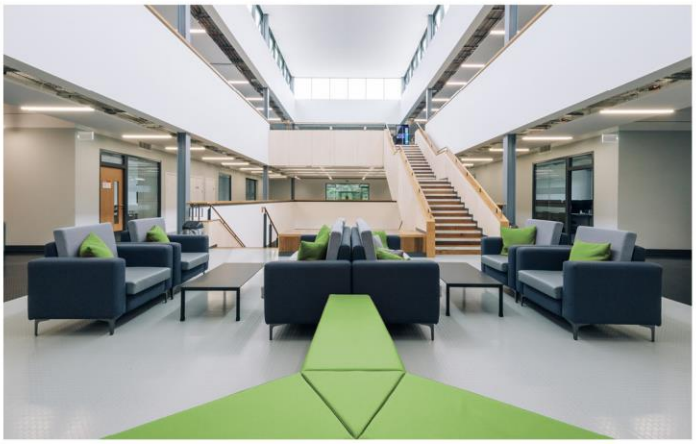






Consulting Civil, Structural, Highway and Transportation Engineers

Flood Risk Assessment

Minera Quarry, Coedpoeth,
Gwynfryn, Wrexham
LL11 3DE

For
Goodwood Projects

Ref:
10620-GCA-XX-ZZ-RP-D-2001

Revision: **P01**
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30th June 2025

gca-consulting.com

GCA

Document Control

Project:	Restoration of derelict quarry building to provide a base and tool store for volunteers, a source of information, and a shelter and toilets for visitor events at Minera Quarry, Coedpoeth, Gwynfryn, Wrexham, LL11 3DE.
Document Title:	Flood Risk Assessment
Our Ref:	10620
Prepared By	S. Hudson, MEng
Reviewed By	M. Barker, MEng, CEng, MIStructE
Date	30th June 2025

RECORD OF AMENDMENTS TO DOCUMENT

Ref	Description	Date
P01	First Issue	30/06/2025

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Appendix A – Proposed Site Plan and Elevations

Appendix B – Topographical Survey

1.0 EXECUTIVE SUMMARY

SITE INFORMATION	Client	Goodwood Projects
	Site	Minera Quarry (Approximately 0.02 hectares)
	Site Location	Minera Quarry, Coedpoeth, Gwynfryn, Wrexham, LL11 3DE (Grid Reference: SJ 25870 51943)
	Current Land Use	Brownfield – Quarry building
	Proposed Development	The proposed re-development involves the restoration of derelict quarry building to provide a base and tool store for volunteers, a source of information, and a shelter and toilets for visitor events
GENERAL INFORMATION	Flood Zone for Rivers	A detailed assessment of levels shows the site should be considered to be located within Flood Zone 1 from fluvial sources and consequently has a low risk of flooding from rivers.
	Flood Zone for the Sea	Based upon the latest surface water flood risk mapping issued by the Government, the site is located in Flood Zone 1 for the sea with the risk of flooding considered to be low.
	Groundwater	Based upon the latest surface water flood risk mapping issued by the Government, flooding from groundwater is considered to be unlikely.
	Surface Water	Based upon the latest surface water flood risk mapping issued by the Government, the development has a low risk of surface water flooding, and any notional water entering the site can be addressed with localised measures
	Sewer Flooding	There is no risk of flooding from sewers

2.0 TERMS OF REFERENCE

201 GCA (UK) Ltd. (GCA) has been commissioned to produce an independent Flood Risk Assessment (FRA) to support a planning application for a proposed re-development comprising a restoration of derelict quarry building to provide a base and tool store for volunteers, a source of information, and a shelter and toilets for visitor events at Minera Quarry, Wrexham, LL11 3DE.

202 The proposed plan and elevations are provided in **Appendix A**.

203 This assessment has been undertaken to ascertain the constraints of the development to the site, and to assess the impact of the design, with respect to flooding and impact of the proposed drainage.

204 This Flood Risk Assessment has been carried out in accordance with the requirements of the Planning Policy Wales (Edition 12, February 2024) and its companion document Technical Advice Note (TAN) 15: Development, Flooding and Coastal Erosion.

205 This assessment has been prepared using our best engineering judgement but there are levels of uncertainty implicit in the historical data and methods of analysis. The report is based on the following information:

- Flood maps from the Flood Map for Planning website
- Flood Risk Assessment Wales (FRAW) maps from DataMapWales website
- British Geological Survey Mapping
- Contours plan from Bing Maps

206 All comments and opinions contained in this report, including any conclusions are based on the information available to GCA at the time of writing this report. The conclusions drawn by GCA could therefore differ if the information is found to be inaccurate, incomplete, or misleading. GCA accepts no liability should this prove to be the case, or, if additional information exists or becomes available with respect to this site.

207 GCA has completed this report for the benefit of the organisations/individuals referred to in the “Introduction” section; and any relevant Statutory Authority which may require reference in relation to approvals for the proposed redevelopment of the site. Other third parties should not use or rely upon the contents of the report unless written approval has been gained from GCA.

208 GCA accepts no responsibility or liability for:

- The consequences of this documentation being used for any purpose or project other than that for which it was commissioned, and
- This documentation to any third party with whom approval for use had not been agreed.

3.0 SITE DESCRIPTION

3.1 Existing Site Description

301 The proposed re-development site is located in the Minera Quarry Nature Reserve, approximately 2.5km west from the centre of Coedpoeth, and 8.1km west of Wrexham City centre. The site is centred on National Grid Reference SJ 25870 51943 and occupies an area of approximately 0.02 ha. See **Figure 1** below.



Figure 1 - Site Location (yellow boundary shows existing and proposed building extents)

302 The site is bounded by the Maesyffynnon Road to the north, an existing car park to the west, a private road to the south and woodland to the east. To the south, there is a steep drop of approximately 5m from the site to the adjacent Aber Sychnant watercourse. The Aber Sychnant watercourse leads to the River Clywedog further downstream to the east. The site is surrounded to the north and east by a wooded area which slopes from north to south.

303 The site is currently occupied by a disused building and public car park.

Address	Minera Quarry, Coedpoeth, Gwynfryn, Wrexham, LL11 3DE	
OS Grid Reference	E: 325870	N: 351943
Site Area	Total site area = 0.02ha Approximate development area = 0.02ha	
Development Type	Restoration of existing derelict quarry building to provide a base and tool store for volunteers, a source of information, and a shelter and toilets for visitor events	
Local Planning Authority	Wrexham County Borough Council	

Table 1 - Details of existing site

3.2 Watercourse & hydrology

304 The Aber Sychnant runs to the south of the proposed development in an open channel, see **Figure 2** below. In proximity to the site, the watercourse is crossed via a footbridge located upstream and to the west of the proposed site.



Figure 2 - Site location (in red) relative to nearby watercourses - taken from Main Rivers digital map from DataMapWales website

305 Downstream of the proposed site, the Aber Sychnant meanders in a roughly south-easterly direction, leading to the River Clywedog in the Minera area (see **Figure 3**). The River Clywedog continues in a south-easterly direction and meanders south of Wrexham approximately 11.5km to the southeast of the development site.



Figure 3 - Map showing Aber Sychnant becoming River Clywedog further downstream to the east - taken from Main Rivers digital map from DataMapWales website

3.3 Topographical Data

306 The site is currently brownfield in nature, occupied by the aforementioned public car park and existing derelict building. The area where the proposed development is located generally consists of woodland and a quarry.

307 The wider area is generally contoured with the land north and south of the Aber Sychnant falling towards the watercourse. From inspection all contours to the east, west and south of the proposed site fall south towards the Aber Sychnant and not towards the proposed site, the main risk of overland flows to the proposed site is from the north (see **Figure 4**). Immediately to the north the area is relatively flat having been quarried historically with an escarpment present just to the north of the site, with any significantly steep contours beyond the escarpment falling in a southeast direction away from the site and towards the existing Maesyffynnon Road to the east (see **Figure 4**). The topographical survey (see **Appendix B**) shows that the existing road levels to the north vary between 267.2m and 267.0m resulting in an approximate fall towards the site of 1 in 50.

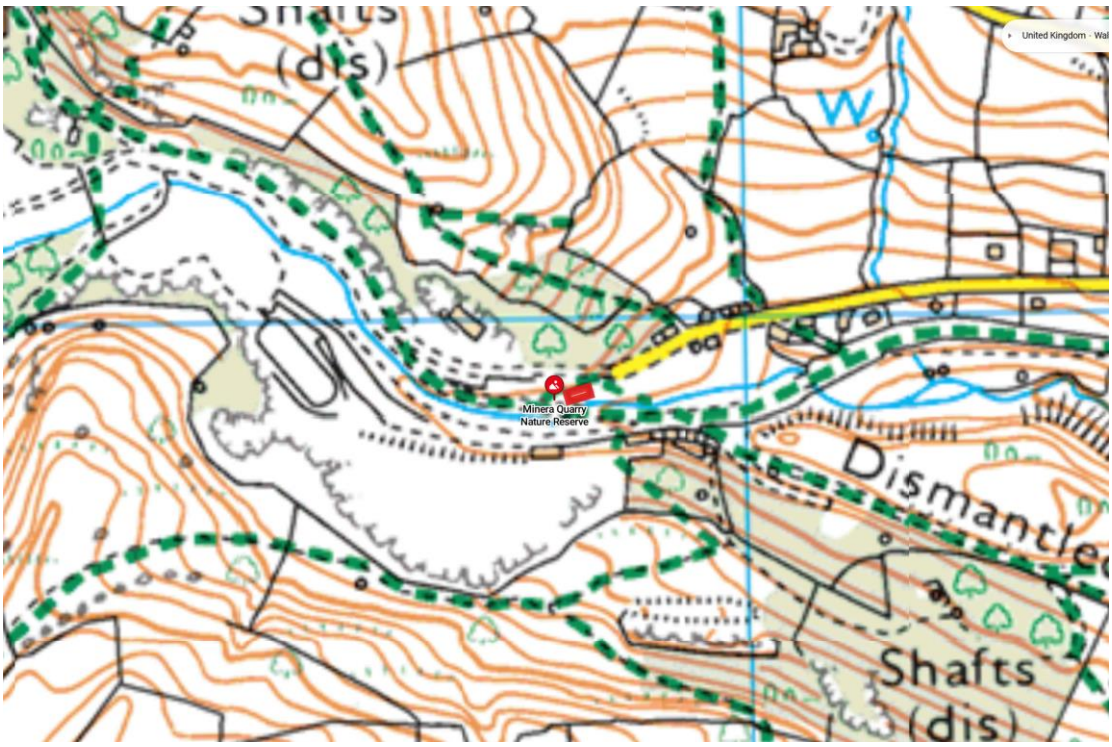


Figure 4 - Land contours for the proposed site location. Proposed development identified by red box. Taken from Bing Maps.

308 The topographical survey (see **Appendix B**) indicates that the drop in level between the proposed site and the Aber Sychnant water course is approximately 5m meaning the site is located at a significant height above the nearby watercourse.

309 The above findings indicate that there will be no significant overland flows; however, there will be some notional overland flows that may impact on the property.

3.4 Geological Data

310 The 1:50,000 scale British Geological Survey (BGS) geological mapping indicates the site to be underlain by the following bedrock formation:

- Cefn Mawr Limestone Formation - Limestone and argillaceous rocks, interbedded. Sedimentary bedrock formed between 337 and 329 million years ago during the Carboniferous period.

311 The 1:50,000 scale British Geological Survey (BGS) geological mapping had no geological information on the superficial deposits underlying the site; however, 400m to the south of the site and 500m to the east of the site the area is underlain by the following:

- Till, Devensian – Diamicton. Sedimentary superficial deposit formed between 116 and 11.8 thousand years ago during the Quaternary period.

3.5 Public Sewers

312 Public records indicate that there are no public sewers in the near vicinity of the site. See **Figure 5** for the public sewer's searches undertaken using the digdat website.

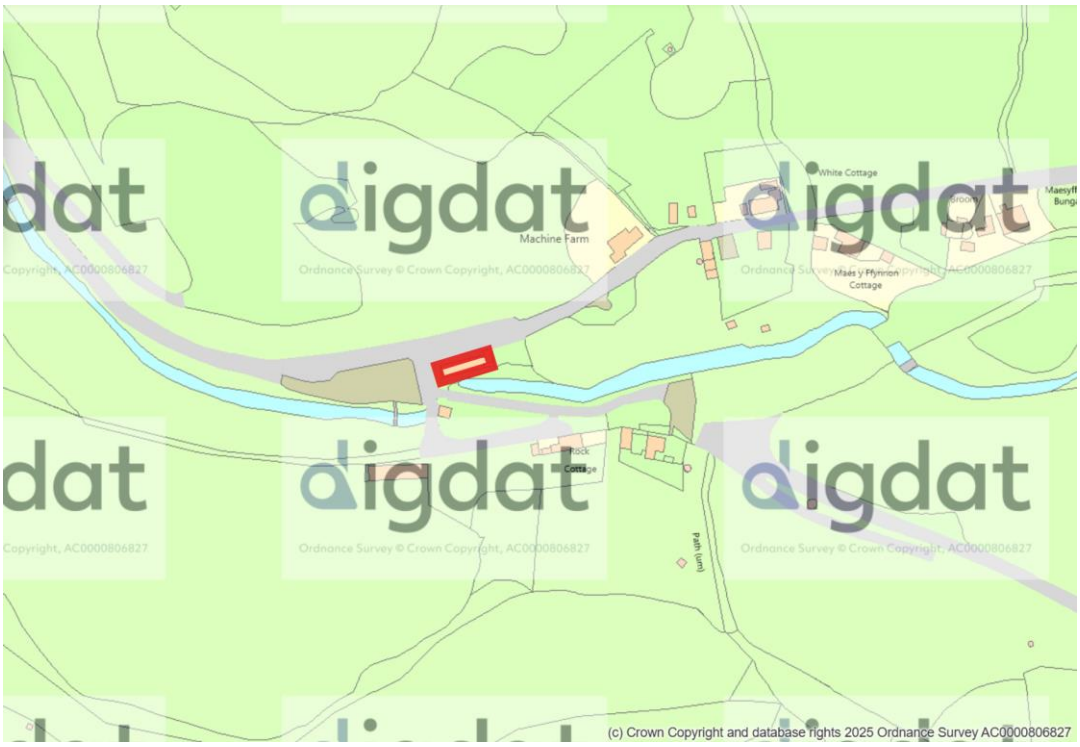


Figure 5 - Public Sewer search using digdat website

3.6 Proposed Development

313 The proposed re-development involves the restoration of derelict quarry building to provide a base and tool store for volunteers, a source of information, and a shelter and toilets for visitor events.

314 The restored building will contain a tool store, facility space, volunteers' base office and kitchen. Gabion walls are also proposed for limited levelling of the ground around the building to provide access, and also to serve as landscaped benches in some locations. Refer to **Appendix A** for proposed building layout and elevations.

315 No change is proposed to the existing access arrangement for the car park.

316 The proposed scheme is located entirely within the grounds of the existing building envelope and car park and will occupy the western portion of the plot. The proposed building is to be located on the same footprint of the existing derelict building which is expected to take up an area of approximately 200m^2 (or 0.02ha) as per the latest proposed site layout shown in **Figure 6**, **Figure 7** and **Appendix A**.

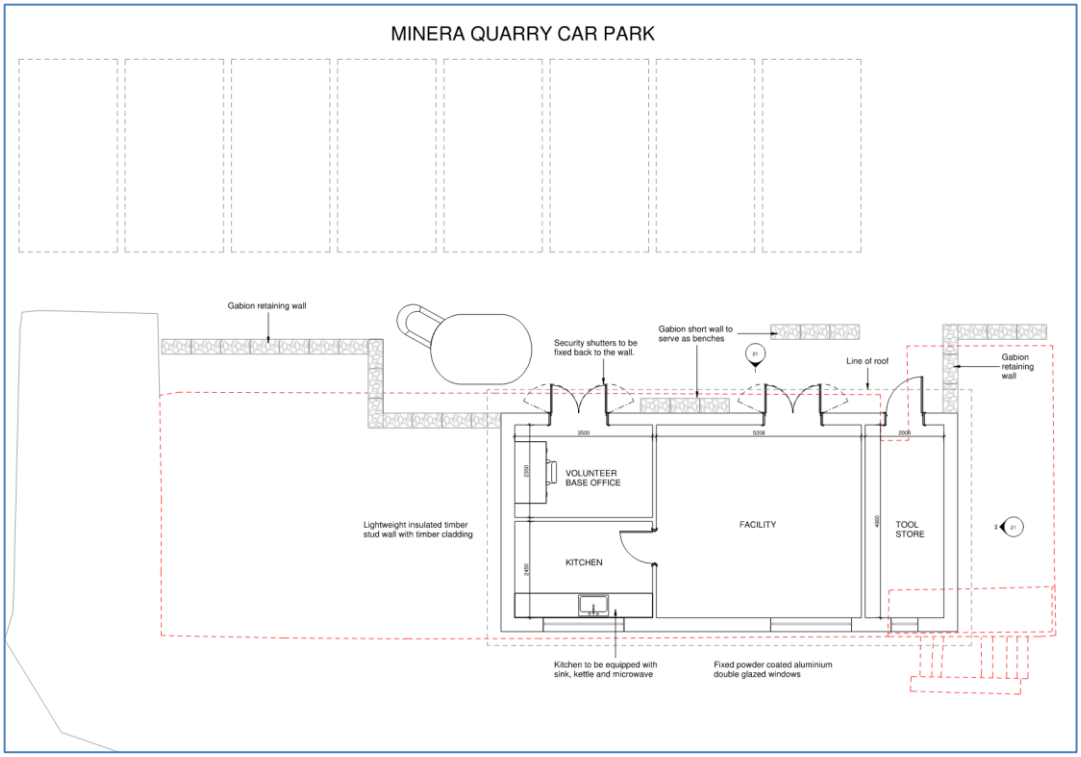


Figure 6 - Proposed building plan

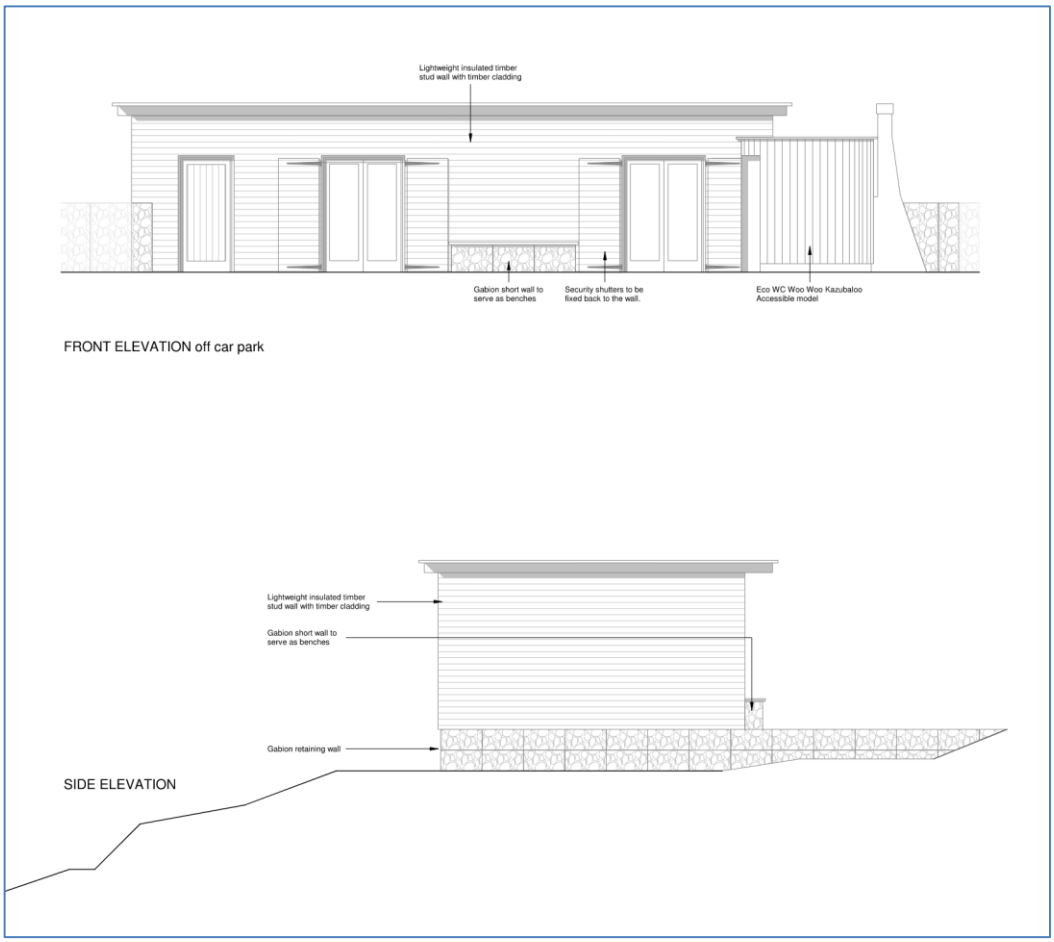


Figure 7 - Proposed building elevations

4.0 INITIAL ASSESSMENT

4.1 Flood Zone Classification and Historical Flooding

401 According to the latest Flood Map for Planning website issued by Natural Resources Wales, the site falls within Flood Zone 3 for rivers. Flood Zone 3 is defined as having more than 1% (1 in 100) chance of flooding from rivers in a given year, including the effects of climate change. The site is within Flood Zones 1 for risk of flooding from the sea, meaning there is a less than 0.1% (1 in 1000) (plus climate change) chance of flooding in a given year. The site is not subject to TAN 15 flood defended zones from the Risk Management Authority. The site is in Flood Zone 1 for flooding from surface water and small watercourses. The site has no records of previous flooding.

402 **Figure 8** below shows the indicative flood map as presented on the Flood Map for Planning on the Natural Resources Wales Government website.

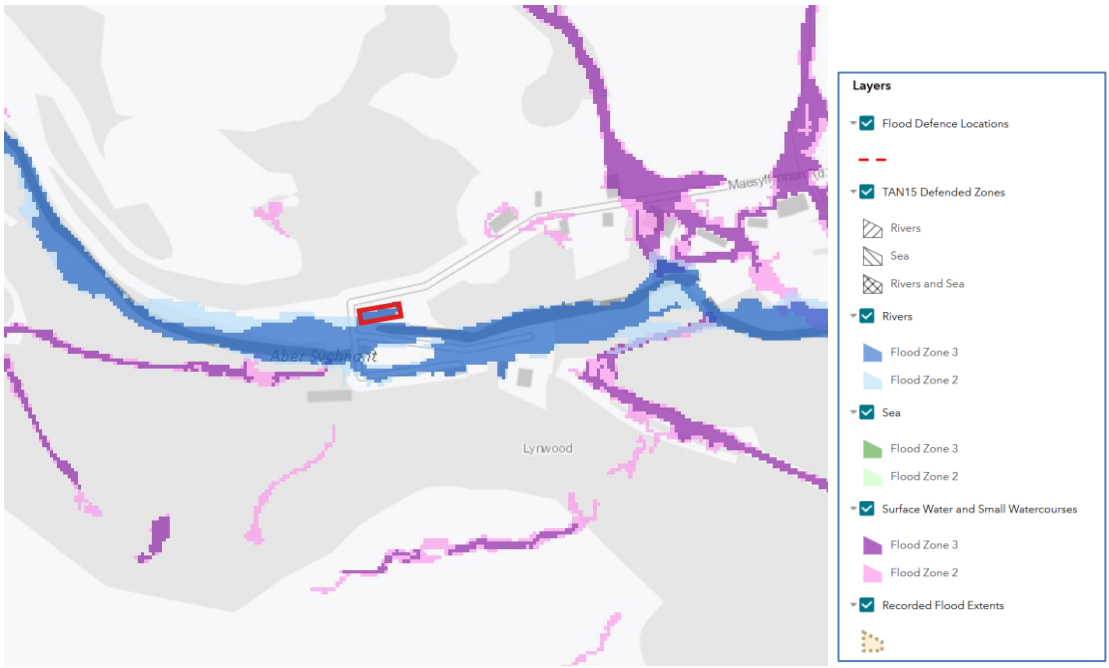


Figure 8 - Flood map (including key) taken from Flood Map for Planning website

4.2 Possible Flood Mechanisms

403 The possible sources of flood are outlined in **Table 2** below, and discussed further within **Section 5** of this report where applicable:

Flood Source	Presence	Description
Flooding from Rivers (Fluvial)	✓	The site is located within Flood Zone 3 (according to Flood Map for Planning), which is deemed to be at a risk of flooding; however, the elevated position of the site is noted and discussed further in section 5.0 and it is the view of this report that the propose site is more accurately located within Flood Zone 1.
Flooding from the Sea (Tidal)	X	Flood maps show the site is in Flood Zone 1 in respect to flooding from the sea and is therefore of low risk of flooding. The development is located approximately 19km away from the nearest coastline and is at an elevation of 267m above sea level, so tidal flooding is not considered a risk.
Overland flows originating off site	X	Flood maps show the site is in Flood Zone 1 in respect to flooding from surface water and small watercourses, the development has a low risk of surface water flooding and any notional overland flows towards the site can be addressed with localised measures.
Flooding from Groundwater	X	Due to the close proximity of the nearest watercourse and the approximate 5m level difference between site level and water course level, the risk of groundwater flooding is considered low.
Flooding from Sewers	X	There are no sewer records in close proximity to the site, therefore, there is no risk of flooding from sewers.
Development Drainage	✓	The surface water system should be suitably designed to manage site surface water rainfall within the site.
Reservoirs, Canals, and other Artificial Sources	✓	The Reservoir Act of 1975 places significant restrictions on owners of reservoirs to mitigate the risk of flooding downstream. Flood maps indicate that there is a worst-case scenario that the area could be flooded in a large reservoir were to fail and release the water it holds. However, the overall risk to the site is not deemed significant for the purposes of this FRA.

Table 2 - Possible Flood Mechanisms

5.0 FLOOD RISK SOURCES

501 The following flood risks have been based on the following information sources:

- Flood maps from the Flood Map for Planning website
- Flood Risk Assessment Wales (FRAW) maps from DataMapWales website
- British Geological Survey Mapping

502 Technical Advice Note (TAN) 15 'Development, flooding and coastal erosion', which supplements the current Planning Policy Wales guidance, advises that the Flood Map for Planning and the Flood Risk Assessment Wales (FRAW) map together make up the Wales Flood Map.

503 Flood Map for Planning displays predicted future flood risk including for 100-year climate change scenarios under the central climate change estimate, whereas the Flood Risk Assessment Wales (FRAW) map provides information about the current risk of flooding to existing properties.

5.2 Fluvial Flood Risk

504 **Figure 9** below shows the flood map for future flood risk under the central climate change estimate for river sources as presented on the Flood Map for Planning website.



Figure 9 – Predicted future flood risk from rivers taken from Flood Map for Planning website

505 The majority of the fluvial flood risk in the local area is associated with the Aber Sychnant watercourse. The areas of open channels for this watercourse are designated as having a high chance of yearly flooding and the site falls within Flood Zone 3 designation.

506 Flood Zone 3 means the site is classified as having more than 1% (1 in 100) chance of flooding from rivers in a given year, including the effects of climate change based on the Flood Map for Planning website.

507 **Figure 10** below shows the flood map for the current risk of flooding to the existing site based on the Flood Risk Assessment Wales (FRAW) map. This indicates that there is a low risk of flooding for the current situation.

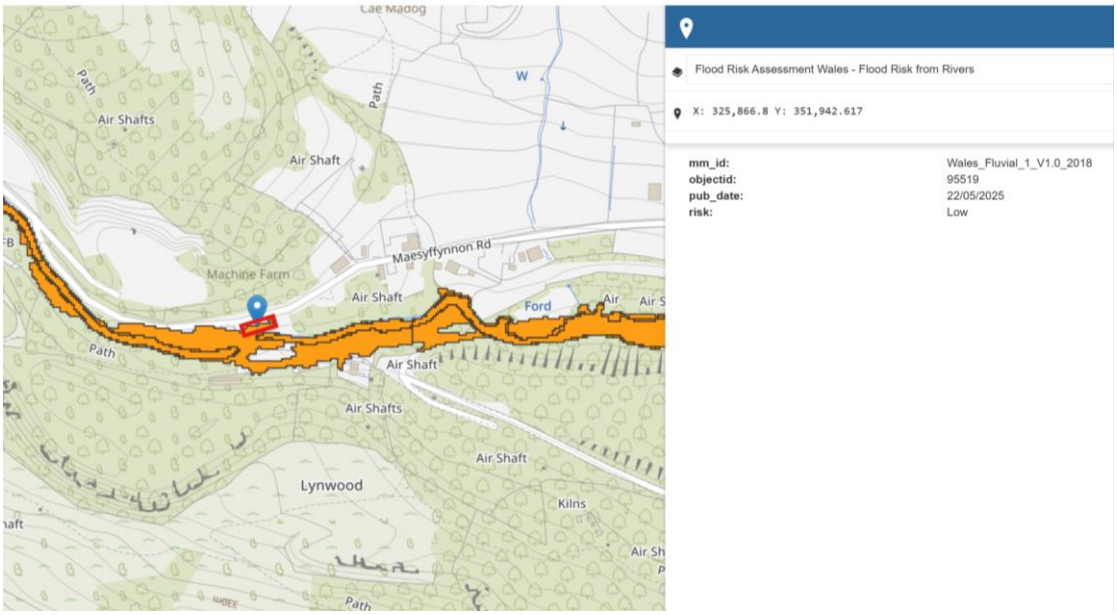


Figure 10 - Current flood risk from rivers taken from Flood Risk Assessment Wales flood maps

508 From detailed inspection of topographical surveys (see **Appendix B**) it can be seen that the road levels – which are classed as Flood Zone 1 - to the north of the site are broadly similar to the building levels (i.e. within approx 200-300mm).

509 Therefore, it is considered that the Lidar data which the online mapping is based on is not accurate in this area, and the building is infact located within the same flood zone (i.e. Flood Zone 1) as the adjacent road.

510 There are currently no recorded cases of flooding of the site based on the Flood Map for Planning website.

511 Based on the current data provided in the flood maps and the site-specific topographical survey, the location of the proposed development is not shown to be at any significant risk of flooding from fluvial source. Therefore, it is deemed that the proposed development does not significantly reduce floodplain function or increase fluvial flood risk elsewhere.

5.3 Flooding from the Sea

512 Flood Map for Planning website indicates that the site's predicted flood risk is Flood Zone 1 for flooding from the sea (see **Figure 11**), meaning there is a less than 0.1% (1 in 1000) (plus climate change) chance of flooding from the sea in a given year.

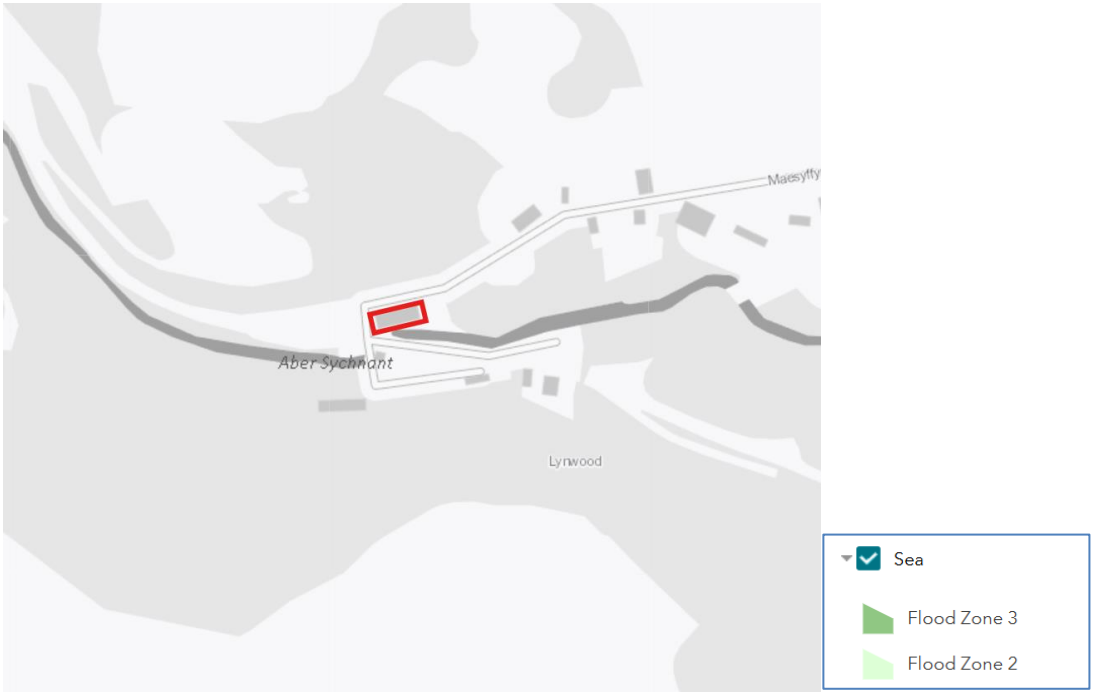


Figure 11 - Flood risk from the sea taken from Flood Map for Planning website

513 The site of the proposed development is located approximately 19km away from the nearest coastline and is at an elevation of 267m above sea level.

514 The site is therefore not deemed to be at significant risk from tidal flooding.

5.4 Overland Flows Originating off Site

515 Flood Map for Planning website indicates that the site's predicted flood risk is Flood Zone 1 for flooding from the surface water and small watercourses (see **Figure 12**), meaning there is a less than 0.1% (1 in 1000) (plus climate change) chance of flooding from the sea in a given year.



Figure 12 - Flood risk from surface water and small watercourses taken from Flood Map for Planning website

516 Areas of medium and high risk are identified in the vicinity of the site as shown in the flood map (**Figure 12**); however, these are confined to areas away for the proposed site or located south of the Aber Sychnant watercourse and therefore will not impact on the proposed development.

517 Notional surface water entering the site from the road and areas immediately surrounding the site are considered to be comfortably mitigated by ensuring the finished floor level is a minimum of 150mm above existing ground levels and external levels are locally guided away from the building.

5.5 Reservoirs

518 Government flood maps indicate that there is a worst-case scenario that the area could be flooded in a large reservoir were to fail and release the water it holds (see **Figure 13**).

519 The Reservoir Act of 1975 places restrictions on owners of reservoirs to mitigate the risk of flooding downstream.



Figure 13 - Flood risk from reservoirs taken from Flood Map for Planning website

520 The development does fall within an area which is deemed to be at risk when flooding from reservoir failure occurs, however, the overall risk to the site is deemed to be low given the management requirements placed on owners of the reservoirs.

5.6 Ground Water

521 The 1:50,000 scale British Geological Survey (BGS) geological mapping indicates the site to be underlain by the following bedrock formation:

- Cefn Mawr Limestone Formation - Limestone and argillaceous rocks, interbedded. Sedimentary bedrock formed between 337 and 329 million years ago during the Carboniferous period.

522 The 1:50,000 scale British Geological Survey (BGS) geological mapping had no geological information on the superficial deposits underlying the site; however, 400m to the south of the site and 500m to the east of the site the area is underlain by the following:

- Till, Devensian – Diamicton. Sedimentary superficial deposit formed between 116 and 11.8 thousand years ago during the Quaternary period.

Figure 14 - Extract from British Geological Survey (BGS) website showing the extents of Till, Devensian – Diamicton formation identified by the light blue areas.

523 Groundwater flooding occurs when the groundwater level rises above ground surface levels. It is most likely to occur in low lying areas underlain by permeable rocks (aquifers), usually associated with chalk, sandstone and limestone catchments that allow groundwater to rise to the surface through permeable sub soil following long period of wet weather.

524 Given the information listed above and the close proximity of the nearest watercourse (Aber Sychnant) and the approximate 5m level difference between proposed site level and water course level, groundwater flood risk at the site is considered to be low.

5.7 Flooding from sewers

525 A search of public records indicates that there are no public sewers in the near vicinity of the site. See previous **Figure 5** for the public sewer's searches undertaken using the digdat website. Consequently, the risk of flooding from sewers is considered low.

526 Any notional water entering the site will be mitigated by raising the proposed building finished floor level to be a minimum of 150mm above existing ground levels and external levels are locally guided away from the building.

5.8 Defended Zones

527 Flood Map for Planning website indicates the site is not subject to TAN 15 flood defended zones from the Risk Management Authority.

6.0 FLOOD ASSESSMENT

6.1 Definition of Flood Zones

601 The following flood assessment has been undertaken in accordance with the requirements of Technical Advice Note (TAN) 15 'Development, flooding and coastal erosion' which supplements the current Planning Policy Wales guidance.

602 **Table 3** below provides the definitions of the flood zones shown in the Flood Map for Planning tool and has been extracted from Figure 1 of TAN 15.

Zone	Flooding from rivers	Flooding from the sea	Flooding from surface water and small watercourses
1	Less than 1 in 1000 (0.1%) (plus climate change) chance of flooding in a given year		
2	Less than 1 in 100 (1%) but greater than 1 in 1000 (0.1%) chance of flooding in a given year, including climate change.	Less than 1 in 200 (0.5%) but greater than 1 in 1000 (0.1%) chance of flooding in a given year, including climate change.	Less than 1 in 100 (1%) but greater than 1 in 1000 (0.1%) chance of flooding in a given year, including climate change.
3	A greater than 1 in 100 (1%) chance of flooding in a given year, including climate change.	A greater than 1 in 200 (0.5%) chance of flooding in a given year, including climate change.	A greater than 1 in 100 (1%) chance of flooding in a given year, including climate change.

Table 3 - Definition of Flood Map for Planning flood zones taken from Technical Advice Note (TAN) 15

603 The site is classified as a general employment and commercial development and is therefore falls within the 'less vulnerable development' category within

604 **Table** 4 below which has been extracted from Figure 4 'Development vulnerability categories' of TAN 15.

Flood Risk Vulnerability Classification	
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, 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	• 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

Table 4 - Development vulnerability categories taken from Technical Advice Note (TAN) 15

605 Although the site for the proposed development falls within Flood Zone 3 in government flood maps for planning, it is suggested in **Section 5.2** that Flood Zone 1 is considered more appropriate for the building given the finished floor levels relative to the road and river.

606 Therefore, the development is considered suitable given the less vulnerable usage in Flood Zone 1, and in line with TAN 15 and Planning policy Wales guidance.

7.0 SUMMARY OF FLOOD MITIGATION MEASURES

701 GCA (UK) Ltd. (GCA) has been commissioned by Goodwood Projects to undertake a Flood Risk Assessment to support a planning application for a proposed re-development involving the restoration of derelict quarry building to provide a base and tool store for volunteers, a source of information, and a shelter and toilets for visitor events.

702 Overall, the re-development of the existing building is not considered to be at significant risk of flooding with reasonable flood mitigation measures and is considered a suitable development in line with TAN 15 guidance for the flood risk and usage of the building.

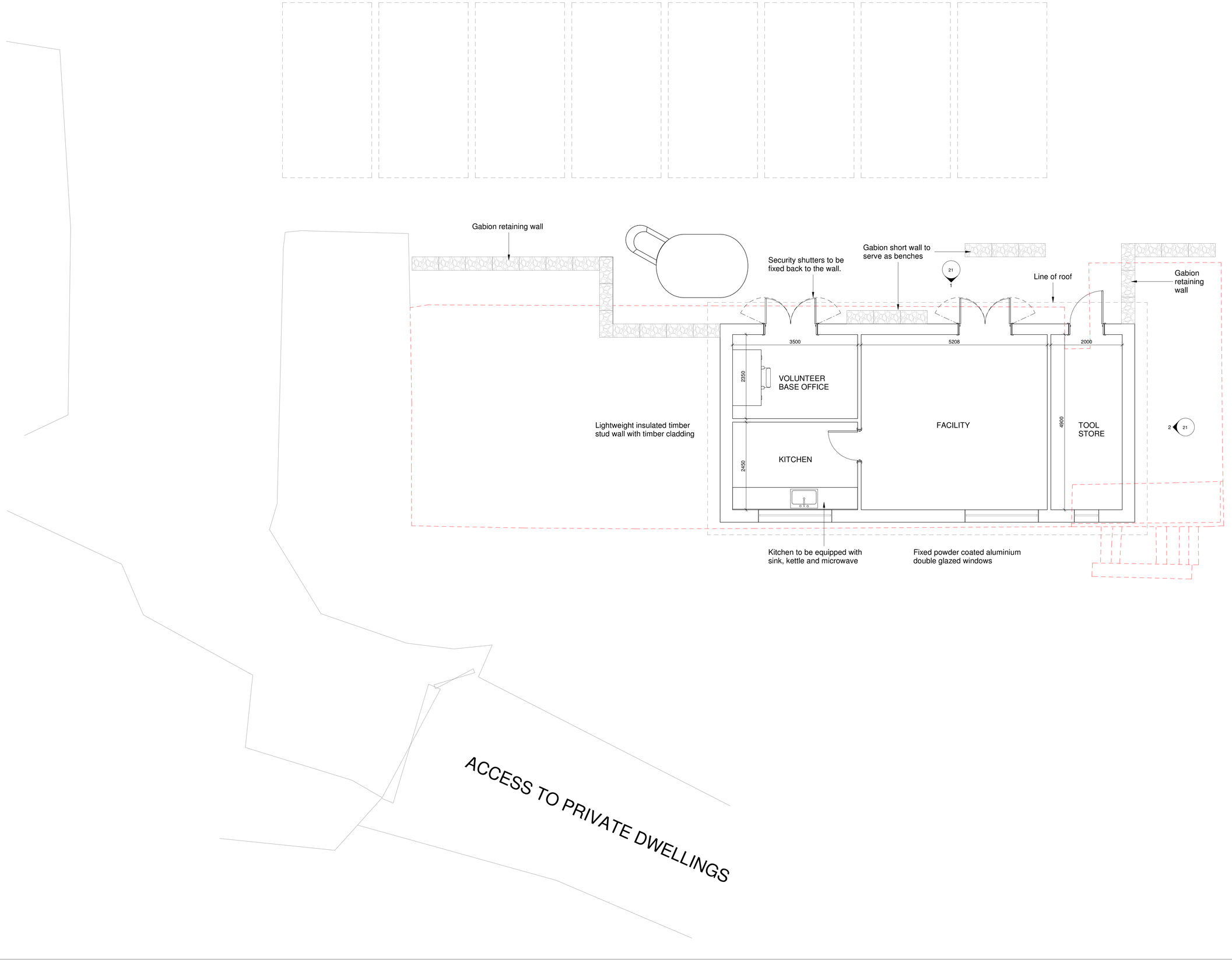
703 Key points are outlined below:

- A detailed assessment of levels shows the site should be considered to be located within Flood Zone 1 from fluvial sources and consequently has a low risk of flooding from rivers.
- The site is located within Flood Zone 1 for sea flooding and due to its distance from the nearest shore and height above sea level and consequently has a low risk of tidal flooding from the sea.
- The site is located within Flood Zone 1 for flooding from surface water and small watercourses and consequently has a low risk of flooding from surface water and small watercourses. Any notional water entering the site can be addressed with localised measures including having the finished floor level set a minimum of 150mm above existing ground levels and having external levels locally guided away from the building.
- There are no known sewers in close proximity to the site, therefore there is no risk of flooding from existing sewers.
- The nature and extents of the redevelopments do not propose to increase impermeable area and therefore it is deemed the proposed development does not significantly reduce floodplain function or increase fluvial flood risk elsewhere.

Appendix A

Proposed Plan and Elevations

MINERA QUARRY CAR PARK



Safety Health and Environmental Information — A1

The following risks are identified as unusual or unfamiliar to a competent contractor

CONSTRUCTION

DEMOLITION RISKS (FUTURE)

It is assumed that all work will be carried out by a competent contractor working, where appropriate, to an approved method statement

Demolition of Existing & New Building

1. Assume that the trees and vegetation to site area to be removed and cleared by volunteers prior to commencement.
2. Demolition and site clearing of the existing building in its entirety. Allow for removal of existing slabs and walls 150mm below ground level and grub up redundant drainage etc. Allow for new concrete pad foundations and pad to steel frame.
3. New retaining walls to raise slab to higher external ground level accessed off carpark. New insulated timber frame building under an insulated steel roof. External walls to be clad with larch. Retaining walls concealed by gabions.
4. New double glazed windows and doors, include timber security shutters externally. New solid timber lockable door to tool store.
5. Supply and install 1no. Woo Woo Kazubaloo 2 Accessible model composting WC (www.waterlesstoilets.co.uk). Allowance for supply and installation of additional Doc M Pack grab rails, toilet roll holders, and dry handwash/ sanitiser station, deadlocks to external door and signage.
6. New mains electric supply, small power, lighting, heating, and security.
7. PC sum of £20k for repairs to dilapidated wall and handrail along rover/ installation of a safety access system for future maintenance.
8. Allowance for gabion walling and furniture.

REV	DETAILS	DATE	DRN/CHK
A	Drawings updated following design changes. External interpretation note removed	17.06.25	JLL

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RIBA Chartered Practice

Minera Quarry

Proposed Plan

Clywedog Valley Heritage Partnership

FOR DISCUSSION

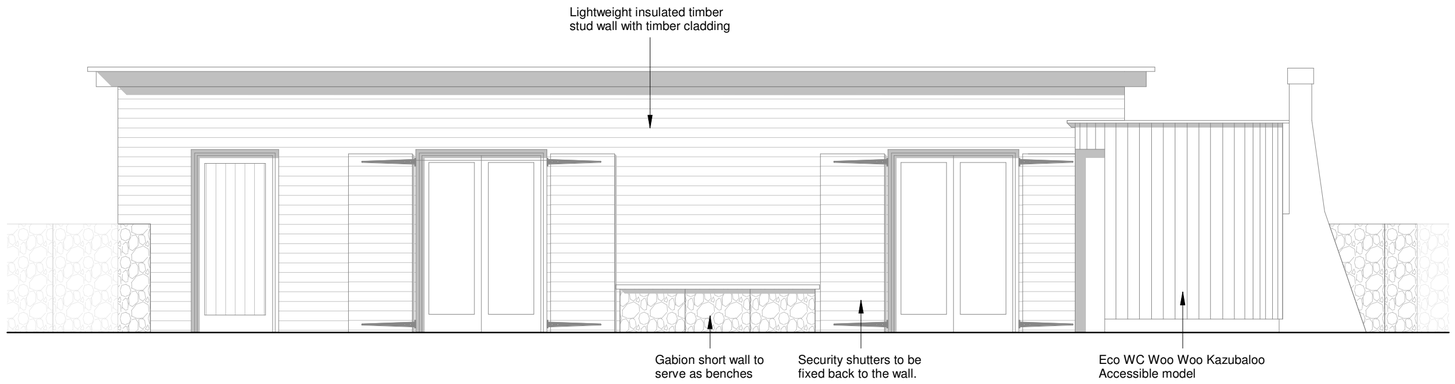
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ISO 9001 REGISTERED FIRM

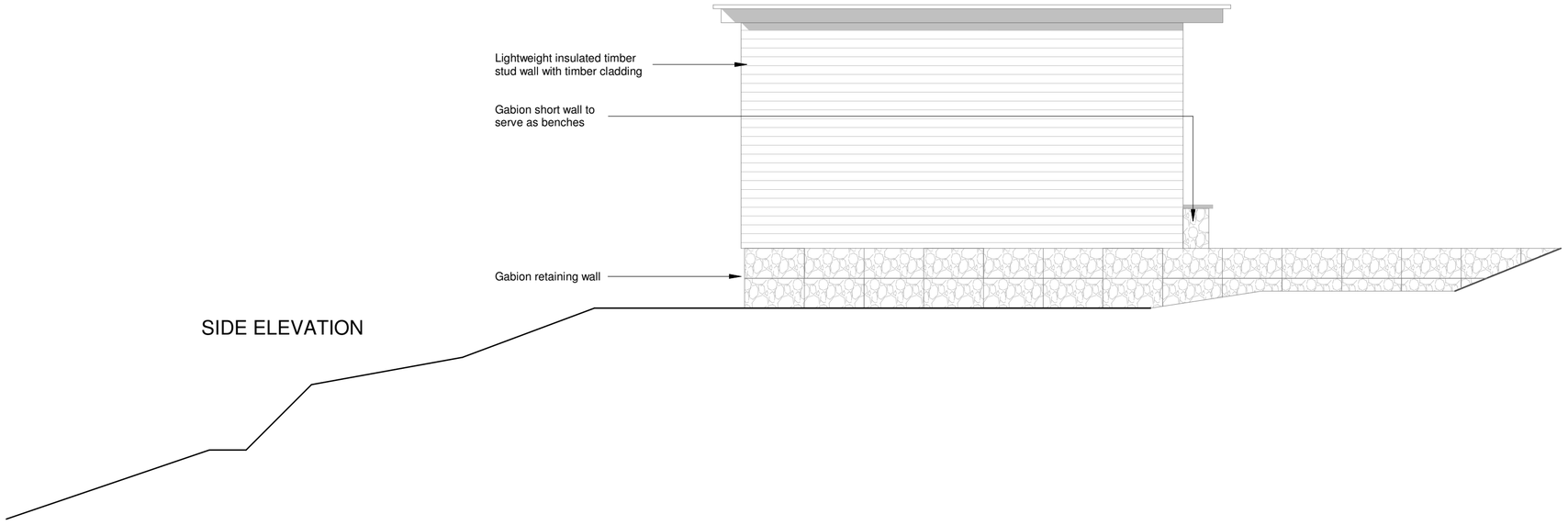
ISO 14001 REGISTERED FIRM

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FRONT ELEVATION off car park



SIDE ELEVATION

Safety Health and Environmental Information — A2

The following risks are identified as unusual or unfamiliar to a competent contractor

CONSTRUCTION

DEMOLITION RISKS (FUTURE)

It is assumed that all work will be carried out by a competent contractor working, where appropriate, to an approved method statement

Demolition of Existing & New Building

1. Assume that the trees and vegetation to site area to be removed and cleared by volunteers prior to commencement.
2. Demolition and site clearing of the existing building in its entirety. Allow for removal of existing slabs and walls 150mm below ground level and grub up redundant drainage etc. Allow for new concrete pad foundations and pad to steel frame.
3. New retaining walls to raise slab to higher external ground level accessed off carpark. New insulated timber frame building under an insulated steel roof. External walls to be clad with larch. Retaining walls concealed by gabions.
4. New double glazed windows and doors, include timber security shutters externally. New solid timber lockable door to tool store.
5. Supply and install 1no. Woo Woo Kazubaloo 2 Accessible model composting WC (www.waterlesstoilets.co.uk). Allowance for supply and installation of additional Doc M Pack grab rails, toilet roll holders, and dry handwash/ sanitiser station, deadlocks to external door and signage.
6. New mains electric supply, small power, lighting, heating, and security.
7. PC sum of £20k for repairs to dilapidated wall and handrail along rover/ installation of a safety access system for future maintenance.
8. Allowance for gabion walling and furniture.

REV	DETAILS	DATE	DRN/CHK
A	Drawings updated following design changes. External interpretation note removed	17.06.25	JLL

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Minera Quarry

Proposed Elevations

Clywedog Valley Heritage Partnership

DRAWING NO. 4269 - 21

REV A | DATE 06/05/2025

FOR DISCUSSION | DRN FD | CHK JLL | SCALE 1 : 50 @ A2

ISO 9001 REGISTERED FIRM
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Appendix B

Topographical Survey

Revision No: -\	Existing Site Plan	March 2025

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Project

Topogrpahical Survey
MINERA QUARRY BUILDING
Maes-Y-Ffynnon Rd, Coedpoeth, Gwynfryn, Wrexham LL11 3DE

Reference No	Drawing No	Scale	Paper Size
250210-01-GP	002	1:200	A3

Survey Stations

Grid - Related to OSGB36 (National Grid) and OSTN15 derived from GNSS

Levels - Related to Ordnance Survey Datum via OSGM15 derived from GNSS

STATIONS	EAST	NORTH	HEIGHT	DESCRIPTION
A	325873.406	351959.572	267.080	Road Nail
A3	325866.643	351958.668	267.768	Wooden Peg
A4	325842.858	351951.453	267.322	Road Nail

Survey Notes

- All critical dimension to be checked on site
- Further investigation may be needed to show the full extent of the drainage on site
- Only trees with a diameter of 300mm or greater have been surveyed
- Boundaries shown do not necessary represent legal boundaries

Legend

Bol	Bollards	MP	Mile post
BS	Bus stop	NP	Name plate
BT	British Telecom IC	O/G	Overgrown
CL	Ceiling Level	O/H	Overhead
CATV	Cable television IC	PO	Post
DK	Drop kerb	PM	Parking Meter
DR	Drain	RE	Rodding Eye
Elec	Electric IC	RL	Ridge Level
EP	Electric pole	RW	Retaining Wall
ER	Earth rod	SP	Soil pipe
FFL	Finished Floor Level	ST	Stop tap
FP	Fence post	Stay	Cable stay
FB	Flower Bed	TCB	Telephone call box
G	Gully	FFL 5.55	Finished Floor Level
GP	Gate Post	TL	Door Threshold Level
H/C	Harcore	TP	Telephone pole
HMP	Hazard Marker Posts	Tar	Tarmacadam
IC	Inspection cover	VP	Vent pipe
K	Kerb	W	Water cover
KO	Kerb outlet	WL	Water level
LB	Letter box	WM	Water meter
LP	Lamp post	WO	Water outlet
Mkr	Utility marker	UTL	Unable to lift

FENCE ANNOTATION

BW	Barb wire	WP 1.0MH	Fence/ Height
WP	Wooden panel		
CI	Corrugated iron		Gate
CL	Chain link		
CPWP	Concrete post Wooden Panel		O/H Canopy
HR	Hand rail		
IR	Iron railing		Foilage
PC	Post and chain		
PR	Post and rail	A	Survey Control station (Coordinated point)
PW	Post and wire		
SF	Security fence	12.28	Spot Level (Surveyed point)
WP	Wooden Panel		

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