

Newport City Council
Civic Centre
Newport
NP20 4UR

Ein cyf/Our ref: CAS-282475-S9S5
Eich cyf/Your ref: 25/0084

Dyddiad/Date: 07 July 2025

Annwyl Syr/Madam/Dear Sir/Madam,

BWRIAD/PROPOSAL: SITTING OF BATTERY ENERGY STORAGE SYSTEM AND ASSOCIATED WORKS INCLUDING ERECTION OF FENCING

LLEOLIAD/LOCATION: LEEWAY HOUSE, LEEWAY, LEEWAY INDUSTRIAL ESTATE NEWPORT SOUTH WALES

Thank you for re-consulting Cyfoeth Naturiol Cymru (CNC)/Natural Resources Wales (NRW) about the above, which we received on 11 June 2025.

We have no objection to the proposed development as submitted and provide the following advice.

Flood Risk

The planning application proposes less vulnerable development. The Flood Map for Planning identifies the application site to be at risk of flooding and within Flood Zone 3 (Sea) / TAN15 Defended Zone.

We refer you to Section 10 of Technical Advice Note 15: Development, flooding and coastal erosion, dated 2025 (TAN15) for advice on how you should consider this application in line with current planning policy. Our role is to provide you with detailed advice on the findings and conclusions of the Flood Consequences Assessment (FCA) in relation to flooding from rivers and/or the sea, including the impact on flooding elsewhere. For advice on flood risk from surface water and or small watercourses you should consult with your Lead Local Flood Authority.

We have reviewed the updated FCA undertaken by JBA dated June 2025 referenced PXS-JBA-XX-XX-RP-Z-0001-S3-P01-Leeway_House_FCA which supersedes the FCA prepared by Sustain Environmental dated January 2025. The JBA FCA incorporates detailed analysis of updated flood modelling of Newport to provide a more comprehensive and robust assessment, addressing our concerns raised dated 18th March 2025.

Consequently, this FCA is now based upon the March 2025 release of Technical Advice Note 15: Development, Flood Risk and Coastal Erosion.

Our advice to you is that the FCA satisfactorily demonstrates that the risks and consequences of flooding are manageable to an acceptable level. Therefore, we have no objection to the application as submitted. Further detail is provided below

The survey only covers the eastern part of the site and not the access road included within the redline boundary. The FCA has utilised the Natural Resources Wales (NRW) Open Source 1m Light Detection and Ranging (LiDAR) data¹ has been used to identify the topographic levels in this area. It should be noted that the LiDAR data in the south-western area does not match the topographic survey. This is likely due to this area being levelled after the LiDAR data was flown.

The eastern area of the site is shown to be generally flat with ground levels between 5.73-5.99m AOD. A concrete base forms the highest area of the site at a level of 6.28m AOD. Along the access road of the site, ground levels rise from east to west from 5.78-6.64m AOD, respectively.

Section 10.29 of TAN-15 which states "Where new developments will have shorter lifetimes, it is reasonable that the flood consequences assessment focusses on potential risks during the developments lifetime", BESS have a significantly shorter operational lifetime of development compared to other forms of industrial and commercial development, typically with operational lifetimes of less than 40 years. Consequently, the flood risk assessment has been based on a lifetime of development of 40-50 years - varying within this range to make best use of available flood risk data.

We defer to your authority regarding the suitability of the lifetime of development to ensure they are satisfied with the appropriateness of this time period.

The FCA states that tidal flooding to the site can occur through two separate but associated flood mechanisms. The first is tidal flooding of the open coast; the second is tidal flooding of the River Usk. These two mechanisms have been separately modelled by NRW, although the extents of the models overlap and also the modelling of the boundary conditions. Therefore, to adequately consider the flood risk at the site two separate flood mapping models have been considered:

- The NRW Stephenson Street River Usk model - was developed by Arup in January 2021, based on an earlier version of the River Usk flood model developed by JBA. The model was specifically developed to inform the options appraisal, design and FCA for the Stephenson Street Flood Alleviation Scheme (FAS). The model therefore provides results reflective of the recently completed Stephenson Street FAS. The flood model extends to the Caldicot Levels, but does not include a tidal boundary along the open coast.
- The Caldicot and Wentlooge Coastal model - was developed by JBA Consulting 2016 on behalf of NRW. The model was further updated by JBA in 2023 to apply current software, climate change guidance and extreme sea level predictions. The model focuses on flooding from the open coast, including wave overtopping. However, due to the potential contributing effects of flooding from the River Usk, a simplified representation of the east bank of the River Usk is included in the model.

Model results from both tidal flood models were reviewed to identify the primary flood mechanism at Leeway House, and therefore which of the two models provides the most

appropriate assessment of flood risk for the site. This review indicated that, assuming a 50 year lifetime of development, the site is not at risk of flooding from the open coast. Close inspection of the Caldicot and Wentlooge Coastal model results show that all the flooding of the site predicted by this model comes from the River Usk and not the open coast. Flood water that ponds behind the Caldicot coastal defences reach a flood depth far less than the level of the site and therefore would not reach the site. This model demonstrates that a maximum water level of 6.00m AOD in the extreme 0.1% AEP (2073) event is expected which is below the typical ground level of the developed area around the site, and approximately the same as the current site level.

The River Usk is therefore considered the main source of flooding and when allowing for approximately 50 years of climate change significant overtopping of the existing flood defences is predicted to occur to the south of the A48 crossing over the Usk. The risk of flooding from the River Usk has recently been significantly reduced in this area through the NRW Stephenson Street FAS, which has been under construction since 2023 and is nearing completion. The flood modelling developed to support the scheme and its own FCA therefore provides the most relevant and accurate information on tidal flood risk at the Leeway House site. The following conclusions are made based on data from this flood model:

- 1 in 200 year plus climate change event (2069) – the whole site is predicted to be flood free in this event.
- 1 in 1000 year plus climate change event (2069) - the whole site is predicted to be flood free in this event.

The site is not predicted to flood; therefore, there will be no increase in flood risk to third parties.

The evacuation routes are predicted to be flood free in the 0.5% AEP plus climate change and the 0.1% AEP plus climate change events.

Provided your authority are satisfied with the lifetime of development used in the flood risk assessment, the proposals are in line with the requirements of TAN 15 and we are satisfied with the use of the modelling to determine the flood risk to the site

Pollution prevention

Please defer to our letter of 18th March for our pollution prevention advice (CAS-275369-H4V8)

Other Matters

Our comments above only relate specifically to matters included on our checklist, *Development Planning Advisory Service: Consultation Topics* (September 2018), which is published on our [website](#). We have not considered potential effects on other matters and do not rule out the potential for the proposed development to affect other interests.

We advise the applicant that, in addition to planning permission, it is their responsibility to ensure they secure all other permits/consents/licences relevant to their development. Please refer to our [website](#) for further details.

If you have any queries on the above, please do not hesitate to contact us.

Yn gywir / Yours faithfully,

Rhian Isaac

Cynghorydd - Cynllunio Datblygu/Advisor - Development Planning
Cyfoeth Naturiol Cymru/Natural Resources Wales

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Croesewir gohebiaeth yn Gymraeg a byddwn yn ymateb yn Gymraeg, heb i hynny arwain at oedi./Correspondence in Welsh is welcomed, and we will respond in Welsh without it leading to a delay.