



Flood Response Plan for the Coleg Gwent, Newport Knowledge Quarter

Final

V3.0

Prepared for
WEPCo Ltd

Date
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This report describes work commissioned by WEPco Ltd by an instruction dated (27th May 2025). The Client's representative for the contract was Mweneni Nashilongo of WEPco Ltd. Suzanne Tulloch of JBA Consulting carried out this work.

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Flood Response Summary

The next four pages of the Flood Response Summary are to be printed and made available in communal areas. This summary must be printed and made available in all induction/welcome materials for new staff and students and any other persons who are or will be on site.

This summary must be read alongside the following documents:

Appendix A - Purpose of Document

Appendix B - Flood Risk

Appendix C - Flood Response Plan Background

Person(s) responsible for the Plan	Site Manager (or delegate)
Person(s) responsible for activating the evacuation procedure	Site Manager (or delegate)
Site name	Coleg Gwent, Newport Knowledge Quarter, Kingsway, Newport NP20 1UH
Site address	Emlyn Street
Proposed site use	Educational Facility
Nearest hospital	Royal Gwent Hospital

Emergency Contact Numbers

Organisation	Contact Number
Natural Resources Wales	0345 988 1188
Gwent Police / - Heddlu Gwent	Emergency: 999 Non-emergency: 101
South Wales Fire and Rescue Service	Emergency: 999
Newport City Council	Urgent but not life-threatening: 01633 656656 Mon - Fri 9am - 5pm

Organisation	Contact Number
Welsh Water / Dwr Cymru	0800 052 0130
Electrical emergency number	105
Gas emergency number (24hr)	0800 111 999
National Grid	0800 6783 105

1 Phase One: Be Aware and Prepare

The Site Manager is responsible for monitoring triggers and enacting the responses.

1.1 Phase One Trigger Levels

Phase One of the Plan will be enacted as a result of any of the following triggers being met:

- Natural Resources Wales (NRW) issues a Flood Alert for Usk Estuary
- The Met Office issues and Amber Weather Warning for wind in the area.
- Reports and forecasts on local radio, TV stations and/or Met Office websites indicating potential for high winds, heavy rainfall and/or stormy conditions.
- Local observations that raise concerns of the potential of flooding.

1.2 Phase One Response Actions

The following response steps are in priority order.

1. Make all staff, students and visitors on-site aware that the site is on standby and to be prepared for the possibility of evacuation.
2. Be prepared to activate Business Continuity procedures / the Business Continuity Plan.
3. Inform stakeholders that preparations are being made for flooding.
4. Use communication channels, including online media, to inform off-site staff, students and the general public not to attend the site.
5. Take all appropriate steps to ensure potentially hazardous / polluting materials are safe, secure and away from flood risk areas (or above possible flood levels). If the object cannot be moved, tie / anchor it down.
6. Commence regular monitoring of the site and surrounding roads for signs of flooding.
7. Remain vigilant. Monitor triggers listed in Phase Two: Act and Evacuate and prepare to activate.

2 Phase Two: Act and Evacuate

The Site Manager is responsible for monitoring triggers and enacting the responses. Throughout this phase, if there is any risk to life, then any individual must call 999 and request emergency services. Await their instructions and prioritise them over those listed in the Plan.

2.1 Phase Two Trigger Levels

Phase Two of the Plan will be enacted as a result of any of the following triggers being met:

- NRW issues a Flood Warning for Usk Estuary at Uskmouth and Old Town Docks.
- The Met Office issues and Red Weather Warning for wind in the area.
- Observations or reports of flooding on the immediately adjoining roads of Emlyn Street or Usk Way.
- Observations or reports of flooding or potential flooding in the local area from the sea.
- Reports of road closures in the local area due to flooding, notably at Emlyn Street or Usk Way.

2.2 Phase Two Response Actions

The following response steps are in priority order. In any emergency where there is risk to safety or life, call 999.

1. Activate Business Continuity procedures / the Business Continuity Plan to coordinate closure of the site.
2. Make all staff, students and visitors on-site aware that the site is closing and will be evacuated.
3. Inform stakeholders e.g. Newport City Council that the site is being evacuated.
4. Use appropriate communication channels to inform off-site staff, students and the general public that the site is now closed, and they should not attempt to attend.
5. Instruct all site users to evacuate the site via the evacuation route and continue on to their places of safe refuge (e.g. their home, or the homes of friends or family). Evacuation must be completed 2 hours prior to the Red Severe Weather Warning taking effect.
6. Check the entry logs to ensure everyone has left the building.
7. Conduct a final sweep of the entire building and grounds to visually confirm that no site users remain.
8. Following the closure of the site, turn off the electrics where it is safe to do so, ensure the building is secure and leave site via the evacuation route.
9. If flooding is observed, call Floodline on 0345 988 1188 (24 hour) to report.

3 Evacuation and Safe Refuge

3.1 Evacuation route

Staff and students must be made aware of the evacuation route. This information must be shared with visitors should it be necessary.

The evacuation route is shown in Figure 3-1. Staff, students and visitors should evacuate solely via the main access road out of the campus. Those in vehicles or on bicycles should continue along the road to seek safe refuge at home or with friends or family. Pedestrians should make their way along the pavement of the main access road and continue on to safe refuge through their usual means.

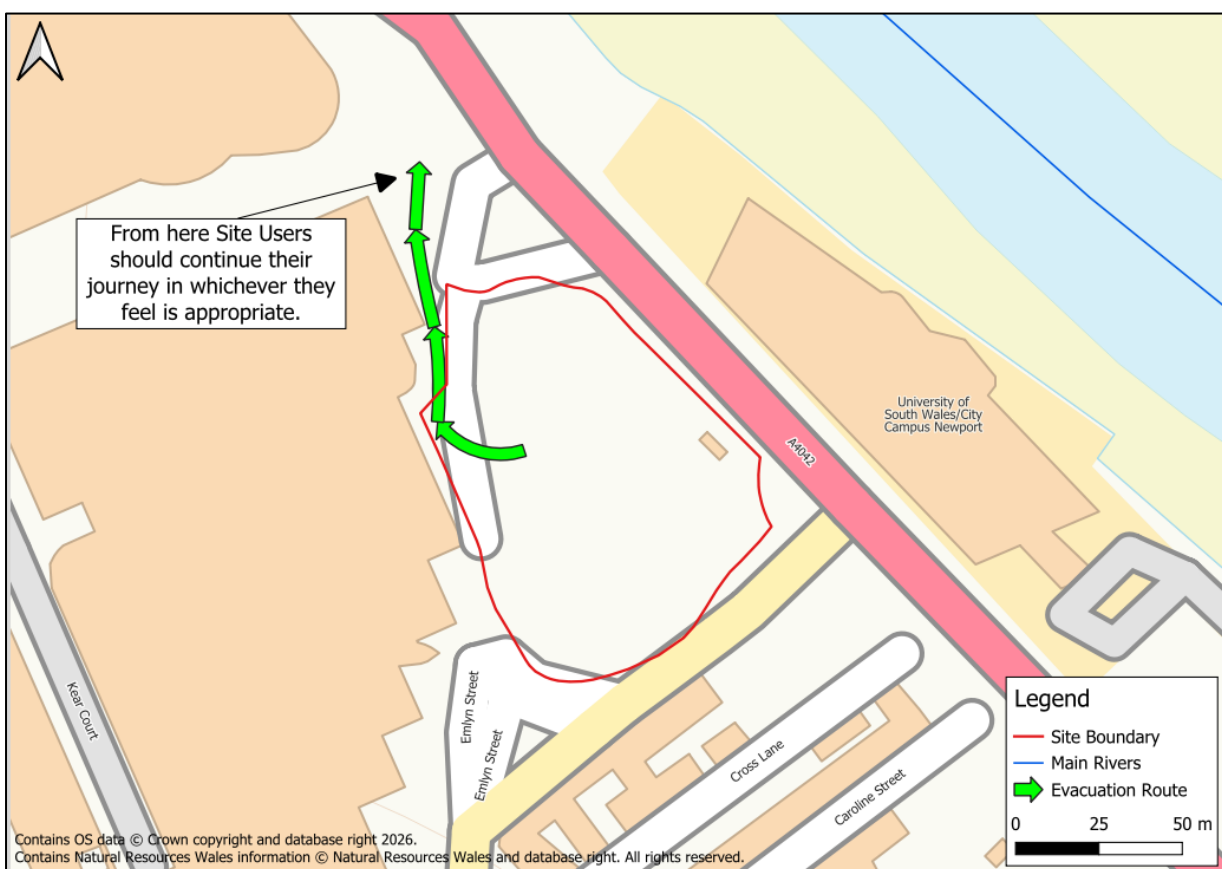


Figure 3-1 - Evacuation Route

3.1.1 Access Road Flooding

The existing access at the west of the site will be the main vehicular entry from the A4042 Usk Way which leads into the west of the college site and a cycle park area.

According to the detailed modelling of the (2100) 0.1% AEP event, there is no risk of flooding to the main access road before the site becomes at risk of flooding. The hazard rating for the access road is medium and therefore presents danger to some. Therefore, in

the event of flooding occurring on the access road, staff and students should take the following actions:

- Do not walk or drive into flood water.
- Contact Newport City Council and inform them that the access road has flooded.

Contact the emergency services if at any point there is a danger to life.

Access routes are modelled not to remain accessible to emergency services vehicles in a (2100) 1% AEP event.

3.2 Warning and Lead Times

NRW operates a Flood Information Service for areas deemed to be at a risk of fluvial or coastal flooding. The Flood Alert and Warning included in this Plan do not cover the actual site location, however the border is approximately 65m from the site and can give a good indication of flooding potential.

Advice for the public on Floodline: 0845 988 1188

Flood Alert: Usk Estuary

Flood Warnings: Usk Estuary at Uskmouth and Old Town Docks

NRW aims to provide between 2 and 12 hours lead time between a Flood Alert being issued and possible flooding occurring and a minimum of 1-2 hours lead time for Flood Warnings on rivers.

Table 3-1 - Flood Alert and Warning Summary

Flood code	What it means
 Flood Alert	Flooding is possible, be prepared
 Flood Warning	Flooding is expected, immediate action is required
 Severe Flood Warning	Severe flooding and danger to life
Warning no longer in force	Warning has been removed in the last 24 hours

3.3 Met Office Weather Warnings

The lead time provided by the Met Office Red Severe Weather Warning should be used by the Site Manager to undertake off-site evacuation if safe to do so. The lead time for a Met Office Weather Warning is around 5 days, but this can vary. All site users and any vehicles must be evacuated from the site 2 hours prior to any Red Severe Weather Warning coming into effect.

A Purpose of Document

A.1 Purpose and Disclaimer

Jeremy Benn Associates Limited (“JBA”) has prepared this Report for the sole use of Coleg Gwent 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 Coleg Gwent for the purposes for which it was originally commissioned and prepared.

No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by JBA. This Report cannot be relied upon by any other party without the prior and express written agreement of JBA.

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.

The methodology adopted and the sources of information used by JBA in providing its services are outlined in this Report. The work described in this Report was undertaken between 17th April and 15th May 2026) and is based on the conditions encountered and the information available during the said period. The scope of this Report and the services are accordingly factually limited by these circumstances.

This Plan is only for the use of Coleg Gwent, Newport Knowledge Quarter, Newport, NP20 1UH. Plans cannot anticipate everything, and as such, this Plan should be used as a guidance document during an incident. Human judgement and discretion are required when applying this Plan to a flooding incident and by balancing the local risk and situational context. The emergency services guidance should always be prioritised over the actions specified in this Plan to protect and preserve life and livelihoods.

This Plan should also be regularly trained and exercised by all relevant staff, and tests should be done with residents or site users. Training should be done at a minimum twice a year to maintain competency in roles and responsibilities. One tabletop exercise should be organised, run, and reviewed yearly, with a full simulation and live test of the Plan once every two years. Gaps and identified lessons are to be recorded, and an effective implementation plan developed to embed those lessons.

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.

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.

A.2 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.

A.3 Accessibility

JBA aims to align with [governmental guidelines on accessible documents](#) and [WGAG 2.2 AA](#) standards, so that most people can read this document without having to employ special adaptation measures. This document is also optimised for use with assistive technology, such as screen reading software.

B Flood Risk

B.1 Fluvial Flood Risk

Natural Resources Wales (NRW) Flood Risk Assessment Wales indicates that the site is at very low risk of flooding from rivers.

B.2 Tidal Flood Risk

B.2.1 Natural Resources Wales Risk of Flooding from the Sea

NRW Risk of Flooding from Rivers and Sea (Figure 3-2) indicates that the site is located primarily on Flood Zone 3 and is therefore at high risk of tidal flooding. This can occur when a storm surge pushes tidal waters up the River Usk causing it to overtop.

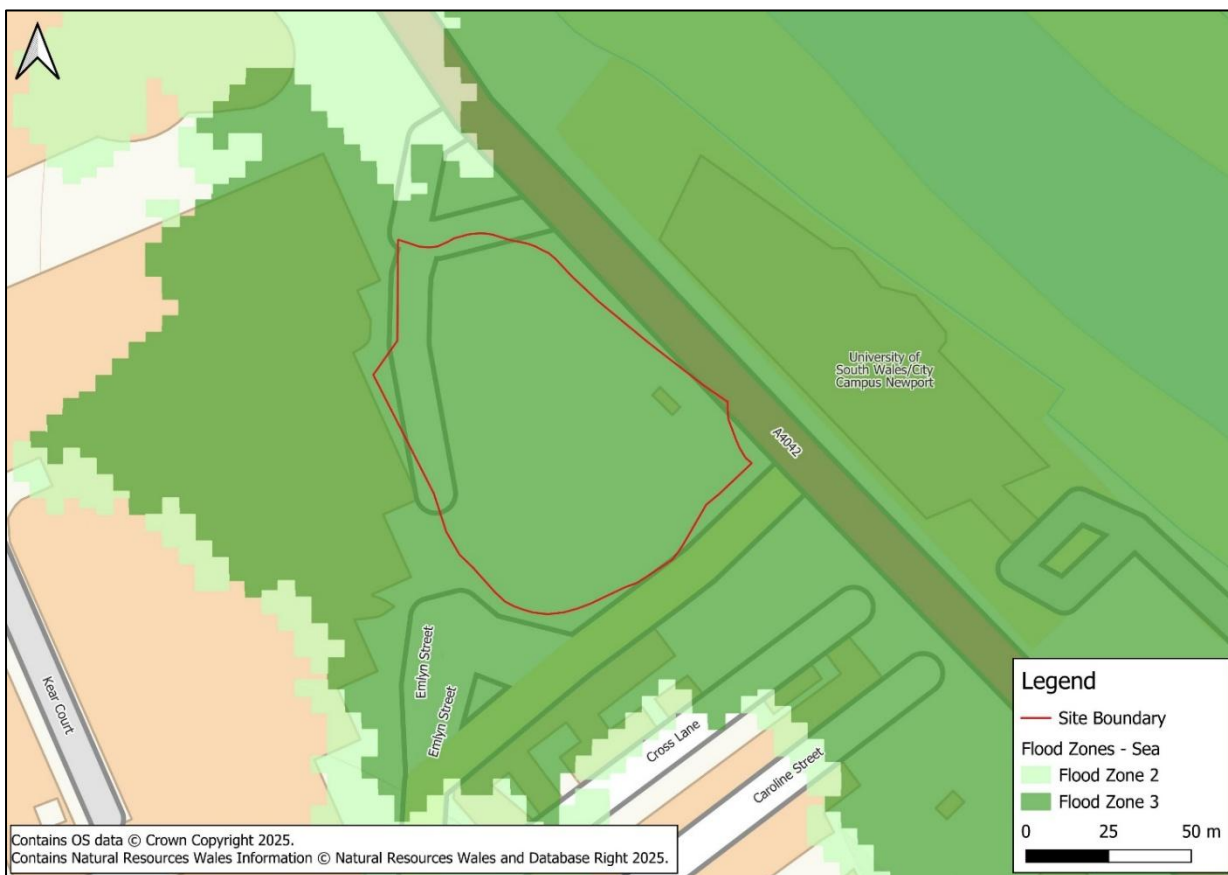


Figure 3-2 - NRW Flood Map for Planning - Flood Risk from the Sea

B.2.2 Detailed Flood Modelling

Detailed hydraulic modelling for the site was completed by JBA Consulting in the Flood Consequences Assessment (FCA) update (2026). The baseline (2025) post development scenario is shown in Figure 3-3. As this development has an expected lifespan of 75 years,

the model was run for the year 2100 to incorporate climate change uplift in both the 0.5% AEP (200-year) and 0.1% (1000-year) AEP events.

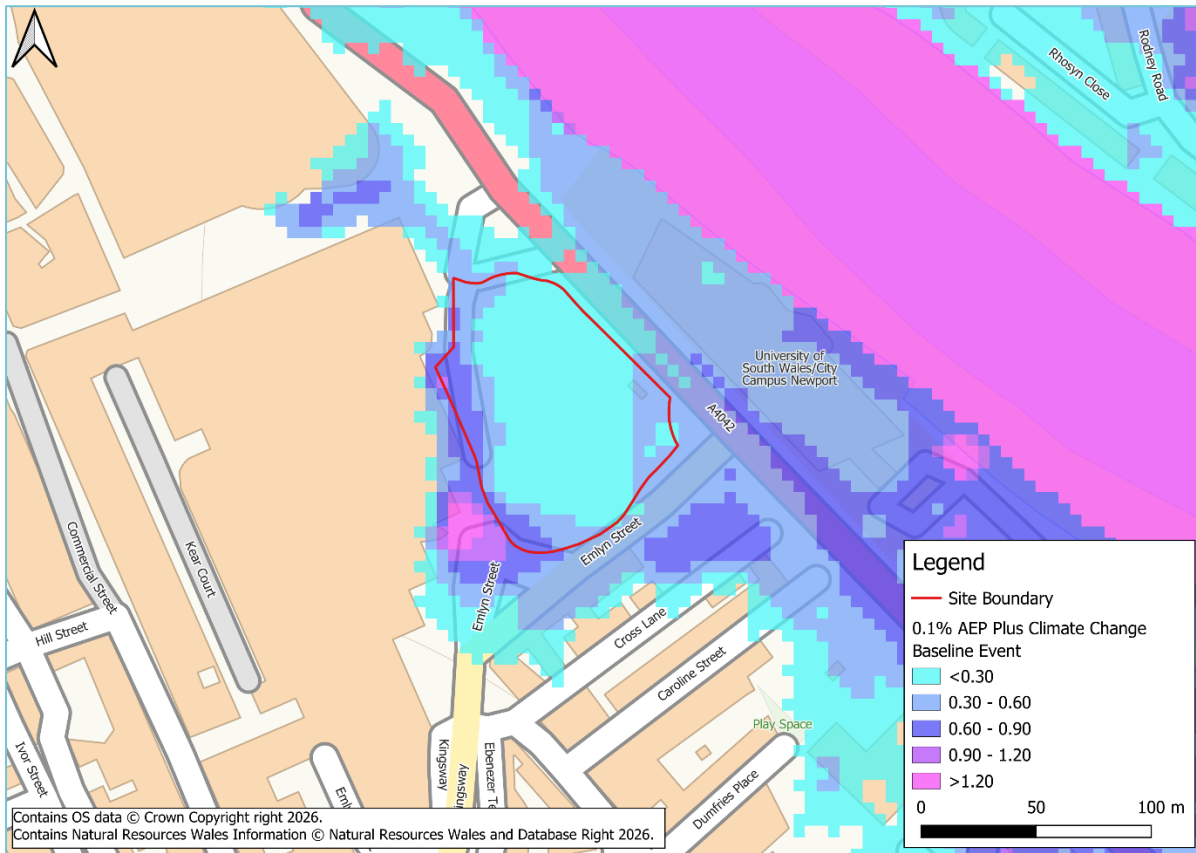


Figure 3-3 - Baseline (2025) 0.1% AEP Event - Post Development Scenario

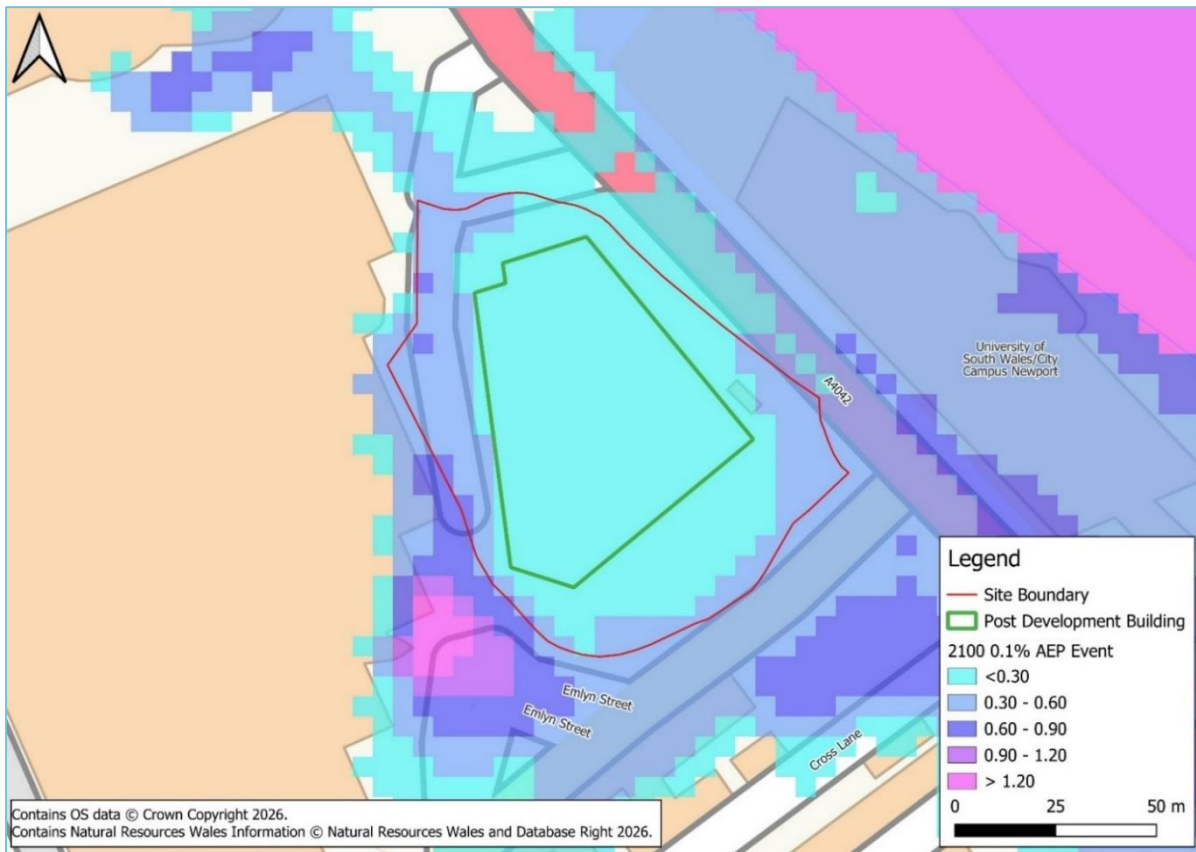


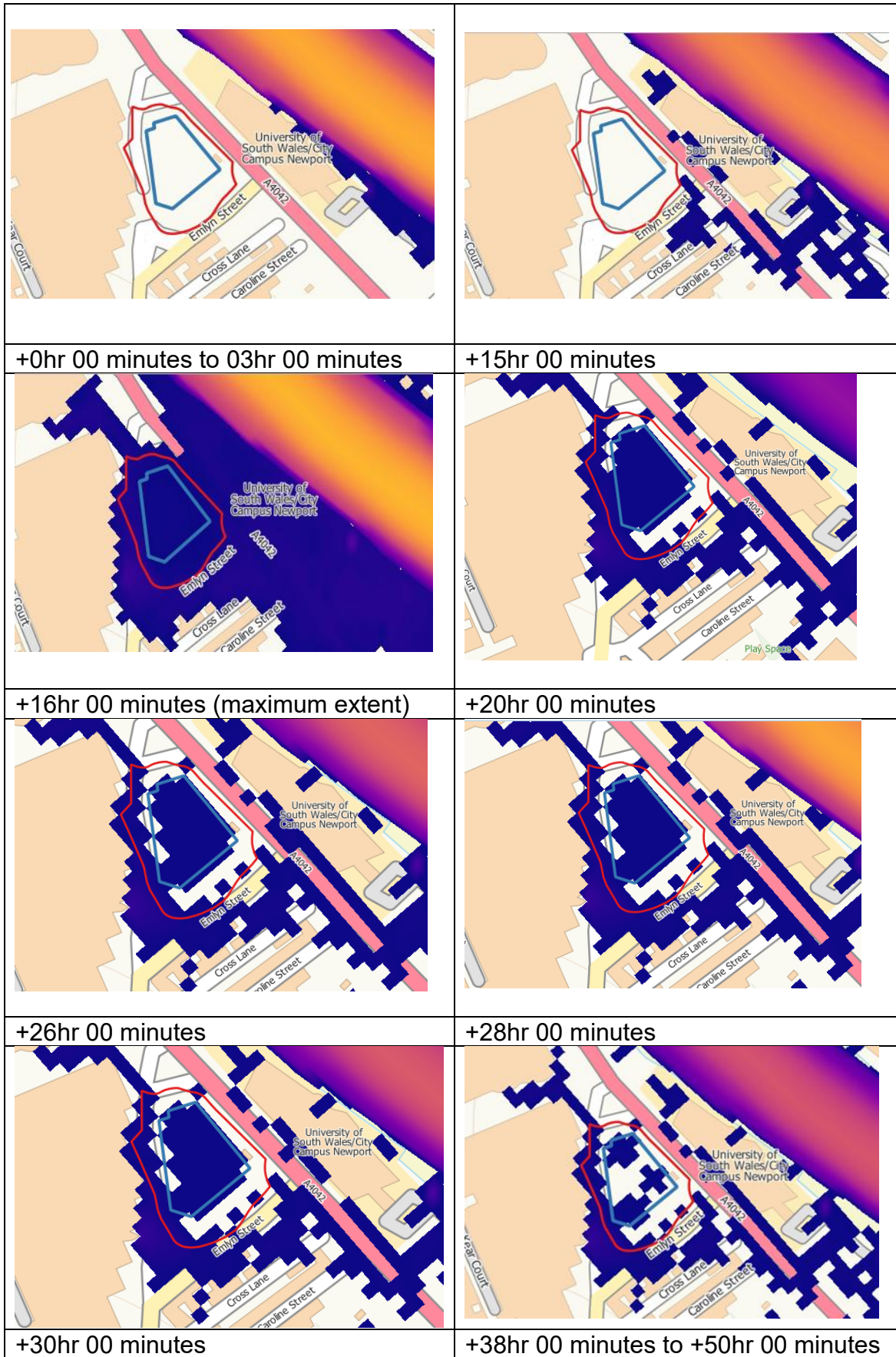
Figure 3-4 - (2100) 0.1% AEP Event - Post Development Scenario

The post development (2100) 0.1% AEP is the worst case scenario design event for this Plan and presents the modelling utilising the proposed finished floor levels (FFL) of 9.40mAOD. During this event, the entire development site is predicted to flood with depths of up to approximately 608mm within the western area of the development site. Within the proposed building footprint, flood depths of up to approximately 191mm are predicted during this event (Figure 3-4). The predicted flood waters approach the site from southerly and easterly directions.

B.2.3 Tidal Flood Duration

Detailed modelling for the site indicates that during the (2100) 0.1% AEP design flood event the site remains flood free from the River Usk coming out of bank for 15 hours before the site is completely inundated at 16 hours. The flood waters peak at this point and remain in some degree for up to 50 hours. Access and egress is unavailable for the duration of the event from site inundation (Table 2).

Table 2 - Modelled Flood Durations (2100) 0.1% AEP



B.3 Surface Water Flood Risk

NRW Flood Risk Assessment indicates that the site is at very low risk of flooding from surface water. Areas of high to low surface water flood risk are found on the roads to the west of the site, likely to be due to lower ground levels in these areas, the turning area which will be the college entrance and the basement entrance to the neighbouring Kingsway car park (Figure 3-5).

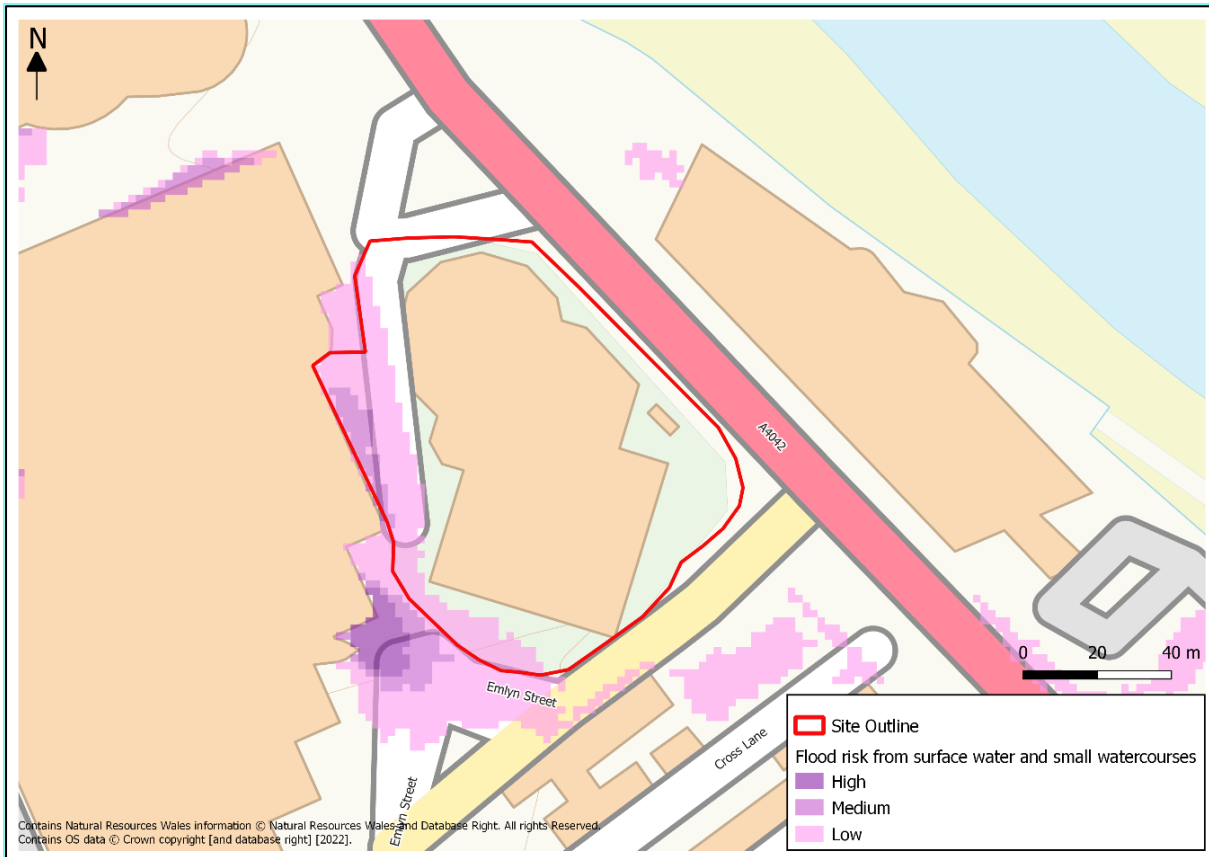


Figure 3-5 - Risk of flooding from surface water and small watercourses

B.4 Groundwater Flood Risk

The Newport Preliminary Flood Risk Assessment (PFRA, 2011) states that in Newport groundwater is not considered to be a significant flood risk due to the underlying geology of the area and that it is considered to rise and fall relatively slowly. In addition, the Newport Flood Risk Management Plan (2015) states that there have been no recorded incidents of groundwater flooding within the Stow Hill Ward, where the site is located. The risk of groundwater flooding to the site is therefore considered to be very low.

B.5 Risk of Flooding from Reservoirs

NRW's flood risk from reservoir mapping indicates that the site is located on the edge of an area predicted to be at risk of flooding due to reservoir failure, shown in Figure 3-6

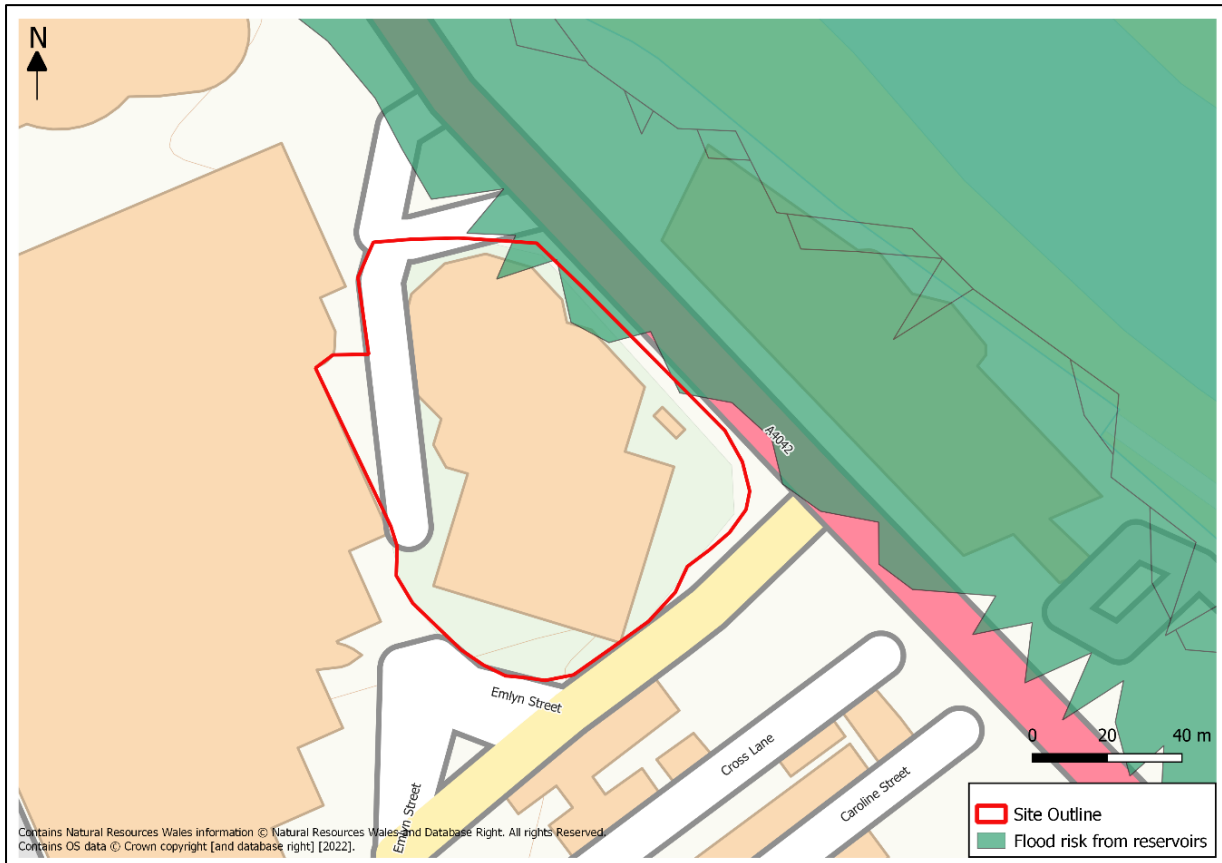


Figure 3-6 - NRW Flood Risk from Reservoirs Map

The reservoirs are:

- Ynysfro Reservoir 6km upstream
- Pant-yr-eos Reservoir 10km upstream
- Llandegfedd Reservoir 18km upstream

These reservoirs will be subject to the statutory maintenance requirements under the Reservoir Act 1975 and provided that they are regularly maintained and inspected, the risk of reservoir flooding at the site is very low.

C Flood Response Plan Background

C.1 Who is Responsible for the Plan?

The Site Manager is responsible for coordinating the response. The Site Manager should make this Plan available to all site users and visitors.

The Site Manager should also ensure that the Plan is reviewed at least annually.

C.2 Critical Success Factors

In order for this Plan to be successful the following are required:

- Go to [NRW: Sign up for flood warnings](#) to receive Flood Alerts and Warnings from Natural Resources Wales;
- Receive app notifications or sign up for severe weather warnings from the [Met Office Weather App](#) and [Met Office: Subscribe to email alerts, warnings and newsletters](#).
- Display the Flood Response Plan and what to do in the case of flooding across the site.
- Install a system of entry which logs all site users on entry and exit from the site.
- Keep a log of all visitors entering and exiting the site.
- Ensure that all appropriate communications channels are accessible to the Site Manager in the event of any of the response phases being triggered.
- All new staff and students must be made aware of the Flood Response Plan on induction / matriculation.
- Ensure that the site has Business Continuity procedures / a Business Continuity Plan in place and that this is updated regularly.
- This Plan will require review once the site layout has been formally accepted. It must be updated if it becomes apparent that any areas e.g. the substation will require extra protection such as flood barriers or that the access road layout has changed.

C.3 Vulnerability of Site Users

The vulnerability of site users is unknown at this stage, it is known that the site will be broadly used by students.

During evacuation vulnerable people may have extra needs that need to be catered for. It is recommended that provisions are made to accommodate these in the event of evacuation. A greater lead time may need to be given to allow additional assistance to be made in good time.

C.4 Training and Exercising the Plan

This Plan will be trained and exercised by all relevant staff, and testing will be done that include site users to maintain familiarity with procedures.

- Training must be done at least annually to maintain competency in roles and responsibilities.
- A tabletop exercise must be run annually to test the Plan and maintain familiarity.
- A live test of the Plan must be run once every two years.
- Identified lessons must be formally recorded, assigned and actioned.

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