

10 Clarence Place

Flood Consequence Assessment

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Client Name: Clarence Land and Homes Ltd

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Site Address: 10 Clarence Place, Newport, NP19 0AE

Control Sheet

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1.0 Introduction

1.1 Project Background

Curtins Consulting Limited has been appointed to prepare a site-specific Flood Consequences Assessment to support a planning application for the proposed refurbishment of 10 Clarence Place, Newport.

This report provides an assessment of flood risk for the development site. This assessment follows Welsh Government guidance with regards to development and flood risk.

The report is based on currently available information and preliminary discussions.

Proposals contained or forming part of this report represent the design intent and may be subject to alteration or adjustment in completing the detailed design for this project. Where such adjustments are undertaken as part of the detailed design and are deemed a material deviation from the intent contained in this document, prior approval shall be obtained from the relevant authority in advance of commencing such works.

Where the proposed works, to which this report refers, are undertaken more than twelve months following the issue of this report, Curtins Consulting shall reserve the right to re-validate the findings and conclusions at no cost to Curtins Consulting.

1.2 Scope of Assessment

The assessment has been undertaken in accordance with the standing advice and requirements of Natural Resources Wales (NRW) and the Welsh Government as outlined in Planning Policy Wales Technical Advice Note 15: Development and Flood Risk.

The assessment has:

- Investigated potential risks of flooding to the site.
- Considered the impact the development may have elsewhere with regards to flooding; and
- Considered outline proposals to mitigate any potential risk of flooding determined to be present.

2.0 Development Proposals

2.1 Proposed Development

The site area is 0.0166 hectares (ha) (166m²) and confirms the full extent of the application area. A further 0.0098 ha (98m²) lies within the ownership of the development.

Proposals are to retain the use Class A3 development on the ground floor and to convert the upper floors of the derelict grade II listed building to a hostel, Class C4.

The application is for the proposed refurbishment of 10 Clarence Place to provide:

- Ground Floor – A3 Unit with welfare facilities (FFL +0.000m AD)
- First Floor - 2 no rooms with shared Living Space (FFFL +3.345m AD)
- Second Floor – 4 No Bedrooms with ensuite (SFFL +7.000m AD)
- Third Floor – 2 No Bedrooms with ensuite (SFFL +9.890m AD)

3.0 Existing Site Details

3.1 Location and Description

10 Clarence Place is a Grade II listed building located in Newport. The post code is NP19 0LY and the site is centred around national grid reference NGR 331405mE 188451mN. The site currently comprises a disused restaurant at ground and first floor level with residential accommodation above. Access to both areas is currently provided off Clarence Place, a public highway running along the northern boundary of the site. The building is adjoined by further buildings to the east and west, with a rear garden backing onto adjacent car parking accessed off St Vincent Road to the south.

The site location plan and its surrounding areas is shown in Figure 1.



Figure 1 - Site Location Plan

3.2 Existing Watercourses

The nearest watercourse to the proposed development site is the River Usk, located approximately 105m to the west of the site. The River Usk is a tidal river, discharging to the Severn Estuary.

3.3 Site Geology

British Geological Survey (BGS) mapping identifies superficial tidal flat deposits of clay and silt beneath the site whilst the bedrock beneath the site is classified as 'Maughans Formation – Argillaceous Rocks and [subequal/ subordinate] sandstone, interbedded' (BGS, n.d.).

4.0 Development and Flood Risk

4.1 Planning Policy Wales (PPW) and Technical Advice Note 15 (Tan 15)

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 is 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 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.

4.2 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

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

Table 4.1 – Form of Development

As detailed in section 2.1, development proposals are for the refurbishment of the existing property at 10 Clarence place. As such, the proposed development is classified as Redevelopment.

4.3 Vulnerability Classification

TAN-15 assigns one of three flood risk vulnerability classifications to a development, as shown in Table 1 below. As the proposed site is to be a mixture of retail and residential the site falls within the highly vulnerable 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. Developments associated with canals. Flood defences and management infrastructure. Open spaces (excluding equipped play areas). Hydro renewable energy generation.

Table 1 – Form of Development

4.4 TAN 15 – Acceptability of Flood Consequences.

Section 11 of TAN 15 outlines the basis behind assessing the acceptability of flood consequences within different Flood Zones. Section 1 states that:

‘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.

There are requirements that must be in place for any development that is permitted to be located in flood risk areas. In all circumstances, developers and planning authorities should ensure the following conditions are met:

- No increase in flooding elsewhere.
- Occupiers aware of flood risk
- Escape / evacuation routes present
- Flood emergency plans and procedures agreed and in place.
- Flood resistant and resilient design
- Acceptable consequences for types of use.

If the FCA identifies that the flood consequences are acceptable and the development is justified in its location the assessment can be used to establish whether suitable mitigation measures can be incorporated within the design to ensure that development is as safe as possible and there is:

- minimal risk to life;
- minimal disruption to people living and working in the area,
- minimal potential damage to property;
- minimal impact of the proposed development on flood risk generally; and,
- minimal disruption to natural heritage.’ (Welsh Assembly Government, 2004, Section 7)

4.5 Statutory Standards and Guidance for Sustainable Drainage Systems (SuDS)

The Welsh Government have enacted the Flood and Water Management Act 2010 (Schedule 3) that came into effect in Wales on 7th January 2019, which requires new developments to include Sustainable Drainage System (SuDS) features that comply with national standards.

The key documents published by the Welsh Government are the 'Statutory Standards for Sustainable Drainage Systems – Design, Construction, Operating and Maintaining Surface Water Drainage Systems' and 'Sustainable Drainage (SuDS) Statutory Guidance' dated 2018 and 2019 respectively.

These state that 'From 7th January 2019, all new developments of more than 1 dwelling house or where the construction area is 100m² or more, will require sustainable drainage (SuDS) for surface water. SuDS must be designed and built-in accordance with Statutory SuDS published by Welsh Ministers and SuDS Schemes must be approved by the local authority acting in its SuDS Approval Body (SAB) role, before construction work begins' (Welsh Government, 2019).

This involves engagement with the local SAB, Newport City Council in this instance, for submission of a SAB Application, which is in addition to the Planning Application process with the intent that both processes run in parallel.

5.0 Site Specific Flood Risk Assessment

5.1 Flood Map for Planning

The proposed development site is located within Flood Zone 3 (defended) of the Flood Map for Planning for Rivers and sea, as shown in Figure 2 below:

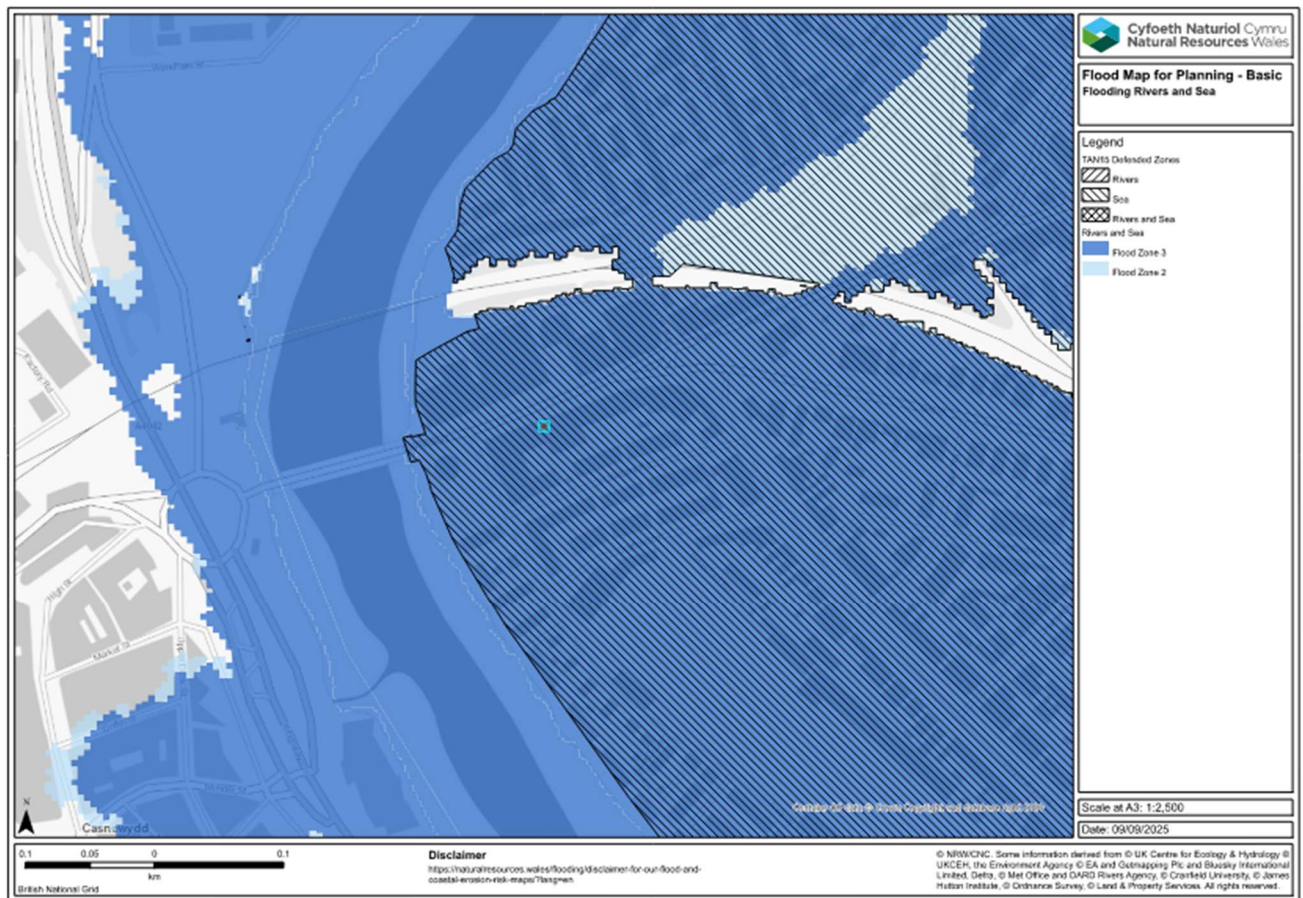


Figure 2 – Flood Map for Planning – NRW Mapping

Flood Zone 3 (defended), shows areas with a 1% chance or greater of flooding occurring in any given year, including an allowance for climate change. The defended zone are areas that benefits from Risk Management Authority flood defences with the following minimum standard of protection:

- 1 in 100 year (present day) for rivers
- 1 in 200 year (present day) for sea.

For flood defences built from 2016 onwards there must be allowances for climate change and design freeboard.

5.2 Flooding from Rivers or the Sea

The Flood Map for Planning (FMfP) indicates the flood risk of an area from a range of flooding sources. An extract of the FMfP indicating the flood risk at 10 Clarence Place from both rivers and sea flooding is included in Figure 3 and 4 below:

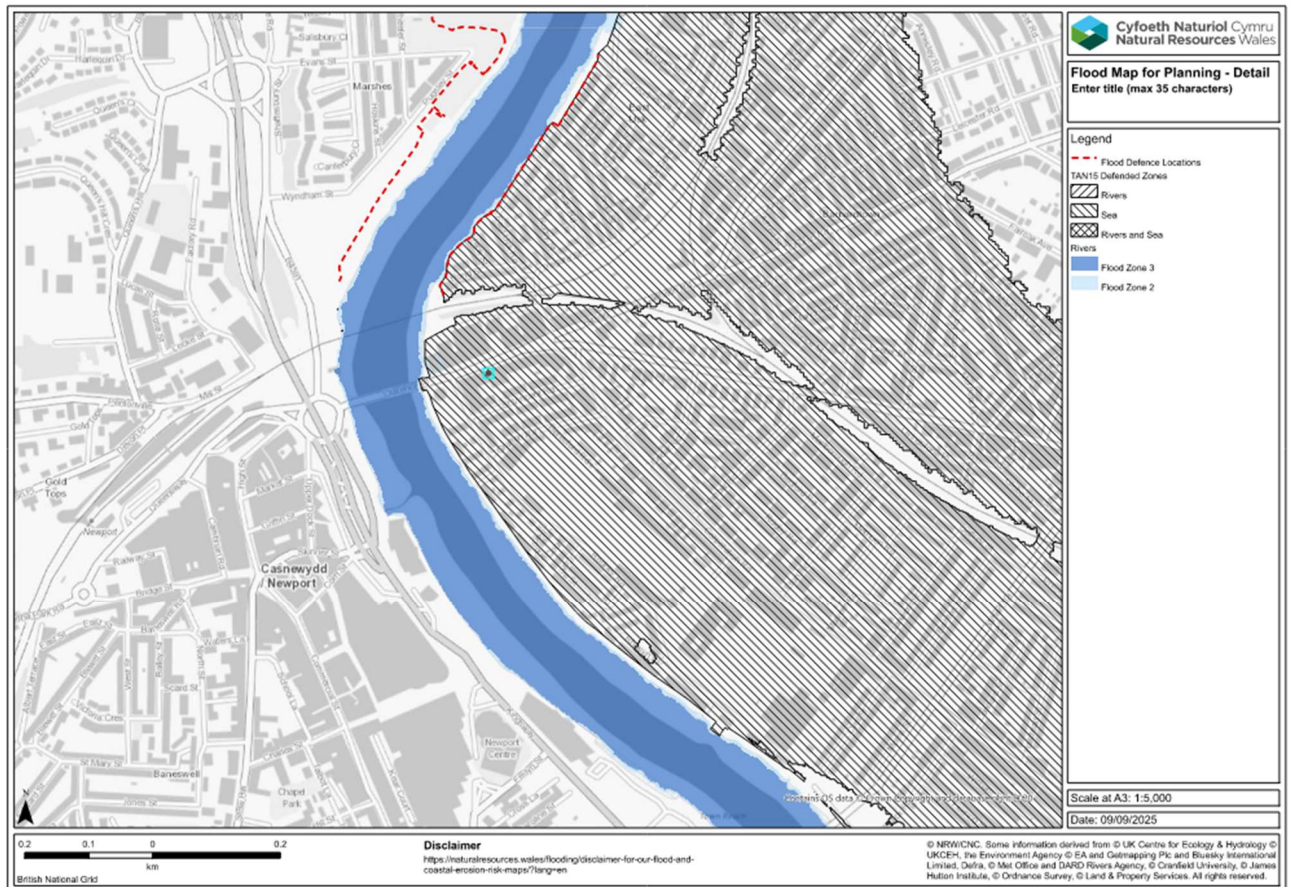


Figure 3 – Flood Map for Planning – River Flooding

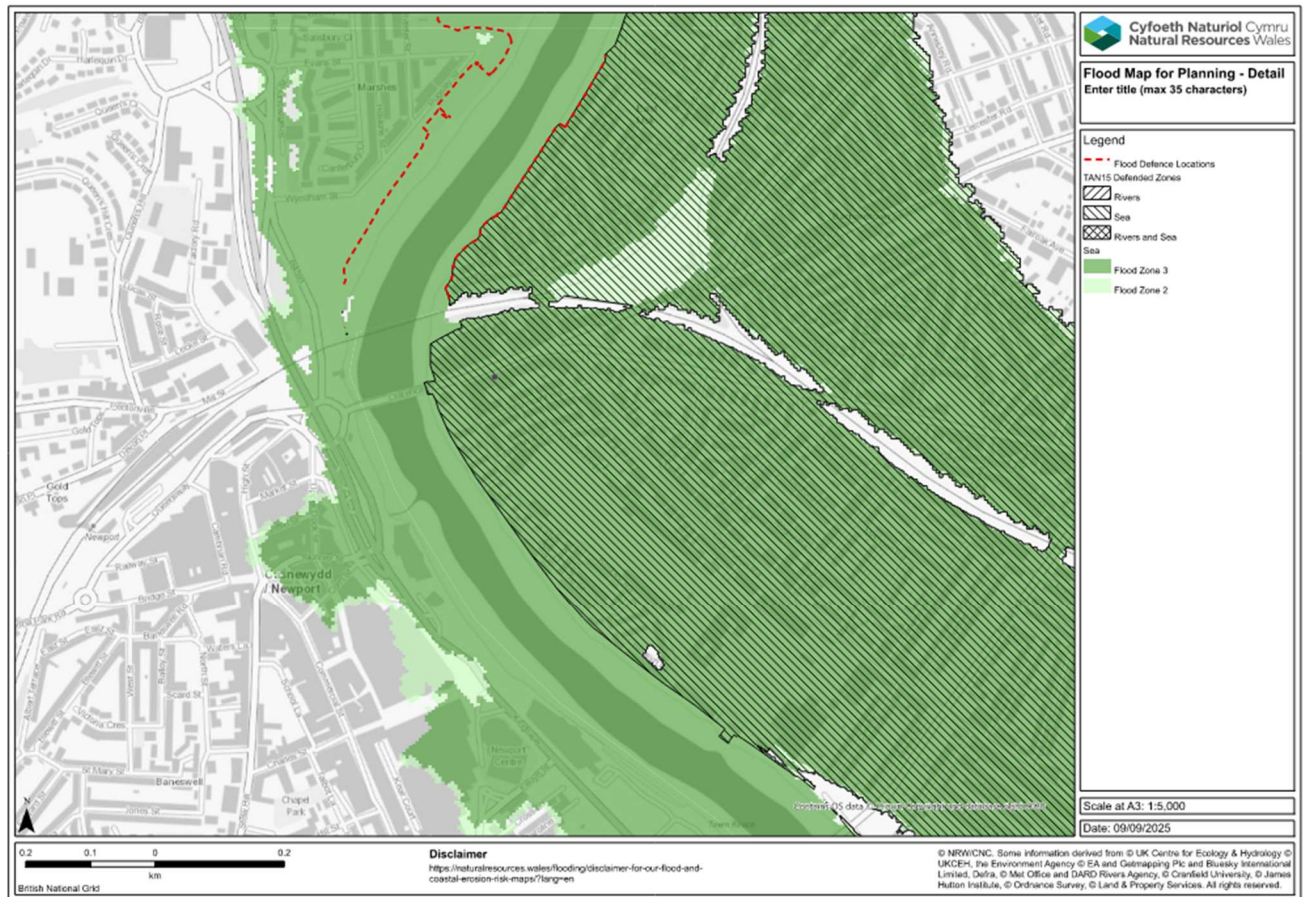


Figure 4 – Flood Map for Planning – Sea Flooding

The maps identifies that the site lies within an area classified as being risk of flooding from the sea and outside of the area classified as being at risk of flooding from the river. Therefore, the main risk of flooding to the site is from a tidal source.

The mapping also indicated that the site is within a defended zone which means that it is subject to flood risk management infrastructure which provides a minimum level of protection against flooding from the seas in the 1:200 + climate change and freeboard event. The location of these flood defences are identified on the mapping above.

5.3 NRW Flood Data

The Flood data for 2021, 2121 and 2096 was obtained from NRW for the defended and undefended scenarios and analysed for five individual points around the proposed building (one on each corner of the building and then one in the middle of the development site). The results are outlined in the tables below for both the defended and undefended scenarios in the 1D and 2D models. As the site is subject to tidal flooding the 1 in 200-year event has to be considered when looking at the flood risk for the site. Due to the type of development, the flood levels need to be reviewed for the whole design life of the development.

Table 2: Legend for Hazard Grids

Flood Hazard Rating (HR)	Colour Code	Hazard to People Classification (ref 6)
Less than 0.75		Very low hazard – Caution
0.75 to 1.25		Danger for some – includes children, the elderly and the infirm
1.25 to 2.0		Danger for most – includes the general public
More than 2.0		Danger for all – includes the emergency services

Taken from NRW Data information

1 in 200 (Defended - 2D)									
Point	2021			2096			2121		
	Depth (m)	Velocity (m/s)	Hazard	Depth (m)	Velocity (m/s)	Hazard	Depth (m)	Velocity (m/s)	Hazard
1	0	0	0	0.096	0.067	0.598	1.4527	0.5047	2.2446
2	0	0	0	0.2	0.105	0.636	1.4797	0.27	1.9887
3	0	0	0	0.178	0.013	0.91	1.591	0.1546	1.9084
4	0	0	0	0.528	0.125	1.264	1.8194	0.169	2.0198
5	0	0	0	0.555	0.155	1.278	1.683	0.1281	1.949

1 in 200 (Defended - 1D)									
Point	2021			2096			2121		
	Depth (m)	Velocity (m/s)	Hazard	Depth (m)	Velocity (m/s)	Hazard	Depth (m)	Velocity (m/s)	Hazard
1	0	0	0	0.096	0.067	0.598	1.082	0.214	
2	0	0	0	0.2	0.104	0.636	1.177	0.277	
3	0	0	0	0.178	0.013	0.91	1.248	0.087	
4	0	0	0	0.528	0.125	1.264	1.601	0.1	
5	0	0	0	0.555	0.155	1.278	1.63	0.137	

1 in 1000 (Defended – 2D)									
Point	2021			2096			2121		
	Depth (m)	Velocity (m/s)	Hazard	Depth (m)	Velocity (m/s)	Hazard	Depth (m)	Velocity (m/s)	Hazard
1	0	0	0	1.016	0.214	1.643	2.191	0.258	2.465
2	0	0	0	1.109	0.248	1.771	2.289	0.314	2.697
3	0	0	0	1.183	0.095	1.655	2.355	0.107	2.369
4	0	0	0	1.537	0.074	1.837	2.708	0.119	2.556
5	0	0	0	1.564	0.103	1.872	2.737	0.124	2.5302

1 in 1000 (Defended – 1D)									
Point	2021			2096			2121		
	Depth (m)	Velocity (m/s)	Hazard	Depth (m)	Velocity (m/s)	Hazard	Depth (m)	Velocity (m/s)	Hazard
1	0	0	0	1.002	0.212	1.631	2.189	0.258	2.464
2	0	0	0	1.095	0.246	1.757	2.287	0.312	2.697
3	0	0	0	1.169	0.093	1.645	2.353	0.107	2.368
4	0	0	0	1.522	0.073	1.827	2.706	0.125	2.556
5	0	0	0	1.55	0.104	1.861	2.735	0.124	2.622

1 in 200 (Un defended)									
Point	2021			2096			2121		
	Depth (m)	Velocity (m/s)	Hazard	Depth (m)	Velocity (m/s)	Hazard	Depth (m)	Velocity (m/s)	Hazard
1	0.1783	0.1877	0.7347	1.5096	0.4729	2.174	2.0292	0.5123	2.5171
2	0.2676	0.094	0.83	1.6401	0.2122	2.0693	2.1619	0.2591	2.3661
3	0.1979	0.053	0.7674	1.7148	0.1442	2.0006	2.235	0.1553	2.2872
4	0.4217	0.1056	1.0687	1.9584	0.1564	2.1233	2.4777	0.1421	2.4134
5	0.3517	0.1076	1.1026	1.8514	0.1254	2.0718	2.3709	0.1322	2.3611

1 in 1000 (Un defended)									
Point	2021			2096			2121		
	Depth (m)	Velocity (m/s)	Hazard	Depth (m)	Velocity (m/s)	Hazard	Depth (m)	Velocity (m/s)	Hazard
1	0	0.4097	1.4033	2.006	0.512	2.5062	2.3726	0.5706	2.6927
2	0	0.1474	1.4251	2.1386	0.2579	2.3551	2.5051	0.2778	2.5973
3	0	0.1297	1.4315	2.2115	0.1604	2.274	2.5806	0.1774	2.5095
4	0	0.15	1.5558	2.4542	0.1527	2.3998	2.8233	0.1684	2.6392
5	0	0.1307	1.5066	2.3475	0.1334	2.3478	2.7154	0.1401	2.5894

Due to the highly vulnerable classification for the residential development all scenarios for the 1 in 200-year and 1 in 1000-year events have been reviewed. As noted in tables above in the current defended scenarios for both events the site is not at risk from flooding. The future years (2096 and 2121) identifies that the site is at risk from flooding between a depth of 0.096m and 2.737m, with a velocity of between 0.0067m/s² and 0.512 m/s² which equates to a hazard rating of a danger for all.

The proposal drawing confirms the first-floor finished floor level FFFL of +3.450m AAD which is the lowest level of the residential units and is set approximately 0.80m above the maximum flood level identified in the 2121 data (Defended 1000 year plus climate change event), therefore the risk to occupants is deemed low. This data also does not take into consideration any work undertaken to the flood defences which will reduce the risk to the site.

The data for the undefended scenarios have been considered and the identifies flood levels between 0.178m and 0.422m with velocities of between 0.053 m/s and 0.187m/s which equates to a maximum hazard rating of danger for most. Under this scenario, the predicted flood level is some 3.028m below the first habitable floor level (+3.45 mAOD), and therefore the risk is low.

The flood data for the 1 in 1000-year event in both the defended and undefended scenarios identifies flood levels of between 1.002m and 2.715m, with a velocity of between 0.073m/s and 0.571m/s which equates to a hazard rating of a danger for most. Under this scenario, the predicted flood level is 0.75m below the first habitable floor level (+3.45 mAOD). Therefore, the risk is low.

5.4 Historic Flooding

The FRA Wales Map also indicates any recorded flood events held for an area, accounting for records held by 'NRW, its predecessors and other Risk Management Authorities' (NRW, 2020). As shown in Appendix B, these records do not indicate any historic flooding at 10 Clarence Place. No further historic flood events are shown in the Newport Flood Risk Management Plan, with the closest flooding incident to the site noted in the management plan corresponding to a fire service record of a flood event at the western end of Grafton Road to the south of the site (Cripps, 2015).

5.5 Flooding from Sewers

Given the well-developed, urban nature of the land surrounding the redevelopment site, it can be expected that public sewers are located beneath Clarence Place. Any flooding from these sewers should be contained by the carriageway and carried within the carriageway away from the site. Therefore, the proposed risk to the development from flooding from sewers is considered low.

5.6 Flooding from Surface Water and Small Watercourses

The FRA Wales Map indicates the flood risk to an area of flooding from surface water and small watercourses. The surface water and small watercourse flood risk to the proposed site is indicated in Appendix C. This shows both the building itself and much of the surrounding area to lie outside of an area classified as being at risk of flooding from surface water and small watercourses, with a small strip along the pavement to Clarence Place and much of the adjacent car parking to the southwest of the building classified as low risk. Given the city centre location of the site, it can be assumed that this risk comes from surface water flooding. However, given its classification as low risk and the likely presence of existing positive drainage serving these areas, the risk to the building is considered low.

5.7 Flooding from Reservoirs, Canals and Artificial Sources

The flood risk to the proposed development site from reservoir flooding, as indicated by the Flood Map for Planning, is included in Appendix A. This shows that the site is located in an area subject to flood risk from reservoir flooding.

The site is not situated in the vicinity of any canals, and no other artificial sources of flooding are currently known.

5.8 Overall Flood Risk

The proposed refurbishment site has been demonstrated to be at low risk of flooding from canals, surface water, small watercourses and sewers and no historic flood events are recorded at the site. However, the refurbishment site has been shown to be located within Flood Zone 3 defended, whilst

extensive flood defences along the River Usk help to reduce the vulnerability of the site, it is still noted as being at low risk of flooding from the sea and as at risk of flooding from reservoirs. Given the Flood Zone classification of the site, further justification and assessment of flood consequences is required. This will be completed in Section 5.0.

6.0 Flood Zone 3 Suitability Assessment

6.1 Acceptability of Flood Consequence

Since the proposed refurbishment site is located within Flood Zone 3 defended, it is necessary to assess the acceptability of the flood consequence and justify the location of the development, as explained in Section 11 of TAN 15 (see Section 3.2 above).

As this application relates to the conversion of an existing building, the location of the development cannot be moved to a lower flood risk area. At present, the building has fallen into disuse, and a lack of maintenance is resulting in the building becoming increasingly dilapidated, with the rear yard now overgrown and littered with refuse and needles. As outlined in Section 11 of TAN 15, it is necessary to balance the flood risk of the site with the negative social and economic consequences already present from being abandoned. It is therefore considered that the refurbishment of the existing building is justified providing the flood consequences are adequately addressed.

6.2 Flood Defences

As indicated in Appendix B, the site is afforded some protection by the extensive flood defences installed along the River Usk as it passes through Newport.

The Severn Estuary Shoreline Management Plan 2 (SMP2)¹ was approved in February 2017. Part B of the SMP2 provides the SMP2 Policy Statements for the themed areas with the SMP which set out the preferred policy options for each Policy Unit and describe the impact of preferred policies on the features of the Policy Unit. The Policy Statement have been divided into individual sixteen theme areas (based on easily recognizable settlements, regions, towns and cities around the Estuary). The site lies in the Newport and the River Usk Theme Area and is primarily associated with Policy Unit NEW 4. The policy is to Hold the Line (HTL) of current defended areas. This covers the short-medium- and long-term period, to 2105 (82-yrs) from current date.

The HLT policy is to:

“Reconstructed defences should be maintained. Actions should not impact on CFMP policy - take actions to reduce flood risk – see Section 3.4 SMP2-CFMP interactions). HTL will manage the risk of impacts from flooding residential, commercial and industrial assets in this and linked Policy Units (NEW5, CALD 1).

HTL does not guarantee funding to build or maintain current or future defences or to counter sea level rise.”

¹ <https://severnestuarycoastalgroup.org.uk/shoreline-management-plan/smp2-action-plan/>

Given the highly central nature of the site, it can be expected that these flood defences will therefore be maintained into the future, with further extensions to the flood defences along this section of the River Usk proposed.

However, given its location on the flood plain, there will always be a flood risk to the refurbishment site, especially when considering the future impacts of climate change. It is therefore important that the refurbishment accounts for this and is designed to mitigate the impacts of flooding where possible.

6.3 Assessing Flooding Consequences

Whilst the conversion of an existing building in this area is justified, it is necessary to ensure that the consequences of the development flooding are acceptable.

The reestablishment of the restaurant on the ground floor does not constitute a change of use and therefore this element remains a less vulnerable and focus should be on

- Ensuring all occupiers of the building are aware of the flood risk.
- Displaying clear escape/ evacuation routes throughout the premises ; and
- The building should be designed in accordance with the document 'Communities and Local Government – Improving the Flood Performance of New Buildings, Flood Resilient Construction'

The development will provide a hostel on the upper levels. This development type is classified as being highly vulnerable development types by Tan 15. Whilst the more vulnerable development will be located on the higher levels of the property, it is necessary to take further steps to minimise the risk to occupiers. These include, but are not limited to,

- Ensuring all occupiers of the building are aware of the flood risk.
- Displaying clear escape/ evacuation routes throughout the premises;
- The development of a flood emergency plan to be circulated to all residents;
- Ensuring all building occupants are signed up to receive flood warnings from NRW; and
- The building should be designed in accordance with the document 'Communities and Local Government – Improving the Flood Performance of New Buildings, Flood Resilient Construction'.

As this is an existing building, the flood consequences to surrounding areas of refurbishing 10 Clarence Place are considered negligible as no additional flood storage areas will be built upon.

6.4 Access and Egress

Architects Plans show the restaurant and the hostel to be served by separate access, both off Clarence Place which is located within flood zone 3 however is subject to flood defences along the river Usk embankment which reduces the overall flood risk of the access.

The mechanism of flooding has a tidal component and is therefore a longer duration and less 'flashy' event. The hazard mapping needs to be taken into context with the development of the flood event. As such whilst the data identifies a hazard rating of danger for most in the more extreme storm events it is only like to occur at the peak of an event, and it will build up to this over a period of time allowing time to evacuate if residents deem it necessary.

The development should also be signed up to the NRW flood warning service to give advanced notice of potential flooding events.

7.0 Evacuation Plan

7.1 End User Obligations

Employers and owners with premises in areas of flood risk have a duty under the Health and Safety at Work etc Act 1974 to ensure, as far as is reasonably practical, that their premises are maintained in such a way that employees and people using their premises can carry out their work without endangering their own health and safety or the health and safety of others. In some circumstances, this may require them to establish within the health and safety document suitable emergency procedures for any risks to their employees and other persons on their premises, including flooding.

Any owner / user of a property within an area of flood risk should be aware of the degree of risk and its extent and take appropriate action in the event of flood warnings and emergency procedures.

It will be required to produce a Flood Evacuation Plan to ensure the safety of users and safe egress from the site to a location of safe refuge in the event of flooding.

7.2 Flood and Warnings

The development site currently lies within the Usk Estuary Flood Alert and Warning Area and occupants and property owners receives NRW flood alerts and warnings. The site and relevant warning area is shown in Figure 5 below.



Figure 5 – NRW Flood Alert and Warning Area for Usk Estuary

However, it is recommended that all end users of the proposed units register to the NRW Flood Warning Scheme at:

<https://naturalresources.wales/flooding/sign-up-to-receive-flood-warnings/?lang=en>

NRW list three types of flood warnings: Flood Alert, Flood Warning and Severe Flood Warning. These will help to prepare for flooding and take necessary actions as follows:

<i>Warning</i>	<i>Message</i>	<i>Timing</i>	<i>Action</i>
 FLOOD ALERT	Flooding is possible Be prepared	Two hours to two days in advance of flooding	▪ Be prepared to act on your flood plan ▪ Prepare a flood kit of essential items ▪ Monitor local water levels and the flood forecast on NRW website
 FLOOD WARNING	Flooding is expected Immediate action required	Half an hour to one day in advance of flooding	▪ Move staff, stock and valuables to a safe place ▪ Move any critical equipment and information to a safe location ▪ Turn off gas, electricity and water supplies if safe to do so ▪ Put flood protection equipment in place ▪ Ensure the flood kit is prepared and all items are fully charged/working
 SEVERE FLOOD WARNING	Severe flooding DANGER TO LIFE	When flooding poses a significant threat to life	▪ Be ready should you need to evacuate from the property ▪ Co-operate with the emergency services ▪ Call 999 if you are in immediate danger
Warning Removed	No further flooding is currently expected for your area	Issued when a flood warning is no longer in force	▪ Flood water may still be around and may be contaminated ▪ If you've been flooded, ring your insurance company as soon as possible

7.3 Safe Refuge

Current Architects Plans show the proposed finished floor levels for the buildings. The lowest habitable finished floor height for the HMO is stated as +3.450 m above ground floor level (estimated from the architects' proposals to be 150mm above external ground level AAD. The assessment of the greatest flood depth (above existing ground level on Clarence Place) from NRW modelled scenarios

is that for the defended 200 year plus climate change 2115 event. This identifies a maximum flood depth of 2.445 at the location of the development.

In respect to the Hostel, safe refuge is therefore possible at first floor level and above.

In respect to the Restaurant, the ground floor area would be at risk of flooding to above ceiling level in the worst-case scenario. Therefore, safe refuge is not viable for this part of the development. A flood plan should therefore be focused on safe egress.

7.4 Safe Egress

The safest refuge point for the future tenants will be to remain within the building as the residential units are to be located above the flood level for current and future storm events. They will be advised to remain in the units until the water recedes and there is a safe egress / access from the building.

If this is not an option, then the safest exit would be onto Clarence Place which records the lowest flood levels / velocities during the various storm events and to head west and across Newport Bridge towards and then towards Queensway. Figure 6 below shows the access route, away from flooding.

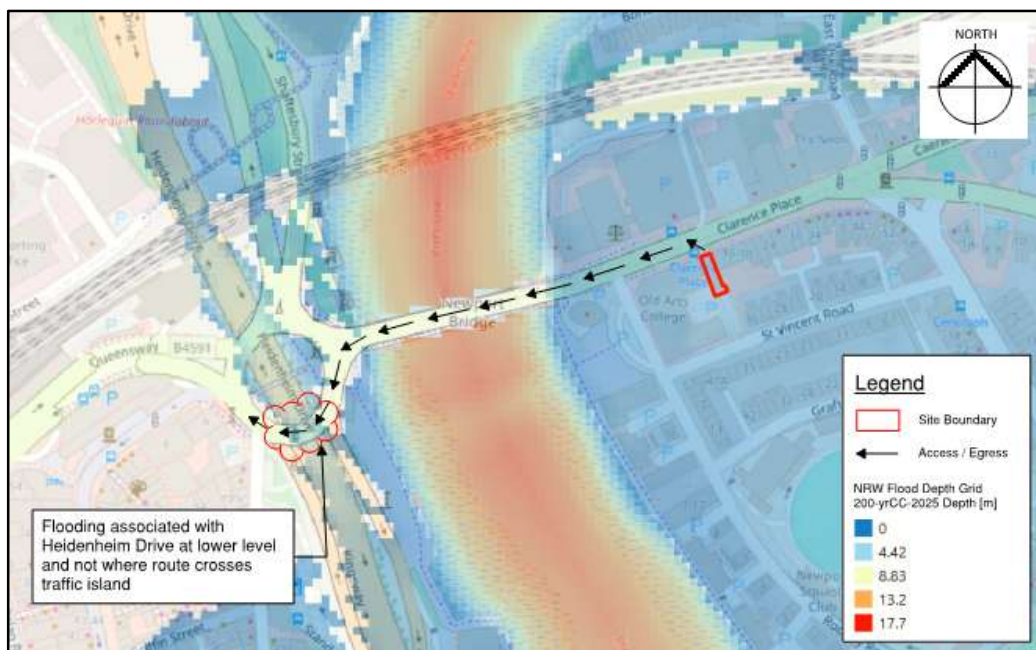


Figure 6 – NRW Flood Alert and Warning Area for Usk Estuary

7.5 Business Flood Plan

It will also be necessary for the landowner / developer to prepare a Business Flood Plan. The Flood Plan is a document that outlines how the business will respond to a flood. A written plan can make information easy to access during a flood, easy to communicate to staff, and easy to understand.

The Business Flood Plan should include the following:

- List of important contacts, including Flood line, building services, suppliers and evacuation contacts for staff.
- A map showing locations of key property, protective materials and service shut-off points.
- Basic strategies for protecting property, preventing business disruption and assisting recovery.
- Checklists of procedures that can be quickly accessed by staff during a flood.

If a flood is imminent, the main priority is to make sure that staff are safe. However, there may be other actions that can be taken to prepare the buildings and their contents to minimise damage and post-flood repair and restoration costs.

8.0 Conclusions

In consideration of the flood risk assessment for the site, the following conclusions and recommendations are made.

It is concluded that:

- The proposed refurbishment site is located within Flood Zone 3, with the main source of flooding being tidal.
- The Shoreline Management Plan (SMP2) confirms the strategy for the Policy Unit, NEW 4, where the development is proposed is to Hold the Line (HTL) of current defended areas. This covers the short- medium- and long-term period, to 2105 (82-yrs) from current date. It can therefore be concluded that the development will be protected over its lifetime.
- The site benefits from extensive flood defences along the River Usk which reduce the flood risk to the site. The flood defences are maintained by an approved water authority therefore it can be concluded that defence will likely to be improved in line with sea level rises and climate change which will reduce the risk of future overturning / breaching events occurring. Reference is also made within the SMP2 in this regard *"The Key Policy Drivers in this area are: International nature conservation sites – Severn Estuary SAC, SPA and Ramsar, River Usk SAC; Critical infrastructure – railway line, electricity substations, docks, M4 and Residential developments – Newport and the outskirts of Newport"*
- This assessment relates to the refurbishment of an existing building; therefore, the location of the development is fixed. Refurbishment is justified due to the negative economic and social consequences of allowing existing city centre, historic buildings such as this to fall into a state of disrepair.
- Records indicate the site has not been subject to historic flooding.
- The assessment of flood risk from sewers, surface water and small watercourses, reservoirs, canals and artificial sources conclude the site to be a low risk from these sources.
- The undefended 2115, 1:200 year +CC flood risk depths is between 1.45mAOD and 1.82mAOD and the first flood level is +3.45m AOD therefore the maximum flood level is 1m below the first-floor level; residual risk is therefore low, subject to the management measures outlined.
- The defended 2115, 1:200 year +CC flood risk depths is between 0.45mAOD and 0.8mAOD and the first flood level is +3.45m AOD therefore the maximum flood level is 2.54m below the first-floor level; residual risk is therefore low, subject to the management measures outlined.

It is recommended that:

- The development be designed accounting for the likelihood it will flood, and adequate steps must be taken to ensure occupiers are both aware of the risk and are adequately prepared for flood events.

-
- Flood resistance and resilience construction should be considered such that should a flood event occur, the building may be brought back into serviceability within a shorter period than could be expected if these techniques are not considered.
 - As the site is within a flood zone, a flood plan is required to ensure the safety of all tenants of the building. This should be conditioned as in place prior to first occupation of the building.
 - In respect to the Hostel, safe refuge is achievable at first floor level, and it is recommended that this should be considered should extreme flooding occur.
 - In respect to the ground floor unit 3 it is recommended that the focus of a flood management plan is safe evacuation of staff and patrons.
 - The owners and occupiers should individually sign up for NRW Flood Warnings

9.0 References

British Geological Survey (BGS), n.d. *Geology of Britain viewer (classic)* [Online]. BGS. Available from: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> [Accessed 2nd July 2021].

Cripps, R., 2015. *Newport Local Flood Risk Management Flood Risk Management Plan* [Online]. ARUP. Available from: <https://www.newport.gov.uk/documents/Council-and-Democracy/Consultations/Newport-Flood-Risk-Management-Plan-Report-Issue-for-Consultation.pdf> [Accessed 2nd July 2021].

Natural Resources Wales (NRW), 2020. *Recorded Flood Extents* [Online]. NRW. Available from: <https://naturalresources.wales/flooding/managing-flood-risk/flood-risk-map-guidance/recorded-flood-extents/?lang=en> [Accessed: 2nd July 2021].

Welsh Assembly Government, 2025. *Planning Policy Wales Technical Advice Note 15: Development and Flood Risk* [Online]. National Assembly for Wales. Available from: [Technical Advice Note 15: Development, flooding and coastal erosion](#) [Accessed 10th September 2025].

Welsh Government, 2019. *Sustainable Drainage (SuDS) Statutory Guidance* [Online]. Welsh Government. Available from: <https://gov.wales/sites/default/files/publications/2019-06/statutory-guidance.pdf> [Accessed 8th July 2021]

Appendix

Appendix A – Architect's Layout

SCHEDULE OF ACCOMMODATION

GROUND FLOOR

GIFA = 151.8m²

Circulation - 5.8m²

Class A3 Unit - 108m²

Back of House - 35.8m²

60 Covers

FIRST FLOOR

GIFA = 49.7m²

Circulation - 6.97m²

Meeting Room - 2.85m²

Communal Area - 9.60m²

Room 1 - 8.65m²

Room 2 - 13.5m²

SECOND FLOOR

GIFA = 49.2m²

Circulation - 9.3m²

Room 3 - 9.2m²

Room 4 - 9.3m²

Room 5 - 10.3m²

Room 6 - 8.4m²

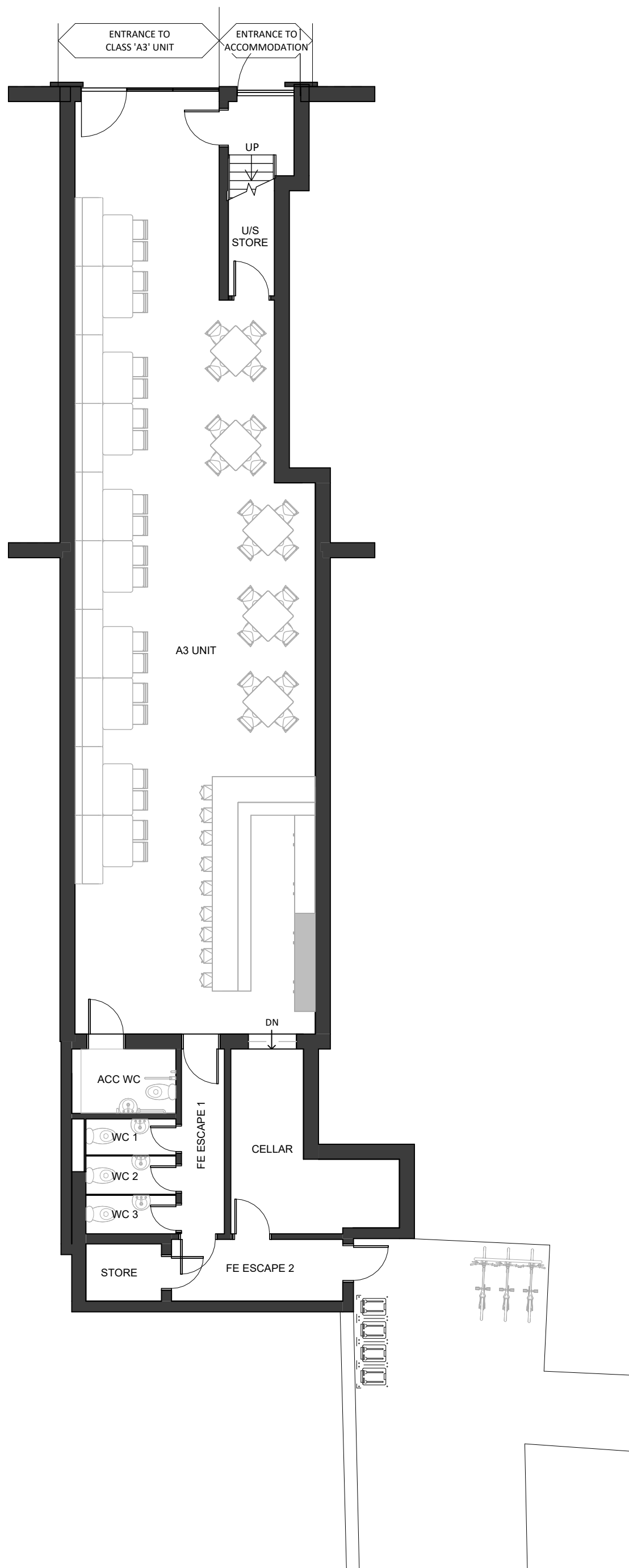
THIRD FLOOR

GIFA = 28.9m²

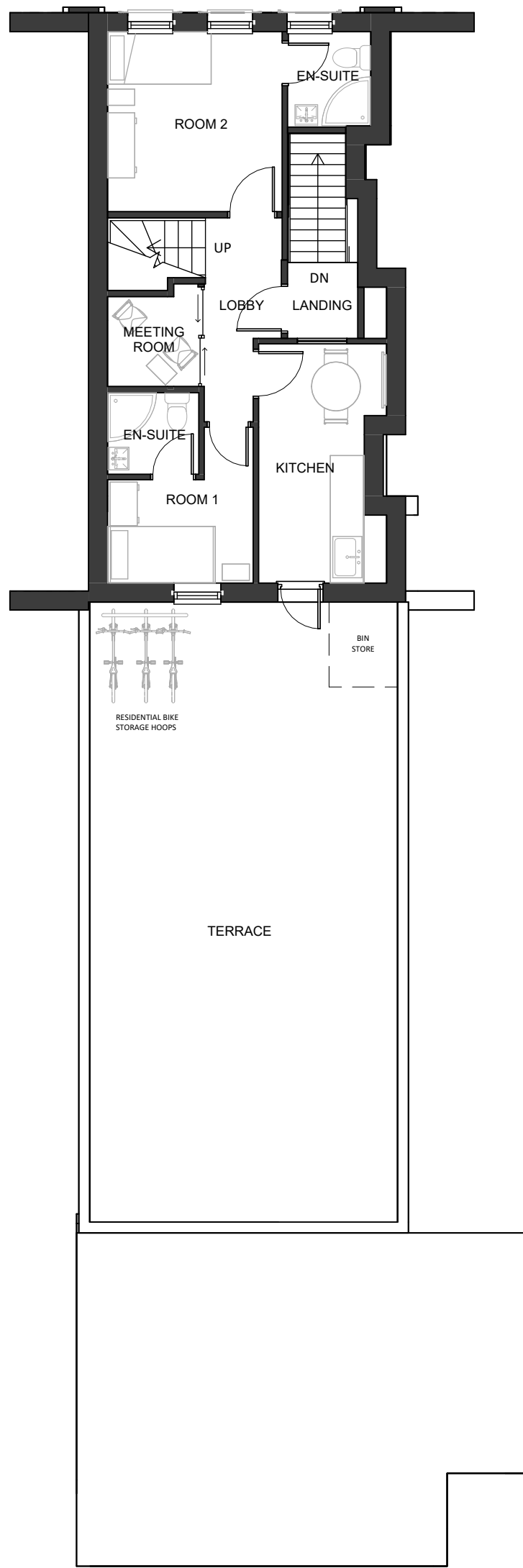
Circulation - 4.8m²

Room 7 - 11m²

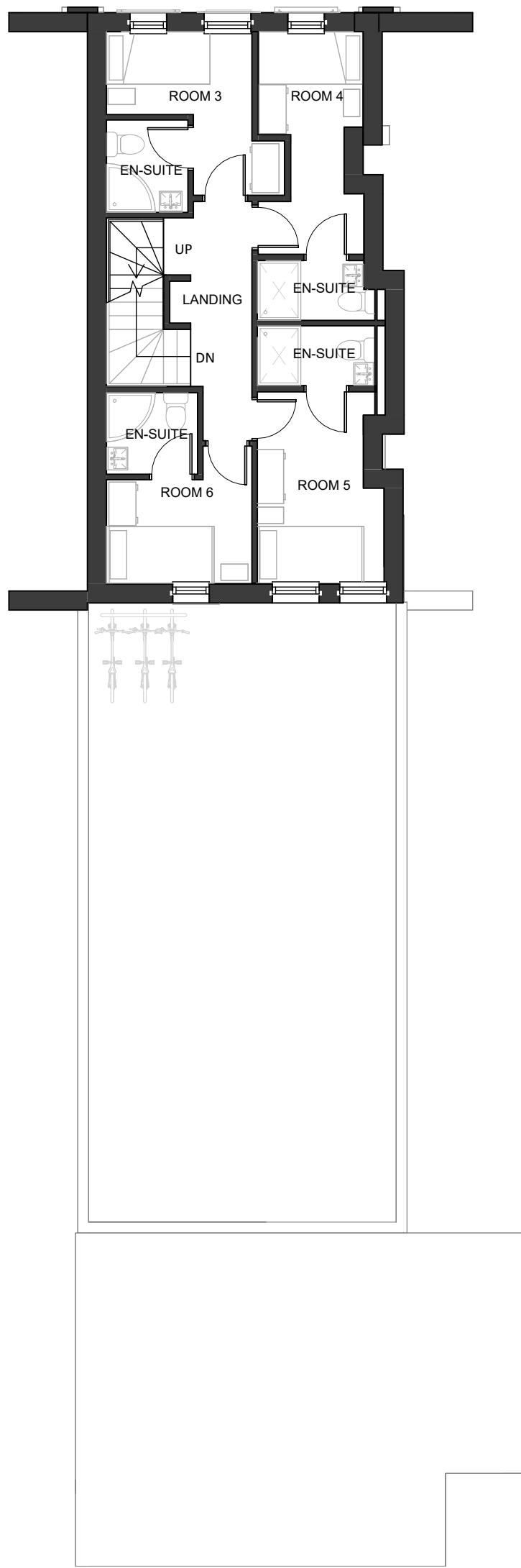
Room 8 - 11m²



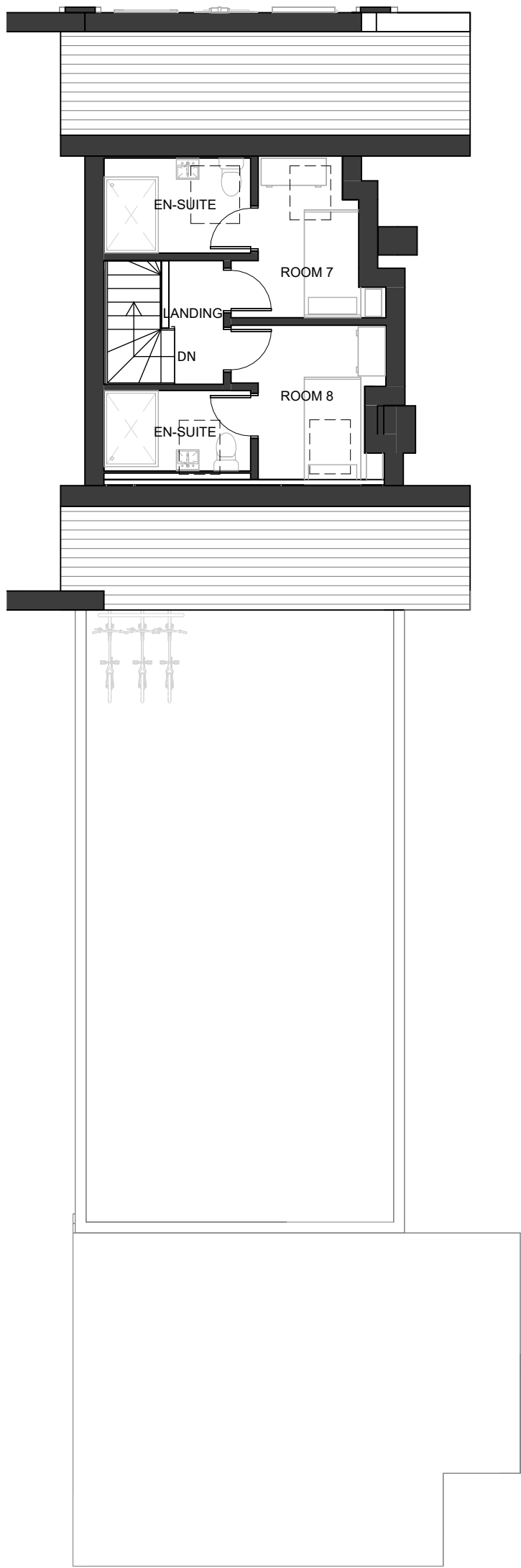
① Proposed Ground Floor Plan
1 : 100



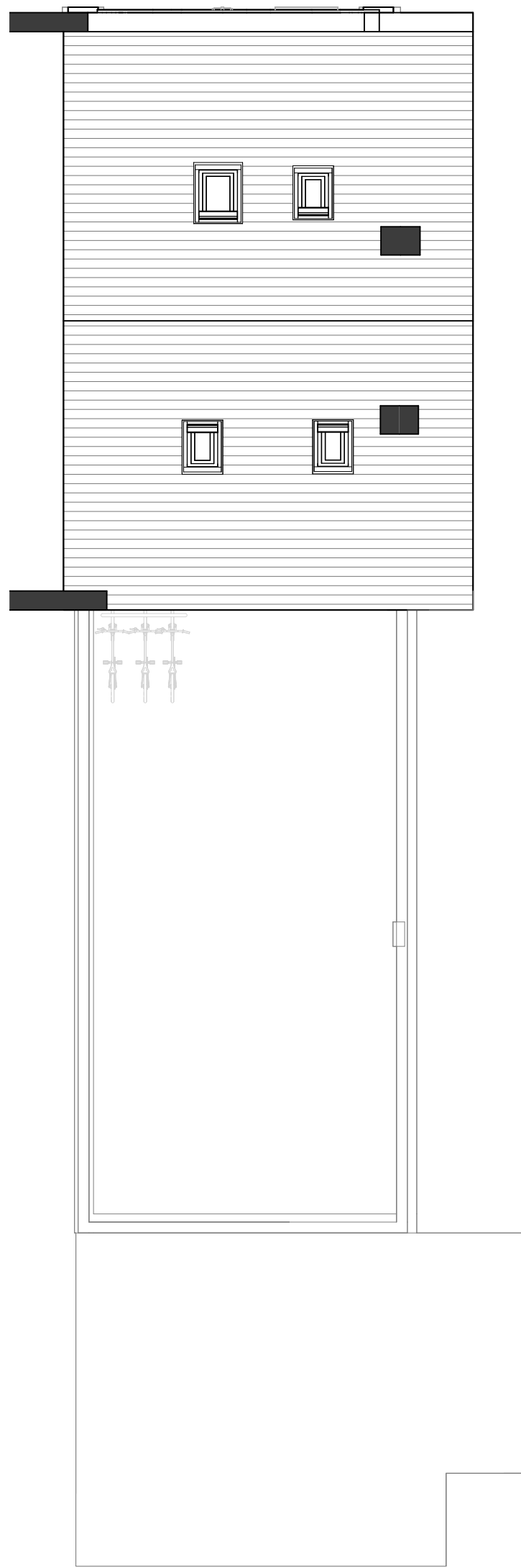
② Proposed First Floor Plan
1 : 100



③ Proposed Second Floor Plan
1 : 100



④ Proposed Third Floor Plan
1 : 100



⑤ Proposed Roof Plan
1 : 100

REV	DATE	DESCRIPTION	BY
CLIENT			DRAWN
Mr I Chaudhary			AA
CHECKED			AJ

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1 Gold Tops, Newport NP20 4PG
www.sustainablestudio.co.uk
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PROJECT
10 Clarence Place
Newport
NP19 0AE

DRAWING TITLE
Floorplans - As Proposed

DRAWING STATUS	SCALE
PL : PLANNING	1 : 100 @ A1
NUMBER	REVISION
PL-004	

Appendix B – Flood Map for planning

Flood Map for Planning - Basic
Flooding Rivers and Sea

Legend

TAN15 Defended Zones



Rivers



Sea



Rivers and Sea

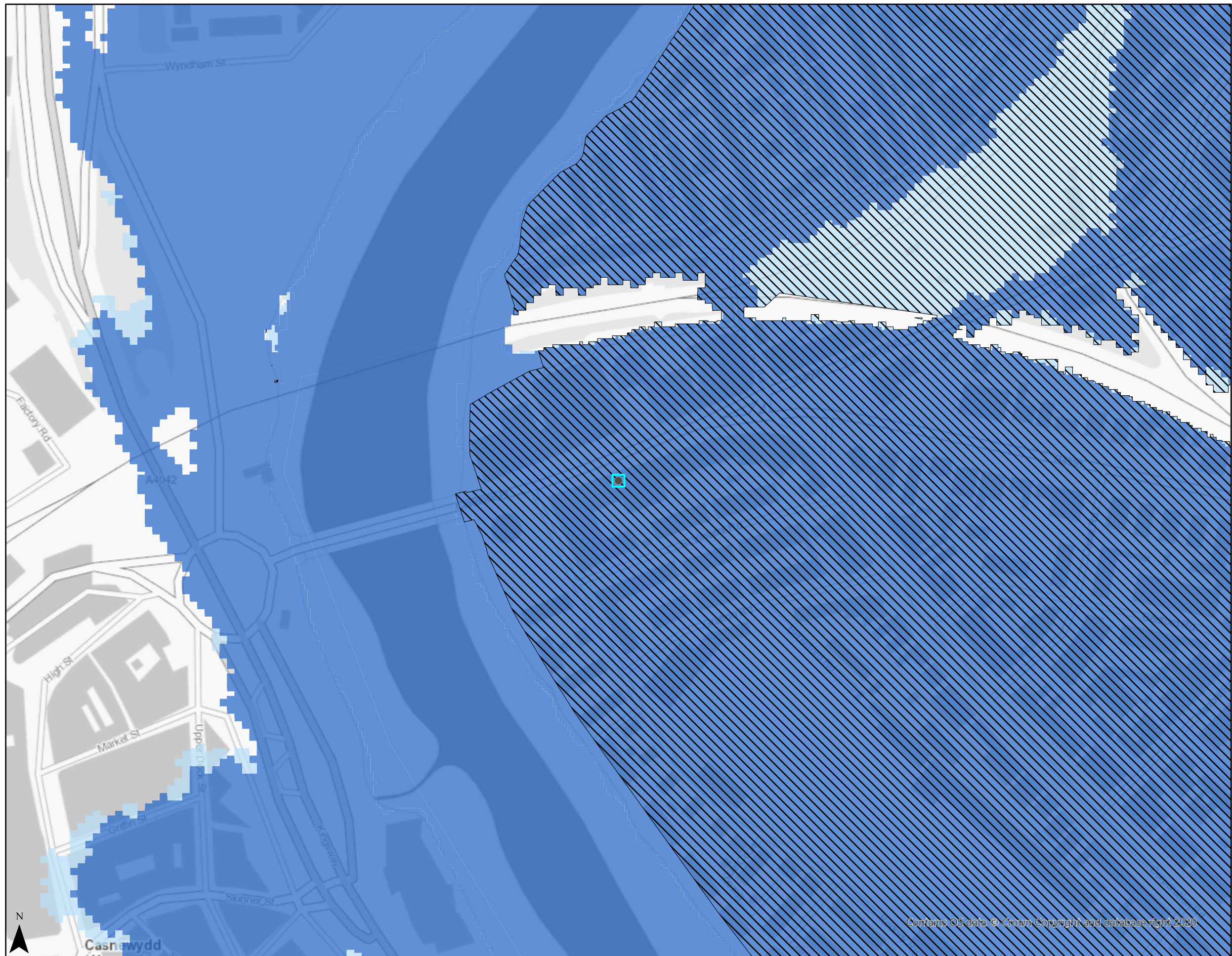
Rivers and Sea



Flood Zone 3



Flood Zone 2



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Scale at A3: 1:2,500

Date: 09/09/2025

0.1 0.05 0 0.1
km
British National Grid

Disclaimer

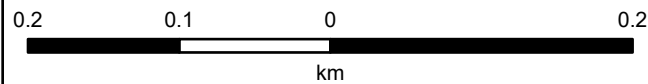
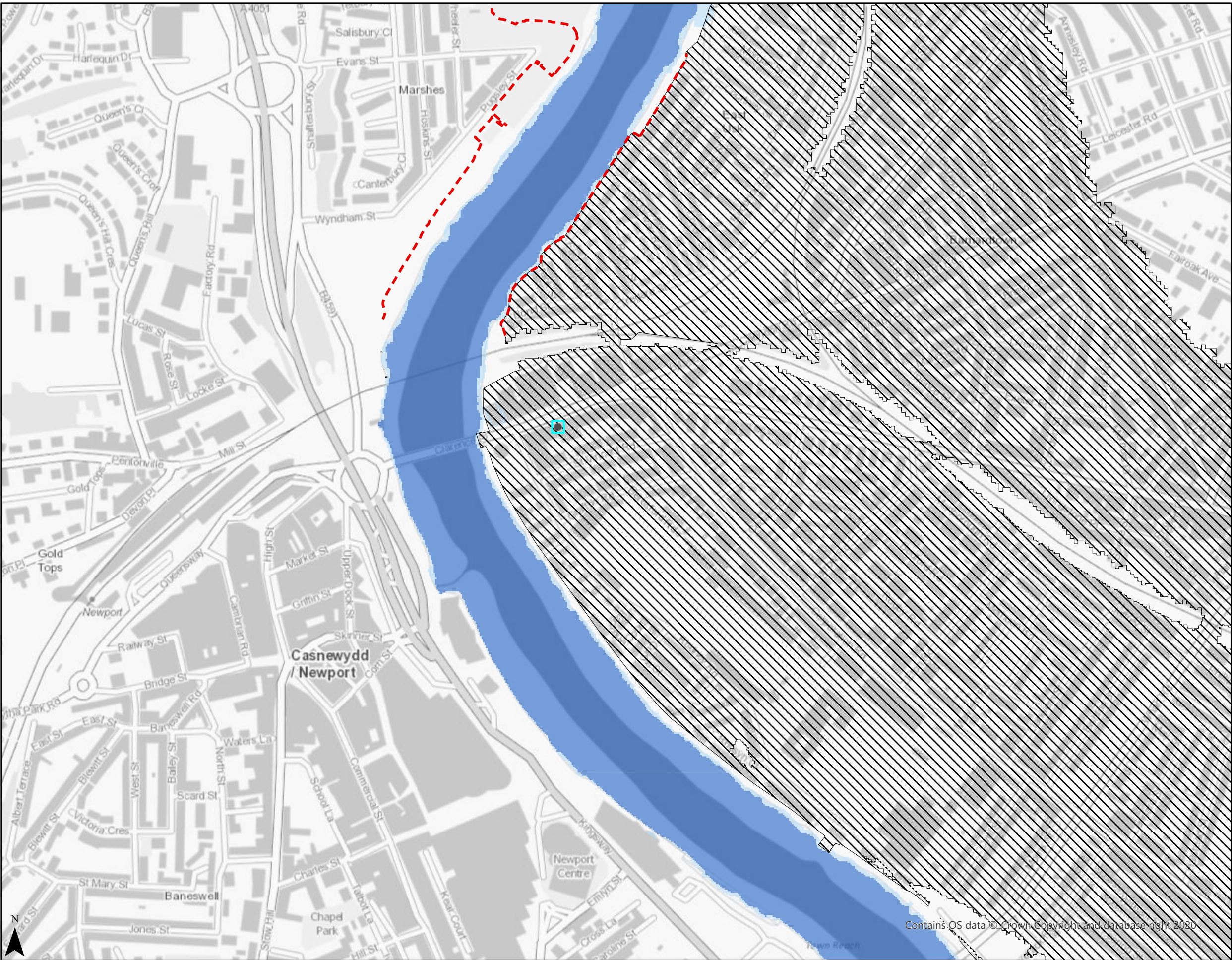
<https://naturalresources.wales/flooding/disclaimer-for-our-flood-and-coastal-erosion-risk-maps/?lang=en>

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Flood Map for Planning - Detail
Enter title (max 35 characters)

Legend

- Flood Defence Locations
- TAN15 Defended Zones
 - Rivers
 - Sea
 - Rivers and Sea
- Rivers
 - Flood Zone 3
 - Flood Zone 2



British National Grid

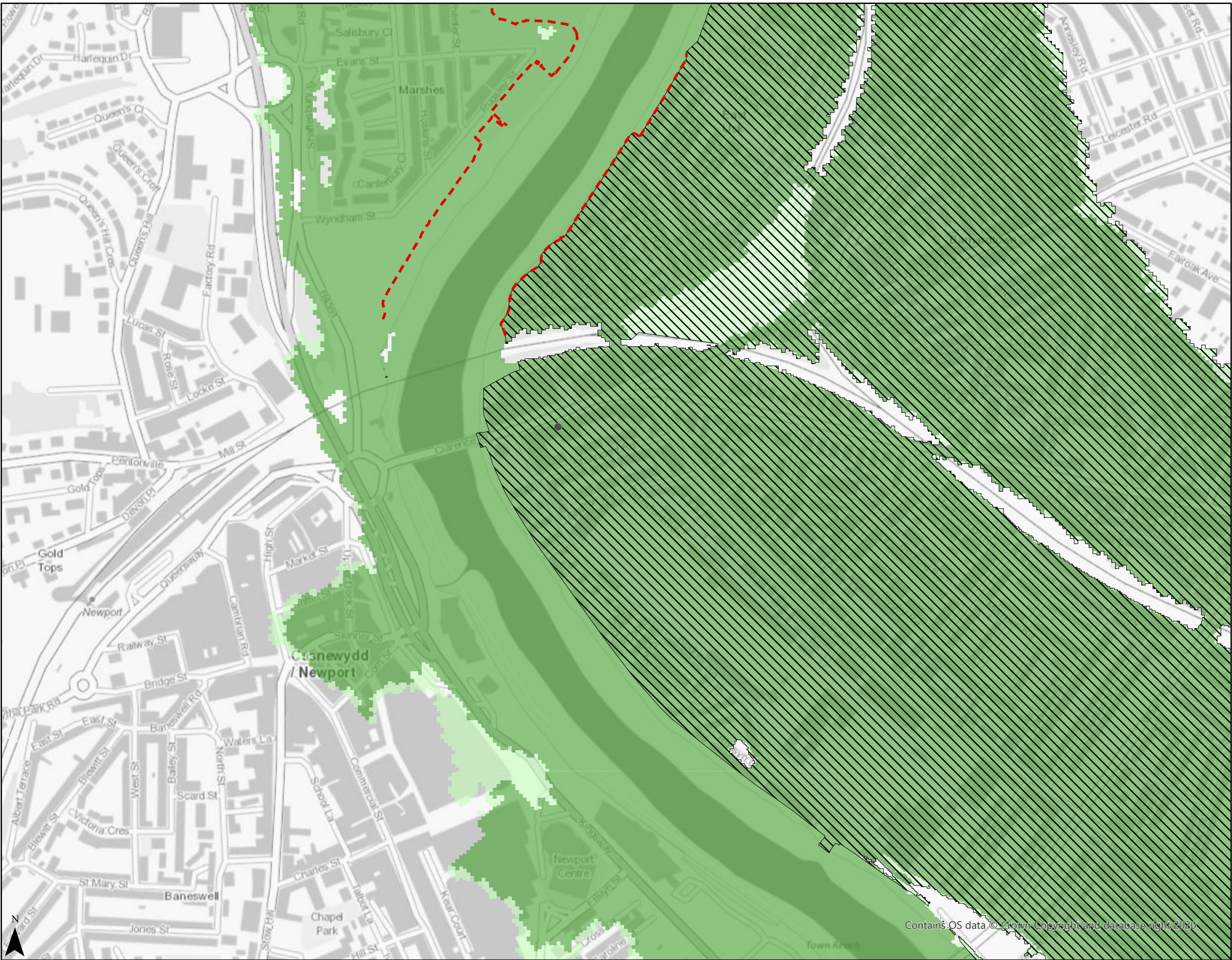
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Flood Map for Planning - Detail
Enter title (max 35 characters)

Legend

- Flood Defence Locations
- TAN15 Defended Zones
- Rivers
- Sea
- Rivers and Sea
- Sea
- Flood Zone 3
- Flood Zone 2



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Scale at A3: 1:5,000

Date: 09/09/2025

Disclaimer

<https://naturalresources.wales/flooding/disclaimer-for-our-flood-and-coastal-erosion-risk-maps/?lang=en>

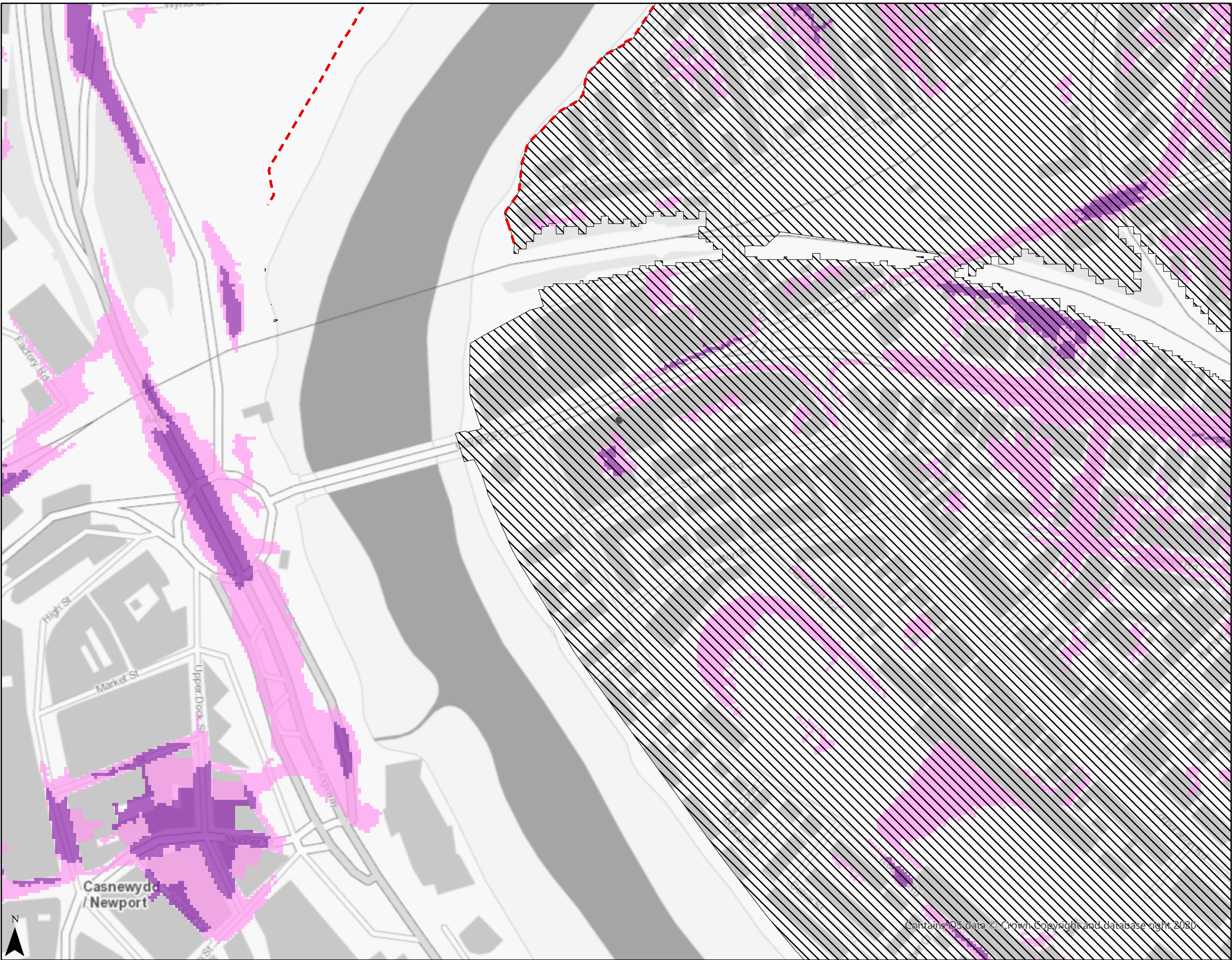
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Flood Map for Planning - Detail
Enter title (max 35 characters)

- Legend
- Flood Defence Locations
 - TAN15 Defended Zones
 - Rivers
 - Sea
 - Rivers and Sea
 - Surface Water and Small Watercourses
 - Flood Zone 3
 - Flood Zone 2

Scale at A3: 1:2,500

Date: 09/09/2025



0.1 0.05 0 0.1
km
British National Grid

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Appendix C – Historic Flood Events

Flood Risk Assessment Wales Map - Flood Defences

Allwedd / Map Key

 Recorded Flood Extents

Graddfa / Scale at A3 1: 5,000

Dyddiad / Date
02/07/2021



0.3 0 0.13 0.3
British_National_Grid Kilometers

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