4.6.A Historic Environment Desk Based Assessment for the Glaslyn Cables Works

nationalgrid

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1. Introduction

1.1.1 This report comprises a desk-based assessment (DBA), which sets out the heritage baseline conditions for the proposed works. This DBA is included as an Appendix (**Volume 8: Appendix 4.6.A**) to **Volume 4, Chapter 6: Historic Environment** of the Environmental Statement (ES).

1.1.2 The purpose of the DBA is to identify all known designated and non-designated historic assets in the Glaslyn Cables works site and the defined study areas (as set out in **Section 3.1**) to establish the archaeological and historical background.

1.1.3 The DBA assesses the potential for the survival of previously unknown historic assets and archaeological remains to exist within the Glaslyn Cables works site and provides an assessment of the significance of the known historic assets and potential archaeological remains that have the potential to be affected by the proposed works. The DBA concludes with an assessment of potentially affected historic assets within the Glaslyn Cables works site and study areas.

1.2 Site Location and Proposed Works

1.2.1 National Grid Electricity Transmission plc (NGET) is proposing reinforcement of the existing double circuit electric line which runs between Pentir Substation near Bangor and Trawsfynydd Substation in Eryri National Park (ENP) ('the Project'). As part of the Project, NGET is proposing to install replacement high voltage underground electricity cables between its cable sealing end compound (CSEC) at Wern to connect to the Eryri (Snowdonia) Visual Impact Provision's (EVIP's) underground cables close to the consented tunnel headhouse (C20/0244/08/LL) at Minffordd, west of Garth in Gwynedd.

1.2.2 The replacement Glaslyn Cables will involve the following:

- The Wern CSEC will be increased from approximately 50 metres (m) x 23 m to 52 m x 49 m; new foundations, high voltage plant and steelworks, an extended earth mat and new perimeter security fencing around the extended compound will be installed; and a new access from the A498 will be provided.
- Replacement of the existing one cable per phase oil filled 400 kilovolt (kV) Glaslyn Cable circuit (2 cables per phase, six phases in total), with new 400 kV cross-linked polyethylene (XLPE) cables and replacement of the existing two circuits of 132 kV Glaslyn Cable to new 400 kV XLPE cables between the extended Wern CSEC and the new Minffordd CSEC, a total length of approximately 6 kilometres (km).
- Removal of parts of the redundant Glaslyn Cables and making safe sections of redundant cables left in-situ.
- Decommissioning and removal of the existing Garth CSEC.
- A new CSEC at Minffordd, approximately 70 m x 80 m, where the replacement Glaslyn Cables will connect to the EVIP and associated landscape works. Foundations, high voltage plant and steelworks, earth mat and new perimeter

security fencing around the compound will be installed and a new access from the existing Garth Headhouse access point will be provided.

- A temporary working corridor approximately 65 m wide, which will include:
    - A cable installation trench when using open cut techniques approximately 1.5 m deep and 1.5 m wide with up to three cables laid in each of the trenches at a depth of approximately 1.1 m.
    - Horizontal directional drilling (HDD) beneath the railway and Afon Glaslyn and other shorter lengths of HDD to pass beneath watercourses and other obstacles.
    - Thirteen HDD working areas, seven of which will be raised to avoid flood risk.
    - Temporary haul roads for the delivery of cable drums and movement of installation plant and traffic.
    - A main construction compound, west of the A498.
    - Storage areas for excavated spoil.
    - Measures for drainage and pollution control.
    - Fencing on each side of the construction corridor.

1.2.3 Further information on the proposed works is provided in ES **Volume 4, Chapter 2: Glaslyn Cables Works**.

1.2.4 For the purposes of this assessment, all elements of the proposed works in the site are hereafter referred to as 'the Glaslyn Cables works site'.

1.3 Aims

1.3.1 The aims of the assessment are:

- To place the Glaslyn Cables works site in its historical and archaeological context through the collection of baseline information.
- To identify the presence of known historic assets (both designated and non-designated) in the Glaslyn Cables works site and the 500 m and 3 km study areas (see **Section 3**).
- To assess the potential for previously unrecorded archaeological remains to exist in the Glaslyn Cables works site.
- To identify the extent of previous ground disturbance which may have affected the survival of archaeological remains in the Glaslyn Cables works site.
- To assess the significance of historic assets in the Glaslyn Cables works site and study area, and the likely significance of previously unrecorded archaeological remains that may be in the Glaslyn Cables works site.
- To identify historic assets and previously unrecorded archaeological remains that have the potential to be impacted by the proposed works which will be taken forward for assessment in the ES.

1.4 Structure of the Document

1.4.1 This DBA is divided into the following sections:

- The legislative and planning policy framework is provided in **Section 2** (Legislation, Policy and Guidance).
- The methodology for the assessment and for the determination of the study areas is set out in **Section 3** (Assessment Methodology).
- A description of the archaeological and historical background of the Glaslyn Cables works site and description of historic assets in the Glaslyn Cables works site and study areas, as well as a summary of previous archaeological investigations undertaken in the study areas, is set out in **Section** Error! Reference source not found. (Heritage Baseline).
- **Section** Error! Reference source not found. assesses the potential for unrecorded archaeological remains to exist in the Glaslyn Cables works site and provides an assessment of the significance of known and potential historic assets which have the potential to be impacted by the proposed works (Assessment of Baseline).
- A summary of the results of the assessment is provided in **Section** Error! Reference source not found. (Conclusions).

1.4.2 This DBA is supported by **Volume 8, Appendix 4.6.B: Gazetteer of Historic Assets**.

1.4.3 This DBA is also supported by the following figures at the end of this report:

- **Figure 4.6.A.1**: Designated Historic Assets in 3 km of Glaslyn Cables works site;
- **Figure 4.6.A.2**: Non-designated Historic Assets in 500 m of Glaslyn Cables works site;
- **Figure 4.6.A.3**: Historic Landscape Character Areas in 500 m of Glaslyn Cables works site;
- **Figure 4.6.A.4**: Extracts from Tithe Surveys of Penmorfa Parish and Ynyscynhaiarn Parish in the County of Carnarvon 1842;
- **Figure 4.6.A.5**: Historical OS Map 1888;
- **Figure 4.6.A.6**: Historical OS Map 1901; and
- **Figure 4.6.A.7**: Historical OS Map 1953.

2. Legislation, Policy and Guidance

2.1.1 Legislation, planning policy and guidance relevant to the historic environment and pertinent to the proposed works are detailed **in Volume 8: Appendix 1.1.A Legislation, Policy and Guidance, Volume 4, Chapter 6. Historic Environment** and are summarised below.

2.2 Legislation

- Ancient Monuments and Archaeological Areas Act 1979 (Ref. 2.1);
- Planning (Listed Buildings and Conservation Areas) Act 1990 (Ref. 2.2);
- The Historic Environment (Wales) Act 2016 (Ref 2.3);
- The Historic Environment (Wales) Act 2023 (Ref 2.4); and
- The Hedgerow Regulations 1997 (Ref 2.5).

2.3 National Planning Policy

- The 2023 Overarching NPS for Energy (EN-1) (Ref 2.6).
- The 2023 NPS for Electricity Networks Infrastructure (EN-5) (Ref 2.7).
- Planning Policy Wales 2024 (Ref 2.8).
- Future Wales 2021 The National Plan to 2040 (Ref 2.9).
- Technical Advice Note 24: The Historic Environment (Ref. 2.10).

2.4 Local Planning Policy

- Anglesey and Gwynedd Joint Local Development Plan 2011 – 2026 (Ref. 2.11).
- Eryri Local Development Plan 2016 – 2031 (Ref. 2.12).

2.5 World Heritage Convention

- The Slate Landscape of Northwest Wales. Nomination as a World Heritage Site. Property Management Plan 2020 – 2030 (Ref. 2.13).

2.6 Guidance

2.6.1 This DBA has been carried out using guidance from the following sources which are relevant to the heritage assessment:

- Conservation Principles for the sustainable management of the historic environment in Wales (Ref 2.14);
- Heritage Impact Assessment in Wales (Ref 2.15);

- Managing Change to Listed Buildings in Wales (Ref. 2.16);
- Managing Change to Registered Historic Parks and Gardens in Wales (Ref 2.17);
- Managing Conservation Areas in Wales (Ref 2.18);
- Managing Historic Character in Wales (Ref 2.19);
- Managing Lists of Historic Assets of Special Local Interest (Ref 2.20);
- Setting of Historic Assets in Wales (Ref 2.21); and
- Chartered Institute for Archaeologists Standard and guidance for historic environment desk-based assessment (Ref 2.22).

3. Assessment Methodology

3.1 Study Area

3.1.1 The study areas set out below have been agreed through consultation with Heneb: the Trust for Welsh Archaeology and are presented on **Figures 4.6.A.2** and **4.6.A.3**.

Designated Historic Assets

3 km Study Area

3.1.2 A study area of 3 km from the Glaslyn Cables works site has been defined to provide historical and archaeological context and to identify designated historic assets with the potential to be affected by the proposed works.

3.1.3 The settings of designated historic assets of the highest value (i.e., World Heritage Sites, scheduled monuments, Grade I and II* listed buildings, registered parks and gardens and conservation areas containing a number of assets of the highest value) outside of the defined study area will be considered. These assets will be considered as the proposed works may have the potential to result in long-term change to the settings of designated historic assets, some of which may be at a distance from the Glaslyn Cables works site.

Non-designated Historic Assets

500 m study area

3.1.4 A study area of 500 m from the Glaslyn Cables works site has been defined to provide historical and archaeological context and to identify non-designated historic assets with the potential to be affected by the proposed works.

3.1.5 Undesignated historic receptors are identified with their Historic Environment Record (HER) reference number which uses the prefix 'PRN'. Each receptor identifier is placed in parentheses and highlighted in bold in the text.

3.2 Data and Information Sources

3.2.1 This assessment has collated cultural heritage data from several sources, comprising:

- Formal search of the Heneb HER for Gwynedd for information relating to non-designated historic assets, previous archaeological investigations and historic landscape character data.
- Records from the National Monuments Record (NMR) of Wales, held by RCAHMW (Ref 3.1).
- Records from the National Museums Wales database (Ref 3.2).
- Records held by Cadw on designated historic assets in Wales (Ref 3.3).

- Published and unpublished literature (including a detailed review of reports for previous fieldwork carried out in proximity to the Glaslyn Cables works site).
- Documentary, cartographic and other resources as deposited in the local archives.
- Local authority conservation area appraisals and management documents and their mapping (Gwynedd Council and Snowdonia National Park).
- Various online resources including the British Geological Survey (BGS) Geology of Britain Viewer (Ref 3.4) and the British Geological Survey GeoIndex Onshore (Ref 3.5).
- Research Framework for the Archaeology of Wales (Ref 3.6).
- National Library of Scotland for historic maps (Ref 3.7).
- Vertical aerial photography of the study area available from the National Collection of Aerial Photographs (Ref 3.8), the APU Welsh Government Aerial Photography (Ref 3.9), and the Britain from Above database (Ref 3.10).
- Available 50cm to 1m spatial resolution light detecting and ranging (LiDAR) data published by the Welsh Government (Ref 3.11) and the National Library of Scotland (Ref 3.7).
- Defence of Britain Database (Ref 3.12).
- Relevant records available from the Portable Antiquities Scheme (PAS) (Ref 3.13).

3.3 Site Walkover Survey

3.3.1 A site visit and visual appraisal of historic assets in the Glaslyn Cables works site and study areas was undertaken between 12th and 14th November 2024 to examine the area of proposed works to:

- Identify known historic assets in the Glaslyn Cables works site.
- Identify areas with the potential to contain any previously unidentified archaeological or historical remains.
- Identify and assess the setting of historic assets in the Glaslyn Cables works site and study area.
- Identify the location, extent and severity of modern ground disturbance and previous construction impacts.
- Assess ground conditions and the suitability of the Glaslyn Cables works site for further evaluation.

3.4 Previous Ground Disturbance

3.4.1 The previous impact to buried archaeological remains caused by historic development has been assessed using a five-point scale of ‘very high’, ‘high’, ‘medium’, ‘low’ and ‘very low’. The definitions are set out in **Table 3-1**.

Table 3-1 – Level of Previous Ground Disturbance

Magnitude of Previous Disturbance	Description
Very High	Deep level basement and sub-basement excavated into the underlying natural geology resulting in the removal of all subsurface archaeological deposits.
High	Extensive and deep disturbance resulting in the removal of all but the deepest archaeological deposits such as wells or quarry pits, deep foundations, quarrying and large utilities.
Medium	Moderate previous disturbance which may extend to some depth, but where there remains the potential for archaeological remains to survive either between or beneath existing impact levels such as building foundations and utility trenches.
Low	Shallow previous disturbance such as areas of car parking and surfacing where archaeological remains may survive with limited truncation beneath the level of impact.
Very Low	No known historic development impacts to subsurface archaeological remains. Potential for the survival of archaeological horizons from Prehistory to the Post-medieval period.

3.5 Archaeological Potential

3.5.1 Archaeological potential assesses the possibility that unrecorded archaeological remains may exist in the Glaslyn Cables works site in addition to the known archaeological resource identified in the baseline. The potential for unrecorded archaeological remains to exist in the Glaslyn Cables works site has been determined by professional judgement guided by an assessment of the existing heritage resource and the impact of previous modern development or ground disturbance in the Glaslyn Cables works site.

3.5.2 The potential for an area to contain archaeological remains is rated ‘high’, ‘medium’, ‘low’, ‘negligible’, or ‘unknown’. This rating is based on an understanding of the archaeological resource as a whole and takes into account its national, regional and local context. The rating also considers the number and proximity of known and predicted archaeological and historical sites or find spots in the Glaslyn Cables works site and the surrounding study areas.

3.6 Significance of Historic Assets

3.6.1 The assessment criteria used in the DBA is based on Cadw guidance on heritage impact assessment in Wales (Ref. 2.14) and the setting of historic assets in Wales (Ref. 2.20). Each historic asset is assigned a significance (heritage value) rating in the DBA. The significance (heritage value) of historic assets has been determined

by professional judgement guided by statutory and non-statutory designations, national, regional, and local policies, and archaeological research frameworks.

3.6.2 The value of a historic asset is guided by its designated status, but is derived also from its heritage interest, which is defined by Cadw as a combination of its evidential, historical, aesthetic or communal interest. The setting of a historic asset can also contribute to its value. Using professional judgement and the results of consultation with heritage stakeholders, historic assets are also assessed on an individual basis and regional variations and individual qualities are considered where applicable. In articulating effects, professional judgement is made on the level of impact (positive or negative) that a historic asset will experience as a result of the proposed works, supported by an appropriate narrative linking this to how the asset will have its significance changed.

3.6.3 **Table 3-2** below provides the criteria for assigning heritage value, but in all cases professional judgement will be applied regarding the appropriate category for individual historic assets, with a justification for this assessment provided.

Table 3-2 – Criteria for Determining the Value of Historic Assets

Value of Historic Assets	Description
High	World Heritage Sites. Scheduled Monuments. Aircraft crash sites. Grade I and II* Listed Buildings. Registered battlefields. Grade I and II* registered parks and gardens. Conservation areas of demonstrable high value. Non-designated historic assets (archaeological sites, historic buildings, monuments, parks, gardens, or landscapes) that can be shown to have demonstrable national or international importance. Well preserved historic landscape character areas, exhibiting considerable coherence, time-depth, or other critical factor(s).
Medium	Grade II Listed Buildings. Conservation areas. Grade II registered parks and gardens. Non-designated historic assets (archaeological sites, historic buildings, monuments, park, gardens, or landscapes) that can be shown to have demonstrable regional importance. Averagely preserved historic landscape character areas, exhibiting reasonable coherence, time-depth, or other critical factor(s). Historic townscapes with historic integrity in that the assets that constitute their make-up are clearly legible.
Low	Locally Listed Buildings.

	Non-designated historic assets (archaeological sites, historic buildings, monuments, park, gardens, or landscapes) that can be shown to have demonstrable local importance. Assets whose values are compromised by poor preservation or survival of contextual associations to justify inclusion into a higher grade. Historic landscape character areas whose value is limited by poor preservation and/or poor survival of contextual associations.
Very Low	Assets identified on national or regional databases, but which have no evidential, historical, aesthetic or communal value. Assets whose values are compromised by poor preservation or survival of contextual associations to justify inclusion into a higher grade. Landscape with no or little significant historical merit.

3.7 Limitations and Assumptions

3.7.1 The assessment has relied upon data and records provided by third parties, and it has been assumed that this information is accurate and up to date at the time of reporting.

3.7.2 Historic aerial photographic coverage of the Glaslyn Cables works site and study area was not available from the National Collection of Aerial Photographs database (Ref. 3.8), the APU Welsh Government Aerial Photography (available on DataMapWales) (Ref. 3.9), or the Britain from Above database (Ref 3.10).

4. Heritage Baseline

4.1 Site Conditions

Geology

4.1.1 The bedrock geology underlying the Glaslyn Cables works site comprises sedimentary mud and siltstones of Ordovician (478 to 485 million years ago) and Cambrian (485 to 499 million years ago) date. These rocks, originally deposited in deep and shallow seas have been folded, faulted, uplifted, eroded and moulded over millions of years. Igneous extrusions of Ordovician date are also recorded in discrete locations across the area and often correspond with rocky outcrop locations of higher elevated land and along the eastern edge of the area (Ref 3.4).

4.1.2 Superficial deposits in the Glaslyn Cables works site generally comprise alluvial sediments of Holocene date underlain by Devensian tills (diamicton) (Ref 3.4).

4.1.3 Soils in the Glaslyn Cables works site are largely of alluvial origin excepting where they overlie rocky igneous intrusions where they are free draining acid loam soils over rock. The soils predominantly consist of silts and silty clays and loamy soils developed in marine alluvium and occur between 2 m and 6 m above ordnance datum (AOD). Reclaimed marine alluvium infills the former estuarine bay and saltmarshes of the Afon Glaslyn where soils are usually greyish brown or grey with yellowish brown mottles and are affected by high groundwater levels. Localised winter floods are common and summer flooding also occurs in many areas after heavy rain. The high groundwater-table and the difficulty of working wet fine textured soils precludes arable cropping so most of the association is under permanent grass with a little rough grassland and scrub (Ref 4.1).

Previous Geotechnical Investigations Undertaken in the Glaslyn Cables Works Site

4.1.4 Previous geoarchaeological assessment (Ref 4.1) has provided information on the broad nature, extent and depth of depositional sequences. It has found that the Traeth Mawr, the reclaimed estuary that comprises most of the Glaslyn Cables works site, developed as a freshwater marsh following the last glacial retreat, with drier sand and gravel-rich areas, rocky outcrops forming islands and dry land on the higher ground around its edges. A transition from freshwater marshland to brackish water, then tidal mudflats and saltmarsh occurred from the Iron Age onwards (Ref 4.1).

4.1.5 Previous geoarchaeological assessment also found that more elevated areas of ground in the area have a high potential for archaeological features and finds that predate the reclaimed landscape. This is supported by the existing archaeological record which shows that the wider area contains sites and finds that date from prehistory to modern times, with the known evidence for prehistoric, Roman and medieval activity confined to areas that lie above the level of the reclaimed estuary on former islands, the former coastline or the areas inland from the estuary. Ground surfaces relating to the pre-reclamation landscape may survive below the reclaimed

ground and marine estuarine deposits, but they are likely to be deeply buried. (Ref 4.1).

4.1.6 Deposit modelling has indicated the solid geology and ancient land surface at 10,000 BC is buried under beneath deep Holocene alluvium. Recent works in the area have confirmed a low archaeological potential of the upper deposits of the Afon Glaslyn Floodplain where the first few metres are of relatively recent date and relate to the reclamation of lands following the construction of embankments in the 19th century (Ref 4.1).

4.1.7 Archaeological testing (Ref 4.2) carried out at the eastern end of Traeth Mawr, c.200 m south-west of the Garth CSEC revealed bands of alluvial sand deposits similar to those uncovered in the test pits and confirmed a low archaeological potential of the upper deposits of the Afon Glaslyn floodplain where the first few metres were of relatively recent date and related to the reclamation of lands following the construction of embankments in the early 19th century.

4.1.8 The results of the geotechnical borehole and test-pitting works undertaken as part of the A487 bypass running across Traeth Mawr have been reviewed alongside BGS records for other geotechnical works in the area to create a series of Projected Profiles across Glaslyn Floodplain as traversed by the A487 (Ref. 6.40). These revealed upper alluvium c.5 m in depth and below that estuarine alluvium between c.10 m and c.30 m in depth in a west to east transect along the west side of the A487 (Ref. 6.40, Figure 14). The results suggested that ground surfaces relating to the pre-reclamation landscape may survive below the reclaimed ground and marine estuarine deposits, but they are likely to be deeply buried (Ref 4.1 & Ref 4.3).

4.1.9 The archaeological potential for earlier archaeology on the reclaimed Traeth Mawr is mostly confined to early crossing points and the former coastline on the fringe of estuary. This is supported by the existing archaeological record which indicates that prehistoric, Roman and later activity was confined to areas that lie above the level of the reclaimed estuary on former islands, coastline or areas inland from the estuary (Ref 4.1 & Ref 4.3).

4.1.10 AECOM were commissioned by National Grid to undertake archaeological monitoring of geotechnical investigations for the Glaslyn Cables works. Nine trial pits were excavated and monitored archaeologically: ATP01(B) and ATP02 were at the eastern end of the Glaslyn Cables works site beside the Wern CSEC; ATP03 and ATP04 were in fields just south of the Tremadog Bypass (A487); ATP05 and ATP06 in the grounds of a town park again south of the Tremadog Bypass; ATP07 in marshy ground south of the Porthmadog Bypass (A487); and ATP08 and ATP09 at the western end of the Glaslyn Cables works site beside the Garth CSEC (Ref 4.4).

4.1.11 The test pits consistently revealed layers of estuarine sands and alluvium, and aligned with previous archaeological and geoarchaeological assessments in the area. None of the monitored test pits revealed layers, features or artefacts of archaeological significance (Ref 4.4).

4.1.12 Only test pit ATP08 beside the Garth CSEC differentiated from the other test pits – in this instance, redeposited estuarine sands covered an old sod layer. According to local informant (National Grid foreman), sands had been deposited in this area during construction of the adjacent compound. This was further confirmed by BGS records that ‘artificial’ geology at the Garth CSEC was described as undifferentiated

made ground, reflecting the artificial platform on which the compound was built (Ref 4.2, Appendix I, 7; Ref 4.4, 11).

4.1.13 The nine trial pits were dug no deeper than 3 m and given their shallow depth they were unlikely to reveal ground surfaces or layers of archaeological significance. The monitoring accorded with the previous geoarchaeological assessment in the area, and archaeological potential is expected to be low or negligible, with no further archaeological work to be recommended (Ref 4.4).

Topography

4.1.14 The topography of the Glaslyn Cables works site varies. At the western end of the Glaslyn Cables works site is parkland associated with Wern House. This part of the park is low-lying and marshy but has two circular copses, probably planted in the 19th century, which are sited to break up the continuous line of the horizon.

4.1.15 The main part of the Glaslyn Cables works site is on estuarine levels called Traeth Mawr reclaimed in the early 19th century and is a largely level area, with some outcrops which once have been islands. The area is crossed by a number of straight lanes and there are some farms of 19th-century origin.

4.1.16 The eastern end of the Glaslyn Cables works site reaches the far side Traeth Mawr where it abuts the former Penrhyn-Garth Peninsula. This was a promontory until the draining of the Traeth Mawr in 1813 and is an area of largely 19th-century dwellings and farms.

4.2 Findings from Site Walkover Surveys

4.2.1 A site walkover was carried out between 12th and 14th November 2024 to examine the Glaslyn Cables works site and the wider study areas. This survey noted the post-medieval field boundaries and drainage culverts associated with the early 19th-century reclamation of Traeth Mawr, as well as other developments notably the tram and railway developments associated with the slate industry in Porthmadog, Treamdog and the wider area. No new assets were recorded as part of the walkover survey.

4.3 Previous Archaeological Investigations

4.3.1 There have been no previous recorded archaeological investigations undertaken in the Glaslyn Cables works site other than recent archaeological monitoring (Ref 4.4) of GI works which have taken place as part of the proposed works.

4.3.2 Sixty-three previous archaeological investigations have been undertaken in the wider 500 m study area. These are illustrated on **Figure 4.6.A.3** and presented in the gazetteer (**Volume 8: Appendix 4.6.B Gazetteer of Historic Environment Assets**).

4.3.3 A desk-based assessment (**PRN 40009**) was carried out by the Gwynedd Archaeological Trust of all active mineral extraction sites in Gwynedd and in the Snowdonia National Park (Ref 4.5).

4.3.4 A desk-based assessment (**PRN 40138**) was carried out by the Gwynedd Archaeological Trust to identify and record slate quarries and quarrying landscapes in Gwynedd (Ref 4.6).

4.3.5 A desk-based assessment and field visits (**PRN 40206** & **43449**) were carried out by the Gwynedd Archaeological Trust of pre-19th-century churches in the former county of Gwynedd (Anglesey, Gwynedd and western Conwy) as part of a Cadw funded survey of churches in Wales (Refs 4.7 & 4.8).

4.3.6 A desk-based assessment (**PRN 40294**) and field survey was carried out by the Gwynedd Archaeological Trust in advance of the construction of the A487 bypass at Porthmadog, Tremadog and Minffordd (Ref 4.9).

4.3.7 A desk-based assessment and field survey (**PRN 40325**) was carried out by Gwynedd Archaeological Trust as part of a Cadw funded project to assess and map the scale of erosion of the coastline of Gwynedd from Porth Cloch to the railway bridge over the Afon Dyfi (Ref 4.10).

4.3.8 An evaluation consisting of a geophysical survey and trial trenching (**PRN 40333**) in advance of the construction of a roundabout at Tremadog, as part of the Porthmadog by-pass works. A number of flint artefacts were recovered from the evaluation trenches (Ref. 4.11).

4.3.9 A metal mines survey (**PRN 40413**) was carried out by Gwynedd Archaeological Trust (Ref 4.12).

4.3.10 Gwynedd Archaeological Trust was grant aided by Cadw to undertake a project concerned with Roman roads in North West Wales between 2004-2005 (**PRN 40538, 40542 & 40544**). The project was a continuation of the 2002 project in examining the Roman military road network across North West Wales (Refs 4.13, 4.14 & 4.15).

4.3.11 An archaeological desk-based assessment (**PRN 40593**) was carried out by Gwynedd Archaeological Trust in advance of a proposed development at Tremadog in Gwynedd (Ref 4.16). Revised and updated in 2004 (**PRN 40594**) (Ref 4.17).

4.3.12 An archaeological watching brief (**PRN 40595**) was undertaken by the Gwynedd Archaeological Trust in advance of the construction of a haulage road as part of the new hospital site at Llidiart Yspytty, Tremadog (Ref 4.18). This was followed by archaeological excavation (**PRN 40596**) (Ref. 4.19). Further excavation and a watching brief were undertaken by the Gwynedd Archaeological Trust (**PRN 40597**) (Ref 4.20).

4.3.13 A desk-based assessment (**PRN 40651**) was carried out by Gwynedd Archaeological Trust of Penrhyn, Caernarfon, Pwllheli, Porthmadog, and Barmouth harbours as part of the threat related assessment of Ports and Harbours of Gwynedd (Ref 4.21).

4.3.14 A level three building survey (**PRN 40768**) was undertaken by the Gwynedd Archaeological Trust in advance of the redevelopment of Snowdon Mill, Porthmadog, into a series of apartments (Ref 4.22).

4.3.15 According to an antiquarian source, a Roman building was partly excavated at Glasfryn, Tremadog in 1908, though nothing was published (**PRN 41925**).

4.3.16 A desk-based assessment (**PRN 44353**) was carried out by the Gwynedd Archaeological Trust of all active mineral extraction sites in Gwynedd and in the Snowdonia National Park (Ref 4.22).

4.3.17 A desk-based research project ‘Early Celtic Societies in North Wales’ (**PRN 44557**) was undertaken in collaboration with Bangor University as an expansion of the

'Welsh Roundhouse Project'. The project assessed evidence for settlement from the Late Bronze Age to the early medieval period (late 2nd millennium BC to early 2nd millennium AD) in north-west Wales and examined the long-term processes of social change and settlement practices. It drew on previous work by E. Ghey, R. Johnston, E. Edwards and R. Pope and a number of Gwynedd Archaeological Trust projects, in particular 'G1770 Defended enclosures survey' and 'G1104 Hut circle settlement survey' (Ref 4.24).

4.3.18 A desk-based assessment (**PRN 44557**) was carried out by the Gwynedd Archaeological Trust for the Glastir Private Woodland Management scheme (a sustainable woodland management programme in Wales). The project identified new sites in private woodlands in the Glastir scheme using historic Ordnance Survey digital mapping. The project output is a Geographical Information Studies (GIS) table with metadata (Ref 4.25).

4.3.19 Excavation, watching brief, and geophysical survey (**PRN 44568**) was carried out by the Gwynedd Archaeological Trust along the route of the proposed A487 Porthmadog bypass. 27 previously unrecorded archaeological sites were identified, including a Roman lime kiln and roofing slates (Ref 4.26).

4.3.20 A field visit (**PRN 44635**) was made by the Gwynedd Archaeological Trust to a number of slate quarries included in the WHS nomination for the Slate Industry of north Wales (Ref 4.27).

4.3.21 Gwynedd Archaeological Trust was grant-aided by Cadw to examine the extent of the medieval and post-medieval road network in north-west Wales (**PRN 44832**). The work included a consideration of the creation and development of the roads as well as the potential for national designation (Ref 4.28).

4.3.22 Gwynedd Archaeological Trust carried out a scoping study of the surviving remains of medieval and post-medieval sites relating to agriculture and subsistence in north-west Wales (**PRN 44846**) as part of a 2013 Cadw grant-aided pan-Wales project. The work aimed to assess the potential for new schedulings and focused on often over-looked sites such as sheepfolds, rabbit warrens and peat cutting (Ref 4.29).

4.3.23 Gwynedd Archaeological Trust was commissioned by Gwynedd Consultancy to undertake a desk-based assessment (**PRN 44863**) in 2012 on land between Llwyn Mafon and Golan Junction on the current A487, in advance of road improvement. Twenty post-medieval features were identified, the most significant being the site of former Cae Canol farm and the Gorseddau tramway. The remaining features comprised field boundaries and trackways (Ref 4.30).

4.3.24 Gwynedd Archaeological Trust (GAT) has carried out a programme of archaeological work (**PRN 44869** & **44870**) on the route of a replacement gas pipeline from Pwllheli to Blaenau Ffestiniog. The work included an archaeological watching brief during removal of topsoil and excavation of the pipe trench, and the archaeological excavation of sites identified during the watching brief. The work started on 16th March 2011 and was completed on 22nd September 2011 (Refs 4.31, 4.32 & 4.33).

4.3.25 An archaeological assessment (**PRN 44878**) completed by Gwynedd Archaeological Trust along the route of a proposed new transfer main between Dolbenmaen Water Treatment Works and Cwmystradllyn Water Treatment Works (WTW), Gwynedd (Ref 4.34).

4.3.26 A heritage assessment (**PRN 44889**) was funded by Cadw of First World War sites in north-west Wales under the theme of Military Landscapes. It focused on training camps, practice trenches, rifle and firing ranges and prisoner of war camps. 75 sites were identified and included in a gazetteer (Ref 4.35).

4.3.27 A similar assessment (**PRN 44893**) was carried out under the theme of 'infrastructure and Support'. It focused particularly on the military and auxiliary hospitals in the area but also looked at a range of activities that local people in north-west Wales undertook to help the war effort. This included efforts to increase in food production and forestry, the work of local societies and the use of existing buildings to accommodate soldiers during training and Belgian refugees. Overall, 93 sites were identified and included in the gazetteer (Ref 4.36).

4.3.28 Gwynedd Archaeological Trust was commissioned by Cadw to identify medieval and post medieval sites in Meirionnydd, to assess their condition and, where appropriate, to recommend sites for scheduling (**PRN 44907**). The project identified 440 mill or potential mill sites, through archive, cartographic and documentary research. Those sites showing potential as sites suitable for scheduling were visited in the field. These sites varied in date from the medieval period through to the 19th century and consisted of a variety of site types and technologies (Ref 4.37).

4.3.29 A week-long assessment excavation (**PRN 44911**) was carried out in Top Yard, Boston Lodge in February 2015. This was carried out by Gwynedd Archaeological Trust and a team of volunteers as a community excavation. The first function of the site was as a quarry producing stone for the construction of The Cob, the most important functional element of William Madocks' reclamation of Traeth Mawr between 1808 and 1811. The probable original quarry floor was found to be 0.4 m beneath the current ground level. The excavation uncovered the remains of a stone-built wagon shed dating from 1842. This was one of the first buildings to be constructed on the site after Boston Lodge ceased to function as a quarry. A length of rails, slate floor and wall foundations were found to be well preserved beneath modern hard-standing. These discoveries allowed previous discoveries of rails and a sliding turntable (in 1956 and 1970) to be set in context and a structural and functional history of the building to be suggested. Most of the original openings were subsequently infilled to produce an office, now preserved as the Plas Smart building and a workshop (Ref 4.38).

4.3.30 An assessment (**PRN 44918**) was conducted to determine the potential direct and indirect impacts on the cultural heritage of the determination of new conditions at the Garth Quarry, Minffordd, Gwynedd. The assessment identified 22 undesignated historic assets in the Development Area, most of which were no longer extant. Of those assets which did survive all would be removed by quarrying operations under the existing permissions, although mitigation measures were proposed for an appropriate level of recording to ensure their preservation by record (Ref 4.39).

4.3.31 Aeon Archaeology was commissioned in 2015 to carry out an archaeological watching brief (**PRN 45014**) during the excavation of two trial holes to locate the existing water main and during the excavation of a trench for the new replacement water main at Penmorfa, Tremadog, Gwynedd. The archaeological watching brief did not expose any archaeological remains or artefacts aside from a series of peaks and troughs thought to represent post-medieval drainage earthworks, which were visible across the surface of the northern part of the grazing field. The high-water table of the field and surrounding lowland would lend itself to the preservation of

organic remains and it is recommended that if any further intrusive excavations occur in the area that a similar level of watching brief be maintained (Ref 4.40).

4.3.32 This project (**PRN 45033**) was grant aided by Cadw, and undertaken by Gwynedd Archaeological Trust in 2011, and formed part of a wider scheduling enhancement project which aimed to assess all monuments of medieval and post medieval date. This was one of four projects undertaken in 2010-11 to examine all ecclesiastical remains from the relevant period. The projects were undertaken with the primary aim of providing consistent and accurate information to allow the creation of a database of medieval ecclesiastical sites in north-west Wales, so that sites considered to be of national importance could be identified (Ref 4.41).

4.3.33 Gwynedd Archaeological Trust was commissioned by Cadw to identify the medieval and post medieval sites in Caernarvonshire, to assess their condition and, where appropriate, to recommend sites for scheduling (**PRN 45048**). The project identified 486 mill or potential mill sites, through archive, cartographic and documentary research. Those sites showing potential as sites suitable for scheduling were visited in the field. These sites varied in date from the medieval period through to the 19th century and consisted of a variety of site types and technologies. A database was created recording each of the mill sites individually with a unique site number (Ref 4.42).

4.3.34 RSK Environment Ltd (RSK) undertook an archaeological desk-based assessment and field reconnaissance survey (**PRN 45076**) in 2010 for a proposed 38 km-long pipeline between Pwllheli and Blaenau Ffestiniog in Gwynedd. The DBA was supported by an archaeological field reconnaissance survey, and a review of borehole data. In total, 618 archaeological sites or areas of interest were identified in the study area. These comprised five Scheduled Monuments, 189 Listed Buildings, four Conservation Areas, three Historic Parks and Gardens and 417 non-scheduled archaeological sites. Sites ranged from negligible to high archaeological importance and dated from the prehistoric to modern periods. Data was gathered for a study area of typically 1km based on the proposed pipeline centreline (Ref 4.43). This was followed by a geophysical survey (**PRN 45310**) which identified a number of features. Most were thought to be geological with only a few of likely archaeological concern (Ref 4.44).

4.3.35 The Royal Commission on the Ancient and Historic Monuments of Wales and Govannon consultancy were commissioned by Gwynedd Archaeological Trust in 2017 to carry out a report (**PRN 45088**) providing a gazetteer of features with statements of significance associated with slate transport routes in the proposed Slate Industry of North Wales World Heritage nomination in order to inform the process of developing the nomination and to enhance the regional Historic Environment Record and the National Monument Record (Ref 4.45).

4.3.36 In December 2012, Archaeology Wales undertook a Desk Based Assessment and site visit (**PRN 45123**) to examine the archaeological potential of land at Braich-y-Saint, Criccieth, Gwynedd, where a planning application has been submitted for the construction of two wind turbines. The site was in an area of known archaeological and historical importance, with two Scheduled Ancient Monuments and 26 Listed Buildings in the surrounding landscape. The aerial photographs suggested the presence of buried archaeology at the site, which was confirmed by the site visit, with corresponding earthworks identified. A standing stone, of possible prehistoric date, was also recorded in the bounds of the site during the walkover survey. The

proposed development of the site was assessed as having a moderate impact upon these features (Ref 4.46).

4.3.37 Engineering Archaeological Services Ltd were commissioned by Ffestiniog and Welsh Highland Railways to conduct an archaeological evaluation (**PRN 45312**). This evaluation was ahead of proposals to construct a new shed at the southern of the Minffordd Yard. The evaluation revealed a wooden structure possibly associated with a trackside facility (Ref 4.47).

4.3.38 Engineering Archaeological Services Ltd (EAS) were again asked by Ffestiniog Railway Company to carry out another archaeological evaluation (**PRN 45315**) in the recently restored Goods Shed in Minffordd Yard. The work revealed the base of crane structure and platform. There was sufficient structure surviving to record the previous layout of the goods shed (Ref 4.48).

4.3.39 Gwynedd Archaeological Trust was grant-aided by Cadw between 2016-18 to examine four of the quarries in the four largest WHS nominated areas (**PRN 45330**); Penrhyn, Dinorwic, Nantlle, and Ffestiniog. The work included updating existing site information and producing new records for previously un-surveyed areas (Ref 4.49).

4.3.40 A desk-based assessment (**PRN 45420**) was carried out by Gwynedd Archaeological Trust on First World War military commemorative sites (Ref 4.50).

4.3.41 Gwynedd Archaeological Trust undertook a field survey and character area production (**PRN 45422**) of the slate landscapes of north-west Wales as part of a 2018-19 Cadw grant-aided project as part of a World Heritage Site Nomination. The survey, which has been ongoing since 2015-16, was completed in 2018-19 with surveys of Gorseddau and Prince of Wales Slate Quarries, Railways and Mill; Bryneglwys Slate Quarry and Aberllefenni Slate Quarry (Ref 4.51).

4.3.42 A field visit (**PRN 45425**) was made by Gwynedd Archaeological Trust as part of a 2016-17 Cadw grant-aided project to a number of slate quarries included in the WHS nomination for the Slate Industry of north Wales (Ref 4.52).

4.3.43 Metal detecting finds have been made in the Porthmadog area (**PRN 45593**, **45594**, **45757** and **45759**) (Ref 4.53).

4.3.44 Gwynedd Archaeological Trust carried out a desk-based assessment (**PRN 45829**) in 2008 as part of a Tir Gofal archaeological management plan at Erw Deg (Ref 4.54).

4.3.45 Gwynedd Archaeological Trust carried out a desk-based assessment (**PRN 45846**) in 2009 as part of a Tir Gofal archaeological management plan at Cefn Dreiniog, Llanfrothen (Ref 4.55).

4.3.46 Gwynedd Archaeological Trust was commissioned by Natural Resources Wales to undertake a desk-based assessment (**PRN 46070**) as part of a review of the existing flood protection system for Porthmadog, Gwynedd, in 2021. The work was undertaken with a view to develop a long-term management plan and to inform option selection, scheme design, and any mitigation strategy that may be required for future works (Ref 4.56).

4.3.47 Gwynedd Archaeological Trust was grant aided by Cadw to undertake a project recording historic farmsteads in Ardudwy (**PRN 46126**), as part of a pan-Wales initiative to record surviving traditional farm buildings (Ref 4.57).

4.3.48 Gwynedd Archaeological Trust was grant-aided in 2016 to undertake an assessment (**PRN 46217**) as part of a pilot study for the WHS nomination for the Slate Industry of north Wales (Ref 4.58).

4.3.49 Gwynedd Archaeological Trust carried out a desk-based assessment (**PRN 46278 & 46279**) in 2010 and 2011 as part of a Better Woodlands for Wales archaeological management plan at the Wern estate (Refs 4.59 & 4.60).

4.3.50 Gwynedd Archaeological Trust was commissioned by the Ffestiniog Railway Trust to carry out a programme of archaeological investigation and recording (**PRN 46280**) at the Ffestiniog and Welsh Highland Railways' Boston Lodge Works in October 2015. The work was carried out as a community project and followed on from a previous excavation in the Top Yard at Boston Lodge. The community excavation revealed previously unknown phases of activity at the lodge. The remains of two gunpowder sheds were also cleaned and fully recorded as part of the work (Ref 4.61).

4.3.51 Gwynedd Archaeological Trust was grant aided by Cadw to undertake a project recording historic farmsteads in North Anglesey and West Meirionnydd (**PRN 46608**), as part of a pan-Wales initiative to record surviving traditional farmsteads (Ref 4.62).

4.3.52 Gwynedd Archaeological Trust carried out a desk-based assessment (**PRN 49129**) in 2008 as part of a Tir Gofal archaeological management plan at Penamser, Porthmadog (Ref 4.63).

4.3.53 Gwynedd Archaeological Trust carried out a desk-based assessment (**PRN 49130**) in 2008 as part of a Tir Gofal archaeological management plan at Farmyard, Tremadog, Porthmadog (Ref 4.64).

4.3.54 Archaeological survey and trial trenching (**PRN 54774**) were carried out by Gwynedd Archaeological Trust in advance of a proposed development at Tremadog (Ref 4.65).

4.3.55 Gwynedd Archaeological Trust was commissioned by Hochtief UK Construction Ltd (on behalf of National Grid) to undertake archaeological mitigation (trial trenching) (**PRN 46501**) to investigate the presence or absence, condition and significance of any remains potentially associated with a projected Roman road alignment that may have passed through the western tunnel head house compound. The trenching was undertaken in September 2022. Within the limit of excavation of the evaluation trial trenches no evidence for the projected Roman road alignment was encountered (Ref 4.66).

4.4 Historic Assets

4.4.1 The historic assets discussed in this assessment, including designated and non-designated historic assets, are identified by their unique identification number assigned by Cadw for designated historic assets, and by the Heneb HER for non-designated historic assets. Any additional assets identified through other sources such as the PAS, NMR or National Museum Wales (NMW) databases are identified in the text using either the assigned prefix AEC or the number assigned by the organisation who holds the database. Each asset can be cross-referenced to the gazetteer in **Appendix 4.6.B** and shown on **Figures 4.6.B.2 and 4.6.B.3**.

Designated Historic Assets

Within the Glaslyn Cables Works Site

4.4.2 There are no designated historic assets in the Glaslyn Cables works site.

Within the 3 km Study Area

4.4.3 There is one World Heritage Site – the Slate Landscape of Northwest Wales World Heritage Site (**UNESCO 1633**) approximately 70 m south-east of the Glaslyn Cables works site.

The Slate Landscape of Northwest Wales (UNESCO 1633)

4.4.4 The Slate Landscape of Northwest Wales comprises six areas or component parts which together represent an exceptional example of an industrial landscape which was profoundly shaped by quarrying and mining slate and transporting it for national and international markets.

4.4.5 Each Component Part has its own unique character. They have been chosen for their scale (all of the largest relict quarries and quarrying areas are represented), for their significant landscape impact, for their integrity, and for the way in which they exemplify technology transfer and the transformation of a minority rural culture into a modern industrial society.

4.4.6 The components represent geographically discrete areas of the World Heritage Site and one is in the 3 km study area: Ffestiniog: its Slate mines and quarries, 'city of slates' and Railway to Porthmadog approximately 70 m south-east of the Glaslyn Cables works site.

4.4.7 From 1780 to 1940 this industry dominated world production of roofing slates, transforming both the environment and the communities who lived and worked here. The quarries and mines are monumental in scale, comprising stepped hillside workings, deep pits and cavernous underground chambers, massive cascading tips, ingenious water systems, and a range of industrial buildings. Outstanding technical equipment and major engineering features survive. Innovative transport systems linked quarries and processing sites with purpose-built coastal export harbours and with main-line railways. Grand country houses and estates built by leading industrialists' contrast with workers' vernacular settlements, with their characteristic chapels and churches, band-rooms, schools, libraries, and meeting-places. By the late 19th century, the region produced about a third of the world output of roofing slates and architectural slabs. Its use in terraced houses, factories, warehouses, and elite architecture contributed to rapid global urbanization. It influenced building styles, encouraging the shallow-pitched roofs of the Georgian order. Technologies that were innovated, adopted, and adapted in the property include the ingenious application of waterpower, the development of bulk handling systems and the first known application of the circular saw for cutting stone. These were diffused by specialists and by emigration of skilled Welsh quarrymen to the developing slate industries of the United States, continental Europe, and Ireland. The Snowdon massif's narrow-gauge railway systems gained global influence and were adopted from Asia and America to Africa and Australasia.

Scheduled Monuments

4.4.8 There are ten scheduled monuments in the 3 km study area. These are listed below with their distance from the Glaslyn Cables works site:

- Gesail Gyfarch Inscribed Stone (**CN019**), approximately 1.39 km north.
- Enclosed Hut Group in Parc-y-Borth (**CN270**), approximately 1.37 km south-west.
- Enclosed Hut Circle Settlement North of Coed Gwlyb (**ME184**), approximately 880 m south.
- Roman Bath House, Tremadoc (**CN174**), approximately 98 m north-east.
- Hut Circles near Craig y Gesail (**CN237**), approximately 1 km north-east.
- Cist Cerrig Burial Chamber & Cup Marked Rock (**CN118**), approximately 1.26 km south.
- Moel y Gest Camp (**CN059**), approximately 600 m south-west.
- Hut Group West of Cwm Mawr (**CN239**), approximately 1.2 km north.
- Fach-goch, standing stone (**CN386**), approximately 1.46 km north.
- Ty'n y Berllan Settlement (**ME096**), approximately 640 m north-east.

4.4.9 There are 336 listed buildings within 3 km of the Glaslyn Cables works site. These include two Grade I, 17 Grade II* and 314 Grade II listed buildings.

- The Grade I listed building comprise Capel Peniel (**Cadw 4442**), approximately 136 m north of the Glaslyn Cables works site and Portmeirion Town Hall (**Cadw 4777**), approximately 1.34 km south of the Glaslyn Cables works site.

4.4.10 The Grade II* listed buildings comprise:

- Church of St Cynhaearn (**Cadw 4291**), approximately 1.7 km south-west.
- Plas Tan-yr-allt (**Cadw 4432**), approximately 740 m north.
- Church of St Mary (**Cadw 4435**), approximately 300 m north.
- Ty Nanney, including forecourt walls, gate piers and gate (**Cadw 4441**), approximately 200 m north.
- Tremadog Manufactory (**Cadw 4449**), approximately 560 m north.
- Market Hall (Siola) (**Cadw 4452**), approximately 430 m north.
- Church of St Beuno (**Cadw 4623**), approximately 50 m south-west.
- Wern Manor (**Cadw 4626**), approximately 60 m east.
- Plas Penrhyn (**Cadw 4852**), approximately 540 m south.
- Campanile (Also Called the Bell Tower) (**Cadw 4868**), approximately 1.32 km south.
- The Colonnade (**Cadw 4878**), approximately 1.28 km south.
- The Cob (**Cadw 5234**) and the Cob (partly in Penrhyndeudraeth) (**Cadw 85406**), approximately 780 m south.

- Ystumllyn (**Cadw 15355**), approximately 2.35 km south-west.
- Former Stables (**Cadw 15356**), approximately 2.33 km south-west.
- Wash House (**Cadw 15357**), approximately 2.35 km south-west.
- Clennennau (**Cadw 21541**), approximately 2.35 km north-west.
- Gateway to the Church of Saint Mary (**Cadw 83132**), approximately 280 m north.

4.4.11 The Grade II listed buildings are dispersed across the study area and comprise country houses, lodges, farmsteads and associated farm buildings, terraced houses, a hotel, war memorials, grave memorials, ancillary buildings, wharves, railway stations, a railway yard, public buildings, schools and churches dating to the post-medieval and modern periods. The closest Grade II listed buildings to the Glaslyn Cables works site are:

- Lychgate at the Church of St Beuno (**Cadw 4285**), approximately 30 m south-west.
- Bryn-y-wern (**Cadw 4286**), approximately 70 m west.
- Snowdon Mill and Ty'r Felin (**Cadw 4431**), approximately 130 m south-east.
- Snowdon Lodge (**Cadw 4437**), approximately 200 m north.
- Bodawen Lodge (**Cadw 4438**), approximately 20 m north-west.
- Courtyard Ranges to the West of Wern Manor, including Stables, Coachhouse and Tower (**Cadw 4627**), approximately 10 m east.
- Summer House at Wern Manor (**Cadw 4628**), approximately 180 m east.
- Wern Lodge (**Cadw 4629**), approximately 5 m north-west.
- Rhos House (**Cadw 5205**), approximately 10 m north-west.
- Railway Lodge at the Ffestiniog Railway Crossing (**Cadw 5211**) approximately 140 m south.
- Chest Tomb in churchyard of the Church of St Beuno (**Cadw 21532**), approximately 40 m south-west.
- Bwlch-y-fedwen (**Cadw 21534**), approximately 470 m north-east.
- Front Terrace, Balustrade and Steps at Wern Manor (**Cadw 21554**), approximately 60 m east.
- Tyn-llan (**Cadw 21557**), approximately 20 m west.
- Gates to Wern Manor (**Cadw 21568**); on the site boundary.
- Ornamental Garden Pool at Wern Manor (**Cadw 21569**), approximately 170 m south-east.
- Bodawen Lodge (**Cadw 85359**), approximately 30 m north-west.
- Croeswr Tramway Bridge over Y Cyt (**Cadw 85373**), approximately 90 m south-east.
- Former church hall (**Cadw 85374**), approximately 170 m south-east;

- Former stable at Bodawen Lodge (**Cadw 85375**), approximately 30 m north-east.
- Former Tremadoc Tramway bridge over drainage ditch (**Cadw 85376**), approximately 50 m north.
- Porthmadog Telephone Exchange (**Cadw 85396**), approximately 80 m south.
- Porthmadog war memorial, including steps, trilithon and monoliths forming its approach (**Cadw 85397**), approximately 10 m north-east.
- Road bridge over Y Cyt beyond North-East end of Chapel Street (**Cadw 85399**), approximately 2 m south-west.
- 19 to 21 Y Graig (Sunnyside), Tremadog (**Cadw 85323, 85325 & 85328**), approximately 330 m north-east.

4.4.12 There is one Registered Park and Garden within the Glaslyn Cables works site. The western end of the Glaslyn Cables works site is occupied by Wern Garden (**PGW(Gd)19(GWY)**).

4.4.13 There are two other Registered Parks and Gardens within 3 km of the Glaslyn Cables works site which comprise the following:

- Tan-yr-Allt (**PGW(Gd)18(GWY)**), approximately 550 m north.
- Portmeirion (**PGW(Gd)29(GWY)**), approximately 990 m south-east.

4.4.14 There are three Conservation Areas within 3 km of the Glaslyn Cables works site. These are as follows:

- Tremadog Conservation Area (**WAL/GWYN/20**), approximately 120 m north.
- Porthmadog Conservation Area (**WAL/GWYN/29**), approximately 250 m south-west.
- Portmeirion Conservation Area (**WAL/GWYN/33**), approximately 330 m south.

Non-designated Historic Assets

Within the Glaslyn Cables Works Site

4.4.15 There are 24 non-designated historic assets in the Glaslyn Cables works site. These are as follows:

- Hedge-bank, North-East of Wern (**PRN 37907**).
- Hedge and ditch, on Traeth Mawr (**PRN 37908**).
- Hedge and ditch, on Traeth Mawr (**PRN 37909**).
- Hedge-bank, on Traeth Mawr (**PRN 37910**).
- Field boundary, Porthmadog (**PRN 33528**).
- Field boundary, Porthmadog (**PRN 33531**).
- Tremadoc and Gorseddau Tramway, Site of, Tremadog (**PRN 21171**).
- Field boundary, Porthmadog (**PRN 33532**).

- Field boundary, Porthmadog (**PRN 33536**).
- Field boundary, Porthmadog (**PRN 33537**).
- Culvert/ditch, Porthmadog (**PRN 33540**).
- Gorsedd Circle 1987, Porthmadog (**PRN 33603**).
- Field boundary, Porthmadog (**PRN 33544**).
- Revetted drain, Porthmadog (**PRN 33545**).
- Road across Traeth Mawr and junction, Porthmadog (**PRN 33605**).
- Shallow ditches, Porthmadog (**PRN 33593**).
- Field boundary, Porthmadog (**PRN 33547**).
- Culvert/ditch, Porthmadog (**PRN 33548**).
- Field boundary, Porthmadog (**PRN 33550**).
- Field boundary, Porthmadog (**PRN 33551**).
- Croeser Tramway embankment, Remains of, Porthmadog (**PRN 21174**).
- Field boundary, Porthmadog (**PRN 33554**).
- Culvert/ditch, Porthmadog (**PRN 33559**).
- Modern Field Drain Field, Porthmadog (**PRN 33591**).

Within the 500 m Study Area

4.4.16 A further 319 non-designated archaeological assets have been identified in the 500 m study area. These non-designated assets comprise archaeological sites, built heritage sites and findspots largely dating to the post-medieval and modern periods, with a small number to the prehistoric, Roman and medieval periods.

4.5 Archaeological and Historical Background

Palaeolithic and Mesolithic (1,000,00 BC to 4,000 BC)

4.5.1 Remains from the Palaeolithic period are rare, and to date, no material from this period has been yet identified in the Glaslyn Cables works site or in the 500 m or 3 km study areas.

4.5.2 A number of prehistoric flint and chert artefacts were found during archaeological excavations 30 m north-east of the Glaslyn Cables works site in advance of the Porthmadog bypass at Y Bryn near Tremadog (**PRN 33604**) comprising a microlith and two blades of Mesolithic date. They seemed to separate from a larger lithic scatter nearby (**PRN 33595**) and could indicate transitory Mesolithic activity (Ref 4.26). The latter scatter contained mostly Neolithic lithics, though a flint core and two broken flakes of possible later Mesolithic date were also recovered.

Neolithic to Bronze Age (4,000 BC to 700 BC)

4.5.3 No findspots, archaeological remains or sites of Neolithic or Bronze Age date have been identified in the Glaslyn Cables works site, though sites are known in the 500 m and 3 km study areas.

4.5.4 As elsewhere, Neolithic settlement sites are particularly rare and our interpretation could be due to a bias towards the survival of the large funerary monuments and ritual sites, the settlement sites having been destroyed by later activity and the erosion of topsoil in the later prehistoric and Romano-British periods.

4.5.5 Neolithic and early Bronze Age activity is mostly represented in the archaeological record by flint tools and funerary monuments.

4.5.6 More widely, North Wales contains numerous Neolithic funerary monuments and has also yielded evidence, from Llanfaethlu on Anglesey, of an early Neolithic village which comprised a cluster of four houses.

4.5.7 The Cist Cerrig Burial Chamber and Cup Marked Rock (**CN118**) is approximately 1.26 km south of the Glaslyn Cables works site. The monument comprises the remains of a chambered tomb, dating to the Neolithic period. Chambered tombs were built and used by local farming communities over long periods of time. There appear to be many regional traditions and variations in shape and construction.

4.5.8 The three orthostats are arranged in a 'H' formation and are the remains of a portal tomb; apart from stones piled immediately around the base, there is no sign of an associated mound. The two side stones are each 2.3 m high, the northern stone being 1.8 m wide and the southern stone 1.6 m wide. The central blocking stone is 2.1 m in height and 1 m in width. 23 m to the east of the uprights is a series of cup-marks on a rock outcrop. Ten cup-marks of varying size and clarity can be seen arranged in a line 2.3 m in length, with a further two offset to the right of the line.

4.5.9 A number of prehistoric flint and chert artefacts found during excavations approximately 20 m north of the Glaslyn Cables works site in advance of the Porthmadog bypass at Tremadog, included a knife or scraper fragment, possibly Neolithic in date (**PRN 33595**) (Ref 4.26).

4.5.10 Several burnt mounds were investigated including a large site on the Pwllheli to Blaenau Ffestiniog Pipeline near Pentrefelin, approximately 16 km west of the Glaslyn Cables works site. The earliest burnt mound was dated to probably 2800–2670 cal BC (68% probability), with others falling at the Neolithic/Bronze Age transition and into the Bronze Age. The large mound with several troughs and pits probably started being used in 2715–2510 cal BC (68% probability) and continued until probably 2105–1895 cal BC (68% probability), with later activity in the late Bronze Age (980–810 cal BC) (Refs 4.32 & 4.33).

4.5.11 The evidence for, and emphasis on, formal ritual and elaborate burial, so characteristic of the Earlier Bronze Age, fell away during the Later Bronze Age. Climate may, again, have contributed to the decline in popularity of the upland locations, which had previously been favoured for burial and ritual. In contrast, the evidence for settlement increases during this period. From the Later Bronze Age, hillforts begin to dominate the landscape. Undefended settlement is also well represented, as are field systems and other components of potentially contemporary landscapes. The quality of the field evidence in certain areas of Gwynedd is very high. The identifiable hierarchy of settlement reflects a perceived increase in the stratification of society dominated by a warrior aristocracy (Ref 4.67).

4.5.12 The Fach-goch standing stone (**CN386**) is approximately 1.46 km north of the Glaslyn Cables works site. The monument comprises a fine standing stone, probably dating to the Bronze Age and is in enclosed pasture about 130 m to the south-south-east of Fach-goch. The standing stone measures 2.2 m in height, 0.8 m in thickness by 0.4 m in width. It commands fine views around its eastern arc.

4.5.13 Metal detecting in the vicinity of Penamser near Porthmadog unearthed a Bronze Age axehead (**PRN 33004**) amongst finds of other periods. The axe was fairly well preserved with the only prominent damage being at the socket, which had partially broken in antiquity.

Iron Age (800 BC to AD 43)

4.5.14 No findspots, archaeological remains or sites of Iron Age date have been identified in the Glaslyn Cables works site, though sites are known in the 500 m and 3 km study areas.

4.5.15 The Iron Age roughly spans the centuries between c. 800 BC and the beginning of the Roman conquest in AD 43. It is distinguished by the impressive numbers of surviving hillforts and settlements present in the archaeological record. However, archaeological excavations have been few and far between and the material culture for the Iron Age in Wales is correspondingly sparse. What there is, largely recovered from deliberately deposited hoards, is exotic and unusual rather than domestic and every day. Swords, spearheads and fine metalwork created in geographically widespread typological and artistic styles testify to broad cultural contacts and the presence of a warrior elite. However, the pottery or tools that could describe local society and the organisation of domestic life are usually lacking (Ref 4.68). Continuing into the Iron Age, hillforts begin to dominate the landscape. Undefended settlement is also well represented, as are field systems and other components of potentially contemporary landscapes

4.5.16 The Enclosed Hut Group in Parc-y-Borth (**CN270**) is approximately 1.37 km south-west of the Glaslyn Cables works site. The monument comprises the remains of small, compact settlement or single homestead dating to the Iron Age or Romano-British period. The site occupies a small terrace in a north-east facing slope and consists of three huts in a roughly oval enclosure. The features are visible as rounded banks and terraces with occasional exposed facing stones. The enclosure has dimensions of 36 m x 42 m and is defined by a low bank which is most pronounced where it is terraced out onto the slope to the north-east.

4.5.17 The Enclosed Hut Circle Settlement North of Coed Gwlyb (**ME184**) is approximately 880 m south of the Glaslyn Cables works site. The monument comprises the complete and well-preserved remains of a small settlement or farmstead which probably dates to the Iron Age or Romano-British period. The site consists of two hut circles joined by banks which form a small common enclosure or yard. The monument is in a lowland area which has been subject to agricultural improvement.

4.5.18 The Hut Circles near Craig y Gesail (**CN237**) are approximately 1 km north-east of the Glaslyn Cables works site. The monument comprises the remains of two substantial stone-built hut circles that probably date to the Iron Age or Romano-British period.

4.5.19 Moel y Gest Camp (**CN059**) is approximately 600 m south-west of the Glaslyn Cables works site. This is a hillfort on the west end of Moel y Gest, with two inner enclosures at the south-west corner. The outer fort is defended by a stone bank

which was originally some 2.4 m wide. This wall is absent on the south side, where the Glaslyn Cables works site is naturally defended. There is a simple entrance, a little over 1.0 m wide, just south of the north-west corner. In the south-west corner of the fort, on the summit of the ridge, is an enclosure 25m by 16m, surrounded by a bank 2.2 to 2.4 m thick, and about 0.2 m high. White quartz pebbles are visible in this bank on the west side. East of the outer fort is a short length of additional walling running between two outcrops.

4.5.20 The Hut Group West of Cwm Mawr (**CN239**) is approximately 1.2 km north of the Glaslyn Cables works site and includes a hut-circle settlement of the Iron Age or Romano-British period consisting of three huts and two small attached enclosures or yards and, close by, two rectangular huts, probably of the medieval period. The two elements represent two phases, or perhaps a long continuity of use. There are field walls of at least three periods, some associated with the round huts, some associated with the rectangular huts and some modern. A faint bank links the middle round hut and the smaller rectangular hut, and in the area thus enclosed is a slight suggestion of ridge and furrow.

4.5.21 The site lies on a low tongue of land projecting from the east side of a shallow valley and raised slightly from its marshy floor in an area of stony rough pasture

4.5.22 The Ty'n y Berllan Settlement (**ME096**) is approximately 640 m north-east of the Glaslyn Cables works site. The monument comprises the remains of an enclosed settlement of multiple hut circles, which probably dates from the first millennium BC. There are four round huts linked and partially enclosed by stretches of walling. Two entrances are clear, marked by orthostats, the first to one of the huts and the second to the enclosure itself.

4.5.23 An Iron Age shell midden (**PRN 34103**) was excavated approximately 10 m south of the Glaslyn Cables works site. It comprised a deposit of mainly cockle shells with some winkles and a few oyster shells covering a roughly oval areas measuring 2.98 m by 1.80 m. The deposit was up to 0.36 m thick and had built up against an outcrop of bedrock. The shells were in a matrix of dark grey/black silty sand, and some charcoal was also present. Below the midden was a heat-reddened layer containing burnt stones and charcoal flecks. This layer measured 1.8 m by 1.3 m and was 0.25 m thick and was probably heat-altered natural; many of the stones seemed to be naturally broken bedrock. It is assumed that this was the site of a fire or hearth. The site would appear to have been a shell processing site where the shells were probably boiled, but on the basis of the organic component and the terrestrial snails it was set back from the coast in woodland. The site lies on the very edge of Traeth Mawr at about 5 m OD. It must have been on the southern shore of the Traeth before reclamation.

Roman (AD 43 to AD 410)

4.5.24 No findspots, archaeological remains or sites of Roman date have been identified in the Glaslyn Cables works site, though sites are known in the 500 m and 3 km study areas.

4.5.25 North-West Wales contains some of the defining type-sites of the age – the enclosed and unenclosed hut-groups together with some of the best known and extensively excavated military installations; Segontium being a prime example. It is also one of the few British regions which Classical sources specifically mention: the Anglesey campaign of AD 60 and the final capture of the island by Julius Agricola in

AD 77 being notable geographical markers in the context of first century military operations (Ref 4.69).

4.5.26 The upland region of Gwynedd, saw less Roman settlement compared to south-east Wales, and to a lesser extent south-west Wales. Following its conquest in the 70s of the first century and a garrisoning phase which effectively only lasted to the mid-second century, its native communities accepted Roman rule, but seemingly played no part in the process of 'Romanization'. Urban centres are notably absent, whilst there is no hint of villa development. Military remains are more obvious, and, in the case of Segontium, indicative of a long-lasting, but markedly localised garrisoning phase. There is evidence for the exploitation of the region's metals by Mediterranean-style business partnerships (societates), whilst Romanization has been perceived as being essentially limited to the circulation of a range of consumer durables – pottery, coinage, metalwork and objects of worked stone, such as rotary querns – on settlement sites whose origins lie in the latter centuries BC. When the politico-military infrastructure of Roman Britain collapsed in the early fifth century, there was a return to a pre-Roman socio-economic framework in the region (Ref 4.69).

4.5.27 During the Roman occupation of Wales and England, arterial roads were built to allow the quick and decisive movement of the Roman legions to subdue any rebellions quickly. Gwynedd has several of these important roads crossing through it.

4.5.28 A Roman Road, which ran from Segontium to Pen Llystyn to Tomen y Mur (**PRN 17812**) is projected to run in a north-west to south-east orientation, through the central and eastern areas of the Glaslyn Cables works site. The road may have followed a traditional crossing place from Tremadog to Minffordd (Ref 4.70). There are no visible surface traces of this road and recent archaeological evaluation at the eastern end of the Glaslyn Cables works site has not revealed any trace of it either (Ref. 4.66).

4.5.29 In the 500 m study area, this road continues in a westerly direction (**PRN 17559**) through Penmorfa and in an easterly direction (**PRN 17813**) towards Maentwrog, along the route of the modern A487 road with no traces of Roman construction.

4.5.30 There are two alternative routes for the Segontium to Pen Llystyn to Tomen y Mur Roman Road. One route (**PRN 17560**) is projected to crossing Trawth Mawr further to the north, again to run in a general west to east orientation. The second route (**PRN 17821**) runs along the southern edge of Porthmadog via the Porthmadog Cob, again in a similar orientation. Similarly, there are modern roads on the projected lines, with no traces of Roman construction.

4.5.31 Branching off the latter route is another Roman Road project as running southwards towards Harlech and Dolgellau (**PRN 17825**).

4.5.32 The Roman bath house at Tremadoc (**CN174**) is approximately 98 m north-east of the Glaslyn Cables works site. It was dated by excavation in 1908 to a period starting in the second century AD and continuing into the fourth. Six rooms were identified and two of them contained hypocausts. The bathhouse site comprises a rectangular complex of rooms laid out in a linear fashion constructed of rubble (including tile and shell) faced with roughly coursed masonry, set in mortar mixed with pounded tile. Among the many finds recovered from the site in the excavation of 1908 were flue and ridge tiles, roofing slates, a fragment of a terracotta statue, part of a hinged jet bangle and pottery. There are no surviving upstanding remains

of this monument. An area immediately around the Roman bath house (**PRN 16876**) has been identified as being of archaeological potential.

4.5.33 Approximately 200 m to the north-west of the Roman bath house and 280 m north of the Glaslyn Cables works site, archaeological evaluation on a narrow terrace revealed the remains of a probable Iron Age timber roundhouse settlement and a later Romano-British corn-drying kiln (**PRN 19661**). It seems likely that the corn drier functioned as part of a much larger settlement complex associated with the Roman bathhouse. In the first occupation phase, a timber roundhouse was constructed, and this is partially represented by a drainage gully, three or four postholes and a slab pathway. During the next phase of occupation, and possibly after a period of abandonment, a stone-built corn dryer was constructed over the earlier timber building. This was rectangular in shape, with a T-shaped flue, and traces of in situ burning and charcoal spreads indicate that the structure was fired from its eastern end. The kiln was associated with two stone platforms - one floor incorporated a fragment of a lower rotary quern stone within its makeup. A large wall was identified to the northwest of the kiln and this may have functioned as a wind-break for the kiln, as a boundary wall or it possibly represents the location of a building (Ref. 6.107). Contexts associated with the firing of the kiln produced a Romano-British sherd dating to between the first to third centuries AD as well as some small quantities of hammerscale. A small clay oven (**PRN 29380**) was in the north-eastern corner of the kiln and another, later oven was constructed next to this, indicating at least two phases of use. These features have been interpreted as bread ovens and they are probably contemporary with the use of the kiln - the entire complex may have been the focus for a wide range of processes including malting, bread-making, small-scale smithing, drying food and so on (Ref 4.71). A clay hearth (**PRN 29384**) was directly below one of the circular ovens (Ref 4.72).

4.5.34 In the same area, three culverts (**PRN 29377**) appeared to have been built together to form a herringbone pattern that would drain water from the slope and channel it away from the area. The subsequent watching brief of the entire area did not reveal any other culverts. Their location directly under the corn-drying complex suggests they were laid as a part of the primary phase of construction for the kiln and ovens to alleviate an area of problematic drainage. A pathway (**PRN 29378**) comprised of large slabs and postholes for a timber structure (**PRN 29379**) were also uncovered (Ref 4.72).

4.5.35 A stone-built lime kiln (**PRN 34844**) was found dug into the side of a small hill known as Y Bryn during excavation approximately 40 m north-east of the Glaslyn Cables works site in advance of the Porthmadog Bypass. This contained burnt limestone and a small number of sherds of Roman pottery. Next to it was a small oven. Radiocarbon dates confirmed the pottery dates of 3rd and early 4th century AD. The same excavation revealed approximately 55 m north of the site a large deposit of thick, roughly cut roofing slates and at the lower end of the slope was a rubble deposit and two gullies (**PRN 34845**). The slates appeared to have been stacked in organised rows but had slipped down the slope. Most of the slates had a hole punctured through them and some of them even had the remains of an iron nail within the hole. The slates are of Roman type and a nearby shallow pit produced a radiocarbon date in the 3rd to 4th century AD.

4.5.36 As mentioned above in paragraph 4.4.16, the Enclosed Hut Group in Parc-y-Borth (**CN270**) is approximately 1.37 km south-east of the Glaslyn Cables works site. The monument comprises the remains of small, compact settlement or single homestead dating to the Iron Age or Romano-British period. The site occupies a

small terrace in a north-east facing slope and consists of three huts in a roughly oval enclosure. The features are visible as rounded banks and terraces with occasional exposed facing stones. The enclosure has dimensions of 36 m by 42 m and is defined by a low bank which is most pronounced where it is terraced out onto the slope to the north-east.

4.5.37 The Enclosed Hut Circle Settlement North of Coed Gwlyb (**ME184**) is approximately 880 m south of the Glaslyn Cables works site. The monument comprises the complete and well-preserved remains of a small settlement or farmstead which probably dates to the Iron Age or Romano-British period. The site consists of two hut circles joined by banks which form a small common enclosure or yard. The monument is in a lowland area which has been subject to agricultural improvement.

4.5.38 The Hut Circles near Craig y Gesail (**CN237**) is approximately 1 km north-east of the Glaslyn Cables works site. The monument comprises the remains of two substantial stone-built hut circles that probably date to the Iron Age or Romano-British period.

4.5.39 The Hut Group West of Cwm Mawr (**CN239**) is approximately 1.2 km north of the Glaslyn Cables works site. This multi-period settlement includes a hut-circle settlement of the Iron Age or Romano-British period consisting of three huts and two small attached enclosures or yards. There are field walls associated with the round huts. The site lies on a low tongue of land projecting from the east side of a shallow valley and raised slightly from its marshy floor in an area of stony rough pasture.

4.5.40 A coin (**PRN 34847**) was found on a field track to the south-west of Y Bryn, approximately 5 m north of the Glaslyn Cables works site. Edward Besly of the National Museum of Wales considers that the coin resembles a House of Valentinian bronze/SECVRITAS REIPVBLICAE, victory left, type. The emperor is uncertain, but likely to be Valentinian I (AD 364-75). The mint is uncertain. The coin has been corroded in the past and cleaned by the finder. Its corroded state supports the claim that it is a genuine British find.

4.5.41 Another Roman findspot (**PRN 2358**) in the wider area (approximately 590 m north-east of the Glaslyn Cables works site) comprises a copper ingot, 32.5 centimetres (cm) diameter, 6.5 cm thick and weighing 42 pounds (lbs). was found near Penmorfa, apparently in the 19th century. An inverted 'V' is incised near the rim and 'LENP' has been stamped near the centre. It was presented to the National Museum of Wales by Lord Harlech in 1938.

4.5.42 Metal detecting in the vicinity of Penamser, Portmadog unearthed a Roman brooch or fibula (**PRN 33004**) amongst finds of other periods.

Early Medieval (AD 410 to 1066)

4.5.43 No findspots, archaeological remains or sites of early medieval date have been identified in the Glaslyn Cables works site, though sites are known in the 500 m and 3 km study areas.

4.5.44 The period *c.* AD 400-1075 in north-west Wales, spanning the centuries between the end of Roman rule and the first Norman intervention, is still poorly understood. The documentary evidence is notoriously sparse and frequently difficult to interpret. It suggests the possibility of Irish settlement in the region and the movement of Cunedda and his followers from Manaw Gododdin around the end of the Roman period. It indicates the establishment of the important kingdom of Gwynedd by the

early 6th century and its gradual rise at the expense of probable minor kingdoms such as Rhos and Meirionydd. It is also possible to chart to some extent Anglo-Saxon alliances and hostilities and from the 9th century onwards Viking raids and likely settlement. At the same time the documentary evidence can throw light on the development of Christianity by helping to identify major ecclesiastical sites (Ref 4.73).

4.5.45 In 1934, the hut group at Pant-y-Saer (Anglesey) was heralded as the first possible early medieval settlement in Wales because of the recovery of a penannular brooch during excavation. This was followed in the late 1950s and 1960s by minor excavation of the hillforts at Dinas Emrys and Degannwy, the early medieval phases of which were recognised by the presence of imported pottery. Over the last 25 years or so evidence of early medieval activity has come to light by chance on a few hut group sites such as Graeanog and Cefn Cwmwd. The most spectacular discovery has been the Viking Age and earlier settlement at Y Glŷn, Llanbedrgoch (Ref 4.73).

4.5.46 It is generally agreed that there was a mixed farming economy in the north-west as elsewhere in Wales during the early Middle Ages and that the best use of pasture was probably facilitated by transhumance. However, in contrast with South Wales, there is no evidence concerning landed estates in the documentary record. The farming economy must have been sufficiently developed to have produced some excess to support the lifestyles evidenced on the few high-status sites that have been recognised (Ref 4.73).

4.5.47 The origins of Christianity in North West Wales lie in the Roman period, though no evidence has so far been found. During the 5th and 6th centuries the evidence of the inscribed stones suggests that Christianity expanded, at least amongst the upper echelons of society, and during the 6th century major monastic sites such as Bangor are likely to have been founded. Around the 8th century there may have been a gradual shift from burial in kin cemeteries to burial associated with ecclesiastical sites which eventually became parish churches and chapels of ease; in addition, some early cemeteries developed into local church sites. Some minor churches may have been connected with landed estates. Over the last few years there have been major advances enabling recognition and increased understanding of early medieval ecclesiastical and burial sites in North West Wales (Ref 4.73).

4.5.48 The Gesail Gyfarch Inscribed Stone (**CN019**) is approximately 1.39 km north of the Glaslyn Cables works site. The monument consists of a stone with an early-medieval inscription on the front. The stone is now 1.7 m long, 0.35 m down to 0.23 m wide and about 0.15 m thick, a piece has broken off the top and the left side has been trimmed, probably in the 19th century. The writing is faint but legible and is confined to what would have been the upper part of the stone when it stood upright. The inscription, in three lines reading vertically down from the top is "FILI CVNALPI / CVNACI IACIT / BECCVRI" and translates as (The stone of) Cunalipus son/Cunacus. He lies here/of Beccurus. There is some doubt about the translation and what can be seen on the stone may be the remains of two independent inscriptions, but its character suggests that it dates to the 6th century. Since the 1960s the stone has been lying in a protective shelter in the garden of Gesail Gyfarch.

Medieval (1066-1640)

4.5.49 No findspots, archaeological remains or sites of medieval date have been identified in the Glaslyn Cables works site, though sites are known in the wider 500 m and 3 km study areas.

4.5.50 The 11th century saw the first Norman incursions into Wales, their initial defeat by Gruffydd ap Cynan, king of Gwynedd (d. 1137) and the start of a successful period of Welsh rule which was to end in 1282/3 with the death of Llywelyn ap Gruffydd and conquest by Edward I. During the tense period which led to his eventual campaign of conquest, in July 1277, Edward launched a punitive expedition into North Wales with an army of 15,500 (Ref 4.74). From Chester the army marched into Gwynedd, camping first at Flint and then Rhuddlan and Deganwy, most likely causing widespread damage to the areas it passed through.

4.5.51 As a result of King Edward I's attempt to bring Wales under England's rule, a number of defensive structures were constructed during 1276 and 1295. The original Norman town of Caernarfon and Castell Caernarfon, approximately 9 km south-west of the Glaslyn Cables works site, was an example of King Edward I's fortified towns and exceptional medieval architecture. The town and castle, designed by a military architect, Master James of St George was designed to withstand damage and protect royal interests in the region.

4.5.52 A sub-circular heap of stones (**PRN 29381**), apparently a medieval field clearance cairn, is approximately 280 m north of the Glaslyn Cables works site. The field cairn suggests the removal of surface stones to improve the land and aid ploughing. This agricultural activity could be medieval in date, though no artefacts of that period were recovered, however, it could date from later periods, such as the Napoleonic wars when arable agriculture was extended in many parts of the country (Ref 4.71).

4.5.53 Metal detecting west of Porthmadog unearthed two medieval silver coins of Edward III of England (1327-77) (**PRN 81555** & **81556**), 310 m and 390 m respectively south of the Glaslyn Cables works site. The first of the coins shows some signs of wear; the second is fairly fresh. Both are of fairly full weight. The finding of two contemporary coins of relatively high value in close proximity suggests that it is likely that they were originally associated in the ground and therefore treasure.

4.5.54 A pre-turnpike road (**PRN 58477**), now a minor tarmac lane runs from Minffordd towards the farms of Plas Newydd and Ty Obry, entering Penrhyndeudraeth after crossing beneath the Festiniog Railway. It is approximately 290 m east of the Glaslyn Cables works site. The line of the road is clearly shown on the John Evans map of 1797 as the main route between the crossing of Traeth Mawr and Maentwrog and areas to the east. The road probably represents a traditional line of communication dating to at least the medieval period.

4.5.55 A small shell midden (**PRN 33597**) was found on an outcrop of bedrock, approximately 150 m north-east of the Glaslyn Cables works site during topsoil stripping for the Porthmadog Bypass. It appears that prior to the land reclamation of the late 18th century this would have formed a low island in a small bay on the northern side of the Penrhyndeudraeth peninsula, sheltered to the north by the outcrop of Y Garth. The shell midden would have been on the southern shore of this island. The shells were almost all of the common cockle (Cerastoderma edule), both complete and broken, but there were also occasional fragments of oyster shells. Two of the cockle shells were selected for dating to give a direct date on the shell

gathering activity. These gave a date in the 13th/14th century AD showing that the midden was medieval (Ref 4.26).

Post-Medieval (1640 to 1900)

4.5.56 The post-medieval period is one of the most significant periods to have shaped modern-day Wales. The majority of social, economic and landscape changes occurred during the post-medieval period because of heavy industry and agriculture.

4.5.57 A number of non-designated historic assets of post-medieval date have been identified in the Glaslyn Cables works site (Ref 4.26), and comprise boundaries and culverts associated with agricultural field enclosures. Some of the boundaries consist of dry-stone walls which have been stocked proofed with wooden posts and stock fencing along the top of the wall. These are as follows:

- Culvert/ditch, Porthmadog (**PRN 33548**).
- Culvert/ditch, Porthmadog (**PRN 33559**).
- Field boundary, Porthmadog (**PRN 33547**).
- Field boundary, Porthmadog (**PRN 33544**).
- Field drain, Porthmadog (**PRN 33545**).
- Field boundary, Porthmadog (**PRN 33550**).
- Field boundary, Porthmadog (**PRN 33551**).

4.5.58 A post-medieval field drain (**PRN 33591**) was uncovered in the Glaslyn Cables works site during a watching brief on topsoil stripping for the Porthmadog Bypass (Ref 4.26).

4.5.59 Wide shallow ditches (**PRN 33593**) were again uncovered in the Glaslyn Cables works site during topsoil stripping for the Porthmadog Bypass. These ditches ran in a north-west to south-east orientation. A slot was excavated across one of the ditches, which showed that it measured 3 m wide and 0.12 m deep with dark brown grey silt fill. The ditch was cut into mottled grey yellow estuarine sand silt (Ref 4.26).

4.5.60 These ditches were investigated to look into the possibility that a clearly defined road (**PRN 33605**) crossed the sands of Traeth Mawr as illustrated on a 1775 map. To investigate the possible survival of a road across Traeth Mawr, geophysical surveys followed by evaluation was carried out. There were no features identified so the anomalies detected in the geophysical survey seem to be geological. This work revealed no convincing evidence for a built road across the Traeth and it is probable that this was always a route on the sand, probably with marker posts. A built road would probably have been rapidly eroded away by the daily inundation of the sea (Ref. 4.26).

4.5.61 Due to large industries developing in Gwynedd, there was a surge in the construction of housing and commercial buildings. As a result of this, there was a specific local vernacular building tradition that developed from the ever-growing industrial communities.

4.5.62 The embankment of the Welsh Highland Railway/Croesor tramway (**PRN 21174**) is in the Glaslyn Cables works site, just to the south-west of Pen-y-Mount station. At this point the railway embankment overlies the embankment constructed by W. A.

Maddocks in 1800 which reclaimed land in the western branch of Traeth Mawr extending as far as Penmorfa. The present railway belongs to a restored section of the former Welsh Highland Railway (opened 1922) which used the existing embankment of the Croesor Tramway. This section, the earliest, of the Croesor Tramway was opened to goods traffic on 1st August 1864.

4.5.63 On the eastern edge of the Glaslyn Cables works site, approximately 20 m north-east of the Garth CSEC, is a post-medieval railway embankment (**PRN 56763**).

Modern (1900 to Present)

4.5.64 During the First World War, Wales prepared communities and the landscape for heavy impact, as seen with other areas around Britian. Due to the relatively sparse nature of Gwynedd, a substantial range of buildings were constructed/re-used for the purpose of defence (Ref 4.75). Both newly constructed hospitals in Bangor and Caernarfon were used for injured soldiers serving in the war (Ref 4.74). Alongside this, other schemes such as large-scale food production (allotments) and forestry were also formed to help support the war effort.

4.5.65 During the Second World War, Wales continued to support the war effort, whilst also defending the coastline of Gwynedd against invasion. One notable defensive structure still extant are WWII-era anti-tank cubes along Fairbourne beach (Ref 4.76). Despite evidence of WWII remains in Gwynedd, there are no known remains dating to WWII in the study area.

4.5.66 A stone circle (**PRN 33603**) erected in 1987 for the National Eisteddfod is in the central part of the Glaslyn Cables works site, approximately 100 m west of the Porthmadog Roundabout on the A487 Bypass. It is in a town park, 24.9 m in diameter with 11 stones in the circle and another stone set just inside. There is an altar made of a large horizontal stone in the centre. The stones are all clearly quarried using modern techniques. The circle is set in a flat field close to the road and was clearly intended to be seen from the road.

Undated

4.5.67 No undated findspots, archaeological remains have been identified in the Glaslyn Cables works site, though sites are known in the wider 500 m and 3 km study areas.

Cartographic Assessment

4.5.68 A review of extracts from the tithe surveys of Penmorfa Parish and Ynyscynhaiarn Parish in the County of Carnarvon' produced in 1842 (see **Figure 4.6.A.4**) shows the Glaslyn Cables works site to have been in a post-medieval field system established following the reclamation of the Traeth Mawr estuary earlier in the century. The Cob or reclamation embankment is visible to the south-east. The regular arrangement of the fields, laid out in a regular geometric fashion, typical of reclamation projects at the time. Both Tremadog and Porthmadog were laid out at this stage. The eastern area of the Glaslyn Cables works site was unenclosed at this stage and comprised open pasture.

4.5.69 The first edition Ordnance Survey (OS) six-inch map series dating to 1888 illustrates that the western area of the Glaslyn Cables works site had remained the same as depicted on the Tithe Map of 1842. The open pasture in the eastern area

of the Glaslyn Cables works site, however, had now been subdivided by linear boundaries into a regular field pattern, again typical of post-medieval reclamation schemes. The map also depicts the Croeso Tramway extending northwards across the Glaslyn Cables works site from Porthmadog. West of the Tramway a rifle range had been laid out with shooting butts at the eastern end and targets marked every 100 yards up to 800 yards. The Porthmadog Bypass now runs along the length of rifle range, with the site of the Shooting Butts just to the north of the road development (see **Figure 4.6.A.5**).

4.5.70 The town itself had now expanded northwards away from the coast, with the extension of High Street and the laying of new streets such as Snowdon Street, Chapel Street and New Street. The Cambrian Railway was laid out by this stage running in an east to west direction on an embankment across Traeth Mawr, with a station built on the northern reaches of the town. Another railway line, the Ffestiniog Railway ran along the Cob or embankment linking Porthmadog with the Ffestiniog slate quarries. At the eastern end of the embankment are a number of buildings called Boston Lodge. The railway continued further eastwards along the edge of the reclaimed estuary towards the village of Minffordd where it met the Cambrian Railway. The village contained two stations which served the two railway lines separately. The village itself was a hamlet focused on a crossroads with Minffordd Chapel nearby (see **Figure 4.6.A.5**).

4.5.71 There was some expansion of Tremadog as well, albeit not on the same scale as Porthmadog. Terraced housing had now appeared along Church Street and Dublin Street, as well as in the vicinity of Madoc Tannery in the north-east of the village (see **Figure 4.6.A.5**).

4.5.72 The landscape remained largely the same in the second edition (1901) of the OS six-inch map series (see **Figure 4.6.A.6**) and subsequent editions in 1920 and 1953 (see **Figures 4.6.A.7** to **4.6.A.8**).

LiDAR Assessment

4.5.73 Accessible LiDAR data was reviewed from the LiDAR data available on the National Museum of Scotland website (LiDAR DTM 50 cm-1.0 m) (Ref 3.7) to highlight if any further archaeological assets are identifiable in the Glaslyn Cables works site or in the 500 m study area.

4.5.74 LiDAR analysis in the Glaslyn Cables works site highlights the current layout and appearance of the countryside in the Glaslyn Cables works site. No new archaeological assets have been identified in the Glaslyn Cables works site. The LiDAR coverage did however reveal the remains of estuarine channels visible in the fields of Traeth Mawr which was reclaimed in the early 19th century, for example at the western end of the Glaslyn Cables works site near Wern Manor (Plate 1).

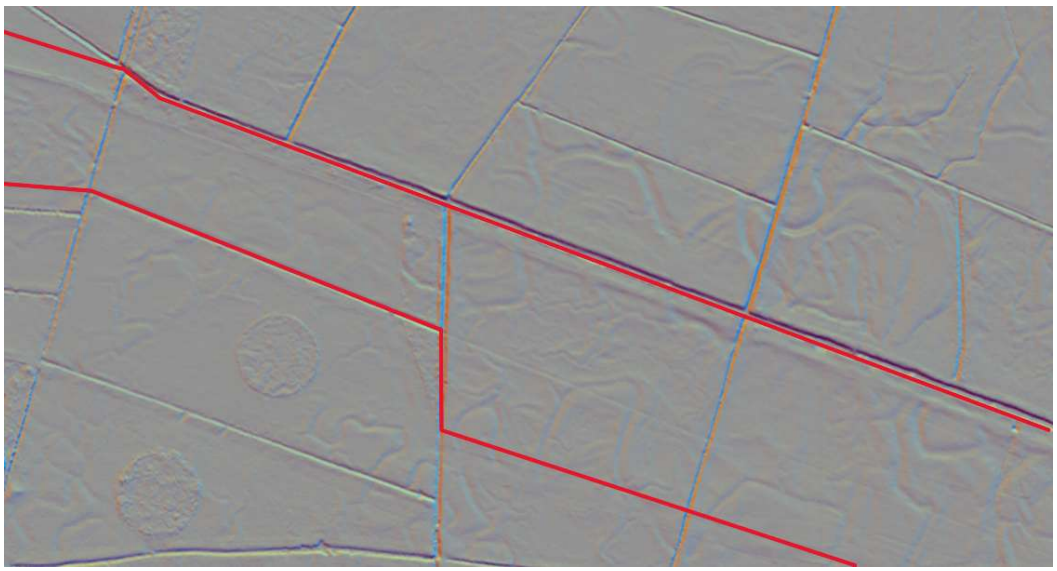


Plate 1: Image of the western end of the Glaslyn Cables works site, near Wern Manor, taken from a LiDAR 0.50cm – 1.0 m resolution DTM (multidirectional hillshade). The circular tree plantations (PRN 68485 and 69486) associated with Wern Manor can be seen to the south of the site boundary (Reproduced with the permission of the National Library of Scotland)

Historic Landscape Characterisation

4.5.75 The Gwynedd Historic Landscape Characterisation (GHLC) forms part of a national project to characterise the historic landscape. The GHLC is formed of an assessment of historic and current mapping that separated blocks of landscape into types based upon morphology or land use. Three GHLC types were identified within 500 m of the Glaslyn Cables works site. These are displayed below in **Table 4-1**.

4.5.76 The GIS data for the study of Historic Characterisation Landscape types in the Glaslyn Cables works site was obtained from Heneb as part of the HER data request and is presented in **Figure 4.6.A.3**. Historic Land Classification (HLC) types presented in **Figure 4.6.A.3** have been used in this study to establish the existing time depth of the historic landscape of the Glaslyn Cables works site and to examine how the surviving historic landscape of the Glaslyn Cables works site relates to that of the surrounding areas, and to the rest of Gwynedd; this enables an assessment of the sensitivity of the historic landscape to change.

Table 4-1 – Gwynedd Historic Landscape Types

HLC Number	HLC Name	Sub-Type
Area 8	Wern	Post-medieval house, gardens, garden designer association
Area 10	Porthmadog	19th-century port town
Area 14	Glaslyn estuary – reclaimed land	19th-century reclaimed land
Area 27	Penrhyn-Garth	19th-century agricultural landscape
Area 31	Minfordd quarry	Quarry, industrial archaeology

4.5.77 The eastern end of the Glaslyn Cables works site is in **Area 8 Wern**. There has been a house at Wern since at least the late medieval period, and the neighbouring Penmorfa parish church is likely to be an early foundation. The house (LB 4626) belonged to the Wynns in the 17th century but was abandoned by them in the second half of the 18th century, and sold in 1800. There followed a long period during which the house was empty or rented out, until it was bought by Richard Methuen Greaves in 1886. In 1892 he had it enlarged and rebuilt by John Douglas. The terraces (LB 21554) to the south of the house were built at two different times; the upper, in about 1895, by John Douglas and the lower, in 1902, by Thomas Mawson, who also designed the long walk and garden pavilion.

4.5.78 The house (LB 4626) is surrounded by a modest park, of which the part to the west, on rising ground, may date back to the eighteenth century or earlier. This part contains a wooded hill – the woods probably originally planted in the eighteenth century – with a derelict 'look-out tower' or folly. There is also a lake. The eastern part of the park is low-lying and marshy but has two circular copses (**PRN 68485** & **PRN 68486**), probably planted in the 19th century, which are sited to break up the continuous line of the horizon.

4.5.79 A square kitchen garden to the north of the house shown on the 1839 tithe map may have occupied the site of the original garden belonging to the sixteenth or seventeenth-century house. When the house was enlarged in 1892 part of this garden was taken up; what remained was turned over to glasshouses and a new kitchen garden was laid out to the north-west. Both are now derelict and overgrown.

4.5.80 Most of the Glaslyn Cables works site is in **Area 14 Glaslyn estuary – reclaimed land**. The area was assigned to William Alexander Madocks as part of the Enclosure Act of 1803, and drained by him as part of the process of building the various embankments. It is not clear what areas were drained by the earlier and smaller embankments, but the whole area was drained by the creation of the Cob, finally completed in 1813. Farms were created on the drained areas, and the area has been crossed by various industrial and public railways since 1842. Currently both the Pwllheli branch of Regional Railways and one arm of the revived Welsh Highland Railway operate in the area.

4.5.81 The former Glaslyn estuary is flat area, though there are some outcrops which would have been islands pre-1813, and which may have supplied rock for the embankments as well as producing in one case ironstone and other minerals. The lanes across the reclaimed areas tend to be long and straight. Farmhouses are largely modern and concrete-built, though the farm-buildings themselves are often of 19th-century build, with walls of rounded local stone. Fields are regular in shape (due to the need for drainage ditches), but boundaries are a surprising mixture of stone walls, earth banks and post-and-wire fences. Both standard- and narrow-gauge railways run through the area.

4.5.82 To the south of the Glaslyn Cables works site is **Area 10 Porthmadog**. A settlement of sorts was established by Madocks to house the navvies building the Cob in the period 1808 to 1813. The first public wharves were built in 1825, and thereafter a series of wharves was built by individual quarry companies along the shore almost as far as Borth y Gest. The opening of the Ffestiniog Railway from the quarries to the sea in 1836 largely brought about the end of the previous system of carting down to the quays along the Dwyryd, whence the slates were boated to Ynys Cyngar for transfer to sea-going vessels.

4.5.83 Little remains of the industrial area which once flourished to the north and east of the town, and which included foundries, timber saw mills, slate-works, soda-pop plant, a gasworks and a flour mill. The High Street continues to be the commercial heart of the town, with recent developments particularly at the eastern end near the Cob, and there is an interesting contrast in social terms between the small, squat terraced houses on the 'level' leading off the High Street, and the altogether grander three to four storeyed houses on the hill overlooking the town and out to Glaslyn.

4.5.84 At the western end of the Glaslyn Cables works site is **Area 27 Penrhyn-Garth**. This was a promontory until the draining of the Traeth Mawr in 1813. This peninsula today is an area of largely 19th-century dwellings and farms. The end of the peninsula facing the sea has large, well-laid out field walls and a pattern characteristic of 18th and 19th century estate improvement, while further back towards the town of Penrhyndeudraeth the fields are smaller and more irregular, and set in small hollows and on top of ridges, and the farms appear to be mainly pre-19th century, or at least not estate-improved and are somewhat run-down. There are areas of woodland, both towards the peninsula's end and down below Penrhyndeudraeth.

4.5.85 To the immediate north-east of the Glaslyn Cables works site is **Area 31 Minffordd quarry**. This is a granite quarry opened for setts in the 1870s, following the opening of the Aberystwyth and Welsh Coast Railway line, and which is now operated on a significant scale as an aggregate producer by Tarmac Quarry Products (North West) Ltd. The quarry has continued to expand and has significantly altered the skyline of Garth, especially as seen from the Cob, in recent years. Its corrugated iron crusher plant is a prominent feature but, although it has never had an archaeological survey, it has expanded its workings and there is not thought to be much of significant industrial archaeological interest on the site.

Registered Historic Landscapes

4.5.86 The Glaslyn Cables works site is also in the Aberglaslyn Registered Historic Landscape HLW (Gw) 7.

4.5.87 The area comprises Traeth Mawr, or the former tidal estuary at the mouth of the River Glaslyn which flows south from Snowdonia into Tremadog Bay. The area represents probably one of the most ambitious 19th-century land reclamation schemes, certainly in Wales, if not in Britain. It includes the Porthmadog Cob embankment, which was once described as the wonder of Wales, the planned Georgian town of Tremadog, and Porthmadog, once one of the largest ports on Cardigan Bay. The reclamation of Traeth Mawr and the building of Tremadog is an excellent example of the product of landlord initiative and conscious landscape creation in pursuit of economic objectives in the late 18th and early 19th centuries. The area includes all the reclaimed land up to the base of the cliffs or slopes surrounding the former estuary as far as Aberglaslyn, the planned town of Tremadog, Porthmadog, the Penrhyndeudraeth peninsula to the south which includes the location and setting of the architecturally exotic, planted, Italianate village of Portmeirion designed by Clough Williams-Ellis. The creation of Tremadog represents the fulfilment of the dreams of William Madocks, MP for Boston in Lincolnshire, who had a vision of improving this part of south Caernarfonshire. His scheme also included land reclamation, road building and the introduction of rural industry, as well as securing the means by which the Ffestiniog slate quarries could expand with the provision of harbour works at Porthmadog. All these features survive in the present landscape.

4.5.88 Plans to reclaim Traeth Mawr had been put forward as early as 1605, by Sir John Wynn of Gwydir, but it was not until the beginning of the 19th century that work started. With a fortune he had inherited, Madocks purchased a number of farms at the upper end of Traeth Mawr, including Ynys Fadog, and in 1800 brought in a Lincolnshire engineer to construct an earth embankment to reclaim about 400ha of marsh and sands for grazing. The second stage of the grand design involved the laying out of the town of Tremadog, on the west side of the land that had been reclaimed. The settlement was intended as a staging post on the proposed main route to Ireland which crossed into Lleyn here on its way to Porth Dinllaen. Work began in 1805 and the town was laid out on a T-shaped plan, with the top formed by the aptly-named main road, Dublin Street, which held the coaching inn, town hall and market house. Off this opened Market Square, around which were houses, shops and smaller inns, while a church and a nonconformist chapel were built either side of the road to the south of the town. To generate employment, a five-storey, water powered woollen mill was built to the east of the town and an ancillary fulling mill and a corn mill erected nearby. The dams and leats of the water supply system survive on the slopes to the north-east of the town. A canal ran from just west of the town out to sea north of Porthmadog, with a basin to allow ships to load and unload. A nursery was created to the east of the church, supplying trees to other parts of the Madocks estate.

4.5.89 Early in 1808, work began on the greatest undertaking of all in the grand scheme, namely the Great Embankment or, as it is now known, the Porthmadog Cob. This extended just over a kilometre from Ynys Tywyn to the south side of the estuary, and was intended to carry the post road from London to Porth Dinllaen via Tremadog, and to reclaim a further 1200 hectares (ha) of land. Construction necessitated diverting the River Glaslyn from its mid-estuary course and an artificial channel was cut through Ynys Tywyn to facilitate this, with sluice gates to control

the flow of water. Although the embankment was completed in 1811, it was breached six months later and had to be repaired at great cost.

4.5.90 The diversion of the River Glaslyn led to the scouring out of a new harbour alongside the rocky Ynys Tywyn, and a harbour licence was obtained in 1821 which initiated the development of Porthmadog. The harbour was built and a new quay rented to Samuel Holland, the slate quarry owner, and the resultant growth of the slate trade achieved in effect, the last phase of Madocks's grand plan. A narrow-gauge tramway (the present Ffestiniog Railway) was built across the Cob connecting the harbour with the Ffestiniog quarries in 1836, although Madocks himself had died in 1828. At the peak of slate production in 1873, an estimated 1,000 ships moved 116,000 tons of slate out of Porthmadog.

5. Assessment of Baseline

5.1 Previous Ground Disturbance

5.1.1 Previous geoarchaeological assessment has confirmed that the Glaslyn Cables works site is on reclaimed estuary. Ground surfaces relating to the pre-reclamation landscape may survive below the reclaimed ground and marine estuarine deposits, but they are likely to be deeply buried (see paragraphs 4.1.4 to 4.1.13).

5.1.2 AECOM were commissioned by National Grid to undertake archaeological monitoring of geotechnical investigations for the Glaslyn Cables works. Nine trial pits were excavated and monitored archaeologically. The test pits consistently revealed layers of estuarine sands and alluvium, and aligned with previous archaeological and geoarchaeological assessments in the area. None of the monitored test pits revealed layers, features or artefacts of archaeological significance (Ref 4.4).

5.1.3 Recent works in the area have confirmed a low archaeological potential of the upper deposits of the Afon Glaslyn Floodplain where the first few metres are of relatively recent date and relate to the reclamation of lands following the construction of embankments in the 19th century (Ref 4.2). Consequently, a **low level** of ground disturbance is assessed, but at a significant depth below the present-day ground surfaces.

5.2 Archaeological Potential

5.2.1 **Palaeolithic to Mesolithic:** There are no known assets of a Palaeolithic or Mesolithic date recorded in the Glaslyn Cables works site. A number of Mesolithic prehistoric flint and chert artefacts were found during archaeological excavations 30 m north-east of the Glaslyn Cables works site in advance of the Porthmadog bypass at Y Bryn near Tremadog (**PRN 33595** & **33604**). There is no indication that this activity extends to within the Glaslyn Cables works site, and the potential for encountering remains of this period is negligible.

5.2.2 **Neolithic to Bronze Age**: There are no known assets of Neolithic and Bronze Age date recorded in the Glaslyn Cables works site. A number of flint and chert artefacts, possibly Neolithic in date (**PRN 33595**), were found during excavations approximately 30 m north of the Glaslyn Cables works site in advance of the Porthmadog bypass at Tremadog. The Cist Cerrig Burial Chamber and Cup Marked Rock (**CN118**) which is of Neolithic date is approximately 1.26 km south of the Glaslyn Cables works site. The Fach-goch standing stone (**CN386**) which is of Bronze Age date is approximately 1.46 km north of the Glaslyn Cables works site. Metal detecting in the vicinity of Penamser, Portmadog unearthed a Bronze Age axehead (**PRN 33004**) amongst finds of other periods.

5.2.3 There is no indication that this activity extends to within the Glaslyn Cables works site, and the potential for encountering remains of this period is negligible.

5.2.4 **Iron Age:** There are no known assets of Iron Age date recorded in the Glaslyn Cables works site. The wider area sees settlement of the Iron Age and Roman

periods. The Enclosed Hut Group in Parc-y-Borth (**CN270**) is approximately 1.37 km south-east of the Glaslyn Cables works site. The Enclosed Hut Circle Settlement North of Coed Gwlyb (**ME184**) is approximately 880 m south of the Glaslyn Cables works site. The Hut Circles near Craig y Gesail (**CN237**) are approximately 1 km north-east of the Glaslyn Cables works site. A hillfort, the Moel y Gest Camp (**CN059**) is approximately 600 m south-west of the Glaslyn Cables works site. The Hut Group West of Cwm Mawr (**CN239**) is approximately 1.2 km north of the Glaslyn Cables works site. The Ty'n y Berllan Settlement (**ME096**) is approximately 640 m north-east of the Glaslyn Cables works site. An Iron Age shell midden (**PRN 34103**) was excavated approximately 110 m south of the Glaslyn Cables works site.

5.2.5 There is no indication that this activity extends to within the Glaslyn Cables works site, and the potential for encountering remains of this period is negligible.

5.2.6 **Roman:** A Roman Road, which ran from Segontium to Pen Llystyn to Tomen y Mur (**PRN 17812**) is projected to run in a north-west to south-east orientation, through the central and eastern areas of the Glaslyn Cables works site, including the proposed location of the Minfordd CSEC and western tunnel head house compound. Archaeological evaluation in 2022 in the latter area revealed no traces of this projected road alignment and given the estuarine nature of the location before the reclamation of the early 19th century, it is highly unlikely that a road would have run through the Glaslyn Cables works site (Ref 5.1). The Roman bath house at Tremadoc (**CN174**) is approximately 98 m north-east of the Glaslyn Cables works site. An area immediately around the Roman bath house (**PRN 16876**) has been identified as being of archaeological potential. Approximately 200 m to the north-west of the Roman bath house and 280m north of the Glaslyn Cables works site, archaeological evaluation on a narrow terrace revealed the remains of a probable Iron Age timber roundhouse settlement and a later Romano-British corn-drying kiln (**PRN 19661**). A stone-built lime kiln (**PRN 34844**) was found dug into the side of a small hill known as Y Bryn during excavation approximately 40 m north-east of the Glaslyn Cables works site in advance of the Porthmadog Bypass. The same excavation revealed approximately 50 m north-east of the Glaslyn Cables works site a large deposit of thick, roughly cut roofing slates and at the lower end of the slope was a rubble deposit and two gullies (**PRN 34845**).

5.2.7 The wider area sees settlement of the Iron Age and Roman periods. The Enclosed Hut Group in Parc-y-Borth (**CN270**) is approximately 1.37 km south-west of the Glaslyn Cables works site. The Enclosed Hut Circle Settlement North of Coed Gwlyb (**ME184**) is approximately 880 m south of the Glaslyn Cables works site. The Hut Circles near Craig y Gesail (**CN237**) are approximately 1 km north-east of the Glaslyn Cables works site. The Hut Group West of Cwm Mawr (**CN239**) is approximately 1.2 km north of the Glaslyn Cables works site. A coin (**PRN 34847**) was found on a field track to the south-west of Y Bryn, approximately 5 m north of the Glaslyn Cables works site. Another Roman findspot (**PRN 2358**) in the wider area (approximately 590 m north-east of the Glaslyn Cables works site) comprises a copper ingot, 32.5 cm diameter, 6.5 cm thick and weighing 42 lbs. was found near Penmorfa, apparently in the 19th century. Metal detecting in the vicinity of Penamser, Portmadog unearthed a Roman brooch or fibula (**PRN 33004**) amongst finds of other periods.

5.2.8 Notwithstanding the presence of Roman period settlement in the wider area, there are no known assets of Roman date recorded in the Glaslyn Cables works site, and consequently the potential for unknown remains from this period in the Glaslyn Cables works site is low.

5.2.9 **Early Medieval:** There are no known assets of early medieval date recorded in the Glaslyn Cables works site. The Gesail Gyfarch Inscribed Stone (**CN019**) is approximately 1.39 km north of the Glaslyn Cables works site. There is no indication that this activity extends to within the Glaslyn Cables works site and the potential for encountering remains of this period is negligible.

5.2.10 **Medieval:** There are no known assets of medieval date recorded in the Glaslyn Cables works site. However, there is activity of this date in the wider area. A sub-circular heap of stones (**PRN 29381**), apparently a medieval field clearance cairn, is approximately 280 m north of the Glaslyn Cables works site. Metal detecting west of Porthmadog unearthed two medieval silver coins of Edward III of England (1327-77) (**PRN 81555** & **81556**) respectively 310 m and 390 m south of the Glaslyn Cables works site. A pre-turnpike road (**PRN 58477**), now a minor tarmac lane running from Minffordd towards the farms of Plas Newydd and Ty Obry, is approximately 290 m east of the Glaslyn Cables works site. A small shell midden (**PRN 33597**) was found on an outcrop of bedrock, approximately 150 m north-east of the Glaslyn Cables works site during topsoil stripping for the Porthmadog Bypass.

5.2.11 There is no indication that this activity extends to within the Glaslyn Cables works site, and the potential for encountering remains of this period is negligible.

5.2.12 **Post-Medieval:** There are number of assets of post-medieval date recorded in the Glaslyn Cables works site comprising boundaries and culverts associated with agricultural field enclosures (**PRN 33548**; **33559**; **33547**; **33544**; **33545**; **33550** and **33551**;). Wide shallow ditches (**PRN 33593**) were uncovered in the Glaslyn Cables works site during topsoil stripping for the Porthmadog Bypass. The embankment of the Welsh Highland Railway/Croesor tramway (**PRN 21174**) is in the Glaslyn Cables works site, just to the south-west of Pen-y-Mount station. On the eastern edge of the Glaslyn Cables works site, approximately 20 m north-east of the Garth CSEC, is a post-medieval railway embankment (**PRN 56763**).

5.2.13 While this activity extends to within the Glaslyn Cables works site, the potential for encountering remains of this period is low.

5.2.14 **Modern:** A stone circle (**PRN 33603**) erected in 1987 for the National Eisteddfod is in the central part of the Glaslyn Cables works site, approximately 100 m west of the Porthmadog Roundabout on the A487 Bypass. Otherwise, there are no known historic assets of modern date recorded in the Glaslyn Cables works site. There is no indication that this activity extends elsewhere within the Glaslyn Cables works site or the 500 m study area, and the potential for encountering remains of this period is negligible.

Summary of Archaeological Potential and Significance of Archaeological Remains

5.2.15 Archaeological evidence of Roman settlement and industrial remains could comprise pits, ditches, buildings, furnace, and hearths. Any such remains would likely be of medium to high value as they could be of interest at a regional and even potentially national level associated with the nearby Roman scheduled monument sites.

5.2.16 In the preceding section, it was assessed that given the Roman settlement in the wider study area that the potential for unknown remains from this period in the site could be considered low. However, given that the Glaslyn Cables works site is

completely occupied by deep estuarine levels reclaimed in the early 19th century, the potential for unknown Roman remains is reduced to negligible.

5.2.17 Given the presence of post-medieval agricultural activity on the reclaimed land, the potential for unknown remains from this period in the Glaslyn Cables works site is low.

5.2.18 For all other periods, there is a negligible potential to encounter archaeological remains.

5.2.19 Evidence of post-medieval archaeological remains is likely to consist of agricultural features. Any such remains would likely be of low value as they would be of local interest.

5.2.20 The significance of potential unrecorded archaeological remains would derive from their archaeological and historical interest and their potential to contribute to our understanding of past human activity based on national, regional or local frameworks. Isolated artefactual material or truncated/disturbed remains are of low value, whilst well preserved and in situ evidence for occupation/settlement remains could be of medium or even high value.

5.3 Historic Landscape Sensitivity to Change

5.3.1 The importance and significance of historic landscape character is assessed in terms of sensitivity to change. Those with a high sensitivity to change should be accommodated and preserved where possible within new developments or should be subject to well managed changes. Historic landscapes with a lower sensitivity to change can be potentially enhanced by new developments and can absorb most types and scales of essential, well-managed change.

5.3.2 Most of the Glaslyn Cables works site is in a post-medieval landscape comprising extant agricultural fields on reclaimed estuarine levels, as well as parkland associated with Wern House. Due to the industrial nature of the existing CSECs and Glaslyn Cables, there is no connection between the Glaslyn Cables works site and the post-medieval agricultural landscape in which it is situated.

5.3.3 Post-medieval field systems are common throughout Gwynedd and Wales, reducing its sensitivity.

5.3.4 The historic landscape character of the Glaslyn Cables works site is assessed as being of low value and the sensitivity to change is assessed as low.

5.3.5 The proposed works would not alter the ability to appreciate the historic landscape of the Glaslyn Cables works site, as following the replacement of the existing underground Glaslyn Cables with new, contemporary underground cables to operate at 400 kV than the existing cables and connecting these to an extended Wern CSEC and a new CSEC at Minffordd close to the EVIP tunnel head house at Minffordd, removing some sections of the redundant existing underground Glaslyn Cables and making safe sections which are left in place, and the decommissioning and removal of the existing Garth CSEC, the new infrastructure would be entirely below ground, or match in scale and form the existing structures in the CSECs.

5.4 Significance of Designated Historic assets

World Heritage Site

Within 3 km of the Glaslyn Cables Works Site

The Slate Landscape of Northwest Wales (UNESCO 1633)

5.4.1 The Slate Landscape of Northwest Wales comprise six areas together which represent an exceptional example of an industrial landscape which was profoundly shaped by quarrying and mining slate, and transporting it for national and international markets.

5.4.2 The components represent geographically discrete areas of the World Heritage Site of which one component is in the wider 3 km study area and comprises Component Part 5: Ffestiniog: its Slate Mines and Quarries, 'city of slates' and Railway to Porthmadog, approximately 70 m south-east of the Glaslyn Cables works site.

5.4.3 The values of a World Heritage site are expressed by its attributes. These are the essential qualities which make it culturally significant. Attributes can be tangible (physical) or intangible. Retention of attributes is important to maintain the values that make the proposed World Heritage Site of international importance.

5.4.4 Summary key attributes of the Outstanding Universal Value of the World Heritage Site are as follows:

- Monumental scale of quarries and mines – stepped hillside workings, deep pits, cavernous underground chambers, massive cascading tips, ingenious water systems, bulk handling systems, range of industrial buildings.
- Innovative narrow gauge railway systems leading to purpose-built coastal export harbours and main-line railways – some fully operational.
- Innovative processing systems – including first known use of circular saw for cutting stone.
- Slate craft skills and use of slate throughout the landscape.
- Grand country houses and estates.
- Workers' vernacular settlements, showing variations in social context, pattern, and scale.
- Chapels and churches, band-rooms, schools, libraries and meeting places, indicating cultural identity and linguistic identity, and aspirations for social justice.
- The Welsh language – placenames.
- Literary tradition associated with The Slate Landscape of Northwest Wales.

Component Part 5: Ffestiniog: its Slate Mines and Quarries, 'city of slates' and Railway to Porthmadog

5.4.5 Two of the elements which comprise component 5 are in the 3 km study area are as follows: the Ffestiniog Railway (element 5.9) and Porthmadog Harbour (element 5.10). A segment of the Ffestiniog railway is approximately 70 m south-east of the Glaslyn Cables works site. The Porthmadog Harbour component is approximately 500 m south of the Glaslyn Cables works site.

5.4.6 The essential setting of Part 5: Ffestiniog: its Slate Mines and Quarries, 'city of slates' and Railway to Porthmadog extends from the mountainous landscapes above the quarries and town of Blaenau Ffestiniog along the part-wooded Dwyryd Valley with its vistas of Harlech Castle, to the Traeth Mawr, the spectacular mountain environment of Cnicht and the Moelwynion beyond, and the bowl of the Croesor Valley distantly apparent beneath them (Ref 2.12).

5.4.7 The setting of the Ffestiniog Railway includes Traeth Mawr in the Glaslyn Cables works site.

5.4.8 The Glaslyn Cables works site forms part of the setting of the Ffestiniog Railway. There is intervisibility between the Glaslyn Cables works site and the Ffestiniog Railway.

5.4.9 There is no intervisibility between the Glaslyn Cables works site and Porthmadog Harbour because of screening from intervening structures including the embankment (The Cob) which carries the Ffestiniog Railway.

5.4.10 The Glaslyn Cables works site does not contribute to the understanding of the attributes of the Outstanding Universal Value of the World Heritage.

Scheduled Monuments

Within 3 km of the Glaslyn Cables Works Site

Gesail Gyfarch Inscribed Stone (CN019)

5.4.11 The Gesail Gyfarch Inscribed Stone (**CN019**) is approximately 1.39 km north of the Glaslyn Cables works site. The monument consists of a stone with an early-medieval inscription on the front (see paragraph 4.5.47 for description of monument).

5.4.12 The monument is of national importance for its potential to enhance knowledge of the organisation and practice of religion and commemoration in the medieval period. The setting of the asset is the local early medieval landscape in which it is situated.

5.4.13 The asset is shielded from the Glaslyn Cables works site by intervening woodland and high terrain, and the Glaslyn Cables works site does not contribute to the understanding of the heritage interests of the asset.

5.4.14 The asset holds archaeological interest, with its value derived from its ability to inform on the organisation and practice of religion and commemoration on the medieval period. The asset is of high value.

Enclosed Hut Group in Parc-y-Borth (CN270)

5.4.15 The Enclosed Hut Group in Parc-y-Borth (**CN270**) is approximately 1.37 km south-west of the Glaslyn Cables works site. The monument comprises the remains of a small, compact settlement or single homestead dating to the Iron Age or Romano-British period (see paragraph 4.5.16 for description of monument).

5.4.16 This is a complete and well-preserved settlement of proven antiquity from finds discovered in the past. The monument is of particular interest due to its survival in a lowland area where this type of earth constructed site is rare.

5.4.17 It is of national importance for its potential to enhance knowledge of prehistoric settlement practices. It is an important relic of the prehistoric landscape and retains significant archaeological potential. There is a strong probability of the presence of environmental and structural evidence, including preserved internal and external floor levels.

5.4.18 The asset holds a group association with the Enclosed Hut Circle Settlement North of Coed Gwlyb (**ME184**), the Hut Circles near Craig y Gesail (**CN237**), Moel y Gest Camp (**CN059),** the Hut group West of Cwm Mawr (**CN239**) and the Ty'n y Berllan Settlement (**ME096**) as well as the more explicitly Roman settlement site – the Bath House at Tremadoc (**CN174**). Based upon archaeological investigations in the wider area surrounding these assets, these are likely part of a wider and much larger Iron Age and Romano-British settlement landscape. This group value also contributes to its significance and combined these assets provide a rare example of well-preserved Iron Age and Romano-British settlement in Wales

5.4.19 The asset is shielded from the Glaslyn Cables works site by intervening woodland and buildings, and the Glaslyn Cables works site does not contribute to the understanding of the heritage interests of the asset.

5.4.20 The asset holds archaeological interest, with its value derived from its ability to inform on Iron Age and Romano-British settlement activity. The asset is of high value.

Enclosed Hut Circle Settlement North of Coed Gwlyb (ME184)

5.4.21 The Enclosed Hut Circle Settlement North of Coed Gwlyb (**ME184**) is approximately 880 m south of the Glaslyn Cables works site (see paragraph 4.5.17 for description of monument).

5.4.22 The monument is of national importance for its potential to enhance knowledge of prehistoric settlement practices. It is an important relic of the prehistoric landscape and retains significant archaeological potential. There is a strong probability of the presence of environmental and structural evidence, including preserved internal and external floor levels, and local waterlogging could have preserved organic material.

5.4.23 The asset holds a group association with the Enclosed Hut Group in Parc-y-Borth (**CN270**), the Hut Circles near Craig y Gesail (**CN237**), Moel y Gest Camp (**CN059**), the Hut group West of Cwm Mawr (**CN239**) and the Ty'n y Berllan Settlement (**ME096**) as well as the more explicitly Roman settlement site – the Bath House at Tremadoc (**CN174**). Based upon archaeological investigations in the wider area surrounding these assets, these are likely part of a wider and much larger Iron Age and Romano-British settlement landscape. This group value also contributes to its significance and combined these assets provide a rare example of well-preserved Iron Age and Romano-British settlement in Wales

5.4.24 The asset is shielded from the Glaslyn Cables works site by intervening woodland and upland terrain and the Glaslyn Cables works site does not contribute to the understanding of the heritage interests of the asset.

5.4.25 The asset holds archaeological interest, with its value derived from its ability to inform on Iron Age and Romano-British settlement activity. The asset is of high value.

Roman Bath House, Tremadoc (CN174)

5.4.26 This Roman bath house is approximately 98 m north of the Glaslyn Cables works site. A Roman bath house, dated by excavation in 1908 to a period starting in the second century AD and continuing into the fourth. There are no surviving upstanding remains of this monument (see paragraph 4.5.31 for description of monument).

5.4.27 The monument is of national importance for its potential to enhance knowledge of Roman remains. It retains significant archaeological potential, with a strong probability of the presence of associated archaeological features and deposits.

5.4.28 The asset holds a group association with the Iron Age/Romano-British settlement sites, namely the Enclosed Hut Group in Parc-y-borth (**CN270**), the Enclosed Hut Circle Settlement North of Coed Gwlyb (**ME184**), Hut Circles near Craig y Gesail (**CN237**), Hut Group West of Cwm Mawr (**CN239**) and Ty'n y Berllan Settlement (**ME096**). Based upon archaeological investigations in the wider area surrounding these assets, these are likely part of a wider and much larger Romano-British settlement landscape. This group value also contributes to its significance and combined these assets provide a rare example of well-preserved Romano-British settlement in Wales.

5.4.29 While the site of the Roman bath house is visible from the Glaslyn Cables works site, the Glaslyn Cables works site does not contribute to the understanding of the heritage interests of the asset.

5.4.30 The asset holds archaeological interest, with its value derived from its ability to inform on Roman settlement activity. The asset is of high value.

Hut Circles near Craig y Gesail (CN237)

5.4.31 This settlement is approximately 1 km north-east of the Glaslyn Cables works site. The monument comprises the remains of two substantial stone-built hut circles that probably date to the Iron Age or Romano-British period, together with the foundations of a rectangular hut platform of later, possibly medieval date.

5.4.32 The monument is unusually well-preserved, reflecting activity over a long period of time. It is of national importance for its potential to enhance our knowledge of later prehistoric, perhaps through to medieval, domestic construction practices. The monument has survived with minimal disturbance and retains significant archaeological potential. There is a strong probability that structural evidence has survived, together with internal and external floor surfaces. The huts' group value is enhanced by their relationship with other similar monuments in the vicinity which also reflects continuity of settlement.

5.4.33 The monument is of national importance for its potential to enhance knowledge of Iron Age or Romano-British settlement practices. It is an important relic of the prehistoric/historic landscape and retains significant archaeological potential.

5.4.34 The asset holds a group association with the Enclosed Hut Group in Parc-y-Borth (**CN270**), the Enclosed Hut Circle Settlement North of Coed Gwlyb (**ME184**), Moel y Gest Camp (**CN059**), the Hut group West of Cwm Mawr (**CN239**) and the Ty'n y Berllan Settlement (**ME096**) as well as the more explicitly Roman settlement site – the Bath House at Tremadoc (**CN174**). Based upon archaeological investigations in the wider area surrounding these assets, these are likely part of a wider and much larger Iron Age and Romano-British settlement landscape. This group value also

contributes to its significance and combined these assets provide a rare example of well-preserved Iron Age and Romano-British settlement in Wales.

5.4.35 The asset is shielded from the Glaslyn Cables works site by intervening woodland and the Glaslyn Cables works site does not contribute to the understanding of the heritage interests of the asset.

5.4.36 The asset holds archaeological interest, with its value derived from its ability to inform on Iron Age and Romano-British settlement patterns. The asset is of high value.

Cist Cerrig Burial Chamber & Cup Marked Rock (CN118)

5.4.37 This monument is approximately 1.26 km south of the Glaslyn Cables works site. The monument comprises the remains of a chambered tomb, dating to the Neolithic period (see paragraphs 4.5.7 and 4.5.8 for description of monument).

5.4.38 The monument is of national importance for its potential to enhance knowledge of prehistoric burial and ritual. The monument is an important relic of a prehistoric funerary and ritual landscape and retains significant archaeological potential, with a strong probability of the presence of both intact burial or ritual deposits and environmental and structural evidence, including a buried prehistoric land surface. Chambered tombs may be part of a larger cluster of monuments and their importance can be enhanced further by their group value.

5.4.39 The asset holds a group association with the Fach-goch standing stone (**CN386**). Based upon archaeological investigations in the wider area surrounding these assets, these are likely part of a wider and much larger prehistoric funerary and ritual landscape. This group value also contributes to its significance and combined these assets provide a rare example of well-preserved Neolithic and Bronze Age funerary practices in Wales.

5.4.40 The asset is shielded from the Glaslyn Cables works site by intervening woodland and upland terrain and the Glaslyn Cables works site does not contribute to the understanding of the heritage interests of the asset.

5.4.41 The asset holds archaeological interest, with its value derived from its ability to inform on Neolithic funerary and ritual practices. The asset is of high value.

Moel y Gest Camp (CN059)

5.4.42 This hillfort is approximately 600 m south-west of the Glaslyn Cables works site on the west end of Moel y Gest, with two inner enclosures at the south-west corner (see paragraph 4.5.19 for description of monument).

5.4.43 The monument is of national importance for its potential to enhance our knowledge of prehistoric settlement and defence. It retains significant archaeological potential, with a strong probability of the presence of associated archaeological features and deposits. The structures themselves may be expected to contain archaeological information concerning chronology and building techniques.

5.4.44 The asset holds a group association with the Enclosed Hut Group in Parc-y-Borth (**CN270**), the Enclosed Hut Circle Settlement North of Coed Gwlyb (**ME184**), Hut Circles near Craig y Gesail (**CN237**), the Hut group West of Cwm Mawr (**CN239**) and the Ty'n y Berllan Settlement (**ME096**). Based upon archaeological investigations in the wider area surrounding these assets, these are likely part of a wider and much larger Iron Age and Romano-British settlement landscape. This

group value also contributes to its significance and combined these assets provide a rare example of well-preserved Iron Age settlement in Wales.

5.4.45 The asset is partly shielded from the Glaslyn Cables works site by intervening woodland and the Glaslyn Cables works site does not contribute to the understanding of the heritage interests of the asset.

5.4.46 The asset holds archaeological interest, with its value derived from its ability to inform on Iron Age settlement patterns. The asset is of high value.

Hut Group West of Cwm Mawr (CN239)

5.4.47 This multi-period settlement is approximately 1.2 km north of the Glaslyn Cables works site and includes a hut-circle settlement of the Iron Age or Romano-British period consisting of three huts and two small attached enclosures or yards and, close by, two rectangular huts, probably of the medieval period (see paragraphs 4.5.20 and 4.5.21 for description of monument).

5.4.48 The monument is of national importance for its potential to enhance knowledge of prehistoric and possibly medieval domestic life and social organisation. The proximity of both Iron Age/Romano-British and medieval types of hut settlement, and their association with earlier field boundaries, suggests that there may have been continuity of occupation. This, combined with the well-preserved character of the features, ensures considerable archaeological potential, with a strong probability of the presence of structural evidence and associated archaeological features and deposits. The importance of the monument is also emphasised by its group value with other similar monuments in the vicinity and by the unusual nature of the small enclosures attached to the hut circles.

5.4.49 The asset holds a group association with the Enclosed Hut Group in Parc-y-Borth (**CN270**), the Enclosed Hut Circle Settlement North of Coed Gwlyb (**ME184**), Hut Circles near Craig y Gesail (**CN237),** Moel y Gest Camp (**CN059**) and the Ty'n y Berllan Settlement (**ME096**) as well as the more explicitly Roman settlement site – the Bath House at Tremadoc (**CN174**). Based upon archaeological investigations in the wider area surrounding these assets, these are likely part of a wider and much larger Iron Age and Romano-British settlement landscape. This group value also contributes to its significance and combined these assets provide a rare example of well-preserved Iron Age and Romano-British settlement in Wales.

5.4.50 The asset is shielded from the Glaslyn Cables works site by intervening upland terrain and the Glaslyn Cables works site does not contribute to the understanding of the heritage interests of the asset.

5.4.51 The asset holds archaeological interest, with its value derived from its ability to inform on Iron Age, Romano-British and medieval settlement patterns. The asset is of high value.

Fach-goch, standing stone (CN386)

5.4.52 This monument is approximately 1.46 km north of the Glaslyn Cables works site and comprises a fine standing stone, probably dating to the Bronze Age and in enclosed pasture about 130 m to the south-south-east of Fach-goch (see paragraph 4.5.12 for description of monument).

5.4.53 The monument is of national importance for its potential to enhance knowledge of prehistoric ritual practices. The monument is well preserved and is an important relic of a prehistoric funerary and ritual landscape. It retains significant

archaeological potential, with a strong probability of the presence of associated archaeological features and deposits.

5.4.54 The asset holds a group association with the Fach-goch standing stone (**CN386**). Based upon archaeological investigations in the wider area surrounding these assets, these are likely part of a wider and much larger prehistoric funerary and ritual landscape. This group value also contributes to its significance and combined these assets provide a rare example of well-preserved Neolithic and Bronze Age funerary practices in Wales.

5.4.55 The asset is shielded from the Glaslyn Cables works site by intervening woodland and upland terrain, and the Glaslyn Cables works site does not contribute to the understanding of the heritage interests of the asset.

5.4.56 The asset holds archaeological interest, with its value derived from its ability to inform on prehistoric funerary and ritual practices. The asset is of high value.

Ty'n y Berllan Settlement (**ME096**)

5.4.57 This monument is approximately 640 m north-east of the Glaslyn Cables works site and comprises the remains of an enclosed settlement of multiple hut circles, which probably dates from the first millennium BC (see paragraph 4.5.22 for description of monument).

5.4.58 The monument is of national importance for its potential to enhance knowledge of prehistoric settlement. It retains significant archaeological potential, with a strong probability of the presence of associated archaeological features and deposits. The structures themselves may be expected to contain archaeological information concerning chronology and building techniques.

5.4.59 The asset holds a group association with the Enclosed Hut Group in Parc-y-Borth (**CN270**), the Enclosed Hut Circle Settlement North of Coed Gwlyb (**ME18**4), the Hut Circles near Craig u Gesail (**CN237**), Moel y Gest Camp (**CN059**), and the Hut Group West of Cwm Mawr (**CN239**) as well as the more explicitly Roman settlement site – the Bath House at Tremadoc (**CN174**). Based upon archaeological investigations in the wider area surrounding these assets, these are likely part of a wider and much larger Iron Age and Romano-British settlement landscape. This group value also contributes to its significance and combined these assets provide a rare example of well-preserved Iron Age and Romano-British settlement in Wales.

5.4.60 The asset is shielded from the Glaslyn Cables works site by intervening woodland and the Glaslyn Cables works site does not contribute to the understanding of the heritage interests of the asset.

5.4.61 The asset holds archaeological interest, with its value derived from its ability to inform on Iron Age and Romano-British settlement patterns. The asset is of high value.

Conservation Areas

Within 3 km of the Glaslyn Cables Works Site

5.4.62 There are three conservation areas within 3 km of the Glaslyn Cables works site:

5.4.63 Tremadog Conservation Area (**WAL/GWYN/20**) is approximately 120 m north of the Glaslyn Cables works site. The conservation area encompasses an area around

one Grade I, five Grade II* and 74 Grade II buildings associated with the village of Tremadog.

5.4.64 The listed buildings in the conservation area include the Grade I listed Capel Peniel (**Cadw 4442**). Also, in the conservation area are following Grade II* listed buildings: Ty Nanney, including forecourt walls, gate piers and gate (**Cadw 4441**), Church of St Mary (**Cadw 4445**), Gateway to the Church of Saint Mary (**Cadw 83132**), Tremadog Manufactory (**Cadw 4449**) and Market Hall (Siola) (**Cadw 4452**).

5.4.65 The Grade II listed buildings comprise residential housing along the Market Square, Dublin Street and Church Street which are the main thoroughfares of the village. Another listed structure comprises the steps and lamp post at the centre of Market Square (**Cadw 4460**).

5.4.66 The Tremadog Conservation Area and the listed buildings possess architectural and historic interest as surviving 19th-century buildings associated with a planned industrial village associated with the slate trade in the 19th century, displaying a range of building types and materials. Its setting also contributes to its significance. The buildings and conservation area are of medium value.

5.4.67 The Porthmadog Conservation Area (**WAL/GWYN/29**) is approximately 250 m south-west of the Glaslyn Cables works site. The conservation area encompasses an area around one Grade II* listed structure and 74 Grade II buildings associated with the town and harbour of Porthmadog.

5.4.68 The conservation area includes the western terminal of the Grade II* listed structure ‘the Cob’ (**Cadw 85406**) which is an embankment across the south end of Traeth Mawr, on the east side of Porthmadog harbour and town.

5.4.69 The Grade II listed buildings include residential terraced housing on Cornhill (Pencei) and Marine Terrace, and other premises on High Street. Other listed structures include the Madoc Yacht Club (**Cadw 4422**), the former slate warehouse on Oakleys Wharf (**Cadw 4426**), the Madocks memorial fountain in the Park (**Cadw 85391**), the Masonic Hall, including forecourt railings and gates (**Cadw 85392**), the Britannia Bridge (**Cadw 85367**), Snowdon Wharf (**Cadw 4408**), Slate Wharf (**Cadw 4409**) and New Wharf (**Cadw 85394**).

5.4.70 The Porthmadog Conservation Area and the listed buildings possess architectural and historic interest as surviving 19th-century buildings associated with a planned industrial town and harbour associated with the slate trade in the 19th century, displaying a range of building types and materials. Its setting also contributes to its significance. The buildings and conservation area are of medium value.

5.4.71 Portmeirion Conservation Area (**WAL/GWYN/33**) is approximately 330 m south of the Glaslyn Cables works site. The conservation area encompasses an area around one Grade I listed building, two Grade II* listed buildings and 75 Grade II listed structures associated with the town of Portmeirion.

5.4.72 The listed buildings in the conservation area include Grade I listed Portmeirion Town Hall (**Cadw 4777**), and Grade II* listed Campanile (also called the Bell Tower) (**Cadw 4868**) and The Colonnade (**Cadw 4878**).

5.4.73 The Grade II listed buildings include Portmeirion Hotel including Revetment, Balustrade and Sculptures to the Upper Terrace (**Cadw 4853**), Anchor (**Cadw 4854**), Fountain (**Cadw 4855**), Angel (**Cadw 4856**), Angel Gates (Hercules Gate), Neptune (**Cadw 4858**), Trinity House including adjacent Petrol Pump (**Cadw 4859**),

Mermaid (**Cadw 4860**), The Arches (**Cadw 4861**), Gothick Pavilion (**Cadw 4862**), Dolphin (Including Royal Dolphin (**Cadw 4864**), Government House (**Cadw 4865**), Watch House (**Cadw 4866**), Descending Steps from Watch House (**Cadw 4867**), Battery (**Cadw 4870**), Toll House (including Pilot House) (**Cadw 4871**), Reception (Chantry Lodge) (**Cadw 4872**), The Gate House (**Cadw 4873**), The Belvedere, including Associated Terraces (**Cadw 4874**), The Bridge House (**Cadw 4875**), Round House Including Adjoining Arch and Walkway (**Cadw 4876**) and the Central Piazza (**Cadw 4885**).

5.4.74 The Portmeirion Conservation Area and the listed buildings possess architectural and historic interest as a village designed and laid out by the celebrated architect Sir Clough Williams-Ellis (1883-1978) following his purchase of the estate, then called Aber Iâ, in 1926. The village evolved over several decades and was still being added to in the 1970s, displaying a range of building types and materials. Its setting also contributes to its significance. The buildings and conservation area are of high value.

Listed Buildings

Within 3 km of the Glaslyn Cables Works Site

5.4.75 There are 336 listed buildings within the 3 km study area, comprising two Grade I, 17 Grade II* and 314 Grade II listed buildings. Of the latter, 128 Grade II listed buildings lie within 500 m of the Glaslyn Cables works site. All high value listed buildings (Grade I and Grade II* listed buildings) in the wider 3 km study area are considered, as well as all listed buildings within 500 m of the Glaslyn Cables works site.

Capel Peniel (Cadw 4442) (Grade I)

5.4.76 Capel Peniel is approximately 136 m north of the Glaslyn Cables works site. Peniel, a Calvanistic Methodist chapel, was built in 1808-9 under the patronage, and perhaps also the general design, of William Madocks, founder of Tremadog. A classical chapel with a temple-like, gable-end east front of scribed roughcast painted cream. The three-bay front has a Tuscan portico, angle pilasters and a pediment. Details within the pediment may be later and are in a different idiom: radial-glazed bullseye window incorporating rounded and pointed trefoils, flanked by large triangular panels. Entrances in the outer bays have fielded-panel doors, flanking a nine-pane hornless sash window. Above, the gallery is lit by three 12-pane hornless sash windows. The earlier of two parallel gabled additions at the rear was the original vestry. Its two-storey south front is pebble-dashed, and in the lower storey are two small-pane sash windows in which the lower sash has been boarded over. In the upper storey is a 12-pane sash window to the left and two two-light casement windows, replaced in earlier openings, to the right side. On the right side is a lean-to against the rear of the chapel, which has a replacement half-glazed door and window to its right. The gable end of the vestry is rubble stone. The later schoolroom projects beyond the north side wall of the chapel. Its north front has a boarded door and overlight to the left, and three four-pane horned sash windows. In its west gable end are two fixed three-light windows within Gothic glazing bars. The setting of the chapel is the planned village of Tremadog. The setting of the building also contributes to its significance. The Glaslyn Cables works site does not form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the chapel, as a result of screening from intervening trees to the south. The

building possesses architectural and historic interest as a surviving example of a chapel of the early 19th century. The building is of high value.

Portmeirion Town Hall (Cadw 4777) (Grade I)

5.4.77 The Town Hall, also known as Hercules Hall, is approximately 1.34 km south of the Glaslyn Cables works site. It was built between 1937 and 1938 in the planned village of Portmeirion and incorporates a large quantity of dressed and carved stonework from Emral Hall, Flintshire. It is an imposing two-storey building of essentially 17th-century character. Of stuccoed brick and rubble construction with sandstone quoins, dressings and embellishments; tiled roof with slab-coped gable parapets and moulded stone eaves. F-shaped plan, with storeyed projecting wings to the centre and left (SE) side. Most significantly, the building houses the famous Hercules Hall which Clough Williams-Ellis bought at auction shortly before the house's demolition. The Hercules Hall is essentially the early 17th-century Great Chamber from Emral which was reconstructed in its present form complete with its exceptionally fine vaulted plasterwork ceiling and later 17th-century panelling. The relief plasterwork depicts the Labours of Hercules and the signs of the Zodiac and is enriched with bold strapwork. In its quality and complexity, the Emral ceiling belongs to the finest examples of late Elizabethan and Jacobean plasterwork in Britain and can be favourably paralleled with the schemes at Hardwick Hall, Derbyshire and Lanhydrock House, Cornwall. Externally, large mullioned windows, heraldic cartouches and Tudor-arched doorways also belong to the former Emral Hall. The setting of house is the surrounding buildings and parkland of the Portmeirion village. The setting of the building also contributes to its significance. The Glaslyn Cables works site does not form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the house, as a result of the topography and screening from intervening trees to the north-west. The building possesses architectural and historic interest for the national importance of the Jacobean Hercules Hall plasterwork which, together with much of the fabric, represent the surviving elements of Emral Hall, Flintshire, the ancient seat of the illustrious Puleston family; significant also as a masterfully-conceived example of Sir Clough Williams-Ellis' eclectic and incorporative style of architecture, and forming a dominant statement in this visionary village. The house is of high value.

Church of St Cynhaearn (Cadw 4291) (Grade II*)

5.4.78 The Church of St Cynhaearn is 1.7 km south-west of the Glaslyn Cables works site. The church, which is the original parish church for the early settlement at Portmadoc, is said by RCAHM to have a 12th-century nave, with added 16th-century north transept, and a south transept added in 1622. In character the building is now largely of the early 19th century. Walls of rubble masonry of long flat stones, the nave and east chancel wall rendered. Modern slate roof. Short nave, north and south transepts, the roofs pitched below the nave eaves, and small chancel. Entrance by the west door, a simple pointed arch and a pair of framed and battened doors. Tall two-light transomed windows in timber to the nave, including to the west gallery, and transepts, but three lancets at the east end. Stepped west bellcote. The setting of the church includes the surrounding churchyard as well as its rural position, in an area that it was built to serve. The setting of the building also contributes to its significance. The Glaslyn Cables works site does not form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the church, as a result of the topography and screening from intervening trees to the north-east. The building possesses architectural and historic interest partly for its surviving medieval fabric, but principally for retaining its character from an early

19th-century pre-Ecclesiological restoration, including contemporary gallery and fitting. The building is of high value.

Plas Tan-yr-allt (Cadw 4432) (Grade II*)

5.4.79 Plas Tan-yr-allt is approximately 740 m north of the Glaslyn Cables works site. Built in the first decade of the 19th century by William Madocks. A late Georgian 2-storey villa comprising a main house near square in plan and incorporating an older building at the rear, and a later wing with service building set back on the west side. Of blocks of quarried stone laid in regular courses, painted light blue. The main house has a hipped slate roof on projecting eaves and stone stack behind to the east. The four-window front overlooks Tremadog, Traeth Mawr and Porthmadog and has a lean-to veranda with slate roof on iron posts, most of which are replacements, wrapped around the sides. The setting of the house is the surrounding buildings and gardens of the Maddocks property. The setting of the building also contributes to its significance. The Glaslyn Cables works site does not form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the house as a result of screening from intervening trees to the south. The building possesses architectural and historical interest as an early 19th-century villa retaining original character, and for its literary association with one of the foremost Romantic poets, Percy Bysshe Shelley. The building is of high value.

Church of St Mary (Cadw 4435) (Grade II*)

5.4.80 The Church of St Mary is approximately 300 m north of the Glaslyn Cables works site in the village of Tremadog. The Church dates from 1811, paid for by William Madocks, the founder of the village, and comprises a west tower and spire, nave with shallow transepts and a chancel. Roughly dressed, squared and coursed Moel y Gest granite boulders; freestone dressings to late 19th-century windows. Slate roofs. Gothic style. There is a three-stage west tower, with angle buttresses. Entrance to church is via an arched doorway with voussoirs in west wall and modern outer doors; tower entrance up steps in north wall. Three-bay nave with moulded stone eaves cornice and shallow pitched roof. Windows are paired traceried lights in freestone with voussoirs and hood moulds: blocked remains of lower earlier openings below them. Shallow transepts with close eaved roofs (the result of a 1958 restoration), and similar windows. Lean-to vestry with long porch to east, abutting south transept. Traceried east window of three lights, also with evidence of its lower predecessor. The church is set within a surrounding churchyard, in the village of Tremadog, raised above the surrounding houses. The setting of the church covers its position over the nearby houses and its rural village location. The setting of the building also contributes to its significance. The Glaslyn Cables works site does not form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the church as a result of the topography and screening from intervening trees to the south. The building possesses architectural and historical interest as the church provided by William Madocks for his new town of Tremadog; an early essay in the Gothic style which, notwithstanding later modification, retains significant elements of its original 19th-century character and construction, and forms a strong element in the planned village of Tremadog. The building is of high value.

Gateway to the Church of Saint Mary (Cadw 83132) (Grade II*)

5.4.81 The Gateway to the Church of Saint Mary is approximately 280 m north of the Glaslyn Cables works site. Of coadestone construction. An eclectic composition, loosely late gothic form, but with an extravagant theatrical decorative vocabulary

combining grotesque and exotic with conventional patterns. Four-centred archway between octagonal embattled piers, every surface enriched. On the piers, this enrichment comprises tiers of blind traceried panels ornamented with foliage or grotesques, above simpler panelled bases. Tiered frieze above, with grotesques etc., and foiled lozenges. Columns are surmounted by turrets, enriched at angles by elephants' heads (minus their trunks). The setting of the gateway is the churchyard of St Mary's and the village of Tremadog. The setting of the structure also contributes to its significance. The Glaslyn Cables works site does form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the gateway as a result of the topography and screening from intervening trees to the south. The building possesses architectural and historical interest as a tour-de-force of design and craftsmanship using artificial stone, or Coadestone. A rare and early example of its use in Wales, and a highly unusual essay in exuberant gothic. An essential component in Madocks' original scheme for Tremadog. The structure is of high value.

Ty Nanney, including forecourt walls, gate piers and gate (Cadw 4441) (Grade II*)

5.4.82 Ty Nanney is approximately 200 m north of the Glaslyn Cables works site in the village of Tremadog. It is a late Georgian house, two-storeys with attic, a symmetrical composition comprising three-bay main block with lower (north and south) one-bay wings in line. Large roughly dressed blocks of quarried stone laid in regular courses, hipped slate roof on deep bracketed eaves. Openings have lintels with simple hoodmoulds. The central entrance has an added metal open trelliswork porch under a swept pyramidal roof, and door with two round-headed panels. Windows are 16-pane horned sashes in the lower storey and 9-pane horned sashes in the upper storey. The wings each have a 12-pane hornless sash window in the lower storey and blind upper-storey window with painted glazing bars. A garden wall is attached at the south end. Coped forecourt walls are swept down from the front of the house to the street. The front has low central gate piers with wooden fretwork gate. On the north side, separated by a vertical joint and therefore of different date, are taller square gate piers for vehicular access. The setting of the house is the surrounding garden and the village of Tremadog. The setting of the building also contributes to its significance. The Glaslyn Cables works site does not form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the house, as a result of the topography and screening from intervening trees to the south. The house possesses architectural and historical interest as an exceptionally well-preserved Georgian house with fine architectural character, which forms a significant component in the village.

Tremadog Manufactory (Cadw 4449) (Grade II*)

5.4.83 The Tremadog Manufactory is approximately 560 m north of the Glaslyn Cables works site in the village of Tremadog. Built in 1805 close to William Madocks' new village of Tremadog. The mill was working by 1806 when water power was introduced to power two carding engines. It was one of the earliest integrated woollen mills in Wales, combining carding, spinning and weaving (the latter having previously been domestic work), and was served by a nearby fulling mill. The mill continued to make coarse cloth until closure in 1816. From c.1835 it was a tannery and then became a laundry, but has been disused since the latter part of the 20th century. A five-storey five-bay mill of coursed rubble stone in large quarried blocks, a shallow hipped roof of corrugated metal, and stone end stacks. Openings have wedge lintels and have been boarded over. In the lower storey are four doorways.

In the east end wall is the shadow and stub wall of a former gabled projection. The rear is only three storeys high as the ground level is much higher. In the central bay are double boarded doors under an overlight now boarded up, heightened from an original opening and with a timber lintel. To its east is a recessed boarded door with window, and a window in the east end bay. To the west of centre is a window inserted into an original but blocked double doorway, and further west a similar blocked doorway in the west end bay. The setting of the mill is the village of Tremadog. The setting of the building also contributes to its significance. The Glaslyn Cables works site does not form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the house, as a result of the topography and screening from intervening trees to the south. The mill possesses architectural and historical interest as one of the earliest surviving integrated woollen mills, representing the industrialisation of a former domestic craft, as the centrepiece of industrial development at Tremadog and for its contribution to the historical integrity of the village.

Market Hall (Cadw 4452) (Grade II*)

5.4.84 The Market Hall is approximately 430 m north of the Glaslyn Cables works site in the village of Tremadog. The Market Hall was an integral component of the original village planned by William Madock and was begun in 1807. The Market hall is classical in style and comprises two-storeys, five-bays, of roughly dressed blocks of quarried stone laid in regular courses, a hipped slate roof, which is on projecting bracketed eaves to the front, and stone end stacks. In the arcaded lower storey are tall round-headed arches, originally open. The end bays are part infilled with rubble stone and three-light wood-framed windows. The central bays are infilled with glazing and with central doors. Arches have an impost band, keystones of reconstituted stone painted white with a variety of moulded heads. In the spandrels are fluted medallions painted white with foliage bosses, probably of cast iron. The spandrel of the west end bay has a small 4-pane window. A freestone plat band is painted white. In the upper storey are tall 24-pane horned sash windows renewed in original openings under deep bracketed hoods. The setting of the market house is the village of Tremadog. The setting of the building also contributes to its significance. The Glaslyn Cables works site does not form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the house due to screening from intervening buildings and trees to the south. The market house possesses architectural and historical interest as a fine early 19th-century public building deriving strong architectural character from its combination of classical detail with the use of local materials. The building is a crucial component of William Madocks' new village, and contributes strongly to the historical integrity of Tremadog.

Church of St Beuno (Cadw 4623) (Grade II*)

5.4.85 The Church of St Beuno is approximately 50 m south-west of the Glaslyn Cables works site. Largely 14th-century nave with a 15th-century chancel; earlier 18th-century porch and later 18th-century vestry; much restored in 1880 and again in 1899. The church is built in rubble stonework, thinly rendered (buttered), pebbledashed at the western end and covered with a 19th-century slate pitched roof. An aisleless church of four bays, continuous through nave and chancel; with a south porch near the west end and a rendered bellcote with crucifix terminal. The porch is gabled, with a round arched entry and split stone voussoirs; boarded door; tiny windows to either side, one depicting St Gybi and the other St Cyngar; chamfered purlins within. On the south side three windows east of the porch, square

headed with two-pointed lights formed in timber. The west end has a square headed window in the gable and round headed window below, replacing a former doorway in this position. The north side has gable ended vestry with chimney stack, entered from east beside monopitch roofed outbuilding. Two windows similar to those on the south beyond. East end has reset three-light window with round arched heads and chamfered jambs; projecting stones at the springing level to either side to the former label moulding. At south-east corner, under the eaves, is a sundial, retaining its gnomon and dated 1816 - in memory of Jeff. Holland, rector. The setting of the church includes the surrounding churchyard as well as its rural position, in an area that it was built to serve. The setting of the building also contributes to its significance. The Glaslyn Cables works site does form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the church, as a result of screening from intervening trees. The building possesses architectural and historic interest as the most historically significant church in the community, retaining a good medieval roof and other items of special interest. The building is of high value.

Wern Manor (Cadw 4626) (Grade II*)

5.4.86 Wern Manor is approximately 60 m east of the Glaslyn Cables works site. In 1892 John Douglas, architect of Chester, completely remodelled the then existing country house for the engineer R.M. Greaves who ran the family slate quarries at Blaenau Ffestiniog (Llechwedd) and was uncle to Sir Clough Williams Ellis, the architect and creator of Portmeirion. It is a Jacobethan style two-storey and attic country house built of snecked local rubble stone with buff sandstone dressings; slate roofs with mostly stone chimney stacks and some rooflights. The main front is to south and the design includes a shaped gable over the end of the main entrance hall, and an intricately detailed porch to left which projects forward from the gable of the hall range. Associated with the house is a west facing courtyard range including stables, coach house and tower (**Cadw 4627**) (**Grade II**). Also associated with house us the front terrace, balustrade and steps (**Cadw 21554**) (**Grade II**), a summer house (**Cadw 4628**) (**Grade II**) and ornamental garden pool (**Cadw 21569**) (**Grade II**). The main approach to the house and gardens is to the south where there are a gate lodge (**Cadw 4629**) (**Grade II**) and gates (**Cadw 21568**) (**Grade II**). The setting of house is the surrounding buildings and parkland of Wern Manor. The setting of the building also contributes to its significance. The Glaslyn Cables works site does form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the house itself, as a result of screening from surrounding trees. The house possesses architectural and historic interest as a well-preserved Victorian country house in a fine contemporary garden layout, and designed by a notable architect, retaining good interiors. The house is of high value.

Plas Penrhyn (Cadw 4852) (Grade II*)

5.4.87 Plas Penrhyn is approximately 540 m south of the Glaslyn Cables works site. Originally a late 17th/early 18th century storeyed vernacular house. In 1827 Samuel Holland (1803-92), industrialist and owner/manager of the Gloddfa Ganol slate works at Blaenau Ffestiniog, moved to the house to which he added the Regency (NW) wing; the latter is recorded as having been roofed by September 1830. Villa-scale Regency country house with sub-medieval origins; 2 storeys. Of stuccoed rubble with double-pile plan, the east wing being primary; slate roofs with end chimneys. The main west elevation has 16-pane sashes, three to the first floor and two to the ground floor. Fine full-length Regency verandah returned onto the sides, with hipped slate roof and flat, pierced wrought iron supports (Porthmadog foundry); slate-flagged terrace. The entrance is to the north return, via a part-gazed door with

good Georgian fan above; this within the returned verandah. The south return elevation is asymmetrical and has 12- and 16-pane sashes on both floors. The primary range has a near-central entrance to the 3-bay east elevation, with boarded door within simple single-storey porch; 16-pane sashes. The setting of the house is the surrounding buildings and gardens of Plas Penryhn. The setting of the building also contributes to its significance. The Glaslyn Cables works site does not form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the house itself, as a result of screening from surrounding trees. The house possesses architectural and historic interest as a Regency villa-scale house with earlier 17th-century origins, retaining good original character; of additional interest for its associations with Elizabeth Gaskell and as the last home of Bertrand, third Earl Russell, philosopher, mathematician and social reformer. The house is of high value.

Campanile (Also Called the Bell Tower) (Cadw 4868) (Grade II*)

5.4.88 The Campanile is approximately 1.32 km south of the Glaslyn Cables works site in the planned village of Portmeirion. Portmeirion was designed and laid out by the celebrated architect Sir Clough Williams-Ellis (1883-1978) following his purchase of the estate, then called Aber Iâ, in 1926. The Campanile was designed and built in 1928. It comprises an imposing square, stone tower in Mediterranean baroque style; of rubble construction with rough-squared quoins. The tower is of five main stages of which the upper 2 are rendered. At the top is an octagonal stone cupola with voluted corners and large vertical openings to each face. This has a sloped copper roof with surmounting golden ball finial and weather vane. The setting of Campanile is the surrounding buildings and parkland of the Portmeirion village. The setting of the building also contributes to its significance. The Glaslyn Cables works site does not form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the building, as a result of the topography and screening from intervening trees to the north-west. The building possesses architectural and historic interest as a highly accomplished bell tower in eclectic baroque style forming an important visual focus in the village; one of a number of buildings and structures designed by the eminent architect and conservationist Sir Clough Williams-Ellis for his visionary Portmeirion. The building is of high value.

The Colonnade (Cadw 4878) (Grade II*)

5.4.89 The Colonnade is approximately 1.28 km south of the Glaslyn Cables works site in the planned village of Portmeirion. Portmeirion was designed and laid out by the celebrated architect Sir Clough Williams-Ellis (1883-1978) following his purchase of the estate, then called Aber Iâ, in 1926. The Colonnade was originally built c.1760 as part of the Arnos Court bathhouse in Bristol; its patron was the Quaker copper smelter William Reeve. The bathhouse itself was bomb-damaged during the war and rapidly fell into dilapidation. In 1959 the colonnade was removed to Portmeirion and reconstructed by William Davies, William Ellis' master mason. The sculptor Jonah Jones incorporated a portrait head of William Ellis as a label stop on the left-hand blind entrance. Imposing single-storey colonnade in Georgian Gothic style, with balustraded parapet above; of Bath stone ashlar construction. There are 16 slender columns with a semi-circular projecting bow to the centre of the composition. Balustrades over, pierced to the sides, and with turned balusters to the centre. To the left and right there are stone ogee domes over the pavilions with ball finials. Raised rear wall behind the central projection, surmounted by three large urns. Within, in the centre of the rear wall, is a stone ogee arched niche with painted northern-Renaissance style angel sculpture and swagged flanking cartouches. The

Colonnade is on a revetted rubble plinth with a flight of rubble and slate steps leading up to it from the lawn to the south of the Central Piazza. The setting of the Colonnade is the surrounding buildings and parkland of the Portmeirion village. The setting of the building also contributes to its significance. The Glaslyn Cables works site does not form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the building, as a result of the topography and screening from intervening trees to the north-west. The building possesses architectural and historic interest as an important Georgian Gothick colonnade; one of a number of buildings and structures reconstructed by the eminent architect and conservationist Sir Clough Williams-Ellis at his visionary Portmeirion village. The building is of high value.

The Cob (Cadw 5234) & The Cob (partly in Penrhyndeudraeth) (Cadw 85406) (Grade II*)

5.4.90 This structure is approximately 780 m south of the Glaslyn Cables works site. The Great Embankment or Cob was conceived by William Madocks MP and built in 1808-11 under the supervision of Madocks' agent John Williams. A substantial rubble-built embankment approximately 1.5 km long, consisting of a lower (road) section and a higher (rail) section. The higher part of the embankment is approximately 6m tall with single-track railway and flanking footpath. The later and much lower 1836 embankment has a narrow double carriageway. The seaward (south) side is heavily buttressed by boulders gradually sloping down to the water. The buttressing on the (north) landward side is less substantial and is predominantly a grassed bank. Parapets are of rubble slate-stone, approximately 0.5m to 1m high (except to the seaward side where it is concrete). On both sides of the higher embankment at the east end are steps down to the shore and the road. The setting of the Cob is the south end of Traeth Mawr and the town and harbour of Porthmadog. The setting of the building also contributes to its significance. The Glaslyn Cables works site forms part of its setting given its location on the reclaimed estuary. There is intervisibility between the Glaslyn Cables works site and The Cob. The structure possesses architectural and historical interest as a major historic engineering achievement associated firstly with the reclamation of Traeth Mawr and, later, with the construction of the Ffestiniog Railway, giving The Cob a major place in the history of Porthmadog and North Wales. The structure is of high value.

Ystumllyn (Cadw 15355), Former Stables (Cadw 15356) & Wash House (Cadw 15357) (Grade II*)

5.4.91 Ystumllyn with its accompanying stables and wash house is approximately 2.35 km south-west of the Glaslyn Cables works site. The house is said to have been built at the end of the 16th century by Ellis ap Cadwaladr (b.1557), who had acquired the property from the Crown. The house was later extended with the addition of a wing to the north-west. Until remodelling work in the late 1940s, a date inscription of 1729 was visible in a blocked window to the rear of the original range, and a dated stone found in the garden (of 1720) is thought to provide the likely date for the additions to the house. The roof of the main range was raised at some time, possibly in the early 19th century, and the fenestration was probably renewed at about the same period. The original building is aligned NE-SW, and is a two-storeyed, large two-unit house, with central service room, extended to the north-west with a wing housing the stairhall and a further principal room. Rough slate rubble construction, and modern slate roof, with plain overhanging eaves. Rear wall and right-hand gable stacks. Main range faces south-east, with low and narrow central entrance in roughly semi-circular cyclopaean archway. Former stables and wash house also in the grounds.

The setting of the building and outbuildings is the surrounding rural landscape and the associated farm outbuildings. The setting of the buildings also contributes to their significance. The Glaslyn Cables works site does not form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the building, as a result of the topography and screening from intervening trees to the north-east. The building and outbuildings possess architectural and historical interest an important example of a 16th-century house, probably one of the first generation of storeyed houses in the region. The 18th-century extension and alterations also represent high quality vernacular work of the period, and the character of the house remains defined by these two principal phases of construction, with only minor subsequent change. The buildings are of high value.

Clenennau (Cadw 21541) (Grade II*)

5.4.92 Clenennau is approximately 2.35 km north-west of the Glaslyn Cables works site. The present building, which was besieged for four weeks and later plundered at the end of the Civil War, appears to incorporate some fabric of the earliest phase of development in the 15th century or early 16th century, and extended in Sir John's time. The main frontage was rebuilt c.1880. Built of rubble stonework, with slated roofs. Two storeys, 'L'-plan; the three-bay front rebuilt c.1880, symmetrical with a central four-panelled door and plain overlight, and three-light timber mullioned and transomed windows to both floors. Gable stacks. The first bay of the rear wing adjoining the main range is an addition of the mid-17th century, probably built by Sir John Owen. Door facing the farmyard, and small paned timber windows. Similar windows to the north gable end set near the outer corners of the building. The setting of Clenennau is the surrounding rural landscape and the associated outbuildings in the farmstead. The setting of the building also contributes to its significance. The Glaslyn Cables works site does not form part of its setting. There is no intervisibility between the Glaslyn Cables works site and the farmstead as a result of the topography and screening from intervening mature trees to the south-east. Clenennau possesses architectural and historic interest as an important 17th-century farmhouse with historical connections with the Civil War in North Wales. The building is of high value.

5.4.93 There are 128 Grade II listed buildings in the 500m study area. These are largely associated with the town of Porthmadog and villages of Tremadog and Minffordd. The setting of these designated buildings and structures has been considered and most of the buildings are in existing settlements where there is no potential for them to be impacted by the proposed works. They are listed and described in **Volume 8: Appendix 4.6.B: Gazetteer of Designated Historic Assets** but they are not considered further in the assessment, and they are scoped out of assessment in the ES.

5.4.94 There is a potential for other Grade II Listed Buildings within 500 m of the proposed works to be impacted by the proposed works with regards to their setting and historical significance. The buildings and structures are of medium value.

- 19 Y Graig (Sunnyside), Tremadog (**Cadw 85323**);
- 20 Y Graig (Sunnyside), Tremadog (**Cadw 85325**);
- 21 Y Graig (Sunnyside), Tremadog (**Cadw 85328**);
- Bodawen Lodge (Building 1) (**Cadw 4438**);
- Bodawen Lodge (Building 2) (**Cadw 85359**);

- Former stable at Bodawen Lodge (**Cadw 85375**);
- Former Tremadoc Tramway bridge over drainage ditch (**Cadw 85376**);
- Porthmadog war memorial, including steps, trilithon and monoliths forming its approach (**Cadw 85397**);
- Rhos House (**Cadw 5205**);
- Plas Newydd Farmhouse (**Cadw 4774**);
- Former Stable Range at Plas Newydd (**Cadw 19800**).

5.4.95 The setting of the buildings and structures also contributes to their significance. The Glaslyn Cables works site forms part of their setting. There is intervisibility between the Glaslyn Cables works site and the above Grade II Listed Buildings.

Registered Historic Parks and Gardens

Within 3 km of the Glaslyn Cables Works Site

Wern (PGW(Gd)19(GWY)) (Grade II*)

5.4.96 Registered as a good example of a late nineteenth/early twentieth-century garden by the well-known garden designer Thomas Mawson (1861-1933) with fine terraces, formal pool, informal water garden and a circular garden with a well-preserved and attractive pavilion. The garden is particularly well documented. The registered area also includes the remains of an earlier tower/summerhouse and a small park. The registered park and garden has group value with Wern Manor and its associated estate outbuildings and structures. The Registered Park and Garden is partially in the western end of the Glaslyn Cables works site.

5.4.97 Wern Manor (**Cadw 4626, Grade II***) lies in a rural setting north-west of Porthmadog, just off the road to Criccieth and Pwllheli. There are courtyard ranges to the west of Wern Manor, including stables, a coachhouse and tower (**Cadw 4627, Grade II**). It is surrounded by gardens set in parkland, on an estate originally founded in the sixteenth-century by Morris Johns. There is a front garden terrace with balustrade and steps (**Cadw, 21554, Grade II**). There is also a summer house (**Cadw 4628, Grade II**) and an ornamental garden pool (**Cadw 21569, Grade II**) in the gardens. The park lies on flat ground to the east and on more uneven ground rising to the west. In the park to the east, viewed over a ha-ha, are two circular copses which were planted to enhance the outlook by breaking up the ridge of hills forming the distant view. These hills offer a pleasant aspect but have a long, almost level skyline, and the copses in the foreground add interest to this without obscuring too much of the view. To the west and south-west, north and west of the lodge (**Cadw 4629, Grade II**) is a more undulating area with rocky outcrops which is traditional parkland with scattered trees, a fair proportion of those shown on the 1915 map surviving. To the north of it is a wooded hill (Coed Bryn-tŵr) with the remains of the look-out tower, probably a summer house.

5.4.98 Beyond, to the north-west, is a similar area but with fewer trees. South of Coed Bryn-tŵr, is a small lake which acts as a reservoir, forming an important element of the foreground of the view from the tower, and probably dating to the late nineteenth-century phase of improvements. Two small ponds south-west of the house, shown in 1915, were filled from the overflow of the reservoir. A watercourse flowed northwards from the ponds past the kitchen gardens and farm.

5.4.99 There are two drives, both still in use. The south drive is the main approach, with heavy wooden gates (**Cadw 21568, Grade II**) and a lodge (**Cadw 4629, Grade II**) at the entrance. The north drive is now a rough track.

5.4.100 The setting of the gardens comprises Wern Manor and its surroundings. The setting of the garden features and their relationship to the country house and landscaping in the wider Glaslyn Cables works site contribute to their significance. The Glaslyn Cables works site is in the north-east of the garden, as well as access routes running north, north-west and south through the garden. The Glaslyn Cables works site forms part of the setting of the garden. The gardens are of high value.

Tan-yr-Allt (PGW(Gd)18(GWY)) (Grade II)

5.4.101 Registered for its historic interest as the house (**Cadw 4432, Grade II*)** and grounds designed by William Madocks (1773-1828) as his own home, laid out in the 'romantic' manner c. 1800. There are exceptional views from the house and grounds. Trees contemporary with the laying out of the site survive and there is a well-preserved kitchen garden. The main access is a drive through the woods from a lodge (**Cadw 4433, Grade II**) to the south-west. The Registered Park and Garden is approximately 500m north of the Glaslyn Cables works site.

5.4.102 The gardens at Tan-yr-allt were laid out around the time the house was built, by Madocks, soon after 1800. They lie around and to the immediate east of the house. There is little formal structure, the important elements being the view, trees, and the kitchen garden. The garden and woods continued to be maintained and there are flourishing trees of all ages. In front of the house, which stands on a narrow shelf in the hillside with its garden below and wooded park above is a large, sloping lawn from where wide views over Porthmadog and its surroundings and down to Harlech can be obtained. At the foot of the lawn is a small formal pond which once had a cherub fountain, and the grass slope is surrounded by trees. A level lawn to the east also enjoys the view. A freestone pedestal with garlanded urn stands on the lawn to the east of the house. This is a memorial to Percy Bysshe Shelley who stayed at Tan-yr-Allt in 1812-13 (**Cadw 85401, Grade II**).

5.4.103 Plantations of trees in the garden area extend away to the east and south-west from the house, and contain a good mixture of species, both trees and underplantings. Madocks was a tree enthusiast and was particularly fond of beech; there are numerous specimens planted by him which have now reached a great size, and these constitute one of the main features of the property.

5.4.104 The kitchen garden (**Cadw 85388, Grade II**) at Plas Tan-yr-allt lies to the west of the house and was laid out by Madocks at the same time as the rest of the garden sometime after 1800. The garden is large, sub-rectangular and walled, covering over a third of an acre, sloping down quite steeply from north to south.

5.4.105 The setting of the gardens comprises Plas Tan-yr-allt and its surroundings. The setting of the garden features and their relationship to the country house and landscaping in the wider Glaslyn Cables works site contribute to their significance. The Glaslyn Cables works site forms parts of the setting to the south. The gardens are of medium value.

Portmeirion (PGW(Gd)29(GWY)) (Grade II*)

5.4.106 The registered area represents the well-preserved garden designed in and around the village of Portmeirion by Clough Williams-Ellis (1883-1978) where conditions permit the growing of many half-hardy and tender plants, which enhance the exotic

character of the site. Attached is the older Gwyllt garden containing an outstanding rhododendron collection of the early twentieth century. The registered area has important group value with the numerous listed buildings and structures at Portmeirion. The Registered Park and Garden is approximately 990 m south-south-east of the Glaslyn Cables works site.

5.4.107 Portmeirion is on the north side of the Traeth Bach estuary, near Porthmadog; the Gwyllt gardens to the west of it occupy the southern part of the peninsula between this and the Traeth Mawr. The site is almost hidden from the landward side and is sheltered from this direction by the shape of the land, as is the village area from the west and south-west by the Gwyllt. The only exposed direction is the south-east with spectacular views over the sands of the estuary towards Harlech.

5.4.108 Portmeirion is a deliberately created village set in a garden. The village, built in and around a small valley opening on to the shore, consists of a hotel and cottages, with shops and public buildings, arranged around a central open square which is laid out as a public garden. The buildings are a collection of architectural fantasies created by Clough Williams-Ellis. It is stylistically diverse, incorporating architectural elements from a wide range of periods and from several countries. The garden area occupies most of the flat ground available and due to the steeply-sloping nature of the rest of the site most of the buildings are displayed to advantage on the hillside. For this reason, the village is best viewed from the sea, from which the site was first seen by Williams-Ellis.

5.4.109 When Clough Williams-Ellis bought the site in 1925, he also acquired the mansion of Aber-Ia (**Cadw 4853**) and its informal pleasure grounds on the Gwyllt peninsula to the west. The Gwyllt garden was probably laid out when the house was first built in the middle of the nineteenth century. The first additions were trees, especially pines and other conifers, some of which survive, and rhododendrons such as R. nobleanum and 'Cornish Red'. The second phase of planting was in the early twentieth century. This was the heyday of the collection, when the owner, Caton Haigh, deliberately collected half-hardy and exotic varieties, some recently introduced from China. Planting survives from both periods and the age range of the trees suggests that some were also planted by Clough Williams-Ellis.

5.4.110 The setting of the gardens comprises the planned village and its surroundings. The setting of the garden features and their relationship to the planned village in the wider Glaslyn Cables works site contribute to their significance. The Glaslyn Cables works site does not form part of the setting. The gardens are of high value.

5.5 Significance of Non-Designated Historic Assets

Within the Glaslyn Cables Works Site

5.5.1 There are 24 non-designated historic assets in the Glaslyn Cables works site.

Hedge-bank, North-East of Wern (PRN 37907)

5.5.2 Tree lined bank. Regular field on Traeth Mawr. Boundary within Wern Historic Park and Garden. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land enclosure in the area during 19th century. The asset would likely hold local interest and is of low value.

5.5.3 The hedge-bank has the potential to be impacted by the proposed works.

Hedge and ditch, on Traeth Mawr (PRN 37908)

5.5.4 Hedge and ditch. Regular field on Traeth Mawr. Penmorfa-Ynyscynhaiarn parish boundary. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during 19th century. The asset would likely hold local interest and is of low value.

5.5.5 The hedge-bank has the potential to be impacted by the proposed works.

Hedge and ditch, on Traeth Mawr (PRN 37909)

5.5.6 Hedge and ditch. Regular field on Traeth Mawr. Boundary shown on tithe map. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during 19th century. The asset would likely hold local interest and is of low value.

5.5.7 The hedge-bank has the potential to be impacted by the proposed works.

Hedge-bank, on Traeth Mawr (PRN 37910)

5.5.8 Bank and treeline. Regular field on Traeth Mawr. Boundary shown on tithe map. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during 19th century. The asset would likely hold local interest and is of low value.

5.5.9 The hedge-bank has the potential to be impacted by the proposed works.

Field boundary, Porthmadog (PRN 33528)

5.5.10 Earth bank and ditches with trees and hedges running along top of it. Ditches are approximately 1.60m in width. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during 19th century. The asset would likely hold local interest and is of low value.

5.5.11 The field boundary has the potential to be impacted by the proposed works.

Field boundary, Porthmadog (PRN 33531)

5.5.12 Earth bank with ditches running either side and trees and hedges running along top. Ditches are approximately 1.60m in width. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during the 19th century. The asset would likely hold local interest and is of low value.

5.5.13 The field boundary has the potential to be impacted by the proposed works.

Tremadoc and Gorseddau Tramway, Site of, Tremadog (PRN 21171)

5.5.14 The Tremadoc Tramway, or the Llidiart Yspytty line, is shown on the Portmadoc Harbour plans of 1845/1846. By 1841 the Tramway is known to have been under construction, though it does not appear on the Tithe map of 1842, and was in use soon after. The line was to remain in use until the mid-1890s.

5.5.15 The value of the asset is derived from its archaeological interest as part of the post-medieval industrial development in the area and may help to inform on transport

systems and techniques utilised in the 19th century in Wales. The asset would likely hold local interest and is of low value.

5.5.16 The proposed works incorporates this asset into its design.

Field boundary, Porthmadog (PRN 33532)

5.5.17 Dry stone wall. There are trees/hedges/wooden posts with wire fencing running along the field side of the wall. A tarmac path runs along the other side. This wall is made up of granite/sandstone/old concrete - angular and sub-angular stones. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during 19th century. The asset would likely hold local interest and is of low value.

5.5.18 The field boundary has the potential to be impacted by the proposed works.

Field boundary, Porthmadog (PRN 33536)

5.5.19 Consists of eastern bank with two narrow culverts either side. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during 19th century. The asset would likely hold local interest and is of low value.

5.5.20 The field boundary has the potential to be impacted by the proposed works.

Field boundary, Porthmadog (PRN 33537)

5.5.21 Consists of an earth bank and two ditches either side. Some fairly mature trees/shrubs growing along the bank. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during 19th century. The asset would likely hold local interest and is of low value.

5.5.22 The field boundary has the potential to be impacted by the proposed works.

Culvert/ditch, Porthmadog (PRN 33540)

5.5.23 Wandering drainage ditch. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during 19th century. The asset would likely hold local interest and is of low value.

5.5.24 The culvert/ditch has the potential to be impacted by the proposed works.

Gorsedd Circle 1987, Porthmadog (PRN 33603)

5.5.25 This is a stone circle erected in 1987 for the National Eisteddfod.

5.5.26 The value of the asset is derived from its archaeological interest as part of the modern cultural and social history of Porthmadog, and may help to inform on commemorative practices in late 20th century Wales. The asset would likely hold local interest and is of low value.

5.5.27 The proposed works incorporates this asset into its design.

Field boundary, Porthmadog (PRN 33544)

5.5.28 Dry stone wall running along road towards Porthmadog. Built of local slate schist stone with brambles, trees and some hedges incorporated within it. Visible on historic OS mapping. No extant remains of the boundary wall survive, and these are likely to have been removed during road improvements including the construction of the Porthmadog bypass.

Revetted drain, Porthmadog (PRN 33545)

5.5.29 Listed in the assessment for the Porthmadog Bypass as feature 9: a revetted drain. No revetment seen, looked to be a general drainage ditch. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during the 19th century. The asset would likely hold local interest and is of low value.

5.5.30 The revetted drain has the potential to be impacted by the proposed works.

Road across Traeth Mawr and junction, Porthmadog (PRN 33605)

5.5.31 Geophysical survey and evaluation trenching revealed no convincing evidence for a built road across the Traeth and it is probable that this was always a route on the sand, probably with marker posts. A built road would probably have been rapidly eroded away by the daily inundation by the sea. There will be no impact from the proposed works.

Shallow ditches, Porthmadog (PRN 33593)

5.5.32 When field 17 was stripped of topsoil for the Porthmadog Bypass site compound, a number of wide, shallow drainage ditches were identified running north-west to south-east, one of which was the ditch found in the evaluation trenching. The ditch was cut into mottled grey and yellow estuarine sand silt. No extant remains of the ditches survive, and these are likely to have been removed during the construction of the Porthmadog bypass. There will be no impact from the proposed works.

Field boundary, Porthmadog (PRN 33547)

5.5.33 Dry stone wall boundary between the school playing fields to the east and general farmland to the west. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during the 19th century. The asset would likely hold local interest and is of low value.

5.5.34 The proposed works incorporates this asset into its design

Culvert/ditch, Porthmadog (PRN 33548)

5.5.35 Culvert/ditch of post-medieval date which turns at a right angle at the northern end. Banks are fairly steep. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during the 19th century. The asset would likely hold local interest and is of low value.

5.5.36 The culvert/ditch has the potential to be impacted by the proposed works.

Field boundary, Porthmadog (PRN 33550)

5.5.37 Dry stone wall of mixed local stone and generally well built. However, in places the wall has slumped and collapsed. Initially stock proofed with stones set on edge

along the top of the wall, then there are later additions of posts, barbed wire, stock fencing along both sides of the wall.

5.5.38 The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during 19th century. The asset would likely hold local interest and is of low value.

5.5.39 The field boundary has the potential to be impacted by the proposed works.

Field boundary, Porthmadog (PRN 33551)

5.5.40 Low dry stone revetment with the Welsh Highland Railway on its eastern side and farmland on its western side.

5.5.41 The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during the 19th century. The asset would likely hold local interest and is of low value.

5.5.42 The field boundary has the potential to be impacted by the proposed works.

Croeser Tramway, Remains of, Porthmadog (PRN 21174)

5.5.43 The embankment of the Welsh Highland Railway/Croesor tramway overlies the embankment constructed by W. A. Maddocks in 1800 which reclaimed land in the western branch of Traeth Mawr extending as far as Penmorfa.

5.5.44 The value of the asset is derived from its archaeological interest as part of the post-medieval industrial development in the area and may help to inform on transport systems and techniques utilised in the 19th century in Wales. The asset would likely hold local interest and is of low value.

5.5.45 The tramway embankment has the potential to be impacted by the proposed works.

Field boundary, Porthmadog (PRN 33554)

5.5.46 Boundary runs between the road and the grounds of Porthmadog football club and consists of concrete posts and heavy duty fencing with a ditch on the eastern side. The ditch is generally overgrown and filled with silt and rubbish. It also appears to be revetted with stones on its western side.

5.5.47 The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during the 19th century. The asset would likely hold local interest and is of low value.

5.5.48 The field boundary has the potential to be impacted by the proposed works.

Culvert/ditch, Porthmadog (PRN 33559)

5.5.49 A fairly wide and well-maintained culvert. A collapsed post, stock fencing and barbed wire fence runs along its western bank. The value of the asset is derived from its archaeological interest as part of the post-medieval field system in the area and may help to inform on the process of land reclamation in the area during the 19th century. The asset would likely hold local interest and is of low value.

5.5.50 The proposed works incorporates this asset into its design

Modern Field Drain Field, Porthmadog (PRN 33591)

5.5.51 Modern drainage ditch found during watching brief on topsoil stripping for Porthmadog Bypass. About 1m wide and 0.2m deep. No extant remains of the drain survive, and these are likely to have been removed during the construction of the Porthmadog bypass.

Within 500 m Study Area

5.5.52 Non-designated buildings have the potential to be affected by the proposed works as a result of changes to their setting.

5.5.53 There are 153 non-designated buildings and structures in the 500m study area. These are largely associated with the town of Porthmadog and villages of Tremadog and Minffordd. The setting of these non-designated buildings and structures has been considered and most of the buildings are in existing settlements where there is no potential for them to be impacted by the proposed works. They are listed and described in **Volume 8: Appendix 6-B: Gazetteer of Historic Assets** but they are not considered further in the assessment, and they are scoped out of assessment in the ES.

5.5.54 The following non-designated buildings in rural locations, however, have the potential to be affected by the proposed works as a result of changes to their setting, and are discussed below.

Outfarm, North-East of Plas-newydd, Llanfrothen (PRN 99275)

5.5.55 Post-medieval outbuilding associated with Plas-newydd Farmhouse (**Cadw 4774**). Possible barn. It is approximately 370 m north-east of the Glaslyn Cables works site. The buildings are recorded on the late 19th-century OS mapping and remain in use as farm buildings. The setting comprises the associated farm complex and surrounding agricultural land.

5.5.56 The outbuilding possesses architectural and historic interest as surviving example of the post-medieval farm industry which has persisted and is of local interest. The buildings are of low value.

Minffordd Chapel (Welsh Calvinistic Methodist), Minffordd, Porthmadog (PRN 68404)

5.5.57 Minffordd Methodist Chapel was built in 1871 and rebuilt in 1879. The present chapel, dated 1879, is built in the Romanesque style of the gable-entry type. to the design of architect Owen Morris Roberts of Porthmadog. It is approximately 240 m south of the Glaslyn Cables works site. The setting of the chapel comprises its position along the main road.

5.5.58 The chapel possesses architectural and historic interest as a surviving chapel opened in the 19th century and is of local interest. It is of low value.

House & Outbuildings, Pen-y-Craig (PRN 27317)

5.5.59 A house and outbuildings are depicted on OS mapping in the late 19th and early 20th centuries and remain extant. They are approximately 80 m south of the Glaslyn Cables works site. The buildings comprise a small farm complex with views of the surrounding land, including to the north towards the Glaslyn Cables works site.

5.5.60 The farm buildings possess architectural and historic interest as surviving examples of the post-medieval farm industry which has persisted and are of local interest. The buildings are of low value.

Building, South-West of Lloc-Meirig (PRN 27321)

5.5.61 A building depicted on OS mapping in the late 19th and early 20th centuries and remains extant. It is approximately 120 m south-east of the Glaslyn Cables works site. The building stands alone with views of the surrounding land, including to the north towards the Glaslyn Cables works site.

5.5.62 The farm building possesses architectural and historic interest as a surviving example of the post-medieval farm industry which has persisted and are of local interest. The building is of low value.

Penamser Farm, Porthmadog (PRN 25424)

5.5.63 A farmstead depicted on OS mapping in the late 19th and early 20th centuries and remains extant. It is approximately 140 m south-west of the Glaslyn Cables works site. The buildings comprise a small farm complex with views of the surrounding land, including to the north towards the Glaslyn Cables works site.

5.5.64 The farmstead possesses architectural and historic interest as a surviving example of the post-medieval farm industry which has persisted and is of local interest. The farmstead is of low value.

Outfarm, South-West of Penamser Farm (PRN 25425)

5.5.65 A building present on OS mapping in the late 19th and early 20th centuries and remains extant. It is approximately 230m south-west of the Glaslyn Cables works site. The building stands alone with views of the surrounding land, including to the north towards the Glaslyn Cables works site.

5.5.66 The farm building possesses architectural and historic interest as a surviving example of the post-medieval farm industry which has persisted and is of local interest. The building is of low value.

Plantation, Wern (PRN 68485)

5.5.67 A circular woodland plantation present on OS mapping in the late 19th and early 20th centuries and remains extant. It is approximately 230m south-west of the Glaslyn Cables works site. The plantation stands in the parkland associated with Wern Manor with views of the surrounding land, including to the north towards the Glaslyn Cables works site.

5.5.68 The plantation possesses architectural and historic interest as a surviving example of the parkland design which has persisted and are of local interest. The plantation is of low value.

Plantation, Wern (PRN 68486)

5.5.69 A circular woodland plantation present on OS mapping in the late 19th and early 20th centuries and remains extant. It is approximately 30 m south-west of the Glaslyn Cables works site. The plantation stands in the parkland associated with Wern Manor with views of the surrounding land, including to the north towards the Glaslyn Cables works site.

5.5.70 The plantation possesses architectural and historic interest as a surviving example of the parkland design which has persisted and are of local interest. The plantation is of low value.

5.6 Assets Scoped Out of ES Assessment

5.6.1 The assessment of significance and setting outlined in the previous section allows for consideration of the potential for the proposed works to result in effects to designated and non-designated historic assets through change to their settings and/or physical impacts. It also allows for the identification of assets where there is no potential for the proposed works to result in such effects. Such assets can now be scoped out of further assessment. **Table 5-1** provides a summary of these assets and the rationale for scoping them out of further assessment.

Table 5-1 – Assets Scoped Out of Further Assessment

Reference	Designation and Grade	Name	Rationale for Scoping Out of Assessment
CN019	Scheduled Monument	Gesail Gyfarch Inscribed Stone	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
CN270	Scheduled Monument	Enclosed Hut Group in Parc-y-Borth	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
ME174	Scheduled Monument	Enclosed Hut Circle Settlement North of Coed Gwlyb	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
CN237	Scheduled Monument	Hut Circles near Craig y Gesail	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.

Reference	Designation and Grade	Name	Rationale for Scoping Out of Assessment
CN118	Scheduled Monument	Cist Cerrig Burial Chamber & Cup Marked Rock	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
CN059	Scheduled Monument	Moel y Gest Camp	There is no intervisibility between the site and the asset, and the proposed works would not result in changes to the setting of the asset.
CN239	Scheduled Monument	Hut Group West of Cwm Mawr	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
CN386	Scheduled Monument	Fach-goch, standing stone	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
ME096	Scheduled Monument	Ty'n y Berllan Settlement	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
WAL/GWYN/20	Conservation Area	Tremadog Conservation Area	The conservation area is some distance from the Glaslyn Cables works site, separated by intervening buildings and woodlands. The proposed works would not result in changes to the setting of the conservation area and the listed buildings within.

Reference	Designation and Grade	Name	Rationale for Scoping Out of Assessment
WAL/GWYN/29	Conservation Area	Porthmadog Conservation Area	The conservation area is some distance from the Glaslyn Cables works site, separated by intervening buildings and woodlands. The proposed works would not result in changes to the setting of the conservation area and the listed buildings within.
WAL/GWYN/33	Conservation Area	Portmeirion Conservation Area	The conservation area is some distance from the Glaslyn Cables works site, separated by intervening buildings and woodlands. The proposed works would not result in changes to the setting of the conservation area and the listed buildings within.
Cadw 4442	Listed Building, Grade I	Capel Peniel	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
Cadw 4777	Listed Building, Grade I	Portmeirion Town Hall	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
Cadw 4291	Listed Building, Grade II*	Church of St Cynhaearn	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
Cadw 4432	Listed Building, Grade II*	Plas Tan-yr-allt	There is no intervisibility between the Glaslyn Cables works site and

Reference	Designation and Grade	Name	Rationale for Scoping Out of Assessment
			the asset, and the proposed works would not result in changes to the setting of the asset.
Cadw 4435	Listed Building, Grade II*	Church of St Mary	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
Cadw 83132	Listed Building, Grade II*	Gateway to the Church of Saint Mary	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
Cadw 4441	Listed Building, Grade II*	Ty Nanney, including forecourt walls, gate piers and gate	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
Cadw 4449	Listed Building, Grade II*	Tremadog Manufactory	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
Cadw 4452	Listed Building, Grade II*	Market Hall	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
Cadw 4632	Listed Building, Grade II*	Church of St Beuno	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would

Reference	Designation and Grade	Name	Rationale for Scoping Out of Assessment
			not result in changes to the setting of the asset.
Cadw 4852	Listed Building, Grade II*	Plas Penrhyn	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
Cadw 4868	Listed Building, Grade II*	Campanile (Also Called the Bell Tower)	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
Cadw 4878	Listed Building, Grade II*	The Colonnade	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
Cadw 15355 / 15356 / 15357	Listed Building, Grade II*	Ystumllyn, Former Stables & Wash House	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
Cadw 21541	Listed Building, Grade II*	Clenennau	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.
PGW(Gd)29(GWY)	Registered Park and Garden Grade II*	Portmeirion	There is no intervisibility between the Glaslyn Cables works site and the asset, and the proposed works would not result in changes to the setting of the asset.

Reference	Designation and Grade	Name	Rationale for Scoping Out of Assessment
PRN 21171	Non-designated asset	Tremadoc and Gorseddau Tramway, Site of, Tremadog	Within the Glaslyn Cables works site. The proposed works incorporates this asset into its design.
PRN 33603	Non-designated asset	Gorsedd Circle 1987, Porthmadog	Within the Glaslyn Cables works site. The proposed works incorporates this asset into its design.
PRN 33544	Non-designated asset	Field boundary, Porthmadog	Removed during construction of Porthmadog bypass.
PRN 33605	Non-designated asset	Road across Traeth Mawr and junction, Porthmadog	Within the Glaslyn Cables works site. Previous geophysical survey and evaluation trenching revealed no evidence
PRN 33593	Non-designated asset	Shallow ditches, Porthmadog	Removed during construction of Porthmadog bypass.
PRN 33547	Non-designated asset	Field boundary, Porthmadog	Within the Glaslyn Cables works site. The proposed works incorporates this asset into its design.
PRN 33559	Non-designated asset	Culvert/ditch, Porthmadog	Within the Glaslyn Cables works site. The proposed works incorporates this asset into its design.
PRN 33591	Non-designated asset	Modern Field Drain Field	Removed during construction of Porthmadog bypass.

5.6.2 The remaining assets discussed in the assessment of the baseline that are not listed above are those where the assessment has identified the potential for the proposed works to result in impacts to the assets, either through physical impacts or through change to their setting. These assets will be taken forward for assessment in **Volume 4, Chapter 6: Historic Environment**.

6. Conclusion

6.1.1 The assessment outlined in this report considers the potential for the proposed works to result in effects to historic assets either through change to their settings and/or physical impacts. It also allows for the identification for assets where there is no potential for the proposed works to result in such effects. Such assets, as detailed above, can be scoped out of further assessment. The remaining assets are those where the assessment has identified the potential for the proposed works to result in effects to the historic assets. The following historic assets set out in **Table 6-1** are therefore scoped into further assessment in **Volume 4, Chapter 6: Historic Environment**.

Table 6-1 – Assets Scoped into Further Assessment

Reference	Designation and Grade	Name	Location
UNESCO 1633	World Heritage Site	The Slate Landscape of Northwest Wales. Component Part 5: Ffestiniog: its Slate Mines and Quarries, 'city of slates' and Railway to Porthmadog	70 m south-east of the Glaslyn Cables works site
CN174	Scheduled Monument	Roman Bath House, Tremadoc	98 m north of the Glaslyn Cables works site
Cadw 4626	Listed Building, Grade II*	Wern Manor	56 m east of the Glaslyn Cables works site
Cadw 5234 / 85406	Listed Building, Grade II*	The Cob	780 m south of the Glaslyn Cables works site
Cadw 4627	Listed Building, Grade II	Courtyard Ranges to the W of Wern Manor, including Stables, Coach house and Tower	8 m east of the Glaslyn Cables works site
Cadw 4628	Listed Building, Grade II	Summer House at Wern Manor	182 m east of the Glaslyn Cables works site

Reference	Designation and Grade	Name	Location
Cadw 21554	Listed Building, Grade II	Front Terrace, Balustrade and Steps at Wern Manor	58 m east of the Glaslyn Cables works site
Cadw 4629	Listed Building, Grade II	Wern Lodge	5 m north-west of the Glaslyn Cables works site
Cadw 21568	Listed Building, Grade II	Gates to Wern Manor	Within Glaslyn Cables works site
Cadw 21569	Listed Building, Grade II	Ornamental Garden Pool at Wern Manor	170 m south-east of the Glaslyn Cables works site
Cadw 85323	Listed Building, Grade II	19 Y Graig (Sunnyside), Tremadog	330 m north-east of the Glaslyn Cables works site
Cadw 85325	Listed Building, Grade II	20 Y Graig (Sunnyside), Tremadog	330 m north-east of the Glaslyn Cables works site
Cadw 85328	Listed Building, Grade II	21 Y Graig (Sunnyside), Tremadog	330 m north-east of the Glaslyn Cables works site
Cadw 4438	Listed Building, Grade II	Bodawen Lodge (Building 1)	19 m north of the Glaslyn Cables works site
Cadw 85359	Listed Building, Grade II	Bodawen Lodge (Building 2)	26 m north of the Glaslyn Cables works site
Cadw 85375	Listed Building, Grade II	Former stable at Bodawen Lodge	30 m north of the Glaslyn Cables works site
Cadw 85376	Listed Building, Grade II	Former Tremadoc Tramway bridge over drainage ditch	50 m north of the Glaslyn Cables works site
Cadw 85397	Listed Building, Grade II	Porthmadog war memorial, including steps, trilithon and monoliths forming its approach	14 m north-east of the Glaslyn Cables works site
Cadw 5205	Listed Building, Grade II	Rhos House	12 m north-west of the Glaslyn Cables works site

Reference	Designation and Grade	Name	Location
Cadw 4774	Listed Building, Grade II	Plas Newydd Farmhouse	343 m north-east of the Glaslyn Cables works site
Cadw 19800	Listed Building, Grade II	Former Stable Range at Plas Newydd	314 m north-east of the Glaslyn Cables works site
PGW(Gd)19(GWY)	Registered Park and Garden	Wern	Within the Glaslyn Cables works site
PGW(Gd)18(GWY)	Registered Park and Garden	Tan-yr-Allt	500 m north of the Glaslyn Cables works site
HLW (Gw)7	Registered Historic Landscape	Aberglaslyn	Within the Glaslyn Cables works site
PRN 37907	Non-designated asset	Hedge-bank, North-East of Wern	Within the Glaslyn Cables works site
PRN 37908	Non-designated asset	Hedge and ditch, on Traeth Mawr	Within the Glaslyn Cables works site
PRN 37909	Non-designated asset	Hedge and ditch, on Traeth Mawr	Within the Glaslyn Cables works site
PRN 37910	Non-designated asset	Hedge and ditch, on Traeth Mawr	Within the Glaslyn Cables works site
PRN 33528	Non-designated asset	Field boundary, Porthmadog	Within the Glaslyn Cables works site
PRN 33531	Non-designated asset	Field boundary, Porthmadog	Within the Glaslyn Cables works site
PRN 33532	Non-designated asset	Field boundary, Porthmadog	Within the Glaslyn Cables works site
PRN 33536	Non-designated asset	Field boundary, Porthmadog	Within the Glaslyn Cables works site
PRN 33537	Non-designated asset	Field boundary, Porthmadog	Within the Glaslyn Cables works site
PRN 33540	Non-designated asset	Culvert/ditch, Porthmadog	Within the Glaslyn Cables works site
PRN 33545	Non-designated asset	Revetted drain, Porthmadog	Within the Glaslyn Cables works site
PRN 33548	Non-designated asset	Culvert/ditch, Porthmadog	Within the Glaslyn Cables works site

Reference	Designation and Grade	Name	Location
PRN 33550	Non-designated asset	Field boundary, Porthmadog	Within the Glaslyn Cables works site
PRN 33551	Non-designated asset	Field boundary, Porthmadog	Within the Glaslyn Cables works site
PRN 21174	Non-designated asset	Croesor Tramway, remains of, Porthmadog	Within the Glaslyn Cables works site
PRN 33554	Non-designated asset	Field boundary, Porthmadog	Within the Glaslyn Cables works site
PRN 33552	Non designated asset	Field boundary Porthmadog	6 m east of the Glaslyn Cables works Site
PRN 33553	Non designated asset	Culvert/ditch Porthmadog	3 m east of the Glaslyn Cables works Site
PRN 68485	Non-designated asset	Plantation, Wern	232 m south-west of the Glaslyn Cables works site
PRN 68486	Non-designated asset	Plantation, Wern	32 m south-west of the Glaslyn Cables works site
PRN 36861	Non-designated asset	Tannery, Plasnewydd Tannery	323 m north-east of the Glaslyn Cables works site
PRN 99275	Non-designated asset	Outfarm, North-East of Plas-newydd, Llanfrothen	369 m north-east of the Glaslyn Cables works site
PRN 68404	Non-designated asset	Minffordd Chapel (Welsh Calvinistic Methodist), Minffordd, Porthmadog	243 m south of the Glaslyn Cables works site
PRN 27317	Non-designated asset	House & Outbuildings, Pen-y-Craig	76 m south of the Glaslyn Cables works site
PRN 27321	Non-designated asset	Building, South-West of Lloc-Meirig	122 m south-east of the Glaslyn Cables works site
PRN 25424	Non-designated asset	Penamser Farm, Porthmadog	139 m south-west of the Glaslyn Cables works site

Reference	Designation and Grade	Name	Location
PRN 25425	Non-designated asset	Outfarm, South-West of Penamser Farm	228 m south-west of the Glaslyn Cables works site

Bibliography

Ref 2.1 – UK Government (1979). *The Ancient Monuments and Archaeological Areas Act*. Available at: https://www.legislation.gov.uk/ukpga/1979/46. Accessed 18 September 2024.

Ref 2.2 – UK Government (1990). *Planning (Listed Buildings and Conservation Areas) Act*. Available at: https://www.legislation.gov.uk/ukpga/1990/9/contents. Accessed 18 September 2024.

Ref 2.3 – Welsh Government (2016). *Historic Environment (Wales) Act 2016*. Available at: http://www.legislation.gov.uk/anaw/2016/4/contents. Accessed 18 September 2024.

Ref 2.4 – Welsh Government (2023). *Historic Environment (Wales) Act 2023*. Available at: https://www.legislation.gov.uk/asc/2023/3/contents. Accessed 19 September 2024.

Ref 2.5 – UK Government (1997). *The Hedgerow Regulations Act*. (1997). Available at: https://www.legislation.gov.uk/uksi/1997/1160/contents/made. Accessed 19 September 2024.

Ref 2.6 – DESNZ (2023a). *Overarching National Policy Statement for Energy (EN-1)*. Available at: https://assets.publishing.service.gov.uk/media/65a7864e96a5ec0013731a93/overarching-nps-for-energy-en1.pdf. Accessed 18 September 2024.

Ref 2.7 – DESNZ (2023b). *National Policy Statement for Electricity Networks Infrastructure (EN-5).* Available at: https://assets.publishing.service.gov.uk/media/655dc25e046ed400148b9dca/nps-electricity-networks-infrastructure-en5.pdf. Accessed 18 September 2024.

Ref 2.8 – Welsh Government (2024). *Planning Policy Wales. Edition 12, February 2024*. Available at: https://gov.wales/planning-policy-wales. Accessed 18 September 2024.

Ref 2.9 – Welsh Government (2021). *Future Wales: The National Plan to 2040*. Available at: https://gov.wales/future-wales-national-plan-2040. Accessed 18 September 2024.

Ref 2.10 – Welsh Government (2017). *Planning Policy Wales. Technical Advice Note (TAN) 24*: The Historic Environment. Available at: https://gov.wales/technical-advice-note-tan-24-historic-environment. Accessed 18 September 2024.

Ref 2.11 – Gwynedd Council (2017). *Anglesey and Gwynedd Joint Local Development Plan 2011 – 2026. Written Statement 31 July 2017*. Available at https://www.gwynedd.llyw.cymru/en/Council/Strategies-and-policies/Environment-and-planning/Planning-policy/Joint-Local-Development-Plan/Joint-Local-Development-Plan-Current/Joint-Local-Development-Plan.aspx. Accessed 18 September 2024.

Ref. 2.12 – Snowdonia National Park Authority (2016). *Eryri Local Development Plan 2016 – 2031. Written Statement.* Available at: https://snowdonia.gov.wales/wp-

content/uploads/2022/01/Cynllun-Datblygu-Lleol-Saesneg.pdf. Accessed 18 September 2024.

Ref 2.13 – Gwynedd Council (2019). The Slate Landscape of Northwest Wales. Nomination as a World Heritage Site. Property Management Plan 2020 – 2030. Available at https://whc.unesco.org/en/list/1633/documents/. Accessed 25 September 2024.

Ref 2.14 – Welsh Government/Cadw (2011). *Conservation Principles for the sustainable management of the historic environment in Wales*. Cardiff: Cadw. Available at: https://cadw.gov.wales/advice-support/historic-assets/conservation-principles. Accessed 19 September 2024.

Ref 2.15 – Welsh Government / Cadw (2017a). *Heritage Impact Assessment in Wales*. Cardiff: Cadw. Available at: https://cadw.gov.wales/advice-support/placemaking/heritage-impact-assessment/heritage-impact-assessment. Accessed 18 September 2024.

Ref 2.16 – Welsh Government / Cadw (2017b). *Managing Change to Listed Buildings in Wales*. Cardiff: Cadw. Available at: https://cadw.gov.wales/advice-support/historic-assets/listed-buildings/managing-change-to-listed-buildings. Accessed 19 September 2024.

Ref 2.17 – Welsh Government / Cadw (2017c). *Managing Change to Registered Historic Parks and Gardens in Wales*. Cardiff: Cadw. Available at: https://cadw.gov.wales/advice-support/historic-assets/registered-historic-parks-gardens/managing-registered-historic-parks. Accessed 19 September 2024.

Ref 2.18 – Welsh Government / Cadw (2017d). *Managing Conservation Areas in Wales*. Cardiff: Cadw. Available at: https://cadw.gov.wales/advice-support/historic-assets/conservation-areas/managing-conservation-areas. Accessed 19 September 2024.

Ref 2.19 – Welsh Government / Cadw (2017e). *Managing Historic Character in Wales*. Cardiff: Cadw. Available at https://cadw.gov.wales/advice-support/placemaking/historic-character/managing-historic-character. Accessed 19 September 2024.

Ref 2.20 – Welsh Government/Cadw (2017f). *Managing Lists of Historic Assets of Special Local Interest in Wales*. Cardiff: Cadw. Available at: https://cadw.gov.wales/advice-support/historic-assets/other-historic-assets/historic-assets-special-local-interest. Accessed 19 September 2024.

Ref 2.21 – Welsh Government / Cadw, (2017g). *Setting of Historic Assets in Wales*. Cardiff: Cadw. Available at: https://cadw.gov.wales/advice-support/placemaking/heritage-impact-assessment/setting-historic-assets. Accessed 18 September 2024.

Ref 2.22 – Chartered Institute for Archaeologists (CIfA) (2020). *Standard and guidance for historic environment desk-based assessment*. Reading: Chartered Institute for Archaeologists. Available at: https://www.archaeologists.net/sites/default/files/CIfAS%26GDBA_4.pdf. Accessed 19 September 2024.

Ref 3.1 – National Monuments Record (NMR) of Wales. Royal Commission for Ancient and Historic Monuments Wales. Available at https://rcahmw.gov.uk/discover/coflein/. Accessed 19 September 2024.

Ref 3.2 – Museums Wales collections. Available at https://museum.wales/collections/online/. Accessed 19 September 2024.

Ref 3.3 – Cadw records on designated historic assets. Available at https://cadw.gov.wales/advice-support/cof-cymru/search-cadw-records. Accessed 19 September 2024.

Ref 3.4 – British Geological Survey (BGS) (2024a). *Geology of Britain Viewer*. Available at: https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/. Accessed 19 September 2024.

Ref 3.5 – British Geological Survey (BGS) (2024b). GeoIndex Onshore Viewer. Available at: https://mapapps2.bgs.ac.uk/geoindex/home.html?_ga=2.29155260.1232066546.1727699365-870852069.1727699365. Accessed 19 September 2024.

Ref 3.6 – Research Framework for the Archaeology of Wales (RFAW) (2024). Available at: https://archaeoleg.org.uk/. Accessed 19 September 2024.

Ref 3.7 – National Library of Scotland (NLS) (2024). Available at: https://maps.nls.uk/. Accessed 19 September 2024.

Ref 3.8 – National Collection of Aerial Photography (NCAP) (2024). Available at: https://ncap.org.uk/. Accessed 19 September 2024.

Ref. 3.9 – DataMapWales (2024). APU Welsh Government Aerial Photography. Available at https://datamap.gov.wales/maps/apu-welsh-government-aerial-photography/ . Accessed 17 December 2024.

Ref. 3.10 – Britain from Above (aerial photographic collection). Available at https://britainfromabove.org.uk/en . Accessed 17 December 2024.

Ref 3.11 – DataMapWales (2024). LiDAR 1m resolution 2020-22 DSM (multidirectional hillshade). Available at https://datamap.gov.wales/maps/new#/. Accessed 19 September 2024.

Ref 3.12 – Archaeology Data Service (ADS) (2024). Defence of Britain Archive. Available at: https://archaeologydataservice.ac.uk/archives/view/dob/. Accessed 19 September 2024.

Ref 3.13 – Portable Antiquities Scheme (PAS) (2024). Available at: http://finds.org.uk/database. Accessed 19 September 2024.

Ref 4.1 – Gwynedd Archaeological Trust (2021). Porthmadog Flood Risk Management Scheme. Desk Based Assessment. July 2021. Report no. 1591.

Ref 4.2 – Gwynedd Archaeological Trust (2022). Snowdonia Visual Impact Provision, Garth, Gwynedd. Archaeological Evaluation. October 2022. GAT Report No. 1658.

Ref 4.3 – AOC Archaeology Group, 2021. Porthmadog Flood Alleviation Scheme. Geoarchaeological Desk Based Assessment. June 2021.

Ref 4.4 – AECOM (2023). Glaslyn Cable Re-routing. Archaeological Monitoring of Geotechnical Works. National Grid. October 2023.

Ref 4.5 – Gruffydd, A. & Riley, H. (1992). Minerals: An Archaeological Assessment of Mineral Extraction Sites & Resources Within the Snowdonia National Park. Gwynedd Archaeological Trust Report No. 023b.

Ref 4.6 – Davidson, A., Gwyn, D. Rh., Jones, G.P. & Riley, H. (1994). Gwynedd Quarrying Landscapes: Slate Quarries. Gwynedd Archaeological Trust Report No. 129.

Ref. 4.7 – Davidson, A. (1997). Welsh Historic Churches Project. Gwynedd Gazetteer. Gwynedd Archaeological Trust Report No. 276.

Ref. 4.8 – Davidson, A. (1998). Historic Churches of Gwynedd, Gazetteer of Churches: Diocese of Bangor, Report No. 390.

Ref 4.9 – Riley, H. & Roberts, R. (1995). A487 Porthmadog/Minffordd and Tremadog Bypasses. Gwynedd Archaeological Trust Report No. 155.

Ref 4.10 – Dutton, L. A. & Gwyn, D. (1996). Coastal Erosion Survey: Aberdaron to Aberdyfi (Revised 1996), Gwynedd Archaeological Trust Report No.198.

Ref. 4.11 – Hopewell, D. & Riley, H. (1995). A487 Porthmadog By-Pass, Proposed Roundabout West of Tremadog. Gwynedd Archaeological Trust Report No. 182.

Ref 4.12 – Gwyn, D. (1998). Gwynedd Metal Mines Survey. Including Parts 1 & 2 Site Gazetteer and Bibliography, Gwynedd Archaeological Trust Report 291.

Ref 4.13 – Hopewell, D. (2004). Roman Roads in North-West Wales. Part 1: Text and Part 2: Maps. Gwynedd Archaeological Trust Report No. 526.

Ref 4.14 – Hopewell, D. (2005). Roman Roads in North West Wales Parts I and II. Gwynedd Archaeological Trust Report No. 572.

Ref 4.15 – Hopewell, D. (2007). Roman Roads in North-West Wales (Revision 4) - Part 1: Text and Part 2: Maps. Gwynedd Archaeological Trust Report No. 668.

Ref 4.16 – Gwyn, D. & Hopewell, D. (2002). Land to the North West of Tremadoc (Llidiart Yspytty): Archaeological Assessment. Gwynedd Archaeological Trust Report No. 455.

Ref 4.17 – Gwyn, D. & Hopewell, D. (2004). Land to the North West of Tremadoc (Llidiart Yspytty): Archaeological Assessment. Gwynedd Archaeological Trust Report No. 519.

Ref 4.18 – Berks, T. & Roberts, J. (2006a). Land to the North West of Tremadog (Llidiart Yspytty): Archaeological Watching Brief. Gwynedd Archaeological Trust Report No. 607.

Ref 4.19 – Berks, T. & Kenney, J. (2006). Land to the North West of Tremadog (Llidiart Yspytty): Archaeological Excavation, Gwynedd Archaeological Trust Report No. 626.

Ref 4.20 – Berks, T. & Roberts, J. (2006b). Land to the North West of Tremadog (Llidiart Yspytty): Excavation and Watching Brief, GAT Report No. 639.

Ref 4.21 – Berks, T., Davidson, A. & Roberts, J. (2005). Ports and Harbours of Gwynedd: A Threat Related Assessment. Gwynedd Archaeological Trust Report No. 577.

Ref 4.22 – Berks, T. & Pierce Jones, G. (2009). Snowdon Mill, Porthmadog. Gwynedd Archaeological Trust Report No. 806.

Ref 4.23 – Gwynedd Archaeological Trust (1991). Minerals: An Archaeological Assessment of Mineral Extraction Sites & Resources Outside the Snowdonia National Park. Gwynedd Archaeological Trust Report No. 023a.

Ref 4.24 – Waddington, K. (2013). The Settlements of Northwest Wales: From the Late Bronze Age to the Early Medieval Period, HER Library Record No. 2377.

Ref 4.25 – McGuiness, N. (2014). Glastir Private Woodland Management Polygonisation.

Ref 4.26 – Parry, L. et al. (2013). A487 Porthmadog, Minffordd and Tremadog Bypass, Gwynedd Archaeological Trust Report No. 1065.

Ref 4.27 – Hopewell, D. (2016a). Slate Industry of North Wales: World Heritage Site Nomination.

Ref 4.28 – Davidson, A., Hopewell, D., McGuinness, N., and Smith, S. (2014). Medieval and Post-Medieval Roads in North-West Wales: Report on Scheduling and Enhancement Study. (Part 1: Report and Gazetteer). Report No. 1171.

Ref 4.29 – Kenney, J. (2014). Medieval and Post-Medieval Agricultural Features in North-West Wales. Report on Scheduling Enhancement Study. Part 1: Report and Gazetteer. Report No. 1162.

Ref 4.30 – Evans, R. (2012). Llwyn Mafon to Golan Junction, Penmorfa, Gwynedd: Archaeological Assessment. Report No. 1046.

Ref 4.31 – Bale, R., Bates, M., Cootes, K., Giorgi, J., Goodwin, J., Grants, F., Hamilton, D., Jenkins, D., Macphail, R., McKinley, J., Nayling, (2013). Gas Pipeline Replacement: Pwllheli to Blaenau Ffestiniog: Report on Archaeological Mitigation, Volume 2: Specialist Reports, Gwynedd Archaeological Trust Report 1136.

Ref 4.32 – Kenney, J. (2012). Gas Pipeline Replacement: Pwllheli City Gate PRI to Blaenau Ffestiniog PRI: Archaeological Assessment of Potential for Analysis Report, GAT Report 1020.

Ref 4.33 – Kenney, J. (2013) Gas Pipeline Replacement: Pwllheli to Blaenau Ffestiniog: Report on Archaeological Mitigation, Volume 1. Gwynedd Archaeological Trust Report 1136.

Ref 4.34 – Richards, G., and Smith, S. (2013). Proposed Water Transfer Pipeline, Dolbenmaen to Cwmystradllyn. Gwynedd Archaeological Trust Report 1133.

Ref 4.35 – Kenney, J. (2015). First World War Military Sites: Military Landscapes. Part 1: Report and Gazetteer. Gwynedd Archaeological Trust Report No. 1248.

Ref 4.36 – Kenney, J. (2017). First World War Military Sites: Infrastructure and Support. Report and Gazetteer. Gwynedd Archaeological Trust Report No. 1370.

Ref 4.37 – Evans, R. and Burnett, A. (2013). Medieval and Post-Medieval Mills. Scheduling Enhancement 2012-13, Meirionnydd. Part 01: Report and Gazetteer. Report No. 1124.

Ref 4.38 – Hopewell, D. (2015). Top Yard, Boston Lodge, Minffordd. Archaeological Excavation. Gwynedd Archaeological Trust Report 1235.

Ref 4.39 – Jones, N., and Hankinson, R. (2016). Garth Quarry, Minffordd, Gwynedd: Heritage Impact Assessment. Clwyd-Powys Archaeological Trust Report No. 1435.

Ref 4.40 – Cooke, R. (2015) Water Mains Renewal, Penmorfa, Tremadog, Gwynedd. Aeon Report 0055.

Ref 4.41 – Parry, I., Smith, G., and Hopewell, D. (2011). Cadw Scheduling Enhancement: Holy Wells. Gwynedd Archaeological Trust Report 931.

Ref 4.42 – Evans, R., and Burnett, A. (2012). Medieval and Post-Medieval Mills. Scheduling Enhancement 2011-12. Part 01: Report and Gazetteer. Report No. 1042.

Ref 4.43 – RSK (2010). Gas Pipeline Replacement: Pwllheli to Blaenau Ffestiniog. Archaeological Desk Based Assessment and Field Reconnaissance Survey. RSK Environment Ltd. Report 41119.

Ref 4.44 – Bartlett, A.D.H. (2010). Pwllheli to Blaenau Ffestiniog. Report on Archaeogeophysical Survey of Proposed Gas Pipeline 2009. Part 1: Report and Inventory of Findings.

Ref 4.45 – Barker, L., and Gwyn, D. (2017). Gwynedd Slate Industry Transport Routes. Report No. GC401.

Ref 4.46 – Thomas, S. (2013). Braich-y-Saint, Criccieth, Gwynedd. Desk Based Assessment and Site Visit. Report No. 1115.

Ref 4.47 – Brooks, I.P. (2018a). Minffordd Yard Archaeological Evaluation. Report No. EAS 2018/10.

Ref 4.48 – Brooks, I.P. (2018b). Evaluation of the archaeological potential of the Minffordd Good Shed. EAS 2018.

Ref 4.49 – Hopewell, D. (2018). Slate Landscapes of North-West Wales World Heritage Site Nomination. Field Survey and Character Area Production. Report No. 1428.

Ref 4.50 – Evans, R. and Ryan Young, C. (2019). First World War Military Sites: Commemoration: Report and Gazetteer. Gwynedd Archaeological Trust Report 1485.

Ref 4.51 – Hopewell, D. (2019). The Slate Landscape of Northwest Wales World Heritage Site Nomination: Field Survey and Character Area Production 2018-19. Gwynedd Archaeological Trust Report 1480.

Ref 4.52 – Hopewell, D. (2017). Slate Industry of north Wales: World Heritage Site Nomination 2016-17.

Ref 4.53 – Kenney, J. & Derby, S. (2017). PAS2017-15: Finds Report, Digital FI File EPRN: 45759.

Ref 4.54 – Burnett, A. (2008). Tir Gofal Management Plan: Erw Deg, Minffordd (HE1), Tir Gofal. Ref. RA2008/015.

Ref 4.55 – Burnett, A. (2009). Tir Gofal Management Plan: Cefn Dreiniog, Llanfrothen Five Year Review, Tir Gofal. Ref. RA2002/143.

Ref 4.56 – McGuinness, N., Roy, L., Reilly, S., & Ryan Young, C. (2021). Porthmadog Flood Risk Management Scheme: Desk-based Assessment. Gwynedd Archaeological Trust Report 1591.

Ref 4.57 – Jones, B. (2021). Recording Traditional Farm Buildings and Historic Farmsteads. Ardudwy 2020-21. Gwynedd Archaeological Trust Report 1585.

Ref 4.58 – Hopewell, D. (2016b). Slate Industry of North Wales: World Heritage Site Nomination and Scheduling Criteria. Gwynedd Archaeological Trust Report 1322.

Ref 4.59 – Burnett, A. (2011). Better Woodlands for Wales Management Plan (WHE1): Wern Estate DWE. Better Woodlands for Wales Reference: 22279.

Ref 4.60 – Flook, R. & Burnett, A. (2011). Better Woodlands for Wales Management Plan: Heritage Management Information Rapid Survey (WHE2) - Wern Estate SRB. Better Woodlands for Wales. Reference No. 24332.

Ref 4.61 – McNicol, D. (2016). Boston Lodge: Archaeological Evaluation and Recording Report. Gwynedd Archaeological Trust Report 1288.

Ref 4.62 – Ferreira, C. (2023). Recording Historic Farmsteads: North Anglesey and West Meirionydd 2022-2023. Asesiad Wrth Ddesg / Desk Based Assessment. Gwynedd Archaeological Trust Report 1657.

Ref 4.63 – Flook, R. (2008a). Tir Gofal Management Plan: Penamser, Porthmadog, Tir Gofal. Ref. RA2007/006.

Ref 4.64 – Flook, R. (2008b). Tir Gofal Management Plan: Farmyard, Tremadog, Porthmadog, Tir Gofal. Ref. RA2008/031.

Ref 4.65 – Berks, T., Davidson, A. & Roberts, J. (2004). Land to the North West of Tremadog (Llidiart Yspytty). Gwynedd Archaeological Trust Report No. 546.

Ref 4.66 – Reilly, S. & McGuiness, N. (2022) Snowdonia Visual Impact Provision, Garth, Gwynedd. Archaeological Evaluation. Gwynedd Archaeological Trust Report 1658.

Ref 4.67 – Longley, D. (2003) Research Framework for the Archaeology of Wales. Northwest Wales – Later Prehistoric. Northwest Wales – Earl Medieval. Regional Seminar Paper. Available at: https://archaeoleg.org.uk/pdf/bronzeandiron/REGIONAL%20SEMINAR%20NW%20WALES%20LATER%20BRONZE%20AGE%20AND%20IRON%20AGE.pdf. Accessed 19 September 2024.

Ref 4.68 – Ritchie, M. (2018). A Brief Introduction to Iron Age Settlement in Wales, Internet Archaeology 48. Available at: https://doi.org/10.11141/ia.48.2. Accessed 19 September 2024.

Ref 4.69 – Davies, J.L. (2003) Research Framework for the Archaeology of Wales. Northwest Wales – Roman. Regional Seminar Paper. Available at: https://archaeoleg.org.uk/pdf/roman/REGIONAL%20SEMINAR%20NW%20WALES%20ROMAN.pdf. Accessed 19 September 2024,

Ref 4.70 – Hopewell, D. (2005). Roman Roads in North West Wales Parts I and II. Gwynedd Archaeological Trust Report No. 572.

Ref 4.71 – Berks, T. & Kenney, J. (2006). Land to the North West of Tremadog (Llidiart Yspytty): Archaeological Excavation, Gwynedd Archaeological Trust Report No. 626.

Ref 4.72 – Berks, T. & Roberts, J. (2006b). Land to the North West of Tremadog (Llidiart Yspytty): Excavation and Watching Brief, GAT Report No. 639.

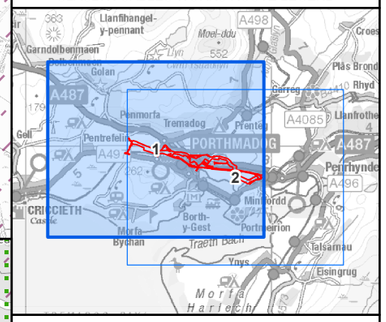
Ref 4.73 – Edwards, N. (2003). Research Framework for the Archaeology of Wales. Northwest Wales – Earl Medieval. Regional Seminar Paper. Available at: https://archaeoleg.org.uk/pdf/earlymed/REGIONAL%20SEMINAR%20PAPER%20%20EARLY%20MEDIEVAL%20NW%20WALES.pdf. Accessed 19 September 2024.

Ref 4.74 – Prestwich, M. (2007). Plantagenet England: 1225–1360 (new ed.). Oxford, Oxford University Press.

Ref 4.75 – Kenney, J. (2017). First World War Military Sites: Infrastructure and Support. Available at: https://www.heneb.co.uk/ww1/reports/ww1infrastructureandsupport.pdf. Accessed on 24 September 2024.

Ref 4.76 – Cadw. (2009). Military Sites of the Twentieth Century. Available at: https://cadw.gov.wales/sites/default/files/2019-04/Caring_for_Military_Sites_EN.pdf . Accessed 24th September 2024.

GLASLYN CABLES WORKS ROUTE LEGEND



Legend

- Glaslyn Works Site Boundary
- 3km Buffer of Glaslyn Works Site Boundary

Designated Historic Assets

- World Heritage Site (WHS)
- Scheduled Monument
- Registered Park and Garden (RPG)
- Conservation Area (CA)

Registered Historic Landscape

- Aberglaslyn
- Ardudwy

Listed Building

- Grade I
- Grade II*
- Grade II

NOTES

1: Where inset maps overlap the study area, there are no historical features within these areas.

Rev	Date	Description	GIS	Chk	App
A	27/08/2025	Environmental Statement	LP	JL	AM

nationalgrid

Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

Volume: VOLUME 8: APPENDICES
GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.1
DESIGNATED HISTORIC ASSETS WITHIN
3KM OF GLASLYN WORKS SITE

Creator:	Date:	Checker:	Date:	Approver:	Date:
LP	27/08/2025	JL	27/08/2025	AM	27/08/2025

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:26,000	A3	1 OF 2	A

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N

See Sheet 1

Garth

PORTHMADOG

Cwmystradllyn

Morfa Bychan

North Bank

South Bank

Penrhyn-isaf

Ynys Tywyn

Llanfrothen

Garreg

Hotel

Harbour Office

White Horses

Aton Dwyryd

Scale: 0 50 100 150 200 250 Metres

Scale: 0 50 100 150 200 Metres

Scale: 0 0.5 1 1.5 2 2.5 Kilometres

CN237 CN237 CN237 CN239 CN386 CN059 CN118 CN118 CN270 CN174

ME184 ME096

Wern RPG

Tan-yr-Allt RPG

Portmeirion RPG

Tremadog CA

Porthmadog CA

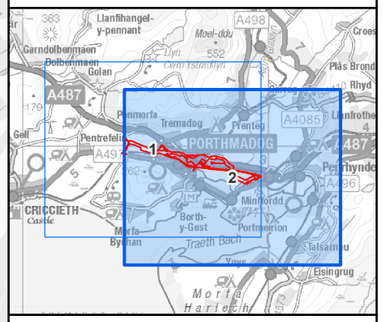
Portmeirion CA

The Slate Landscape of Northwest Wales - Ffestiniog: its Slate mines and Quarries, 'city of slates' and Railway to Porthmadog WHS

The Slate Landscape of Northwest Wales - Ffestiniog: its Slate mines and Quarries, 'city of slates' and Railway to Porthmadog WHS

21559 21567 21558 21556 21534 21533 4285 21532 4626 21569 4628 21554 4433 85375 85359 4438 85376 85399 85397 85396 85373 85406 85379 85368 4409 85342 85399 85369 4431 85393 18964 85374 85371 85297 85337 85391 85398 85378 85403 85386 4405 85351 85335 85380 85298 4427 24011 4429 85322 4428 85366 85382 85343 85411 4410 85402 85392 85384 85372 4424 4419 4404 85315 85409 85389 85324 85309 4425 85307 4426 85299 85355 85312 4423 85352 4418 4417 4416 85395 4415 85326 4406 85339 4421 85334 4414 85320 4407 4420 19841 4819 19801 19802 26857 26856 4774 19800 26852 26854 87607 26882 5205 5223 26855 26853 5222 5211 26888 87900 26859 26860 14419 14417 14418 14424 14423 5234 5235 14416 4852 14415 14413 26886 26887 14414 14412 14411 26883 26885 4841 83457

4886 4885 26877 26867 4889 4887 4883 4882 4878 4872 4884 4881 4876 26876 26871 4880 26875 26889 4877 26874 26884 4888 26873 26878 4873 4874 4879 26862 26872 26866 4896 26879 4875 4861 4871 26870 26890 4860 4859 4892 4858 4868 4870 4777 4865 4869 4867 26868 4856 4862 4857 4866 4891 26864 4890 4864 26869 4855 26881 26861 4854 4893 26863 4895 26865 4894 26880 4853



GLASLYN CABLES WORKS ROUTE LEGEND

Legend

- Glaslyn Works Site Boundary
- 3km Buffer of Glaslyn Works Site Boundary

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- Scheduled Monument
- Registered Park and Garden (RPG)
- Conservation Area (CA)

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Rev	Date	Description	GIS	Chk	App
A	27/08/2025	Environmental Statement	LP	JL	AM

nationalgrid

Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

Volume: VOLUME 8: APPENDICES
GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.1
DESIGNATED HISTORIC ASSETS WITHIN 3KM OF GLASLYN WORKS SITE

Creator:	Date:	Checker:	Date:	Approver:	Date:
LP	27/08/2025	JL	27/08/2025	AM	27/08/2025

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:26,000	A3	2 OF 2	A

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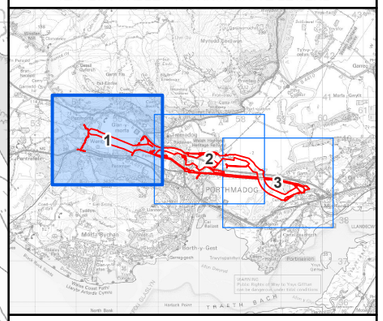
GLASLYN CABLES WORKS ROUTE LEGEND



Legend

- Glaslyn Works Site Boundary
- 500m Buffer of Glaslyn Works Site Boundary
- Non-Designated Historic Asset
- Roman Road (Indicative Alignment)

Penmorfa
Pwllgloiculas
Coed Tyn-llan
Coed yr Eglwys
Coed y Wern
Coed Pen-amser
Coed y Chwarel
Coed y Cefn
Coed y Warren
Coed y Capel
Nant-yr-Afon-oer
Afon Bontfaen
Penamser Farm
Parc Busnes Porthmadog Business Park
A497 FFORDD PENAMSER / PENAMSER ROAD
ROMAN BATH HOUSE
Aberglaslyn Mountain Rescue
Cefn Cyfanedd
Butlers Cottage
Wern Lodge
Pont-Faen
Bryn-Derwen Cottage
Cae-canol
Llwyn Derw
Tyddyn Deucwm Ucha
Tyn y Coed
Ty'n-yr-allt
Cae-Crwn
Allt-wen
Craig y Castell
Craig y Dref
Cwm Bach
Cwm Mawr
Glan Rhes Glanmorfa Terrace
Cwt Defaid
Careg-Felen
Gleguron
Bryn Coch
Hut Circle
Hut Circles
Livestock Pen
Reservoir (cov)
El Dist Sta
Sluice
Overflow
Moel-y-Gest Quarries (ths)
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Fort
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Metres

Rev	Date	Description	GIS	Chk	App
A	27/08/2025	Environmental Statement	LP	EC	AM

nationalgrid

Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

Volume: VOLUME 8: APPENDICES
GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.2
NON-DESIGNATED HISTORIC ASSETS
WITHIN 500M OF GLASLYN WORKS SITE

Creator:	Date:	Checker:	Date:	Approver:	Date:
LP	27/08/2025	EC	27/08/2025	AM	27/08/2025

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FIGURE	1:8,000	A3	1 OF 3	A

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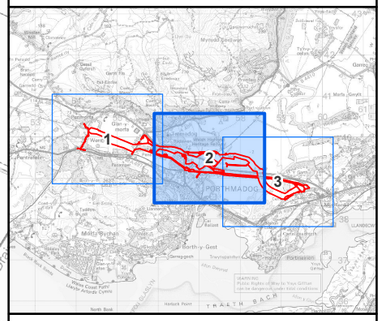
GLASLYN CABLES WORKS ROUTE LEGEND



Legend

- Glaslyn Works Site Boundary
- 500m Buffer of Glaslyn Works Site Boundary
- Non-Designated Historic Asset
- Roman Road (Indicative Alignment)

PORTHMADOG

Tremadog

Ynys Galch

Ysgol Eifionydd

Ysgol

Llyn Bach

Ynys Cerrigduon

Coed Tan-yr-allt

Coed Tuhwnt-i'r-bwlch

Coed Morfa Lodge

Morfa Lodge Estate

Penrhyn Heli

Hadfer Campsite

Clwb Chwaraeon Madog / Madog Sports Club

Gwern Eithin

Ty Bricks

Sewage Works

Allot Gdns

Sewage Ppg Sta

Football Ground

Balancing Pond

Car Park

Police Services

Reservoir (cov)

War Mem

Ynys Fadog

Ynys Hir

Y Nursery

Snowdon Lodge

Isgraig

Craig y Dref

Tan-y-Marian

Ty'n y Coed

Cysgod y Graig

The Lodge

Factory Place

Aberglaslyn Mountain Rescue

17560

17812

17821

A487

A497

16876 33594 68397 11274 1781 60098 18220 33526 33527 33528 33533 33530 33531 21171 33532 33534 33535 33537 33536 33539 33538 33589 33540 33541 33603 33542 56822 56823 33543 33544 33593 21518 101934 56821 33545 33605 58799 33547 17812 101355 33548 33551 33550 33552 58753 33557 33553 33554 33555 33592 33556 27845 27846 27844 101743 101971 21174 20230 68399 18210 21172 102464 68402 68401 11637 71500 71535 71536 71555 20236 18209 102463 33601 58444 33558 33559 68487 33591 56769 58754 34105 65712

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0 100 200 300 400 500
Metres

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Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

Volume: VOLUME 8: APPENDICES GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.2 NON-DESIGNATED HISTORIC ASSETS WITHIN 500M OF GLASLYN WORKS SITE

Creator:	Date:	Checker:	Date:	Approver:	Date:
LP	27/08/2025	EC	27/08/2025	AM	27/08/2025

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:8,000	A3	2 OF 3	A

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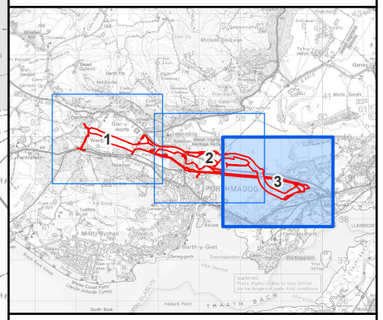
GLASLYN CABLES WORKS ROUTE LEGEND



Legend

- Glaslyn Works Site Boundary
- 500m Buffer of Glaslyn Works Site Boundary
- Non-Designated Historic Asset
- Roman Road (Indicative Alignment)

Rev	Date	Description	GIS	Chk	App
A	27/08/2025	Environmental Statement	LP	EC	AM

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Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

Volume: VOLUME 8: APPENDICES
GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.2
NON-DESIGNATED HISTORIC ASSETS
WITHIN 500M OF GLASLYN WORKS SITE

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LP	27/08/2025	EC	27/08/2025	AM	27/08/2025

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:8,000	A3	3 OF 3	A

0 100 200 300 400 500
Metres

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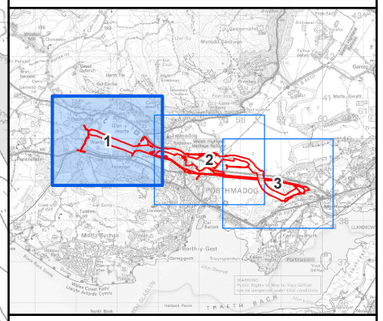
GLASLYN CABLES WORKS ROUTE LEGEND



Legend

- Glaslyn Works Site Boundary
- 500m Buffer of Glaslyn Works Site Boundary

Heneb Historic Landscape Character (HLC)

- Area 8: Wern
- Area 10: Porthmadog
- Area 14: Glaslyn Estuary
- Area 20: Tremadoc
- Area 33: Llidiart Ysbytty

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Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

Volume: VOLUME 8: APPENDICES
GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.3
HISTORIC LANDSCAPE CHARACTER AREAS WITHIN 500M OF GLASLYN WORKS SITE

Creator:	Date:	Checker:	Date:	Approver:	Date:
LP	28/08/2025	JL	28/08/2025	AM	28/08/2025

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:8,000	A3	1 OF 3	A

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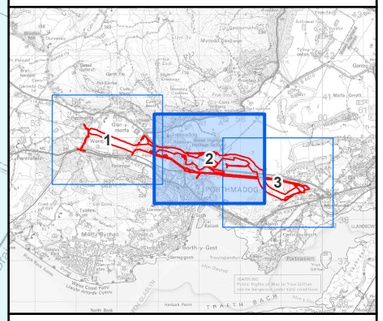
GLASLYN CABLES WORKS ROUTE LEGEND



Legend

- Glaslyn Works Site Boundary
- 500m Buffer of Glaslyn Works Site Boundary

Heneb Historic Landscape Character (HLC)

- Area 3: Ffestiniog railway
- Area 9: Porthmadog Harbour
- Area 10: Porthmadog
- Area 14: Glaslyn Estuary
- Area 20: Tremadoc
- Area 33: Llidiart Ysbytty

Rev	Date	Description	GIS	Chk	App
A	28/08/2025	Environmental Statement	LP	JL	AM

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Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

Volume: VOLUME 8: APPENDICES
GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.3
HISTORIC LANDSCAPE CHARACTER AREAS
WITHIN 500M OF GLASLYN WORKS SITE

Creator:	Date:	Checker:	Date:	Approver:	Date:
LP	28/08/2025	JL	28/08/2025	AM	28/08/2025

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FIGURE	1:8,000	A3	2 OF 3	A

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Metres

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N

Area 14: Glaslyn Estuary

Area 31: Minffordd quarry

Area 27: Penrhyn-Garth

Area 3: Ffestiniog railway

Area 32: Penrhyndeudraeth

Clwb Chwaraeon Madog / Madog Sports Club

Balancing Pond

Afon Glaslyn

Minffordd

Plas Penrhyn

Boston Lodge

Ynys Berfedd

Ynys Glog

Bwlch-Glas

Y Garth

Plas-newydd

Glasdir

Ty'n-y-berllan

Holiday Site

Parc Busnes Eryri / Snowdonia Business Park

Ysgol Hafod Lon

Llwyn Celyn

Swn Ywylan

Stentir Bungalow

Tyddyn Heulyn

Min-y-don

Borth-Wen-Fach

STRYD FAWR / HIGH STREET

A487

A497

0 100 200 300 400 500

Metres

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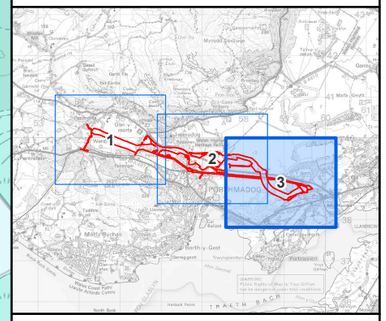
GLASLYN CABLES WORKS ROUTE LEGEND



Legend

- Glaslyn Works Site Boundary
- 500m Buffer of Glaslyn Works Site Boundary

Heneb Historic Landscape Character (HLC)

- Area 3: Ffestiniog railway
- Area 14: Glaslyn Estuary
- Area 27: Penrhyn-Garth
- Area 31: Minffordd quarry
- Area 32: Penrhyndeudraeth

Rev	Date	Description	GIS	Chk	App
A	28/08/2025	Environmental Statement	LP	JL	AM

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Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

Volume: VOLUME 8: APPENDICES
GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.3
HISTORIC LANDSCAPE CHARACTER AREAS WITHIN 500M OF GLASLYN WORKS SITE

Creator:	Date:	Checker:	Date:	Approver:	Date:
LP	28/08/2025	JL	28/08/2025	AM	28/08/2025

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:8,000	A3	3 OF 3	A

Document Path: \na.aecomnet.com\lfs\EMEA\Manchester-UKMCR5\DCS\Projects\EGE\60686216_NWWC_GIS2\900_CAD_GIS\920_GIS\02_Maps\PTR - Environmental Statement\PTR_ES_Chp6App_Fig_HER_HistoricLandscapeCharaterAreas.aprx

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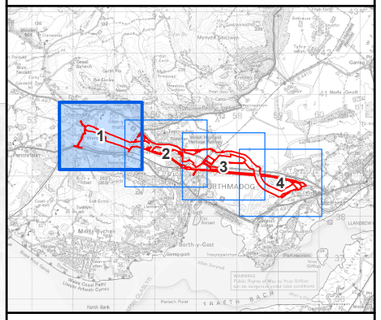
GLASLYN CABLES WORKS ROUTE LEGEND



Legend

Glaslyn Works Site Boundary

0 100 200 300 400 500

Metres

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Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

Volume: VOLUME 8: APPENDICES
GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.4
EXTRACTS FROM TITHE SURVEYS OF
PENMORFA PARISH AND YNYSCYNHAIARN PARISH
IN THE COUNTY OF CARNARVON 1842

Creator:	Date:	Checker:	Date:	Approver:	Date:
ID	31/07/2025	JL	31/07/2025	AM	31/07/2025

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:6,000	A3	1 OF 4	A

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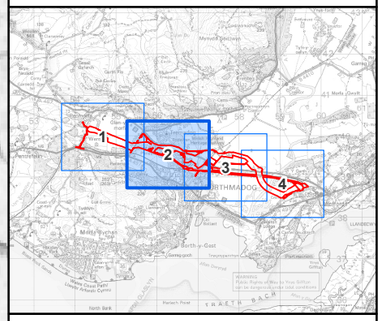
GLASLYN CABLES WORKS ROUTE LEGEND



Legend

Glaslyn Works Site Boundary

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0 100 200 300 400 500
Metres

Rev	Date	Description	GIS	Chk	App
A	31/07/2025	Environmental Statement	ID	JL	AM

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Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

Volume: VOLUME 8: APPENDICES
GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.4
EXTRACTS FROM TITHE SURVEYS OF
PENMORFA PARISH AND YNYSCYNHAIARN PARISH
IN THE COUNTY OF CARNARVON 1842

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ID	31/07/2025	JL	31/07/2025	AM	31/07/2025

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FIGURE	1:6,000	A3	2 OF 4	A

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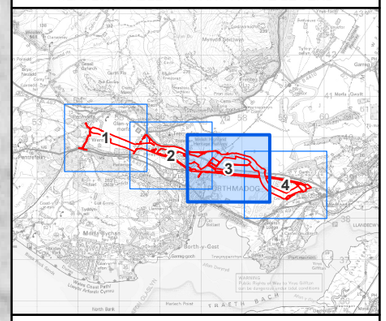
GLASLYN CABLES WORKS ROUTE LEGEND



Legend

Glaslyn Works Site Boundary

0 100 200 300 400 500

Metres

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Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

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GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.4
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ID	31/07/2025	JL	31/07/2025	AM	31/07/2025

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FIGURE	1:6,000	A3	3 OF 4	A

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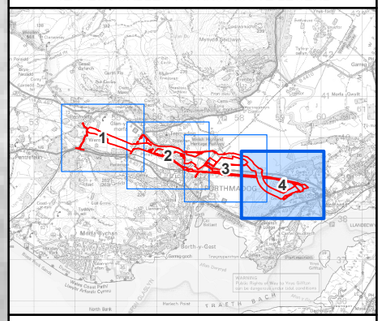

Legend

Glaslyn Works Site Boundary

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0 100 200 300 400 500
Metres

Rev	Date	Description	GIS	Chk	App
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Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

Volume: VOLUME 8: APPENDICES
GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.4
EXTRACTS FROM TITHE SURVEYS OF
PENMORFA PARISH AND YNYSCYNHAIARN PARISH
IN THE COUNTY OF CARNARVON 1842

Creator:	Date:	Checker:	Date:	Approver:	Date:
ID	31/07/2025	JL	31/07/2025	AM	31/07/2025

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:6,000	A3	4 OF 4	A

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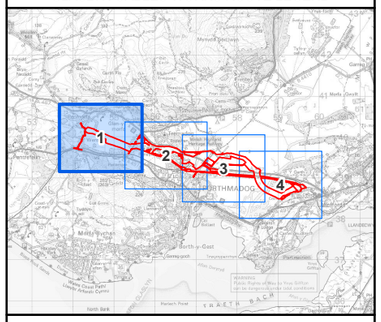
GLASLYN CABLES WORKS ROUTE LEGEND



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Glaslyn Works Site Boundary

Rev	Date	Description	GIS	Chk	App
A	31/07/2025	Environmental Statement	ID	JL	AM

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Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

Volume: VOLUME 8: APPENDICES
GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.5
HISTORICAL OS MAP 1888

Creator:	Date:	Checker:	Date:	Approver:	Date:
ID	31/07/2025	JL	31/07/2025	AM	31/07/2025

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:6,000	A3	1 OF 4	A

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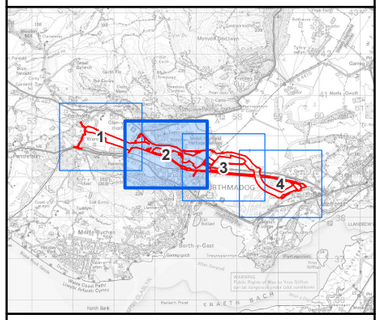
GLASLYN CABLES WORKS ROUTE LEGEND



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Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

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N

Old Shaft

Bod-awen

Glan-yr-afon

Pen-y-mount

TRAMWAY

CROSS

Bedgelert Siding

Old Shaft

Recreation Ground

Rifle Range

800 Yds 200 600 300 400 300 200 100

F.P

S.P

Whitchurch Hty M.P

Ynys Cerig-duon

Gas Works

Drill Hall

PORTMADOC

Acres

6433·574

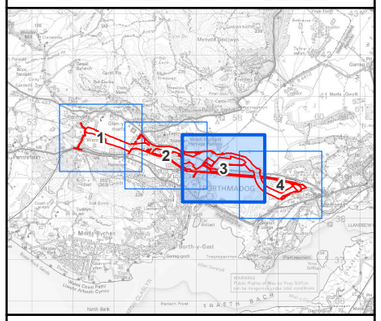
Butts

F.S.

0 100 200 300 400 500

Metres

GLASLYN CABLES WORKS ROUTE LEGEND



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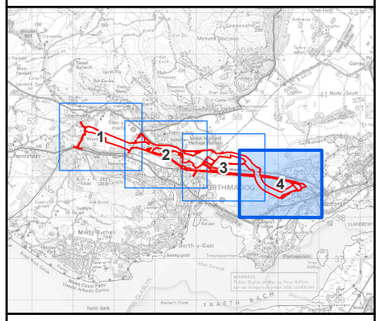
GLASLYN CABLES WORKS ROUTE LEGEND



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Glaslyn Works Site Boundary

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FIGURE	1:6,000	A3	4 OF 4	A

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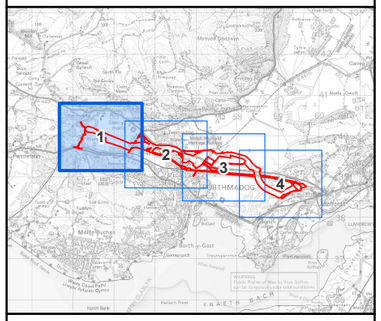

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Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

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GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.6
HISTORICAL OS MAP 1901

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ID	31/07/2025	JL	31/07/2025	AM	31/07/2025

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:6,000	A3	1 OF 4	A

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N

School
B.M. 12·8
Hen Fynwent
(Roman Remains found)
Pont Pen-anser
Ty-nanney
Capel Peniel
Gorphwysfa
Ynys-Fadog
Y Nursery
Sewage Filters
(Ynyscynhaiarn U.D Council)
Ynys-hir
Bodawen
Glan-yr-afon
Lodge
B.M. 11·9
CAMBRIAN COAST SECTION RAILWAY
Pen-anser
Pen-Syflog
Y Cyt
Acres
4593·200
Baptist Chapel
Queen's Hotel
Station
Ynys Calch
Font Ynys-galch
School
Presby Church
Memorial Chapel
H.P. to which O.T. flow
Corn Mill
Gas Works
Drill Hall
Beddgelert Siding

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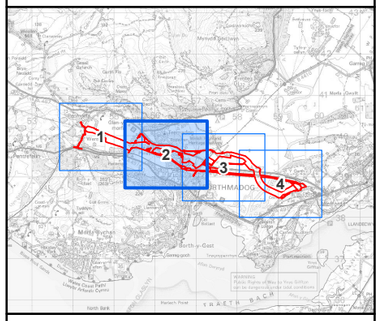

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Glaslyn Works Site Boundary

Rev	Date	Description	GIS	Chk	App
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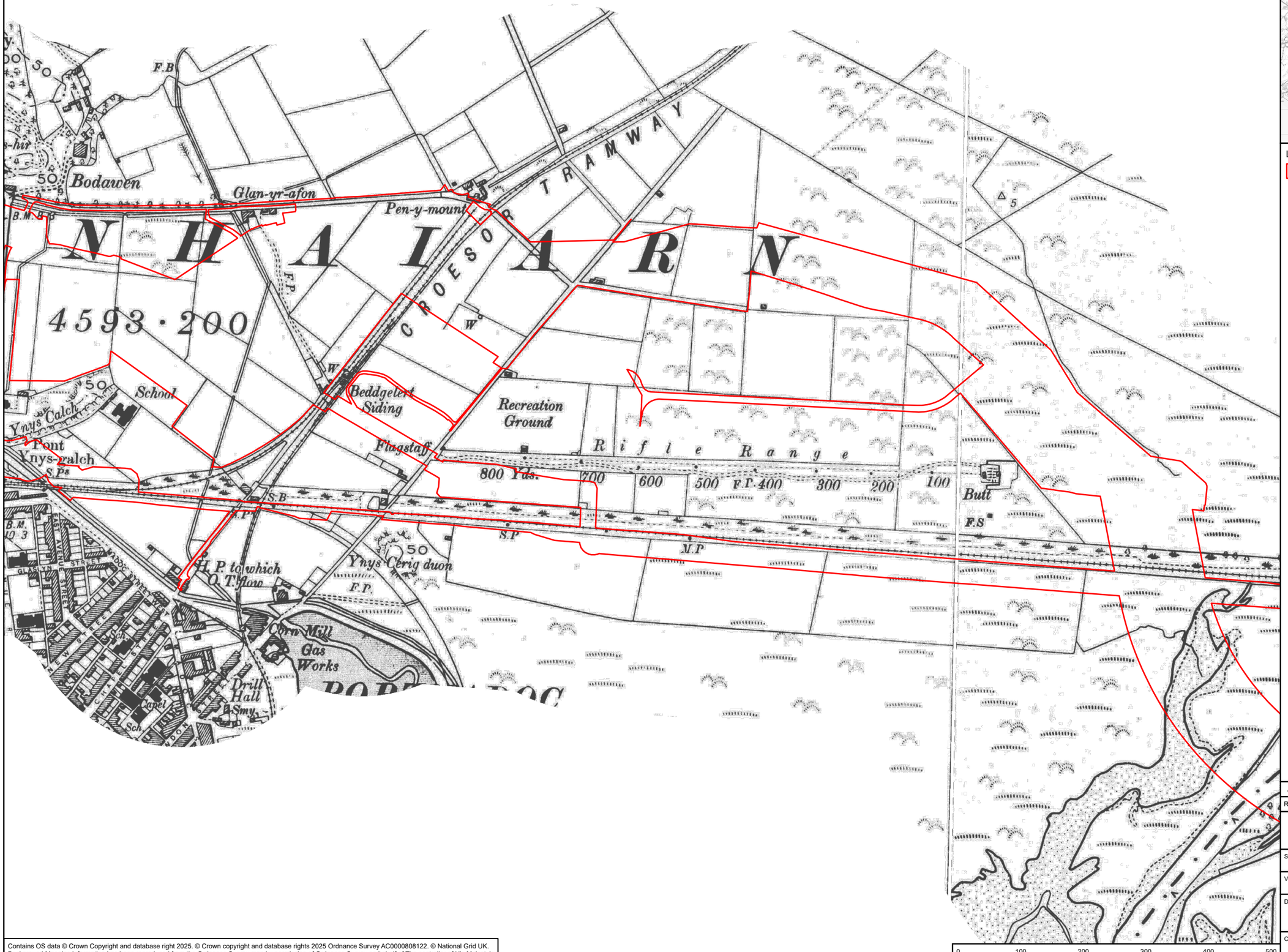

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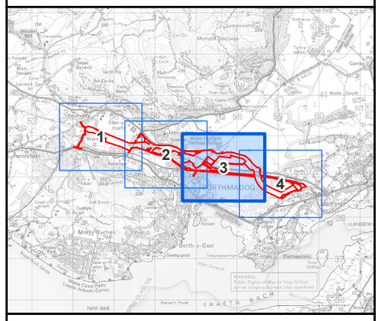
Metres

GLASLYN CABLES WORKS ROUTE LEGEND



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Glaslyn Works Site Boundary

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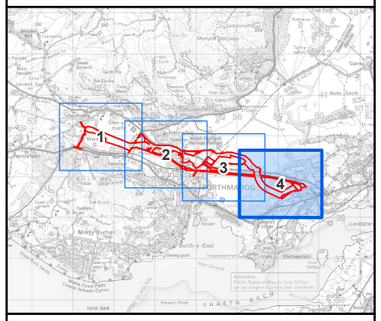

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Glaslyn Works Site Boundary

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N

Ty'n-y-lôn
Quarry
Dismantled Railway
Rises
W.T
Capel Garisim
B.M. 164·5
B.M. 117·3
Ffynnon-Beuno
Coed Ty'n-llan
Ty'n-y-berllan
200·2
200
100
50
Coed yr Eglwys
Bryn Celynen
Reservoir
Ty'n-llan
St. Beuno's Church
Nant yr Afon-ver
F.B.
F.P.
Bryn-y-wern
Tanks
Coed Bryn-tŵr
Sheepfold
Rises
Rises
Reservoir
Overflow
Wern
Cwt-y-defaid
Lodge
W
88
68
B.M. 79·7
98
B.M. 132·4
Quarry
Quarry
Tan-y-bryn
Coed y Chwarel
Rises
B.M. 17
U.D. By
Old Level
G.P.
Pont Pen-amser
Rises
Coed Pen-amser
Rises
B.M. 11·6
CAMBRIAN RAILWAY
COAST SECTION
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S.P.
W
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Pen-amser Terrace
Coed Pen-amser
Rises
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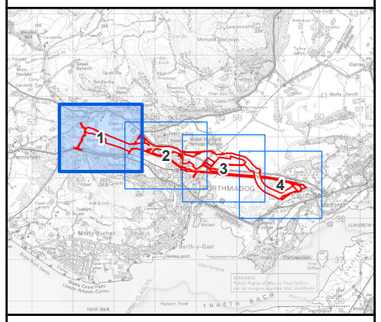
GLASLYN CABLES WORKS ROUTE LEGEND



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Glaslyn Works Site Boundary

Rev	Date	Description	GIS	Chk	App
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Volume: VOLUME 8: APPENDICES
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Document Title: FIGURE 4.6.A.7
HISTORICAL OS MAP 1920

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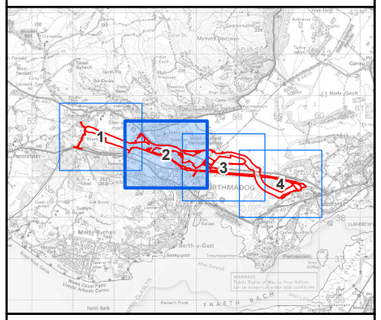
GLASLYN CABLES WORKS ROUTE LEGEND



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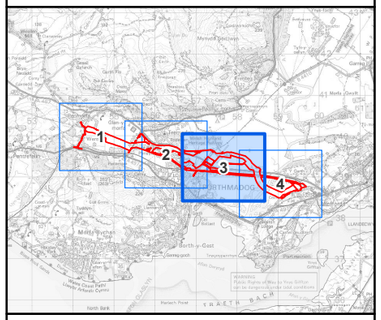

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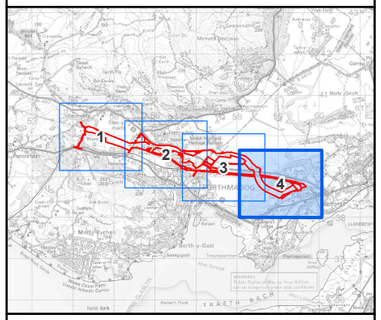
GLASLYN CABLES WORKS ROUTE LEGEND



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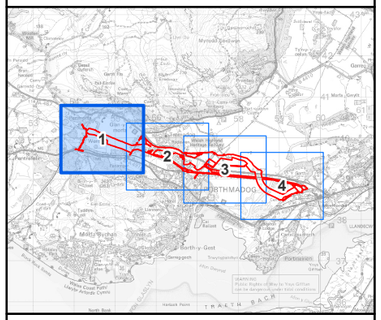

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Glaslyn Works Site Boundary

Rev	Date	Description	GIS	Chk	App
A	31/07/2025	Environmental Statement	ID	JL	AM

nationalgrid

Scheme: PENTIR TO TRAWSFYNYDD REINFORCEMENT

Volume: VOLUME 8: APPENDICES
GLASLYN CABLES WORKS

Document Title: FIGURE 4.6.A.8
HISTORICAL OS MAP 1953

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ID	31/07/2025	JL	31/07/2025	AM	31/07/2025

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:6,000	A3	1 OF 4	A

0 100 200 300 400 500
Metres

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N

Old Level
Rises
Tannery
(Disused)
School
Glasfryn
G.P.
Hen Fynwent
ROMAN BATH HOUSE
(Site of)
Fy-Nanney
Woodlands
Capel Peniel
Ynys Fadog
Y Nursery
F.B.
Pont
Pen-amser
Sewage Filters
(Ynyscynhaiarn U.D.C.)
Ynys Hir
Bodawen
Lodge
Glan-yr-afon
B.M 11·6
G.W.R.
COAST SECTION
G.P.
S.P.
Penamser
Rises
F.P.
Pen-y-Stog
Y Cyt
El Sub Sta
MEADOW DRIVE
Chap.
Ynys Calch
Pont Ynys-galch
County
Intermediate School
Bwlgwrt Sch
S P
Queen's Hotel
M.P.
Station
Allotment
Gardens
Ch.
EAST AVENUE
GLASLYN AVENUE
MAWDDACH STREET
NEW STREET
CHAPEL STREET
ROAD
Corn Mill
Smithy
Maid

0 100 200 300 400 500
Metres

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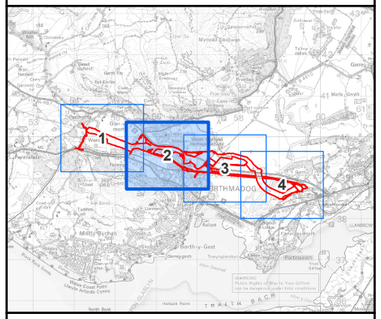
GLASLYN CABLES WORKS ROUTE LEGEND



Legend

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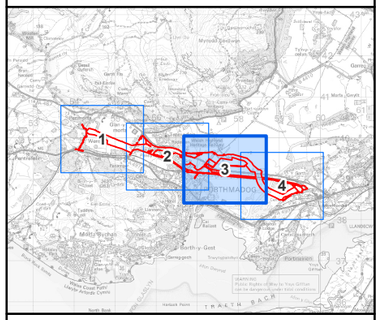

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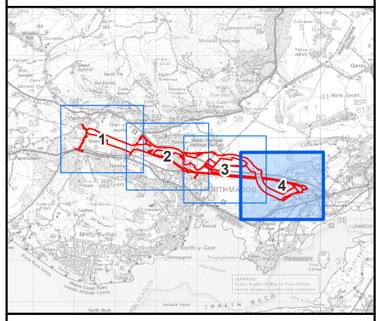
GLASLYN CABLES WORKS ROUTE LEGEND



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4.6.B Gazetteer of Historic Assets and Archaeological Investigations (Glaslyn Cables)

nationalgrid

World Heritage Sites

UNESCO Ref.	Grade	Name	Description	Period	NGR
1633	14	The Slate Landscape of Northwest Wales - Gorseddau and Prince of Wales Slate Quarries, Railways and Mill	The Slate Landscape of Northwest Wales is located in the United Kingdom, in the mountains of Snowdon massif. Six areas together represent an exceptional example of an industrial landscape which was profoundly shaped by quarrying and mining slate,and transporting it for national and international markets. From 1780 to 1940 this industry dominated world production of roofing slates, transforming both the environment and the communities who lived and worked here. The quarries and mines are monumental in scale, comprising stepped hillside workings, deep pits and cavernous underground chambers, massive cascading tips, ingenious water systems, and a range of industrial buildings. Outstanding technical equipment and major engineering features survive. Innovative transport systems linked quarries and processing sites with purpose-built coastal export harbours and with main-line railways. Grand country houses and estates built by leading industrialists contrast with workers' vernacular settlements, with their characteristic chapels and churches, band-rooms, schools, libraries and meeting-places.	Post-medieval	SH5633346069
1633	15	The Slate Landscape of Northwest Wales - Ffestiniog: its Slate mines and Quarries, 'city of slates' and Railway to Porthmadog	The Slate Landscape of Northwest Wales is located in the United Kingdom, in the mountains of Snowdon massif. Six areas together represent an exceptional example of an industrial landscape which was profoundly shaped by quarrying and mining slate,and transporting it for national and international markets. From 1780 to 1940 this industry dominated world production of roofing slates, transforming both the environment and the communities who lived and worked here. The quarries and mines are monumental in scale, comprising stepped hillside workings, deep pits and cavernous underground chambers, massive cascading tips, ingenious water systems, and a range of industrial buildings. Outstanding technical equipment and major engineering features survive. Innovative transport systems linked quarries and processing sites with purpose-built coastal export harbours and with main-line railways. Grand country houses and estates built by leading industrialists contrast with workers' vernacular settlements, with their characteristic chapels and churches, band-rooms, schools,	Post-medieval	SH6772444183

Scheduled Monuments

SAM No.	Grade	Name	Description	Period	NGR
CN239	SM	Hut Group West of Cwm Mawr	This multi-period settlement includes a hut-circle settlement of the Iron Age or Romano-British period (c.800 BC - AD 400) consisting of three huts and two small attached enclosures or yards and, close by, two rectangular huts, probably of the medieval period. The two elements represent two phases, or perhaps a long continuity of use. There are field walls of at least three periods, some associated with the round huts, some associated with the rectangular huts and some modern. A faint bank links the middle round hut and the smaller rectangular hut, and in the area thus enclosed is a slight suggestion of ridge and furrow. The site lies on a low tongue of land projecting from the east side of a shallow valley and raised slightly from its marshy floor in an area of stony rough pasture.	Prehistoric	SH5491641341
CN386	SM	Fach-goch, standing stone to SSE of	The monument comprises a fine standing stone, probably dating to the Bronze Age (c.2300 BC - 800 BC) and situated within enclosed pasture about 130m to the SSE of Fach-goch. The standing stone measures 2.2m in height, 0.8m in thickness from NNW to SSE by 0.4m in width. It commands fine views around its E arc.	Prehistoric	SH5684241152
ME096	SM	Ty'n y Berllan Settlement	The monument comprises the remains of an enclosed settlement of multiple hut circles, which probably dates from the first millennium BC. There are four round huts linked and partially enclosed by stretches of walling. Two entrances are clear, marked by orthostats, one to one of the huts and one to the enclosure itself.	Prehistoric	SH6003039352
CN270	SM	Enclosed Hut Group in Parc-y-Borth	The monument comprises the remains of small, compact settlement or single homestead dating to the Iron Age or Romano-British period (c. 800 BC - AD 400). The site occupies a small terrace in a north-east facing slope and consists of three huts within a roughly oval enclosure. The features are visible as rounded banks and terraces with occasional exposed facing stones. The enclosure has dimensions of 36m x 42m and is defined by a low bank which is most pronounced where it is terraced out onto the slope to the north-east.	Prehistoric	SH5620537829
ME184	SM	Enclosed Hut Circle Settlement North of Coed Gwlyb	The monument comprises the complete and well preserved remains of a small settlement or farmstead which probably dates to the Iron Age or Romano-British period (c. 800 BC - AD 400). The site consists of two hut circles joined by banks which form a small common enclosure or yard. The monument is situated in a lowland area which has been subject to agricultural improvement.	Prehistoric	SH5423338766
CN019	SM	Gesail Gyfarch Inscribed Stone	The monument consists of a stone with an early-medieval inscription on the front. The stone is now 1.7m long, 0.35m down to 0.23m wide and about 0.15m thick, a piece has broken off the top and the left side has been trimmed, probably in the 19th century. The writing is faint but legible and is confined to what would have been the upper part of the stone when it stood upright. The inscription, in three lines reading vertically down from the top is "FILI CVNALPI / CVNACI IACIT / BECCVRI" and translates as (The stone of) Cunalipus son / Cunacus. He lies here / of Beccurus. There is some doubt about the translation and what can be seen on the stone may be the remains of two independent inscriptions, but its character suggests that it dates to the 6th century.	Early Medieval	SH5400941709
CN237	SM	Hut Circles near Craig y Gesail	The monument comprises the remains of two substantial stone-built hut circles that probably date to the Iron Age or Romano-British period (c. 800 BC - AD 400), together with the foundations of a rectangular hut platform of later, possibly medieval date. The monument is unusually well-preserved, reflecting activity over a long period of time. It is of national importance for its potential to enhance our knowledge of later prehistoric, perhaps through to medieval, domestic construction practices. The monument has survived with minimal disturbance and retains significant archaeological potential. There is a strong probability that structural evidence has survived, together with internal and external floor surfaces. The huts' group value is enhanced by their relationship with other similar monuments in the vicinity which also reflects continuity of settlement.	Prehistoric	SH5472841264
CN118	SM	Cist Cerrig Burial Chamber & Cup Marked Rock	The monument comprises the remains of a chambered tomb, dating to the Neolithic period (c. 4,400 BC - 2,900 BC). Chambered tombs were built and used by local farming communities over long periods of time. There appear to be many regional traditions and variations in shape and construction. The three orthostats are arranged in a 'H' formation and are the remains of a portal dolmen; apart from stones piled immediately around the base, there is no sign of an associated mound. The two side stones are each 2.3m high, the northern stone being 1.8m wide and the southern stone 1.6m wide. The central blocking stone is 2.1m in height and 1m in width. Twenty-three metres to the	Prehistoric	SH5433938407

SAM No.	Grade	Name	Description	Period	NGR
			east of the uprights is a series of cup-marks on a rock outcrop. Ten cup-marks of varying size and clarity can be seen arranged in a line 2.3m in length, with a further two offset to the right of the line.		
CN059	SM	Moel y Gest Camp	A hillfort on the W end of Moel y Gest, with two inner enclosures at the SW corner. The outer fort is defended by a stone bank which was originally some 2.4 m wide. This wall is absent on the S side, where the site is naturally defended. There is a simple entrance, a little over 1.0 m wide, just S of the NW corner. In the SW corner of the fort, on the summit of the ridge, is an enclosure 25 m W to E by 16 m, surrounded by a bank 2.2 - 2.4 m thick, and about 0.2 m high. White quartz pebbles are visible in this bank on the W side. A modern cairn (trig. point) sits in the middle of the N side. The rectangular sheep-shelter shown on the OS 1:2,500 map is no longer obviously present. A similarly sized enclosure joins the E end of this enclosure, but the enclosing wall is much slighter (1.3 m wide) and it may be of a later date.	Prehistoric	SH5498738947
CN174	SM	Roman Bathhouse, Tremadoc	A Roman bathhouse, dated by excavation in 1908 to a period starting in the second century AD and continuing into the fourth. Six rooms were identified and two of them contained hypocausts. There are no surviving upstanding remains of this monument.	Roman	SH5573340140

Listed Buildings

NPRN No.	Grade	Name	Description	Period	NGR
4442	I	Capel Peniel	A classical chapel with a temple-like, gable-end E front of scribed roughcast painted cream, with side walls of coursed, quarried rubble stone in large blocks, and slate roof on projecting eaves. The 3-bay front has a Tuscan portico, angle pilasters and a pediment. Details within the pediment may be later and are in a different idiom: radial-glazed bullseye window incorporating rounded and pointed trefoils, flanked by large triangular panels. Entrances in the outer bays have fielded-panel doors, flanking a 9-pane hornless sash window. Above, the gallery is lit by three 12-pane hornless sash windows. In the 3-window side walls are 12-pane hornless sash windows in raised cement surrounds, lighting the main floor and gallery. In the rear, above lower additions and offset to the R side, is a 3-light round-headed window with Gothic glazing bars. The earlier of 2 parallel gabled additions at the rear was the original vestry. Its 2-storey S front is pebble-dashed, and in the lower storey are 2 small-pane sash windows in which the lower sash has been boarded over. In the upper storey is a 12-pane sash window to the L and two 2-light casement windows, replaced in earlier openings, to the R side. On the R side is a lean-to against the rear of the chapel, which has a replacement half-glazed door and window to its R. The gable end of the vestry is rubble stone. The later schoolroom projects beyond the N side wall of the chapel. Its N front has a boarded door and overlight to the L, and three 4-pane horned sash windows. In its W gable end are 2 fixed 3-light windows with thin Gothic glazing bars.	Post-medieval	SH5625939895
4777	I	Portmeirion Town Hall	Imposing 2-storey building of essentially C17 character. Of stuccoed brick and rubble construction with sandstone quoins, dressings and embellishments; tiled roof with slab-coped gable parapets and moulded stone eaves. F-shaped plan, with storeyed projecting wings to the centre and left (SE) side. In the centre wing is an early C17 Tudor-arched entrance with moulded label, accessed via 8 steps ascending up into the lower floor. Over this is a large mullioned and transomed 5 x 3 light window with 3-light returns and leaded panes. An heraldic stone cartouche with the Puleston arms is attached between the top of the entrance and this window; there are other heraldic plaques to both left and right of this projecting bay. The ground floor has mullioned windows to both left and right. Both bays have Jacobean entrances to their returns, with a connecting path running laterally from L to R. On the left, extruded in the corner of the SE bay, is a wide lateral chimney with old brick upper section; arched niche at the ground-floor level of the stack containing an oculus with oval ironwork grille (originally from the Old Bank of England). To the R on the first floor of the main elevation is a projecting semi-circular stone balcony supported on scrolled brackets; slightly convex iron balustrade. A small arched entrance with multi-pane glazed door leads onto it. Beyond this, on the far R, is an iron hanging sign with painted shield. The SE projecting bay has a window similar to that at the centre, with an arched opening underneath with chevron-boarded doors. Between the floors are 3 open rectangular lights, that to the centre with Jacobean strapwork surround; decorative iron hanging sign above. The SE and NW gable ends have similar large transmullioned windows each of 9 x 3 lights; the latter has a square louvred light above. The SE bay has a small hipped roof of red pantiles. The central bay is surmounted by a stone balustrade. Behind this, and completing the whole composition, is a low square tower with a round arched French window to the front and a glazed oculus above. The tower is topped by a shaped tiled roof terminating in a white square lantern surmounted by a copper crown and ball (their base an up-turned copper wash boiler). Adjoining the SE gable end, stepped-down and set back, is a single-storey modern extension with rendered elevations and a slate roof. This has small-pane French doors to the R and 3 similar tall windows to the L of its main (E) elevation. This block inter-communicates with the upper floor of the main building and faces a balustraded terrace on the E side. Adjoining the main block at the NW corner, and partly overlapping it to the rear, is the cafeteria building. This is a long single-storey block raised up on a balustraded terrace with sweeping ramped access points to the L and R; Rendered main (road-facing) facade with 5 large arches; of these the outer ones are glazed entrances, the remainder windows; small-pane glazing and rusticated stucco surrounds with decorative keystones.	Post-medieval	SH5891037133

NPRN No.	Grade	Name	Description	Period	NGR
4291	II*	Church of St Cynhaearn	Walls of rubble masonry of long flat stones, the nave and E chancel wall rendered. Modern slate roof. Short nave, N and S transepts, the roofs pitched below the nave eaves, and small chancel. Entrance by the W door, a simple pointed arch and a pair of framed and battened doors. Tall 2-light transomed windows in timber to the nave, including to the W gallery, and transepts, but 3 lancets at the E end. Stepped W bellcote.	Medieval	SH5258338787
4432	II*	Plas Tan-yr-allt	A late Georgian 2-storey villa comprising a main house near square in plan and incorporating an older building at the rear, and a later wing with service building set back on the L (W) side. Of blocks of quarried stone laid in regular courses, painted light blue. The main house has a hipped slate roof on projecting eaves and stone stack behind to the R. The 4-window front overlooks Tremadog, Traeth Mawr and Porthmadog and has a lean-to veranda with slate roof on iron posts, most of which are replacements, wrapped around the sides. The central recessed half-glazed door has Gothic glazing bars, under a fluted panel in place of a former overlight. On the L side is an added late C19 canted bay window with French doors. On the R side are French doors. The upper storey has 2-light casement windows. The R (E) end wall has a similar canted bay window with French doors, below a 2-light casement in the upper storey. The veranda is infilled with a boarded and glazed screen on the L side. Further R is the gable end of the earlier building, which has lower eaves than the main house. It has an added lean-to in the lower storey with a wide 4-light window and half-glazed door at the R end. Above it an early C20 4-light window under a deep bracketed hood. The short L (W) return wall of the main house, in front of the service wing, has a replacement window in the lower storey and 2-light casement window above, to the L of which is an external brick stack. Set back to the L is the 2-storey 4-bay service wing, under a hipped roof of graded slates on projecting eaves, and stone end stacks. The upper storey has 2-light casements similar to the main house. The lower storey has a lean-to veranda on rustic timber posts. The entrance R of centre has a half-glazed panel door under a 3-pane overlight. To the L are 12-pane hornless sash windows. To the R is a brick lean-to inside the veranda, with modern casement windows. Part of a former coursed stone garden wall abuts at the L end, beyond which is a lower 2-storey 2-window extension, formerly housing more service rooms, of whitened coursed rubble stone under a hipped roof. In the lower storey is a half-glazed boarded door and a link to a formerly detached and restored small stone outbuilding. The upper storey has two 2-light casements. At the rear is the original gabled building, of scribed roughcast, slate roof and stone stack to the R. Its central hipped half-glazed porch has a half-glazed door, to the R and L of which are wooden cross windows. Further R a similar 3-light mullioned and transomed window and further L a replacement window in an earlier opening. Above the entrance is a 2-light casement under a gable. This and a gabled 3-light casement window to its L have inserted vases in the gables. Further R is a 12-pane sash window turned on its side to slide horizontally. The 4-bay service wing projects behind the main house. It has a fielded-panel door to the L of centre under an overlight, flanked by 12-pane hornless sash windows and with a shorter 16-pane hornless sash window to the R end. In the upper storey are 2-light casement windows similar to the front, but the centre-R window is blind. Return walls have similar windows. The extension of the wing has a 2-light window upper L, two 2-light windows in the lower storey and a lean-to against the end wall.	Post-medieval	SH5662940456
4435	II*	Church of St Mary	Church, comprising W tower and spire, nave with shallow transepts and a chancel. Roughly dressed, squared and coursed Moel y Gest granite boulders; freestone dressings to late C19 windows. Slate roofs. Gothic style. 3-stage W tower, with angle buttresses. Entrance to church in arched doorway with voussoirs in W wall and modern outer doors; tower entrance up steps in N wall; 2-light window above (blind recesses to N and S), then moulded cornice before bell stage: this has splayed angles with incised crosses and paired foiled lancets in the principal faces, with clock or matching roundels above them, set below moulded cornice. Embattled parapet, then spire. This is rendered over brick, and has two tiers of lucarnes. 3-bay nave with moulded stone eaves cornice and shallow pitched roof. Windows are paired plate-traceried lights in freestone with voussoirs and hood moulds: blocked remains of lower earlier openings below them. Shallow transepts with close eaved roofs (the result of the 1958 restoration), and similar windows. Lean-to vestry with long porch to E, abutting S transept. Plate traceried E window of 3 lights, also with evidence of its lower predecessor.	Post-medieval	SH5626140065
4441	II*	Ty Nanney, including forecourt walls, gate piers and gate	A late Georgian house, 2-storeys with attic, a symmetrical composition comprising 3-bay main block with lower (N and S) 1-bay wings in line. Large roughly dressed blocks of quarried stone laid in regular courses, hipped slate roof on deep bracketed eaves, with stone end stacks, which have double V-shaped ends. Openings have lintels with simple hoodmoulds. The central entrance has an added metal open trelliswork porch under a swept pyramidal roof, and door with 2 round-headed panels. Windows are 16-pane horned sashes in the lower storey	Post-medieval	SH5624439962

NPRN No.	Grade	Name	Description	Period	NGR
			and 9-pane horned sashes in the upper storey. The wings each have a 12-pane hornless sash window in the lower storey and blind upper-storey window with painted glazing bars. A garden wall is attached at the L end. In the L (S) end wall are French doors in the lower storey and 12-pane horned sash window above. In the rear the S wing has an added 1-storey lean-to with glazed door to the L and paired 16-pane horned sash windows to the R. The upper storey of the wing has a small-pane window on the L side. A lower 2-storey gabled rear wing has an end stack. In the S side wall it has a 24-pane horned sash window in the lower storey, similar 16-pane window under a gable in the upper storey and small inserted window to the R. The opposite (N) wall has a former 16-pane horned sash window, of which the lower sash is missing and boarded over. To the L of the rear wing is a lower 2-storey lean-to against the main range, with half-glazed panel door, and small-pane windows in each storey replaced in earlier openings. Further L is a 1-storey half-hipped lean-to against the N wing, with 12-pane horned sash window. The N end wall has a 12-pane hornless sash window in the upper storey, boarded-up lower-storey window and on the R side another window boarded up that was converted from a doorway. Coped forecourt walls are swept down from the front of the house to the street. The front has low central gate piers with wooden fretwork gate. On the R side, separated by a vertical joint and therefore of different date, are taller square gate piers for vehicular access.		
4449	II*	Tremadog Manufactory	A 5-storey 5-bay mill of coursed rubble stone in large quarried blocks, a shallow hipped roof of corrugated metal, and stone end stacks. Openings have wedge lintels and have been boarded over, except the upper L-hand window which is partially blocked. In the lower storey are 4 doorways and a window at the R end. In the R end wall is the shadow and stub wall of a former gabled projection. In the 2-window L side wall, above the adjoining Bronhaul, are windows in the 3rd, 4th and 5th storeys, similar to the front but smaller. The rear is only 3 storeys high as the ground level is much higher. In the central bay are double boarded doors under an overlight now boarded up, heightened from an original opening and with a timber lintel. To its L is a recessed boarded door with window, and a window in the L end bay. To the R of centre is a window inserted into an original but blocked double doorway, and further R a similar blocked doorway in the R end bay.	Post-medieval	SH5638240320
4452	II*	Market Hall (Siola)	Market hall in classical style. 2-storeys 5-bays, of roughly dressed blocks of quarried stone laid in regular courses, a hipped slate roof, which is on projecting bracketed eaves to the front, and stone end stacks. In the arcaded lower storey are tall round-headed arches, originally open. The end bays are part infilled with rubble stone and 3-light wood-framed windows. The central bays are infilled with glazing and with central doors. Arches have an impost band, keystones of reconstituted stone painted white with a variety of moulded heads. In the spandrels are fluted medallions painted white with foliage bosses, probably of cast iron. The spandrel of the L end bay has a small 4-pane window. A freestone plat band is painted white. In the upper storey are tall 24-pane horned sash windows renewed in original openings under deep bracketed hoods. The ground level is higher at the rear, which has stone steps to a rear porch at upper-storey level, and to its L a stone porch at intermediate level.	Post-medieval	SH5617140190
4623	II*	Church of St Beuno	The building contains much fabric of the C15 including the roof structure, and restored in 1851-3 and later. Walls plastered above a boarded dado. Roof constructed with five/six C15 knee-braced trusses, strengthened in the C19 restoration with iron ties, and having a boarded panelled ceiling over the chancel bay, with inscribed wall plate cornice all round internally. Fittings: Jacobethan style arcaded chancel screen; octagonal panelled pulpit of 1887. Lectern of oak, in the form of a large angel with spreading wings, carved by Mrs Constance Mary Greaves, an aunt of the architect Clough William Ellis; similarly the font cover in the form of a winged eagle. Glass: N window by Ward and Hughes, 1896, to Marian Owen of Ymlylch, S Chancel window, a strong geometric pattern by Meyer of Munich, to Elinor S Huddart. In the nave 3 further Huddart memorial windows. In the W window under the bellcote, some good early C16 yellow-stain glass depicting the head of a bishop, vestments with the inscription ORATE LLYN QUI:JAIOC:FENESTRA(m) [expanded as: Ianit pro Meredyt a vean ap Robert et Margerta verch Maurice uxor ejus, qui haec fenestra fecerunt]. He was the grandfather of Sir John Wynn and had 5 wives and 26 children, and died in 1525 Monuments: against E wall, left of the altar, (a) a white marble or alabaster draped cartouche by R Wynne (fecit) putti under the drapes, and coloured arms and crest at the top connected by hanging garlands. To Sir Robert Owen of Clenennau, d.1666, deputy sheriff, Sergeant Major General of the royalist troops in N Wales, who was sentenced to death but reprieved. Below, winged putto, and inscription Sr R O 1680. Long inscription in Latin explaining that John Owen, a soldier, had 'undoubted and evident loyalty to his King, the Blessed Martyr Charles I', and for whom 'the power of God	Medieval	SH5413040295

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			turned back the sharp edge of the Executioner's axe' and that 'Charles II had restored both himself and his own'. On the N side of the Altar, (b) white marble tablet on slate, panel between carved pilasters, to Nathaniel Matthew of Wem and Pakenham, d.1867; (c) on the N wall, a similar monument to last, by L PooL, to May Matthew, d.1852; (d) bronze cartouche to Richard Methuen Greaves of Wern, d.1942; on the S wall of the nave, (e) upright marble panel on slate, round crenel over, by Barker of W Brompton, to Elinor Sophia Huddart of Brynker; (f) carrara marble sarcophagus tablet to Joseph Huddart, aged 9; (g) Sir Joseph Huddart of Bath, d.1841, and son Augustus added; (h) tablet in Carrara marble to Ralph Huddart, son, d.1839. Also (i) tablet to William Maurice of Clenenay, d.1622, and (j) Emanuel Annwyl, d.1646. On the nave N wall a monument to Flt. Lieut Tony Knowles. At the rear of the church a large hatchment of 1870 with arms of Jones-Parry of Madryn, Lleyn, set in a lozenge, and their motto 'Nec timet nec tumet'.		
4626	II*	Wern Manor	Jacobethan style 2-storey and attic country house built of snecked local rubble stone with buff sandstone dressings; slate roofs with mostly stone chimney stacks and some rooflights. Ovolo-moulded, mullion and transom windows throughout with leaded glazing. The main front is to south and is deliberately asymmetrical; the design includes a shaped gable over the end of the main entrance hall, flanked by a deep, 3-window, bow to the right and an intricately detailed porch to left which projects forward from the shaped gable of the hall range. The gabled bay has finials and 5-light window to ground floor with cornice, the first floor above being jettied on brackets. The swept roof bow has 2- and 3-light windows and the masonry appears older indicating retention of earlier fabric in this wing. The porch has a round-arched entrance and its rich Jacobethan detail includes a parapet with obelisks on bracket plinths and divided by semicircular crenels; rosettes to the frieze and strapwork-derived carving to the paired pilasters; the parapet is inscribed RMG and ANNO DOMINI MDCCCXCII. The Saloon range on the left has strapwork pierced parapet with ball finials and large squared bay with twinned 3-light, double-transomed windows; this range adjoins the gable end of the south range of the service courtyard. The long E front has a lateral chimney breast and freestone stack. The gabled right hand side has two projecting gabled bays towards front and another to extreme end at rear. The 3-window left hand bay lighting the staircase has been added in the remodelling; it is broader and deeper with ogee-headed top lights below an attic roundel and has side doorway dated 1892; downpipe dated 1894 to right. The next gabled bay, which is 1-window, is original below the gable - see the massive quoins; the masonry changes at this point again define the extent of the pre-existing house. The wing steps down beyond and ends with another 1-window gabled bay, including tripartite ground-floor window. Gabled rear, stepping in and out with projecting cross ranges and lean-tos; open yard to right (west) facing service courtyard. One central gable has paired 16-pane sashes; cast-iron-bracketed and glazed hood to side entrance. Narrower gable to right containing secondary staircase and added squared bay to next gable, retaining leaded and coloured glazing to the lower panes on both floors. The rear is completed by a snecked rubble projecting gable with 3-light window lighting the Saloon. Stepped down from that and closing the south side of the service courtyard is a 2-storey, 5-window rubble range of staff accommodation with 4-pane horned sashes and one round-arched doorway; similar glazing to south side. The lean-tos and attached outbuildings, some with hipped roofs, link with boundary walls that divide the house from the service courtyard; includes crow-stepped and arched gateways and retains well-preserved pyramidal roofed game-larder to left (east) which is tiled internally.	Post-medieval	SH5427739927
4852	II*	Plas Penrhyn	Villa-scale Regency country house with sub-medieval origins; 2 storeys. Of stuccoed rubble with double-pile plan, the E wing being primary; slate roofs with end chimneys. The main (W) elevation has 16-pane sashes, three to the first floor and two to the ground floor. Fine full-length Regency verandah returned onto the sides, with hipped slate roof and flat, pierced wrought iron supports (Porthmadog foundry); slate-flagged terrace. The entrance is to the N return, via a part-gazed door with good Georgian fan above; this within the returned verandah. 12-pane sash to the R of the entrance with 16-pane sash to the first floor above, and a blind window to its R. The S return elevation is asymmetrical and has 12- and 16-pane sashes on both floors. The primary range has a near-central entrance to the 3-bay E elevation, with boarded door within simple single-storey porch; 16-pane sashes. Further entrance to the far R with 12-pane sash above and flush lean-to beyond.	Post-medieval	SH5905137922
4868	II*	Campanile (Also Called The Bell Tower)	Imposing square, stone tower in Mediterranean baroque style; of rubble construction with rough-squared quoins. The tower is of five main stages of which the upper 2 are rendered; the lower 3 have a slight taper. Arched openings to the lower stage with two further arched entrances leading off from an external parapet stair on the second stage of the W face, and an intermediate mezzanine level below; these with recessed boarded	Post-medieval	SH5899037146

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			doors. There are open-pedimented arches to the second stage on the N and S sides with shallow stone balconys, and arched openings with balustrading to the third stage above. On the E and W sides of this stage are clock faces. The rendered upper stages are slightly recessed and have angle buttresses. The lowest of these is the bell chamber. This has round-headed arches to each face, those on the W and E flanked by Ionic columns. The fifth stage has vertical window openings with external shutters and balutraded sections below. At the top is an octagonal stone cupola with voluted corners and large vertical openings to each face. This has a sloped copper roof with surmounting golden ball finial and weather vane.		
4878	II*	The Colonnade	Imposing single-storey colonnade in Georgian Gothic style, with balustraded parapet above; of Bath stone ashlar construction. There are 16 slender columns with a semi-circular projecting bow to the centre of the composition. Solid pavilions at both ends with archways with depressed pointed arches (that to the L blind). Balustrades over, pierced to the sides, and with turned balusters to the centre. To the L and R there are stone ogee domes over the pavilions with ball finials. Raised rear wall behind the central projection, surmounted by 3 large urns. Within, in the centre of the rear wall, is a stone ogee arched niche with painted northern-Renaissance style angel sculpture and swagged flanking cartouches. The Colonnade is on a revetted rubble plinth with a flight of rubble and slate steps leading up to it from the lawn to the S of the Central Piazza.	Modern	SH5898037184
5234	II*	The Cob	Substantial rubble-built embankment approximately 1.5 km long, consisting of a lower (road) section and a higher (rail) section. The higher part of the embankment is approximately 6m tall with single track railway and flanking footpath; the later and much lower 1836 embankment has narrow twin-track roadway. The seaward (S) side is heavily buttressed by boulders gradually sloping down to the water; the buttressing on the (N) landward side is less substantial and is predominantly a grassed bank. Rubble slate-stone parapets, approx. 0.5m to 1m high (except to the seaward side where it is concrete) - masonry breaks and changes in the coping indicated that the wall between the higher and lower sections has been heavily repaired. At the Porthmadog end the parapet of the higher embankment terminates opposite No. 6 Tros Y Bont Terrace and beside the curve into the railway station. On both sides of the higher embankment at the eastern end there are steps down to the shore and the roadway. Beyond, the railway tracks curve NE or continue into the Boston Lodge Workshops. Beneath the curve is a semicircular arched recess, now blocked but originally serving as a passage beneath the railway; portal like entrance with coursed masonry and voussoirs. At the Boston Lodge end the list terminates at the gated steps between the railway line and the road. The western part of The Cob is in Dwyfor District and Porthmadog Community.	Post-medieval	SH5802138037
15355	II*	Ystumllyn	The original building is aligned NE-SW, and is a 2-storeyed, large 2-unit house, with central service room, extended to the NW with a wing housing the stair hall and a further principal room. Rough slate rubble construction, and modern slate roof, with plain overhanging eaves. Rear wall and right hand gable stacks. Main range faces SE, with low and narrow central entrance in roughly semi-circular cyclopaean archway. This aligns with a further entrance in the rear wall (the present entrance). 2 storeys, 4 irregularly spaced 16-pane sash windows to first floor, roughly aligned with lower windows (one on each floor a C20 insertion). Narrow 12-pane sash window alongside doorway, and paired 16-pane sash windows to its right (formerly a tripartite sash window). Stack on rear wall of main range, with 16-pane sash windows on each floor alongside it. Similar windows in gable end. Wing also has 2x16-pane sash windows on each floor in its SW elevation, with doorway to right of centre and single sash windows to right of entrance on each floor, lighting the staircase. Projecting side wall stack to NE elevation of wing, with cellar entrance alongside it, and doorway up steps towards the centre, with panelled door in moulded architrave, inserted c1946; 16-pane sash window above. Lower extensions to NE of main range, terminating in a higher gabled cross range (probably formerly a stable and loft), with central door and flanking windows in NE elevation, and external staircase to loft doorway in NW gable. The courtyard is enclosed on the NW side by a wash house: single storeyed, with door and single 6-pane sash window to SE elevation, and tall stack on gable end.	Post-medieval	SH5186238784
15356	II*	Former Stables	The original building is aligned NE-SW, and is a 2-storeyed, large 2-unit house, with central service room, extended to the NW with a wing housing the stairhall and a further principal room. Rough slate rubble construction, and modern slate roof, with plain overhanging eaves. Rear wall and right-hand gable stacks. Main range faces SE, with low and narrow central entrance in roughly semi-circular cyclopaean archway. This aligns with a further entrance in the rear wall (the present entrance). 2 storeys, 4 irregularly spaced 16-pane sash windows to first floor, roughly aligned with lower windows (one on each floor a C20 insertion). Narrow 12-	Post-medieval	SH5187138801

NPRN No.	Grade	Name	Description	Period	NGR
			pane sash window alongside doorway, and paired 16-pane sash windows to its right (formerly a tripartite sash window). Stack on rear wall of main range, with 16-pane sash windows on each floor alongside it. Similar windows in gable end. Wing also has 2x16-pane sash windows on each floor in its SW elevation, with doorway to right of centre and single sash windows to right of entrance on each floor, lighting the staircase. Projecting side wall stack to NE elevation of wing, with cellar entrance alongside it, and doorway up steps towards the centre, with panelled door in moulded architrave, inserted c1946; 16-pane sash window above. Lower extensions to NE of main range, terminating in a higher gabled cross range (probably formerly a stable and loft), with central door and flanking windows in NE elevation, and external staircase to loft doorway in NW gable. The courtyard is enclosed on the NW side by a wash house: single storeyed, with door and single 6-pane sash window to SE elevation, and tall stack on gable end.		
15357	II*	Wash House	The original building is aligned NE-SW, and is a 2-storeyed, large 2-unit house, with central service room, extended to the NW with a wing housing the stairhall and a further principal room. Rough slate rubble construction, and modern slate roof, with plain overhanging eaves. Rear wall and right-hand gable stacks. Main range faces SE, with low and narrow central entrance in roughly semi-circular cyclopaean archway. This aligns with a further entrance in the rear wall (the present entrance). 2 storeys, 4 irregularly spaced 16-pane sash windows to first floor, roughly aligned with lower windows (one on each floor a C20 insertion). Narrow 12-pane sash window alongside doorway, and paired 16-pane sash windows to its right (formerly a tripartite sash window). Stack on rear wall of main range, with 16-pane sash windows on each floor alongside it. Similar windows in gable end. Wing also has 2x16-pane sash windows on each floor in its SW elevation, with doorway to right of centre and single sash windows to right of entrance on each floor, lighting the staircase. Projecting side wall stack to NE elevation of wing, with cellar entrance alongside it, and doorway up steps towards the centre, with panelled door in moulded architrave, inserted c1946; 16-pane sash window above. Lower extensions to NE of main range, terminating in a higher gabled cross range (probably formerly a stable and loft), with central door and flanking windows in NE elevation, and external staircase to loft doorway in NW gable. The courtyard is enclosed on the NW side by a wash house: single storeyed, with door and single 6-pane sash window to SE elevation, and tall stack on gable end.	Post-medieval	SH5185038794
21541	II*	Clenennau	Built of rubble stonework, with slated roofs. Two storeys, 'L'-plan; the 3-bay front rebuilt c1880, symmetrical with a central 4-panelled door and plain overlight, and 3-light timber mullioned and transomed windows to both floors. Gable stacks. The first bay of the rear wing adjoining the main range is an addition of the mid C17, probably built by Sir John Owen. Door facing the farmyard, and small paned timber windows. Similar windows to the N gable end set near the outer corners of the building.	Medieval	SH5320442455
83132	II*	Gateway to the Church of Saint Mary	Gateway to church-yard. Coade stone construction. An eclectic composition, loosely late gothic form, but with an extravagant theatrical decorative vocabulary combining grotesque and exotic with conventional patterns. Four-centred archway between octagonal embattled piers, every surface enriched. On the piers, this enrichment comprises tiers of blind traceried panels ornamented with foliage or grotesques, above simpler panelled bases. Tiered frieze above, with grotesques etc., and foiled lozenges. Columns are surmounted by turrets, enriched at angles by elephants' heads (minus their trunks). Frieze band continues over archway, vestigial pedimented centrepiece, foliate trails, foiled lozenges, crockets, and crenelations.	Post-medieval	SH5628240038
85406	II*	The Cob (partly in Penrhyndeudraeth)	A substantial rubble-built embankment approximately 1.5 km long, consisting of a lower (road) section and a higher (rail) section. The higher part of the embankment is approximately 6m tall with single-track railway and flanking footpath. The later and much lower 1836 embankment has a narrow double carriageway. The seaward (S) side is heavily buttressed by boulders gradually sloping down to the water. The buttressing on the (N) landward side is less substantial and is predominantly a grassed bank. Parapets are of rubble slate-stone, approximately 0.5m to 1m high (except to the seaward side where it is concrete). The parapet between roadway and cycle track is of stone from Dyffryn Nantlle, replacing a wall of stone from Blaenau Ffestiniog. Masonry breaks and changes in the coping indicated that the wall between the higher and lower sections has been heavily repaired. At the Porthmadog end the parapet of the higher embankment terminates opposite No 6 Tros Y Bont and beside the curve into the railway station. On both sides of the higher embankment at the E end are steps down to the shore and the road. Beyond, the railway tracks curve NE or continue into the Boston Lodge Workshops. Beneath the curve is a semicircular arched recess, now blocked but originally serving as a	Post-medieval	SH5746738294

NPRN No.	Grade	Name	Description	Period	NGR
			passage beneath the railway. It has a portal-like entrance with coursed masonry and voussoirs. At the Boston Lodge end the Cob terminates at the gated steps between the railway line and the road.		
4211	II	Carreg-felin	Built of stone rubble, the added wing rendered and pebble dashed, and rendered linings to openings. Slate roofs with tall chimney stacks with drip courses. Two storeys and attic. The main range has a central doorway to a former stair hall, now open to the gable parlour, and a main living room. C19 4-pane sash windows, but a tripartite paned sash to the living room. Two gabled dormers to the main range. The wing is also of 3 bays, with gable stacks, the first bay passing across the gable of the earlier build.	Post-medieval	SH5338539831
4277	II	Ereiniog	Built of uncoursed stone with massive stone-on-edge quoins, and a slate roof (undergoing replacement at the time of inspection). 'L'-plan, comprising a N-S wing at right angles to the cart road, and a later E-W wing at right angles attached to the W side. The main range has its primary elevation facing E; asymmetrical, with off-centre part-glazed door and late C19 4-pane sliding sash windows, and 3 similar smaller windows above. The range attached to the rear encloses a walled yard in the SW angle. It is also of 3 bays, 2 storeys, with a blocked central door and C20 windows, the upper floor openings having large timber lintels. On the N side, three 4-pane sashes, with oversailing stone lintels to the ground floor openings. A single-storey cathouse continues the main range to the N, also of the C17 and with a similar roof structure. Massive chimney at the S end of the earlier range with weather drip courses.	Post-medieval	SH5528343340
4285	II	Lychgate at the Church of St Beuno	The gate is set in the churchyard wall. It is built of rubble stonework with a slate roof between coped gables on kneelers. Five external rounded steps raise the path to the through passage, closed externally by boarded timber gates with strap hinges set in an outer rebate, the gateposts rising to a high cross transom and inserted plank arch. Within the passage, timber seats each side. On the SW gable end, a slate carrying an heraldic displayed eagle on a lozenge, and the inscription Mrs A M E Jones / O'r Parkiau A Rodd / Yr Adeilad Hon / 1698 / Pam Oedd / H Jones Rector / W Wyne Esq R Iohn Wadenied.	Post-medieval	SH5415240300
4286	II	Bryn-y-wern	Rubble slate masonry in long pieces, slate roof. One storey and attic, 4 bays. The house has a blocked wide door at the centre of each side, with a label moulding over a segmental arch composed of long slate voussoirs. A 12-pane sash inserted in the recessed blocking stonework. To each side, a boarded door and 12-pane window on the ground floor, and two raised dormers with 9-pane sashes to each former dwelling, lighting the first floor. Coped gables, and stone chimney stacks. Outbuildings attached to the rear.	Post-medieval	SH5421740109
4292	II	Barn at Clenennau	Built of boulders and rubble stonework, with a slate roof. Central opposed doors, that to the W with a lower lintel, and a small door at the N end. Long ventilation slits to the barn section. At the S end, the upper floor granary reached by a substantial external stone stair on the E side, and door to the lower room in the gable end.	Post-medieval	SH5317242477
4403	II	Church of St Michael and All Angels	A single-chamber parish church with detail in simple C19 Gothic style, of rubble stone with renewed slate roof behind coped gables. An earlier gabled W bellcote houses a single bell. The pointed W door, another feature to have survived the 1888-9 restoration, has thin voussoirs. The nave has 2 pointed windows in N and S walls, including a pair on the S side. The chancel has a 2-light geometrical E window and cusped S window.	Medieval	SH5344437858
4404	II	Gelli Faia	A Regency villa near square in plan of 2 storeys of whitened roughcast walls with Tuscan pilasters articulating the bays, and pyramidal slate roof on bracketed eaves, with central rendered stack. In the lower storey is a continuous lean-to (similar to Plas Ynys Tywyn, built for Madocks' engineer John Williams). The W entrance front has unequal bays in the lower storey, articulated by pilasters. The entrance bay is offset to the L of centre and has a half-glazed panel door with Gothic pointed side lights, and renewed glazed in doors in the outer bays, of which the R-hand is wider, in openings designed for French doors. The upper storey has two 2-light casement windows. In the S garden front are 2 similar upper-storey windows, and in the lower storey a flat-roofed extension of the 1980s, with wide central bow window, flanked by 3-light windows. The E front also has 2 upper-storey windows, replacement glazing and doors in 2 openings for French windows, and an inserted window on the L side in the flat-roof extension. The higher service wing on the N side is 2 storeys with attic, under a half-hipped roof. Its W end wall is set back from the entrance front of the main house. It has 16-pane sash windows in lower and middle storeys and a 9-pane sash window in the attic. On its R side is a lower 2-storey projection, with small-pane sash windows in the N wall and 2-light window over a later C20 gabled addition at right angles. The N face, of rubble stone, faces a sheer cliff face and has an inserted upper-storey window and dormer on the L side A narrow single-pitched projection under a corrugated iron roof has a round-	Post-medieval	SH5663738513

NPRN No.	Grade	Name	Description	Period	NGR
			headed door and vents to a pantry or game store. On the E side the wing projects beyond the main house. It 2-window E wall has replacement windows in earlier openings, and cross window in the attic, and in the short S wall a small-pane window in the upper storey and paired 8-pane sash windows to the attic under a gable.		
4405	II	Gatws	A double-fronted 1½-storey lodge of coursed stone, a roof of fishscale slates incorporating bands of octagonal-pattern slates, on projecting eaves and with stone end stacks. The central entrance has a boarded door with overlight and is flanked by 2-light casement windows in original openings. In the L gable end is a 2-light casement window under a hood mould, with bullseye window in the gable, both replacements in original openings. Set back on the R side is a projection under a single-pitch roof concealed from the front by a coped ridge, which has a 2-light window. The rear has a doorway to the L, then a 2-light window in an original opening, an inserted window, and another replacement window to the R. The rear roof slope has 2 added skylights.	Post-medieval	SH5667938796
4406	II	Pen-y-clogwyn, including attached farm building	A 1½-storey farm house of whitened rubble stone, slate roof and stone end stacks, larger and original to the R and later to the L. The central entrance has a replacement half-glazed boarded door. It is flanked by replacement windows in earlier openings, of which the R hand is at a higher level due to the sloping site. Three late C19 gabled dormers have replacement 2-light casement windows and slate-hung sides. Set back to the L is a lower outbuilding, probably a cow house originally, of whitened stone and slate roof. It has 2 replacement boarded doors, at higher level on the R side.	Post-medieval	SH5656338293
4407	II	Greaves Wharf and Oakleys Wharf	The wharf is 180m long NE-SW, built of battered walls of large blocks of dressed stone laid in regular courses, with later steel ladders and iron mooring rings. It has steel railings set back from the edge, except by the harbour-masters office (which is the boundary between Greaves and Oakleys Wharves). At the SW end is a return wall facing a wide slipway (known as 'The Beach'), which has a later stone parapet. At the NE end the wharf abuts Britannia Bridge.	Post-medieval	SH5693338378
4408	II	Snowdon Wharf	At the NE end, by Britannia Bridge, the wharf is of bedrock, but an L-shaped section, representing the earliest section of wharf, and then a later 130m long NE-SW section are of battered walls of large, roughly dressed stone blocks laid in regular courses. The NE end has a later stone parapet. At the angle S of the Ffestiniog Railway station the road is carried over the angle on a concrete beam. Here the earlier section is recessed at the end and has stone steps. At the SW end is a short return wall into the bank.	Post-medieval	SH5702038316
4409	II	Slate Wharf	A long wharf approximately 650m long and oriented roughly N-S, of battered coursed stone in large blocks, with stone steps at the N end by the Madoc Yacht Club, and a slipway at the S end.	Post-medieval	SH5685637958
4410	II	Brecon Place and Brecon House	A late Georgian 3-bay house of 2 storeys with basement. The front is scribed roughcast painted white, beneath a slate roof on bracketed eaves, and stone end stacks. The central entrance, reached up steps, has a fielded panel door of which the top 4 panels are now glazed, beneath a radial-glazed overlight. Windows are 20-pane hornless sashes in the lower storey, placed above basement lightwells. The veranda stands on wooden posts, has Tudor arches with diamond latticework to the spandrels, and a plastered segmental tunnel vault into which 3 skylights have been added. In the upper storey are 16-pane hornless sash windows under hood moulds. The rubble stone L gable end (originally intended to be a dividing wall) has 2 external stacks. The roughcast rear elevation, advanced slightly beyond the rear of the adjoining Greenways, has a 2-storey wing on the R side, continuing as a lower 2-storey former coach house. The main house has two 12-pane hornless sash windows in the upper storey and a 20-pane sash window lower L. On the R side is a half-glazed panel door under an overlight. The 2-window rear wing, facing the yard, has 12-pane hornless sash windows in the upper storey and a 20-pane hornless sash window lower L. In the 2-window former coach house 12-pane sash windows are retained in the upper storey. In the lower storey former wide lintelled openings have been infilled with modern windows and a lean-to entrance porch in the R-hand to the rear dwelling (Brecon House).	Post-medieval	SH5681238600
4411	II	Plas Ne	A 2-storey 3-window range with a roughcast front painted green and with smooth-rendered architraves, and slate roof with added skylights. Originally 3 cottages with windows to the R and entrances to the L, only the centre and L doorways have survived, both with replacement half-glazed doors. Windows are round-headed iron-framed windows with small-pane radial glazing, probably cast at the Britannia Foundry. Small pivoting lights within the windows have been removed. The rear has replacement windows.	Post-medieval	SH5719038463

NPRN No.	Grade	Name	Description	Period	NGR
4412	II	Bridge Cottage	A double-fronted single-storey cottage of L-shaped plan. Its walls are slate-hung. The hipped slate roof is on a wooden cornice with chevron frieze, moulded finials and slate-hung stacks to the ends. Walls, roof and stacks incorporate bands of hexagonal slates. The front has a central low gable over the porch, which has a hipped lean-to roof, and a replacement panel door in its R side wall. The front has a 5-light window with plain wood mullions, and the L side a similar 2-light window. Windows in the main range are replacements in original openings. A lower extension on the R is in similar materials and has a hipped roof, a small replacement window to the front, and a replacement half-glazed door under a gable to the side wall. Behind this extension, hidden by an attached garden wall, is a later flat-roof extension. In the L side wall, facing the river, is a 2-pane sash window on the L side where the building was extended.	Post-medieval	SH5710438485
4413	II	Harbour Side, including attached gate piers and wall	A Regency 2-storey 2-bay house of coursed stone painted white, hipped slate roof on projecting eaves, a stone ridge stack to the L of centre and stone stack behind on the R side. Windows are 9-pane hornless sashes (renewed on the L side) in the lower storey and 2-pane sashes above. The entrance is in a lean-to porch set back on the R side. It has a door of 2 round-headed panels, and has an overlight incorporating coloured glass and a ship in etched glass. Behind the porch is a lower 2-storey gabled wing with end stack and replacement window to the rear. The L side of the main house has a blocked window in each storey, under a plain hood mould in the lower storey. Attached to the R of the porch is a gateway, of square coursed stone piers and replacement doors. Behind the R-hand pier is a contemporary wall of local stone, although much rebuilt.	Post-medieval	SH5688238280
4414	II	,2 Pencei (Cornhill),Porthmadog ,Porthmadog,GWYNEDD	Belongs to a group of 2-5 Pencei (Cornhill). A 4-storey 4-bay block of large blocks of slate-stone laid in regular courses, slate roof, ridge stack to the L of centre and to the L-hand ridge. The front has unequal outer gabled bays (Nos 2 and 5). The L-hand (No 2) has replacement windows, larger in the lower storey, and the entrance offset to the R with half-glazed door and side panel, replacing a larger original door. No 3 has a replacement half-glazed door and overlight on the R side, and 2-pane sash window to its L. The 2nd storey has a replacement window but 3rd and 4th storeys retain earlier 2-pane sash windows. No 4 has a panel door and overlight, with 16-pane hornless sash window to its L. The 2nd and 3rd storeys have similar windows and the 4th storey a shorter 12-pane sash window. No 5, under the R-hand gable, has a half-glazed panel door with 2-light small-pane window to its L. The 2nd, 3rd and 4th storeys all have 18-pane sash windows in former loading doors, with a pulley block over the upper-storey window. The R end wall (No 5) retains the shadow of a former 1-storey gabled building, and replacement 2-light windows in 2nd, 3rd and 4th storeys. The 2-window L end (No 2) has replacement windows and a lean-to with blocked window facing the front. At the L end is a garage with double doors under a steel lintel.	Post-medieval	SH5686638311
4415	II	Ty Toronto	A 3-bay commercial and industrial building of 4 storeys and attic, of large blocks of dressed slate-stone laid in regular courses, slate roof and end stacks with slate caps. The central bay is brought forward under a gable with bracketed eaves. In the lower storey the wall is roughcast, and has windows replaced in original openings. It has a shallow recessed small-pane bow window in the central bay, 2 windows in the L-hand bay (of which the R-hand was originally a doorway) and half-glazed door with overlight and a window in the R-hand bay. The 2nd, 3rd and 4th storeys have 2-light windows in the outer bays and former loading doors converted to windows in the central bay. Beneath the apex of the central bay is the infilled former aperture for a pulley block. Two wide flat roof dormers added in the later C20 have 3-light windows. The rubble-stone L gable end incorporates large slate-stone blocks and is laid in rough courses. It has replacement windows in the centre, and on the L side has a doorway under a canopy and a 2-light window above it. The R gable end, also of rubble stone, faces Grisiau Mawr and has a glazed door at 2nd-storey level, and replacement windows in the 3rd and 4th storeys. The rear has 3 raked half dormers and a 3-light roof dormer to the L similar to the front.	Post-medieval	SH5685638340
4416	II	Grisiau Mawr (steps between Pencei (Cornhill) and Ffordd Garth)	Three steep contiguous flights of steps with renewed concrete treads over the original slate. The steps are between garden walls and end walls of the abutting buildings. Only at the bottom is there an iron handrail.	Post-medieval	SH5684138344
4417	II	Nos.7,8,9 & 10 Cornhill, Gwynedd,	A 3½-storey 2-window house roofed in the same range as Nos 8-10 but separated from No 8 by a full-height vertical joint. Of large slate-stone blocks laid in regular courses, slate roof with added skylights, and stone stacks. Openings are offset towards the R. The entrance on the R has a replacement half-glazed door in a slightly wider original opening. Windows are replacements in original openings. In the L gable end, facing the steep Grisiau Mawr, are replacement windows in each storey, of which the middle-storey window was originally	Post-medieval	SH5685838355

NPRN No.	Grade	Name	Description	Period	NGR
			a doorway. A full-height vertical joint separates the main range from an added lower rear wing built into a steep bank. Facing Grisiau Mawr it has a doorway converted to a window, a replacement window further L, and the entrance at 3rd-storey level by an inserted panel door.		
4418	II	Nos.11,12,13,14 & 15 Cornhill, Gwynedd,	Built as a pair with No 12, No 11 is a late Georgian 2-window house of 2½ storeys and basement, of large squared slate-stone blocks laid in regular courses (now outlined with heavy cement pointing), slate roof and stone stack shared with the adjoining and taller No 10. To the R side are steps, rebuilt in cement and shared with No 12, to the entrance raised above street level, which has a fielded-panel door and overlight. Windows are 16-pane hornless sashes. The basement is cement-rendered. It has a central boarded door and replaced small-pane window to its L.	Post-medieval	SH5684938375
4419	II	Cornhill Cottage, including revetment walls and steps	Belongs to a group of Cornhill Cottage and Limekiln Cottage. A pair of 2-storey 2-window houses of large slate-stone blocks laid in regular courses, and slate roof with 2 later small roughcast stacks. Cornhill Cottage on the L side has a replacement glazed door and replacement 2-light casement windows in original openings. Limekiln Cottage has a former doorway to the R, now a window, an enlarged modern window to the L and in the upper storey 2-light casement windows in original openings. The entrance is in an added rear wing of pebble-dash painted white, and has a modern glazed door. On the L side of Cornhill Cottage, at street level, is a boarded door and overlight to the yard behind No 15 Cornhill. Two revetment walls retain the steep ground from street level to the entrances of the cottages, and are of coursed unworked slate-stone. The lower revetment has a concrete coping, and gateways, with slate orthostats, leading to slate steps up to the houses. Return walls on both sides have coping courses.	Post-medieval	SH5683038403
4420	II	Tafarn Pencei Cafe Bar	Built in a range with No 19 Cornhill, Nos 17-18 are a pair of 2-window 2½-storey houses converted to a single premises, of large slate-stone blocks laid in regular courses, slate roof, of which No 18 on the R side is lower, and stone stacks. Both units have replacement glazed doors on the R side, and a 12-pane horned sash window. The upper storey has 4-pane horned sashes in 2 pairs. The L-hand (No 17) has a large added gabled roof dormer, and the R side (No 18) has 2 added skylights. On the L side is a 1-storey projection with balcony above, on the site of No 16. The L gable end, formerly a dividing wall with No 16, is rendered and painted cream and has a glazed door opening to the balcony. The rear has a 2-storey gabled extension to the L side (No 18), a flat-roof addition to the R side (No 17), which also has a raised slate-hung upper storey.	Post-medieval	SH5684438421
4421	II	NO.20 CORNHILL,,,,,GWYNEDD,	Built in a range with No 21 (and Nos 1-3 Lombard Street), a 3-storey 2-window house of large slate-stone blocks laid in regular courses, slate roof and stone stack to the L. Openings are offset to the R and have raised cement-render surrounds. On the R is a recessed half-glazed door. Windows are replacements in original openings. The rear is pebble-dashed and has replacement windows.	Post-medieval	SH5686538422
4422	II	Madoc Yacht Club	A 3-storey house with 2-storey former newsroom set forward on its R side and a smaller 1-storey range set forward on the L side. The 3-window house is of coursed local slate-stone in regular squared blocks, with slate roof on overhanging eaves, and end stone stacks. The central replaced boarded door has an overlight. Windows are 12-pane hornless sashes in the lower and middle storey, narrower in the centre. The upper storey has 2 shorter 9-pane sash windows under gables. The 2-window L-hand range is of rubble slate-stone, including large undressed blocks and laid in rough courses, under a slate roof. It has replacement 20-pane sash windows. Its R side wall has a doorway blocked and converted to a window. The 3-window newsroom on the R is of large roughly dressed slate-stone blocks laid in regular courses, has a slate roof and end stack to the R. In the lower storey is a blocked double doorway with pebble-dashed infill and inserted window. The upper storey has 12-pane hornless sash windows. At the R end are external stone steps, with iron railings and renewed cement treads, to a fielded-panel door. The R gable end has a blocked double doorway with pebble-dashed infill and 2 inserted windows, below a pointed newsroom window with thin glazing bars forming Y-tracery. The rear of the has another double doorway, blocked similar to the end and front doorways, and inserted boarded door to the R. The house has a single replacement door and window to the rear.	Post-medieval	SH5688638300
4423	II	Wharf House	A 1½-storey house of large slate-stone blocks laid in regular courses, under a slate roof, half-hipped to the R, on deep projecting eaves. There are 2 stone ridge stacks, to the centre and L, and one stack on the rear wing. A gabled porch to the L of centre has a replacement panel door and glazed side panels, beneath an original boarded gable with vertical and arched ribs. Side walls of the porch have small windows with leaded glazing. A single window to the L and 3 windows to the R of the porch are all replacements in earlier openings. The	Post-medieval	SH5689438426

NPRN No.	Grade	Name	Description	Period	NGR
			second window R of the porch is within an earlier wide doorway under a stone lintel partially cut into by the window. The R-hand window has a vertical joint beneath its L-hand jamb, suggesting that it was also originally a doorway. Two gabled dormers placed to the R of the porch have replacement windows. The pebble-dashed R (S) end wall (described as slate-hung in the previous survey) has an added balcony on 2 square piers, with glazed door, an inserted and a replacement window. The L (N) gable end has a blocked doorway to the R, to the L of which is a raised band, probably defining the ridge of a former lean-to. Above is a replacement window. The rear of the main range has replacement windows either side of the rear wing. The roof of the wing has bands of fish-scale slates. Entrances to 2 of the modern apartments are in the rear wing. In its N wall are external steps to a replacement panel door. In its E gable end is a 2-storey projection housing a porch, L of which is a replacement window. The attic and S side wall also have replacement windows.		
4424	II	Cwrt yr Harbwr	A 2-storey block of rubble stone, incorporating large slate-stone blocks and laid in rough courses, with hipped slate roof, a stone ridge stack R of centre and at the R end. The front faces NE, in which the 2 original dwellings occupy the R-hand side and retain original openings. The warehouse to the centre and L has mainly inserted openings. All inserted or replaced windows are small-pane horned sashes. The gabled centre has glazed doors in earlier openings in both storeys, flanked by windows (apartment Nos 3 and 4). At the L end is a balcony on steel posts and glazed door under a gable. To its R is a lean-to porch with glazed doors (to apartment Nos 5 and 6) and 2 windows further R, and 2 windows in the upper storey, of which the R-hand is a flat half-dormer. To the R of centre is a full-height vertical joint, demonstrating that the warehouse and dwellings are of different dates. A double-fronted (No 2) and then a single-fronted house (No 1) have replacement doors, the door to No 1 being in a slightly wider original opening. No 1 has no upper-storey window. The 2-window R (N) end wall (No 1) is built of slate-stone blocks laid in regular courses. It has a central blocked doorway (an unusual position placed directly beneath the stack). The 9-window rear elevation has replacement windows to the original dwellings at the L end, but otherwise has inserted windows. A full-height joint separates the warehouse from the domestic end. Four more full-height vertical joints suggest that there were originally open bays on this side of the warehouse.	Post-medieval	SH5693338459
4425	II	The Oakleys	A former house and hotel of 2 storeys and 3 bays, with a further bay set back to the L (the original office), of large blocks of coursed local stone painted white, hipped slate roof incorporating bands of fish-scale and diamond slates, 2 rendered stacks to the main house and an end stack to the office. The former E entrance front has an added 1-storey flat-roofed projection, above which are 4-pane sash windows. The flat-roof extension extend across the 1-bay office set back to the L, which has a 2-pane sash window in the upper storey. Its end wall has 2 replacement upper-storey windows. The N front, latterly used as the entrance, is also 3 bays and has 2-pane sash windows. The R-hand bay has an inserted entrance inside an added shallow flat-roof half-glazed porch with glazed door. The rear (W) is slate hung, with diamond-pattern slates in the upper storey. It has a central replacement window in the lower storey and 2-pane sash window above. Set back to the R the rear of the office is rendered and has an added 1-storey lean-to.	Post-medieval	SH5696238478
4426	II	Former slate warehouse on Oakleys Wharf	A single-storey former warehouse of rubble stone and slate roof. The NE side was formerly open-fronted on full-height coursed stone piers, but all of its 10 bays are now infilled. The first bay, now a harbour-master's office, is narrower and has an inserted boarded door and steel-framed window, with pebble-dash below the sill. Bay 2 has a similar window. Bay 3 has boarded double doors, and bays 4-9 boarded infill (incorporating doors in bay 6). Bay 10 is glazed almost to full-height, with rubble stone below the sill, with boarded door to its R. Further R is a full-height joint marking the original end of the building, to which an extension roofed under the same range has been added, with double boarded doors in each of its 2 bays. In the L gable end, facing the harbour, is a former doorway now blocked and into which a window has been inserted, to the L of which is an inserted boarded door. The rear has a central inserted boarded door.	Post-medieval	SH5697638441
4427	II	Pioden (Magpie)	One of a row of 4 late-Georgian style 3-storey 2-window shops with houses above. They have slate-hung fronts, a slate roof hipped to the R end (No 1) where the corner is also splayed, with transverse stone stacks and a fourth, pebble-dashed stack at the R end. The houses are not of equal width. No 1 is the widest, Nos 7 and 9 are narrower than No 3. No 1 has a replacement lower-storey window and replacement door to the R in a modern stone surround. To its R is a single-storey flat-roofed extension with slate-hung walls, and wide modern shop window under an awning. In the middle storey are 12-pane hornless sashes and in the upper storey shorter 9-pane sashes. The 2-window R end wall, facing Madoc Street, is slate-hung above a lower-	Post-medieval	SH5700738556

NPRN No.	Grade	Name	Description	Period	NGR
			storey dentilled cornice. It has 12-pane and 9-pane sash windows similar to the front. To the R of the 1-storey extension is a 4-pane hornless sash window in the lower storey. The rear, where Nos 3, 7 and 9 are set slightly back from No 1, is of rubble stone laid in rough courses. No 1 retains some sash windows and has a 1-storey projection under a single-pitch roof.		
4428	II	Plas Ynys Tywyn	A late Georgian 2-storey 5-window house of large blocks of local slate-stone laid in regular courses, slate roof on projecting eaves and stone stack to the R of centre (the end of the original building). Against the lower storey is an original continuous lean-to and a porch to the L of centre (but centrally placed within the original building). The porch has a simple freestone surround with Tudor-arched head and parapet, with replacement glazed door. Windows are replacement 12-pane horned sashes in original openings. There are 4 windows in the lower storey, then a full-height joint on the R side separating the 2 phases of the building, beyond which is a half-glazed boarded door. On the L side the lean-to has been extended to form a garage extending across the L gable end. In the gable end is a sash window L of centre. The R gable end is pebble-dashed and has small-pane horned sash windows: a single window to the R in the lower storey and 2 upper-storey windows. The rear has some small-pane sash windows similar to the front, as well as enlarged or inserted windows and, at the R end, a 1-storey projection with balcony.	Post-medieval	SH5702738561
4429	II	Former outbuilding of Plas Ynys Tywyn (attached to Co-op supermarket)	A lofted building of large slate-stone blocks laid in regular courses, and slate roof. The gable end has a bellcote over a replacement steel-framed small-pane loft window, beneath which is a similar but larger window. The L side wall has 3 open bays on slate-stone orthostats and lintels. In the R side wall is an inserted similar opening to make a pedestrian way through the building and enclosed within the open-fronted canopy across the Co-op supermarket, which is attached to the rear of the building.	Post-medieval	SH5703338595
4431	II	Snowdon Mill and Ty'r Felin	A large former mill comprising 2 parallel ranges on a sloping site. The original, front range, facing Snowdon Street, is of slate-stone rubble in large blocks and laid in rough courses, under a slate roof. The 3-storey SE front has windows grouped 3+4. On the L side the middle-storey windows are partly obscured by an added pebble-dashed lean-to, which has a lower weatherboarded lean-to on its R side. Windows are all replacement small-pane and single-pane windows in original openings, of which the 3 L-hand windows are smaller. Between 2nd and 3rd storeys is a repainted stone tablet inscribed 'RG BR AD 1862'. At the L (SW) end is a slightly lower 3-storeyed 2-window house (Ty'r Felin) of pebble-dashed walls, slate roof and stack to the L, and replacement windows and entrance on its R side. The NE gable end of the mill, where the ground level is lower, has an abutting wall of a former lower lean-to engine house at basement level, and a small-pane attic window. The rear of the front range and house have replacement windows, and the mill has a boarded door at 3rd-storey level. A short rear wing, part of the original link between the 2 ranges, has higher eaves and lower ridge, a half-hipped roof, replacement windows and lean-to against the lower storey. A narrow weatherboarded link is between wing and the rear mill range. On the NE side is a C20 flat-roofed link of cement render projecting in front of the gable end of the front range. The 4-storey rear range is slightly higher than the front range and its ground storey is at a lower level. Its SW gabled front is rendered and painted and has a replacement door and enlarged flanking windows in the lower storey. Above are 3 superimposed boarded doors under shouldered heads, and the bracketed and gabled wooden frame of a former hoist, flanked by 2-light casement windows in each storey in original openings. The 6-window L (NW) side is cement rendered, except for the rubble-stone basement. It has replacement windows, in a larger openings lower R and a blocked doorway immediately to its L. The 3-window rear (NE) gable end has exposed slate-stone rubble laid in rough courses, a replacement door in the basement flanked by windows, of which the R-hand is blocked. Above are 2-light windows replaced in original openings.	Post-medieval	SH5706338951
4433	II	Tan-yr-allt Lodge	A 1½-storey picturesque lodge of roughly squared blocks of quarried stone laid in regular courses, slate roof with added skylights and barge boards with blind fretwork, and central stone stack. The asymmetrical gabled front has outshuts set slightly back on each side under a continuous roof line. The entrance is on the L side and has a replacement glazed door. In the centre is a 3-light wood-framed mullioned and transomed window incorporating casements, and beneath an unmoulded slate hood. The upper storey has a 3-light window and similar hood. On the R side is a 2-light window with Gothic arched glazing bars. In the R side wall is a 3-light casement window. In the L side wall is a small replacement window, and a 1-storey projection at the rear, which has a boarded door and 2-light small-pane casement to its L.	Post-medieval	SH5692140468

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4434	II	Nos.1,3,5,7,9,11,13 & 15 Church Street,Tremadog,Gwynedd,	A 2-storey house of large roughly dressed blocks of quarried stone laid in regular courses, slate roof on projecting eaves and rebuilt, rendered stack to the R. The house is integral with No 13-15 Market Square (Spar Shop), the R-hand end of which was probably originally part of No 1 Church Street, making it a symmetrical double-fronted house in its earliest form. No 1 Church Street is now a single-fronted house with the entrance on the L side, which has a recessed replacement door under an overlight. In the lower storey is a 9-pane horned sash window, above which is a 6-pane sash window. The L-hand upper window is blind. A vertical joint between Nos 1 and 3 and the slightly lower ridge line of No 3 indicate their different dates.	Post-medieval	SH5620940123
4437	II	Snowdon Lodge	A 2-storey 3-window house in mildly Gothic style, of snecked rock-faced stone, slate roof on overhanging boarded eaves, stone end stacks, and stone stack to an integral rear wing. It has a central half-glazed timber-framed porch with replacement half-glazed door under an original overlight, and inside a replacement half-glazed door with similar but original side panels. The lower storey has canted bay windows with 2-pane margin-lit sashes. In the upper storey the outer windows have 2-pane margin-lit sash windows carried above the eaves under half-hipped roofs with tile finials and cresting. The central window is similar but narrower and under a gable with pendant finial. In the R gable end is a narrow 2-pane horned sash window lower L. The offset rear wing is slightly set back from the R gable end, and has 2-pane margin-lit horned sashes in each storey. The opposite 4-window side wall of the wing has, in the lower storey 4-pane sash windows on the L side and 2-pane on the R side, whereas in the upper storey are three 4-pane sash windows and a 2-pane sash window to the R. A C20 extension is further behind.	Post-medieval	SH5630539955
4438	II	Bodawen Lodge	Belongs to a group of 1-2 Bodawen Lodge. A reflected pair of 2-storey 2-window cottages of squared blocks of quarried stone laid in regular courses and painted white, hipped slate roof on slightly overhanging eaves, and stone end stacks. A central half-glazed lean-to porch has door with glazed panels to each house. On the outer sides are 2-light casement windows in original openings. Upper-storey windows retain earlier diamond-pattern wooden glazing bars, and are horizontal sliding sashes to each end, a fixed window L of centre (No 2) and a 2-light casement R of centre (No 1). End walls have added lean-tos, of which the R-hand is set back.	Post-medieval	SH5667839651
4439	II	Stiwdio Harddwch (One-to-One Beauty Studio)	Belongs to a group of 2-4 Church Street, Tremadog. A pair of houses in a 2-storey 3-window range of large quarried blocks of stone, roughly squared and laid in regular courses, hipped slate roof on projecting eaves and stone stack to the L of centre. The entrance to No 2 is R of centre and has a recessed replacement door in an original opening. To its L is a 6-pane hornless sash window inserted into a former doorway. At the R end is a 8-pane sash window inserted into a large opening (probably a shop window) under a timber lintel. At the L end (No 4) is a 20-pane horned sash window inserted into a similar large former opening with timber lintel. In the upper storey are 6-pane hornless sash windows to the centre and R (described as Gothic in the previous survey) and replacement window to the L. The R end (No 2) adjoins No 14 Market Square. Attached to the L end (No 4) is a short garden wall of coursed rubble stone and coping. It has a pointed doorway with dressed voussoirs, and a wrought iron gate with railings forming ogee arches, and a quatrefoil and trefoils incorporated into the main arch. (An identical gate is at Plas Tan yr Allt.) The L side wall (No 4) is 4 bays of which bays 2 and 4 have blind round-headed arches of dressed voussoirs (in imitation of the Market Hall). The entrance to No 4 is on the R side of the 2nd bay, and has a replacement split boarded door in an original opening. Bays 1 and 3 have 4-pane sash windows in the lower storey under slate lintels and replacement windows in the upper storey in earlier openings. At the L end is an added 1-storey projection of rubble stone and slate roof, which has a replacement half-glazed boarded door and replacement window to its L.	Post-medieval	SH5618140118
4440	II	Post Office and house	Belongs to a group of 8-16 Church Street, Tremadog. A terrace of four 2-storey houses and a shop of various rendered fronts, slate roofs and 4 stone stacks (there is no L end stack). The details of the houses differ, and have mostly later C19 fronts. Nos 8-10 form a 2-window shop (The Post Office) and house of scribed render. A modern replacement small-pane shop window has a recessed half-glazed door, and has simple Tuscan pilasters below a fascia and moulded cornice. Other openings have hood moulds. The house (No 10) is entered at the L end by a recessed replacement panelled door and overlight. In the upper storey are replacement top-hung windows offset to the L and aligned with the doorways. No 12 is a double-fronted house of cream-painted pebble-dashed front with smooth-rendered pilaster strips, upper-storey sill band and architraves. Its entrance is offset to the L of centre and has a recessed central door of 2 round-headed panels under an overlight. Windows are 12-pane hornless sashes with slate sills. No 14 is a 2-window house with grey pebble-dashed front. Openings are offset to the L. The entrance on the L side has an added half-glazed porch,	Post-medieval	SH5619040097

NPRN No.	Grade	Name	Description	Period	NGR
			inside which is a replacement half-glazed door under a round-headed overlight with relief foliage in the spandrels. Windows are 2-pane sashes in original openings, horned in the lower storey, hornless in the upper storey. The front bears a plaque commemorating William Jones. No 16 is a pebble-dashed 2-window house. The entrance on the L side has a modern open porch of steel posts supporting an entablature and cornice with dentil frieze. The replacement door has 2 circular panels and glazed round-headed upper panels, under a plain overlight. On the R side is a late C19 2-storey canted bay window with 4-pane sashes. The upper storey also has a 4-pane sash window above the doorway. In the rubble-stone L gable end No 16 has a replacement attic window to the R of centre. To the rear the houses have 2-storey wings, except for a 1-storey wing to No 12, with added skylights and a roof dormer added to No 14.		
4443	II	,9 Heol Dulyn (Dublin Street),Tremadog, GWYNEDD	Belongs to a group of 9-25 Dublin Street, Tremadog. A terrace of 1½-storey cottages of roughly coursed and squared quarried stone, with boulder footings to Nos 9 and 11, slate roof and 5 stone stacks. All have raked half dormers. No 9 is a 2-window house with half-glazed door to the L. Windows are replacements in original openings. Nos 11-25 are single-fronted in reflected pairs, mostly with C20 replacement doors and windows, some of which are enlarged while others are in original openings. No 11 has a small-pane horizontal-sliding sash window to its dormer. Between Nos 13 and 15 is a blocked lower doorway. No 25 has a 2-window addition on its R side with skylight, and then a single-storey addition (Yr Efail) with modern detail. The rear of the terrace has extensive alteration and addition, with modern detail. No 9 has a 2-storey wing, Nos 11 and 13 outshuts, Nos 15 and 17 2-storey wings, Nos 19 and 21 have 2-storey flat-roofed extensions, No 23 has an outshut and No 25 has a 2-storey wing.	Post-medieval	SH5613940151
4444	II	The Old Granary	An aisled former coach house and granary of coursed rubble stone and slate roof. In the gable-end N front is a wide segmental arch with freestone voussoirs, now infilled with glazing. Above it is a segmental-headed former doorway converted to a window, with pulley block above it. In the lean-to aisles is a doorway to the L blocked and converted to a small window, and a replacement glazed door to the R. The L (E) side wall has openings introduced when it was converted for domestic use: a recessed door with window to its L, a low raked roof dormer to the aisle, skylights to the main range, and 2-window extension to the L end. Likewise the R (W) side wall has modern openings: 2 small windows in deeper, partly blocked earlier openings, and 2 skylights. The 2-window rear (S) gable end has replacement windows under original timber lintels and a loft pitching eye.	Post-medieval	SH5609140108
4445	II	,1 Heol Dulyn (Dublin Street),Tremadog, GWYNEDD	Belongs to a group of 1-2 Dublin Street, Tremadog. A reflected but unequal pair of 2-storey 2-window houses of blocks of quarried stone laid in regular courses, slate roof and roughcast end stacks. No 1 on the R-hand side is wider. Openings have flat stone arches. Doorways to the inner sides have half-lit doors with vertical panels and small-pane glazing. Outer windows are 16-pane hornless sashes in the lower storey. In the upper storey are 12-pane hornless sash windows, of which the outer are under individual gables, and the narrower inner windows, which are not aligned with the doorways beneath, are under a single gable. To the L is a projecting gabled bay, originally forming the centre of the composition, with round pitching eye to the loft. It is otherwise obscured by the addition of a 5-bay 1-storey rendered garage front and only the original L gable end of the stables has otherwise survived. Against the R gable end is a modern flat canopy attached to the Royal Madoc Arms Hotel. The rear is mainly rendered and painted white, and has a 2-storey wing. The side walls of the wing have a boarded door and small-pane sash window in the upper storey, and the rear of the main range has small-pane sashes in each storey. (Further R is the projecting rear wing of the former stables, of rubble stone but with the roof mostly burnt out.)	Post-medieval	SH5613040183
4446	II	Deseret	A double-fronted 1½-storey house, pebble-dashed over stone, with slate roof and stack to the R. Replacement windows, including raked half dormers, are in smooth-rendered surrounds. The central entrance has a lean-to porch with half-glazed door. Set forward on the L side is a 2-window extension under a slate roof with L end stack and doorway in the gable end. The rear of the extension is splayed, where the house backs on to the road. The rear of the main house has an added half dormer.	Post-medieval	SH5634240284
4447	II	Ty Gwyn	A late Georgian 2-storey 3-bay house of pebble-dashed front over stone, slate roof and end stacks. The later central wooden gabled porch has fretwork scrolled barge boards. The entrance has a fielded-panel door and 3-pane overlight. On the R side windows are 18-pane tripartite hornless sashes. On the L side are narrower 24-pane hornless sashes. The central upper window is blind. On the L side is a lower former 2-storey double-fronted cottage, which has a central door of vertical and glazed panels, and casement windows with margin	Post-medieval	SH5636140301

NPRN No.	Grade	Name	Description	Period	NGR
			lights. The former cottage has a rear outshut. The main house, which is rubble stone to the rear, has a small-pane 2-light window upper R.		
4448	II	Bronhaul	A 2-storey 3-window house of blocks quarried stone laid in regular courses and with larger blocks near the base, under a corrugated metal roof with stone stack to the L. Openings are offset to the L side. A porch, roofless at the time of inspection, has walls of coursed stone and scribed render, and a slate pediment. The doorway has a fielded-panel door but it is not fixed and was probably brought from another site. Windows, formerly with sashes, have been boarded up. In the lower storey they have pronounced slate lintels. In the upper storey they have thinner slate lintels, are shorter, and the central window is shorter still. A parallel range on the R side of the rear is built into the steep bank behind the house, and has a doorway opening to a small yard between the main range, Manufactory and embankment.	Post-medieval	SH5636940309
4450	II	Ty Felin (Mill House)	A 2-storey 2-window house, built as a reflected pair, of coursed rubble, renewed slate roof with added skylights, and stone end stacks. Openings have stone lintels. Replacement doors to the centre are under a lean-to canopy. Windows are all replaced in original openings. Set back to the R is a 1-storey addition of rendered walls and slate roof. In the L gable end the wall is partly built of large unworked boulders. The whitened rear has 4 small windows in the lower storey and 2 upper-storey windows, all replacements in original openings.	Post-medieval	SH5640340350
4451	II	Royal Madoc Arms Hotel	A late Georgian style hotel, symmetrically designed with central 3 bay, 3 storeyed and attic block, flanked by lower 2-storey 2-bay in-line wings. Roughly dressed blocks of quarried stone laid in regular courses, slate roof behind coped gables and stone end stacks to the main range. A rendered central flat-roofed porch has round-headed openings in the side walls. The entrance has a half-glazed fielded-panel door. Windows have late C19 rendered architraves with shallow triangular heads. The lower storey has 4-pane horned sashes, the middle storey 12-pane hornless sashes (horned to the R-hand) and the upper storey 6-pane hornless sashes. Three hipped roof dormers have 2-light casements. The R-hand wing (the original tap room) is in line with the main range and abuts the Market Hall. It has surrounds similar to the main range, 12-pane hornless sashes in the upper storey, a glazed door with glazed side panel inserted into an earlier doorway to the lower R, and a large inserted small-pane bay window to the L. The L-hand wing has a roof hipped to the L side and a central, heightened stone stack. It has a half-glazed fielded-panel door to the L (similar to the main entrance doorway) and 4-pane horned sashes in rendered architraves. At the L end is a lean-to with boarded door. The 3-window L side wall of the wing has, in the lower storey, a central window boarded up and a 12-pane horned sash window to the L. In the upper storey are 4-pane sash windows to the centre and L and a blocked window to the R. At the L end is a modern canopy attached to No 1 Dublin Street (the former stable block). The 2-window rear of the main range has 12-pane sash windows in the middle storey but mostly replacement windows, an added escape stair from the attic and inserted attic roof dormer. The wing on the L side has a flat-roofed projection and a replacement small-pane window in the upper storey. The longer wing on the R side has an added flat-roofed projection.	Post-medieval	SH5615340180
4453	II	,1 Sgwar y Farchnad (High Street),Tremadog,,GWYNEDD	Belongs to a group of 1-7 High Street, Tremadog. Three cottages built in a single range, of squared local quarried stone laid in regular courses, graded slate roof on projecting eaves and with added skylights, and 3 stone stacks. No 1 is a 2-window cottage and abuts the Market Hall on the L side. Its entrance on the L side has a replacement half-glazed door. Windows are replacement 12-pane hornless sashes. Behind is a 1-storey rear wing with end stone stack and replaced windows. A vertical joint separates No 1 from the remainder of the row, which is later. No 3-5, originally 2 properties, has a replacement boarded door L of centre, a window to its L in an original opening, and 3 altered windows to the R replacing a former shop front, which are under original slate lintels but have later brick jambs. All lower-storey windows are modern. In the upper storey are 2 small 12-pane sash windows. At the rear are replacement windows and an added dormer. No 7 is a double-fronted cottage with central half-glazed fielded-panel door with marginal glazing. Windows are 2-pane sashes with sills. On the R side are communal stone steps. The rear has replacement door and windows in the lower storey and horizontal-sliding sashes in the upper storey.	Post-medieval	SH5618440191
4454	II	Gwynle, including steps to the L-hand	Belongs to a group of 9-13 High Street, Tremadog. A short terrace of three 2-storey houses with entrances raised above street level, of squared quarried stone laid in regular courses, slate roof and stone stacks. No 9 is a double-fronted. Rebuilt stone steps lead up to the central entrance, which has a replacement glazed door.	Post-medieval	SH5620540199

NPRN No.	Grade	Name	Description	Period	NGR
			Windows are replaced in original openings, except for a blind central upper-storey window. A full-height vertical joint separates Nos 9 and 11, indicating their different dates. No 11 is a narrow single-fronted house. The entrance, on the L side, is reached by replacement slate steps. It has a replacement door and overlight. In the lower storey is a 12-pane horned sash window and in the upper storey a 16-pane hornless sash window. No 13 is a double-fronted. The central entrance is reached by replacement slate steps. It has a replacement half-lit boarded door beneath an overlight. Windows are 12-pane horned sashes in the lower storey, 16-pane hornless sashes in the upper storey. Against the L gable end (No 9) are communal stone steps. The rear of No 9 has a rubble-stone lean-to with corrugated iron roof, built into the steep cliff face.		
4455	II	Bodlondeb	Belongs to a group of 15-17 High Street, Tremadog. A pair of 2-storey double-fronted houses, of large blocks of local quarried stone laid in regular courses, renewed slate roof with added skylights, and stone stacks to the centre and L. No 15 has a central half-glazed door and top-hung windows replaced in original openings. No 17 has a replacement half-glazed door and 2-pane sash windows in original openings. Both have a blind central window in the upper storey.	Post-medieval	SH5622240205
4456	II	,19 Sgwar y Farchnad (High Street),Tremadog,,GWYNEDD	Belongs to a group of 19-23 High Street, Tremadog. A row of three 2-window houses of 3 storeys with attic and basement, of large blocks of local quarried stone laid in regular courses and with large stone lintels, renewed slate roof with skylights, 2 stone ridge stacks and a pebble-dashed stack to the L end. In each house the entrance is above street level, reached up slate steps to the doorway on the R side. No 19 has a replacement panel-door and overlight and 4-pane horned sashes. On the L side are steps down to a central replacement half-glazed basement door, with replacement window to its L. No 21 has a replacement half-glazed door with overlight, and 2-pane sash windows. Steps lead down to a replacement half-glazed basement door with replacement window to its L. No 23 has a panel door under a late C19 overlight, and 2-pane horned sash windows. Steps lead down to a replacement half-glazed basement door and replacement window. The L gable end (No 19) is pebble-dashed.	Post-medieval	SH5623740212
4457	II	,16 Sgwar y Farchnad (High Street),Tremadog,,GWYNEDD	Belongs to a group of 14-16 High Street, Tremadog. A reflected pair of single-fronted houses of 2 storeys and basement, of large squared blocks of quarried stone laid in regular courses, slate roof and stone end stacks. Entrances to the centre are raised above street level, up shared slate steps with iron handrails. Each house has a replacement glazed door. No 16 to the L side has 2-pane sash windows and a 2-light replacement basement window incorporating a steel-framed top-hung casement. No 14 has replacement windows in original openings. The R gable end is pebble-dashed.	Post-medieval	SH5622740186
4458	II	,30 Sgwar y Farchnad (High Street),Tremadog,,GWYNEDD	28-30 High Street, Tremadog. A reflected pair of 2-storey 2-window houses of coursed stone in large blocks, slate roof and central stone stack. Entrances are on the outer sides and windows and doors have been replaced in original openings. The R gable end (No 28) is pebble-dashed. The rear elevations have replacement windows, 1-storey flat-roof projections, and large added roof dormers.	Post-medieval	SH5628140208
4459	II	Tremadog War Memorial Institute	A late Georgian former shop of two and a half storeys; roughly coursed and squared blocks of quarried stone, pyramidal slate roof on projecting bracketed eaves, and stone stack to the rear. It has a 1-window elevation to Market Square and a 2-window elevation to High Street. The original entrance is in the splayed corner, a blocked doorway later converted to a window, itself now blocked. Above it is a slate plaque commemorating the foundation of the Cambrian Pill dispensary here in 1839. To Market Square is an added bay window with paired 25-pane horned sashes. A 16-pane window in the middle storey and 9-pane window in the upper storey beneath a gable both replace original sashes. In the High Street elevation is an inserted bay window similar to the Market Square elevation, but the lintel of an original window can be seen behind it. A 12-pane window is to the L in the lower and middle storeys, and in the upper storey is a gabled 9-pane window on the L side, all replacing original sashes. Windows on the R side are blocked in middle and upper storeys. In the 2-storey outshut behind the lower storey is integral with the main range but the upper storey was added later and is separated from the main range by a vertical joint. Facing High Street it has a 20-pane hornless sash window in the lower storey and small-pane pivoting window above. Its rear, facing a small back yard open to High Street, has 2 replacement upper-storey windows, and a flat-roof porch with glazed door.	Post-medieval	SH5619940178
4460	II	Steps and lamp post at centre of Market Square	An octagonal stepped freestone plinth with a tall fluted cast iron lamp post and lantern. The post has, in raised letters, 'JH Williams & Son, Portmadoc, 1879'.	Post-medieval	SH5618440151

NPRN No.	Grade	Name	Description	Period	NGR
4461	II	Awelon	A 2-storey double-fronted house of pebble-dashed walls, renewed slate roof on wide boarded eaves, hipped to the R and in a single range with No 4, with pebble-dashed stack to the L and to the front slope of the R-hand (Dublin Street) elevation. An added central gabled porch is of coursed stone with impost band below a freestone round head, which has a replacement glazed door and plain overlight. Late C19 2-storey canted bay windows have replacement glazing. The R-hand corner is splayed. The 2-window elevation to Dublin Street has replacement glazing. The gable rear has an added lean-to conservatory. The forecourt, added with the bay windows, has a slate plinth to iron railings with spear finials.	Post-medieval	SH5615440158
4462	Ii	Nos.6,8,10 & 12 Market Square,Tremadog, Gwynedd,	A 2-storey double-fronted house of large roughly coursed and squared blocks of quarried stone with large slate-stone lintels, slate roof on projecting eaves, with 3 skylights and stone end stacks. Openings have raised cement surrounds. The entrance is offset to the L of centre has a replacement half-glazed boarded door. Windows are renewed 4-pane horned sashes of late C19 type, and in the lower storey they have wrought-iron grilles. The rear is rendered. It has an added outshut on the R side, with eaves stack, and attached 1-storey gabled rear wing with tall stone stack. To the L of the outshut are 2 1-storey lean-tos.	Post-medieval	SH5616140138
4463	II	Y Sgwar (The Square Restaurant)	Tremadog was a town created by William Madocks (1773-1828) in the first decade of the C19 on reclaimed land known as Traeth Mawr, the estuary of Afon Glaslyn. It was originally intended to be a post town on a direct road between London and Dublin, via Porthdinllaen on the Lleyn peninsula, a project that in due course lost out to the Holyhead Road. Tremadog was laid out around a market square, with market hall, coaching inn, houses and shops, with a church and chapel just outside the centre. Building of this small planned development, as well as a separate woollen manufactory, began c1805 and was largely completed by the time Richard Colt Hoare described it in 1810. Nos 12-14 Market Square were part of this first phase of development, and were probably originally shops with houses above.	Post-medieval	SH5617240116
4464	II	Ochr Heulog	Belongs to a group of 1-2 Y Graig (Sunnyside), Tremadog. A pair of 2-storey cottages of blocks of quarried stone laid in regular courses and with stone lintels, renewed slate roof and stone stack to the R of each cottage. No 1 is double-fronted. The central entrance has a replacement half-glazed door and overlight. Windows are 2-pane sashes replaced in original openings, shorter in the upper storey. No 2 is a 4-window house. The entrance to the R of centre has a replacement door and overlight. Windows are all replacements in earlier openings. To the R of the entrance is a doorway converted to a window, and a smaller window at the end. To the L of the entrance is a small window, a window in a former doorway, and a blocked small window at the L end. In the upper storey are 4 windows. In the pebble-dashed L gable end is an inserted window to the L in the lower storey.	Post-medieval	SH5608040201
4465	II	Cynfal	Belongs to a group of 3-5 Y Graig (Sunnyside), Tremadog. A short row of houses of roughly dressed blocks of stone laid in regular courses, stone and slate-stone lintels, renewed slate roof and 4 stone stacks, of which the R end stack is partly pebble-dashed. No 5 to the L is a double-fronted house with replacement fielded-panel door and overlight. In the lower storey is a horned sash window of 8 over 2 panes to the L and a similar 6/2-pane hornless sash to the R. The upper storey has 8/2-pane hornless sashes. No 4 was formerly a reflected pair of single-fronted cottages. It has 8/2-pane hornless sashes. It has a boarded door with overlight to the R of centre. To its L is a window (horned) in the former 2nd doorway. No 3 to the R end of the row was also formerly a reflected pair of single-fronted cottages. The entrance L of centre has a replacement boarded door and overlight. Windows are 4-pane sashes. To the R of the entrance is a window in a former doorway. An added 1-storey lean-to is against the R gable end.	Post-medieval	SH5603940218
4466	II	,6 Y Graig (Sunnyside),,,Gwynedd	Belongs to a group of 6-8 Y Graig (Sunnyside), Tremadog. A short row of houses of roughly dressed blocks of stone laid in regular courses, with stone lintels, slate roof and 4 stacks. The L end stack is pebble-dashed, the next coursed stone, then a rebuilt smaller roughcast stack R of centre and pebble-dashed R end stack. No 8 at the L end is single-fronted with openings offset to the L of centre, and its entrance on the R has a half-glazed door and overlight. On the L side is a 2-pane hornless sash window and in the upper storey a similar horned sash. The L gable end is pebble-dashed in the upper storey and gable. Behind is an added wing. No 7 is double-fronted. It has a split boarded door and thin overlight, and 2-pane sash windows, slightly wider to the lower L. No 6 is double-fronted and has windows and door replaced in original openings. A lean-to under a corrugated iron roof is set back on the R side. The R gable end is pebble-dashed.	Post-medieval	SH5599140220

NPRN No.	Grade	Name	Description	Period	NGR
4467	II	,9 Y Graig (Sunnyside),Tremadog,,GWYNEDD	Belongs to a group of 9-10, 19-21 Y Graig (Sunnyside), Tremadog. A terrace of five 2-storey houses of local stone, roughly coursed and squared to No 9, and elsewhere, random rubble with larger quoins. Stone lintels, slate roof and 6 stone stacks. No 21 was a later addition to the row, and is single-fronted with windows and door, to the R, replaced in original openings. The L gable end is painted black. Behind is a lean-to. A vertical joint separates Nos 20 and 21. Nos 20, 19 and 10 are single-fronted with entrances on the R. No 20 is the best preserved and has a boarded door and overlight, and 4-pane hornless sash windows. Nos 19 and 9 have doors and windows replaced in the late C20 in original openings. No 9 is double-fronted with door and windows replaced in original openings. It has a flat-roof rear wing.	Post-medieval	SH5596440232
4627	II	Courtyard Ranges to the W of Wern Manor, including Stables, Coachhouse and Tower	Built of local rubble stonework with slated roofs with rooflights; the two ranges forming the 'L'-plan are focused on the clock tower built up from the NW corner. This 2-storey tower is to an ornate design and is capped by a swept pyramidal roof rising to the clock and louvred bellcote. The snecked masonry and freestone quoins of the upper part contrast with the earlier rubble below. Freestone is also used for the gabled dormers on each of the four sides of the tower, and their ball finials; these have 2-light leaded windows. The clock and bellcote are timber; clock faces to three sides but hands are missing. The west range comprises the coach-house and stables; in the angle is a large covered loading area with gabled roof, the apron boarded, and boarded doors. Well ventilated stables to left have paned hopper windows flanking central boarded stable door with overlight; stone lintels. The north range includes the Turbine House and Gun Room (later the Estate Office) and has red brick chimney stacks heightened in yellow brick. Two windows flank the Turbine House entrance, both are twinned horned 4-pane sashes; one retains ornate timber blind box. The Gun Room at the right end has tall gable with roundel over boarded door flanked by 3-light diamond-leaded windows. The south gable end of the coach-house and stable range has unusually massive quoins and the roof is canted forward at the apex to form a winch cover over the loft door. The rear of this range has some blocked openings and there is an added, parallel, coach-house with yellow-brick segmental arch. To rear of the Turbine House is a low addition with similar sash and small-pane windows and attached to the north side of the clock-tower is a 3-window range. Walled garden beyond containing glasshouses.	Post-medieval	SH5422439915
4628	II	Summer House at Wern Manor	Summer-house in Italianate style, built of stone and having a fine-grained brown sandstone ashlar front; hipped slate roof. Three semicircular arches to front with voussoirs together with stylised Doric columns with egg and dart echinus raised on the scroll-pierced balustrade; broad end pilaster strips and dentil cornice. The building stands on a raised platform and is approached by 3 semicircular-shaped steps.	Post-medieval	SH5438739834
4629	II	Wern Lodge	Built of rubble stonework with a slate roof. Single-storey and attic lodge with wide bracketed eaves. The gabled front is set forward between the lean-to side wings, and has distinctive wave-pattern bargeboards, pendant and tall finial; this detail is continued either side on the lean-to wings. The front has circular window with leaded glazing over a patterned-slate lean-to porch extending the full width which is ornately bracketed and open-fronted. The central door is flanked by diamond-leaded 2-light windows which are repeated around the corner. The set-back lean-tos either side have fishscale slate hoods over shallow bays with similar glazing. Symmetrical stone chimneys either side of the central block, both pierced.	Post-medieval	SH5412439763
4774	II	Plas Newydd Farmhouse	2-and-a-half storey end-chimney building of rubble construction on boulder and rock foundations. Renewed slate roof with slab-coped gable parapets and shaped kneelers; tall chimneys with original moulded capping and weather coursing. The entrance front faces N, away from the farmyard. This has 2 ground-floor entrances with boarded C20 doors, that to the L recessed, that to the R with 3-light modern casement beyond. Above the latter entrance on the first floor, a former, similar entrance, now a window as before. Large dormer entrance to attic floor with dormer window to R; both have coped, kneelered gables and the entrance has a late C19/early C20 boarded door reusing the original C17 decorative hinges. Both first and attic floor access stairs have been removed, those to the latter within recent years. Two windows to each floor on S side (rear), all modern casements, though in primary openings. Those to the attic floors are contained within gabled dormers as before. Adjoining to the L are the remains of a connecting range; these consist of the first section of adjoining wall, now reduced to a stepped buttress and a masonry mass beyond with evidence of an end fireplace and an associated stone corkscrew stair. Two blocked first-floor windows to the W gable, with C20 single-storey brick lean-to below.	Post-medieval	SH5986539072

NPRN No.	Grade	Name	Description	Period	NGR
4819	II	Ty Mawr Farmhouse	Long one-and-a-half storey vernacular end-chimney farmhouse with later agricultural addition to R. Of rubble construction, the house pebble-dashed and with battering to the front; pronounced boulder plinth to L (downhill) gable. Slate roofs, that to the house section modern, with tiled ridges. Squat end chimneys with weather coursing and plain capping. Off-centre entrance (to R) with deeply-recessed C19 boarded door. To the L, a small square ground-floor light with a 4-pane late C19 sash window beyond; both are apparently primary openings. To the R of the entrance are 2 further sashes, similar though slightly larger; three 4-pane casements to the attic floor, breaking the eaves and contained within gabled dormers. Modern catslide extension to rear, with adjacent porch. To the R, the original blocked rear entrance, with 4-pane glazing to small, original flanking windows; 3 large, out-of-character modern skylights to rear roof pitch. Adjoining to the R and raised up slightly, the agricultural range. This has a window opening to the L, with a further, blocked opening under the eaves to the R. Beyond is a large cart entrance with recessed boarded doors. To the R of this is a flush cross-gable with similar entrance and window above; modern plastic glazing to this, slate lintels throughout. External stone-stepped access to upper boarded door to long R return. Later single-storey lean-to to rear, with modern continuously-roofed extension to R; corrugated iron roof.	Post-medieval	SH6143240176
4841	II	Castell Deudraeth	Medium-sized country house in castellated style. Of local slatestone construction with dressed slatestone and yellow sandstone dressings; slate roofs. The house consists of a primary 3-storey, 4-bay central block with a taller keep-like block adjoining stepped back to the L, and a square tower adjoining flush to the R; the flanking tower sections are each of 4 storeys, the upper storeys with blind faux cross-loops; crenellated and corbelled parapets throughout. The keep-like block (to the south east) is of two generous bays and has an octagonal tower on the front (eastern) corner which rises up a further stage. Sandstone cross-windows throughout, with 2-light windows to the second floor of the central section and slit-lights to the octagonal tower; label-course to the second floor of the SE block. A large single-storey porch projects in front of the SE block, extruded in the angle with the primary section. This has a segmentally-arched entrance and thin octagonal corner turrets rising above a crenellated parapet; slit- lights to the returns. Extruded between the porch and the large octagonal corner tower to the L is an advanced, parapeted bay of one storey. The SE (L) elevation, facing the drive, has cross-windows as before, and a large canted bay window to the ground floor; corbelled, but uncrenellated parapet. The rear (garden) facade has an uncastellated central, primary block with gable to the L; 12- and 15-pane sashes and cross-windows to the ground floor, as before. Modern single-storey, rectangular conservatory-style addition to the R.	Post-medieval	SH5922437716
4853	II	Portmeirion Hotel Including Revetment, Balustrade and Sculptures to the Upper Terrace	Victorian former country house, now a large hotel; of rendered rubble construction with slate roofs, fish-scale patterned to the primary part; this also has seven chimneys with grouped Gothic-style terracotta stacks. The original house is of 2-storeys and consists of a principal H-plan section with a subsidiary section of inverted F-plan adjoining to the SW; gables with projecting eaves and plain bargeboards. The main block has a 5-bay eastern (sea-facing) elevation, with bays 2 and 5 projecting as gabled crosswings. These have arched windows with plain 2-pane sashes to the first floor, each with moulded label; bay 2 has a square-headed similar sash with returned, moulded label, whilst bay 5 has a single-storey canted bay with arched, plain-glazed windows. The recessed third and fourth bays have labelled sashes to the upper floor and a large flat-roofed bow window to the ground floor, a C20 addition; this with tall 2-part windows. The recessed first bay, to the S, has a similar arched first floor sash with an entrance to the ground floor via a decorative iron porch with sloped metal canopy. The entrance elevation, facing N, is of 3 bays, with a canted single-storey porch to the right-hand bay. This has an arched entrance with plain glazed doors and segmental overlight; plain round-headed windows to the canted returns. Arched sash windows with labels to both floors; large mural by Hans Feibusch to the first floor, between bays 1 and 2 and below a flush lateral chimney. Adjoining to the S is a bowed, single-storey, flat-roofed restaurant addition with rectangular bay beyond; cross-windows throughout. The southern section of the hotel comprises two C20 4-storey additions, with rendered elevations and hipped slate roofs; the northern-most of the two is set back slightly. 12-pane sashes and 16-pane, 2-part casements under the eaves to the upper floor; all have external wooden slatted shutters. The southern elevation, facing the Observatory Tower, has a depressed arch to the exposed rubble ground floor and a multi-pane window to the first floor above with decorative wrought iron balcony; small-pane, 2-part casements with shutters to the second and third floors. Facing the sea immediately in front of the hotel (to the E) is a Victorian revetted terrace. This has turned balustrading and classical surmounting statuary.	Post-medieval	SH5893137016

NPRN No.	Grade	Name	Description	Period	NGR
4854	II	Anchor	Four-storey domestic building of Mediterranean character; stuccoed elevations with hipped pantiled roof having shallow pitch and oversailing, slightly feathered eaves. Symmetrical main (E) elevation of four bays with rubble ground floor having large flat-arched openings in the manner of an arcade; slatted wooden gates to these. Four 6-pane full length sash windows to all other floors with horizontal glazing bars only; open faux iron balconies shared between the outer bays. The 2-bay S return has 12-pane sashes to the three upper foors. Anchor is accessed via a bridge at first floor level and steps from the road; there is a mural to the R of this road-facing elevation.	Post-medieval	SH5895237095
4855	II	Fountain	Three-storey domestic building with flat felt roof and oversailing eaves; rendered elevations. Symmetrical facade with the 3-window upper storeys over a 3-bay open ground floor; this with flat-arched openings. The upper floors each have 12-pane central doors with decorative iron balconies, and tall flanking 18-pane sashes. Access is to the side elevation (R) via a flight of parapetted steps; shallow wooden verandah projection to the upper floor above an open porch to the first floor.	Post-medieval	SH5895037104
4856	II	Angel	Two-storey building of domestic character in Arts and Crafts style. Rendered elevations with slightly oversailing upper floor and slate roof; tall rendered chimney. L-shaped plan with rounded ends and concave curved corner, giving distinctive character. The main, SE elevation has a pair of multi-pane French doors deeply recessed to the ground floor of the southern arm, with the upper storey advanced over and supported on a tapering chamfered column. Two single multi-pane glazed doors to the concave centre and R, each with a small square window to the L and R respectively. The upper storey has two 2-part, 12-pane metal casements to each of the bowed ends, with two small square lights to the centre. The western side, facing the road, has a part-glazed door to the bowed corner, with small square lights to R and L; casement window above, as before. To the L, extruded in the angle with the adjoining building (Neptune), is a storeyed, flat-roofed porch carried on a single corner column and with open lower section; casement windows to the upper section. There are various plaques and painted signs to the exterior.	Post-medieval	SH5892537152
4857	II	Angel Gates (Hercules Gate)	A fine set of wrought iron double gates set between 2 full-height rusticated sandstone piers, each surmounted by a cornice and urn. Complex decorative iron overthrow within which is the date 1908. These gates are an important axis and announce Town Hall, the entrance to which is aligned onto them immediately to the SW.	Post-medieval	SH5892537142
4858	II	Neptune	Two-storey rectangular building in sub-medieval vernacular style. Rendered elevations with slightly oversailing upper floor carried on corbels on the rear (E) elevation; slate roof with tall rendered chimney to the R (S) gable end. The front, W, elevation has a central round-arched shop entrance with recessed part-glazed doors (small-pane upper sections). To the R of this is a small square light with a large 2-part shop window beyond; this consists of a canted, flat-roofed bay window to the L with a flush continuation to the R; multi-pane glazing. To the L of the entrance is a second canted wooden bay with 6-pane sections; 2-part 12-pane windows flank this to R and L. The upper storey has three 2-light leaded windows to the centre and 2-single light windows to the R; further slit-like window to the far L. The rear elevation has a recessed arch to the centre with 12-pane fixed window within. There are 3 small 6-pane windows to the R of this and a tall, multi-pane window to the L, the latter with additional small, square light beyond. Ascending to the upper floor from R to L from the central arched window, is a plain external wooden stair; part-boarded upper entrance with flanking leaded windows as before; further, similar window to the R. There are various applied plaques to the exterior.	Post-medieval	SH5892337160
4859	II	Trinity House Including Adjacent Petrol Pump	Three-storey commercial building of eclectic Georgian character. Rendered elevations with rubble ground floor and hipped slate roof with oversailing eaves; plain rendered chimney. The front (SW) elevation has a main 3-bay section with an advanced additional bay to the R, the latter jettied out slightly at first floor level and with slightly angled corner. The main block has a shop front to the ground floor consisting of a central entrance with triple multi-pane doors deeply recessed between two canted multi-pane bays; a projecting canopy runs along the entire length of this section above the entrance and bays. The upper storeys have 12-pane sash windows to the outer bays and 6-pane vertical windows to the centre, that to the second floor with external wooden shutters. The advanced right-hand section has a tunnel entrance to the L which gives access to the rear, and a part-glazed door to the R. The first floor has a 2-part 8-pane casement window; small square light to the second floor diagonally above. The rear elevation, facing the pond, has a symmetrical main section with three arched niches to the ground floor and two shallow canted oriels to the upper floors. The niches have segmental fans and there are baroque busts within the outer ones. The canted oriels have 12-pane central and 8-pane	Post-medieval	SH5891837175

NPRN No.	Grade	Name	Description	Period	NGR
			flanking sashes, with small rectangular lights to the far L and R on both floors. 12-pane sashes to the L return on both upper floors. Set back to the L is the adjoining section. This has a metal-railed stair leading up in one straight flight to the first floor where there is a glazed door within a recessed porch; 6-pane upper window. Standing in front of Trinity is a National Benzole petrol pump of 1926, embellished with a polychromed early C19 pine figurehead.		
4860	II	Mermaid	Two-storey cottage in picturesque Regency-Gothic style; of whitened rubble construction under a slate roof with oversailing eaves and decorative cusped bargeboards; two central chimneys with paired, off-set stacks and pots, one stack missing. The eastern elevation, facing the Central Piazza, has three ground floor entrances with small-pane glazed doors; those to the R each have 2-light latticed windows to the first floor above. The W side has a central gable with smaller flanking gables, all with decorative bargeboards. The central gable contains an arched multi-pane casement, whilst the flanking ones cover dormer windows of latticed type which barely break the eaves. Further asymmetrically-placed small-pane windows to the ground floor. The southern gable end has a Regency-style verandah with 4 decorative iron pilasters and a sloped metal roof. Adjoining the plain N gable end is a decorative iron canopy covering a painted baroque wooden sculpture of the Virgin and Child.	Post-medieval	SH5894237169
4861	II	The Arches	Building of Mediterranean village character comprising 3 storeys plus a dummy attic; rendered elevations with mono-pitch felt roof and wide, overhanging eaves. The 3-bay front facade is symmetrical and has and arcaded ground floor of 3 round headed arches, gently battered to the front and sides. Small-pane glazed shop-front behind the arcade, with glazed door to the centre. 12-pane sashes to the first and second floors, with faux 6-pane windows above; CWE cartouche in cast concrete above the central arcade arch, in the form of a keystone. The central first floor window has a delicate wrought-iron balcony; painted hanging sign to the L , and a lantern bracket attached to the R corner. Irregular window arrangement to the returns, with small-pane windows; painted oval mural plaque to first-floor R return, by Hans Feibusch..	Post-medieval	SH5890437170
4862	II	Gothick Pavilion	Pavilion in Gothick style, consisting of a tall loggia with four clustered columns in stone supporting an entablature with frieze of Gothic pattern. Castellated parapet, raised over the centre in pediment form; four tall surmounting obelisk finials topped by urns. Trefoil-headed open arch to the rear wall. A flight of three cobbled steps leads up to the structure.	Post-medieval	SH5896637162
4864	II	Dolphin (Including Royal Dolphin)	Large building of three-storeys over an arched rubble plinth rising up from the natural rock; rendered elevations and hipped, pantiled roof with sprocket eaves. The front elevation has an arched entrance to the ground floor giving access to Royal Dolphin, which occupies this level. To the L is a small 8-pane, 2 part casement and to the R is a similar 12-pane casement; 12-pane casements to the upper floors, each with external wooden boarded shutter. To the L on the first floor is an arched light with decorative wrought-iron grille; narrow small-pane window above. The rear, estuary-facing elevaion, has two multi-pane French doors to the ground floor (Royal Dolphin), leading onto a railed terrace; 12-pane casement to the R. The upper floors have similar windows to the R and recessed triangular balconys to the centre; these have plain railings to the front and small-pane glazed doors. The balconys are flanked on each floor by tall 12-pane windows.	Post-medieval	SH5896937137
4865	II	Government House	Large building of two sections, a main three-storey, hipped-roofed block and a lower two-storey bock adjoining at an angle to the NE. Rendered elevations and pantiled roofs with sprocket eaves; large projecting lateral chimney to the rear elevation of the NE block. The main section has an arched entrance with small-pane glazed door to the L and a 12-pane casement to the R. The first floor has two 12-pane sashes; the second floor has similar with a narrower 8-pane window in between, these with external slatted wooden shutters. Similar shuttered sashes to the rear elevation, facing the estuary, with applied baroque cartouche to the centre between the floors. Rising up from the roof-line of this rear elevation is a tall gable of bellcote type, though lacking bell arch; instead there is a segmental iron balcony. The NE section has a casement window to the ground floor and a shuttered sash above, as before. The left-hand (NE) corner is rounded. The rear elevation is asymmetrical, with a small-pane glazed door to the L of the central chimney and 12-pane sashes to the R and above; further entrance to the R of the chimney and sash above. Faux second floor with trompe l'oeil windows. Advanced to the R, and overlapping this rear elevation, is a parapetted external stair with open loggia to the first floor; this gives access to the NE block via a glazed door within the loggia. This continues as a short section of parapetted wallwalk with descending steps to join the Campanile to the NE. The main block	Post-medieval	SH5898437142

NPRN No.	Grade	Name	Description	Period	NGR
			adjoins The Dolphin via a loggia bridge at first floor level, with twin arches and wooden Salomonic column facing the front (N). A short balustraded balcony leads to this from Government House at the rear; at this point a life-sized polychromed figure of William Shakespeare is located, leaning over the parapet and facing out towards the estuary. On the seaward (east) side the Royal Dolphin has 3 storeys. The Dolphin has in centre a tall gable-like structure with a round headed arch and balcony, and figure of a stork surmounting the gable. The loggia on the south side has a bust of Shakespeare leaning on the balustrade and looking out to sea.		
4866	II	Watch House	Small, single storey building of vernacular cottage character; of whitened rubble with shallow, hipped slate roof. Tall, round lateral chimney with conical cap. The Seaward end (SE-facing) is built out on tapering octagonal columns as a loggia. Small-pane glazing within, with French windows to the centre; small asymmetrically-placed windows with small-pane glazing to the long side elevations.	Post-medieval	SH5898437131
4867	II	Descending Steps From Watch House	Sequence of steep walled steps and small towers of Mediterranean inspiration built onto exposed rock. The walls are of rubble, externally painted white; the towers have hipped red pantile roofs. The steps begin at Watch house and descend in an irregular zig-zag down the steep wooded slope with parapet wall to the downward side. Roughly half-way down is the first roofed structure. This is in the form of a square diminutive gate tower, and has a round-arched entrance to the front with horizontal rectangular light above and slit light diagonally to the L. Here the steps turn a right-angle and pass through a short sloped section wall to the NE via a further arched entrance with simple slatted iron gate. The steps continue to corkscrew downwards to pass through a second, similar structure with open, loggia-type upper section; this has round supporting columns and a corbel course below. The steps emerge below this via a similar arched opening and continue through a final half-gated arch within a walled enclosure on the shore-line; small boiler house structure to the L.	Post-medieval	SH5899637115
4869	II	Prior's Lodging	Small cottage of 2-storeys with rendered elevations and mono-pitch, pantiled roof facing the square; sprocket eaves. C19 Gothic stone archway to the L with Tudor-arched head and boarded door; 6-pane vertical window to the centre with external shutters. To the R is a recessed, round-headed loggia with 2-pane window within. The upper floor has 2 small lights, that to the L of 4 panes and that to the R of 6. The rear elevation, facing the estuary, has 3 tall, round headed windows the height of 2 storeys, with a decorative lunette below; this with small flanking lights. To the R is a segmental tunnel arch to the ground floor. This elevation and that to the side (W) have parapets concealing the roof, that to the side elevation with terminating baroque-style volute to the L. The main entrance is on this W side, via an applied baroque wooden doorcase with surmounting cartouche; 12-pane sash to the L with external wooden shutters and Renaissance-style head-plaque above.	Post-medieval	SH5899737152
4870	II	Battery	Three-storey house in weather-boarded vernacular style with rendered ground floor; pitched slate roof brought down to L and R over lean-to blocks, though with near-flush facade; lain rendered chimney. Asymmetrical elevations, that to the front, facing Battery square, with a slightly-recessed lean-to section to the L; this has a parapeted L-shaped stair giving access to the first floor, the whole covered by a wide arch. The main block, to the R has a narrow arched entrance off-centre to the R with recessed boarded door; small 4-pane window beyond. L of the entrance is a 12-pane sash wih external shutters and a lunette window to its L. Further 12-pane shuttered sash to the first floor L, with small, square, 4-pane windows to the R; similar second-floor window with taller, 6-pane flanking windows. Nine-pane sashes to the weather-boarded rear elevation, those to the ground floor in tripartite windows with narrow 4-pane outer sections. Partly-recessed terrace to the first floor L, with plain railings. A lower storeyed projection to the L has irregular roof pitches and a canted bay to the ground floor; this contains the Chart Room; 12-pane sashes, with lunette windows to the ground floor L as before.	Modern	SH5900637150
4871	II	Toll House (Including Pilot House)	Three-storey house partly of weather-boarded, timber-framed construction with jettied upper storeys and rendered, stepped gable chimney to the L. The ground floor has a bowed, small-pane shop window of Georgian character with flanking 6-pane glazed doors Above this is an iron-railed balcony to the first floor, with 16-pane French windows giving access to the centre. Paired 8-pane casement to the second floor with external slatted shutters. The left-hand (NW) corner has a rendered, turret-like projection to the ground floor surmounted by a railed semi-circular platform. This contains a polychromed life-sized statue of St. Peter in the act of preaching; there is a sloped octagonal canopy over the figure and a painted wrought-iron hanging sign to the front. Between this conical turret and the projecting chimney breast on the gable end is an incorporated shelter with lean-to roof. The chimney itself is pierced on the ground floor by an arched, small-pane window;	Modern	SH5901837152

NPRN No.	Grade	Name	Description	Period	NGR
			applied relief plaque above. To the L of the chimney a flight of steps with attendant parapet slopes up in an L-plan to a tall arched entrance with lower arched, boarded door. A wide arch joins Toll House to Bridge House beyond. Rising up beyond the roof-line to the rear is a flat-roofed boarded lookout. To the rear adjoins Pilot House. This is a 2-storey weather-boarded block with wide, horizontal, metal-framed windows to both floors facing out across the estuary.		
4872	II	Reception (Chantry Lodge)	Simple building of domestic character; T-plan. Of 2 storeys with stucco elevations and slate roof with projecting end chimney to the L. The front elevation has 4 windows of which those at ground floor level have 12-pane sashes and those above have casements with diamond panes. Arched doorway to the left of centre with multipane door, and further arched entrance to the far L. The left gable end has a projecting porch to the first floor above an arched bridge, with parapetted curving walls flanking a high-level access path; arched entrance to the porch, with multi-pane door, as before. Storeyed rear projection with hipped roof; sashes and casements as before.	Modern	SH5905237242
4873	II	The Gate House	Imposing gatehouse of 2 main storeys over a tunnel archway at a point where the road is cut into the cliff. Stucco elevations with hipped slate roof, feathered at the eaves; flush lateral chimney to the NW. Flush buttressing on the SE (downhill) side gives the impression of pronounced battering to the principal (NE and SW) sides. The NE elevation has small casement windows in a scattered pattern as well as circular, shaped and rectangular lights. Rusticated arch with a large polychromed cartouche of the Prince of Wales' crest above, with Garter motto and The Prince of Wales' feathers. Above this is a circular plaque with the Welsh dragon, and directly above this is the chimney; flanking the chimney under the eaves are small casements with faux shutters, incised and painted into the flanking walls. Similarly asymmetrical rear (SW) elevation, with a projecting balcony with Regency style canopy over the rusticated arch; small-pane glazed door. Twelve-pane sashes to the upper floors and a second, recessed balcony off-centre under the eaves, with pierced block-work balustrade and flanking caryatids. Open oculus to the tunnel on the downhill (SE) end, with simple iron-railed balcony above. This with glazed door; 12-pane sash to the upper floor.	Modern	SH5905437196
4874	II	The Belvedere, Including Associated Terraces	Simple Classical house of 2 storeys; T-plan. Stucco elevations with hipped slate roof and deep eaves. Three-bay main (SW) elevation with wide arch to the centre containing a recessed tripartite door with small-pane glazing. Twelve-pane sash windows with external shutters and full-height plain, dividing pilasters. The central first-floor bay has an iron-balustraded balcony with small-pane glazed door. The main entrance is to the NW, via a sloped canopy porch extruded in the angle between the main (SW) and rear (NE) wings; small-pane glazed door. Above the porch is a small-pane glazed oculus, with a 12-pane sash to the ground floor L, beyond a small 6-pane light. The advanced section to the R is the hipped end wall of the main SW block. This has 12-pane sashes and stucco end pilasters, as before. A short section of wall with an open arch links the Belvedere with the rear range of the Pantheon. Stepped down immediately to the S of Belvedere and built into and against a rock outcrop is a near semi-circular slate-paved terrace facing out across the lane and towards the estuary beyond. The terrace is approximately 4m wide and has a 1m high rendered brick parapet with faux gun loops facing the lane. Eight steps lead down to this from a part-cobbled forecourt area in front of Belvedere. Adjoining this terrace immediately to the NE is a smaller, triangular one with parapet as before.	Modern	SH5903337184
4875	II	The Bridge House	Imposing gatehouse in elegant classical style, built over the carriageway with 2 storeys over a tunnel arch. Rendered elevations with shallow slate roof. The main facade is on the south, village side. This has a rusticated podium, pierced by a rusticated basket arch. The upper storeys have a main, 3-bay section immediately above the arch, with 12-pane sashes flanked by Doric pilasters; surmounting cornice and coping, the whole composition topped by 4 tall urns. To the left is a projecting 2-storey canted bay window with similar sashes to each face. The rear elevation has one large ogee-arched window to the centre with moulded sandstone surround; diamond panes and coloured glass. Below this is an inset decorative iron mermaid panel.	Modern	SH5902737166
4876	II	Round House Including Adjoining Arch and Walkway	One of a pair of small shops linked by a parapetted overhead walkway above a central arch. Stuccoed walls with slate roof and pantiles to the wall and gable tops. The plan is in the form of a semi-circular drum tower with a main floor above a basement of rubble, built against a slope. The rear wall is flat and has a stepped and scrolled gable. This has a broad arch with main entrance within; small-pane glazing with central glazed doors. Above is an applied baroque cartouche and a decorative hanging bell to its R. To the R steps with sloped	Modern	SH5899137164

NPRN No.	Grade	Name	Description	Period	NGR
			parapet walls lead up to the walkway which turns a right-angle to ascend over the large open arch. To the L the wall turns an angle to join the corner of Prior's Lodging; this short stretch of wall has a large open arch with another cartouche above. The rounded NW side has two 12-pane windows flanking a central small-pane glazed door which opens onto an iron balcony. The basement level has an arched niche beneath the balcony.		
4877	II	Ladies Lodge (Siop Bach)	Small rectangular shop in baroque manner; rendered elevations above a rubble plinth with pantile roof and shaped, scrolled gable parapets to the NW and SE ends. The SE (square-facing) end has a single-storey canted shop-front window with small-pane glazing, and a segmental mural by Hans Feibusch above; lattice window in the gable apex. The NW end has a 12-pane sash window with arched fan over and a decorative iron balcony in front; above is a vertical lattice window. The NE side has an arched niche to the L (containing a floral urn) with a lunette window to the R; under the eaves to the centre is a Jacobean window with splayed sandstone surround, probably re-used from Emral Hall, Flintshire. There are hanging signs and bracket lanterns to the corners.	Modern	SH5899837166
4879	II	The Pantheon Including Addition to the Rear	Large octagonal building with plastered walls and pilasters at the angles surmounted by a ribbed dome with elegant octagonal cupola and gilded ball finial. Tall arched windows with multi-pane glazing flank a large Gothic-style porch on the SW side; a sequence of oval oculi runs around the top. The porch is of 2-storeys and originated as a fireplace; painted red sandstone. It has 2 segmentally-headed arches on the ground floor, and 6 narrow windows above, all set in ornamental Gothic decoration, and painted white; parapetted top with eagle sculptures to the canted corners. Adjoining the Pantheon to the rear is a single-storey addition with rendered elevations and slate roof. This is in the form of two conjoined blocks with an angled central chimney in between; the latter has a cupola-like top with upturned copper wash boiler as finial. Tripartite multi-pane windows, and a part-glazed door to the gable of the western-most section. A short link wall with open arch links the building at this point to the adjacent Chantry Row. Similarly an arch links the eastern block to the corner of the Belvedere. In front of the Pantheon is a balustraded terrace from which steps lead down to the lane opposite Battery Square.	Modern	SH5901237180
4880	II	Chantry Row	Single-storey flat-roofed building arranged to simulate a terrace of 4 houses. Stucco fronts painted different colours and with 5 dummy windows under the eaves to imply an attic storey; wide overhanging eaves. There are nine bays with 12-pane sashes alternating asymmetrically with 12-pane glazed doors, the latter with iron railed balconys. These doors are (from L-R) to bays 2,5,7 &8. At the west end is half an octagonal turret with onion dome above, built to conceal chimney, and finished in green in imitation of copper.	Modern	SH5900637195
4881	II	Chantry	A tall building of town hall character having 3 storeys plus attic. Rendered elevations with wide eaves and hipped pantile roof with surmounting turret, the latter with roof of gabled mansard type and urn finial; imitation clock face to the front. The village-facing (SW) elevation is in 2 parts, with the 3-storey westernmost bay recessed. This has an arched multi-pane ground-floor window with 12-pane sash to the first floor and 6-pane sash under the eaves above. The remaining part has 3 tall, round-headed windows divided into 2 storeys; multi-pane glazing. Twelve-pane, 2-part casement to the attic floor above, contained within a hipped dormer. The SE elevation has 12-pane sashes to the first floor and a flat-roofed dormer to the attic with 3-part casement; part-glazed entrance to the ground floor stepped-up via a metal stair and with tripartite window to the L. The rear (NE) elevation is studiedly asymmetrical. It has a recessed bay to the R with entrance to the L and sashes, as before, on three storeys to the R; the entrance has an applied wooden baroque doorcase and small-pane glazed door. The advanced left-hand section has a recessed loggia to the ground floor, the upper floors jettied out above and supported on a cast iron column at the corner. The third floor is further jettied with a sloped soffit. Small 4-, 6- and 12-pane windows with a large 12-pane sash to the upper floor. This has a segmental iron balcony in front and a segmental fan above. A small lean-to store projects to the front L, its return flush with the SE elevation; boarded doors. The whole building sits upon a partly arcaded plinth built into the hillside.	Modern	SH5898737204
4882	II	The Unicorn	Elegant classical building with stuccoed elevations; it essentially consists of a single-storey, flat-roofed cottage raised up above an arcaded basement, and it gives the impression of being a more substantial 2-storey villa due to its fine symmetrical facade. This is of 7 bays, with the central three advanced with moulded pediment and full-height pilasters defining the bay divisions. Elegant 15-pane sashes to the principal floor, that to the central bay with balcony and decorative mermaid balustrade, and those to the four outer wings with applied	Modern	SH5896237245

NPRN No.	Grade	Name	Description	Period	NGR
			circular plaques above. Rusticated quoins to the corners and projecting keys and imposts to the arcade arches. Within the pediment is a relief crest of a unicorn.		
4883	II	Telford's Tower, Including Adjoining Walls and Arches	Square tower of three storeys above a basement with single-storey rectangular range adjoining to the E, thereby forming an overall L-plan. Stucco elevations with slate roofs; that to the tower section is pyramidal and has feathered eaves and an urn finial. Canted oriel to the ground floor S side of the tower (facing the village), with 6-pane central and 3-pane outer lights; sloped metal roof. Above this is an 8-pane vertical window with external wooden slatted shutters and shallow segmental arch over. The upper storey is slightly recessed and has a 6-pane window; further, similar windows to the side elevaions. The adjoining block has steps up to an arched entrance to the L with multi-pane glazed door. Venetian window to the R and to the eastern gable end, the latter with blind recessed occulus above. Adjoining this block to the R (NE) is a rendered and tile-coped wall which steps up over two round-headed arches with volutes to the sides; to the R of these is a larger, rusticated arch, with surmounting Royal arms in stone with lion and unicorn supporters. A short link section connects this with the adjoining Unicorn.	Modern	SH5894537229
4884	II	Gloriette	Large and imposing classical loggia consisting of a triple-arched rusticated podium, with balcony above; this has decorative iron balustrades set between 4 stone Ionic columns rising through 2 storeys, and supporting a dentilated entablature with balustrade and 4 urns. To the rear of the loggia is a dummy facade with stucco front; this has 2-storeys and 3-windows with central pedimented classical doorway at the balcony level. Sloped sides with open oculi. The rear elevation has an applied Ionic porch to the centre, the fluted columns supporting a sloped metal roof. Above this is a faux square latticed window.	Modern	SH5894137212
4885	II	Central Piazza	The Central Piazza occupies the main flat area in the centre of the village and consists of a formal fountain basin set within a raised and revetted terrace; this is approached by a shallow flight of cobbled steps from the lower level in front of the Gothick Pavilion (to the S). These steps are flanked by 2 urns and a balustrade, with tall Ionic columns at each end. The columns are topped by gilded oriental dancing figures. The fountain basin is rectangular with apsidal ends and has low copings; at the southern end is a circular stone fountain on a circular plinth. Raised flower beds surround the fountain basin.	Modern	SH5895137192
4886	II	Salutation	U-shaped former stable complex of one-and-a-half storeys arranged around a black/white quarry-flagged courtyard; partly-rendered, coursed stone construction, with fish-scale slated roofs of medium-steep pitch. Triple twisted terracotta Gothic stacks to a chimney at L. The central, recessed section has glazed small-pane doors to the centre with a decorative sloped metal canopy porch above. Three flat-roofed dormers to the roof with 2-part 12-pane casements. The left-hand advanced wing has 2 large arched windows to both the gable end and the inner (E) side, the latter with a further, trompe l'oeil window to the centre. Above those to the gable end is a small Gothic tracery oculus, together with a decorative iron hanging sign. The W side has a large advanced central gable with large canted bay;12-pane window with narrow 4-pane outer lights. Flanking this central bay are further single bays also with (smaller) gables; that to the L has an entrance with stone quoins, that to the R an arched window as before. The right-hand advanced wing has a voluted Dutch gable with large lattice-glazed doors leading onto a corbelled first-floor balcony with iron railings; trompe l'oeil oval oculus in the gable apex above. The ground floor has a canted bay with 20-pane front and 8-pane side windows. Further decorative iron hanging sign to the L. The inner side has a single-storey shop extruded in the angle with the central range; this has a shallow canted front and small-pane glazing throughout. The E side of this block has an external rick stair giving access to a first-floor entrance.	Modern	SH5892437225
4887	II	Triumphal Arch Including Adjoining Service Block to the NW	Triumphal gateway in Rococo style. Stuccoed brick with raised stucco quoins and banding. Rusticated arch over carriageway beneath high pediment inscribed by 2 massive scrolls with a semi-circular top. In the centre of the pediment is a round headed niche, with shell cartouche over. The niche contains a classical female figure. Applied cartouches of cast concrete to each pier flanking the arch. This archway, by which the visitor may leave the village, complements the 2 entrance gateways. Adjoining the gateway to the NW is a single-storey service block with rendered elevations and mono-pitch corrugated iron roof. The block has three round-arched entrances with boarded doors and vertically-slatted upper sections; a small link section of wall adjoins stepped-down to the L with small road-arched entrance and boarded door.	Modern	SH5891137234
4888	II	The Piazza, Including Adjoining Playhouse Central Vase Monument	Small semi-circular piazza with low rubble walls forming an arc some 20m across. The wall is surmounted by a topiaried beech hedge which forms a high screen. Off-centre to the R is a wall fountain flanked by gaps within	Modern	SH5889937233

NPRN No.	Grade	Name	Description	Period	NGR
			wall and hedge for paths up to the Gwyllt; both gaps are defined by flanking sandstone balls on shallow chamfered bases. The fountain is in the form of a terracotta dolphin with scallop shell basin, the whole with aedicular surround; shaped pediment with scallop corbel and cartouche above. Arched opening behind the dolphin, with balusters, relief lozenges and voluted sides. To either side of the fountain, beyond the path entrances, are life-sized classical caryatids; these are set into the topiary screen, one to the R and 2 to the L. To the far L is a square angled plinth of sandstone ashlar with a smaller surmounting statue of a female classical figure. The wall and surmounting hedge continue to the L of this figure for another 6 to 8m; at this point a low rubble parapet wall with circular terminating pier adjoins. This flanks a part-metalled access lane on the NW side. In the centre of the piazza is a vase monument in the form of a large terrcotta copy of the Warwick Vase; this has a square classical plinth with rams-head corners and putti decoration and sits on a 2-tier circular base, itself set within a decorative circular cobbled pavement. Adjoining the piazza screen wall and hedge to the E is the Playhouse. This is a plain rectangular building containing an audio visual presentation. It has a shallow-pitched roof and overhanging eaves. The entrance is at the front gable end which is symmetrical. A short flight of steps leads up to a central marginally-glazed entrance with decorative segmental fan over and flanking external wooden shutters. To the L and R of this are small vertical windows with lozenge glazing and single outer shutters. Rusticated corners to the front gable.		
4889	II	Statue of Buddha	Over life-sized statue of Buddha in gilded plaster; this is contained within a small 4 columned shelter of painted rubble with rounded red pantiled roof. There is a decorative ironwork balustrade to the front and a flight of access steps winding up to the R.	Modern	SH5900337174
4890	II	Hercules Statue	Life-sized bronze statue of Hercules carrying the globe; on a tall, 2-stage rendered pedestal. A plaque is affixed dedicated "to the summer of 1959, in honour of its splendour"; other plaques to 1971,73 and 75.	Modern	SH5894037152
4891	II	Astrolabe	Metal astrolabe mounted on a Tuscan stone column, itself upon a terracotta octagonal base (from a C19 chimney); circular plinth with inscription: "In grattidtude (sic.) to William Willett."	Modern	SH5892937149
4892	II	Chronometer Sundial	Sundial in chronometer shape supported by a life-sized lead puto figure. The sundial itself is of brass;circular slate plinth with rendered columnar base approx 0.50m high.	Modern	SH5898837170
4893	II	Observatory Tower	Rectangular tower of whitewashed stone. Of four stages, the 3-storey lower section with small balcony at top level facing N (towards the village). The rendered fourth storey is slightly inset, and has window openings to each face having minute external slatted wooden shutters; plain glazing. Shaped shingle roof with box like structure above with star finial over; wide eaves. The ground floor has an arched entrance to the N face and a double-arched, balustraded opening to the E; arched entrance to the second storey on the W face, accessed via a straight flight of external stone steps; small slit-like windows asymmetrically placed to all faces.	Modern	SH5892536886
4894	II	White Horses	White Horses consists of a primary single-storey vernacular cottage with C20 additions to the S and NW, the latter addition in the form of a storeyed link block. The primary block is of whitened rubble and is parallel with the quay of which it forms a part; slate roof. Sturdy central chimney stack of traditional type with slated opening. The single-storey S addition is of one bay deep; its S elevation has an arched entrance to the R with boarded door and two blind arched windows to the L with faux small-pane glazing and fans. The NW addition connects the primary block with the Observation Tower via a link wall at right-angles to it. It is constructed on arches over the path to the point, and the main structure is therefore effectively of one raised storey only. Timber hung with horizontal boarding, slate roof. Inset anchorage for boats.	Modern	SH5891636880
4895	II	Statue of Nelson	Painted, life-sized statue of Nelson in Coade stone; presented to Sir Clough Wiliams-Ellis by Sir Michael Duff of Vaenol Hall near Caernarfon.	Modern	SH5892036888
4896	II	Rotunda or Grotto	A rounded structure designed as a lookout platform with grotto below. Of rendered brick and concrete with low slab-coped parapet walls. The building consists of a semi-circular, single storey flat-topped drum built into the hill side, with a viewing platform and parapet at roof level. A cast iron fluted column stands in the centre of the concrete platform with a surmounting metal astrolabe. There are arched entrances to the lower, grotto part, and 5 rectangular barred openings with outward splays.	Modern	SH5907137167
5205	II	Rhos House	Two-storey sub-medieval house evolved into L-plan; rubble construction with slate roofs and end chimneys with distinctive triangular crestings. The primary block has a 2-window W front with 12-pane sashes flanking a central entrance to both floors, those to the upper floor with gabled dormers; slab-coped principal gables to this	Post-medieval	SH5955438696

NPRN No.	Grade	Name	Description	Period	NGR
			wing. The later rear range has two 2-pane sashes facing the lane (S) and a similar window to the first floor contained within a gabled dormer; plain bargeboards. Full-length lean-to to the primary range at the rear, extruded in the angle with the later block.		
5211	II	Railway Lodge at the Ffestiniog Railway Crossing	Two-storey building with slate stone elevations laid in thin heavily mortared slabs; slate roof, hipped to left end, with wide boarded eaves and rubble chimney stacks. One window front; boarded door across corner, splayed back to ground floor only. One window left hand side and single storey cross range with pebbledash gable end to the road including chimney stack. The windows are mostly of timber frame small pane type with metal casement openings; later sash window on left end and to cross range. Cement render right hand gable end - the building may have once continued further to W.	Post-medieval	SH5954138517
5222	II	Bron-y-Garth Hospital	Large former workhouse complex of rubble construction, the main elevations roughcast; slate roofs. Of standard grid-plan form with transverse and spinal ranges linked by central octagonal block. Most windows are small pane sashes. The front range facing the road has 2 storeys and basement, 4 bay block with advanced centre, hipped slate roof and wide eaves; pebbledash with cement render dressings. This was formerly the main entrance - window now inserted to doorway. Single storey ranges set back to either side, largely pebbledash and original to left, rubble and part post-1888 to right; deep bracket hoods to doorways and horned small pane sash windows throughout. The spinal range running back from the central block to the 3-storey octagon and 3-storey parallel ranges forms 2 courtyards open at ends. That to NE has rubble ranges and the main entrance is in a flat roof extension; largely pebbledash to SW with red brick stack. The parallel range has 2nd floor cill band. The rear courtyards are slightly larger, again mostly 3 storey and rubble with all 15 and 20 pane sashes with massive lintels retained; doorways to 2nd floor. The NE rear courtyard is closed at the top by a single storey range; that to SW has detached garages.	Post-medieval	SH6032338661
5223	II	Casual Ward at Bron-y-Garth Hospital	L-plan single storey structure in local rubble with slate roof, very wide bracketed eaves and tall red brick chimney stack. To the left is a cross range with broad 2 + 2-window gable end; horned 12-pane sash windows lighting the warden's accommodation. Lean-to porch in the angle to right and beyond are small pivot windows just below eaves, grouped in 3 pairs and lighting individual cells; raised ventilator and skylight to ridge. Five windows to rear of gabled cross range and beyond is a full width lean-to with massive lintels over the full height recesses in which are retained the cast iron plates with small round holes - formerly upright in ramped frames. Behind these are 4 pane casement windows.	Post-medieval	SH6027438648
5235	II	Toll House at the E End of The Cob (Also Known as The Rebecca Tollgate)	Single storey, 3 bay rubble building with slate roof and wide eaves; the central gabled bays to front and rear project creating a cruciform plan; rubble chimney stacks with tall flues to either side of centre. The front has central entrance with attached toll-board to left - this was transfered from the former tollgate at the Porthmadoc end; tall, round-topped and painted gate pier (for pedestrian gate) to right. The outer bays have cross frame windows. Rendered left gable end with high plinth continuing across blank rear. Free-standing similar gate pier in front holding replaced main and pedestrian gates; gate on SE side of road is missing.	Post-medieval	SH5846037918
14411	II	Former Erecting Shop at Boston Lodge	Single-storey range of slatey rubble with slate roof, now with roof-lights; old photographs show that there was formerly a chimney. To the centre are 2 full-height, half-glazed door entrances through which run railway tracks. At the extreme right hand end is the carriage works, the front part of which is modern; lower part-glazed entrance to the left section with tall iron framed flanking windows.	Post-medieval	SH5847837844
14412	II	Former Machine Shop at Boston Lodge	Of local slate rubble construction with slate roofs. It is 2-storey with wide eaves, bracketed to gable end, and small-pane sashes (25 and 30-pane); 3-original windows to the ground floor, replacement copies above. Rebuilt and extended to the left, which is cement-rendered with modern windows except one original window to first floor. Lean-to at rear with further small-pane sash windows.	Post-medieval	SH5848337864
14413	II	Former Iron Foundry and Smithy at Boston Lodge	Built of local slatey rubble with corrugated iron roof and wide eaves, bracketed to gable end. 4-bay iron foundry has voussoir-arched openings, 3 of which are filled in to base and given small-pane windows but the left hand one retains boarded door. Stepped back to left is 5-bay, slate-roofed, smithy which has similar round-arched openings of which alternate ones remain open as split boarded doors while the rest are converted, as in the foundry, into windows. Railway track at front with turntables to either end.	Post-medieval	SH5850437890

NPRN No.	Grade	Name	Description	Period	NGR
14414	II	Crane at S End of Boston Lodge Railway Works	Late C19 cast-iron crane set in base of massive slate blocks on central cast-iron pivot with frame supporting large gear wheels and shoe for gib (timber gib missing). Manufactured by 'H & J Ellis, Engineers, Manchester'. The crane would have been used to load goods to and from wagons on the siding.	Post-medieval	SH5843737849
14415	II	Locker Room Block at Boston Lodge	Rectangular single-storey block of local slate rubble construction with hipped slate roof. The front NE elevation has a plain-panelled timber gabled porch to the R with arched entrance and glazed side lights; 12-pane sash window to the NW return (R). The rear elevation has a central catslide outshut with multi-pane window; 2 modern timber windows to the R and L of this.	Post-medieval	SH5846637874
14416	II	Boston Lodge	This prominent range, although altered, is the oldest at Boston Lodge because it was originally the barrack building to house some of the workforce brought in to build the Cob; there was also a comparable barracks on the Porthmadoc side. Tall, 3-storey stone building with painted rendered elevations and boulder plinth; hipped slate roof with wide eaves and cement rendered chimney stacks to ends and centre. 3 + 3-window west front with modern cross-frame, small-pane, windows and drip-edges at sill level. Irregular window arrangement at rear and entrances up steps to either end.	Post-medieval	SH5847637889
14417	II	Former Brass Foundry at Boston Lodge Railway Works	Single-storey, built of local slatey rubble with slate roof and wide eaves, bracketed to gable end. 3-bay front with central boarded door flanked by 4-light transomed windows. 1970's extension to right now links with Oil Store.	Post-medieval	SH5848837892
14418	II	Former Oil Store at Boston Lodge Railway Works	Single-storey, built of local slatey rubble with slate roof and wide eaves, bracketed to gable end. The north front has boarded door to left and 2-light timber window to right with transom and pointed arched heads to the glazing. The west gable end has small blocked roundel and projecting masonry at the north corner which originally formed the springing for an arch that formerly spanned the railway line at this point.	Post-medieval	SH5848537902
14419	II	Former Manager's Office at Boston Lodge Railway Works	Of local slatey rubble with slate roof. The whitewashed rendered front has offset gabled timber porch with pendant and finial and part-trellissed sides; flanking 2-light window. Left end, beside track, has unhorned 16-pane sash window.	Post-medieval	SH5850237934
14423	II	Former Weigh House at Boston Lodge Railway Works	Like the other mid C19 buildings here it is built of local slatey rubble and in this case also has quoins. Slate roof with stone chimney stack to south and wide eaves which are bracketed to the asymmetrical gable end; on the west side the eaves line slopes down towards the south, exaggerated by the fact that the walls are not parallel. The gable end has a boarded door beside a narrow sash window, with glazing bar to upper sash; overall stone lintel. West side has 3-light, small-pane, timber window beneath which are apertures for the counter-balance rods used in weighing the wagons on the line. One small-pane sash window on the east side. At south end it is attached to locomotive shed.	Post-medieval	SH5857638001
14424	II	Locomotive Shed at Boston Lodge Railway Works	Built of local slatey rubble with corrugated iron roof; coursed rubble to south gable end but uncoursed to sides. Boarded gates to the twinned square-headed entrances with iron lintel; modern lean-to on west side. Embankment wall on opposite side of track. At north end it is attached to the weigh house.	Post-medieval	SH5855537991
15358	II	Mile Post	Slate mile post, rectangular but with chamfered angles. Inscribed ‘To Pwllheli 10.M. Tremadoc 3.M. Criccieth 1 ½. M.’.	Post-medieval	SH5172239031
15376	II	Braich y Saint	Eastern building: Roughly courses slate rubble, with slate roof, and end wall stacks. The right-hand stack is corbelled out, and is largely a recent reconstruction (though based on the earlier form). Small 2-unit plan, originally with internal cross-passage. Entrance towards centre, with steep split stone voussoir arch (the door itself, which is studded and has fine strapwork hinges, is a late C20 replica of an earlier type). Small window openings on each floor - renewed as pivoting windows with small panes. Inside, the staircase winds up alongside the stack in the larger left-hand room. Main building: Exterior: The earliest part of the house is the rear wing to the W. This is probably late C16, but was raised at some time to the height of the frontage range which was added c1780. This range is built of roughly coursed and squared slate blocks, with slobbered pointing and smooth rendered dressings. The earlier rear wing is rougher stonework in smaller blocks. Slate roofs throughout, hipped and with end wall stacks to front block, gable end stack to wing. Front block is a high 2 storeys, 3-window range. Central entrance with recessed 4-panelled door with radial fanlight, flanked by 12-pane sash windows. Similar windows to first floor and in return elevations. Integral rear wing to NW is clearly distinguishable as the earlier phase, and has 2x12-pane sash windows to first floor, which do not align with the lower windows (a tripartite and a 12-pane sash). Lower rear wing beyond was probably added when the house	Medieval	SH5115640287

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			was remodelled in the late C18 to provide service accommodation. Further extensions (a former dairy) connect this building to the other house on the site.		
15377	II	Braich y Saint	Eastern building: Roughly courses slate rubble, with slate roof, and end wall stacks. The right-hand stack is corbelled out, and is largely a recent reconstruction (though based on the earlier form). Small 2-unit plan, originally with internal cross-passage. Entrance towards centre, with steep split stone voussoir arch (the door itself, which is studded and has fine strapwork hinges, is a late C20 replica of an earlier type). Small window openings on each floor - renewed as pivoting windows with small panes. Inside, the staircase winds up alongside the stack in the larger left-hand room. Main building: Exterior: The earliest part of the house is the rear wing to the W. This is probably late C16, but was raised at some time to the height of the frontage range which was added c1780. This range is built of roughly coursed and squared slate blocks, with slobbered pointing and smooth rendered dressings. The earlier rear wing is rougher stonework in smaller blocks. Slate roofs throughout, hipped and with end wall stacks to front block, gable end stack to wing. Front block is a high 2 storeys, 3-window range. Central entrance with recessed 4-panelled door with radial fanlight, flanked by 12-pane sash windows. Similar windows to first floor and in return elevations. Integral rear wing to NW is clearly distinguishable as the earlier phase, and has 2x12-pane sash windows to first floor, which do not align with the lower windows (a tripartite and a 12-pane sash). Lower rear wing beyond was probably added when the house was remodelled in the late C18 to provide service accommodation. Further extensions (a former dairy) connect this building to the other house on the site.	Post-medieval	SH5115240285
15378	II	Former Threshing Barn at Braich y Saint	Random slate rubble, in which the gaps between the larger stones are filled in with smaller ones. Slate roof. Built against the slope, with opposed doors, each with steep rough voussoir arch. The space is unequally divided as 1-2 bays by the entrances. Single small vent in rear. Upper entry with rough timber lintel in the W gable wall. Slate threshing floor. Rough queen strutt trusses, with ridge and 2 purlins, set into the wall below the present wall plate.	Post-medieval	SH5109740262
18964	II	Capel Salem, including attached Sunday School, forecourt gates and railings and hall to rear	A classical style chapel of snecked rubble stone with grey freestone dressings, on a rusticated plinth, and slate roof. The 3-bay gable-end front has a giant arch and pediment characteristic of Thomas. Tuscan pilasters are on high bases to sill level. The outer bays have 2-light windows with tripartite key stones to round heads, and moulded impost bands. The wider central bay has a recessed porch with 3 round-headed arches with tripartite keys, of which the central arch is wider and higher and has 2 detached Tuscan columns carrying the projecting balcony above. Inside the porch is a boarded wainscot and a round-headed window. In its return walls are double doors with round-headed panels and segmental-headed radial-glazed overlights. The balcony has an open balustrade. Above it is the large gallery window, which has 2 main lights under a round large tracery light, in an eared architrave with tripartite keystone. The 5-window side walls of coursed local slate-stone rubble, and have round-headed 2-light gallery windows. On the R side is an attached Sunday school facing Snowdon Street, of roughcast painted light blue, slate roof, and ball finial over the R-hand gable. It has 4 round-headed 2-light windows. In its R gable end is the entrance, in a lower gabled porch with panelled door facing the road, which has an opening boarded up on its R side. The gable end of the school has 2-light windows flanking the porch and an oculus in the gable. At the rear the school has been extended to form a shallow lean-to against the rear of the chapel. The chapel gable end has a round-headed louvered vent in the gable. The main chapel entrance has distinctive forecourt gates and railings. The forecourt has a dwarf wall of snecked rubble with freestone coping. Terminal and gate piers are square freestone monoliths incorporating round-headed raised fields, and moulded caps and bases. Double cast iron gates have dog bars with spear finials, similar finials over the top rail, and incorporate neo-classical fretwork. Flanking railings are similar.	Post-medieval	SH5685838727
19800	II	Former Stable Range at Plas Newydd	Rectangular gabled range of rubble construction under a corrugated iron roof; slate-coped gable parapets with shaped kneelers and slightly coved eaves. 3-bay front with central entrance and flanking windows to ground floor (that to L formerly also an entrance); 3-light modern casements. 3 further windows to upper floor (under the eaves), the central one larger and with modern glazing; those flanking is blocked with slate slabs. Similar blocked window to R (N) gable; modern single-storey addition to L (S gable). To the rear, an original external flight of slatestone steps gives first-floor access to the centre; plain, open entrance.	Post-medieval	SH5985639041
19801	II	Ty Obry Farmhouse	T-plan storeyed farmhouse with adjoining agricultural range to W. Of rubble construction on a boulder plinth with slate roof and tiled ridge; plain, late C19 bargeboards. End chimneys of two stages, the upper sections	Post-medieval	SH6051039660

NPRN No.	Grade	Name	Description	Period	NGR
			C19 raising. That to the gable end of the (later) stem of the T now appears as a central stack because of the range's extension northwards in the late C19; this has off-set slates arranged decoratively to the capping. The entrance front has low rubble forecourt walls and faces a hillslope to the S. Off-centre entrance (to L) with recessed late Victorian boarded door and rectangular overlight. 2 windows to each of ground and first floors with plain C20 casements and projecting cills. On the E gable of the primary block, an original small, oak-framed stair light; plain modern window to W gable, facing farmyard. Further modern casements to the W side of the rear arm, those to the first floor just breaking the eaves and contained within catslide dormers. Single-storey late C19 porch extruded in the angle between this and the rear of the primary block. To the L a parapetted external stone stair leads up to the first floor, the entrance via a gabled porch addition. Stepped down from this and adjoining to the W is a narrow agricultural range with kennels to the ground floor and an upper loading bay to the gable end. This range and the gabled extension of the main house which it adjoins are raised up above the lane running parallel with it. Adjoining to the E side of the rear wing is a small late C19 storeyed addition with a further entrance between that and the primary block; low catslide porch. A single-storey rubble-and-slate lean-to adjoins to the R of the storeyed addition.		
19802	II	T-shaped Agricultural Range at Ty Obry	T-shaped agricultural complex of rubble construction with slate roofs. The long range runs N-S, and consists of two adjoining barns, that to the S primary. This is set into the hillslope and has an old slated roof. Entrances to the centre of the E side and at R on the W, the latter with catslide-roofed dormer; rectangular open window to L with loading bay beyond. The later barn is stepped down from this, leaving the N gable of the earlier barn partly exposed. This has C19 nesting boxes to its upper section, arranged in 6 tiers and with slate ledges. The N barn range is joined to the latter range by a short later C19 link section with boarded entrances to both E and W. A modern steel-framed barn adjoins to the W and a low corrugated-iron-roofed catslide extension adjoins to the E; this with three boarded openings. 6 tiers of nesting-boxes to the upper N gable, as before. Adjoining the primary barn to the W is a continuously roofed storeyed range of three sections, that to the centre advanced, that to the L a later C19 addition. Boarded doors to each section with windows to the L of that to the centre and to the R; C20 small-pane, re-used glazing. Small, squat end chimney to E gable with capping and weathercoursing.	Post-medieval	SH6048139642
19841	II	Cart-shed at Ty Mawr	Of rubble construction with central monolithic slatestone dividing the bays at the front. Old slate roof with rubble gable parapet to R.	Post-medieval	SH6139740183
21523	II	Cefn-y-meysydd isaf	Rubble stonework with slate roofs. The mid C19 SE front is of 2 storeys, 2 window bays with gable stacks and 16-paned sashes. The rear wing is a 1-bay service end partly rebuilt in the C19, and extended to the NE in more recent times. The side door leads to a cross passage. The building is linked by a lean-to shelter to a washhouse-bakehouse building, probably of the late C18 or early C19.	Post-medieval	SH5266840209
21525	II	Pentrefelin Church Hall	Built of selected hard roughly squared rubble stone, with a slate roof. Single cell structure with rounded corners, subdivided internally, with a lean-to vestry on the N side. The building is entered from the W end by a recessed door, set within a tall round arch, and the sides splayed back to a pair of panelled doors with a fanlight over, round-headed niches central to both tapering sides, and in front, two semi-circular steps. In the gable above the arch, a circular oculus containing the bell. Round-headed windows on the W rounded corners. Main windows are multi-paned with flat iron glazing bars, 5 on the S and 4 on the N, all with slate sills and lintels directly below the angled boxed eaves. The walls are also rounded at the E end with an E window at high level. The roof continues down over the vestry, which also has rounded N corners and angled boxed eaves. Over the W end, a small tower with timber sides in the form of a cross, partially louvred, and having a slated skirt and 2-stage swept roof.	Post-medieval	SH5280139763
21526	II	Tomb of David Owen	Rectangular ledger stone in polished blue slate, set in a slightly raised position above the ground. It bears a circular recessed panel at the head with a carving of his harp, and an inscription noting the date 1749, with an englyn by Ellis Owen, his champion.	Post-medieval	SH5256238761
21527	II	Monuments to John Williams and Ellis Owen	Two pink granite tombstones standing side by side, that to the W comprising a cubic die set on a moulded base, with a cornice carrying a stepped cross, all enclosed in low cast iron railings with fleur terminals. The second, to the E, consists of a short column with a cavetto-sided conical apex carrying a turned vase. One inscribed to John Williams [Ioan Madog], bardd godidog, d.1878, the second to Ellis Owen of Cefn Meusydd, d.1868, both being well known literary figures in S Caernarfonshire in the 3rd quarter of the C19.	Post-medieval	SH5257038784

NPRN No.	Grade	Name	Description	Period	NGR
21528	II	Gravestone of John Ystymllyn	A simple sandstone headstone, elegantly inscribed with the inscription 'Here lieth the Body of John Ystymllyn who Died July the 27th 1791, Aged 46 Years, followed by an inscription recording his origin in India (probably the West Indies).	Post-medieval	SH5255138776
21532	II	Chest Tomb in churchyard of the Church of St Beuno	A large chest tomb built of rubble stonework and roughly rendered, and covered with an edge moulded ledger compounded of 3 slabs of standard proportions. At the NE corner, a sandstone panel reads: HER LYETH... / THE:REC.../ WILL..... MAU... CLENE.../ DIED THE ...ANO DOmin 1622.	Post-medieval	SH5414640287
21533	II	Plas-isa	Coursed squared rubble stonework with a hipped slate roof. Two storeys, the main elevation faces E, of 3 bays with a central panelled door and flanking margin-glazed windows, all set under an open timber lean-to verandah with a slated roof and modillion eaves. 9-paned single sash windows to the first floor, the central window blind. A stone stack occurs on the party wall with No 2 with a further stack with weather courses in the hipped roof at the N end. Contemporary lean-to at the rear with 16-paned sashes, probably containing service rooms. Further to the rear, a single storey washhouse set at right angles with a side door and 6-paned sash window.	Post-medieval	SH5489340624
21534	II	Bwlch-y-fedwen	A large village farmhouse; 2 storeys with 4-bay entrance front facing E over present driveway and 2 storeyed rear wing with stepped-down roofline indicating 2 phases of construction. Pebbledashed with slate roof, deeply overhung at eaves, and with gable end stacks and axial and end-wall stacks to rear wing. Entrance in 2nd bay from left: a 4-panelled door with decorative overlight. 16-pane sash windows to the ground floor, 12-pane to first floor. Gable end to street has one blind opening to upper floor. Rear range has blocked doorway to left and tripartite 8-pane sash window beyond, with 2x12-pane sashes to first floor. Lower continuation of this range beyond has blind wall to street.	Post-medieval	SH5476140586
21536	II	Farm Building at Ereiniog	Built of uncoursed rubble stonework, with a slate roof. Single storey, 4 bays, with an animal opening central to the S gable end, and a side door at the upper end. A pitching door for animal feedstuffs is near ground level at the N end by the road.	Post-medieval	SH5525343314
21537	II	Ty-newydd, with attached walls	Built of large greenstone rubble, with a slate roof. Single storey building comprising 2 rooms with gable stacks and lean-to on the N end. Central door within a slate orthostatic porch, the door boarded. Small deeply recessed windows either side with slate windows, probably 4-pane casements, and a small light to the loft in the S gable end. The substantial stacks have weather drips. The wide lean-to has a boarded door and two windows on the N end. The attached walls enclosing the field to the N are built of boulders.	Post-medieval	SH5577842556
21540	II	Pont y pandy	Built of local rubble slate stone. A segmental arch rising 2.1m and spanning 5.4m composed of stone voussoirs with flush spandrels and parapets, coped with stone-on-edge copings. The carriageway over is 3.1m wide between the 45cm parapets.	Post-medieval	SH5495243396
21542	II	Outfield yard group at Clenennau	Built of rubble stone with slate roofs. The group consists of a major hay barn of 4 bays, with a hipped roof, opposed large cart openings and three large ventilation openings on each side, flanked by, on the right, an 'L'-plan open hammel range of 7 bays, the front wall carried on stone piers and corrugated iron sheet roofing, with a stone walled front yard, opening to the S, and to the left of the hay barn, a milking parlour, possibly of later date, with 8 double stalls, returning with 4 stalls each end, drained floor and a rear service area. A stone wall encloses the fold yard in front of the milking parlour and part of the hay barn, extending further to the S than the hammel yard. A driftway from the farm flanks the W side gable of the milking parlour. The milking parlour has two stable doors and 3 iron ventilation windows.	Post-medieval	SH5332642591
21547	II	Lychgate to the Church of St Cynhaearn	Built of rubble stonework flushed with mortar, with an old irregular sized slate roof. A gated stile stands at the side of the stone-built storeroom added on its W side. Openings on each face of the lychgate have slate lintels, and the gable walls are returned to enclose the ends of stone benches internally each side. Pine roof, with slates fully torched, and single tier of purlins. Cast iron gate. The building is extended to the SW by a churchyard store with a lower pitched old slate roof.	Post-medieval	SH5254238768
21553	II	Carreg and Pilkington Tombs	The tombs are in separate railed enclosures. The W contains 2 slate chest tombs, the ledger slab moulded along the edges, and sides with engraved panels, all set on a plinth of slate. The N tomb is for Edward Carreg, surgeon to the Caernarfonshire Militia, later coroner for the county, d.1842, aged 57, and eldest son, also Edward, d.1855. The S chest tomb is to Margaret Dorathea Carreg, about whom nothing is said, d.1839. The two are closely set within fine 2m tall cast iron railings with baluster stanchions capped with urns, and	Post-medieval	SH5257638778

NPRN No.	Grade	Name	Description	Period	NGR
			intermediate square rails with fleur terminals, cast by the John Jones Foundry of Portmadoc. Immediately to the E, a further tomb, low set ledger of slate, inscribed to Elizabeth, wife of Major Pilkington of Ty Nannau, d.1842, Mary Waterhouse added. This tomb is enclosed in similar cast iron railings, c1.5m high, probably by the same foundry.		
21554	II	Front Terrace, Balustrade and Steps at Wern Manor	The artificial terrace extends along the whole SW frontage of the house, and has a balustrade with a central bay with balustraded steps, and further steps at the E end both descending to a lower cross terrace, which in turn has steps down to the main axial walk of the garden, which ends in the summer house. The steps and balustrade are of stone.	Post-medieval	SH5426939873
21555	II	Llys Cynhaearn	House, in a free C18 domestic revival style. Trefor granite with slate roofs and clay hip tiles. Eaves are strongly projecting with raking soffits, carried forward on scrolled wrought-iron brackets. Two storeys, L-plan, with main range facing SE over gardens, and slightly lower short, advanced wing defining small forecourt at entrance front. Cross-wing of c1998 parallel to this range at W. Windows throughout are uPVC replacements of original sashes. Garden front is strongly symmetrical with broad central gable with circular window towards apex: a 7-window range (3-2-3 bays), the pattern of fenestration to the ground floor altered by the introduction of paired central French doors, and similar doors alternating with windows to either side. Curved steps leading to central doors added c1998 in appropriate style. The central gable is flanked by hipped dormers set within the roof. Symmetrically placed battered stone stacks to either side. Right hand return has round-arched entrance with small-paned glazed door with interlace set to left up curving steps. Dormer through eaves to right above. Screen wall to entrance forecourt attached at angle, with round-headed archway through, and terminal pier at lane with remains of finial. Entrance front has semi-circular tower with conical slate roof clasped in the angle of main range and advanced wing forming porch. Outer small-paned glazed door (either the original or closely modelled on an original) set in basket arch. Small recessed panel over door. Single window in main range to right, and 2 dormers in roof above. Return of cross-wing has shouldered stack with circular feature containing the slate carved arms of the Bishopric of Bangor. The upper floor of the cross-wing and the porch are slightly jettied on stone corbels, a detail which has been repeated in the parallel modern wing.	Post-medieval	SH5283839796
21556	II	Mynediad Cae Chwarae	Built of rubble stonework with dressed stone copings. It consists of a raised arched entrance gate set above a watercourse, at the foot of the sloping field. A flight of 7 steps with iron railings rise from pavement level at the side of a basin receiving clear water from a stream which emerges through a semicircular opening and falls over a small waterfall. The gateway above consists of a round-headed arch with superstructure with curved sides sweeping up to a coped gable. To the right of the arch, a slate tablet notes the land was a gift of Richard Greaves of Wern. Above the arch, two finely carved stone panels depicting in relief, on the left a crowned sitting lion holding an angled shield with the arms of Great Britain, a monogram above; below an inscription reading GEORGE V./A.D.1910-1936. On the right, a similar panel with a gorged unicorn holding an identical shield, and below the inscription reading KING GEORGE'S / FIELD. Iron gate.	Modern	SH5487040656
21557	II	Tyn-llan	The house is of pebbledashed rubble stone, with a slate roof. Two storeys, 3 bays, 1 room deep, the main 2 bays containing reception rooms either side of an entrance hall, each with axial stacks, and a third, service bay in line at the SW end with a gable stack. Boarded main front door with simple rectangular overlight, and narrow 4-pane horned sash windows. The upper bay has a boarded door and similar windows. All upper windows have small gables breaking through the eaves line. Rear wing, 1 storey and attic with a gable stack.	Post-medieval	SH5415840317
21558	II	Erwsuran	Built of local stone rubble, with megalithic quoins and door jamb, slate roof. Two bays, 2 storeys, with a 1-storey and loft extension attached to the SE gable. Boarded door off-centre, set in an opening with megalithic jamb on the right, and radial arch of long slate voussoirs. Small 4-pane window to the left, and 9-pane window to the right. The upper floor has 9-pane sash windows. Rendered gable stacks. A flight of steps leads to the grain loft over a cellar in the SE extension, which has a window in the gable end and rooflight.	Post-medieval	SH5615941539
21559	II	Outbuildings at Erwsuran	The outbuildings opposite the house comprise a 2-storey building at right angles, and a washhouse or out-kitchen on a lower level, of local stone rubble with slate roofs. The two-storey farm building at right angles to the house and road is linked to the house by a flight of steps and a short length of walling. It has an external stone stair to the attic level, and irregularly placed small windows. Attached at right angles, the small whitewashed washhouse or out-kitchen with gable stack and boarded door, and with a small window.	Post-medieval	SH5616541550

NPRN No.	Grade	Name	Description	Period	NGR
21567	II	Outbuilding in line with the house at Erwsuran	Built of local stone rubble, with a slate roof. One storey and attic, with boarded door on the NE and similar door with external steps in the gable end facing the gable of the house.	Post-medieval	SH5615041554
21568	II	Gates to Wern Manor	Three square rubble piers with stepped caps and ball finials, carrying a timber carriageway gate and a flanking pedestrian gate, hung on ironmongery provided by Boulton and Paul of Norwich.	Post-medieval	SH5412939755
21569	II	Ornamental Garden Pool at Wern Manor	The pond, is built of concrete. with some stone dressings, rectangular in form with apsidal bays at each end of lesser depth separated from the main water area by a low weir.	Post-medieval	SH5440239884
24011	II	Eglwys Bresbyteriadd Cymru Y Garth, including forecourt wall, railings and steps	A freestyle chapel mixing Italianate and early Gothic detail, of snecked rock-faced stone with grey freestone dressings, and slate roof with ridge ventilators. The chapel has a 3-bay gable-end front flanked by lower near square stair towers set slightly back. The pedimented front has a recessed central bay under a giant arch breaking through the cornice. Outer bays have rusticated quoin strips in the lower stage and Tuscan pilasters to the gallery stage. Windows have corbelled sills. In the central bay are triple round-headed windows with keystones and moulded architraves. Outer bays have double windows in architraves with pediments. A raised moulded band is between stages. The gallery stage has taller triple round-headed windows in the central bay incorporating 2 ringed polished granite shafts. Outer bays have similar double windows. Above the cornice is a lunette, with large panelled apron below the cornice, set within the giant arch, which has a moulded head with keystone and intermediate voussoirs. The moulded pediment has an apex urn finial and iron weathervane. At basement level the central bay has a half-glazed panel door with diamond-leaded lights, in a surround with Tuscan pilasters and pediment with a wooden painted board recording the building and enlarging of the chapel. It is flanked by narrow segmental-headed windows. Outer bays have pairs of similar windows. Stair towers have freestone quoins, a freestone eaves cornice and parapet with an open balustrade with angle piers and urn finials, behind which are hipped roofs. Double panelled doors have Tuscan pilasters and segmental pediments with prominent keystones. Above are paired round-headed windows with keystones and central ringed shaft, and coloured glass in small panes. Side walls have 2 tall round-headed windows with keyed architraves, small-pane margin-lit sash windows under semi-circular heads with diamond glazing. In the side wall of the R-hand tower, facing Dora Street, the basement is scribed roughcast and has 2 margin-lit sash windows. The 5-window side walls are of scribed roughcast, and have margin-lit 8-pane sash windows. At the lower level they have plain architraves and segmental heads. At gallery level, they are round-headed with keyed architraves and have diamond-pattern glazing to the heads. Offset towards the front end of the chapel are external stacks with rusticated quoins, rising above eaves gables. The R side wall has a porch at the R end which has a round-headed window in the gable end and boarded door on the side continuous with the rear of the chapel. The forecourt has snecked rock-faced walls with freestone coping and iron railings. The R-hand side is splayed on the corner with Dora Street. Three square monolithic gate piers with moulded caps and bases carry 2 iron gates with intersecting arches across the dog bars, and finials. Each pair of gates leads to a flight of stone steps. At the L end is a replacement boarded door under a segmental head, leading to a basement passage at the side of the chapel.	Post-medieval	SH5679238641
26852	II	Parish Church of the Holy Trinity	Small Victorian parish church in simple lancet style, consisting of a nave and chancel with W-end bellcote, N porch and vestry projection to the S. Rough-dressed, snecked slatestone elevations with pale sandstone dressings and steep slate roofs; slab-coped and kneelered gable parapets with decorative gable cross bases. The nave N side has a large porch to the R with tall pointed-arched entrance having hollow-chamfered and ball-flower detail; engaged columns to R and L with naturalistic foliage capitals; moulded returned label with carved head stops. To the R of the porch is a window consisting of paired, cusped lancets; to the L of the porch is a single lancet with a pair of lancets to the L and a further single lancet beyond. The latter has a modern slate dedication plaque inserted to its R. The S side has similar windows arranged as two pairs each with a single to its R. At the far R is a single-bay vestry projection with a triple cusped lancet group to the S gable and a Tudor-arched, chamfered entrance with boarded door to the E return; reduced lateral chimney to the W return. The W end has flush stepped buttresses to the N and S, that to the latter with incised Bench Mark. Large triangular tracery Rose with 3 cusped occuli within a moulded label with carved foliated stops. A moulded stringcourse at high dado level returns onto the flanking buttresses where it terminates. Surmounting the W gable is an elegant octagonal bellcote, corbelled-out over the W wall and with open arched upper storey. Stone spire with ball flower and ribbed decoration. The Chancel is stepped-down from the nave and set back; it is of one bay's length. Triple lancet group to the E end with ogee heads; single lancets to the N and S sides.	Post-medieval	SH6115038839

NPRN No.	Grade	Name	Description	Period	NGR
26853	II	The Vicarage Including Adjoining Service Complex and Gates	Mid-Victorian vicarage of medium size, in simple Tudor style. Of snecked, rough-dressed slatestone blocks with renewed slate roof and out-of-character modern bargeboards; three 2-stage chimneys of slatestone ashlar, with moulded capping and ceramic pots. The house consists of a main double-pile block with gable to the front and single-storey gabled porch; stepped down to the W is a service block with associated ranges around a small service court. The entrance front is asymmetrical and of 3 bays, that to the L with flush gable. The porch is placed in the centre with the entrance to the L (E) return; original 4-panelled door with marginally-glazed rectangular overlight. Two-light windows to both floors with moulded wooden mullions, projecting sills and returned labels; 3-pane glazing to each light. The 3-bay rear (S) elevation is near-symmetrical and has a central entrance via 3 brick steps. This has a C20 glazed 3-pane door with rectangular overlight; label as before. Similar 2-light windows to both floors, except to the ground-floor R, which is a 3-light. The E, side elevation, is of 2 bays, that to the L gabled and slightly advanced. This has a 2-storey canted bay in dressed painted stone, with 3-light transmullioned windows to both floors and single-light returns; the quoins project irregularly and there are plain sill and cornice bands, together with decorative quatrefoil bossess applied between the floors. The R bay has a 3-light and a 2-light window to the ground and first floors respectively, with labels as before. The single-storey service block is stepped-down to the L of the main elevation, and set back slightly from it. This has a modern boarded door with overlight and an out-of-character PVCu window to the R. This block faces a small concreted service yard with high rubble screen wall to the E having an entrance with boarded door. On the N side is a low storage range of rubble and slate with 3 boarded and framed doors; at right-angles to this to the L (W) is a brewhouse block with higher roof and 2-stage chimney, as before, to the rear gable. This has a boarded door to its inner return and a 9-pane window to the S gable, with central opening casement. Overlapping this gable end and projecting southwards is a lower store block with 3 boarded doors, that to the end (L) beyond a short section of link wall which connects this block with the main service range of the house; this with open entrance. Set back slightly to the R (N) of this service court complex, and adjoining the screen wall, are plain wrought iron gates with spear-headed finials. These open onto a short drive leading to the former coach-house.	Post-medieval	SH6107038770
26854	II	Former Coachhouse at the Vicarage, Including Associated Garden Walls	One-and-a-half storey rectangular coachhouse and stable block; of rubble construction with slate roof having deep verges with plain bargeboards. Central 2-stage chimney of slatestone ashlar, with moulded capping. The main (SE) elevation has a large central coach entrance with original boarded double doors and large slate lintel. Above this is a boarded loading bay door within a gabled dormer with projecting verges and plain bargeboards. To the R of the coach entrance is a window with slate lintel and 8-pane C20 glazing. To the L of the entrance is a similar window beyond a narrower entrance with boarded door. The NE gable, facing the drive, has a similar large entrance, though with modern boarded doors and concrete lintel; conventional entrance to the L with lintel and boarded door. In the gable apex above is a 6-pane C20 casement window. The SW gable has a plain modern window to its apex, and modern bargeboards. Adjoining the coachhouse to the SW are rubble garden walls approximately 3m high. The walls enclose a large and roughly rectangular garden area to the S and W, returning towards the coachhouse on the NE side at a height of approximately 2.5m. Within this last return stretch is an open entrance. It returns to the NE to adjoin the service complex of the main house, and adjoins a roofless former pigsty block to the SW, before continuing NW to connect once more with the coachhouse block; there is a further open entrance in the centre of this last stretch.	Post-medieval	SH6103938763
26855	II	Gorffwysfa Chapel Including Hall Adjoining to the Rear and Railed Forecourt Walls to the Front.	Medium-sized galleried chapel in eclectic Victorian Renaissance style. Of rubble construction with slate roof, the facade of snecked, quarry dressed blocks with yellow sandstone dressings. Symmetrical showpiece facade of three bays; the central, entrance bay is advanced and pedimented, the flanking bays have moulded cornice and surmounting balusrade with turned balusters. Central entrance with fluted brackets on plain pilasters carrying an entablature with moulded cornice and shallow surmounting pediment; 6-panel double doors with 3-pane plain overlight. Flanking the entrance are two narrow vertical slit lights; corbel course above. Three arched windows to the upper level, above the entrance, that to the centre larger and the whole flanked by Composite pilasters; moulded archivolts and scrolled keys; blind horizontal panel above. The outer bays have tall, continuous lights which rise through both floors; these are arched as before at the top and have narrow lozenge-decorated panels defining the floors and dividing the arched upper window sections from plain 5-pane, rectangular lower windows. Corbelled cills and moulded stringcourse at the springing of the arches. This facade is continued around for one bay onto the sides, which are similar to the outer bays. Stuccoed 3-bay	Post-medieval	SH6098238787

NPRN No.	Grade	Name	Description	Period	NGR
			side elevations, beyond the returned bays of the facade, with stringcourse continued across arched upper windows with scrolled keys; 12-pane recessed sashes to the ground floor. Adjoining to the rear is a rectangular pitched-roofed hall, its gable end flush with the chapel's W elevation and projecting one bay to the E, thereby forming an L-plan with chapel. Narrow arched windows to the W end flanking a larger blind-arched recess. Boarded entrance to the N elevation of the projecting eastern side. Enclosing a metalled forecourt to the front, and continuing S along the lane to the chapel's R, are low stone walls with chamfered sandstone copings and plain surmounting railings; plain entrance piers with octagonal shaped cappings to the front and R.		
26856	II	Nazareth Chapel	Imposing town chapel in Victorian classical style. Of rendered rubble construction with slate roof, the facade of snecked, quarry dressed blocks with grey limestone dressings. Symmetrical showpiece facade of six bays, with the central pair slightly advanced. Bays 2 and 5, flanking the advanced central pair, have entrances with classical open porches; square pillars carry entablatures with shallow surmounting pediments; 6-panel doors with 3-pane overlights. Tall arched windows to each bay, those above the entrances squatter; moulded archivolts with keys and imposts to the central pair, otherwise quoined. Similar quoins to the corners. Classical balustrade and cornice with central and outer urn finials, the central ones flanking a recessed rectangular stone inscribed `Nazareth.' 8-pane fixed glazing to 2-light windows throughout. Roughcast 4-bay rear elevation, with 4-pane sashes to two floors, with marginal glazing. The right-hand bay has a single-storey projecting boilerhouse with slate roof.	Post-medieval	SH6092039254
26857	II	Penrhyndeudraeth Station, Ffestiniog Railway, Including Railed Railway Embankment Adjoining to the N	Victorian railway station, consisting of a main block containing waiting room and offices, and a U-shaped storage/service block adjoining to the SE. Of timber-studded and vertically-boarded construction, with (renewed) yellow brick chimneys to the rear of the principal block; slate roofs. Running in front of the station is the contemporary platform, partly with slate flaging. The main section is a rectangular building with fish-scale roof having projecting, scalloped eaves. The front (platform) elevation is recessed below its roof pitch thereby forming a covered verandah; this is carried on 6 thin iron columns. The recessed elevation has three entrances to the left half, that to the far L with window to its R and an affixed station clock beyond; the remaining entrances have windows to their L. 20-pane unhorned sashes and boarded doors throughout. The U-shaped adjoining block is in two parts: that to the L is an L-shaped block of boarded construction as before, and has 2 boarded doors and 2 multi-pane windows; that to the R is an L-shaped rubble block and consists of a gabled engine house to the R with sliding boarded doors; boarded door and 20-pane window to the recessed left-hand part. The station buildings are accessed from the road via a short inclined path leading westwards between a pair of rough-dressed square piers with stone cappings; the path has a slightly battered slatestone revettment with sloped parapet wall following the incline. The right-hand (easternmost) of the piers is built against the returned revettment of the long railway embankment associated with the station. At this point the revettment is at a height of some 2m; it is of slatestone rubble and is surmounted by plain spike railings with chamfered posts at intervals of around 2m; these with pyramidal cappings. The embankment follows the road eastwards for some 86m from this point before terminating at a height of 0.50m and continuing for another 12m as a cock-and-hen coped slate wall. At 32m and 86m (the end point) are breaks in the railings for pedestrian crossing points over the railway. The railings screen around inwards at these points; plain slate posts define the gateways.	Post-medieval	SH6132039512
26859	II	Minffordd Station	Railway Station, comprising T-plan storeyed stationmaster's house with adjoining ticket office and covered platform with refreshment room. Snecked slatestone with (whitened) sandstone quoins and dressings; slate roofs with projecting eaves and decorative bargeboards; large, squat central chimney to the station master's house. The latter has a single-bay gabled crosswing with single bay recessed main block. Plain glazed cross-windows to the track (N) side, with relief plaque of the Prince of Wales' Feathers in the gable apex. Single-storey 2-bay contemporary block to the L (E) with 4-panel door to L; upper panels glazed, plain glazed overlight, modern 2-pane glazed window to R. A low parapet wall runs in front of this recessed block flush with the gable end. The central, station part, has an open central section with single-bay flanking stone bays; windows as before. The whole has a monopitch slate roof with decorative fascia to the platform side. The advanced, hipped-roofed former refreshment room adjoins to the R; large window with modern glazing to the platform side; 3-light mullioned and transomed window to the gable end. The road-facing elevation (S) is roughcast with expressed quoins and has 16-pane sashes to the advanced gable on both floors; Extruded	Post-medieval	SH6001638540

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			modern porch in the angle to the R; cross-window above, modern glazing to single-storey section adjoining to the R.		
26860	II	Former Lodge to Plas Penrhyn	Single-storey lodge with canted front; of dressed slatestone blocks with slate roof having oversailing eaves. Steps up to central entrance with ogee-arch and returned label; modern boarded door. The canted returns have similar ogee-headed and labelled windows with modern glazing. Decorative flush lateral chimney to the L, with moulded capping and paired ogee-headed piercings. Modern gabled dormer to R return; further modern additions to the rear.	Post-medieval	SH5945438359
26861	II	Sea-front Terrace Incorporating the Casino and Amis Reunis	Long built quay, or terrace of irregular plan, incorporating the Amis Reunis ship and the Casino, as well as a parapetted steps and subway structure leading from the road down onto the quay. The quay itself is flagged and has a rubble revettment, with broad flight of stone steps descending to the water in the centre. The Amis Reunis is incorporated into the Sea Front Terrace at an angle to the S and gives the impression of being moored. Concrete faux boat with two tall masts. The Casino is placed in the centre of the quay, opposite the steps and backing onto the hotel's terrace revettment. It consists of a part-rendered rubble logia of three round-headed arches with Tuscan columns to the centre; balustrade to the top, with three sections of turned balusters between solid piers; moulded copings. Steps sweep up to the L and R to the upper (hotel) terrace, though are now blocked off. To the N of the quay is a square walled projection containing a subway-type stair access to the road above; surmounting balustraded parapet.	Modern	SH5896137041
26862	II	Revetment Wall Immediately N of The Arches, Including Associated Columnar and Urn Monuments	Low rubble revetment wall running from The Arches to the Piazza. Adjoining at the southern end is the Williams-Ellis Column. This consists of a circular plinth and base with tall whitened Doric column made of bricks; surmounting this is a bronzed figure of a classical nymph. Towards the northern termination of the revettment wall is a classical painted iron urn on fluted column. This is framed by a large chinoiserie-style decorative wrought iron arch and is approached by a flight of four rendered and slate-coped steps.	Modern	SH5889637195
26863	II	Monument Immediately E of Fountain	Rendered columnar monument on circular slate-coped, rendered base. The column is octagonal and is scribed; moulded capping. Surmounting this is a large terracotta urn with relief hunting frieze.	Modern	SH5895737096
26864	II	Aedicular Niche to the N of the Swimming Pool	Tall stuccoed and rusticated aedicule consisting of an arched niche with baroque-style shaped and voluted gable. Within the gable apex is a circular niche with raised surround; this contains a Roman-style bust.	Modern	SH5898837115
26865	II	Chinese Gateway, Steps and Railings to Anchor, Including Associated Wall with Enclosure to N	Single-storey Chinese-style pavilion with adjoining walls, railings and steps. The pavilion is of rendered brick or block-work and has a fanciful oriental metal roof carried on 4 stone corner balls. Off-centre arch to the R with pierced square light to the L; similar light to the narrow southern end and a trompe l'oeil equivalent on the N side. Within the pavilion a flight of steps descends towards Anchor and Fountain, passing through a similar arch on its E side. Two bridges with similar decorative balustrades give high level access to the two houses, while below this, immediately to the SW of Anchor, is a narrow terrace with decorative iron balustrade between square rendered piers. Adjoining the Chinese Gateway to the S and N is a rubble parapetted revettment wall which follows the road down to the Hotel and up towards the Town Hall. The wall terminates to the S at a flight of steps leading down to the Sea-front Terrace. To the N the wall continues to a point diagonally opposite the Town Hall where it terminates in a small U-shaped enclosure open to the road side. This has a section of turned balustrading to the E side with short advanced stretches to the L and R. That to the R (S), is surmounted by a shaped gable with open arch to the centre and with surmounting urn finial; cobbled pavement.	Modern	SH5894537095
26866	II	Walls and Gateways Edging the Central Piazza to the NW	The wall begins at Trinity, uncoped, and at a height of approximately 2.2m. It runs northwards following the road in a curve to the E. At a point some 8m N of Trinity the wall slopes down on either side of a vista break with sandsone balustrading. Beyond this, after a short distance, the wall slopes down again on either side of a wide opening between two large trees. The opening gives onto a raised and rubble revetted childrens' play area of roughly parabolic plan. Immediately adjoining this to the E is an entrance to the Piazza. This consists of a pair of widely-spaced rusticated, rendered piers some 2m high, with surmounting urn finials. A flight of 8 slate steps leads down from a cobbled pavement; simple scrolled iron balustrades to both sides. Adjoining this to the E the wall splays inwards to enclose a cobbled seating area some 8m in length, with reconstituted stone balustrading and surmounting stone flower boxes; terracotta urns flank the area to R and L. Immediately E of this the wall slopes up on either side of a tall baroque archway. This consists of a rubble arch with rendered overthrow in the form of a shaped pediment with voluted flanking piers. Central arched niche above the arch to	Modern	SH5891037189

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			the road side containing a small baroque statue; affixed bronze star above. On the Piazza side is a large Coade stone Royal Arms dated 1806; roundels to the L and R. The wall continues for approximately 6m further until it joins the Gloriette.		
26867	II	Neo-Jacobean Gateway and Adjoining Walls to the NE of the Central Piazza	Rubble wall, approximately 2m high on the road side and 3m high on the Piazza side; connecting the Gloriette with the Colonnade. At a short distance to the E of the Gloriette the wall is punctuated by a well-detailed neo-Jacobean archway, with rusticated arch having entablature with strapwork cartouche over and flanking obelisk finials. A flight of 8 stone slab steps leads down to the Central Piazza through the archway from the road. The walls slope up to the arch on either side and have stone surmounting ball finials at their highest point. Between this archway and the Colonnade to the SE is a break in the wall with a wrought-iron balcony and flanking square piers; these are surmounted by stone ball finials.	Modern	SH5895737212
26868	II	Steps, Piers and Associated Cobbled Pavement Descending From Ladies Lodge to the Hercules Statue	A flight of nine steps descends towards the Hercules monument from the main village lane immediately opposite the Statue of Buddha. At the top of the steps are tall rendered piers with stone ball finials and short sections of turned balustrade terminating in squat inner piers; the latter are surmounted by stone urns. At the bottom of the flight a decorative random-cobbled pavement descends the rest of the way, joined from the SE by a similar pavement descending from the arch between Ladies Lodge and the Round House. Half-way down the pavement, close to the Gothick Pavilion, and on the opposite side of the path, is a large stone sculpture of a recumbant lion on a stone plinth with dedicatory cartouche.	Modern	SH5898037165
26869	II	Bandstand and Adjoining Flight of Descending Steps (the Hercules Steps)	The Bandstand is a single-storey classical loggia raised above a substation basement. Rendered elevations with shallow hipped metal roof. Three-bay long and 2-bay short sides with round-headed arches having impost bands, keys and circular spandrel plaques. Entrance to the centre of the inward-facing (NW) long side. The remaining arches have cast-iron decorative mermaid panels to their lower halves. Adjoining the bandstand to the E are the Hercules Steps. These consist of a long flight of broad, stone-flagged steps which descend in three straight flights down the hillslope. The steps terminate at a part-balustraded parapet wall with stepped waterfall below which overlooks Anchor and Fountain and the lawns in front of them.	Modern	SH5893737143
26870	II	Pond, Walls and Steps Immediately E of Trinity	Pond of irregular oval plan with low rubble retaining walls. At the N end is a depressed-arch with carved classical head forming an applied keystone. Above this the revetment slopes up to form a hump in the middle with a surmounting angel figure; this section of wall has brick copings and flanking urns. A metalled path leads around the perimeter of the pond.	Modern	SH5892937180
26871	II	Villa Winch	Two-storey villa-scale building with rendered elevations and hipped, pantiled roof. The front elevation (facing SE) is symmetrical and consists of an advanced 2-bay central section with broad single flanking bays; stucco pilasters define the sections and the central part has a moulded parapet with urn finials to R and L; 12-pane sashes to both floors, with trompe l'oeil oculi below the parapet. Tripartite windows to the outer bays on the first floor, with 12-pane sashes having 8-pane narrow outer lights. Those to the ground-floor however, have part-glazed doors in place of windows in the centre. All ground floor openings have segmental plaster arches. A parapetted stair curves up to the L giving access to a first floor entrance on the side (SW) elevation. The entrance has a part-glazed door with flanking lights in a tripartite arrangement and is recessed within a balconied loggia. This sits above a ground floor recessed balcony with similar door arrangement and contained within a wide depressed arch. A short section of link wall with arch connects Villa Winch to Chantry at the SE corner. There is a balustraded terrace in front of the main elevation.	Modern	SH5898837221
26872	II	C19 Wall Adjoining Bridge House to the E	Rubble wall with a maximum height of approximately 2.5m; this adjoins Bridge House to the E and curves gently outwards and downwards facing the estuary. There is a gap approximately a third of the way along with a plain cast iron balcony with rendered rubble flanking piers and surmounting cast iron fluted vases. The wall continues until it terminates in a circular pier at the cliff edge. In the centre of this last section, opposite a flight of steps leading down from the road in front of the Gatehouse, is a cyclopean, Tudor-arched slate entrance with walls sloped up to the L and R.	Modern	SH5905537177
26873	II	Cliff House Including Annex	Two-storey rectangular main house with single-storey, flat-roofed annex adjoining to the NE; in theatrical Georgian style. Rendered elevations, the main house with hipped slate roof and deep eaves. The main house has symmetrical, three-bay elevations, those to the E and W longer; of these the W elevation is the entrance front. This has a central entrance with part-glazed door and flanking 12-pane sashes, the whole with Regency-style open iron verandah/porch in front; this has a sloped metal lean-to roof and decorative iron flanking	Modern	SH5907837201

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			supports. Beyond the porch on both sides are smaller 6-pane outer windows. Three 6-pane windows to the upper floor, that to the centre with flanking external wooden shutters. The windows to the R of the entrance on both floors are blind and are intended purely to achieve symmetry. The N elevation has trompe l'oeil windows; 3 tall arched windows to the ground floor with oval occuli above, the central one with flanking swags; raised plaster architraves and keys, with applied cartouches to the tops of the ground floor arches. Twelve-pane sashes to the S elevation, with a balcony with decorative iron balustrade to the first-floor centre. The annex has a screen wall facing W and thereby hiding a flat roof. Wide central entrance with classical surround and entablature, surmounted by central and flanking finials; part-glazed doors. Narrow 6-pane vertical rectangular windows to either side of the entrance.		
26874	II	Forecourt Walls and Balustrading at Cliff House	Low decorative balustrading, consisting of sections of turned reconstituted stone baluster with rendered piers acting as divisions; moulded capping. Adjoining the Cliff House Annex to the N is a section of rendered screen wall with three round-arched openings and similar balustrades. A short section of balustrading defines a terrace immediately to the N of the house and similarly defines a larger cliff-top terrace to the S.	Modern	SH5907437210
26875	II	Statue of Huntsman	Life-sized, heavily-weathered sandstone statue with metal staff; on a square plinth.	Modern	SH5906837208
26876	II	Former Tollhouse (Now Public Telephone Kiosk)	Former tollgate of rubble construction The structure is built in folly-style in the form of a pair of truncated drum towers with central arched entrance; a flight of eight steps ascends up to and through the open entrance and terminates at an arched entrance in the L return of the taller, right-hand tower; this with boarded door. The left-hand tower has a similar arched entrance to the L (facing SE), with recessed panelled door; this gives access to the telephone kiosk. Slit-light to the front (NE) of the latter tower. An electrified lantern is affixed to the top of the stepped-up central link wall which contains the arch.	Modern	SH5906237223
26877	II	Westminster Abbey Balustrade	Stretch of Gothic-style stone balustrading, approximately 1.4m high, with conjoined cusped quatrefoils between broad base and rail sections. Adjoining this, to the R, is a further section of wall constructed of rendered modern breeze block; this is surmounted by moulded triangular sandstone copings, originally belonging to the balustrade.	Modern	SH5894637285
26878	II	Corrugated Iron Shelter	Decorative aedicular shelter of painted corrugated iron construction; in the form of a tented pavilion with fictive swags; central raised ball and star finial and flanking fleurs-de-lis, all two dimensonal and of cut-out form. This structure contains a slatted bench in the summer months.	Modern	SH5885137290
26879	II	The Gazebo	Open octagonal gazebo; of simple metal construction on a rubble plinth with 5 segmental steps leading up from the W. A central column, made up of reused second-quarter C19 terracotta chimney sections, supports a sloped conical metal roof with surmounting ball finial; decorative cresting to the eaves. Between paired plain outer colonnettes are placed six decorative iron mermaid panels.	Modern	SH5885437165
26880	II	Dovecote Above Portmeirion Hotel	Rubble dovecote in the form of a cylindrical tower. The upper section has four tiers of nesting boxes with square holes and continuous projecting slate ledges. The structure is surmounted by a rendered balustrade with slatestone capping.	Modern	SH5890737021
26881	II	The Lighthouse	The Lighthouse consists of a small cylindrical tower of sheet metal with surmounting upturned pig boiler forming a dome. In between are latticed lights with dividing volutes; surmounting the whole is an ornate metal finial. This tower section stands on a wider circular rubble platform with railed balustrade and arched entrance.	Modern	SH5863136705
26882	II	North Block at Bron-y-Garth Hospital	Detached single storey rubble range, with shallow hipped slate roof. Symmetrical main elevation of 5 bays; central catslide porch with recessed boarded door and narrow rectangular overlight; narrow 8-pane windows. The four outer bays each have single 12-pane sash windows. Recessed lean-to bay to the R with tall, plain brick chimney.	Modern	SH6032238716
26883	II	Stone needle 500m SW of Plas Penrhyn	Narrow stone needle of obelisk type, approximately 3m in height; a single piece of slatestone.	Post-medieval	SH5889737763
26884	II	Penrhyn Isaf	Sub-medieval storeyed house of local rubble construction with slate roof; C19 yellow sandstone window surrounds, formerly 3-light mullioned windows, the mullions now missing. Large projecting, gabled end chimney to the R, with corbelling-out at the top; small C19 stacks with moulded capping to this and opposite gable end. Three-bay main front with central, single-storey gabled porch; this has a window to the front with 2-	Post-medieval	SH5863537352

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			pane modern glazing, and a glazed modern door to the R return. Similar windows to both floors. The rear elevation has a single-storey C19 wash/brewhouse addition to the L, forming an L-plan with the primary block, and a large modern extruded addition to the R. Modern windows throughout, including an arched one to the centre of the main block.		
26885	II	Castellated Garden Walls and Towers at Castell Deudraeth	Sequence of castellated garden walls and towers; of rubble construction. The wall starts at the SW corner of Castell Deudraeth at a height of approximately 4m. It runs in a south-westerly direction for approximately 25m, closing the lawns to the rear of the house on the L side and acting as a high revettment with terrace above. At intervals of roughly 5m are three deep niches set within this stretch, each with depressed brick arch. At the end is a square tower of approximately 8m in height. This has a corner turret to the E and a plain opening with slate lintel to the NE; Gothick pointed-arched windows to the ground and upper floors on the SE (lawn-facing) side. The wall continues beyond the tower for an equivalent distance, though with fewer crenellations and at a slightly reduced height; in front is a low terrace with 1m revettment, accessed via steps at the tower. The wall then turns a right-angle and steps up beyond an opening onto the low terrace, to continue north-westwards for approximately 15m. At the end of this stretch is a plain, wide opening, beyond which the wall terminates in a part-castellated square tower of approximately 4m in height. This tower is castellated only on the NE and SE (house-facing) sides, and conceals a simple single-storey lean-to store with modern boarded SW side. The wall turns another right-angle at this point and continues for some 22m in a north-easterly direction back towards the house and running parallel with the lower wall. It terminates finally in a tower, as before. At the end of the lower terrace wall a further low wall adjoins and runs in a wide arc to follow the lane; this steps up and down at 1m and 2m heights variably and eventually terminates in a flight of steps with iron railings beyond towards the SE corner of the house. Approximately two-thirds along the length of this last stretch of wall is a tall, circular turret with open rear.	Post-medieval	SH5916737654
26886	II	Cae Canol Including Adjoining Garage Block to the NE	Sub-medieval vernacular former farmhouse of one-and-a-half storeys; T-plan. Of whitened rubble construction with slate roofs. The house consists of T-plan main range with 3-bay front elevation; single bay lower additions flank this to the L and R. The main, primary block has rendered end chimneys with paired, off-set stacks. Central entrance within single-storey porch, having open front with wooden latticed gable; 6-panel main door with glazed upper panels. Flanking 12-pane recessed sashes to the ground floor, with smaller 16-pane sashes to the upper floor, the latter piercing the eaves and contained within rubble gabled dormers with plain, oversailing bargeboards. Twelve-pane sash to the L (C20) addition, and a 16-pane sash to the right-hand addition; this with tall rubble end chimney. The rear wing has 2 similar dormers to the E side with sashes as before. Shallow slated lean-to below with pointed-arched iron-framed Gothick window to the L and part-glazed C20 door with plain-glazed flanking window sections to the R. Adjoining at right-angles to the R is a lower whitened rubble block with slate roof extending over a recessed gate to the R; this leads to the Castle Yard which adjoins the property to the rear. Round-headed, iron-framed window to the L section of this block, with multi-pane glazing, as before. Adjoining the front elevation to the R, and advanced slightly in front of it, is a former coach house/stable block, now a garage. This is a single storey rubble building of rectangular plan with slate roof. To the L is a covered tunnel arch which gives access to a small rear service court. R of this is a 16-pane iron-framed window occupying a former entrance. To the R of this is an entrance with boarded door with a large modern garage entrance beyond; this latter projects forward slightly and has wooden boarded doors and a corrugated iron roof. A high rubble wall divides the house, with its garden area in front, from this garage block with gravelled yard in front. The wall runs SE for some 30m before curving around to the NE where it terminates; open arch to te centre.	Post-medieval	SH5938237763
26887	II	Borthwen	Sub-medieval storeyed vernacular house of roughly T-plan. Of whitened rubble construction with slate roofs; three paired, off-set chimneys with further single off-set stack. The house consists of a central primary range with large gabled and advanced cross-wing adjoining to the L and flush, continuously-roofed additions to the R. The front (SE) elevation has a primary entrance to the L of the central section, in the angle with the advanced block to the L. This has a slate lintel inscribed with the initials M I J and the date 1758; part-glazed, multi-pane door with glazed C20 canopy above. Three-light window to the R with 2-pane glazed sections. The first floor of this central block has two 8-pane sashes with marginal glazing contained within shallow gabled dormers. The L-hand gabled bay has a large 3-light, multi-pane window to the ground floor with a large 12-pane sash with marginal glazing above; scalloped bargeboards. The right-hand section has a 4-light window to the ground	Post-medieval	SH5961337736

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			floor with cross-window beyond and a modern, part-glazed door to the far R with plain light to its L. The upper floor has two 3-light windows and a modern 2-light window to the far R; plain glazed sections throughout. The rear elevation has marginally-glazed 12-pane sashes to the advanced cross-wing (R), with scalloped eaves, as before. To the L , extruded in the angle with the primary, central block, is a 2-storey gabled stair projection, with boarded gable; 9-pane sash to the L on the first floor. Single-storey porch to the L section with multi-pane window to the front and entrance to the L return. Four-light window above, and further modern windows to the ground floor and first floor L. Boarded entrance to the far L.		
26888	II	Entrance Piers at the Minffordd Approach to Portmeirion	Pair of entrance piers; of whitened cement blocks in three diminishing stages and with stopped-chamfered edges; on square plinth bases. Each pier is surmounted by a square vase of reconstituted stone with figurative relief decoration to the sides.	Modern	SH5964038419
26889	II	Columnar Monument Immediately S of Chantry	The monument consists of a tall Ionic sandstone column with surmounting turned finial and decorative metal weathervane. On a square plinth, within a semi-circular low brick-walled enclosure.	Modern	SH5898537192
26890	II	Monument in Battery Square	The monument is of columnar form; it consists of a fluted iron column in the centre of a large circular brick planter, itself with stepped brick plinth incorporating seat. Surmounting the column is a square plinth supporting a spread eagle on a ball finial	Modern	SH5900337159
83457	II	Milepost to N of Llandecwyn	Cast iron milepost with a triangular profile, wider at the top with a raking head and facing panels which bear the names and distances: BLAENAU / FFESTINIOG / 8 on the left hand face and HARLECH / 6 on the right.	Post-medieval	SH6239437924
85296	II	Cadw Mei Ce and house	Belongs to a group of 1-3 Lombard Street. A terrace of three 3-storey 2-window houses roofed under a single range with slate roof, and stone stacks except for a pebble-dashed stack to the R end (No 3). In each house the openings are offset to the L side. No 1 is whitened scribed roughcast, in the same range as 21 Cornhill, has a half-glazed door to the L, replacement shop window to its R, and 4-pane sash windows in middle and upper storeys. No 2 has a pebble-dashed front, replacement half-glazed door to the L, and 2-pane sash windows. No 3 is of large blocks of local stone laid in regular courses (exposed by removal of render). It has a replacement half-glazed door to the L, and 2-pane sash windows. The R gable end is pebble-dashed. At the rear, No 1 is of large blocks of local slate-stone laid in regular courses, retains a 4-pane sash window in the middle storey but otherwise has replaced openings. Nos 2 and 3 are rendered with replacement windows and No 3 has a 2-storey lean-to on the rear.	Post-medieval	SH5686438429
85297	II	Y Pisgotwr (The Fisherman)	Belongs to a group of 1-3 Snowdon Street. A 3-storey range of large blocks of roughly dressed slate-stone, painted white in the middle and upper storeys, under a slate roof, which is hipped to the splayed corner; blocking course to corner and the High Street elevation. No 1 is a shop and house, the lower storey of which has a continuous boarded fascia and deep bracketed cornice. Its entrance is in the splayed corner, which has replacement glazed doors, above which the wall is faced in white glazed tiles and a large painted sign. In the single-window High Street elevation is a replacement shop window in an earlier opening, 4-pane horned sash window in the middle storey, and in the upper storey a round-headed 4-pane sash window under a gable. In the 3-window Snowdon Street elevation are 12-pane hornless sash windows in the middle storey and similar 9-pane windows in the upper storey. The lower storey has original openings: a replacement half-glazed door and overlight, a window to its L and shop window to its R, both replacements.	Post-medieval	SH5687538696
85298	II	Shop and house	A 3-storey 3-window house and shop in late Georgian style, of pebble-dashed front, slate roof on projecting eaves, and shared stone stack to the L. In the lower storey the house entrance on the R has a recessed half-glazed door (partly boarded over) under a round-headed overlight. The shop has windows of 2 round-headed lights defined by thin mahogany glazing bars, flanking a recessed central glazed door and overlight. The shop and house entrance are both framed by plain pilasters and a deep fascia, with a later fascia superimposed, and awning over the shop. In the middle storey are hornless sash windows over 6 over single panes, and in the upper storey 9-pane hornless sash windows. The pebble-dashed R gable end has a panelled door and, to the R, a tall small-pane horned sash window to the stair, and 12-pane hornless sash window above it. The rubble-stone rear has an lean-to and, on the R, small-pane sash windows.	Post-medieval	SH5682838635

NPRN No.	Grade	Name	Description	Period	NGR
85299	II	Caffi y Morwr Madog (The Mariner Café) and house	A 3½-storey 2-window house and café roofed in a single range with Nos 7-9 but slightly wider, of distinctive large slate-stone blocks laid in regular courses, slate roof with added skylights, and shared stone stacks. The lower storey has 2 replacement glazed doors on the R side, to house and commercial premises respectively. A former shop window to the L is a 2-pane horizontal-sliding sash with replacement top-hung casement above. Middle and upper storeys have replacement 4-pane horned sash windows.	Post-medieval	SH5685238370
85300	II	,10,Market Square,Tremadog,,,	A 2-storey double-fronted house of roughly coursed and squared blocks of quarried stone, slate roof on projecting eaves, 2 skylights and stone end stacks. The central entrance has a C19 panelled door. Windows have been replaced in original openings.	Post-medieval	SH5616840122
85301	II	,10 Y Graig (Sunnyside),Tremadog,,	Belongs to a group of 9-10, 19-21 Y Graig (Sunnyside), Tremadog. A terrace of five 2-storey houses of local stone, roughly coursed and squared to No 9, and elsewhere, random rubble with larger quoins. Stone lintels, slate roof and 6 stone stacks. No 21 was a later addition to the row, and is single-fronted with windows and door, to the R, replaced in original openings. The L gable end is painted black. Behind is a lean-to. A vertical joint separates Nos 20 and 21. Nos 20, 19 and 10 are single-fronted with entrances on the R. No 20 is the best preserved and has a boarded door and overlight, and 4-pane hornless sash windows. Nos 19 and 9 have doors and windows replaced in the late C20 in original openings. No 9 is double-fronted with door and windows replaced in original openings. It has a flat-roof rear wing.	Post-medieval	SH5595940234
85302	II	,11 Heol Dulyn (Dublin Street),Tremadog,,	Belongs to a group of 9-25 Dublin Street, Tremadog. A terrace of 1½-storey cottages of roughly coursed and squared quarried stone, with boulder footings to Nos 9 and 11, slate roof and 5 stone stacks. All have raked half dormers. No 9 is a 2-window house with half-glazed door to the L. Windows are replacements in original openings. Nos 11-25 are single-fronted in reflected pairs, mostly with C20 replacement doors and windows, some of which are enlarged while others are in original openings. No 11 has a small-pane horizontal-sliding sash window to its dormer. Between Nos 13 and 15 is a blocked lower doorway. No 25 has a 2-window addition on its R side with skylight, and then a single-storey addition (Yr Efail) with modern detail. The rear of the terrace has extensive alteration and addition, with modern detail. No 9 has a 2-storey wing, Nos 11 and 13 outshuts, Nos 15 and 17 2-storey wings, Nos 19 and 21 have 2-storey flat-roofed extensions, No 23 has an outshut and No 25 has a 2-storey wing.	Post-medieval	SH5613440149
85303	II	,11 Sgwar y Farchnad (High Street),Tremadog,,	Belongs to a group of 9-13 High Street, Tremadog. A short terrace of three 2-storey houses with entrances raised above street level, of squared quarried stone laid in regular courses, slate roof and stone stacks. No 9 is a double-fronted. Rebuilt stone steps lead up to the central entrance, which has a replacement glazed door. Windows are replaced in original openings, except for a blind central upper-storey window. A full-height vertical joint separates Nos 9 and 11, indicating their different dates. No 11 is a narrow single-fronted house. The entrance, on the L side, is reached by replacement slate steps. It has a replacement door and overlight. In the lower storey is a 12-pane horned sash window and in the upper storey a 16-pane hornless sash window. No 13 is a double-fronted. The central entrance is reached by replacement slate steps. It has a replacement half-lit boarded door beneath an overlight. Windows are 12-pane horned sashes in the lower storey, 16-pane hornless sashes in the upper storey. Against the L gable end (No 9) are communal stone steps. The rear of No 9 has a rubble-stone lean-to with corrugated iron roof, built into the steep cliff face.	Post-medieval	SH5621040201
85304	II	,11,Market Square,Tremadog,,,	A 2-storey double-fronted house slightly altered when converted to 2 premises. Of roughly coursed and squared quarried stone with stone lintels, renewed slate roof on boarded projecting eaves, with stone end stacks. The central entrance has a replacement door with large glazed panel. On the L side are 2-pane horned sash windows, shorter in the upper storey. On the R side is a shop front inserted in place of an original window, with recessed glazed door and small-pane window, and 4-pane sash window in the upper storey.	Post-medieval	SH5621340141
85305	II	Shop and house	Belongs to a group of 3-15 Church Street, Tremadog. A 2-storey terrace of 4 houses and a shop, mainly of large roughly dressed blocks of quarried stone laid in regular courses, and renewed slate roofs on projecting eaves with stone and roughcast stacks. The details differ. A 2-storey 2-window terraced shop and house of large dressed blocks of quarried stone laid in regular courses, slate roof on projecting eaves and stone end stacks. The entrance to the house (No 11) on the L side has a half-glazed fielded-panel door and small-pane overlight. The replacement shop front has small-pane windows and recessed central half-glazed fielded-panel door below a hopper light, framed by fluted pilasters and awning. In the upper storey are 16-pane hornless sash windows offset to the L side.	Post-medieval	SH5621740101

NPRN No.	Grade	Name	Description	Period	NGR
85306	II	,12 Hoel y Llan (Church Street),Tremadog,,	Belongs to a group of 8-16 Church Street, Tremadog. A terrace of four 2-storey houses and a shop of various rendered fronts, slate roofs and 4 stone stacks (there is no L end stack). The details of the houses differ, and have mostly later C19 fronts. Nos 8-10 form a 2-window shop (The Post Office) and house of scribed render. A modern replacement small-pane shop window has a recessed half-glazed door, and has simple Tuscan pilasters below a fascia and moulded cornice. Other openings have hood moulds. The house (No 10) is entered at the L end by a recessed replacement panelled door and overlight. In the upper storey are replacement top-hung windows offset to the L and aligned with the doorways. No 12 is a double-fronted house of cream-painted pebble-dashed front with smooth-rendered pilaster strips, upper-storey sill band and architraves. Its entrance is offset to the L of centre and has a recessed central door of 2 round-headed panels under an overlight. Windows are 12-pane hornless sashes with slate sills. No 14 is a 2-window house with grey pebble-dashed front. Openings are offset to the L. The entrance on the L side has an added half-glazed porch, inside which is a replacement half-glazed door under a round-headed overlight with relief foliage in the spandrels. Windows are 2-pane sashes in original openings, horned in the lower storey, hornless in the upper storey. The front bears a plaque commemorating William Jones. No 16 is a pebble-dashed 2-window house. The entrance on the L side has a modern open porch of steel posts supporting an entablature and cornice with dentil frieze. The replacement door has 2 circular panels and glazed round-headed upper panels, under a plain overlight. On the R side is a late C19 2-storey canted bay window with 4-pane sashes. The upper storey also has a 4-pane sash window above the doorway. In the rubble-stone L gable end No 16 has a replacement attic window to the R of centre. To the rear the houses have 2-storey wings, except for a 1-storey wing to No 12, with added skylights and a roof dormer added to No 14.	Post-medieval	SH5619340091
85307	II	,12,Cornhill (Pencei),Porthmadog harbour,Porthmadog,,	Built as a pair with No 11, No 12 is a late-Georgian double-fronted house of 2½ storeys and basement, of large squared slate-stone blocks laid in regular courses (now outlined with heavy cement pointing), slate roof and stone stack to the R. Steps, rebuilt in cement and shared with No 11, lead up to the central entrance raised above street level, which has a fielded-panel door under a plain overlight, and is flanked by 16-pane hornless sash windows. The upper storey has a single similar window over the door. On the R side of the main steps, slate steps lead down to a boarded basement door.	Post-medieval	SH5684738380
85308	II	Bridge over drainage ditch at entrance to Tan-y-Marian	A single-carriageway single-span bridge of blocks of rubble stone laid in regular courses. It has a segmental arch with voussoirs and simple drip mould. The parapet has been lowered on the road (N) side and has a cement coping. On the SE side it is splayed to a terminal square pier. On the SW side the parapet abuts an iron gate with square stone piers.	Post-medieval	SH5657140301
85309	II	,13,Cornhill (Pencei),Porthmadog harbour,Porthmadog,,	A 2-window house of 2½ storeys and basement, roofed in a single range with Nos 11-12 and 14-15 but separated from Nos 14-15 by a full-height vertical joint (the joint between Nos 12 and 13 is concealed by cement). Of large slate-stone blocks laid in regular courses, slate roof and coursed stone end stacks. Openings are offset to the L. The entrance on the L side is above street level, reached by stone steps. It has a replacement fielded-panel door under a narrow overlight. Windows are 4-pane hornless sashes, including 2 gabled roof dormers. On the R side slate steps lead down to a replacement boarded basement door to the L of centre, which has a window to its R.	Post-medieval	SH5684538385
85310	II	,13 Sgwar y Farchnad (High Street),Tremadog,,	Belongs to a group of 9-13 High Street, Tremadog. A short terrace of three 2-storey houses with entrances raised above street level, of squared quarried stone laid in regular courses, slate roof and stone stacks. No 9 is a double-fronted. Rebuilt stone steps lead up to the central entrance, which has a replacement glazed door. Windows are replaced in original openings, except for a blind central upper-storey window. A full-height vertical joint separates Nos 9 and 11, indicating their different dates. No 11 is a narrow single-fronted house. The entrance, on the L side, is reached by replacement slate steps. It has a replacement door and overlight. In the lower storey is a 12-pane horned sash window and in the upper storey a 16-pane hornless sash window. No 13 is a double-fronted. The central entrance is reached by replacement slate steps. It has a replacement half-lit boarded door beneath an overlight. Windows are 12-pane horned sashes in the lower storey, 16-pane hornless sashes in the upper storey. Against the L gable end (No 9) are communal stone steps. The rear of No 9 has a rubble-stone lean-to with corrugated iron roof, built into the steep cliff face.	Post-medieval	SH5621540203
85311	II	Crud yr Awel	Belongs to a group of 8-16 Church Street, Tremadog. A terrace of four 2-storey houses and a shop of various rendered fronts, slate roofs and 4 stone stacks (there is no L end stack). The details of the houses differ, and	Post-medieval	SH5619540085

NPRN No.	Grade	Name	Description	Period	NGR
			have mostly later C19 fronts. Nos 8-10 form a 2-window shop (The Post Office) and house of scribed render. A modern replacement small-pane shop window has a recessed half-glazed door, and has simple Tuscan pilasters below a fascia and moulded cornice. Other openings have hood moulds. The house (No 10) is entered at the L end by a recessed replacement panelled door and overlight. In the upper storey are replacement top-hung windows offset to the L and aligned with the doorways. No 12 is a double-fronted house of cream-painted pebble-dashed front with smooth-rendered pilaster strips, upper-storey sill band and architraves. Its entrance is offset to the L of centre and has a recessed central door of 2 round-headed panels under an overlight. Windows are 12-pane hornless sashes with slate sills. No 14 is a 2-window house with grey pebble-dashed front. Openings are offset to the L. The entrance on the L side has an added half-glazed porch, inside which is a replacement half-glazed door under a round-headed overlight with relief foliage in the spandrels. Windows are 2-pane sashes in original openings, horned in the lower storey, hornless in the upper storey. The front bears a plaque commemorating William Jones. No 16 is a pebble-dashed 2-window house. The entrance on the L side has a modern open porch of steel posts supporting an entablature and cornice with dentil frieze. The replacement door has 2 circular panels and glazed round-headed upper panels, under a plain overlight. On the R side is a late C19 2-storey canted bay window with 4-pane sashes. The upper storey also has a 4-pane sash window above the doorway. In the rubble-stone L gable end No 16 has a replacement attic window to the R of centre. To the rear the houses have 2-storey wings, except for a 1-storey wing to No 12, with added skylights and a roof dormer added to No 14.		
85312	II	,14 Pencei (Cornhill),Porthmadog ,Porthmadog,	Belongs to a group of 14-15 Pencei (Cornhill). A pair of 2½-storey double-fronted houses of large squared slate-stone blocks laid in regular courses, slate roof with 2 skylights to each house, and stone end stacks. No 14 has raised rendered surrounds painted white, fielded-panel door under a narrow overlight, and 4-pane hornless sashes. No 15 has raised rendered surrounds, a replacement half-glazed door under a narrow overlight, and 4-pane horned sash windows. Each entrance has approach slate steps. No 14 has a dwarf forecourt wall of coursed, roughly shaped blocks, and No 15 has replacement steps. Both houses have replacement rear windows and No 14 has an added large dormer.	Post-medieval	SH5684238390
85313	II	,14 Sgwar y Farchnad (High Street),Tremadog,,	Belongs to a group of 14-16 High Street, Tremadog. A reflected pair of single-fronted houses of 2 storeys and basement, of large squared blocks of quarried stone laid in regular courses, slate roof and stone end stacks. Entrances to the centre are raised above street level, up shared slate steps with iron handrails. Each house has a replacement glazed door. No 16 to the L side has 2-pane sash windows and a 2-light replacement basement window incorporating a steel-framed top-hung casement. No 14 has replacement windows in original openings. The R gable end is pebble-dashed.	Post-medieval	SH5622240184
85314	II	,15 Hoel y Llan (Church Street),Tremadog,,	Belongs to a group of 3-15 Church Street, Tremadog. A 2-storey terrace of 4 houses and a shop, mainly of large roughly dressed blocks of quarried stone laid in regular courses, and renewed slate roofs on projecting eaves with stone and roughcast stacks. The details differ. A 2-storey 2-window house with rendered front, slate roof on projecting eaves and stone end stacks. Original openings are offset to the L and comprise a recessed replacement door and replacement windows. In the rubble-stone R gable end is a window to the R inserted in an earlier doorway.	Post-medieval	SH5621940096
85315	II	,15 Pencei (Cornhill),Porthmadog ,Porthmadog,	Belongs to a group of 14-15 Pencei (Cornhill). A pair of 2½-storey double-fronted houses of large squared slate-stone blocks laid in regular courses, slate roof with 2 skylights to each house, and stone end stacks. No 14 has raised rendered surrounds painted white, fielded-panel door under a narrow overlight, and 4-pane hornless sashes. No 15 has raised rendered surrounds, a replacement half-glazed door under a narrow overlight, and 4-pane horned sash windows. Each entrance has approach slate steps. No 14 has a dwarf forecourt wall of coursed, roughly shaped blocks, and No 15 has replacement steps. Both houses have replacement rear windows and No 14 has an added large dormer.	Post-medieval	SH5684038398
85316	II	,15 Heol Dulyn (Dublin Street),Tremadog,,	Belongs to a group of 9-25 Dublin Street, Tremadog. A terrace of 1½-storey cottages of roughly coursed and squared quarried stone, with boulder footings to Nos 9 and 11, slate roof and 5 stone stacks. All have raked half dormers. No 9 is a 2-window house with half-glazed door to the L. Windows are replacements in original openings. Nos 11-25 are single-fronted in reflected pairs, mostly with C20 replacement doors and windows, some of which are enlarged while others are in original openings. No 11 has a small-pane horizontal-sliding sash window to its dormer. Between Nos 13 and 15 is a blocked lower doorway. No 25 has a 2-window	Post-medieval	SH5612540146

NPRN No.	Grade	Name	Description	Period	NGR
			addition on its R side with skylight, and then a single-storey addition (Yr Efail) with modern detail. The rear of the terrace has extensive alteration and addition, with modern detail. No 9 has a 2-storey wing, Nos 11 and 13 outshuts, Nos 15 and 17 2-storey wings, Nos 19 and 21 have 2-storey flat-roofed extensions, No 23 has an outshut and No 25 has a 2-storey wing.		
85317	II	,16 Hoel y Llan (Church Street),Tremadog,,	Belongs to a group of 8-16 Church Street, Tremadog. A terrace of four 2-storey houses and a shop of various rendered fronts, slate roofs and 4 stone stacks (there is no L end stack). The details of the houses differ, and have mostly later C19 fronts. Nos 8-10 form a 2-window shop (The Post Office) and house of scribed render. A modern replacement small-pane shop window has a recessed half-glazed door, and has simple Tuscan pilasters below a fascia and moulded cornice. Other openings have hood moulds. The house (No 10) is entered at the L end by a recessed replacement panelled door and overlight. In the upper storey are replacement top-hung windows offset to the L and aligned with the doorways. No 12 is a double-fronted house of cream-painted pebble-dashed front with smooth-rendered pilaster strips, upper-storey sill band and architraves. Its entrance is offset to the L of centre and has a recessed central door of 2 round-headed panels under an overlight. Windows are 12-pane hornless sashes with slate sills. No 14 is a 2-window house with grey pebble-dashed front. Openings are offset to the L. The entrance on the L side has an added half-glazed porch, inside which is a replacement half-glazed door under a round-headed overlight with relief foliage in the spandrels. Windows are 2-pane sashes in original openings, horned in the lower storey, hornless in the upper storey. The front bears a plaque commemorating William Jones. No 16 is a pebble-dashed 2-window house. The entrance on the L side has a modern open porch of steel posts supporting an entablature and cornice with dentil frieze. The replacement door has 2 circular panels and glazed round-headed upper panels, under a plain overlight. On the R side is a late C19 2-storey canted bay window with 4-pane sashes. The upper storey also has a 4-pane sash window above the doorway. In the rubble-stone L gable end No 16 has a replacement attic window to the R of centre. To the rear the houses have 2-storey wings, except for a 1-storey wing to No 12, with added skylights and a roof dormer added to No 14.	Post-medieval	SH5619840079
85318	II	,17 Heol Dulyn (Dublin Street),Tremadog,,	Belongs to a group of 9-25 Dublin Street, Tremadog. A terrace of 1½-storey cottages of roughly coursed and squared quarried stone, with boulder footings to Nos 9 and 11, slate roof and 5 stone stacks. All have raked half dormers. No 9 is a 2-window house with half-glazed door to the L. Windows are replacements in original openings. Nos 11-25 are single-fronted in reflected pairs, mostly with C20 replacement doors and windows, some of which are enlarged while others are in original openings. No 11 has a small-pane horizontal-sliding sash window to its dormer. Between Nos 13 and 15 is a blocked lower doorway. No 25 has a 2-window addition on its R side with skylight, and then a single-storey addition (Yr Efail) with modern detail. The rear of the terrace has extensive alteration and addition, with modern detail. No 9 has a 2-storey wing, Nos 11 and 13 outshuts, Nos 15 and 17 2-storey wings, Nos 19 and 21 have 2-storey flat-roofed extensions, No 23 has an outshut and No 25 has a 2-storey wing.	Post-medieval	SH5612140144
85319	II	,17 Sgwar y Farchnad (High Street),Tremadog,,	Belongs to a group of 15-17 High Street, Tremadog. A pair of 2-storey double-fronted houses, of large blocks of local quarried stone laid in regular courses, renewed slate roof with added skylights, and stone stacks to the centre and L. No 15 has a central half-glazed door and top-hung windows replaced in original openings. No 17 has a replacement half-glazed door and 2-pane sash windows in original openings. Both have a blind central window in the upper storey.	Post-medieval	SH5622940208
85320	II	,19,Cornhill (Pencei),Porthmadog harbour,Porthmadog,,	A 2½-storey 3-window house of large slate-stone blocks laid in regular courses, slate roof with added skylights, and end stacks, of which the R-hand has been heightened adjacent to the higher No 20. The entrance is offset to the R of centre. It has a replacement half-glazed door and overlight. Windows are 4-pane horned sashes, shorter in the upper storey. The 2-window rear has replacement windows in earlier openings and an added 1-storey gabled wing on the R side.	Post-medieval	SH5685838418
85321	II	,19 Heol Dulyn (Dublin Street),Tremadog,,	Belongs to a group of 9-25 Dublin Street, Tremadog. A terrace of 1½-storey cottages of roughly coursed and squared quarried stone, with boulder footings to Nos 9 and 11, slate roof and 5 stone stacks. All have raked half dormers. No 9 is a 2-window house with half-glazed door to the L. Windows are replacements in original openings. Nos 11-25 are single-fronted in reflected pairs, mostly with C20 replacement doors and windows, some of which are enlarged while others are in original openings. No 11 has a small-pane horizontal-sliding sash window to its dormer. Between Nos 13 and 15 is a blocked lower doorway. No 25 has a 2-window	Post-medieval	SH5611740142

NPRN No.	Grade	Name	Description	Period	NGR
			addition on its R side with skylight, and then a single-storey addition (Yr Efail) with modern detail. The rear of the terrace has extensive alteration and addition, with modern detail. No 9 has a 2-storey wing, Nos 11 and 13 outshuts, Nos 15 and 17 2-storey wings, Nos 19 and 21 have 2-storey flat-roofed extensions, No 23 has an outshut and No 25 has a 2-storey wing.		
85322	II	Fellowship House	A 2-window house of 2½ storeys and basement, of large blocks of squared slate-stone laid in regular courses, under a slate roof with added skylight, stone stack to the L and shared roughcast stack to the R. The entrance, on the L side, is above street level and is reached up stone steps. It has a half-glazed panel door and overlight. In the lower storey is a canted bay window with 4-pane sash, flanking which are replacement basement windows. In the upper storey are 4-pane hornless sash windows offset to the R of centre. In the rear elevation is a lower 2-storey wing and an added continuous dormer under a flat roof.	Post-medieval	SH5680338547
85323	II	,19 Y Graig (Sunnyside),Tremadog,,	Belongs to a group of 9-10, 19-21 Y Graig (Sunnyside), Tremadog. A terrace of five 2-storey houses of local stone, roughly coursed and squared to No 9, and elsewhere, random rubble with larger quoins. Stone lintels, slate roof and 6 stone stacks. No 21 was a later addition to the row, and is single-fronted with windows and door, to the R, replaced in original openings. The L gable end is painted black. Behind is a lean-to. A vertical joint separates Nos 20 and 21. Nos 20, 19 and 10 are single-fronted with entrances on the R. No 20 is the best preserved and has a boarded door and overlight, and 4-pane hornless sash windows. Nos 19 and 9 have doors and windows replaced in the late C20 in original openings. No 9 is double-fronted with door and windows replaced in original openings. It has a flat-roof rear wing.	Post-medieval	SH5595540236
85324	II	Awelfor	Belongs to a group of 1-3 Lombard Street. A terrace of three 3-storey 2-window houses roofed under a single range with slate roof, and stone stacks except for a pebble-dashed stack to the R end (No 3). In each house the openings are offset to the L side. No 1 is whitened scribed roughcast, in the same range as 21 Cornhill, has a half-glazed door to the L, replacement shop window to its R, and 4-pane sash windows in middle and upper storeys. No 2 has a pebble-dashed front, replacement half-glazed door to the L, and 2-pane sash windows. No 3 is of large blocks of local stone laid in regular courses (exposed by removal of render). It has a replacement half-glazed door to the L, and 2-pane sash windows. The R gable end is pebble-dashed. At the rear, No 1 is of large blocks of local slate-stone laid in regular courses, retains a 4-pane sash window in the middle storey but otherwise has replaced openings. Nos 2 and 3 are rendered with replacement windows and No 3 has a 2-storey lean-to on the rear.	Post-medieval	SH5686238435
85325	II	,20 Y Graig (Sunnyside),Tremadog,,	Belongs to a group of 9-10, 19-21 Y Graig (Sunnyside), Tremadog. A terrace of five 2-storey houses of local stone, roughly coursed and squared to No 9, and elsewhere, random rubble with larger quoins. Stone lintels, slate roof and 6 stone stacks. No 21 was a later addition to the row, and is single-fronted with windows and door, to the R, replaced in original openings. The L gable end is painted black. Behind is a lean-to. A vertical joint separates Nos 20 and 21. Nos 20, 19 and 10 are single-fronted with entrances on the R. No 20 is the best preserved and has a boarded door and overlight, and 4-pane hornless sash windows. Nos 19 and 9 have doors and windows replaced in the late C20 in original openings. No 9 is double-fronted with door and windows replaced in original openings. It has a flat-roof rear wing.	Post-medieval	SH5595240238
85326	II	,21,Cornhill (Pencei),Porthmadog harbour,Porthmadog,,	A 3-storey corner house built in a range with No 20 Cornhill and Nos 1-3 Lombard Street, of whitened scribed roughcast, slate roof hipped to the corner, and stone end stack to the longer Lombard Street front. Single-window fronts to Cornhill and Lombard Street have 2-pane sash windows. The entrance is in the corner, splayed in the lower storey and corbelled out above. It has a replacement half-glazed door. In the Lombard Street elevation, 'Lombard Street' is inscribed into the roughcast, although now painted over.	Post-medieval	SH5686938424
85327	II	,21 Sgwar y Farchnad (High Street),Tremadog,,	Belongs to a group of 19-23 High Street, Tremadog. A row of three 2-window houses of 3 storeys with attic and basement, of large blocks of local quarried stone laid in regular courses and with large stone lintels, renewed slate roof with skylights, 2 stone ridge stacks and a pebble-dashed stack to the L end. In each house the entrance is above street level, reached up slate steps to the doorway on the R side. No 19 has a replacement panel-door and overlight and 4-pane horned sashes. On the L side are steps down to a central replacement half-glazed basement door, with replacement window to its L. No 21 has a replacement half-glazed door with overlight, and 2-pane sash windows. Steps lead down to a replacement half-glazed basement door with replacement window to its L. No 23 has a panel door under a late C19 overlight, and 2-pane horned sash	Post-medieval	SH5624240214

NPRN No.	Grade	Name	Description	Period	NGR
			windows. Steps lead down to a replacement half-glazed basement door and replacement window. The L gable end (No 19) is pebble-dashed.		
85328	II	,21 Y Graig (Sunnyside),Tremadog,,	Belongs to a group of 9-10, 19-21 Y Graig (Sunnyside), Tremadog. A terrace of five 2-storey houses of local stone, roughly coursed and squared to No 9, and elsewhere, random rubble with larger quoins. Stone lintels, slate roof and 6 stone stacks. No 21 was a later addition to the row, and is single-fronted with windows and door, to the R, replaced in original openings. The L gable end is painted black. Behind is a lean-to. A vertical joint separates Nos 20 and 21. Nos 20, 19 and 10 are single-fronted with entrances on the R. No 20 is the best preserved and has a boarded door and overlight, and 4-pane hornless sash windows. Nos 19 and 9 have doors and windows replaced in the late C20 in original openings. No 9 is double-fronted with door and windows replaced in original openings. It has a flat-roof rear wing.	Post-medieval	SH5594840241
85329	II	,23 Heol Dulyn (Dublin Street),Tremadog,,	Belongs to a group of 9-25 Dublin Street, Tremadog. A terrace of 1½-storey cottages of roughly coursed and squared quarried stone, with boulder footings to Nos 9 and 11, slate roof and 5 stone stacks. All have raked half dormers. No 9 is a 2-window house with half-glazed door to the L. Windows are replacements in original openings. Nos 11-25 are single-fronted in reflected pairs, mostly with C20 replacement doors and windows, some of which are enlarged while others are in original openings. No 11 has a small-pane horizontal-sliding sash window to its dormer. Between Nos 13 and 15 is a blocked lower doorway. No 25 has a 2-window addition on its R side with skylight, and then a single-storey addition (Yr Efail) with modern detail. The rear of the terrace has extensive alteration and addition, with modern detail. No 9 has a 2-storey wing, Nos 11 and 13 outshuts, Nos 15 and 17 2-storey wings, Nos 19 and 21 have 2-storey flat-roofed extensions, No 23 has an outshut and No 25 has a 2-storey wing.	Post-medieval	SH5610940139
85330	II	,23 Sgwar y Farchnad (High Street),Tremadog,,	Belongs to a group of 19-23 High Street, Tremadog. A row of three 2-window houses of 3 storeys with attic and basement, of large blocks of local quarried stone laid in regular courses and with large stone lintels, renewed slate roof with skylights, 2 stone ridge stacks and a pebble-dashed stack to the L end. In each house the entrance is above street level, reached up slate steps to the doorway on the R side. No 19 has a replacement panel-door and overlight and 4-pane horned sashes. On the L side are steps down to a central replacement half-glazed basement door, with replacement window to its L. No 21 has a replacement half-glazed door with overlight, and 2-pane sash windows. Steps lead down to a replacement half-glazed basement door with replacement window to its L. No 23 has a panel door under a late C19 overlight, and 2-pane horned sash windows. Steps lead down to a replacement half-glazed basement door and replacement window. The L gable end (No 19) is pebble-dashed.	Post-medieval	SH5624740216
85331	II	,25 Heol Dulyn (Dublin Street),Tremadog,,	Belongs to a group of 9-25 Dublin Street, Tremadog. A terrace of 1½-storey cottages of roughly coursed and squared quarried stone, with boulder footings to Nos 9 and 11, slate roof and 5 stone stacks. All have raked half dormers. No 9 is a 2-window house with half-glazed door to the L. Windows are replacements in original openings. Nos 11-25 are single-fronted in reflected pairs, mostly with C20 replacement doors and windows, some of which are enlarged while others are in original openings. No 11 has a small-pane horizontal-sliding sash window to its dormer. Between Nos 13 and 15 is a blocked lower doorway. No 25 has a 2-window addition on its R side with skylight, and then a single-storey addition (Yr Efail) with modern detail. The rear of the terrace has extensive alteration and addition, with modern detail. No 9 has a 2-storey wing, Nos 11 and 13 outshuts, Nos 15 and 17 2-storey wings, Nos 19 and 21 have 2-storey flat-roofed extensions, No 23 has an outshut and No 25 has a 2-storey wing.	Post-medieval	SH5610540138
85332	II	,28 Sgwar y Farchnad (High Street),Tremadog,,	28-30 High Street, Tremadog. A reflected pair of 2-storey 2-window houses of coursed stone in large blocks, slate roof and central stone stack. Entrances are on the outer sides and windows and doors have been replaced in original openings. The R gable end (No 28) is pebble-dashed. The rear elevations have replacement windows, 1-storey flat-roof projections, and large added roof dormers.	Post-medieval	SH5627540205
85333	II	,3 Hoel y Llan (Church Street),Tremadog,,	Belongs to a group of 3-15 Church Street, Tremadog. A 2-storey terrace of 4 houses and a shop, mainly of large roughly dressed blocks of quarried stone laid in regular courses, and renewed slate roofs on projecting eaves with stone and roughcast stacks. The details differ. A single-fronted 2-storey terraced house of large roughly dressed blocks of quarried stone laid in regular courses, slate roof on projecting eaves and stone stack to the R. It has a replacement glazed door to the L and replacement 16-pane horned sash windows, smaller in the upper storey. A vertical joint between Nos 1 and 3 and the slightly lower ridge line of No 3 indicate their	Post-medieval	SH5621140118

NPRN No.	Grade	Name	Description	Period	NGR
			different dates. Similarly, stone courses between Nos 3 and 5 do not match, indicating that the houses are also of different dates.		
85334	II	,3 Pencei (Cornhill),Porthmadog ,Porthmadog,	Belongs to a group of 2-5 Pencei (Cornhill). A 4-storey 4-bay block of large blocks of slate-stone laid in regular courses, slate roof, ridge stack to the L of centre and to the L-hand ridge. The front has unequal outer gabled bays (Nos 2 and 5). The L-hand (No 2) has replacement windows, larger in the lower storey, and the entrance offset to the R with half-glazed door and side panel, replacing a larger original door. No 3 has a replacement half-glazed door and overlight on the R side, and 2-pane sash window to its L. The 2nd storey has a replacement window but 3rd and 4th storeys retain earlier 2-pane sash windows. No 4 has a panel door and overlight, with 16-pane hornless sash window to its L. The 2nd and 3rd storeys have similar windows and the 4th storey a shorter 12-pane sash window. No 5, under the R-hand gable, has a half-glazed panel door with 2-light small-pane window to its L. The 2nd, 3rd and 4th storeys all have 18-pane sash windows in former loading doors, with a pulley block over the upper-storey window. The R end wall (No 5) retains the shadow of a former 1-storey gabled building, and replacement 2-light windows in 2nd, 3rd and 4th storeys. The 2-window L end (No 2) has replacement windows and a lean-to with blocked window facing the front. At the L end is a garage with double doors under a steel lintel.	Post-medieval	SH5686438316
85335	II	Harbour Restaurant and house	One of a row of 4 late-Georgian style 3-storey 2-window shops with houses above. They have slate-hung fronts, a slate roof hipped to the R end (No 1) where the corner is also splayed, with transverse stone stacks and a fourth, pebble-dashed stack at the R end. The houses are not of equal width. No 1 is the widest, Nos 7 and 9 are narrower than No 3. No 3 has its entrance to the L, a recessed replacement boarded door under an overlight. To its R is a modern shop window in an earlier opening and across the lower storey is an awning and modern fascia. The middle storey has replacement 12-pane horned sash windows and the upper-storey similar but shorter 9-pane sash windows. The rear, where Nos 3, 7 and 9 are set slightly back from No 1, is of rubble stone laid in rough courses. No 3 retains some sash windows, has 30light small-pane casements in the upper storey, and has a narrow 2-storey rear wing.	Post-medieval	SH5700338560
85336	II	,3,Market Square,Tremadog,,,	A small 2-storey 2-window house of roughly coursed and squared blocks of quarried stone with large lintels in the lower storey, slate roof on projecting boarded eaves, and stone stack to the R. The entrance on the L side has a replacement boarded door and narrow overlight. Windows are 4-pane horned sashes, all of different sizes.	Post-medieval	SH5620040173
85337	II	Jessie's Deli and house	Belongs to a group of 1-3 Snowdon Street. A 3-storey range of large blocks of roughly dressed slate-stone, painted white in the middle and upper storeys, under a slate roof, which is hipped to the splayed corner; blocking course to corner and the High Street elevation. No 1 is a shop and house, the lower storey of which has a continuous boarded fascia and deep bracketed cornice. Its entrance is in the splayed corner, which has replacement glazed doors, above which the wall is faced in white glazed tiles and a large painted sign. In the single-window High Street elevation is a replacement shop window in an earlier opening, 4-pane horned sash window in the middle storey, and in the upper storey a round-headed 4-pane sash window under a gable. In the 3-window Snowdon Street elevation are 12-pane hornless sash windows in the middle storey and similar 9-pane windows in the upper storey. The lower storey has original openings: a replacement half-glazed door and overlight, a window to its L and shop window to its R, both replacements.	Post-medieval	SH5688238702
85338	II	Ty Pab, including attached garden wall and gate	Belongs to a group of 2-4 Church Street, Tremadog. A pair of houses in a 2-storey 3-window range of large quarried blocks of stone, roughly squared and laid in regular courses, hipped slate roof on projecting eaves and stone stack to the L of centre. The entrance to No 2 is R of centre and has a recessed replacement door in an original opening. To its L is a 6-pane hornless sash window inserted into a former doorway. At the R end is a 8-pane sash window inserted into a large opening (probably a shop window) under a timber lintel. At the L end (No 4) is a 20-pane horned sash window inserted into a similar large former opening with timber lintel. In the upper storey are 6-pane hornless sash windows to the centre and R (described as Gothic in the previous survey) and replacement window to the L. The R end (No 2) adjoins No 14 Market Square. Attached to the L end (No 4) is a short garden wall of coursed rubble stone and coping. It has a pointed doorway with dressed voussoirs, and a wrought iron gate with railings forming ogee arches, and a quatrefoil and trefoils incorporated into the main arch. (An identical gate is at Plas Tan yr Allt.) The L side wall (No 4) is 4 bays of which bays 2 and 4 have blind round-headed arches of dressed voussoirs (in imitation of the Market Hall). The entrance to	Post-medieval	SH5618240113

NPRN No.	Grade	Name	Description	Period	NGR
			No 4 is on the R side of the 2nd bay, and has a replacement split boarded door in an original opening. Bays 1 and 3 have 4-pane sash windows in the lower storey under slate lintels and replacement windows in the upper storey in earlier openings. At the L end is an added 1-storey projection of rubble stone and slate roof, which has a replacement half-glazed boarded door and replacement window to its L.		
85339	II	Harbourside Clinic and apartments	Belongs to a group of 2-5 Pencei (Cornhill). A 4-storey 4-bay block of large blocks of slate-stone laid in regular courses, slate roof, ridge stack to the L of centre and to the L-hand ridge. The front has unequal outer gabled bays (Nos 2 and 5). The L-hand (No 2) has replacement windows, larger in the lower storey, and the entrance offset to the R with half-glazed door and side panel, replacing a larger original door. No 3 has a replacement half-glazed door and overlight on the R side, and 2-pane sash window to its L. The 2nd storey has a replacement window but 3rd and 4th storeys retain earlier 2-pane sash windows. No 4 has a panel door and overlight, with 16-pane hornless sash window to its L. The 2nd and 3rd storeys have similar windows and the 4th storey a shorter 12-pane sash window. No 5, under the R-hand gable, has a half-glazed panel door with 2-light small-pane window to its L. The 2nd, 3rd and 4th storeys all have 18-pane sash windows in former loading doors, with a pulley block over the upper-storey window. The R end wall (No 5) retains the shadow of a former 1-storey gabled building, and replacement 2-light windows in 2nd, 3rd and 4th storeys. The 2-window L end (No 2) has replacement windows and a lean-to with blocked window facing the front. At the L end is a garage with double doors under a steel lintel.	Post-medieval	SH5686238322
85340	II	,4 Y Graig (Sunnyside),Tremadog,,	Belongs to a group of 3-5 Y Graig (Sunnyside), Tremadog. A short row of houses of roughly dressed blocks of stone laid in regular courses, stone and slate-stone lintels, renewed slate roof and 4 stone stacks, of which the R end stack is partly pebble-dashed. No 5 to the L is a double-fronted house with replacement fielded-panel door and overlight. In the lower storey is a horned sash window of 8 over 2 panes to the L and a similar 6/2-pane hornless sash to the R. The upper storey has 8/2-pane hornless sashes. No 4 was formerly a reflected pair of single-fronted cottages. It has 8/2-pane hornless sashes. It has a boarded door with overlight to the R of centre. To its L is a window (horned) in the former 2nd doorway. No 3 to the R end of the row was also formerly a reflected pair of single-fronted cottages. The entrance L of centre has a replacement boarded door and overlight. Windows are 4-pane sashes. To the R of the entrance is a window in a former doorway. An added 1-storey lean-to is against the R gable end.	Post-medieval	SH5602940218
85341	II	,5 Hoel y Llan (Church Street),Tremadog,,	Belongs to a group of 3-15 Church Street, Tremadog. A 2-storey terrace of 4 houses and a shop, mainly of large roughly dressed blocks of quarried stone laid in regular courses, and renewed slate roofs on projecting eaves with stone and roughcast stacks. The details differ. A double-fronted 2-storey terraced house of large dressed blocks of quarried stone laid in regular courses, large slate-stone lintels, slate roof on projecting eaves and stone end stacks. It has a recessed central replacement half-glazed door under an overlight, and windows replaced in earlier openings. Stone courses between Nos 3 and 5 do not match, indicating that the houses are of different dates.	Post-medieval	SH5621240112
85342	II	Twb Lemon (Lemon Tub) and house/office	A shop and house (or office) of 2 storeys and attic, of whitened scribed roughcast front, renewed slate roof and end stone stacks. The late C19 shop front is framed by panelled pilasters with stylised foliage capitals, above which are encaustic figure tiles at the ends of the fascia, which has a later fascia superimposed. The cornice has a frieze of 4-leaf and ballflower decoration. Small-pane shop windows, over a later marbled stallboard, and a central overlight frame the recessed entrance, which has a glazed door incorporating a lower faceted panel. The upper storey has 2 canted oriel windows with 2-pane sashes and cornices similar to the shop front. In the attic are round-headed 2-light casement windows under gables with fretwork scrolls. The R gable end of is of slate rubble laid in rough courses. It has double-panelled doors and overlight to the R side (the original house entrance). In the upper storey is a 12-pane sash window to the R and 2-pane sash window to the L. The attic has a 12-pane horned sash window to the L of centre. A lower 2-storey 6-window rear wing, of slate-stone rubble laid in rough courses, faces Chandlers Place (occupied by Eric Owen locksmith, and Trevor Warner Audio-Visual). In the lower storey are 12-pane horned sash windows, and openings have raised cement surrounds. From the L end is a panel door, 2 windows, replacement door, window, replacement door, and a window (formerly a doorway) at the R end. The upper storey has 5 small-pane horned sash windows and a similar paired window at the R end. In the gable end is a former upper-storey loading door converted to a window, under a projecting gable over the former pulley block. On the R side an outshut has double doors	Post-medieval	SH5674338827

NPRN No.	Grade	Name	Description	Period	NGR
			under a stone lintel. The rear of the main range has skylights, and a 2-light window on the R side in the middle storey.		
85343	II	Tom Parry & Co	Belongs to a group of 4, 4a and 5 Lombard Street. A 2½-storey double-fronted house (No 4) and shop (No 5) of scribed roughcast front painted cream, and slate roof. No 4 has rendered end stacks, No 5 has a stone stack on the R side. No 4 has a half-glazed door, incorporating coloured glazing and the figure of a sailing ship, under an overlight, flanked by canted bay windows, of which the L-hand has a 4-pane sash, and the R-hand a replacement window (and now part of the adjoining shop). It has 4-pane sash windows in the upper storey. In front of the house are cast iron forecourt railings on a dressed slate plinth. On the L side is a terminal pebble-dashed pier. On the R side the railings return against the corner of the shop window. The L gable end is pebble-dashed. It has a 2-pane sash window lighting the stair and a small attic window to the R. A lower 2-storey rear wing (No 4a) has a central door flanked by 4-pane sash windows and replacement top-hung casements in the upper storey. No 5 has a shop front with large single-pane bay windows, incorporating original mullions and thin transoms in the returns, between recessed replacement half-glazed doors. Above is an awning and then the fascia, which has modern lettering, and a cornice incorporating a moulded billet frieze. In the upper storey is a canted oriel window with 4-pane sash and 2 gabled dormers have 4-pane sash windows and slate-hung sides. The rear of No 5 has a 4-pane sash window under a gable in the upper storey, to the L of which is an added lower 2-storey wing with stack.	Post-medieval	SH5685138459
85344	II	,5,Market Square,Tremadog,,,	A 2-storey double-fronted house of pebble-dashed front with smooth-rendered surrounds and cement rendered plinth, renewed slate roof on projecting eaves, and stone end stacks. The entrance, offset to the L of centre, has a glazed door and overlight. Windows, wider to the lower R, are all replacements in original openings.	Post-medieval	SH5620340167
85345	II	,5 Y Graig (Sunnyside),Tremadog,,	Belongs to a group of 3-5 Y Graig (Sunnyside), Tremadog. A short row of houses of roughly dressed blocks of stone laid in regular courses, stone and slate-stone lintels, renewed slate roof and 4 stone stacks, of which the R end stack is partly pebble-dashed. No 5 to the L is a double-fronted house with replacement fielded-panel door and overlight. In the lower storey is a horned sash window of 8 over 2 panes to the L and a similar 6/2-pane hornless sash to the R. The upper storey has 8/2-pane hornless sashes. No 4 was formerly a reflected pair of single-fronted cottages. It has 8/2-pane hornless sashes. It has a boarded door with overlight to the R of centre. To its L is a window (horned) in the former 2nd doorway. No 3 to the R end of the row was also formerly a reflected pair of single-fronted cottages. The entrance L of centre has a replacement boarded door and overlight. Windows are 4-pane sashes. To the R of the entrance is a window in a former doorway. An added 1-storey lean-to is against the R gable end.	Post-medieval	SH5602140219
85346	II	Plas Penbwll	A 2-storey double-fronted house of roughcast painted green with smooth-rendered architraves, and slate roof with an added small skylight. The entrance is offset to the R and has a replacement panel door. Windows are round-headed iron-framed windows with small-pane radial glazing, and incorporating small pivoting lights, probably cast at Britannia Foundry. The rear has replacement windows.	Post-medieval	SH5719938458
85347	II	House, including steps to R-hand	Belongs to a group of 1-7 High Street, Tremadog. Three cottages built in a single range, of squared local quarried stone laid in regular courses, graded slate roof on projecting eaves and with added skylights, and 3 stone stacks. No 1 is a 2-window cottage and abuts the Market Hall on the L side. Its entrance on the L side has a replacement half-glazed door. Windows are replacement 12-pane hornless sashes. Behind is a 1-storey rear wing with end stone stack and replaced windows. A vertical joint separates No 1 from the remainder of the row, which is later. No 3-5, originally 2 properties, has a replacement boarded door L of centre, a window to its L in an original opening, and 3 altered windows to the R replacing a former shop front, which are under original slate lintels but have later brick jambs. All lower-storey windows are modern. In the upper storey are 2 small 12-pane sash windows. At the rear are replacement windows and an added dormer. No 7 is a double-fronted cottage with central half-glazed fielded-panel door with marginal glazing. Windows are 2-pane sashes with sills. On the R side are communal stone steps. The rear has replacement door and windows in the lower storey and horizontal-sliding sashes in the upper storey.	Post-medieval	SH5619740195
85348	II	Union Inn	A 2-storey double-fronted public house of roughly coursed and squared quarried stone with large lintels, slate roof on slated projecting eaves, and stone end stacks. Its central entrance has fielded-panel doors under a thin overlight. Windows are 4-pane horned sashes, shorter in the upper storey.	Post-medieval	SH5620740157

NPRN No.	Grade	Name	Description	Period	NGR
85349	II	,7 Y Graig (Sunnyside),Tremadog,,	Belongs to a group of 6-8 Y Graig (Sunnyside), Tremadog. A short row of houses of roughly dressed blocks of stone laid in regular courses, with stone lintels, slate roof and 4 stacks. The L end stack is pebble-dashed, the next coursed stone, then a rebuilt smaller roughcast stack R of centre and pebble-dashed R end stack. No 8 at the L end is single-fronted with openings offset to the L of centre, and its entrance on the R has a half-glazed door and overlight. On the L side is a 2-pane hornless sash window and in the upper storey a similar horned sash. The L gable end is pebble-dashed in the upper storey and gable. Behind is an added wing. No 7 is double-fronted. It has a split boarded door and thin overlight, and 2-pane sash windows, slightly wider to the lower L. No 6 is double-fronted and has windows and door replaced in original openings. A lean-to under a corrugated iron roof is set back on the R side. The R gable end is pebble-dashed.	Post-medieval	SH5598340223
85350	II	,7-9 Hoel y Llan (Church Street),Tremadog,,	Belongs to a group of 3-15 Church Street, Tremadog. A 2-storey terrace of 4 houses and a shop, mainly of large roughly dressed blocks of quarried stone laid in regular courses, and renewed slate roofs on projecting eaves with stone and roughcast stacks. The details differ. A 2-storey 3-window terraced house of large dressed blocks of quarried stone laid in regular courses, large slate-stone lintels, slate roof on projecting eaves and stone end stacks. Its entrance on the L side has a replacement half-glazed door and overlight. Windows are all replacement 2-pane horned sashes, not all in original openings. The central window in the lower storey was originally a (shop) doorway and the R-hand has a wider earlier opening, probably a shop window. In the upper storey the central window is blind and rendered.	Post-medieval	SH5621540106
85351	II	Y Cymro and house	A 3-storey 3-window shop and house of roughcast painted cream, with slate roof on projecting eaves and stone end stacks. The house entrance on the R has a recessed fielded-panel door under a round-headed overlight. The shop front is framed by plain pilasters, a two-tier rascia and moulded cornice. It has windows of 2 round-headed lights with slender glazing bars, and recessed central half-glazed fielded-panel door, above which the overlight has been replaced by a painted sign. Upper storeys are strongly designed, with continuous sill bands to windows, which are 8-pane sashes in the middle storey, the central two paired, and all linked by a continuous string course which forms their segmentally arched heads. The upper storey has 4-pane sash windows.	Post-medieval	SH5683338641
85352	II	,8,Cornhill (Pencei),Porthmadog harbour,Porthmadog,,	A 3½-storey 2-window house roofed in a single range with Nos 7-10, but separated from the later No 7 by a full-height vertical joint. Of large slate-stone blocks laid in regular courses, slate roof with added skylights, and shared stone stacks. Openings are offset to the R. The main entrance is on the R, which has a replacement half-glazed boarded door in an unusually wide doorway. To its L another doorway has been converted to a window. Middle and upper storeys have 4-pane horned sash windows, of which the R-hand in each storey was originally a doorway. The rear has replacement windows.	Post-medieval	SH5685638360
85353	II	The Golden Fleece	A 2-storey double-fronted public house of large roughly coursed and squared blocks of quarried stone with large slate-stone lintels, slate roof on projecting eaves, small skylights and stone end stacks. Openings have raised cement surrounds. The central entrance has a fielded-panel door. Windows are replaced in original openings. Behind is an added 2-storey rear wing.	Post-medieval	SH5616440130
85354	II	,8 Y Graig (Sunnyside),Tremadog,,	Belongs to a group of 6-8 Y Graig (Sunnyside), Tremadog. A short row of houses of roughly dressed blocks of stone laid in regular courses, with stone lintels, slate roof and 4 stacks. The L end stack is pebble-dashed, the next coursed stone, then a rebuilt smaller roughcast stack R of centre and pebble-dashed R end stack. No 8 at the L end is single-fronted with openings offset to the L of centre, and its entrance on the R has a half-glazed door and overlight. On the L side is a 2-pane hornless sash window and in the upper storey a similar horned sash. The L gable end is pebble-dashed in the upper storey and gable. Behind is an added wing. No 7 is double-fronted. It has a split boarded door and thin overlight, and 2-pane sash windows, slightly wider to the lower L. No 6 is double-fronted and has windows and door replaced in original openings. A lean-to under a corrugated iron roof is set back on the R side. The R gable end is pebble-dashed.	Post-medieval	SH5597740225
85355	II	,9,Cornhill (Pencei),Porthmadog harbour,Porthmadog,,	A 3½-storey 2-window house roofed in a single range with Nos 7-10, of distinctive large slate-stone blocks laid in regular courses, slate roof with added skylights, and shared stone stacks. Openings are offset to the R. The main entrance is on the R, which has a replacement half-glazed door and window to its L, both in raised cement surrounds painted white. Windows are replacements in original openings, except the R-hand middle-storey window which was originally a doorway.	Post-medieval	SH5685438365

NPRN No.	Grade	Name	Description	Period	NGR
85356	II	,9,Market Square,Tremadog,,,	A 2-storey double-fronted house of pebble-dashed front with smooth-rendered surrounds, plinth and upper-storey sill band, renewed slate roof on boarded projecting eaves, 2 added skylights and stone end stacks. The central entrance has an early C20 half-glazed boarded door and overlight. Windows are 4-pane horned sashes, smaller in the upper storey.	Post-medieval	SH5620940149
85357	II	Belle Vue, including forecourt wall and railings	Belongs to a group of 1-2 Belle Vue. A pair of 3-storey 2-bay late-Victorian classical style houses of rendered walls, slate roof on projecting eaves and hipped to the R, and rendered stacks. Both have the entrance in the R-hand bay, comprising recessed panel doors with half-lit side panels and overlights. Ground-floor openings have cornices on moulded consoles, and middle-storey windows have hood moulds. No 1 has 12-pane sash windows, No 2 has 2-pane sash windows. The 3-window R end wall (No 1) has small-pane sash windows and a small added porch. The forecourt has scribed roughcast revetment walls and iron railings, which continues around the side of No 1 (railings to No 2 are largely obscured).	Post-medieval	SH5683138209
85358	II	Belle Vue, including forecourt wall and railings	Belongs to a group of 1-2 Belle Vue. A pair of 3-storey 2-bay late-Victorian classical style houses of rendered walls, slate roof on projecting eaves and hipped to the R, and rendered stacks. Both have the entrance in the R-hand bay, comprising recessed panel doors with half-lit side panels and overlights. Ground-floor openings have cornices on moulded consoles, and middle-storey windows have hood moulds. No 1 has 12-pane sash windows, No 2 has 2-pane sash windows. The 3-window R end wall (No 1) has small-pane sash windows and a small added porch. The forecourt has scribed roughcast revetment walls and iron railings, which continues around the side of No 1 (railings to No 2 are largely obscured).	Post-medieval	SH5682938202
85359	II	Bodawen Lodge	Belongs to a group of 1-2 Bodawen Lodge. A reflected pair of 2-storey 2-window cottages of squared blocks of quarried stone laid in regular courses and painted white, hipped slate roof on slightly overhanging eaves, and stone end stacks. A central half-glazed lean-to porch has door with glazed panels to each house. On the outer sides are 2-light casement windows in original openings. Upper-storey windows retain earlier diamond-pattern wooden glazing bars, and are horizontal sliding sashes to each end, a fixed window L of centre (No 2) and a 2-light casement R of centre (No 1). End walls have added lean-tos, of which the R-hand is set back.	Post-medieval	SH5667039653
85360	II	Carreg Wen, Marine Terrace	A late Georgian style 2½-storey 3-window house of rubble stone in regular courses, large stone lintels, and slate roof with coursed stone end stacks. The central entrance has a fielded-panel door under a 2-pane margin-glazed overlight. Hornless sash windows are 12-pane in the lower storey, 16-pane in the upper storey. Two added gabled dormers have 2-light windows and slate-hung sides.	Post-medieval	SH5683338265
85361	II	Marine Terrace	A symmetrical 2-storey 3-window house of roughcast (mostly obscured by vegetation) with slate roof and shared stone stack to the L. All openings are in moulded architraves. The central entrance has a recessed half-glazed panel door and overlight. Windows are 2-pane sashes, shorter in the upper storey, replaced in original openings.	Post-medieval	SH5683438256
85362	II	Wenallt, Marine Terrace	A 2-storey 3-window house of roughcast front, renewed slate roof and shared roughcast end stacks. Openings are offset slightly to the L side and have hood moulds. The central entrance, above street level and reached up steps, has a half-glazed panel door and overlight. Windows are 4-pane horned sashes, shorter in the upper storey.	Post-medieval	SH5683438246
85363	II	Afallon, Marine Terrace	A symmetrical 2-storey 3-window house of whitened roughcast with rusticated quoin strips and panelled, pedimented architraves, slate roof with added skylights, and shared roughcast stack to the R. The central entrance has a porch with paired fluted columns and moulded cornice, to a half-glazed panel door incorporating coloured-glass panels, and overlight. The sides of the porch have been infilled with wooden latticework. In the lower storey the windows are 3-light casements of an unusual type with small-pane glazing above transoms. The upper storey has similar 2-light windows.	Post-medieval	SH5683538237
85364	II	Garthowen, Marine Terrace	A 3-storey 3-bay late-Georgian style house of roughcast front with rusticated quoin strips, over slate-stone, slate roof on projecting eaves in a range with No 7, and roughcast stack to the L and stone stack to the R. A central added porch has a flat roof concealed behind a moulded cornice. It has a half-glazed fielded-panel door with small-pane glazing incorporating a small diamond light and beneath an Art Nouveau coloured-glass overlight. On its L side is a small-pane window incorporating a circular light, and small lights are in the side walls. Windows to the main house are under hood moulds in the lower 2 storeys, are 12-pane hornless sashes in the lower storey, 16-pane hornless sashes in the middle and upper storeys.	Post-medieval	SH5683538228

NPRN No.	Grade	Name	Description	Period	NGR
85365	II	Aberteg, Marine Terrace	A 3-storey 2-bay late-Georgian style house of roughcast walls with rusticated quoin strips, slate roof on projecting eaves roofed in a range with No 6, and roughcast end stacks. Openings are offset to the R side. On the R side it has a recessed fielded-panel door and overlight of coloured frosted glass. Windows are 12-pane horned sashes, under hood moulds in the lower 2 storeys, shorter and beneath the eaves in the upper storey. In the L gable end is a 2-pane sash window in the middle storey on the R side.	Post-medieval	SH5683638219
85366	II	Bee-hive Establishment (Tom Parry & Co)	A 2½-storey 4-window shop and house of scribed roughcast painted cream, slate roof and rendered stacks to the centre and ends. In the lower storey the house, on the L-hand side, has its entrance to the R, a recessed panel door and overlight, and has a centrally placed canted bay window with 4-pane horned sash. The projecting shop front on the R has cast iron posts to 2-light shop windows with thin glazing bars, central recessed half-glazed fielded-panel doors and overlight, repainted fascia and dentil cornice. In the upper storey are 2 pairs of 4-pane hornless sash windows, which have hood moulds on moulded consoles. Four gabled roof dormers have round-headed 4-pane horned sash windows, and fish-scale slate-hung sides.	Post-medieval	SH5679838552
85367	II	Britannia Bridge	A double-carriageway 5-bay bridge, of large blocks of squared local stone laid in regular courses. The original construction is best observed on the N (landward) side. Segmental arches have freestone voussoirs, and keystones recessed. Prominent rounded cutwaters retain slots for tidal gates, and above them are shallow buttresses carried up to a raised band at the base of the parapet. The parapet spanning the river is C20, of coursed slate-stone. Above the abutments the original parapet has survived, which is lower, and curves out to round terminal piers, which on the E side abuts Bridge Cottage. On the S (harbour) side the bridge has been extended by widening of the deck to accommodate a footway, which is supported on the cutwaters. These cutwaters also retain slots for tidal gates. The C20 parapet is similar to the parapet on the N side.	Post-medieval	SH5707838486
85368	II	Bron y Garth Lodge	A 1-storey lodge of picturesque composition, of rubble stone, renewed slate roof with rear skylights, and roughcast stack behind. Main openings have freestone ogee lintels of reddish stone and possibly re-used. The asymmetrical 3-window front has an entrance L of centre in a polygonal open porch on rustic posts and under a bold hipped roof. The entrance has a vertical-ribbed door. To its L is a small-pane window and to its R a replacement oriel window. Further R is a vertical joint and an extension built of smaller rubble stone with, under a gable, a small-pane sash window, which an ogee lintel probably re-used from the original side wall of the lodge. The L gable end has a small-pane sash window.	Post-medieval	SH5673537993
85369	II	Browsers Bookshop and house	A 3-storey 2-window shop and house of squared stone blocks laid in regular courses and painted white, slate roof, pebble-dashed stack to the R and original shared stone stack to the L. In the lower storey the house entrance is on the R side, raised above street level and reached up stone steps. It has a fielded-panel door and overlight. The shop has shallow bay windows of 2 panes each flanking a central recessed half-lit fielded-panel door incorporating similar panels to its L and an overlight. Over the shop front is a cornice with moulded billet frieze, above which is an awning. In the middle and upper storeys the windows are offset to the R and are 12-pane horned sashes in the middle storey, shorter 9-pane sashes in the upper storey. The R gable end, facing Capel Salem, is slate-hung above a cement-rendered lower storey. The rear has a 1-storey flat-roof projection, above which are small-pane sash windows, including a stair window to the L.	Post-medieval	SH5684138726
85370	II	Bwthyn Marda	Belongs to a group of 1-2 Dublin Street, Tremadog. A reflected but unequal pair of 2-storey 2-window houses of blocks of quarried stone laid in regular courses, slate roof and roughcast end stacks. No 1 on the R-hand side is wider. Openings have flat stone arches. Doorways to the inner sides have half-lit doors with vertical panels and small-pane glazing. Outer windows are 16-pane hornless sashes in the lower storey. In the upper storey are 12-pane hornless sash windows, of which the outer are under individual gables, and the narrower inner windows, which are not aligned with the doorways beneath, are under a single gable. To the L is a projecting gabled bay, originally forming the centre of the composition, with round pitching eye to the loft. It is otherwise obscured by the addition of a 5-bay 1-storey rendered garage front and only the original L gable end of the stables has otherwise survived. Against the R gable end is a modern flat canopy attached to the Royal Madoc Arms Hotel. The rear is mainly rendered and painted white, and has a 2-storey wing. The side walls of the wing have a boarded door and small-pane sash window in the upper storey, and the rear of the main range has small-pane sashes in each storey. (Further R is the projecting rear wing of the former stables, of rubble stone but with the roof mostly burnt out.)	Post-medieval	SH5612540182

NPRN No.	Grade	Name	Description	Period	NGR
85371	II	Church of St John	A geometrical style parish church comprising an aisled nave, lower and narrower chancel, NW tower and S vestry and organ chamber, of snecked rock-faced Deudraeth stone with Bath stone dressing and cornices and red sandstone banding, and slate roof behind coped gables. The buttressed W front has an entrance in a slightly advanced steep coped gable. It has pointed double doors enriched with C-hinges and studs, and a single order of polished stone nook shafts. It is flanked by small cusped lights, and above it is the main 2-light W window with quatrefoil plate-tracery light. The buttressed 4-bay lean-to N and S aisles have alternately, 2-light plate-tracery windows with quatrefoils, and 3 stepped cusped lights. The clerestorey has pairs of cusped lights. The 3-stage tower has angle buttresses and a N entrance with similar detail to the main W doorway. In E and W walls are narrow lights. The middle stage has narrow lights in W and N faces only, and a small W stair light. The bell stage has paired openings under linked hoods, with louvres and with sill band. Above is a corbel table below the coped parapet, dominated by its bold octagonal corner turrets with narrow blank arches. Each face of the parapet has a stepped merlon in Bath stone. The lower projecting and gabled S vestry has a boarded door within the lean-to of the original vestry, and cusped window to the R with iron bars. The S gable end has a 2-light window, and on the E side is a cusped window with iron bars, and external stone stack. Further R is the end of the original lean-to vestry. It has paired cusped lights under a relieving arch. In front is a dwarf wall and railings to basement steps. The 2-bay buttressed chancel has a single 2-light plate-tracery S window, 3-light E window, and on the N side a 2-light plate-tracery window and a 3-light window with plate tracery over the outer lights. The N aisle and clerestorey are similar to the S side.	Post-medieval	SH5653038776
85372	II	Church of the Most Holy Redeemer	A church in simplified Romanesque style, with Arts-and-Crafts influence. The church is oriented N-S and comprises a nave and chancel under a single roof, with shallow apsidal projections to the chancel S (liturgical E) and E walls, and lower hipped vestry on the N side. Nave and chancel are tall and narrow, of rock-faced rubble stone with larger quoins, and a steep slate roof on a moulded stone cornice. The nave, reached up a steep flight of stone steps, has boarded doors with strap hinges, under a lintel with date and the inscription 'ADDOLWYN A CHLODFORWN DI O GRIST. DHERWYDD TRWY DY CROES FENDIGAID TI A BRYNAiST Y BYD. The tympanum has thin voussoirs, and a representation of Christ on the Cross in low-relief - probably marble. It is inscribed with the text 'ADOREMUS TE ET BENEDICIMUS TIBI QUIA SANCTUM CRUCEM REDEMISTI MUNDUM'. To the R and L are small round-headed windows with steel-framed glazing and incorporating pivoting lights. Above is a large cross in low relief, superimposed on a round window. The nave gable has raised verges, concealing a stack on the L (E) side, and has a slate-hung apex of swept profile, projecting on 2 gilded head corbels. The 3-window side walls have round-headed windows with steel-framed glazing and incorporating pivoting lights. The W side also has a small blocked window at the N end. The E wall has a boarded basement door to a boiler room at the N end, where the ground level is lower. The E apsidal chancel projection is lower and under a conical roof. The S (liturgical E) chancel apse has a hipped slate roof on wide eaves. The chancel gable is slate hung. The vestry has a half-lit door in the splay abutting the chancel, and in its S wall a 2-light and a 1-light window. In the opposite N wall is a boarded door under a 2-light window.	Post-medieval	SH5670738516
85373	II	Croeswr Tramway Bridge over Y Cyt	A single-span flat-deck tramway bridge of coursed dressed Gest stone abutments, and segmental arch with freestone voussoirs. There is no parapet.	Post-medieval	SH5703838986
85374	II	Former church hall	A corrugated-iron single-storey 4-window hall painted black. The entrance is R of centre, has an open porch with finial, to boarded doors. Windows have wooden mullions and transoms and small-pane glazing. Outer windows are 2-light, the centre and centre-L windows 3-light windows. The gable ends have inserted boarded doors and the rear has similar windows.	Post-medieval	SH5703238867
85375	II	Former stable at Bodawen Lodge	A single-storey former stable of whitened coursed rubble stone, and slate roof. It has a boarded door on the L side and 2-light window with diamond-pattern glazing to the R side.	Post-medieval	SH5665739659
85376	II	Former Tremadoc Tramway bridge over drainage ditch	Effectively a short culvert, the entrances of which have round arches with freestone voussoirs, but mainly concealed by vegetation.	Post-medieval	SH5616939625
85377	II	Former Tremadog lock up (also known as Siop Crydd & Carchar)	A 2-storey building of large blocks of roughly squared quarried stone laid in regular courses, slate roof (some slates missing at the time of inspection) and stone end stacks. Openings have stone lintels. In the lower storey are 2 studded doors, and in the upper storey an iron-barred window on the L side. In the R gable end, where	Post-medieval	SH5607240191

NPRN No.	Grade	Name	Description	Period	NGR
			the ground level is higher, are stone and slate steps to a boarded upper-storey door to the R of centre. The L gable end is attached to a later, modernised range at the rear of Ty Newydd.		
85378	II	Gate piers and gates at entrance to Brecon Place and Greenways	Two monolithic gate piers stand either side of a single wide cast iron gate, to the R of which is another similar gate attached to the wall of HSBC bank. On the L side is a narrower pedestrian gate attached to a rubble-stone forecourt wall. The Arts-and-Crafts gates have a grid of scrollwork pattern.	Post-medieval	SH5687938651
85379	II	Gate piers, gates and wall at entrance to Bron-y-Garth	Square gate piers of coursed rock-faced stone frame the main entrance and a pedestrian entrance to its L, both of which have boarded wooden gates. On the R side is a curving dwarf wall with rock-faced balustrade, terminating with a ogee-headed boarded door, beyond which is a plainer stone garden wall.	Post-medieval	SH5674038009
85380	II	Gates, gate piers and flanking walls at S entrance to church of St John	Square gate piers of rock-faced stone have roll-moulded freestone quoins and truncated pyramid caps. Arts-and-Crafts style ironwork comprises central double gates between simple square posts, and outer sections, of which the R-hand incorporates a pedestrian gate and the L-hand is fixed. Each section has 4 tiers of wrought iron scrolls with cast iron rosettes. The double gates have 6 columns each, the side sections 4 columns. The central gates also have scrollwork above the top rail. Short stepped flanking walls are of rock-faced stone with freestone copings.	Post-medieval	SH5653238761
85381	II	Gelli	Belongs to a group of 9-25 Dublin Street, Tremadog. A terrace of 1½-storey cottages of roughly coursed and squared quarried stone, with boulder footings to Nos 9 and 11, slate roof and 5 stone stacks. All have raked half dormers. No 9 is a 2-window house with half-glazed door to the L. Windows are replacements in original openings. Nos 11-25 are single-fronted in reflected pairs, mostly with C20 replacement doors and windows, some of which are enlarged while others are in original openings. No 11 has a small-pane horizontal-sliding sash window to its dormer. Between Nos 13 and 15 is a blocked lower doorway. No 25 has a 2-window addition on its R side with skylight, and then a single-storey addition (Yr Efail) with modern detail. The rear of the terrace has extensive alteration and addition, with modern detail. No 9 has a 2-storey wing, Nos 11 and 13 outshuts, Nos 15 and 17 2-storey wings, Nos 19 and 21 have 2-storey flat-roofed extensions, No 23 has an outshut and No 25 has a 2-storey wing.	Post-medieval	SH5611440141
85382	II	Greenways and The Mews, including forecourt walls and gate piers	A late Georgian 3-bay house of 2 storeys with basement. The front is scribed roughcast painted white. The roof is slate on wide bracketed eaves, with end stone stacks. The entrance, reached up steps to a veranda, has a replacement glazed door under an original radial-glazed overlight. Windows are tall 20-pane hornless sashes in the lower storey, and are directly above basement lightwells. The veranda stands on wooden posts, has Tudor arches with diamond latticework to the spandrels, and plastered segmental tunnel vault. The original balustrade has been taken town. In the upper storey are 16-pane hornless sash windows under hood moulds. In the rubble-stone R gable end (originally intended to be a dividing wall with the next house) is an external stack. The forecourt has coursed rubble-stone walls with slate copings. On the L side the wall is stepped down from the house, and on the R side swept down. The wall at the front has monolithic gate piers, with later gate, leading to a slate-paved path and steps up to the entrance. At the rear is a 2-storey wing on the R side, with lower 2-storey former coach house (The Mews). The main range has 12-pane hornless sash windows in the upper storey, a 20-pane sash window to the L in the lower storey and a boarded door and 4-pane sash window to the basement. The wing retains a single 12-pane sash window in the upper storey and a replaced and inserted window on the R side, all above a recently added 1-storey link to a formerly detached stable. The coach house has 2 former wide doorways, infilled with a wide window and French doors. The upper storey has an enlarged window on the R side and replacement window to the L. The gable end facing Bank Place has a blocked window. The former lofted stable has a replacement door and window, and a boarded loft door above. It is attached to the main house by a yard wall, with boarded door, abutting the rear L corner of the house.	Post-medieval	SH5682038609
85383	II	Hafan	Belongs to a group of 1-2 Y Graig (Sunnyside), Tremadog. A pair of 2-storey cottages of blocks of quarried stone laid in regular courses and with stone lintels, renewed slate roof and stone stack to the R of each cottage. No 1 is double-fronted. The central entrance has a replacement half-glazed door and overlight. Windows are 2-pane sashes replaced in original openings, shorter in the upper storey. No 2 is a 4-window house. The entrance to the R of centre has a replacement door and overlight. Windows are all replacements in earlier openings. To the R of the entrance is a doorway converted to a window, and a smaller window at the end. To the L of the entrance is a small window, a window in a former doorway, and a blocked small window at	Post-medieval	SH5607440202

NPRN No.	Grade	Name	Description	Period	NGR
			the L end. In the upper storey are 4 windows. In the pebble-dashed L gable end is an inserted window to the L in the lower storey.		
85384	II	Harbour yard walls and gates to Greaves Wharf and Oakleys Wharf	A wall approximately 65m in overall length, in several sections and clearly of several phases. From the NE end is a rubble stone wall attached to the Oakleys, breached to make an entrance to Cwrt yr Harbwr, to the R of which the attached wall is curved and constructed of large blocks of coursed stone with stone coping and incorporating a pedestrian gate. Between Cwrt yr Harbwr and Wharf House are 3 sections with entrances defined by monolithic gate piers, of which the northernmost retains iron gates.	Post-medieval	SH5692038469
85385	II	Heddfa	Belongs to a group of 9-25 Dublin Street, Tremadog. A terrace of 1½-storey cottages of roughly coursed and squared quarried stone, with boulder footings to Nos 9 and 11, slate roof and 5 stone stacks. All have raked half dormers. No 9 is a 2-window house with half-glazed door to the L. Windows are replacements in original openings. Nos 11-25 are single-fronted in reflected pairs, mostly with C20 replacement doors and windows, some of which are enlarged while others are in original openings. No 11 has a small-pane horizontal-sliding sash window to its dormer. Between Nos 13 and 15 is a blocked lower doorway. No 25 has a 2-window addition on its R side with skylight, and then a single-storey addition (Yr Efail) with modern detail. The rear of the terrace has extensive alteration and addition, with modern detail. No 9 has a 2-storey wing, Nos 11 and 13 outshuts, Nos 15 and 17 2-storey wings, Nos 19 and 21 have 2-storey flat-roofed extensions, No 23 has an outshut and No 25 has a 2-storey wing.	Post-medieval	SH5612940147
85386	II	HSBC Bank	A Gothic style bank of 3 storeys and attic, of snecked rock-faced stone, pale freestone quoins and dressings, slate roof on a moulded cornice and behind coped gables on moulded kneelers, with stone end stacks. The 3-bay front has a central porch with double panelled doors and plain replacement overlight in a pointed doorway with half nook shafts and foliage capitals, moulded arch, hood mould and impost band. Above the impost band the angles of the porch have nook shafts. The stone parapet has diamond-pattern friezes. Side walls have cusped windows with original coloured glazing, under a gabled hoods with crocketed finials, and a blank panel below the parapet. In the lower storey the windows are replacements in original openings with shallow triangular heads to the lintels. In the middle storey each bay has paired 2-pane sash windows under shouldered lintels and a relieving arch. In the upper storey each bay has a segmental-pointed 4-pane sash window on corbelled sills. A central attic gable has a similar window, and is flanked by gabled roof dormers with round-headed windows, a 4-pane sash to the R and replacement window to the L. A moulded freestone band between lower and middle storeys, partly obscured by a modern sign, continues around the 3-window L gable end. It incorporates the date in raised Gothic letters at the base of a corbelled first-floor false external stack. In the lower storey is a large and 2 smaller openings, all with replaced windows. Further L is a blocked opening under a shouldered lintel, in a rear lean-to. The middle storey has 2-pane sash windows under shouldered lintels, with relieving arches. The upper storey has a single central 4-pane sash window under a segmental-pointed head. The rendered rear has a 2-storey lean-to and barred windows.	Post-medieval	SH5687138653
85387	II	Ivy Cottage	A double-fronted 1½-storey house of pebble-dash walls over stone, slate roof and shared roughcast stack to the R. Windows, including raked half dormers, are replacement 4-pane horned sashes in smooth-rendered surrounds. The central entrance has a replacement half-glazed door. A rear outshut, built against a steep bank, has a boarded door in its side wall.	Post-medieval	SH5635340294
85388	II	Kitchen garden walls and former coach house (The Studio) at Plas Tan-yr-allt	On a sloping site and approximately 90m N-S by 40m, the garden is defined by rubble stone walls which, on the E and W sides, converge at the S (downhill) end. Part of the W wall has an inner brick face. E and W walls have pointed doorways, which on the E side has a wrought-iron gate with quatrefoil and trefoils in the arch (also used at 4 Church Street, Tremadog, and possibly made at Britannia Ironworks, which produced architectural ironwork for Clough Williams-Ellis in the early-mid C20). In the NW corner is a large stone water tank, later used as a swimming pool, with brick and render inner walls. The N side is occupied by a former coach house of rubble stone and slate roof. It has replacement windows and door to the S side facing the garden. Its N side facing the drive to the house, retains original openings but the details are all modern. On the E side is an added lower tack room.	Post-medieval	SH5652140448
85389	II	Limekiln Cottage, including revetment walls and steps	Belongs to a group of Cornhill Cottage and Limekiln Cottage. A pair of 2-storey 2-window houses of large slate-stone blocks laid in regular courses, and slate roof with 2 later small roughcast stacks. Cornhill Cottage on the L side has a replacement glazed door and replacement 2-light casement windows in original openings.	Post-medieval	SH5682738410

NPRN No.	Grade	Name	Description	Period	NGR
			Limekiln Cottage has a former doorway to the R, now a window, an enlarged modern window to the L and in the upper storey 2-light casement windows in original openings. The entrance is in an added rear wing of pebble-dash painted white, and has a modern glazed door. On the L side of Cornhill Cottage, at street level, is a boarded door and overlight to the yard behind No 15 Cornhill. Two revetment walls retain the steep ground from street level to the entrances of the cottages, and are of coursed unworked slate-stone. The lower revetment has a concrete coping, and gateways, with slate orthostats, leading to slate steps up to the houses. Return walls on both sides have coping courses.		
85390	II	Llwyn Derw	An Arts-and-Crafts 2-storey house of snecked stone in the lower storey, pebble-dashed painted white in the upper storey, and timber-framed gables. The steep hipped slate roof has replacement brick stacks to the front and rear eaves of 4 diagonally set shafts. The relatively modest NE entrance front has a 2-storey gabled porch on the R side. The entrance in its side wall is under bracketed canopy, and has a fielded-panel door with small-pane glazing. The front wall of the porch has a 2-light window in the lower storey and paired sash windows in the upper storey of 4 over single panes. A 2-light window is on the L side. The asymmetrical SE elevation facing the road has advanced gable to left with timber framing at apex; roof brought down to left over set-back kitchen and veranda. Right of the gable, the roof is hipped over a bay window. The kitchen has inserted double-half-glazed doors that open to a recessed veranda wrapped around the rear elevation. The veranda has thin rock-faced monolithic piers and simple rock-faced balustrade, except on the R side where there is a coursed stone, square chamfered pier and similar respond. The rear (SW) has a triple 2-pane sash window to the kitchen. The R (NW) side wall faces a steep bank. To the L of centre is a large wood mullioned and transomed 3-light stair window. Further R in the lower storey is a 2-pane sash window, boarded door under a 2-pane overlight, another sash window and small-pane window in the lean-to that was formerly a doorway. In the upper storey are 2 pairs of 2-pane sash windows either side of a single sash window.	Post-medieval	SH5637238161
85391	II	Madocks memorial fountain in The Park	A square polished granite memorial on a stepped freestone plinth. The memorial has a corbelled basin below a spout, and a bronze plaque with the inscription: 'This fountain was erected as a memorial of Wm Alexander Madocks Esq MP the founder of Portmadoc and in commemoration of the coming of age of his grandson Francis Wm Alexr Roche Esq Feb 18th 1875'.	Post-medieval	SH5692738593
85392	II	Masonic Hall, including forecourt railings and gates	A 2-storey Masonic hall of snecked rock-faced stone with larger quoins, monolithic rock-faced dressings and raised plat band, and slate roof, which is hipped to the front. The 3-bay front has a central entrance with Tuscan portico, and 'MASONIC HALL' in metal letters across the entablature. The entrance has a wide panelled door. Windows are 4-pane horned sashes, in the front and side walls. The R side wall, to Lombard Street, has 5 windows in the upper storey and 2 windows in the lower storey. In the L side wall are 2 windows in each storey at the R end, to the L of which the wall, like the rear gable end, is rendered with impressed small stones. The forecourt has a dwarf wall with slate coping, and railings forming an open arcade of round arches with simple finials. The central entrance has double gates, flanking which the railings incorporate the Masonic symbol of crossed dividers. At the L end is a monolithic rock-faced gate pier, with pyramidal cap, and single gate hinged on the wall of the neighbouring house. Attached to the L angle of the front is a later iron gate.	Post-medieval	SH5678938590
85393	II	Kerfoots	A 3-storey 3-bay shop of whitened rendered front, with rusticated quoins painted green, slate roof on a deep moulded corbel table and continuing to No 138 (and stone stack to the R removed). The shop front is brought forward, and is framed by fluted pilasters and a deep fascia incorporating awnings above the windows. The central recessed entrance has double glazed doors with faceted panels to the base, and overlight, with round-headed windows to the returns of the shop front. The shop windows have, R and L of the entrance a pair of 2-light shop windows, with round-headed thin glazing bars. In the middle storey are paired windows in the outer bays and single window in the central bay, each of them round-headed with moulded architraves, Corinthian capitals and keystones, and 2-pane sashes. In the upper storey are 4-pane horned sash windows in plain architraves. The sides, behind the adjoining buildings, and rear are roughcast, painted white to the rear, and the roof is also hipped at the rear. Some small-pane sash windows are retained, but most windows are replacements in earlier openings. The rear has an external brick stack on the L side and a 1-storey lean-to.	Post-medieval	SH5666538849
85394	II	New Wharf	A quay approximately 230m long NE-SW, of coursed rock-faced stone, incorporating mooring rings and timber buffers. A low stone parapet has been added, behind which are original cast-iron mooring posts. It has a 40m return wall at the NE end and a shorter 10m return at the SW end where the angle is rounded.	Post-medieval	SH5709938281

NPRN No.	Grade	Name	Description	Period	NGR
85395	II	Cornhill Wharf	Cornhill Wharf is an L-shaped quay with battered sides, built of large dressed stone blocks laid in regular courses, and has 3 weathered stone mooring posts on the NW side facing Cornhill. At the end of the NE-SW arm is a return wall to the slipway known as 'The Beach'. The NW-SE arm continues in front of the present Madoc Yacht Club and terminates with stone steps. The Beach wall has a later stone parapet.	Post-medieval	SH5687838341
85396	II	Porthmadog Telephone Exchange	A neo-Georgian telephone exchange of 2 storeys and L-shaped plan, of snecked rock-faced stone with pale freestone dressings, and hipped slate roof. The symmetrical 5-bay front has a central panelled door in a moulded round-headed surround with overlight protected by half-moon pattern ironwork. Above the door is 'telephone exchange' in raised letters. In the lower storey round-headed small-pane windows are in iron frames and have radial glazing. The upper storey has 12-pane sash windows. The 1-window R side and 4-window L side have similar windows, in yards concealed by contemporary coped walls. A large modernist 2-storey extension is behind.	Post-medieval	SH5668339109
85397	II	Porthmadog war memorial, including steps, trilithon and monoliths forming its approach	The main memorial is a cross surmounting a small eminence, but its approach was also designed to achieve a sense of procession from street level. The Celtic style cross stands on a stepped plinth. Its square base has inset bronze inscription panels with roll call of the 1914-18 war dead in raised letters. The wheel-headed cross is on a tapering shaft. The memorial is within a square enclosure defined by dwarf walls of coursed stone, with piers set across the angles bearing bronze plaques commemorating the 1939-45 war dead. The memorial is reached by a winding path from street level. An arc of stone steps, with stepped parapet, leads up from the street to a rock-faced trilithon engraved 'Bryn Coffa'. Beyond is a path lined on each side by monoliths, each bearing the inscription of the years of the 1914-18 and 1939-45 wars.	Post-medieval	SH5666239263
85398	II	Portmeirion Pottery and Gifts	One of a row of 4 late-Georgian style 3-storey 2-window shops with houses above. They have slate-hung fronts, a slate roof hipped to the R end (No 1) where the corner is also splayed, with transverse stone stacks and a fourth, pebble-dashed stack at the R end. The houses are not of equal width. No 1 is the widest, Nos 7 and 9 are narrower than No 3. No 9 has a late C19 shop front with replacement window and recessed entrance to the L with replacement glazed door. Middle and upper storeys of Nos 7 and 9, now a single premises have hornless sash windows similar to Nos 1 and 3 but in which the glazing bars in the lower sashes have been removed. The L gable end is of large blocks of unworked slate-stone laid in regular courses in lower and middle storeys, roughcast above. The lower storey has inserted paired horned sash windows, and on the L side are small-pane sash windows in lower and middle storeys. The upper storey has a small-pane sash window to the R. The rear, where Nos 3, 7 and 9 are set slightly back from No 1, is of rubble laid in rough courses. No 9 retains some small-pane sashes. Nos 7-9 have a 2-storey rear roughcast wing, which has a pebble-dashed front facing the lane at the side of the block. It has C20 horned sash windows, renewed external steps at the L end to a replacement first-floor door, and a half-glazed door and shop window inserted in a former wide doorway.	Post-medieval	SH5699138574
85399	II	Road bridge over Y Cyt beyond NE end of Chapel Street	A single-span, wide single-carriageway bridge of coursed Gest stone abutments and segmental arch with voussoirs. On the upstream (NW) side the abutments incorporate slots for stop planks. On the downstream (SE) side the abutments are longer and incorporate moulded rebates. The bridge has a coped parapet which, on the upstream side, has a short return wall on the L (N), and has partially collapsed at the R (S) end. On the downstream side are simple square terminal piers.	Post-medieval	SH5694239008
85400	II	Rockcliff, including forecourt railings and gate	A 3-storey 2-bay late Victorian classical style house of rendered walls with rusticated quoins, and slate roof on projecting eaves in a range with Nos 1-2 Belle Vue, with shared stack to the R. The entrance on the L side has a replacement glazed door and overlight, under a cornice on consoles. On the R side is a 2-storey canted bay window with 4-pane sashes. A similar sash window is on the L side of the middle storey under a hood mould on consoles. The upper storey has plainer 4-pane sash windows. Set back to the L is a lean-to garage. In the L gable end middle and upper storeys have small-pane sash windows on the L side. A 2-storey wing is behind. The forecourt has rendered dwarf walls and coping to iron railings and gate.	Post-medieval	SH5682538195
85401	II	Shelley memorial in garden at Plas Tan-yr-allt	A freestone pedestal, with garlanded urn (the lid of which is missing). The pedestal has a weathered inscription of which only 'Percy Bysshe Shelley' is now legible. It was replaced by an oval slate plaque, itself now detached, but which reads 'Percy Bysshe Shelley stayed here 1812-13 and completed Queen Mab. "All things are recreated"', which probably repeats the original inscription.	Post-medieval	SH5666340475

NPRN No.	Grade	Name	Description	Period	NGR
85402	II	Ship on Launch	Belongs to a group of 1-3 Lombard Street. A terrace of three 3-storey 2-window houses roofed under a single range with slate roof, and stone stacks except for a pebble-dashed stack to the R end (No 3). In each house the openings are offset to the L side. No 1 is whitened scribed roughcast, in the same range as 21 Cornhill, has a half-glazed door to the L, replacement shop window to its R, and 4-pane sash windows in middle and upper storeys. No 2 has a pebble-dashed front, replacement half-glazed door to the L, and 2-pane sash windows. No 3 is of large blocks of local stone laid in regular courses (exposed by removal of render). It has a replacement half-glazed door to the L, and 2-pane sash windows. The R gable end is pebble-dashed. At the rear, No 1 is of large blocks of local slate-stone laid in regular courses, retains a 4-pane sash window in the middle storey but otherwise has replaced openings. Nos 2 and 3 are rendered with replacement windows and No 3 has a 2-storey lean-to on the rear.	Post-medieval	SH5686138440
85403	II	Shop and Dunn & Ellis Accountants	One of a row of 4 late-Georgian style 3-storey 2-window shops with houses above. They have slate-hung fronts, a slate roof hipped to the R end (No 1) where the corner is also splayed, with transverse stone stacks and a fourth, pebble-dashed stack at the R end. The houses are not of equal width. No 1 is the widest, Nos 7 and 9 are narrower than No 3. No 7 has its entrance to the L, a recessed replacement glazed door under an overlight, to the R of which is a replacement shop window in an earlier opening, and under a modern fascia. Middle and upper storeys of Nos 7 and 9, now a single premises, have hornless sash windows similar to Nos 1 and 3 but in which the glazing bars in the lower sashes have been removed. The rear, where Nos 3, 7 and 9 are set slightly back from No 1, is of rubble stone laid in rough courses. No 7 retains some small-pane sashes. Nos 7-9 have a 2-storey rear roughcast wing, which has a pebble-dashed front facing the lane at the side of the block. It has C20 horned sash windows, renewed external steps at the L end to a replacement first-floor door, and a half-glazed door and shop window inserted in a former wide doorway.	Post-medieval	SH5699538569
85404	II	Spar Shop and house	A 2-storey shop of roughly coursed and squared quarried stone, under a slate roof hipped to the R, on boarded projecting eaves to Market Square and slated eaves to Church Street where there are 2 skylights, and a stone stack to the Market Square elevation. Facing Market Square is a recessed replacement door at the L end under an overlight. Next R is a large modern shop window, to the R of which is the vertical joint associated with an earlier doorway. Further R is a glazed door flanked by shop windows. Both shop windows have modern rubble below the sills, indicating earlier large openings, probably earlier shop fronts. A modern painted fascia is above the entire shop front. In the upper storey are two 4-pane horned sash windows on the L side, and a single 6-pane hornless sash window to the R. The Church Street elevation has a large shop window on the L side with replacement glazing in an earlier opening, a blocked doorway and another blocked doorway to the R converted to a window, although it was probably originally a window and part of the adjoining No 1 Church Street. The upper storey has two 6-pane hornless sash windows.	Post-medieval	SH5620940129
85405	II	Taleifion	A 2-storey double-fronted house of large squared blocks of quarried stone laid in regular courses (and of more regular shape and size than 6-12 Market Square), renewed slate roof on wide eaves in a range with No 2, and with a stone end stack to the L. The central entrance has a replacement panel door and overlight. Windows are also replacements in original openings, larger to the lower L. In the L gable end, facing Dublin Lane, is a blocked doorway and a blocked window to its L. In the middle storey and attic are replacement windows. An added outshut also has a blocked door facing Dublin Lane to the side of the house, and has enlarged and replaced windows to the rear, which is pebble-dashed and painted blue.	Post-medieval	SH5615640151
85407	II	The Sail Loft	A 2-storey sail loft of rubble stone incorporating larger quoins and dressings, and partly rendered. The slate roof is hipped to the L, with skylight, and has a roughcast end stack to the R. In the lower storey are central wide boarded doors, flanked by a 16-pane sash window to the L, shuttered window to the R and a boarded door at the R end where the ground level is slightly higher. In the upper storey, offset L of centre, is a boarded loading door under a projecting gable (formerly with pulley). Shuttered openings are to the R and L. The 2-window rear has replacement windows and central boarded door and overlight.	Post-medieval	SH5716638475
85408	II	Trefdy	Belongs to a group of 1-7 High Street, Tremadog. Three cottages built in a single range, of squared local quarried stone laid in regular courses, graded slate roof on projecting eaves and with added skylights, and 3 stone stacks. No 1 is a 2-window cottage and abuts the Market Hall on the L side. Its entrance on the L side has a replacement half-glazed door. Windows are replacement 12-pane hornless sashes. Behind is a 1-storey rear wing with end stone stack and replaced windows. A vertical joint separates No 1 from the remainder of the	Post-medieval	SH5619040193

NPRN No.	Grade	Name	Description	Period	NGR
			row, which is later. No 3-5, originally 2 properties, has a replacement boarded door L of centre, a window to its L in an original opening, and 3 altered windows to the R replacing a former shop front, which are under original slate lintels but have later brick jambs. All lower-storey windows are modern. In the upper storey are 2 small 12-pane sash windows. At the rear are replacement windows and an added dormer. No 7 is a double-fronted cottage with central half-glazed fielded-panel door with marginal glazing. Windows are 2-pane sashes with sills. On the R side are communal stone steps. The rear has replacement door and windows in the lower storey and horizontal-sliding sashes in the upper storey.		
85409	II	Tregunter, including forecourt railings and gate	Belongs to a group of 4, 4a and 5 Lombard Street. A 2½-storey double-fronted house (No 4) and shop (No 5) of scribed roughcast front painted cream, and slate roof. No 4 has rendered end stacks, No 5 has a stone stack on the R side. No 4 has a half-glazed door, incorporating coloured glazing and the figure of a sailing ship, under an overlight, flanked by canted bay windows, of which the L-hand has a 4-pane sash, and the R-hand a replacement window (and now part of the adjoining shop). It has 4-pane sash windows in the upper storey. In front of the house are cast iron forecourt railings on a dressed slate plinth. On the L side is a terminal pebble-dashed pier. On the R side the railings return against the corner of the shop window. The L gable end is pebble-dashed. It has a 2-pane sash window lighting the stair and a small attic window to the R. A lower 2-storey rear wing (No 4a) has a central door flanked by 4-pane sash windows and replacement top-hung casements in the upper storey. No 5 has a shop front with large single-pane bay windows, incorporating original mullions and thin transoms in the returns, between recessed replacement half-glazed doors. Above is an awning and then the fascia, which has modern lettering, and a cornice incorporating a moulded billet frieze. In the upper storey is a canted oriel window with 4-pane sash and 2 gabled dormers have 4-pane sash windows and slate-hung sides. The rear of No 5 has a 4-pane sash window under a gable in the upper storey, to the L of which is an added lower 2-storey wing with stack.	Post-medieval	SH5685438453
85410	II	Y Bwthyn	A double-fronted 1½-storey house, pebble-dashed over stone, with slate roof and stack to the R. Replacement windows, including raked half dormers, are in smooth-rendered surrounds. The central entrance has a lean-to porch with half-glazed door. Set forward on the L side is a 2-window extension under a slate roof with L end stack and doorway in the gable end. The rear of the extension is splayed, where the house backs on to the road. The rear of the main house has an added half dormer.	Post-medieval	SH5634840290
85411	II	Y Llong (The Ship) public house	A symmetrical 2-storey 3-window public house of large slate-stone blocks laid in regular courses, slate roof with 3 skylights, and stone end stacks. The central entrance has a simple portico with cast iron posts, bracketed cornice, and replacement fielded panel door. Windows are 4-pane sashes on stone sills, incorporating leaded glazing in the lower storey. The rear has replacement doors and windows and a lower gabled wing.	Post-medieval	SH5683038505
87607	II	Mardir	Neo-Georgian villa with attached contemporary surgery. House is 2 storeyed and 7 bays with modern extension set back to left. Stuccoed finish, with small pane sash windows with projecting sills, hipped slate roof with overhanging eaves, plain ridge tiles and two central ridge stacks, the right reduced. Main front overlooking the estuary dominated by advanced central 3 bays with a shallow pedimented gable with lunette and dentilled string course. First floor string course to the outer bays. Single storey extensions set back to either side with round headed windows and balconies above, the main entrance is through a Palladian loggia in the return of the right hand extension. To the right of the main house is a single storey surgery of six bays, attached and set back. Rear elevation displays no clear symmetry with large later extension advanced to the right and new colonnaded single storey entrance to left.	Modern	SH6112038785
87900	II	Former Women's Institute Hall	Former farm building converted into Women's Institute hall. Rectangular single storey, with added catslide to rear, offset to right and not full width. Rubble stone brought to courses. Slate roof (raised at rear to meet catslide) with metal ridge vents. Projecting later timber porch in the centre of the front elevation, with lean-to slate roof and door to right and window to front. Wide 3-light windows with transoms to main range either side of porch. Air-vents in walls. Rear lean-to extension has stable-type door with glazed upper section in right side elevation, 2 windows in rear face.	Post-medieval	SH6003938543

Registered Parks and Gardens

Record No.	Grade	Name	Description	Period	NGR
PGW(Gd)18(GWY)	RP&G	Tan-yr-Allt	The gardens at Tan-yr-allt were laid out around the time the house was built, by Madocks, soon after 1800. They lie around and to the immediate east of the house. There is little formal structure, the important elements being the view, trees, and the kitchen garden. The garden and woods continued to be maintained and there are flourishing trees of all ages. The original informal layout does not seem to have been much altered. In front of the house, which stands on a narrow shelf in the hillside with its garden below and wooded park above is a large, sloping lawn from where wide views over Porthmadog and its surroundings and down to Harlech can be obtained. At the foot of the lawn is a small formal pond which once had a cherub fountain, and the grass slope is surrounded by trees. A level lawn to the east also enjoys the view, and from here one can hear the sound of a stream which runs down through the woods nearby. Varieties of rhododendron planted in this area flower successively, giving colour from early spring to midsummer. A freestone pedestal with garlanded urn stands on the lawn to the east of the house. This is a memorial to Percy Bysshe Shelley who stayed at Tan-yr-Allt in 1812-13 and completed Queen Mab (LB: 85401).	Post-medieval	SH5688540518
PGW(Gd)19(GWY)	RP&G	Wern	Wern Manor (LB: 4626) lies in a rural setting north-west of Porthmadog, just off the road to Criccieth and Pwllheli. It is surrounded by gardens set in parkland, on an estate originally founded in the sixteenth-century by Morris Johns. The park lies on flat ground to the east and on more uneven ground rising to the west. In the park to the east, viewed over a ha-ha, are two circular copses which were planted to enhance the outlook by breaking up the ridge of hills forming the distant view. These hills offer a pleasant aspect but have a long, almost level skyline, and the copses in the foreground add interest to this without obscuring too much of the view. To the west and south-west, north and west of the lodge (LB:4629) is a more undulating area with rocky outcrops which is traditional parkland with scattered trees, a fair proportion of those shown on the 1915 map surviving. To the north of it is a wooded hill (Coed Bryn-tŵr) with the remains of the look-out tower, probably a summer house.	Post-medieval	SH5434039996
PGW(Gd)29(GWY)	RP&G	Portmeirion	The registered area represents the well-preserved garden designed in and around the village of Portmeirion by Clough Williams-Ellis (1883-1978) where conditions allow the cultivation of many hardy and tender plants, which adds to the exotic character of the site. Related to this is an older garden which is a Wild garden which contains an exceptional collection of rhododendrons from the early twentieth century. This registered area has an important group value with the many listed buildings and structures in Portmeirion.	Post-medieval	SH5874237074

Conservation Areas

Inspire ID	Grade	Name	NGR
WAL/GWYN/29	CA	Porthmadog	SH 56859 38689
WAL/GWYN/33	CA	Portmeirion	SH 59057 37197
WAL/GWYN/20	CA	Tremadog	SH 56173 40176

Non-Designated Assets

PRNUID	Name	Description	Period	NGR
33604	Y Bryn lithic scatter, Porthmadog	A microlith and 2 blades were found on the western part of Y Bryn during work related to the Porthmadog Bypass. These seemed to be separate from the larger lithic scatter on the hill (PRN 33595) and could indicate transitory Mesolithic activity.	Mesolithic	SH55714006
33595	Flint Scatter, Findspot, Y Bryn	A number of prehistoric flint and chert artefacts found during excavations in advance of the Porthmadog bypass at Tremadog, including a knife or scraper fragment. Possibly Neolithic in date. (Hopewell & Riley, 1995) During the excavations at Y Bryn in advance of the Porthmadog Bypass a number of prehistoric flint and chert artefacts were found. These resulted mainly from surface collection over the top and eastern side of the rocky hillock. Most were unstratified, found in an eroded and disturbed area, although some were found in the red-brown silt (3005) covering the hill and representing the lower horizon of the soil that had built up over the hill. A total of 157 individual pieces of flint and chert were collected, mostly of possible Neolithic date.	Neolithic	SH55664007
33004	Various Finds, Penamser, Porthmadog	The findspot of a medieval coin, a Roman brooch, a bronze age axe head, and a post medieval ring.	Bronze Age	SH553393
34103	Shell Midden, North-East of Penamser	A concentrated deposit (71001) of mainly cockle shells with some winkles and a few oyster shells covering a roughly oval areas measuring 2.98m by 1.80m. The deposit was up to 0.36m thick and had built up against an outcrop of bedrock. The shells were in a matrix of dark grey/black silty sand, and some charcoal was also present. Below the midden was a heat-reddened layer containing burnt stones and charcoal flecks.	Iron Age	SH55513960
33596	Peat Deposit, Penrhyndeudraeth	Peat deposit, Prehistoric	Prehistoric	SH60163862
16876	Area Around Roman Bathhouse, Llidiart Yspytty	The buried but excavated remains of a Roman bathhouse stand about 30m outside the south-eastern boundary of the study area. It is very unlikely that the bathhouse stood alone and it is possible that it was associated with nearby mining or possibly with a mansio. Further remains have yet to be identified but it is possible that further Roman features exist within the study area.	Roman	SH55754014
19661	Corn-Drying Kiln, Llidiart Yspytty	Excavation on a narrow terrace revealed the remains of a dry-stone built structure of possible Roman date. The structural remains appear to consist of an arc of walling, and a number of other lines of stone on other alignments. It is probable that some of the stones represent stone-capped drains and not walls. However, it would appear that more than one phase of construction is present.	Roman	SH5564940326
29377	Culvert, Llidiart Yspytty	Complex of drain (PRN 29377), pathway (PRN 29378) and timber structure (PRN 29379). The first clear activity was the construction of a line of large slabs up to 0.7m in length (323) (plate 4). These slabs resembled the capping of a drain but there was no drain below them. They ran roughly north to south forming a pathway from the middle of the trench to the near the southern baulk.	Roman	SH5564940326
29384	Hearth, Llidiart Yspytty	Partially covering Culverts A and B [PRN 29377 & 29378] was a clay hearth (Figure 02). The hearth was located directly below one of the circular ovens identified during the 2005 excavation [PRN 29380] (Plate 02). The hearth was c.2.00m wide and 0.20m deep and comprised a thin layer of yellow clay, followed by a layer of charcoal-rich clay and a thin layer of heat reddened clay (Figure 09). The hearth, like the culverts, utilised the levelling deposit of red-brown silt. The fact that the location of the hearth matched that of one of the ovens from the corn-drying complex suggested that the two were related, with the hearth either representing the primary phase of the construction of the oven (as the stone floor of the oven was set into clay) or an earlier phase of corn-drying that was succeeded by the construction of the oven. The heat reddened surface of the hearth could have been caused by the oven	Roman	SH5564940326
1924	Horse Bones, Findspot, Tremadog	When the Bryn was truncated during a roadway widening scheme c.1860, the skeletons of numerous horses were uncovered. There was an oral tradition that they were associated with the nearby ysbyty (St. John's?) and had nothing to do with the Roman site opposite.	Roman	SH557401

PRNUID	Name	Description	Period	NGR
17812	Part of Roman Road, Segontium to Pen Llystyn to Tomen y Mur	The western road must in reality have run southward from Segontium by way of Llanllyfni and Dolbenmaen. In the Mabinogi story of Math vab Mathonwy, the men from South Wales, after their defeat by Math near Caernarfon, fell back along a route from Nantcall to Dolbenmaen, and so by way of Traeth Mawr to Felinrhyd and Maentwrog.	Roman	SH57033963
17821	Part of Roman Road, Segontium to Pen Llystyn to Tomen y Mur	This section runs from the Roman Fort site at Penllystyn, Bryncir (PRN 144), across open fields and then along part of the route of the current A487(T), before continuing across more open fields and the Porthmadog cob area, before terminating west of the Tomen y Mur fort complex.	Roman	SH59233829
29378	Path, or Culvert, Llidiart Yspytty	Complex of drain (PRN 29377), pathway (PRN 29378) and timber structure (PRN 29379). The first clear activity was the construction of a line of large slabs up to 0.7m in length (323) (plate 4). These slabs resembled the capping of a drain but there was no drain below them.	Roman	SH5564940326
29380	Roman Ovens, Llidiart Yspytty	At the north-eastern corner of (366) [PRN 19661], and probably roughly contemporary with it, was a small circular structure built of stone and clay (359) (plate 9), which is interpreted as an oven. This survived mainly as a floor composed of stone blocks set within clay, but a short arc of wall survived on the western side.	Roman	SH5564940326
29379	Timber Structure, Possible, Llidiart Yspytty	Complex of drain (PRN 29377), pathway (PRN 29378) and timber structure (PRN 29379).	Roman	SH5564940326
34847	Y Bryn, coin findspot	During excavations in advance of the Porthmadog Bypass a member of the public brought a coin to the excavation team and donated it to the project. The coin was found on the field track to the south-west of Y Bryn.	Roman	SH55684005
34845	Y Bryn, dump of Roman slates	Excavation in advance of the Porthmadog Bypass on a low hill known as Y Bryn revealed a large deposit of thick, roughly cut roofing slates and at the lower end of the slope was a rubble deposit and two gullies. The slates appeared to have been stacked in organised rows but had slipped down the slope. Most of the slates had a hole punctured through them and some of them even had the remains of an iron nail within the hole.	Roman	SH55704010
34844	Y Bryn, Roman lime kiln	A stone-built lime kiln was found dug into the side of a small hill known as Y Bryn during excavation in advance of the Porthmadog Bypass. This contained burnt limestone and a small number of sherds of Roman pottery. Next to it was a small oven. Radiocarbon dates confirmed the pottery dates of 3rd/early 4th century AD.	Roman	SH55704008
29381	Clearance Cairn, Llidiart Yspytty	A sub-circular heap of stones, apparently a field clearance cairn, was piled against large stone protruding at the northern end of wall (305), and another layer of shaley colluvium (315) spread over the site. The movement of colluvium suggests that the land upslope was being ploughed. The field cairn also suggests the removal of surface stones to improve the land and aid ploughing.	Medieval	SH5564940326
81556	Coin, Findspot, Porthmadog	The findspot of two medieval silver coins.	Medieval	SH549394
81555	Hoard, Findspot, Porthmadog	The findspot of a medieval hoard.	Medieval	SH54913948
58447	Route of Pre-Turnpike Road, Minffordd	Now a minor tarmac lane running from Minffordd towards the farms of Plas Newydd and Ty Obry, entering Penrhyndeudraeth after crossing beneath the Festiniog Railway. The line of the road is clearly shown on the John Evans map of 1797 as the main route between the crossing of Traeth Mawr and Maentwrog and areas to the east.	Medieval	SH59983885
33597	Shell Midden, Llanfrothen	It appears that prior to the land reclamation of the late 18th century this would have formed a low island in a small bay on the northern side of the Penrhyndeudraeth peninsula, sheltered to the north by the outcrop of Y Garth. The shell midden would have been on the southern shore of this island. The material appeared to have been dumped directly onto the bedrock and consisted of mostly shells with some fragments of mammal bones	Medieval	SH59843882
36861	Tannery, Plasnewydd Tannery, Llanfrothen	Probable site of tannery.Coflein: 'Date of construction unknown, although worked from 1695 to at least 1802. Pits were still in view in 1880	Medieval	SH5984839060
18208	Wern Landscape, Dolbenmaen	There has been a house at Wern since at least the late medieval period, and the neighbouring Penmorfa parish church is likely to be an early foundation. The house belonged to the Wynns in the seventeenth century but was abandoned by them in the second half of the eighteenth century, and sold in 1800. There followed a long period during which the house was empty or rented out, until it was bought by Richard Methuen Greaves in 1886. In 1892 he had it enlarged and rebuilt by John Douglas	Medieval	SH54313993

PRNUID	Name	Description	Period	NGR
18233	Llidiart Ysbytty Landscape, Porthmadog	However, by the 1860s Gorseddau quarry had also closed, and the railway through Llidiart Yspytty was adapted in 1872-5 in an attempt to tap the supposed mineral wealth of Cwm Pennant. However, it was hardly used and was dismantled before the end of the nineteenth century. Key historic landscape characteristics: ironstone mine, railway and road routes. Remains of the principal mine adit can be seen, still partially open, as well as the site of the kilns built in 1845 to the south-west. Several presumed other blocked adits are also visible, as are areas of industrial activity. Parts of the line of the 1848 railway, the 1855 Gorseddau tramway and the Turnpike Trust road are clearly visible. The main road from Caernarfon to Tremadog is still in use as such. Conservation priorities and management: preservation of the remains relating to mining and transport activities which characterise this area is the priority.	Post-medieval	SH55534036
18231	Minffordd Quarry Landscape, Llanfrothen	The quarry has continued to expand and has significantly altered the skyline of Garth, especially as seen from the Cob, in recent years. Its corrugated iron crusher plant is a prominent feature but, although it has never had an archaeological survey, it has expanded its workings and there is not thought to be much of significant industrial archaeological interest on the site.	Post-medieval	SH59423907
18209	Porthmadog Harbour Landscape, Porthmadog	A deep-water harbour created as an unintended consequence of the building of the Cob in 1808-1813, which channelled the waters of the Glaslyn between Ynys y Towyn and the Green. The public quay (SH 5688 3838) dates from 1824, when the area came to be used for the transhipment of slate from river boats to ocean-going vessels instead of the exposed Ynys Cyngar to the east	Post-medieval	SH57203867
18210	Porthmadog Landscape, Porthmadog	The town of Porthmadog came into being as a consequence of the draining of the Traeth Mawr by William Alexander Madocks and the unintended creation of a harbour by the newly channelled Afon Glaslyn where it passed through the sluice gates. It is a town built partly on made-up land, partly on higher ground	Post-medieval	SH56613899
18220	Tremadoc Landscape, Porthmadog	Tremadoc is an outstanding example of a planned urban community, created by William Alexander Madocks on land recovered from the Traeth Mawr by the first embankment of 1800. Designed as a composite whole, with three main streets leading to and from a central square (see photograph), it established a pattern of Regency-style architecture within the area that lasted well into the late 19th-century. Amongst its claims to fame are the first Welsh chapel with a classical facade, based on Inigo Jones's design for the Covent Garden chapel in London, and the first Gothic revival church in Wales.	Post-medieval	SH56134005
16862	1848 Link Railway, Line of, Llidiart Yspytty	The line of the link railway is visible as a 3.5m wide slightly raised platform with occasional exposed kerb stones. This railway leads into a cutting immediately adjacent to the road. A length of 80m is clearly visible but the railway could not be traced as far as the principal adit with any certainty.	Post-medieval	SH55624018
16871	Agricultural Building, Llidiart Yspytty	This building was shown on the 1841 lease. It is now derelict, has lost its roof and has been converted into a sheep pen. The building measures 8m x 4m internally and has a 9m x 4m sheepfold added to the north-west. It is built from rough blocks of local stone and has a recent entrance added through the north-west gable.	Post-medieval	SH55644027
33599	Area of quarrying, Penrhyndeudraeth	An outcrop of poor-quality slate ran roughly NNW to SSE across the line of the Porthmadog Bypass. It was entirely covered in mature ash and sycamore trees. There were clear indications of quarrying where the removal of stone has left hollows. A rough stone boundary (FB91) ran along the top of the outcrop. The occupants of the Ffestiniog Union Workhouse (Bron-y-Garth Hospital) were employed to quarry stone for road building and maintenance and small-scale quarrying can be seen in most of the larger outcrops around the former Ffestiniog Union Workhouse.	Post-medieval	SH59963876
33586	Boundary walls around Yr Bryn, Porthmadog	Two post medieval boundary walls were partially excavated and recorded in the strip, map and sample area on Y Bryn in advance of the Porthmadog Bypass. These had been detected by the earlier evaluation trenches (Hopewell 1995) but then they had been assumed to be stone filled field drains and were not investigated. Wall (3000) ran approximately north-south along the lower part of Y Bryn and on the edge of the wetter area of the field. At its southern end this wall abutted another similar wall (3027) running perpendicular to it (figure 7). Both walls survived as foundations only and were composed of a mixture of sub-angular stones with some boulders (plates 17 and 18). They were built directly on estuarine clay.	Post-medieval	SH55734005
96861	Bryn Melyn Chapel, Dolbenmaen	A chapel.	Post-medieval	SH5417039260
96855	Bryn-derwen, Dolbenmaen	Bryn-derwen is marked on the Ordnance Survey second edition map of 1900.	Post-medieval	SH5412439446

PRNUID	Name	Description	Period	NGR
101066	Bryn-y-wern, Dolbenmaen	A post medieval farmstead.	Post-medieval	SH5420440110
56767	Building, E of Derlwyn	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5941638325
96857	Building, East of Bryn-derwen Cottage	A building shown on the Ordnance Survey second edition map of 1900.	Post-medieval	SH5413739441
96859	Building, East of Bryn-derwen Cottage	A building shown on the Ordnance Survey second edition map of 1900.	Post-medieval	SH5414239440
61674	Building, Garth Quarry	The western road must in reality have run southward from Segontium by way of Llanllyfni and Dolbenmaen. In the Mabinogi story of Math vab Mathonwy, the men from South Wales, after their defeat by Math near Caernarfon, fell back along a route from Nantcall to Dolbenmaen, and so by way of Traeth Mawr to Felinrhyd and Maentwrog	Post-medieval	SH5933239012
61678	Building, Garth Quarry	Stone chute first shown on the 2nd edition Ordnance Survey 25" map.	Post-medieval	SH5934538980
61681	Building, Garth Quarry	Large building shown on the 3rd edition Ordnance Survey 25" map.	Post-medieval	SH5926439012
61683	Building, Garth Quarry	Building at the base of the incline, shown on 2nd and 3rd edition Ordnance Survey 25" maps.	Post-medieval	SH5932538989
61686	Building, Garth Quarry	Building first shown on the 3rd edition Ordnance Survey 25" maps.	Post-medieval	SH5934539005
68650	Building, Minffordd Yard	A late 20th century structure in Minffordd yard.	Post-medieval	SH 5994 3853
96873	Building, Northeast of Cefn Cyfanedd	A building.	Post-medieval	SH5468539491
61673	Building, Site of, Garth Quarry	Quarry building shown on the 1st edition Ordnance Survey 25" map.	Post-medieval	SH5933539045
61675	Building, Site of, Garth Quarry	Quarry building first shown on the 1st edition Ordnance Survey 25" map.	Post-medieval	SH5939939009
61676	Building, Site of, Garth Quarry	Quarry building first shown on the 1st edition Ordnance Survey 25" map.	Post-medieval	SH5939339014
61682	Building, Site of, Garth Quarry	Small building depicted on the 2nd and 3rd edition Ordnance Survey 25" maps.	Post-medieval	SH5932139054
61684	Building, Site of, Garth Quarry	Small building shown on the 2nd edition Ordnance Survey 25" map.	Post-medieval	SH5943939012
61685	Building, Site of, Garth Quarry	Building at the top of the stone chute, shown on the 2nd and 3rd edition Ordnance Survey 25" maps.	Post-medieval	SH5937938998
16875	Building, Site of, Llidiart Yspytty	A small building is shown in this position on the 1887 OS map but not on the 1915 edition. (Gwyn & Hopewell 2002) The watching brief revealed that only the foundation course had survived and that it was constructed using large blocks of sub-angular stone with no evidence of bonding material. It is known to date from the late C19th. (Gwyn & Hopewell 2004) Trench 1 dug in the evaluation phase found no traces of foundations of this building but did demonstrate that the rock cut channel (feature 13) continued through this area, although it did become smaller and shallower. It was noticed that a line of large stones, up to 0.75m in length, along the edge of the toll road seemed to be in situ	Post-medieval	SH55384039
56822	Building, Ynys Hir, NW of Bodawen Lodge	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5660639724

PRNUID	Name	Description	Period	NGR
65661	Cae Ednyfed Stable, Smithy and Houses, Festiniog Railway	A stable, smithy and house for the railways 'policeman' associated with the horse station on the site of Minffordd station.	Post-medieval	SH 6011 3858
68488	Cae Ednyfed-Bach, Maentwrog	A farmstead shown on the Ordnance Survey 1st Edition map.	Post-medieval	SH6014038720
21175	Cambrian Railway, Porthmadog	The embankment and line of the Cambrian Railway, as it passes Garth quarry and approaches the Glaslyn viaduct. This section of the Cambrian Railway was opened in September 1867. Individual features, not necessarily contemporary, include a level crossing, the junction with the quarry siding, and signal and mile posts.	Post-medieval	SH58853902
65712	Carriage Shed, Boston Lodge Railway Works	A late 20th century carriage shed located at the Boston Lodge railway works.	Post-medieval	SH 5843 3870
1781	Carved Stone Block, Tremadog	A carved sandstone block was found c. Jan/ Feb 1985 at 5 Church St, Tremadog. Face down in sandy clay, 2ft under the flagged floor. House is early 19 century, DMTL reckons it belongs to this period of building, and possibly belonged to Capel Peniel, built 1809 in classical style with Corinthian pilasters.	Post-medieval	SH562402
68397	Catholic Church, Church Street, Tremadoc	A post medieval church.	Post-medieval	SH56154014
101163	Cefn-cyfannedd, Dolbenmaen	A post medieval farmstead.	Post-medieval	SH5433739421
61450	Cemetery Lodge, Porthmadog	Cemetery lodge shown on Ordnance Survey First Edition 25-inch map. (Ordnance Survey, 1889)	Post-medieval	SH5563439186
65684	Coal Road, Minffordd Yard	A coal road associated with Minffordd Yard.	Post-medieval	SH 5975 3863
102463	Cob Crwn, Porthmadog	A post medieval embankment.	Post-medieval	SH5720038670
74472	Crane, Remains of, Minffordd Good Shed, Minffordd Yard	The remains of a crane structure's base.	Post-medieval	SH5976138618
21174	Croesor Tramway, Remains of, Porthmadog	The embankment of the Welsh Highland Railway/ Croesor tramway just to the SW of Pen-y-Mount station. At this point the railway embankment overlies the embankment constructed by W. A. Maddocks in 1800 which reclaimed land in the western branch of Traeth Mawr extending as far as Penmorfa.	Post-medieval	SH57323950
29539	Culvert, Llidiart Yspytty	A north south aligned culvert was discovered at the eastern end of the haulage road. It was cut into boulder clay, constructed from locally sourced stone with a nineteenth century ceramic clay pipe running through the centre and it was assumed, from its direction, that it was used to drain excess water off the hillside into what is now a marshland.	Post-medieval	SH55404037
33564	Culvert/ditch, Llanfrothen	Drainage ditch with a large number of reeds and a bank on the north side.	Post-medieval	SH59583891
33565	Culvert/ditch, Llanfrothen	Drainage ditch with collapsed wire fencing and trees lining it. Fairly large and separates Minffordd Quarry from the pastureland.	Post-medieval	SH59603888
33566	Culvert/ditch, Llanfrothen	Drainage ditch with a large number of reeds.	Post-medieval	SH59703886
33571	Culvert/ditch, Penrhyndeudraeth	Small field drainage ditch with a large number of reeds.	Post-medieval	SH59913879
33576	Culvert/ditch, Penrhyndeudraeth	A curving drainage ditch.	Post-medieval	SH60053874
33518	Culvert/ditch, Porthmadog	Culvert running SW to NE, 2.7m wide. Not be affected by Bypass works.	Post-medieval	SH55474030

PRNUID	Name	Description	Period	NGR
33524	Culvert/ditch, Porthmadog	Ditch with still water and vegetation. Overgrown and rusty iron bed posts within it. Trees and brambles run along its east bank as well as wooden posts with wire fencing	Post-medieval	SH55763998
33534	Culvert/ditch, Porthmadog	This area looks less like a culvert and more like a spread-out wet area at its south east end. At its northwest end it is more like a culvert with banks. It is very overgrown with reeds growing within it and on its banks. Quite wandering in nature.	Post-medieval	SH56163979
33540	Culvert/ditch, Porthmadog	Wandering drainage ditch.	Post-medieval	SH56463976
33541	Culvert/ditch, Porthmadog	Stream/culvert which runs under the current Tremadog-Porthmadog road. It runs through a stone-built culvert then under the road into C7and has overflow pipes at both ends.	Post-medieval	SH56523973
33542	Culvert/ditch, Porthmadog	Part of culvert 7 which runs towards the main Porthmadog - Tremadog road and ran underneath the road and comes out at a very well-constructed partially revetted drain	Post-medieval	SH56533972
33543	Culvert/ditch, Porthmadog	Stream/culvert which runs under the current Tremadog-Porthmadog road. This ran parallel to the road on the south side of the road. It runs through a stone-built culvert then under the road.	Post-medieval	SH56613967
33548	Culvert/ditch, Porthmadog	Culvert which turns at a right angle at the northern end. Banks are fairly steep	Post-medieval	SH57073945
33553	Culvert/ditch, Porthmadog	A culvert which along with post - stock fencing/barbed wire fence forms the boundary between farmland and the road to Porthmadog football club	Post-medieval	SH57393929
33557	Culvert/ditch, Porthmadog	Culvert runs along the northern edge of the main football ground and is fairly overgrown in places. The bank is higher on the southern side and is stock proofed with posts/stock fencing/barbed wire.	Post-medieval	SH57673934
33559	Culvert/ditch, Porthmadog	A fairly wide and well-maintained culvert. A collapsed posts/stock fencing/barbed wire fence runs along its western bank	Post-medieval	SH58353913
33560	Culvert/ditch, Porthmadog	A well-maintained culvert in the area of the road.	Post-medieval	SH58633910
33562	Culvert/ditch, Porthmadog	A well-maintained culvert.	Post-medieval	SH58763908
33563	Culvert/ditch, Porthmadog	Dry stone build wall made up of local slate and schist stone. Wooden post and wire fencing runs along the top of it.	Post-medieval	SH59313896
33590	Ditch, Porthmadog	A post medieval ditch (3006) was recorded in the Y Bryn excavations in advance of the Porthmadog Bypass. It ran NNE to SSW, and measured approximately 25m long and 1.2m wide with regular and fairly steep sides and a slightly round to flattish base.	Post-medieval	SH55724010
29534	Drain or Wall Foundation (Possible), Llidiart Yspytty	A very ephemeral stone-built feature was identified at the northern end of the marshland towards the base of the slope. It was only partially extant, c.15.0m long and was aligned east to west, cutting the boulder clay.	Post-medieval	SH55464034
29385	Drains, Llidiart Yspytty	A ceramic drain and a possible French drain were noted at the northwest corner of the site. The latter measured 200mm in width and the same in depth, with a fill of stones (sub-angular/irregular)	Post-medieval	SH5564940356
61677	Drum House, Site of, Garth Quarry	Drum house at the top of the quarry incline, shown on the first edition Ordnance Survey 25" map.	Post-medieval	SH5938639018
37906	Drystone wall, E of Bryn y Wern	Drystone wall. Boundary to paddocks related to Bryn Wern. Boundary within Wern Historic Park and Garden	Post-medieval	SH54294012
34119	Drystone wall, NW of Bryn y Wern	Drystone wall. Regular field next to the road, probably related to Bryn Wern. Boundary within Wern Historic Park and Garden.	Post-medieval	SH53994021
37905	Drystone wall, NW of Bryn y Wern	Drystone wall. Regular field probably related to Bryn Wern. Boundary within Wern Historic Park and Garden	Post-medieval	SH54054020
68401	Ebenezer Methodist Chapel, Porthmadog	A post medieval house.	Post-medieval	SH5686638836

PRNUID	Name	Description	Period	NGR
33598	Embankment with road, Penrhyndeudraeth	Originally an embankment protecting an area of low-lying land from inundation this feature has been adapted and altered during the 19th century and has been truncated by the embankment of the Cambrian Coast Mainline Railway and its level crossing.	Post-medieval	SH59443891
58446	Embankment, Minffordd	An earthen linear embankment originally protecting an area of low-lying land from tidal inundation. The feature has been adapted and altered during the 19th century and now carries the road to Garth quarry and has been truncated by the embankment of the Cambrian Railways and its level crossing.	Post-medieval	SH59593870
56760	Enclosure Complex, W of Ty'n-y-berllan	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5972239241
56821	Enclosure Complex, W side of Pensyflog	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5620939463
81945	Farm building, Hen-gaeau	Extant traditional farm building shown on 2nd Edition OS 25 inch map	Post-medieval	SH5983838693
81946	Farm building, Hen-gaeau	Extant traditional farm building shown on 2nd Edition OS 25 inch map	Post-medieval	SH5985438681
27318	Farm building, Lloc-Meirig	Extant traditional farm building shown on 2nd Edition OS 25 inch map	Post-medieval	SH5937638549
81941	Farm building, Lloc-Meirig	Extant traditional farm building shown on 2nd Edition OS 25 inch map	Post-medieval	SH5941138558
81943	Farm building, Lloc-Meirig	Extant traditional farm building shown on 2nd Edition OS 25 inch map	Post-medieval	SH5940838553
27844	Farm Yard, Porthmadog	A post medieval outfarm.	Post-medieval	SH5737740126
81947	Farmstead, Hen-gaeau	A post medieval farmstead.	Post-medieval	SH5983438684
81944	Farmstead, Lloc-Meirig	A post medieval farmstead.	Post-medieval	SH5940038553
68406	Ffestiniog Railway Crossing, Ffestiniog	A level crossing on the Festiniog Railway (NPRN: 34660; PRN: 59325) and Quarry Lane, a minor road. Its name preserves the memory of Mrs Charlotte Olive Edwards, the crossing keeper for many years. The adjacent dwelling (NPRN: 34937; PRN: 65688) was formerly the crossing-keepers house.	Post-medieval	SH5954038530
58442	Field Boundaries, Tremadog	The remains of the field boundaries shown on the Tithe map of 1842, delineating the western and southern bounds of the raised area known as Bryn or Bryn-y-Fynwent, now remain as a discontinuous dry stone revetment. They may date from the time of the 1800 reclamation, or may be earlier revetting of the seaward-side of the Bryn.	Post-medieval	SH55664006
33567	Field boundary, Llanfrothen	Fairly low dry stone wall lined with mature oak and hazel trees. Built generally of local schist and slate however two large vertical slate stones have been set on end.	Post-medieval	SH59733884
33568	Field boundary, Llanfrothen	Dry stone wall revetment with higher dry stone construction in places with a wooden post and wire fencing. Built of local slate and schist	Post-medieval	SH59783882
33569	Field boundary, Llanfrothen	Dry stone wall mostly consisting of fairly large blocks of mixed stone - local schist/slate and quartz.	Post-medieval	SH59853879
33570	Field boundary, Llanfrothen	Partially collapsed stone and earth bank	Post-medieval	SH59903875
29382	Field Boundary, Llidiart Yspytty	A rather poorly defined linear feature with some stone slabs in the base of its fill (353) ran north-south across the eastern side of the trench. This was interpreted as the remains of levelling for a field boundary, probably of 19th century date. This field wall probably accounts for much of the stone robbing from the corn-drier	Post-medieval	SH5565140326

PRNUID	Name	Description	Period	NGR
33572	Field boundary, Penrhyndeudraeth	Stone built slate wall with wooden post and wire fencing running along the top of it. Partially well-constructed modern wall into a more collapsed stone built wall.	Post-medieval	SH59933879
33573	Field boundary, Penrhyndeudraeth	Stone built slate wall. Various size stones.	Post-medieval	SH59943879
33574	Field boundary, Penrhyndeudraeth	Runs along the top edge of a small cliff. Generally built of schist/slate	Post-medieval	SH59973875
33575	Field boundary, Penrhyndeudraeth	Partially consists of a well-constructed dry stone wall. The remainder is a post and wire fence on a low bank, a fence also runs along the wall.	Post-medieval	SH60033872
33577	Field boundary, Penrhyndeudraeth	Stone built slate wall with wooden post and wire fencing running along the top of it.	Post-medieval	SH60113867
33578	Field boundary, Penrhyndeudraeth	Stone built slate wall with wooden post and wire fencing running along the top of it	Post-medieval	SH60123864
33579	Field boundary, Penrhyndeudraeth	Wooden post and wire fencing.	Post-medieval	SH60143868
33580	Field boundary, Penrhyndeudraeth	Wooden post and wire fencing running alongside the railway line	Post-medieval	SH60143864
33581	Field boundary, Penrhyndeudraeth	Stone built slate wall with metal post and wire fencing running along the top of it. Runs alongside of railway lines.	Post-medieval	SH60153864
33585	Field boundary, Penrhyndeudraeth	Large slate stone built wall	Post-medieval	SH60163857
33547	Field boundary, Porthmado	Dry stone wall boundary between the school playing fields to the east and general farmland to the west. A fairly well constructed dry stone wall consisting of local slate/schist which has mostly been laid flat. On top of the wall stones have been set on edge. Boundary has been stock proofed with wooden posts and stock fencing along the top of the wall.	Post-medieval	SH56973952
33519	Field boundary, Porthmadog	Very straight modern wall with concrete mortar. Curves round a corner (the entrance of Ysbyty Alltwen). The stones within the wall are mostly angular to sub-angular with a mixture of schist/slate/sandstone and granite stones. Average size of stone = 0.30x0.25x0.10m. Metal (steel) posts have been set into the top with concrete. Wall was probably built during the construction of Ysbyty Alltwen. Runs along the A487 with a ditch/culvert running along the non-roadside.	Post-medieval	SH55524028
33525	Field boundary, Porthmadog	Dry stone wall. Almost revetment like. The stones have been pushed against earth bank/trees to form a boundary. The stone type is a mixture of slate/schist/granite which was mostly angular to sub-angular. Stone sizes range from medium (0.18x0.14x0.08m) to large (0.70x0.42x0.20m).	Post-medieval	SH55783996
33526	Field boundary, Porthmadog	Earth bank which incorporates some stone (?5% visible). Hedges and trees - as well as the earth bank define this boundary. There are also wooden posts and wire fencing running along the top of it (stock proofing). The stones that are visible are angular schist and granite. Average size of stones = 0.42x0.38x0.18m (with some smaller stones).	Post-medieval	SH55873988
33522	Field boundary, Porthmadog	This wall is a continuation of FB2. Unlike FB2 it has wooden fence posts on top (fixed with concrete) and wire fencing. This wall changes character from a high/straight modern wall (mixture of stone types/slate/schist/granite) with the average stone size 0.64x0.36x0.28m. Changes character to a partially collapsed dry stone wall. With wooden posts inserted into the top with wire fencing. Largest stone size = 2.15x0.60x0.20m. This was most likely the first phase of this wall.	Post-medieval	SH55684013
33523	Field boundary, Porthmadog	The northern most end of wall is very modern and straight. It is mostly a mixture of granite and slate with a concrete mortar. A lot of the stones have been shaped and ?squared off?. A turret style has been used on top of the wall (possibly for decoration or stock proofing). The average stone size for this modern part of the wall is 0.44x0.16x0.12m. There is a gap (removed gate) then a change in character. Initially there is a 2.0m long area of schist/slate slabs built up; probably to support the gate post. These slabs are on top of a stretch of this field	Post-medieval	SH55684011

PRNUID	Name	Description	Period	NGR
		boundary best described as earth and stone bank. The stones are a mixture of granite and schist. Turf covers most of the bank. A water filled ditch also runs along the inside of this part of the field boundary. Average stone size 0.36x0.16x0.09m (not including slate slabs).		
33527	Field boundary, Porthmadog	Earth bank with hedges and trees running along top of it. Ditches run either side of the boundary both approximately 2.0m wide	Post-medieval	SH55913986
33528	Field boundary, Porthmadog	Earth bank and ditches with trees and hedges running along top of it. Ditches are approximately 1.60m in width.	Post-medieval	SH55983982
33530	Field boundary, Porthmadog	Dry stone revetment-like wall. Stones built against an earth bank with trees and hedges to form a boundary. There is a mixture of slate/schist/sandstone/granite sub-angular to angular stones. Average stone size=0.32x0.18x0.09m	Post-medieval	SH55993980
33531	Field boundary, Porthmadog	Earth bank with ditches running either side and trees and hedges running along top. Ditches are approximately 1.60m in width	Post-medieval	SH56063978
33532	Field boundary, Porthmadog	Dry stone wall. There are trees/hedges/wooden posts with wire fencing running along the ?field side? of the wall. A tarmac path runs along the other side. This wall is made up of granite/sandstone/?old? concrete - angular and sub-angular stones. Average stone size = 0.38x0.30x0.11m	Post-medieval	SH56093978
33533	Field boundary, Porthmadog	Hedgerow boundary with a shallow ditch running along its south west side. Hedges are on a slightly raised bank of earth. Width of ditch = 1.62m	Post-medieval	SH56113980
33535	Field boundary, Porthmadog	Earth bank with vegetation running along top of it. Ditches run either side of this	Post-medieval	SH56233978
33536	Field boundary, Porthmadog	Consists of eastern bank with two narrow culverts either side.	Post-medieval	SH56223977
33537	Field boundary, Porthmadog	Consists of an earth bank and two ditches either side. Some fairly mature trees/shrubs growing along the bank.	Post-medieval	SH56303979
33538	Field boundary, Porthmadog	Boundary consists of an earth bank with culverts/drainage ditches on either side.	Post-medieval	SH56323979
33539	Field boundary, Porthmadog	Consists of a fairly wide culvert/ditch and a low modern mixed stone and mortar wall. There is farmland on west/south side of boundary and current the Tremadog-Porthmadog road to east/north. The bank on the east/north side is approximately 1.0m high but only 0.3 on the west/south side. The low wall is constructed from mixed imported stone ranging in size from 0.10m-0.50m. Stones are set on edge	Post-medieval	SH56373983
33544	Field boundary, Porthmadog	Dry stone wall running along road towards Porthmadog. Built of local slate schist stone with brambles, trees and some hedges incorporated within it.	Post-medieval	SH56683961
33550	Field boundary, Porthmadog	Dry stone wall of mixed local stone and generally well built. However in places the wall has slumped and collapsed. The stones range in size from 0.10x0.04m to 0.40x0.30m. Initially stock proofed with stones set on edge along the top of the wall then there are later additions of posts, barbed wire, stock fencing along both sides of the wall	Post-medieval	SH57123946
33551	Field boundary, Porthmadog	Low dry stone revetment with the Welsh Highland Railway (WHR) on its eastern side and farmland on its western side. The stone revetment is needed to contain the higher ground on the WHR side of the boundary. A fence of wooden posts, stock fencing, barbed wire runs along its eastern edge. The average stone size is generally 0.30m to 0.50m.	Post-medieval	SH57213937
33552	Field boundary, Porthmadog	This boundary consists of posts, stock fencing, barbed wire which runs between the WHR to the west and farmland to the east.	Post-medieval	SH57233936
33554	Field boundary, Porthmadog	Boundary runs between the road and the grounds of Porthmadog football club and consists of concrete posts and heavy duty fencing with a ditch on the eastern side. The ditch is generally overgrown and filled with silt and rubbish. It also appears to be revetted with stones on its western side.	Post-medieval	SH57393926

PRNUID	Name	Description	Period	NGR
33555	Field boundary, Porthmadog	A post - stock fencing/barbed wire fence lined with evergreens which changes to a fairly high metal fence in the immediate area of the football ground. This boundary surrounds the main football ground and car park separating it from farmland to the south and east.	Post-medieval	SH57363923
33556	Field boundary, Porthmadog	This boundary is between the caravan park farmland to the north and east. It consists of posts/stock fencing/barbed wire and is lined with trees and shrubs. It initially runs E-W but turns to the south at a right angle.	Post-medieval	SH57673920
33558	Field boundary, Porthmadog	Mostly consisting of posts/stock fencing/barbed wire. There are also the remains of a silted up ditch/culvert that can be seen in the area which the road will occupy.	Post-medieval	SH58093915
33561	Field boundary, Porthmadog	A post/stock fencing/barbed wire boundary.	Post-medieval	SH58733908
29761	Field Boundary, Site of, Llidiart Yspytty	Trench 11 was aligned north-west to south-east along the terrace south-east of trench 3, It was dug down to the grey shaley sub-soil along its length. The modern drain was located in its north-western end... Towards the south-eastern end of the trench was a broad shallow cut, which continued a slight earthwork feature visible on the ground surface. This was probably the remains of a 19th century field boundary	Post-medieval	SH55674030
65685	Flour Shed, Site of, Minffordd Yard	Site of a shed believed to have stored flour, and to have been in existence until the 1920s. On the evidence of photograph, the principal structural materials were corrugated iron or timber	Post-medieval	SH 5989 3859
68405	Glan-Y-Don, Dolbenmaen	A post medieval house. It was a tavern for many years.	Post-medieval	SH5952038660
101355	Glan-yr-afon, Porthmadog	A post medieval farmstead.	Post-medieval	SH5706439606
11637	Glaslyn Foundry Schoolhouse, Porthmadog	Not apparent if listed.	Post-medieval	SH56963881
65671	Goods Shed, Minffordd Yard	Goods shed, orientated east-west, of typical late 19th century design, in which narrow gauge tracks entered and left through the gable walls, and which was formerly also accessed from the east by a standard gauge siding. Believed to have been built for the opening of the yard in 1872, and constructed of rubble stone walls, patched with brick and faux stone work in cement render on south-western corner before conservation in 2017; 19th century roofing slates were replaced by corrugated iron sheeting, then by imported slates in 2017; American pine trusses	Post-medieval	SH 5974 3861
16874	Gorseddau Tramway, Llidiart Yspytty	The bed of the Gorseddau tramway is well preserved in this area and is currently used as a footpath. The tramway is visible as a well-defined raised platform flanked by mortared stone walls. (Gwyn & Hopewell 2002) A tramway is visible as an embankment running across the western end of the development area, this passes through the middle of the site in a rock cutting and its route across the south-eastern part of the site is defined by a scarp in the hill slope. The earliest tramway, constructed in 1841, reached only as far as the iron mines, but was extended to the north-west in 1855-57 to serve the Gorseddau slate quarry.	Post-medieval	SH55504039
33583	Group of field boundaries, Penrhyndeudraeth	Wire and post fencing along edge of track way.	Post-medieval	SH6017738618
67058	Gwaith Dafydd-y-Miner, Garth Quarry	There are several mine holes along 'Tyddyn Isaf' 'Hafodwern' and 'Plasnewydd' and the land is known as 'Gwaith Dafydd y Miner' after an elderly local man who failed to find any mineral resources. The mine trials are poorly located and may lie outside the Site Boundary.	Post-medieval	SH5939
37908	Hedge and ditch, on Traeth Mawr	Hedge and ditch. Regular field on Traeth Mawr. Penmorfa-Ynyscynhaiarn parish boundary.	Post-medieval	SH54793983
37909	Hedge and ditch, on Traeth Mawr	Hedge and ditch. Regular field on Traeth Mawr. Boundary shown on tithe map.	Post-medieval	SH55013976
37904	Hedge-bank, N of Pont Faen	Earth bank with modern fenceline and occasional mature trees. Slightly irregular boundary but only because it borders a stream. Part of a very regular field system. Ynyscynhaiarn-Penmorfa parish boundary	Post-medieval	SH53724008
37907	Hedge-bank, NE of Wern	Tree lined bank. Regular field on Traeth Mawr. Boundary within Wern Historic Park and Garden	Post-medieval	SH54484006

PRNUID	Name	Description	Period	NGR
37910	Hedge-bank, on Traeth Mawr	Bank and treeline. Regular field on Traeth Mawr. Boundary shown on tithe map.	Post-medieval	SH55393963
37903	Hedge-bank, W of Pont Faen	Earth core bank with stone revetment, turf covered in places. Very straight boundary. Part of a very regular field system. Boundary shown on tithe map.	Post-medieval	SH53634003
16870	Incline (Possible), Llidiart Yspytty	A field boundary runs parallel to and to the site of the turnpike road. The ground is very overgrown below the boundary but a linear dip in the blackthorn and two lengths of rock-cut terracing suggest that an incline runs from somewhere near the opencast, down the slope below the field boundary, to a point to the east of Glanmorfa terrace. The lower end of this feature is difficult to trace and may have been landscaped during road widening.	Post-medieval	SH55494036
61669	Inclined Plane, Garth Quarry	Inclined plane first shown on the 1st edition Ordnance Survey 25" map.	Post-medieval	SH5935839000
16865	Industrial Remains, Llidiart Yspytty	An overgrown and obviously disturbed area of land immediately to the north-west of the open workings presumably contained features associated with the mining operations. No features are currently visible above ground as the area was presumably landscaped at the same time as the open workings were infilled.	Post-medieval	SH55574032
61679	Junction Box, Site of, Garth Quarry	The site of a former junction box, presumably for quarry traffic, shown on the 1st and 2nd edition Ordnance Survey 25" map.	Post-medieval	SH5918438998
16859	Kilns, Site Of, Llidiart Yspytty	The site of kilns erected in 1845 is visible as a roughly semi-circular platform to the south-west of the principal adit. The remains of the kilns themselves are not visible but could be buried beneath spoil	Post-medieval	SH55584025
65666	Level Crossing, Minffordd Yard	A level crossing where the road access to Minffordd yard crosses the main running line of the Festiniog Railway.	Post-medieval	SH 5982 3852
29386	Line of Tramway, Possible, Llidiart Yspytty	When the marshland area was fully stripped it exposed what appeared to be the tramway line extending eastwards towards the primary school. A close inspection revealed that the feature was c.2.0m wide but very shallow, c.0.10m, comprising a dark brown stone-rich deposit (stones were small and sub-angular). It did not have the depth or the inclusions to match the tramway activity recorded to the west during the 2005 excavation, but it did appear on the same alignment as both this and the OS map evidence. It is therefore possible that the tramway further west was upgraded to a higher specification	Post-medieval	SH5566840278
16867	Link Railway, Llidiart Yspytty	The line of the 1848 link railway can be seen running across a field at this point. The field is improved pasture and the rail bed can be seen as a terrace benched into the slope. It is cut at the south end by Tremadog school playground	Post-medieval	SH55644030
21517	Llidiart Ysbytty Mine, Porthmadog	General: a tiny site, possibly Roman, on the site of the sea-shore before the construction of the Tremadoc embankment in 1800, and served by a complex network of nineteenth century transport features. Geology: worked a deposit of ironstone.	Post-medieval	SH557404
16872	Locomotive Shed, Site of, Llidiart Yspytty	A locomotive shed is shown in this position on the 1887 map. There is, however, no sign of it on the ground	Post-medieval	SH55564027
61667	Magazine, Site of, Garth Quarry	Quarry magazine shown on 1st edition Ordnance Survey 25" map.	Post-medieval	SH5920539106
65663	Minffordd Bridge, Festiniog Railway	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH 5995 3852
68404	Minffordd Chapel (Welsh Calvinistic Methodist), Minffordd, Porthmadog	Built in the Romanesque style, gable entry type. Note also the vestry next to the chapel.	Post-medieval	SH5952038410
65664	Minffordd Yard, Festiniog Railway	An exchange yard where slate was transferred from the Festiniog Railway to the standard gauge Cambrian Railways main-line system.	Post-medieval	SH 59816 38614
96869	Mining Level, Coed y Cefn	A mining level.	Post-medieval	SH5471039390

PRNUID	Name	Description	Period	NGR
96875	Mining Structure, Possible, North of Coed y Cefn	A possible mining structure.	Post-medieval	SH5472039510
33591	Modern Field Drain Field, Porthmadog	Modern drainage ditch found during watching brief on topsoil stripping for Porthmadog Bypass. About 1m wide and 0.2m deep.	Post-medieval	SH58503911
68398	Mortuary Chapels, Porthmadog/Portmadoc	Post medieval mortuary chapels.	Post-medieval	SH5567039170
11274	No.16 Market Square, W Side, Porthmadog	Contained by Nos. 2 and 4 Church Street. Of similar design to 6, 8, 10 and 12 Market Square	Post-medieval	SH5617140116
65670	Oakeley Slate Wharf, Minffordd Yard	The site of a wharf at Minfordd yard for the transferring of slate from narrow gauge wagons to standard gauge wagons.	Post-medieval	SH 5967 3858
16864	Open Workings, Llidiart Yspytty	The open workings on the top of Bryn y Garreg Haiarn shown on the 1887, 25" OS map have, for the most part, been infilled. The edge and upper part of the workings are still visible	Post-medieval	SH55594028
99257	Outfarm, East of Plas-newydd, Llanfrothen	Cowhouse with two yards; Associated with Plas-newydd PRN 99,274.	Post-medieval	SH5995239076
99275	Outfarm, North-East of Plas-newydd, Llanfrothen	A post medieval outfarm.	Post-medieval	SH5988139092
101743	Outfarm, North-West of Pen-y-mount, Porthmadog	A post medieval outfarm.	Post-medieval	SH5738439659
99276	Outfarm, South of Plas-newydd, Llanfrothen	A post medieval outfarm.	Post-medieval	SH5986138990
25425	Outfarm, South-West of Penamser Farm, Porthmadog	A post medieval outfarm.	Post-medieval	SH5518939420
27329	Pandy Minffordd, Penrhyndeudraeth	HER and RCAHMW pin-point the site as that of a woollen mill - no obvious signs of river, pond, leat etc.	Post-medieval	SH5919938299
33594	Part of the Gorseddau Tramway, Porthmadog	The tramway track was identified on 12th April 2010 during an intermittent watching brief of a service trench measuring 13.0m in length and 1.0m in width. The tramway was defined by kerb stones (002) and to the east was a compact surface of stone setts (001).	Post-medieval	SH55744013
65691	Pathway, Boston Lodge Railway Works	A pathway at Boston Lodge railway works leading from the main road past 3 and 4 Boston Lodge cottages to Boston Lodge halt.	Post-medieval	SH 5875 3809
60098	Peaks and Troughs, south of Dublin Street	A series of broad peaks and troughs are orientated from north to south and occupy the northern half of the grazing field located to the immediate south of A498 Dublin Street and to the west of Tremadog, centred on NGR SH 55853 40068. The peaks measure 8.0m in width and the troughs measure 4.0m in width, with the approximate height between peak and trough averaging 0.6m.	Post-medieval	SH5585340068
21518	Pen Y Syflog Mine, Porthmadog	An iron mine near Porthmadog, possibly never developed beyond surface trenches. No trace is now visible.	Post-medieval	SH562396
25426	Pen-amser Terrace, Porthmadog	A Terrace of houses and outbuildings marked on the Ordnance Survey 1st edition map of 1889 and still extant in 1917	Post-medieval	SH5518739518
101934	Pen-syflog, Porthmadog	A post medieval farmstead.	Post-medieval	SH5616039476
101971	Pen-y-mount, Porthmadog	A post medieval farmstead.	Post-medieval	SH5741839655
25424	Penamser Farm, Porthmadog	A post medieval farmstead.	Post-medieval	SH5528139459

PRNUID	Name	Description	Period	NGR
25432	Penrhynllwyd, Porthmadog	A building.	Post-medieval	SH5574139231
99274	Plas-newydd, Llanfrothen	A post medieval farm.	Post-medieval	SH5986039066
74473	Platform, Remains of, Minffordd Good Shed, Minffordd Yard	The platform had a stone retaining wall and probably a central spine wall within a deposit of packed stones within a thin lime mortar matrix. There also appears to have been a spread of lime mortar below the standard gauge rail bed	Post-medieval	SH5976138618
33600	Pre-turnpike road, from Penrhyndeudraeth to Minffordd	The pre-turnpike road from Penrhyndeudraeth to Minffordd is represented by a minor tarmac road running from Minffordd towards the farms of Plas Newydd and Ty Obry, entering Penrhyndeudraeth after crossing beneath the Ffestiniog Railway.	Post-medieval	SH59923878
56795	Railway Building 1, NW of Capel Bryn-melyn	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5366039438
56796	Railway Building 2, NW of Capel Bryn-melyn	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5367039466
56765	Railway Cutting, NE of Bod Hyfryd	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5996438477
56764	Railway Embankment, E of Bod Hyfryd	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5998038368
56769	Railway Embankment, NE of Sewage Works	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5809939071
56763	Railway Embankment, NE of Syenite Terrace	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5967038786
56811	Railway Embankment, NW of Penamser	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5496439581
56794	Railway Embankment, W of Capel Bryn-melyn	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5367839445
56762	Railway Embankment, W of Garth Quarry	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5905239001
56768	Railway Embankment, W of Llwyn Celyn	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5902538302
96853	Railway Feature, West of Capel Bryn-melyn	Railway feature shown on the Ordnance Survey first edition map of 1889.	Post-medieval	SH5367539373
16873	Railway Shed, Site of, Llidiart Yspytty	A shed associated with the railway is shown in this position on the 1887 map. There is, however, no sign of it on the ground	Post-medieval	SH55594024
16868	Railway Siding or Yard, Llidiart Yspytty	The railway joined the line of the turnpike road next to the open workings. The north-eastern side of the track/road has been widened at this point by cutting into a rock outcrop. A large block of slate lies in this area that could have fallen off a wagon. (Gwyn & Hopewell 2002) At the south-eastern end the cutting becomes a terrace with only the northern side cut into the rock. This broader, flatter area is where the toll road ran closest to the tramway.	Post-medieval	SH55564034
61671	Railway Sidings, Site of, Garth Quarry	Former railway sidings shown on the 1st edition Ordnance Survey 25" map.	Post-medieval	SH5934538972
65658	Railway Station Building, Minffordd Station	A booking office and station house, comprising a T-plan storeyed stationmaster's house with adjoining ticket office and covered platform with refreshment room. Snecked slatestone with (whitened) sandstone quoins and dressings; slate roofs with projecting eaves and decorative bargeboards; large, squat central chimney to the station master's house	Post-medieval	SH 60016 38540

PRNUID	Name	Description	Period	NGR
68399	Railway Station Goods Shed, Porthmadog	A post medieval timber framed, corrugated iron, goods shed.	Post-medieval	SH5628339178
56797	Railway Structure, NW of Capel Bryn-melyn	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5368939452
56828	Reservoir, E of Bryn Celynen	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5396240376
33587	Revetment walling on west and south side of Y Bryn, Porthmadog	A length of drystone revetment runs intermittently along the south-western side of Y Bryn.	Post-medieval	SH55664007
33545	Revetted drain, Porthmadog	Revetted drain, Post Medieval.	Post-medieval	SH56733956
68403	Rhos, Minffordd	An early storeyed Snowdonian house.	Post-medieval	SH5920038710
33605	Road across Traeth Mawr and junction, Porthmadog	The compound for the Porthmadog Bypass Scheme was situated close to the probable junction of the two routes, near Ynys Hir, and the bypass also crossed the line of the old road across the sands at its eastern end. The presence of a clearly defined road across the sands on the 1775 map implies that there was some type of laid surface	Post-medieval	SH56703952
16866	Road, Caernarvonshire Turnpike Trust (SE Part)	The turnpike is still in use as a footpath/track running from Tremadoc school to the junction with the Gorseddau tramway. It is bounded by mortared stone walls and an iron fence adjacent to the open workings.	Post-medieval	SH55614030
16869	Road, Caernarvonshire Turnpike Trust (W Part)	The line of the, by this time superseded turnpike, was used by the Gorseddau railway for a short distance beyond the open workings. The line of the turnpike is not entirely clear beyond this point but a dotted line on the 1887 map appears to indicate that the tramway quickly deviated from the turnpike and that the turnpike was retained as a track just above the field boundary.	Post-medieval	SH55414039
29533	Rock-Cut Channel, Llidiart Yspytty	The rock-cut channel was thought to be part of the iron mining operations of the mid-nineteenth century, channelling water down the slope. The channel appeared to run towards the building PRN 16875. A stone capped drain was identified running southwards from the channel as it began to level off, suggesting that the channel may have fed into this rather than into the building PRN 16875	Post-medieval	SH55474036
6325	Row of 3 Houses, Penmorfa	Row of three houses: Blwch y Fedwen, Pen y Bryn and Pen y Gomfa.	Post-medieval	SH548406
33593	Shallow ditches, Porthmadog	Wide, shallow drainage ditches were located running northwest to southeast, one of which was the ditch found in the evaluation trenching	Post-medieval	SH56713959
110662	Sheepfold, Coed y Cefn	A sheepfold.	Post-medieval	SH5495039293
61680	Sheepfold, Site of, Garth Quarry	Sheepfold shown on the 1st and 2nd edition Ordnance Survey 25" maps.	Post-medieval	SH5964239149
25423	Sheepfold, SW of Penamser	Sheepfold marked on the Ordnance Survey 1st edition map of 1889 Single compartment.	Post-medieval	SH5505639286
25429	Sheepfold, SW of Penamser	Sheepfold marked on the 2nd edition Ordnance Survey map of 1900. roughly circular; single compartment.	Post-medieval	SH5517539345
68649	Shelter, Minffordd Yard	A pitched roof shelter or mess-room in Minffordd yard.	Post-medieval	SH 5994 3853
58444	Shooting Butts, Site of, Porthmadog	Shooting butts, part of the rifle range shown on the OS 25" county series maps of 1888 and 1917, probably associated with the County Volunteers	Post-medieval	SH58303917
65668	Siding Access, Minffordd Yard	The principal siding access probably dated to 1872.	Post-medieval	SH 5973 3853

PRNUID	Name	Description	Period	NGR
65681	Sidings, Standard Gauge, Minffordd Yard	An area of Minffordd yard given over to standard-gauge sidings from the Cambrian Railways.	Post-medieval	SH 5995 3853
29383	Slate Graffiti Slab, Llidiart Yspytty	A long sub-rectangular slate slab lay near the north-western end of the tramway cutting. It had clearly been moved from its original location. This slab was 2.1m long and 0.4m wide at the base, tapering to 0.21m wide at the top. It had 5 rectangular mortise holes cut into it, these were equidistant (0.2m apart) along the middle of the top half of the slab.	Post-medieval	SH5550940374
20212	Slate Quarry, Bryneglwys	N/A	Post-medieval	SH536397
20218	Slate Quarry, Cloddfa Shon Prys	N/A	Post-medieval	SH542396
20213	Slate Quarry, Coed Y Chwarel	N/A	Post-medieval	SH538396
20214	Slate Quarry, Garreg Felin	N/A	Post-medieval	SH538397
20236	Slate Quarry, Morfa Lodge	N/A	Post-medieval	SH567386
20230	Slate Quarry, Penrhynllwyd	N/A	Post-medieval	SH559393
25431	Slate Quarry, Penrhynllwyd	Small quarry marked on the Ordnance Survey 1st edition map of 1889. Possibly part of Penrhynllwyd Slate Quarry located just to the NE?	Post-medieval	SH5582939265
65679	Slate Sheds, Minffordd Yard	Two large adjoining structures in Minffordd yard (NPRN: 420656; PRN: 65664), here considered as one, orientated north-west to south-east, the ?Maenofferen bach? to the south-west and the ?Maenofferen Mawr? to the north-east, built with brick piers; slate rubble and breeze-block infill, in some places covered in corrugated iron sheeting; planking on gables painted red oxide (the south-east facing gable of Maenofferen Mawr is prominently lettered ?Maenofferen Slate Quarry Co Ltd?).	Post-medieval	SH 5989 3856
65680	Slate Wharf, Minffordd Yard	The site of a wharf in Minffordd yard for the transfer of slate from narrow gauge wagons to standard gauge wagons.	Post-medieval	SH 5992 3855
65686	Slate Wharf, Minffordd Yard	The site of a wharf in Minffordd yard for the transfer of slate from narrow gauge wagons to standard gauge wagons formerly in lease to Votty and Boydd slate quarry, now only visible as slate slabs on the wharf-edge.	Post-medieval	SH 5967 3860
56823	Steps, W of Ynys Hir	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5656639727
61670	Stone Chute, Garth Quarry	Stone chute first shown on the 2nd edition Ordnance Survey 25" map.	Post-medieval	SH5938038987
56812	Sub-rectangular Enclosure, Bryn Celynen	Pair early 19th century, regency type, courged stone, cement-stucco, good arched fanlights.	Post-medieval	SH5379640383
68402	Tabernacl,Y, Chapel (Welsh Calvinistic Methodist)	When the marshland area was fully stripped it exposed what appeared to be the tramway line extending eastwards towards the primary school. A close inspection revealed that the feature was c.2.0m wide but very shallow, c.0.10m, comprising a dark brown stone-rich deposit (stones were small and sub-angular). It did not have the depth or the inclusions to match the tramway activity recorded to the west during the 2005 excavation, but it did appear on the same alignment as both this and the OS map evidence. It is therefore possible that the tramway further west was upgraded to a higher specification.	Post-medieval	SH5690938887
33588	Timber post structure, Porthmadog	Possible remains of field barn.	Post-medieval	SH55744002

PRNUID	Name	Description	Period	NGR
58445	Trackway, Minffordd	A linear earth embankment and track running north-west from Minffordd towards the Afon Glaslyn, which appears to represent the south-eastern end of the pre-Maddocks route across Traeth Mawr. The feature is shown on the OS map of 1838 and the John Evans map of 1797.	Post-medieval	SH59503865
68487	Traeth Mawr	Rifle buttes shown on the Ordnance Survey 1st and 2nd Edition map onwards.	Post-medieval	SH5828039110
25430	Tramway and Incline, Penrhynllwyd	A tramway and incline.	Post-medieval	SH5559639209
29760	Tramway, Llidiart Yspytty	Cutting across the eastern end of the compacted shale deposit was the trench of a later tramway. This was aligned north-west to south-east, 3.75m wide with steep parallel sides and a flat base. A compact deposit of shale fragments covered the base and formed the trackbed. The surface of this was very flat, except against the north-eastern side of the cut where there was a narrow gully.	Post-medieval	SH55614032
61668	Tramways, Site of, Garth Quarry	Quarry tramways shown on the 2nd edition Ordnance Survey 25" map.	Post-medieval	SH5940239015
61672	Tramways, Site of, Garth Quarry	Quarry tramways shown on the 2nd edition Ordnance Survey 25" map.	Post-medieval	SH5947439017
21171	Tremadoc and Gorseddau Tramway, Site of, Tremadog	The Tremadoc Tramway, or the Llidiart Yspytty line, is shown on the Portmadoc Harbour plans of 1845/1846. A lease of 1840 gives the right to lay a railway from Llidiart Yspytty to the wharf at Porthmadog. By 1841 the Tramway is known to have been under construction, though it does not appear on the Tithe map of 1842, and was in use soon after. Built to transport ironstone from the mines at Llidiart Yspytty and Pensyflog the Tremadoc tramway had a gauge of 3ft and was probably horse-worked in both directions throughout its life.	Post-medieval	SH56093978
56813	Triangular Enclosure, SW of Gorffwysta	Site identified using early Ordnance Survey Maps (McGuiness, 2014)	Post-medieval	SH5381140543
58799	Turnpike Road from Maentwrog to Tremadog	Turnpike Road from Maentwrog to Tremadog. Part of the Porthmadog and Beaver Pool Turnpike Trust road constructed after an act of 1864.	Post-medieval	SH5665139399
34101	Two Boundary Ditches, N of Pont Faen	The pipe trench cut through two ditches about 3m apart. Ditch [647001] was 3.4m wide and 0.6m, while [647003] was about 3.5m wide and 0.4m deep. They were filled was fairly stony brown silty clay (647002, 647004) and seemed to be roughly parallel. These ditches were just east of a boundary that is shown on the 1889 OS map. There is also a footpath shown on this and later maps and the ditches may have flanked the path.	Post-medieval	SH53734008
33589	Two Dry Stone Walled buildings, Porthmadog	Just south of Tremadog, is the upstanding remains of two drystone walled structures which were recorded during work in advance of the Porthmadog Bypass. The buildings were constructed of what appeared to be mostly granite stones. The large foundation stones measured over 1.0m in length and the majority of the walls consisted of angular stones measuring 0.2 to 0.6m. The smaller of the two buildings stood to the north-west and was cut by a drain at its north-western end	Post-medieval	SH56383978
68396	Ty'n-Y-Llan, Garden, Penmorfa	A garden shown on the Ordnance Survey 2nd Edition 25-inch map of Caernarvonshire XXXIV, sheet 11 (1900). The main element on that map is a kitchen garden.	Post-medieval	SH5413440326
65667	Weighbridge House, Minffordd Yard	A weighbridge house, of some architectural ambition, set parallel to the running line, and oriented east-west. The weighbridge pit is no longer evident. To the west is an enclosed area extending out from the gable end. Constructed in 1871-2 and built out of shaped setts from Penrhyndeudraeth quarry and slatey rubble; patterned slate roof; brick chimney.	Post-medieval	SH 5980 3852
33592	Well, Porthmadog	A post medieval well (PRN 33592, SH 57356 39252) was located 5.5m from the edge of the road directly opposite the fence between Porthmadog Football Club and the field gate. This feature consisted of three large slates forming the mouth or working surface of the well (plate 24). They measured 0.77m by 1.85m, 0.54m by 1.5m and 0.4m by 1.35m.	Post-medieval	SH57363925
102375	Wern Manor Farm, Dolbenmaen	A post medieval farmstead.	Post-medieval	SH5428540009

PRNUID	Name	Description	Period	NGR
21172	Y Cyt Canal, Tremadoc	The feature is a steep sided water-filled linear drain, with areas of revetting remaining in places. The canal, also known as Y Cyt, was constructed as part of a land reclamation scheme of 1800. The inspiration behind it is reputed to be the Brecon canal, which Maddocks knew from his visits to Talgarth. The canal drained the surrounding land, discharging water through the 1800 embankment via the great sluice into the estuary of the Glaslyn. In its heyday the canal was capable of accommodating vessels of up to 120 tons.	Post-medieval	SH57103896
102464	Y Cyt Tidal Doors, Porthmadog	The Y Cyt Tidal doors are located at the northwestern corner of the Cob Crwn embankment. A set of vertically-hung tidal gates are recorded as being installed here when the Cob Crwn embankment was constructed c. 1855. The present-day tidal gates also function as a road bridge, carrying Snowdon Street across Y Cyt. It was not possible to assess the tidal doors at close proximity during the walkover survey but the original cut and dressed stonework appears to survive, albeit with the addition of a modern metal deck, fencing, steps and railings the eastern side	Post-medieval	SH5711038963
58753	Army training camp I, Porthmadog	North Wales Chronicle 30th July 1914, p8: G company of the Brecknockshire Territorial Battalion "departed for their annual training in camp at Portmadoc". North Wales Chronicle 13th March 1914, p2: the South Wales Infantry Brigade of the TA were to train at Porthmadog in July and August for the first time. About 3500 men would be housed in tents and would carry out manoeuvres in Snowdonia.	Modern	SH57253934
58754	Army training camp II, Porthmadog	South Wales Infantry camp 1914 Porthmadog	Modern	SH57443907
65675	Covered Storage, Minffordd Yard	A steel portal building with steel cladding in Minffordd yard.	Modern	SH 5975 3859
34106	Flint find spot, N of Minffordd	A broken piece of flint (SF24) was found in the topsoil. This is a large fresh flake of imported chalk flint and is most probably a modern import from elsewhere in Britain. The proximity of the railway line may indicate this was the source of the flint. Nineteenth century pottery was also recorded in this area.	Modern	SH59463880
33603	Gorsedd Circle 1987, Porthmadog	A stone circle which measures about 24.9m in diameter with 11 stones in the circle and another stone set just inside. There is an altar made of a large horizontal stone in the centre. The stones are all clearly quarried using modern techniques. The circle is set in a flat field close to the road and was clearly intended to be seen from the road. The hill of Ynys Hir lies to the north and the housing estates on the edge of Porthmadog to the south.	Modern	SH56573966
20510	Granite Quarry, Y Garth, Minffordd	Working granite quarry. In the extreme north east corner of the site an overgrown rectangular ruin lay within a dense deciduous woodland. Despite substantial overgrowth, it was clear that the structure (approximately 10m x 5m) consisted of well faced stone walls on at least three sides, possibly indicating the remains of a Medieval or Post Medieval building. Gruffydd & Riley 1992) Garth quarry, also known as the Minffordd sett quarry, was first operated on a small scale from c.1856, though only officially opened in 1870.	Modern	SH594391
33350	Gweithdy, Minffordd	Large, single-storey corrugated iron structure adjacent to the Ffestiniog Railway. Prefabricated single storey, 5 bay, pitched roof structure retaining 4 large, mullion and transom, fixed-pane timber windows on the south elevation and small entrance porch. West gable contains two ground floor (blocked) and one upper storey (roof space) light. Painted cream elevations with oxide roof. No rainwater goods	Modern	SH6008038560
33381	Hay Barns, Tremadog	2 prefabricated corrugated steel hay barns. Iron framed. Painted green.	Modern	SH5553739847
65669	Hostel, Minffordd Yard	Late 20th century three-storey accommodation for volunteers in Minffordd yard.	Modern	SH 5985 3855
71535	Memorial Plaque, Salem Chapel	A war memorial.	Modern	SH5685838727
71500	Memorial, Ebeneser Chapel, Porthmadog	A war memorial.	Modern	SH5687438831
71536	Memorial, Goffa Chapel	A war memorial.	Modern	SH5685838727
34105	Modern drainage ditch, E of Porthmadog	Ditch, of modern date.	Modern	SH57973902

PRNUID	Name	Description	Period	NGR
65674	Office, Minffordd Yard	A reconstructed early 21st century brick office in Minffordd yard.	Modern	SH 5977 3859
68485	Plantation, Wern	A plantation shown on the Ordnance Survey 2nd Edition map onwards.	Modern	SH5454039800
68486	Plantation, Wern	A plantation shown on the Ordnance Survey 2nd Edition map onwards.	Modern	SH5465039970
65656	Pont Cae Ednyfed, Ffestiniog Railway	A steel bridge opened in 2001 carrying the Ffestiniog Railway over the Porthmadog bypass.	Modern	SH 6014 3864
33601	Porthmadoc Rifle Range, Traeth Mawr	The shooting butts, shown on the OS 25" county series maps of 1889 and 1917, were at the eastern end of a rifle range extending to SH 57364 39234. Targets are marked every 100 yards up to 800 yards on the first and second edition maps but only up to 600 yards on the third edition. The rifle range was probably associated with the County Volunteers.	Modern	SH5822739190
65689	Rhiw Plas Bridge, Festiniog Railway	The present bridge replaced an earlier structure to ease an awkward double bend in the road, and to increase the capacity of the bridge for road traffic, and opened in 1960. A temporary level crossing operated while it was under construction.	Modern	SH 5896 3824
71534	Roll Of Honour, Bethel Chapel	A war memorial.	Modern	SH5413140296
71555	Seamen Of Porthmadog Memorial, Porthmadog	A war memorial.	Modern	SH5692638593
65676	Shed, Minffordd Yard	A breeze block shed with monopitch roof in Minffordd yard.	Modern	SH 5982 3858
65659	Shelter, Railway Station Building	A small wooden shelter on the down (northern) platform of Minffordd station.	Modern	SH 6000 3855
65677	Signals and Telegraph Storage Building, Minffordd Yard	A steel portal building constructed in 2014 in Minffordd yard.	Modern	SH 5984 3858
65672	Wagon Tracks Shed, Minffordd Yard	A steel portal frame building constructed in 2015 in Minffordd yard, providing cover for heritage rolling stock.	Modern	SH 5980 3861
65678	Water Tank, Minffordd Yard	A locomotive water tower on a steel frame in Minffordd yard.	Modern	SH 5983 3859
65660	Water Tank, Railway Station Building	A locomotive water tank on a stone pillar.	Modern	SH 6008 3859
65673	Workshops and Mess Room, Minffordd Yard	A portal frame building in Minffordd yard.	Modern	SH 5973 3859
16861	Blocked Adit (Possible), Llidiart Yspytty	A very overgrown slot cut into the rock face 40m to the south-west of the principal adit could be the remains of a blocked trial or adit.	Undated	SH55624024
16863	Blocked Adit/Trial, Llidiart Yspytty	A linear excavation into the rock close to the top of Bryn y Garreg Haiarn is presumably a blocked adit or abandoned trial. The area could not be properly assessed as it was very overgrown.	Undated	SH55654023
96255	Bryn-twr, Penmorfa	Building labelled as 'Bryn-twr' on 1st edition OS map.	Undated	SH5394840065
96863	Building, Coed-y-cefn	A building. A two-chambered building or structure present on the OS 1st edition map of 1888-1889 but not present on the OS 2nd edition map of 1900 or the 2009 Mastermap digital map.	Undated	SH5447639604
27321	Building, South-West of Lloc-Meirig	A building present on the Ordnance Survey 1st Edition Map of 1889, 2nd Edition Map of 1901	Undated	SH5926838429

PRNUID	Name	Description	Period	NGR
27845	Circular Feature, Farmyard	Circular feature approximately 5m in diameter marked on the Ordnance Survey 1st edition 25" map of 1889, not marked on later maps. Possibly a horse gin.	Undated	SH5737440126
27846	Circular Feature, Farmyard	Circular feature approximately 5m in diameter marked on the Ordnance Survey 1st edition 25" map of 1889, not marked on later maps. Possibly a horse gin.	Undated	SH5737940133
96871	Enclosure/Structure, Coed y Cefn	Between 10-12-2010 and 23-06-2022 this site was recorded as PRN31535. An enclosure or structure, approx. 8m x 8m, present on the OS 1st edition map of 1888-1889 but not present on the OS 2nd edition map of 1900 or the 2009 Mastermap digital map.	Undated	SH5468539383
74469	Feature, Minffordd Yard	Cut into the top of Context 5 is a shallow, “T” shaped feature (Context 6, Figures 3, 4 and 5, Plates 1 and 2), which runs along the western end of the trench and has an extension running at right angles for 1.88 m and which is 0.7 m wide	Undated	SH5967238574
32071	Ffynnon Beuno, Penmorfa	The well was destroyed in 1980 when the owner of the house (also known as Ffynnon Beuno) concreted over it to create a parking space. The well was 3'6" wide and extended 2'6" into the slope, it was cleaned weekly by two men and the blue slates at it's base removed to be cleaned occasionally	Undated	SH54614055
27319	Horse Gin, Possible, Lloc-Meirig	A circular feature, approximately 4m in diameter, attached to the side of an agricultural building, present on the Ordnance Survey 1st Edition Map of 1889 and 2nd Edition Map of 1901 but not present on the current Ordnance Survey Landline Digital Map. The feature could be a horse gin, also known as a 'horse mill' or 'horse engine', the remains of which are very rare in North Wales	Undated	SH5941738559
27317	House & Outbuildings, Pen-y-Craig	A house and outbuildings.	Undated	SH5950438578
96254	Pont-y-faen, Penmorfa	Building labelled as 'Pont-y-faen' on 1st edition OS map.	Undated	SH5377639988
16858	Principal Adit, Llidiart Yspytty	A partially blocked adit can be seen running to the south-west side of Bryn y Garreg Haearn. The entrance is still accessible, although partially blocked by a fall of earth, and is 1.4m wide and 1.6m high. Various pieces of iron and steel can be seen in the vicinity of the adit. These appear to be, in part, a result of modern dumping but some could be the remains of a gate that formerly closed off the adit. The adit appears to be open for some distance underground but no attempt was made to enter.	Undated	SH55594026
16860	Revetment Wall, Llidiart Yspytty	A revetment wall 10m long and 3m high of local stone stands behind the kiln platform (PRN 16859). The central part is slightly raised possibly indicating that ore was tipped from here to the kilns below.	Undated	SH55604026
34410	Sluice, E of Bryn Celyn	Sluice labelled on the 2nd ed OS map.	Undated	SH5397140374
34414	Sluice, N of Cwt Defaid	Sluice labelled on the 2nd ed OS map.	Undated	SH5397539901
30797	Well, East of Ty'n-y-coed	A well labelled on the Ordnance Survey 1st Edition Map of 1889 but not present on the Ordnance Survey 2009 Mastermap Digital Map	Undated	SH5897937987
27320	Well, Lloc-Meirig	A well labelled on the Ordnance Survey 1st Edition Map of 1889 and 2nd Edition Map of 1901 but not present on the current Ordnance Survey Landline Digital Map	Undated	SH5940138560
27322	Well, Lloc-Meirig	A well labelled on the Ordnance Survey 1st Edition Map of 1889 and 2nd Edition Map of 1901 but not present on the current Ordnance Survey Landline Digital Map	Undated	SH5940938566
74470	Wooden Structure, Minffordd Yard	A wooden structure, possibly some sort of trackside facility.	Undated	SH5967238574
34846	Y Bryn, scatter of burnt bone	During excavations in advance of the Porthmadog Bypass a small quantity of burnt bone (find 331) was found scattered over an area just off the south-eastern edge of the top of Y Bryn.	Undated	SH55704006

Roman Roads

PRNUID	Name	Description	Period	NGR
17559	Roman Road	Documentary evidence of a Roman Road of unknown condition	Roman	SH52553973
17560	Roman Road	Documentary evidence of a Roman Road of unknown condition	Roman	SH61674172
17821	Roman Road	Documentary evidence of a Roman Road of unknown condition	Roman	SH59233829
17825	Roman Road	Documentary evidence of a Roman Road of unknown condition	Roman	SH58902650
17812	Roman Road	Documentary evidence of a Roman Road of unknown condition	Roman	SH57033963
17813	Roman Road	Documentary evidence of a Roman Road of unknown condition	Roman	SH66574123

4.7.A Glaslyn Cables: Initial Conceptual Site Model and Risk Assessment

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1. Initial Conceptual Site Model

1.1 Introduction

1.1.1 The initial Conceptual Site Model (iCSM) has been developed to identify potentially complete contaminant linkages that may require further investigation to assess their existence and/or potential significance. The potential sources of contamination on or in the vicinity of the Glaslyn Cables works site, receptors on or near the works site, and pathways on or near the works site are discussed in the following sub-sections.

1.1.2 Past and current potentially contaminative land uses have been considered. The iCSM is based on the Glaslyn Cables works as defined in the Environmental Statement (ES) **Volume 4, Chapter 2: Glaslyn Cables Works**.

1.2 Assessment Framework

1.2.1 The Glaslyn Cables works site, in terms of potential land contamination, will be regulated by Gwynedd Council under the Town and Country Planning Act 1990 (as amended) (Ref 1.1), taking account of Planning Policy Wales (Ref 1.2), with Natural Resources Wales (NRW) acting as statutory consultee.

1.2.2 Environmental liabilities can arise through provisions contained in statutory legislation including Part 2A of the Environmental Protection Act (EPA) 1990 (Ref 1.3), the Environmental Damage (Prevention and Remediation) Regulations 2015 (Ref 1.4), the Water Resources Act 1991 (Ref 1.5), the Groundwater Regulations 2009 (Ref 1.6) and the Water Act 2003 (Ref 1.7).

1.2.3 Current best practice recommends that the determination of health hazards due to contaminated land is based on the principle of risk assessment, as outlined in the Statutory Guidance to Part 2A (2012) and Land Contamination: Risk Management (LCRM) (2023) (Ref **Error! Reference source not found.**1.8) and the NRW Advice for Developers – Land Contamination (Ref 1.9).

1.2.4 The “suitable for use” approach is adopted for the assessment of contaminated land. Remedial measures are undertaken where unacceptable risks to human health or the environment are realised taking into account the use (or proposed use) of the land in question and the environmental setting. The proposed end-use for the work site is electricity cable infrastructure, Cable Sealing End Compounds (CSECs) and associated electrical infrastructure as defined in ES **Volume 4, Chapter 2 Glaslyn Cables Works**.

1.2.5 The risk assessment process for environmental contaminants is based on a source-pathway-receptor analysis. These terms can be defined as follows:

- **Source:** hazardous substance that has the potential to cause adverse impacts;

- **Pathway:** route whereby a hazardous substance may come into contact with the receptor: examples include ingestion of contaminated soil and leaching of contaminants from soil into watercourses; and
- **Receptor:** target that may be affected by contamination: examples include human occupants/ users of site, water resources (surface waters or groundwater), or structures.

1.2.6 For a risk to be present, there must be a relevant and viable contaminant linkage; i.e. a mechanism whereby a source impacts on a sensitive receptor via a pathway.

1.2.7 The following sections detail the iCSM which has been developed for the proposed works with a view to assessing the potential risks and liabilities and constraints associated with the site in its current condition prior to any proposed redevelopment. Risks associated with the proposed works at the site have also been assessed based on a commercial and industrial future land use scenario, including any potential sources of contamination, potential receptors and potential contaminant pathways identified during this desk-based assessment.

Sources of Potential Contamination

1.2.8 Based on the information obtained as part of the baseline for the **Chapter 7 Geology, Soils, Hydrogeology Land Use and Agriculture (Soils) in Volume 4 of the ES, Table 1.1** indicates the contaminants of potential concern (CoPC) that may be associated with the current and previous land use.

1.2.9 CoPC have been identified using National House Building Council, Environment Agency and the Chartered Institute of Environmental Health publication R&D 66 (NHBC/EA/CIEH, 2008), – 'Guidance for the safe development of housing on land affected by contamination', Volume 2 (Ref 1.10) and professional judgment.

Table 1.1 – Potential Sources of Contamination

Source	Description	CoPC
Alluvium and peat deposits	Alluvium underlies the entire Glaslyn Cables works site	Potential low levels of ground gas – CH_4 and CO_2.
Made Ground	Two records of Made Ground are within the Glaslyn works site. One is associated with Cerrigduon Sewage Treatment Site, the second associated with Penrhyndeudraeth Quarry.	Metals and metalloids, Cyanides (total, free), Semi-Volatile Organic Compounds (SVOCs), Volatile Organic Compounds (VOCs), Total Petroleum Hydrocarbon Criteria Working Group (TPH CWG), Polycyclic Aromatic Hydrocarbon (PAH-16), Polychlorinated Biphenyls (PCBs), pH and Asbestos Containing Material (ACM) or asbestos

Source	Description	CoPC
Agricultural Land	The site is bounded by agricultural land. With agricultural land, there is a potential for pesticides to be used on the land and there is a potential for spills and leaks from machinery used.	Metals and metalloids, SVOCs, VOCs, PAH-16, Organochlorine Pesticides, Sulphate, Sulphide, Ammoniacal nitrogen and Pathogens
Glaslyn Cables	Fluid filled cables	Mineral Oil
Wern and Garth CSECs	Works will be carried out at two existing CSECs	Metals and metalloids, SVOCs, VOCs, PCBs, TPH, PAHs, sulphate, pH and ACM or asbestos.

Potential Receptors

1.2.10 Potential receptors associated with the site are shown on **Table 1.2**.

Table 1.2 – Potential Receptors

Receptor Group	Receptor	Description
Human Health	Construction Workers	Exposures experienced by construction workers are of short duration due to the limited period of exposure, although construction workers are more likely to encounter potential contaminants during the construction works when compared with personnel visiting the site after completion of the development.
	Site Users and Maintenance Workers	Future site users are maintenance workers undertaking routine maintenance works at and around the Glaslyn Cables.
	Adjacent Site Users	Adjacent users include persons on agricultural land and agricultural buildings including farms with on-site residents, as well as residential, commercial, recreational and community facilities near the town of Porthmadog.
Controlled Waters	Superficial Aquifers	Majority of the site is classified as Secondary A aquifers, supporting local water supplies and base flow to rivers.
	Bedrock Aquifers	Secondary B aquifers associated with Ffestiniog Flags Formation, Dolgellau Formation, Dol-cyn-afon Formation and Nant Ffrancon subgroup.
	Surface Water bodies	Glaslyn Cable Works interacts with three Water Framework Directive (WFD) water bodies, the Llyn and Eryri Groundwater body; the Glaslyn -

Receptor Group	Receptor	Description
		tidal to Afon Croesor Surface water body and the Porthmadog Cut Surface water body.
Property	Buildings & Infrastructure: Structures with enclosed spaces	Proposed buildings on-site. Drinking water pipes. Agricultural buildings including farms with on-site residents.
Ecology	Flora and Fauna	Flora and fauna within and surrounding the site could be affected by the presence of elevated concentrations of certain contaminants. There are numerous wildlife sites / priority habitats within the site and 250 m study area.
Livestock	Animals on nearby farms	Livestock on surrounding land due to migration of contamination

Potential Pathways

1.2.11 Potential pathways associated with the proposed works are shown in **Table 2.3**.

Table 1.3 – Potential Pathways

Pathway Group	Pathway	Description
Human Health	Ingestion of soil and soil-derived dust	Direct or indirect ingestion of soil and soil derived dust from on-site activities.
	Inhalation of dust - indoor and outdoor	Inhalation of soil derived dust, organic vapours or ground generated gas by indoor and outdoor receptors.
	Dermal contact - indoor and outdoor	Dermal contact with contaminated soils, soil derived dust by indoor and outdoor receptors.
	Vapour intrusion and inhalation – indoors and outdoors	Soil vapour migrating from the source to indoor and outdoor receptors through the underlying soils.
	Plant uptake and consumption of homegrown produce	Uptake of contaminants via the roots of plants.
	Gas Ingress	Ground gas migrating from the source to indoor and outdoor receptors through the underlying soils.
Controlled Waters	Leaching and vertical migration	Rainfall infiltration can generate and mobilise soil derived leachate impacting on surface water and groundwater. If perched groundwater is

Pathway Group	Pathway	Description
	through unsaturated zone	present, there may also be vertical migration into deeper pathways.
	Lateral and vertical migration in groundwater	As well as being a receptor, aquifers allow transportation of contaminants through the permeable strata.
	Baseflow from groundwater to surface water	Surface waterbodies are beneath on-site roads. Due to the proximity of these waterbodies, connectivity through baseflow on-site is likely.
	Direct run-off	Surface spills could migrate via surface run-off to on-site surface water bodies and drainage on-site and off-site.
Property	Gas intrusion – explosion.	Ground gas migrating from the source off-site property receptors.
	Corrosion of concrete or permeation of water pipes	Direct contact with aggressive ground conditions
Ecology: Flora and Fauna	Direct contact with contaminants in soil or water or indirect contact due to dust	Direct or indirect contact with contaminants on-site or migration of contaminants off-site
Agricultural: Livestock	Direct contact with contaminants in soil or water or indirect contact due to dust	Direct or indirect contact with contaminants due to migration offsite

2. Risk Assessment Principles

2.1.1 Current best practice recommends that the determination of hazards due to contaminated land is based on the principle of risk assessment, as outlined in the Environment Agency guidance 'LCRM' and the Welsh Government's Contaminated Land Statutory Guideline (Ref 2.1).

2.1.2 For a risk to be present, there must be a viable contaminant linkage; i.e. a mechanism whereby a source impacts on a sensitive receptor via a pathway.

2.1.3 Assessments of risks associated with each of these contaminant linkages are discussed in the following sections.

2.1.4 Using criteria broadly based on those presented in the he CIRIA C552 (Ref 2.2), the magnitude of the risk associated with potential contamination at the Pentir works site has been assessed. To do this an estimate is made of:

- The magnitude of the potential consequence (i.e. severity); and
- The magnitude of probability (i.e. likelihood).

2.1.5 The severity of the risk is classified according to the criteria in **Table 2.1**.

Table 2.1 – Description of Consequence

Consequence	Definition	Examples (as defined by C552)
Severe	Short-term (acute) risk to human health likely to result in "significant harm" as defined by Environmental Protection Act 1990, Part IIA. Short-term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource. Catastrophic damage to buildings or property. A short-term risk to a particular ecological system (or ecosystem), or organism forming part of such ecosystem (note: the definitions of ecological systems in the Draft Circular on Contaminated Land, DETR, 2000).	High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled water. Explosion, causing building collapse (can also equate to a short-term human health risk if buildings are occupied).
Medium	Short-term (acute) risk to human health likely to result in "significant harm" as defined by Environmental Protection Act 1990, Part IIA. Short-term risk of pollution (note: Water Resources	High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled water.

Consequence	Definition	Examples (as defined by C552)
	Act contains no scope for considering significance of pollution) of sensitive water resource. Catastrophic damage to buildings or property. A short-term risk to a particular ecological system (or ecosystem), or organism forming part of such ecosystem (note: the definitions of ecological systems in the Draft Circular on Contaminated Land, DETR, 2000).	Explosion, causing building collapse (can also equate to a short-term human health risk if buildings are occupied).
Mild	Short-term (acute) risk to human health likely to result in "significant harm" as defined by Environmental Protection Act 1990, Part IIA. Short-term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource. Catastrophic damage to buildings or property. A short-term risk to a particular ecological system (or ecosystem), or organism forming part of such ecosystem (note: the definitions of ecological systems in the Draft Circular on Contaminated Land, DETR, 2000).	High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled water. Explosion, causing building collapse (can also equate to a short-term human health risk if buildings are occupied).
Minor	Short-term (acute) risk to human health likely to result in "significant harm" as defined by Environmental Protection Act 1990, Part IIA. Short-term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource. Catastrophic damage to buildings or property. A short-term risk to a particular ecological system (or ecosystem), or organism forming part of such ecosystem (note: the definitions of ecological systems in the Draft Circular on Contaminated Land, DETR, 2000).	High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled water. Explosion, causing building collapse (can also equate to a short-term human health risk if buildings are occupied).

2.1.6 The probability of the risk occurring is classified according to the criteria in **Table 2.2**.

Table 2.2 – Probability of Risk Occurrence

Probability	Definition	Examples
High	There is a pollutant linkage and an event would appear very likely in the short-term and almost inevitable over the long-term, or there is evidence at the receptor of harm or pollution.	The contaminant linkage exists or is very likely to exist in the short term, and/or may also be linked to visual or olfactory evidence of that linkage being present and active in some cases. The conditions are such that there is no foreseeable reason to suggest that a source-pathway-receptor linkage is not occurring and required mediums for a contamination source to pass through or in to reach a receptor are all present.
Likely	There is a pollutant linkage and all the elements are present and in the right place which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short-term and likely over the long-term.	The conditions are such that there are very few foreseeable reasons to suggest that a source-pathway-receptor linkage is not occurring, and that all or most of the required mediums for a contamination source to pass through or in to each a receptor are present.
Low	There is a pollutant linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a long period such an event would take place, and is less likely in the shorter term.	The source, pathway and receptor linkage may exist and it is possible that contamination could reach a receptor in certain circumstances. The site conditions indicate that there are limiting factors in the pathway mediums or generation potential of the source or presence of the receptor.
Unlikely	There is a pollutant linkage but circumstances are such that it is improbable that an event would occur even in the very long-term.	The source, pathway and receptor may exist in certain circumstances, but the contaminant linkage is improbable in the short term and in the long term.

2.1.7 An overall evaluation of the level of risk is gained from a comparison of the severity and probability, as shown in **Table 2.3**.

Table 2.3 – Risk based on Comparison of Probability and Consequence

		Consequence			
		SEVERE	**MEDIUM**	**MILD**	**MINOR**
Probability	**HIGH**	Very High	High	Moderate	Low
	LIKELY	High	Moderate	Moderate/Low	Low
	LOW	Moderate	Moderate/Low	Low	Very Low
	UNLIKELY	Moderate/Low	Low	Very Low	Very Low

2.2 Preliminary Risk Assessment

2.2.1 An evaluation of the potential risks associated with the identified sources at the site to the various receptors is presented in **Table 2-4** and discussed in **Table 2-5**. The level of risk is determined based on the current condition of the site, i.e., the effects of mitigation measures such as soil or groundwater treatment are not included but the level of risk takes into account the nature of the proposed works at the Glaslyn Cables works site.

Table 2-4. Contaminant Linkage Preliminary Risk Assessment

Source	Receptor	Pathway	Probability	Consequence	Risk
On-Site and Off-Site: Alluvium and Peat Deposits Made Ground Agricultural Land Glaslyn Cables and CSEC	Human Health: Construction Workers Site Users / Maintenance Workers Adjacent Site Users	Ingestion of soil and soil-derived dust	Unlikely	Medium	Low
		Inhalation of dust - indoor and outdoor	Unlikely	Medium	Low
		Dermal contact - indoor and outdoor	Low	Medium	Moderate/Low
		Vapour intrusion and inhalation – indoors and outdoors	Unlikely	Medium	Low
		Plant uptake and consumption of homegrown produce	Unlikely	Medium	Low
		Gas Ingress	Unlikely	Medium	Low
	Controlled Waters: Secondary B Aquifer Secondary A Aquifer	Leaching and vertical migration through unsaturated zone	Low	Medium	Moderate/Low
		Lateral and vertical migration in groundwater	Low	Medium	Moderate/Low
	Controlled Waters: Surface Waterbodies	Baseflow from groundwater to surface water	Low	Medium	Moderate/Low

		Direct run-off	Low	Medium	Moderate/Low
	Property: Buildings & Infrastructure: Structures with enclosed spaces	Gas intrusion – explosion	Unlikely	Medium	Low
	Existing and future structures, public water supply	Direct contact of contaminants in soil and/or groundwater	Likely	Mild	Moderate/Low
	Ecology: Flora and Fauna	Direct or indirect contact with contaminants	Low	Mild	Low
	Livestock	Direct or indirect contact of contaminants in soil and/or groundwater	Low	Minor	Very Low

Table 2-5. Identified Risk to Receptors

Receptor	Discussion
Human Health: Construction Workers	There is a potential moderate / low risk to workers in terms of exposure to contaminants in soil or shallow groundwater during ground-based works such as excavations and stockpiling based on the historical and current land uses. The proposed Glaslyn Cables works will be undertaken in compliance with CDM 2015 regulations (Ref 2.3). Prior to work commencing, a health and safety risk assessment will need to be carried out by the appointed Principal Contractor / developed in accordance with current health and safety regulations. This assessment should cover potential risks to construction and maintenance staff. Based on the findings of this risk assessment, appropriate mitigation measures would be implemented during construction and maintenance works, including following general best practice, for example 'Environmental Good Practice on Site Guide', CIRIA Publication C811 (Ref 2.4) to mitigate dust or run-off. Potential risk from ground gas in confined spaces, including excavations. Should gross or unexpected contamination be identified during excavations, it should be possible effectively manage this through good health and safety practices and protocols such as a provision of a discovery strategy.
Human Health: Site Users and Maintenance Workers	If future works involves excavations, risks will be similar to construction workers receptor discussion above.
Human Health: Adjacent Site Users	The adjacent land uses include residential, commercial, recreational and community facilities as well as farmland where users could be outdoors. The construction works will be managed in accordance with Construction Design and Management (CDM) 2015 regulations (Ref 2.3) and mitigation measures would be implemented if required to mitigate dust and / or run-off for example, 'Environmental Good Practice on Site Guide', CIRIA Publication C811 (Ref 2.4) to reduce this risk.
Controlled Waters: Surface Water	The site crosses two surface Water Framework Directive (WFD) water bodies; the Glaslyn - tidal to Afon Croesor Surface water body and the Porthmadog Cut Surface water body. Some areas of soft ground will remain on the site which may allow infiltration of rainwater and thus the generation of soil leachate. Various potential pathways exist to the surface waterbodies including direct run-off (more likely to be an impact in the construction phase) and from baseflow to groundwater if there are sources of contamination in the soil underlying the site which will be aided due to the permeable nature of the alluvial and till superficial deposits.

Receptor	Discussion
	Mitigation should be implemented during construction works to ensure run-off during excavations and stockpiling does not impact water quality.
Controlled Waters: Secondary A and B Aquifers	The Alluvium this comprises majority of the Glaslyn Cables works site. A number of boreholes and private water supply abstractions have been identified within 1 km of the Glaslyn Cables works site including residential and commercial/industrial use The potential for contaminants arising from the Glaslyn Cables works site impacting water quality at these abstractions is considered low.
Property: Buildings & Infrastructure: Structures with enclosed spaces	Potential for aggressive ground conditions to be present associated with Made Ground or superficial deposits at the Glaslyn Cables works site which could require mitigation for buried concrete. Potential for contamination associated with the Made Ground and existing land uses which could impact buried drinking water pipes. No potentially significant sources of ground gas have been identified
Ecology: Flora and Fauna	There are numerous wildlife sites / priority habitats and statutory designated sites within the Glaslyn Cables works site and within the 250m study area. The potential for contamination to impact on flora and fauna in these area is considered low.
Livestock	There is also a low potential for contaminants at the Glaslyn Cables works site impacting on nearby livestock.

Bibliography

Ref 1.1 – HMSO (1990). Town and Country Planning Act 1990. Available at: https://www.legislation.gov.uk/ukpga/1990/8/contents. Accessed January 2025.

Ref 1.2 – Welsh Government (2024). *Planning Policy Wales – Edition 12*, February 2024. Available at: https://gov.wales/planning-policy-wales. Accessed January 2025.

Ref 1.3 – His Majesty's Statutory Office, (1990). *Environmental Protection Act 1990*. Available at: https://www.legislation.gov.uk/ukpga/1990/43/contents. Accessed January 2025.

Ref 1.4 – UK Government (2015). *The Environmental Damage (Prevention and Remediation) (Wales) Regulations 2015.* Available at: https://www.legislation.gov.uk/wsi/2015/1394/contents/made. Accessed January 2025.

Ref 1.5 – UK Government (1991). *The Water Resources Act 1991 (as amended).* Available at: https://www.legislation.gov.uk/ukpga/1991/57/contents. Accessed January 2025.

Ref 1.6 – UK Government (2009). *Groundwater (England and Wales) Regulations 2009*. Available at: https://www.legislation.gov.uk/ukdsi/2009/9780111480816/contents. Accessed January 2025.

Ref 1.7 – UK Government (2003). *The Water Act 2003*. Available at: https://www.legislation.gov.uk/ukpga/2003/37/contents. Accessed January 2025.

Ref 1.8 – Environment Agency's online guidance for the management of land contamination '*Land Contamination Risk Management*' (LCRM) (2023). Available at: https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm. Accessed January 2025.

Ref 1.9 – NRW (2023). *Advice for Developers – Land Contamination.* Available at: https://naturalresources.wales/guidance-and-advice/business-sectors/planning-and-development/advice-for-developers/land-contamination/?lang=en. Accessed March 2025.

Ref 1.10 – National House Building Council (NHBC), Environment Agency (EA), Chartered Institute of Environmental Health (CIEH) report R&D Publication 66. *Guidance for the Safe Development of Housing on Land Affected by Contamination*. Available at: https://www.middevon.gov.uk/media/114550/volume-2-guidance-for-the-safe-development-of-housing-on-land-affected-by-contamination.pdf. Accessed January 2025.

Ref 2.1 – Welsh Government (2012). Contaminated Land Statutory Guidance, Available at: https://www.gov.wales/sites/default/files/publications/2019-08/contaminated-land-statutory-guidance-2012.pdf

Ref 2.2 – CIRIA C552 (2001). *Contaminated Land Risk Assessment - A Guide to Good Practice*.

Ref 2.3 – HSE (2015) *Construction Design Management (CDM) Regulations 2015.* Available at: https://www.hse.gov.uk/construction/cdm/2015/index.htm. Accessed January 2025.

Ref 2.4 – CIRIA C811 (2015). *Environmental Good Practice On Site Guide*. 5th edition.

4.8.A Water Abstractions and Discharges

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Table A1: Licensed abstractions in the ZOI

ID	Permit number	Operator	Expiry date	Site name	WFD waterbody	Source type	Source location	NGR	Primary purpose	Secondary purpose	Purpose usage	Peak abstraction rate (l/s)	Hourly authorised (m^3/hour)	Daily authorised (m^3day)	Annual authorised (m^3year)
A1	WA/065/0006/006	Breedon Trading Ltd	2025-03-31T01:00:00	Minffordd Quarry, Penrhydeudraeth	GB110065053860: Glaslyn - tidal to Afon Croesor	Surface Water	Afon Glaslyn	SH 59107 39160	I: Industrial, Commercial, Public Services	MIN: Mineral Products	060: Dust Suppression - High	25	12	60	4000
A1	WA/065/0006/006	Breedon Trading Ltd	2025-03-31T01:00:00	Minffordd Quarry, Penrhydeudraeth	GB110065053860: Glaslyn - tidal to Afon Croesor	Surface Water	Afon Glaslyn	SH 59107 39160	I: Industrial, Commercial, Public Services	MIN: Mineral Products	300: Mineral Washing - Low	25	12	84	2436
A1	WA/065/0006/006	Breedon Trading Ltd	2025-03-31T01:00:00	Minffordd Quarry, Penrhydeudraeth	GB110065053860: Glaslyn - tidal to Afon Croesor	Surface Water	Afon Glaslyn	SH 59131 39152	I: Industrial, Commercial, Public Services	MIN: Mineral Products	300: Mineral Washing - Low	25	12	84	2436
A4	WA/065/0006/006	Breedon Trading Ltd	2025-03-31T01:00:00	Minffordd Quarry, Penrhydeudraeth	GB110065053860: Glaslyn - tidal to Afon Croesor	Surface Water	Afon Glaslyn	SH 59131 39152	I: Industrial, Commercial, Public Services	MIN: Mineral Products	060: Dust Suppression - High	25	12	60	4000

Table A2: NRW discharges in the ZOI

ID	Permit number	Operator	Site name	Site description	Outlet NGR	Discharge	Receiving waterbody	Release type	Treatment
D1	CG0043901	Mr Paul Davies and Mrs Marie-Ann Davies	Wern Manor Porthmadog	TE: Domestic Property (Single)	SH 54330 39940	Sewage - non Water Undertaker	Groundwater via infiltration system	UA: sewage discharges - final/treated effluent - not water company	06: septic tank
D2	CG0399701	Group Projects Manager	Travis Perkins Penamser Ind Est		SH 55986 39116	Trade	Unnamed watercourse	TD: trade discharges - site drainage (contam surface water, not waste sit	16: oil interceptor
D3	CG0052001	Dwr Cymru Cyfyngedig	Tremadog Sso	SB: Sewerage Network CSO - water company	SH 56028 39940	Sewage - Water Undertaker	Stream leading to the Cyt stream	SC: sewage discharges - sewer storm overflow - water company	11: screening
D4	CG0440401	Lidl Uk Gmbh	Lidl Foodstore	QA: Shops	SH 56431 38984	Trade	Unnamed watercourse	TC: trade discharges - site drainage	16: oil interceptor
D5	WP3829GY	Ceri Roberts	Bodawen Nursing Home	TF: Domestic Property (Multiple)	SH 56798 39757	Sewage - non Water Undertaker	Groundwater via infiltration system	UA: sewage discharges - final/treated effluent - not water company	06: septic tank
D6	CG0357901	Dwr Cymru Cyfyngedig	Bakers Lane/Chandlers Place Porth	SB: Sewerage Network CSO - water company	SH 56907 39031	Sewage - Water Undertaker	Nant Y Cyt	SC: sewage discharges - sewer storm overflow - water company	99: none
D7	CG0357801	Dwr Cymru Cyfyngedig	Chapel Street/Madog Street Porthm	SB: Sewerage Network CSO - water company	SH 56940 39000	Sewage - Water Undertaker	Nant Y Cyt	SC: sewage discharges - sewer storm overflow - water company	99: none
D8	CG0051901	Dwr Cymru Cyfyngedig	Snowdon Street Ps	SC: Sewerage Network - Pumping Station - water company	SH 56960 39070	Sewage - Water Undertaker	Cyt Bach surface watercourse	SD: sewage discharges - pumping station - water company	11: screening
D9	CG0150601	Dwr Cymru Cyfyngedig	Britannia Ps	SC: Sewerage Network - Pumping Station - water company	SH 57290 38430	Sewage - Water Undertaker	Estuary - Afon Glaslyn	SD: sewage discharges - pumping station - water company	99: none
D10	CG0051702	Dwr Cymru Cyfyngedig	Porthmadog Stw Storm Storage Port	SA: Sewage Disposal Works – including a sewage pumping station at the head of a works	SH 57360 38900	Sewage - Water Undertaker	Glaslyn Estuary	SA: sewage discharges - final/treated effluent - water company	11: screening

ID	Permit number	Operator	Site name	Site description	Outlet NGR	Discharge	Receiving waterbody	Release type	Treatment
D10	CG0375401	Dwr Cymru Cyfyngedig	Porthmadog Stw Storm Storage Port	SA: Sewage Disposal Works – including a sewage pumping station at the head of a works	SH 57360 38900	Sewage - Water Undertaker	Glaslyn Estuary within Glaslyn	SC: sewage discharges - sewer storm overflow - water company	11: screening
D10	CG0375402	Dwr Cymru Cyfyngedig	Porthmadog Stw Storm Storage Port	SA: Sewage Disposal Works – including a sewage pumping station at the head of a works	SH 57360 38900	Sewage - Water Undertaker	Glaslyn estuary	SD: sewage discharges - pumping station - water company	11: screening
D13	CG0401001	Thomas Ellis Jones	Ty Bricks Caravan Park	QF: Short stay accommodation - holiday lets, B&B, Caravan sites (prisons?)	SH 57442 39185	Sewage - non Water Undertaker	Groundwater via infiltration system	UA: sewage discharges - final/treated effluent - not water company	29: package treatment plant
D14	CB3090CN	Joanne Wallbanks	Bwlch-Y Moch	QF: Short stay accommodation - holiday lets, B&B, Caravan sites (prisons?)	SH 57576 40521	Sewage - non Water Undertaker	Unnamed tributary of River Glaslyn	UA: sewage discharges - final/treated effluent - not water company	29: package treatment plant
D15	CG0015001	Dwr Cymru Cyfyngedig	Prenteg Stw	SA: Sewage Disposal Works – including a sewage pumping station at the head of a works	SH 59300 41310	Sewage - Water Undertaker	Glaslyn	SA: sewage discharges - final/treated effluent - water company	01: biological filtration
D16	CG0041801	Leicestershire County Council	Aberglaslyn Hall Beddgelert	TA: Education – nursery, schools, colleges, universities, training venues	SH 59351 46052	Sewage - non Water Undertaker	The Afon Glaslyn	UA: sewage discharges - final/treated effluent - not water company	29: package treatment plant
D17	CG0023901	Dwr Cymru Cyfyngedig	Nantmor Stw	SA: Sewage Disposal Works – including a sewage pumping station at the head of a works	SH 59570 45640	Sewage - Water Undertaker	Glaslyn	SA: sewage discharges - final/treated effluent - water company	01: biological filtration
D18	CG0349201	Breedon Southern Limited	Minffordd Quarry	NB: General Construction site	SH 59672 38938	Trade	Non-tidal river	TD: trade discharges - site drainage (contam surface water, not waste sit	10: lagoon settlement
D19	CB3695FE	Alan Heason	Tywyn	TE: Domestic Property (Single)	SH 59715 46145	Sewage - non Water Undertaker	Cwm Bychan	UA: sewage discharges - final/treated effluent - not water company	01: biological filtration

ID	Permit number	Operator	Site name	Site description	Outlet NGR	Discharge	Receiving waterbody	Release type	Treatment
D20	CB3196HT	Dorien James	Hafod Garegog	TE: Domestic Property (Single)	SH 60384 44407	Sewage - non Water Undertaker	Nanmor	UA: sewage discharges - final/treated effluent - not water company	29: package treatment plant
D21	CG0078701	Dwr Cymru Cyfyngedig	Llanfrothen Stw	SA: Sewage Disposal Works – including a sewage pumping station at the head of a works	SH 60580 41600	Sewage - Water Undertaker	River Caseg	SA: sewage discharges - final/treated effluent - water company	01: biological filtration

Table A3: Private water supplies in the ZOI

ID	PWS Reference	Grid Reference
P1	8929	SH 53994 39762
P2	5059	SH 55283 39459
P3	8252	SH 56041 39082
P4	9682	SH 56399 40353
P5	7213	SH 56399 40353
P6	9044	SH 57535 40538
P7	8876	SH 58931 42921
P8	8877	SH 58931 42921
P9	7304	SH 59372 45419
P10	7217	SH 59372 45419
P11	8772	SH 59372 45419
P12	8771	SH 59372 45419
P13	9110	SH 59372 45419
P14	9951	SH 59372 45419
P15	8784	SH 59372 45419
P16	8785	SH 59372 45419
P17	8755	SH 59372 45419
P18	8787	SH 59372 45419
P19	9699	SH 59974 42070
P20	7111	SH 62264 41178
P21	10108	SH 62264 41178
P22	5711	SH 62264 41178

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4.8.B. Water Framework Directive Assessment

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1. Introduction

1.1 Introduction

1.1.1 This Water Framework Directive assessment (WFDa) has been prepared to assess the risks to the water environment posed by the Pentir to Trawsfynydd Reinforcement – Glaslyn Cable Works.

1.1.2 The Glaslyn Cable Works consist of the an extension to the existing Wern Cable sealing End Compound (CSEC), replacement of the Glaslyn Cables, including the removal of some redundant sections of cable and making safe other redundant sections that will be left buried, a new CSEC at Minffordd and raising the floor level of a new Tunnel Head House (THH), previously consented as part of the Eryri (previously Snowdonia) Visual Impact Provision (EVIP) project, and the removal of the existing Garth CSEC.

1.1.3 The Glaslyn Cable Works interact with three Water Framework Directive (WFD) waterbodies: the Llyn and Eryri (GB41002G204600) Groundwater body; the Glaslyn - tidal to Afon Croesor (GB110065053860) Surface Waterbody; and the Porthmadog Cut (GB110065053800) Surface waterbody. Each activity associated with the Glaslyn Cable Works will be assessed against the biological, physico-chemical and hydromorphological quality elements that comprise the Water Framework Directive.

1.1.4 It is not anticipated that the upstream WFD watercourses of the Glaslyn will be impacted by the Glaslyn Cable Works as the topography limits how far effects could propagate upstream and there will be no in-channel works proposed that could act as barriers to aquatic ecology or impact hydromorphological processes. It is not anticipated that the downstream Glaslyn transitional waterbody will be impacted by the works as it is separated from the Glaslyn - tidal to Afon Croesor waterbody by a tidal gate and an embankment known as The Cob.

1.2 Study Area

1.2.1 The Study Area (**Figure 4.8.2**) is in North West Wales around the town of Porthmadog spanning over 5 kilometres (km) from Garth (NGR SH 59603 38798) to Wern (NGR SH 54353 40181). The Glaslyn Cable Works could potentially impact the Glaslyn - tidal to Afon Croesor (GB110065053860) and the Porthmadog Cut (GB110065053800) surface waterbodies as the works intersect these waterbodies. There is also the potential for the works to impact the Llyn and Eryri (GB41002G204600) Groundwater body.

1.3 Introduction to the Water Framework Directive

1.3.1 An impact assessment of any works/modifications to water bodies in the UK is required under the European Union's Water Framework Directive (2000/60/EC). The WFD is transposed into law in England and Wales by the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (Ref 1.1). Compliance with the WFD legislation is required for permitting of the Glaslyn Cable Works.

1.3.2 The primary aim of the WFD is to improve or maintain the Ecological Status/Potential of all water bodies and to prevent deterioration in status of the water bodies and their associated WFD quality elements. Ecological Status/Potential is determined by a suite of biological, physico-chemical and hydromorphological quality elements. This WFD assessment establishes the baseline conditions, evaluates potential impacts of the Glaslyn Cable Works and assesses compliance against WFD objectives.

1.3.3 The overarching objective of the WFD is for surface water bodies in Europe to attain overall 'Good Ecological Status' (GES) or 'Good Ecological Potential' (GEP). GES refers to situations where the ecological characteristics show only a slight deviation from natural/near natural conditions. In such a situation, the biological, chemical, physico-chemical and hydromorphological conditions are associated with limited or no human pressure. Artificial and heavily modified water bodies have a target to achieve GEP, which recognises their important uses, whilst ensuring the quality elements are protected as far as possible.

1.3.4 For groundwater bodies, Good Status has quantitative and chemical components that are assessed via a series of 'tests', as shown in **Plate 1-1**. Together, these provide a single final classification: good or poor Status. Quantitative Status is evaluated on the basis of overall aquifer water balance, impacts of abstraction on dependent surface waters or wetlands and potential for saline intrusion. Chemical Status is evaluated on the basis of evidence for impacts of poor water quality on dependent surface waters or wetlands or deterioration of the quality of groundwater used for potable supply.

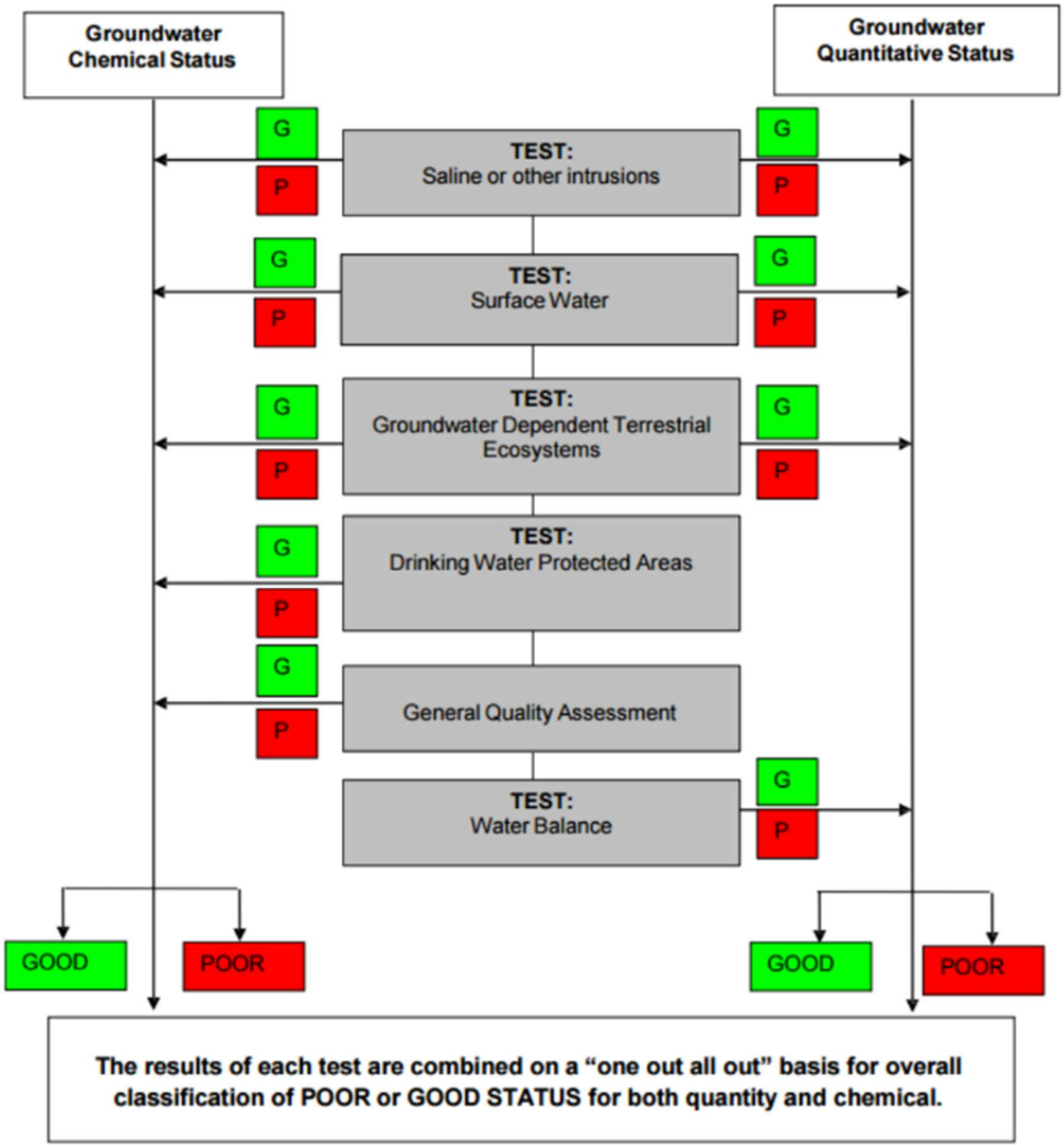

Plate 1-1 Overview of the groundwater classification elements (UKTAG, 2012 (Ref 1.2))

1.3.5 The WFD sets several objectives including:

- Prevent deterioration in status for water bodies.
- Aim to achieve good biological and good surface water chemical status in water bodies. For those water bodies that did not achieve GES by 2015, alternative objectives have been set by the Natural Resources Wales where water bodies have been allocated a target date for compliance of either 2021 or 2027. The target date set for each water body takes into consideration measures that are practicably achievable for achieving GES or GEP.

- For water bodies that are designated as artificial or heavily modified, the objective is to achieve GEP. Those artificial/heavily modified water bodies that did not achieve GEP by 2015 need to achieve compliance by 2021 or 2027.
- Where is it considered either technically infeasible or disproportionately expensive to achieve GES or GEP by 2021 or 2027, alternative objectives have been set for the water body, such as a target to achieve Moderate status.
- Comply with objectives and standards for protected areas, where relevant.
- Reduce pollution from priority substances and cease discharges, emissions and losses of priority hazardous substances.

1.3.6 Where a new modification, change in activity or change to a structure on a water body is proposed, a WFDa needs to consider whether the proposed alteration would cause deterioration in the Ecological Status or Potential of any water body. For heavily modified/artificial water bodies, proposed new modifications, or changes to activities or structures, may also result in WFD mitigation measures or actions, set to help a water body achieve GES/GEP, being ineffective. This could result in the water body failing to meet GES/GEP. Where a WFDa concludes that deterioration or failure to achieve GES/GEP may occur, an Article 4.7 assessment would be required, which makes provision for deterioration of status provided that certain stringent conditions are met.

1.3.7 The assessment methodology used here is based on guidance provided by the Nationally Significant Infrastructure Projects: Advice on the Water Framework Directive (Ref 1.3). While this project is not a Nationally Significant Infrastructure Project, this guidance remains applicable for this assessment. The guidance outlines a three-stage process to WFDa: screening, scoping, and impact assessment.

Stage 1: Screening

1.3.8 Screening is required to identify activities which have the potential to result in deterioration of a water body or fail to comply with the objectives of that water body. Screening also serves to identify those proposed activities (e.g. proposed construction methods) that are required to be taken through to scoping, and those activities that are unlikely to result in the deterioration of the water body.

Stage 2: Scoping

1.3.9 Scoping is required to identify risks to receptors from a project's activities, based on the relevant water bodies and their water quality elements (including information on status, objectives, and the parameters for each water body). Potential risks to hydromorphology, biology (habitats and fish), water quality, WFD protected areas and invasive non-native species should be assessed. The scoping stage identifies which elements need to be carried forward to Stage 3.

Stage 3: Impact Assessment

1.3.10 Where assessment has been considered necessary at scoping stage, an impact assessment is carried out for each receptor identified as being at risk in terms of potential deterioration or non-compliance with its specific objectives as set out in the River Basin Management Plan as a result of the project. Where the potential for deterioration of water bodies is identified, and it is not possible to mitigate the impacts to

a level where deterioration can be avoided, the project would need to be assessed in the context of Article 4(7) of the WFD.

2. Methodology

2.1 Data Collection

Desk Study

2.1.1 A desk-based study was carried out to inform the WFD assessment, reviewing the existing information of the Glaslyn Cable Works and Study Area to develop a baseline for the catchments, watercourses and surrounding areas. The following data sources were used for the desk study:

- contemporary Ordnance Survey (OS) maps.
- geology and soil maps.
- current aerial photography.
- Environment Agency ecology data.
- historic maps.
- designated areas data.
- hydrological information.
- WFD status and objectives from the River Basin Management Plan (RBMP) Western Wales River Basin District for Cycle 2.

Field Survey

Hydromorphology Walkover Survey

2.1.2 A site walkover was conducted in August 2023 by two suitably qualified and experienced hydrologists to gain an understanding of baseline geomorphological processes operating in the Study Area local to the Glaslyn Cable Works. Whilst most of the proposed cable route was able to be accessed, due to a large number of livestock and boggy conditions on the east of the Afon Glaslyn, adjacent to the Garth CSEC, this area could not be accessed. It was viewed from the opposite side of the river, which alongside aerial mapping allowed for a full conceptualisation.

2.2 WFD Assessment Process

2.2.1 The sequence of the WFD compliance assessment is summarised below:

- **Step 1:** Identify potential generic operational impacts of the Glaslyn Cable Works on hydromorphological quality;
- **Step 2:** Site specific assessment of the Glaslyn Cable Works against biological, physico-chemical and hydromorphological quality elements;

- **Step 3:** Assessment of proposed options against WFD status objectives; and,
- **Step 4:** Assessment of the Glaslyn Cable Works against Article 4(7) (if required).

2.2.2 Whilst the assessment of potential construction impacts is not required as part of a WFD assessment, these impacts may have detrimental impacts on the WFD quality elements and construction periods may sometimes be of long duration (i.e. several years). Thus, construction impacts are considered, along with mitigation to reduce or eliminate potential impacts on the water body and WFD quality elements.

3. WFD Screening and Scoping

3.1 Stage 1: WFD Screening

Screening of Water Bodies

3.1.1 The purpose of the WFD screening stage is to identify the extent to which the Glaslyn Cable Works may affect WFD water bodies that lie within the zone of influence of the Glaslyn Cable Works.

3.1.2 All WFD water bodies in the Study Area are in the Western Wales River Basin District. The 2021 (Cycle 3) RBMP has been used for the assessment. It sets out the objectives of all the water bodies in the region and a summary of the programme of measures that are needed to achieve the objectives.

3.1.3 WFD water bodies are screened into the assessment where they have a potential hydrological or hydrogeological connection to the Glaslyn Cable Works and have the potential to be affected. All other WFD water bodies which are considered to not have a potential connection to the Glaslyn Cable Works have been screened out from further assessment on the basis that they are unlikely to be affected.

3.1.4 The Glaslyn - tidal to Afon Croesor (GB110065053860) and Porthmadog Cut (GB110065053800) WFD water bodies, would be directly impacted by the Glaslyn Cable Works due to a range of activities that would interact with the local watercourse network. These WFD water bodies are screened in for further assessment.

3.1.5 Due to the distance downstream from the of the Glaslyn Cable Works, and the in-channel and floodplain structures present (tidal gate and The Cob), there is sufficient grounds to exclude the downstream Glaslyn (GB511006507300) WFD Transitional waterbody from the assessment.

3.1.6 There are five upstream WFD waterbodies of the Glaslyn Cable Works. As these waterbodies are upstream it is not envisaged that there will be any significant impact on these waterbodies both direct or indirectly. These waterbodies have been screened out as shown in **Table 3-1**.

3.1.7 The groundwater body that underlies the Study Area is Llyn and Eryri groundwater body. Activities relating to the construction and operation of the Glaslyn Cable Works will occur within the water body and therefore it is screened in for further assessment.

Table 3-1 - WFD screening of waterbodies

WFD Water Body	Screened In/Out	Justification
Glaslyn - tidal to Afon Croesor (GB110065053860)	In	The Glaslyn Cable Works are within this water body and has the potential to directly impact the water body.
Porthmadog Cut (GB110065053800)	In	The Glaslyn Cable Works are within this water body and has the potential to directly impact the water body.
Glaslyn - Nanmor to Colwyn (GB110065053910)	Out	The Glaslyn Cable Works are downstream of the water body and no direct or indirect impacts anticipated to this water body.
Nanmor (GB110065053930)	Out	The Glaslyn Cable Works are downstream of the water body and no direct or indirect impacts anticipated to this water body.
Croesor (GB110065053890)	Out	The Glaslyn Cable Works are downstream of the water body and no direct or indirect impacts anticipated to this water body.
Gaseg (GB110065053840)	Out	The Glaslyn Cable Works are downstream of the water body and no direct or indirect impacts anticipated to this water body.
Portreuddyn (Glaslyn) (GB110065053810)	Out	The Glaslyn Cable Works are downstream of the water body and no direct or indirect impacts anticipated to this water body.
Llyn and Eryri groundwater body (GB41002G204600)	In	The Glaslyn Cable Works are within this water body and has the potential to directly impact the water body..
Glaslyn Transitional waterbody (GB511006507300)	Out	The Glaslyn Cable Works are upstream of this waterbody but the in-channel and floodplain structures present (tidal gate and The Cob), there is considered to be sufficient grounds to exclude downstream waterbodies from the assessment.

Screening of Activities

3.1.8 As the Glaslyn Cable Works are a linear infrastructure project the construction methods will predominantly be consistent along the length of the route. Development activities which will be repeated multiple times have been considered as single groups of activities for the purposes of screening.

3.1.9 **Table 3-2** summarises the proposed activities and determines whether they are screened in or out of further assessment on the basis of having a potential impact on WFD classifications.

Table 3-2 Screening assessment for the activities as part of the Glaslyn Cable works

Activity/Infrastructure	Element of construction/operation and maintenance of interest	Screening outcome	Justification
Site establishment (Construction)	Soil stripping and storage Aggregate laying and compaction to form hard standing Installation of offices, welfare facilities and generators Storage of plant and equipment	In	Direct loss of habitat Possible disturbance of protected species Structure and stability of riparian zone Bank stability and impacts on channel substrate Pollution including sedimentation Potential for the spread of Invasive Non Native Species (INNS)
Cable corridor laying (Construction)	Land drainage Soil stripping and storage Trenching Duct installation Cable installation Jointing installation Reinstatement of easement	In	Direct loss of habitat Possible disturbance of protected species Structure and stability of riparian zone Bank stability and impacts on channel substrate Pollution including sedimentation Potential for the spread of INNS Changes to flow dynamics
Cable corridor watercourse crossing – open cut	Trenching Fluming Damming Reinstatement of channel and banks	In	Temporary barrier to fish migration during works Possible disturbance of protected species Changes to flow dynamics Changes to river width and depth

Activity/Infrastructure	Element of construction/operation and maintenance of interest	Screening outcome	Justification
(Construction)			Pollution including sedimentation Impacts on channel substrate
Cable corridor watercourse crossings – Trenchless (Construction)	Horizontal directional drilling (HDD) HDD compounds	In	Direct loss of habitat Possible disturbance of protected species Structure and stability of riparian zone Possible water pollution from Frac-out Possible ground disturbance from Frac-out
Permanent above ground infrastructure (Construction and Operation)	Joint bay kiosks Wern CSEC Minffordd CSEC	In	Direct loss of habitat Possible disturbance of protected species Structure and stability of riparian zone Bank stability and impacts on channel substrate Pollution including sedimentation Potential for the spread of INNS
Haul roads and access roads (Construction and Operation)	Access road – A498 to Wern CSEC Haul roads	In	Direct loss of habitat Possible disturbance of protected species Structure and stability of riparian zone Bank stability and impacts on channel substrate Pollution including sedimentation Potential for the spread of INNS

Activity/Infrastructure	Element of construction/operation and maintenance of interest	Screening outcome	Justification
Decommissioning of existing infrastructure (Construction)	Purging of cables to be removed Cut, purging, capping of cables and installation of monitoring points for cables remaining in situ. Decommissioning of existing Garth CSEC.	In	Direct loss of habitat Possible disturbance of protected species Structure and stability of riparian zone Pollution including sedimentation Potential for the spread of INNS Possible disturbance of protected species

3.2 Baseline Conditions

WFD Status

3.2.1 The WFD water bodies screened into the assessment are outlined in **Section 3.1**. This section presents baseline information on the current (2022 Cycle 3) WFD classifications and the objectives of the water body (Ref 2.1). The water body objectives are presented here, along with reasons for not achieving Good, in order to assess the likelihood of the Glaslyn Cable Works affecting the ability of the water bodies to achieve these objectives.

3.2.2 The current WFD status of the Glaslyn - tidal to Afon Croesor (GB110065053860) and Porthmadog Cut (GB110065053800) WFD water bodies are provided in **Table 3-3** and **Table 3-4** respectively.

3.2.3 The WFD status of the Llyn and Eryri (GB41002G204600) WFD groundwater body is shown in **Table 3-3**.

Table 3-3 - WFD status of the Glaslyn - tidal to Afon Croesor (GB110065053860) WFD water body

Water Body ID	**GB110065053860**
Water Body Name	Glaslyn - tidal to Afon Croesor
Water Body Type	River
Hydromorphological Designation	Heavily Modified
Overall Ecological Status	Moderate
Current Overall Status	Moderate
Status Objective (overall)	Good by 2027
Justification for not Achieving Good Status by 2015	Disproportionate cost
Biological Quality Elements	
Overall Biological Quality Element Status Objective	Moderate
Fish	Not assessed
Invertebrates	Moderate
Macrophytes	Good

Water Body ID	GB110065053860
Physico-chemical Quality Elements	
Ammonia (Phys-Chem)	High
Dissolved oxygen	High
pH	High
Phosphate	High
Temperature	Good
Specific pollutants	**High**
Manganese	High
Copper	High
Iron	High
Zinc	High
Chemical	**High**
Hydromorphological Quality Elements	**Not High**

Table 3-4 - WFD status of the Porthmadog Cut (GB110065053800) WFD water body

Water Body ID	GB110065053800
Water Body Name	Porthmadog Cut
Water Body Type	River
Hydromorphological Designation	Heavily Modified
Overall Ecological Status	Moderate
Current Overall Status	Moderate
Status Objective (overall)	Moderate by 2027
Justification for not Achieving Good Status by 2015	Disproportionate cost
Biological Quality Elements	

Water Body ID	GB110065053800
Overall Biological Quality Element Status Objective	Moderate
Fish	Not Assessed
Invertebrates	Moderate
Macrophytes	Not Assessed
Physico-chemical Quality Elements	
Ammonia (Phys-Chem)	Good
Dissolved oxygen	Poor
pH	High
Phosphate	Good
Temperature	High
Specific pollutants	**Not Assessed**
Chemical	**High**
Hydromorphological Quality Elements	**High**

Table 3-5 – WFD classification for Llyn and Eryri (GB41002G204600) groundwater body

Water Body Classification 2022 Cycle 3	Llyn and Eryri (GB41002G204600)
Overall Water Body	Poor
Quantitative Status element	Good
Quantitative Saline Intrusion	Good
Quantitative Water Balance	Good
Quantitative GWDTEs test	Good
Quantitative Dependent Surface Water Body Status	Good
Chemical Status element	Poor

Water Body Classification 2022 Cycle 3	Llyn and Eryri (GB41002G204600)
General Chemical Test	Good
Chemical GWDTEs test	Poor
Chemical Dependent Surface Water Body Status	Poor
Chemical Saline Intrusion	Good

Catchment Characteristics

Catchment Geology

3.2.4 The bedrock geology of the Glaslyn Cable Works is the Dol-cyn-afon Formation which is grey mudstone and silty mudstone and siltstone with bioturbated sandstones locally. It is overlain by sandstones or conglomerates of the Allt Lwyd Formation (Nant Ffrancon Subgroup).

3.2.5 Superficial deposits are Alluvium of clay, silt, sand and gravel. Sedimentary superficial deposit formed between 11.8 thousand years ago and the present during the Quaternary period.

Catchment Hydrology

3.2.6 An overview of the catchment hydrology can be seen in **Figure 4.8.5**. The Glaslyn Cable Works are within the Glaslyn surface water catchment in North Wales. The Glaslyn rises on the slopes of Snowdon and drains in a south-westerly direction to the sea at Porthmadog. In total the watercourse drains a catchment of 151 square kilometres (km^2).

3.2.7 To the east of Porthmadog, the Glaslyn passes through the reclaimed Traeth Marshes, before discharging through a tide gate outlet structure situated within the Inner Cob, and into the tidal inner harbour. Under normal tidal conditions, the Glaslyn becomes tide-locked during periods of high tide, and river water accumulates in the lowest areas of Traeth Marshes before draining out at low tide. The volume of water stored within Traeth Marshes is dependent on tidal conditions (whether spring or neap tide and meteorological conditions), the volume of flow arriving from the upper catchment and the phasing of any fluvial flood event with the high tide. The area of Traeth Marshes that would be inundated in a flood event is dependent on the severity of the combined fluvial and tidal event.

Climate

3.2.8 The Meteorological Office (Met Office) website holds the latest set of 30-year rainfall averages, covering the period 1991-2020 (Ref 2.2). Average annual rainfall of 1100 millimetres per annum (mm/a) was recorded for the Llanbedr Airfield climate station, and an average annual rainfall of 1988 mm/a was recorded for the Cwmystradllyn

climate station. It is important to highlight that the rainfall in the Snowdon catchment more accurately reflects the Glaslyn system functions, colloquially values of up to 3000 to 5,000 mm a year are quoted at Snowdon the source of the Afon Glaslyn.

Historical Channel Change

3.2.9 The tidal gate and embankment known as The Cob has excluded normal tidal processes and energy from the lower reaches of the Afon Glaslyn, likely limiting the potential for significant channel change. A comparison between Historic mapping from pre 1900 (Ref 2.3) and contemporary aerial photos, supports this. Comparison of mapping shows that the Glaslyn channel between the mountain railway and The Cob still occupies the same general position in each mapped epoch, over this time period, the channel has in places shifted to the west/east by up to 25 m. Also, over this time the overall 'width' of activity has reduced, with secondary channels silting up and the watercourse now being confined to a single, slightly wider single-thread channel. Siltation and succession from substantially aquatic to less regularly inundated vegetated marsh has been substantial as the Glaslyn channel nears The Cob, reflecting the exclusion of tidal energy.

Conservation Sites

3.2.10 There are a number of conservation sites in and around the Glaslyn Cable Works location these are shown in **Table 3-6.**

Table 3-6 Conservation sites within the Glaslyn Cable works location

Site name	Designation	Water dependency
Coedydd Beddgelert a Cheunant Aberglaslyn	Site of Scientific Interest (SSSI)	Geomorphological features of interest including boulder-bed reach.
Coedydd Nanmor	SSSI	Wet woodland habitat
Glaslyn	SSSI	Wet woodland, saltmarsh and oligotrophic lowland river.
Meirionnydd Oakwoods and Bat Sites	Special Area of Conservation (SAC)	Wet woodland habitat
Hafod Garregog	National Nature Reserve (NNR)	Wet woodland habitat

3.3 Stage 2: WFD Scoping

3.3.1 The WFD scoping stage defines the level of detail required for further WFD assessment. This includes identifying risks to the WFD receptors from the Glaslyn Cable Works' activities.

3.3.2 The Scoping assessment for Porthmadog Cut (GB110065053800) and Glaslyn - tidal to Afon Croesor (GB110065053860) are shown in **Table 3-7** and shows no elements to be taken forward to impact assessment.

3.3.3 The Scoping assessment for Llyn and Eyri (GB41002G204600) is shown in **Table 3-8** and shows no elements to be taken forwards to impact assessment.

Table 3-7 - WFD scoping of the Glaslyn Cable Works' activities against WFD quality elements for Glaslyn - tidal to Afon Croesor and Porthmadog Cut WFD river waterbodies scoping for further assessment

WFD Quality Element	Scoping outcome (In/Out)	Impacts	Mitigation
Biological Quality Elements			
Macrophytes and phytobenthos combined	Out	Macrophytes may be impacted through sedimentation and vegetation clearance may also allow more light to reach the river.	The implementation of a suitable Environmental Management Plan (EMP) and Pollution Prevention Plan (PPP) will ensure that appropriate mitigation is in place to prevent impacts upon this WFD quality element. The EMP will contain appropriate measures which will ensure that sediment runoff into the watercourse is prevented and the PPP will manage the risk of chemicals and fuels being spilled and entering the watercourse. There are no in-channel works of WFD waterbodies which would affect Macrophytes and phytobenthos combined.
Invertebrates	Out	Invertebrates may be impacted by sedimentation as well as temporary loss of habitats. Invertebrates may also be impacted by noise and vibration.	The implementation of a suitable Environmental Management Plan (EMP) and Pollution Prevention Plan (PPP) will ensure that appropriate mitigation is in place to prevent impacts upon this WFD quality element. The EMP will contain appropriate measures which will ensure that sediment runoff into the watercourse is prevented and the PPP will manage the risk of chemicals and fuels being spilled and entering the watercourse. There are no in-channel works of WFD waterbodies which would affect Invertebrates.

Fish	Out	Fish may be impacted by noise and vibrations and may be impacted by loss of aquatic, marginal and riparian habitats.	The implementation of a suitable Environmental Management Plan (EMP) and Pollution Prevention Plan (PPP) and following a robust HDD methodology will ensure that appropriate mitigation is in place to prevent impacts upon this WFD quality element. The EMP will contain appropriate measures which will ensure that sediment runoff into the watercourse is prevented and the PPP will manage the risk of chemicals and fuels being spilled and entering the watercourse. Through the use of HDD, there will be no temporary or barriers to fish migration as a result of the works. Open-cut crossings are only proposed on upstream Ordinary Watercourses, they will be temporary and are not expected to significantly affect fish passage.
Physico-chemical Quality Elements			
Thermal Conditions	Out	It is not anticipated any of the activities will impact on thermal conditions	
Salinity	Out	It is not anticipated any of the activities will impact on Salinity.	
Acidification Status	Out	It is not anticipated any of the activities will impact on Acidification Status	
Nutrient Conditions	Out	Cutting down riparian vegetation as part of the site clearance works has the potential to impact the nutrient conditions. In the short term, nutrient levels could be increased through additional vegetation entering the watercourse and	The implementation of a suitable Environmental Management Plan (EMP) and the creation of a Pollution prevention plan (PPP) will ensure that appropriate mitigation is in place to prevent significant impacts upon this WFD quality element. The EMP will

		breaking down. In the long term, the clearance of riparian vegetation may result in a reduction in the levels of nutrients entering the water course by the removal of trees and shrubs that will shed leaves and other organic material into the river.	contain appropriate measures which will ensure that sediment runoff into the watercourse is prevented and the PPP will manage the risk of chemicals and fuels being spilled and entering the watercourse.
Oxygenation Conditions	Out	It is not anticipated any of the activities will impact on Oxygenation Conditions	
Hydromorphological Quality Elements			
Quantity and Dynamics of Water Flow	Out	Activities on smaller waterbodies and ditches within the WFD catchments may impact on dynamics of water flow.	The implementation of a suitable Environmental Management Plan (EMP) will ensure that appropriate mitigation is in place to prevent impacts upon this WFD quality element. The EMP will ensure that the conveyance of watercourses is not impacted during construction. Open cut crossings on small watercourses and ditches within the WFD catchment will not be of a large enough magnitude to significantly impact upon the quality and dynamics of water flow of the WFD waterbodies. They will be of a temporary nature and pre work conditions will be reinstated. Where HDD is used there will be no in-channel works and therefore no temporary or permanent effects on the quantity and dynamics of river flow.

Connection to Groundwater Bodies	Out	The use of HDD may impact on groundwater connection.	The implementation of a suitable Environmental Management Plan (EMP) and following a robust HDD methodology will ensure that appropriate mitigation is in place to prevent impacts upon this WFD quality element. The EMP will ensure that there is no significant risk of sediment mobilisation which may affect the connection to groundwater bodies and the design of the works avoids in-channel structures of WFD waterbodies.
River Continuity	Out	The activities may result in changes that could affect the river continuity by works on smaller watercourses in the catchment.	The implementation of a suitable Environmental Management Plan (EMP) will ensure that appropriate mitigation is in place to prevent impacts upon this WFD quality element. The EMP will contain measures which will ensure that no works will other than specified crossings will affect the conveyance of watercourses during construction. Open cut crossings on small watercourses and ditches within the WFD catchment will not be of a large enough magnitude to impact upon the continuity of the WFD waterbodies. They will be of a temporary nature and pre work conditions will be reinstated. On Main Rivers and WFD waterbodies, crossings will be by HDD and there will be no temporary or permanent change of river continuity.
River Depth and Width Variation	Out	It is not anticipated any of the activities will impact on river depth or width.	All open-cut crossings will be reinstated to pre-works conditions following construction, and the use of HDD on Main Rivers and WFD waterbodies will ensure that there is no effect on River Depth and Width Variation.

Structure and Substrate of the River Bed	Out	It is not anticipated any of the activities will impact on the structure and substrate of the bed.	All open-cut crossings will be reinstated to pre-works conditions following construction, and the use of HDD on Main Rivers and WFD waterbodies will ensure that there is no effect on structure or substrate of the river bed.
Structure of the Riparian Zone	Out	The activities may impact the structure of the riparian zone because of vegetation clearance and the construction of new access roads and infrastructure	The implementation of a suitable Environmental Management Plan (EMP) will ensure that appropriate mitigation is in place to prevent impacts upon this WFD quality element. The EMP will ensure that riparian vegetation is only removed where necessary and where it is removed, it will be returned to its previous condition following construction. HDD compounds and construction of access roads and infrastructure are suitably set back from the bank top of the WFD waterbodies. Open cut crossings will reinstate the riparian zone to pre works condition following construction, and will only occur on minor watercourses.

Table 3-8 - WFD scoping of the Glaslyn Cable Works' activities against WFD quality elements for Llyn and Eryri WFD groundwater body

WFD Quality Element	Scoping outcome (In/Out)	Impacts	Mitigation
Quantitative Status elements			
Quantitative Saline Intrusion	Out	It is not anticipated that any project activities will affect saline intrusion.	

Quantitative Water Balance	Out	It is not anticipated that any project activities will affect water balance. There will be no impact on groundwater surface water interactions and no abstractions as part of the project.	
Quantitative GWDTEs test	Out	As the proposed activities will not affect the water balance, there would be no impact on any Groundwater Dependent Terrestrial Ecosystems (GWDTEs) which are present within the study area.	.
Quantitative Dependent Surface Water Body Status	Out	It is not anticipated any of the activities will impact on any quantitative dependent surface water bodies	
Quantitative Status elements			
General Chemical Test	Out	There is potential during construction for the impact of chemicals and fuel spillages, along with frack-out from HDD to affect the chemical status of the WFD groundwater body.	The creation of a Pollution Prevention Plan (PPP) will ensure that appropriate mitigation is in place to prevent significant impacts, through ensuring the fuels and chemicals are suitably stored and handled to mitigate the risk of them entering groundwater. The HDD will be undertaken by competent contractors who will monitor drilling pressure to prevent frack-out.
Chemical GWDTEs test	Out	There is potential during construction for the impact of chemicals and fuel spillages, along with frack-out from HDD to affect the chemical status of any GWDTEs.	The implementation of a suitable Environmental Management Plan (EMP) and the creation of a Pollution prevention plan (PPP) through ensuring the fuels and chemicals are suitably stored and handled to mitigate the risk of them entering groundwater will ensure that appropriate mitigation is in place to prevent significant impacts upon this WFD quality element.

Chemical Dependent Surface Water Body Status	Out	It is not anticipated any of the activities will affect the groundwater chemical status which will therefore subsequently not affect any surface waters.
Chemical Saline Intrusion	Out	It is not anticipated that any project activities will affect saline intrusion.

4. Conclusions

4.1.1 This WFD Assessment has been prepared to assess the impacts and to identify appropriate mitigation measures for the proposed works associated with the Glaslyn Cable Works.

4.1.2 This assessment concludes that the Glaslyn Cable Works would not result in significant impacts on the WFD status or objectives of any associated surface water or groundwater bodies near the Glaslyn Cable Works.

4.1.3 The assessment also concludes no adverse impacts on Protected Areas in hydrological connection with the scheme.

4.1.4 The Glaslyn Cable Works would not prevent the achievement of the wider WFD objectives in the Western Wales River Basin District and is not predicted to have a significant impact on any other water body within the Western Wales River Basin District or mitigation measures developed to achieve good status.

Bibliography

Ref 1.1 – UK Government, (2015). The Water Framework Directive (Standards and Classification) Directions (England and Wales). Available at: https://www.legislation.gov.uk/uksi/2015/1623/resources. [Accessed July 2025]

Ref 1.2 UKTAG (2012) Paper 11b(ii) : Groundwater Quantitative Classification for the purposes of the Water Framework Directive. Groundwater Quantitative Classification for the purposes of the Water Framework Directive [Accessed July 2025]

Ref 1.3 The Planning Inspectorate (2024). Nationally Significant Infrastructure Projects: Advice on the Water Framework Directive. (Online). Available at https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-the-water-framework-directive. [Accessed July 2025]

Ref 2.1 – Water Watch Wales (2024). Cycle 3 Rivers and Waterbodies Interim 2024. Available at: https://waterwatchwales-nrw.hub.arcgis.com/. [Accessed July 2025]

Ref 2.2 – Met Office (2025) Location-specific long-term averages - Llanbedr Airfield. Available at: https://www.metoffice.gov.uk/research/climate/maps-and-data/location-specific-long-term-averages/gcmh6hkcz. [Accessed July 2025].

Ref 2.3 - National Library of Scotland (2025). Map finder. https://maps.nls.uk [Accessed July 2025]

4.8.C. Glaslyn Cables Flood Consequence Assessment

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1. Introduction

1.1 Background

1.1.1 WSP UK Ltd (WSP) has been commissioned by National Grid Electricity Transmission (NGET), the Client to undertake a Flood Consequences Assessment (FCA) in support of the planning application for the Glaslyn Cables which is part of the Pentir to Trawsfynydd Reinforcement Project.

1.1.2 The Glaslyn Cables works site is between the existing Wern Cable Sealing End Compound (CSEC) and Garth CSEC, Porthmadog. The Glaslyn Cables works consist of an extension to the existing Wern Cables Sealing End Compound (CSEC), replacement of the existing Glaslyn Cables with new 400 kilovolt (kV) sections ('inland' A circuit and 'coastal' B circuit) between Wern CSEC and Minffordd CSEC. A new CSEC and increase of floor height of the tunnel head house previously consented by the Eryri Visual Impact Provision (EVIP) project at Minffordd; removal of the existing Garth CSEC; removal of some redundant sections of the existing 400 kV and 132 kV cables; and making safe sections of redundant Glaslyn Cables left in-situ.

1.1.3 The Wern and Minffordd CSECs are situated respectively on the north-western and south-eastern edges of the Afon Glaslyn's floodplain.

1.1.4 This Flood Consequences Assessment (FCA) forms an appendix of the main Environmental Statement. The following scope is proposed for this FCA:

- Use Arup's 2025 Glaslyn Cable Uprating flood modelling outputs, which includes runs of Natural Resources Wales (NRW) flood model, to inform the FCA, specifically on flood sources, pathways and receptors.
- Flood mitigation measures, including recommended design flood levels for scheme elements within the floodplain, will be suggested, in addition to any other flood risk or drainage mitigation measures, including climate change uplifts in accordance with national policy, over the lifetime of the development.
- Present the case for compliance with the Technical Advisory Note (TAN) 15 Justification Test.
- Advise on drainage design basis requirements and integrate drainage strategy into this FCA.

1.1.5 This appendix is supported by the figures listed below:

- **Figure 4.8.C.1**: Fluvial Flood Risk
- **Figure 4.8.C.2**: Tidal Flood Risk
- **Figure 4.8.C.3**: Surface Water Flood Risk

1.2 Policy content

1.2.1 This FCA has been prepared in accordance with the relevant national, regional and local requirements and guidance of the following publications and organisations, where applicable:

- Planning Policy Wales (PPW - Edition 12, February 2024) issued by Welsh Government (Ref 1.1)
- TAN 15: Development and Flood Risk dated March 2025 issued by The Welsh Government (Ref 1.2)
- Flood map for planning, issued by Natural Resources Wales (Ref 1.3).
- Climate Chage Allowance Guidance issued by the Welsh Government (Ref 1.4)
- Gwynedd Council
- Building Regulations 2010 (Part H3) (Ref 1.5)
- Sewers for Adoption 7th Edition (Ref 1.6)

1.2.2 To further inform this FCA, the following stakeholders have been consulted:

- Natural Resources Wales (NRW)

1.2.3 PPW (Ref 1.1) and TAN15 (Ref 1.2) set out the criteria for development and flood risk by stating that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere.

1.2.4 For this site, the key aspects that require the assessment are:

- The construction of new impermeable area for the CSECs,
- The NRW Flood Map for Planning shows that the site is within fluvial Flood Zones 2 and 3, tidal Flood Zone 2 and areas of Flood Zones 2 and 3 associated with Surface Water and Small Watercourses Flood Zone 2 and 3.
- Flood risk attributed to the site within this FCA will be informed by the Flood Map for Planning (FMFP) (Ref 1.3) as per TAN15 (2025) (Ref 1.2), as well as detailed hydraulic flood modelling undertaken by Arup.

1.3 Assumptions and Limitations

1.3.1 The conclusions of this FCA are based on current flood risk and available site information accessed at the time of drafting for the current design proposals.

1.3.2 This assessment has been undertaken under the guidance of TAN15 (2025) (Ref 1.2).

1.3.3 The surface water management and drainage proposals from the proposed development are outside of the scope of this FCA report.

1.3.4 This assessment has been written prior to conclusion of the mitigation hydraulic modelling and does not currently demonstrate compliance with the TAN15 acceptability criteria. Further work is required following completion of the mitigation modelling in order to demonstrate compliance and a new version of this report or supplementary report will be required during the planning process.

1.3.5 This report has been prepared using a NRW hydraulic model that has been adapted for this project by a third party, it is noted that the hydraulic model does not run in an event with an annual chance of 1 in 1,000 plus climate change so risk in an event of this magnitude cannot be assessed.

1.3.6 The conclusions of this report are based on the data gathered for the purposes of the report and are limited in their accuracy in proportion to the validity of the dataset. The data gathered has been based on an agreed scope of works. WSP cannot guarantee that the data used is the best available at the time of the report, but it is the best available data that could be gathered on the agreed scope of works.

2. Consultation responses

2.1.1 Consultation has been undertaken with NRW. Error! Reference source not found. gives an outline of the discussions and outcomes from consultation.

Table 2-1 – Stakeholder consultation summary

Meeting & date	Topic	Discussion summary	NRW response
NRW Glaslyn Model Updates and Flood Risk Meeting (16/10/2023)	NRW Model updates.	New model includes recent changes in topography, review of the hydrology rating curve for an upstream Glaslyn gauge.	Caused a shift in the return periods for flows. Flood Risk mapping may be updated in May 2024 if NRW get required 2D outputs.
NRW Glaslyn Cable uprating 06/11/2023	Watercourse crossing options.	Disclosed crossing options for the River Glaslyn and other main river and ditches.	NRW stated that the culverted option was the least preferred, and any hard invert on watercourses is discouraged. Unless there is no other alternative culverting won't be considered.
		The Glaslyn will be crossed with Horizontal Directional Drilling (HDD) technique, requiring entry and exit platforms.	NRW had no issues with the HDD techniques discussed.
NRW Glaslyn Cable uprating 06/11/2023	Permit approval process.	Discussed the NRW permit approval process and requirements.	All main rivers require a Flood Risk Activity Permit and ordinary watercourses will require a Section 23 land drainage consent, even if below ground. NRW will be required to consent to the

			method of over-pumping from any excavations and open cut crossings.
NRW Glaslyn Cables replacement, Flood risk meeting 06/08/2025	Flood risk modelling	The results of Arup's flood modelling were discussed with NRW. This covered the modelling showing a small increase in flood depth to residential receptors in Tremadog.	In dialogue with NRW, potential suitable mitigation approaches were considered. Approved mitigation approaches were selected, which needed flood modelling to verify their effectiveness. NRW agreed that the modelling results would be able to be submitted following initial submission of the FCA and ES chapter. NRW also request confirmation that access would be available to all main Rivers and IDD watercourses during construction and operation. NGET confirmed that access would be able to be maintained for NRW, providing sufficient notice was given.

3. Background

3.1 Site visits

3.1.1 The understanding of the baseline conditions of the Study Area as shown on **Figure 4.8.2** has been informed by desktop study and by a site walkover.

Site visit 2023

3.1.2 The walkover was carried out on 30th and 31st August 2023 by two WSP hydrologists. The route of the walkover started at the Wern CSEC and followed the existing cable route towards Porthmadog. Most of the proposed cable route was able to be accessed but the area on the east of the Afon Glaslyn, adjacent to the Garth CSEC could not be accessed, due to a large number of livestock and boggy conditions. It was viewed from the opposite side of the river, which alongside aerial mapping allowed for a full conceptualisation.

3.2 Site Description

3.2.1 The proposed Glaslyn Cables works site is shown in ES **Volume 4: Glaslyn Cables, Figure 4.8.1**. The works site is in land surrounding the town of Porthmadog, Gwynedd, Wales, UK. The works site covers an area between two CSECs ('Wern' and 'Garth'), which are situated respectively on the western and south-eastern edges of the Afon Glaslyn's floodplain. This section describes the baseline situation for the works site.

3.3 Route breakdown

3.3.1 For the purpose of this report the route has been divided into five sections running west to east (see **Volume 4: Glaslyn Cables, Figure 4.8.3**). These sections have been delineated based on the different aspects of the proposed development, Cable Sealing End Compounds (CSEC), Horizontal Directional Drilling (HDD) sections and current infrastructure e.g., road networks.

Section A: Wern CSEC to A498

3.3.2 Section A encompasses the area between Wern CSEC and the A498 Highway. It is bound by the A487 to the north and by the A497 and Network Rail to the south.

Section B: A498 to Porthmadog Roundabout

3.3.3 Section B includes the area between A498 and the A487 Roundabout (Porthmadog Roundabout) connecting the by-pass to Porthmadog High Street. This section is south of the A487 and north of the woodland near Pensyflog and Porthmadog. The cable routes in this section will cross National Cycle Route 8, a stone circle feature, and a playground in close vicinity to the roundabout.

Section C: Porthmadog Roundabout to Snowdon Street

3.3.4 Section C is to the east of the roundabout and encompasses all areas within the Red Line Boundary up to the interface with Snowdon Street in the north-east of Porthmadog.

Section D: Afon Glaslyn Crossing

3.3.5 Section D begins at Snowdon Street and encompasses the Zone of Influence associated with the floodplain of the River Glaslyn, including the HDD crossing of the Glaslyn floodplain and the Glaslyn Site of special scientific interest (SSSI).

Section E: East of Afon Glaslyn crossing to Minffordd CSEC

3.3.6 Section E consists of the proposed Minffordd CSEC adjacent to the EVIP Tunnel Headhouse.

3.4 Climate

3.4.1 The Meteorological Office (Met Office) website holds the latest set of 30-year rainfall averages, covering the period 1991-2020 (Ref 3.1). Average annual rainfall of 1100 millimetres per annum (mm/a) was recorded for the Llanbedr Airfield climate station, and an average annual rainfall of 1988 mm/a was recorded for the Cwmystradllyn climate station. It is important to highlight that the rainfall in the Snowdon catchment more accurately reflects the Glaslyn system functions, colloquially values of up to 3,000mm to 5,000 mm a year are quoted at Snowdon the source of the Afon Glaslyn.

3.5 Topography and land use

3.5.1 The works site cover a large area of flat low-lying land, mainly between 0.3 metres (m) Above Ordnance Datum (AOD) and 3.7 m AOD between the Garth and Wern CSECs. However, the route rises to ~25 m AOD at the access road west of the Wern CSEC. The land use directly surrounding the site is mainly neutral and improved grasslands used for livestock grazing. Surrounding the works site are residential areas including the town of Porthmadog, and areas classified as saltmarsh in the Glaslyn floodplain. Although the areas of land directly surrounding the Site are flat low-lying land, in the western sections of the route (Wern CSEC to Porthmadog Roundabout) the topography rises to heights of ~345 m AOD (north), ~95 m AOD (west) and ~260 m AOD (south).

3.5.2 Due to the spatial extent of the works site, further details on the topography and land use have been split between the cable route sections.

Section A: Wern CSEC to A498

3.5.3 The topography surrounding the Wern CSEC varies between ~25 m AOD (western access track) and ~3 m AOD (east of the Wern CSEC). However, the topography to the north, south and west quickly rises to heights of ~345 m AOD, ~260 m AOD and ~95 m AOD respectively. The land coverage around the Wern CSEC mainly includes areas of broadleaf woodland and improved grassland but is predominantly used for cattle grazing and the existing Wern CSEC site. As the topography rises to the north, south and west, the land cover becomes dominated by broadleaf woodland and improved grassland.

3.5.4 The cable route section spanning eastwards towards the A498 follows a relatively flat topography ranging from ~3 m AOD (east of the Wern CSEC) to ~2.3 m AOD (west of the A498). Similarly, to the topography surrounding the Wern CSEC, the topography to the north and south quickly rises to heights of ~345 m AOD and ~260 m AOD respectively. The area surrounding the cable route mainly comprises of

arable/agricultural land and improved/neutral grassland (intersected with numerous drainage ditches) predominantly used for cattle grazing as well as isolated areas of broadleaved woodland.

Section B: A498 to Porthmadog Roundabout

3.5.5 From the A498 to Porthmadog Roundabout the terrain along the cable route remains relatively flat, with the topography steeply rising to the north and south of the works site to heights of ~205 m AOD and ~225 m AOD respectively. The area directly surrounding the cable route mainly comprises of arable land and improved/neutral grassland. However, around the eastern end of the cable route and to the north and south, the land-use changes to more urban and suburban areas around Tremadog and the Town of Porthmadog, as well as an area of broadleaf woodland to the north-east of this section.

Section C: Porthmadog Roundabout to Snowdon Street

3.5.6 From Porthmadog roundabout to Snowdon Street the topography along the cable route remains relatively flat, ranging from ~2.8 m AOD in the west to ~1.6 m AOD around Snowdon Street. The land-use of Section C is predominantly neutral grassland, with urban and suburban areas closer to Porthmadog and arable land to the north. Section C also contains the Porthmadog Railway Station and the Ffestiniog and Welsh Highland Railways.

Section D: Afon Glaslyn Crossing

3.5.7 Section D is made up of the Afon Glaslyn floodplain. In this area the topography is low lying and gently slopes into the main channel either side of the Glaslyn. The topography ranges between 1.6 m AOD (in the east and west) and ~0.5 m AOD near the main channel. The landcover is predominantly saltmarsh south of the Cob (A487) and arable land north of the Cob. Adjacent to the eastern bank of the Glaslyn channel is an area of woodland, through which the existing cable route runs.

Section E: Minffordd CSEC

3.5.8 The land directly adjacent to the Minffordd CSEC is at 1.9 m AOD, the topography then rises to heights of 3 to ~30 m AOD towards Minffordd. The land cover in this section is mixture of improved grassland and suburban areas associated with Minffordd and current cable route infrastructure. Minffordd Quarry is also located to the north of this section on the opposing side of the A487.

3.6 Hydrology

3.6.1 The following section describes the hydrology associated with the proposed cable route. An overview can also be seen on **Volume 4: Glaslyn Cables, Figure 4.8.5**.

Afon Glaslyn

3.6.2 The Afon Glaslyn is an NRW main river which arises on the slopes of Mount Snowdon (Yr Wyddfa) and drains southwards to the Irish Sea at Porthmadog. In total, the watercourse drains a catchment of 151 square kilometres (km^2). The catchment can be characterised as steep and mountainous in nature, becoming flatter in the wide floodplain area towards Porthmadog. To the east of Porthmadog, the Glaslyn passes

through the Traeth Mawr, an area of reclaimed land protected from the sea by a series of flood risk management structures and sluice gates, before discharging through a tide gate outlet structure situated within the Inner Cob, and into the tidal inner harbour. Under normal tidal conditions, the Glaslyn becomes tide-locked during periods of high tide, and river water accumulates in the lowest areas of Traeth Mawr before draining out at low tide. The volume of water stored within Traeth Mawr is dependent on tidal conditions (whether spring or neap tide and meteorological conditions), the volume of flow arriving from the upper catchment and the phasing of any fluvial flood event with the high tide. The area of Traeth Mawr that would be inundated in a flood event is dependent on the severity of the combined fluvial and tidal event.

Y Cyt/Nant Yr Afon Oer

3.6.3 The Y Cyt is an NRW Main River, and a tributary of the Afon Glaslyn. It originates at NGR SH5435740295 in the western section of the proposed cable route near Penforma and flows through Porthmadog. After flowing through Porthmadog, a tide gate controls the flows from the Y Cyt to the tidal inner harbour. In the advent of tide-locking, a bypass channel and tide gate connects the lower Y Cyt to the Glaslyn, via Abattoir Cyt, allowing flows from the Y Cyt to be stored in the lower Traeth Mawr. This acts as a 'safety-valve' to reduce the risk of flooding to Porthmadog from a tide-locked Y Cyt (if additional storage is available here).

Y Cyt Drainage ditches

3.6.4 There are a series of ditches draining the agricultural land in the western sections of the cable route that form the catchment of the Y Cyt system. While all these ditches are man-made uniform channels, a number of them are designated as NRW Main Rivers. In addition, this area is within the Glaslyn and Pensyflog Internal Drainage Districts (IDD) administered by NRW.

NRW Access

3.6.5 NRW require access to all Main Rivers and IDD watercourses in order to carry out periodic maintenance. While the proposed construction works and permanent infrastructure will involve crossing multiple waterbodies, NGET have confirmed that access for NRW will be able to be maintained to all of them for the construction[1] and lifetime of the development.

3.7 Geology, hydrogeology and soils

Geology

3.7.1 This section provides a summary of the bedrock and superficial deposits which the cable route overlies.

3.7.2 Error! Reference source not found. provides a summary of the bedrock encountered on the proposed cable route.

[1] Providing that NRW provide sufficient notice to NGET in the instance that access is required to an active construction area.

Table 3-1 – Bedrock and superficial deposits

Cable route section	Bedrock geology	Superficial deposits
Section A - Wern CSEC to A498	Dol-cyn-afon Formation (Grey mudstone and silty mudstone and siltstone with bioturbated sandstones locally)	Alluvium (clay, silt, sand and gravel)
Section B - A498 to Porthmadog Roundabout	Nant Ffrancon Subgroup (Mudstones, silty mudstones and sandstones)	Alluvium (clay, silt, sand and gravel)
Section C - Porthmadog Roundabout to Snowdon Street	Nant Ffrancon Subgroup (Mudstones, silty mudstones and sandstones)	Alluvium (clay, silt, sand and gravel)
Section D - Afon Glaslyn Crossing	Nant Ffrancon Subgroup (Mudstones, silty mudstones and sandstones) Dol-cyn-afon Formation (Grey mudstone and silty mudstone and siltstone with bioturbated sandstones locally)	Alluvium (clay, silt, sand and gravel)
Section E – Minffordd CSEC	Dol-cyn-afon Formation (Grey mudstone and silty mudstone and siltstone with bioturbated sandstones locally)	Alluvium (clay, silt, sand and gravel)

3.7.3 As illustrated in **Table 3-1**, British Geological Survey (BGS) mapping indicates that the majority of the works site overlies a consistent and low permeability geology, mainly the low permeability Nant Ffrancon Subgroup consisting of Mudstones, silty mudstones and sandstones, and the Dol-cyn-afon Formation consisting of grey mudstone and silty mudstone and siltstone with bioturbated sandstones locally. Superficial deposits of Alluvium (clay, silt, sand and gravel) can be found across the entirety of the works site.

Hydrogeology

Bedrock aquifer status

3.7.4 The bedrock geology underlying the works site is a Secondary B aquifer. These aquifers defined are mainly lower permeability layers that may store and yield limited amounts of groundwater through characteristics like thin cracks (called fissures) and openings or eroded layers).

Bedrock aquifer vulnerability

3.7.5 BGS groundwater vulnerability mapping (Ref 3.2) indicates that the Secondary B Aquifer associated with the bedrock geology underlaying the majority of the cable route (sections A/B/C/D) is at high vulnerability. Section E, the area surrounding the Minffordd CSEC, is indicated as medium vulnerability.

Superficial deposits aquifer status

3.7.6 The superficial deposits underlaying the cable route is a Secondary A aquifer. These aquifers comprise permeable layers that can support local water supplies and may form an important source of base flow to rivers.

Superficial deposits aquifer vulnerability

3.7.7 BGS groundwater vulnerability mapping indicates that the Secondary A Aquifer associated with the superficial deposits underlying the majority of the cable route (Sections A/B/C/D) is at high vulnerability. Section E is indicated as medium vulnerability.

Soils

3.7.8 Soil types (Ref 3.3) along the cable route sections are described below.

Section A: Wern CSEC to A498

3.7.9 The Wern CSEC and cable route to the A498 is located on loamy and clayey soils of coastal flats with naturally high groundwater. Although to the north and south there are freely draining acid loamy soils over rock.

Section B: A498 to Porthmadog Roundabout

3.7.10 Section B is predominantly located on loamy and clayey soils of coastal flats with naturally high groundwater, with a freely draining acid loamy soils over rock to the north and south.

Section C: Porthmadog Roundabout to Snowdon Street

3.7.11 Section C is located on loamy and clayey souls of coastal flats with naturally high groundwater.

Section D: Afon Glaslyn Crossing

3.7.12 Section D is predominantly underlain by naturally wet saltmarsh soils across the lower reaches of the Glaslyn floodplain. And the western and northern areas of the Glaslyn floodplain are underlain by loamy and clayey soils of coastal flats with naturally high groundwater.

Section E: Minffordd CSEC

3.7.13 Section E is predominantly underlain by naturally by freely draining acid loamy soils over rock.

3.8 Overview of proposed development

3.8.1 A description of works is in **Chapter 2 of Volume 4: Glaslyn Cables** with a high level overview provided here.

Glaslyn crossing Cable route works

3.8.2 The Glaslyn crossing will require the following works between the Wern and Minffordd CSECs:

- Replace existing 400 kV cable;
  - Uprate existing NG 400 kV Glaslyn Cables (4ZC Pentir – Trawsfynydd 1st Circuit) by replacing the existing 1 x cable per phase oil filled 400 kV Glaslyn Cable circuit from Wern CSEC at tower 4ZC044 to Garth CSEC at Tower 4ZC037 with new 400 kV cross-linked polyethylene (XLPE) cables (two per phase);
- Replace existing 132 kV cable;
  - Replace the 132 kV Glaslyn Cable with 400 kV cables (Pentir – Trawsfynydd 2nd Circuit) by replacing the existing 2 circuits at 132 kV Glaslyn Cable from Wern CSEC at tower 4ZC044 to Garth CSEC at Tower 4ZC037 with new 400 kV XLPE cables.
- Horizontal Directional Drilling
  - For the Glaslyn crossing works, necessary supporting areas are required for access, laydown, and associated compound areas such as for the entry/exit points of the proposed Horizontal Directional Drilling (HDD) intended to pass beneath the A487 bypass, the Porthmadog-Minffordd national railway line, the Afon Glaslyn channel and other NRW main rivers.

Permanent site at Wern CSEC

3.8.3 The Wern CSEC will involve the following works:

- Reconfiguration and extension to the existing CSEC at Wern;
- Extend compound area;
- New CAT 3 perimeter security fencing to extended compound to tie into the existing fencing including fencing and gates;
- New foundations for High Voltage (HV) plant and support steelwork, for Surge Arrestor, Earth Switches and Cable Sealing Ends;
- New HV electrical equipment;
- Extended earth mat for new CSEC;
- New access road from the A498 (approximately 1.26 km); and
- Other standard site requirements such as drainage, access and hard standings.

Permanent site at Minffordd

3.8.4 Due to the adjacent works for the EVIP, the replacement cable will run from Wern CSEC to a new CSEC at Minffordd adjacent to the Tunnel Head House for the EVIP Project. Minffordd CSEC would be approximately 400 m east of the existing CSEC at Garth.

3.8.5 The new Minffordd CSEC will require:

- New compound area;
- New CAT 3 perimeter security fencing to CSWEC to tie into the existing fencing for Tunnel Headhouse site, including fencing and gates;
- New foundations for HV plant and support steelwork, for Surge Arrestor, Earth Switches and Cable Sealing Ends;
- New HV electrical equipment;
- New earth mat for CSEC;
- New access to CSEC from Tunnel Headhouse access point; and
- Other standard site requirements such as drainage, access and hard standings.

Ancillary activities

3.8.6 Additional ancillary activities are required to facilitate project construction and operation including:

- Temporary land to facilitate construction activities, including temporary amendments to the public highway, public rights of way, working areas for construction equipment and machinery, site offices, welfare, storage and access;
- Potential diversion and projection of third-party assets and land drainage from the construction and operational footprint;
- Land required for mitigation, compensation and enhancement of the environment as a result the environmental assessment process, and NGET's commitments to Net Benefit for Biodiversity (NBB); and
- Instillation of temporary bridges and haul roads required for the delivery of cable drums and associated plant.

Decommissioning of existing cable route

3.8.7 The scope of works also includes the decommissioning of the existing cables and associated infrastructure, as detailed below:

- Decommission/remove existing oil filled 400 kV cable and ground assets from Wern CSEC to Garth CSEC, removing where possible;
- Decommission/remove existing 132 kV cables from Wern SEC to Garth SEC, removing the existing assets where possible;
- Decommission/remove cable auxiliary systems including link boxes, oil tanks, cable markers and moisture sensitive and thermos couplers pits;

- Decommissioning of Wern CSE compound sealing end infrastructure, including fence sections, to allow for future CSEC extension works and connection to the new 400 kV connection;
- Decommissioning of Garth CSEC but not tower 4ZC037;
- Installation of monitoring at cut and capped cable end sections left redundant in situ to control and maintenance of the remaining oil filled hydraulic system; and
- Removal of cable bridge structures at the 400 kV corridor installed to cross watercourses.

Decommissioning methodology

3.8.8 To decommission the cable systems, it is necessary to remove the oil from the system's hydraulic termination points in a controlled manner. This will be done by purging the oil at the stop joint locations and at the ends of the system (Wern and Garth CSECs). The oil tanks that supply the system will also be emptied before proceeding with the cable cutting.

3.8.9 Where the cables and associated ancillary apparatus are to be physically removed, the remaining cable oil will be purged and removed following best practice guidance.

3.8.10 Where the cables are to remain in situ, the cable will be cut, purged of oil, and capped with oil monitoring pits installed.

3.8.11 Oil monitoring pits will be designed to TGN(E) 278, NG TS 3.10, NRSWA 1991, DMRB, and Local Council standards. Stainless steel or lead armoured pipework will be installed from the cable cap to the monitoring pit, with bonding leads connected to existing or new earth points. During the decommissioning of the cable route, at all link box pits and stop joint pits, the existing earthing rods will be used to earth the remaining circuits.

3.8.12 Where new monitoring pits are required, and no existing earthing rods are available, a new earth rod will be installed as per the approved design.

4. Definition of Flood Hazard

4.1 Overview

4.1.1 This section provides an overview of the present-day baseline flood risk at the site and surrounding areas including climate change allowances.

4.1.2 This assessment considers flood risk profile, sources and mechanisms of flooding during the current day scenario and taking into account climate change information where available.

4.1.3 According to the Flood Map for Planning the proposed development is located within fluvial and pluvial Flood Zones 2 and 3 and tidal Flood Zone 2.

4.2 Flooding History

4.2.1 The Gwynedd Strategic Flood Consequence Assessment (SFCA) and Preliminary Flood Risk Assessment (PFRA) have been examined for details of any past flooding. No incidences in close proximity to the works site are noted in these reports. However, these documents are prepared in support of assessing the risk to an area's main residential and employment development, and generally concentrate on flood risk to urban areas.

4.2.2 Further online searches for relevant documented flood events, identified that a major tidal breach of the Inner Cob occurred in 1927, resulting in extensive inundation of Traeth Mawr. Whilst photographs of the event are available, no documented flood levels for this tidal event could be located. Whilst the present-day inspection and maintenance regime for the Main and Inner Cob has improved considerably since that time, the event serves to indicate the potential for a breach event. NRW and previous management organisations have also invested in a series of improvements to the defences since this time.

4.2.3 Fluvial flooding (i.e. not involving a tidal breach) of the Glaslyn floodplain occurred in 2005, again, no detailed levels are available, but NRW shared aerial photographs during the consultation meeting on 06 August 2025 which showed extensive inundation of the Glaslyn floodplain.

4.3 Flood Defences

4.3.1 The settlement of Porthmadog benefits from a series of NRW formal flood defences including embankments, harbour walls and mechanical flood gates at key locations on the Afon Glaslyn and Y Cyt.

4.3.2 The Cob forms a structure across the much of the Glaslyn Estuary, it is not a tidal defence structure, but does prevent the natural inward movement of tidal water from flowing up the Glaslyn. At the western extent of The Cob, there is a bridge connecting the structure to Porthmadog Highstreet, the bridge has no tidal defence mechanisms and allows for water to bypass The Cob. At the Main Cob, the 0.94 m of defence above the estimated tidal flood level, provides a margin of protection from wave overtopping.

For the Inner Cob Crwn, the A497 Britannia Bridge shelters the inner harbour and the Cob Crwn tidal defence from the full force and fetch of the sea.

4.4 Fluvial Flooding

4.4.1 Fluvial flooding occurs when flows exceed the capacity of the watercourse, such as rivers, causing out of bank flows.

4.4.2 The Flood Map for Planning, contains NRW's information with respect to flooding. The Flood Map for Planning categorises fluvial flood risk as follows and includes an allowance for climate change:

- Flood Zone 1 (FZ1) (Low Risk) – Land assessed as having less than a 1 in 1,000 (plus climate change) annual probability of flooding from rivers or the sea (<0.1%);
- Flood Zone 2 (FZ2) (Medium Risk) – Land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (1% - 0.1%), or between a 1 in 200 and 1 in 1,000 annual probabilities of coastal flooding (0.5% - 0.1%);
- Flood Zone 3 (FZ3) (High Risk) – Land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%), or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%);

4.4.3 **Figure 4.8.C.1** shows that much of the site is within Flood Zones 2 and 3, associated with the Afon Glaslyn and the Y Cyt.

4.4.4 NRW has confirmed that the current modelling which underpins the Flood Map for Planning is in the process of being updated. The latest flood model has been provided to Arup who have used it to model the construction and operation scenarios for the Glaslyn Cable Works.

4.4.5 Arup's modelling report (GLAS-ARUP-DS-ZZ-FN-X-0011) is included within **Appendix C** and a summary of the outputs is provided here.

4.4.6 The modelling represents all temporary works occurring at once as a worst case scenario. A range of scenarios are presented covering the critical duration storms for both the Y Cyt and Glaslyn systems, across a range of flood magnitudes.

4.4.7 The general picture for all modelled scenarios for temporary works is that there is a small increase in flood extent and a minor increase in flood levels for the temporary works scenarios. This increase is on average between 0.01 m and 0.10 m in most cases the increases affect agricultural land. The exception to this is the 35.5 hour storm duration 1% event where there is a 0.01 m to 0.05 m increase in flood depth to residential receptors in Tremadog. However, no scenarios show any new residential receptors being affected. Multiple scenarios also show reductions in flood depths in the west on agricultural land to the south of the proposed access track.

4.4.8 For the scenarios showing permeant infrastructure, there is very little change in depth or extent compared to baseline for the majority of the Study Area.
The only exceptions are in the west, related to the access road. The presence of the access road being 300 millimetres (mm) above local ground levels acts to disrupt floodplain conveyance and leads to an increase in flood depth to the north of the access road, and a decrease to the south. In addition, the permanent infrastructure 9.5 hour duration scenario also show an increase in flood depth of 0.01 m to 0.10 m to residential receptors in the south of Tremadog.

4.5 Tidal Flooding

4.5.1 The Flood Map for Planning, contains NRW's information with respect to flooding. The Flood Map for Planning categorises fluvial flood risk as follows and includes an allowance for climate change:

- Flood Zone 1 (FZ1) (Low Risk) – Land assessed as having less than a 1 in 1,000 (plus climate change) annual probability of flooding from the sea (<0.1%).
- Flood Zone 2 (FZ2) (Medium Risk) – Land assessed as having between a 1 in 200 and 1 in 1,000 annual probabilities of coastal flooding (0.5% - 0.1%).
- Flood Zone 3 (FZ3) (High Risk) – Land assessed as having a 1 in 200 or greater annual probability of flooding from the sea (>0.5%).

4.5.2 NRW tidal flood risk mapping indicates that the entirety of the works site, including the Wern and Minffordd CSECs, cable route, access roads, HDD compounds and joint bay kiosks, is within Flood Zone 3[2], however the Flood Map for Planning indicates that the zone is in an area benefitting from flood defences from the sea. The extent of Flood Zone 3 spans north up the Glaslyn floodplain to Nantmore, east to the Minffordd CSEC footprint and west through Porthmadog and Tremadog to the western extent of the proposed Wern CSEC, see **Figure 4.8.C.2** for further details of the extent.

4.5.3 Although The Cob forms a structure across the much of the Glaslyn Estuary, it is not a tidal defence structure. At the western extent of The Cob, there is a bridge connecting the structure to Porthmadog Highstreet, the bridge has no tidal defence mechanisms and allows for water to bypass The Cob.

4.5.4 During large tidal events the inflow of water through western extent of The Cob can cause tide locking, preventing fluvial flows from the Glaslyn and Y Cyt systems from discharging to the sea. The combination of a large tidal event and a large fluvial event can cause water backup the Glaslyn Floodplain.

4.6 Surface Water and Small Watercourses Flood Risk

4.6.1 Surface water flooding occurs because rainwater is unable to drain away through the normal drainage systems or infiltrate into the ground. It lies on or flows over the ground instead. NRW define "High", "Medium", and "Low" surface water flood risk as:

- Flood Zone 1 (FZ1) "Low" risk means that each year, the area has a chance of flooding between 1 in 1000 (0.1%) and 1 in 100 (1%).
- "Medium" risk means that each year, the area has a chance of flooding between 1 in 100 (1%) and 1 in 30 (3.3%).
- "High" risk means that each year, this area has a chance of flooding of greater than 1 in 30 (3.3%).

4.6.2 NRW surface water flood risk extent mapping is shown on **Figure 4.8.C.3**.

4.6.3 Locations within the works site where the NRW mapping shows areas of surface water flood risk are detailed in **Table 4-1**. The table also provides details of the location (NGR), route section and whether the surface water flood zone is related to a flow path

[2] The previous version of the Flood Map for Planning which did not incorporate the impacts of climate change showed the site to be in tidal Flood Zone 2.

or watercourse. There are 47 instances of surface water flood mapping (Flood Zone 2 & 3) throughout the works site that coincide with project activities.

Table 4-1 Locations where the works site intersect NRW mapped surface water flood zones

Project Elements impacted	NGR at approximate centre of search area	Surface Water Flood Zones Intersected
Section A: Wern CSEC to A498		
Wern CSEC access road (permanent infrastructure)	SH54314017	Flood Zone 2 (flowpath)
Wern CSEC (permanent infrastructure)	SH54344019	Flood Zone 2 (flowpath)
Underground cables (construction phase)	SH54504010	Flood Zone 2 & 3 (watercourse crossing)
Underground cables (construction phase)	SH54604006	Flood Zone 2 & 3 (flowpath)
Indicative stockpiles (construction phase)	SH54644001	Flood Zone 2 (flowpath)
HDD underground cables (construction phase)	SH54743999	Flood Zone 2 (flowpath)
HDD underground cables (construction phase)	SH54803997	Flood Zone 2 & 3 (watercourse crossing)
HDD underground cables (construction phase)	SH54873993	Flood Zone 2 & 3 (flowpath)
Indicative stockpiles (construction phase)	SH54843986	Flood Zone 2 & 3 (flowpath)
HDD underground cables (construction phase)	SH54973990	Flood Zone 2 (flowpath)
HDD underground cables (construction phase)	SH55053987	Flood Zone 2 & 3 (watercourse crossing)
HDD underground cables (construction phase) Main construction compound Main construction compound access road (construction phase) Fuel tank storage (construction phase) Security gate house (construction phase) Wheel wash point (construction phase)	SH55073981	Flood Zone 2 & 3 (flowpath)

Project Elements impacted	NGR at approximate centre of search area	Surface Water Flood Zones Intersected
HDD underground cables (construction phase)	SH55103985	Flood Zone 2 & 3 (flowpath)
Indicative stockpiles (construction phase)	SH55143976	Flood Zone 2 (flowpath)
Underground cables (construction phase)	SH55253975	Flood Zone 2 (flowpath)
Underground cables (construction phase)	SH55283975	Flood Zone 2 & 3 (flowpath)
Indicative stockpiles (construction phase)	SH55293980	Flood Zone 2 & 3 (flowpath)
Construction compound Waste storage areas Canteen Server Wheel wash point Security gate house Haul road entrance/exit	SH55283971	Flood Zone 2 & 3 (flowpath)
Construction compound car parking (construction phase)	SH55343966	Flood Zone 2 & 3 (flowpath)
Section B: A498 to Porthmadog Roundabout		
Access road (construction phase)	SH55583978	Flood Zone 2 (flowpath)
Indicative stockpiles (construction phase)	SH55603966	Flood Zone 2 (flowpath)
Underground cables (construction phase) HDD underground cables (construction phase) Indicative stockpiles (construction phase)	SH55723970	Flood Zone 2 & 3 (extensive flowpath)
Underground cables (construction phase) and joint bay	SH56103972	Flood Zone 2 (flowpath)
Underground cables (construction phase) Indicative stockpiles (construction phase) Access road (construction phase)	SH56283969	Flood Zone 2 & 3 (flowpath)

Project Elements impacted	NGR at approximate centre of search area	Surface Water Flood Zones Intersected
Underground cables (construction phase)	SH56313968	Flood Zone 2 & 3 (watercourse crossing)
Underground cables (construction phase)	SH56353966	Flood Zone 2 & 3 (flowpath)
Access road (construction phase)	SH56563959	Flood Zone 2 (flowpath)
Underground cables (construction phase)	SH56613962	Flood Zone 2 (flowpath)
Underground cables (construction phase)	SH56643960	Flood Zone 2 (flowpath)
Section C: Porthmadog Roundabout to Snowdon Street		
Access road (construction phase)	SH56683951	Flood Zone 2 & 3 (flowpath)
Underground cables (construction phase)	SH56713954	Flood Zone 2 & 3 (watercourse crossing)
Indicative stockpiles (construction phase)	SH56793953	Flood Zone 2 & 3 (flowpath)
Indicative stockpiles (construction phase)	SH57163952	Flood Zone 2 & 3 (flowpath)
Underground cables (construction phase) Access road (construction phase)	SH57403953	Flood Zone 2 (flowpath)
Underground cables (construction phase)	SH57603953	Flood Zone 2 & 3 (flowpath)
Section D: Afon Glaslyn Crossing		
Underground cables (construction phase)	SH57743954	Flood Zone 2 (watercourse crossing)
Underground cables (construction phase)	SH57853954	Flood Zone 2 & 3 (watercourse crossing)
Underground cables (construction phase)	SH58103947	Flood Zone 2 & 3 (watercourse crossing)
Construction compound (construction phase) HDD drive locations/drilling rig (construction phase)	SH58463925	Flood Zone 2 & 3 (watercourse)
HDD underground cables (construction phase)	SH58513907	Flood Zone 2 (watercourse crossing)

Project Elements impacted	NGR at approximate centre of search area	Surface Water Flood Zones Intersected
HDD underground cables (construction phase)	SH58523894	Flood Zone 2 (watercourse crossing)
HDD underground cables (construction phase)	SH58543883	Flood Zone 2 (watercourse crossing)
HDD underground cables (construction phase)	SH58783870	Flood Zone 2 & 3 (flowpath)
HDD underground cables (construction phase)	SH58943857	Flood Zone 2 & 3 (flowpath)
HDD compound (construction phase)	SH59053849	Flood Zone 2 (watercourse)
Indicative stockpiles (construction phase) Access roads (construction phase)	SH59203855	Flood Zone 2 & 3 (watercourse)
Section E: Minffordd CSEC		
EVIP Tunnel headhouse– adjacent to proposed Minffordd CSEC	SH59423866	Flood Zone 2 & 3 (watercourse)

Surface water flood risk

4.6.4 The development of Minffordd CSEC, footprint of the Wern CSEC extension, construction compounds and access tracks have the potential to increase the overall extent of lower permeability surfaces within the works site. In the absence of effective surface water management measures, this could lead to an increase in peak runoff rates and increase flood risk for downstream receptors, either via uncontrolled discharges into the watercourse network, or by overland flow.

4.6.5 Along sections of the route, the soil is prone to waterlogging which may pose a risk when trafficking and working within the works site. Impacts of compaction and the creation of tyre track ruts have been considered. Compaction has the potential to exacerbate the surface water flooding issue by reducing infiltration and soil storage. Ruts have the potential to act as preferential flow paths, particularly if directed downslope which may pose a flood hazard elsewhere if runoff is routed from a site.

4.6.6 If uncontrolled, discharges to watercourses could locally, along with other factors, increase the risk of flash flooding due to the rapid discharge of surface water that otherwise would have been attenuated as natural overland flow and the proportion of that runoff that would have been subject to infiltration. Uncontrolled overland flow could also impact local receptors without entering the stream network.

4.7 Groundwater

4.7.1 British Geological Survey (BGS) geology mapping indicates that the bedrock geology underlying the land around the two CSECs and cable route is the Dol-cyn-afon Formation, comprised of mudstones and siltstones, with siltstone of the Nant Ffrancon formation underlying the central Afon Glaslyn floodplain. The two compounds are located on the edge of a superficial layer of alluvium (clay, silt, sand and gravel), associated with the former tidal marshes.

4.7.2 BGS aquifer mapping[3] indicates that the superficial geology is classified as a Secondary A aquifer "permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers". The bedrock geology is classified as a Secondary B aquifer: "predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering".

4.7.3 Available data indicates that whilst some groundwater may emerge in the vicinity of the existing CSECs, especially on account of the superficial geology, and the CSECs locations at the break in slope between the surrounding hills and the flat low-lying marshes. However, the impacts of groundwater that may emerge are unlikely to be significant. At both sites, the local topography is such that emergent groundwater would not accumulate at the sites, and would drain towards adjacent lower-lying land.

4.7.4 In contrast, in the low lying areas (cable route and the footprint of the proposed CSEC compound extensions) groundwater would be expected to emerge into the excavated trenches/areas. On the basis that appropriate equipment, dewatering and trench support will be utilised for the construction phase the risk is minor and manageable.

4.8 Artificial Sources of Flood Risk

Sewer

4.8.1 Because of the generally rural location of the proposals, the risk from sewer flooding to the infrastructure is limited.

4.8.2 The risk to the proposed infrastructure will be minimal since the CSECs are set slightly above the surrounding lower lying marshes, indicating that flow pathways would be away from the sites, rather than allowing water to accumulate at the sites. Once constructed, the cable route is not considered vulnerable to flooding on the basis that it will be waterproof once installed. In addition, the proposed design levels for other sources of flood risk will provide protection against this source of flood risk.

Reservoir

4.8.3 The NRW reservoir flood mapping indicates that no areas of the works site are at flood risk from reservoir impoundment failure.

Other

4.8.4 No canals are present in the vicinity of the works site.

[3] See: http://mapapps2.bgs.ac.uk/geoindex/home.html

5. Mitigation Measures

5.1.1 This section of the report outlines flood risk mitigation measures included as part of the proposed works.

- During Construction the HDD compounds have been designed to have a suitable freeboard to the 1% AEP event plus climate change to ensure that they will remain dry in the event of a flood. The design levels and freeboards are included in **Appendix C**.
- A drainage strategy for the permanent infrastructure is to be provided. This may involve site design and landscaping features to redirect surface water flows away from key electrical infrastructure. This would also include the implementation of site drainage in the form of SuDS to facilitate the removal of surface water, ensuring there is no increase in flood risk to offsite receptors.
- For all link boxes, the flood modelling has been used to set a design level of the earthworks and plinth to ensure there is a 40 to 60 mm freeboard to the design flood plus climate change.
- During construction, a flood evacuation plan will be in place with safe egress to the east or west via the A487 or A497. The Site manager (or appropriate person) will sign up to receive NRW flood warnings and evacuate all personnel upon receipt of one.
- The infrastructure is typically unstaffed in operation and any risks to people or the water environment can be appropriately managed. If a flood warning is received, no personnel will attend site to undertake operation or maintenance activities.
- Waterproof seals, and cable entry protections can reduce the risk of water ingress into electrical equipment. Electrical equipment can also be stored in elevated enclosures that are waterproofed.

5.1.2 Further mitigation measures are currently being modelled to manage the minor increased in flood level elevation to a small number of residential receptors, these are discussed further in **Section 6.9** of this report.

6. Requirements of Technical Advice Note 15 (2025)

6.1 Overview

6.1.1 This report assesses the suitability of the proposed development against the requirements of the 2025 edition of Technical Advice Note 15 (TAN15). This section outlines the risks identified in the report and explains the steps required for the development to comply with current legislation.

6.1.2 According to the Flood Map for Planning the site is situated within fluvial Flood Zones 2 and 3, tidal Flood Zone 3 and surface water and small watercourses Flood Zones 2 and 3.

6.1.3 The proposed development being utilities infrastructure is classified as ‘Less Vulnerable’ under TAN 15. According to Section 10 of TAN15, Less Vulnerable developments are conditionally acceptable in or on greenfield sites in Zone 3 whereas all developments are generally permissible in fluvial Flood Zone 1/2. Therefor if the proposed development is able to be judged to be in accordance with the criteria set out in Section 11.4 and 11.5 of TAN15 it can be judged to be acceptable.

6.2 Fluvial Flooding

6.2.1 The effect of the temporary works and permanent infrastructure within the floodplain has been modelled. The modelling currently shows a small increase in flood depths across agricultural land, and a minor increase in flood depth to residential receptors in the south of Tremadog. No new residential flood risk receptors are shown to be affected as a result of the works.

6.2.2 The modelling has also been used to set design levels for the temporary and permanent works to ensure that they are able to stay dry during flood events.

6.3 Tidal Flooding

6.3.1 The entire site is in tidal Flood Zone 3, however, it is in area shown to be designated as benefitting from defences from the sea reducing the risk from this source of flooding. According to the Flood Map for Planning these defences have a standard of protection from a 1 in 200 year event. In the present day fluvial flood risk is the worst form of flooding at the site, mitigation measures have been included to protect the permanent works, it is anticipated that these will be sufficient to protect from tidal flooding given the defended nature of the site and that the design life is shorter than the climate change epoch shown on the Flood Map for Planning.

6.4 Surface water and small watercourses flood risk

6.4.1 The proposed development is outlined to be at risk from surface water and small watercourses. Permanent infrastructure has been raised above the modelled fluvial

flood levels and in this instance also will be suitably raised above the pluvial flood depths.

6.4.2 In addition, the CSECs will incorporate SuDS which will ensure that the increase in impermeable area does not result in any increase in flood risk to off-site receptors.

6.5 Access, Egress and Evacuation

6.5.1 The permanent infrastructure (once operational) will primarily be unmanned. Due to the location of the development, safe access and egress will be available to the west and east via the A487 or A497. No personnel shall access any part of the proposed development if flooding is occurring, or if an NRW flood warning is received.

6.6 Awareness of Flood Risk

6.6.1 The site is within the NRW Glaslyn and Dwyryd catchment flood warning area. The exact period of advance warning notwithstanding, notice should be available prior to an extreme event and a Flood Action Plan can be developed to manage safe refuge/evacuation and reoccupation. Awareness of flood risk can be addressed within the Flood Action Plan and can include emergency notices posted next to fire notices to be accessible to all site users, inducting new employees and practice drills. Those responsible for the site and all site users should be encouraged to sign up to NRW's flood line service (0345 988 1188).

6.7 Groundwater

6.7.1 Based on the location, design and the existing nature of the site the risk of groundwater flooding has been preliminary assessed as medium. The development platforms will be raised above the existing ground levels to accommodate the overland flow in the area and groundwater is unlikely to impact on the development.

6.8 Reservoir, Sewer, Highways and Artificial sources Flood Risk

6.8.1 The risk of flooding from these sources is low – negligible.

6.9 TAN 15 acceptability & development advice

6.9.1 The assessment of flood risk has been undertaken based on the latest information available at the time of reporting, consisting of the flood modelling outputs reported in document GLAS-ARUP-DS-ZZ-FN-X-0011, dated 08 July 2025.

6.9.2 As the modelling shows a small increase in flood depth to residential receptors in Tremadog and surrounding agricultural land, this report is unable to conclude that the requirements of TAN15 are met by the Glaslyn Cable Works at this time.

6.9.3 However, following consultation with NRW (06 August 2025) the discussed mitigation approaches are being pursued. These comprise:

- Lowering the permanent access road to Wern CSEC (currently designed to 300 mm). Two scenarios will be modelled, these being at existing ground level and a height of 100 mm.

- In the construction phase, all temporary works (ramps, access road and compounds) will be sufficiently designed with conveyance pipes so as not to act as a barrier to flood water movement across the floodplain.
- Finally, conveyance pipes can be placed passing through the temporary HDD compounds themselves if needed, with suitable part-raising of internal ground levels to maintain access/construction activities within the compound.

6.9.4 These mitigations were discussed with NRW and are currently being modelled in order to confirm their effectiveness. While the modelling results have not been completed at the time of reporting, they will be included as supplementary environmental information during the planning process. When this information is submitted, it will be accompanied by justification that the scheme is aligned with the acceptability criteria in TAN15 and Planning Policy Wales.

6.9.5 Under Section 11.4 of TAN15 the following points are noted:

i. The available modelling currently shows a small increase in flood depths to residential receptors and agricultural fields. Noting these receptors are also shown to be subject to flooding under baseline conditions .

ii. Occupiers aware of flood risk

iii. Escape/evacuation routes present

iv. Flood emergency plans and procedures will be agreed and in place

v. Flood resistant and resilient design

vi. Acceptable consequences for type of use.

6.9.6 This report provides sufficient information on access and flood warnings for these acceptability criteria to be understood.

6.9.7 Section 11.5 of TAN15 notes that if required, mitigation measures should be incorporated into the design to make it as safe as possible and that there is:

- Minimal risk to life;
- Minimal disruption to people living and working in the area;
- Minimal potential damage to property;
- Minimal impact of the Proposed Development on flood risk generally; and
- Minimal disruption to natural heritage.

6.9.8 This report sets out the risks as currently understood and makes a clear number of recommendations to further mitigate this residual risk.

6.9.9 This report provides sufficient information for the majority of acceptability criteria to be addressed.

Bibliography

Ref 1.1 - Welsh Government (2024) Planning policy Wales. (Online). Available at: https://www.gov.wales/planning-policy-wales. Accessed August 2025.

Ref 1.2 - Welsh Government (2025). Technical Advice Note (TAN) 15. (Online). Available at: https://www.gov.wales/technical-advice-note-tan-15-development-flooding-and-coastal-erosion. Accessed August 2025.

Ref 1.3 – Natural Resources Wales (2025). Flood map for planning. (Online). Available at: https://naturalresources.wales/flooding/flood-map-for-planning/?lang=en. Accessed August 2025.

Ref 1.4 - Welsh Government (2021). Climate change allowances and flood consequence assessments. (Online). Available at: https://www.gov.wales/climate-change-allowances-and-flood-consequence-assessments. Accessed August 2025.

Ref 1.5 – UK Government (2010). Drainage and waste disposal: Approved Document H. (Online). Available at: https://www.gov.uk/government/publications/drainage-and-waste-disposal-approved-document-h. Accessed August 2025.

Ref 1.6 – WaterUK (2013). Sewer for Adoption. (Online). Available at file:///C:/Users/UKHMS775/Downloads/SFA7smalldev%20sep2013%20(1).pdf. Accessed August 2025.

Ref 3.1 – Met Office (2025). Location-specific long-term averages. (Online). Available at: https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-averages/gcmh6hkcz. Accessed august 2025.

Ref 3.2 – BGS (2025). Groundwater vulnerability mapping (Online). Available at: https://mapapps2.bgs.ac.uk/geoindex/home.html?_ga=2.242149378.1820886392.1712652538-1517499660.1712652538. Accessed August 2025.

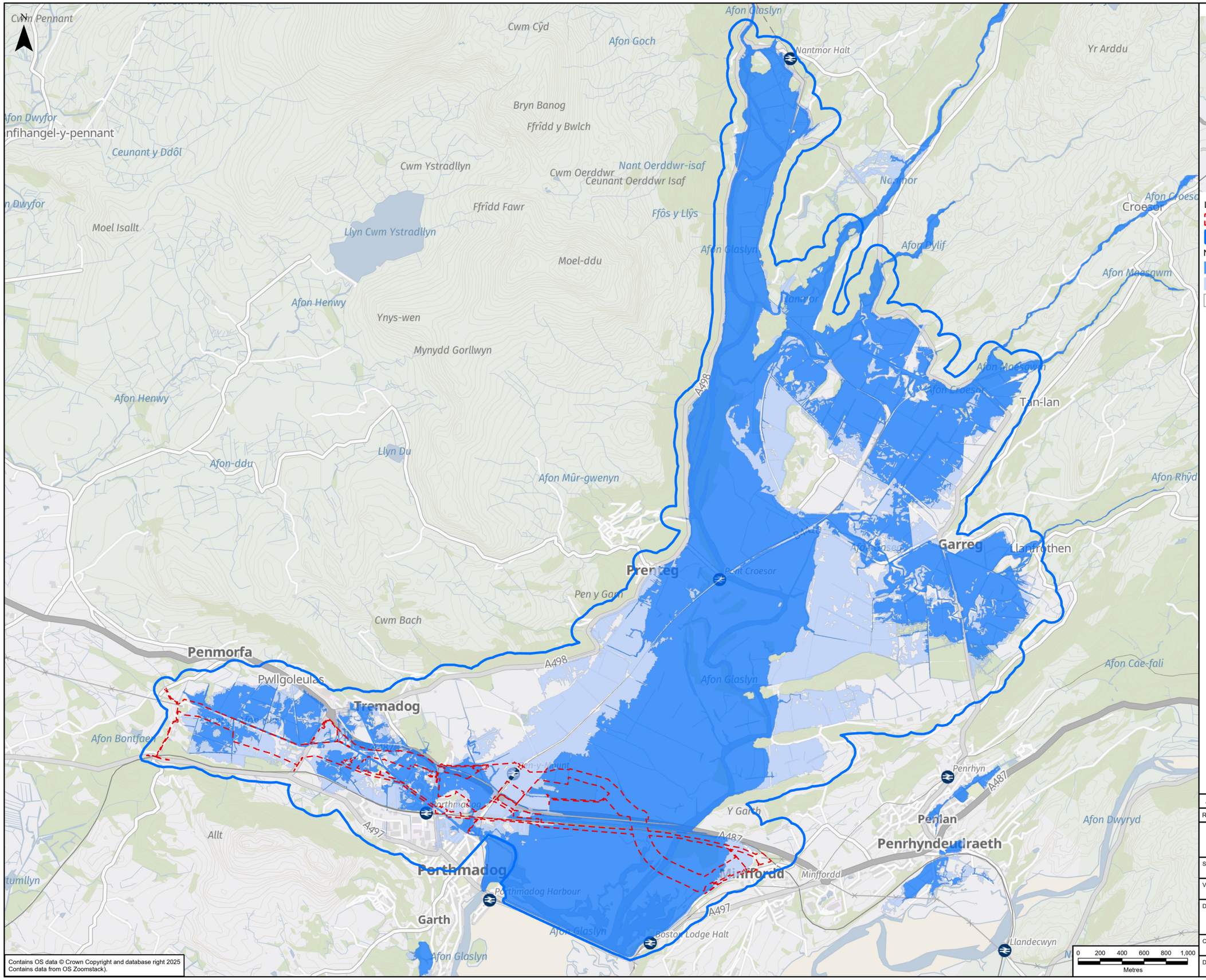
Ref 3.3 – LandIS (2025). Soilscapes Viewer. (Online). Available at: https://www.landis.org.uk/soilscapes/. August 2025.

Appendix A Figures

Figure 4.8.C.1: Fluvial Flood Risk

Figure 4.8.C.2: Tidal Flood Risk

Figure 4.8.C.3: Surface Water Flood Risk



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nationalgrid

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GLASLYN CABLE WORKS

Legend
- Works Site Boundary
- Zone of Influence

NRW Flood Risk from Tidal Water
- Flood Zone 3
- Flood Zone 2
- Flood Zone 1

Rev	Date	Description	GIS	Chk	App
A	13/08/2025	Flood Condition Assessment	JP	HS	RB

nationalgrid

Scheme: GLASLYN CABLE WORKS

Volume:

Document Title:
FIGURE 4.8.C.2
TIDAL FLOOD RISK

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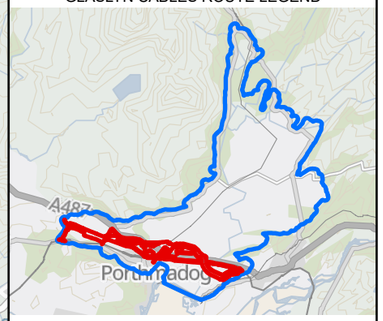
GLASLYN CABLES ROUTE LEGEND



Legend

- Works Site Boundary
- Zone of Influence

NRW Flood Risk from Surface Water

- Flood Zone 3
- Flood Zone 2
- Flood Zone 1

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Scheme: GLASLYN CROSSING

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SURFACE WATER FLOOD RISK

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Appendix B Planning Policy Wales vulnerability testing and Technical Advice Note 15 (2025)

The following legislation is relevant to Water Quality, Resources and Flood Risk

The general approach of the Planning Policy Wales (PPW), now supported by the Technical Advice Note 15 (TAN15) 2025 (Ref 1.2), is to follow a precautionary framework approach when determining the suitability of land for development in flood risk areas, with the intention of steering development away from areas of high risk of flooding to the lowest flood risk areas.

In Flood Zone 2 - Planning applications in Zone 2 require careful consideration and must be consistent with the acceptability considerations set out in section 11 (TAN 15) (Ref 1.2). They must also be accompanied by a FCA which clearly describes the flood risk and the risks must be acceptable. Applications for new highly vulnerable development on greenfield land are only appropriate where the site has been allocated in adopted Development Plans.

In Flood Zone 3 - Planning applications in Zone 3 require the strongest justification. No new highly vulnerable development on greenfield land should be permitted in zone 3 regardless of the conclusion of any Flood Consequences Assessments and NRW will not consider these conclusions. Welsh Ministers must be notified of any such proposal a planning authority intends to approve.

Where development has to be considered in high-risk areas (Flood Zone 3) only those developments which can be justified on the basis on the tests outlined in Section 6 and Section **Error! Reference source not found.** of the TAN15 guidance (Ref 1.2) are to be located within such areas.

Table B-1 TAN15 (Ref 1.2) guidance confirms the ‘Flood risk vulnerability classification’ of a site, depending on the proposed usage. This classification is subsequently applied to Flood Map for Planning containing three fluvial flood zones (1, 2 and 3 with additional information on Defended Zones) to determine whether:

The proposed development is suitable for the zone in which it is located; and

The appropriate planning tests have been demonstrated in relation to the proposed development.

In line with TAN15 (2025) (Ref 1.2), the development category for the works is Less Vulnerable Development, which includes energy infrastructure (not associated with Power Plants). In line with Section 10 of TAN15 (Ref 1.2), highly vulnerable development is acceptable in Flood Zones 2 subject to the application of the acceptability of consequences. Proposals which are essential to the Development Plan Strategy to regenerate an existing settlement or achieve key economic or environmental objectives and located in Flood Zone 3 may be considered appropriate if the potential consequences from flooding have been considered and found to be acceptable.

No new highly vulnerable development on greenfield land should be permitted in Zone 3.

6.9.10 **Table B-1 – Extract of TAN15 Figure 4 Development Vulnerability Categories (Source: TAN15 2025 (Ref 1.2), accessed May 2025)**

Vulnerability category	Types
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 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.

Acceptability Criteria

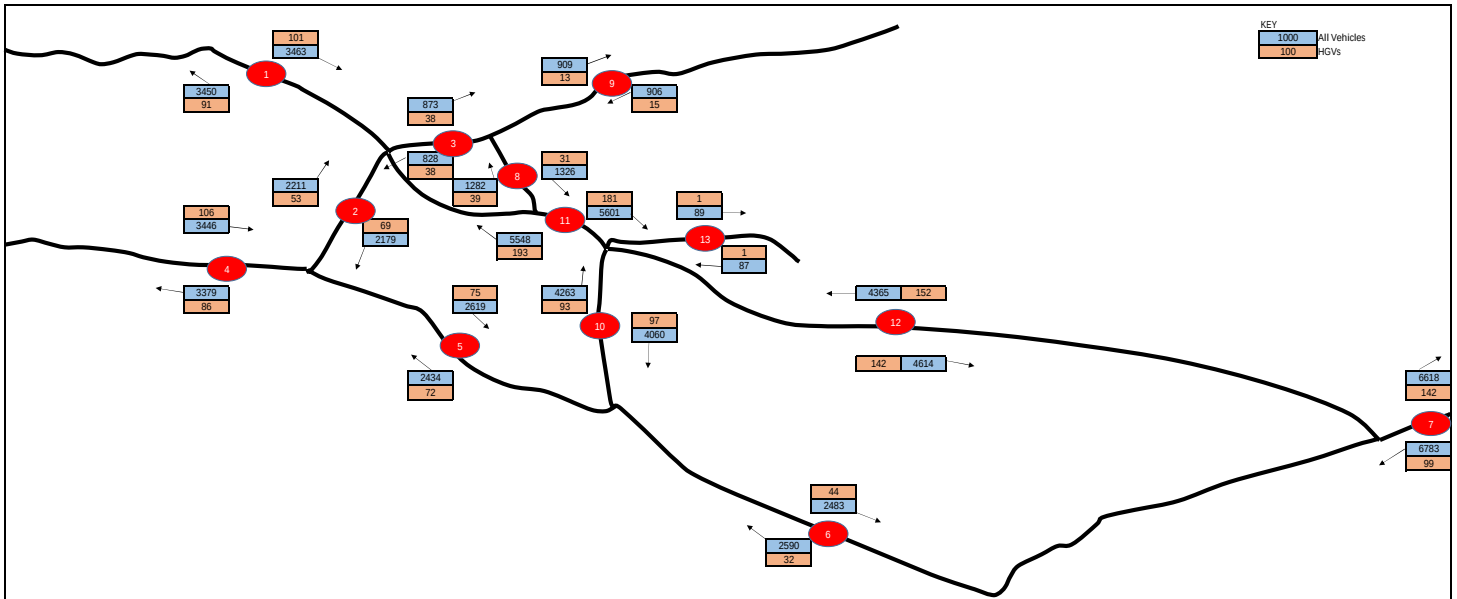
To satisfy the acceptability criteria of the assessment of flood consequences, the following conditions should be satisfied:

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

- Acceptable consequences for type of use
- 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
- minimal disruption to the sustainable management of natural resources

Appendix C – Flood Modelling Report

Flood Modelling Report



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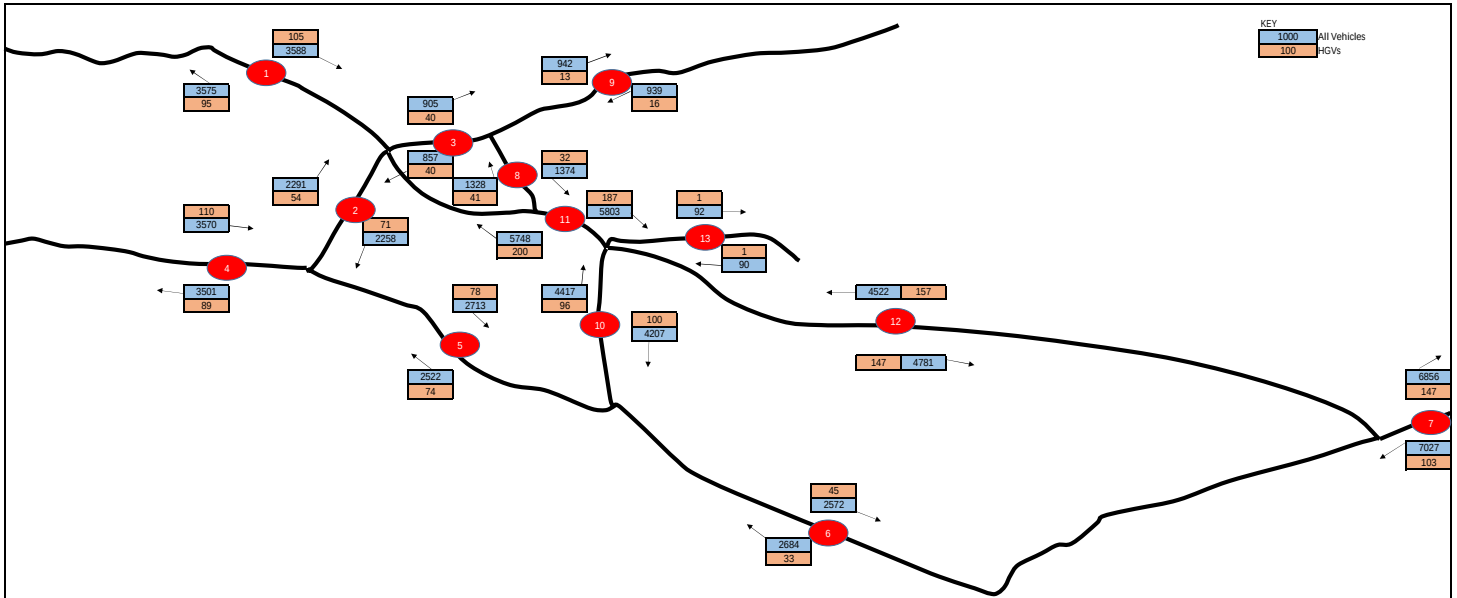

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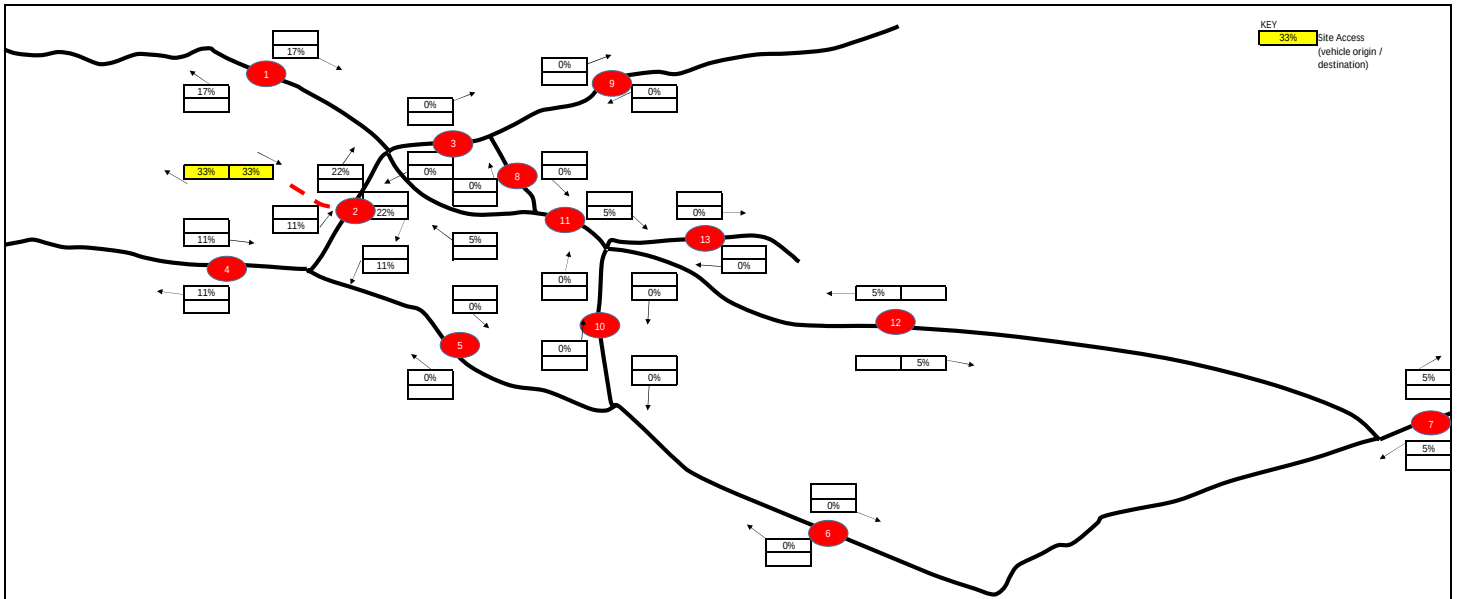

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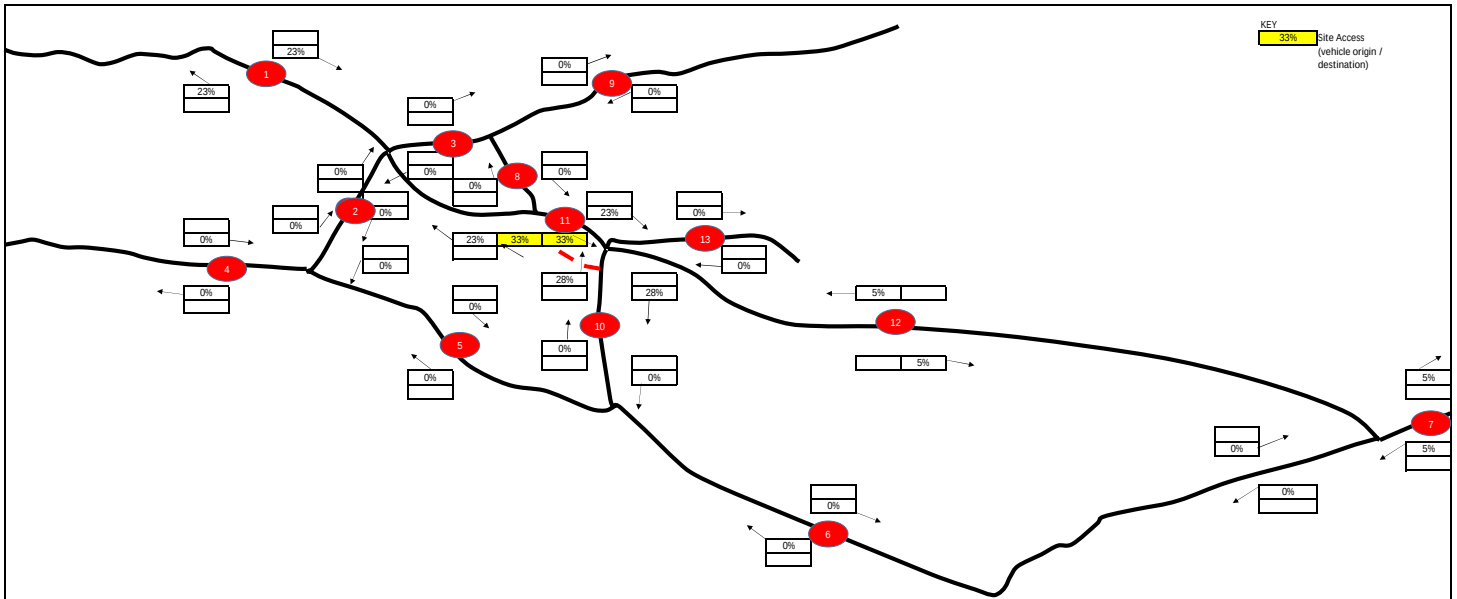

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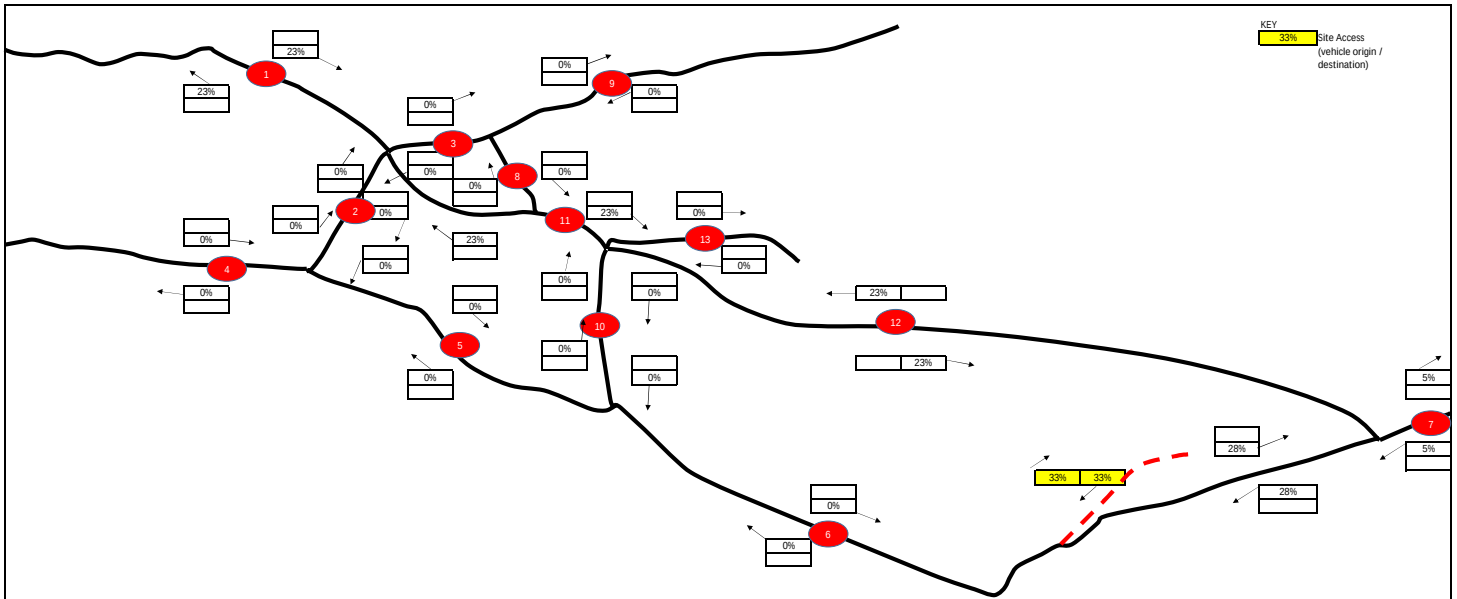

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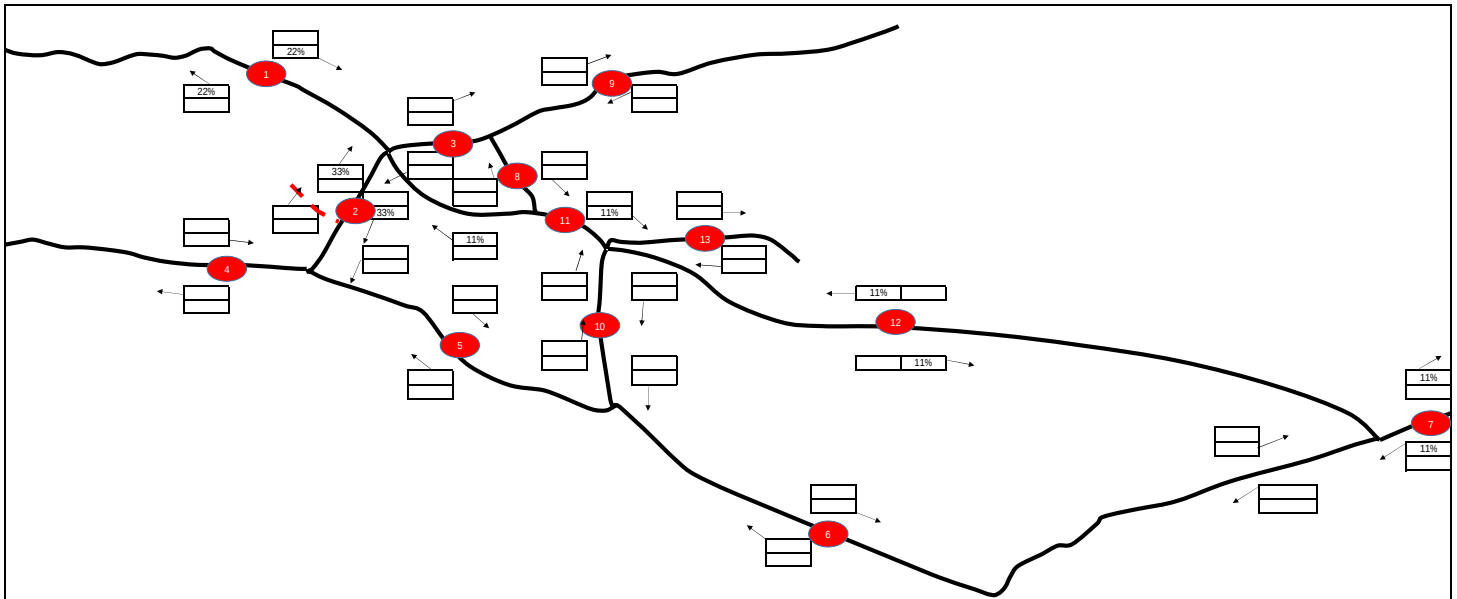

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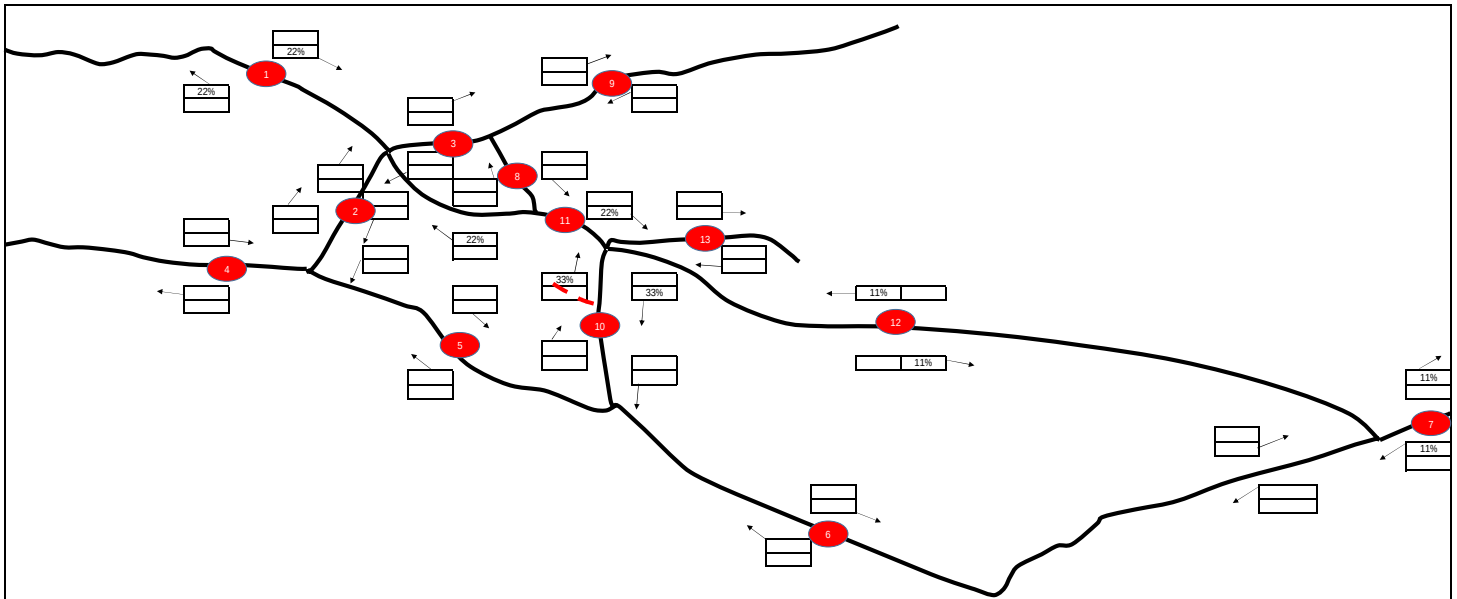

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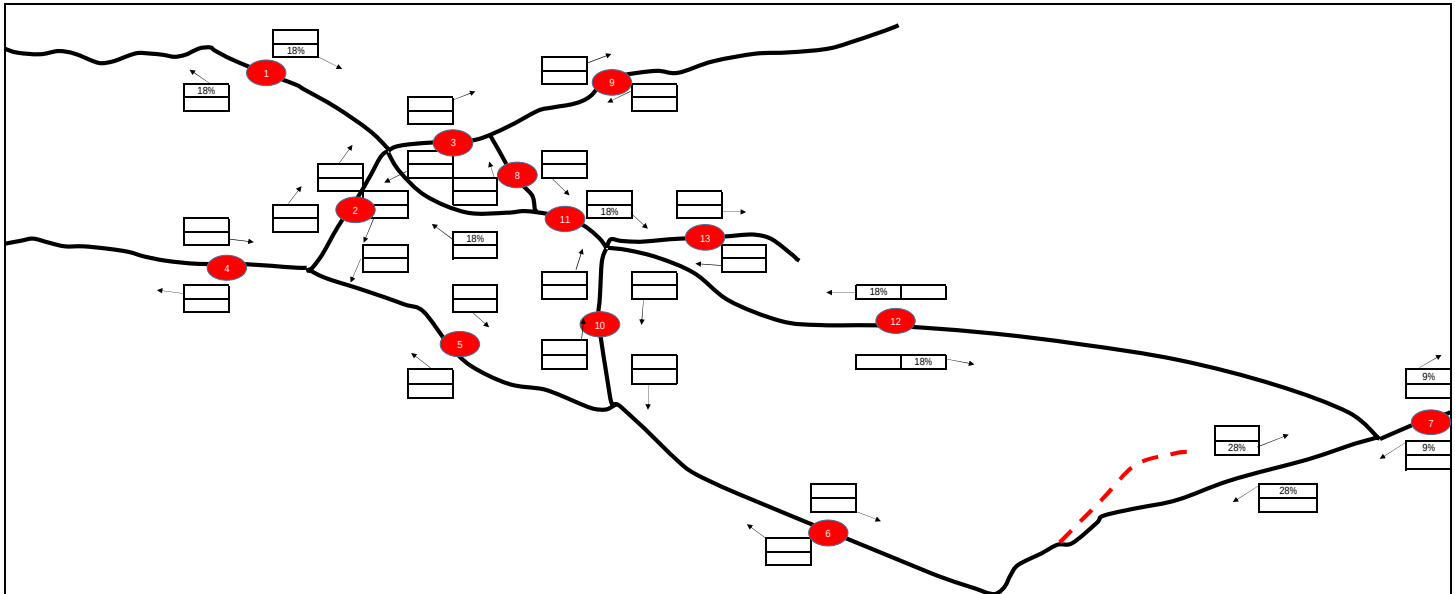
						Approved	MR



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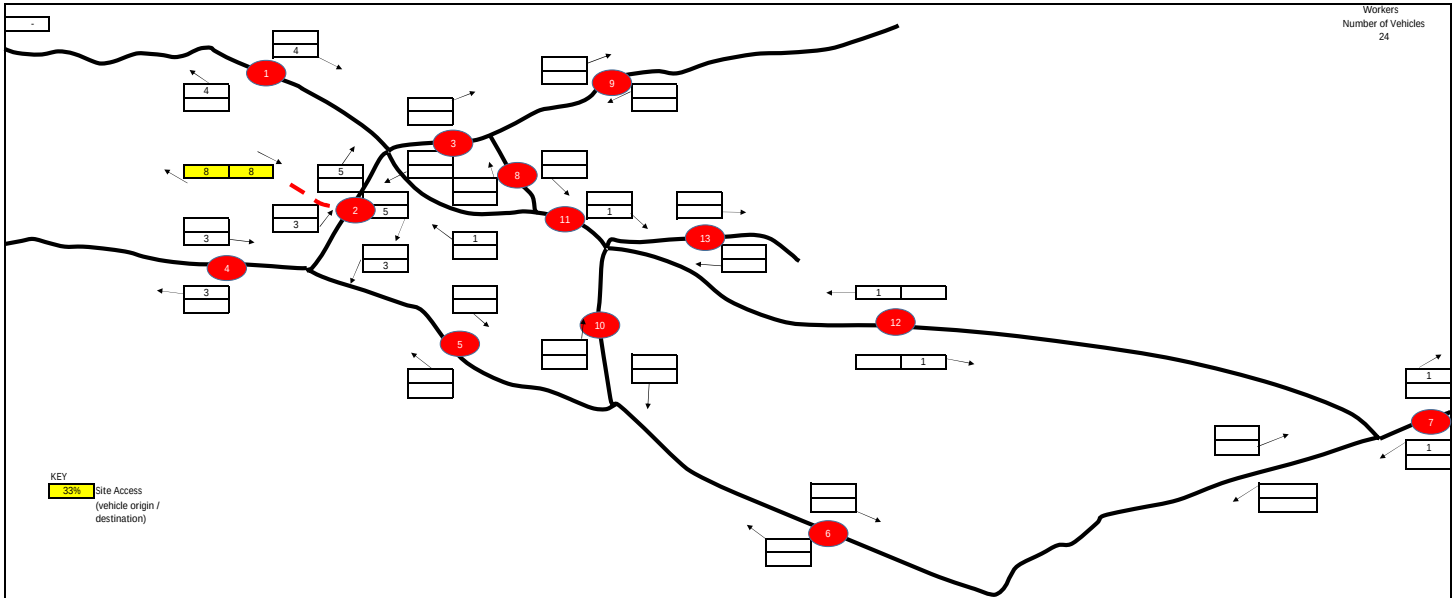
						Checked	AS
						Approved	MR



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National Grid	PTR - Glaslyn	Worker Assignment Site Access Point 1	AECOM	60686216	A	Date	11.09.25
						Design	FM
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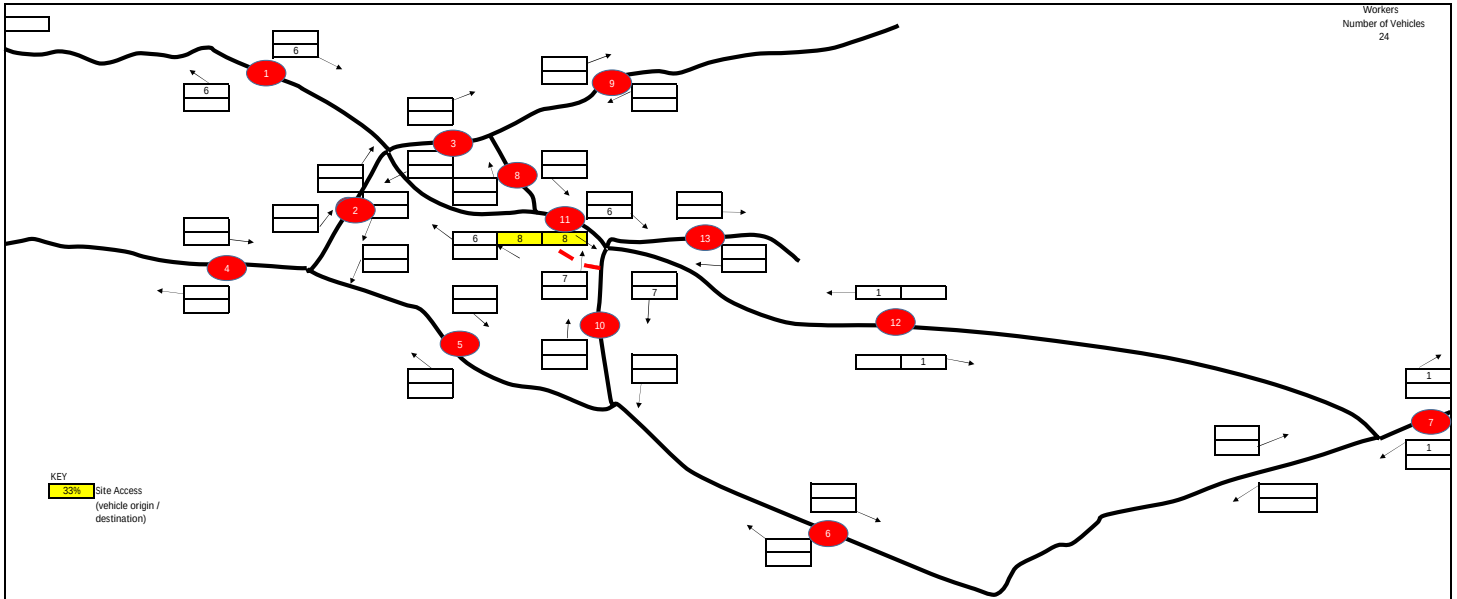
						Approved	MR



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National Grid	PTR - Glaslyn	Worker Assignment Site Access Point 2	AECOM	60686216	A	Date	11.09.25
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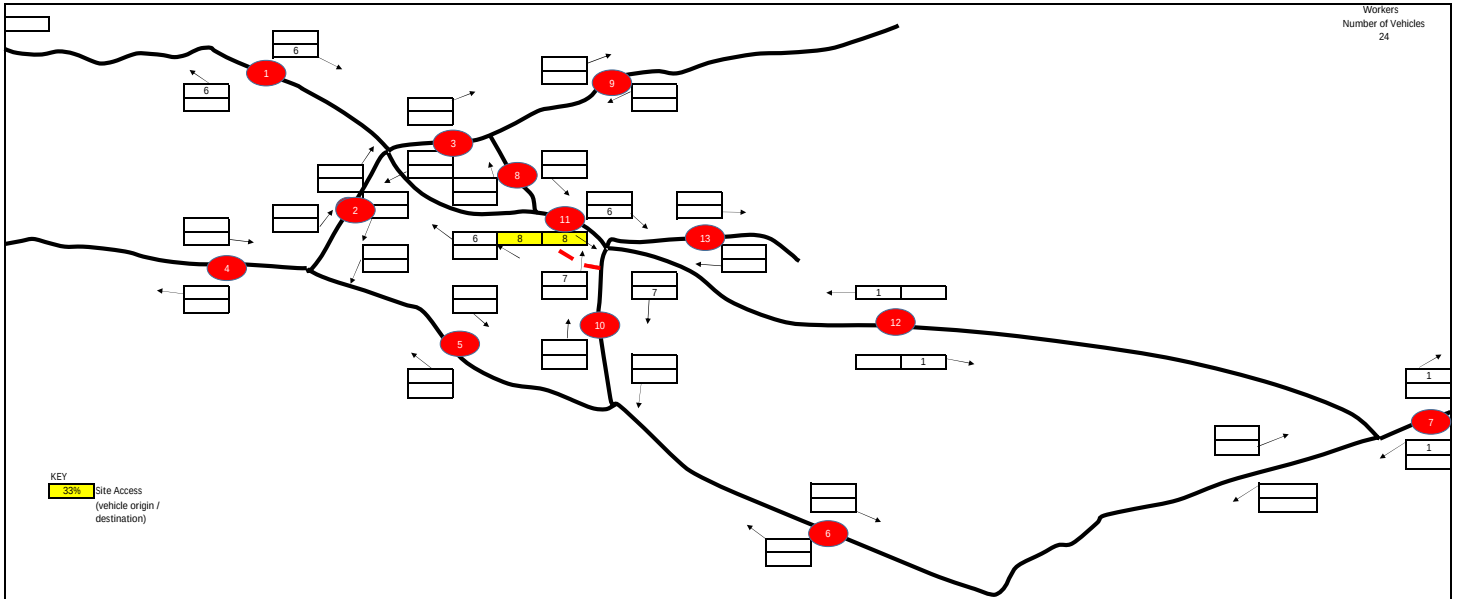
						Approved	MR



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National Grid	PTR - Glaslyn	Worker Assignment Site Access Point 2	AECOM	60686216	A	Date	11.09.25
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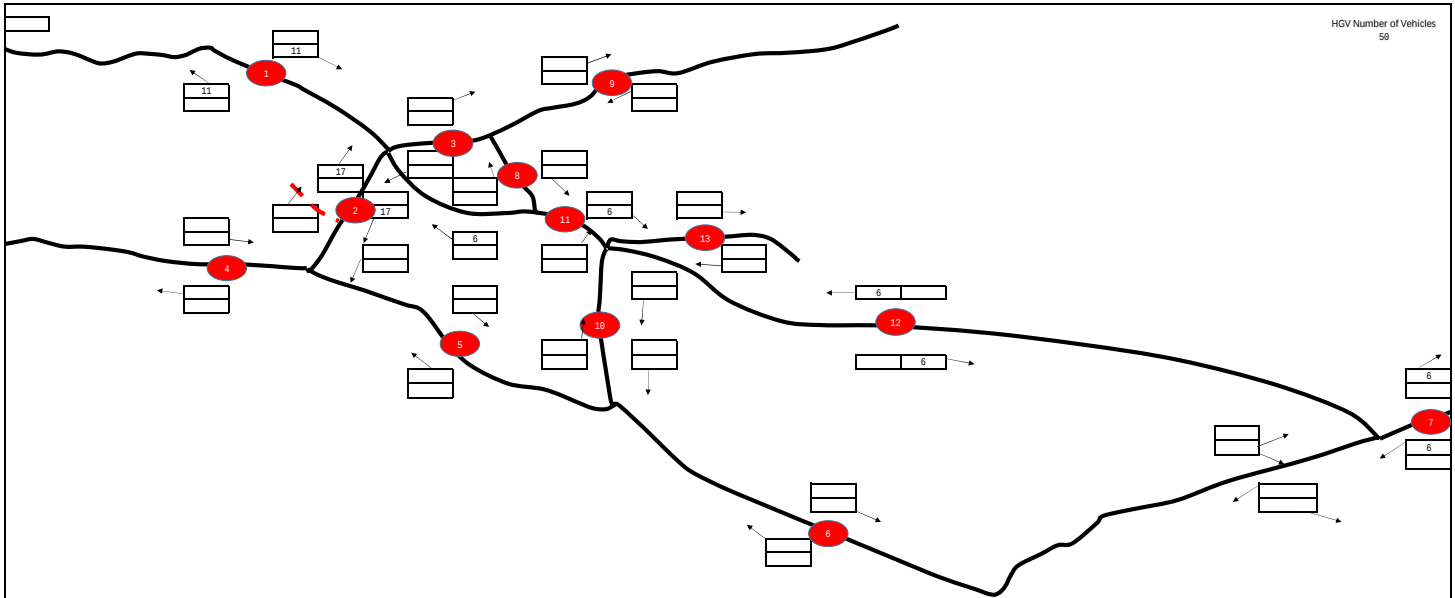
						Approved	MR



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National Grid	PTR - Glaslyn	HGV Distribution Site Access Point 1	AECOM	60686216	A	Design	FM
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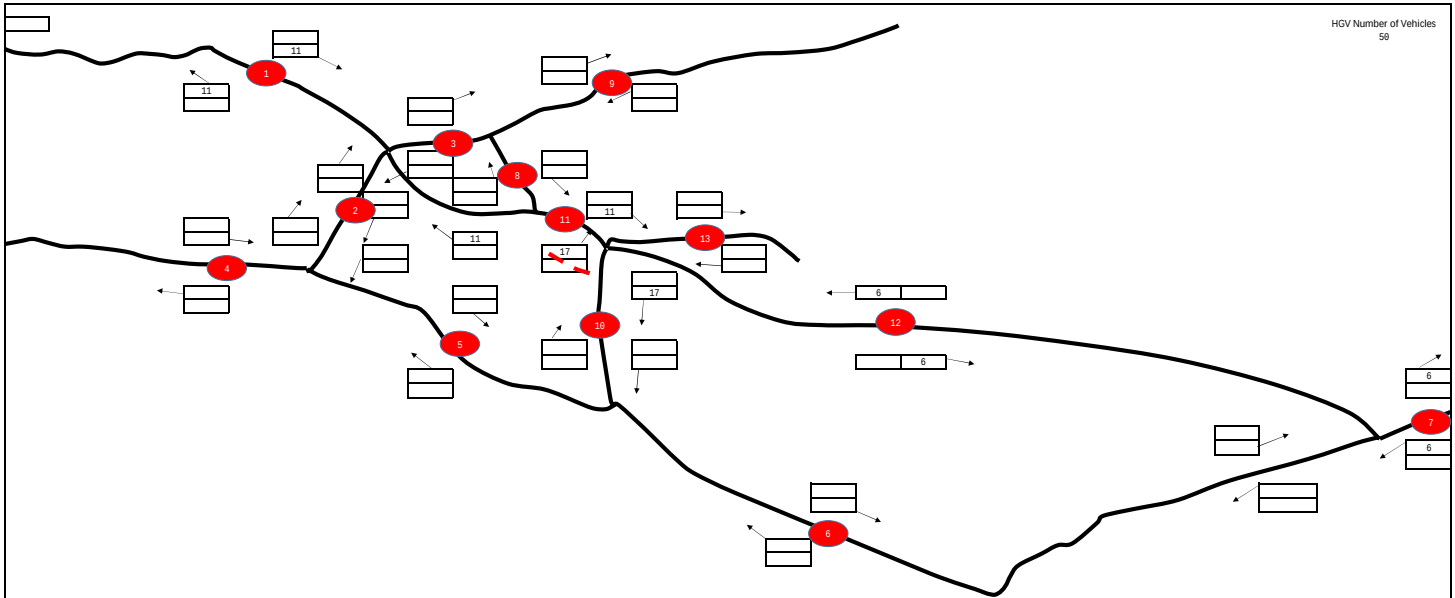
						Approved	MR



Client:	Project:	Title:		Project Number:	Rev		
National Grid	PTR - Glaslyn	HGV Distribution Site Access Point 2	AECOM	60686216	A	Date	11.09.25
						Design	FM
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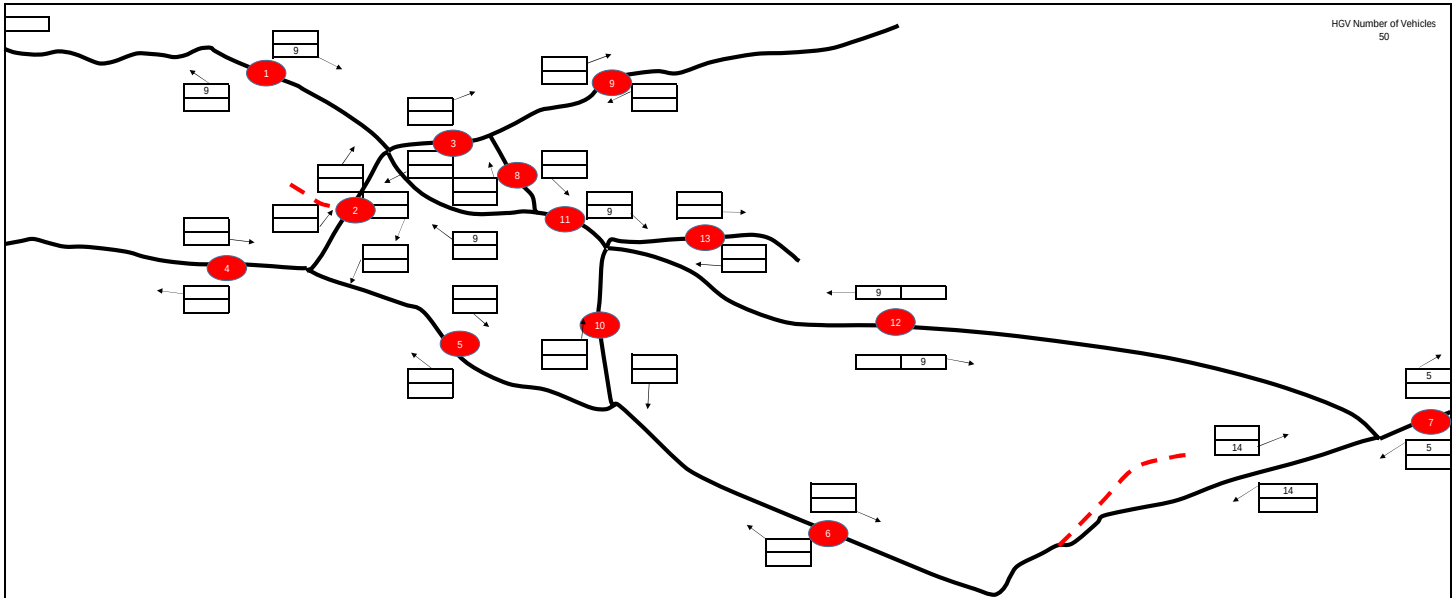
						Approved	MR



Client:	Project:	Title:		Project Number:	Rev		
National Grid	PTR - Glaslyn	HGV Assignment Site Access Point 3	AECOM	60686216	A	Date	11.09.25
						Design	FM
						Checked	AS
						Approved	MR

, A487

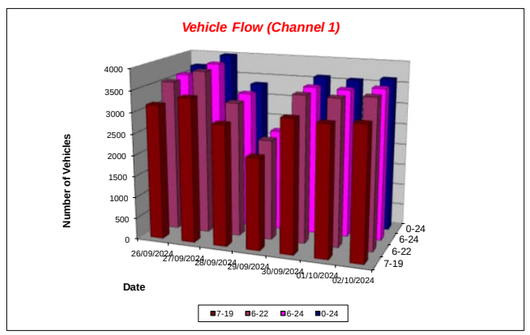
ices Ltd.

Porthmadog ATC 1, A487

Produced by Road Data Services Ltd.

Channel 1 - Eastbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	11	16	19	7	3	4	9	9	10
2	9	6	11	11	8	4	3	6	7
3	13	5	8	5	18	4	3	9	8
4	5	5	6	5	2	4	6	4	5
5	10	14	11	8	13	18	8	13	12
6	46	46	32	15	60	51	46	50	42
7	139	129	50	38	141	144	165	144	115
8	234	208	71	60	263	258	250	243	192
9	403	355	201	93	391	362	367	376	310
10	301	352	319	166	279	316	274	304	287
11	261	261	295	212	239	260	259	256	255
12	234	292	285	242	217	210	228	236	244
13	250	250	285	293	222	208	225	231	248
14	237	277	248	203	233	241	240	246	240
15	257	293	242	223	259	237	248	259	251
16	242	318	232	203	275	224	247	261	249
17	285	278	258	199	292	301	275	286	270
18	270	296	241	147	274	276	294	282	257
19	182	195	160	110	152	147	189	173	162
20	117	163	122	77	100	112	95	117	112
21	89	104	95	63	72	90	95	90	87
22	55	73	59	29	45	52	60	57	53
23	30	37	51	18	26	18	33	29	30
24	15	19	24	14	10	22	14	16	17
7-19	3156	3375	2837	2151	3096	3040	3096	3153	2964
6-22	3556	3844	3163	2358	3454	3438	3511	3561	3332
6-24	3695	3992	3325	2441	3594	3563	3633	3605	3379
0-24	3695	3992	3325	2441	3594	3563	3633	3695	3463



Porthmadog ATC 1, A487

Produced by Road Data Services Ltd.

Channel 1 - Eastbound — Average Speed — Week 1

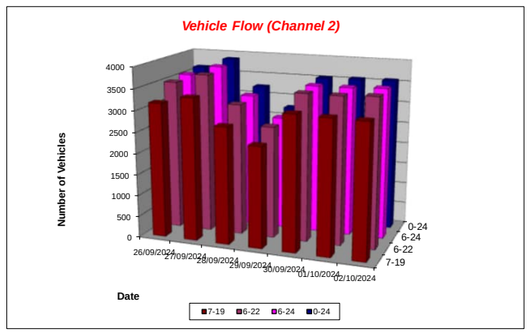
Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	35.5	33.4	34.6	31.9	39.0	31.0	34.0
2	33.8	35.2	32.3	31.2	32.8	32.1	38.5
3	35.9	34.7	35.2	37.0	34.8	30.0	25.9
4	31.6	33.4	34.6	37.4	36.3	36.0	30.9
5	36.8	37.1	38.0	35.8	30.4	28.7	35.2
6	33.4	34.4	31.9	32.4	31.8	32.9	32.8
7	29.5	31.8	31.5	33.3	29.9	29.3	30.7
8	29.3	29.8	30.7	29.7	27.7	28.0	28.3
9	27.7	27.5	28.6	29.7	26.6	26.0	26.1
10	25.9	25.9	26.4	27.6	25.4	24.2	26.1
11	26.5	26.3	25.9	26.5	27.0	25.6	26.1
12	27.2	25.5	25.9	27.7	27.2	25.8	25.3
13	26.4	27.5	27.7	25.2	26.4	26.5	26.3
14	27.6	26.5	26.7	26.6	27.0	25.3	25.6
15	26.3	26.3	27.9	27.1	26.6	25.9	26.5
16	28.0	27.4	27.8	27.8	27.2	26.0	26.7
17	25.9	28.1	26.6	29.0	27.1	25.9	26.6
18	27.3	26.9	28.8	27.8	26.5	26.0	27.2
19	28.0	28.9	28.6	29.8	27.3	27.2	27.1
20	29.0	28.2	29.2	29.2	29.0	28.4	29.2
21	28.8	29.5	28.2	30.9	29.5	31.4	29.1
22	31.0	29.1	30.8	31.8	29.8	31.1	29.7
23	30.9	32.0	31.8	33.8	31.7	32.6	32.9
24	31.2	33.2	30.1	32.1	29.8	32.4	29.8
10-12	26.8	25.9	25.9	27.2	27.1	25.7	25.7
14-16	27.1	26.8	27.8	27.4	28.9	25.8	26.8
0-24	27.6	27.6	27.8	27.9	27.3	26.6	27.1

Mean (ALL): 27.4
Weekday Inter-Peak: 26.5

Channel 1 - Eastbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	41.8	36.2	42.4	39.8	49.9	34.0	42.0
2	42.3	40.9	35.5	35.5	39.4	36.6	40.2
3	40.8	39.7	40.6	42.9	38.6	35.6	28.1
4	40.7	39.5	41.4	46.2	40.5	40.7	33.2
5	42.6	45.5	46.8	41.3	36.6	34.7	39.9
6	38.5	39.8	39.5	41.1	38.1	38.6	39.2
7	35.0	38.0	38.3	40.5	36.5	35.6	36.7
8	34.3	35.3	36.5	37.0	33.3	33.8	34.6
9	32.6	32.5	34.0	34.9	31.7	31.4	31.8
10	30.9	30.8	31.9	33.1	30.4	29.3	31.4
11	32.2	31.6	31.2	32.0	32.3	30.1	31.5
12	32.5	30.8	30.8	32.5	31.9	30.1	30.3
13	31.5	33.0	32.6	30.5	31.6	31.1	31.3
14	32.1	32.0	32.7	32.5	32.3	30.5	30.8
15	31.7	31.2	33.3	32.0	31.7	31.1	31.5
16	33.0	32.3	32.5	32.5	32.3	31.4	32.2
17	31.6	33.6	32.4	34.4	32.2	30.8	31.6
18	33.0	32.5	34.2	33.4	32.5	30.8	32.4
19	33.4	34.8	34.7	35.0	33.4	31.9	32.1
20	34.1	33.9	35.4	36.1	34.6	33.9	34.8
21	35.4	34.3	33.1	35.9	34.2	36.8	34.0
22	36.4	35.2	37.4	36.4	37.3	36.9	36.2
23	38.3	40.2	38.0	41.3	39.7	41.4	39.8
24	40.0	41.3	36.6	41.0	38.0	39.5	37.4
10-12	32.3	31.3	31.0	32.4	32.1	30.1	30.9
14-16	32.4	31.8	32.5	32.2	32.6	31.2	31.8
0-24	33.2	33.3	33.6	33.8	32.9	32.1	32.8

85th %ile (ALL): 33.1
Weekday Inter-Peak: 31.7



Porthmadog ATC 1, A487

Produced by Road Data Services Ltd.

Channel 2 - Eastbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	33.4	29.7	35.6	35.5	34.8	28.2	35.9
2	36.7	36.9	39.3	40.2	30.1	33.4	38.0
3	38.4	38.1	29.8	39.8	38.2	37.1	31.4
4	28.6	46.2	36.8	38.1	37.7	33.4	42.0
5	36.9	41.6	40.9	34.9	38.4	33.8	37.7
6	36.4	35.9	32.4	32.9	37.8	40.7	39.1
7	34.7	32.4	33.5	34.4	33.6	35.2	35.0
8	29.9	31.3	32.3	33.2	31.5	31.9	32.1
9	28.5	30.8	30.7	30.6	29.4	31.0	29.8
10	28.3	27.3	28.4	30.1	27.2	30.6	29.7
11	27.2	27.3	28.6	28.3	28.0	29.9	28.6
12	28.0	29.3	27.6	29.1	28.7	30.4	29.5
13	28.5	29.5	28.8	28.3	28.4	30.0	29.9
14	28.3	30.0	29.0	28.8	28.7	31.6	30.6
15	28.7	29.2	28.6	28.1	27.1	30.5	29.6
16	29.2	29.1	27.9	27.5	28.0	29.6	29.8
17	29.1	29.5	28.1	29.2	29.1	30.7	30.2
18	28.4	29.7	30.2	30.0	28.4	31.3	29.8
19	30.0	29.4	29.5	31.5	30.6	31.8	32.2
20	30.9	30.1	30.9	31.6	30.0	32.7	30.8
21	32.3	30.3	30.0	30.3	29.2	30.6	30.5
22	29.8	31.7	28.5	32.3	31.1	34.6	28.7
23	29.4	34.6	33.7	31.6	33.6	33.9	34.8
24	35.4	31.8	34.3	35.8	28.7	34.5	33.9
10-12	27.6	28.2	28.0	28.7	28.4	30.2	29.1
14-16	29.5	29.7	28.3	27.8	27.8	30.8	29.7
0-24	29.1	29.6	29.3	29.5	29.0	31.1	30.3

Average (ALL): 29.7
Weekday Inter-Peak: 28.9

Channel 2 - Eastbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	39.8	39.5	44.5	44.1	46.4	35.6	40.9
2	42.8	44.8	48.0	46.3	34.9	38.2	
3	43.1	48.8	35.0	43.8	43.7	39.9	35.0
4	34.6	52.7	44.7	43.3	39.1	39.9	45.3
5	45.9	50.2	48.4	44.5	47.2	40.7	41.2
6	43.5	41.6	39.6	42.8	44.9	48.5	47.8
7	41.8	39.9	39.2	41.7	40.6	41.6	42.3
8	36.7	37.8	40.1	40.4	37.3	38.2	38.8
9	34.9	36.6	38.3	37.4	35.4	36.8	36.4
10	34.4	33.4	35.1	36.9	33.7	37.4	37.0
11	34.0	33.5	34.6	34.5	33.7	37.2	35.0
12	33.8	35.3	33.6	35.7	34.9	36.8	36.2
13	34.8	35.6	35.4	34.1	34.4	36.3	37.2
14	34.9	36.8	35.3	35.8	35.0	39.5	37.3
15	35.1	35.5	35.3	34.8	33.6	37.8	37.3
16	35.0	35.5	34.0	33.3	34.6	36.2	36.3
17	35.8	35.4	34.5	35.0	35.4	37.4	36.8
18	35.1	36.7	36.8	36.9	34.4	38.2	36.7
19	36.7	36.1	36.4	38.6	37.9	39.1	39.9
20	37.7	37.0	38.1	39.4	38.0	40.3	38.4
21	38.9	36.2	35.2	37.4	36.2	37.0	36.4
22	36.3	39.2	36.3	40.2	39.3	42.6	37.3
23	35.9	44.3	41.8	40.8	42.2	42.9	42.6
24	44.3	39.1	39.8	45.5	35.6	44.2	41.8
10-12	33.9	34.4	34.0	35.1	34.4	37.1	35.7
14-16	35.1	35.7	34.8	34.1	34.2	37.0	36.7
0-24	35.8	36.3	36.1	36.5	35.7	38.1	37.5

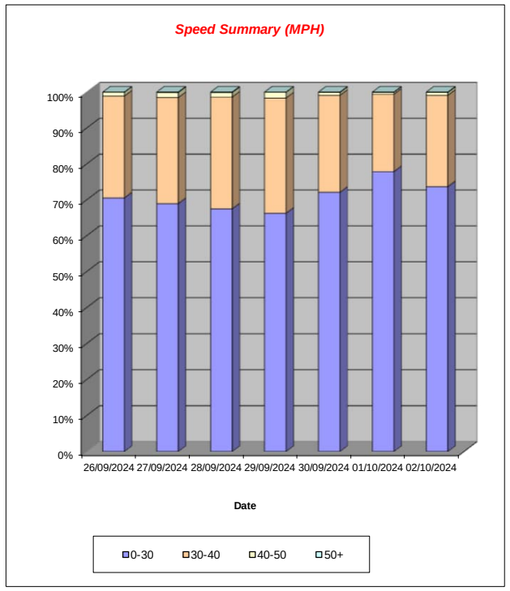
85th %ile (ALL): 36.6
Weekday Inter-Peak: 35.5

Porthmadog ATC 1, A487

Produced by Road Data Services Ltd.

Channel 1 - Eastbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	2606	2752	2244	1617	2591	2774	2676
30-40	1048	1179	1035	784	971	768	924
40-50	40	57	42	39	29	19	30
50+	1	4	4	1	3	2	3
TOTAL	3695	3992	3325	2441	3594	3563	3633

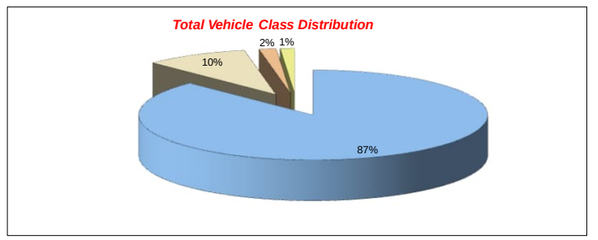


Porthmadog ATC 1, A487

Produced by Road Data Services Ltd.

Channel 1 - Eastbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	2647	403	69	37	3156
6-22	2997	441	77	41	3556
6-24	3041	441	77	42	3601
0-24	3110	454	79	52	3695
27/09/2024					
7-19	2959	327	61	28	3375
6-22	3383	363	67	31	3844
6-24	3434	368	67	31	3900
0-24	3505	382	69	36	3992
28/09/2024					
7-19	2627	172	24	14	2837
6-22	2934	186	26	17	3163
6-24	3080	190	26	17	3238
0-24	3075	202	28	20	3325
29/09/2024					
7-19	1962	153	21	15	2151
6-22	2141	172	25	20	2358
6-24	2176	174	26	20	2390
0-24	2214	179	26	22	2441
30/09/2024					
7-19	2657	338	66	35	3096
6-22	2987	364	66	37	3454
6-24	3023	364	66	37	3490
0-24	3101	380	73	40	3594
01/10/2024					
7-19	2655	291	45	49	3040
6-22	3011	320	59	56	3438
6-24	3047	323	48	60	3478
0-24	3117	334	49	63	3563
02/10/2024					
7-19	2616	348	61	71	3096
6-22	2983	384	63	81	3511
6-24	3038	386	63	81	3558
0-24	3085	398	63	87	3633
Average					
7-19	2589	290	50	36	2964
6-22	2919	319	53	41	3332
6-24	2954	321	53	41	3379
0-24	3030	333	55	46	3463

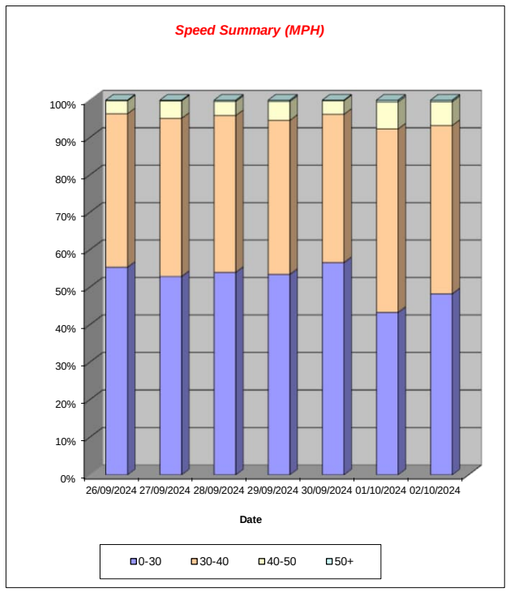


Porthmadog ATC 1, A487

Produced by Road Data Services Ltd.

Channel 2 - Eastbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	2010	2046	1744	1475	1999	1540	1722
30-40	1491	1635	1354	1136	1399	1743	1605
40-50	126	180	122	139	129	257	227
50+	6	8	11	10	5	17	15
TOTAL	3633	3869	3231	2760	3532	3557	3569

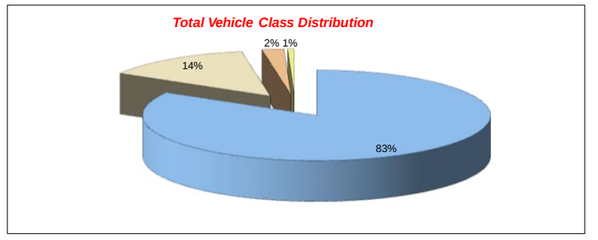


Porthmadog ATC 1, A487

Produced by Road Data Services Ltd.

Channel 2 - Eastbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	2598	464	85	22	3169
6-22	2888	511	93	22	3514
6-24	2939	514	93	23	3569
0-24	2987	524	97	25	3633
27/09/2024					
7-19	2858	401	67	21	3347
6-22	3178	452	76	26	3732
6-24	3232	460	78	29	3805
0-24	3282	475	82	30	3869
28/09/2024					
7-19	2496	222	23	7	2748
6-22	2808	249	26	10	3093
6-24	2868	253	26	10	3155
0-24	2928	264	28	11	3231
29/09/2024					
7-19	2157	190	26	5	2378
6-22	2378	215	29	8	2630
6-24	2418	220	29	9	2674
0-24	2490	228	31	11	2760
30/09/2024					
7-19	2651	437	63	7	3158
6-22	2991	480	67	9	3457
6-24	2925	488	68	9	3490
0-24	2957	494	70	11	3532
01/10/2024					
7-19	2327	681	99	23	3130
6-22	2596	730	102	27	3455
6-24	2639	738	102	27	3496
0-24	2679	746	104	28	3557
02/10/2024					
7-19	2438	579	76	28	3121
6-22	2760	623	80	30	3493
6-24	2799	631	80	30	3530
0-24	2819	638	80	32	3569
Average					
7-19	2504	425	63	16	3007
6-22	2787	466	68	19	3339
6-24	2829	472	68	20	3388
0-24	2877	481	70	21	3450



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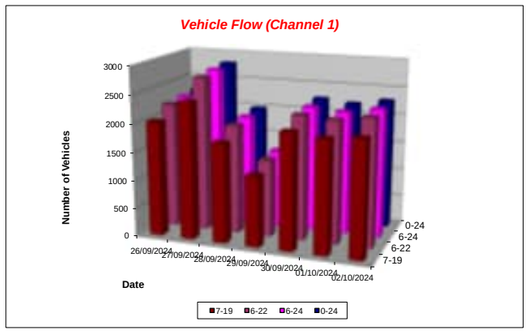
Produced by Road Data Services Ltd.

Channel 1 - Southbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	2	2	12	6	2	1	2	2	4
2	1	4	2	5	4	4	1	3	3
3	4	0	3	6	2	1	2	2	3
4	2	3	2	20	1	2	3	2	5
5	6	6	3	11	6	5	8	6	6
6	19	14	7	11	14	12	11	14	13
7	42	37	16	15	30	34	37	36	30
8	83	83	42	30	97	94	104	92	76
9	198	190	104	37	204	189	201	196	160
10	173	156	141	69	162	171	181	169	150
11	135	148	141	132	133	125	134	135	135
12	148	178	192	132	168	136	128	152	155
13	149	182	187	147	154	167	184	167	167
14	191	201	175	136	167	180	161	180	173
15	183	266	195	141	201	173	185	202	192
16	219	281	173	119	240	199	188	225	203
17	227	265	170	133	207	231	237	233	210
18	211	263	133	90	213	202	198	217	187
19	115	196	98	78	98	114	136	122	110
20	72	142	85	52	63	63	92	86	81
21	50	89	52	29	33	47	55	55	51
22	21	53	24	23	30	34	25	33	30
23	26	32	16	12	19	11	15	21	19
24	6	11	14	4	3	6	6	6	7
7-19	2032	2409	1751	1244	2044	1981	2037	2101	1928
6-22	2217	2730	1928	1363	2200	2159	2246	2310	2120
6-24	2246	2773	1956	1379	2222	2178	2267	2337	2146
0-24	2283	2802	1987	1438	2251	2201	2294	2366	2179



Channel 1 - Southbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	44.2	41.2	40.3	45.9	40.5	35.3	47.2
2	48.1	46.5	40.9	41.0	45.2	47.1	38.8
3	43.4	-	38.7	49.3	48.7	42.0	40.6
4	41.0	40.5	44.5	52.6	44.2	41.2	41.0
5	46.0	44.7	46.3	48.0	44.4	42.7	47.7
6	41.7	44.8	42.3	50.2	44.5	45.6	43.9
7	40.8	44.4	42.8	43.4	42.9	43.4	42.9
8	40.8	44.1	42.6	44.2	44.1	42.2	41.7
9	42.1	42.4	41.0	38.4	41.1	41.1	41.2
10	39.5	40.1	40.3	40.4	38.2	39.8	40.0
11	38.7	40.5	39.2	40.2	39.4	39.2	39.5
12	38.7	38.6	39.7	39.8	38.8	38.6	38.6
13	39.0	39.6	39.6	39.7	39.1	39.4	38.4
14	38.3	39.8	39.1	40.1	37.3	39.2	36.5
15	38.6	38.1	39.3	40.7	39.3	39.9	40.0
16	39.9	39.2	39.4	40.3	39.2	39.6	40.2
17	40.3	40.9	39.7	41.1	40.4	40.6	40.6
18	41.4	41.9	42.3	42.3	41.2	42.4	41.7
19	43.7	42.6	40.9	43.5	41.4	40.3	42.4
20	42.2	41.0	41.3	43.5	41.6	43.6	41.9
21	42.9	43.6	42.9	46.7	43.2	46.1	42.9
22	43.9	45.9	42.0	45.4	45.9	47.0	45.9
23	44.4	40.9	48.1	44.7	43.8	48.2	46.3
24	49.6	46.8	46.1	38.8	41.5	40.2	46.8
10-12	38.7	39.4	39.5	40.0	39.1	38.8	39.0
14-16	39.8	38.6	39.3	40.1	39.2	39.7	40.1
0-24	40.3	40.8	40.3	41.4	40.2	40.7	40.4

Mean (ALL): 40.5
Weekday Inter-Peak: 39.2

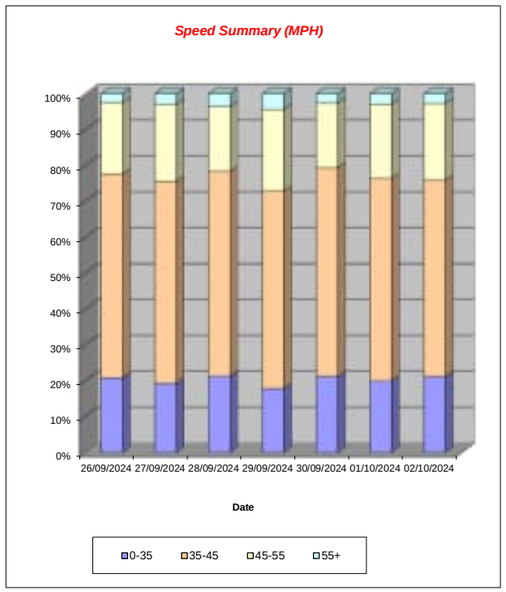
Channel 1 - Southbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	44.4	46.2	51.1	50.6	43.9	-	52.6
2	-	49.7	45.7	45.8	51.3	51.0	-
3	47.3	-	40.5	56.2	53.1	-	45.3
4	43.5	41.8	48.1	59.7	-	50.2	49.2
5	56.6	50.7	50.2	54.4	53.1	48.9	55.0
6	48.5	52.7	49.9	57.1	52.5	51.9	50.0
7	48.9	52.7	50.1	54.9	50.6	50.8	51.5
8	48.8	51.3	51.2	52.6	51.2	51.4	49.1
9	49.2	50.5	49.2	48.1	48.5	48.5	48.4
10	45.7	48.3	46.6	47.7	45.1	47.0	47.5
11	45.9	46.9	47.0	48.0	46.3	47.1	46.7
12	44.9	45.5	47.9	48.0	45.1	45.2	46.8
13	46.6	46.7	48.0	47.3	45.5	47.2	46.3
14	45.2	47.0	47.0	47.1	45.3	46.6	45.0
15	46.5	44.0	47.2	48.3	46.7	47.6	47.5
16	46.0	45.9	47.0	47.0	45.4	45.9	46.3
17	48.1	48.5	46.3	48.4	47.9	47.9	48.5
18	48.9	48.7	49.6	50.2	47.9	48.9	49.1
19	52.1	50.6	49.8	53.3	49.3	47.9	51.0
20	50.6	47.9	49.6	51.6	52.0	51.5	50.5
21	49.0	52.1	51.0	55.0	51.0	54.5	50.8
22	50.0	53.2	49.5	52.8	56.3	56.0	54.4
23	53.2	46.9	58.8	51.5	50.6	55.2	54.7
24	57.8	53.1	52.4	42.8	46.4	46.8	51.3
10-12	45.4	46.1	47.5	48.0	45.7	46.1	46.7
14-16	46.2	45.9	47.3	47.7	48.0	46.7	47.0
0-24	47.8	48.2	48.3	49.6	47.6	48.3	48.3

85th %ile (ALL): 48.2
Weekday Inter-Peak: 46.1

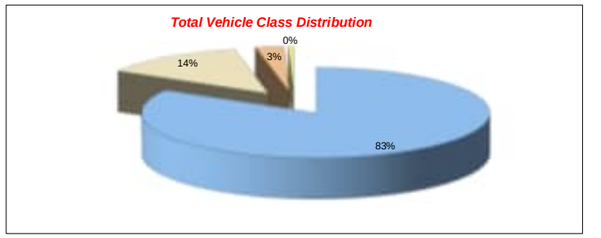
Channel 1 - Southbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-35	476	541	424	257	478	440	486
35-45	1297	1580	1134	791	1310	1242	1256
45-55	452	599	357	327	404	454	489
55+	58	82	72	63	59	65	63
TOTAL	2283	2802	1987	1438	2251	2201	2294



Channel 1 - Southbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	1634	328	61	9	2032
6-22	1787	348	69	9	2217
6-24	1825	343	69	8	2249
0-24	1852	356	63	11	2283
27/09/2024					
7-19	1998	338	68	7	2409
6-22	2285	368	70	8	2730
6-24	2331	374	70	8	2773
0-24	2345	370	70	8	2802
28/09/2024					
7-19	1543	154	48	6	1751
6-22	1696	172	51	7	1928
6-24	1736	173	51	7	1958
0-24	1747	181	51	8	1987
29/09/2024					
7-19	1125	99	17	3	1244
6-22	1221	117	19	4	1363
6-24	1241	120	15	4	1379
0-24	1285	125	23	4	1438
30/09/2024					
7-19	1841	322	62	13	2044
6-22	1981	343	60	16	2200
6-24	1991	347	63	18	2222
0-24	2013	347	70	18	2251
01/10/2024					
7-19	1592	311	70	8	1981
6-22	1749	327	75	11	2159
6-24	1766	329	72	11	2176
0-24	1786	331	72	12	2201
02/10/2024					
7-19	1642	323	60	12	2037
6-22	1826	342	64	14	2246
6-24	1843	345	66	13	2267
0-24	1866	348	64	16	2294
Average					
7-19	1590	268	53	8	1928
6-22	1766	288	57	10	2120
6-24	1798	290	57	10	2146
0-24	1816	295	58	11	2179



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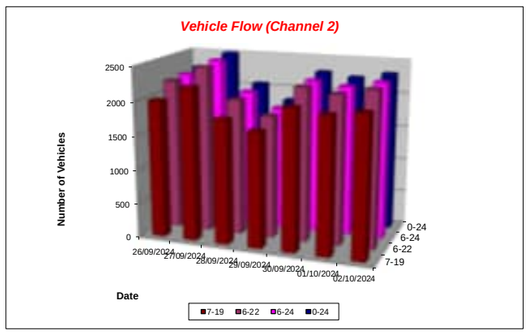
Channel 2 - Northbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	3	4	4	6	2	4	2	3	4
2	1	2	6	2	1	3	0	1	2
3	1	1	3	2	1	3	3	2	2
4	6	0	2	4	7	3	3	4	4
5	2	4	3	0	5	4	5	4	3
6	25	20	16	8	26	27	23	25	22
7	69	62	34	23	79	66	87	73	60
8	118	98	43	35	116	125	125	116	94
9	247	191	112	60	188	207	224	211	176
10	167	248	182	128	189	178	179	192	182
11	164	288	208	181	263	151	178	209	205
12	168	184	200	196	208	173	191	185	189
13	163	176	184	212	145	166	148	160	171
14	153	139	178	181	155	158	155	152	160
15	157	204	155	186	151	172	186	174	172
16	168	220	159	210	187	181	161	183	184
17	188	186	133	124	151	195	214	187	170
18	207	192	139	108	188	169	175	186	168
19	107	97	117	58	109	109	114	107	102
20	62	73	73	49	49	59	64	61	61
21	44	46	36	28	29	38	35	38	37
22	24	27	39	12	30	22	28	26	26
23	11	19	18	10	6	15	9	12	13
24	5	9	11	7	3	7	7	6	7
7-19	2007	2223	1810	1679	2050	1984	2050	2063	1972
6-22	2208	2431	1992	1791	2237	2169	2264	2261	2156
6-24	2253	2469	2021	1808	2246	2191	2289	2280	2175
0-24	2260	2496	2055	1830	2288	2235	2316	2319	2211



Channel 2 - Northbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	44.2	41.5	49.1	43.4	36.2	41.6	61.4
2	42.8	41.5	51.1	35.8	47.6	36.5	-
3	47.8	48.0	39.5	46.3	42.2	43.8	47.2
4	44.5	-	42.5	50.2	43.7	44.5	50.1
5	40.3	48.7	37.2	-	47.5	45.5	47.9
6	44.3	47.0	46.3	47.1	47.8	48.5	47.5
7	41.0	40.8	44.4	48.9	43.7	44.1	44.1
8	41.4	42.6	42.5	45.2	42.0	42.1	44.4
9	41.1	41.2	40.8	42.2	42.1	42.3	41.7
10	40.5	38.2	39.6	40.6	38.6	40.0	40.4
11	38.2	36.2	39.1	39.2	38.1	40.2	39.6
12	38.8	38.6	39.4	40.6	39.0	38.9	38.5
13	39.3	39.5	40.2	39.8	41.9	38.4	40.2
14	39.1	40.4	40.5	40.1	41.8	39.1	36.9
15	41.2	38.6	39.8	40.4	39.4	38.4	38.7
16	39.9	41.6	38.9	40.8	41.3	39.8	40.5
17	40.8	42.9	40.9	40.9	41.6	38.8	39.4
18	41.4	42.5	41.3	42.6	41.8	44.1	42.2
19	42.0	42.2	43.4	41.7	42.7	42.2	42.5
20	43.1	39.6	40.1	42.3	41.0	42.6	43.5
21	43.1	43.9	42.6	38.8	41.5	41.9	41.6
22	46.2	46.8	45.5	47.1	42.6	47.0	41.7
23	44.7	46.6	44.4	42.3	47.0	49.4	41.4
24	50.1	46.3	43.6	50.8	50.7	47.4	41.3
10-12	38.5	37.2	39.3	39.3	38.5	39.5	39.0
14-16	40.1	40.7	39.8	40.1	40.8	39.1	39.8
0-24	40.6	40.3	40.6	40.9	40.9	40.8	40.7

Average (ALL): 40.7
Weekday Inter-Peak: 39.2

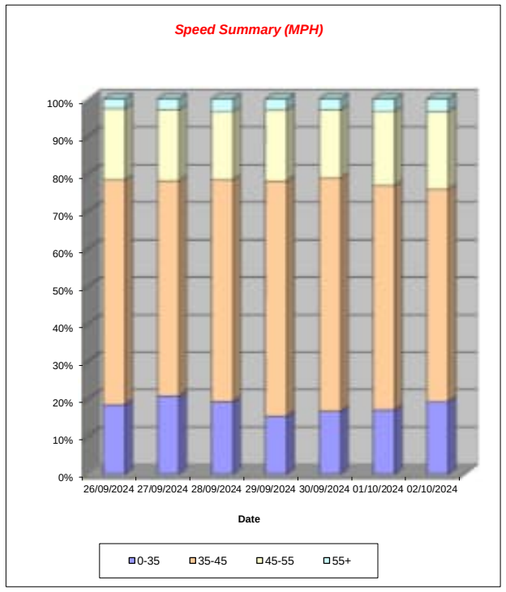
Channel 2 - Northbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	58.7	52.3	52.0	45.6	39.4	50.1	66.2
2	-	49.2	60.0	40.8	-	46.2	-
3	-	-	49.3	54.7	-	45.6	49.4
4	50.4	-	52.1	55.3	48.8	49.9	50.7
5	42.0	64.6	40.3	-	51.4	51.9	54.8
6	50.2	55.9	51.5	52.5	57.5	54.9	55.0
7	47.7	48.6	54.5	59.6	51.5	52.1	52.1
8	47.7	49.7	48.6	51.5	48.0	48.6	52.3
9	48.0	48.3	49.0	51.4	48.0	49.3	48.3
10	48.2	44.0	45.8	48.0	44.2	47.2	46.5
11	44.5	41.5	45.0	47.2	44.3	45.4	45.7
12	44.8	44.8	47.0	47.3	44.6	45.3	44.8
13	45.3	46.8	47.0	46.5	50.5	45.2	47.4
14	45.8	47.0	48.2	45.8	48.8	45.1	45.4
15	47.6	44.1	48.2	47.5	46.1	44.4	45.7
16	47.7	47.9	45.7	46.3	48.6	46.3	47.2
17	48.2	50.2	47.3	47.2	47.6	48.4	46.7
18	49.5	49.8	49.6	51.5	49.1	51.8	52.2
19	49.0	49.3	51.0	49.9	50.9	49.6	49.4
20	50.2	46.9	48.7	51.7	51.9	51.1	51.7
21	53.5	52.4	50.3	46.4	49.5	48.9	48.8
22	54.5	57.2	54.1	57.6	51.5	60.4	49.4
23	52.9	54.9	53.9	47.7	53.7	57.8	47.2
24	61.9	53.3	48.6	58.2	53.5	50.4	49.0
10-12	44.8	43.0	46.3	47.3	44.5	45.4	45.2
14-16	47.7	48.3	47.3	48.1	47.8	48.4	48.5
0-24	47.9	47.5	48.2	48.3	48.1	48.3	48.4

85th %ile (ALL): 48.1
Weekday Inter-Peak: 45.6

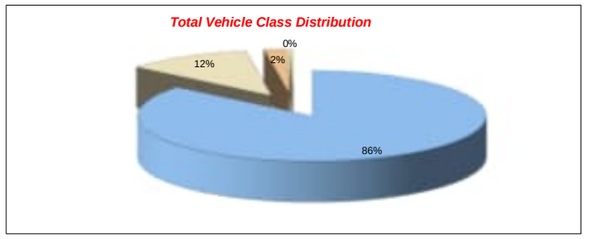
Channel 2 - Northbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-35	418	520	397	283	383	383	448
35-45	1355	1434	1215	1148	1423	1338	1312
45-55	429	471	373	345	415	440	478
55+	58	71	70	54	67	74	78
TOTAL	2260	2496	2055	1830	2288	2235	2316



Channel 2 - Northbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	1683	281	48	3	2007
6-22	1848	303	49	6	2206
6-24	1865	304	49	4	2222
0-24	1887	314	53	6	2260
27/09/2024					
7-19	1913	282	43	5	2223
6-22	2094	285	46	6	2431
6-24	2113	292	48	6	2459
0-24	2146	296	48	7	2496
28/09/2024					
7-19	1627	144	35	4	1810
6-22	1774	169	44	5	1992
6-24	1798	174	45	5	2021
0-24	1827	177	46	5	2055
29/09/2024					
7-19	1514	141	21	3	1679
6-22	1611	154	23	3	1791
6-24	1623	158	23	4	1808
0-24	1640	159	23	4	1830
30/09/2024					
7-19	1731	268	47	4	2050
6-22	1911	293	53	4	2264
6-24	1914	295	53	4	2290
0-24	1952	303	56	5	2316
Average					
7-19	1702	227	38	5	1972
6-22	1855	250	43	6	2156
6-24	1887	253	44	6	2175
0-24	1899	260	46	6	2211



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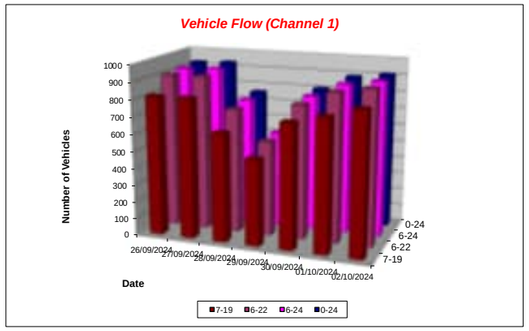
Porthmadog ATC 3, A498

Produced by Road Data Services Ltd.

Channel 1 - Westbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	0	0	3	2	0	1	0	0	1
2	0	1	1	2	3	0	0	1	1
3	1	0	0	3	2	0	0	0	1
4	0	0	2	1	0	0	0	0	0
5	1	1	1	0	1	1	1	1	1
6	8	5	4	1	3	7	5	6	5
7	15	12	8	7	10	12	13	12	11
8	43	52	11	8	41	45	53	47	36
9	99	90	34	21	95	85	109	96	76
10	63	57	58	40	54	58	60	58	56
11	52	54	54	48	34	51	39	46	47
12	53	55	60	45	62	60	50	56	55
13	53	71	58	65	57	63	71	63	63
14	74	65	53	53	43	66	57	61	59
15	68	72	74	46	68	68	69	69	66
16	102	115	69	65	96	82	88	97	88
17	82	58	63	52	76	70	106	78	72
18	80	79	55	41	61	78	76	75	67
19	49	51	46	21	41	47	52	48	44
20	40	42	45	24	25	32	31	34	34
21	24	22	26	13	16	31	16	22	21
22	11	15	17	9	8	23	12	14	14
23	6	11	15	4	8	8	6	8	8
24	2	3	2	0	2	1	0	2	1
7-19	818	819	635	505	728	773	830	794	730
6-22	908	910	731	558	787	871	902	876	810
6-24	918	920	746	562	797	880	908	885	819
0-24	925	933	760	568	804	889	914	893	828



Porthmadog ATC 3, A498

Produced by Road Data Services Ltd.

Channel 1 - Westbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	-	-	25.8	28.3	-	22.5	-
2	-	27.9	33.0	24.1	25.5	-	-
3	-	-	20.6	-	-	-	-
4	-	-	26.3	25.9	-	-	-
5	27.2	27.4	26.3	-	28.9	31.1	34.1
6	25.7	27.5	25.8	25.3	28.0	26.9	27.4
7	24.5	24.3	27.6	24.7	24.6	24.6	27.9
8	25.0	23.8	26.0	23.2	25.1	24.6	24.6
9	22.9	22.9	24.3	24.6	22.7	22.7	21.8
10	24.0	23.4	24.8	23.9	21.4	22.6	23.7
11	23.8	24.4	23.7	25.1	23.0	22.8	22.9
12	23.3	23.8	24.0	23.8	24.0	22.9	24.2
13	22.8	23.9	23.8	23.4	23.8	23.7	24.2
14	23.3	23.7	22.0	23.8	23.0	23.5	23.5
15	23.5	23.3	24.2	23.6	22.6	23.4	23.0
16	20.7	22.7	23.5	24.5	22.4	21.0	21.0
17	24.1	23.1	23.7	23.7	23.1	23.4	23.6
18	23.4	23.6	25.3	23.9	24.2	23.1	23.3
19	25.0	23.5	24.2	24.9	24.2	23.9	24.3
20	23.3	24.6	23.4	23.9	22.8	22.4	24.0
21	24.4	22.5	24.3	24.7	24.6	22.5	23.5
22	24.8	26.0	24.6	25.8	24.4	26.3	23.8
23	23.3	23.0	25.4	30.3	23.5	26.9	20.5
24	25.8	21.2	23.8	-	24.2	20.6	-
10-12	23.5	24.1	23.9	24.5	23.6	22.8	23.8
14-16	21.8	22.9	23.8	24.1	22.9	22.1	21.9
0-24	23.4	23.6	24.1	24.1	23.3	23.2	23.3

Mean (ALL): 23.5
Weekday Inter-Peak: 22.8

Channel 1 - Westbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	-	-	33.7	30.6	-	-	-
2	-	-	-	29.2	27.3	-	-
3	-	-	-	-	-	-	-
4	-	-	34.9	-	-	-	-
5							
6	30.0	32.1	30.0	-	33.3	30.5	30.6
7	30.0	30.0	30.6	29.9	27.3	28.8	31.8
8	29.8	27.7	32.8	29.1	29.1	29.3	28.8
9	27.3	28.0	28.6	30.3	26.9	26.9	26.3
10	29.0	27.5	28.1	28.1	26.0	27.5	27.7
11	28.5	28.5	27.9	28.8	27.6	26.8	27.0
12	28.4	28.4	28.5	28.0	28.5	26.5	28.1
13	27.4	28.8	29.0	27.9	27.4	27.8	28.1
14	27.4	28.0	25.9	28.1	26.8	27.5	27.3
15	27.7	27.5	29.1	28.0	27.1	27.8	27.1
16	25.1	27.6	28.2	28.7	26.7	25.4	25.3
17	28.7	27.2	28.7	27.3	27.3	28.5	28.2
18	27.9	27.6	30.1	28.9	28.3	27.1	27.0
19	29.3	29.0	27.9	27.6	28.7	28.4	28.9
20	27.9	29.7	28.7	27.6	28.0	25.3	29.3
21	28.7	26.2	29.1	29.8	29.8	26.2	27.7
22	29.7	29.7	28.2	32.4	29.2	32.0	29.1
23	28.7	28.2	31.6	33.4	26.3	30.5	23.4
24	27.7	24.6	24.2	-	27.3	-	-
10-12	28.4	28.5	28.3	28.5	28.1	26.6	27.6
14-16	26.4	27.6	28.7	28.1	26.9	26.7	26.2
0-24	28.1	28.2	28.8	28.5	27.7	27.7	27.7

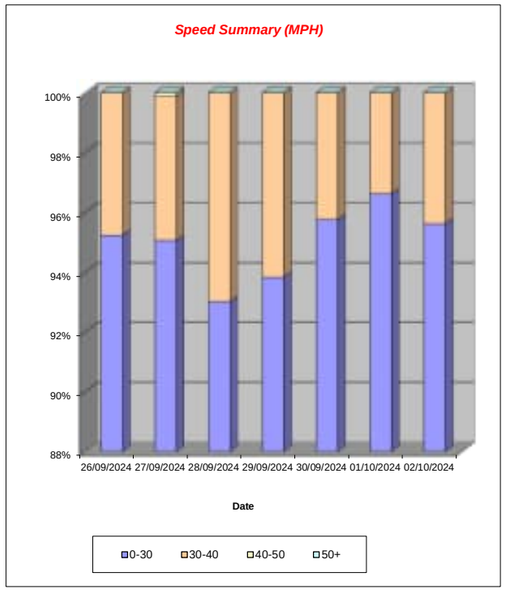
85th %ile (ALL): 28.1
Weekday Inter-Peak: 27.3

Porthmadog ATC 3, A498

Produced by Road Data Services Ltd.

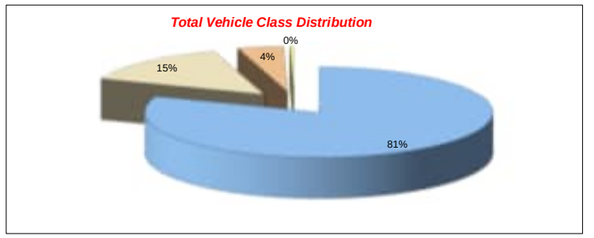
Channel 1 - Westbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	881	887	707	533	770	859	874
30-40	44	45	53	35	34	30	40
40-50	0	1	0	0	0	0	0
50+	0	0	0	0	0	0	0
TOTAL	925	933	760	568	804	889	914



Channel 1 - Westbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	648	131	38	3	818
6-22	718	144	42	4	908
6-24	729	144	42	4	919
0-24	736	134	43	4	925
27/09/2024					
7-19	660	128	29	2	819
6-22	735	138	34	3	910
6-24	746	140	34	4	924
0-24	751	140	34	4	933
28/09/2024					
7-19	534	68	33	1	635
6-22	606	86	37	2	731
6-24	623	86	37	2	748
0-24	632	88	37	2	760
29/09/2024					
7-19	435	55	12	3	505
6-22	477	63	13	4	558
6-24	481	64	13	4	562
0-24	484	67	13	4	568
30/09/2024					
7-19	557	134	36	1	728
6-22	668	130	42	4	787
6-24	681	134	43	4	797
0-24	691	137	43	4	808
01/10/2024					
7-19	606	120	36	3	773
6-22	692	134	41	4	871
6-24	705	134	42	4	880
0-24	709	134	42	4	889
02/10/2024					
7-19	661	131	34	4	830
6-22	722	137	38	4	902
6-24	730	137	38	4	908
0-24	734	137	38	4	914
Average					
7-19	586	111	31	2	730
6-22	651	120	33	3	810
6-24	667	121	34	3	819
0-24	667	122	35	3	829

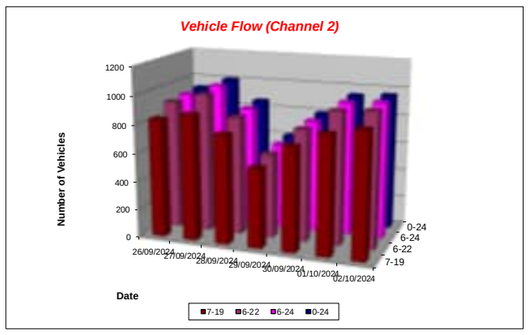


Porthmadog ATC 3, A498

Produced by Road Data Services Ltd.

Channel 2 - Eastbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	5	0	3	0	2	1	1	2	2
2	0	2	3	3	2	0	0	1	1
3	1	0	1	0	0	0	1	0	0
4	0	0	3	2	0	0	0	0	1
5	1	1	0	0	0	1	0	1	0
6	4	3	1	1	1	3	3	3	2
7	8	8	4	1	11	9	12	10	8
8	32	29	9	9	29	33	43	33	26
9	119	99	36	18	96	103	108	105	83
10	65	76	53	47	45	54	67	61	58
11	56	58	78	56	63	54	71	60	62
12	49	73	98	54	58	72	68	64	67
13	55	74	71	66	47	60	69	61	63
14	69	64	68	74	58	68	53	62	65
15	70	71	70	66	51	77	63	66	67
16	90	104	71	49	81	94	98	93	84
17	76	76	72	46	70	82	86	78	73
18	95	99	77	45	78	75	99	89	81
19	58	60	61	28	50	57	52	55	52
20	37	42	30	20	23	44	26	34	32
21	20	20	23	11	17	36	21	23	21
22	10	12	9	10	12	11	13	13	11
23	8	14	12	7	3	7	7	8	8
24	2	8	4	5	3	4	4	4	4
7-19	834	883	764	558	726	829	877	830	782
6-22	909	977	833	593	787	930	947	910	854
6-24	918	990	845	605	793	941	958	922	866
0-24	930	1004	859	612	798	946	963	928	873



Porthmadog ATC 3, A498

Produced by Road Data Services Ltd.

Channel 2 - Eastbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	30.4	-	29.4	-	26.2	28.8	27.9
2	-	31.1	28.7	26.0	26.0	-	-
3	28.4	-	-	31.5	-	-	28.6
4	-	-	32.9	32.3	-	-	-
5	24.0	20.0	-	-	-	24.5	
6	24.8	32.3	32.5	39.2	27.8	31.6	25.2
7	28.4	28.4	28.6	38.4	26.6	30.1	29.8
8	25.8	25.0	26.3	28.3	25.3	26.6	25.8
9	21.9	21.1	25.9	25.0	21.6	21.0	21.3
10	25.8	25.1	25.9	25.7	26.2	23.1	24.1
11	24.6	25.2	25.1	24.9	24.7	22.4	24.9
12	24.6	23.9	24.8	26.6	24.3	24.4	24.6
13	24.5	24.4	25.4	24.7	25.2	24.7	25.3
14	24.0	26.7	25.6	25.8	26.0	25.2	24.3
15	24.1	23.3	24.6	25.3	23.7	24.0	24.3
16	19.3	21.8	24.8	26.6	20.9	20.2	20.1
17	24.7	25.0	26.1	26.6	25.5	25.1	26.1
18	25.5	24.9	26.0	26.3	25.8	25.2	25.3
19	26.3	25.1	26.0	26.3	25.2	24.2	24.9
20	27.0	26.2	23.7	26.5	25.3	25.7	27.0
21	23.1	23.7	24.6	27.0	25.4	25.4	24.2
22	23.7	27.7	26.7	26.0	25.8	29.0	25.2
23	25.8	27.5	30.1	29.5	23.1	24.3	26.3
24	30.4	29.3	31.9	27.4	30.4	27.3	26.6
10-12	24.6	24.4	24.9	25.7	24.5	23.5	24.7
14-16	23.4	23.4	24.5	25.6	23.9	23.0	23.2
0-24	24.1	24.4	25.5	26.0	24.4	23.9	24.2

Average (ALL): 24.6
Weekday Inter-Peak: 23.0

Channel 2 - Eastbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	35.9	-	31.2	-	29.8	-	-
2	-	34.8	32.5	30.1	31.1	-	-
3	-	-	-	-	-	-	-
4	-	-	36.2	34.3	-	-	-
5							
6	31.6	32.9	-	-	-	35.2	27.0
7	34.3	35.7	32.9	-	33.2	35.2	35.1
8	28.9	29.4	30.2	33.4	29.7	30.7	30.2
9	27.9	26.9	29.9	29.9	27.1	26.3	26.7
10	30.8	28.8	31.2	30.3	31.8	28.0	29.2
11	29.0	29.7	29.2	29.8	29.3	26.8	29.3
12	29.1	28.3	29.2	31.8	28.3	29.3	28.2
13	29.6	28.8	30.8	30.3	31.8	29.5	30.4
14	28.4	31.5	30.1	30.5	31.3	30.1	28.9
15	29.5	28.2	28.9	32.7	28.3	29.0	28.5
16	24.9	26.5	29.3	32.1	26.2	25.4	25.2
17	29.9	29.3	31.7	31.9	30.4	30.1	30.3
18	29.8	29.6	32.3	31.0	30.4	29.9	30.3
19	31.1	29.8	30.7	31.9	30.3	29.5	28.7
20	32.5	31.5	27.6	31.6	30.4	31.8	32.4
21	27.7	30.2	29.1	30.8	31.3	30.7	29.0
22	28.6	32.4	31.9	28.3	30.7	36.3	29.9
23	29.9	32.0	36.8	33.0	27.0	31.3	31.8
24	33.4	32.6	38.5	31.5	32.0	31.1	31.0
10-12	29.1	28.9	29.2	30.8	28.8	28.3	28.7
14-16	27.4	27.2	29.1	29.1	27.9	27.4	26.9
0-24	29.6	29.5	30.5	31.5	29.9	29.4	29.4

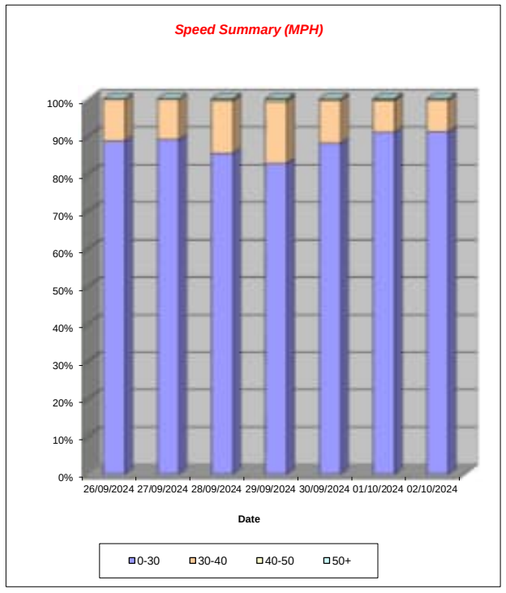
85th %ile (ALL): 30.0
Weekday Inter-Peak: 28.2

Porthmadog ATC 3, A498

Produced by Road Data Services Ltd.

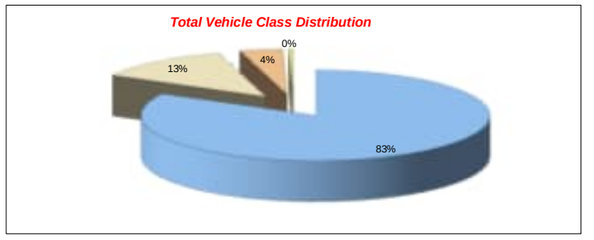
Channel 2 - Eastbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	826	896	735	507	704	862	879
30-40	103	107	120	101	92	81	82
40-50	1	1	3	3	2	2	2
50+	0	0	1	1	0	1	0
TOTAL	930	1004	859	612	798	946	963



Channel 2 - Eastbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	694	109	23	2	834
6-22	754	120	33	2	909
6-24	765	124	30	2	919
0-24	773	121	34	2	930
27/09/2024					
7-19	729	120	34	3	883
6-22	803	133	38	3	977
6-24	821	127	34	3	999
0-24	823	130	39	3	1004
28/09/2024					
7-19	669	63	28	4	764
6-22	723	74	31	5	833
6-24	736	77	30	5	848
0-24	744	78	32	5	859
29/09/2024					
7-19	494	43	20	1	558
6-22	524	48	28	4	604
6-24	533	48	28	4	613
0-24	540	49	22	1	612
30/09/2024					
7-19	676	111	36	1	824
6-22	623	126	40	0	787
6-24	629	126	41	1	797
0-24	629	126	37	0	792
01/10/2024					
7-19	693	106	28	4	829
6-22	775	121	30	4	930
6-24	788	123	31	4	946
0-24	788	123	31	4	946
02/10/2024					
7-19	703	129	39	6	877
6-22	752	140	43	8	947
6-24	764	140	43	8	958
0-24	769	141	45	8	963
Average					
7-19	651	98	30	3	782
6-22	709	109	34	3	854
6-24	723	111	34	3	868
0-24	724	111	35	3	873



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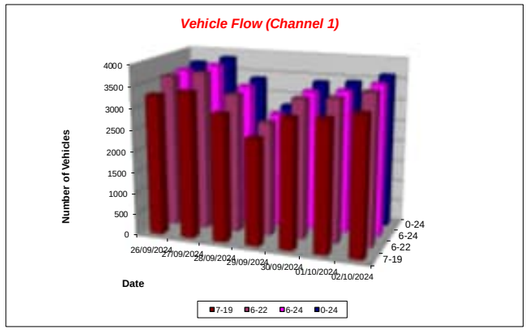
ices Ltd.

Porthmadog ATC 4. A497

Produced by Road Data Services Ltd.

Channel 1 - Eastbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	6	2	10	12	4	5	3	4	6
2	1	3	4	6	3	1	1	2	3
3	3	2	0	3	7	5	6	5	4
4	7	1	4	6	8	4	6	5	5
5	10	11	6	5	11	11	8	10	9
6	37	40	26	11	42	40	37	39	33
7	94	94	41	33	114	95	111	102	83
8	195	179	89	53	188	201	186	190	156
9	348	331	185	89	311	320	321	326	272
10	275	357	263	212	274	245	273	285	271
11	261	389	344	286	337	245	283	303	306
12	329	294	363	306	299	270	303	299	309
13	315	285	305	321	233	263	259	271	283
14	309	241	287	309	289	269	260	274	281
15	307	349	296	290	220	279	273	286	288
16	294	318	257	242	282	289	291	295	282
17	274	280	231	153	235	295	347	286	259
18	233	238	198	131	205	246	247	234	214
19	156	158	158	94	145	134	180	155	146
20	92	114	111	73	66	91	89	90	91
21	65	57	69	53	43	58	63	57	58
22	54	43	69	34	40	39	46	44	46
23	18	43	36	19	19	19	27	25	26
24	11	17	26	12	5	9	15	11	14
7-19	3296	3419	2976	2486	3018	3056	3223	3202	3068
6-22	3601	3727	3266	2679	3281	3339	3532	3496	3346
6-24	3635	3781	3326	2716	3326	3387	3574	3533	3386
0-24	3694	3846	3378	2753	3380	3433	3635	3598	3446



Channel 1 - Eastbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	47.1	47.2	46.2	51.7	41.8	42.4	62.1
2	40.0	45.1	54.4	47.3	51.7	41.4	49.5
3	44.6	44.2	-	47.2	45.4	44.1	47.9
4	47.2	38.2	40.0	52.4	43.0	47.6	47.4
5	46.8	50.3	43.3	49.4	47.8	48.4	50.3
6	43.0	47.7	47.0	47.4	46.9	46.5	49.1
7	40.0	41.3	44.2	47.9	41.7	42.2	42.7
8	40.1	42.3	43.0	45.4	39.3	41.5	43.4
9	40.6	40.1	41.8	43.8	39.8	41.2	40.3
10	40.0	38.4	39.9	40.1	36.0	38.4	39.8
11	37.5	37.7	38.6	39.4	37.7	36.7	38.3
12	36.6	37.6	38.4	38.9	38.6	38.8	38.0
13	37.4	36.4	38.7	38.9	39.6	38.1	38.0
14	38.1	37.8	39.3	38.2	38.4	38.8	38.9
15	39.0	36.0	37.7	39.2	38.8	36.8	37.1
16	38.3	38.7	39.2	39.9	35.5	38.7	39.1
17	39.9	40.6	39.5	40.8	40.4	39.8	37.3
18	40.2	40.6	41.3	43.1	40.6	42.1	40.4
19	43.0	42.5	41.2	42.0	41.7	41.0	39.9
20	42.4	41.8	41.0	42.8	43.2	41.1	40.9
21	40.9	44.8	41.2	42.7	44.2	42.0	43.0
22	42.7	44.8	41.9	44.0	45.0	47.8	46.3
23	45.3	42.0	46.2	45.4	45.7	50.3	42.7
24	44.1	45.4	45.1	49.6	47.7	47.3	45.7
10-12	37.0	37.8	38.5	39.1	38.1	37.8	38.1
14-16	38.7	37.3	38.8	39.1	37.9	37.7	38.2
0-24	39.4	39.2	39.9	40.4	39.2	39.7	39.6

Mean (ALL):	39.6
Weekday Inter-Peak:	37.8

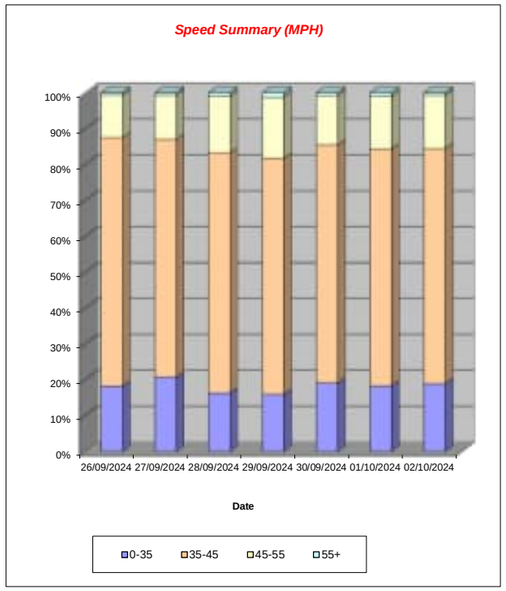
Channel 1 - Eastbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	53.3	54.7	53.8	60.7	43.7	49.3	67.6
2	-	48.4	65.6	56.9	53.9	-	-
3	46.2	44.5	-	49.7	49.9	45.3	55.1
4	55.4	-	51.9	62.0	48.3	52.5	50.6
5	52.3	57.8	47.0	55.6	52.9	55.7	60.2
6	51.7	55.7	53.4	52.3	53.2	52.2	56.2
7	46.8	47.2	50.4	55.2	48.6	49.4	49.5
8	45.6	48.2	50.0	50.8	46.2	48.0	49.0
9	45.5	45.0	47.5	48.9	44.8	47.5	45.8
10	44.8	43.8	45.4	46.6	45.7	44.9	45.0
11	43.3	42.4	44.0	45.6	43.5	43.2	44.3
12	41.1	43.2	44.2	44.3	43.1	44.2	43.1
13	42.4	42.0	44.6	44.1	44.9	43.5	43.0
14	43.2	43.8	45.6	44.3	43.6	44.6	43.7
15	44.1	42.7	43.3	45.3	44.2	42.3	43.0
16	43.1	44.1	44.6	45.3	44.6	43.8	44.4
17	45.3	45.8	45.4	46.9	46.0	44.8	42.5
18	45.9	45.8	47.6	48.0	45.9	47.4	47.1
19	48.5	48.4	46.5	48.2	48.6	49.5	46.2
20	49.3	48.5	47.2	48.6	50.0	48.4	46.8
21	47.8	51.9	47.8	48.5	50.7	48.8	50.6
22	49.7	51.9	47.8	51.3	51.5	57.1	53.3
23	54.6	47.8	56.0	52.8	53.5	58.6	49.2
24	51.4	53.0	52.4	54.8	50.9	51.4	51.1
10-12	42.1	42.7	44.1	44.9	43.3	43.6	43.7
14-16	43.7	43.6	43.9	45.1	44.9	43.1	43.9
0-24	45.1	45.4	46.1	46.8	46.1	46.2	45.8

85th %ile (ALL):	45.9
Weekday Inter-Peak:	43.6

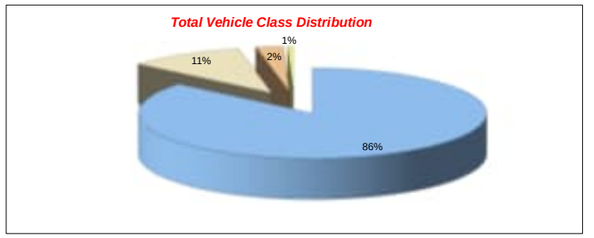
Channel 1 - Eastbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-35	675	799	552	438	646	629	688
35-45	2558	2549	2261	1815	2244	2268	2383
45-55	437	471	532	466	463	504	539
55+	24	27	33	34	27	32	25
TOTAL	3694	3846	3378	2753	3380	3433	3635



Channel 1 - Eastbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	2787	406	85	18	3296
6-22	3040	438	90	19	3601
6-24	3073	443	94	19	3630
0-24	3120	453	101	20	3694
27/09/2024					
7-19	2911	402	81	17	3410
6-22	3191	432	85	19	3727
6-24	3244	438	86	19	3787
0-24	3299	447	90	20	3846
28/09/2024					
7-19	2669	235	58	14	2976
6-22	2924	261	65	16	3266
6-24	2988	267	66	16	3328
0-24	3022	271	68	16	3378
29/09/2024					
7-19	2261	176	41	8	2486
6-22	2431	194	47	9	2679
6-24	2466	199	48	9	2716
0-24	2500	201	44	8	2753
30/09/2024					
7-19	2741	363	86	19	3018
6-22	2979	398	100	22	3281
6-24	3018	404	104	23	3326
0-24	3043	410	107	24	3380
01/10/2024					
7-19	2570	375	86	25	3056
6-22	2805	412	95	26	3339
6-24	2858	419	98	26	3367
0-24	2886	423	96	26	3431
02/10/2024					
7-19	2728	385	89	21	3223
6-22	3004	412	94	22	3532
6-24	3041	418	96	23	3574
0-24	3092	422	98	23	3635
Average					
7-19	2630	335	77	17	3068
6-22	2881	363	83	18	3346
6-24	2919	369	84	18	3386
0-24	2965	374	87	19	3445



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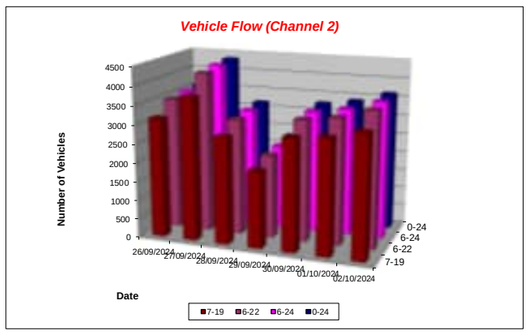
Channel 2 - Westbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	3	5	12	12	4	2	3	3	6
2	2	5	4	8	5	4	2	4	4
3	4	0	3	8	2	2	2	2	3
4	2	2	2	21	1	5	3	3	5
5	5	6	4	12	7	7	9	7	7
6	18	13	8	13	16	11	12	14	13
7	44	50	19	15	38	52	53	47	39
8	97	104	52	41	122	104	133	112	93
9	247	226	101	50	240	236	281	246	197
10	223	234	188	81	215	244	256	234	206
11	220	224	224	151	201	216	229	218	209
12	270	263	283	221	243	230	255	252	252
13	259	298	316	280	217	244	279	259	270
14	305	358	286	250	255	266	290	295	287
15	293	422	338	245	281	292	297	317	310
16	351	437	310	232	348	312	326	355	331
17	359	460	289	216	324	367	345	371	337
18	348	427	266	129	342	330	340	357	312
19	174	310	154	120	156	179	191	202	183
20	137	208	121	71	106	112	143	141	128
21	93	130	81	53	69	83	95	94	86
22	63	77	44	42	44	56	59	60	55
23	40	57	38	16	24	25	28	35	33
24	10	17	26	6	3	11	9	10	12
7-19	3146	3763	2807	2016	2944	3020	3222	3219	2988
6-22	3483	4228	3072	2197	3201	3323	3572	3561	3297
6-24	3523	4289	3136	2218	3229	3359	3608	3606	3341
0-24	3567	4333	3169	2293	3263	3390	3640	3639	3378



Channel 2 - Westbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	38.4	49.2	40.6	43.4	43.4	37.2	43.9
2	41.3	41.3	42.9	44.8	44.3	40.9	50.4
3	40.8	-	42.6	44.5	41.2	34.6	38.8
4	38.6	38.9	46.8	45.8	35.9	46.6	45.0
5	38.1	38.6	43.6	42.7	42.6	40.3	42.2
6	39.7	38.9	42.4	43.9	39.8	40.4	42.3
7	36.9	40.8	41.5	40.5	40.9	39.5	39.9
8	37.8	40.3	40.9	40.4	41.2	39.8	39.5
9	37.7	39.6	40.0	39.7	38.7	39.0	39.9
10	38.0	38.5	40.0	41.0	38.1	38.3	37.9
11	37.2	37.7	38.8	38.8	38.2	37.6	36.6
12	37.1	38.2	38.9	38.8	38.0	37.1	36.8
13	37.5	37.1	38.3	38.2	37.4	36.7	37.0
14	38.0	37.3	38.5	39.4	37.7	37.3	38.1
15	37.2	37.2	37.6	39.1	37.3	37.2	37.4
16	38.3	37.6	38.2	39.1	37.4	37.5	38.1
17	38.8	37.9	38.2	38.7	39.0	38.5	37.7
18	39.6	39.2	38.8	40.1	39.8	39.6	40.4
19	41.7	39.5	40.1	41.1	41.5	39.9	40.9
20	40.5	40.2	39.2	40.4	40.3	40.6	40.1
21	41.0	42.6	41.0	41.6	41.8	42.5	41.7
22	42.1	41.0	41.3	41.9	40.5	43.8	42.6
23	42.3	39.7	41.7	42.6	40.5	43.6	43.9
24	44.1	42.2	42.3	41.5	39.1	45.4	44.6
10-12	37.2	38.0	38.8	38.8	38.1	37.3	36.7
14-16	37.8	37.4	37.8	39.1	37.5	37.8	37.8
0-24	38.5	38.5	38.9	39.6	38.8	38.5	38.6

Average (ALL):	38.7
Weekday Inter-Peak:	37.5

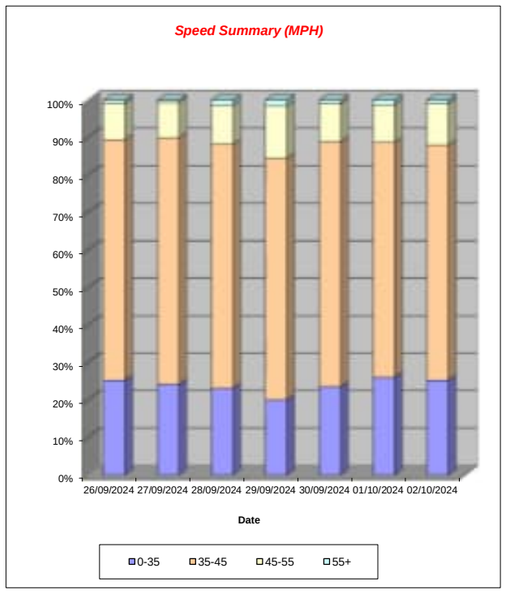
Channel 2 - Westbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	40.6	55.3	47.0	50.2	49.7	39.2	47.6
2	42.4	51.8	52.5	51.5	49.6	46.0	53.5
3	43.3	-	51.6	50.4	49.5	37.2	42.0
4	44.5	42.2	49.3	53.7	-	54.0	47.5
5	43.4	45.2	46.0	52.3	50.0	44.6	49.1
6	45.9	46.2	47.1	51.0	47.6	47.1	48.9
7	42.5	46.9	49.8	50.9	47.7	47.1	47.6
8	44.1	46.6	48.9	46.4	47.6	46.4	45.7
9	44.0	45.1	45.8	46.0	44.6	45.3	45.7
10	43.2	44.7	45.8	47.8	43.5	44.5	43.6
11	42.6	43.4	44.8	44.5	43.4	43.5	42.6
12	42.5	43.6	44.4	44.6	43.6	42.4	43.0
13	42.8	42.5	45.1	45.1	43.5	42.8	43.2
14	43.6	43.0	44.2	45.0	43.5	43.4	43.6
15	42.7	42.6	43.7	45.4	43.2	43.0	43.3
16	43.9	42.6	43.7	45.2	42.9	43.7	43.7
17	44.7	43.6	45.5	45.8	44.3	44.1	43.9
18	45.6	44.7	45.1	46.8	45.5	45.6	46.9
19	48.1	45.0	45.9	47.2	48.9	46.6	48.8
20	46.6	46.2	45.8	47.1	47.4	47.3	47.1
21	47.6	50.1	48.7	47.6	49.9	49.9	49.0
22	47.9	46.7	48.8	48.4	46.8	51.9	50.3
23	47.4	45.2	49.6	49.8	45.9	49.7	50.6
24	51.4	46.2	49.3	49.8	43.7	51.6	52.6
10-12	42.6	43.5	44.4	44.6	43.5	42.8	42.8
14-16	43.4	42.6	43.7	45.1	43.1	43.4	43.5
0-24	44.4	44.3	45.3	46.1	44.9	44.9	45.1

85th %ile (ALL):	44.9
Weekday Inter-Peak:	43.1

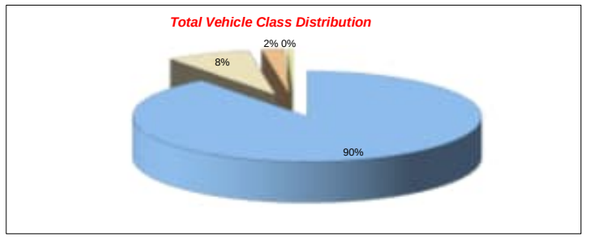
Channel 2 - Westbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-35	903	1051	734	461	769	884	923
35-45	2288	2849	2063	1478	2133	2123	2282
45-55	347	407	326	319	330	340	399
55+	29	26	46	35	31	43	36
TOTAL	3567	4333	3169	2293	3263	3390	3640



Channel 2 - Westbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	2754	307	69	16	3146
6-22	3061	331	76	16	3483
6-24	3105	337	78	16	3533
0-24	3147	335	75	17	3567
27/09/2024					
7-19	3381	310	72	14	3763
6-22	3797	338	78	15	4228
6-24	3855	347	79	15	4302
0-24	3888	350	80	17	4333
28/09/2024					
7-19	2611	140	47	9	2807
6-22	2852	155	52	10	3072
6-24	2911	160	54	10	3136
0-24	2940	164	55	10	3169
29/09/2024					
7-19	1888	93	28	7	2016
6-22	2050	103	30	8	2197
6-24	2073	108	30	8	2219
0-24	2140	111	34	8	2293
30/09/2024					
7-19	2605	261	70	10	2944
6-22	2830	278	74	13	3201
6-24	2866	284	76	13	3229
0-24	2889	287	77	15	3263
01/10/2024					
7-19	2663	261	76	20	3020
6-22	2935	282	82	23	3323
6-24	2977	288	83	24	3359
0-24	2999	284	83	24	3390
02/10/2024					
7-19	2824	300	80	18	3222
6-22	3141	321	83	21	3572
6-24	3175	324	84	21	3609
0-24	3207	324	88	21	3640
Average					
7-19	2672	240	63	13	2988
6-22	2955	258	69	15	3297
6-24	2995	264	70	15	3341
0-24	3029	264	70	16	3379



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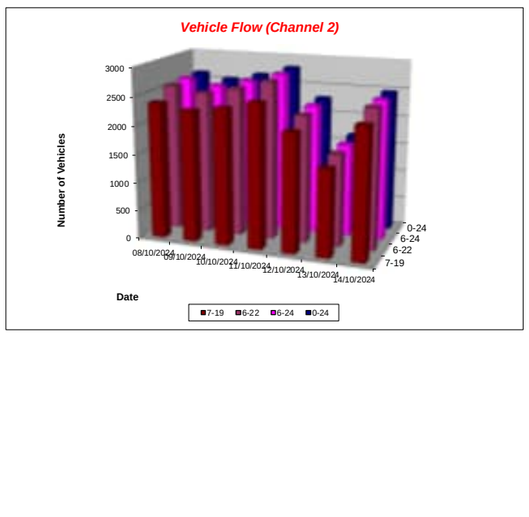
Channel 1 - /heastbound — **Vehicle Flow** — **Week 1**

Hr Ending	08/10/2024 Tuesday	09/10/2024 Wednesday	10/10/2024 Thursday	11/10/2024 Friday	12/10/2024 Saturday	13/10/2024 Sunday	14/10/2024 Monday	Weekday Average	Average
1	4	3	1	1	6	13	3	2	4
2	0	2	0	5	1	13	1	2	3
3	2	4	5	3	2	0	2	3	3
4	3	1	4	2	3	1	3	3	2
5	11	11	8	10	10	0	12	10	9
6	14	18	12	15	10	5	19	16	13
7	43	61	52	66	19	17	54	55	45
8	141	122	119	118	60	28	132	126	103
9	272	229	263	282	137	54	238	257	211
10	223	210	228	262	164	80	210	227	197
11	215	177	224	269	196	168	217	220	209
12	222	214	236	250	247	230	229	230	233
13	253	236	212	209	261	236	229	228	234
14	225	248	238	260	260	242	199	234	239
15	251	288	231	216	239	171	243	246	234
16	250	208	223	238	228	191	264	237	229
17	242	243	227	237	193	126	239	238	215
18	178	173	188	200	151	63	197	187	164
19	102	130	133	130	127	56	120	123	114
20	60	60	72	73	62	42	60	65	61
21	38	40	54	39	38	28	43	43	40
22	31	35	35	40	33	24	22	33	31
23	16	13	24	20	22	13	12	17	17
24	5	6	8	11	18	3	7	7	8
7-19	2574	2478	2522	2671	2263	1645	2517	2552	2381
6-22	2746	2674	2735	2889	2415	1756	2696	2748	2559
6-24	2767	2693	2761	2920	2466	1772	2715	2772	2584
0-24	2801	2732	2797	2956	2487	1804	2755	2808	2619



Channel 1 - utheastbound — **Average Speed** — **Week 1**

Hr Ending	08/10/2024 Tuesday	09/10/2024 Wednesday	10/10/2024 Thursday	11/10/2024 Friday	12/10/2024 Saturday	13/10/2024 Sunday	14/10/2024 Monday
1	38.9	31.7	29.4	49.7	32.9	39.8	37.2
2	-	39.6	-	30.9	49.4	36.7	25.7
3	39.9	41.6	39.6	43.6	37.2	-	39.8
4	36.4	35.8	43.8	39.6	34.1	38.2	43.0
5	43.8	44.3	47.3	44.1	39.5	-	47.8
6	41.1	41.1	42.2	40.2	39.4	38.2	43.1
7	39.4	39.7	37.6	38.6	34.8	40.6	38.0
8	37.7	37.7	37.6	38.4	38.2	40.7	38.1
9	36.0	37.7	35.9	37.4	36.1	37.8	37.0
10	36.2	34.9	35.7	36.4	36.0	36.9	36.9
11	34.5	34.5	34.9	35.1	36.6	35.5	36.1
12	33.7	33.9	35.6	36.5	36.3	35.7	36.7
13	32.7	33.4	35.4	36.6	35.1	36.2	36.2
14	34.5	34.4	36.0	34.1	34.8	36.4	35.8
15	34.0	34.0	34.8	36.1	35.2	35.0	34.5
16	34.2	34.7	35.7	36.1	34.8	34.6	35.4
17	34.8	35.3	36.3	36.5	35.2	36.2	35.7
18	36.7	37.3	36.5	36.8	36.0	38.3	35.7
19	37.3	36.6	36.9	37.1	37.1	36.1	36.6
20	35.5	36.5	35.1	34.7	36.3	36.2	36.6
21	35.5	36.6	37.4	37.1	38.1	38.9	36.6
22	35.3	36.5	34.4	39.6	36.1	38.4	37.1
23	41.0	38.1	39.1	37.6	37.8	37.8	37.7
24	48.4	42.0	37.2	39.4	42.3	42.0	35.0
10-12	34.1	34.2	35.3	35.8	36.5	35.6	36.4
14-16	34.1	34.2	35.3	36.1	35.0	34.8	35.9
0-24	35.2	35.4	36.0	36.4	35.8	36.2	36.3

Mean (ALL)	35.9
Weekday Inter-Peak	35.1

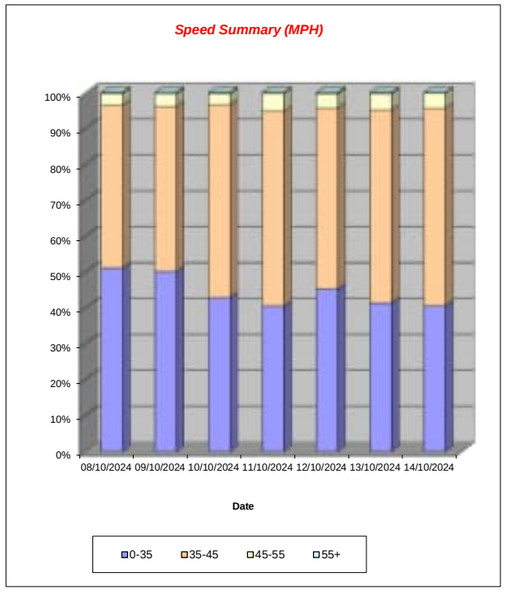
Channel 1 - utheastbound — **85th Percentile**

Hr Ending	08/10/2024 Tuesday	09/10/2024 Wednesday	10/10/2024 Thursday	11/10/2024 Friday	12/10/2024 Saturday	13/10/2024 Sunday	14/10/2024 Monday
1	40.6	36.7	-	-	41.7	44.0	41.3
2	-	44.4	-	35.0	-	44.7	-
3	47.7	51.3	45.4	48.8	38.1	-	44.6
4	40.9	-	48.9	39.9	36.4	-	51.3
5	50.1	48.8	51.3	50.9	43.6	-	54.8
6	47.7	48.7	48.1	44.8	47.7	44.3	51.0
7	45.5	46.5	42.8	44.7	40.9	46.4	42.8
8	43.9	43.1	43.4	44.5	46.5	48.1	43.5
9	41.5	43.4	41.2	43.1	42.0	44.9	42.4
10	41.3	41.1	40.6	41.4	41.7	42.8	42.2
11	38.9	39.2	39.9	40.1	41.1	41.2	40.6
12	38.4	39.2	39.8	41.7	41.6	40.8	41.6
13	37.5	37.9	40.8	42.2	40.7	41.2	41.0
14	40.4	39.3	40.9	40.2	39.5	41.8	40.8
15	38.5	38.7	40.1	41.8	39.9	39.8	40.5
16	39.2	39.4	40.6	41.3	39.9	39.5	40.0
17	40.5	40.8	41.6	41.8	40.3	41.0	41.4
18	42.5	42.4	42.1	42.2	41.5	44.0	41.2
19	42.4	41.8	42.6	42.8	42.7	42.1	42.7
20	42.0	42.0	40.9	40.8	41.5	41.8	42.1
21	41.5	43.1	42.9	45.8	44.4	46.1	42.2
22	40.3	42.6	41.4	46.7	41.0	44.1	43.9
23	48.5	45.0	48.0	43.9	44.9	46.3	43.6
24	57.9	57.1	43.7	46.1	49.1	46.8	42.0
10-12	38.7	39.2	39.9	41.0	41.5	41.0	41.3
14-16	39.8	39.6	40.8	41.9	39.9	39.7	40.3
0-24	40.8	41.0	41.4	42.2	41.3	41.8	41.8

85th %ile (ALL)	41.5
Weekday Inter-Peak	40.1

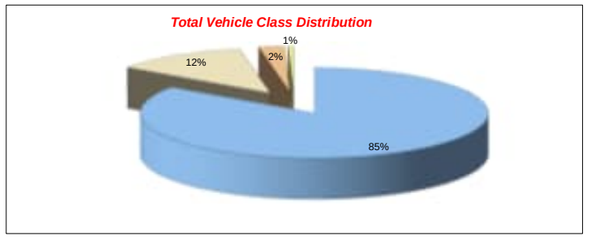
Channel 1 - utheastbound — **Speed Summary** — **Week 1**

Speed (MPH)	08/10/2024 Tuesday	09/10/2024 Wednesday	10/10/2024 Thursday	11/10/2024 Friday	12/10/2024 Saturday	13/10/2024 Sunday	14/10/2024 Monday
0-35	1436	1373	1202	1199	1129	748	1120
35-45	1268	1255	1502	1605	1252	970	1516
45-55	91	95	87	147	99	82	116
55+	6	9	6	5	7	4	3
TOTAL	2801	2732	2797	2956	2487	1804	2755



Channel 1 - Southeastbound — **Vehicle Class** — **Week 1**

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
08/10/2024					
7-19	2114	367	74	19	2574
6-22	2260	393	79	20	2746
6-24	2277	398	78	20	2767
0-24	2307	394	78	22	2801
09/10/2024					
7-19	1810	399	92	13	2288
6-22	1986	426	64	14	2490
6-24	2031	427	63	14	2519
0-24	2036	434	66	14	2539
10/10/2024					
7-19	1876	416	73	9	2372
6-22	2071	439	80	11	2600
6-24	2108	447	91	11	2636
0-24	2114	443	82	11	2650
11/10/2024					
7-19	2043	398	57	13	2511
6-22	2240	439	68	14	2781
6-24	2265	443	68	14	2793
0-24	2287	443	70	14	2809
12/10/2024					
7-19	1771	358	91	1	2071
6-22	1905	276	44	1	2226
6-24	1945	284	44	1	2274
0-24	1965	286	39	1	2291
13/10/2024					
7-19	1347	149	16	5	1517
6-22	1434	157	17	6	1614
6-24	1446	157	17	6	1633
0-24	1468	161	17	6	1652
14/10/2024					
7-19	1806	395	65	11	2277
6-22	1941	419	73	11	2444
6-24	1961	423	75	11	2459
0-24	1964	423	75	11	2473
Average					
7-19	2011	363	68	11	2381
6-22	2165	391	69	12	2559
6-24	2199	397	69	13	2584
0-24	2217	397	69	13	2619



Porthmadog ATC 5, A497

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Channel 2 - /hwestbound — **Vehicle Flow** — **Week 1**

Hr Ending	08/10/2024 Tuesday	09/10/2024 Wednesday	10/10/2024 Thursday	11/10/2024 Friday	12/10/2024 Saturday	13/10/2024 Sunday	14/10/2024 Monday	Weekday Average	Average
1	3	4	2	4	6	11	1	3	4
2	0	3	0	1	0	4	0	1	1
3	0	0	1	3	1	2	0	1	1
4	3	2	3	1	4	1	1	2	2
5	2	4	3	2	2	0	2	3	2
6	4	8	6	5	4	1	8	6	5
7	32	31	30	36	15	11	30	32	26
8	73	76	70	91	45	27	77	77	66
9	169	184	176	156	78	32	155	168	136
10	174	129	184	185	132	59	150	164	145
11	186	192	207	221	165	132	179	197	183
12	199	175	206	198	230	198	196	195	200
13	235	212	207	209	242	192	225	218	217
14	227	243	205	237	246	173	213	225	221
15	228	220	232	253	217	216	220	231	227
16	249	230	229	271	233	198	214	239	232
17	254	240	249	317	204	114	242	260	231
18	261	254	262	249	156	105	281	261	224
19	129	133	145	124	125	71	125	131	122
20	79	87	92	98	74	33	59	83	75
21	48	50	70	63	30	30	46	55	48
22	40	34	36	53	34	23	32	39	36
23	21	19	28	24	34	16	12	21	22
24	9	10	8	8	14	3	8	8	8
7-19	2384	2288	2372	2511	2073	1517	2277	2366	2203
6-22	2683	2490	2600	2761	2226	1614	2444	2576	2388
6-24	2611	2519	2636	2793	2274	1633	2459	2604	2418
0-24	2625	2539	2650	2809	2291	1652	2473	2619	2434

Channel 2 - rthwestbound — **Average Speed** — **Week 1**

Hr Ending	08/10/2024 Tuesday	09/10/2024 Wednesday	10/10/2024 Thursday	11/10/2024 Friday	12/10/2024 Saturday	13/10/2024 Sunday	14/10/2024 Monday
1	35.4	58.5	37.7	42.6	48.8	44.2	32.3
2	-	43.8	-	47.0	-	41.0	53.0
3	-	-	28.0	43.0	49.2	48.3	-
4	45.9	39.9	36.8	42.3	44.2	45.7	42.3
5	43.4	44.5	43.0	53.1	52.8	-	41.2
6	44.7	47.9	45.1	41.6	47.1	50.0	44.3
7	41.5	42.5	41.6	43.2	42.1	45.2	44.3
8	42.1	41.6	43.7	42.6	42.7	43.5	43.0
9	41.2	41.3	39.9	42.7	41.7	42.0	41.4
10	39.8	41.5	40.5	40.4	40.0	41.9	42.1
11	39.6	39.6	39.4	38.5	40.8	39.6	41.0
12	40.1	39.8	39.0	40.6	40.6	41.4	41.3
13	39.3	40.4	39.4	39.8	40.1	41.0	40.2
14	39.6	39.3	40.0	40.5	40.0	40.2	40.0
15	39.4	39.5	40.3	40.2	40.2	40.9	40.1
16	39.8	40.2	40.9	40.5	39.6	40.9	41.4
17	40.6	41.8	41.4	40.9	40.9	42.9	41.7
18	43.1	42.2	41.6	41.7	41.0	43.4	40.6
19	42.0	41.3	42.6	43.1	41.4	44.0	42.1
20	41.7	42.2	41.4	42.9	41.3	41.2	42.5
21	42.5	42.6	42.1	42.4	46.4	44.3	42.2
22	43.2	41.2	44.5	42.8	42.4	47.0	44.3
23	47.9	42.8	44.0	43.7	44.4	44.3	43.1
24	50.8	42.9	50.2	45.6	44.2	54.0	49.0
10-12	39.8	39.7	39.2	39.5	40.7	40.7	41.2
14-16	39.8	39.9	40.8	40.6	39.9	40.9	40.7
0-24	40.7	40.8	40.7	41.0	40.8	41.6	41.2

Average (ALL)	40.9
Weekday Inter-Peak	40.1

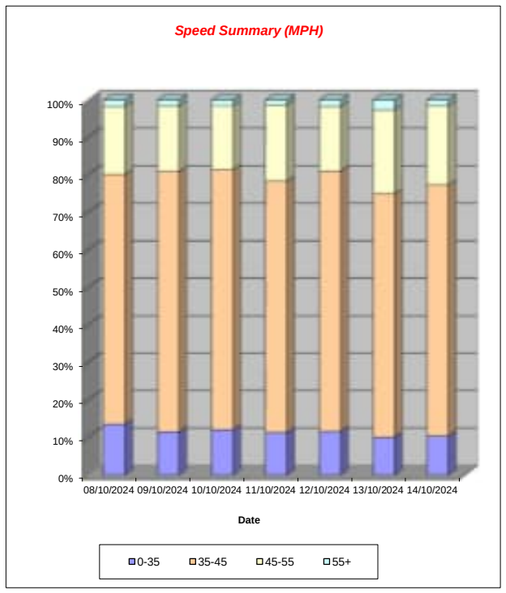
Channel 2 - rthwestbound — **85th Percentile**

Hr Ending	08/10/2024 Tuesday	09/10/2024 Wednesday	10/10/2024 Thursday	11/10/2024 Friday	12/10/2024 Saturday	13/10/2024 Sunday	14/10/2024 Monday
1	37.9	67.4	39.8	53.1	56.6	51.2	-
2	-	54.7	-	-	-	49.0	61.9
3	-	-	-	50.9	-	59.5	-
4	59.5	42.3	40.4	-	52.3	-	-
5	49.0	49.6	47.2	66.6	54.4	-	41.7
6	50.7	61.7	51.7	47.4	52.1	-	49.0
7	47.7	49.5	47.2	51.1	47.4	51.4	52.5
8	49.7	48.3	51.4	49.9	49.4	52.2	50.5
9	48.5	47.9	46.5	49.7	48.5	49.9	47.4
10	46.5	47.8	46.7	46.7	46.7	50.5	47.5
11	45.0	45.3	45.6	44.6	47.0	46.7	47.1
12	45.2	45.1	44.8	46.6	46.5	47.5	47.1
13	45.0	46.2	45.1	45.9	46.5	47.2	45.4
14	45.6	45.3	44.2	46.3	45.6	46.1	45.8
15	45.1	44.7	46.1	45.5	45.6	46.8	45.5
16	45.7	46.6	46.7	47.1	45.6	46.5	47.6
17	47.1	47.1	47.4	47.3	46.7	49.5	47.7
18	48.5	48.5	48.3	48.5	46.0	49.6	48.6
19	50.1	48.1	48.5	48.6	48.8	52.0	49.0
20	49.2	47.6	47.4	50.5	49.3	48.8	50.1
21	50.6	50.6	48.4	49.5	56.1	52.1	50.4
22	50.3	51.0	51.2	48.5	48.6	56.9	51.9
23	56.6	53.4	52.7	50.5	52.8	50.7	48.9
24	62.0	55.2	61.8	50.4	55.9	61.9	58.4
10-12	45.2	45.2	45.2	45.6	46.7	47.3	47.2
14-16	46.4	46.7	46.8	46.8	45.8	46.7	46.8
0-24	47.2	47.2	46.9	47.5	47.2	48.4	47.6

85th %ile (ALL)	47.4
Weekday Inter-Peak	46.0

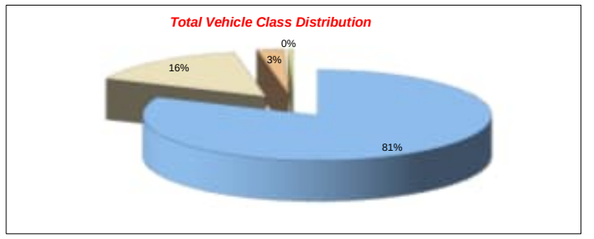
Channel 2 - rthwestbound — **Speed Summary** — **Week 1**

Speed (MPH)	08/10/2024 Tuesday	09/10/2024 Wednesday	10/10/2024 Thursday	11/10/2024 Friday	12/10/2024 Saturday	13/10/2024 Sunday	14/10/2024 Monday
0-35	356	294	322	318	267	167	258
35-45	1750	1762	1837	1885	1591	1073	1656
45-55	475	443	450	569	395	369	521
55+	44	40	41	37	38	43	38
TOTAL	2625	2539	2650	2809	2291	1652	2473



Channel 2 - Northwestbound — **Vehicle Class** — **Week 1**

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
08/10/2024					
7-19	1872	433	67	12	2384
6-22	2035	457	78	13	2583
6-24	2065	459	78	13	2613
0-24	2075	459	78	13	2625
09/10/2024					
7-19	1810	399	92	13	2288
6-22	1986	426	64	14	2490
6-24	2031	427	63	14	2519
0-24	2036	434	66	14	2539
10/10/2024					
7-19	1876	416	73	9	2372
6-22	2071	439	80	11	2600
6-24	2108	447	91	11	2636
0-24	2114	443	82	11	2650
11/10/2024					
7-19	2043	398	57	13	2511
6-22	2240	439	68	14	2781
6-24	2265	443	68	14	2793
0-24	2287	443	70	14	2809
12/10/2024					
7-19	1771	358	91	1	2071
6-22	1905	276	44	1	2226
6-24	1945	284	44	1	2274
0-24	1965	286	39	1	2291
13/10/2024					
7-19	1347	149	16	5	1517
6-22	1434	157	17	6	1614
6-24	1446	157	17	6	1633
0-24	1468	161	17	6	1652
14/10/2024					
7-19	1806	395	65	11	2277
6-22	1941	419	73	11	2444
6-24	1961	423	75	11	2459
0-24	1964	423	75	11	2473
Average					
7-19	1791	350	53	9	2203
6-22	1945	373	60	10	2388
6-24	1977	378	61	10	2418
0-24	1984	378	62	10	2434



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Porthmadog ATC 6, Britannia Terrace

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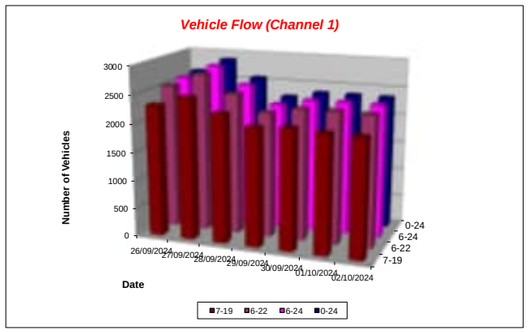
Channel 1 - Eastbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	7	7	8	11	7	2	4	5	7
2	0	1	2	3	1	2	1	1	1
3	1	1	4	3	2	2	0	1	1
4	1	1	1	1	2	0	2	1	1
5	9	4	3	4	1	3	1	4	4
6	12	10	9	5	8	6	9	9	8
7	43	48	23	15	49	52	47	48	40
8	112	130	57	36	92	106	117	111	93
9	135	174	88	59	145	123	124	140	121
10	148	233	159	106	179	148	125	167	157
11	188	241	228	179	214	155	174	194	197
12	244	215	202	269	190	169	175	199	209
13	207	222	235	246	180	178	189	195	208
14	231	201	179	253	174	171	186	193	199
15	218	256	234	272	214	217	200	221	230
16	236	247	265	251	211	200	189	217	228
17	205	228	253	185	202	247	230	222	221
18	233	204	213	126	189	224	228	216	202
19	160	134	141	86	115	130	121	132	127
20	90	123	76	47	73	96	92	95	85
21	60	75	68	38	43	61	62	60	58
22	42	56	58	31	34	35	37	41	42
23	29	37	32	16	17	24	26	27	26
24	17	18	26	8	15	9	15	15	15
7-19	2317	2485	2254	2068	2105	2068	2058	2207	2194
6-22	2552	2787	2479	2199	2304	2312	2296	2450	2418
6-24	2686	2941	2637	2325	2436	2440	2413	2592	2552
0-24	2628	2866	2564	2250	2357	2360	2354	2513	2483



Porthmadog ATC 6, Britannia Terrace

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Channel 1 - Eastbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	28.2	33.7	33.2	32.4	30.3	32.0	34.3
2	-	33.2	29.8	33.7	37.2	33.8	37.7
3	30.1	37.8	29.8	30.6	29.8	32.2	-
4	39.7	37.9	30.8	36.8	29.0	-	25.2
5	27.9	33.0	31.1	33.2	33.9	35.3	33.4
6	29.4	29.9	29.0	30.0	31.8	31.0	31.4
7	30.1	29.7	30.4	31.0	29.5	30.0	30.9
8	30.0	30.7	31.1	28.0	29.4	30.1	31.6
9	30.1	29.5	29.8	31.6	30.2	30.3	30.9
10	29.1	28.6	28.1	29.3	29.1	29.4	29.8
11	28.5	27.2	28.3	29.0	28.8	28.9	28.3
12	28.0	28.2	28.8	28.4	28.7	28.8	28.9
13	28.0	28.3	29.0	28.5	29.2	29.6	28.8
14	28.5	28.8	26.5	29.5	28.7	28.9	28.8
15	27.8	28.7	20.6	29.2	29.4	28.9	28.3
16	28.7	28.4	19.1	29.2	28.9	29.4	29.0
17	29.3	28.4	20.1	29.6	29.0	29.1	29.1
18	30.1	29.8	24.0	31.1	30.8	30.2	31.1
19	30.1	29.6	29.7	30.2	30.8	30.7	30.2
20	29.5	30.1	30.6	30.9	30.0	30.1	30.4
21	29.5	29.0	30.2	30.0	30.8	29.2	30.9
22	31.2	29.8	31.2	30.8	31.1	32.3	31.5
23	29.9	30.5	33.1	30.3	30.3	31.4	31.4
24	31.7	31.6	32.5	32.6	30.7	34.3	31.1
10-12	28.2	27.7	28.5	28.6	28.7	28.8	28.8
14-16	28.8	28.5	19.8	29.1	29.2	29.1	28.8
0-24	29.0	28.9	26.0	29.4	29.5	29.6	29.6

Mean (ALL): 28.8
Weekday Inter-Peak: 28.6

Channel 1 - Eastbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	30.8	37.0	36.6	35.5	33.0	38.3	40.6
2	-	-	30.0	36.7	-	36.4	-
3	-	-	32.0	31.8	30.1	33.1	-
4	-	-	-	-	31.0	-	30.2
5	34.7	35.7	33.7	36.4	-	39.7	-
6	33.0	34.4	32.7	32.5	34.3	36.0	34.5
7	33.9	33.4	35.0	34.4	32.8	33.0	34.8
8	33.7	35.1	35.6	33.6	33.7	34.2	35.6
9	34.0	33.4	33.6	34.9	33.6	34.3	34.8
10	32.7	32.0	32.4	33.3	32.9	32.7	33.7
11	32.1	31.0	32.2	32.6	32.5	32.6	32.1
12	31.8	31.9	32.4	32.3	32.7	32.3	32.7
13	31.9	31.8	33.4	31.8	33.0	33.4	32.8
14	33.1	32.8	31.4	33.6	32.5	33.1	32.5
15	32.2	33.0	24.4	33.0	33.1	32.5	32.4
16	32.5	32.0	22.5	32.7	33.0	33.4	32.7
17	33.1	32.4	23.9	33.4	32.8	33.2	32.7
18	33.9	33.6	29.1	34.9	34.5	33.9	34.8
19	34.4	33.8	33.5	34.2	34.7	34.7	33.9
20	33.5	33.8	35.7	34.8	34.1	34.5	34.7
21	33.3	33.1	34.1	34.6	34.6	33.8	36.5
22	36.5	33.7	36.0	35.0	35.4	37.8	36.5
23	34.3	34.3	37.8	34.9	34.5	36.9	35.1
24	36.5	36.4	37.6	38.9	36.5	41.7	35.0
10-12	31.9	31.5	32.3	32.4	32.5	32.4	32.4
14-16	32.8	32.5	23.5	33.1	33.1	32.9	32.5
0-24	33.1	32.9	32.1	33.3	33.4	33.6	33.7

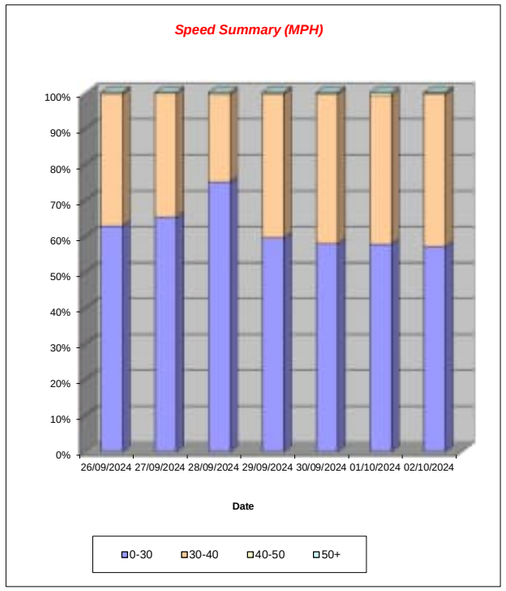
85th %ile (ALL): 33.4
Weekday Inter-Peak: 32.5

Porthmadog ATC 6, Britannia Terrace

Produced by Road Data Services Ltd.

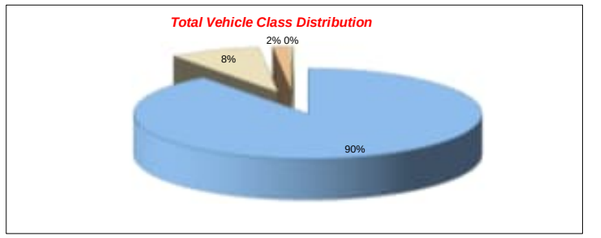
Channel 1 - Eastbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	1654	1873	1926	1340	1367	1365	1346
30-40	968	990	625	902	982	978	998
40-50	6	3	13	8	8	17	9
50+	0	0	0	0	0	0	1
TOTAL	2628	2866	2564	2250	2357	2360	2354



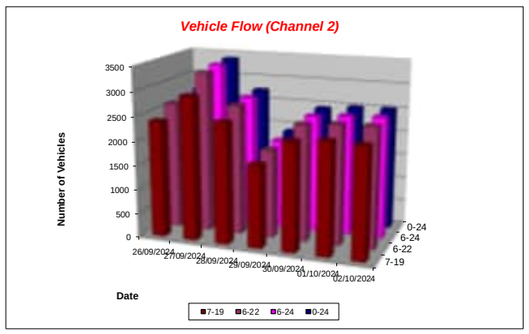
Channel 1 - Eastbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	2022	259	36	0	2317
6-22	2236	277	38	1	2552
6-24	2271	278	40	1	2598
0-24	2300	285	41	2	2628
27/09/2024					
7-19	2252	198	35	2	2485
6-22	2525	212	48	3	2787
6-24	2577	216	47	3	2842
0-24	2607	219	41	3	2866
28/09/2024					
7-19	2099	115	39	8	2254
6-22	2311	125	34	9	2479
6-24	2368	129	34	9	2537
0-24	2388	128	38	9	2564
29/09/2024					
7-19	1910	123	33	2	2068
6-22	2031	130	36	2	2199
6-24	2076	131	38	2	2221
0-24	2077	135	36	2	2250
30/09/2024					
7-19	1871	193	33	3	2105
6-22	2050	206	40	8	2304
6-24	2098	207	34	8	2336
0-24	2110	207	33	7	2357
01/10/2024					
7-19	1801	235	28	6	2068
6-22	2018	257	30	6	2312
6-24	2056	257	33	6	2345
0-24	2064	257	33	6	2360
02/10/2024					
7-19	1790	226	32	10	2058
6-22	2010	242	33	10	2296
6-24	2046	242	33	10	2337
0-24	2064	244	36	10	2354
Average					
7-19	1964	192	32	4	2194
6-22	2173	207	38	5	2418
6-24	2225	209	34	5	2460
0-24	2228	211	39	5	2483



Channel 2 - Westbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	2	5	9	13	1	6	2	3	5
2	4	1	1	9	2	3	0	2	3
3	0	0	1	2	1	2	0	1	1
4	3	0	1	2	0	2	1	1	1
5	4	5	5	8	3	5	1	4	4
6	11	11	6	2	11	15	14	12	10
7	21	36	20	17	46	37	38	36	31
8	112	106	65	27	96	95	102	102	86
9	171	190	126	71	172	167	178	176	154
10	214	195	217	104	178	206	187	196	186
11	198	221	262	173	180	201	190	198	204
12	224	241	275	187	188	216	216	217	221
13	214	274	245	253	187	210	203	218	227
14	224	296	281	219	218	191	204	227	232
15	219	300	300	205	220	231	197	233	239
16	229	318	218	179	251	220	191	242	229
17	247	280	179	107	246	204	252	246	216
18	201	279	194	102	168	216	216	216	197
19	143	235	116	66	118	129	124	150	133
20	91	170	89	48	56	76	92	97	89
21	59	99	46	32	36	31	44	54	50
22	47	56	41	30	34	24	33	39	39
23	30	38	26	22	13	9	21	22	23
24	15	17	15	5	9	9	9	12	11
7-19	2396	2935	2478	1693	2222	2286	2260	2420	2324
6-22	2618	3296	2674	1820	2394	2454	2467	2645	2531
6-24	2680	3361	2715	1847	2418	2472	2492	2679	2565
0-24	2683	3373	2738	1883	2434	2505	2515	2702	2590



Channel 2 - Westbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	31.5	31.7	27.5	32.2	29.8	34.1	36.3
2	29.2	24.4	28.7	32.2	33.2	37.8	-
3	-	-	29.5	26.5	21.1	29.4	-
4	32.6	-	32.1	33.7	-	33.7	29.5
5	34.0	32.0	30.2	33.6	31.8	31.0	32.4
6	30.5	31.3	27.8	31.6	30.1	31.1	31.9
7	29.3	30.8	31.6	31.7	30.9	31.7	31.6
8	30.3	31.9	31.0	32.2	30.0	31.7	32.3
9	30.5	31.1	30.7	31.9	30.2	31.0	32.2
10	28.8	29.5	29.0	29.1	30.1	28.5	29.3
11	27.7	27.9	27.4	29.5	28.8	27.5	29.0
12	28.0	27.9	27.8	27.6	27.7	27.9	28.1
13	27.7	27.9	27.3	27.3	28.2	28.5	28.3
14	27.2	27.0	24.5	27.7	27.4	27.8	27.9
15	28.1	27.5	18.0	28.1	26.9	27.4	28.1
16	28.6	27.7	15.7	27.7	27.7	28.6	28.9
17	29.1	28.8	16.2	28.5	28.7	28.9	28.6
18	30.2	29.1	21.6	29.5	30.1	30.6	29.7
19	30.0	29.3	29.0	30.3	30.5	29.7	30.0
20	29.5	28.1	28.9	29.6	30.0	30.1	30.2
21	31.8	28.5	29.8	30.8	28.0	30.3	31.0
22	30.1	30.0	32.0	29.7	30.5	31.3	31.5
23	30.3	30.8	30.3	30.4	32.2	28.2	30.7
24	29.6	28.0	31.4	32.9	32.6	33.0	29.2
10-12	27.8	27.9	27.8	28.5	28.3	27.7	28.5
14-16	28.6	27.8	17.5	27.9	27.9	28.3	28.5
0-24	28.9	28.6	24.7	28.7	28.8	29.0	29.3

Average (ALL): 28.2
Weekday Inter-Peak: 28.0

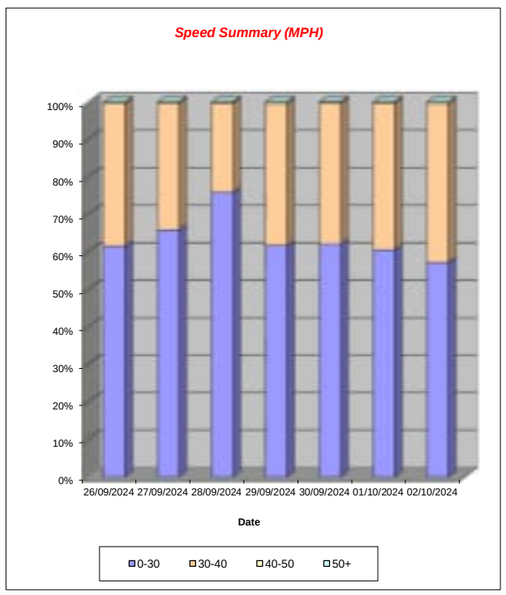
Channel 2 - Westbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	31.8	35.0	30.9	37.5	-	35.9	37.8
2	33.4	-	-	35.0	34.3	40.7	-
3	-	-	-	30.4	-	33.2	-
4	34.0	-	-	42.1	-	37.2	-
5	37.2	36.7	35.7	38.2	35.5	33.3	-
6	34.7	36.4	32.5	34.9	33.5	35.3	37.8
7	32.9	34.4	35.0	35.7	35.0	35.6	35.9
8	34.4	35.9	34.9	38.0	33.7	35.4	36.7
9	34.4	34.6	35.2	35.7	34.1	35.2	36.5
10	32.8	33.6	33.4	33.5	33.9	32.7	33.8
11	32.3	32.2	31.5	33.9	33.1	31.5	33.8
12	32.3	32.1	32.0	32.3	32.0	32.2	32.4
13	32.1	32.0	31.5	32.0	32.4	32.7	32.5
14	31.7	31.1	30.4	32.4	31.5	31.5	32.4
15	32.0	31.5	22.3	32.4	31.2	32.3	32.8
16	33.1	31.8	19.3	32.3	31.6	33.1	33.3
17	33.7	32.8	19.7	33.5	33.7	33.2	33.2
18	34.8	33.8	29.7	33.4	34.2	34.9	34.0
19	34.4	33.6	34.5	35.0	34.8	34.1	34.1
20	33.9	32.4	34.3	33.7	34.5	35.0	34.5
21	36.4	32.0	34.8	36.0	34.3	35.8	35.9
22	34.1	34.1	36.7	34.6	35.3	36.8	37.3
23	35.2	35.5	35.7	35.9	34.4	32.4	36.4
24	35.0	31.0	35.7	39.3	38.5	37.3	32.7
10-12	32.2	32.2	31.8	33.2	32.7	31.8	33.0
14-16	32.8	31.7	21.1	33.1	31.8	32.3	33.1
0-24	33.4	32.9	31.9	33.5	33.3	33.5	34.0

85th %ile (ALL): 33.5
Weekday Inter-Peak: 32.4

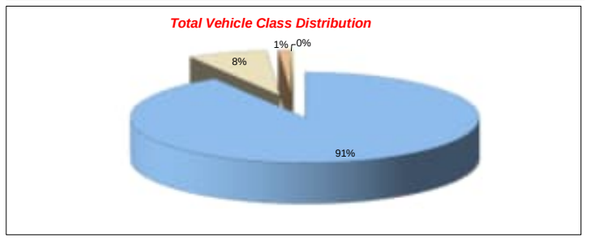
Channel 2 - Westbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	1655	2227	2081	1164	1515	1520	1441
30-40	1016	1134	651	709	914	978	1061
40-50	12	12	6	10	5	7	13
50+	0	0	0	0	0	0	0
TOTAL	2683	3373	2738	1883	2434	2505	2515



Channel 2 - Westbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	2130	220	38	2	2386
6-22	2341	230	41	2	2614
6-24	2381	234	42	1	2659
0-24	2405	233	42	3	2683
27/09/2024					
7-19	2698	212	25	2	2935
6-22	3033	229	33	4	3296
6-24	3095	231	31	4	3361
0-24	3107	233	33	5	3373
28/09/2024					
7-19	2339	112	15	12	2478
6-22	2525	120	18	12	2674
6-24	2564	121	18	12	2715
0-24	2584	125	16	13	2738
29/09/2024					
7-19	1613	65	12	3	1693
6-22	1738	68	12	3	1820
6-24	1761	70	13	3	1847
0-24	1797	75	10	3	1883
30/09/2024					
7-19	2011	188	20	3	2222
6-22	2173	197	23	1	2394
6-24	2196	198	23	1	2416
0-24	2209	198	23	4	2434
01/10/2024					
7-19	2044	216	23	3	2286
6-22	2192	232	27	3	2454
6-24	2208	233	27	3	2472
0-24	2241	234	27	3	2505
02/10/2024					
7-19	2000	229	27	4	2260
6-22	2180	245	29	5	2467
6-24	2214	247	28	5	2497
0-24	2231	248	31	5	2515
Average					
7-19	2120	177	23	4	2324
6-22	2311	189	29	4	2531
6-24	2344	192	28	5	2569
0-24	2366	192	27	5	2590



nrhyn

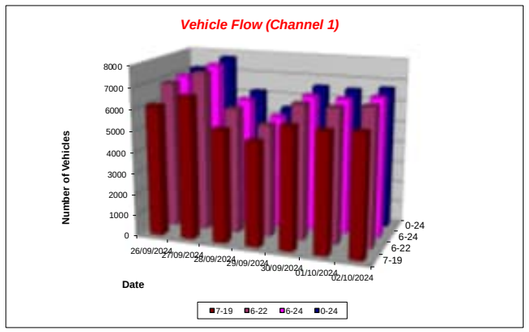
ices Ltd.

Porthmadog ATC 7, A487 Penrhyn

Produced by Road Data Services Ltd.

Channel 1 - Eastbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	12	19	17	27	10	8	9	12	15
2	5	5	17	11	4	8	5	5	8
3	18	11	9	5	16	10	5	12	11
4	11	8	5	5	13	7	7	9	8
5	22	15	13	8	18	22	20	19	17
6	67	58	48	23	78	76	61	68	59
7	197	210	82	49	208	190	205	202	163
8	338	288	118	83	333	340	333	326	262
9	484	540	239	161	463	447	459	479	399
10	440	636	429	328	499	406	412	479	450
11	494	694	559	431	526	455	420	518	511
12	566	579	541	582	515	409	466	507	523
13	471	551	522	612	402	454	463	468	496
14	563	506	452	559	466	480	494	502	503
15	509	606	432	621	508	528	504	531	530
16	600	673	571	561	559	554	537	585	579
17	639	659	597	431	528	590	615	606	580
18	668	568	503	314	587	637	637	619	559
19	379	372	325	212	333	332	369	357	332
20	262	318	232	155	227	243	278	266	245
21	197	172	185	134	144	165	169	169	167
22	121	133	138	62	77	97	127	111	108
23	55	81	79	39	54	52	68	62	61
24	30	41	59	20	24	30	32	31	34
7-19	6151	6674	5288	4895	5719	5632	5709	5977	5724
6-22	6928	7507	5925	5295	6375	6327	6488	6725	6406
6-24	7013	7629	6081	5354	6483	6409	6594	6818	6501
0-24	7148	7745	6172	5433	6592	6540	6695	6944	6618



Channel 1 - Eastbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	34.5	31.9	34.3	33.8	29.2	29.6	35.7
2	34.3	32.6	34.9	36.0	34.0	29.1	37.4
3	35.8	35.0	32.3	32.4	37.9	37.6	42.3
4	32.9	35.8	39.8	33.9	35.3	30.8	28.5
5	31.9	33.7	33.8	30.8	32.0	32.9	33.1
6	30.8	34.0	30.7	34.9	31.7	32.7	32.3
7	29.8	30.0	31.8	31.9	29.8	29.6	29.7
8	28.0	28.4	30.5	30.0	27.9	27.1	27.6
9	26.5	26.3	29.0	29.4	25.6	26.7	25.8
10	25.9	25.4	26.6	27.2	26.0	26.6	26.6
11	25.8	24.7	25.4	28.0	25.7	25.8	27.0
12	25.2	25.3	26.1	26.3	26.3	26.4	26.4
13	25.8	24.8	26.2	26.4	26.3	26.0	26.3
14	24.9	25.2	26.3	26.0	26.1	25.9	26.1
15	25.9	24.6	26.2	25.8	25.4	25.2	25.1
16	24.5	24.8	24.0	25.8	24.3	25.2	25.3
17	25.0	24.9	25.5	27.8	25.2	24.6	25.2
18	24.7	25.1	26.5	28.2	24.9	24.5	25.0
19	26.7	25.9	27.8	28.6	26.6	26.7	25.8
20	27.3	26.5	28.0	28.4	26.5	26.8	26.2
21	27.2	28.0	27.9	28.1	27.7	27.9	28.2
22	28.9	29.2	28.1	28.0	27.9	29.1	28.7
23	30.1	30.5	31.3	31.1	28.3	29.7	28.7
24	30.9	28.3	30.3	31.5	32.1	30.6	30.6
10-12	25.5	25.0	25.7	27.0	26.0	26.1	26.7
14-16	25.1	24.7	25.1	25.1	24.9	25.2	25.2
0-24	26.0	25.8	26.6	27.2	26.2	26.2	26.3

Mean (ALL): 26.3
Weekday Inter-Peak: 25.4

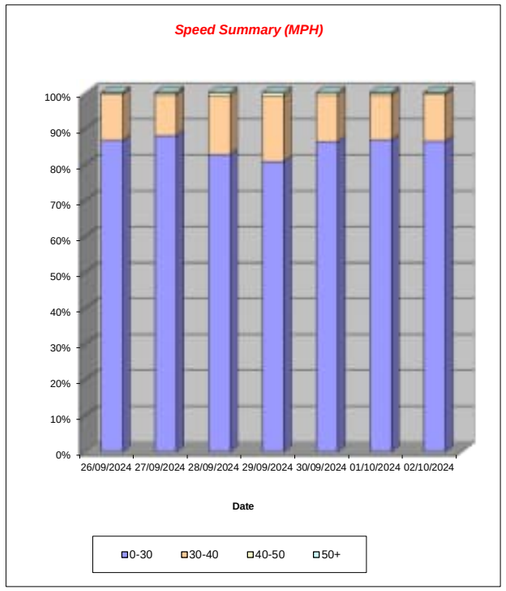
Channel 1 - Eastbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	41.5	37.9	41.7	41.2	34.3	34.5	46.7
2	40.1	36.1	45.1	44.2	38.7	36.6	42.2
3	40.0	38.9	35.5	36.6	43.9	41.7	51.0
4	37.1	41.0	44.6	42.1	41.7	35.5	31.4
5	38.9	40.5	41.4	35.3	38.3	40.3	38.7
6	36.6	40.2	35.8	42.3	37.2	38.8	38.5
7	34.0	35.4	37.2	37.0	34.1	34.0	34.7
8	32.1	32.9	35.2	35.1	32.6	31.6	32.3
9	30.5	30.1	33.5	34.0	29.6	30.5	30.2
10	30.0	29.8	31.2	31.4	30.5	30.7	30.6
11	29.9	29.0	29.4	32.5	29.9	30.0	31.3
12	29.3	29.4	29.8	30.7	30.3	30.6	30.4
13	30.0	29.0	30.2	30.6	31.2	31.7	30.5
14	29.7	30.3	30.8	30.1	30.3	29.9	29.8
15	29.7	29.4	30.9	30.0	30.0	29.1	29.2
16	28.8	29.3	30.0	30.0	28.8	29.8	29.6
17	29.1	29.4	29.7	32.7	29.5	28.7	29.2
18	29.7	30.4	31.2	32.3	29.4	28.8	29.1
19	31.2	30.4	32.8	33.4	30.9	31.4	30.1
20	31.7	30.4	32.6	32.9	30.9	30.8	30.4
21	32.1	33.6	33.2	34.2	32.3	32.9	33.2
22	34.1	35.0	32.7	33.8	33.2	34.8	33.1
23	34.1	35.4	37.8	37.4	32.4	36.7	33.4
24	36.8	33.6	35.4	36.9	38.3	36.4	37.7
10-12	29.6	29.2	29.8	31.5	30.1	30.3	30.9
14-16	29.2	29.2	30.0	30.7	29.4	29.6	29.6
0-24	30.7	30.7	31.6	32.0	30.9	30.9	30.9

85th %ile (ALL): 31.1
Weekday Inter-Peak: 29.7

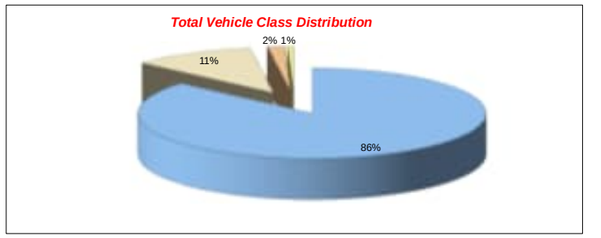
Channel 1 - Eastbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	6197	6820	5114	4393	5694	5682	5792
30-40	923	877	1008	990	856	815	873
40-50	24	39	45	47	40	36	25
50+	4	9	5	3	2	7	5
TOTAL	7148	7745	6172	5433	6592	6540	6695



Channel 1 - Eastbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	5278	747	97	29	6151
6-22	5975	810	119	30	6928
6-24	6055	814	119	30	7013
0-24	6155	840	121	32	7148
27/09/2024					
7-19	5867	680	88	32	6674
6-22	6615	761	97	33	7507
6-24	6773	773	99	34	7629
0-24	6913	793	101	38	7745
28/09/2024					
7-19	4730	458	68	23	5288
6-22	5320	502	77	26	5925
6-24	5448	513	79	26	6063
0-24	5546	521	79	26	6172
29/09/2024					
7-19	4384	444	49	18	4895
6-22	4733	487	63	20	5295
6-24	4786	492	63	20	5354
0-24	4849	506	67	21	5433
30/09/2024					
7-19	4831	734	118	31	5719
6-22	5410	800	128	37	6375
6-24	5496	801	128	38	6483
0-24	5553	812	129	39	6592
01/10/2024					
7-19	4685	812	98	37	5632
6-22	5275	891	117	44	6327
6-24	5350	898	124	44	6409
0-24	5459	913	124	44	6540
02/10/2024					
7-19	4755	800	105	49	5709
6-22	5431	886	112	59	6488
6-24	5529	889	113	59	6589
0-24	5609	906	123	57	6695
Average					
7-19	4932	669	89	31	5724
6-22	5533	734	100	34	6406
6-24	5625	739	102	34	6501
0-24	5718	758	105	36	6618

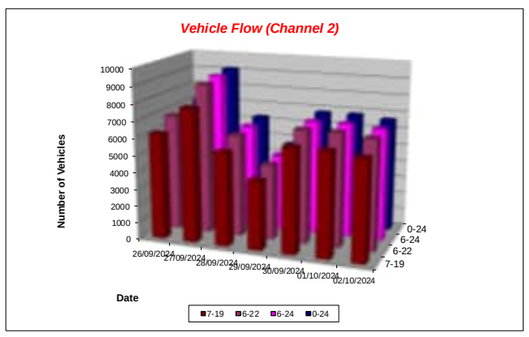


Porthmadog ATC 7, A487 Penrhyn

Produced by Road Data Services Ltd.

Channel 2 - Westbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	26	13	27	30	11	7	11	14	18
2	13	12	6	24	2	19	4	10	11
3	14	5	6	11	8	9	5	8	8
4	7	11	20	36	5	15	8	9	15
5	26	38	30	40	17	15	19	23	26
6	58	49	43	35	66	52	62	57	52
7	138	161	94	68	164	173	170	161	138
8	407	398	221	109	357	439	391	398	332
9	642	728	315	152	627	607	608	642	526
10	547	593	511	259	512	586	510	550	503
11	512	633	553	412	456	458	526	517	507
12	552	652	589	439	497	500	493	539	532
13	487	638	620	524	491	481	496	519	535
14	538	642	564	447	549	457	479	533	525
15	495	731	552	434	544	531	451	550	534
16	580	777	454	419	610	554	493	603	555
17	588	743	407	318	665	615	539	630	554
18	504	730	415	300	503	561	585	577	514
19	368	569	276	228	313	308	316	375	340
20	221	439	210	158	192	196	198	249	231
21	169	273	139	95	98	104	129	155	144
22	124	150	94	72	79	96	100	110	103
23	66	85	49	44	29	28	54	52	51
24	31	73	47	20	10	16	18	30	31
7-19	6220	7834	5486	4041	6124	6097	5887	6432	5956
6-22	6872	8857	6023	4434	6657	6666	6484	7107	6570
6-24	6965	9015	6119	4498	6698	6710	6558	7189	6652
0-24	7113	9143	6251	4674	6805	6827	6665	7311	6783



Channel 2 - Westbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	32.3	34.1	31.8	35.6	39.0	36.2	32.1
2	36.3	36.0	33.0	31.7	42.1	35.1	31.4
3	39.6	39.0	31.8	35.0	32.8	33.3	35.3
4	31.1	34.0	38.1	36.1	40.9	36.5	35.6
5	35.1	35.3	39.4	33.2	36.5	34.1	34.7
6	33.6	32.7	35.4	35.9	32.6	32.0	32.5
7	30.8	30.8	29.3	31.2	29.0	28.6	28.7
8	27.5	27.8	30.9	31.4	27.7	27.2	27.6
9	26.1	26.4	28.5	29.3	26.1	26.2	26.6
10	26.7	26.6	27.3	28.3	26.3	25.7	26.5
11	26.7	26.2	26.0	27.9	27.0	26.4	26.6
12	26.7	25.5	26.7	27.2	26.2	26.4	27.0
13	27.5	26.3	27.1	27.4	26.5	27.3	27.1
14	26.2	26.5	26.8	27.1	26.7	26.5	26.7
15	27.0	26.5	26.7	27.0	26.3	25.6	26.5
16	26.6	26.1	27.2	27.2	25.7	26.4	26.5
17	26.1	27.5	27.5	28.8	26.6	26.0	27.1
18	27.0	27.5	28.3	28.6	26.8	27.1	25.7
19	27.9	27.2	28.8	29.7	28.2	27.9	27.4
20	28.4	27.7	27.4	30.4	27.4	27.0	26.4
21	29.9	28.1	28.1	30.2	29.1	29.8	28.9
22	29.6	30.6	29.1	31.0	29.7	30.0	27.9
23	32.2	29.9	32.9	34.0	30.1	32.8	29.6
24	33.9	33.0	32.0	33.8	30.1	35.8	32.6
10-12	26.7	25.8	26.4	27.5	26.6	26.4	26.8
14-16	26.6	26.7	27.5	27.9	26.3	26.6	26.6
0-24	27.3	27.1	27.7	28.5	26.9	26.8	27.0

Average (ALL): 27.2
Weekday Inter-Peak: 26.4

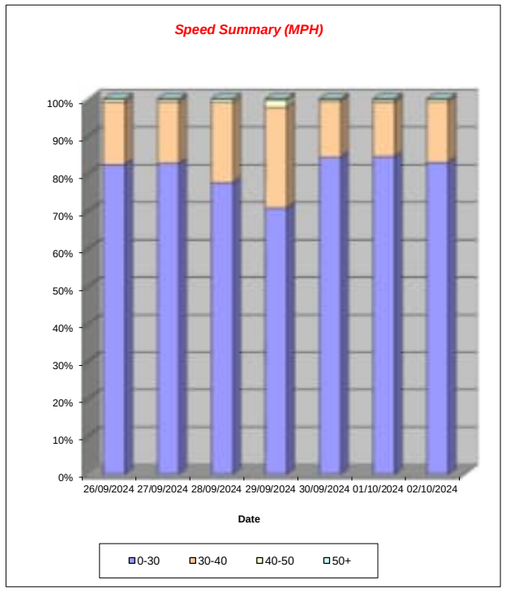
Channel 2 - Westbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	37.4	42.1	38.4	42.2	48.0	46.2	42.8
2	43.4	42.5	39.8	40.8	50.2	41.7	37.1
3	46.5	44.6	36.6	43.7	39.5	40.9	44.0
4	34.1	38.3	44.3	42.6	48.9	43.2	43.0
5	41.5	42.7	46.8	39.5	45.1	40.5	40.4
6	38.4	38.2	39.8	42.5	39.0	38.2	39.6
7	36.9	36.6	34.4	37.0	34.3	34.0	34.2
8	32.3	32.0	35.2	36.4	31.5	31.9	31.8
9	30.0	31.5	33.0	34.2	30.9	30.3	30.8
10	30.5	30.5	31.3	32.1	31.4	30.6	31.1
11	30.6	30.3	30.5	32.3	30.7	30.5	30.8
12	31.1	29.8	30.5	32.4	30.5	30.8	31.1
13	31.2	30.3	30.7	31.3	30.6	31.1	31.3
14	30.7	31.1	31.4	31.1	30.9	31.4	30.5
15	30.9	31.3	30.5	30.9	30.3	29.5	30.7
16	30.4	30.8	31.1	31.4	29.8	31.0	31.4
17	30.6	31.1	32.4	33.4	30.5	30.1	31.4
18	31.0	31.7	33.2	32.8	30.9	31.4	30.4
19	32.6	31.2	33.0	34.0	32.0	32.2	32.1
20	33.3	31.7	34.4	35.4	31.2	31.8	30.6
21	34.2	32.0	33.0	35.2	34.1	34.7	34.1
22	34.2	35.0	33.5	36.6	36.0	35.9	31.5
23	38.1	35.7	39.7	41.9	35.9	38.0	35.8
24	42.2	38.4	37.4	40.7	34.1	44.2	38.5
10-12	30.8	30.0	30.8	32.3	30.7	30.6	30.9
14-16	30.7	31.1	30.8	31.8	30.4	30.7	31.1
0-24	31.9	31.8	32.5	33.5	31.4	31.5	31.6

85th %ile (ALL): 31.9
Weekday Inter-Peak: 30.7

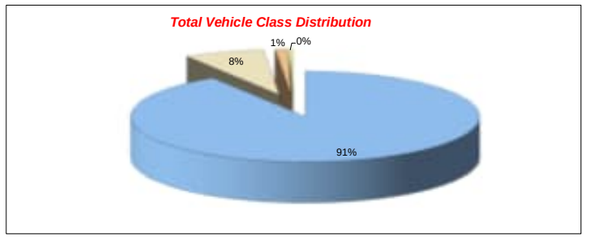
Channel 2 - Westbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	5874	7579	4861	3320	5756	5783	5542
30-40	1175	1498	1327	1253	1011	991	1082
40-50	56	57	57	92	32	43	38
50+	8	9	6	9	6	10	3
TOTAL	7113	9143	6251	4674	6805	6827	6665



Channel 2 - Westbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	5607	516	72	20	6220
6-22	6233	595	83	21	6872
6-24	6325	538	84	22	6969
0-24	6450	552	88	23	7113
27/09/2024					
7-19	7284	449	91	15	7834
6-22	8271	477	83	26	8857
6-24	8413	471	84	27	9015
0-24	8543	496	84	31	9143
28/09/2024					
7-19	5139	283	44	20	5486
6-22	5661	297	48	17	6023
6-24	5754	298	48	17	6118
0-24	5875	307	46	23	6251
29/09/2024					
7-19	3819	186	29	7	4041
6-22	4191	202	33	8	4434
6-24	4252	204	34	8	4498
0-24	4417	212	31	8	4674
30/09/2024					
7-19	5501	537	75	11	6124
6-22	6022	544	78	15	6657
6-24	6075	549	79	15	6696
0-24	6132	551	77	15	6775
01/10/2024					
7-19	5352	631	91	23	6097
6-22	5882	666	95	23	6666
6-24	5955	667	96	24	6710
0-24	6036	671	96	24	6827
02/10/2024					
7-19	5046	698	110	33	5887
6-22	5600	733	112	39	6484
6-24	5674	738	113	40	6566
0-24	5776	740	113	36	6665
Average					
7-19	5396	470	71	19	5956
6-22	5981	493	75	20	6570
6-24	6065	498	76	21	6652
0-24	6178	505	78	21	6783



Street

ices Ltd.

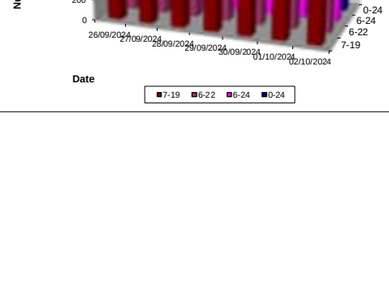
Porthmadog ATC 8, Church Street

Produced by Road Data Services Ltd.

Channel 1 - Northbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	5	0	5	10	1	1	4	2	4
2	1	1	2	6	3	3	1	2	2
3	1	0	2	0	0	0	0	0	0
4	2	0	1	3	1	1	1	1	1
5	0	0	4	0	0	2	0	0	1
6	3	1	3	0	1	0	4	2	2
7	19	10	5	3	6	9	7	10	8
8	35	31	26	14	31	37	32	33	29
9	74	71	40	26	69	68	84	73	62
10	74	75	68	39	73	75	75	74	68
11	74	88	105	56	62	73	73	74	76
12	102	98	89	104	93	112	92	99	99
13	108	108	110	105	89	102	91	100	102
14	128	110	103	88	75	69	86	94	94
15	113	109	107	117	94	110	98	105	107
16	131	141	131	86	125	136	117	130	124
17	147	118	124	62	132	117	150	133	121
18	141	158	125	67	137	156	185	155	138
19	98	111	82	47	68	98	99	95	86
20	61	99	84	28	61	49	80	70	66
21	52	54	45	26	37	42	39	45	42
22	36	26	35	12	19	25	25	26	25
23	21	24	22	9	9	12	19	17	17
24	8	8	9	3	2	5	6	6	6
7-19	1225	1218	1110	811	1048	1153	1182	1165	1107
6-22	1393	1407	1279	880	1171	1278	1333	1316	1249
6-24	1429	1439	1310	892	1182	1299	1358	1339	1271
0-24	1434	1441	1327	911	1188	1302	1368	1347	1282

Vehicle Flow (Channel 1)



Porthmadog ATC 8, Church Street

Produced by Road Data Services Ltd.

Channel 1 - Northbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	29.7	-	29.4	29.7	12.3	44.2	32.5
2	21.7	20.7	26.8	29.2	26.9	26.3	21.3
3	21.1	-	31.8	-	-	-	-
4	31.0	-	45.4	37.2	35.0	31.5	34.8
5	-	-	32.5	-	-	29.9	-
6	30.2	29.9	30.8	-	24.6	-	25.8
7	30.0	29.8	27.8	28.2	30.6	30.3	29.5
8	27.9	27.1	25.7	27.8	28.5	28.1	28.7
9	27.3	27.2	29.5	24.6	27.8	29.2	28.0
10	27.8	26.7	25.8	25.9	26.2	24.4	27.4
11	26.9	25.8	26.0	27.0	26.8	22.9	28.1
12	25.0	25.4	24.6	26.0	26.3	24.6	25.9
13	24.6	26.5	25.7	26.9	25.7	27.0	25.1
14	24.5	27.4	25.3	26.8	26.5	26.7	25.9
15	24.5	25.9	25.8	25.9	26.9	26.3	25.4
16	26.0	27.0	25.3	25.5	26.4	25.8	27.5
17	26.5	25.5	26.1	28.1	27.0	26.8	26.7
18	25.9	25.6	25.8	27.1	27.1	26.3	26.4
19	26.9	26.2	27.3	27.3	27.0	26.4	25.7
20	26.9	26.4	26.0	29.8	27.0	27.4	27.5
21	27.1	25.2	26.3	27.9	26.1	28.5	26.6
22	28.2	27.0	28.7	32.6	27.7	27.5	27.2
23	28.7	28.1	28.4	31.4	26.5	28.9	29.3
24	31.7	27.5	26.0	27.8	25.7	24.2	30.6
10-12	25.8	25.8	25.4	26.3	26.5	23.8	26.9
14-16	25.8	26.5	25.8	26.7	26.8	26.3	26.6
0-24	26.2	26.3	26.1	26.9	26.8	26.3	26.7

Mean (ALL): 26.4
Weekday Inter-Peak: 26.0

Channel 1 - Northbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	35.4	-	37.5	38.6	-	-	38.3
2	-	-	28.3	34.0	36.2	27.6	-
3	-	-	33.3	-	-	-	-
4	32.6	-	-	43.5	-	-	-
5	-	-	41.6	-	-	38.3	-
6	34.5	-	34.8	-	-	-	30.4
7	35.7	34.4	34.5	31.5	36.1	37.3	34.2
8	33.1	30.9	32.1	34.4	34.0	35.1	34.6
9	33.2	33.7	35.7	31.2	33.4	34.7	33.2
10	33.0	32.6	31.6	30.5	31.7	30.6	33.3
11	32.4	30.9	31.2	32.2	32.0	27.5	33.0
12	29.8	31.0	30.2	32.4	31.3	30.0	32.0
13	29.5	32.4	30.9	32.2	31.6	31.7	30.5
14	29.5	32.1	30.8	31.4	31.6	31.3	31.6
15	30.1	31.4	31.1	31.9	32.3	31.5	30.8
16	32.2	31.9	30.5	31.8	31.2	30.6	32.7
17	32.3	31.4	31.4	33.4	32.1	32.0	31.8
18	31.4	30.8	31.6	31.7	32.4	31.5	31.9
19	32.5	32.1	32.8	32.1	33.1	32.5	31.0
20	31.6	31.6	31.9	31.7	31.5	32.8	32.2
21	32.9	31.4	32.1	32.2	32.4	34.7	33.0
22	34.5	33.1	32.8	32.4	35.3	33.5	31.6
23	34.4	32.9	33.9	36.5	31.8	34.0	35.8
24	36.2	35.4	30.6	32.0	32.6	30.6	34.4
10-12	31.0	31.0	30.8	32.3	31.6	29.1	32.6
14-16	31.8	31.7	30.7	31.8	31.7	31.0	32.0
0-24	31.9	31.9	31.7	32.7	32.2	31.9	32.2

85th %ile (ALL): 32.0
Weekday Inter-Peak: 31.4

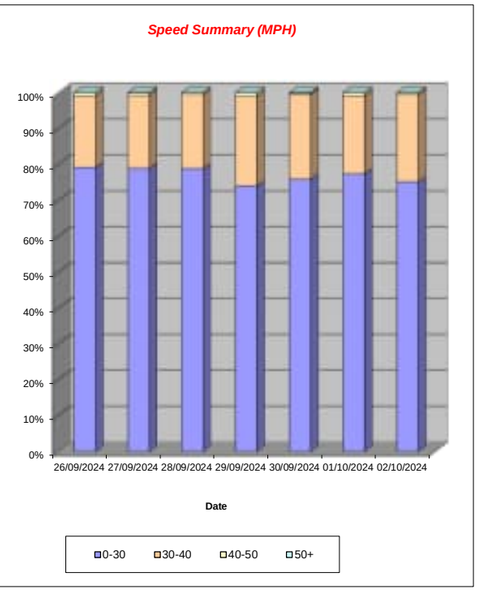
Porthmadog ATC 8, Church Street

Produced by Road Data Services Ltd.

Channel 1 - Northbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	1136	1138	1047	675	902	1008	1029
30-40	286	292	273	227	280	283	332
40-50	12	10	7	9	5	11	7
50+	0	1	0	0	1	0	0
TOTAL	1434	1441	1327	911	1188	1302	1368

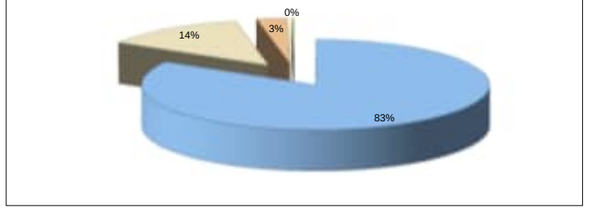
Speed Summary (MPH)



Channel 1 - Northbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	990	192	42	1	1225
6-22	1125	210	48	1	1393
6-24	1151	222	49	1	1422
0-24	1160	224	49	1	1434
27/09/2024					
7-19	1002	173	38	5	1218
6-22	1165	195	40	6	1407
6-24	1197	198	40	6	1439
0-24	1197	198	40	6	1441
28/09/2024					
7-19	952	129	27	2	1110
6-22	1094	151	34	2	1279
6-24	1135	156	35	2	1328
0-24	1134	158	33	2	1327
29/09/2024					
7-19	708	86	16	1	811
6-22	760	91	17	1	880
6-24	770	100	17	1	892
0-24	792	101	17	1	911
30/09/2024					
7-19	852	158	37	1	1048
6-22	958	172	42	1	1171
6-24	986	174	43	1	1182
0-24	977	175	45	1	1198
01/10/2024					
7-19	956	165	31	1	1153
6-22	1061	180	35	2	1278
6-24	1098	182	33	2	1295
0-24	1083	182	35	2	1302
02/10/2024					
7-19	986	155	33	8	1182
6-22	1110	173	38	8	1333
6-24	1130	174	38	8	1358
0-24	1140	176	38	8	1368
Average					
7-19	923	151	32	3	1107
6-22	1040	170	36	3	1249
6-24	1069	173	36	3	1271
0-24	1069	173	36	3	1282

Total Vehicle Class Distribution



Street

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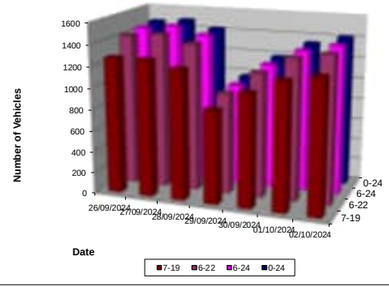
Porthmadog ATC 8, Church Street

Produced by Road Data Services Ltd.

Channel 2 - Southbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	3	0	4	5	0	0	3	1	2
2	0	0	1	4	1	0	0	0	1
3	1	0	2	0	0	0	0	0	0
4	0	2	1	1	1	1	0	1	1
5	3	1	2	0	2	5	3	3	2
6	9	4	0	1	3	6	11	7	6
7	22	18	5	4	11	19	21	18	14
8	46	41	24	15	47	51	50	47	39
9	129	124	63	23	118	120	115	121	99
10	92	97	88	49	82	78	80	86	81
11	76	78	129	101	78	97	88	83	92
12	102	105	148	103	86	103	91	97	105
13	115	114	108	92	93	109	91	104	103
14	131	113	123	102	93	86	104	105	107
15	106	129	107	111	109	109	109	112	111
16	134	117	100	100	88	131	126	119	114
17	110	118	129	74	93	109	135	113	110
18	138	132	104	61	107	126	149	130	117
19	94	108	91	41	60	68	106	87	81
20	72	87	78	34	53	49	52	63	61
21	36	33	57	28	33	41	30	35	37
22	22	40	30	11	13	24	26	25	24
23	16	17	19	6	6	5	13	11	12
24	6	13	13	3	6	1	8	7	7
7-19	1273	1276	1214	872	1054	1187	1244	1207	1160
6-22	1427	1454	1384	949	1164	1320	1373	1348	1296
6-24	1446	1484	1416	958	1176	1336	1394	1366	1315
0-24	1465	1491	1424	971	1183	1338	1411	1378	1326

Vehicle Flow (Channel 2)



Porthmadog ATC 8, Church Street

Produced by Road Data Services Ltd.

Channel 2 - Southbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	29.7	-	28.7	31.2	-	-	30.2
2	-	-	40.7	28.7	25.9	-	-
3	28.2	-	-	31.9	-	-	-
4	-	33.9	32.9	30.4	31.5	34.7	-
5	26.2	25.6	31.0	-	27.7	26.3	27.2
6	25.9	31.2	-	26.1	22.9	29.7	29.9
7	30.0	29.9	29.4	29.2	27.8	30.8	30.7
8	28.2	27.7	28.1	26.7	30.1	27.8	28.6
9	27.4	28.1	27.5	26.8	26.9	28.2	27.3
10	26.7	27.5	26.2	26.6	26.1	25.2	27.3
11	27.1	26.9	26.9	25.6	26.8	22.1	27.4
12	24.5	26.7	25.3	26.8	25.9	25.6	25.7
13	25.5	25.7	26.8	28.7	26.6	27.0	25.9
14	26.3	28.0	26.6	26.9	26.9	27.3	26.0
15	26.5	26.4	25.6	26.4	26.3	26.2	27.7
16	25.9	27.3	26.9	27.6	27.3	28.0	27.7
17	27.6	27.1	26.7	26.9	27.2	26.9	27.4
18	28.1	27.5	27.8	28.2	28.7	26.6	27.3
19	27.9	27.4	27.4	29.3	28.9	26.8	27.1
20	27.6	28.1	27.5	27.6	27.6	27.1	26.7
21	28.4	26.4	28.3	26.8	29.1	28.3	27.2
22	27.7	25.3	30.5	28.6	26.6	27.4	28.8
23	29.6	27.5	28.0	29.0	27.1	33.3	29.5
24	32.3	28.4	28.0	34.8	27.2	35.5	32.7
10-12	25.6	26.8	26.0	26.2	26.3	23.8	26.8
14-16	26.8	26.8	26.8	27.6	26.7	27.3	27.2
0-24	26.9	27.2	26.9	27.2	27.2	26.7	27.2

Average (ALL): 27.1
Weekday Inter-Peak: 26.4

Channel 2 - Southbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	35.3	-	30.6	40.2	-	-	32.3
2	-	-	-	33.7	-	-	-
3	-	-	-	34.3	-	-	-
4	-	34.3	-	-	-	-	-
5	27.4	-	31.4	-	31.9	31.4	30.7
6	30.7	37.2	-	-	23.7	36.0	34.0
7	35.7	35.2	34.2	35.4	32.5	36.9	36.1
8	33.8	32.3	34.7	34.6	36.2	33.0	34.4
9	31.9	32.9	32.8	31.7	32.5	33.2	32.4
10	32.3	32.8	31.2	31.2	31.5	31.3	31.9
11	32.7	31.9	31.9	31.7	31.6	26.9	33.6
12	29.4	31.3	31.5	32.3	32.0	30.9	30.8
13	30.9	31.1	33.7	33.2	32.5	32.3	31.1
14	31.4	33.7	31.7	32.8	32.0	32.3	30.8
15	32.5	30.9	31.1	31.5	32.3	32.0	32.8
16	31.8	32.7	32.7	33.2	32.4	33.0	33.7
17	33.0	32.2	32.2	32.7	32.4	32.4	32.7
18	34.0	33.0	33.5	33.7	34.1	31.5	32.8
19	33.9	33.7	33.5	34.0	33.3	32.6	32.8
20	32.5	33.0	34.0	32.8	32.8	32.9	31.6
21	35.6	33.7	34.0	34.0	36.0	35.3	33.3
22	32.9	30.9	36.0	33.2	32.7	34.6	33.2
23	36.4	33.7	34.6	32.6	34.2	40.9	34.5
24	36.5	34.8	33.0	39.8	34.5	-	39.9
10-12	31.0	31.6	31.8	32.1	31.8	29.3	32.3
14-16	32.1	31.7	31.8	33.1	32.4	32.4	31.9
0-24	32.6	32.6	32.7	32.8	32.8	32.4	32.7

85th %ile (ALL): 32.7
Weekday Inter-Peak: 32.0

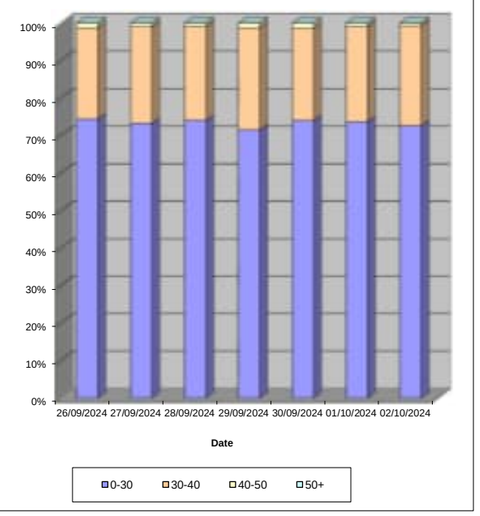
Porthmadog ATC 8, Church Street

Produced by Road Data Services Ltd.

Channel 2 - Southbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	1091	1093	1055	695	876	986	1026
30-40	356	383	356	264	291	340	375
40-50	18	15	13	12	16	12	10
50+	0	0	0	0	0	0	0
TOTAL	1465	1491	1424	971	1183	1338	1411

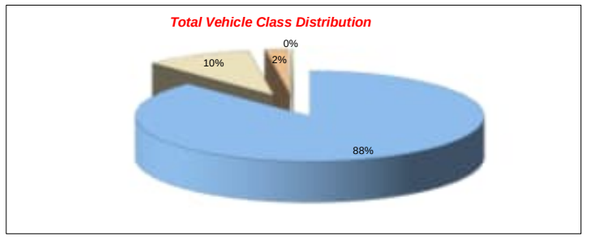
Speed Summary (MPH)



Channel 2 - Southbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	1108	135	23	1	1273
6-22	1233	158	33	1	1427
6-24	1255	157	36	1	1449
0-24	1271	160	33	1	1465
27/09/2024					
7-19	1181	140	32	4	1276
6-22	1264	154	32	4	1454
6-24	1293	157	34	4	1484
0-24	1297	157	33	4	1491
28/09/2024					
7-19	1093	95	22	4	1214
6-22	1245	116	22	4	1384
6-24	1271	118	23	4	1416
0-24	1278	119	23	4	1424
29/09/2024					
7-19	799	57	14	2	872
6-22	870	61	15	2	949
6-24	873	63	15	2	958
0-24	889	66	15	2	971
30/09/2024					
7-19	905	118	30	1	1054
6-22	1005	126	32	1	1164
6-24	1015	127	33	1	1176
0-24	1021	130	32	1	1183
01/10/2024					
7-19	1043	112	32	0	1187
6-22	1156	132	32	0	1320
6-24	1146	132	32	0	1326
0-24	1178	132	30	0	1338
02/10/2024					
7-19	1068	143	31	2	1244
6-22	1177	158	33	3	1373
6-24	1178	160	33	3	1394
0-24	1210	164	34	3	1411
Average					
7-19	1011	112	26	2	1150
6-22	1133	129	29	2	1296
6-24	1152	131	29	2	1315
0-24	1163	132	29	2	1326

Total Vehicle Class Distribution



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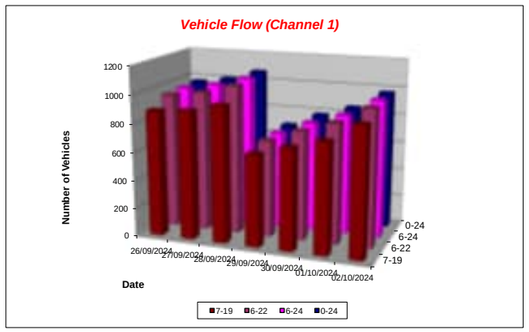
Porthmadog ATC 9, A498

Produced by Road Data Services Ltd.

Channel 1 - hwestbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	0	0	4	2	0	0	1	0	1
2	0	0	0	0	3	0	0	1	0
3	1	0	1	0	0	0	0	0	0
4	1	0	1	0	0	0	0	0	0
5	1	0	1	0	1	0	0	0	0
6	4	1	1	2	1	3	3	2	2
7	12	13	3	6	9	13	10	11	9
8	39	28	14	10	34	34	35	34	28
9	74	71	38	16	71	71	85	74	61
10	72	55	66	35	47	57	51	56	55
11	58	68	93	76	39	54	64	57	65
12	69	71	110	79	79	64	73	71	78
13	78	90	94	79	59	69	88	77	80
14	91	81	94	85	57	70	79	76	80
15	80	93	105	73	77	85	95	86	87
16	113	116	93	73	75	83	97	97	93
17	86	83	96	55	67	87	114	87	84
18	72	78	85	37	68	61	71	70	67
19	57	70	69	28	40	41	52	52	51
20	34	43	52	15	34	27	20	32	32
21	12	15	25	12	11	20	18	15	16
22	9	14	12	5	9	9	9	9	9
23	7	6	7	0	2	3	9	5	5
24	1	9	7	0	2	1	0	3	3
7-19	889	904	957	646	713	776	904	837	827
6-22	956	989	1049	684	772	845	961	905	894
6-24	964	1004	1061	684	776	849	970	913	901
0-24	971	1005	1071	688	781	852	974	917	908



Channel 1 - hwestbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	-	-	33.7	39.1	-	-	24.2
2	-	-	-	-	35.1	-	-
3	29.8	-	24.6	-	-	-	-
4	44.9	-	30.7	-	-	-	-
5	27.5	-	37.0	-	35.9	-	-
6	30.2	21.4	33.1	32.8	25.3	30.5	31.3
7	34.1	32.3	39.4	27.8	32.4	31.6	38.0
8	31.9	34.6	32.3	28.7	31.6	31.8	30.4
9	29.4	31.8	29.2	29.2	29.8	30.3	30.2
10	28.8	29.1	28.0	30.0	28.6	29.1	27.6
11	26.8	28.3	28.3	27.7	27.2	27.3	29.4
12	28.0	29.3	28.4	28.5	27.6	28.7	27.1
13	27.8	29.1	27.9	29.9	26.2	28.4	29.5
14	27.6	30.0	28.1	29.0	26.3	30.4	29.4
15	28.6	29.9	28.3	28.7	28.7	29.9	28.6
16	29.0	30.4	29.7	30.4	29.7	30.4	29.5
17	30.8	30.3	28.5	29.0	28.8	29.0	28.4
18	29.1	29.4	28.7	31.4	28.8	30.2	29.9
19	30.0	28.5	29.1	31.8	29.9	30.9	31.5
20	28.5	28.6	29.5	30.3	30.1	32.9	29.8
21	31.8	32.2	31.7	26.2	32.3	29.7	27.9
22	36.0	32.4	34.2	34.3	25.3	37.2	32.6
23	34.7	36.0	29.1	-	36.8	43.2	29.0
24	31.9	32.8	31.8	-	26.1	44.8	-
10-12	27.5	28.8	28.3	28.1	27.5	28.1	28.2
14-16	28.8	30.2	28.8	29.8	29.2	30.2	29.1
0-24	29.1	30.0	28.8	29.3	28.7	29.9	29.3

Mean (ALL) 29.2
Weekday Inter-Peak 28.9

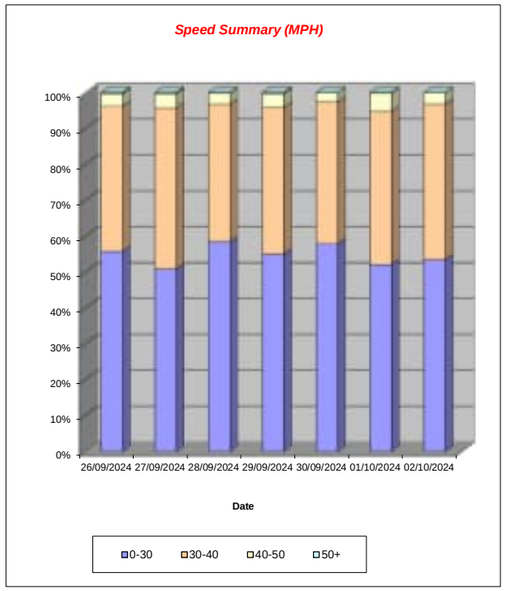
Channel 1 - hwestbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	-	-	38.2	46.3	-	-	-
2	-	-	-	-	44.5	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	34.9	-	-	40.0	-	36.7	39.7
7	39.7	37.4	43.9	38.2	39.8	39.5	43.2
8	37.8	42.7	37.9	33.2	38.0	36.9	36.9
9	35.9	38.1	36.3	35.0	35.7	35.8	36.0
10	35.8	35.2	34.4	36.1	35.8	35.3	33.1
11	32.7	34.9	33.8	33.8	33.7	33.4	36.5
12	34.0	35.2	34.7	35.4	32.8	35.8	33.7
13	33.9	36.0	33.9	36.3	33.5	33.5	35.5
14	33.7	36.4	35.0	35.6	33.1	36.4	35.2
15	34.1	34.9	35.2	35.5	35.5	35.4	35.1
16	35.1	37.0	36.1	37.4	36.1	37.0	35.7
17	37.7	36.6	34.4	34.3	35.5	34.7	35.0
18	36.1	35.7	36.0	38.4	35.7	36.6	36.2
19	36.9	34.8	36.2	38.1	36.1	35.9	38.0
20	33.6	34.3	34.8	36.8	36.2	41.0	38.7
21	39.1	39.3	39.2	33.3	36.3	37.4	34.4
22	44.8	38.2	40.1	36.2	33.8	44.4	36.4
23	39.5	41.5	37.1	-	38.3	53.9	33.8
24	-	40.9	37.6	-	29.5	-	-
10-12	33.5	35.1	34.2	34.6	33.1	34.8	35.1
14-16	34.7	36.1	35.8	36.1	35.8	36.3	35.6
0-24	35.6	36.5	35.4	36.0	35.4	36.3	35.8

85th %ile (ALL) 35.9
Weekday Inter-Peak 35.2

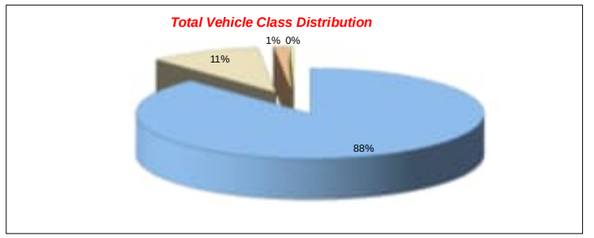
Channel 1 - hwestbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	542	512	627	379	453	445	521
30-40	393	450	410	281	308	363	422
40-50	33	40	33	26	20	43	31
50+	3	3	1	2	0	1	0
TOTAL	971	1005	1071	688	781	852	974



Channel 1 - Southwestbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	770	101	15	3	889
6-22	829	103	15	3	956
6-24	841	108	15	3	964
0-24	845	110	15	3	971
27/09/2024					
7-19	781	101	9	3	894
6-22	870	108	9	4	989
6-24	885	108	9	4	1004
0-24	884	108	9	4	1005
28/09/2024					
7-19	879	64	11	3	957
6-22	953	81	12	3	1049
6-24	965	84	12	3	1063
0-24	973	83	12	3	1071
29/09/2024					
7-19	595	45	4	2	646
6-22	631	47	5	2	684
6-24	631	47	5	2	684
0-24	632	49	5	2	688
30/09/2024					
7-19	601	92	18	4	713
6-22	654	98	16	4	772
6-24	655	98	16	4	776
0-24	655	100	16	4	781
01/10/2024					
7-19	674	88	11	2	776
6-22	735	96	13	3	845
6-24	738	98	13	3	849
0-24	743	98	11	2	852
02/10/2024					
7-19	778	107	14	5	904
6-22	830	112	14	5	961
6-24	838	113	14	5	970
0-24	841	114	14	5	974
Average					
7-19	727	86	11	3	827
6-22	785	93	12	3	894
6-24	797	94	12	3	901
0-24	797	94	12	3	906

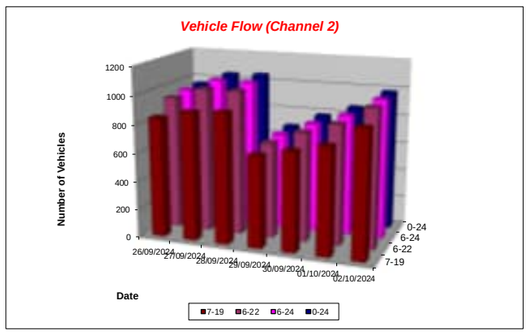


Porthmadog ATC 9, A498

Produced by Road Data Services Ltd.

Channel 2 - theastbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	2	0	3	0	2	2	1	1	1
2	0	1	2	2	2	1	0	1	1
3	0	0	2	0	0	0	0	0	0
4	2	0	3	1	1	1	1	1	1
5	0	0	2	0	0	1	0	0	0
6	2	2	2	1	1	1	2	2	2
7	9	8	4	2	14	9	8	10	8
8	38	19	23	14	22	27	35	28	25
9	54	36	39	20	42	48	62	48	43
10	65	64	53	55	59	51	79	64	61
11	64	89	101	60	70	51	91	73	75
12	70	91	100	77	63	85	75	77	80
13	65	76	94	66	51	64	81	67	71
14	94	74	81	83	53	65	69	71	74
15	92	86	92	93	56	81	84	80	83
16	84	102	106	64	82	81	89	88	87
17	86	97	88	42	80	83	79	85	79
18	71	101	80	37	80	82	84	84	76
19	61	65	59	33	38	33	61	52	50
20	35	57	46	15	29	32	33	37	35
21	31	34	32	12	19	35	22	28	26
22	19	18	19	1	10	15	18	16	14
23	14	17	17	4	6	8	7	10	10
24	1	7	4	3	1	2	2	3	3
7-19	844	900	916	644	696	751	889	816	806
6-22	938	1017	1013	674	768	842	970	907	889
6-24	963	1041	1038	681	775	852	978	920	903
0-24	959	1044	1052	685	781	858	983	925	909



Channel 2 - ortheastbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	46.2	-	36.7	-	32.2	36.3	44.9
2	-	31.0	40.6	37.1	32.3	35.5	-
3	-	-	38.3	-	-	-	-
4	39.7	-	44.9	49.5	36.1	37.6	41.5
5	-	-	37.2	-	-	20.5	-
6	41.3	43.7	42.2	52.5	33.9	36.4	32.6
7	35.5	37.6	41.0	42.4	39.2	41.5	34.3
8	36.7	38.3	35.7	41.0	34.5	35.4	36.9
9	38.0	38.6	36.9	32.7	34.3	36.8	35.4
10	35.7	35.3	35.3	33.9	34.5	32.9	35.6
11	33.3	34.2	34.5	34.2	34.1	35.5	34.3
12	32.6	33.3	35.0	36.3	33.9	33.2	32.5
13	32.8	34.2	35.1	34.9	31.8	33.2	32.6
14	31.4	33.7	36.4	34.6	36.9	34.7	33.2
15	31.7	32.3	34.0	35.3	34.0	35.2	34.1
16	32.4	34.6	34.5	34.8	33.6	36.2	34.4
17	34.6	34.2	34.9	35.2	35.4	33.3	33.2
18	34.9	34.7	33.7	36.8	36.0	34.5	34.3
19	35.8	34.3	36.2	35.7	33.8	34.1	33.2
20	36.4	34.5	33.2	33.9	35.3	37.3	36.4
21	37.6	34.6	33.1	33.1	35.2	35.6	35.1
22	35.9	36.9	37.1	32.1	36.7	38.4	34.0
23	37.8	39.1	38.4	37.5	39.9	38.8	31.6
24	49.0	35.9	41.0	33.6	43.7	34.5	39.8
10-12	32.8	33.7	34.8	35.4	34.0	34.1	33.5
14-16	32.6	33.6	34.7	35.1	33.9	35.1	34.2
0-24	34.2	34.5	35.1	35.2	34.7	34.8	34.1

Average (ALL) 34.6
Weekday Inter-Peak 33.7

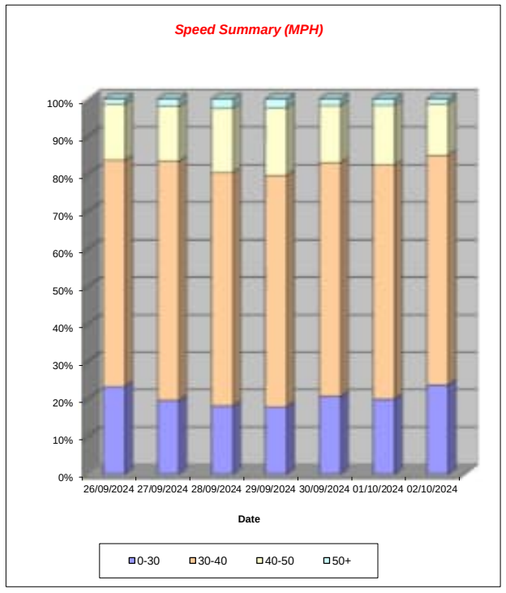
Channel 2 - ortheastbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	52.7	-	44.4	-	34.3	50.6	-
2	-	-	43.0	38.0	35.7	-	-
3	-	-	41.1	-	-	-	-
4	43.9	-	52.4	-	-	-	-
5	-	-	38.4	-	-	-	-
6	43.5	44.7	42.5	-	-	-	40.0
7	42.6	42.9	45.5	45.4	44.8	47.8	42.2
8	45.0	43.9	42.7	47.3	42.0	45.4	44.4
9	44.3	46.7	43.1	42.7	42.0	44.9	42.6
10	42.2	43.0	43.2	40.1	40.6	38.9	42.7
11	39.0	40.4	40.5	40.2	39.8	41.1	40.2
12	38.5	40.4	43.8	44.5	41.0	39.1	39.3
13	38.9	40.6	42.6	40.9	37.8	39.4	40.6
14	38.3	39.5	43.4	40.3	44.9	40.0	38.5
15	37.4	38.7	40.3	41.8	39.6	43.2	41.5
16	38.0	41.4	40.1	42.0	39.4	43.3	41.6
17	40.6	40.7	42.5	44.1	41.4	39.8	39.9
18	41.7	40.8	41.6	44.8	43.4	41.2	41.2
19	43.7	42.2	42.8	42.0	40.8	42.3	38.9
20	43.1	41.0	39.6	41.1	41.2	44.7	43.8
21	45.9	42.7	40.8	42.4	42.9	42.6	44.0
22	43.5	43.6	44.0	-	44.2	45.5	43.2
23	45.7	50.4	46.5	47.1	46.6	47.6	40.5
24	-	42.2	44.6	38.6	-	36.1	43.8
10-12	38.7	40.4	42.8	42.8	40.4	40.0	39.9
14-16	37.8	40.3	40.7	41.8	39.5	42.1	41.5
0-24	41.1	41.5	42.3	42.4	41.4	41.9	41.2

85th %ile (ALL) 41.7
Weekday Inter-Peak 40.3

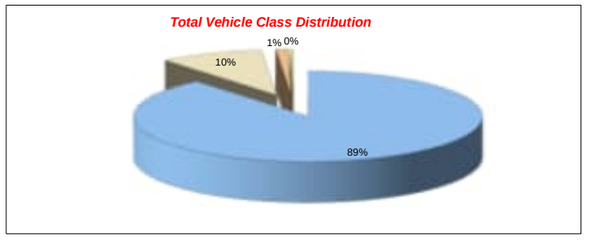
Channel 2 - ortheastbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	224	205	191	123	162	172	234
30-40	579	666	655	423	487	535	602
40-50	143	153	180	123	119	137	135
50+	13	20	26	16	13	14	12
TOTAL	959	1044	1052	685	781	858	983



Channel 2 - Northeastbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	718	112	13	1	844
6-22	801	118	16	2	938
6-24	821	118	14	1	953
0-24	826	117	14	2	959
27/09/2024					
7-19	786	85	14	5	890
6-22	900	93	14	5	1017
6-24	923	93	14	5	1041
0-24	929	97	14	5	1044
28/09/2024					
7-19	842	66	6	2	916
6-22	935	74	6	2	1017
6-24	953	77	6	2	1038
0-24	964	79	7	2	1052
29/09/2024					
7-19	601	37	4	2	644
6-22	629	38	4	3	674
6-24	634	40	4	3	681
0-24	639	40	4	3	686
30/09/2024					
7-19	660	83	11	2	756
6-22	666	90	12	0	768
6-24	677	90	12	0	775
0-24	679	90	12	0	781
01/10/2024					
7-19	677	70	4	0	751
6-22	760	78	4	0	842
6-24	771	77	4	0	852
0-24	778	78	4	0	858
02/10/2024					
7-19	766	102	16	5	889
6-22	831	109	17	6	970
6-24	841	110	17	6	974
0-24	849	111	17	6	983
Average					
7-19	715	79	10	2	806
6-22	791	85	10	3	889
6-24	807	87	10	3	903
0-24	808	88	10	3	909



Street

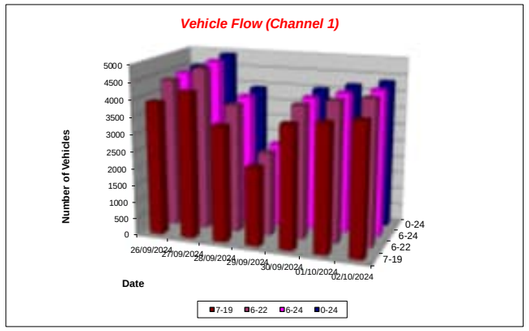
ices Ltd.

Porthmadog ATC 10, High Street

Produced by Road Data Services Ltd.

Channel 1 - Southbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	8	6	16	11	3	1	6	5	7
2	0	3	2	12	3	9	1	3	4
3	5	3	6	3	6	3	2	4	4
4	3	8	9	4	2	2	8	5	5
5	13	10	16	12	11	9	11	11	12
6	26	28	15	6	37	20	34	29	24
7	89	57	24	20	55	64	58	65	52
8	196	161	92	42	162	195	166	176	145
9	383	418	187	62	350	377	378	381	308
10	332	353	308	141	325	324	303	327	298
11	327	327	327	257	276	274	289	299	297
12	327	358	377	287	274	288	292	308	315
13	329	335	333	305	317	296	296	315	316
14	323	341	292	268	301	279	321	313	304
15	317	414	339	291	298	357	314	340	333
16	383	480	316	233	347	347	375	386	354
17	366	432	350	178	370	380	393	388	353
18	349	357	246	123	358	376	429	374	320
19	282	290	208	98	214	214	298	260	220
20	193	236	169	70	135	169	148	176	160
21	121	113	120	49	89	102	122	109	104
22	70	108	80	33	52	72	67	74	69
23	46	40	56	15	19	23	29	31	33
24	14	33	26	8	7	13	14	16	16
7-19	3914	4266	3375	2285	3592	3707	3854	3867	3570
6-22	4387	4780	3777	2457	3923	4114	4249	4291	3955
6-24	4447	4853	3855	2485	3948	4150	4292	4338	4004
0-24	4502	4911	3923	2528	4011	4194	4354	4394	4060



Channel 1 - Southbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	26.8	26.1	29.3	28.4	32.5	27.8	27.3
2	-	28.5	27.8	29.3	27.9	26.2	27.3
3	22.2	31.2	29.0	25.4	28.4	21.9	23.4
4	29.7	25.3	30.0	26.0	35.7	26.9	28.5
5	29.3	29.9	28.0	27.4	24.5	26.9	28.1
6	28.4	25.9	28.6	28.9	28.9	28.8	26.9
7	27.8	28.0	27.6	27.7	27.7	26.6	28.6
8	24.7	26.3	26.9	25.4	26.0	25.0	26.1
9	23.8	23.3	24.9	23.8	23.7	24.4	23.9
10	24.0	23.6	24.2	25.1	24.2	24.4	24.2
11	23.4	23.9	23.8	24.0	23.5	23.0	23.4
12	22.9	23.6	23.3	23.5	23.1	23.0	23.1
13	23.9	23.5	24.0	24.1	23.7	23.3	23.3
14	22.4	24.5	23.9	24.3	23.3	23.8	23.4
15	23.9	23.3	22.8	23.7	23.7	23.7	23.6
16	23.3	24.2	24.5	23.4	22.7	23.0	24.3
17	24.2	24.4	23.9	24.8	23.7	23.6	23.7
18	23.3	25.4	25.8	26.1	24.2	23.8	23.3
19	23.8	24.6	25.3	25.8	25.3	25.3	24.1
20	24.5	24.8	24.6	24.8	24.1	24.6	24.4
21	25.9	24.8	25.1	24.3	23.1	24.7	24.4
22	25.2	25.0	26.4	26.0	24.0	27.0	25.7
23	25.8	26.6	25.5	30.9	25.5	26.6	26.5
24	28.1	26.7	24.5	30.2	24.1	25.5	26.7
10-12	23.1	23.7	23.5	23.8	23.3	23.0	23.7
14-16	23.8	23.8	23.8	23.9	22.9	23.3	24.0
0-24	23.9	24.3	24.4	24.4	23.9	24.0	24.1

Mean (ALL)	24.1
Weekday Inter-Peak	23.5

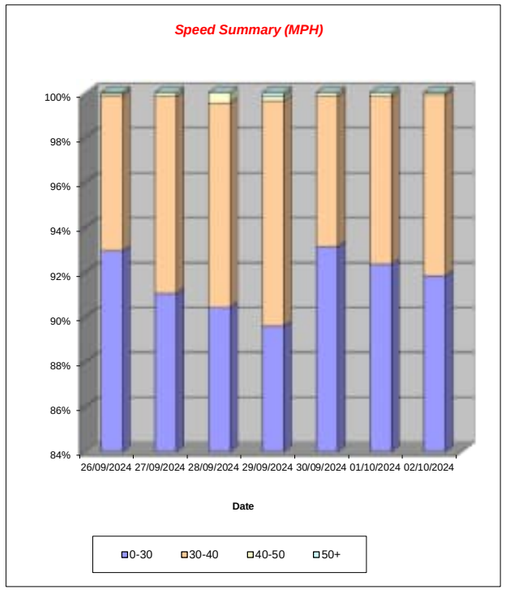
Channel 1 - Southbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	32.7	30.9	35.8	35.1	35.4	-	32.6
2	-	31.9	30.8	33.1	29.9	32.9	-
3	26.4	39.5	35.4	29.1	34.4	25.7	24.7
4	31.5	27.7	34.8	32.0	37.2	27.6	32.6
5	34.4	36.1	35.7	32.3	30.7	31.9	32.6
6	33.9	31.8	34.0	33.1	34.6	34.4	33.9
7	34.9	33.7	34.2	33.8	35.3	34.3	34.6
8	29.5	31.5	31.5	31.0	30.8	30.5	31.5
9	28.5	28.7	29.4	28.4	28.8	29.0	28.4
10	28.7	28.2	29.1	29.9	28.6	28.7	28.7
11	27.8	28.1	28.4	28.9	27.9	27.4	28.8
12	27.1	28.1	28.2	28.1	27.8	27.2	27.7
13	28.3	28.1	28.6	30.1	27.8	28.1	28.4
14	27.1	29.2	28.6	30.4	27.7	28.7	27.9
15	28.5	28.5	27.3	28.0	27.8	28.1	28.5
16	28.1	29.0	29.2	28.1	27.9	28.2	28.7
17	28.8	29.4	28.9	29.7	28.3	28.0	28.3
18	28.5	29.9	30.5	31.7	29.1	28.1	28.5
19	28.5	29.4	30.1	30.4	29.9	30.1	28.8
20	29.1	29.7	29.8	30.5	29.1	30.0	29.3
21	31.0	29.8	30.9	29.8	27.6	30.1	29.9
22	29.6	29.9	32.5	31.9	29.2	32.1	31.5
23	32.9	33.3	31.3	36.4	31.0	32.9	32.6
24	35.7	32.2	29.6	38.2	31.4	29.0	33.2
10-12	27.4	28.1	28.3	28.5	27.8	27.3	28.3
14-16	28.1	28.8	28.7	29.1	27.9	28.3	28.6
0-24	28.8	29.3	29.4	29.7	28.8	28.9	29.0

85th %ile (ALL)	29.1
Weekday Inter-Peak	28.2

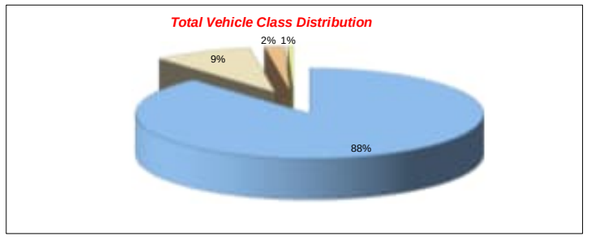
Channel 1 - Southbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	4185	4472	3548	2265	3736	3874	3999
30-40	310	431	357	254	269	313	351
40-50	6	8	18	5	6	7	4
50+	1	0	0	4	0	0	0
TOTAL	4502	4911	3923	2528	4011	4194	4354



Channel 1 - Southbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	3402	407	79	26	3914
6-22	3816	456	89	26	4387
6-24	3873	458	89	27	4447
0-24	3914	465	89	34	4502
27/09/2024					
7-19	3723	408	71	16	4222
6-22	4237	431	93	21	4780
6-24	4300	438	93	21	4853
0-24	4364	440	93	24	4911
28/09/2024					
7-19	3079	240	46	10	3375
6-22	3442	272	53	11	3777
6-24	3514	277	53	11	3855
0-24	3564	289	54	16	3923
29/09/2024					
7-19	2105	150	21	9	2285
6-22	2261	161	25	10	2457
6-24	2288	162	25	10	2485
0-24	2325	164	26	13	2528
30/09/2024					
7-19	3130	362	86	14	3592
6-22	3439	394	92	18	3923
6-24	3470	394	92	18	3948
0-24	3503	397	93	20	4011
01/10/2024					
7-19	3207	410	74	16	3707
6-22	3574	443	79	18	4114
6-24	3609	448	83	19	4150
0-24	3639	449	83	23	4194
02/10/2024					
7-19	3374	388	70	22	3854
6-22	3735	413	78	23	4249
6-24	3773	417	79	23	4292
0-24	3823	425	77	29	4354
Average					
7-19	3155	335	66	16	3570
6-22	3500	368	73	18	3955
6-24	3543	372	74	19	4004
0-24	3587	376	74	23	4060

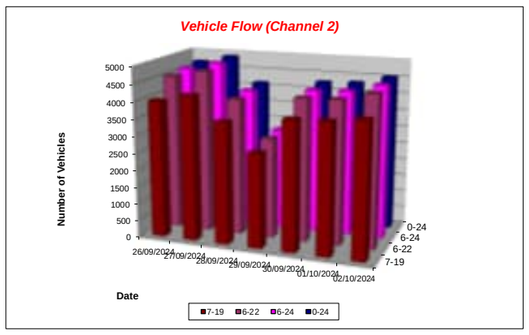


Porthmadog ATC 10, High Street

Produced by Road Data Services Ltd.

Channel 2 - Northbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	12	4	13	16	2	5	5	6	8
2	3	4	7	14	3	10	3	5	6
3	3	2	6	0	3	5	2	3	3
4	7	6	4	7	2	1	4	4	4
5	11	8	9	6	15	11	15	12	11
6	26	24	17	13	34	29	20	27	23
7	77	65	25	19	50	56	61	62	50
8	177	155	68	44	159	173	168	166	135
9	306	276	143	63	288	288	283	288	235
10	259	307	252	141	308	236	261	274	252
11	314	385	340	226	306	240	286	306	300
12	337	367	346	333	328	316	299	329	332
13	339	358	365	342	308	354	317	335	340
14	364	359	339	337	307	335	312	335	336
15	352	415	326	379	356	337	319	356	350
16	418	452	417	346	394	398	394	411	403
17	405	409	345	242	368	390	454	405	373
18	467	459	371	181	394	457	505	456	405
19	270	280	234	116	256	273	320	280	250
20	229	257	194	69	182	181	241	218	193
21	131	116	141	61	111	97	110	113	110
22	107	88	91	31	50	62	91	90	74
23	49	60	50	26	38	45	40	46	44
24	23	32	27	9	8	16	20	20	19
7-19	4008	4222	3546	2750	3772	3797	3918	3943	3716
6-22	4552	4748	3997	2930	4165	4193	4421	4416	4144
6-24	4624	4846	4074	2985	4211	4254	4481	4482	4207
0-24	4686	4888	4130	3021	4270	4315	4530	4538	4263



Channel 2 - Northbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	31.6	22.1	25.8	27.6	19.0	28.8	24.7
2	24.9	26.5	25.3	30.0	25.5	35.1	21.6
3	32.3	30.4	26.0	-	29.9	26.3	34.9
4	29.2	27.0	29.9	29.2	29.0	25.9	28.9
5	25.7	28.1	33.5	26.3	26.5	26.7	26.7
6	30.1	26.2	25.4	28.8	29.5	28.7	26.7
7	25.6	25.9	27.4	29.3	26.1	25.8	27.4
8	24.5	26.0	26.2	27.4	25.0	25.0	25.5
9	23.4	24.0	26.7	24.6	23.8	24.4	24.3
10	24.7	23.8	24.1	24.9	23.9	24.5	24.3
11	23.6	22.8	23.2	24.4	23.2	23.7	24.7
12	22.5	23.1	23.0	23.4	23.5	23.0	23.4
13	23.9	23.5	22.6	23.5	23.7	23.2	23.5
14	23.1	23.6	23.3	24.1	24.1	23.2	23.5
15	22.6	22.9	23.3	23.2	23.2	22.8	23.2
16	22.8	23.2	23.5	23.6	23.1	22.8	23.1
17	23.2	23.7	23.2	24.4	23.6	23.2	23.3
18	22.6	23.7	24.0	24.8	23.8	23.1	23.4
19	24.6	24.2	25.3	25.0	24.2	23.8	23.6
20	24.9	25.3	25.0	26.3	24.8	25.1	24.5
21	25.6	25.9	25.8	26.4	23.6	26.0	25.0
22	26.2	25.1	26.6	27.8	25.4	27.3	26.0
23	27.6	27.6	27.2	25.1	27.5	27.3	28.0
24	27.9	26.7	26.1	27.4	24.7	25.8	28.4
10-12	23.0	22.9	23.1	23.8	23.3	23.3	24.1
14-16	22.7	23.1	23.3	23.8	23.3	23.0	23.3
0-24	23.7	23.9	24.0	24.3	23.9	23.8	23.9

Average (ALL)	23.9
Weekday Inter-Peak	23.1

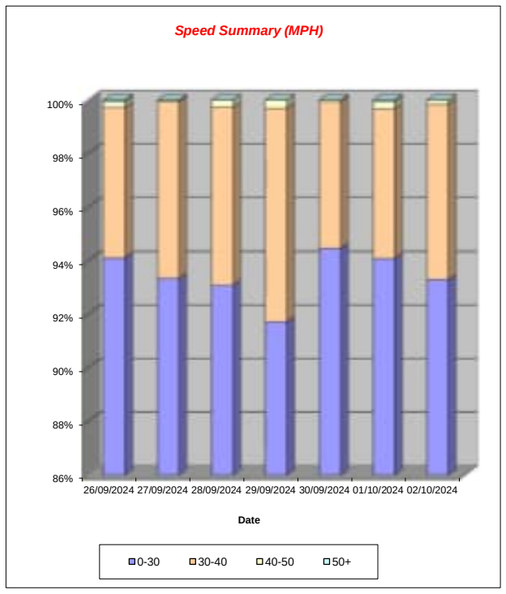
Channel 2 - Northbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	38.0	26.6	32.9	34.5	24.3	36.7	30.7
2	28.7	32.4	28.7	34.3	32.4	47.5	24.4
3	33.2	33.9	29.0	-	35.9	31.7	39.1
4	32.6	29.8	40.0	33.6	39.3	-	30.9
5	31.8	35.3	39.0	29.9	32.9	34.3	33.4
6	36.0	31.9	32.8	35.9	33.7	35.0	34.4
7	29.9	30.6	33.9	35.2	30.8	30.9	31.7
8	29.9	30.9	31.5	32.5	29.4	29.6	30.5
9	28.0	28.9	31.7	29.9	28.2	28.7	28.5
10	29.1	28.6	28.5	29.5	28.3	29.4	28.7
11	28.0	26.9	27.2	28.5	27.4	27.9	29.2
12	26.5	27.4	27.0	27.9	27.6	27.2	28.1
13	29.3	27.8	27.0	28.1	27.9	27.7	28.0
14	27.2	28.4	27.8	28.4	28.3	27.4	28.1
15	27.0	27.1	27.8	27.1	27.5	27.2	28.1
16	27.1	27.2	27.4	27.8	27.0	27.0	27.2
17	27.4	28.0	27.8	29.0	27.5	27.6	27.9
18	27.2	28.2	28.4	29.5	28.7	27.1	28.4
19	28.9	28.5	30.0	29.7	28.8	28.9	28.0
20	29.6	29.5	30.1	32.0	29.2	29.6	28.7
21	30.5	31.0	30.5	31.5	28.5	31.3	30.5
22	31.2	30.4	31.6	35.0	30.2	32.5	31.6
23	34.1	33.1	33.1	34.4	32.1	31.7	34.5
24	34.5	33.3	33.0	30.3	29.7	31.4	33.7
10-12	27.2	27.1	27.3	28.2	27.4	27.5	28.8
14-16	27.4	27.2	27.5	27.8	27.3	27.1	27.6
0-24	28.5	28.5	28.7	29.1	28.3	28.5	28.7

85th %ile (ALL)	28.6
Weekday Inter-Peak	27.4

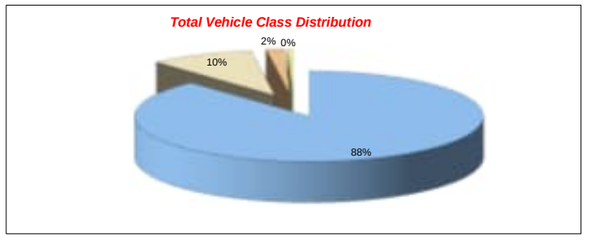
Channel 2 - Northbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-30	4410	4563	3845	2771	4034	4060	4227
30-40	263	322	274	241	233	241	296
40-50	10	3	11	9	3	11	7
50+	3	0	0	0	0	3	0
TOTAL	4686	4888	4130	3021	4270	4315	4530



Channel 2 - Northbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	3485	439	65	19	4008
6-22	3964	488	83	21	4552
6-24	4029	494	83	21	4624
0-24	4077	499	85	25	4686
27/09/2024					
7-19	3723	408	71	16	4222
6-22	4171	458	89	21	4748
6-24	4264	469	91	21	4840
0-24	4294	470	90	25	4888
28/09/2024					
7-19	3238	259	41	8	3546
6-22	3635	299	53	10	3997
6-24	3708	307	53	10	4074
0-24	3746	317	53	14	4130
29/09/2024					
7-19	2540	178	24	8	2750
6-22	2705	193	28	9	2930
6-24	2733	197	28	9	2965
0-24	2787	203	27	11	3021
30/09/2024					
7-19	3265	418	72	17	3772
6-22	3612	445	93	15	4165
6-24	3655	449	93	14	4211
0-24	3699	453	93	20	4270
01/10/2024					
7-19	3278	430	72	17	3797
6-22	3625	462	83	20	4193
6-24	3666	467	83	20	4254
0-24	3733	473	85	24	4315
02/10/2024					
7-19	3435	405	62	16	3918
6-22	3877	455	72	20	4421
6-24	3917	459	73	20	4481
0-24	3967	466	74	23	4530
Average					
7-19	3281	362	60	14	3716
6-22	3695	400	72	17	4144
6-24	3751	409	73	17	4207
0-24	3757	413	73	20	4263



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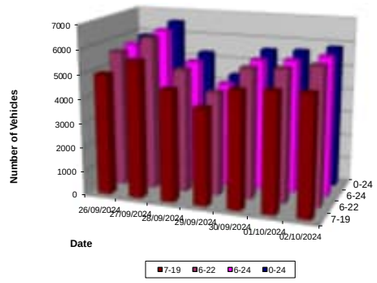
Porthmadog ATC 11, A487

Produced by Road Data Services Ltd.

Channel 1 - Eastbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	19	7	18	18	4	5	15	10	12
2	6	4	13	6	10	7	4	6	7
3	12	5	10	6	12	4	5	8	8
4	13	12	2	10	16	7	2	10	9
5	15	23	23	6	15	25	14	18	17
6	86	95	45	29	102	78	67	86	75
7	195	229	93	71	203	208	256	218	179
8	361	302	72	53	326	346	343	336	258
9	500	518	285	144	501	476	492	497	417
10	408	573	451	299	437	391	353	432	416
11	423	646	468	342	435	365	376	449	436
12	387	486	447	482	382	385	402	408	424
13	382	514	507	535	344	432	372	409	441
14	433	386	502	441	382	437	371	402	422
15	396	479	370	474	406	380	421	416	418
16	452	506	465	470	416	421	461	451	456
17	519	477	369	305	413	483	511	481	440
18	466	445	397	258	479	486	476	470	430
19	278	300	255	174	279	284	341	296	272
20	205	214	178	110	163	166	228	195	181
21	160	129	161	105	145	113	148	139	137
22	96	113	79	31	58	70	102	88	79
23	38	55	38	26	41	47	58	48	43
24	35	37	41	10	15	20	35	28	28
7-19	5005	5634	4588	3977	4800	4886	4919	5049	4830
6-22	5661	6319	5099	4294	5369	5443	5653	5689	5405
6-24	5734	6411	5178	4330	5425	5510	5734	5765	5476
0-24	5885	6557	5289	4405	5584	5636	5853	5903	5601

Vehicle Flow (Channel 1)



Channel 1 - Eastbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	33.9	29.5	36.8	34.6	33.5	26.1	38.3
2	29.3	20.5	28.1	32.0	33.9	37.2	34.9
3	27.3	30.0	30.7	32.9	31.0	35.6	34.0
4	30.4	29.6	33.2	33.1	29.1	34.1	23.1
5	27.0	29.9	31.4	30.1	33.0	29.4	31.3
6	30.5	33.1	31.9	32.6	32.1	31.4	32.7
7	30.3	30.8	31.5	33.2	31.0	32.5	31.6
8	31.4	29.8	30.8	31.9	31.0	30.1	31.2
9	30.6	29.9	30.7	32.5	31.2	30.3	30.6
10	30.0	29.2	31.5	30.3	29.5	30.0	29.4
11	29.6	29.5	31.2	30.3	29.8	29.4	29.0
12	28.9	29.6	30.1	31.2	30.5	29.8	29.9
13	29.6	30.0	31.5	31.0	29.9	29.3	30.1
14	29.9	30.0	30.5	30.8	29.5	30.3	30.4
15	30.9	29.8	31.1	30.6	29.7	29.6	29.5
16	29.9	31.0	30.7	30.9	30.7	30.3	30.4
17	30.4	31.7	30.5	32.4	31.4	29.8	30.4
18	31.0	31.5	31.5	31.9	31.7	32.3	31.5
19	31.5	30.5	32.8	32.2	31.8	32.0	31.3
20	31.3	31.6	32.1	31.4	30.1	31.2	30.2
21	31.3	33.7	31.5	30.3	33.6	31.6	31.2
22	33.1	31.3	34.7	33.0	32.9	33.1	32.8
23	30.6	32.4	31.5	30.1	32.8	32.3	32.1
24	33.3	31.3	32.9	31.4	32.6	32.7	30.8
10-12	29.3	29.5	30.8	30.8	30.1	29.6	29.4
14-16	30.6	30.4	30.8	30.7	30.2	30.0	30.0
0-24	30.4	30.4	31.2	31.2	30.7	30.5	30.5

Mean (ALL): 30.7
Weekday Inter-Peak: 29.9

Channel 1 - Eastbound — 85th Percentile

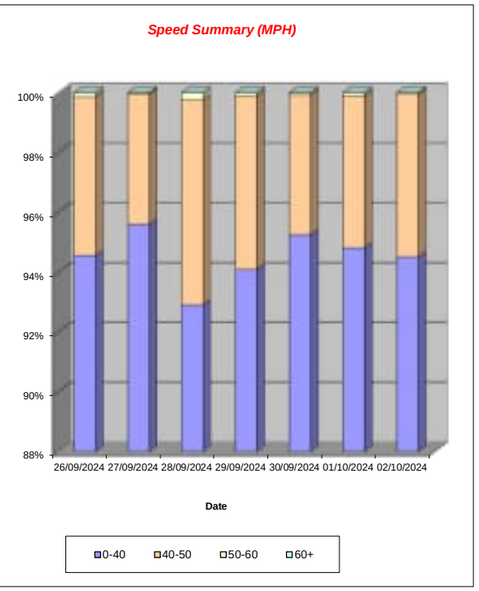
Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	39.1	37.1	41.1	38.8	40.6	32.0	45.8
2	32.8	21.6	38.0	37.9	42.7	42.9	38.5
3	34.1	32.0	36.1	37.0	37.8	42.0	41.6
4	35.6	34.0	34.1	39.4	35.4	42.2	23.4
5	35.7	38.6	36.0	34.9	39.4	36.0	39.1
6	38.6	41.1	40.6	38.8	38.4	39.0	40.7
7	37.5	37.8	38.5	40.9	38.5	40.3	38.7
8	38.0	36.5	38.2	37.6	37.7	37.6	37.8
9	37.1	36.2	37.3	38.9	37.3	36.9	37.5
10	37.0	36.0	38.2	37.1	35.9	36.9	36.4
11	36.0	35.7	38.6	37.8	36.3	35.7	35.9
12	35.6	36.1	36.8	37.8	36.9	36.3	36.5
13	36.4	36.0	37.8	37.6	36.3	36.3	36.7
14	36.3	36.8	37.7	37.4	36.0	37.1	36.8
15	37.2	36.3	38.1	37.3	36.4	36.3	36.3
16	37.2	37.0	37.3	37.8	37.1	36.7	36.9
17	37.2	38.2	37.5	39.4	37.9	36.9	37.2
18	38.1	38.2	38.1	38.5	38.2	38.8	38.2
19	39.0	37.2	39.4	38.0	38.5	38.1	38.1
20	38.4	38.6	39.3	38.2	36.5	38.3	37.4
21	38.3	40.5	39.7	36.6	40.5	38.9	37.9
22	40.0	38.7	41.8	41.5	39.0	40.8	38.6
23	38.9	39.6	39.4	36.5	40.8	40.5	37.5
24	43.8	37.5	39.2	37.6	40.1	41.0	37.8
10-12	35.9	35.8	37.7	37.8	36.6	36.0	36.2
14-16	37.2	36.7	37.8	37.8	36.7	36.3	36.7
0-24	37.3	37.0	38.2	38.0	37.3	37.4	37.3

85th %ile (ALL): 37.5
Weekday Inter-Peak: 36.4

Channel 1 - Eastbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-40	5565	6269	4914	4145	5319	5344	5532
40-50	312	285	362	255	261	286	318
50-60	8	3	13	5	4	6	3
60+	0	0	0	0	0	0	0
TOTAL	5885	6557	5289	4405	5584	5636	5853

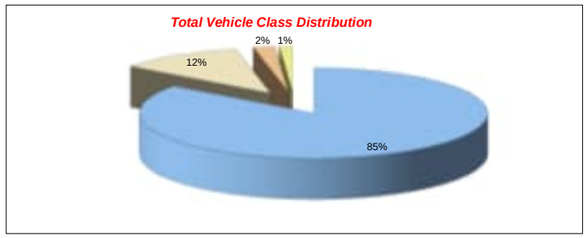
Speed Summary (MPH)



Channel 1 - Eastbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	4115	719	95	76	5005
6-22	4683	778	118	82	5661
6-24	4744	783	123	84	5734
0-24	4859	805	128	94	5885
27/09/2024					
7-19	4632	667	78	54	5434
6-22	5421	728	105	64	6319
6-24	5497	745	104	64	6411
0-24	5599	771	111	76	6557
28/09/2024					
7-19	4162	329	64	33	4588
6-22	4615	360	84	39	5099
6-24	4688	367	87	43	5178
0-24	4781	377	88	43	5289
29/09/2024					
7-19	3607	292	48	30	3977
6-22	3870	323	53	32	4294
6-24	3911	334	53	32	4330
0-24	3967	345	53	40	4405
30/09/2024					
7-19	3943	673	134	44	4800
6-22	4429	731	159	50	5369
6-24	4471	736	164	54	5425
0-24	4553	750	169	57	5584
01/10/2024					
7-19	4068	668	94	55	4886
6-22	4533	734	106	71	5443
6-24	4606	757	113	73	5510
0-24	4698	752	110	76	5636
02/10/2024					
7-19	4074	674	100	71	4919
6-22	4710	747	115	81	5653
6-24	4786	753	119	81	5746
0-24	4879	768	122	84	5853
Average					
7-19	4116	575	88	52	4830
6-22	4609	630	105	62	5405
6-24	4677	639	109	63	5476
0-24	4767	653	111	69	5601

Total Vehicle Class Distribution



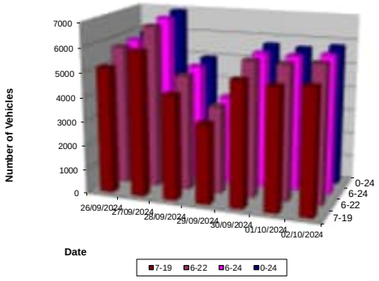
Porthmadog ATC 11, A487

Produced by Road Data Services Ltd.

Channel 2 - Westbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	24	9	14	30	12	1	14	12	15
2	14	15	5	13	2	8	5	9	9
3	20	6	7	20	7	10	6	10	11
4	14	12	11	39	5	12	16	12	16
5	25	33	25	29	21	7	16	20	22
6	27	20	32	20	45	23	30	30	29
7	119	111	72	36	107	127	104	114	97
8	264	227	160	78	237	300	281	262	221
9	501	477	221	113	459	499	525	492	399
10	382	385	378	215	448	453	450	424	387
11	411	416	387	369	328	372	383	382	381
12	410	461	483	331	423	394	357	409	408
13	404	472	465	381	423	344	376	404	409
14	413	485	361	368	434	372	396	420	404
15	432	574	414	349	406	381	400	439	422
16	545	692	431	363	537	464	457	539	498
17	544	685	422	292	536	583	538	577	514
18	544	588	348	220	561	514	551	552	475
19	334	463	227	185	319	299	371	357	314
20	249	349	201	166	178	243	241	252	232
21	126	159	115	93	106	102	151	129	122
22	81	145	79	53	78	99	85	98	89
23	40	62	50	47	30	34	49	43	45
24	18	75	58	16	11	11	25	25	29
7-19	5184	5925	4297	3264	5111	4975	5085	5256	4834
6-22	5758	6689	4764	3612	5580	5546	5666	5848	5374
6-24	5811	6826	4879	3676	5621	5591	5726	5916	5447
0-24	5941	6927	4966	3826	5713	5652	5813	6009	5548

Vehicle Flow (Channel 2)



Channel 2 - Westbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	32.4	31.3	38.5	36.3	37.7	20.2	36.4
2	41.3	35.3	38.9	33.4	27.5	36.5	27.4
3	37.6	39.6	35.1	39.3	35.9	37.8	35.0
4	31.5	32.9	35.5	41.3	35.1	32.2	32.0
5	32.9	29.7	35.4	34.5	33.7	32.3	42.2
6	34.8	34.0	34.9	37.1	34.7	39.1	33.0
7	36.1	34.1	34.1	40.3	33.4	34.1	32.9
8	33.6	32.9	35.0	35.6	34.8	32.3	32.6
9	31.9	32.2	33.9	35.5	32.6	31.8	31.9
10	32.0	31.7	31.8	32.9	32.1	31.7	32.2
11	31.5	31.0	31.0	33.4	31.3	32.1	31.8
12	31.9	31.2	31.9	32.6	31.6	31.5	32.2
13	32.1	31.0	31.6	34.0	30.6	31.4	31.7
14	31.6	30.5	31.5	33.0	31.1	32.6	31.1
15	32.1	31.9	32.2	34.4	31.7	30.9	32.1
16	31.2	29.6	32.6	32.4	30.8	31.5	31.3
17	31.5	30.7	32.3	34.1	30.4	30.7	32.2
18	31.1	32.8	33.1	34.1	31.2	32.3	31.7
19	32.5	32.5	34.0	34.8	31.0	33.2	33.6
20	33.8	32.4	32.6	32.8	31.7	33.3	32.0
21	33.5	32.2	32.4	35.5	33.4	33.8	33.5
22	33.0	33.6	33.4	35.2	33.6	37.4	32.2
23	34.2	33.1	34.7	35.8	31.5	34.4	34.2
24	37.7	31.5	35.2	35.4	34.5	36.3	40.1
10-12	31.7	31.1	31.5	33.0	31.5	31.8	32.0
14-16	31.6	30.6	32.1	33.8	31.1	32.1	31.6
0-24	32.1	31.6	32.5	33.9	31.6	32.1	32.2

Average (ALL): 32.2
Weekday Inter-Peak: 31.4

Channel 2 - Westbound — 85th Percentile

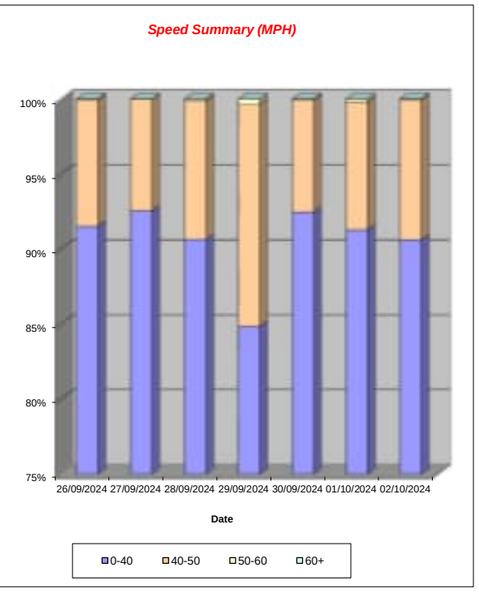
Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	38.9	39.0	47.0	41.7	42.7	-	46.1
2	48.9	40.7	44.8	39.9	33.7	41.1	36.4
3	45.8	49.5	37.3	44.2	43.3	42.8	40.0
4	37.1	38.7	43.3	46.9	39.9	37.2	42.5
5	37.5	38.0	40.6	40.1	43.8	36.9	51.3
6	41.0	40.8	41.9	42.9	40.4	44.9	38.4
7	43.7	40.9	41.1	48.2	40.8	41.9	40.4
8	40.0	39.3	41.9	43.6	41.3	39.1	40.1
9	38.4	38.7	39.9	42.3	39.4	38.6	38.9
10	38.4	38.0	38.3	40.1	38.2	38.1	39.1
11	37.9	37.7	37.8	39.9	37.1	38.5	38.5
12	38.3	37.4	38.1	39.9	38.7	37.8	38.3
13	38.7	37.6	38.3	39.9	37.4	37.7	38.4
14	38.2	37.4	38.6	39.4	38.2	39.0	39.0
15	38.8	38.5	38.9	40.7	38.3	37.6	39.4
16	38.0	36.5	39.2	38.6	37.2	38.1	38.0
17	39.0	38.1	39.3	40.8	37.9	38.3	39.0
18	38.1	39.0	39.8	39.5	38.1	39.4	38.4
19	39.1	38.9	39.9	41.5	37.4	39.9	40.0
20	40.2	39.4	39.2	39.5	38.9	41.2	39.3
21	40.9	39.9	39.4	41.8	39.7	40.4	40.1
22	38.4	40.2	39.6	41.2	39.5	45.0	38.7
23	42.4	40.0	41.9	42.6	41.0	39.5	42.4
24	42.8	39.8	41.9	41.8	37.7	41.4	45.3
10-12	38.1	37.6	38.0	39.9	38.1	38.2	38.4
14-16	38.6	37.5	39.1	39.7	37.7	38.5	38.7
0-24	38.9	38.4	39.2	40.6	38.4	39.0	39.2

85th %ile (ALL): 39.1
Weekday Inter-Peak: 38.0

Channel 2 - Westbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-40	5438	6412	4502	3247	5283	5160	5269
40-50	501	514	458	566	428	481	542
50-60	2	1	6	13	2	11	2
60+	0	0	0	0	0	0	0
TOTAL	5941	6927	4966	3826	5713	5652	5813

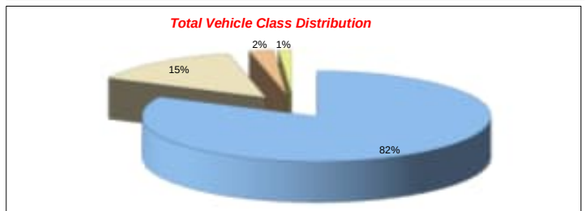
Speed Summary (MPH)



Channel 2 - Westbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	4108	850	178	56	5184
6-22	4601	922	176	59	5759
6-24	4665	924	177	59	5817
0-24	4725	956	179	81	5941
27/09/2024					
7-19	4894	827	133	75	5825
6-22	5551	911	143	79	6689
6-24	5625	914	144	83	6826
0-24	5730	964	150	83	6927
28/09/2024					
7-19	3730	490	50	27	4297
6-22	4145	533	56	30	4764
6-24	4205	538	58	30	4872
0-24	4314	549	62	41	4966
29/09/2024					
7-19	2868	329	45	22	3264
6-22	3177	363	50	26	3612
6-24	3223	378	50	24	3675
0-24	3341	393	57	35	3826
30/09/2024					
7-19	4071	868	129	43	5111
6-22	4462	930	133	55	5580
6-24	4499	934	134	54	5621
0-24	4553	991	138	71	5713
01/10/2024					
7-19	3932	834	149	60	4975
6-22	4421	909	153	64	5546
6-24	4466	923	155	63	5591
0-24	4496	927	157	72	5652
02/10/2024					
7-19	4107	779	131	68	5085
6-22	4610	842	132	80	5666
6-24	4648	860	133	85	5726
0-24	4718	869	138	88	5813
Average					
7-19	3958	711	115	50	4834
6-22	4427	773	125	56	5374
6-24	4485	784	126	57	5447
0-24	4554	801	126	68	5548

Total Vehicle Class Distribution



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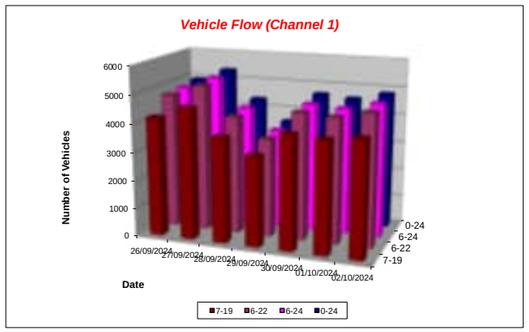
Porthmadog ATC 12, A487

Produced by Road Data Services Ltd.

Channel 1 - Eastbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	8	8	12	20	2	7	10	7	10
2	6	3	11	7	5	5	4	5	6
3	13	6	7	5	14	6	6	9	9
4	10	6	4	7	11	8	5	8	7
5	13	16	11	3	16	20	16	16	14
6	65	63	43	24	84	75	71	72	61
7	182	171	77	60	172	176	204	181	149
8	288	251	83	61	282	279	297	279	220
9	443	408	226	122	417	397	418	417	347
10	324	445	347	250	334	310	302	343	330
11	324	501	394	295	361	296	299	356	353
12	350	407	401	376	328	293	323	340	354
13	327	393	380	404	289	330	305	329	347
14	355	341	375	347	327	346	296	333	341
15	333	389	287	367	350	322	338	346	341
16	354	435	356	361	365	345	340	368	365
17	417	390	329	241	351	394	419	394	363
18	460	429	317	212	388	386	439	420	376
19	228	228	211	141	226	234	294	242	223
20	182	191	163	104	141	140	186	168	158
21	123	110	127	100	113	108	110	113	113
22	87	85	88	32	47	61	90	74	70
23	27	51	50	22	37	33	41	38	37
24	18	27	38	16	12	16	23	19	21
7-19	4203	4617	3706	3177	4018	3932	4070	4168	3960
6-22	4777	5174	4161	3473	4491	4417	4680	4704	4450
6-24	4829	5253	4249	3511	4540	4466	4734	4761	4509
0-24	4937	5354	4337	3577	4672	4587	4836	4877	4614



Porthmadog ATC 12, A487

Produced by Road Data Services Ltd.

Channel 1 - Eastbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	45.2	44.7	47.9	49.3	44.8	47.4	47.8
2	43.0	37.4	40.4	45.1	47.7	58.1	48.9
3	39.4	43.5	43.0	47.0	42.7	43.4	46.0
4	42.3	41.9	46.0	45.3	42.7	46.5	43.3
5	37.5	42.7	44.7	46.4	42.8	41.9	44.3
6	44.1	45.3	45.3	44.8	44.4	43.1	44.8
7	42.1	42.2	43.1	45.1	43.8	44.5	42.8
8	42.6	42.6	43.4	44.6	43.2	41.8	41.8
9	41.7	41.6	42.8	44.9	43.1	41.7	41.9
10	41.1	40.5	42.9	42.1	41.4	41.4	40.8
11	40.6	40.4	43.5	42.6	40.8	40.3	40.2
12	39.8	40.5	41.6	42.4	41.9	41.1	40.8
13	41.0	40.6	42.7	42.0	40.8	40.3	41.4
14	41.1	41.6	42.3	42.5	41.2	41.6	41.8
15	42.3	41.1	42.6	42.2	41.0	41.3	40.8
16	40.7	42.1	42.4	42.5	41.9	41.9	42.5
17	41.8	43.4	42.6	44.8	42.7	41.6	42.1
18	42.4	43.5	43.6	44.2	43.6	43.3	43.1
19	43.8	43.5	44.9	43.8	43.5	43.5	42.8
20	42.7	43.1	44.6	43.1	42.1	43.4	42.0
21	43.2	44.7	43.7	41.7	44.5	44.3	42.4
22	43.6	44.0	46.7	46.4	45.9	44.8	43.8
23	44.3	44.9	46.1	44.5	45.7	46.8	45.2
24	42.7	45.7	44.2	43.4	45.6	47.8	46.2
10-12	40.2	40.4	42.5	42.5	41.4	40.7	40.5
14-16	41.8	41.8	42.8	43.1	41.9	41.8	41.7
0-24	41.7	41.9	43.1	43.0	42.3	42.0	42.0

Mean (ALL): 42.2
Weekday Inter-Peak: 41.1

Channel 1 - Eastbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	50.2	54.4	54.6	56.1	47.7	54.5	56.1
2	53.2	42.2	49.8	52.1	53.7	64.9	52.1
3	48.8	50.3	47.6	49.5	48.3	51.7	50.5
4	49.3	51.5	54.8	54.1	50.8	50.2	47.1
5	45.8	51.8	51.6	48.0	50.7	47.8	52.8
6	53.6	52.7	52.6	52.7	52.0	50.9	52.0
7	49.6	49.2	50.2	54.1	51.4	51.5	49.9
8	49.0	49.1	50.1	50.7	49.0	48.5	49.0
9	46.8	46.8	49.0	50.8	48.7	47.5	47.8
10	47.4	46.4	48.9	49.2	47.2	47.9	47.1
11	46.1	45.5	51.6	50.1	46.6	46.5	46.8
12	46.2	46.3	47.5	48.4	47.8	46.8	46.5
13	46.6	46.3	48.5	47.8	47.3	46.8	46.8
14	47.1	47.8	48.9	48.7	46.6	47.2	47.6
15	48.6	47.3	49.5	48.2	46.6	46.9	46.9
16	47.3	47.6	48.2	48.0	47.8	47.6	48.4
17	47.1	49.0	48.8	51.3	48.6	48.0	47.7
18	48.6	50.2	49.0	51.2	49.3	49.2	48.8
19	51.2	49.1	50.7	49.7	50.0	50.0	49.0
20	49.8	49.5	51.1	49.4	48.7	49.9	49.0
21	50.0	51.4	52.2	48.3	51.2	51.5	49.9
22	50.2	51.7	54.9	54.9	52.4	53.5	50.0
23	52.5	50.9	54.6	49.8	52.3	55.6	52.5
24	52.0	51.7	51.2	50.8	52.8	59.0	54.4
10-12	46.2	45.9	49.7	49.2	47.3	46.7	46.7
14-16	46.8	47.5	48.8	49.1	47.3	47.3	47.7
0-24	48.1	48.0	49.7	49.5	48.5	48.5	48.3

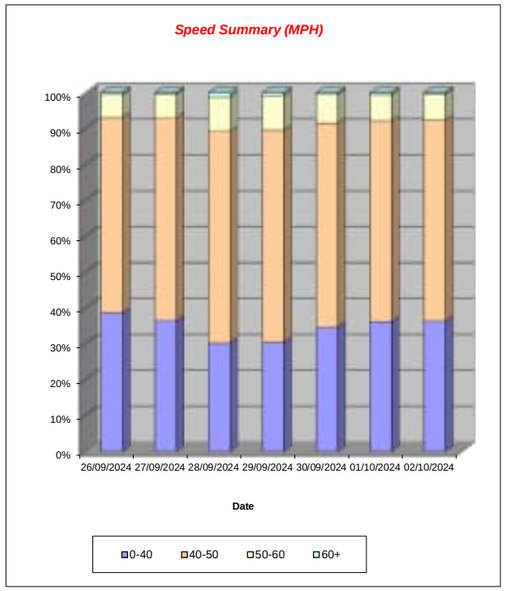
85th %ile (ALL): 48.6
Weekday Inter-Peak: 47.0

Porthmadog ATC 12, A487

Produced by Road Data Services Ltd.

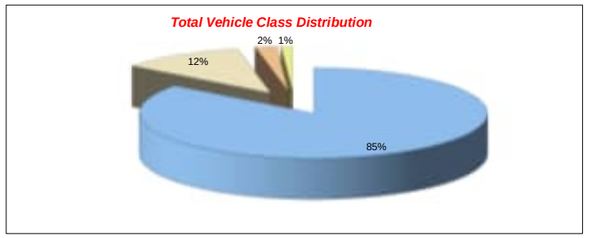
Channel 1 - Eastbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-40	1909	1955	1311	1090	1622	1660	1761
40-50	2688	3022	2561	2115	2657	2568	2706
50-60	314	355	413	343	373	332	351
60+	26	22	52	29	20	27	18
TOTAL	4937	5354	4337	3577	4672	4587	4836



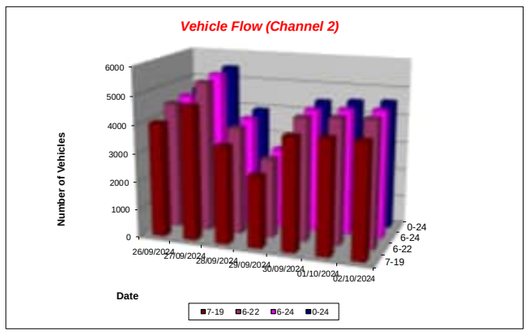
Channel 1 - Eastbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	3491	581	83	48	4203
6-22	3980	637	103	55	4777
6-24	4029	638	103	59	4829
0-24	4109	658	108	65	4937
27/09/2024					
7-19	3852	544	76	32	4617
6-22	4433	612	89	40	5174
6-24	4697	623	84	49	5252
0-24	4579	636	94	49	5354
28/09/2024					
7-19	3368	259	58	23	3706
6-22	3773	289	64	28	4161
6-24	3866	293	66	24	4249
0-24	3935	302	68	31	4337
29/09/2024					
7-19	2880	231	44	22	3177
6-22	3130	263	45	33	3473
6-24	3184	270	47	30	3511
0-24	3221	279	48	29	3577
30/09/2024					
7-19	3321	553	103	33	4018
6-22	3738	599	118	36	4491
6-24	3771	604	118	48	4540
0-24	3821	615	119	51	4672
01/10/2024					
7-19	3252	556	88	43	3932
6-22	3664	608	90	55	4417
6-24	3709	617	93	63	4466
0-24	3801	630	94	62	4587
02/10/2024					
7-19	3374	557	88	51	4070
6-22	3883	613	101	61	4660
6-24	3943	618	105	68	4734
0-24	4030	635	105	66	4836
Average	3779	470	78	39	3960
7-19	3803	518	87	45	4450
6-22	3855	527	87	45	4509
6-24	3935	537	91	51	4614



Channel 2 - Westbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	20	5	17	24	7	1	10	9	12
2	7	10	6	15	3	13	3	7	8
3	4	4	5	9	5	7	5	6	6
4	7	8	10	32	5	10	8	8	11
5	16	24	21	27	9	9	12	14	17
6	28	22	21	19	34	21	27	26	25
7	84	92	56	41	87	89	86	88	76
8	219	173	113	59	201	251	235	216	179
9	382	387	177	75	354	389	397	382	309
10	312	343	293	154	328	348	334	333	302
11	318	329	305	268	275	283	301	301	297
12	299	362	391	283	319	297	294	314	321
13	303	345	371	294	320	297	314	316	321
14	323	373	306	265	339	306	306	329	317
15	335	452	328	277	311	314	310	344	332
16	450	530	333	284	399	406	359	429	394
17	441	568	351	232	441	474	404	466	416
18	390	469	277	181	453	426	476	443	392
19	262	371	183	149	229	223	290	275	244
20	182	275	158	125	156	177	187	195	180
21	111	135	88	66	66	79	110	100	94
22	71	109	61	48	61	66	67	75	69
23	43	46	41	28	24	22	36	34	34
24	17	40	38	18	7	10	9	17	20
7-19	4034	4702	3428	2521	3969	4014	4020	4148	3813
6-22	4482	5313	3791	2801	4339	4425	4470	4606	4232
6-24	4540	5399	3876	2847	4370	4457	4518	4657	4286
0-24	4628	5472	3950	2973	4433	4518	4580	4726	4365



Channel 2 - Westbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	44.6	47.3	52.2	48.0	53.0	40.0	50.0
2	59.1	50.0	52.6	50.8	43.4	48.0	41.6
3	52.7	48.5	50.2	52.1	54.2	50.5	49.6
4	41.3	48.0	47.3	54.2	50.6	47.3	47.0
5	45.2	45.5	48.4	49.9	49.3	49.1	53.6
6	48.6	47.8	47.9	50.9	48.4	50.8	47.0
7	49.1	46.4	46.4	50.6	45.8	47.0	47.1
8	45.6	45.7	48.1	49.6	47.7	44.0	44.8
9	44.0	43.9	46.6	46.6	44.2	43.5	42.8
10	44.2	43.1	44.5	45.2	43.5	42.8	44.3
11	43.5	42.5	43.5	46.1	43.8	43.7	43.5
12	44.2	43.2	43.3	44.5	43.5	42.8	44.4
13	43.7	42.7	43.5	45.6	42.9	43.7	43.3
14	43.0	41.9	43.3	45.9	42.6	44.6	43.1
15	43.8	43.2	43.9	46.6	44.1	43.3	45.4
16	42.3	40.4	44.9	45.3	42.4	42.8	42.7
17	42.0	41.9	44.2	47.4	41.8	42.1	44.0
18	43.1	44.7	45.6	47.2	42.4	44.0	43.5
19	44.0	44.4	46.9	48.8	42.7	45.0	45.8
20	46.1	44.7	46.1	46.0	43.4	44.3	44.2
21	46.7	43.5	45.7	47.2	45.5	46.4	44.9
22	46.0	45.2	45.5	49.5	46.5	49.4	45.4
23	45.1	47.1	46.4	49.0	47.2	49.1	50.6
24	49.6	44.9	46.9	48.0	47.3	48.8	52.4
10-12	43.8	42.8	43.4	45.3	43.7	43.2	43.9
14-16	43.0	41.7	44.8	45.9	43.1	43.9	44.0
0-24	43.9	43.2	44.7	46.6	43.5	43.8	44.1

Average (ALL): 44.1
Weekday Inter-Peak: 43.1

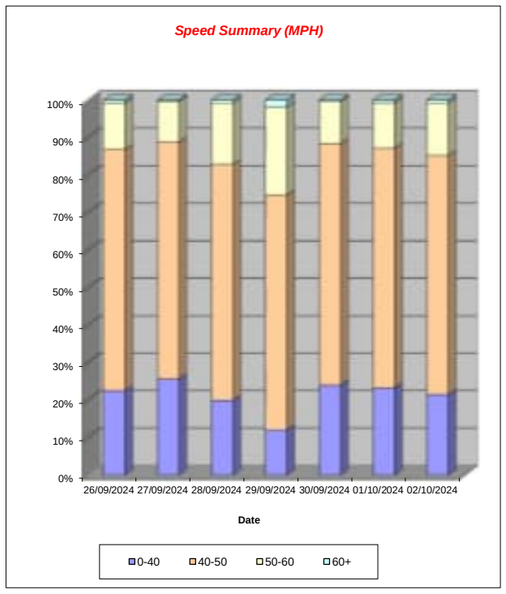
Channel 2 - Westbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	50.8	55.8	59.9	51.9	57.5	-	58.7
2	66.8	58.4	58.0	57.4	52.7	52.7	53.3
3	61.3	59.0	56.6	56.3	62.3	57.7	52.5
4	46.1	53.3	52.9	61.8	55.3	56.2	56.6
5	51.7	52.7	55.7	55.8	60.0	59.6	62.9
6	55.9	55.0	54.2	58.9	55.2	58.8	56.2
7	57.7	53.7	53.1	59.4	52.3	54.8	55.8
8	51.9	51.0	54.7	57.5	53.6	50.2	51.1
9	49.7	49.5	53.1	53.5	50.6	49.4	51.1
10	49.3	49.1	51.2	51.4	49.6	48.9	50.0
11	49.1	48.0	49.8	51.8	49.5	49.7	49.8
12	49.3	48.5	49.3	51.9	49.6	48.9	50.1
13	50.0	48.6	49.7	50.9	49.4	49.1	49.6
14	49.2	49.2	50.3	51.8	48.8	50.4	51.0
15	49.8	49.4	49.8	52.5	49.9	49.0	50.9
16	48.4	48.5	51.0	50.4	48.6	49.5	50.5
17	51.3	50.4	51.2	54.1	49.8	51.2	49.6
18	50.0	50.8	51.4	52.5	48.8	49.8	50.0
19	50.8	51.1	52.2	56.3	48.0	51.2	52.2
20	53.2	50.9	51.4	52.6	52.1	52.4	50.8
21	53.6	51.2	52.3	55.1	51.3	53.6	51.4
22	51.3	51.9	53.9	56.0	52.4	57.4	53.2
23	53.3	54.4	55.4	56.7	54.9	55.0	58.3
24	57.5	54.5	55.2	58.9	54.8	54.1	60.3
10-12	49.2	48.2	49.8	52.0	49.6	49.3	49.9
14-16	49.1	49.1	50.8	51.6	49.2	49.8	51.0
0-24	50.7	50.1	51.3	53.2	50.2	50.6	51.0

85th %ile (ALL): 50.9
Weekday Inter-Peak: 49.4

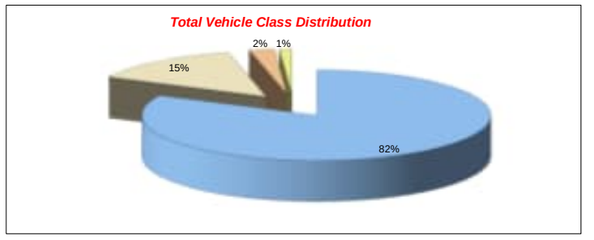
Channel 2 - Westbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-40	1042	1405	789	359	1065	1049	985
40-50	2977	3457	2484	1862	2854	2889	2918
50-60	573	592	646	698	496	548	641
60+	36	18	31	54	18	32	36
TOTAL	4628	5472	3950	2973	4433	4518	4580



Channel 2 - Westbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	3191	674	113	50	4034
6-22	3566	738	123	53	4482
6-24	3627	748	123	54	4542
0-24	3673	785	127	63	4628
27/09/2024					
7-19	3882	695	112	48	4782
6-22	4411	726	124	50	5313
6-24	4465	732	124	53	5399
0-24	4531	760	127	54	5472
28/09/2024					
7-19	3000	356	50	22	3428
6-22	3323	390	54	24	3791
6-24	3384	398	56	24	3870
0-24	3453	407	59	31	3950
29/09/2024					
7-19	2193	273	37	18	2521
6-22	2433	307	41	21	2801
6-24	2485	313	41	22	2847
0-24	2577	327	37	32	2973
30/09/2024					
7-19	3181	642	98	40	3969
6-22	3501	690	108	48	4339
6-24	3529	696	104	41	4370
0-24	3576	708	109	34	4433
01/10/2024					
7-19	3178	665	124	47	4014
6-22	3523	720	129	53	4425
6-24	3584	724	132	57	4497
0-24	3593	734	133	58	4518
02/10/2024					
7-19	3233	626	108	53	4020
6-22	3629	671	113	57	4470
6-24	3674	683	114	61	4535
0-24	3709	690	114	67	4580
Average	3124	556	93	40	3813
7-19	3483	606	98	44	4232
6-22	3855	673	113	45	4286
6-24	3586	627	101	51	4365



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Porthmadog ATC 13, Unnamed Road

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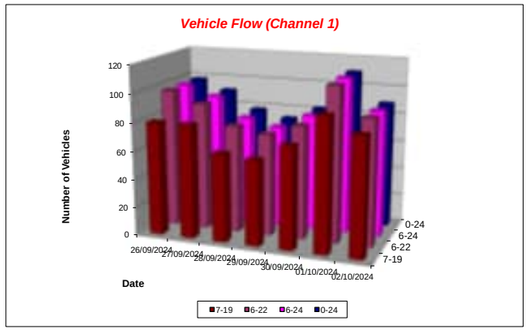
Channel 1 - Northbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	0	0	1	1	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0
7	2	4	2	1	0	2	0	2	2
8	14	12	9	12	12	16	12	13	12
9	11	1	6	3	8	8	14	8	7
10	5	7	0	3	8	9	9	8	6
11	6	4	4	5	7	13	4	7	6
12	3	5	12	8	2	6	3	4	6
13	8	6	2	2	4	6	9	7	5
14	5	10	12	3	3	7	9	7	7
15	10	10	5	10	7	9	2	8	8
16	3	8	3	6	6	4	4	5	5
17	4	7	2	2	8	7	9	7	6
18	9	5	5	3	4	4	3	5	5
19	2	5	2	3	3	5	5	4	4
20	9	4	12	7	7	12	4	7	8
21	5	1	0	3	0	0	2	2	2
22	2	1	0	1	1	1	0	1	1
23	0	1	0	0	0	1	0	0	0
24	0	0	1	0	2	0	0	0	0
7-19	80	80	62	60	72	94	83	82	76
6-22	98	90	76	72	80	109	89	93	88
6-24	98	91	77	73	82	110	89	94	88
0-24	98	91	78	73	82	110	89	94	89



Channel 1 - Northbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	-	-	18.1	14.9	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-
7	15.0	14.5	12.6	14.0	-	12.2	-
8	11.8	12.7	11.9	12.6	13.4	13.0	13.7
9	12.5	13.5	10.8	12.9	12.9	12.7	14.0
10	11.8	11.4	-	12.1	13.2	15.3	12.3
11	11.5	12.4	13.6	14.9	11.9	11.9	15.2
12	12.3	12.5	12.3	11.4	10.4	12.0	13.8
13	13.6	11.9	15.5	13.8	14.8	13.0	15.4
14	13.4	11.9	13.5	13.1	9.5	14.1	13.5
15	12.9	12.3	12.3	12.2	12.0	11.9	13.3
16	12.9	14.4	13.8	12.5	13.2	13.1	13.1
17	17.7	11.1	13.6	13.7	13.4	13.0	12.5
18	11.7	10.5	13.3	11.6	11.9	15.8	11.5
19	11.2	11.7	12.1	10.1	13.9	12.5	11.9
20	14.0	11.2	14.1	12.0	14.6	12.2	12.5
21	11.2	14.3	-	11.5	-	-	12.0
22	13.7	14.5	-	15.5	19.1	13.1	-
23	-	10.2	-	-	-	12.1	-
24	-	-	7.3	-	10.7	-	-
10-12	11.7	12.4	12.8	12.7	11.6	11.8	14.8
14-16	12.8	13.2	12.8	13.1	12.9	12.3	13.2
0-24	12.7	12.3	12.9	12.5	13.0	12.9	13.4

Mean (ALL): 12.8
Weekday Inter-Peak: 12.6

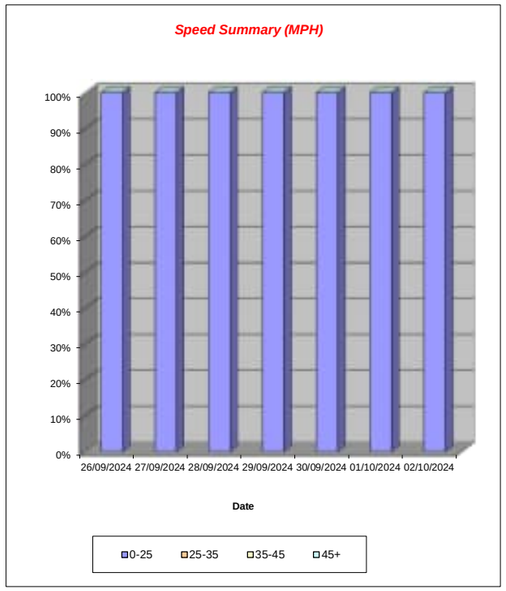
Channel 1 - Northbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-
7	18.5	17.5	12.8	-	-	12.8	-
8	14.4	14.7	13.8	14.5	16.3	15.2	16.8
9	14.9	-	11.4	13.4	16.2	15.4	17.9
10	13.6	13.6	-	14.9	15.7	19.4	13.7
11	13.3	14.3	16.1	17.1	14.6	14.2	18.7
12	14.1	14.8	13.7	14.4	10.7	13.2	17.6
13	15.3	14.6	18.2	15.0	17.4	15.3	17.5
14	19.1	15.5	16.8	14.4	12.3	16.8	15.6
15	14.3	14.7	13.8	14.4	14.6	13.5	14.6
16	14.8	16.8	15.1	14.3	14.3	16.0	14.5
17	19.5	11.8	13.9	14.6	15.2	17.8	15.9
18	14.2	11.6	17.5	14.1	13.4	19.5	11.9
19	12.4	13.0	12.1	12.4	17.7	13.9	13.0
20	17.1	11.8	17.1	13.6	17.2	14.4	13.8
21	12.3	-	-	13.9	-	-	13.9
22	14.7	-	-	-	-	-	-
23	-	-	-	-	-	-	-
24	-	-	-	-	11.2	-	-
10-12	13.6	14.5	14.4	16.0	14.6	13.6	18.3
14-16	14.4	15.9	14.9	14.1	14.8	14.4	14.6
0-24	15.6	14.8	15.7	14.9	15.9	15.8	16.3

85th %ile (ALL): 15.6
Weekday Inter-Peak: 15.0

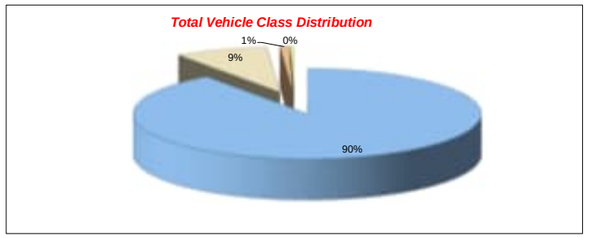
Channel 1 - Northbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-25	98	91	78	73	82	110	89
25-35	0	0	0	0	0	0	0
35-45	0	0	0	0	0	0	0
45+	0	0	0	0	0	0	0
TOTAL	98	91	78	73	82	110	89



Channel 1 - Northbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	68	11	1	0	80
6-22	84	12	1	0	98
6-24	84	13	1	0	98
0-24	84	13	1	0	98
27/09/2024					
7-19	72	8	0	0	80
6-22	81	8	1	0	90
6-24	82	8	1	0	91
0-24	83	8	1	0	91
28/09/2024					
7-19	54	8	0	0	62
6-22	67	9	0	0	76
6-24	68	9	0	0	77
0-24	69	9	0	0	78
29/09/2024					
7-19	58	1	1	0	60
6-22	69	2	1	0	72
6-24	69	2	1	0	72
0-24	70	2	1	0	73
30/09/2024					
7-19	64	1	0	1	66
6-22	73	2	0	1	80
6-24	77	3	0	1	82
0-24	77	3	0	1	82
01/10/2024					
7-19	87	2	0	0	94
6-22	101	5	0	0	109
6-24	102	5	0	0	110
0-24	102	5	0	0	110
02/10/2024					
7-19	74	7	1	1	83
6-22	82	5	1	1	89
6-24	82	6	1	1	89
0-24	80	7	1	1	89
Average					
7-19	68	7	1	0	76
6-22	79	8	1	0	88
6-24	80	8	1	0	88
0-24	80	8	1	0	89

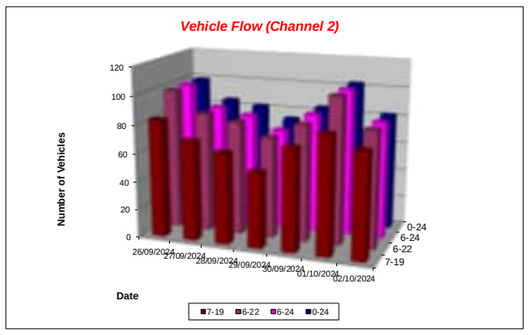


Porthmadog ATC 13, Unnamed Road

Produced by Road Data Services Ltd.

Channel 2 - Southbound — Vehicle Flow — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday	Weekday Average	Average
1	0	0	2	3	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0
7	0	3	0	0	0	1	0	1	1
8	8	7	11	4	11	13	6	9	9
9	11	4	3	9	9	5	11	8	7
10	6	5	4	5	8	4	4	5	5
11	3	4	2	2	5	7	5	5	4
12	6	7	11	9	4	11	4	6	7
13	8	5	6	3	4	2	5	5	5
14	9	4	6	1	1	7	8	6	5
15	14	12	8	4	10	11	8	11	10
16	4	6	6	10	7	4	4	5	6
17	4	7	3	1	6	8	7	6	5
18	6	6	3	2	4	8	9	7	5
19	4	3	1	3	3	3	3	3	3
20	5	5	8	7	6	8	1	5	6
21	9	6	8	11	4	11	7	7	8
22	2	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0
24	0	0	0	0	2	0	0	0	0
7-19	83	70	64	53	72	83	74	76	71
6-22	99	84	80	71	82	103	82	90	86
6-24	99	84	80	71	84	103	82	90	86
0-24	99	85	82	74	84	103	82	91	87



Channel 2 - Southbound — Average Speed — Week 1

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	-	-	11.9	12.2	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	-	13.5	-	-	-	-	-
7	-	8.7	-	-	-	11.3	-
8	11.6	12.8	11.7	8.4	9.4	10.8	12.2
9	8.3	13.4	10.0	9.0	9.9	11.1	10.8
10	8.7	11.8	12.7	9.5	11.9	11.5	12.6
11	12.8	7.6	13.9	12.9	11.0	12.1	10.7
12	10.0	8.8	9.5	8.3	10.2	12.4	11.5
13	12.6	9.7	11.9	9.1	12.8	10.1	9.5
14	11.1	11.1	10.7	7.6	13.7	11.7	9.1
15	10.9	9.8	12.8	11.7	10.2	8.2	8.4
16	9.4	10.9	7.5	9.5	10.1	11.4	9.4
17	9.4	8.2	12.5	13.1	9.5	9.6	9.2
18	10.1	10.5	8.2	14.0	12.2	12.5	10.4
19	11.7	9.7	11.7	8.3	8.3	8.7	11.9
20	11.2	8.6	12.0	11.4	9.6	9.8	11.2
21	9.1	11.1	8.8	7.7	11.7	10.5	11.9
22	8.6	-	-	-	-	-	-
23	-	-	-	-	-	-	-
24	-	-	-	-	6.2	-	-
10-12	10.8	8.3	10.2	9.1	10.7	12.3	11.1
14-16	10.5	10.2	10.3	10.1	10.1	9.9	9.7
0-24	10.4	10.2	10.8	9.5	10.3	10.8	10.4

Average (ALL): 10.4
Weekday Inter-Peak: 10.2

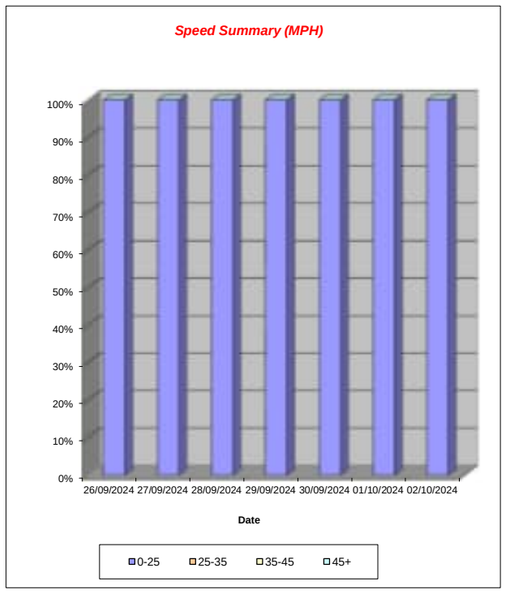
Channel 2 - Southbound — 85th Percentile

Hr Ending	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
1	-	-	13.7	13.8	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-
7	-	10.9	-	-	-	-	-
8	14.3	16.7	14.1	11.5	12.5	13.1	15.3
9	10.3	14.0	11.8	12.5	12.3	13.3	13.1
10	10.9	12.7	14.5	11.0	14.2	13.0	14.0
11	13.6	9.1	14.9	14.7	12.7	13.7	11.5
12	12.5	11.1	12.0	10.8	13.3	15.1	12.4
13	14.6	13.2	13.9	13.3	14.3	13.8	11.8
14	13.6	13.4	12.7	-	-	14.8	12.0
15	13.6	13.0	14.7	13.7	13.4	10.8	10.8
16	11.3	14.4	9.8	13.0	14.0	13.7	12.2
17	12.9	10.7	15.6	-	11.8	12.1	12.2
18	13.3	13.1	11.7	14.6	13.7	14.2	13.1
19	12.8	12.6	-	12.3	11.1	12.0	13.2
20	13.9	11.4	14.6	14.2	12.7	12.2	-
21	12.0	14.7	12.3	9.2	13.8	14.0	13.7
22	9.6	-	-	-	-	-	-
23	-	-	-	-	-	-	-
24	-	-	-	-	6.9	-	-
10-12	13.4	10.4	13.0	12.1	13.2	14.7	12.0
14-16	13.1	13.6	13.2	13.4	13.8	13.4	11.9
0-24	13.3	13.5	13.8	12.7	13.3	13.7	13.1

85th %ile (ALL): 13.4
Weekday Inter-Peak: 13.2

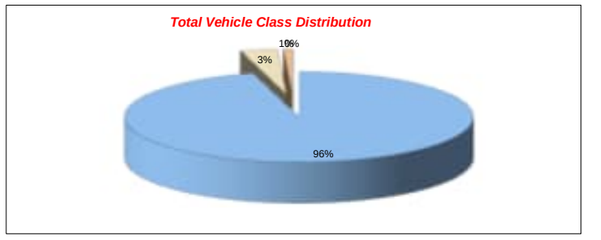
Channel 2 - Southbound — Speed Summary — Week 1

Speed (MPH)	26/09/2024 Thursday	27/09/2024 Friday	28/09/2024 Saturday	29/09/2024 Sunday	30/09/2024 Monday	01/10/2024 Tuesday	02/10/2024 Wednesday
0-25	99	85	82	74	84	103	82
25-35	0	0	0	0	0	0	0
35-45	0	0	0	0	0	0	0
45+	0	0	0	0	0	0	0
TOTAL	99	85	82	74	84	103	82



Channel 2 - Southbound — Vehicle Class — Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
26/09/2024					
7-19	78	6	1	0	83
6-22	93	7	1	0	99
6-24	93	7	1	0	99
0-24	93	7	1	0	99
27/09/2024					
7-19	82	8	0	0	90
6-22	81	3	0	0	84
6-24	81	3	0	0	84
0-24	83	3	0	0	86
28/09/2024					
7-19	59	3	2	0	64
6-22	75	3	2	0	80
6-24	75	3	2	0	80
0-24	77	3	2	0	82
29/09/2024					
7-19	52	1	0	0	53
6-22	70	1	0	0	71
6-24	70	1	0	0	71
0-24	72	1	0	0	74
30/09/2024					
7-19	71	1	0	0	72
6-22	81	1	0	0	82
6-24	83	1	0	0	84
0-24	83	1	0	0	84
01/10/2024					
7-19	82	1	0	0	83
6-22	100	2	1	0	103
6-24	100	2	1	0	103
0-24	100	2	1	0	103
02/10/2024					
7-19	69	4	1	0	74
6-22	77	4	1	0	82
6-24	77	4	1	0	82
0-24	77	4	1	0	82
Average					
7-19	68	3	1	0	71
6-22	83	3	1	0	86
6-24	83	3	1	0	86
0-24	83	3	1	0	87



4.11.A Construction Noise and Vibration Calculations and Results

nationalgrid

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1. Introduction

1.1.1 This report outlines the construction noise modelling used to predict construction noise levels and the method of determining the likely level of vibration that may be experienced during piling works. The report also summarises the construction traffic data and details the construction noise predications generated during each Noise Generating Activity (NGA) associated with the Glaslyn Cables element of the Project.

2. Construction Noise Modelling

2.1.1 CadnaA noise mapping software was used to predict construction noise levels at the selected receptors. The demolition and construction noise model followed the procedures for prediction of demolition and construction noise set out in BS 5228-1 (Ref 2.1).

2.1.2 A list of plant with corresponding sound power data (referenced from BS 5228-1 (Ref 2.1)) have been defined based on experience of similar projects. The combined noise level from all plant in each work package has been used to derive the total sound power output level for each construction activity. Noise source data for construction plant are presented in Table **2-1**.

Table 2-1 – Construction Plant

Work package	Plant/equipment	Reference	Sound power Lw (dBA)	Quantity
Horizontal Directional Drill	HDD Power unit and drill	Contractor	100	1
	HDD Generator	Contractor	98	1
	Bentonite pump	Contractor	104	1
	Bentonite mixer	Contractor	98	1
	Tracked excavator	C.2, Item 2	95	1
	Diesel Generator	C.4, Item 78	94	1
Cable Installation (open cut)/ decommissioning	Tracked excavator	C.4, Item 63	105	1
	Wheeled backhoe loader	C.4, Item 66	97	1
	Dumper	C.4, Item 9	105	2
	Telescopic handler	C.4, Item 55	98	1
	Vibratory roller	C.5, Item 27	95	1
Compound setup	Low loader	C.6, Item 23	110	1
	Tracked excavator	C.6, Item 4	108	2
	Tipper lorry	C.6, Item 23	110	1
	Dozer	Based on Caterpillar D6	109	1
	Roller	C.5, Item 25	107	1
CSEC enabling works and foundation construction and	35T Excavator	C.5, Item 18	108	2
	Dump Truck	C.5, Item 16	109	2
	Roller	C.5, Item 19	108	1
	Paver	C.5, Item 31	105	1

Work package	Plant/equipment	Reference	Sound power Lw (dBA)	Quantity
installation of access roads	Planer	C.5, Item 7	110	1
	Dozer	C.5, Item 12	105	1
CSEC demolition	Breaker mounted on excavator	C.1, Item 9	118	1
	Dump truck (tipping fill)	C.2, Item 30	104	1
	Articulated dump truck	C.4, Item 1	109	1
	Compressor	D.7, Item 9	102	2
	Power Tools	D.6, Item 52	106	2
	Forklift Trucks	D.7, Item 93	104	1
Landscaping works for reinstatement	360-hydraulic excavators (20T)	C.2, Item 14	107	1
	Dumper (9T)	C.2, Item 33	109	1
	GPS Bulldozer	C.5, Item 15	111	1
	Roller	C.2, Item 40	101	1
Demobilisation - Removal of construction compounds	Low loader	C.6, Item 23	110	1
	Tracked excavator	C.6, Item 4	108	2
	Tipper lorry	C.6, Item 23	110	1

3. Construction Vibration Calculations

3.1.1 Data from bored piling activities was referenced from Table D.6 of BS 5228-2 (Ref 2.1) to determine the likely level of vibration that may be experienced during piling works. Regression analysis was undertaken to determine a formula for calculating the PPV from bored piling activities. This analysis is presented in **Plate 3-1**.

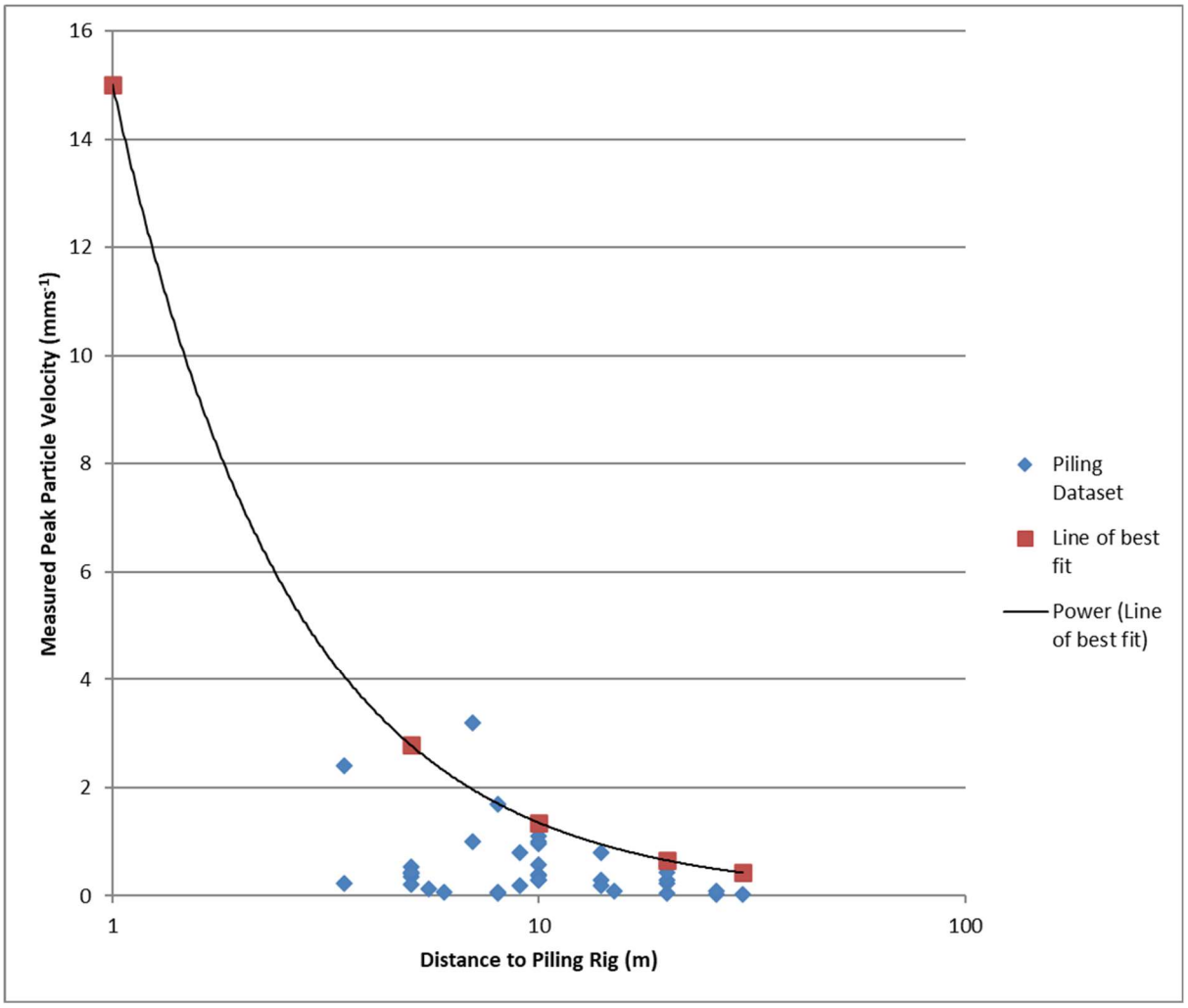

Plate 3-1 – Bored piling data regression analysis

3.1.2 For calculating potential levels of vibration at buildings due to road surfacing and reinstatement activities, reference has been made to Table E.1 of BS 5228-2 (Ref 2.1). Table E.1 contains a method for calculating the percentage chance of a PPV occurring at distance due to a vibratory roller based on the diameter of the drum and the amplitude of vibration. Vibration calculations have been undertaken assuming a typical vibratory roller that may be used is the Tandem Vibratory Roller, which has a drum of 0.72 m and amplitude of vibration of 0.56 mm.

4. Construction Traffic Data

4.1.1 Construction traffic data is presented as hourly average flows. This data was defined by taking the hourly average of baseline traffic data from the Annual Average Daytime Traffic data and adding hourly construction traffic flows averaged over the 10-hour core daytime work period of 08:00 to 18:00. Basic noise level calculations were undertaken assuming traffic speeds of 60 km/h on A-roads and 48 km/h on all other roads.

4.1.2 Construction traffic data associated with Glaslyn Cables are presented in Table **4-1** for future baseline traffic flows and in Table **4-2** for future baseline + construction traffic.

Table 4-1 – 2026 future baseline traffic data

Road link	Average hourly vehicles	HGV (%)
A487 West of A498	298	2.8
A498 South of A487	190	2.8
A498 North of A487	73	4.5
A497 South of A498	295	2.8
Penamser Road	218	2.9
Brittania Terrace/A497	219	1.5
A487 West of Minffordd Roundabout	578	1.8
Church Street	113	2.7
A498 East of Church Street Junction	78	1.5
Porthmadog High Street	359	2.3
A487 west of Porthmadog High Street Junction	481	3.4
A487 east of Porthmadog High Street Junction	388	3.3
Unnamed Road (north of Porthmadog Roundabout)	8	1.0

Table 4-2 – 2026 future baseline + Glaslyn Cables construction traffic data

Road link	Average hourly vehicles	HGV (%)
A487 West of A498	308	4.7
A498 South of A487	194	4.4

Road link	Average hourly vehicles	HGV (%)
A498 North of A487	73	4.5
A497 South of A498	295	2.8
Penamser Road	218	2.9
Brittania Terrace/A497	223	2.7
A487 West of Minffordd Roundabout	582	2.3
Church Street	113	2.7
A498 East of Church Street Junction	78	1.5
Porthmadog High Street	364	3.2
A487 west of Porthmadog High Street Junction	489	4.4
A487 east of Porthmadog High Street Junction	393	4.3
Unnamed Road (north of Porthmadog Roundabout)	8	1.0

4.1.3 Construction traffic data associated with Glaslyn Cables are presented in Table **4-3** for future baseline traffic flows and in Table **4-4** for future baseline + construction traffic.

Table 4-3 – 2026 future baseline traffic data

Road link	Average hourly vehicles	HGV (%)
A487 north of B4411	451	4.2
A487 east of B4411	382	3.4
B4411 south of A487	137	5.9

Table 4-4 – 2026 future baseline + Glaslyn Cables construction traffic data

Road link	Average hourly vehicles	HGV (%)
A487 north of B4411	454	4.5
A487 east of B4411	385	3.8
B4411 south of A487	139	5.9

5. Construction Noise Predictions

5.1.1 The results of construction noise predictions at each receptor during each NGA associated with the Glaslyn Cables are presented in Table **5-1**. Noise predictions are made up to a distance of 2 km so, where there are no results, the property is further than 2 km from the noise source location in the respective NGA.

Table 5-1 – Glaslyn Cables construction noise predictions

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Bryn Derwen Cottagebryn Derwen Cottage Road From A497 Cwt Y Defaid Junction Southwards To Porth Yr Hirfaen, Treflys, LL49 9YN	Residential	49	41	41	40	19	46	39
Fferm Cefn Road From A497 Cwt Y Defaid Junction Southwards To Porth Yr Hirfaen, Treflys, LL49 9YN	Residential	49	41	41	39	20	46	40
Cefn Cyfaneddcefn Isafcefn Isaf Road From A497 Cwt Y Defaid Junction Southwards To Porth Yr Hirfaen, Treflys, LL49 9YN	Residential	49	41	40	39	20	45	41
Cambrian Viewcambrian View A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	49	49	41	34	46	46	44
Llythyrdyllythyrdy A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	48	46	39	34	48	43	44
11.0 Bakers Lane, Porthmadog, LL49 9DT	Residential	48	34	41	39	29	45	41
41.0 Madog Street, Porthmadog, LL49 9BU	Residential	49	34	42	38	27	46	40
Llwyn Derwllwyn Derw A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	49	49	41	35	47	46	44

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Trem Arfontremarfon A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	49	49	40	35	47	46	44
Llys Tegidllys Tegid A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	49	49	41	34	45	46	44
1-2 Back Snowdon Street, Porthmadog, LL49 9BY	Residential	49	31	41	38	25	46	42
Garthgarth A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	49	49	42	35	47	46	44
Cartrefcartref A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	49	49	42	35	47	46	44
Tandderwentan Y Dderwen4 Bodlondeb Terrace A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	49	50	41	35	47	45	44
Bargoedbargoed A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Hotel	49	50	41	35	48	46	44
49.0 Madog Street, Porthmadog, LL49 9BU	Residential	49	34	43	40	29	47	41
Y Cwmni Gyrfaoffice Snowdon Street, Porthmadog, LL49 9BT	Residential	49	34	42	39	29	46	42
39.0 Madog Street, Porthmadog, LL49 9BU	Residential	49	34	42	39	29	46	42
Flatrear Of 83A High Streetflat A High Street, Porthmadog, LL49 9DT	Residential	49	32	42	40	25	46	42
Henllys16.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	49	34	42	40	29	46	42
43.0 Madog Street, Porthmadog, LL49 9BU	Residential	49	34	43	39	29	46	42
37.0 Madog Street, Porthmadog, LL49 9BU	Residential	50	34	42	39	29	47	42

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
61.0 Madog Street, Porthmadog, LL49 9BU	Residential	50	31	43	39	26	47	42
51.0 Madog Street, Porthmadog, LL49 9BU	Residential	49	31	43	40	26	47	42
45.0 Madog Street, Porthmadog, LL49 9BU	Residential	49	34	43	39	29	46	42
47.0 Madog Street, Porthmadog, LL49 9BU	Residential	49	34	43	39	29	47	42
Maes Y Brynmaesybryn A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	50	50	41	35	48	46	45
Llys Awenllys Awen A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	49	49	42	35	47	46	45
57.0 Madog Street, Porthmadog, LL49 9BU	Residential	50	32	43	40	26	47	41
55.0 Madog Street, Porthmadog, LL49 9BU	Residential	50	34	43	40	26	47	42
14.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	49	34	42	40	29	46	42
53.0 Madog Street, Porthmadog, LL49 9BU	Residential	50	34	43	40	29	47	42
Penmountpenmount A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	50	51	41	35	48	47	45
Bwthynbwthyn High Street, Porthmadog, LL49 9EU	Residential	50	32	42	40	25	46	42
4.0 Tanner Terrace, Porthmadog, LL49 9DW	Residential	49	31	42	40	25	46	41
18.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	50	34	42	40	29	46	42
22.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	50	34	42	40	29	46	42
Bodlondebbodlondeb A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	50	50	41	39	48	47	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Capel Seioncapel Seion Chapel Street, Porthmadog, LL49 9DS	Place of worship	50	33	42	40	28	47	42
Tan Y Bryn Terracebron Graigbron Graig A487(T) From Capel Garisim Penmorfa To Ffordd Caernarfon, Penmorfa, LL49 9RU	Residential	52	38	43	41	22	48	43
59.0 Madog Street, Porthmadog, LL49 9BU	Residential	50	32	43	40	26	47	42
Clydfanclydfan Chapel Street, Porthmadog, LL49 9DS	Hotel	49	33	42	40	28	46	42
Tan Y Bryn Terracetan Y Bryntan Y Bryn A487(T) From Capel Garisim Penmorfa To Ffordd Caernarfon, Penmorfa, LL49 9RU	Residential	50	43	43	41	23	47	41
New Housety Newydd Chandlers Place, Porthmadog, LL49 9EB	Residential	50	32	42	40	25	46	43
Second Floor Flat High Street, Porthmadog, LL49 9HA	Residential	50	32	42	40	25	46	42
High Street, Porthmadog, LL49 9HA	Residential	50	32	42	40	25	46	42
Isallt24.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	50	34	42	40	29	46	43
28.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	50	34	42	41	29	47	42
High Street, Porthmadog, LL49 9HA	Residential	50	32	42	41	25	47	43
3.0 Cerrig Yr Afon, Porthmadog, LL49 9JN	Residential	50	34	43	41	29	47	42
Llys Caradog12Aa Snowdon Street, Porthmadog, LL49 9BT	Residential	50	34	43	40	29	47	43
Erw Wenerw Wen Road From Osmond Terrace Passing Synite Terrace And Erw Wen To Bwlch Bryn Road, Minffordd, Penrhyndeudraeth, LL48 6HR	Residential	49	48	40	36	47	45	45
5.0 Tanner Terrace, Porthmadog, LL49 9DW	Residential	50	31	42	40	25	47	42
Canolfan Garddio New Street, Porthmadog, LL49 9ED	Residential	50	34	43	40	29	47	42

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Flat 2 Snowdon Street, Porthmadog, LL49 9BT	Residential	50	34	42	41	29	47	42
32.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	50	34	43	41	29	47	42
2 Hughendon Cottages Hughendon Cottages, Porthmadog, LL49 9EW	Residential	51	30	44	40	25	48	42
14.0 Chapel Street, Porthmadog, LL49 9DS	Residential	50	33	43	41	28	47	42
Hebog View1 Hebog View Rear Access Road To 13-25 Chapel Street From Epworth Villas To Chapel Street, Porthmadog, LL49 9DR	Residential	50	33	43	42	29	47	42
18.0 Chapel Street, Porthmadog, LL49 9DS	Residential	50	33	44	41	28	47	43
Ynysfa18.0 New Street, Porthmadog, LL49 9ED	Residential	50	33	43	41	28	47	43
Meirion Storesty Meirion A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	50	51	41	39	48	46	46
Llwyn Celyn16.0 New Street, Porthmadog, LL49 9ED	Residential	50	33	43	41	28	47	43
42.0 Chapel Street, Porthmadog, LL49 9DN	Residential	50	34	43	40	29	47	43
28.0 Cerrig Yr Afon, Porthmadog, LL49 9JN	Residential	51	34	44	41	29	48	43
52.0 Snowdon Street, Porthmadog, LL49 9DF	Residential	50	32	43	41	29	48	43
Holiday Unit Snowdon Street, Porthmadog, LL49 9DF	Residential	50	34	43	41	29	47	43
56.0 Snowdon Street, Porthmadog, LL49 9DF	Residential	50	34	43	40	29	47	43
1 Hughendon Cottages Hughendon Cottages, Porthmadog, LL49 9EW	Residential	51	33	43	41	28	47	42
28.0 New Street, Porthmadog, LL49 9ED	Residential	51	33	43	41	28	47	43

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
20.0 New Street, Porthmadog, LL49 9ED	Residential	50	33	43	41	28	47	43
40.0 Chapel Street, Porthmadog, LL49 9DN	Residential	50	33	43	41	29	47	43
Old Stables2 Old Stables Smith Street, Porthmadog, LL49 9NN	Residential	50	34	42	41	29	46	44
Flat Snowdon Street, Porthmadog, LL49 9DF	Residential	50	34	43	40	29	47	43
58.0 Snowdon Street, Porthmadog, LL49 9DF	Residential	50	34	43	41	29	47	43
Maelfa36.0 Chapel Street, Porthmadog, LL49 9DS	Residential	50	33	43	42	28	47	43
32.0 Chapel Street, Porthmadog, LL49 9DS	Residential	51	33	44	41	28	48	43
34.0 Chapel Street, Porthmadog, LL49 9DS	Residential	51	33	44	42	28	48	43
Synite Terrace6 Syenite Terrace Road From Osmond Terrace Passing Synite Terrace And Erw Wen To Bwlch Bryn Road, Minffordd, Penrhyndeudraeth, LL48 6HP	Residential	50	52	43	36	64	47	46
Ffynhondyffynhondy Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	50	51	42	36	49	46	46
Rhosydd26.0 New Street, Porthmadog, LL49 9ED	Residential	51	33	43	41	28	47	43
3 Hughendon Cottages Hughendon Cottages, Porthmadog, LL49 9EW	Residential	51	31	43	41	28	47	43
32.0 New Street, Porthmadog, LL49 9ED	Residential	51	33	43	42	28	48	43
34.0 New Street, Porthmadog, LL49 9ED	Residential	51	33	43	42	28	48	43
Synite Terrace4 Syenite Terracecrawiau Road From Osmond Terrace Passing Synite Terrace And Erw Wen To Bwlch Bryn Road, Minffordd, Penrhyndeudraeth, LL48 6HP	Residential	51	53	43	36	59	48	46

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
High Street, Porthmadog, LL49 9EU	Residential	50	32	41	41	25	46	44
Henfaes30.0 New Street, Porthmadog, LL49 9ED	Residential	51	33	44	41	28	48	43
Old Stables1 Old Stables Smith Street, Porthmadog, LL49 9NN	Residential	50	31	43	41	25	47	44
46.0 Chapel Street, Porthmadog, LL49 9DN	Residential	51	34	45	42	29	49	43
Synite Terrace3 Syenite Terracehafan Road From Osmond Terrace Passing Synite Terrace And Erw Wen To Bwlch Bryn Road, Minffordd, Penrhyndeudraeth, LL48 6HP	Residential	50	51	43	35	59	47	46
63.0 Madog Street, Porthmadog, LL49 9BU	Residential	50	31	43	40	26	47	44
Eirianfa42.0 New Street, Porthmadog, LL49 9EE	Residential	51	34	44	41	28	48	43
T+À'R Ysgol50.0 Chapel Street, Porthmadog, LL49 9DN	Residential	51	34	44	41	29	48	43
7.0 Sawmill Terrace, Porthmadog, LL49 9DG	Residential	51	31	43	41	29	48	43
Bryn Golaubryn Golau Prow Dolbenmaen No 131, Pentrefelin, LL49 9SH	Residential	52	44	43	42	22	48	43
40.0 New Street, Porthmadog, LL49 9EE	Residential	51	34	44	41	28	48	43
Tawelfan38.0 New Street, Porthmadog, LL49 9EE	Residential	51	33	44	42	29	48	43
8.0 Sawmill Terrace, Porthmadog, LL49 9DG	Residential	51	34	42	41	29	47	43
Cwt Y Defaidcwt Defaid Prow Dolbenmaen No 131, Pentrefelin, LL49 9SH	Residential	52	44	43	42	22	48	43
32.0 Madog Street, Porthmadog, LL49 9BU	Residential	51	32	42	42	26	47	44
Llys Ifan34.0 Madog Street, Porthmadog, LL49 9BU	Residential	51	31	41	41	26	47	44

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Eirianfa High Street, Porthmadog, LL49 9HD	Residential	52	33	44	42	28	48	43
Morannedd24.0 New Street, Porthmadog, LL49 9ED	Residential	51	33	44	43	28	47	43
5.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	51	34	43	42	29	48	44
9.0 Cerrig Yr Afon, Porthmadog, LL49 9JN	Residential	51	33	43	41	29	47	44
54.0 Chapel Street, Porthmadog, LL49 9DN	Residential	51	34	44	42	29	48	43
52.0 Chapel Street, Porthmadog, LL49 9DN	Residential	51	34	44	42	29	48	43
Sunday School Snowdon Street, Porthmadog, LL49 9BT	Educational Building	51	34	44	41	29	48	45
Cilgwyn33.0 New Street, Porthmadog, LL49 9ED	Residential	52	32	45	42	25	49	43
3.0 Eryri Terrace, Porthmadog, LL49 9EF	Residential	51	31	44	42	25	48	42
4.0 Cerrig Yr Afon, Porthmadog, LL49 9JN	Residential	51	34	43	40	29	48	45
50.0 Snowdon Street, Porthmadog, LL49 9DF	Residential	51	34	44	41	29	48	43
Hen Gaeauhen Gaeau Road From Osmond Terrace Passing Synite Terrace And Erw Wen To Bwlch Bryn Road, Minffordd, Penrhyndeudraeth, LL48 6HR	Residential	51	50	42	37	51	46	47
Minffordd Hostel A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HF	Hotel	50	47	40	37	48	45	47
St Beuno'S Churchst Beuno'S Cemetery Road From T+À'N Llan Southwestwards To Prow Dolbenmaen No 131, Penmorfa, LL49 9SG	Place of Worship	54	51	47	43	21	52	42

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Robert & Owen85.0Robert & Owen High Street, Porthmadog, LL49 9EU	Residential	51	32	44	43	25	47	45
92.0 Pensyflog, Porthmadog, LL49 9LB	Residential	52	32	47	43	27	50	42
38.0 Madog Street, Porthmadog, LL49 9BU	Residential	51	31	42	42	26	47	44
2.0 Eryri Terrace, Porthmadog, LL49 9EF	Residential	51	31	43	42	25	48	42
137.0 High Street, Porthmadog, LL49 9HD	Residential	52	33	44	42	28	48	43
139.0 High Street, Porthmadog, LL49 9HD	Residential	52	33	44	42	28	48	43
Lyndhurst46.0 New Street, Porthmadog, LL49 9EE	Residential	51	33	44	41	28	48	43
10.0 East Avenue, Porthmadog, LL49 9EN	Residential	51	33	44	42	28	48	43
Llidiart Gwynllidiart Gwyn Road From Garreg Frech Southeastwards Passing Tyn Y Coed To A487 Junction Penmorfa, Penmorfa, LL49 9SD	Residential	53	45	44	43	22	50	43
3.0 Tanner Terrace, Porthmadog, LL49 9DW	Residential	51	31	43	41	25	47	45
46.0 Madog Street, Porthmadog, LL49 9BU	Residential	51	32	42	41	26	47	44
50.0 New Street, Porthmadog, LL49 9EE	Residential	51	33	44	42	28	48	43
Dyfi48.0 New Street, Porthmadog, LL49 9EE	Residential	51	33	44	42	28	48	43
Llywel29.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	51	34	44	43	29	48	45
35.0 Madog Street, Porthmadog, LL49 9BU	Residential	51	34	42	41	29	47	45
62.0 Chapel Street, Porthmadog, LL49 9DN	Residential	51	34	44	42	29	48	43

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
T+À'N Llan Bach Road From T+À'N Llan Southwestwards To Prow Dolbenmaen No 131, Penmorfa, LL49 9SG	Residential	54	52	47	43	21	53	43
Min Y Fforddmin Y Ffordd Road From Garreg Frech Southeastwards Passing Tyn Y Coed To A487 Junction Penmorfa, Penmorfa, LL49 9SD	Residential	53	45	44	43	22	50	43
Bron Haulbron Haul Road From Garreg Frech Southeastwards Passing Tyn Y Coed To A487 Junction Penmorfa, Penmorfa, LL49 9SD	Residential	53	44	44	43	22	49	43
Tegfan27.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	51	34	44	43	29	48	45
East Lynne48.0 Madog Street, Porthmadog, LL49 9BU	Residential	51	31	42	41	26	47	44
2.0 Tanner Terrace, Porthmadog, LL49 9DW	Residential	51	34	43	43	29	47	45
14.0 East Avenue, Porthmadog, LL49 9EN	Residential	52	33	45	42	28	49	43
2 Epworth Villas Tai Epworth, Porthmadog, LL49 9DP	Residential	51	33	42	41	29	47	45
50.0 Madog Street, Porthmadog, LL49 9BU	Residential	51	31	43	42	26	48	45
Trigfatrigfa A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	51	50	42	39	48	47	47
Bryn Awelbryn Awel Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	52	52	45	36	50	49	47
Aeldremaeldrem Road From Garreg Frech Southeastwards Passing Tyn Y Coed To A487 Junction Penmorfa, Penmorfa, LL49 9SD	Residential	53	46	44	43	23	50	43
Flat105Aflat 1 High Street, Porthmadog, LL49 9HA	Residential	51	32	44	43	25	48	44

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
The Lemon Tub115.0 High Street, Porthmadog, LL49 9HA	Residential	51	32	43	42	25	47	44
Gestiana7.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	51	32	44	42	25	48	44
12.0 East Avenue, Porthmadog, LL49 9EN	Residential	52	33	45	42	28	48	42
16.0 East Avenue, Porthmadog, LL49 9EN	Residential	52	33	45	42	28	49	43
1.0 Cerrig Yr Afon, Porthmadog, LL49 9JN	Residential	52	31	44	43	25	48	45
Erw Wen25.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	51	34	44	43	29	48	45
42.0 Snowdon Street, Porthmadog, LL49 9DF	Residential	51	34	43	41	29	48	45
66.0 Chapel Street, Porthmadog, LL49 9DN	Residential	52	34	45	42	29	49	43
112.0 High Street, Porthmadog, LL49 9NW	Hotel	52	33	45	43	28	49	45
23.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	51	32	44	43	26	48	45
The Old Mineral Worksy Gonglthe Old Mineral Worksy Gongl Rear Access Road For 33-83 Chapel Street From Madog Street To Rear Of Library, Porthmadog, LL49 9AX	Residential	51	32	43	43	25	47	45
Flat109.0Flat High Street, Porthmadog, LL49 9HA	Residential	52	33	44	43	28	48	45
9.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	51	34	44	43	29	48	44
11.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	51	34	44	43	29	48	44
30.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	51	34	43	43	29	48	45
17.0 Cerrig Yr Afon, Porthmadog, LL49 9JN	Residential	51	34	43	42	29	48	45
26.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	52	34	44	43	29	49	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
West End Dental Porthmadog15.0 Snowdon Street, Porthmadog, LL49 9BT	Medical Facility	51	34	44	43	29	48	44
Wern Manorwern Lodgewern Lodge Prow Dolbenmaen No 131, Pentrefelin, LL49 9SH	Residential	53	45	44	43	21	49	44
Hebog View2 Hebog View Rear Access Road To 13-25 Chapel Street From Epworth Villas To Chapel Street, Porthmadog, LL49 9DR	Residential	51	33	43	42	29	48	45
Snowdon Street Commercial Cleaners Snowdon Street, Porthmadog, LL49 9DF	Residential	52	32	44	41	26	48	45
Moneifion21.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	51	34	44	43	29	48	45
Tenovus The Cancer Charity122.0 High Street, Porthmadog, LL49 9NW	Residential	52	33	44	42	28	49	45
Flat124.0Flat High Street, Porthmadog, LL49 9NW	Residential	52	33	45	42	28	49	45
R D Pritchard & Sonr D Pritchard & Son High Street, Porthmadog, LL49 9NW	Residential	52	33	45	42	28	49	45
Toy Bocs Teganau107.0Contessa High Street, Porthmadog, LL49 9HA	Residential	51	32	43	43	25	48	45
8.0 Cerrig Yr Afon, Porthmadog, LL49 9JN	Residential	52	34	44	44	29	48	45
1.0 Tanner Terrace, Porthmadog, LL49 9DW	Residential	51	32	43	43	29	47	45
Dragon Motor Engineers66.0 New Street, Porthmadog, LL49 9EE	Residential	52	33	44	42	28	49	43
Llys Meirion31.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	52	34	44	43	29	48	45
Ceredigion36.0 Madog Street, Porthmadog, LL49 9BU	Residential	51	34	43	42	29	48	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
31.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	54	33	50	44	27	53	44
Beresford Adams148.0Beresford Adams High Street, Porthmadog, LL49 9NU	Residential	52	30	44	43	25	49	44
33.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	52	32	44	43	26	48	45
Hen Gapel7.0 Glaslyn Street, Porthmadog, LL49 9EJ	Residential	52	32	45	42	25	49	43
Penhelig60.0 New Street, Porthmadog, LL49 9EE	Residential	52	33	44	43	28	49	44
Lili Wen106Alili Wen High Street, Porthmadog, LL49 9NW	Residential	52	33	45	43	28	49	45
1 Epworth Villas Tai Epworth, Porthmadog, LL49 9DP	Residential	52	34	44	43	29	48	44
28.0 East Avenue, Porthmadog, LL49 9EN	Residential	52	33	45	43	28	49	43
19.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	51	34	44	43	29	48	45
68.0 New Street, Porthmadog, LL49 9EE	Residential	52	33	44	42	28	49	43
42.0 Madog Street, Porthmadog, LL49 9BU	Residential	52	34	43	43	29	48	45
Snowdon Street, Porthmadog, LL49 9DF	Residential	52	32	44	41	26	48	45
40.0 Snowdon Street, Porthmadog, LL49 9DF	Residential	51	34	43	42	29	48	45
Tai L+¦ntai Lon Road From Garreg Frech Southeastwards Passing Tyn Y Coed To A487 Junction Penmorfa, Penmorfa, LL49 9SD	Residential	53	45	44	43	22	50	43
34.0 Pensyflog, Porthmadog, LL49 9LB	Residential	53	32	46	43	27	50	44
1.0 Heol Y Llan, Porthmadog, LL49 9HW	Residential	52	32	46	43	24	50	43
Hen Gapel3.0 Glaslyn Street, Porthmadog, LL49 9EJ	Residential	52	32	45	43	25	49	43

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
2.0 Cerrig Yr Afon, Porthmadog, LL49 9JN	Residential	52	34	44	43	29	48	44
4.0 Eryri Terrace, Porthmadog, LL49 9EF	Residential	52	33	44	43	28	49	43
10.0 Pensyflog, Porthmadog, LL49 9LA	Residential	53	33	48	44	27	52	44
Blaenddol2.0 Heol Y Llan, Porthmadog, LL49 9HW	Residential	52	33	45	43	28	49	43
3.0 Heol Y Llan, Porthmadog, LL49 9HW	Residential	52	33	45	43	28	49	43
Hen Gapel2.0 Glaslyn Street, Porthmadog, LL49 9EJ	Residential	52	33	45	43	28	49	43
5.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	33	43	43	28	48	44
Old Bakery1 Hen Fecws Chandlers Place, Porthmadog, LL49 9EB	Residential	52	34	43	42	28	48	45
44.0 Chapel Street, Porthmadog, LL49 9DN	Residential	52	34	44	44	29	49	45
Street Record Cerrig Yr Afon, Porthmadog, LL49 9JN	Residential	52	34	44	42	29	48	45
44.0 Madog Street, Porthmadog, LL49 9BU	Residential	52	34	43	43	29	48	45
62.0 Snowdon Street, Porthmadog, LL49 9DF	Residential	51	34	44	41	29	48	45
T+À'N Llan Housetyn Llan House Road From T+À'N Llan Southwestwards To Prow Dolbenmaen No 131, Penmorfa, LL49 9SG	Residential	55	52	47	43	22	53	43
13.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	52	32	44	43	25	48	44
17.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	52	34	44	43	29	48	44
35.0 Snowdon Street, Porthmadog, LL49 9BT	Residential	52	32	44	43	26	49	45
6.0 Sawmill Terrace, Porthmadog, LL49 9DG	Residential	52	31	44	42	26	48	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Hen Gapel Glaslyn Street, Porthmadog, LL49 9EJ	Residential	52	32	45	43	28	49	43
9.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	52	33	45	42	28	49	43
3.0 Chapel Street, Porthmadog, LL49 9DS	Residential	51	31	43	43	25	47	44
5.0 Cerrig Yr Afon, Porthmadog, LL49 9JN	Residential	52	34	44	42	29	49	45
48.0 Chapel Street, Porthmadog, LL49 9DN	Residential	52	34	44	41	29	48	45
The Old Mineral Worksy Galerithe Old Mineral Worksy Galeri Rear Access Road For 33-83 Chapel Street From Madog Street To Rear Of Library, Porthmadog, LL49 9AX	Residential	51	31	42	43	25	47	45
Rosslyn40.0 Madog Street, Porthmadog, LL49 9BU	Residential	52	34	43	43	29	48	45
Y Berllany Berllan Road From A487 Southwards To Maes Y Garth, Minffordd, Penrhyndeudraeth, LL48 6EL	Residential	51	47	41	39	43	44	47
Porthmadog Kebab House3.0Porthmadog Kebab House New Street, Porthmadog, LL49 9ED	Residential	52	32	44	43	25	48	44
54.0 Madog Street, Porthmadog, LL49 9DB	Residential	52	31	43	42	26	48	45
13.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	52	33	44	42	29	49	43
16.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	33	44	44	28	48	44
Awelon44.0 New Street, Porthmadog, LL49 9EE	Residential	52	33	44	43	28	49	44
30.0 East Avenue, Porthmadog, LL49 9EN	Residential	52	33	45	43	28	49	43
7.0 Cerrig Yr Afon, Porthmadog, LL49 9JN	Residential	52	33	43	44	29	48	45
26.0 Cerrig Yr Afon, Porthmadog, LL49 9JN	Residential	52	34	44	43	29	48	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
44.0 Snowdon Street, Porthmadog, LL49 9DF	Residential	52	34	43	42	29	47	45
48.0 Snowdon Street, Porthmadog, LL49 9DF	Residential	52	34	44	43	29	49	45
46.0 Snowdon Street, Porthmadog, LL49 9DF	Residential	52	34	45	43	29	49	45
Bryn Derwenbryn Derwen Road From Garreg Frech Southeastwards Passing Tyn Y Coed To A487 Junction Penmorfa, Penmorfa, LL49 9SB	Residential	53	43	44	44	22	50	44
T+À Cae Llynty Cae Llyn Road From Garreg Frech Southeastwards Passing Tyn Y Coed To A487 Junction Penmorfa, Penmorfa, LL49 9SB	Residential	53	42	43	44	22	48	44
Glanrhyd30.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	55	30	50	44	24	53	45
T+À Cornel Chandlers Place, Porthmadog, LL49 9EB	Residential	52	33	43	43	28	48	44
2.0 Chandlers Place, Porthmadog, LL49 9EB	Residential	52	32	44	42	25	49	45
11.0 New Street, Porthmadog, LL49 9ED	Residential	52	31	43	42	25	48	45
18.0 East Avenue, Porthmadog, LL49 9EN	Residential	52	33	45	42	28	49	45
7.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	33	44	43	28	48	44
20.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	33	43	42	28	48	44
70.0 New Street, Porthmadog, LL49 9EE	Residential	52	33	44	43	28	49	44
56.0 Madog Street, Porthmadog, LL49 9DB	Residential	52	31	43	42	26	48	45
11.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	53	33	44	43	28	49	43
The Grapevineflat152.0Flat High Street, Porthmadog, LL49 9NU	Residential	52	33	45	42	28	49	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
68.0 Chapel Street, Porthmadog, LL49 9DN	Residential	52	34	45	44	29	49	44
1.0 Chandlers Place, Porthmadog, LL49 9EB	Hotel	52	32	44	43	25	49	45
72.0 Pensyflog, Porthmadog, LL49 9LD	Residential	53	32	48	44	24	51	44
84.0 Pensyflog, Porthmadog, LL49 9LD	Residential	53	32	48	44	24	52	44
Purple Moose Brewery129.0Ffrindia Bach Pet Shop High Street, Porthmadog, LL49 9HA	Residential	52	32	43	43	25	48	45
7.0 New Street, Porthmadog, LL49 9ED	Residential	52	32	44	43	25	48	44
93.0 Pensyflog, Porthmadog, LL49 9LB	Residential	53	32	47	45	27	51	42
62.0 Madog Street, Porthmadog, LL49 9DB	Residential	52	34	43	44	29	48	45
64.0 Madog Street, Porthmadog, LL49 9DB	Residential	52	32	43	42	26	48	45
5.0 Sawmill Terrace, Porthmadog, LL49 9DG	Residential	52	34	44	42	29	48	46
9.0 Pensyflog, Porthmadog, LL49 9LA	Residential	54	33	48	44	27	52	43
Hen Gapel1.0 Glaslyn Street, Porthmadog, LL49 9EJ	Residential	53	33	45	43	28	49	43
Flat154.0Flat High Street, Porthmadog, LL49 9NU	Residential	52	33	45	42	28	49	45
Flat 1156.0Flat 1 High Street, Porthmadog, LL49 9NU	Residential	53	33	45	42	28	49	45
42.0 East Avenue, Porthmadog, LL49 9EL	Residential	53	33	45	43	28	50	43
22.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	33	44	43	28	48	45
22.0 New Street, Porthmadog, LL49 9ED	Residential	52	33	43	43	28	48	45
6.0 Cerrig Yr Afon, Porthmadog, LL49 9JN	Residential	52	34	44	43	29	49	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Snowdon Street, Porthmadog, LL49 9BT	Residential	52	34	45	44	29	49	45
Brynbryn Road From Garreg Frech Southeastwards Passing Tyn Y Coed To A487 Junction Penmorfa, Penmorfa, LL49 9SD	Residential	54	45	44	44	23	50	44
44.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	44	27	51	44
32.0 Pensyflog, Porthmadog, LL49 9LB	Residential	53	32	47	45	27	51	44
31.0 Pensyflog, Porthmadog, LL49 9LB	Residential	53	32	47	45	27	51	43
68.0 Pensyflog, Porthmadog, LL49 9LD	Residential	53	32	49	45	24	52	44
69.0 Pensyflog, Porthmadog, LL49 9LD	Residential	53	32	47	45	24	51	44
96.0 Pensyflog, Porthmadog, LL49 9LB	Residential	53	32	47	44	24	51	44
9.0 New Street, Porthmadog, LL49 9ED	Residential	52	31	44	43	25	49	44
15.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	31	45	44	25	49	45
19.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	32	45	44	25	50	45
2.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	53	33	45	43	28	49	43
The Beauty Box158.0The Beauty Box High Street, Porthmadog, LL49 9NU	Residential	53	33	45	42	28	49	45
44.0 East Avenue, Porthmadog, LL49 9EL	Residential	53	33	46	43	28	50	43
Auction Room Snowdon Street, Porthmadog, LL49 9BT	Residential	52	34	44	43	29	48	45
Bron Eryribron Eryri A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Hotel	51	49	41	39	46	46	48

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
The Old Schoolyr Hen Ysgol Road From Garreg Frech Southeastwards Passing Tyn Y Coed To A487 Junction Penmorfa, Penmorfa, LL49 9SB	Residential	54	43	44	44	23	50	44
26.0 Church Street, Tremadog, LL49 9RA	Residential	52	33	46	46	23	50	44
30.0 Pensyflog, Porthmadog, LL49 9LB	Residential	53	32	47	45	27	51	43
Ger Y Coed10.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	65	30	59	43	24	65	46
Creigle11.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	65	30	59	44	24	65	46
East Avenue, Porthmadog, LL49 9EN	Residential	53	32	45	44	25	49	45
17.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	32	45	44	25	49	45
Glyn21.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	31	45	43	25	50	45
The Old Mineral Worksllofftthe Old Mineral Worksy Llofft Rear Access Road For 33-83 Chapel Street From Madog Street To Rear Of Library, Porthmadog, LL49 9AX	Residential	52	31	43	44	25	48	45
High Street, Porthmadog, LL49 9NW	Residential	53	34	45	43	29	49	45
28.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	33	44	44	28	49	45
High Street, Porthmadog, LL49 9NW	Residential	53	34	45	43	29	49	45
36A Snowdon Street, Porthmadog, LL49 9BT	Residential	52	34	43	43	29	48	45
58.0 Madog Street, Porthmadog, LL49 9DB	Residential	52	34	44	42	29	49	46
Hen Berllanhen Berllan A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	52	48	43	39	44	47	48
35.0 Pensyflog, Porthmadog, LL49 9LB	Residential	53	32	47	45	27	51	44

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
29.0 Pensyflog, Porthmadog, LL49 9LB	Residential	53	32	47	45	24	51	44
Perfection5.0Shop New Street, Porthmadog, LL49 9ED	Residential	53	32	44	44	25	49	45
27.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	31	45	42	25	50	46
23.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	32	45	43	25	50	46
25.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	32	45	43	25	50	46
9.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	32	44	44	25	49	45
11.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	32	44	44	25	49	45
91.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	33	47	45	27	51	44
4.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	52	33	44	44	28	49	44
Flat133.0Flat High Street, Porthmadog, LL49 9HD	Residential	53	33	45	43	28	49	45
13.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	33	44	44	28	48	45
38.0 Chapel Street, Porthmadog, LL49 9DS	Residential	53	33	45	44	29	49	45
30.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	33	45	44	28	49	45
Arfryn74.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	45	43	29	50	46
Royal Sportsman Hotel131.0 High Street, Porthmadog, LL49 9HB	Hotel	53	32	44	44	25	49	45
33.0 Pensyflog, Porthmadog, LL49 9LB	Residential	53	32	47	44	24	51	44
38.0 Pensyflog, Porthmadog, LL49 9LB	Residential	53	32	47	45	27	50	44
37.0 Pensyflog, Porthmadog, LL49 9LB	Residential	53	32	46	45	27	50	44
36.0 Pensyflog, Porthmadog, LL49 9LB	Residential	53	32	46	45	27	50	44

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
9.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	31	45	44	25	49	45
29.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	31	46	42	25	50	46
15.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	32	44	44	25	49	45
19.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	32	44	44	25	48	45
17.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	32	44	44	25	49	45
Rhiwen12.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	64	32	58	45	24	64	46
Hen Gapel6.0 Glaslyn Street, Porthmadog, LL49 9EJ	Residential	53	33	45	43	28	49	44
Gwynfagwynfarear Of East Avenue, Porthmadog, LL49 9EL	Residential	53	32	45	44	25	50	43
Hen Gapel8.0 Glaslyn Street, Porthmadog, LL49 9EJ	Residential	53	33	45	42	28	49	46
Swn Y L+¦n24.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	33	44	44	28	48	45
Bryn Tirionbryntirion A497 From Minffordd To Minffordd Roundabout, Minffordd, Penrhyndeudraeth, LL48 6HG	Residential	52	50	43	39	47	48	48
Dwyfor31.0 New Street, Porthmadog, LL49 9ED	Hotel	53	32	45	44	25	49	45
100.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	45	27	52	44
99.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	45	27	52	44
23.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	32	44	44	25	48	45
19.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	33	48	45	27	51	45
17.0 New Street, Porthmadog, LL49 9ED	Residential	52	32	44	43	25	48	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Avenue Houseavenue House East Avenue, Porthmadog, LL49 9EN	Residential	53	33	45	43	28	50	45
36.0 New Street, Porthmadog, LL49 9ED	Residential	53	33	45	44	28	49	45
25.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	34	44	44	29	48	45
60.0 Madog Street, Porthmadog, LL49 9DB	Residential	52	34	43	44	29	49	46
T+À Capelty Capel Snowdon Street, Porthmadog, LL49 9DF	Residential	53	34	45	44	29	49	46
Ysgoldy Capel Minfforddysgoldy Capel Minffordd A497 Y Cob Porthmadog To Minffordd, Minffordd, Penrhyndeudraeth, LL48 6HL	Hotel	53	54	45	41	47	50	48
54.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	46	27	53	44
105.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	45	27	52	44
106.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	45	27	52	43
101.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	45	27	51	44
7.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	31	45	44	25	49	45
27.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	32	44	44	25	49	45
8.0 Pensyflog, Porthmadog, LL49 9LA	Residential	54	33	48	44	27	51	45
33.0 East Avenue, Porthmadog, LL49 9EL	Residential	53	33	46	43	28	50	46
19.0 New Street, Porthmadog, LL49 9ED	Residential	53	33	44	43	28	49	45
26.0 Chapel Street, Porthmadog, LL49 9DS	Residential	52	33	44	44	28	49	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Capel Y Porth Chapel Street, Porthmadog, LL49 9DN	Place of worship	53	34	45	45	29	50	46
Tan Y Bryn Terracewenalltwenallt A487(T) From Capel Garisim Penmorfa To Ffordd Caernarfon, Penmorfa, LL49 9RU	Residential	54	38	44	44	23	50	45
Tan Y Bryn Terraceael Y Brynael Y Bryn A487(T) From Capel Garisim Penmorfa To Ffordd Caernarfon, Penmorfa, LL49 9RU	Residential	54	43	45	44	23	50	45
Bryn Y Wern Prow Dolbenmaen No 131, Pentrefelin, LL49 9SH	Residential	57	57	50	45	21	56	44
41.0 Pensyflog, Porthmadog, LL49 9LB	Residential	53	32	47	46	27	51	44
102.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	47	46	27	51	44
103.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	47	46	27	51	44
5.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	33	45	44	28	49	45
35.0 East Avenue, Porthmadog, LL49 9EL	Residential	53	33	46	43	25	50	46
20.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	33	48	45	27	51	45
21.0 New Street, Porthmadog, LL49 9ED	Residential	53	32	44	44	25	49	45
Cyngor Gwyneddold Library Chapel Street, Porthmadog, LL49 9DS	Residential	53	34	44	44	29	49	45
Baptist Chapel Housebaptist Chapel House Chapel Street, Porthmadog, LL49 9DS	Residential	53	34	44	44	29	49	45
Moelwyn64.0 Snowdon Street, Porthmadog, LL49 9DF	Residential	53	34	44	43	29	49	46
3.0 Sawmill Terrace, Porthmadog, LL49 9DG	Residential	53	34	44	43	29	49	46

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Wern Manorwern Home Farmfferm Wern Home Prow Dolbenmaen No 131, Pentrefelin, LL49 9SH	Residential	54	45	46	45	22	50	45
Pen Y Brynpen Y Bryn Road From Garreg Frech Southeastwards Passing Tyn Y Coed To A487 Junction Penmorfa, Penmorfa, LL49 9SB	Residential	54	44	45	45	23	51	45
39.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	47	44	27	51	44
42.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	47	46	27	51	44
43.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	46	27	51	44
70.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	53	45
Frondirion23.0 New Street, Porthmadog, LL49 9ED	Residential	53	32	45	44	25	49	45
Trigfan39.0 East Avenue, Porthmadog, LL49 9EL	Residential	53	31	46	43	25	50	46
37.0 East Avenue, Porthmadog, LL49 9EL	Residential	53	32	46	43	25	50	46
Hafod Y Gestflat 31Hafod Y Gestflat 31 High Street, Porthmadog, LL49 9NU	Residential	53	33	46	45	28	50	46
T+À'R Frenhinesty'R Frenhines Road From Tremadog Road To Dolydd, Porthmadog, LL49 9HT	Residential	55	33	49	44	28	53	44
1.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	33	45	43	28	50	46
24.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	33	45	44	28	49	46
50.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	49	46	27	52	44
45.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	47	46	27	51	44
62.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	50	45	27	53	44

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
2.0 Craig Madog, Tremadog, LL49 9TG	Residential	54	34	47	46	25	51	45
43.0 East Avenue, Porthmadog, LL49 9EL	Residential	54	31	46	43	25	50	46
Henfaes41.0 East Avenue, Porthmadog, LL49 9EL	Residential	53	31	46	43	25	50	46
39.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	32	44	44	25	49	45
37.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	32	44	45	25	49	45
29.0 New Street, Porthmadog, LL49 9ED	Residential	53	32	45	44	25	49	46
47.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	55	33	49	45	27	53	46
45.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	55	32	50	43	27	53	43
Yr Heulwen8.0 Heol Y Llan, Porthmadog, LL49 9HW	Residential	53	33	46	43	28	50	45
Isfryn3.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	33	45	44	28	50	46
10.0 Heol Y Llan, Porthmadog, LL49 9HW	Residential	53	33	46	44	28	50	45
66.0 Madog Street, Porthmadog, LL49 9DB	Residential	53	32	45	45	26	50	46
Llwydiarth68.0 Madog Street, Porthmadog, LL49 9DB	Residential	53	34	45	44	29	50	46
1.0 Sawmill Terrace, Porthmadog, LL49 9DG	Residential	53	34	44	45	29	49	46
Tai'R Felin13.0 Snowdon Street, Porthmadog, LL49 9EP	Residential	53	34	45	45	29	50	46
Wern Manorthe Bothy And Butler'S Cottage Prow Dolbenmaen No 131, Pentrefelin, LL49 9SH	Hotel	55	50	47	45	22	52	45
Kingdom Hall Of Jehovah'S Witnesses Rear Access Road For 1-31 East Avenue From Glaslyn Street To New Street, Porthmadog, LL49 9EN	Place of Worship	53	33	45	44	28	50	46

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Bryncir Terrace9 Bryncir Terrace A487(T) From Capel Garisim Penmorfa To Ffordd Caernarfon, Penmorfa, LL49 9RY	Residential	54	43	45	45	23	50	45
40.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	45	27	51	44
49.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	47	46	27	51	44
73.0 Pensyflog, Porthmadog, LL49 9LD	Residential	54	32	48	44	24	52	45
65.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	53	44
72.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	52	46	24	56	46
Hen Gapel4.0 Glaslyn Street, Porthmadog, LL49 9EJ	Residential	53	32	45	44	25	49	45
111.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	52	45
47.0 East Avenue, Porthmadog, LL49 9EL	Residential	54	31	46	43	25	50	46
York House45.0 East Avenue, Porthmadog, LL49 9EL	Residential	54	31	46	43	25	50	46
49.0 East Avenue, Porthmadog, LL49 9EL	Residential	54	31	46	43	25	51	46
25.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	45	27	52	46
27.0 New Street, Porthmadog, LL49 9ED	Residential	53	33	45	45	28	49	45
33.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	33	44	44	28	49	45
Hendre Bach35.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	32	44	44	25	49	45
7.0 Heol Y Llan, Porthmadog, LL49 9HW	Residential	53	33	45	43	28	49	45
6.0 Heol Y Llan, Porthmadog, LL49 9HW	Residential	53	33	46	43	28	50	45
4.0 Heol Y Llan, Porthmadog, LL49 9HW	Residential	53	33	45	43	28	49	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Camelia Heol Y Llan, Porthmadog, LL49 9HW	Residential	53	33	45	44	28	49	45
5.0 Heol Y Llan, Porthmadog, LL49 9HW	Residential	53	33	45	43	28	50	45
9.0 Heol Y Llan, Porthmadog, LL49 9HW	Residential	53	33	46	44	28	50	45
D+¦l Heulog11.0 Heol Y Llan, Porthmadog, LL49 9HW	Residential	53	33	46	44	28	50	45
25.0 New Street, Porthmadog, LL49 9ED	Residential	53	33	45	45	25	49	45
Garisim Chapelmaisonette Road From Garreg Frech Southeastwards Passing Tyn Y Coed To A487 Junction Penmorfa, Penmorfa, LL49 9SB	Residential	54	44	45	45	23	51	45
Bryn Hyfrydbryn Hyfryd Road From Garreg Frech Southeastwards Passing Tyn Y Coed To A487 Junction Penmorfa, Penmorfa, LL49 9SB	Residential	54	44	45	45	22	51	45
Bryncir Terrace10 Bryncir Terracetegfryn A487(T) From Capel Garisim Penmorfa To Ffordd Caernarfon, Penmorfa, LL49 9RY	Residential	54	41	45	45	23	50	45
Bloc 6106.0 Isgraig, Tremadog, LL49 9PU	Residential	54	33	48	46	23	51	45
54.0 Isgraig, Tremadog, LL49 9PT	Residential	54	33	49	46	23	51	41
Bloc 17.0 Isgraig, Tremadog, LL49 9PT	Residential	55	33	50	45	23	53	41
66.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	46	27	53	45
26.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	45	27	52	44
51.0 East Avenue, Porthmadog, LL49 9EL	Residential	54	31	46	43	25	51	46
41.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	45	44	28	49	45
Trem Y Foel63.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	58	32	54	45	27	57	46

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Cwrt Coffaflat 3Cwrt Coffaflat 3 High Street, Porthmadog, LL49 9HD	Residential	54	33	46	44	28	50	45
50.0 East Avenue, Porthmadog, LL49 9EL	Residential	54	33	46	43	28	50	43
36.0 East Avenue, Porthmadog, LL49 9EL	Residential	53	33	45	43	28	50	45
70.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	45	45	29	50	46
72.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	44	44	29	49	46
56.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	45	44	29	50	46
Tyn Ffordd Fawrtynffordd Fawr Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	53	51	43	40	48	48	49
Cyngor Gwynedd High Street, Porthmadog, LL49 9NU	Educational Building	54	33	47	45	28	51	46
47.0 Pensyflog, Porthmadog, LL49 9LB	Residential	55	32	49	46	27	52	44
48.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	47	46	27	51	44
83.0 Isgraig, Tremadog, LL49 9PU	Residential	54	31	49	46	23	52	42
Llys Y Coed28.0 Church Street, Tremadog, LL49 9RA	Residential	54	33	48	46	23	52	44
97.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	45	26	52	44
98.0 Pensyflog, Porthmadog, LL49 9LB	Residential	55	33	49	45	27	52	44
67.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	53	45
95.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	45	27	52	45
61.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	59	32	54	46	27	58	44

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
35.0 New Street, Porthmadog, LL49 9ED	Residential	53	33	45	44	28	49	46
51.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	32	45	45	25	50	45
43.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	45	45	29	49	45
6.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	53	33	45	45	28	50	44
Glandon8.0 East Avenue, Porthmadog, LL49 9EN	Residential	53	33	44	44	28	49	46
Rhianfa39.0 New Street, Porthmadog, LL49 9EE	Residential	53	33	45	44	29	49	46
T+À Capel Y Borth Madog Street, Porthmadog, LL49 9DB	Residential	53	34	45	45	29	50	46
Tremaynetremayne Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	54	55	46	41	51	50	49
Glyn Terracetrem Y Gesttrem Y Gest Road From A487 Junction Opposite Wenallt Passing Tyn Y Berllan To Tyn Llan, Penmorfa, LL49 9SA	Residential	55	44	45	45	22	51	45
Glyn Terracepinch Pot Cottagepinch Pot Cottage Road From A487 Junction Opposite Wenallt Passing Tyn Y Berllan To Tyn Llan, Penmorfa, LL49 9SA	Residential	55	44	45	45	22	51	45
46.0 Pensyflog, Porthmadog, LL49 9LB	Residential	55	34	49	46	27	52	44
55.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	32	52	46	24	55	45
28.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	47	46	27	51	44
Tawelfan29.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	32	50	46	27	54	45
27.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	45	27	52	44
56.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	52	46	27	55	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Bwlch43.0 New Street, Porthmadog, LL49 9EE	Residential	53	32	45	44	25	49	46
41.0 New Street, Porthmadog, LL49 9EE	Residential	53	33	45	44	29	49	46
49.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	32	45	45	25	49	46
55.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	32	45	44	25	50	46
57.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	32	45	44	25	50	46
90.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	33	48	45	27	52	45
67.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	44	44	29	49	46
65.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	44	44	29	49	46
Ystrad Las27.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	57	33	53	45	27	56	44
5.0 Eryri Terrace, Porthmadog, LL49 9EF	Residential	53	33	44	45	28	49	46
58.0 New Street, Porthmadog, LL49 9EE	Residential	53	33	44	45	28	49	45
45.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	45	45	29	49	46
61.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	45	44	29	49	46
60.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	45	45	29	49	46
63.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	44	44	29	49	46
Tyn Llidiarttyn Llidiart A497 Y Cob Porthmadog To Minffordd, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	53	48	44	40	47	48	49
51.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	50	45	27	53	44
107.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	53	44

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
28.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	32	51	45	27	54	45
71.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	52	45
Hafod Lwyfog45.0 New Street, Porthmadog, LL49 9EE	Residential	53	32	45	44	25	49	46
47.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	45	45	29	49	46
53.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	32	45	45	25	50	46
59.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	32	45	44	25	50	46
89.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	33	48	45	27	52	45
26.0 East Avenue, Porthmadog, LL49 9EN	Residential	54	33	45	44	28	50	46
Llys Emrysflat 2Llys Emrysflat 2 High Street, Porthmadog, LL49 9EQ	Residential	54	33	46	45	28	50	46
The Nest2.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	57	33	52	45	28	56	46
69.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	44	44	29	49	46
58.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	44	44	29	49	46
71.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	44	44	29	49	46
Tyn Y Berllan Road From A487 Junction Opposite Wenallt Passing Tyn Y Berllan To Tyn Llan, Penmorfa, LL49 9SG	Residential	55	41	45	45	22	51	45
Stabl Y Fedwenstabl Y Fedwen A487(T) From Capel Garisim Penmorfa To Ffordd Caernarfon, Penmorfa, LL49 9RY	Residential	55	44	46	45	24	51	46
52.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	50	45	27	53	44
53.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	50	46	27	53	44

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Maes Alawmaes Alaw Church Street, Tremadog, LL49 9PS	Residential	54	33	48	47	25	52	44
63.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	32	51	46	27	54	44
108.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	53	44
27.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	32	51	46	27	54	45
3.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	52	45	24	57	45
9.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	66	32	60	45	27	65	44
Berwyn47.0 New Street, Porthmadog, LL49 9EE	Residential	53	32	45	44	29	49	46
Preswylfa52.0 New Street, Porthmadog, LL49 9EE	Residential	54	33	45	44	28	50	46
49.0 New Street, Porthmadog, LL49 9EE	Residential	54	34	45	44	29	50	46
64.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	44	45	29	50	46
73.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	44	44	29	49	46
75.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	34	44	44	29	49	46
Synite Terrace5 Syenite Terrace Road From Osmond Terrace Passing Synite Terrace And Erw Wen To Bwlch Bryn Road, Minffordd, Penrhyndeudraeth, LL48 6HP	Residential	54	56	46	40	62	51	49
Synite Terrace2 Syenite Terrace Road From Osmond Terrace Passing Synite Terrace And Erw Wen To Bwlch Bryn Road, Minffordd, Penrhyndeudraeth, LL48 6HP	Residential	54	57	46	41	62	51	49
Tremoryd18.0 Craig Madog, Tremadog, LL49 9TG	Residential	53	34	47	47	25	51	43
3.0 Isgraig, Tremadog, LL49 9PT	Residential	54	33	49	47	23	52	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
104.0 Pensyflog, Porthmadog, LL49 9LB	Residential	55	32	48	46	27	52	46
T+À'N Coedty'N Coed Church Street, Tremadog, LL49 9PS	Residential	55	33	49	47	23	52	44
Gwynfa22.0 Church Street, Tremadog, LL49 9RA	Residential	54	33	48	47	23	52	45
109.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	53	45
110.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	52	45
112.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	52	45
113.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	52	45
51.0 New Street, Porthmadog, LL49 9EE	Residential	54	32	45	44	25	50	46
77.0 Chapel Street, Porthmadog, LL49 9DN	Residential	53	32	44	44	25	50	46
K K Cycles141.0K K Cycles High Street, Porthmadog, LL49 9HD	Residential	54	32	47	45	25	51	46
2.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	48	45	27	52	46
13.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	47	45	27	52	45
11.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	48	44	27	52	45
20.0 East Avenue, Porthmadog, LL49 9EN	Residential	54	33	45	44	28	50	46
22.0 East Avenue, Porthmadog, LL49 9EN	Residential	54	33	45	44	28	50	46
Tyn Y Berllan1 Tyn Y Berllan Road From A487 Junction Opposite Wenallt Passing Tyn Y Berllan To Tyn Llan, Penmorfa, LL49 9SG	Residential	55	47	47	45	22	53	45
6.0 Isgraig, Tremadog, LL49 9PT	Residential	54	31	49	47	23	52	44
3.0 Craig Madog, Tremadog, LL49 9TG	Residential	54	34	47	46	25	50	46

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
23.0 Pensyflog, Porthmadog, LL49 9LB	Residential	55	32	49	46	27	52	46
22.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	58	32	53	47	27	57	45
21.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	58	32	54	47	27	58	45
85.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	48	45	24	52	45
17.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	59	32	54	47	27	58	45
20.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	59	32	54	47	27	58	45
19.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	59	32	54	47	27	58	45
18.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	59	32	54	47	27	58	45
16.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	60	32	56	47	27	60	45
Cartrefle53.0 East Avenue, Porthmadog, LL49 9EL	Residential	54	31	46	45	25	51	46
24.0 Pensyflog, Porthmadog, LL49 9LB	Residential	55	32	48	46	27	52	46
114.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	52	45
116.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	48	45	27	52	45
115.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	52	45
117.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	27	52	45
118.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	33	49	45	27	52	45
Cryd Yr Awel40.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	59	33	54	44	27	58	47
12.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	47	45	27	52	45
53.0 New Street, Porthmadog, LL49 9EE	Residential	54	32	45	45	25	50	46

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
64.0 New Street, Porthmadog, LL49 9EE	Residential	54	33	44	45	28	49	46
55.0 New Street, Porthmadog, LL49 9EE	Residential	54	34	45	45	29	50	46
79.0 Chapel Street, Porthmadog, LL49 9DN	Residential	54	32	44	44	25	50	46
46.0 East Avenue, Porthmadog, LL49 9EL	Residential	54	32	46	46	28	50	46
Ael Y Brynael Y Bryn Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	53	52	44	40	48	48	50
Canolfan Hamdden Glaslynporthmadog Library Heol Y Llan, Porthmadog, LL49 9HX	Community Facility	55	33	48	46	28	52	46
Bwlch Y Fedwen B & B A487(T) From Capel Garisim Penmorfa To Ffordd Caernarfon, Penmorfa, LL49 9RY	Hotel	55	43	45	46	24	51	46
Wern Manor Prow Dolbenmaen No 131, Pentrefelin, LL49 9SH	Residential	56	51	49	46	22	53	45
Ffynnon Beunoffynnon Beuno Road From A487 Junction Opposite Wenallt Passing Tyn Y Berllan To Tyn Llan, Penmorfa, LL49 9SG	Residential	55	45	46	46	23	52	45
58.0 Isgraig, Tremadog, LL49 9PT	Residential	54	33	49	46	23	52	45
16.0 Isgraig, Tremadog, LL49 9PT	Residential	56	32	52	46	26	54	43
2.0 Isgraig, Tremadog, LL49 9PT	Residential	54	31	48	45	24	52	45
30.0 Church Street, Tremadog, LL49 9RA	Residential	54	33	47	47	23	51	44
Dolwen36.0 Church Street, Tremadog, LL49 9RA	Residential	54	33	48	47	26	52	44
Ty Gerddity Gerddi Maes Gerddi, Porthmadog, LL49 9LE	Residential	67	33	62	47	24	67	45
24.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	53	47	27	56	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
54.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	50	46	27	54	45
58.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	52	46	27	55	45
Crafnant57.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	52	46	27	55	45
32.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	50	46	27	54	45
60.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	58	32	53	46	27	57	45
33.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	50	45	27	54	45
62.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	59	32	54	46	26	58	45
22.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	32	48	46	27	51	46
77.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	33	49	45	27	53	45
64.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	58	32	54	46	27	57	46
79.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	45	24	53	45
21.0 Pensyflog, Porthmadog, LL49 9LB	Residential	54	33	48	46	27	52	46
18.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	48	46	27	52	45
17.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	48	46	27	52	45
1.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	54	32	45	45	25	50	46
Brongest5.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	54	33	46	45	28	51	46
Lleirion1.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	57	33	50	45	28	55	45
Snowdonia57.0 New Street, Porthmadog, LL49 9EE	Residential	54	34	45	45	29	50	46
Erw Las17.0 Craig Madog, Tremadog, LL49 9TG	Residential	54	34	47	47	25	52	46

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
61.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	32	51	46	27	55	44
55.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	49	47	27	53	44
58.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	32	51	47	24	55	44
59.0 Pensyflog, Porthmadog, LL49 9LD	Residential	57	32	52	46	27	55	44
Fferm Pensyflogpensyflog Farm Pensyflog, Porthmadog, LL49 9PW	Residential	56	32	51	47	26	55	44
5.0 Isgraig, Tremadog, LL49 9PT	Residential	54	31	49	47	23	52	44
94.0 Pensyflog, Porthmadog, LL49 9LB	Residential	55	32	48	46	27	52	45
Erw Las59.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	53	46	27	56	45
34.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	32	50	45	27	54	45
35.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	50	45	27	54	45
51.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	32	52	46	27	55	46
50.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	52	46	27	55	46
31B Glaslyn Street, Porthmadog, LL49 9EG	Residential	54	32	47	45	25	51	46
Clettwr62.0 New Street, Porthmadog, LL49 9EE	Residential	54	33	44	45	28	49	46
Maes Garnedd1.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	49	46	28	52	46
3.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	54	33	45	45	28	50	46
54.0 New Street, Porthmadog, LL49 9EE	Residential	54	33	46	45	28	50	46
52.0 East Avenue, Porthmadog, LL49 9EL	Residential	54	33	46	45	28	50	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
34.0 East Avenue, Porthmadog, LL49 9EL	Residential	54	33	45	43	28	50	46
Foelasvoelas Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	54	54	45	40	50	50	50
Machlud Haulmachlyd Haul Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	54	52	45	40	49	49	50
Cilancilan Dublin Street, Tremadog, LL49 9RH	Residential	54	34	48	47	22	52	42
57.0 Isgraig, Tremadog, LL49 9PT	Residential	54	33	48	46	23	52	45
56.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	33	51	47	27	55	44
57.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	32	52	47	27	55	44
60.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	32	52	46	27	55	44
81.0 Isgraig, Tremadog, LL49 9PU	Residential	54	33	48	48	26	52	45
34.0 Church Street, Tremadog, LL49 9RA	Residential	54	33	47	48	23	52	44
20.0 Church Street, Tremadog, LL49 9RA	Residential	54	33	47	47	23	51	44
Cysgod Y Coed26.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	52	47	27	56	44
14.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	65	34	59	46	24	65	44
13.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	66	34	60	46	27	66	45
Annedd59.0 New Street, Porthmadog, LL49 9EE	Residential	54	33	45	45	29	50	46
75.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	32	49	46	27	53	45
Rowen36.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	50	45	27	54	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
37.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	50	45	27	54	45
76.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	32	49	46	27	53	45
Dolwar39.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	55	32	50	45	27	53	45
38.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	51	45	27	54	45
16.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	48	46	27	52	45
15.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	48	46	27	53	45
83.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	33	49	45	27	53	46
1.0 Eryri Terrace, Porthmadog, LL49 9EF	Residential	54	33	45	45	28	50	46
3.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	49	46	28	53	46
56.0 New Street, Porthmadog, LL49 9EE	Residential	54	33	46	45	28	50	46
83.0 Chapel Street, Porthmadog, LL49 9DN	Residential	54	34	45	46	29	50	46
Tai'R Felin1.0 Snowdon Street, Porthmadog, LL49 9EP	Residential	54	34	46	45	29	51	47
Glandwrglandwr Snowdon Street, Porthmadog, LL49 9DF	Residential	54	35	45	46	30	51	46
Y Berthy Berth Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	54	54	45	41	51	50	50
Synite Terrace1 Syenite Terrace Road From Osmond Terrace Passing Synite Terrace And Erw Wen To Bwlch Bryn Road, Minffordd, Penrhyndeudraeth, LL48 6HP	Residential	55	57	46	41	60	51	50
1.0 Isgraig, Tremadog, LL49 9PT	Residential	54	33	48	47	26	52	45
Derlwyn32.0 Church Street, Tremadog, LL49 9RA	Residential	54	33	48	47	23	52	44

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
25.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	52	47	27	55	44
15.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	59	32	54	45	27	59	44
Hafan53.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	32	51	46	27	54	45
74.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	32	49	46	27	53	45
61.0 New Street, Porthmadog, LL49 9EE	Residential	54	32	45	45	25	50	46
63.0 New Street, Porthmadog, LL49 9EE	Residential	54	32	46	45	25	50	46
52.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	52	46	27	55	45
Gwyndy48.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	49	45	27	53	46
31A East Avenue, Porthmadog, LL49 9EN	Residential	54	32	46	45	25	51	46
4.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	49	46	28	53	46
38.0 East Avenue, Porthmadog, LL49 9EL	Residential	54	33	45	45	29	50	46
40.0 East Avenue, Porthmadog, LL49 9EL	Residential	54	33	45	45	29	50	47
Talavera81.0 Chapel Street, Porthmadog, LL49 9DN	Residential	54	34	45	46	29	50	46
89.0 Isgraig, Tremadog, LL49 9PU	Residential	55	31	49	47	26	53	45
Bloc 697.0 Isgraig, Tremadog, LL49 9PU	Residential	55	33	50	47	23	52	45
23.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	58	32	53	47	27	57	44
40.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	51	45	27	54	46
41.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	51	45	27	54	46
Llannerch42.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	50	45	27	54	46

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
31.0 East Avenue, Porthmadog, LL49 9EN	Residential	54	32	46	45	25	51	46
87.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	33	48	46	27	53	46
86.0 Pensyflog, Porthmadog, LL49 9LD	Residential	55	32	48	45	24	52	46
6.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	49	45	27	53	46
Snowdon Lodgey Fflat Bach Church Street, Tremadog, LL49 9PS	Residential	56	33	51	47	26	54	44
T+À'R Arddty'R Ardd Church Street, Tremadog, LL49 9PS	Residential	55	33	49	47	23	53	44
Ger Y Coedger Y Coed Church Street, Tremadog, LL49 9PS	Residential	55	33	50	47	23	53	44
90.0 Isgraig, Tremadog, LL49 9PU	Residential	55	31	49	49	26	53	44
Bloc 6110.0 Isgraig, Tremadog, LL49 9PU	Residential	54	33	49	48	26	52	44
24.0 Church Street, Tremadog, LL49 9RA	Residential	54	33	46	47	23	51	45
78.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	32	49	46	27	53	45
80.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	32	50	46	27	54	45
82.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	33	50	46	27	54	46
14.0 Pensyflog, Porthmadog, LL49 9LA	Residential	56	33	49	46	27	53	46
7.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	49	45	27	53	46
Station Inn Road From Tremadog Road To Dolydd, Porthmadog, LL49 9HT	Residential	56	33	49	47	28	53	47
55.0 Isgraig, Tremadog, LL49 9PT	Residential	55	33	49	48	26	52	45
4.0 Craig Madog, Tremadog, LL49 9TG	Residential	55	34	48	47	22	52	46

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
55.0 East Avenue, Porthmadog, LL49 9EL	Residential	54	31	46	45	25	51	46
Gwalia65.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	59	32	54	46	27	58	46
Trefin67.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	58	32	53	46	27	56	46
46.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	50	46	27	54	46
81.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	33	50	46	27	54	46
13.0 Railway Place, Porthmadog, LL49 9HN	Residential	55	34	48	46	28	52	46
5.0 Pensyflog, Porthmadog, LL49 9LA	Residential	55	33	49	46	27	53	46
65.0 New Street, Porthmadog, LL49 9EE	Residential	54	34	46	45	29	51	46
Pen Y Caepenycae Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	54	54	46	41	51	50	50
82.0 Isgraig, Tremadog, LL49 9PU	Residential	55	32	49	48	23	53	45
Meirion66.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	58	34	53	46	27	57	46
32.0 East Avenue, Porthmadog, LL49 9EN	Residential	55	32	46	45	25	51	46
Blaen Rhos43.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	50	46	27	53	46
Glyn Rhosyn13.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	56	33	51	45	27	55	45
12.0 Railway Place, Porthmadog, LL49 9HN	Residential	55	34	48	46	28	52	46
11.0 Railway Place, Porthmadog, LL49 9HN	Residential	55	34	48	46	28	52	46
2.0 Cambrian Terrace, Porthmadog, LL49 9EH	Residential	55	33	46	46	28	51	47

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Trem Y Foeltrem Y Foel Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	55	54	46	41	50	51	50
4.0 Isgraig, Tremadog, LL49 9PT	Residential	54	33	48	49	23	51	45
88.0 Isgraig, Tremadog, LL49 9PU	Residential	55	31	49	49	23	53	41
78.0 Isgraig, Tremadog, LL49 9PU	Residential	55	31	49	49	23	53	45
45.0 Isgraig, Tremadog, LL49 9PT	Residential	54	32	49	47	25	52	45
64.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	34	51	47	27	54	44
68.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	34	52	46	27	56	46
Kingdom Hall Of Jehovahs Witnesses Glaslyn Street, Porthmadog, LL49 9EG	Residential	55	33	46	46	28	51	47
10.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	55	32	46	46	25	51	47
44.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	56	33	50	46	27	53	46
2.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	58	34	52	46	27	56	46
9.0 Railway Place, Porthmadog, LL49 9HN	Residential	55	34	48	46	28	52	46
10.0 Railway Place, Porthmadog, LL49 9HN	Residential	55	34	48	46	28	52	46
3.0 Railway Place, Porthmadog, LL49 9HN	Residential	55	34	48	46	28	52	46
Railway Place, Porthmadog, LL49 9HN	Residential	55	34	48	46	28	52	46
Valletta3.0 Cambrian Terrace, Porthmadog, LL49 9EH	Residential	55	33	46	46	28	51	47
Y Traeth L+¦n Y Traeth, Porthmadog, LL49 9PP	Community Facility	60	36	51	44	31	59	49

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
6.0 Craig Madog, Tremadog, LL49 9TG	Residential	55	34	47	48	25	52	46
20.0 Craig Madog, Tremadog, LL49 9TG	Residential	55	34	48	48	25	53	46
Penclawdd7.0 Craig Madog, Tremadog, LL49 9TG	Residential	55	34	47	48	25	52	46
43.0 Isgraig, Tremadog, LL49 9PT	Residential	55	34	48	48	26	52	46
57.0 East Avenue, Porthmadog, LL49 9EL	Residential	55	31	47	47	25	52	46
69.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	34	52	47	27	55	46
10.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	56	33	50	46	27	53	46
Gwendraeth25.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	60	33	55	46	27	59	47
8.0 Railway Place, Porthmadog, LL49 9HN	Residential	55	34	48	46	28	52	46
6.0 Railway Place, Porthmadog, LL49 9HN	Residential	55	34	48	46	28	52	46
5.0 Railway Place, Porthmadog, LL49 9HN	Residential	55	34	48	46	28	52	46
4.0 Railway Place, Porthmadog, LL49 9HN	Residential	55	34	48	46	28	52	46
67.0 New Street, Porthmadog, LL49 9EE	Residential	55	34	46	46	29	51	46
Bloc 15 Llys Glyndwr Llys Glyndwr, Porthmadog, LL49 9HN	Residential	55	34	48	46	28	52	46
Ordre12.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	55	33	47	46	28	51	47
42.0 Isgraig, Tremadog, LL49 9PT	Residential	55	34	48	48	23	52	46
50.0 Isgraig, Tremadog, LL49 9PT	Residential	54	31	49	49	23	52	42
53.0 Isgraig, Tremadog, LL49 9PT	Residential	54	31	48	46	23	50	41
Deunant71.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	51	46	27	54	46

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Irfon38.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	61	33	54	46	27	60	46
48.0 East Avenue, Porthmadog, LL49 9EL	Residential	55	32	47	46	25	51	46
Henfaes9.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	56	33	50	46	28	53	46
4.0 Cambrian Terrace, Porthmadog, LL49 9EH	Residential	55	33	46	46	28	51	47
Bryn Aberbryn Aber Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	55	53	47	41	51	51	51
Llidiart Ysbytyllidiart Ysbyty Dublin Street, Tremadog, LL49 9RN	Residential	55	35	48	48	26	52	47
Hendre64.0 Dublin Street, Tremadog, LL49 9RH	Residential	55	34	48	48	25	52	46
16.0 Craig Madog, Tremadog, LL49 9TG	Residential	55	34	47	48	25	53	46
84.0 Isgraig, Tremadog, LL49 9PU	Residential	55	31	49	48	23	52	42
91.0 Isgraig, Tremadog, LL49 9PU	Residential	54	31	48	48	26	51	41
49.0 Isgraig, Tremadog, LL49 9PT	Residential	55	33	48	49	23	52	45
9.0 Isgraig, Tremadog, LL49 9PT	Residential	56	32	51	48	23	54	42
Bro Awel38.0 Church Street, Tremadog, LL49 9RA	Residential	55	33	50	48	26	53	44
Garneddwen11.0 Craig Madog, Tremadog, LL49 9TG	Residential	54	34	47	48	25	51	42
5.0 Cambrian Terrace, Porthmadog, LL49 9EH	Residential	55	32	46	46	25	51	47
70.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	34	51	47	27	55	46
1.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	52	46	27	56	46
Roma5.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	61	34	53	47	27	60	46

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
4.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	60	34	54	46	27	59	46
Plas Y Dd+¦l11.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	57	33	51	46	27	55	46
Maes Yr Awel8.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	56	33	49	46	27	53	46
88.0 Pensyflog, Porthmadog, LL49 9LD	Residential	56	33	50	46	28	54	46
Faenolfaenol Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	55	56	47	41	47	51	51
Crossing Housecrossing House Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	55	55	46	41	51	51	51
5.0 Craig Madog, Tremadog, LL49 9TG	Residential	55	34	48	48	25	52	46
92.0 Isgraig, Tremadog, LL49 9PU	Residential	55	32	48	48	26	52	44
Bloc 467.0 Isgraig, Tremadog, LL49 9PU	Residential	55	33	50	48	23	53	45
51.0 Isgraig, Tremadog, LL49 9PT	Residential	54	31	49	46	23	52	42
20.0 Isgraig, Tremadog, LL49 9PT	Residential	56	32	52	49	26	54	42
10.0 Isgraig, Tremadog, LL49 9PT	Residential	56	32	52	48	25	54	42
7.0 Cambrian Terrace, Porthmadog, LL49 9EH	Residential	55	32	46	46	25	51	47
6.0 Cambrian Terrace, Porthmadog, LL49 9EH	Residential	55	32	46	46	25	51	47
49.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	51	47	27	55	46
77.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	52	47	27	55	46
14.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	55	33	47	46	28	52	47

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Uwchlaw'R Ffynnonuwchlaw'R Ffynnon Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	55	58	47	42	52	52	51
Ferlasferlas Dublin Street, Tremadog, LL49 9RH	Residential	55	34	48	48	22	53	46
Gwynysgwynys Dublin Street, Tremadog, LL49 9RN	Residential	55	32	48	48	25	52	46
Bod Hyfrydbod Hyfryd Dublin Street, Tremadog, LL49 9RH	Residential	55	35	48	48	25	53	46
Gest View74.0 Dublin Street, Tremadog, LL49 9RH	Residential	55	35	48	48	25	53	46
Nant Yr Arannant Yr Aran Dublin Street, Tremadog, LL49 9RH	Residential	55	34	48	48	25	52	46
Y Winllany Winllan Church Street, Tremadog, LL49 9PS	Residential	56	33	51	48	23	54	45
T+À Nanneyflatty Nanneyflat Church Street, Tremadog, LL49 9PS	Residential	56	33	51	48	26	53	45
85.0 Isgraig, Tremadog, LL49 9PU	Residential	55	31	49	48	23	52	43
80.0 Isgraig, Tremadog, LL49 9PU	Residential	55	33	48	47	26	52	46
69.0 New Street, Porthmadog, LL49 9EE	Residential	55	34	46	46	29	51	46
Pennant8.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	67	32	61	46	27	67	46
Madog Street West72.0 Madog Street, Porthmadog, LL49 9DU	Residential	55	34	46	47	29	51	46
Erw Degerw Deg Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	56	58	48	42	50	53	51
Y Berllany Berllan Dublin Street, Tremadog, LL49 9RN	Residential	56	35	48	48	25	53	46
Bloc 6 Isgraig, Tremadog, LL49 9PU	Residential	55	33	50	49	23	53	43
15.0 Isgraig, Tremadog, LL49 9PT	Residential	56	32	52	46	26	54	43

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
11.0 Isgraig, Tremadog, LL49 9PT	Residential	56	32	52	48	26	54	42
Llys Awel78.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	52	47	27	56	46
79.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	57	32	52	47	27	56	46
18.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	55	33	46	46	27	51	47
Tyddyn Difyr6.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	65	34	58	47	27	64	46
Tan Y Foel37.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	60	33	54	46	27	60	47
16.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	55	33	47	46	28	52	47
Tegwynfa31.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	57	33	51	46	27	55	46
Madog Motor Museumwarehouse Iard Llechi, Porthmadog, LL49 9DF	Community Facility	55	34	47	47	29	52	47
Bryn Ffynnonbryn Ffynnon Dublin Street, Tremadog, LL49 9RN	Residential	55	36	48	48	26	53	47
T+À Eiddewty Eiddew Dublin Street, Tremadog, LL49 9RH	Residential	55	34	48	48	25	53	46
21.0 Craig Madog, Tremadog, LL49 9TG	Residential	55	32	48	48	25	53	46
Bloc 359.0 Isgraig, Tremadog, LL49 9PU	Residential	55	33	49	50	26	53	45
12.0 Isgraig, Tremadog, LL49 9PT	Residential	56	32	52	48	26	54	42
71.0 New Street, Porthmadog, LL49 9EE	Residential	55	32	46	46	25	51	47
7.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	66	32	60	46	27	66	46
73.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	58	33	52	47	27	56	46
36.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	58	32	52	46	27	58	44

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
65.0 Madog Street, Porthmadog, LL49 9DU	Residential	55	34	47	46	29	52	47
Madog Street West68.0 Madog Street, Porthmadog, LL49 9DU	Residential	55	34	47	47	29	52	47
Madog Street West66.0 Madog Street, Porthmadog, LL49 9DU	Residential	55	34	47	46	29	52	47
Madog Street West67.0 Madog Street, Porthmadog, LL49 9DU	Residential	55	34	47	46	29	52	47
Godre'R Graiggodre'R Graig Dublin Street, Tremadog, LL49 9RN	Residential	56	35	49	48	25	53	47
Morfa19.0 Craig Madog, Tremadog, LL49 9TG	Residential	56	32	48	48	25	53	46
44.0 Isgraig, Tremadog, LL49 9PT	Residential	55	33	49	48	26	52	44
Bodlondeb9B Craig Madog, Tremadog, LL49 9TG	Residential	56	34	49	49	25	53	46
Eirianfa74.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	58	33	52	47	27	57	46
39.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	62	33	55	47	27	62	47
Madog Street West74.0 Madog Street, Porthmadog, LL49 9EA	Residential	56	33	47	47	28	52	47
Egryn72.0 New Street, Porthmadog, LL49 9EE	Residential	55	33	47	47	29	52	47
73.0 New Street, Porthmadog, LL49 9EE	Residential	55	33	47	47	29	52	47
Madog Street West69.0Bod Elgan Madog Street, Porthmadog, LL49 9DU	Residential	55	34	47	47	29	52	47
Cefn Y Felin Iard Llechi, Porthmadog, LL49 9DH	Residential	55	34	47	47	29	52	47
Lodgelodge A497 Y Cob Porthmadog To Minffordd, Minffordd, Penrhyndeudraeth, LL48 6HL	Residential	55	52	45	42	46	50	51
Garth Cottages Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	56	59	48	43	50	53	51

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Rhosrhos Road From Osmond Terrace Passing Synite Terrace And Erw Wen To Bwlch Bryn Road, Minffordd, Penrhyndeudraeth, LL48 6HP	Residential	56	59	48	42	64	53	51
52.0 Isgraig, Tremadog, LL49 9PT	Residential	54	31	48	49	23	51	41
13.0 Isgraig, Tremadog, LL49 9PT	Residential	57	32	52	48	26	54	45
Bloc 7 Isgraig, Tremadog, LL49 9PU	Residential	55	33	49	49	26	52	45
26.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	60	32	55	48	24	59	47
76.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	67	34	58	47	27	67	47
Min Y Dd+¦lmin Y Ddol A497 Y Cob Porthmadog To Minffordd, Minffordd, Penrhyndeudraeth, LL48 6HL	Residential	55	54	46	42	48	50	51
Osmond Terrace5.0 Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HW	Residential	56	57	48	42	54	53	51
Talgarreg22.0 Craig Madog, Tremadog, LL49 9TG	Residential	56	35	49	49	25	53	46
T+À Capel Peniel Church Street, Tremadog, LL49 9PS	Residential	57	33	53	49	26	55	45
Wynds Point9A Craig Madog, Tremadog, LL49 9TG	Residential	56	34	49	49	25	53	46
T+À Clyd9C Craig Madog, Tremadog, LL49 9TG	Residential	55	34	48	49	23	52	45
75.0 Maes Gerddi, Porthmadog, LL49 9LE	Residential	63	34	54	47	27	62	47
30.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	57	33	51	47	27	55	47
Danesford7.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	57	33	50	46	27	54	46
87.0 Isgraig, Tremadog, LL49 9PU	Residential	55	31	48	49	24	52	44

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Bodfan9D Craig Madog, Tremadog, LL49 9TG	Residential	55	34	48	49	25	52	45
Crud Y Gwynt6.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	57	33	50	47	27	54	46
Rhiwbwys8.0 Craig Madog, Tremadog, LL49 9TG	Residential	56	34	49	49	25	53	46
86.0 Isgraig, Tremadog, LL49 9PU	Residential	55	31	49	49	23	52	43
14.0 Isgraig, Tremadog, LL49 9PT	Residential	57	33	52	48	26	54	42
Fferm Pensyflogpencoedpencoed Pensyflog, Porthmadog, LL49 9PW	Residential	57	33	52	50	26	55	45
Minawel9.0 Craig Madog, Tremadog, LL49 9TG	Residential	56	34	49	49	22	53	46
15.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	58	33	51	47	27	55	47
Dolawel16.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	58	33	52	47	28	56	47
Penarth5.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	57	32	51	48	27	54	46
Osmond Terrace Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HW	Residential	57	58	49	43	52	54	52
Nantllysnantllys Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	56	60	48	42	56	53	52
North West Wales Nhs Trustysbyty Alltwen Dublin Street, Tremadog, LL49 9AQ	Medical Facility	56	37	49	48	26	53	49
12.0 Craig Madog, Tremadog, LL49 9TG	Residential	56	34	48	49	22	53	46
Arfrynarfryn Dublin Street, Tremadog, LL49 9RN	Residential	56	35	49	48	24	53	48
Bloc 694.0 Isgraig, Tremadog, LL49 9PU	Residential	56	31	50	49	23	53	44

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
9E Craig Madog, Tremadog, LL49 9TG	Residential	55	34	48	49	23	52	45
9F Craig Madog, Tremadog, LL49 9TG	Residential	56	34	48	49	25	52	45
12.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	57	33	51	47	27	55	47
Cambrian House2 Cambrian House Cambrian Terrace, Porthmadog, LL49 9EH	Residential	56	33	48	47	28	53	47
Madog Street West78.0 Madog Street, Porthmadog, LL49 9EA	Residential	56	33	47	47	29	52	47
Madog Street West76.0 Madog Street, Porthmadog, LL49 9EA	Residential	56	33	47	47	29	52	47
Traeth Mawrtraeth Mawr L+¦n Y Traeth, Porthmadog, LL49 9PP	Residential	56	35	47	45	30	52	50
Y Graigy Graig Road From Osmond Terrace Passing Cemetery To A487 Opposite Boston Lodge Cottages, Minffordd, Penrhyndeudraeth, LL48 6HP	Residential	58	65	50	43	57	56	52
Pen Y Graigpenygraig Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HN	Residential	57	60	49	43	52	54	52
Meithrinfa Hen Felin Dublin Street, Tremadog, LL49 9RN	Educational Building	56	36	49	49	26	53	48
Glasfrynglasfryn Dublin Street, Tremadog, LL49 9RN	Residential	56	35	49	49	25	53	48
48.0 Isgraig, Tremadog, LL49 9PT	Residential	55	33	48	51	23	52	42
4.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	58	32	51	47	25	56	46
20.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	56	32	46	47	25	52	47
Ger Y Moel32.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	58	34	52	47	27	56	46
35.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	58	32	52	47	27	56	46

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Las Ynys28.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	57	33	52	47	27	55	47
15.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	56	34	46	47	29	51	47
Coed Y Cefn15.0 Craig Madog, Tremadog, LL49 9TG	Residential	56	34	48	49	25	53	46
Bodawen Lodge2 Bodawen Lodges Ffordd Glanrafon, Porthmadog, LL49 9PR	Residential	61	34	62	48	27	60	46
14.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	58	33	51	47	27	55	46
Bron Ddwyryd17.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	56	33	47	47	29	52	47
Twrog House19.0 Glaslyn Street, Porthmadog, LL49 9EG	Residential	56	34	47	47	29	52	47
56.0 Isgraig, Tremadog, LL49 9PT	Residential	56	33	49	50	23	54	45
9G Craig Madog, Tremadog, LL49 9TG	Residential	56	34	48	49	25	52	46
Bronfoel3.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	58	33	52	47	27	56	47
54.0 East Avenue, Porthmadog, LL49 9EL	Residential	56	33	48	48	28	53	47
Llys Awel8.0 Cambrian Terrace, Porthmadog, LL49 9EH	Residential	56	33	48	48	28	53	47
Cynfalcynfal Ffordd Glanrafon, Porthmadog, LL49 9PP	Residential	57	35	54	45	31	54	51
Clwb Chwaraeon Madogcaravan L+¦n Y Traeth, Porthmadog, LL49 9PP	Residential	62	36	61	45	31	61	51
Osmond Terrace6.0Y Bwthyn Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HW	Residential	58	65	51	43	53	57	52
Madog Street West80.0 Madog Street, Porthmadog, LL49 9EA	Hotel	56	33	48	47	28	53	47
9H Craig Madog, Tremadog, LL49 9TG	Residential	56	34	48	49	25	52	45

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
10.0 Craig Madog, Tremadog, LL49 9TG	Residential	56	32	49	49	25	53	46
Madog Street West82.0 Madog Street, Porthmadog, LL49 9EA	Residential	56	33	48	47	28	53	47
13.0 Craig Madog, Tremadog, LL49 9TG	Residential	56	34	49	50	25	54	46
14.0 Craig Madog, Tremadog, LL49 9TG	Residential	56	34	49	50	25	54	47
Auchen9J Craig Madog, Tremadog, LL49 9TG	Residential	56	34	48	50	23	52	45
46.0 Isgraig, Tremadog, LL49 9PT	Residential	56	32	51	50	25	54	43
9I Craig Madog, Tremadog, LL49 9TG	Residential	56	34	48	50	25	52	45
29.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	58	34	51	48	27	56	47
Glandonglandon Road From Osmond Terrace Passing Cemetery To A487 Opposite Boston Lodge Cottages, Minffordd, Penrhyndeudraeth, LL48 6HP	Residential	58	65	50	43	59	56	52
19.0 Isgraig, Tremadog, LL49 9PT	Residential	57	32	52	50	26	54	42
Ardwyn17.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	57	33	51	48	28	55	46
T+À Brics Caravan Parkresidential Chalet L+¦n Y Traeth, Porthmadog, LL49 9PP	Residential	57	35	49	48	30	53	50
Bodawen Lodge1 Bodawen Lodges Ffordd Glanrafon, Porthmadog, LL49 9PR	Residential	61	34	62	48	28	60	48
56.0 East Avenue, Porthmadog, LL49 9EL	Residential	57	33	49	48	28	53	47
Osmond Terrace4.0Troed Y Rhiw Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HW	Residential	58	65	50	43	54	56	52

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
Clwb Chwaraeon Madog L+¦n Y Traeth, Porthmadog, LL49 9PP	Community Facility	62	36	61	46	31	62	52
17.0 Isgraig, Tremadog, LL49 9PT	Residential	57	32	52	49	26	54	43
77.0 Isgraig, Tremadog, LL49 9PU	Residential	56	33	50	51	26	54	45
79.0 Isgraig, Tremadog, LL49 9PU	Residential	54	31	48	50	23	52	43
Llwyn Celynllwyn Celyn Road From A487 Passing Llwyn Celyn To Plas Penrhyn, Minffordd, Penrhyndeudraeth, LL48 6HY	Residential	56	50	45	43	44	50	53
18.0 Isgraig, Tremadog, LL49 9PT	Residential	57	32	52	50	26	54	42
Cynlas18.0 Meadow Drive, Porthmadog, LL49 9HU	Residential	57	33	51	48	28	54	46
Osmond Terrace3.0Preswylfa Quarry Lane, Minffordd, Penrhyndeudraeth, LL48 6HW	Residential	58	64	50	44	53	55	53
Seion Chapel2 Ty Capel Road From Tremadog Road To Dolydd, Porthmadog, LL49 9SB	Residential	59	32	52	48	27	57	47
The Eyriethe Eyrie A497 Y Cob Porthmadog To Minffordd, Minffordd, Penrhyndeudraeth, LL48 6DW	Residential	56	52	47	44	45	51	53
Maes Y M+¦rfirst Floor 39 Craig Madog, Tremadog, LL49 9PY	Residential	57	34	50	50	25	53	46
Bloc 5 Isgraig, Tremadog, LL49 9PU	Residential	56	33	50	51	26	54	45
21.0 Isgraig, Tremadog, LL49 9PT	Residential	58	32	53	50	26	54	42
Derlwynderlwyn A497 Y Cob Porthmadog To Minffordd, Minffordd, Penrhyndeudraeth, LL48 6HL	Residential	57	52	48	44	45	52	53
19.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	61	33	54	49	28	59	47

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
22.0 Isgraig, Tremadog, LL49 9PT	Residential	58	32	53	50	26	54	45
20.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	61	33	54	49	28	59	48
Pensyflog Barns2 Pensyflog Barns Pensyflog, Porthmadog, LL49 9PW	Residential	58	34	53	51	26	56	45
24.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	62	33	56	49	27	61	47
Rhandir41.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	63	33	56	49	27	62	47
Bodawenbodawen House Ffordd Glanrafon, Porthmadog, LL49 9PR	Residential	59	33	54	49	28	56	50
Trem Y Cribiau21.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	62	33	55	49	27	60	47
23.0 Isgraig, Tremadog, LL49 9PT	Residential	58	33	53	51	26	54	44
Gwelfryn23.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	63	33	56	49	27	62	47
Hendraeth22.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	62	33	55	49	27	61	48
T+À Capel Ynys Galchty Capel Ynys Galch Road From Tremadog Road To Dolydd, Porthmadog, LL49 9HT	Residential	60	33	54	50	28	59	48
Min Y Traethmin Y Traeth L+¦n Y Traeth, Porthmadog, LL49 9PP	Residential	58	35	48	49	30	54	50
Arwel42.0 Meadow Drive, Porthmadog, LL49 9HY	Residential	63	33	56	49	28	63	48
41.0 Isgraig, Tremadog, LL49 9PT	Residential	57	34	49	52	23	54	46
38.0 Isgraig, Tremadog, LL49 9PT	Residential	58	34	49	52	23	54	46
47.0 Isgraig, Tremadog, LL49 9PT	Residential	58	31	50	52	23	54	45
40.0 Isgraig, Tremadog, LL49 9PT	Residential	58	34	49	52	23	54	46

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
24.0 Isgraig, Tremadog, LL49 9PT	Residential	58	32	53	51	26	54	45
Fferm Penmountllofft Yr Ydllofft Yr Yd Ffordd Glanrafon, Porthmadog, LL49 9PP	Hotel	61	35	58	45	30	59	54
39.0 Isgraig, Tremadog, LL49 9PT	Residential	58	34	49	52	23	54	46
25.0 Isgraig, Tremadog, LL49 9PT	Residential	59	33	53	52	25	54	42
37.0 Isgraig, Tremadog, LL49 9PT	Residential	58	34	50	52	23	54	46
Aneddannedd Road From Tremadog Road To Dolydd, Porthmadog, LL49 9HT	Residential	61	33	55	50	28	60	48
36.0 Isgraig, Tremadog, LL49 9PT	Residential	58	34	50	52	23	54	46
35.0 Isgraig, Tremadog, LL49 9PT	Residential	58	33	50	53	23	54	46
Brian Rees Jonespenamserpenhelig Ffordd Penamser, Porthmadog, LL49 9SL	Residential	62	38	53	52	24	56	57
34.0 Isgraig, Tremadog, LL49 9PT	Residential	58	33	50	53	23	54	46
33.0 Isgraig, Tremadog, LL49 9PT	Residential	59	33	50	53	23	54	46
32.0 Isgraig, Tremadog, LL49 9PT	Residential	59	33	49	53	23	54	46
Lloc Meuriglloc Meurig Road From Osmond Terrace Passing Cemetery To A487 Opposite Boston Lodge Cottages, Minffordd, Penrhyndeudraeth, LL48 6HS	Residential	61	62	54	46	49	58	56
26.0 Isgraig, Tremadog, LL49 9PT	Residential	59	32	53	53	25	54	44
Ynys Wenynys Wen Road From Tremadog Road To Dolydd, Porthmadog, LL49 9HT	Residential	62	33	55	51	28	60	48

Addressbase plus building address	Receptor type	Predicted construction noise level $L_{Aeq,T}$ dB						
		NGA 1	NGA 2	NGA 3	NGA 4	NGA 5	NGA 6	NGA 7
31.0 Isgraig, Tremadog, LL49 9PT	Residential	59	33	51	53	23	54	46
30.0 Isgraig, Tremadog, LL49 9PT	Residential	59	33	51	53	23	54	46
29.0 Isgraig, Tremadog, LL49 9PT	Residential	59	33	51	53	24	54	46
Bloc 2 Isgraig, Tremadog, LL49 9PT	Residential	59	33	53	53	23	54	46
Cyngor Gwynedd Tremadog Road, Porthmadog, LL49 9HS	Educational Building	60	33	54	52	28	58	49
Dolydddolydd Road From Tremadog Road To Dolydd, Porthmadog, LL49 9HT	Residential	63	33	56	53	28	60	48
Fferm Glanrafonglanrafon Ffordd Glanrafon, Porthmadog, LL49 9PP	Residential	62	34	50	53	29	55	57
Porthmadog Golf Range Road From Caernarfon Road A487(T) To Penamser Road A497, Porthmadog, LL49 9SL	Community Facility	68	37	74	65	24	66	61
Fferm Penmountpenmount Ffordd Glanrafon, Porthmadog, LL49 9PP	Residential	66	35	51	55	27	59	63
Talar Wentalarwen Ffordd Glanrafon, Porthmadog, LL49 9PP	Residential	71	34	52	60	30	64	68
Gwynfryngwynfryn Ffordd Glanrafon, Porthmadog, LL49 9PP	Residential	72	34	50	62	29	66	69

Bibliography

Ref 2.1 – BSI (2014). *British Standard 5228-1:2009+A1:2014. Code of practice for noise and vibration control on construction and open sites - Part 1: Noise*.

4.12.A: Socio-Economic Land Use Receptors

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1.2 Public Right of Way and Recreational Routes 3

1.3 Open Space 4

1.4 Community Facilities 5

1.5 Visitor Attractions 6

1.6 Business Premises 7

1. Receptors

1.1.1 This report provides details of the Socio-Economic Land Use Receptors identified within the Glaslyn Cables works site that informs the Environment Statement (ES) **Volume 4 Chapter 12 Socio-Economics**.

1.2 Public Right of Way and Recreational Routes

1.2.1 There are six Public Right of Ways (PRoW) which cross the Glaslyn works site:

- Porthmadog No 10 bridleway.
- Porthmadog No 37 bridleway.
- Porthmadog No 6 footpath.
- Dolbenmaen No 107 footpath.
- Porthmadog No 8 footpath.
- Porthmadog No 11 footpath.

1.2.2 32 additional PRoW are located within 500 m of the Glaslyn works site:

- Penrhyndeudraeth No 45 footpath.
- Penrhyndeudraeth No 42 bridleway.
- Penrhyndeudraeth No 36 bridleway.
- Penrhyndeudraeth No 34 footpath.
- Llanfrothen No 32 footpath.
- Penrhyndeudraeth No 35 bridleway.
- Penrhyndeudraeth (br) No 43 bridleway.
- Penrhyndeudraeth No 43 footpath.
- Penrhyndeudraeth No 44 bridleway.
- Porthmadog No 62 footpath.
- Porthmadog No 12 footpath.
- Porthmadog No 41 footpath.
- Porthmadog No 57 footpath.
- Porthmadog No 31 footpath.
- Porthmadog No 60 footpath.
- Porthmadog No 7 footpath.
- Porthmadog No 9 footpath.
- Porthmadog No 32 footpath.

- Porthmadog No 5 footpath.
- Porthmadog No 3 footpath.
- Porthmadog No 42 footpath.
- Porthmadog No 1 bridleway.
- Dolbenmaen No 129 footpath.
- Dolbenmaen No 48 footpath.
- Dolbenmaen No 48a footpath.
- Dolbenmaen No 129a footpath.
- Dolbenmaen No 130 footpath.
- Dolbenmaen No 131 footpath.
- Dolbenmaen (rb) No 131 restricted byway.
- Dolbenmaen No 47 footpath.
- Dolbenmaen No 108 Bridleway.
- Dolbenmaen No 46 footpath.

1.2.3 A National Cycle Route (National Cycle Route 8) crosses and partially runs within the Glaslyn works site.

1.2.4 The Gwynedd long distance trail coastal path is also within 500 m of the Glaslyn works site.

1.2.5 There is one informal recreational route within 500 m of the Glaslyn works site: the Cob Crwn hiking area.

1.3 Open Space

1.3.1 There are 18 dedicated open spaces within 500 m of the Glaslyn works site. Of these, three are located within the Glaslyn works site:

- Ysgol Eifionydd Playing Field.
- Porthmadog Eisteddfod Stone Circle park.
- Leap Park

1.3.2 The remaining 15 are:

- Rhandiroedd Cae Pawb Allotments.
- Mynwent Minffordd Cemetery.
- Traeth Glaslyn North Wales Wildlife Trust Nature Reserve.
- Magdog Sports Club, which contains Traeth Stadium and Porthmadog FC.
- Porthmadog Park.
- St John's Church garden.
- A sports facility at the Ysgol Eifion Wyn nursery school.

- A playing field near Porthmadog Station.
- Porthmadog Eisteddfod Stone Circle park.
- Snowdon Lodge.
- St Mary's Church.
- A play space near Church Street in Tremadog.
- Porthmadog Public Cemetery.
- St Beuno's Church.
- A playing field in Penmorfta.

1.4 Community Facilities

1.4.1 There are 38 community facilities located within 1 km of the Glaslyn works site. One of these community facilities is within the Glaslyn works site:

- Ysgol Eifionydd Secondary School (sections of the car park and the playground only).

1.4.2 The remaining 37 are located within 500m of the site boundary:

- Minfford Train Station.
- Seion Chapel in Penmorfa.
- St Beuno's Church.
- Porthmadog Public Cemetery.
- Ysbyty Alltwen NHS Wales hospital.
- Ysgol Y Gorlan primary school.
- Tremadog Post Office.
- St Mary’s Church.
- Capel Peniel chapel.
- Madog Sports Club.
- North Wales Fire & Rescue Service.
- Porthmadog Train Station.
- Byw'n Iach Glaslyn (Fitness, Swimming & Sports) Porthmadog leisure centre.
- Ysgol Eifion Wyn nursery.
- St John's Church.
- Porthmadog Delivery Office.
- The Church of Jesus Christ of Latter-day Saints.
- Catholic Church of the Most Holy Redeemer.
- Kingdom Hall of Jehovah's Witnesses.

- North Wales Police station.
- Capel Y Porth chapel.
- Porthmadog ACF youth group.
- Edwards Dr I dentist.
- HMRC Welsh Contact Centre.
- Y Ganolfan Community Centre.
- Masonic Hall.
- Rowlands Pharmacy Porthmadog High St.
- Careers Wales Gyrfa Cymru career guidance service.
- New St John's Church.
- Porthmadog Post Office.
- Aberglaslyn Mountain Rescue Team.
- Y Ganolfan Pentrefelin community centre.
- Bron Y Garth Hospital.
- Penwood Dental Care.
- Eryri i(Snowdonia) National Park Offices.
- Ysgol Hafod Lon special needs school.
- Harbwr Porthmadog marina.

1.5 Visitor Attractions

1.5.1 There are 23 hospitality facilities within 500 m of the Glaslyn works site providing accommodation:

- Bron Turnor Cottage holiday home.
- Minffordd Hostel.
- 2 Cae Eithin Cottage holiday apartment rental.
- Signance Homes Ltd self-catering accommodation.
- Bwlch Y Fedwen Contractor Accommodation.
- My Next Home holiday home.
- Wern Manor accommodation.
- Godre'r Graig B&B.
- Porthmadog holidays holiday home.
- Snowdon Lodge.
- Queens Rooms Porthmadog.
- Royal Sportsman Hotel & Restaurant.

- Gwynfa Bed and Breakfast.
- Dizzy Heights holiday home.
- Travelodge Porthmadog.
- Tudor Lodge hotel.
- Dros Y Dwr apartment rental.
- Private Hafan Holidays holiday homes.
- Stryd-Dora homestay.
- Island Hide, Anglesey camping cabin.
- 4 Star Garden Flat - REF: 1080 holiday flat.
- STS Holidays accommodation.
- Tree Tops - with views of the Steam Trains holiday flat.

1.6 Business Premises

1.6.1 169 businesses have been identified within 500 m of the Glaslyn works site. One of these is within the Glaslyn works site:

- Hochtief UK Construction Ltd.

1.6.2 The other businesses are outside the Glaslyn works site but within 500m:

- Gweithdy Minffordd Workshop.
- CCICM financial institution.
- Breedon Southern Ltd.
- Boston Lodge Works (Ffestiniog Railway).
- Babi Pur homeware shop.
- Penamser Garage.
- Pritchard a Griffiths Cyf. funeral directors.
- Y Sgwâr restaurant.
- SPAR – Tremadog.
- Styles hairdresser.
- The Union Inn.
- PMA Porthmadog martial arts school.
- Gardencraft garden building suppliers.
- Golden Fleece Inn.
- Tremadog Garden Centre.
- Chippy Dre.
- Ffestiniog Travel tour operator;.

- Kopa Marketing marketing agency.
- Porthmadog Window And Door Medic.
- Porthmadog Function Room.
- Porthmadog FC.
- Traeth Stadium.
- Cambrian Homes.
- Lard-yr-Orsaf Pay & Display Car Park.
- Station Inn.
- Portico Kitchens & Bathrooms.
- C M C Ltd Porthmadog MOT centre.
- Welsh Highland Heritage Railway.
- Hughs Tyres.
- K9 Clippers pet groomer.
- Dereks Tyre Services.
- A E Motors mechanics.
- Regent Garage.
- Grey Slate & Stone Ltd natural stone supplier.
- Gelerts Farm Halt railway services.
- Robworth Storage Ltd self-storage facility.
- King of Kings Gym.
- Guest View Garage.
- Aspire Park & Leisure Homes manufacturer.
- L&R Laundry Ltd.
- Tesco Superstore.
- ALDI.
- Lidl.
- GO Outdoors Express.
- Sports Direct.
- Snowdonia Design & Print commercial printer.
- Breaktimes café.
- GAME video game shop.
- Pianos Cymru piano shop.
- Gray T Enterprises caravan repair shop.

- City Electrical Factors Ltd (CEF) electrical product wholesaler.
- GSF Car Parts (Porthmadog) auto parts store.
- Wolseley Plumb & Parts.
- Howdens – Porthmadog kitchen shop.
- Hamdden Caravans & Accessories caravan shop.
- Certas Energy fuel supplier.
- Links Electrical Supplies Ltd.
- Huws Gray Porthmadog building material supplier.
- Travis Perkins building material supplier.
- K K Cycles bike shop.
- Portmeirion Café.
- Meithrinfa Enfys Fach Cyf childcare agency.
- Cyfrifiaduron Porthmadog Computers.
- Baavet manufacturer.
- Siop Fawr Portmeirion department store.
- Ellis Barber Stylist.
- H. O. Davies Ltd funeral director.
- Emilia's sandwich shop.
- New Yamin Chinese Takeaway.
- Motor Engineers CO UK.
- Darlun Design Studio.
- GTA Diagnostix vehicle repair shop.
- Porthmadog Intermediate Depot warehouse.
- Wool Producers Of Wales wholesaler.
- Purple Moose Brewery.
- Gwyndaf Evans Motors – Porthmadog car dealer.
- Smartphone screen repairs, Porthmadog phone repair service.
- Allports Fish & Chips Porthmadog.
- Clwb Llyn Bach pub.
- Siop Anna Fabric Wool & Haberdashery Shop fabric shop.
- Welsh Highland Railway Porthmadog Car Park.
- Llyn Bach Pay & Display Car Park.
- Milfeddygon Deufor veterinarian.

- Siop Anna Fabric Wool & Haberdashery Shop.
- Rook & Thomas optician.
- B&M Store.
- Rob Piercy Gallery art gallery.
- Porthmadog Kebab & Pizza House.
- Red Lion pub.
- Robyns Owen solicitors;.
- Ragz Fine Art artist.
- Shell petrol station.
- The Port Cafe Deli & Restaurant.
- Traceys tans Porthmadog tanning salon.
- Glaslyn Tandoori restaurant.
- Dunn & Ellis accountant.
- Crazy Golf Portmahog Park.
- Amryw Wax Melts.
- Country Home Antiques & Interiors Porthmadog.
- Split Endz hairdresser.
- Thai Harbwr restaurant.
- Alton Murphy optician.
- Get Connected mobile phone shop.
- Tenovus Cancer Care charity shop.
- Savers Health & Beauty shop.
- Alan James Hairdressing.
- Star Barber.
- Oriel Hafan Gallery art dealer.
- Gamlins Solicitors LLP.
- Lili Wen florist.
- Freshfields Animal Rescue Shop charity shop.
- Siop Coffi T.H. coffee shop.
- Paganuzzi beach entertainment shop.
- Sima Tandoori restaurant.
- Ochirly Chinese Restaurant and Takeaway.
- SPAR Porthmadog.

- Laud, Meredith & Company accountants.
- PanIQ Rooms escape room.
- Pyramid ladies clothing.
- Gifts & Home gift shop.
- Newells bakery.
- G.C.WILLIAMS electronics shop.
- Roberts & Owen jeweller.
- Betfred betting shop.
- Narrowboat Crew Ltd training centre.
- The Creel Fish & Chips shop.
- Blas Y Mor / Taste Of The Sea fishmonger.
- Kitty's Coffee, Cakes & Sandwiches.
- Browsers Bookshop.
- The Big Rock Café.
- GM Lounge Bar & Food restaurant.
- The Original Factory Shop (Porthmadog) discount shop.
- Jodies Barber.
- Newell's Bistro.
- Porthmadog Models model shop.
- Revive coffee shop.
- Glosters pottery shop.
- Lledar Ltd - Leather Bags and Accessories.
- HSBC Porthmadog.
- The Baron Barbershop.
- Pikes W newsstand.
- Yr Wylan restaurant.
- Davies clothing shop.
- Redskin Tattoo shop.
- Breese Gwyndaf Solicitors.
- Portmeirion Shop gift shop.
- Costa Coffee.
- Vegonia Wholefoods.
- Cadwaladers ice cream shop.

- Pet and Aquatic Centre.
- Woof 'n' Roll pet care store.
- Richards Menswear Porthmadog.
- The Australia pub.
- The Purple Moose Brewery Shop / Siop y Bragdy Mŵs Piws (Porthmadog).
- Richards Ladieswear Porthmadog.
- Cariad Gelato Kiosk ice cream shop.
- A Good Start - Dechrau Da, Knitting Yarns, Babies And Children's Clothing children’s clothes.
- Crefft gift shop.
- Porthmadog Antiques shop.
- Tŷ Martha ladies clothes shop.
- 6292 and Frens souvenir shop.
- The Edinburgh Woollen Mill clothing shop.
- Cwt Carlwm Creps & kouigh creperie;.
- Pioden Magpie giftshop.
- Pop Local And Beyond giftshop.
- Cyffug Fudge shop.
- Cymru Country Store.
- Londis convenience store.

4.13.A Glaslyn Cables Climate Change Risk Assessment

1. Glaslyn Cables Climate Change Risk Assessment (CCRA) Risk Register

1.1.1 The CCRA Risk Register identifies and assesses the likelihood and consequences of climate-related impacts on the Glaslyn Cables section of the Proposed Works. The methodology and criteria used to inform the CCRA are set out in **Environmental Statement Volume 8: Appendix 1.4.A Topic Methodology** and supplement the potential effects and mitigation measures presented in the Glaslyn Cables Climate Change Chapter.

Table 1-1: Glaslyn Cables CCRA Risk Register

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
Construction						
Flooding (Pluvial)	Extreme precipitation over an extended period can cause surface water and flash flooding, resulting in the construction site becoming inundated. Flooding can damage ground-level infrastructure, access routes, and equipment, leading to delays or a complete halt in construction activities. This is likely to result in increased financial costs.	• Construction Site & Equipment.	• A Construction Environmental Management Plan (CEMP) will be prepared by the contractor and will outline measures for managing environmental impacts during construction. The CEMP will outline floodplain control measures and contingency actions in the event of site flooding. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • A Flood Risk Assessment will be included in the Environmental Statement to assess flood risk exposure and inform construction planning. • The contractor will implement stop-work protocols and change management procedures. If conditions are unsafe (e.g. flooding on the construction site), work will pause until safe to resume or controls are in place. • The contractor will monitor weather forecasts, receive Natural Resources Wales flood alerts, and adjust work plans using internal procedures to manage personnel and resources during adverse weather. • Where feasible, durable materials and resilient equipment will be used to withstand extreme weather. These measures will be included in the CEMP. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on the planned activities and any identified health and safety risks.	Moderate	Minor	Medium (Not Significant)
Flooding (Fluvial)	Extreme precipitation over an extended period can cause local rivers to overflow, leading to flooding of the construction site. Flooding may damage ground-level infrastructure, access routes, and on-site equipment, resulting in delays or potential suspension of construction activities. This is likely to increase financial costs.	• Construction Site & Equipment	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. The CEMP will outline floodplain control measures and contingency actions in the event of site flooding. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • A Flood Risk Assessment will be included in the Environmental Statement to assess flood risk exposure and inform construction planning. • The contractor will implement stop-work protocols and change management procedures. Work will be paused if conditions are unsafe (e.g. flooding on the construction site), until hazards are mitigated or conditions improve. • Weather forecasts and Natural Resources Wales flood alerts will be monitored to plan works and manage staff and resources during adverse weather.	Unlikely	Minor	Low (Not Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
			• Where feasible, durable materials and resilient equipment will be used to withstand extreme weather. These measures will be included in the CEMP. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any health and safety concerns identified.			
Flooding (Coastal)	Extreme rainfall events, combined with storm surges, can result in coastal flooding. Coastal flooding may damage ground-level infrastructure, access routes, and construction equipment, leading to delays or suspension of site activities and increased financial costs.	• Construction Site & Equipment	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. The CEMP will outline floodplain control measures and contingency actions in the event of site flooding. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • A Flood Risk Assessment will be included in the Environmental Statement to assess flood risk exposure and inform construction planning. • The contractor will implement stop-work protocols and change management procedures. Work will be paused if conditions are unsafe (e.g. flooding on the construction site), until hazards are mitigated or conditions improve. • Weather forecasts and Natural Resources Wales flood alerts will be monitored to plan works and manage staff and resources during adverse weather. • Where feasible, durable materials and resilient equipment will be used to withstand extreme weather. These measures will be included in the CEMP. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any health and safety concerns identified.	Unlikely	Minor	Low (Not Significant)
Flooding (Pluvial, Fluvial & Coastal)	Flooding at the construction site can pose health and safety risks to workers due to unsafe conditions. Resulting delays to construction activities may lead to increased financial costs.	• Human health and safety (staff and visitors)	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. The CEMP will outline floodplain controls and contingency actions in the event of site flooding. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • A Flood Risk Assessment will be included in the Environmental Statement to assess flood risk exposure and inform construction planning. • The contractor will implement stop-work protocols and change management procedures. Work will pause if conditions become unsafe and will only resume once appropriate control measures are implemented. • Weather forecasts and Natural Resources Wales flood alerts will be monitored to plan works and manage staff and resources during adverse weather. • A Health and Safety Plan will be developed to protect workers and minimise disruption to construction activities. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • Toolbox Talks will be held to raise awareness of weather-related risks and associated mitigation measures.	Unlikely	Insignificant	Low (Not Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
Flooding (Fluvial & Pluvial)	Prolonged extreme precipitation can cause local rivers to overflow, resulting in flooding at the construction site. Saturation and erosion of natural land, particularly on slopes or in excavated areas, can lead to landslides. Landslides may damage the site and equipment, causing disruption and increased construction costs.	• Construction Site & Equipment	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will pause if conditions are deemed unsafe and will resume only when appropriate controls are in place. • A Health and Safety Plan will be developed to protect workers and minimise disruption to construction activities. • Toolbox Talks will be held to raise awareness of weather-related risks and associated mitigation measures. • The contractor will monitor weather forecasts to inform short- and medium-term planning and protect workers and resources during extreme weather.	Moderate	Minor	Medium (Not Significant)
Flooding (Fluvial & Pluvial)	Prolonged extreme precipitation can cause local rivers to overflow, leading to flooding at the construction site. Flooding and heavy rainfall can saturate and erode natural land, particularly on slopes or in excavated areas, increasing the risk of landslides. Landslides can create hazardous conditions for construction workers, posing risks to health and safety.	• Human health and safety (staff and visitors)	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will pause if conditions are unsafe and resume only once appropriate controls are implemented. • Toolbox Talks will be held to raise awareness of weather-related risks and associated mitigation measures. • Weather forecasts and Natural Resources Wales flood alerts will be monitored to plan works and manage staff and resources during adverse weather. • A Health and Safety Plan will be developed to protect workers and minimise disruption to construction activities.	Moderate	Minor	Medium (Not Significant)
Flooding (Pluvial, Fluvial & Coastal)	Flooding at the construction site can displace soil, causing damage to construction equipment and leading to delays. Such delays or equipment damage can result in increased financial costs.	• Construction Site & Equipment	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. The CEMP will outline floodplain controls and contingency measures in the event of site flooding. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • A Flood Risk Assessment will be included in the Environmental Statement to assess flood risk exposure and inform construction planning. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will pause if conditions are unsafe and resume only when controls are in place. • Weather forecasts and Natural Resources Wales flood alerts will be monitored to plan works and manage staff and resources during adverse weather.	Unlikely	Insignificant	Low (Not Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
			• Where feasible, the contractor will use durable, climate-resilient materials and equipment, as set out in the CEMP.			
Sea Level Rise	Sea level rise can increase the frequency of coastal flooding and coastal erosion. Construction sites in affected areas may be at risk of sea inundation, erosion, and flooding, potentially rendering equipment non-operational and causing delays to the construction programme.	• Construction Site & Equipment	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. The CEMP will outline floodplain control measures and contingency actions in the event of site flooding. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • A Flood Risk Assessment will be included in the Environmental Statement to assess flood risk exposure and inform construction planning. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will pause if conditions are unsafe and resume only once controls are in place. • Weather forecasts and Natural Resources Wales flood alerts will be monitored to plan works and manage staff and resources during adverse weather. • Where feasible, durable and climate-resilient materials and equipment will be used, as outlined in the CEMP.	Unlikely	Minor	Low (Not Significant)
Extreme Heat & Heatwaves	Extreme heat events can disrupt construction activities due to health and safety concerns, such as the risk of sunstroke, dehydration, or, in severe cases, fatality. Resulting delays to construction can lead to increased financial costs. .	• Human health and safety (staff and visitors)	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will pause if conditions are unsafe and resume only when appropriate controls are in place. • Toolbox Talks will be held to raise awareness of weather-related risks and associated mitigation measures. • The contractor will monitor weather forecasts to inform short- and medium-term planning and implement timely measures to protect workers and resources. Measures to support work in high temperatures may include sun protection, lightweight clothing, hydration breaks, and access to cool drinking water. • A Health and Safety Plan will be developed to protect workers and minimise disruption to construction activities.	Rare	Minor	Low (Not Significant)
Storm Events	Hot, dry conditions combined with strong winds can generate excessive dust from construction activities. This can delay works due to poor visibility or unsafe conditions and may also lead to	• Construction Site & Equipment	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities.	Unlikely	Minor	Low (Not Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
	increased equipment maintenance. Resulting delays can increase financial costs.		• A Dust Management Plan will be prepared to minimise dust generation during construction. It will set out site-specific dust control measures. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will be suspended during unsafe conditions and will only resume when appropriate controls are in place. • Toolbox Talks will be held to raise awareness of weather-related risks and associated mitigation measures. • The contractor will monitor short- and medium-term weather forecasts to inform planning and safeguard workers and site resources. Measures to address high temperatures may include sun protection, lightweight clothing, hydration breaks, and access to cool drinking water. • A Health and Safety Plan will be developed to protect workers and minimise disruption to construction activities.			
Storm Events	Hot, dry conditions combined with strong winds can generate excessive dust from construction activities. This may delay works due to reduced visibility and create hazardous conditions for workers, such as irritation or injury to the eyes and ears. Resulting delays can increase financial costs.	• Human health and safety (staff and visitors).	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • A Dust Management Plan will be prepared to minimise dust generation during construction. It will set out site-specific dust control measures. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will be paused during unsafe conditions and will resume only when hazards are mitigated. • Weather forecasts will be monitored to anticipate extreme weather and implement contingency measures to reduce disruption. • Toolbox Talks will be held to raise awareness of weather-related risks and outline mitigation measures to protect worker health and safety. • A Health and Safety Plan will be prepared by the contractor to manage worker safety and reduce risks to site operations. • Ahead of storms and strong winds, the contractor will secure temporary structures using sandbags and relocate movable equipment where necessary.	Unlikely	Minor	Low (Not Significant)
Drought	Prolonged hot weather and limited rainfall can lead to drought conditions, making groundworks and excavation more challenging. This may delay construction activities and increase project costs.	• Construction Site & Equipment	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will pause during unsafe conditions and resume only when appropriate controls are in place. • The contractor will monitor short- and medium-term weather forecasts to support programme planning and enable timely measures to protect workers and site resources.	Unlikely	Moderate	Medium (Not Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
Extreme Cold	Extreme cold temperatures can cause water tanks to freeze, disrupting the water supply to welfare facilities such as portable toilets. If welfare provisions cannot be maintained, this may lead to temporary site closure and construction delays, increasing project costs.	• Construction Site & Equipment • Human health and safety (staff and visitors)	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will pause during unsafe conditions (e.g. freezing temperatures) and resume once appropriate controls are implemented. • Toolbox Talks will be held to raise awareness of weather-related risks and associated mitigation measures. • The contractor will monitor short- and medium-term weather forecasts to support planning and enable timely mitigation to protect workers and resources. • A Health and Safety Plan will be developed to protect workers and minimise disruption to construction activities. • Where feasible, the contractor will use durable and climate-resilient materials and equipment, such as those suited to extreme cold. These measures will be included in the CEMP.	Moderate	Minor	Medium (Not Significant)
Extreme Cold	Extreme cold temperatures can lead to ground freezing, black ice formation, and snowfall. These conditions create hazardous working environments by reducing visibility and making ice difficult to detect, increasing the risk of accidents. Resulting delays to construction activities can lead to higher financial costs.	• Human health and safety (staff and visitors)	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will be paused during unsafe conditions (e.g. snowfall) and resume once appropriate controls are implemented. • Weather forecasts will be monitored to anticipate extreme weather and implement contingency measures to reduce disruption. • Toolbox Talks will be held to raise awareness of weather-related risks and associated mitigation measures. • The contractor will monitor short- and medium-term forecasts to support programme planning and implement timely protective measures for workers and site resources. • A Health and Safety Plan will be developed to protect workers and minimise disruption to construction activities.	Moderate	Minor	Medium (Not Significant)
Extreme Cold	Extreme cold can disrupt construction activities by freezing soil, making earthworks unfeasible. Frozen ground may also require de-icing, causing delays to the construction schedule.	• Construction Site & Equipment	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks.	Moderate	Minor	Medium (Not Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
			• The contractor will implement stop-work protocols and change management procedures. Work will pause during unsafe conditions (e.g. black ice) and resume once appropriate controls are in place. • Toolbox Talks will be held to raise awareness of weather-related risks and associated mitigation measures. • Short- and medium-term forecasts will be monitored to support planning and enable timely protection of workers and resources.			
Storm Events	Storm events and strong winds can create hazardous conditions on the construction site, posing safety risks to workers. For example, strong winds can generate dust, reducing visibility on site and nearby roads. Areas at height or exposed to wind are particularly dangerous during such events. These unsafe conditions may necessitate temporary site closures, leading to construction delays and increased financial costs.	• Human health and safety (staff and visitors)	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • A Dust Management Plan will be prepared to minimise dust generation during construction. It will set out site-specific dust control measures. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will pause during unsafe conditions (e.g. strong winds) and resume once appropriate controls are in place. • Toolbox Talks will be held to raise awareness of weather-related risks and associated mitigation measures. • Short- and medium-term forecasts will be monitored to support programme planning and timely protection of workers and site resources. • A Health and Safety Plan will be developed to manage worker safety and reduce construction risks. • Ahead of storms and strong winds, the contractor will secure temporary structures using sandbags and relocate movable equipment where necessary.	Unlikely	Minor	Low (Not Significant)
Storm Events	Storm events and strong winds can disrupt the construction of the Proposed Works and site access. For example, debris such as tree branches may fall onto the construction site, potentially damaging equipment, delaying construction activities, and creating health and safety hazards. Blocked access roads can also hinder the delivery of construction materials and the movement of personnel. Delays in construction activities can result in increased financial costs	• Construction Site & Equipment. • Human health and safety (staff and visitors)	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • A Dust Management Plan will be prepared to minimise dust generation during construction. It will set out site-specific dust control measures. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will pause during unsafe conditions (e.g. strong winds) and resume once appropriate controls are in place. • Toolbox Talks will be held to raise awareness of weather-related risks and associated mitigation measures. • Short- and medium-term forecasts will be monitored to support programme planning and timely protection of workers and site resources. • A Health and Safety Plan will be developed to manage worker safety and reduce construction risks. • Ahead of storms and strong winds, the contractor will secure temporary structures using sandbags and relocate movable equipment where necessary.	Unlikely	Minor	Low (Not Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
Wildfires	Increased heatwaves and prolonged dry periods can create conditions conducive to wildfires, particularly in areas with surrounding vegetation. Wildfires near the construction site may spread, causing damage to materials, equipment, and the site itself. Such events could lead to delays in construction activities and increased financial costs.	• Construction Site & Equipment.	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will be paused during unsafe conditions and resume once risks are mitigated. • Weather forecasts will be monitored to anticipate extreme temperatures and implement contingency measures to reduce disruption. • Where feasible, the contractor will use climate-resilient materials and equipment (e.g. for wildfire or extreme heat), with measures included in the CEMP.	Rare	Moderate	Medium (Not Significant)
Wildfires	Increased heatwaves and dry periods can create conditions conducive to wildfires in areas with vegetation and trees. Wildfires in close proximity to the construction site may spread, potentially causing damage to the site, materials, and equipment. This could result in delays to construction activities and increased financial costs.	• Human health and safety (staff and visitors).	• A CEMP will be prepared by the contractor and will outline measures for managing environmental impacts during construction. • A Severe Weather Plan, annexed to the CEMP, will identify construction-phase climate risks from extreme weather events and outline mitigation measures. It will address risks to sensitive receptors and weather-vulnerable construction activities. • Daily site inspections will be carried out to assess on-site conditions. Workers will be briefed each morning on planned activities and any identified health and safety risks. • The contractor will implement stop-work protocols and change management procedures. Work will be paused during unsafe conditions and resume once risks are mitigated. • Weather forecasts will be monitored to anticipate extreme temperatures and implement contingency measures to reduce disruption. • Where feasible, the contractor will use climate-resilient materials and equipment (e.g. for wildfire or extreme heat), with measures included in the CEMP.	Rare	Moderate	Medium (Not Significant)
Operation						
Flooding (Pluvial, Fluvial & Coastal)	Any form of flooding can result in dangerous working conditions for staff carrying out maintenance work on the asset. This can cause health and safety risks. Maintenance work may need to cease if conditions are too dangerous. This would lead to disruption and delays, along with increased costs.	• Human health and safety (staff and visitors). • Underground Cables • Cable Sealing end compound (CSEC) • Green spaces & Vegetation • Supporting structures (e.g. signage,	• An Operational Environmental Management Plan (OEMP) will be developed, setting out mitigation and emergency response measures to minimise flood impacts during operation. • A Health and Safety Plan will outline safety procedures and emergency protocols to protect staff and the public. • A Flood Risk Assessment will be included in the Environmental Statement to assess flood risk exposure and inform construction planning. • All site components will be designed to withstand climatic and environmental conditions in accordance with International Electrotechnical Commission (IEC) 61936-1 (Clause 4.4). • CSECs will be built or upgraded to mitigate flood and climate change risks. • Access routes will be designed to remain operational during flood events, including the 0.1% (1-in-1000) annual probability event. • Weather forecasts will be monitored to enable early response to extreme rainfall and minimise operational disruption. • A flood contingency plan will be prepared for flood-prone CSECs, identifying vulnerable assets and trigger points for deploying temporary defences.	Likely	Minor	High (Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
		posts, fencing)	• Temporary flood defences may include earth bunds, flood doors/gates, drainage systems, pumping stations, and land management solutions. • Permanent flood defences such as bunds, flood gates, reservoirs, and nature-based solutions (e.g. natural bunds) will be installed where appropriate. • Tree and hedge planting will increase water absorption and reduce surface runoff.			
Flooding (Pluvial, Fluvial & Coastal)	Any form of flooding can impact the functioning of assets. For instance, underground cables could become exposed and damaged. This could result in potential power failures, leading to operational delays and increased costs.	• Underground Cables • CSEC • Earthworks (e.g. foundations and pavement subgrades) • Green spaces & Vegetation	• An OEMP will be developed, setting out flood mitigation and emergency response measures. • A Flood Risk Assessment will be included in the Environmental Statement to assess site-specific flood risks and inform construction planning. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • New CSECs will be designed to prevent loss of supply or equipment damage during a 0.1% (1-in-1000) annual exceedance probability (AEP) flood event. • Weather forecasts will be monitored to prepare for extreme weather, tides, and storm surges. Temporary measures such as sandbags or tiger dams will be deployed to protect at-risk ground-level infrastructure. • A flood contingency plan will be prepared for flood-prone CSECs, identifying vulnerable assets and trigger points for deploying temporary defences. • Temporary flood protection measures may include earth bunds, flood doors/gates, drainage systems, pumping stations, and land management solutions. • Permanent flood defences such as bunding, flood storage reservoirs, natural features, and flood gates will be installed where appropriate. • Tree and hedge planting will increase water absorption and reduce surface runoff. • Underground cables in flood-prone areas will be stabilised with mesh to reduce erosion and fitted with cable covers or jackets to prevent water ingress.	Likely	Minor	High (Significant)
Flooding (Pluvial, Fluvial & Coastal)	Any form of flooding, particularly flooding resulting in erosion, may result in tree roots and vegetation becoming loose or uprooted. This could result in trees, branches and other debris impacting the asset and causing disruption and potential loss of supply.	• Underground Cables • Supporting structures (e.g. signage, posts, fencing) • CSEC • Earthworks (e.g. foundations and pavement subgrades) • Green spaces & Vegetation • Human health and safety (staff and visitors)	• An OEMP will be developed, setting out mitigation and emergency response measures to minimise flood impacts during operation. • A Flood Risk Assessment will be undertaken as part of the Environmental Statement to assess flood risk and inform construction planning. • Trees and vegetation near key assets will be regularly monitored and pruned to maintain safe clearance and reduce operational risks. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • Weather forecasts will be monitored to anticipate extreme weather (e.g. heavy rainfall, high tides, and storm surges), enabling timely deployment of contingency measures such as sandbags or tiger dams to protect vulnerable infrastructure. • A flood contingency plan will be prepared for flood-prone CSECs, identifying vulnerable assets and trigger points for deploying temporary defences. • Temporary flood protection measures may include earth bunds, flood doors/gates, drainage systems, pumping stations, and land management solutions. • Permanent flood protection will include flood doors and gates, flood storage reservoirs, bunds, and nature-based solutions such as natural bunds. • Tree and hedge planting will increase water absorption and reduce surface runoff. • Underground cables in flood-prone areas will be stabilised with mesh to reduce erosion and fitted with cable covers or jackets to prevent water ingress.	Likely	Minor	High (Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
Flooding (Fluvial & Pluvial)	Prolonged periods of heavy rainfall can create favourable conditions for landslides. Assets located on land susceptible to landslides may be damaged, potentially resulting in their failure or reduced functionality, and leading to a decrease in security of supply.	• Underground Cables • CSEC • Supporting structures (e.g. signage, posts, fencing) • Earthworks (e.g. foundations and pavement subgrades) • Green spaces & vegetation • Human health and safety (staff and visitors)	• An OEMP will be developed, setting out mitigation and emergency response measures to manage heavy rainfall during operation. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • CSEC foundations will be constructed on undisturbed inorganic strata with a minimum safe bearing capacity of 100 kN/m² to reduce the risk of ground movement. • Install leaky barriers, swales, or Sustainable Drainage Systems (SuDS) to slow and store surface water runoff. • Use trees and shrubs to stabilise slopes, enhance soil strength, intercept rainfall, and reduce landslide and erosion risk. • Establish riparian buffer zones along riverbanks to prevent erosion and landslides during heavy rainfall. • Improve soil cover with vegetation near CSECs to reduce runoff and water pollution. • Upgrade underground cables in flood- or erosion-prone areas with mesh to stabilise surrounding soil. • Fit underground cables with sheathing or jackets to prevent water ingress and physical damage.	Moderate	Minor	Medium (Not Significant)
Changes in Precipitation (Extreme Rainfall)	Extreme precipitation over an extended period can cause fluctuating soil moisture content, which can accelerate the degradation of soils. Degradation of soil and ground surfaces may impact stability, through the process of shrink-swell. This can cause damage to infrastructure and increased costs due to increased maintenance.	• Underground Cables • Supporting structures (e.g. signage, posts, fencing) • CSEC • Earthworks (e.g. foundations and pavement subgrades) • Green spaces & Vegetation • Human health and safety (staff and visitors)	• An OEMP will be developed, setting out mitigation and emergency response measures to minimise disruption from heavy rainfall during operation. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • All CSEC foundations will be constructed on undisturbed inorganic strata with a minimum safe bearing capacity of 100 kN/m² to reduce ground movement risks. • Weather forecasts will be monitored to anticipate extreme rainfall and allow early deployment of contingency measures to maintain operational continuity. • Trees and hedges will be planted to enhance water absorption, slow surface runoff, and intercept rainfall. • Underground cables will be fitted with mesh to stabilise surrounding soil during periods of heavy rainfall.	Moderate	Minor	Medium (Not Significant)
Changes in Precipitation (Extreme Rainfall)	Extreme rainfall events could result in damage to assets and underground cables, leading to power outages and potential equipment damage. This could lead to operational delays and increased financial costs.	• Underground Cables • CSECs • Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures to minimise disruption from heavy rainfall during operation. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • Weather forecasts will be monitored to anticipate extreme weather events (e.g. heavy rainfall), allowing timely deployment of contingency measures to minimise disruption.	Likely	Minor	High (Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
			• Trees and hedges will be planted to enhance water absorption, slow surface runoff, and intercept rainfall. • Underground cables will be fitted with mesh to stabilise the surrounding soil during periods of intense rainfall.			
Extreme Heat & Heatwaves	Extreme heat days and heatwaves can affect electrical components, as temperatures may exceed the maximum operating thresholds of cables and wires, causing them to overheat. Overheating increases conductor resistance, which impairs current flow and reduces efficiency. This can result in power disruption and operational downtime, potentially leading to additional financial costs.	• Underground Cables • CSECs • Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures to minimise disruption during heatwave events in the operational phase. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • Conductors with higher operating temperature limits will be installed to improve performance during heatwaves. • The Operator will monitor weather forecasts and adjust operations to protect workers and infrastructure during extreme weather events.	Moderate	Minor	Medium (Not Significant)
Extreme Heat & Heatwaves	Extreme heat days and heatwaves can impact electrical components. For instance, when temperatures exceed the maximum operating thresholds of cables and wires, they can overheat. This overheating increases electrical resistance, reduces current flow, and lowers efficiency. This can lead to disruption in electricity transmission and operations, potentially causing blackouts. These conditions may also pose health and safety risks for staff, the public, and end users.	• Underground Cables • CSECs • Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures to minimise disruption during heatwave events in the operational phase. • A Health and Safety Plan will be developed to protect workers and minimise disruption to construction activities. • All site components will be designed with safety as a primary consideration, minimising health and safety risks as far as reasonably practicable. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • The Operator will monitor weather forecasts and adjust operations to protect workers and infrastructure during extreme weather events.	Moderate	Minor	Medium (Not Significant)
Extreme Heat & Heatwaves	Extreme heat days and heatwaves results in discomfort of the maintenance staff due to overheating. These conditions can result in health hazards as outdoor workers may become dehydrated or suffer from other heat associated health risks such as sunstroke, and in the worst-case death.	• Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures to minimise disruption during heatwave events in the operational phase. • A Health and Safety Plan will be developed to protect workers and minimise disruption to construction activities. • All site components will be designed with safety as a priority; minimising health risks were reasonably practicable. • The Operator will provide outdoor workers with access to indoor facilities, air conditioning, and shaded areas for water breaks. • The Operator will monitor weather forecasts and adjust operations to protect workers and infrastructure during extreme weather. • Hydration kits will be made available to support workers affected by heat exposure.	Moderate	Insignificant	Low (Not Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
Changing Temperatures	Increasing temperatures can cause thermal expansion of conductors, potentially exceeding design tolerances. This may lead to compromised clearance limits, increased cooling demand, and a heightened risk of power outages if the system fails.	• CSECs • Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures to minimise disruption during heatwave events in the operational phase. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • Conductors with higher thermal operating limits will be installed to improve resilience to elevated temperatures. • The Operator will monitor weather forecasts and adjust operations as needed to protect workers and infrastructure during extreme weather events.	Likely	Minor	High (Significant)
Changing Temperatures	Increasing temperatures can impact the performance of underground cable systems. Underground cables are designed to operate efficiently up to a specified maximum core temperature. However, as ground temperatures rise, it becomes more difficult for heat to dissipate, causing the core temperature of the cable to increase. This leads to higher electrical resistance and reduces the cable's ability to carry current, potentially resulting in disruption to operations. This can have both operational and financial costs.	• Underground Cables • Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures to minimise disruption during heatwave events in the operational phase. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • Underground cables may be cooled through watering or sprinkler systems, where necessary. • Temperature monitoring will be considered, along with cable de-loading to reduce thermal stress during high temperatures.	Likely	Minor	High (Significant)
Changing Temperatures	Fluctuations in ambient temperature can induce material stress in assets. For example, rapid freeze–thaw cycles can accelerate the erosion of natural and man-made surfaces, such as concrete foundations. This may compromise the stability of assets, increasing the risk of damage and resulting in negative operational and financial impacts.	• Underground Cables • Earthworks (e.g. foundations and pavement subgrades) • Green spaces & vegetation	• An OEMP will be prepared, setting out mitigation and emergency response measures to minimise the impacts of temperature fluctuations during operation. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • CSEC foundations will be set on undisturbed inorganic strata with a minimum safe bearing capacity of 100 kN/m² to reduce the risk of ground movement and maintain system integrity.	Unlikely	Minor	Low (Not Significant)
Increasing Temperatures coupled with Changing Precipitation Patterns	Warmer temperatures and prolonged periods of heat, coupled with increased precipitation, can alter growing seasons and create optimal conditions for vegetation growth. Increased vegetation growth near electrical assets can reduce required clearances, potentially leading to faults and physical damage.	• CSECs • Supporting structures (e.g. signage, posts, fencing) • Green spaces & vegetation • Human health and safety	• Implement more frequent vegetation maintenance procedures to prevent damage to infrastructure. • Monitor and prune trees and vegetation near key assets to maintain safe clearance.	Moderate	Minor	Medium (Not Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
	This may result in operational disruption and reduced reliability for users.	(staff and visitors)				
Drought	Drought conditions can cause soil surrounding terrestrial underground cables to dry out and shrink, leading to increased thermal resistivity, reduced heat transfer from cable to surrounding soil/backfill and a reduced current (load) carrying capacity. This may cause delays and affect users. "	• Underground Cables • Green spaces & vegetation • Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures to minimise the impacts of drought conditions during operation. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • Implement more frequent vegetation maintenance to prevent asset damage. • Monitor and prune trees and vegetation near key assets to maintain safe clearance.	Moderate	Minor	Medium (Not Significant)
Drought	Drought conditions can cause soil to dry out, leading to suboptimal growing conditions for trees and vegetation. As a result, trees may become unstable, increasing the risk of uprooting or falling branches. This could damage underground cables and potentially lead to system failures.	• Underground Cables • CSEC • Supporting structures (e.g. signage, posts, fencing) • Earthworks (e.g. foundations and pavement subgrades) • Green spaces & vegetation • Human health and safety (staff and visitors)	• All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • Implement regular vegetation maintenance to prevent damage to infrastructure. • Monitor and prune trees and vegetation near key assets to maintain safe clearance.	Moderate	Minor	Medium (Not Significant)
Drought	Drought conditions can cause soil to dry out and shrink, leading to ground movement that places strain on underground cables. Network joints are particularly vulnerable and may fail if pulled apart, resulting in direct damage to cables and potential disruption to supply.	• Underground Cables • CSEC • Supporting structures (e.g. signage, posts, fencing) • Earthworks (e.g. foundations and pavement subgrades)	• An OEMP will be prepared, setting out mitigation and emergency response measures to minimise the impacts of drought conditions during operation. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • Implement regular vegetation maintenance to support soil moisture retention (e.g. mulching or drought-resistant planting). • Upgrade or retrofit underground cables with mesh to stabilise surrounding soil.	Moderate	Minor	Medium (Not Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
		• Green spaces & vegetation • Human health and safety (staff and visitors)				
Drought	Drought conditions can cause soil to dry out, increasing soil resistivity and reducing the effectiveness of the earthing system. If earthing design parameters are exceeded, this may pose health and safety risks to both the public and maintenance staff, as exposed metal components inside and outside the site boundary could become live.	• Green spaces & vegetation • Human health and safety (staff and visitors).	• An OEMP will be prepared, setting out mitigation and emergency response measures to minimise the impacts of drought conditions during operation. • Develop a Health and Safety Plan outlining procedures and emergency protocols to protect staff and the public. • Design all site components with safety as a priority, minimising risks to personnel, contractors, and the public. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • Implement regular vegetation maintenance to preserve soil moisture, such as mulching or using drought-tolerant planting.	Moderate	Insignificant	Low (Not Significant)
Drought	Drought conditions can cause soil to dry out and shrink, leading to ground movement. Structures built on affected ground may experience instability, particularly as movement is amplified by structural height. This can compromise foundation integrity, increasing the risk of damage and potential system faults or outages.	• CSEC • Supporting structures (e.g. signage, posts, fencing) • Earthworks (e.g. foundations and pavement subgrades) • Green spaces & vegetation • Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures to minimise the impacts of drought conditions during operation. • Set all CSEC foundations on undisturbed inorganic strata with a minimum bearing capacity of 100 kN/m² to reduce ground movement risk. • Assets will be designed in line with IEC 61936-1 (Clause 4.4) and account for projected end-of-life climatic conditions, with adaptive capacity incorporated where appropriate.	Moderate	Minor	Medium (Not Significant)
Extreme Cold	Extreme cold events are expected to decrease in frequency and intensity as the climate warms, but they will still occur. Extreme cold days can cause discomfort to staff performing outdoor maintenance due to being exposed to extreme cold temperatures for a prolonged period of time. Freezing	• Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures for periods of cold weather. • Develop a Health and Safety Plan outlining procedures and protocols to protect staff and the public. • The Operator will monitor weather forecasts to inform short- and medium-term planning and facilitate timely implementation of cold weather mitigation measures.	Rare	Insignificant	Low (Not Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
	conditions can also cause hypothermia. This may result in delays in undertaking maintenance activities, leading to increases in costs and time.					
Extreme Cold	Extreme cold events are expected to decrease in frequency and intensity as the climate warms, but they will still occur. Ice accumulation can disrupt services and damage assets, leading to interruptions in supply and operational impacts. De-icing of affected infrastructure may result in additional financial costs.	• CSEC • Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures for periods of cold weather. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • Design assets for future climatic conditions expected by end-of-life, using relevant design guidance or incorporating adaptive capacity. • The Operator will monitor weather forecasts to inform short- and medium-term planning and facilitate timely implementation of cold weather mitigation measures.	Rare	Minor	Low (Not Significant)
Extreme Cold	Extreme cold events are expected to decrease in frequency and intensity as the climate warms, but they will still occur. Snow and frost can affect foundations, and subsequent thawing may lead to ground instability and asset damage. This can result in delays and operational disruption, reducing supply and increasing financial costs.	• Underground Cables • CSEC • Supporting structures (e.g. signage, posts, fencing) • Earthworks (e.g. foundations and pavement subgrades) • Green spaces & vegetation • Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures for periods of cold weather. • Construct CSEC foundations on undisturbed inorganic strata with a minimum bearing capacity of 100 kN/m² to reduce the risk of ground movement. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4).	Rare	Minor	Low (Not Significant)
Sea Level Rise	Long-term sea level rise can increase the frequency of coastal flooding and erosion. Assets located near or along the coast may be at risk. Sea inundation, coastal erosion, and flooding could render assets non-operational, potentially leading to a loss of system resilience and supply.	• Underground Cables • CSEC • Supporting structures (e.g. signage, posts, fencing) • Earthworks (e.g.	• An OEMP will be prepared, setting out mitigation and emergency response measures for extreme weather events during operation. • Develop a Health and Safety Plan outlining procedures and emergency protocols for staff and public safety. • A Flood Risk Assessment will be included in the Environmental Statement to assess site-specific flood risks and inform construction planning. • Design all site components with safety as a priority, minimising risks to personnel, contractors, and the public. • CSECs will be designed or upgraded to manage flood and climate risks.	Moderate	Minor	Medium (Not Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
		foundations and pavement subgrades) • Green spaces & vegetation • Human health and safety (staff and visitors)	• Design access routes to remain operational during flood events, including up to the 0.1% AEP (1 in 1000-year) event. • Construct CSEC foundations on undisturbed inorganic strata with a minimum bearing capacity of 100 kN/m² to reduce ground movement risk. • Monitor weather forecasts to enable early deployment of contingency measures (e.g. sandbags or tiger dams) ahead of flood events. • A flood contingency plan will be prepared for flood-prone CSECs, identifying vulnerable assets and trigger points for deploying temporary defences. • Temporary flood protection measures may include earth bunds, flood doors/gates, drainage systems, pumping stations, and land management solutions. • Install permanent flood protection, including flood gates, storage reservoirs, bunds, and natural flood management features. • Plant trees and hedges to enhance infiltration and reduce runoff. • Upgrade or retrofit underground cables in flood-prone areas with mesh to stabilise soil and prevent erosion. • Protect underground cables with covers or jackets to prevent water ingress.			
Storm Events (Strong Winds)	Increased storm intensity, combined with strong and variable winds, can cause physical damage to infrastructure and associated equipment. Debris may also obstruct access roads, hindering maintenance activities. This can lead to increased costs due to damage and the need for more frequent repairs.	• CSEC • Supporting structures (e.g. signage, posts, fencing) • Earthworks (e.g. foundations and pavement subgrades) • Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures for extreme weather events during operation. • A Health and Safety Plan will be prepared, setting out procedures and emergency measures to protect staff and the public. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • Vegetation near key assets will be monitored and pruned to maintain safe clearance and reduce the risk of damage during high wind conditions. • The Operator will monitor weather forecasts to support programme planning and implement timely mitigation to protect staff and assets.	Likely	Minor	High (Significant)
Storm Events (Lightning Strikes)	Increased storm frequency can lead to a rise in lightning strikes. If lightning strikes electrical equipment, it may result in power failures or surges. This can disrupt services and lead to higher costs due to equipment damage and increased maintenance requirements.	• CSEC • Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures for extreme weather events during operation. • A Health and Safety Plan will outline procedures and emergency protocols to safeguard staff and the public. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • The Operator will monitor weather forecasts to support short- to medium-term planning and implement timely mitigation measures. • Lightning protection will be implemented across CSECs and underground cables. This may include surge arresters, earthing screens, grounding systems, and cable sheathing.	Moderate	Minor	Medium (Not Significant)
Storm Events (Lightning Strikes)	Storm events such as strong winds, lightning, and debris can create health and safety risks for	• Human health and safety	• An OEMP will be prepared, setting out mitigation and emergency response measures for extreme weather events during operation.	Moderate	Insignificant	Low (Not Significant)

Climate variable	Description of impacts	Receptor(s)	Planned controls & adaptation measures	Likelihood	Consequence	Risk rating
	workers performing asset maintenance.	(staff and visitors)	• A Health and Safety Plan will detail procedures and emergency protocols to protect staff and the public. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • The Operator will monitor weather forecasts to support short- to medium-term planning and implement timely mitigation measures. • Vegetation around key assets will be managed to maintain safe clearance and reduce risk to human health.			
Wildfires	Rising temperatures, heatwaves, and increased storm activity (including lightning strikes) can trigger wildfires, posing health and safety risks to maintenance staff and others in close proximity to affected assets.	• Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures for wildfire events. • A Health and Safety Plan will outline safety procedures and emergency protocols to protect staff and the public, including fire preparedness and weather-related risks. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • Lightning protection will be implemented for CSECs and underground cables, using measures such as surge arresters, earthing screens, grounding systems, insulating materials, cable sheathing, and rise pole arresters. • Vegetation around key assets will be regularly monitored, pruned, and maintained to reduce the risk of fire, damage, and operational disruption. • Fire adaptation strategies will include removing invasive, fire-prone species and restoring native, fire-resistant vegetation. • The Operator will monitor weather forecasts to support short- to medium-term planning and enable timely mitigation for extreme weather conditions.	Moderate	Insignificant	Low (Not Significant)
Wildfire	Increasing temperatures and heatwaves can create optimal conditions for wildfires by drying out vegetation and reducing moisture levels. Wildfires pose a risk to underground cables and associated equipment through heat damage, fire exposure, or impact from debris. This can result in asset damage and increased financial costs.	• Underground Cables • CSEC • Supporting structures (e.g. signage, posts, fencing) • Green spaces & vegetation • Human health and safety (staff and visitors)	• An OEMP will be prepared, setting out mitigation and emergency response measures for wildfire events. • Vegetation around key assets will be regularly monitored, pruned, and maintained to reduce the risk of fire, damage, and operational disruption. • All site components will be designed with safety as a primary consideration, minimising risks to personnel, contractors, and the public. • All site components will be designed to withstand climatic and environmental conditions in accordance with IEC 61936-1 (Clause 4.4). • Lightning protection will be implemented for CSECs and underground cables, using measures such as surge arresters, earthing screens, grounding systems, insulating materials, cable sheathing, and rise pole arresters. • Fire adaptation strategies will include removing invasive, fire-prone species and restoring native, fire-resistant vegetation. • The Operator will monitor weather forecasts to support short- to medium-term planning and enable timely mitigation for extreme weather conditions.	Moderate	Minor	Medium (Not Significant)