
A470 MAES YR HELMAU TO CROSS FOXES: **Dolgellau, Gwynedd**

DRAFT



Archaeological Assessment

GAT Project No. 2079

Report No. 822

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A470 MAES YR HELMAU TO CROSS FOXES (G2079)

ARCHAEOLOGICAL ASSESSMENT

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SUMMARY

An initial assessment of the route of the proposed A470(T) road improvement between Maes yr Helmau and Cross Foxes has identified twenty-two sites. One of national, six of regional and the remainder of local interest, and two sites that require further assessment. These sites consist of a series of scoops (9), and a terraced area (10).

Initial recommendations are also proposed for mitigatory measures for known sites, ranging from preservation in situ where possible to the provision of a watching brief during road construction.

Sites identified within the route corridor range from the Roman period to the twentieth century, but are predominantly of post Medieval date.

Sites of interest are the Methodist chapel at Rhiwspardyn (11), the pre 1817 trackway to Beudy Cefn Coch (8), and the improved turnpike roads (17) which may throw light on the development of lines of communication within the region.

It is recommended that the trackway (8) and the roads (16) & (17) be examined archaeologically to enable a study of their construction. This should be accompanied by full descriptive and photographic recording.

Recommendations are proposed for further assessment to clarify the extent and nature of potential sites. Further assessment by trial trenching is required to establish the exact nature of a series of scoops (9) and the low rectangular platform (10).

A number of agricultural, domestic and other features were identified. Among these were a number of old tracks, field boundaries, and gravel pits and scoops which can be adequately recorded by photograph and description in advance of destruction. It is recommended that an archaeological survey be undertaken of the field boundaries within the corridor of interest, and expand this where necessary to allow the boundaries to be put into context.

Trial trenches are recommended, the area of which should approximate to some 5% of the ground area to be developed.

It is recommended that a watching brief be maintained during the ground disturbance and that provision be made for the adequate recording of any sites which are identified at this stage of the development.

The present document also considers the impact of the proposed development on the identified Landscape of Outstanding Historic Interest within which it falls. It concludes that the development will make a significant visual impact on the landscape, and will affect a character area associated with the Quaker movement from the seventeenth century.

1 INTRODUCTION

As part of its improvements to the A470 Glan Conwy to Cardiff trunk road, the Welsh Assembly is proposing improvements between Maes yr Helmau and Cross Foxes, Dolgellau. The proposed improvement starts on the present A470 just to the east of Maes yr Helmau at approximately SH 7545 1843, and runs north for about 2.3km to link up with the present road again beyond Cross Foxes at SH 7695 1680.

The route crosses mainly agricultural land, currently laid down to permanent pasture, some of it recently improved, some semi-parkland, and also some areas of mature beech, birch, and oak woodland. This woodland includes a Site of Special Scientific Interest centred at SH 7585 1812.

The extent of the area of interest is a strip 400m wide centred on the proposed route, but expanding to include slip roads, roundabouts and alterations to existing roads.

This report, containing a significant amount of information gathered previously, updates and replaces two earlier assessment reports, completed in 1994 (GAT report 87) and 2003 (GAT report 437).

2 SPECIFICATION AND PROJECT DESIGN

The basic requirement was for a desk-top survey and field search of the corridor of interest in order to assess the impact of the proposals on the archaeological and heritage features within the road corridor and close enough to it to be affected. The importance and condition of known archaeological remains were to be assessed and areas of archaeological potential and new sites to be identified. Measures to mitigate the effects of the road scheme on the archaeological resource were to be suggested.

The present assessment is based upon the guidelines set out in *Design Manual for Roads and Bridges Volume 11, Section 3, Part 2* and also as set out in *Standards and Guidance: Desk-based Assessments* (IFA, 1994, revised 2001), and *Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Processes* (version: 1 September 2001 – henceforth Good Practice).

Gwynedd Archaeological Trust's proposals for fulfilling these requirements were as follows:

- a) to identify and record the cultural heritage of the area to be affected
- b) to evaluate the importance of what was identified (both as a cultural landscape and as the individual items which make up that landscape)
- c) to recommend ways in which damage to the cultural heritage can be avoided or minimised

A full archaeological assessment usually comprises six phases:

- 1) Desk-top study
- 2) Field Search
- 3) Interim Draft Report
- 4) Detailed Field Evaluation
- 5) Final Draft Report
- 6) Final Report

This assessment has covered the work required under 1, 2 and 3. It is sometimes necessary to undertake a programme of field evaluation following the desktop assessment. This is because some sites cannot be assessed by desktop or field visit alone, and additional fieldwork is required. This typically takes the form of geophysical survey and trial excavation, although a measured survey is also an option. The present report makes recommendations for any field evaluation required.

It should be noted that full details of ancillary areas likely to be affected by the road works, such as vehicle parking and turning areas, materials storage areas etc., have not yet been supplied. Experience shows that these areas are as likely to suffer damage as the actual land-take for the road. If all such areas fall within the corridor of interest, they will have been covered, but in order that all areas affected may be subjected to the same level of survey, any information relating to areas affected outside the 400m corridor should be notified to the Trust as soon as possible.

For areas identified as Landscapes of Historic Interest in Wales by Cadw, ICOMOS and the Countryside Council for Wales, it is recommended that archaeological assessments answer the requirements of an ASIDOHL (Assessment of the Significance of the Impact of Development on Historic Landscapes). The constituents of such an instrument are identified in 3.3 below. This is provided as a separate report.

3 METHODS AND TECHNIQUES

3.1 Desk-top Study

The *Design Manual for Roads and Bridges Volume 11, Section 3, Part 2 Chapter 2* sets out the considerations by which the cultural heritage resource should be assessed. The following topics were considered:

- The presence or absence, character, condition, setting and value of archaeological remains, historic buildings, and historic landscapes
- All designations related to cultural heritage, including those where cultural heritage values may play a part in a broader citation (e.g. Areas of Outstanding Natural Beauty, National Parks, etc.);
- Historical legibility (i.e. the way in which a historic monument or landscape can be ‘read’ through an understanding of the development of its features, character, setting and context through time);
- Time-depth and phases of development (i.e. the evidence for the character and processes of change on a site or landscape over time)

Consultation of maps, computer records, written records and reference works, which make up the Historic Environment Record (HER), was undertaken at Gwynedd Archaeological Trust. PRNs are the unique reference numbers given to each site on the HER. Records (including early Ordnance Survey maps, tithe maps and schedules, estate maps and papers and reference works - see bibliography) were also consulted in the library and the archives of the University of Wales, Bangor, and the county archives at Dolgellau. Aerial photographs were inspected at the National Monuments Record, Aberystwyth and two aerial photographs were obtained from the Central Register of Aerial Photographs in Cardiff.

3.2 Field Search

On 12th August 2009 the revised route was walked by the author of this revised report. The whole length of the preferred route was walked where possible; inaccessible areas included some areas of forest notably Coed Maes yr Helmau and Coed Tir Stent Fach, some small areas overgrown with scrub, and some extremely boggy enclosures). The rest of the corridor was either walked or observed from neighbouring fields, paths etc. Conditions were generally fine for fieldwork, though a significant proportion of the land was extremely boggy with thick growth of juncus, or thickly covered with scrub and ground cover. The light condition was fair for the time of year.

Sites identified were marked on copies of 1:2,500 OS maps, as accurately as possible without surveying. Forms were filled in assessing each site, and detailed notes made of the more important. Photographs were taken of all potential sites identified.

3.3 Landscape assessment

The proposed road improvement falls within an identified Landscape of Outstanding Historic Significance, as set out in the ICOMOS/Cadw/Countryside Council for Wales Register of Landscapes of Outstanding Historic Interest in Wales. This document identifies thirty-six such landscapes, of which 31. Bro Dolgellau/Vale of Dolgellau is one.

The latest guidance on the use of the Register is set out in Welsh Office Planning Guidance (Wales): First Revision (April 1999), para. 5.6.10 and in National Assembly for Wales Public Consultation, Draft Planning Policy Wales, February 2001, para. 8.4, both of which state:

Information on the landscapes on the second part of the Register should also be taken into account by local planning authorities in preparing development plans, and in considering the implications of developments which are of such a scale that they would have more than a local impact on an area on the Register.

Such developments include major communications schemes, which may therefore require the application of part or all of the ASIDOH process.

A separate ASIDHOL assessment has been carried out, and this forms report 820.1

A Historic Landscape Characterisation (HLC) was carried out over the area of the Bro Dolgellau Landscape of Outstanding Historic Interest (Thompson 2005). The proposed route crosses two Historic Landscape Character Areas (HLA) identified in that study. These were *15 Fields and Woods-east of Dolgellau*, which was defined as a rather amorphous character area defined by a mixture of fields and woods of post medieval date, and *16 Fields and Woods around Tir Stent*, characterised by woodland, very dispersed farmsteads and irregular field patterns, some with possible prehistoric origins.

3.4 Report

All available information was collated, and transferred onto a single set of maps at a scale of 1:2,500 for convenience. The sites were then assessed and allocated to the categories listed below. These are intended to give an idea of the importance of the site and the level of response likely to be required; descriptions of the sites and specific recommendations for further evaluation or mitigatory measures, as appropriate, are given in the relevant sections of this report. In some cases, further investigation may result in sites being moved into different categories.

3.4.1 Assessment of the value of archaeological assets

All archaeological sites should be assessed for value, and allocated to one of the categories listed below. The allocation of a site to a category defines the value of the archaeological resource of that site.

Table 1: Factors for assessing the value of archaeological assets

Very High	<ul style="list-style-type: none"> • World Heritage Sites (including nominated sites). • Assets of acknowledged international importance. • Assets that can contribute significantly to acknowledged international research objectives. (Previously Category A)
High	<ul style="list-style-type: none"> • Scheduled Monuments (including proposed sites). • Undesignated assets of schedulable quality and importance. • Assets that can contribute significantly to acknowledged national research objectives. (Previously Category A)
Medium	<ul style="list-style-type: none"> • Designated or undesignated assets that contribute to regional research objectives. (Previously Category B)
Low	<ul style="list-style-type: none"> • Designated and undesignated assets of local importance.

	<ul style="list-style-type: none"> • Assets compromised by poor preservation and/or poor survival of contextual associations. • Assets of limited value, but with potential to contribute to local research objectives. (Previously Category C)
Negligible	<ul style="list-style-type: none"> • Assets with very little or no surviving archaeological interest. (Previously Category D)
Unknown	<ul style="list-style-type: none"> • The importance of the resource has not been ascertained. (Previously Category E)

3.4.2 Magnitude of impacts

The definition of impacts on the cultural heritage are defined as follows (DMRB Volume 11, 2007)

Table 2: Factors in the Assessment of Magnitude of Impacts

Major	Change to most or all key archaeological materials, such that the resource is totally altered. Comprehensive changes to setting.
Moderate	Changes to many key archaeological materials, such that the resource is clearly modified. Considerable changes to setting that affect the character of the asset
Minor	Changes to key archaeological materials, such that the asset is slightly altered. Slight changes to setting
Negligible	Very minor changes to archaeological materials, or setting
No Change	No change

The value of an archaeological asset refers to both the physical remains and information inherent in the site. If a site is excavated in advance of destruction the physical remains will be destroyed but the information will have been retained. This is termed “Preservation of Archaeological Remains by Record” in Planning and the Historic Environment: Archaeology (Welsh Office Circular 60/96). It should be noted that even though this is seen as a valid mitigatory measure, preservation *in situ* is the preferred option.

3.4.3 The significance of effect

The significance of effect is derived from the importance of the resource and the magnitude of the impact upon it. Archaeological value Unknown sites are not included because they would have been reassigned to another category by the end of the assessment and evaluation.

Very large - A serious impact on a site of international or national importance with little or no scope for mitigation. These effects represent key factors in the decision making process.

Large - Lesser impacts on sites of national importance and serious impacts on sites of regional importance, with some scope for mitigation. These factors should be seen as being very important considerations in the decision making process.

Moderate - Moderate or minor impacts on sites of regional importance and minor to major impacts on sites of local or minor importance. A range of mitigatory measures should be available.

Slight - Negligible impacts on sites of regional, local or minor importance and minor and moderate impacts on minor or damaged sites. A range of basic mitigatory measures should be available.

Neutral - No perceptible effect or change to sites of all categories.

The significance of effect will be determined using Table 3, a basic matrix combining archaeological value and magnitude of impact.

Table 3: Determination of Significance of Effect

	Very High	Neutral	Slight	Moderate or Large	Large or Very Large	Very Large
Archaeological Value	High	Neutral	Slight	Moderate or Slight	Moderate or Large	Large or Very Large
	Medium	Neutral	Neutral or Slight	Slight	Moderate	Moderate or Large
	Low	Neutral	Neutral or Slight	Neutral or Slight	Slight	Moderate or Slight
	Negligible	Neutral	Neutral	Neutral or Slight	Neutral or Slight	Slight
	No Change	Negligible	Minor	Moderate	Major	
	Magnitude of impact					

3.4.4 Definition of Mitigation Measures

The alignment of the Proposed Improvement avoids as far as possible sites of archaeological interest. Where a site is affected, mitigation measures would be required in accordance with the guidelines in DMRB Volume 10 and Interim Advice Note (IAN) 81/06.

The following are the basic categories of archaeological mitigation measures which will be used. Additional details may be added in regard to the setting of archaeological sites. The detailed recording, basic recording and watching brief options fulfil the “preservation by record” option described in Welsh Office Circular 60/96.

None - No impact, so no requirement for mitigation measures.

Detailed recording - Detailed recording requires a photographic record, surveying and the production of a measured drawing prior to the commencement of the works on site. Archaeological excavation works may also be required, depending upon the particular feature and the extent and effect of the impact.

This may entail full excavation and recording where a known site will be destroyed or partially destroyed by the scheme. Some built sites would require dismantling by hand, to provide a detailed record of the method of construction and in the case of a listed structure, the salvage of materials for re-use and re-building.

For wider areas of high archaeological potential there are three main options:

Geophysical Survey: This can be used, where appropriate, as an initial non-intrusive assessment technique allowing areas of archaeological activity to be recognised. Magnetometer survey is the preferred first option in most cases, because it allows large areas to be surveyed quickly and can detect a wide range of archaeological features. Resistivity may be used as a secondary option. It should be noted that not all archaeological features can be detected using geophysical survey and absence of positive results does not prove that there is no archaeology present. Geophysical survey should be followed by one of the following options.

Trial Trenching: This can be adopted as a staged mitigation process involving assessment and then wider excavation where necessary. A series of trenches would be excavated within a designated area in order to provide a sample of the buried archaeology. A minimum of 5% area coverage is usually specified. The results from geophysical survey can be used to allow accurate positioning of a proportion of the trenches over specific archaeological features. All archaeological features uncovered during the process would be assessed. Significant features would then be excavated and fully recorded.

Strip map and sample: This technique involves the examination of machine-stripped surfaces to identify archaeological remains. The process of machine stripping would be supervised by an archaeologist. Once stripping has been undertaken, areas of archaeological potential would be identified and cleaned by hand. Sample areas would be cleaned by hand in apparently negative areas to act as a control. Where complex archaeological deposits are identified during stripping, these would be identified at an early stage in order to formulate a defined area of work. This technique relies upon the recognition of features by plan, and excavation of features would be kept to a level required to assess the nature and importance of the remains. This would be followed by full excavation where appropriate.

Basic recording - Recording by photograph and description requires a photographic record and written description prior to the commencement of works on site. A measured survey may be required in certain cases.

Watching brief - Observation of particular identified features or areas during works in their vicinity. This may be supplemented by detailed or basic recording of exposed layers, structures or sections.

Avoidance - Features which may be affected directly by the scheme, or by the construction of the scheme, should be avoided.

Reinstatement and/or relocation - The feature should be reinstated with archaeological advice and supervision.

3.4.5 Definition of field evaluation techniques

Field evaluation is necessary to allow the reclassification of the category E sites, and to allow the evaluation are areas of land where there are no visible features, but for which there is potential for sites to exist. Two principal techniques can be used for carrying out the evaluation: geophysical survey and trial trenching.

Geophysical survey

This technique involves the use of a magnetometer, which detects variation in the earth's magnetic field caused by the presence of iron in the soil. This is usually in the form of weakly magnetised iron oxides, which tend to be concentrated in the topsoil. Features cut into the subsoil and back-filled or silted with topsoil contain greater amounts of iron and can therefore be detected with the gradiometer. Strong readings can be produced by the presence of iron objects, and also hearths or kilns.

Other forms of geophysical survey are available, of which resistivity survey is the other most commonly used. However, for rapid coverage of large areas, the magnetometer is usually considered the most cost-effective method. It is also possible to scan a large area very rapidly by walking with the magnetometer, and marking the location of any high or low readings, but not actually logging the readings for processing.

Trial trenching

Buried archaeological deposits cannot always be detected from the surface, even with geophysics, and trial trenching allows a representative sample of the development area to be investigated. Trenches of an appropriate size can also be excavated to evaluate category E sites. These trenches typically measure between 20m and 30m long by 2m wide. The turf and topsoil is removed by mechanical excavator, and the resulting surface cleaned by hand and examined for features. Anything noted is further examined, so that the nature of any remains can be understood, and mitigation measures can be recommended.

3.4.6 Definition of Mitigatory Recommendations

Below are the measures that may be recommended to mitigate the impact of the development on the archaeology.

None:

No impact so no requirement for mitigatory measures.

Detailed recording:

Requiring a photographic record, surveying and the production of a measure drawing prior to commencement of works.

Archaeological excavation may also be required depending on the particular feature and the extent and effect of the impact.

Basic recording:

Requiring a photographic record and full description prior to commencement of works.

Watching brief:

Requiring observation of particular identified features or areas during works in their vicinity. This may be supplemented by detailed or basic recording of exposed layers or structures.

Avoidance:

Features, which may be affected directly by the scheme, or during the construction, should be avoided. Occasionally a minor change to the proposed plan is recommended, but more usually it refers to the need for care to be taken during construction to avoid accidental damage to a feature. This is often best achieved by clearly marking features prior to the start of work.

Reinstatement:

The feature should be re-instated with archaeological advice and supervision.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1 Introduction

No sites are located on the Gwynedd Historic Environment Record (HER) within the proposed scheme route; however 15 sites are located within 1km of the proposed route. These are listed in Appendix 1.

4.1.1 Topographic description

The area of the proposed route lies mainly on the south-west side of a side valley formed by the Afon Clywedog, a tributary of the Afon Wnion, which flows from south-east to north-west to join the Wnion on the meadows at Dolserau. To the south the area is closed by the mountain range of which Cadair Idris is the highest peak, but which is pierced at Bwlch Llyn bach, a mountain pass which leads to the Dysinni valley, and Bwlch Oerddrws, which leads to the Mawddwy valley.

4.2 Archaeological Background

4.2.1 Prehistoric

There are no known settlements or burial sites of the prehistoric period within and near the corridor of interest. However within a 5km radius of the corridor, there a number of cairns and standing stones belonging to the Bronze Age.

4.2.2 Roman

The focus of the Roman presence within the area was the fortlet at Brithdir, outside the study area to the north, believed initially to have been established during the governorship of Julius Frontinus (AD 74-78). This lay at the intersection of a number of Roman roads, including those to Pennal and Caersws. It is possible that these routes followed the same topography as the present roads, and in particular that the Roman routes may underlie existing tarmacadamized roads, particularly to the south and east of Cross Foxes. It has variously been suggested that an east-west Roman road crosses over the present A470 near the site of Cross Foxes,¹ and at approximately SH 761- 178-. The latter authority also suggests a Roman camp at Henblas, at SH 7750 1894.² However, it must be emphasised that the Pennal route may have lay to the west of Cadair Idris and the Caersws route may have passed over Rhos Gwanas.³ The recent discovery of a Roman site at Gwanas Fawr, near Cross Foxes, but just outside the current study area, is a most important discovery. It was recognized from the air by Bob Jones, a pilot from Welshpool Airport with long experience of archaeological aerial reconnaissance. This appears to be a hitherto unknown Roman fort, centred on NGR SH77111645, 4km south-east of Dolgellau (Hopewell 2008). The site survives as a rectangular, bivallate earthwork, with rounded corners. The enclosure has external dimensions of 168m x 130m enclosing an area of 2.6ha. Jeff Davies (*pers. comm.*) concluded that the site has all the hallmarks of a Roman auxiliary fort built of earth and timber.

Sarn Helen, a Roman road running north south from Aberconwy, past the Roman Fort at Tomen y Mur, before continuing south towards Dolgellau. According to Edward Lhuyd, the 17th century antiquarian, it enters the area just to the south of the Cross Foxes Hotel, after crossing the Afon Clywedog at Pont Bylan, presumably on the alignment of the present A487(T). It is then thought to turn to the west at the Cross Foxes, probably following the line of the present country lane to Tabor, on its way to Dolgellau.

Outside the area of interest immediately to the south east of the southern end of the corridor is the possible route of another Roman Road which would have linked the Brithdir fortlet with a postulated larger fort at Dolgellau, 1.5km to the east

4.2.3 Medieval and later

Settlement of the area during the Medieval period is well documented but not well represented on the ground. The area lies within the commote of Tal y bont in the Cantref of Ardudwy. In the Medieval period these lands formed part of the townships of Gwanas and Garthgynfor and the parish of Dolgellau, but since 1894 they have come within the then newly-created civil parish (now community) of Brithdir ac Islaw'r Dref.

While there are no known sites actually located within the corridor, place-name evidence from both within and just on the edge of the area suggests use in the period. Hendre Gyfeilliad, a farmstead in the north of the area, may derive its name from the word gafael, a term applied during the Medieval period to land on which a cash rent was owed in tribute, though it is at least equally probable that its apparent meaning is the correct interpretation, 'the twins' homestead'.⁴ The Merioneth Extent drawn up in the early fifteenth century mentions the landholding gwely Einion Du in the township of Garthgynfawr, which cannot now be identified.⁵

¹ ID Margary, *Roman Roads in Britain* (London, 1955-7), p. 347.

² Waddelove E: *The Roman Roads of North Wales: Recent Discoveries* (Denbigh, 1999), pp. 173-88.

³ D Hopewell, 'Archaeological Surveys and Excavations at Brithdir', *JMHR* XII IV (1997), pp. 310-333.

⁴ One source attests Hendre Gefeilliad as in existence as a separate holding in 1592, but adds that it may be much older (Gwynedd Archaeological Trust Report G1176, *A470 Maes yr Helmau to Cross Foxes, Dolgellau Improvement* [1994], p. 3). It is possible that this is true, but it is not attested in the *Extent of Merioneth* of that year – see PRO: LR2/236.

⁵ *Registrum Vulgariter Nuncupatum "The Record of Caernarvon"* (London, 1838), p. 271 (from British Library Harleian ms 4776, Extenta Com' Meryoneth).

The same document also identifies within the study area a tract of 'extent land', a phrase which survives in the name Tir Stent. 'Stent' derives from the English word 'extent', indicating land in crown's holding, whether because it had previously been escheat through intestate death or through felony, or for other reasons. The early fifteenth century Extent records of Garthgynfawr 'that there is in this township one parcel of extent land called Brythir and Ednowayn (sic) who gives to the lord prince annually xvij shillings in equal payments at Easter and at the feast of St Michael the Archangel.'⁶ Whether this was the area still known as Tir Stent is unclear. 'Brythir' is presumably to be distinguished from the township of Brithdir, which is noted separately.

By the mid seventeenth century, part at least of Tir Stent had become the property of Richard Lloyd of Dylasau, near Penmachno, and Robert Price of Giler, near Cerrig y Drudion, by whom it was leased to Theodore Vaughan of Caerynwch.⁷ However, the neighbouring farms also had the right to graze cattle on Tir Stent, and part appears to have remained common land, or to have been regarded as such, for much later.⁸

Also of interest is Dol Yspytty, a name associated with Hospice and Grange of Gwanas, which before 1338, was part of the land belonging to Halston, a Preceptory of the Order of St. John. The Order of St John of Jerusalem or the Knights Hospitallers was established during the first half of the eleventh Century to provide hospitality for pilgrims making the journey way to the Middle East. The grange complex of Gwanas is thought to have stood at or near the farmsteads of either Gwanas Fawr (SH 771 166), or Plas Gwanas (SH 770 169), or both. The chapel, grange and hospital are mentioned in a survey of about 1284 as Hospitalis de Villa de Wona and also as Hospitalis de Wannas.⁹ The buildings standing at Plas Gwanas and Gwanas Fawr today probably post-date the dissolution of the monasteries from 1536. However, a short length of probable 16th century walling with a lancet window is to be found at Plas Gwanas. Medieval fabric structures survive in more complete form in two houses within the study area. Both are believed to date from the late fifteenth or early sixteenth century. Plas Hen was the focus of the Caerynwch estate, and Dolgun is a three-bay hall house believed to have been built by either by Ednyfed ap Hywel, or by his father, Hywel ap Maredudd.¹⁰

The evolution of Medieval land-tenure in this area into the estates of the sixteenth and seventeenth century is imperfectly understood, in part because the Extent of Merioneth of 1592, though it lists tenements in the township of Brithdir, does not list those in Gwanas or Garthgynfawr, which may have been crown lands.¹¹ However, it is clear that the landscape of the Dolgellau area came to be dominated in the period before the Civil War by the Nannau estate, to the north of the town, and by a series of smaller estates and freeholds to the south, including the area along the proposed improvement corridor. Amongst these were Caerynwch, based on the east side of the Clywedog, around the house now known as Plas Hen.¹² The house and the estate were owned in 1588 by Tudor Fychan, whose grandson and successor in title, the tenant of Tir Stent, preserved the family name but further anglicised it to Theodore Vaughan. Caerynwch's fortunes improved when Sir Richard Roberts (1752-1823), later a judge and a baron of the exchequer, married into the family; his elder son became Member of Parliament for Merioneth.¹³

Nannau itself, whose owners' sympathies lay with the Royalists, was burnt down by the Parliamentary army in 1645, forcing the family to decamp to their estates elsewhere in the county. This effectively created a situation whereby the other land-owners could flourish.

⁶ *Registrum Vulgariter Nuncupatum "The Record of Caernarvon"* (London, 1838), p. 271 (from British Library Harleian ms 4776, Extenta Com' Meryoneth.

⁷ DRO: ZDA/15.

⁸ G.J. Williams, 'The Quakers of Merioneth During the Seventeenth Century' *JMHS* VIII 2-3 (1978-9), p. 319, DRO: ZDA/248.

⁹ RCAHMW, *Inventory of the County of Merioneth*, p. 9, A.D. Carr, 'The First Extent of Merioneth', appendix 1 of *History of Merioneth 2* (Cardiff, 2001), p.706.

¹⁰ P. Smith and R. Suggett, 'Dolgun Uchaf: A Late-Medieval Hall-House' *JMHS* XCII 2 1995 pp. 95-10.

¹¹ PRO LR2/236 (photocopy on DRO).

¹² Owen, p. 37n.

¹³ *Dictionary of Welsh Biography*, entry for Richards family of Coed and Humphreys family of Caerynwch.

This in part contributed to the tradition of religious radicalism for which the area became noted. Dolgellau and its surrounding area became in the seventeenth century a stronghold of the Society of Friends (Quakers), whose number included the owners of most of the lands through which the present road runs. Dolgun Uchaf was the home of the first effective yearly Meeting of the Welsh Quakers, when Ellis Morris 'gent' was living there, a sympathiser with, if not necessarily a member of, the Society of Friends. They 'were faign to meett out of doors under the shadie trees'¹⁴ in what is now Torrent Walk when the house could not hold them. Robert Owen of Dolserau had been Oliver Cromwell's militia commissioner for Merionethshire, and may have been attracted by the teachings of the millennial sect, the Fifth Monarchists. His family had been famous for their religious radicalism ever since one of them, Lewis Owen, had joined the Jesuits, only to become their most ferocious critic. Lewis Owen of Tyddyn y Garreg sat on the Merioneth County Committee established by the Parliament of Saints; his son Owen Lewis provided the Quakers with a burial ground. Rowland Ellis of Gwanas was among the many from the immediate area who emigrated to Pennsylvania. He gave the name of his birthplace, south of Dolgellau, Bryn Mawr to his new farm in America, on the lands of which the women's university was eventually to be established. Neither Maes yr Helmau nor Hendre Gefeilliad is recorded as a Quaker household, though it is possible that Maes yr Helmau was not yet a separate holding.¹⁵ Nor was Caerynwch, whose centre lay on the east bank of the Clywedog.

Houses and farms along the route date from at least the late 17th century onwards, some of them being buildings of intrinsic merit and some having group value with their associated outbuildings and walls. Others are now reduced to earthworks or ruins. Although no Listed buildings are situated within the corridor of interest, several lie immediately outside. Maes yr Helmau farmhouse and its contiguous farm building are listed Grade II. So are Gwanas Fawr and its outbuildings. The house at Gwanas, which in its present form dates from the 16th century, is 'L' shaped, built of stone under a slate roof with casements and the remains of stone mullioned windows. The date-stone of 1722 probably commemorates alterations. The outbuildings date from the 17th century.

An example of Quaker enterprise is the blast-furnace established on Dolgun by Abraham Darby I, a Quaker ironfounder from Bristol, had already succeeded in using coke instead of charcoal to smelt iron in a blast furnace at Coalbrookdale. Bedded oolitic iron ore from an open-cast on Bryn Castell, west of Cross Foxes, provided the main source of iron ore. The furnace was only in blast from 1719 to 1733, and the last known reference comes in 1802, when mention was made of a forge powered by water, and a charcoal fuelled furnace. The remains survive, together with the pit for the wheel which operated the bellows.¹⁶

4.2.4 Modern

The Quaker cause declined in and around Dolgellau as a consequence of emigration to Pennsylvania in the late seventeenth century, until in 1845 only three elderly ladies were left to attend the meeting house at Tir Stent, built in 1796. With the death of the last of these, Lowri Lewis of Gwanas in 1847, the Independents were purchased the meeting house and established Capel Tabor.¹⁷ The Methodists were established within the study area by 1812, when they established a school, formerly based at Hafod Oer, in a 'poor cottage' on the site of the present Capel Rhiwspardyn. A chapel was built in 1828, and a lease confirmed in 1832.¹⁸

¹⁴ J. Gwynn Williams, JG: 'The Quakers of Merioneth During the Seventeenth Century' *JMHS* VIII 2-3 (1978-9).

¹⁵ The name Maes yr Helmau, 'field of the barns', suggests that it formed part of a larger holding until the post-medieval period. The element *helm*, 'barn', is more common in Montgomeryshire Welsh than in Merionethshire, and its use in the watershed of the Afon Wnion is testament to the importance of the area as a transport corridor.

¹⁶ P. Riden, *A Gazetteer of Charcoal-fired Blast Furnaces in Great Britain in use since 1660* (Cardiff, 1993).

¹⁷ Idris Fychan, *Hanes Dolgellau* (Treffynnon, 1872), pp. 45-6.

¹⁸ Rev. Robert Owen, *Hanes Methodistiaeth Gorllewin Meirionydd* 1 (Dolgellau, 1889), pp. 456-7.

Caerynwch mansion was built on the Plas Hen estate, Brithdir, Merionethshire, by Sir Richard Richards (1752-1823), Lord Chief Baron of the Exchequer, son of Thomas Richards of Coed, Merionethshire. He had acquired Plas Hen following his marriage in 1785 to Catherine Humphreys, only child of Robert Vaughan Humphreys of Plas Hen. After the present mansion was built 150 yards to the south-west of Plas Hen in the early years of the 19th century, the estate came to be called Caerynwch instead of Plas Hen (Fig. 4). Sir Richard was succeeded by his son Richard Richards (1787-1860), who became a Master in Chancery and MP for Merionethshire, 1836-1852. He married, in 1814, Harriet (d 1852), daughter and co-heiress of Jonathan Dennett of Lincolns Inn Fields. Richard Richards was in turn succeeded by his son, Richard Meredydd Richards (1821-1873) who, in 1863, married as his second wife Louisa Jannette Anne Edwards, only daughter and heiress of Edward Lloyd Edwards of Cerrigllwydion, Denbighshire, and of the Dolserau estate near Dolgellau, which further consolidated his estates in the area. Richard Meredydd Richards's eldest son, Richard Edward Lloyd Richards (1865-1905), died without issue so that the estate passed to his brother Henry Meredydd Richards (1870-1942), who was succeeded by his son, Richard Meredyth Richards.

By the nineteenth century, Caerynwch was established as the leading house of the area. In 1817 Dolgun, Maes yr Helmau, Hendre Gefeiliad, Tyddyn y Garreg, Tyddyn Mawr, Ty'n y Clawdd and Cross Foxes were still holdings of the Dolgun estate (Fig. 3, GAS ZDA/234), but by 1862 a Caerynwch rental shows that these had all become part of the estate.¹⁹

The Merioneth Turnpike Trust was formed in 1777 and was responsible for maintaining the road from Dolgellau to Dinas Mawddwy, among others by the end of the eighteenth century. John Evans's map of North Wales (Appendix 1, map 1) published in 1797 shows the road between from Dinas Mawddwy making its way through Bwlch Oerddrws, over Pont Gwanas and past the Cross Foxes before dropping down precipitately to Dolgellau, a route known as the 'ffordd dryll drybedd' or 'ffordd y fron serth'.²⁰ The section from Pont Gwanas to the Cross Foxes lies within the corridor. Pont Gwanas is itself listed, grade II. At some stage after the Evans map was surveyed, the Turnpike Trust undertook the construction of a road along the present course of the A470(T) from Dolgellau through Maes yr Helmau to Cross Foxes. The engineer is unknown. It was described as 'New Turnpike' on a Dolgun estate map of 1817 (Fig. 3).²¹ This same map also shows the Cross Foxes Inn, though situated in the fork between the Tabor road and the Machynlleth road rather than, as today, the fork between the Machynlleth road and the Dinas Mawddwy road. The Cross Foxes Inn is also shown at this location on the Dolgellau tithe map of 1842 (Fig. 5), but in its current location on the 25 inch 1st edition Ordnance Survey map of 1889 (Fig. 6). A building is situated on the site of the present inn, but it is likely that this was a toll-house, the 'Gwanas gate' mentioned in some early documents.²² The name indicates that it was built by the Wynnstay estate, whose centre lay near the English border near Rhiwabon but which included some scattered lands in North-west Wales.²³ The present building incorporates a date-stone of 1854 on the porch, which believed to refer to the date of the porch's construction rather than of the entire building.²⁴ The Turnpike Trust ceased to exist in the 1870s. Otherwise, the Ordnance surveys of the late nineteenth and early twentieth centuries show a landscape that saw little further change (Fig. 6). The other alteration to the road network within the proposed corridor came in 1930, when the old Pont Gwanas was bypassed as a result of the completion of a new bridge a little way upstream. The new bridge was among the last of the traditional stone bridges within the area to be built, and was opened by Herbert Morrison, Minister for Transport in Ramsey MacDonald's government, on 26 June that year.²⁵

¹⁹ DRO: ZDA/234 and 104.

²⁰ Idris Fychan, *Hanes Dolgellau* (Treffynnon, 1872), p. 83.

²¹ DRO: ZDA/234.

²² Brenda Parry-Jones, 'Aunt Emily's Caerynwch Journals', *JMHR* IV 1 (1961) p. 50.

²³ The coat of arms of the Williams-Wynn family of Wynnstay was a pair of crossed foxes.

²⁴ Information from licensee.

²⁵ Gwyndaf Breese, *The Bridges of Wales* (Llanrwst, 2001), p. 239 and evidence of date-plaque.

5 ARCHAEOLOGICAL FINDINGS AND RECOMMENDATIONS

5.1 Archaeological survey

The sites included in the gazetteer are those elements of the cultural landscape noted during the assessment which are within the corridor of interest. They are described under the categories of Archaeological Remains, Historic Buildings and Historic Landscapes. Each description is followed by recommendations for work if the site is to be affected by the construction of the new road. Where the remains require evaluating before full mitigatory measures can be decided upon, the recommendations are for further assessment, the results of which will allow appropriate mitigation measures to be recommended. Where the information is considered sufficient, mitigatory measures are suggested. A summary at the end of the Gazetteer lists the sites according to their allocated category.

There are several sites of interest within the area of study. Pont Gwanas, a good example of late seventeenth or early eighteenth century bridge construction, has been placed in category A as a site of national importance.

Sites deemed to be of regional importance (category B) due to architectural and archaeological criteria are the Cross Foxes Inn, the farmhouse of Dol Ysptyty, and the remains of the building near the Cross Foxes (12).

The majority of the remaining sites identified within the corridor are of local interest only, but nonetheless form an intrinsic part of the cultural landscape. It is recommended that these sites are recorded at a level sufficient to allow future students of the landscape to be aware of their existence

5.1.1 Archaeological Remains

Feature 1 Category D	Trackway	SH 7570 1827 C
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Archaeological Value: Low

A disused track way which provided access to a barn mentioned on an estate map of 1817, situated south of, and also part of Hendre Gyfeilliad. The track runs east-west for about 200m from the existing A470(T) just opposite the Caerynwch Lodge. The surrounding area is planted with both deciduous and coniferous trees among which is a system of drystone field boundaries and possibly other remains.

Magnitude of impact prior to mitigation: Minor

Significance of effect prior to mitigation: Slight

Recommendation for further assessment: None.

Recommendation for mitigatory measures: Basic recording

Magnitude of impact with mitigation: Negligible

Significance of effect with mitigation: Neutral

Feature 3 (Fig.8) Category C	Lane to Tabor	SH 7595 1781 C
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Archaeological Value: Medium

The present tar macadamised lane leading west towards Tabor which is shown on an estate map of 1817. The lane is bounded by drystone walls on both sides as it approaches its junction with the present A470(T).

Magnitude of effect prior to mitigation: Moderate

Significance of effect prior to mitigation: Moderate

Magnitude of impact with mitigation: Negligible
Significance of effect with mitigation: Neutral

Feature 7 Trackway SH 7625 1733 C
Category D

Archaeological value: Low

An unenclosed trackway, slightly scarped into the contours of the hillside, leading to the derelict 18th century barn/cowhouse of Beudy Cefn Coch (outside the corridor of interest) from the present A470 and ultimately to Caerynwch, via an estate lane and Pont Cefn Coch. Beudy Cefn Coch was part of the Caerynwch estate during the 19th century.

Magnitude of effect prior to mitigation: Moderate
Significance of effect prior to mitigation: Slight

Recommendation for further assessment: None
Recommendation for mitigatory measures: Basic recording

Magnitude of impact with mitigation: Negligible
Significance of effect with mitigation: Neutral

Feature 8 (Fig. 10) Trackway SH 7627 1728 C
Category C

Archaeological value: Low

An enclosed hollow-way leading west to Beudy Cefn Coch from the present A470(T). A low earth bank carrying an overgrown birch hedge, now grown into trees, lines both sides of the slightly sunken track. The track appears on the 1838 OS. 1st. edition and on the tithe map of the 1840s, as well as on modern maps.

Magnitude of effect prior to mitigation: Moderate
Significance of effect prior to mitigation: Slight

Recommendation for further assessment: None
Recommendation for mitigatory measures: Basic recording and archaeological examination to establish the method used in construction.

Magnitude of impact with mitigation: Negligible
Significance of effect with mitigation: Neutral

Feature 9 Series of scoops SH 7642 1735 C
Category E

Archaeological value: Unknown

A series of substantial sub-circular and sub-rectangular scoops situated near the present road. The scoops are grassed over and their exact nature is unknown, although they may be gravel diggings.

Magnitude of effect prior to mitigation: Moderate
Significance of effect prior to mitigation: Unknown

Recommendation for further assessment: Trial trenching to establish exact nature of feature.
Recommendation for mitigatory measures: To be established following further assessment.

Magnitude of impact with mitigation: Unknown
Significance of effect with mitigation: Unknown

Feature 10 (Fig. 11) Terraced area SH 7643 1723
Category E

Archaeological value: Unknown

A low sub-rectangular grass covered terraced area lying alongside the existing A470(T) near field entrance, possibly representing turnpike construction.

Magnitude of effect prior to mitigation: Major
Significance of effect prior to mitigation: Unknown

Recommendation for further assessment: To be investigated by trial trenching.
Recommendation for mitigatory measures: To be established following further assessment.

Magnitude of impact with mitigation: Unknown
Significance of effect with mitigation: Unknown

Feature 12 Structural remains near the Cross Foxes Inn SH 7631 1670
Category E PRN 5755

Archaeological value: Unknown

A substantial rectangular structure. The Cross Foxes Inn (see feature 13) is indicated here on a map of 1817. All that now remains is a slightly raised level, rectangular, grassed-over platform with a length of truncated walling of coursed rubble on its western side.

Magnitude of effect prior to mitigation: Neutral
Significance of effect prior to mitigation: Unknown

Recommendation for further assessment: None.
Recommendation for mitigatory measures: Avoidance

Magnitude of impact with mitigation: Neutral
Significance of effect with mitigation: Unknown

Feature 16 Roman roads
Category E PRN 17726

Archaeological value: Unknown

There are several possible sections of Roman road in the corridor: Sarn Helen, running between Dolgellau and the Roman fort of Cefn Caer, Pennal; a postulated Roman route running east from Dolgellau over Bwlch Oer Ddrws to Welshpool and beyond; and a possible east-west route from Brithdir to Dolgellau.

These may lie on the same alignment as the existing tar macadamised routes. Sarn Helen enters the area from the south at SH76621653 and follows the A487(T) as far as the Cross Foxes then turns west to follow the minor road to Tabor. The other route, which is less certain, is thought to follow the line of the A470(T) west as far as the Cross Foxes where it is thought to join with Sarn Helen.

Magnitude of effect prior to mitigation: Unknown
Significance of effect prior to mitigation: Unknown

Recommendation for further assessment: None

Recommendation for mitigatory measures: A watching brief should be undertaken during any disturbance of the existing road and immediate environs

Magnitude of impact with mitigation: Unknown

Significance of effect with mitigation: Unknown

Feature 17 Improved turnpike road SH 7545 1843 to SH 7695 1680.
Category C

Archaeological value: Medium

The present A470(T) follows the alignment of the late 18th - early 19th century turnpike road from Dolgellau to Dinas Mawddwy. This road appears named on an estate map of 1817 as the 'New Turnpike Road from Dolgellau'. The present road scheme would affect it along its length from near Maes yr Helmau (SH 7545 1843) to beyond Pont Gwanas at SH 7695 1680.

Magnitude of effect prior to mitigation: Major

Significance of effect prior to mitigation: Moderate

Recommendation for further assessment: None

Recommendation for mitigatory measures: A controlled watching brief should be maintained during disturbance to the road, so that information concerning the development and construction method is recorded.

Magnitude of impact with mitigation: Moderate

Significance of effect with mitigation: Moderate

Feature 20 Opening in dry stone wall SH 7591 1787
Category D

Archaeological value: Low

An opening in a drystone field wall, with large boulders used as gate posts (Fig. 13). The wall is currently significantly truncated.

Magnitude of effect prior to mitigation: Major

Significance of effect prior to mitigation: Moderate

Recommendation for further assessment: None

Recommendation for mitigatory measures: Basic Recording

Magnitude of impact with mitigation: Minor

Significance of effect with mitigation: Slight

Feature 21 (Fig. 14) Drystone wall SH 7589 1792
Category D

Archaeological value: Low

A drystone wall, consisting of up to nine courses of medium sized local boulders. It is characteristic of the walls in the area.

Magnitude of effect prior to mitigation: Major
Significance of effect prior to mitigation: Moderate

Recommendation for further assessment: None
Recommendation for mitigatory measures: Basic Recording

Magnitude of impact with mitigation: Minor
Significance of effect with mitigation: Slight

5.1.2 Historic Buildings

Feature 2 (Fig. 7) 19th Century Lodge SH 7574 1830
Category C

Archaeological Value: Medium

A late 19th century Lodge belonging to the Caerynwch estate, unlisted. Constructed of coursed rubble under a slate roof.

Magnitude of effect prior to mitigation: Moderate
Significance of effect prior to mitigation: Moderate

Recommendation for further assessment: None
Recommendation for mitigatory measures: Basic recording

Magnitude of impact with mitigation: Minor
Significance of effect with mitigation: Slight

Feature 11 Capel Rhiwspardyn SH 7631 1674
Category C

Archaeological value: Low

A partially rendered rectangular two story dwelling of coursed rubble construction under a slate roof, formerly a Methodist Chapel. The 'poor cottage' which preceded the chapel is marked on the John Evans map of 1795, and the present structure probably represents the chapel of 1828. The identity of the building has been somewhat lost in its conversion to a dwelling house.

Magnitude of effect prior to mitigation: Neutral
Significance of effect prior to mitigation: Slight

Recommendation for further assessment: None.
Recommendation for mitigatory measures: Basic Recording

Magnitude of impact with mitigation: Neutral
Significance of effect with mitigation: Neutral

Feature 13 (Fig. 12) The Cross Foxes Inn SH 7636 1669
Category B PRN 5756

Archaeological value: Medium

A large two storeyed stone built building under a slate roof. A date plaque on the porch carries the date 1859, but the building itself is likely to be earlier. An estate map of 1817 shows a smaller building on the site, possibly a toll-house. The building was formerly Listed as Grade III.

Magnitude of effect prior to mitigation: Negligible

Significance of effect prior to mitigation: Slight

Recommendation for further assessment: None

Recommendation for mitigatory measures: Preservation in situ

Magnitude of impact with mitigation: Negligible

Significance of effect with mitigation: Neutral

Feature 14	Dol Ysptyty farm	SH 7675 1684
Category B	PRN 5757	

Archaeological value: Medium

This site comprises an 18th century, possibly earlier, farmhouse and associated field system. The name of the site, Dol Ysptyty indicates some antiquity, referring to the Medieval Hospice of Gwanas, which belonged to the Order of the Knights of St John. This was thought to be located somewhere in the region, probably at the nearby farms of Gwanas Fawr and Plas Gwanas. The place-name indicates that this was a meadow belonging to the Order.

Magnitude of effect prior to mitigation: Negligible

Significance of effect prior to mitigation: Slight

Recommendation for further assessment: None

Recommendation for mitigatory measures: Preservation in situ

Magnitude of impact with mitigation: Negligible

Significance of effect with mitigation: Neutral

Feature 15	Pont Gwanas	SH 7682 1679
Category A (listed grade II)	PRN 5758	

Archaeological value: High

An early double span bridge with segmental arches, cut-water and pilaster. This bridge carried the turnpike and its precursor from Dolgellau to Dinas Mawddwy across the Afon Clywedog. The bridge appears on a map of 1787 and on Ogilby's map of 1675, it is also mentioned in documents dating to 1679 and 1688 (the Helygog Collection, National Library). It is known that the bridge was repaired in 1764 and has clearly been widened but it is likely that the basic fabric of the bridge dates from the mid-seventeenth century. There is no sign of a ford in the immediate vicinity.

It was noticed during field walking in 1994 that the bridge was being used as an alternative temporary river crossing while work is being carried out on the bypass bridge on the A470(T). The bridge was damaged as a result, with the partial removal of one parapet and the insertion of metal strengthening plates above the northernmost arch. Heavy traffic had caused large fissures to appear in the metal surface of the bridge and elsewhere in the structure. However repairs have since been undertaken to the parapet walls.

Magnitude of effect prior to mitigation: Negligible

Significance of effect prior to mitigation: Slight

Recommendation for further assessment: None

Recommendation for mitigatory measures: Preservation in situ

Magnitude of impact with mitigation: Negligible
Significance of effect with mitigation: Neutral

Feature 18 Gwanas bridge (modern) SH 7679 1675
Category B

Archaeological value: Medium

A double span bridge with segmental arches and cut-water, opened by Herbert Morrison in 1930 on behalf of Merionethshire County Council. It is believed to be among the last traditional stone-built bridges in Wales, though there is possibly some use of pre-stressed concrete in the structure. The stone is not local, though a Merionethshire source is likely.

Magnitude of effect prior to mitigation: Negligible
Significance of effect prior to mitigation: Neutral

Recommendation for further assessment: None
Recommendation for mitigatory measures: Avoidance

Magnitude of impact with mitigation: Negligible
Significance of effect with mitigation: Neutral

Feature 19 (Fig. 13) Farm gateway SH 7685 1678
Category C

Archaeological value: Medium

A gateway to the Caerynwch demesne, in use, with stone-built flanking walls and pillars, the latter embellished with stone finials. The gate itself is of timber construction.

Magnitude of effect prior to mitigation: Negligible
Significance of effect prior to mitigation: Neutral

Recommendation for further assessment: None
Recommendation for mitigatory measures: Basic recording

Magnitude of impact with mitigation: Negligible
Significance of effect with mitigation: Neutral

Feature 22 (Fig. 9) Farm Gate SH 7627 1728
Category C

Archaeological value: Medium

An ornamental wooden gateway, giving access to the Caerynwch demesne along trackway (Feature 8, Fig. 7). It is hung on a substantial wooden post. It seems to represent a Caerynwch estate 'house style', although less grand than feature 19.

Magnitude of effect prior to mitigation: Major
Significance of effect prior to mitigation: Large

Recommendation for further assessment: None
Recommendation for mitigatory measures: Basic Recording, followed by reinstatement as close as possible to road edge on track way after road improvements completed.

Magnitude of impact with mitigation: Minor
Significance of effect with mitigation: Slight

5.1.3 Historic Landscape

5.1.3.1 Field boundaries

The pattern and nature of field boundaries are an important part of the historic landscape. Their construction, linear plan and ecological diversity can provide valuable information about the landscape and its evolution.

The most common type of field boundary in this area is the drystone wall, but examples of embanked walls, and low earth banks, usually topped with modern sheep-fencing as well as banks topped by hedges of birch and blackthorn were noted. These are particularly apparent close to site 3, where small fields associated with Hendre Gyfeiliad farm are located (Fig. 12).

Recommendation for further assessment: None

Recommendation for mitigatory measures: A descriptive survey should be carried out on all traditional field boundaries to be affected, including measured profiles and photographic recording. It is also recommended that an ecological survey of the boundaries accompanies the archaeological survey. The information gained from this survey would provide both a suitable record of historic features and contribute to the re-instatement of landscape features.

5.1.3.2 General Landscape

The development falls within the Bro Dolgellau/Vale of Dolgellau (Gw) 13 registered Landscape of Outstanding Historic Interest in Wales. This area extends from the summit of Cader Idris in the south to Garn in the north, and from Penmaenpool in the west to Brithdir in the east, a total of 54.14 sq. km. The following is the summary of the Contents and Significance of this landscape, as set out in The Register of Landscapes of Outstanding Historic Interest in Wales:

A natural basin at the confluence of two valleys situated between Cader Idris, the Arenig and Rhinog Mountains, containing diverse evidence of land use and exploitation from the prehistoric, medieval and recent periods. The area includes a close group of Iron Age hillforts; a Roman fortlet and industrial complex; Cymer Abbey and motte, territorially succeeded by the Nannau estate; Dolgellau town; 19th and 20th century gold and copper workings; historic associations with the Quaker movement (ICOMOS/Cadw 1998, 117).

The detailed Historic Landscape Characterisation process was carried out for Bro Dolgellau in January 2005 (Thompson 2005). The proposed route lies mainly within Character Area 15, *Fields and Woods east of Dolgellau*. None of the mostly regular enclosures have been identified as earlier than post medieval, but the scattered settlement of farmsteads can mostly be seen on the 1838 tithe map of the area. Many of the areas of woodland are thought to be ancient or semi-natural (*ibid.* 69). The route also lies within the north western part of Character Area 16, *Fields and Woods around Tir Stent*, particularly in the region of Hendre Gefeiliad. In this area ancient woodland is interspersed with more irregular field systems of possible medieval or earlier date, particularly to the north of Tabor (*ibid.* 70).

In terms of their relative importance to each other, and to the whole of the identified landscape of Outstanding Historic Interest, the character areas contain features that are in themselves not uncommon either in Gwynedd or Welsh terms, as indicated in 5.1. They are representative rather than rare, only moderately well documented, though they do for the most part survive in robust or largely complete condition. However, in terms of the integrity, historic coherence and associations of the two areas, as well as of the features identified in 5.1, they are of comparable importance as part of a cultural and associative landscape associated with the development of land-holding and land-use within the area, and above all for their association with the Quaker movement and the emigration to America. Effectively, the area between Gwanas and Dolserau is one of the cradles of the state of Pennsylvania.

The same comment therefore applies to the relationship between the identified character areas and the whole of the identified Landscape of Outstanding Historic Interest. Whilst the character areas only form a small component of the whole, their significance reflects the significance of the whole of Bro Dolgellau.

The present and proposed routes of the A470(T) between Maes yr Helmau and Cross Foxes therefore pass through a landscape of national importance, deriving in particular from its association with the Quaker movement and emigration. It provides archaeological and architectural evidence to complement and expand on documentary records for this period, and for the association of this particular landscape. It enables a comprehension of historical perspectives through the experience of the physical landscape.

5.2 Areas of unknown archaeological potential

Previous results from similar projects have shown that many sites can only be detected by excavation, particularly in areas such as this where surface indications are slight due to ploughing. A continuous watching brief along the line of the route is therefore an essential part of the mitigation procedure, with potential for discovering sites that would otherwise go unrecorded.

5.3 Summary of relative importance of the part of the historic character areas directly affected by the proposed development

EVALUATION OF THE RELATIVE IMPORTANCE OF THE PART OF THE HISTORIC CHARACTER AREAS DIRECTLY AFFECTED BY THE PROPOSED DEVELOPMENT						
CRITERION VALUE	High/good	Moderate/average	Low/fair	High/good	Moderate/average	Low/fair
In relation to:	Historic character areas			Landscape of Historic Interest		
Rarity		<input type="checkbox"/>			<input type="checkbox"/>	
Representativeness	<input type="checkbox"/>			<input type="checkbox"/>		
Documentation		<input type="checkbox"/>		<input type="checkbox"/>		
Group value		<input type="checkbox"/>		<input type="checkbox"/>		
Survival	<input type="checkbox"/>			<input type="checkbox"/>		
Condition	<input type="checkbox"/>			<input type="checkbox"/>		
Coherence		<input type="checkbox"/>		<input type="checkbox"/>		
Integrity		<input type="checkbox"/>		<input type="checkbox"/>		
Potential		<input type="checkbox"/>		<input type="checkbox"/>		
Amenity		<input type="checkbox"/>		<input type="checkbox"/>		
Associations	<input type="checkbox"/>			<input type="checkbox"/>		

6 SUMMARY OF IMPACTS AND RECOMMENDATIONS FOR MITIGATION

6.1 Summary of impacts

6.1.1 Individual sites

The following table summarises the archaeological features in the survey area by feature number, the potential impact of the development on these, and recommended mitigatory measures.

Feature	Archaeological Value	Magnitude of impact prior to mitigation	Recommended mitigation	Magnitude of impact with mitigation
1	Low	Minor	Basic recording	Negligible
2	Medium	Moderate	Basic recording	Minor
3	Medium	Moderate	Basic recording	Negligible
4	Low	Minor	Basic recording	Negligible
5	Low	Moderate	Basic recording and watching brief	Negligible
6	Low	Moderate	Survey and basic recording	Negligible
7	Low	Moderate	Basic recording	Negligible
8	Low	Moderate	Basic recording and archaeological evaluation	Negligible
9	Unknown	Moderate	Archaeological evaluation	Unknown
10	Unknown	Major	Archaeological evaluation	Unknown
11	Low	Neutral	Basic recording	Neutral
12	Unknown	Neutral	Avoidance	Neutral
13	Medium	Negligible	Avoidance	Negligible
14	Medium	Negligible	Avoidance	Negligible
15	High	Negligible	Avoidance	Negligible
16	Unknown	Unknown	Archaeological watching brief	Unknown
17	Medium	Major	Archaeological watching brief	Moderate
18	Medium	Negligible	Avoidance	Negligible
19	Medium	Negligible	Basic recording	Negligible
20	Low	Major	Basic recording	Minor
21	Low	Major	Basic recording	Minor
22	Medium	Major	Basic recording	Minor

6.1.2 General Recommendations

Unknown sites may be identified along the routes which are not indicated on the surface, although the potential for this is thought to be low to medium. A watching brief is therefore recommended along the whole line of the route.

6.1.3 Impact on the landscape

The direct impact of the proposed road on the immediate area should be considered as Moderate, as defined in 3.4.2 above. Mitigation would consist of sympathetic design and planting which would lessen the adverse significance of effect, particularly with maintaining Caerynwch estate building styles.

6.2 Further assessment by field evaluation

This section summarises the work which is recommended to evaluate those archaeological remains whose status and extent are not yet established, i.e. sites of unknown archaeological value. They will be reclassified and suitable mitigatory measures suggested following evaluation.

9. Series of scoops

Trial trenching

10. Rectangular platform

Trial trenching

7 STATEMENT OF SIGNIFICANCE OF THE LANDSCAPE

The area between Maes yr Helmau and Cross Foxes forms part of an identified Landscape of Outstanding Historic Importance. It preserves features from the late Medieval and more recent periods; the possibility also exists of buried features from earlier periods. Surviving surface features relate mainly to land-use and to regional transport from the seventeenth century onwards to the early twentieth. Evidence for the construction of the turnpike road is particularly noticeable.

The particular areas within which the proposed development falls are, within the context of a Landscape of Outstanding Historic Interest and in its own right, of great importance as associative cultural landscapes. Their associations of the area with the growth of the Quaker movement in and around Dolgellau and elsewhere in Merioneth confirm the national significance of the identified Vale of Dolgellau Landscape of Outstanding Historic Interest; their associations with the emigration to Pennsylvania and the early history of the United States of America confirm their international significance.

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ZDA/47 (Caerynwch rentals, 1797-1804)

ZDA/55 (lease of Cae Humphrey Shone on Gwanas Isa from John Kennedy esq. to Griffith Jones, blacksmith, 30 April 1805.

ZDA/234 (map of estates in Dolgellau 1817)

Tithe Map of the parish of Dolgellau 1842

8.1.2 National Library of Wales

MAP 7428 Caerynwch Demesne Situate in the several townships of Brithdir-Isaf and Gartheyn-Fawr 1826

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8.4 Abbreviations used in text

Arch. Camb.: Archaeologia Cambrensis
 ASIDOHL: Assessment of the Significance of the Impact of Development on Historic Landscapes).
 CCW: Countryside Council for Wales
 DRO: Dolgellau Record Office, Gwynedd Archives Service
 IFA: Institute of Field Archaeologists
 JMHS: Journal of the Merionethshire Historical and Record Society
 RCAHMW: Royal Commission on the Ancient and Historic Monuments of Wales



Fig. 1 A470 MAES YR HELMAU TO CROSS FOXES PROPOSED ROUTE. GWYNEDD CONSULTANCY DRAWING NO. 142/GA/135

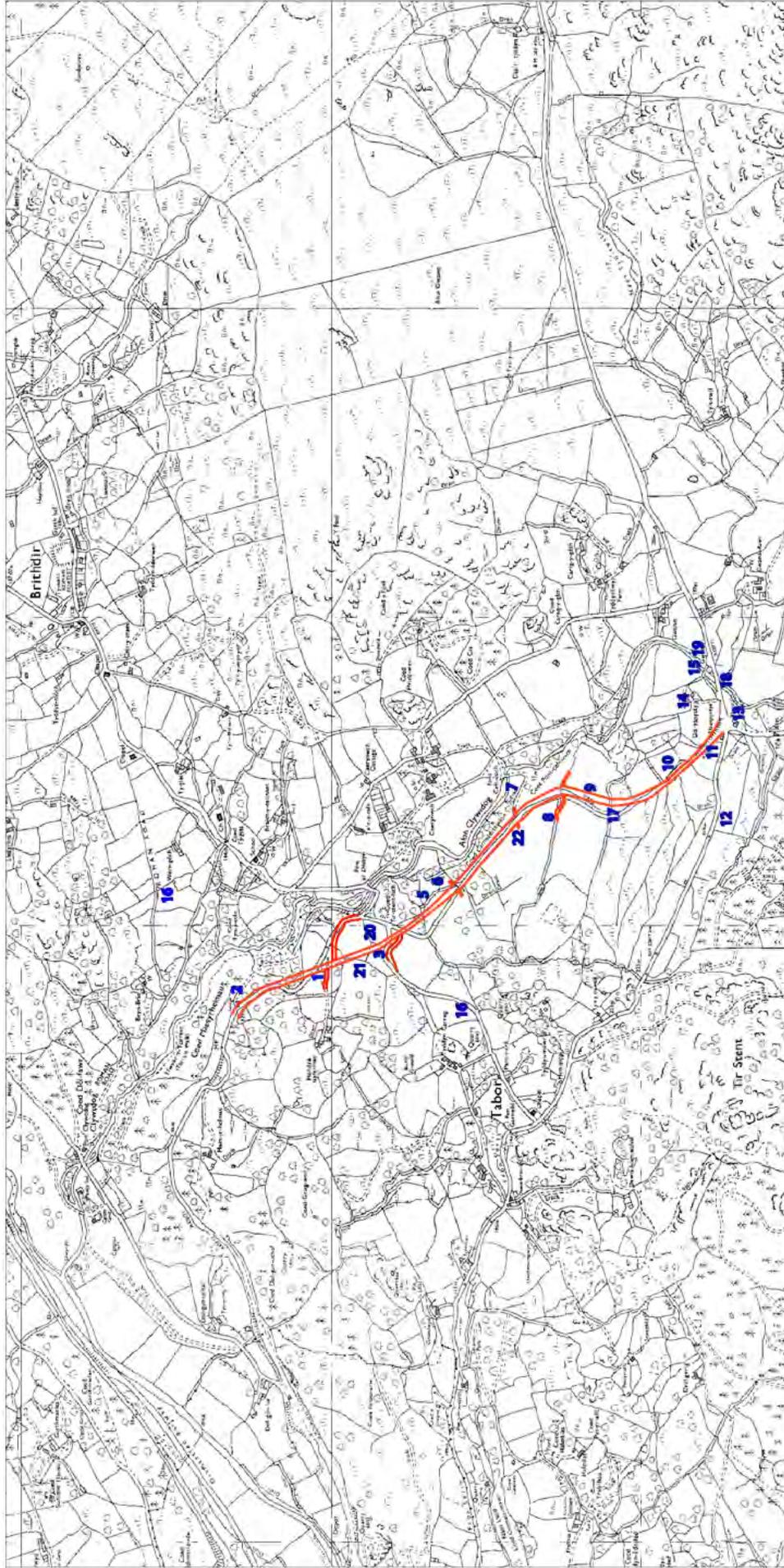


Fig. 2 Location of Sites mentioned in the Text. Base Map taken from OS 1:10 000 sheet SH 71 NE.

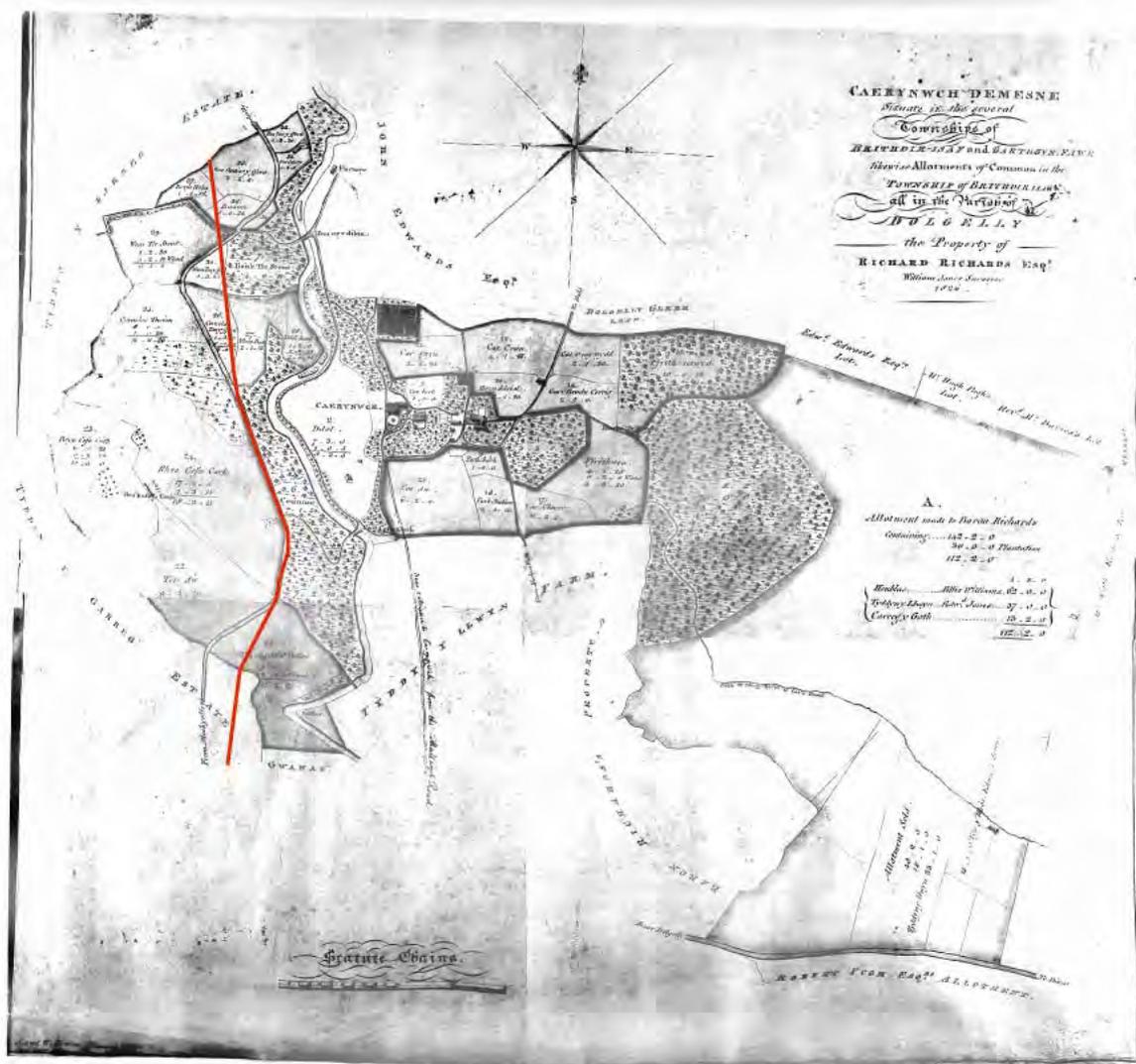


Fig. 4 Caerynwch Demesne, Situate in the several Townships of Brithdir-Isaf and Garthein Fawr 1826 (NLW MAP 7248). Proposed route for road is overlaid in red.

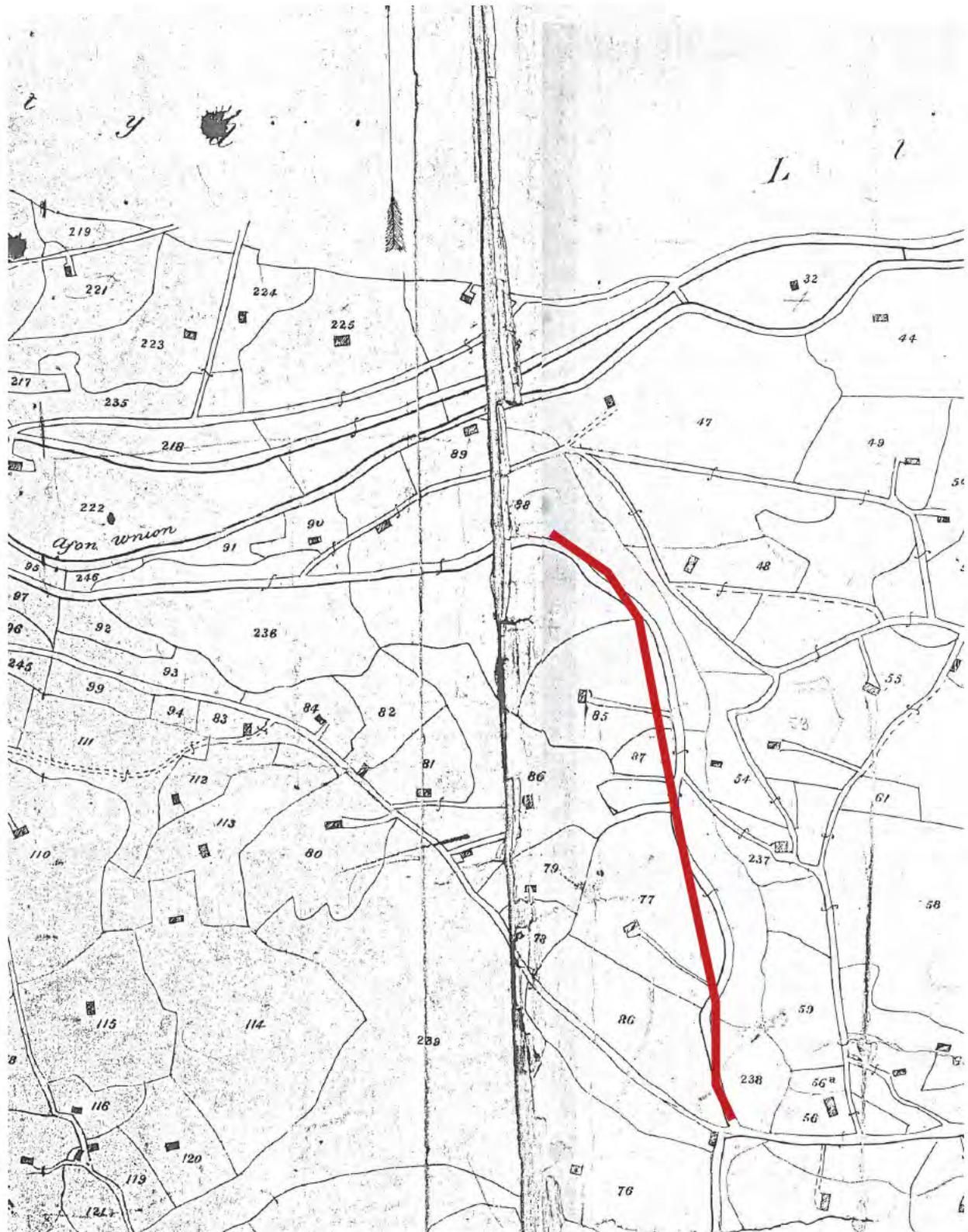


Fig. 5 Proposed route overlain on 1842 Tithe Map of the Parish of Dolgellau

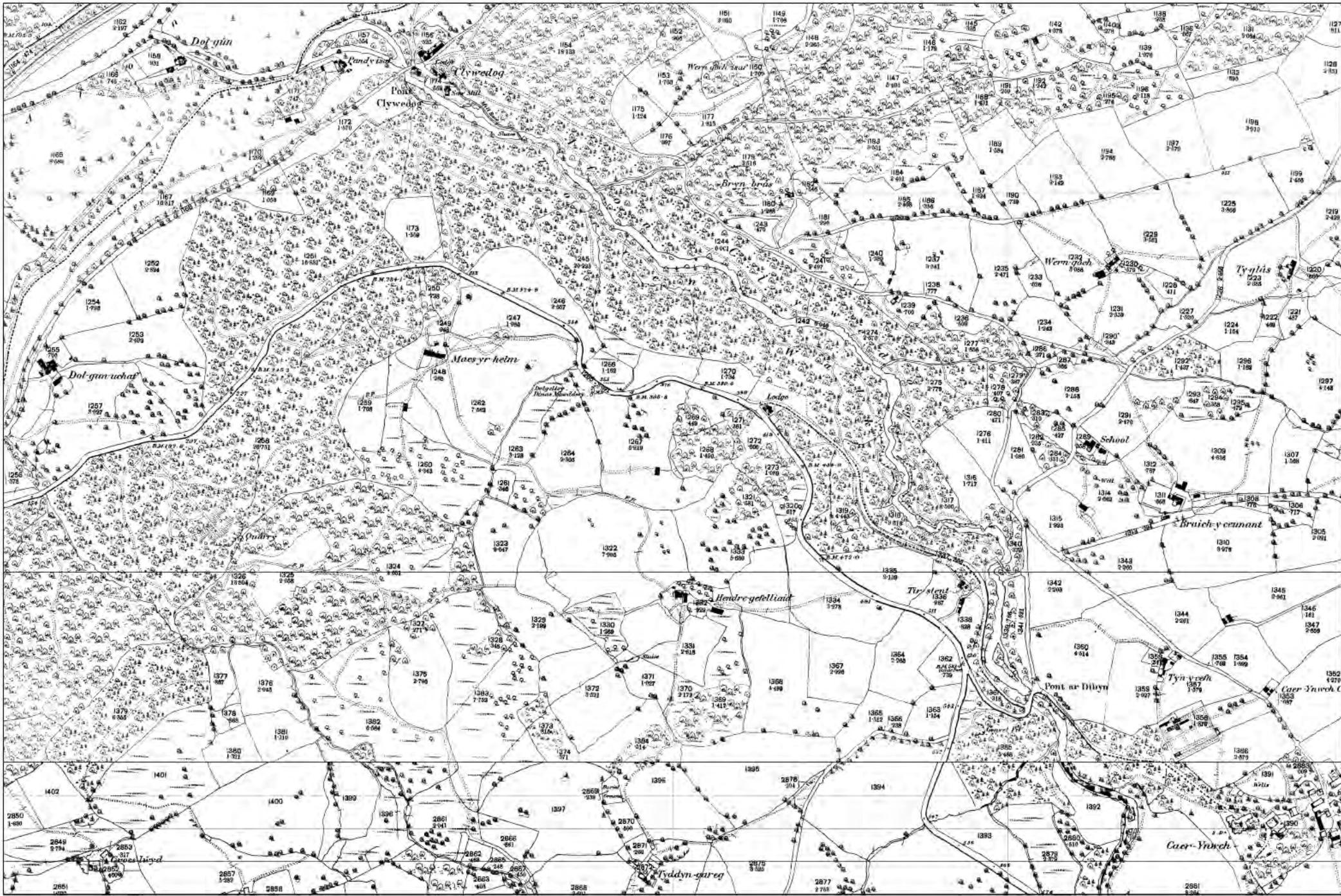


Fig. 6a. Ordnance Survey 1st Edition 25 inch Map 1889 Sheet XXXIII.16, showing northern part of route. Scale 1: 5000@A4

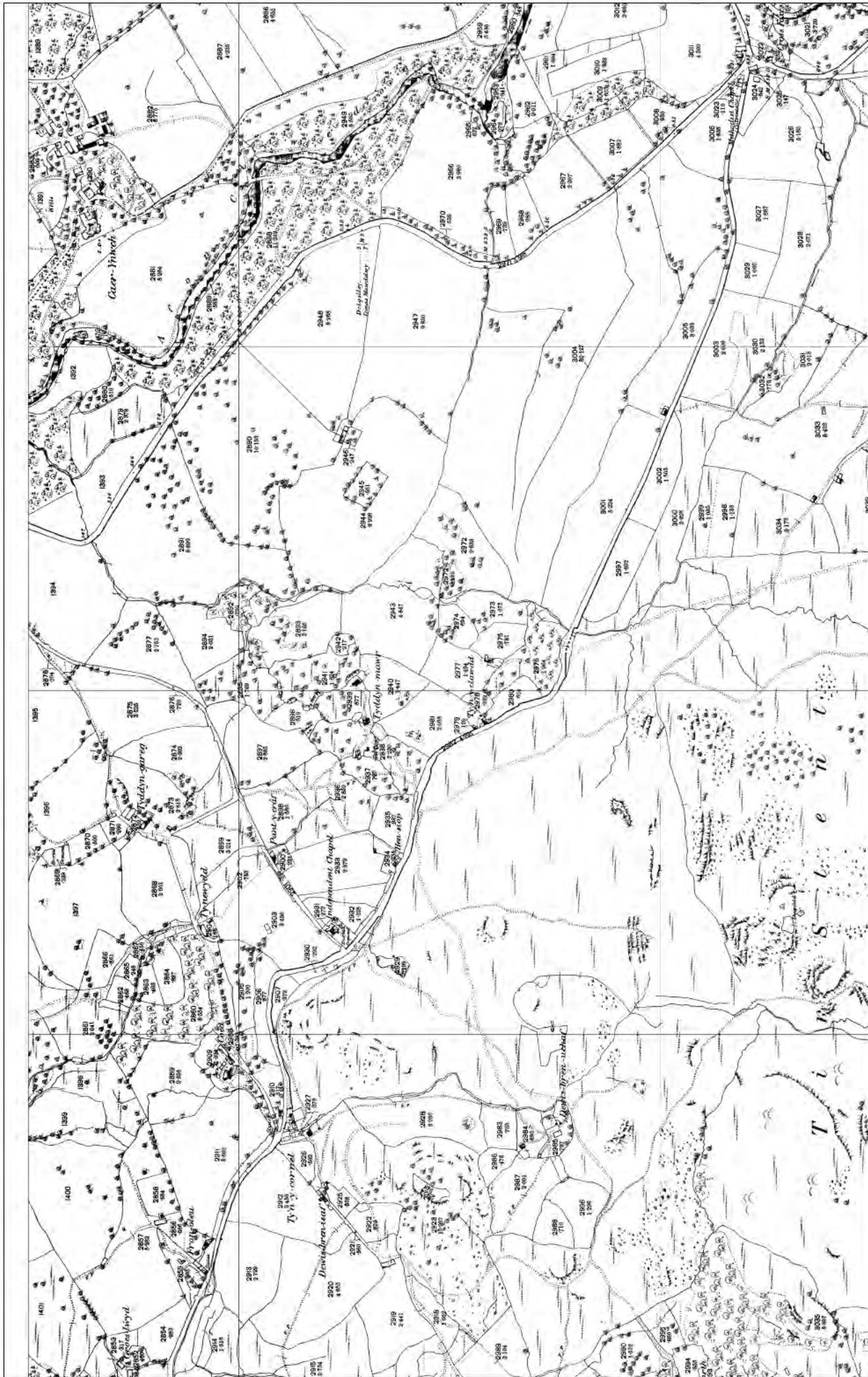


Fig. 6b. Ordnance Survey 1st Edition 25 inch Map 1889 Sheet XXXVII.4 showing southern part of route. Scale 1:5000@A4



Fig. 7 Site 2. A late 19th century lodge belonging to the Caerynwch estate



Fig. 8 Site 3. Lane to Tabor



Fig. 9 Site 22. Roadside gate at Junction of road with site 7. Scale 1m



Fig. 10 Site 8. Unenclosed trackway leading to the derelict 18th century barn of Beudy Cefn Coch. Scale 1m



Fig. 11 Site 10 Terraced area. Scale 1m



Fig. 12 Site 13. The Cross Foxes Inn, from the north west. Scale 1m



Fig. 13 Site 19. Caerynwch Estate gateway. Scale 1m



Fig. 14 Site 21. Drystone boundary wall near site 3. Scale 1m



Fig. 15 Site 20. Opening in drystone wall. Scale 1m

APPENDIX 1

Sites listed on the Gwynedd HER within 1km of the proposed A470 improvement					
PRN	NPRN	SITENAME	NGR	STATUS_NO	PERIOD
4135	55159	GWANAS - SITE OF CHAPEL HOSPICE AND GRANGE	SH76751683A		Medieval
5755	63187	BUILDING REMS. NR. CROSS FOXES INN	SH76311670		Post-Medieval
5756	63188	CROSS FOXES INN	SH76361669		Post-Medieval
5757	63189	DOL YSPYTTY FARM, NR CROSS FOXES	SH76751684		Post-Medieval
5758	63190	PONT GWANAS BRIDGE, NR CROSS FOXES	SH76821679		Post-Medieval
6367	41658	GARREG Y GARTH HAY BARN, AFON CLYWEDOG	SH76861725		Unknown
6368	28193	BRAICH Y CEUNANT, SW OF BRITHDIR	SH76341815		Post-Medieval?
6853	63823	DERELICT BUILDINGS, GWANAS	SH77181673		Post-Medieval
21726	0	BRYNCASTELL MINE	SH76101650		Post-Medieval
12323	28260	CAERYNWCH	SH76431767	GII	Post-Medieval
12324	28261	CAERYNWCH (HOUSE 150YDS N.E.)	SH76551774	GII	Post-Medieval
12482	28780	TYDDEN GARRED	SH75571764	GII	Post-Medieval
20392	0	SLATE QUARRY, PANT CRA	SH75601740		Post-Medieval
9859	0	GWANAS (WONAS) MEDIEVAL TOWNSHIP	SH77001690		Medieval
17726	0	PART OF ROMAN ROAD : BRITHDIR - CEFN CAER, PENNAL	SH75991691		Roman



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