

Leeway House Newport Flood Consequences Assessment

Version 1

June 2025

Prepared for:

Aldustria Ltd

Units A & B Leeway House

Leeway Industrial Estate

NEWPORT

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This report describes work commissioned by Greenslade Taylor Hunt, on behalf of Aldustria Ltd, by an instruction dated 20 May 2025. The Client's representative for the contract was Andrew Pegg of Aldustria Ltd. Hannah Booth and Nick Yeo of JBA Consulting carried out this work.

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1 Introduction

1.1 Terms of Reference

JBA Consulting (JBA) was commissioned by Aldustria Ltd to undertake a Flood Consequences Assessment (FCA) to support a planning application for a Battery Energy Storage System (BESS) and associated works at Leeway House, Leeway Industrial Estate, Newport.

This FCA 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 concerns raised by Natural Resources Wales (NRW) in their consultation response dated 18th March 2025. Consequently, the opportunity has also been taken to base the FCA on the March 2025 release of Technical Advice Note 15: Development, Flood Risk and Coastal Erosion (TAN-15).

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;
- minimal impact of the proposed development on flood risk generally; and
- Minimal disruption to the sustainable management of natural resources.

2 Site Summary

2.1 Site Description

The proposed development site is located at Leeway House in Leeway Industrial Estate, Newport. The development site is 0.26ha, formed by the development area and its access route to Lee Way. The development site is within an established industrial estate, which supports commercial and industrial development in Newport.

The site is accessible by vehicles from Lee Way, located to the west of the site. Further information on the site is provided in Table 2-1.

Table 2-1 Site Summary

Parameter	Description
Site Name	Leeway House
Site area	0.26ha
Existing land use	Parking area
Purpose of development	Battery energy storage system and associated works at Leeway House, Leeway Industrial Estate, Newport
OS NGR	ST 34605 86440
Local Planning Authorities	Newport City Council
Lead Local Flood Authority	Newport City Council



Figure 2-1 Site Location

2.2 Site Topography

A topographic survey was undertaken by Survey Solutions in 2024 and is provided in Appendix A. The survey only covers the eastern part of the site and not the access road included within the redline boundary. Therefore, 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, shown in Figure 2-2. 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 5.73mAOD and 5.99mAOD. A concrete base forms the highest area of the site at a level of 6.28mAOD.

Along the access road of the site, ground levels rise from east to west from 5.78mAOD to 6.64mAOD, respectively.

¹ <https://datamap.gov.wales/maps/lidar-data-download/>

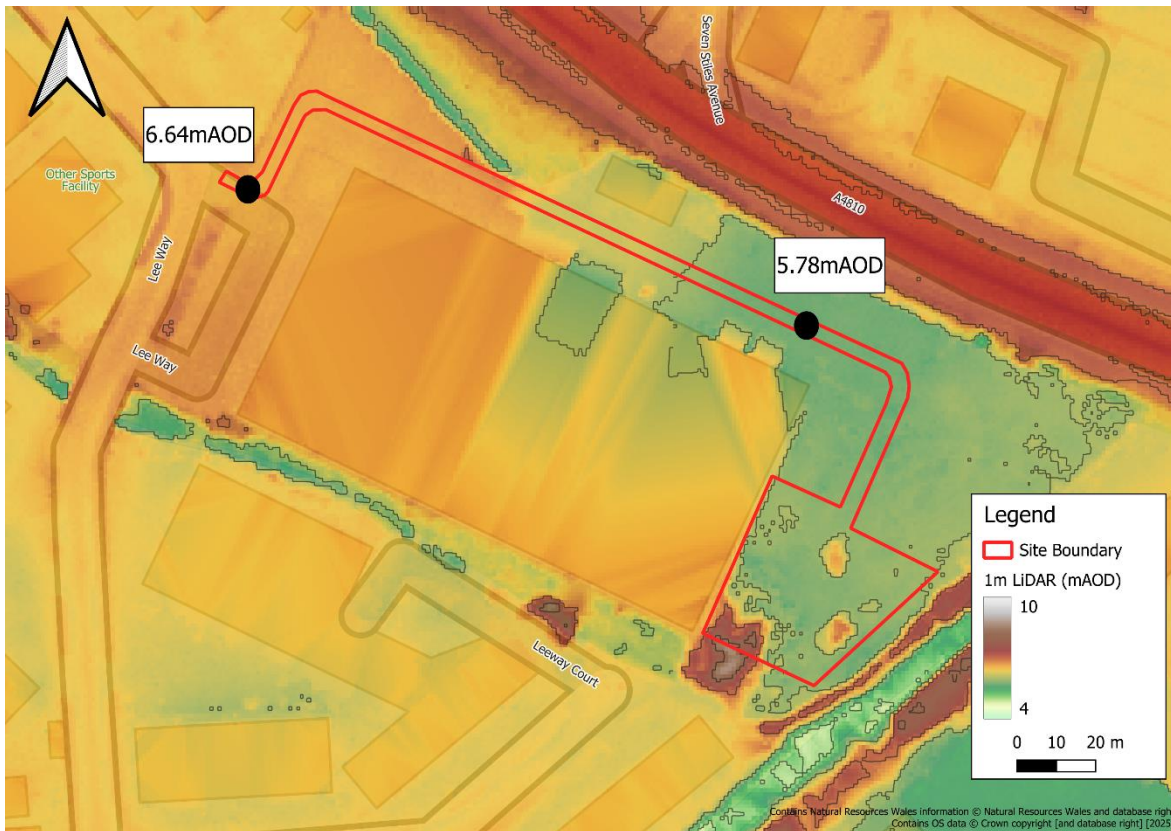


Figure 2-2: LiDAR Topographic data from NRW (1m resolution)

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 Soilscales 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 proposed development site. Figure 2-3 shows the locations of the nearest waterbodies and watercourses. Two unnamed watercourses are situated in close proximity to the site. The first (shown as unnamed ordinary watercourse 1 in Figure 2-3) is located 65m to the west of the site at its closest point and flows in a north westerly direction. The second (shown as unnamed ordinary watercourse 2 in Figure 2-3) is located 10m east of the site and flows in a southerly direction towards its confluence with the Great Spitty Reen 660m south of the site.

The site is located 2km from the River Usk (a NRW Main River) and 4.1km from the Severn Estuary, as shown in Figure 2-4. The River Usk is tidally influenced. Flood defences are

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

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

present along the banks of the River Usk and River Severn, which protect the site from tidal flooding.

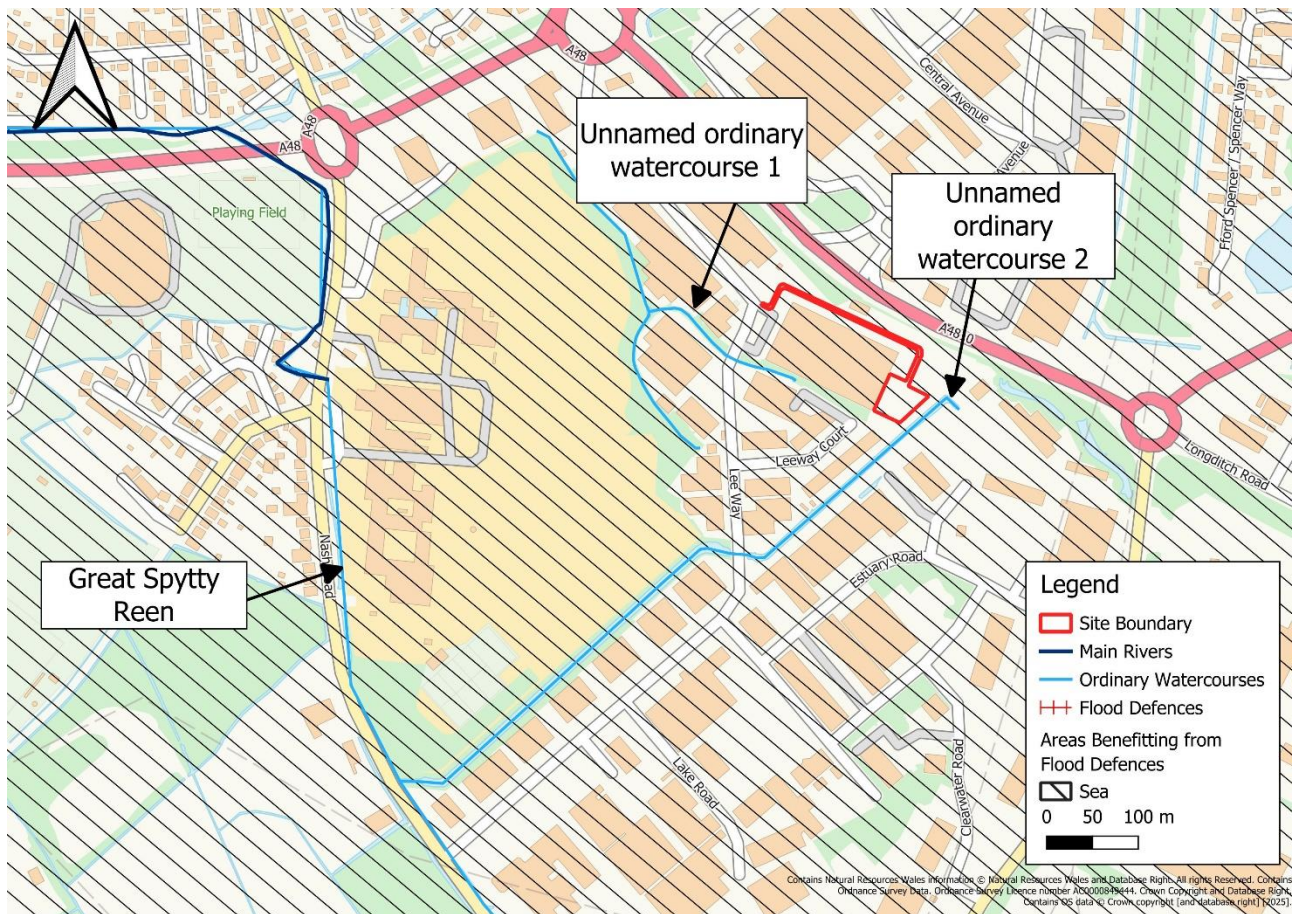


Figure 2-3 Watercourses near to the site

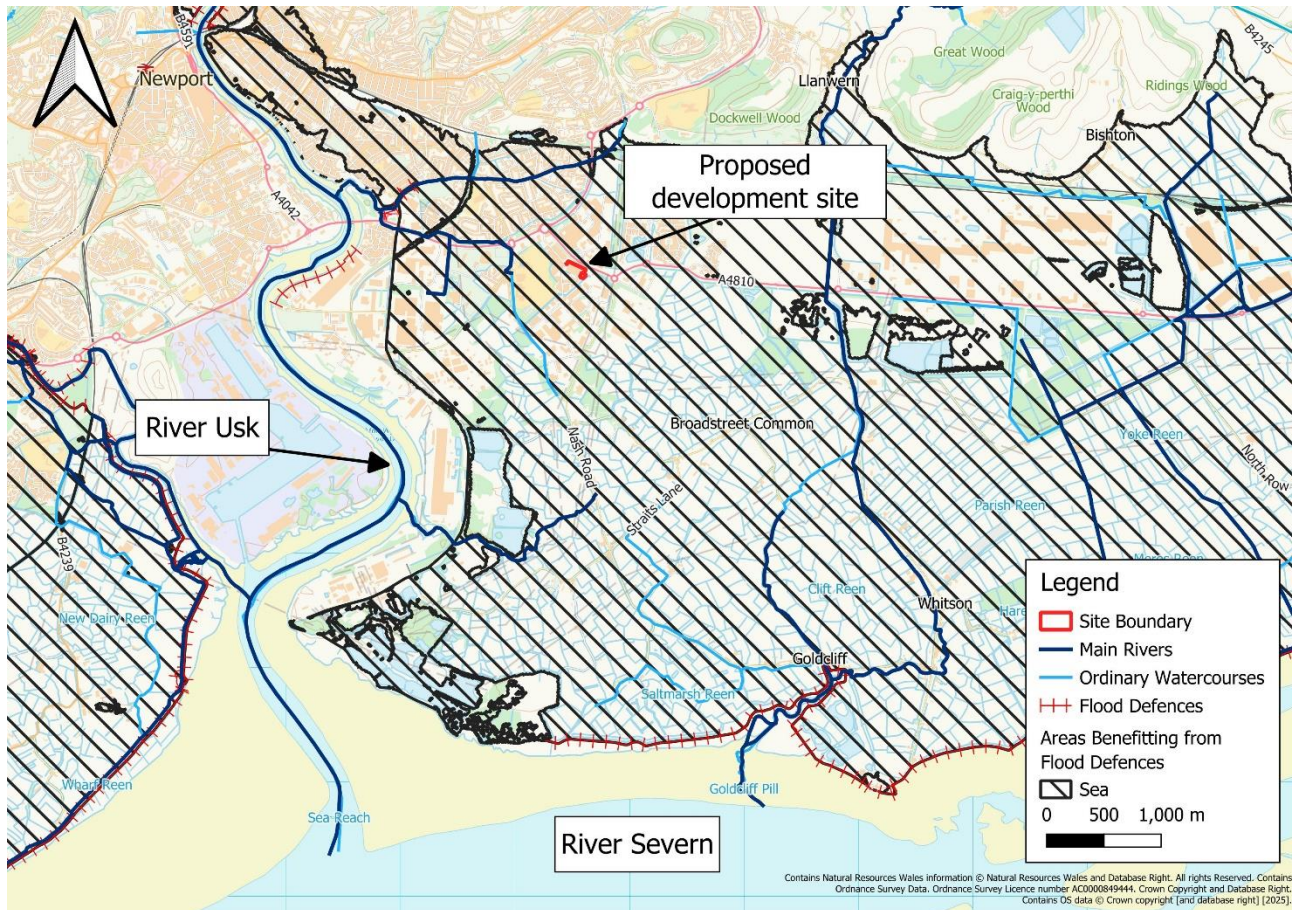


Figure 2-4 Watercourses and flood defences

2.5 Development Proposal

Development proposals are for a BESS which will comprise batteries housed in containers as well as inverters, transformers and a substation. The equipment will be mounted on concrete foundations.

The location of the proposed equipment on the site is shown below in Figure 2-5 and full plans are contained in Appendix B.

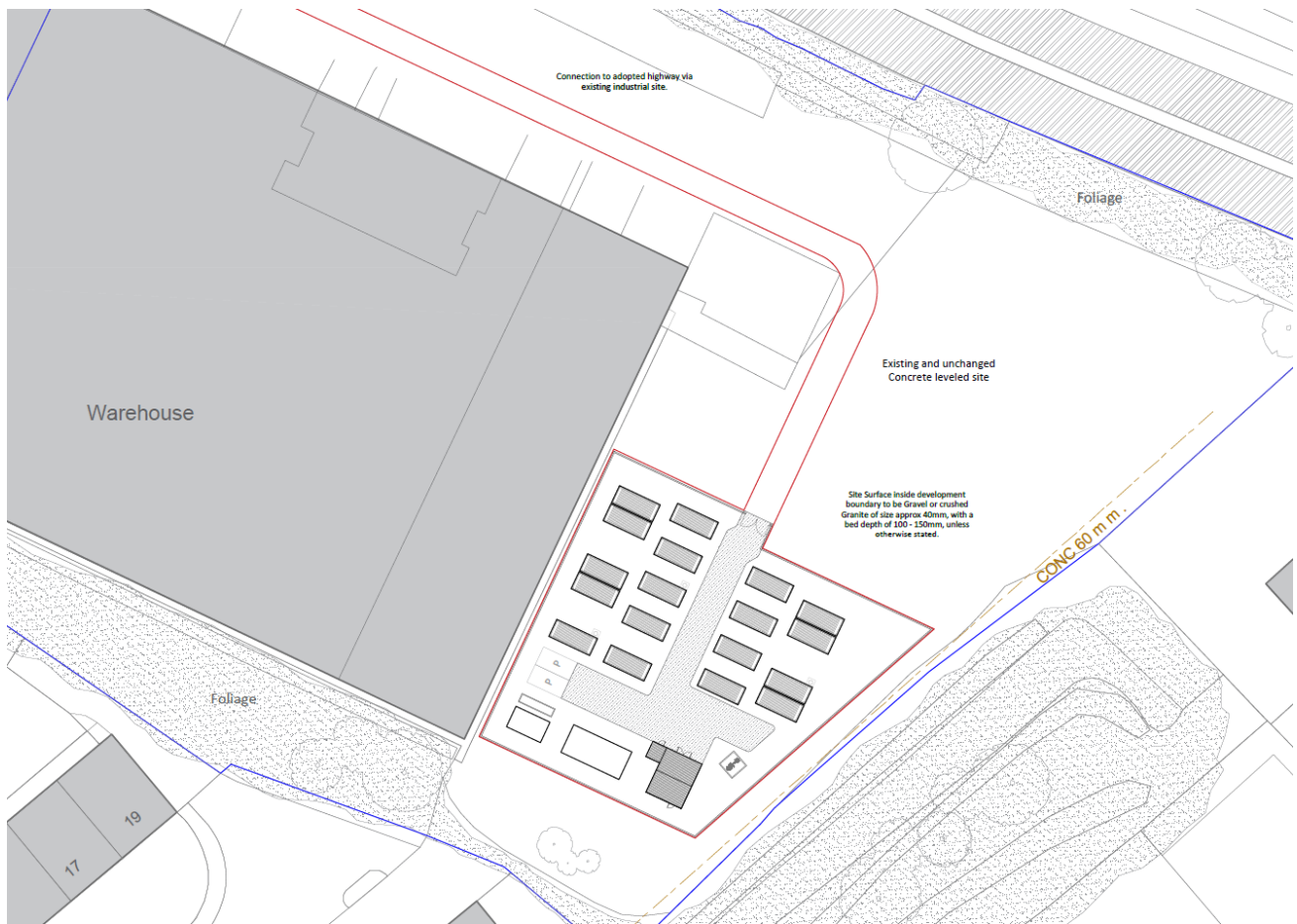


Figure 2-5 Proposed Development Plan

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 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 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 additional infrastructure on an already developed and operational site. 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 proposed development best aligns with the **Less Vulnerable Development** classification for industrial development and renewable energy generation facilities.

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.*"

Furthermore, Section 10.29 of TAN-15 states "*Where new developments will have shorter lifetimes, it is reasonable that the flood consequences assessment focusses on potential risks during the developments lifetime.*"

The development proposals comprise of a BESS with supporting infrastructure. 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, this assessment has assessed the flood risk based on a lifetime of development of 40-50 years - varying within this range to make best use of available flood risk data.

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 Flood Zone 1, Flood Zone 2, Flood 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 within 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.

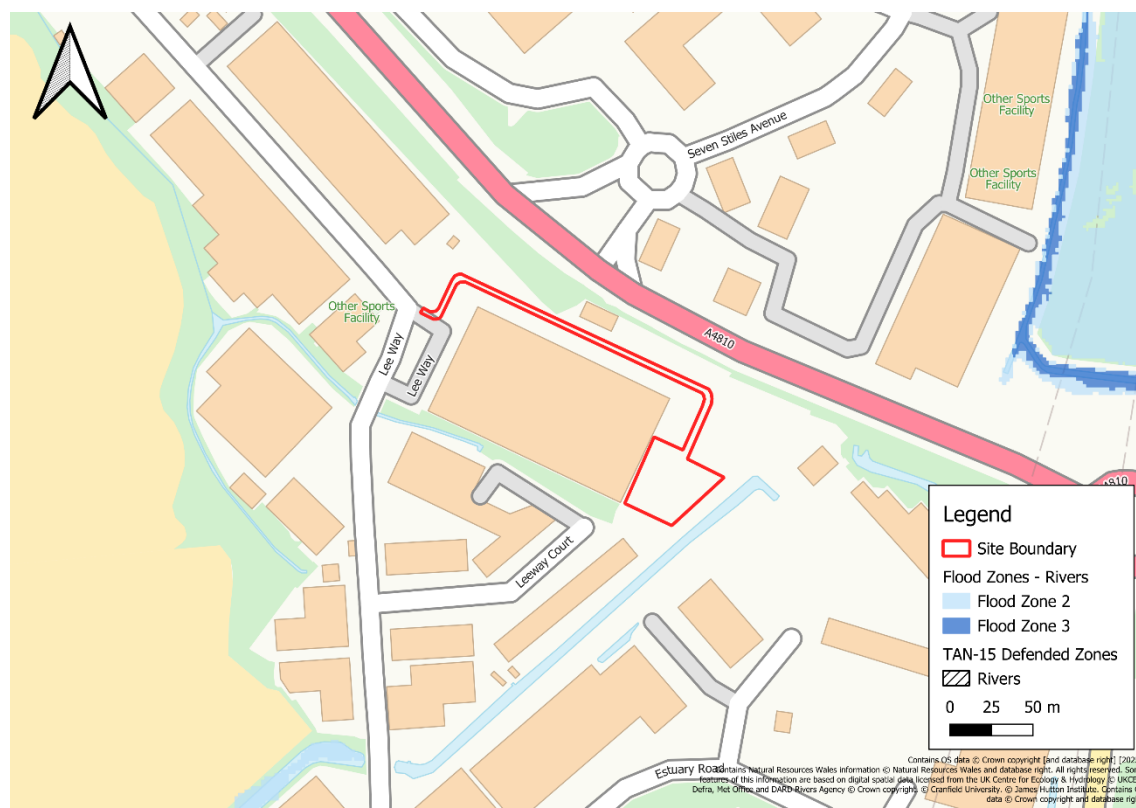


Figure 3-1 Flood Map for Planning - Rivers

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).

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

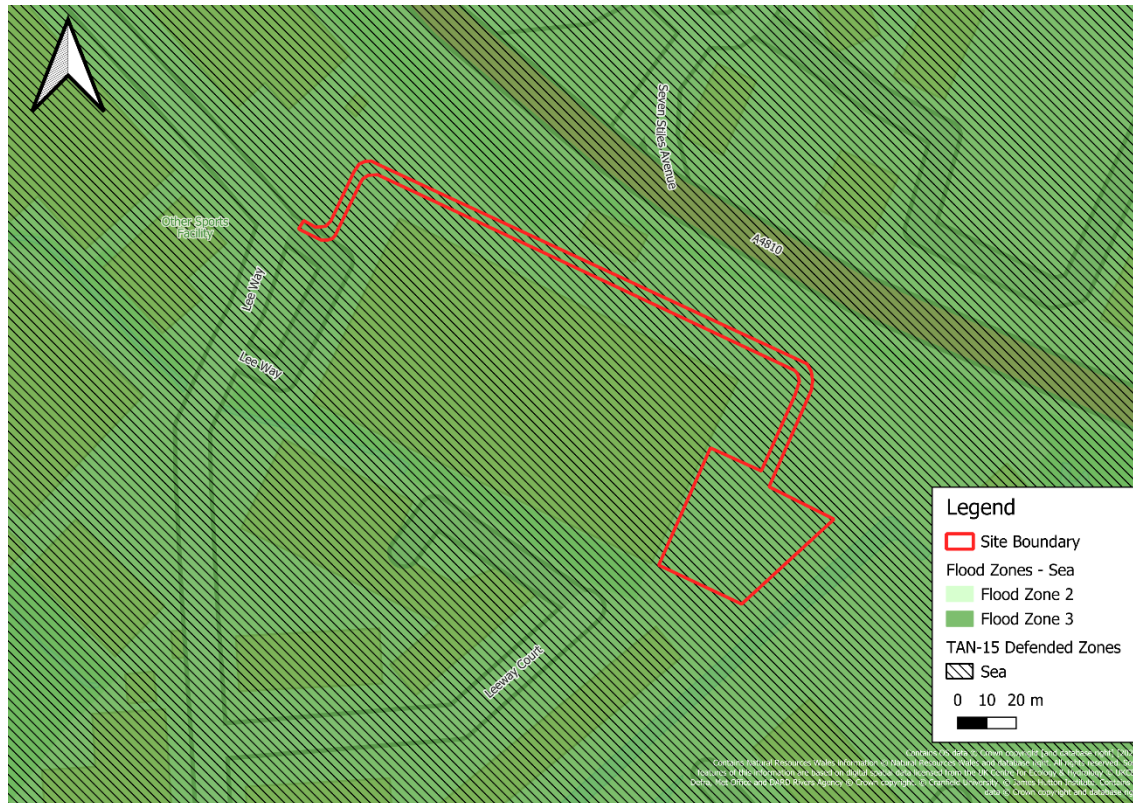


Figure 3-2 Flood Map for Planning - Sea

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

Figure 3-3 shows the site is predominantly within Flood Zone 1 of the FMfP for 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.

Lesser areas of the site are situated in Flood Zones 2 and 3 of the FMFP for Surface Water and Small Watercourses. Flood Zone 2 indicates areas which have a less than 1% AEP but greater than 0.1% AEP chance of surface water flooding in any given year, including climate change. Flood Zone 3 shows areas with a 1% chance or greater of flooding occurring in any given year, including an allowance for climate change.

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

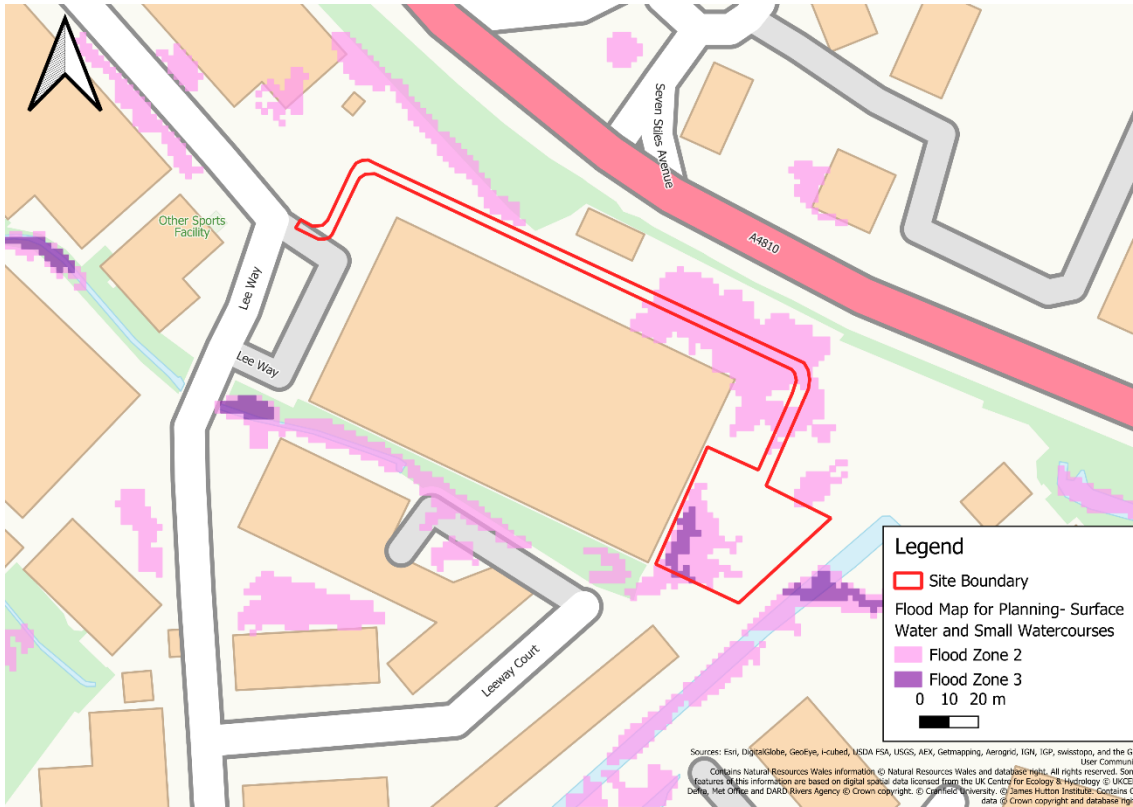


Figure 3-3 FMfP - Flood Risk from Surface Water and Small Watercourses

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	✓	Low- The site is at 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	✓	Low- The site is at 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 that the site experienced flooding from the Crindau Pill in December 1981, marking a record of historic flooding at 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 for 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 (i.e. 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 shown in Figure 3-3, the Flood Map for Planning Surface Water and Small Watercourses mapping shows that the proposed development site is predominantly 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. Parts of the site are shown to be at risk of flooding (located in Flood Zones 2 and 3).

The FMFP for Surface Water and Small Watercourses is informed by the National Flood Risk Assessment Wales mapping, which is national scale mapping undertaken in 2019. This modelling used the LiDAR data available at the time to identify the topographic levels across Wales. Surface water flooding is likely to be predicted in any topographical depression.

As noted in Section 2.2, a comparison between the topographic survey, 2018 LiDAR data which informed the national scale modelling, and historic aerial imagery indicates that the site was previously vegetated and at a lower level than the rest of the site. This made areas of the site vulnerable to surface water flooding. Since this time, this area has been cleared and levelled to extend the area of hardstanding. This area of extended hardstanding includes the proposed BESS development.

The topographic survey shows that the area is now generally flat, and therefore it is unlikely flood water would pond in this area and any residual risk would be mitigated through properly implemented surface water drainage (SUDS). Therefore, it is concluded that the site is at **low** risk of surface water flooding.

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 been concluded that the risk of groundwater flooding at the site is **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>

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 4-1. 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, and due to the location of the reservoirs in relation to the site, substantial warning time would be available. Therefore, the risk of reservoir flooding is considered to be **low**.

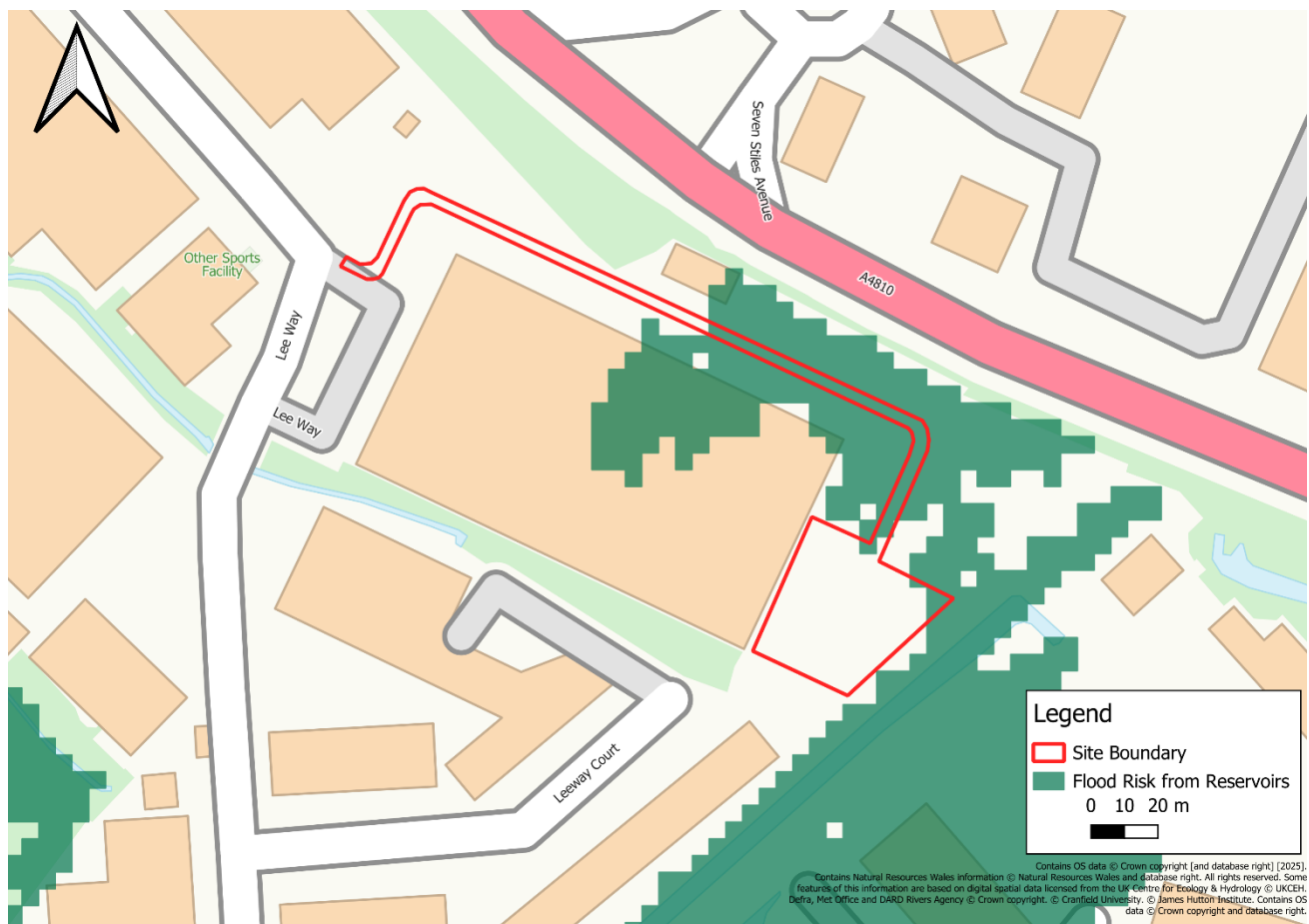


Figure 4-1 FRAW - Flood Risk from Reservoirs

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, the predominant source of flood risk to the site is from the sea (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.

5.1 Lifetime of development

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 40 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.

5.2 Hydraulic modelling availability

Tidal flooding of 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 so do the modelling of the boundary conditions. Therefore, to adequately consider the flood risk at the site two separate flood mapping models have been considered:

1. The NRW **Stephenson Street River Usk model** is a 1D-2D linked ESTRY-TUFLOW model that focuses on tidal flood risk from the River Usk. This 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.
2. 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. This simplified representation of the River Usk flooding is sourced from an earlier version of the Tidal Usk flood 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 is illustrated in Figure 5-1, which shows a long-section of the water level surface from the Caldicot and Wentlooge Coastal model. This shows that flooding of the Caldicot levels from the open coast ponds across the levels reaching a maximum water level of 6.00mAOD in the extreme 0.1% AEP (2073) event. This is below the typical ground level of the developed area around the site, and approximately the same as the current site level.

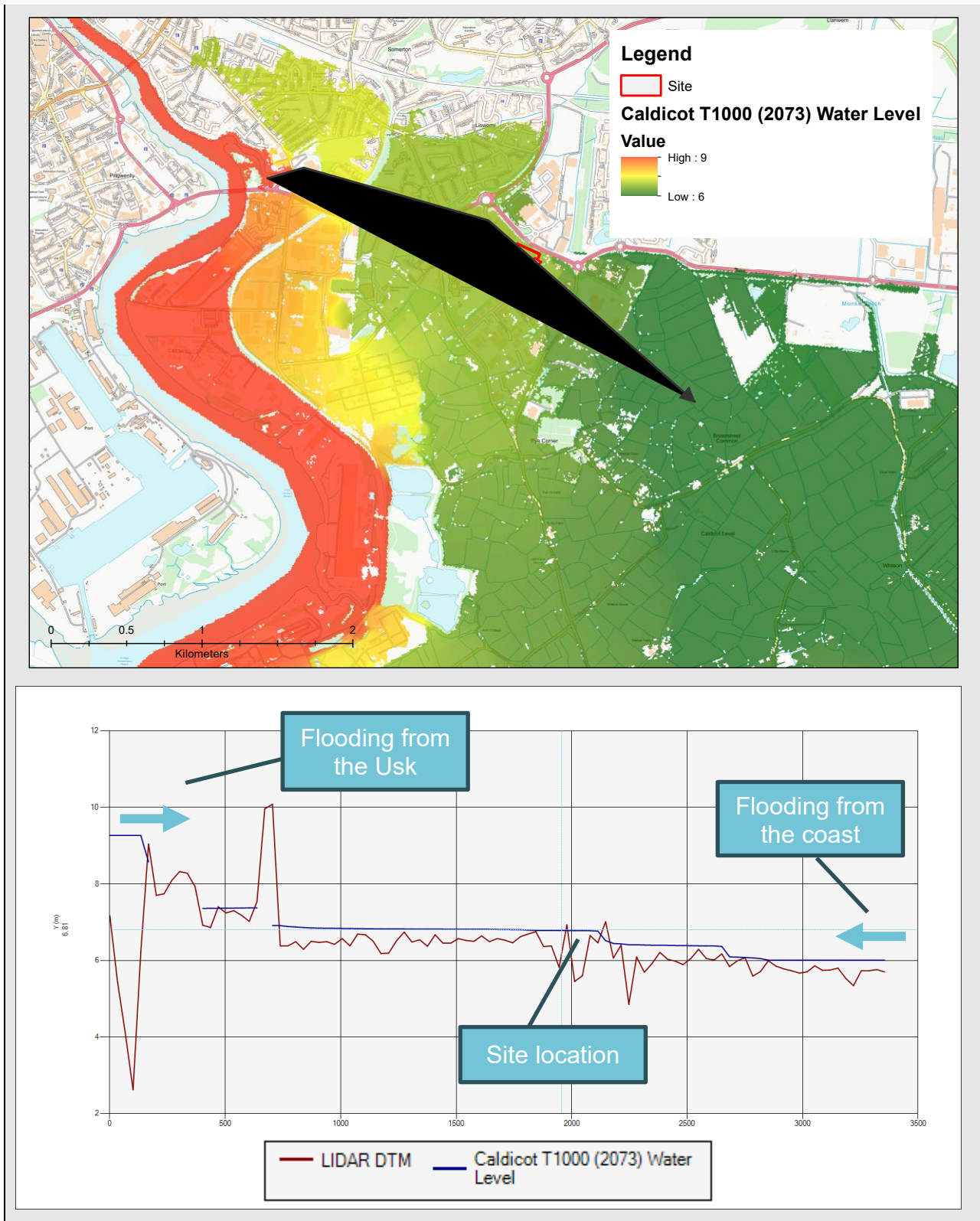


Figure 5-1: Long-section inspection of 0.1% AEP (2073) water level grid

If the risk of the site flooding from the open coast during the lifetime of development is discounted, this leaves the risk of flooding from the River Usk. As show in Figure 5-1, 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 £23m scheme is designed to reduce the flood risk to 2000 properties in the southeast of Newport, allowing for the effects of climate change for the next 50 years. 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.

5.3 Stephenson Street FAS Model Results

5.3.1 0.5% AEP plus climate change event

Figure 5-2 below shows the maximum flood depths at the site as a result of the 0.5% AEP plus climate change (2069) event. This shows that the whole site is predicted to be flood free in this event.

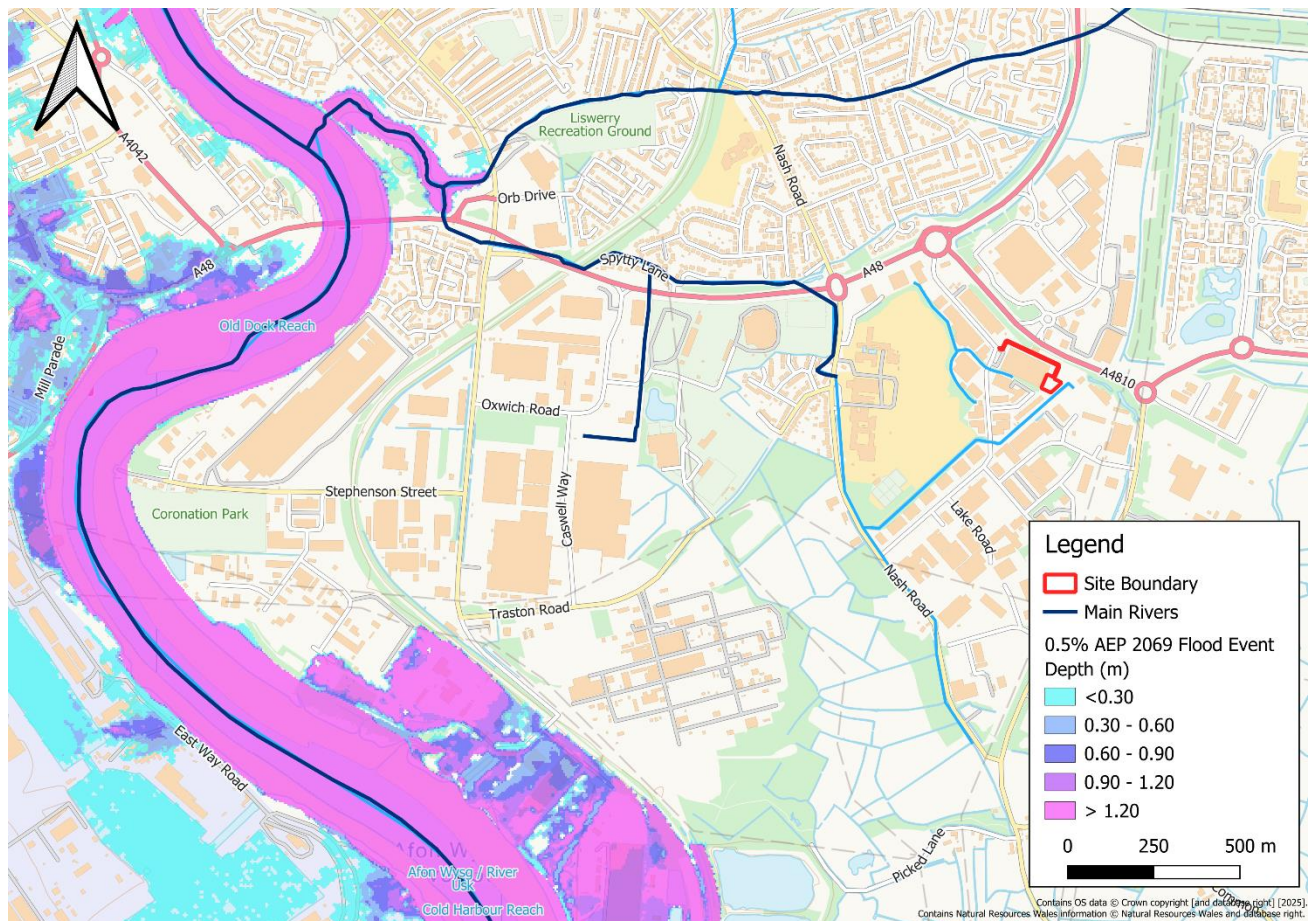


Figure 5-2 0.5% AEP (2069) flood depths

5.4 0.1% AEP plus climate change event

Figure 5-3 below shows the maximum flood depths at the site as a result of the 0.1% AEP plus climate change (2069) event. This shows that the whole site is predicted to be flood free in this event.

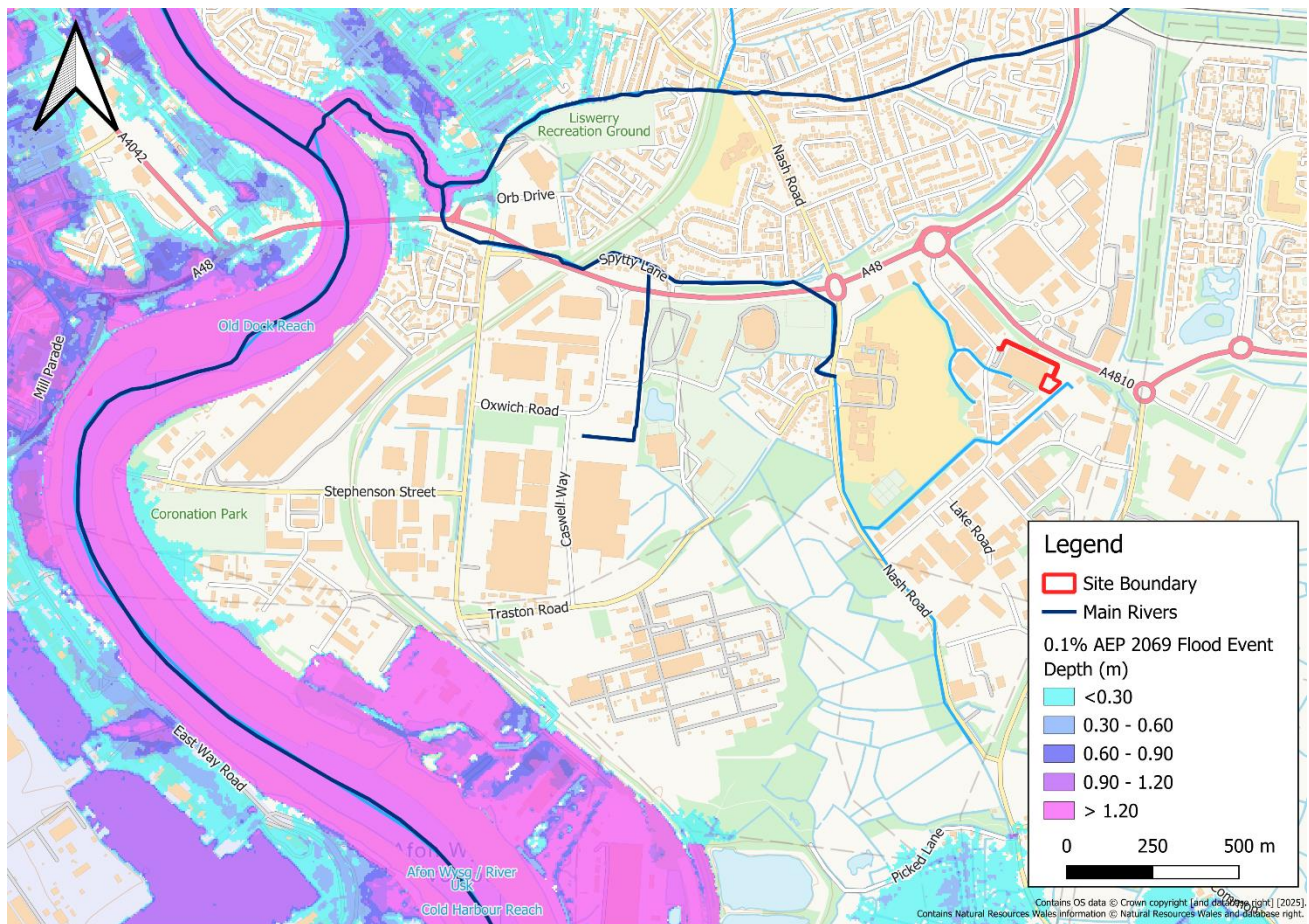


Figure 5-3 0.1% AEP (2069) flood depths

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 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 a battery storage area within the established Leeway House site. The development proposals will not result in an over-intensification of development within the wider Leeway House site, as development is proposed within an area of the site already established for use as storage and used by the site owners.

Provided that the principal of development is justified, development must demonstrate compliance with the acceptability considerations set out within Section 11 of TAN-15. This is demonstrated in Section 6.1.

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. TAN-15 sets out the key conditions that should be met to demonstrate that development is appropriate for its location.

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

Table 6-1 Assessment of Acceptability Criteria

TAN-15 Acceptability Criteria	Comments	Achieved
No increase in flooding elsewhere.	The site is not predicted to flood; therefore, there will be no increase in flood risk to third parties.	Yes
Occupiers aware of flood risk	The site owners will be provided with information on the risk to the site in the form of this report.	Yes

TAN-15 Acceptability Criteria	Comments	Achieved
Escape/evacuation routes present	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.	Yes
Flood emergency plans and procedures agreed and in place	N/A - The proposed development site is predicted to be flood free in all events.	Yes
Flood resistant and resilient design	N/A - The site is shown to be flood-free for the duration of its lifetime.	Yes
Acceptable consequences for type of use	Detailed in Sections 6.2 to 6.4	Yes

6.2.1 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.

6.2.2 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 and velocity 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 to this indicative value is afforded to redevelopment sites.

As per Section 5 of this report, the site is predicted to be flood free 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 Aldustria Ltd to undertake a FCA to support a planning application for a battery energy storage system and associated works at Leeway House, Leeway Industrial Estate, Newport.

Development proposals are for a battery storage area which will comprise rows of battery racks across the site as well as inverters, transformers and a substation.

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

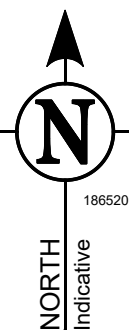
The site is at low risk of surface water, groundwater, reservoir and sewer flooding and very low risk of river flooding.

The assessment of tidal risk has been undertaken using NRW's Stephenson Street detailed tidal flood modelling of the River Usk. The model assesses the risks of tidal flooding from a range of climate change epochs and accounts for NRW nearly complete flood alleviation scheme at Stephenson Street. The site is considered to have a lifetime of development of less than 50 years, and therefore an assessment against the 2069 epoch was undertaken.

The site is not predicted to flood in its lifetime for all design events up to and including the 0.1% AEP plus climate change event.

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 Topographic Survey



ABBREVIATIONS & SYMBOLS

AA	Arch Neck Line	ET	ET/Transformer	RSD	Roller Shutout Door
AB	Arm	FL	Flange Bar	RSJ	Roller Shut Joint
AC	Arch	TC	Tail Coat	SS	Stainless Steel
AK	Arch	FL	Flange	SL	Shallow Set Line
AL	Arch	FL	Flange	SV	Shut Valve
AM	Arm	FL	Flange	SV	Shut Valve
AN	Arch	FL	Flange	SV	Shut Valve
AO	Arch	FL	Flange	SV	Shut Valve
AP	Arch	FL	Flange	SV	Shut Valve
AR	Arch	FL	Flange	SV	Shut Valve
AS	Arch	FL	Flange	SV	Shut Valve
AT	Arch	FL	Flange	SV	Shut Valve
AV	Arch	FL	Flange	SV	Shut Valve
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BC	Arch	FL	Flange	SV	Shut Valve
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BG	Arch	FL	Flange	SV	Shut Valve
BH	Arch	FL	Flange	SV	Shut Valve
BI	Arch	FL	Flange	SV	Shut Valve
BJ	Arch	FL	Flange	SV	Shut Valve
BK	Arch	FL	Flange	SV	Shut Valve
BL	Arch	FL	Flange	SV	Shut Valve
BM	Arch	FL	Flange	SV	Shut Valve
BN	Arch	FL	Flange	SV	Shut Valve
BO	Arch	FL	Flange	SV	Shut Valve
BP	Arch	FL	Flange	SV	Shut Valve
BQ	Arch	FL	Flange	SV	Shut Valve
BR	Arch	FL	Flange	SV	Shut Valve
BS	Arch	FL	Flange	SV	Shut Valve
BT	Arch	FL	Flange	SV	Shut Valve
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BV	Arch	FL	Flange	SV	Shut Valve
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BX	Arch	FL	Flange	SV	Shut Valve
BY	Arch	FL	Flange	SV	Shut Valve
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Topographical Survey

Trees are drawn to scale showing the average canopy spread. Descriptions and heights should be used as a guide only.

All building names, descriptions, number of storeys, construction type including roof line details are indicative only and taken externally from ground level.

All below ground details including drainage, voids and services have been identified from above ground and therefore all details relating to these features including; sizes, depth, description etc will be approximate only. All critical dimensions and connections should be checked and verified prior to starting

Detail, services and features may not have been surveyed if obstructed or not reasonably visible at the time of the survey.

Surveyed physical features may not necessarily represent the legal boundary line.

Measurements to internal walls are taken to the wall finishes at approx 1m above the floor level and the wall assumed to be vertical.

General

The contractor must check and verify all site and building dimensions, levels, utilities and drainage details and connections prior to commencing work. Any errors or discrepancies must be notified to Survey Solutions immediately.

The accuracy of the digital data is the same as the plotting scale implies. All dimensions are in metres unless otherwise stated.

The survey control listed is only to be used for topographical surveys at the stated scale. All control must be checked and verified prior to use.

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This drawing should only be scaled using digital methods.

SURVEY CONTROL CO-ORDINATES				
STATIONS	EASTINGS	NORTHINGS	LEVEL	DESCRIPTION
ST01	334611.552	186422.858	5.883	PK Nail
ST02	334635.282	186465.693	5.917	PK Nail
ST03	334636.528	186435.850	5.974	PK Nail

The coordinate system established for this survey is related to Ordnance Survey (OS) National Grid at multiple points using GNSS with a scale factor of 1.000.

The level datum established for this survey is related to Ordnance Survey (OS) using GPS Smartnet.

To avoid discrepancies within the survey, adding to the survey or setting out points from the survey, any coordinated data must be directly derived from the original survey control. Survey Solutions are not responsible for any third-party adding survey data to the existing information.

REV	DESCRIPTION	DRAWN	APPR	DATE
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IPSWICH / BEDFORD / BIRMINGHAM / COVENTRY / CRAWLEY / GLASGOW / LEEDS / LONDON CENTRAL /
LONDON EAST / MANCHESTER / NEWCASTLE / NORWICH / NOTTINGHAM / THAMES VALLEY

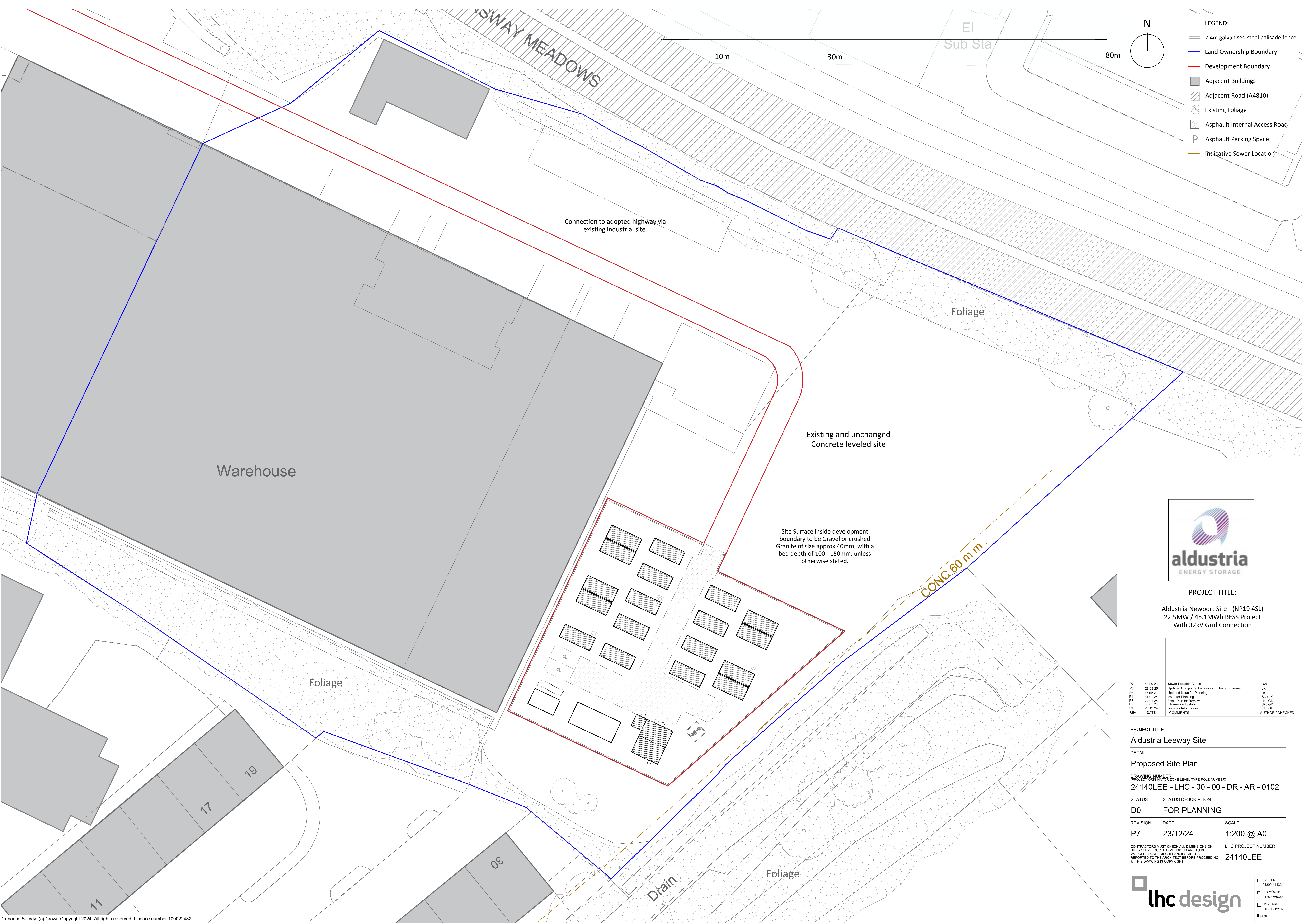
PROJECT TITLE
SITE OFF LEE WAY, LEE WAY IND. EST.
NEWESTT 11/15/10

DRAWING DETAIL

TOPOGRAPHICAL SURVEY Sheet 1 of 1					SCALE 1:200
CLIENT ALDUSTRIA LTD					
SURVEYOR RRH & JM	SURVEY DATE 17/10/2024	CHECKED BY RAH	APPROVED BY RAH	DWG STATUS FINAL	
DRAWING NO 68930YOLS-01			REVISION	ISSUE DATE 22/10/2024	



B Development Proposals



PROJECT TITLE:

Aldustria Newport Site - (NP19 4SL)
22.5MW / 45.1MWh BESS Project
With 32kV Grid Connection

P7	16.05.25	Sewer Location Added	SW
P6	08.03.25	Updated Compound Location - 3m buffer to sewer	JK
P5	17.02.25	Updated Issues for Planning	JK
P4	31.01.25	Issues for Planning	SG / JK
P3	24.01.25	Fixed Plan for Review	JK / GD
P2	03.01.25	Information Update	JK / GD
P1	23.12.24	Issue for Information	JK / GD
REV	DATE	COMMENTS	AUTHOR / CHECKED

PROJECT TITLE
Aldustria Leeway Site

DETAIL
Proposed Site Plan
DRAWING NUMBER
(PROJECT OVERLAY OR ZONE-LEVEL-TYPE-ROLE-NUMBER)
24140LEE - LHC - 00 - 00 - DR - AR - 0102

STATUS	STATUS DESCRIPTION	
D0	FOR PLANNING	
REVISION	DATE	SCALE
P7	23/12/24	1:200 @ A0

CONTRACTORS MUST CHECK ALL DIMENSIONS ON SITE - ONLY FIGURED DIMENSIONS ARE TO BE WORKED FROM - DISCREPANCIES MUST BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING © THIS DRAWING IS COPYRIGHT	LHC PROJECT NUMBER 24140LEE
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