

JOB NUMBER: 4307	BY: AC	CHK: SF	DATE: MAY 2025
DRAWING NUMBER: (23) 100	REV: *	SCALE: 1:25 @ A1	

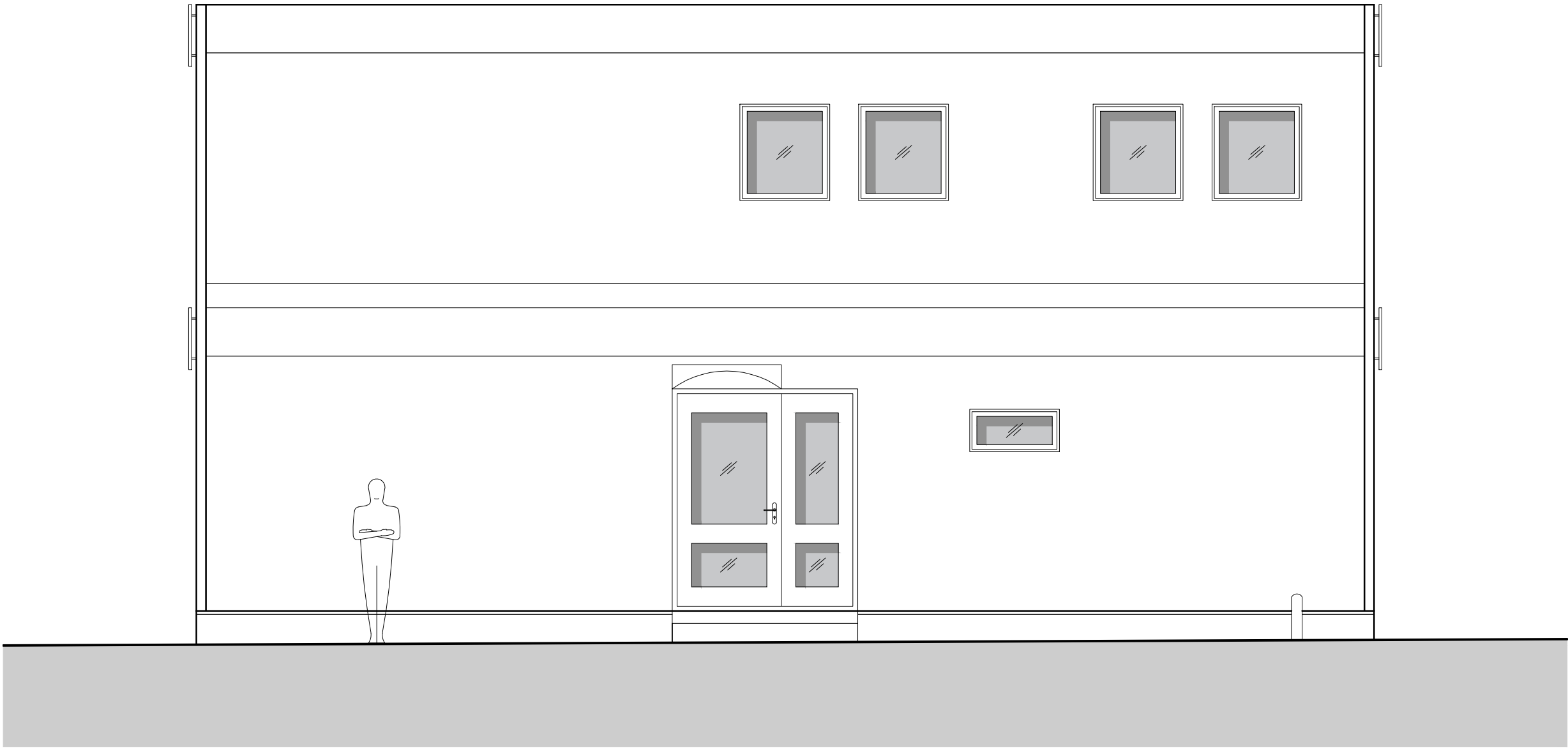
Franks and Toms Architects Limited
Office 8 St Andrews Crescent, Cardiff, CF10 3DD.
T 02920 390099 E info@franksandtoms.com
www.franksandtoms.com

FOR RETROSPECTIVE PLANNING PURPOSES ONLY

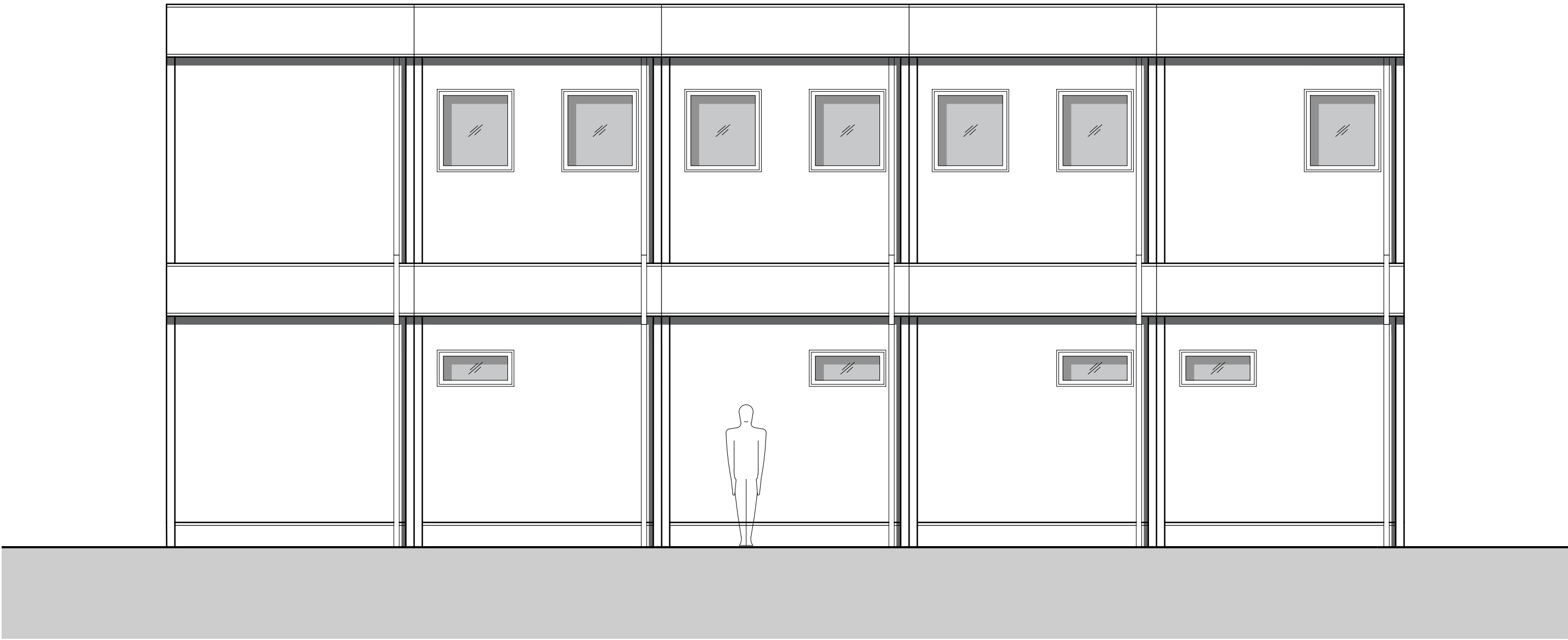
EXISTING FINISHES LEGEND
Roof Finish - Felted roof.
External Walls - Coated steel containers.
External windows - White uPVC units.
External doors - Grey coated steel & white timber.
Gutters and downpipes - Black uPVC with matching fixings.



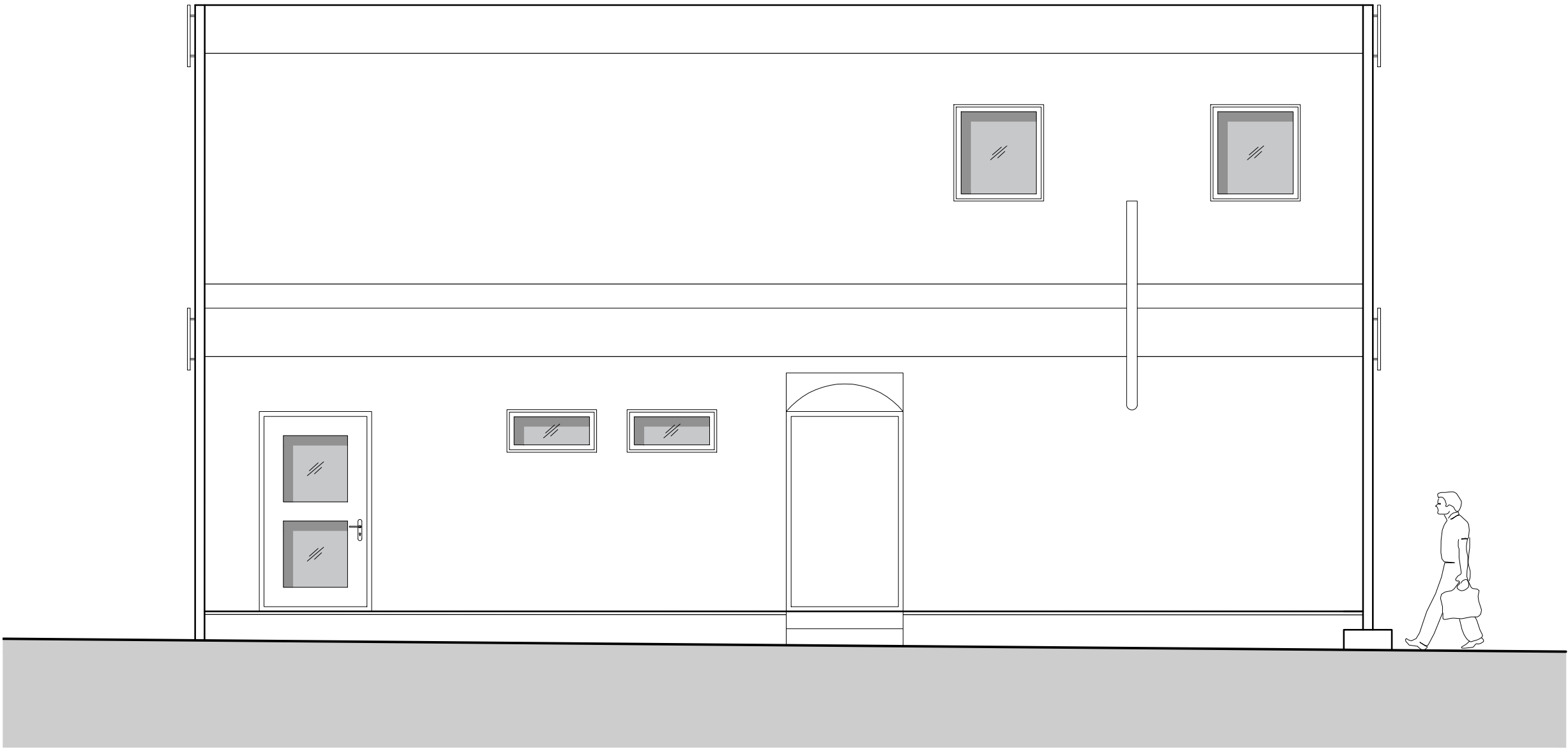
EXISTING FRONT / SOUTH-WEST ELEVATION
Scale 1:50@A1



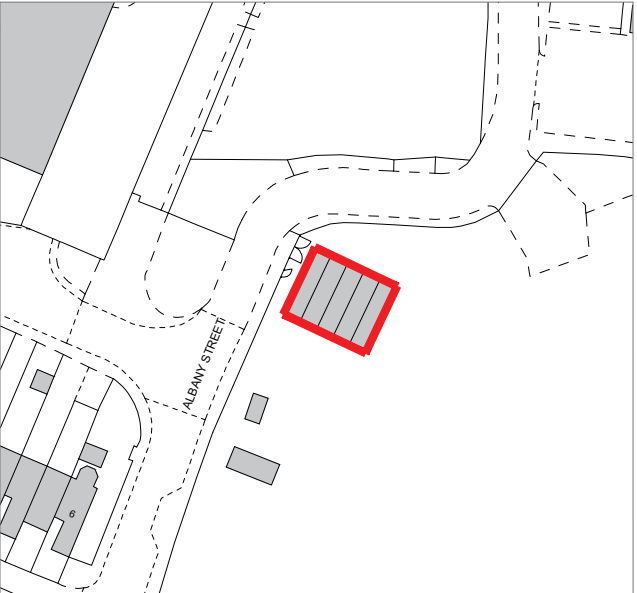
EXISTING SIDE / SOUTH-EAST ELEVATION
Scale 1:50@A1



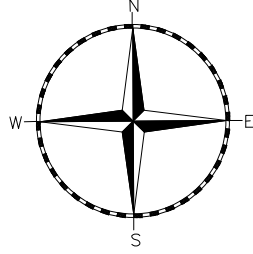
EXISTING REAR / NORTH-EAST ELEVATION
Scale 1:50@A1



EXISTING SIDE / NORTH-WEST ELEVATION
Scale 1:50@A1



SITE LOCATION PLAN 1:1250



THE DRAWINGS RELATE TO THE PROPOSED RETROSPECTIVE PLANNING APPLICATION AT CABIN CAFE, ALBANY STREET, NEWPORT, NP20 5NJ.

FOR STRUCTURAL / DRAINAGE DETAILS PLEASE REFER TO CLIENT APPOINTED STRUCTURAL ENGINEERS DESIGN AND FULL SPECIFICATION.

THE DRAWING HAS BEEN PRODUCED FOR RETROSPECTIVE PLANNING PURPOSES ONLY.

CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE, PLEASE NOTE DIMENSIONS HAVE BEEN TAKEN ON SITE WITH A TRADITIONAL MEASURING TAPE.

REVISION NOTE:

DRAWING STATUS:

PLANNING

CLIENT:

ROLAND MASON

PROJECT:

CABIN CAFE, ALBANY STREET, NEWPORT, NP20 5NJ.

franks + toms
ARCHITECTS

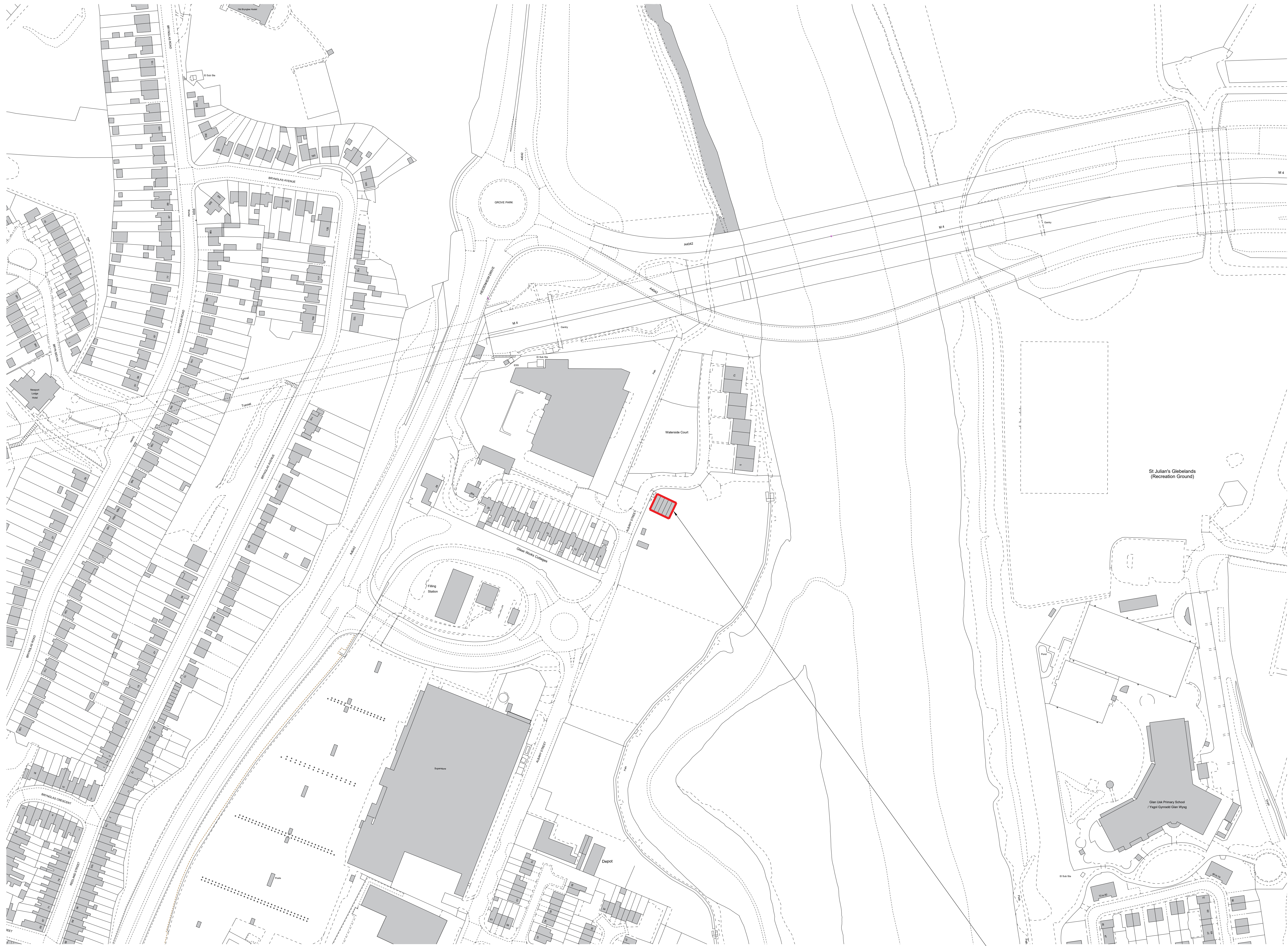
DRAWING TITLE:

EXISTING ELEVATIONS

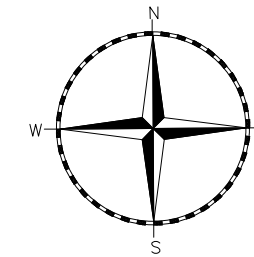
JOB NUMBER: 4307	BY: AC	CHEK: SF	DATE: MAY 2025
DRAWING NUMBER: (23) 110	REV: *	SCALE: 1:50 @ A1	

Franks and Toms Architects Limited
Office 8 St Andrews Crescent, Cardiff, CF10 3DD.
T 02920 390099 E info@franksandtoms.com
www.franksandtoms.com

FOR RETROSPECTIVE PLANNING PURPOSES ONLY



SITE LOCATION PLAN
Scale 1:1250@A1



THE DRAWINGS RELATE TO THE PROPOSED
RETROSPECTIVE PLANNING APPLICATION AT
CABIN CAFE, ALBANY STREET, NEWPORT,
NP20 5NJ.

FOR STRUCTURAL / DRAINAGE DETAILS
PLEASE REFER TO CLIENT APPOINTED
STRUCTURAL ENGINEERS DESIGN AND FULL
SPECIFICATION.

THE DRAWING HAS BEEN PRODUCED FOR
RETROSPECTIVE PLANNING PURPOSES
ONLY.

CONTRACTOR TO CHECK ALL DIMENSIONS
ON SITE, PLEASE NOTE DIMENSIONS HAVE
BEEN TAKEN ON SITE WITH A TRADITIONAL
MEASURING TAPE.

REVISION NOTE:

DRAWING STATUS:

PLANNING

CLIENT:

ROLAND MASON

PROJECT:

CABIN CAFE, ALBANY STREET,
NEWPORT, NP20 5NJ.

franks + toms
ARCHITECTS

DRAWING TITLE:

SITE LOCATION PLAN

JOB NUMBER:

4307

BY:

AC

CHK:

SF

DATE:

MAY 2025

DRAWING NUMBER:

(23) 190

REV:

*

SCALE:

1:1250 @ A1

Franks and Toms Architects Limited

Office 8 St Andrews Crescent, Cardiff, CF10 3DD.

T 02920 390099 E info@franksandtoms.com

www.franksandtoms.com

CABIN CAFE, ALBANY STREET, NEWPORT, NP20 5NJ.

Offices at

Bristol
Coleshill
Doncaster
Dublin
Edinburgh
Exeter
Glasgow
Haywards Heath
Isle of Man
Leeds
Limerick
Newcastle upon Tyne
Newport
Peterborough
Portsmouth
Saltaire
Skipton
Tadcaster
Thirsk
Wallingford
Warrington

Registered Office
1 Broughton Park
Old Lane North
Broughton
SKIPTON
North Yorkshire
BD23 3FD
United Kingdom

+44(0)1756 799919
info@jbaconsulting.com
www.jbaconsulting.com
Follow us:  

Jeremy Benn
Associates Limited
Registered in England
3246693

JBA Group Ltd is
certified to:
ISO 9001:2015
ISO 14001:2015
ISO 27001:2022
ISO 45001: