

# A487 FISHGUARD TO BANGOR TRUNK ROAD IMPROVEMENT AT FFRIDD GATE, MACHYNLLETH

## ARCHAEOLOGICAL ASSESSMENT

Report No. 434



Prepared for

Hyder Consulting Ltd

January, 2002

By

J. Kenney

**Ymddiriedolaeth Archaeolegol  
Gwynedd Archaeological Trust**



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# **A487 FISHGUARD TO BANGOR TRUNK ROAD IMPROVEMENT AT FFRIDD GATE, MACHYNLLETH (G1726)**

## **ARCHAEOLOGICAL ASSESSMENT**

### **SUMMARY**

*An archaeological assessment was carried out in advance of improvement works on a bend in the A487 near Ffridd Gate. This involved consultation of existing records and documents and a field search. Fifteen archaeological features were identified: 1 was categorised as of national importance, 5 of regional importance, 5 of local importance, and 4 of minor importance. The road improvement will have a slight impact on 4 of these features, a considerable impact on feature 9, and it is also likely to impact on feature 10. Mitigatory measures have been suggested to minimise the impact of the works on the archaeology. Most of the sites are avoided by the work, but those sites affected will require either detailed or basic recording, and a watching brief during earth removal.*

### **1 INTRODUCTION**

Gwynedd Archaeological Trust was asked, by Hyder Consulting Ltd, to carry out an archaeological assessment in advance of a proposed improvement of the bend in the A487 at Ffridd Gate (see figures 1 and 2). The improvements are centred on SH 751 022, and the study area is indicated on Doc No. SH50036/D1/V2 prepared by Hyder Consulting.

The area is not within a registered historic landscape, but is on the eastern edge of the Snowdonia National Park. The Afon Dulas valley is an obvious routeway through the hills, and transport routes of different periods are concentrated along the narrow valley floor.

### **2 SPECIFICATION AND PROJECT DESIGN**

The basic requirement was for a desktop survey and field search of the proposed area, in order to assess the impact of the proposals on the archaeological features within the area concerned. 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 improvement work on the archaeological resource were to be suggested.

Gwynedd Archaeological Trust's proposals for fulfilling these requirements were, briefly, 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); and*
- c) *to recommend ways in which damage to the cultural heritage can be avoided or minimised.*

A full archaeological assessment usually comprises 6 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 or trial excavation, although a measured survey is also an option. The present report makes recommendations for any field evaluation required.

## 3 METHODS AND TECHNIQUES

### 3.1 Desk-top Study

This involved consultation of maps, computer records, written records and reference works, which make up the Sites and Monuments Record (SMR), located at Gwynedd Archaeological Trust, Bangor. The archives held by the Merioneth Record Office, Dolgellau, were also consulted. Aerial photographs were examined at the office of the Countryside Council for Wales, Bangor. Information about Listed Buildings and Scheduled Ancient Monuments was obtained from Cadw: Welsh Historic Monuments. Secondary sources were consulted to provide background information, especially on the Corris Railway.

The sites listed in the SMR and the Register of Listed Buildings within an area of c.3km around the study area were collected to give an indication of the type of sites recorded in the general locality (figure 1). These are presented as appendices (Appendix I and II). A 1km square around the section of road to be improved was taken as the study area, and sites within this area were studied more closely.

### 3.2 Field Search

This was undertaken on 13<sup>th</sup> December 2001, when the route of the improvement works were inspected by an archaeologist to note the present state known sites, and to identify any archaeological features visible as earthworks. The fields to the west of the road, which are to be directly affected by the improvements, were walked. Recorded sites within the study area were inspected; even those not directly affected by the works. The fields to the east of the road were also briefly inspected to identify any previously unknown features, which may contribute to the understanding of the area.

The conditions were ideal for a field search. Most of the fields were closely grazed, so earthworks could be easily seen. The current owners of Felin y Ffridd kindly allowed a brief inspection of the mill building and part of the leat to the north.

Features identified were marked on copies of the 1:10,000 OS map, as accurately as possible without surveying. Each feature was described and assessed. Detail notes, sketch plans and photographs were made of the more important features. These records are archived in Gwynedd Archaeological Trust under project number G1726.

### 3.3 Report

All available information was collated, and the features were then assessed and allocated to the categories listed below. These are intended to give an idea of the importance of the feature and the level of response likely to be required; descriptions of the features and specific recommendations for further assessment or mitigatory measures, as appropriate, are given in the relevant sections of this report.

The criteria used for allocating features to categories of importance are based on those used by the Secretary of State when considering ancient monuments for scheduling; these are set out in the Welsh Office Circular 60/96.

### 3.3.1 *Categories of importance*

The following categories were used to define the importance of the archaeological resource.

#### *Category A - Sites of National Importance.*

This category includes Scheduled Ancient Monuments and Listed Buildings of grade II\* and above, as well as those sites that would meet the requirements for scheduling (ancient monuments) or listing (buildings) or both.

Sites that are scheduled or listed have legal protection, and it is recommended that all Category A sites remain preserved and protected *in situ*.

#### *Category B - Sites of Regional Importance*

This category includes grade II Listed Buildings and sites which would not fulfil the criteria for scheduling, but which are nevertheless of particular importance within the region. Preservation *in situ* is the preferred option for Category B sites, but if damage or destruction cannot be avoided, appropriate detailed recording might be an acceptable alternative.

#### *Category C - Sites of District or Local Importance*

These sites are not of sufficient importance to justify a recommendation for preservation if threatened, but nevertheless merit adequate recording in advance of damage or destruction.

#### *Category D - Minor and Damaged Sites*

These are sites, which are of minor importance, or are so badly damaged that too little remains to justify their inclusion in a higher category. For these sites rapid recording either in advance or during destruction, should be sufficient.

#### *Category E - Sites needing further investigation*

Sites, the importance of which is as yet undetermined and which will require further work before they can be allocated to categories A-D, are temporarily placed in this category, with specific recommendations for further evaluation. By the end of the assessment there should be no sites remaining in this category.

### 3.3.2 *Definition of Impact*

The direct impact of the proposed development on each site was estimated. The impact is defined as *none, slight, unlikely, likely, significant, considerable or unknown* as follows:

#### *None:*

There is no construction impact on this particular site.

#### *Slight:*

This has generally been used where the impact is marginal and would not by the nature of the site cause irreversible damage to the remainder of the feature, e.g. part of a trackway or field bank.

#### *Unlikely:*

This category indicates sites that fall on the margins of the study area, but are unlikely to be directly affected.

#### *Likely:*

Sites towards the edges of the study area, which may not be directly built on, but which are likely to be damaged in some way by the construction activity.

#### *Significant:*



The partial removal of a site affecting its overall integrity. Sites falling into this category may be linear features such as roads or field boundaries where the removal of part of the feature could make overall interpretation problematic.

*Considerable:*

The total removal of a feature or its partial removal which would effectively destroy the remainder of the site.

*Unknown:*

This is used when the location of the site is unknown, but thought to be in the vicinity of the proposed development.

### **3.3.3 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.

### **3.3.4 Definition of Mitigatory Recommendations**

*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 FINDINGS AND RECOMMENDATIONS**

### **4.1 Topographic Description**

The study area is located at the southern end of the valley of the Afon Dulas, where it joins the Afon Dyfi (figure 1). There is an area of flood plain at the confluence of the rivers, but the Dulas valley quickly narrows to become little wider than a gorge. The hills rise fairly steeply on each side, with restricted areas suitable for agriculture. Much of the western side of the valley is wooded, and has been at least since the early 19<sup>th</sup> century. At the northern end of the valley, around Corris, there is slate of various qualities, which was quarried from the late 18<sup>th</sup> century onwards, but the lower end of the valley has no natural resources except for its fast flowing river and tributary streams. These powered several watermills, mostly for the woollen industry.

### **4.2 Archaeological and Historical Background**

The study area must be seen in relation to Machynlleth to the south, the village of Corris to the north, and, beyond Corris, Dolgellau. The narrow valley of the Afon Dulas provides a direct routeway through the hills between Machynlleth and Dolgellau. However, the route does not seem to have been turnpiked until the 19<sup>th</sup> century. It is not included in any of the five districts set up to administer the turnpikes of Merioneth after the Act of 1777 authorised the turnpiking of all the major highways in the county (Pritchard 1961, 27). A map of postal service routes, published in 1807, suggests that the road from Dolgellau to Machynlleth ran via Mallwyd at this period, and the postal service does not seem to have used the route via Corris before 1846 (Archer 1971, 236). This route was probably turnpiked in the first half of the 19<sup>th</sup> century, as the turnpike cottage was built in c.1830 to control the southern end of the road (Cadw listing information). The turnpike was certainly well used by 1880, when letters of complaint were received by the Board of Trade from travellers, who feared that the use of steam locomotives on the line would endanger the users of the road (Morgan 1991, 9). The present B4404 may be the older road. Jervoise (1936, 58) claims that the bridge over the Dulas, near Ffridd Gate, was part of the route from St David's to Holyhead mapped by John Ogilby, published in 1675. The bridge probably dates to the 18<sup>th</sup> century (Cadw listing information), and most early routes seem to have run up the Dyfi on its eastern side (Dodd 1925, map), but the 17<sup>th</sup> century road could have travelled along the western side of the river to Mallwyd.

Prior to the 19<sup>th</sup> century the economy of the Corris area was based on sheep rearing and spinning. The woollen industry was of considerable importance in Merioneth in general, reaching its peak towards the end of the 18<sup>th</sup> century, but declining rapidly in the early 19<sup>th</sup> century (Parkinson 1984, 422). The watermill at Ffridd Gate, which was a cornmill in the 19<sup>th</sup> century, seems to have been originally constructed as a fulling mill, and later converted to corn, perhaps when the industry declined (Parkinson 1984, 452). Fulling, the cleaning and shrinking of cloth, was the first process in the woollen industry to be mechanised. Powered fulling mills were first developed during the medieval period, with references as early as AD 1117. Wooden hammers (fulling stocks) were driven by waterpower to



pound the cloth in a trough of water and solvents to remove the grease. After the cloth was cleaned of its grease it was stretched and dried on tenters, long frames or racks permanently set up in fields near the mill. The word 'tenter' was transferred into Welsh as 'deintur'. A field to the south-east of Felin y Ffridd is named Cae Deintyr on the 1839 tithe map, further supporting the proposition that the mill was originally for fulling (Parkinson 1984, 424, 452).

The establishment of the slate industry between the 1790s and 1850s caused a dramatic change to the economy and a rapid growth in the population (Morgan 1991, 1, 3). As Corris grew as a slate quarrying area it required a means of transporting the slate to the markets. In 1859 a tramroad, using horses to pull the wagons, was constructed to carry the slate from Corris to Machynlleth, and down the River Dyfi to the sea. The narrowness of the valley dictated that, for most of its route, it followed the line of the road very closely. By 1863 the standard gauge Aberystwyth and Welsh Coast Railway had reached Machynlleth, removing the need for the river and sea routes. The Cambrian Railways line also linked to Machynlleth from 1864. The Corris tramroad needed upgrading to meet the needs of the increasing traffic, and an Act of 1864 authorised its conversion to a steam railway. However, the conversion had not taken place by 1877, when it was still a horse-drawn tramway. In 1878 steam locomotives were finally ordered and new track laid to take them. After opposition from quarry owners a Bill allowing passenger travel on the line was finally passed in 1880, although it was 1883 before the first official passengers travelled on the line. During the beginning of the 20<sup>th</sup> century the line declined, and was finally abandoned in 1948 after flood erosion seriously threatened the line (Morgan 1991).

The railway crossed the Dyfi on a timber viaduct, and there were five other bridges along the length of the line, over streams (Morgan 1991, 11). The viaduct, with its timber trestles, had deteriorated by the start of the 20<sup>th</sup> century, and work on rebuilding the bridge in ironwork started in 1906 (ibid, 9). The new bridge was carried on stone piers, with four steel spans (Boyd 1970, 26). When the railway was abandoned the viaduct was one of the first sections to be demolished (Boyd 1970, 28).

Where it passes through the study area the railway ran down the eastern side of the A487, swinging out to pass the turnpike cottage on the eastern side. Where the railway crossed what is now the B4404 there was a small station, opened officially in July 1887 (Boyd 1970, 25), though trains had stopped when required since October 1885 (Morgan 1991, 16). The turnpike cottage became the crossing keeper's house (Morgan 1991, 46). The station, or halt, as there was no station building, was closed by 1925 (Boyd 1970, 32).

#### **4.3 The Existing Archaeological Record**

(See figure 1)

The area is unusual in that all the recorded archaeological sites are of modern or post-medieval date, with the exception of a circular cropmark at Foel y Ffridd (PRN 5117), which may belong to an earlier period. This absence of prehistoric, Roman and medieval sites is likely to be an artefact of research priorities. The recent quarrying activity and the railway have attracted the attention of industrial archaeologists and historians, but the area never seems to have been investigated for sites of earlier periods. Such sites almost certainly exist here as they do in similar areas elsewhere in Wales. This is demonstrated by the fact that two previously unrecorded round barrows, located not far from the road, were identified during the present survey.

Only one site in the area, Machynlleth Bridge (PRN 5114) is a scheduled ancient monument (Mg 02). There are numerous grade II listed buildings in the area, but there is only one grade II\* structure, again Machynlleth Bridge or Pont ar Ddyfi (record no. 22723).

See appendix I for the Sites and Monuments Record for this area, and appendix II for a full list of the Listed Buildings.

#### 4.4 The Archaeological Survey

(See figure 2)

Fifteen features were identified within the survey area. These are listed below along with recommendations for further assessment and mitigatory measures.

##### **Feature 1      Felin y Ffridd**

SH 7514 0242

PRN 6533

Period: 18<sup>th</sup> century

Category: B, Impact: None

Felin y Ffridd is listed merely as a mill in the 1844 tithe schedule, but is specified as a cornmill on the 25" OS map (1901). However, a Pandy'r-Ffridd (Ffridd fulling mill) was present in the area in 1749 (Jenkins 1969, 174). The neighbouring farm was occupied by a fuller at least until 1848. The design of the existing mill building is not typical of a cornmill, and it is probably a converted fulling mill (Parkinson 1984, 452). The name of Cae Deintyr for a nearby field strongly supports this.

The mill building is still in very good condition (**plate 1**). The interior has not been renovated, and though the machinery has gone, other fixtures remain. It is still just possible to trace the outline of the leat, although it has been entirely in-filled, and incorporated in a garden. The house south of the mill has been recently renovated and the survival of original features is unknown. This building is shown on the 1844 tithe map. The condition of the smaller buildings in the complex was not inspected.

*Recommendations for further assessment: None*

*Recommendations for mitigatory measures: Avoid*

##### **Feature 2      Cae Deintyr**

SH 7521 0229 centre

Period: 18<sup>th</sup> century

Category: B, Impact: None

This field is named as Cae Deintyr on the 1844 tithe map. This strongly suggests that it was the field in which tenter frames were constructed and cloth, fulling in Felin y Ffridd, was stretched. Shallow linear hollows can be seen running east to west across this field. These were not at sufficiently regular intervals to be ridge and furrow, but could merely be surface traces of drainage. However, the field to the south does not contain similar features, implying that the earthworks are specific to the use of this field. It is possible that these furrows are related to the tenter frames. A detailed survey and more documentary research would be necessary to clarify this point.

*Recommendations for further assessment: None*

*Recommendations for mitigatory measures: Avoid*

##### **Feature 3      Pont Felin-y-ffridd**

SH 7519 0243

Period: 18<sup>th</sup> century

Grade II listed building (record no.22722)

Category: B, Impact: None

The bridge carries the B4404 over the Afon Dulas. It has three arches and has been widened on its upstream side, so it is now double its original width (**plate 2**). The Cadw listing information dates the bridge as 18<sup>th</sup> century, and notes in the Merioneth Quarter Session Rolls mentioning Pontarddulas in 1756 and 1788 probably refer to this bridge (William-Jones 1965, 148; Hough 1996). It was on the 17<sup>th</sup> century road from St David's to Holyhead (Jervoise 1936, 58).

*Recommendations for further assessment: None*

*Recommendations for mitigatory measures: Avoid*

##### **Feature 4      Corris Railway line**

SH 7500 0249-7493 0198

Period: Late 19<sup>th</sup> century

Category: B, Impact: Slight

The bed of the line still survives along the whole length of the survey area. For most of its length it is overgrown with brambles (**plates 3a, b, c**), but parts of it have been adapted for various uses. Where the line passes east of Turnpike Cottage it has been made into a driveway. On the other side of the road it has also been converted into a drive for Haulfryn, with a new gate and section of slate walling. On

the east and south side of Haulfryn the line has been incorporated into the garden. In the southern part of the study area the line has been made into a cycle path leading to the new cycle bridge over the Dyfi (plate 3d). Along much of the eastern side of the line the original slate fencing still survives.

*Recommendations for further assessment: None*

*Recommendations for mitigatory measures: Basic recording and watching brief*

#### **Feature 5      Ffridd Gate Station**

SH 7514 0231

*Period: Late 19<sup>th</sup> century*

*Category: C, Impact: None*

This is the first station north of Machynlleth, and was opened in 1885 to serve the adjoining hamlet and the village of Llanwrin (Corris Railway Society 1988, 34). The station consisted of a platform and a small, sentry box-like shelter (plate 4a, b). Neither these, nor the crossing gates, survive, as the area is now the gateway and drive to Haulfryn (plate 4c). However, the small fir tree shown in a photograph dating probably from the 1940s (plate 4a) is now a large and impressive tree. A small stone building visible in this and an earlier photograph is also still there. This appears to be a shed, and it has been re-roofed relatively recently. It appears on the 1901 25" map (figure 3), but not on the 1844 tithe map. It is likely that the shed predates the station, and was used by the occupants of Turnpike Cottage.

*Recommendations for further assessment: None*

*Recommendations for mitigatory measures: Avoid*

#### **Feature 6      Machynlleth to Dolgellau turnpike**

SH 7475 0199-7500 0249

*Period: 19<sup>th</sup> century*

*Category: C, Impact: Slight*

The turnpike road ran up the western side of the Dulas valley, taking the most direct route through the hills from Machynlleth to Dolgellau. There is no firm evidence that it was turnpiked much before the Turnpike Cottage was built c.1830. There are no traces of the 19<sup>th</sup> century road visible, although its surface may be preserved under the present road surface.

*Recommendations for further assessment: None*

*Recommendations for mitigatory measures: Basic recording and watching brief*

#### **Feature 7      Turnpike Cottage**

SH 7513 0232

*Period: 19<sup>th</sup> century*

*Grade II listed building (record no. 22720)*

*Category: B, Impact: None*

Single storey, stone built cottage, with slate roof. Retains distinctive T-shaped plan of a toll-house, including bay window overlooking the road, with its original glazing (plate 5). Built in c.1830 to control south end of the turnpike road to Dolgellau. The building appears on the 1844 tithe map, where gates are shown across both roads to either side of the cottage.

*Recommendations for further assessment: None*

*Recommendations for mitigatory measures: Avoid*

#### **Feature 8      Haulfryn**

SH 7512 0227

*Period: Late 19<sup>th</sup> century*

*Category: C, Impact: None*

A stone built cottage with sheds added to its north-eastern end. The house has recently been re-roofed in slate. The most unusual feature about the house is its lack of windows on the western side (plate 6), presumably to avoid seeing and hearing the road from inside the house. Haulfryn is not shown on the 1844 tithe map, nor on the 1850 tramway plan (Z/CD/128), but was built by time the 1901 25" map was surveyed.

*Recommendations for further assessment: None*

*Recommendations for mitigatory measures: Avoid*

#### **Feature 9      Ruined structure**

SH 7506 0219 approx.

*Period: 18<sup>th</sup> or 19<sup>th</sup> century?*

*Category: D, Impact: Considerable*

The remains of a very small stone built structure measuring roughly 2m by 2.5m. The south-eastern side is defined by a ruined section of slate drystone walling on the top of a small natural mound (plate 7). To the west of this is a platform terraced into the hill, with another, parallel, section of walling, now completely overgrown with turf. There are no side walls visible. The function of this structure is unclear, but the remains do not seem to be consistent with a roofed building. It is presumed to be either 18<sup>th</sup> or 19<sup>th</sup> century in date, and probably related to the use of this field, which was previously woodland (1901 25" map, 1844 tithe map).

**Recommendations for further assessment:** *None*

**Recommendations for mitigatory measures:** *Basic recording and watching brief*

#### **Feature 10      Parallel scarps**

SH 7487 0204 centre

*Period: early 19<sup>th</sup> century?*

*Category: C, Impact: Likely*

Running most of the length of the field are two very slight scarps, no more than 0.2m high, and about 4m apart (plate 8). They are aligned roughly north-east to south-west, and run at an angle to the present road-side boundary. They are so slight that it was initially assumed that they were just the result of livestock using the same tracks across the field, although, they did seem too continuous to be explained in this way. However, the plan of the route of the Corris, Machynlleth and River Dovey Tramway dated to 1850 (Z/CD/128) shows the route running on the western side of the road, along a very different line to that eventually used. In the field by the road, to the south of Ffridd Farm, the tramway takes exactly the same alignment as the scarps noticed on the ground. It seems probable that the scarps are related in some way to the tramway. Perhaps initial levelling of the route had started before it was decided to move the line to run next to the road. The improvement works may just avoid this feature, but it will be close to the works and will risk being damaged. A measured survey and further documentary research would be recommended to clarify whether this feature is a relic of the tramway.

**Recommendations for further assessment:** *None*

**Recommendations for mitigatory measures:** *Detailed recording and watching brief*

#### **Feature 11      Probable round barrows**

SH 7517 0215 and 7513 0202

*Period: Bronze Age*

*Category: A, Impact: None*

Two circular mounds were noticed in a field to the east of the road. As this is on Mr Evans's land the opportunity was taken to inspect them. The northern mound measures about 20m diameter, and is 0.6m high, while the southern one is about 18m in diameter and c.0.5m high. Both are circular and fairly well defined, with only some slight hollows suggesting disturbance (plate 9). The northern barrow had some disturbance on its southern edge, possibly caused by a previous field boundary or drainage. This is the flood plain of the Afon Dulas, and the fields are quite flat, except for these two mounds. Bronze Age barrows are not usually located in such a low-lying area, but the views from the site are good, particularly to the south down the valley. The regularity of the features and the lack of other mounds and hummocks in the surrounding fields do suggest that these are Bronze Age burial mounds. Only excavation could confirm this.

Both mounds are just visible, with the use of a stereoscope, on the aerial photographs (Line 53 95 93 061 and 062)

**Recommendations for further assessment:** *None*

**Recommendations for mitigatory measures:** *None*

#### **Feature 12      Tracks on Ffridd Farm**

*Period: 18<sup>th</sup> or 19<sup>th</sup> century?*

*Category: D, Impact: Slight*

Two tracks are shown leading to Ffridd Farm on the 1844 tithe map, from the south (12a) and the east (12b). Both are also shown on the 1901 map. The former is still in use as the main access to the farm. The latter is completely grassed over, and is visible as an earthwork terraced into the hillside. The 1901 map also shows a track coming in from the north (12c), which is no longer in use. Although this track is not actually marked on the tithe map the field boundaries to the north of the farm leave a gap for a track to pass between them, suggesting that this route had been in use before 1844, if not actually at the time of the map. The improvement works will impact on the ends of tracks 12a and b, but this will not cause a significant loss of archaeological information.

**Recommendations for further assessment:** *None*



*Recommendations for mitigatory measures: Basic recording and watching brief*

**Feature 13 Field boundaries**

*Period: 18<sup>th</sup> or 19<sup>th</sup> century?*

*Category: D, Impact: Slight*

The field boundaries shown on the 1844 tithe map are almost identical to the present boundaries. One boundary (13a) had gone out of use by 1901, and is now visible on the ground only as a very slight ditch and bank. Boundary 13b has fairly recently gone out of use, and is now just a grass covered bank 0.4m high and 2m wide, with some trees and bushes surviving on its line. Boundary 13c is composed of an earthen bank revetted on the southern side by stone. Boundary 13d is also not now maintained, but has been fenced off. It is defined by large coppiced hazel trees, and is partially terraced into the hillside. The boundaries along side the road are closely clipped hedges. The works will have significant impact on some of these boundaries, especially the hedge to the west of the road, but this will not result in much loss of archaeological information. Reinstatement of the hedge on the western side of the road would be recommended to maintain the character of the area, but the plan supplied by Hyder Consulting Ltd indicates that this is already part of the intended works.

*Recommendations for further assessment: None*

*Recommendations for mitigatory measures: Basic recording and watching brief*

**Feature 14 Railway bridge (site of) /cycle bridge**

*SH 7492 0197*

*Period: 19<sup>th</sup> century*

*Category: D, Impact: None*

The railway crossed the Dyfi on a viaduct supported on timber trestles (Morgan 1991, 11) (plate 10a). This structure had deteriorated by the start of the 20<sup>th</sup> century, and work on rebuilding the bridge in ironwork started in 1906 (ibid, 9). The new bridge was carried on stone piers, with four steel spans (Boyd 1970, 26) (plate 10b). When the railway was abandoned the viaduct was one of the first sections to be demolished (Boyd 1970, 28). As a millennium project a new cycle bridge was constructed in the place of the viaduct. This new bridge is of a dramatic modern design and was opened on 22<sup>nd</sup> October 2001 (plate 10c). There is now little to see of the railway viaduct, though boulders lying against the south bank of the river presumably originate from it.

*Recommendations for further assessment: None*

*Recommendations for mitigatory measures: None*

**Feature 15 Ffridd Farm**

*SH 7496 0224*

*Period: 19<sup>th</sup> century*

*Category: C, Impact: None*

The farmhouse and the barns to its east are shown on the 1844 tithe map. At this time they were owned by John Edwards and occupied by Owen Jones. At the same time Vaughan Jones occupied Felin y Ffridd, and William Jones occupied Ddolderwen factory (tithe schedule). It is not known if all these Jones were closely related but it seems likely.

*Recommendations for further assessment: None*

*Recommendations for mitigatory measures: Avoid*

**Summary of importance and impact**

Feature no	Category	Impact	Mitigation measures
1	B	None	Avoid
2	B	None	Avoid
3	B	None	Avoid
4	B	Slight	Basic recording and watching brief
5	C	None	Avoid
6	C	Slight	Basic recording and watching brief
7	B	None	Avoid
8	C	None	Avoid
9	D	Considerable	Basic recording and watching brief
10	C	Likely	Detailed recording and watching brief

11	A	None	Avoid
12	D	Slight	Basic recording and watching brief
13	D	Slight	Basic recording and watching brief
14	D	None	Avoid
15	C	None	Avoid

## 5 RECOMMENDATIONS FOR MITIGATORY MEASURES

Most of the 15 features identified will not be affected by the road improvement works, though the presence of these sites should be considered if the plans for the work are changed in any way. The line of the railway (feature 4) should only be affected where new access is constructed to the fields. If this involves earth-moving then a watching brief is recommended in case any traces the railway, or of the earlier tramway, survive. The turnpike road (feature 6) will be significantly affected along the line of the improvements, but this is only a very short section of the road. It is possible that remains of the turnpike road, and possibly earlier road surfaces survive under the present road, so a watching brief is recommended where the present road surface has to be removed. The tracks (feature 12) and field boundaries (feature 13) west of the road will be cut through by the improvement work. These are of minor importance, and only the lower sections of the features will be destroyed so basic recording and a watching brief during destruction should be adequate. Feature 9 is likely to be completely destroyed by the works, but it is a small structure of only minor importance. Basic recording is recommended in advance of its destruction. Detailed recording involving a measured survey is recommended for feature 10, and there should be a watching brief if it is to be damaged by the works.

## 6 CONCLUSION

The assessment has identified 15 archaeological features in the study area. Of these 1 was categorised as of national importance, 5 of regional importance, 5 of local importance, and 4 of minor importance. The road improvement will have a slight impact on 4 of these features (features 4, 6, 12 and 13), a considerable impact on feature 9, and it is likely to also impact on feature 10. Mitigatory measures have been suggested to minimise the impact of the works on the archaeology. Most of the sites are avoided by the work, but those sites affected will require either detailed or basic recording. It is also recommended that an archaeologist be present to carry out a watching brief when work involving ground disturbance is carried out at the identified sites.

## 7 SOURCES

### Sources held by Gwynedd Archaeological Trust

OS 1:10,000 map sheets SH 70 SW (1980) and SH 70 SE (1979)

Gwynedd Sites and Monuments Record

Copy of Register of Buildings of Special Architectural or Historic Interest compiled by Cadw: Welsh Historic Monuments for the communities of Corris and Pennal

### Sources in Merioneth Record Office, Dolgellau

25" County Series map, Merioneth XLVII.8 (1901)

First edition 1" OS map, c1860s

Tithe map and schedule for Pennal parish, 1844 (poor copy held in Record Office, could not be reproduced in this report)



Z/CD/128 Corris-Machynlleth-River Dovey Tramway, plan and section with book of reference, 1850 (bound in book, not possible to obtain copy from Record Office, so not reproduced in this report)

Hough, G (ed), 1996 Pontydd Merionnydd, 1787-1817

William-Jones, K (ed), 1965 A calendar of the Merioneth Quarter Sessions Rolls, vol I, 1733-65

#### **Aerial Photographs**

Held by the Countryside Council for Wales

Line 53, frames 95 93 061 and 062, dated 17/08/93

#### **Published sources**

Archer, MS, 1971 The postal history of Wales with particular reference to Merioneth. *Journal of the Merioneth Historical and Record Society*, Vol VI (part III), 232-244

Boyd, JIC, 1970 *Narrow Gauge Railways in Mid-Wales*. Lingfield

Dodd, AH, 1925 The roads of North Wales, 1750-1850. *Archaeologia Cambrensis* vol LXXX, part I

Jervoise, E, 1936 *The Ancient Bridges of Wales and Western England*. London

Morgan, J S, 1991 *Corris: A Narrow Gauge Portrait*. Pinner

Parkinson, AJ, 1984 Fulling mills in Merioneth. *Journal of the Merioneth Historical and Record Society*, Vol IX (part IV), 420-456

Pritchard, RT, 1961 Merionethshire roads and turnpike trusts. *Journal of the Merioneth Historical and Record Society*, Vol IV (part I), 22-36

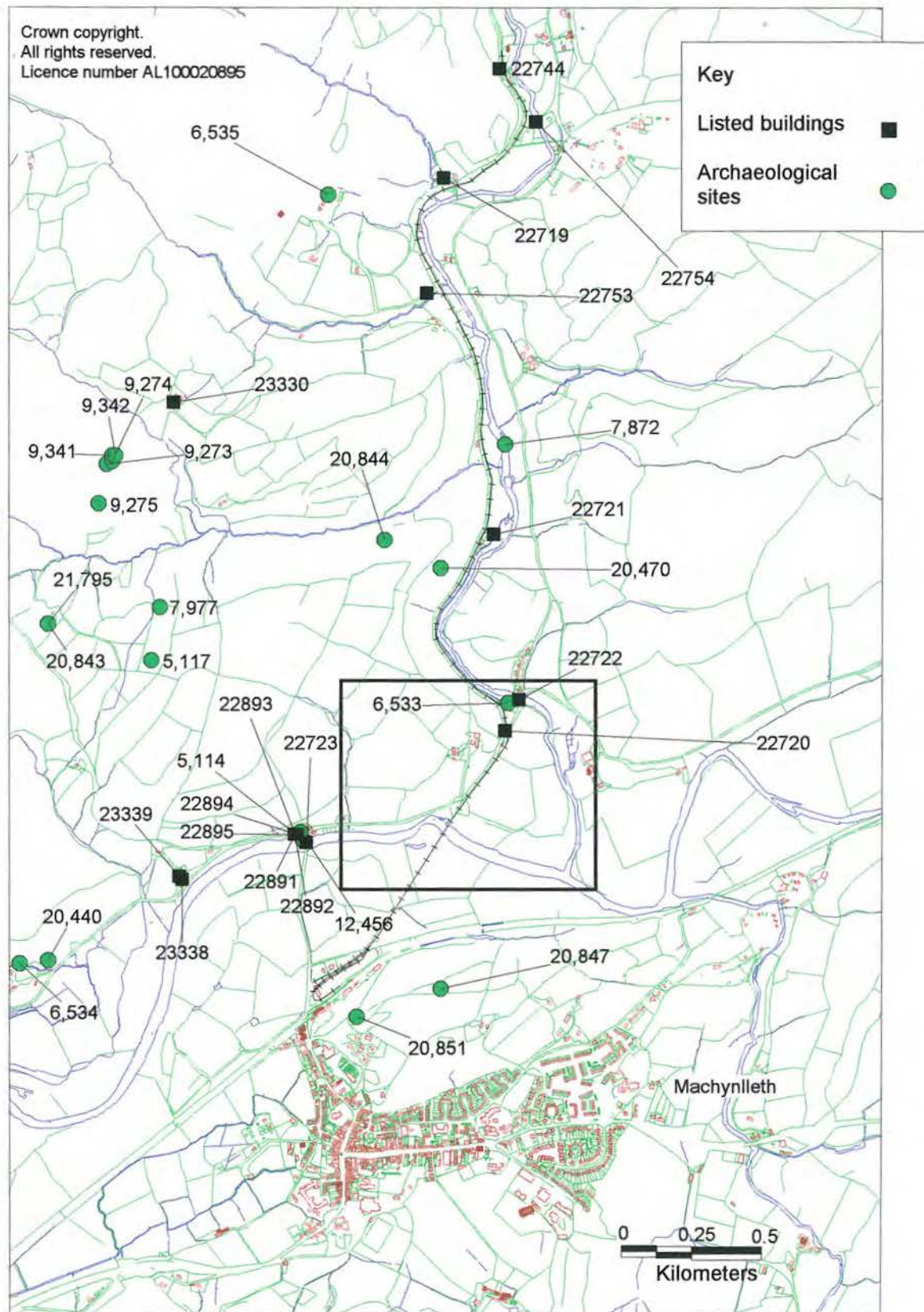


Figure 1: Location of archaeological sites and listed buildings in the area.  
Black rectangle indicates study area.

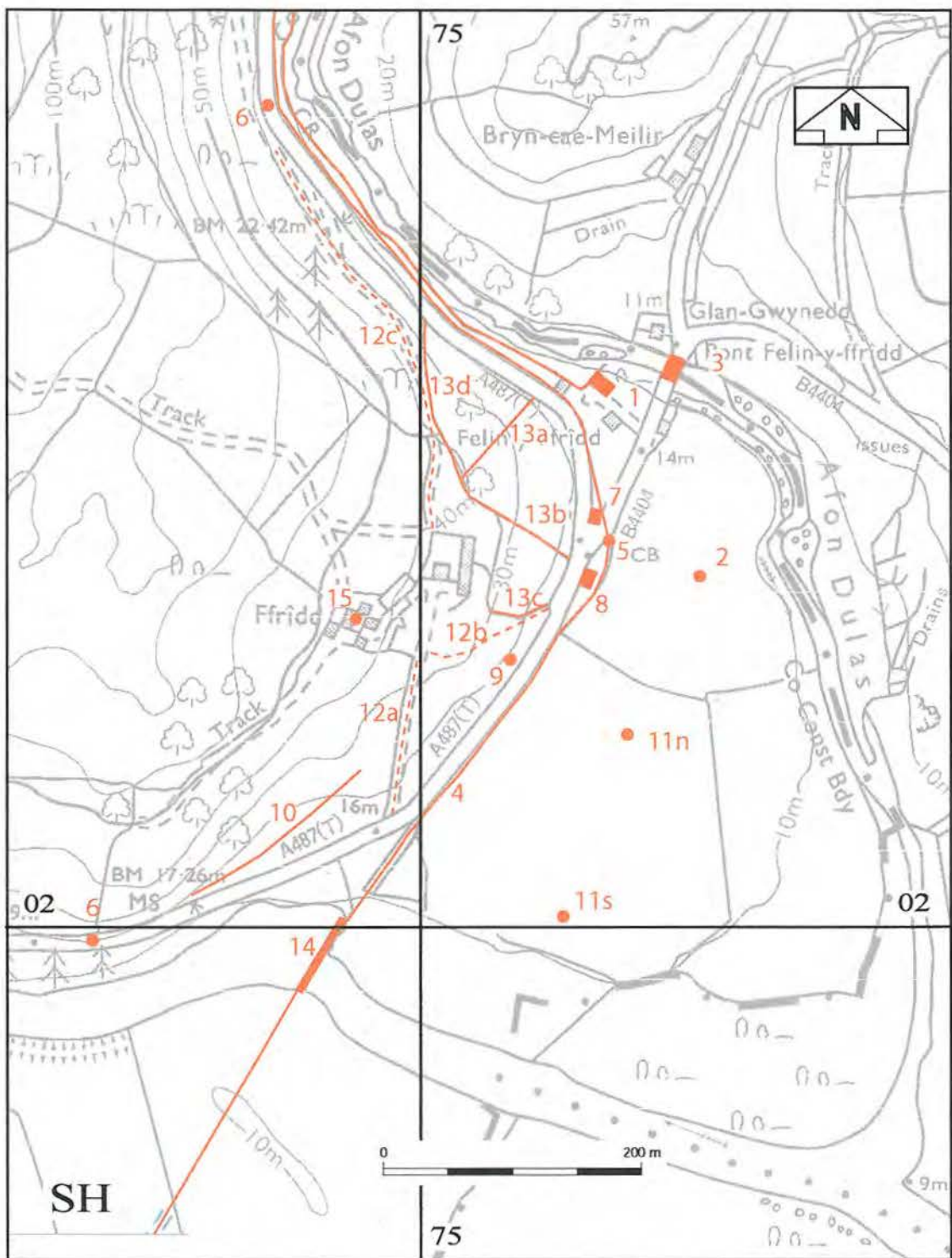


Figure 2: location of features



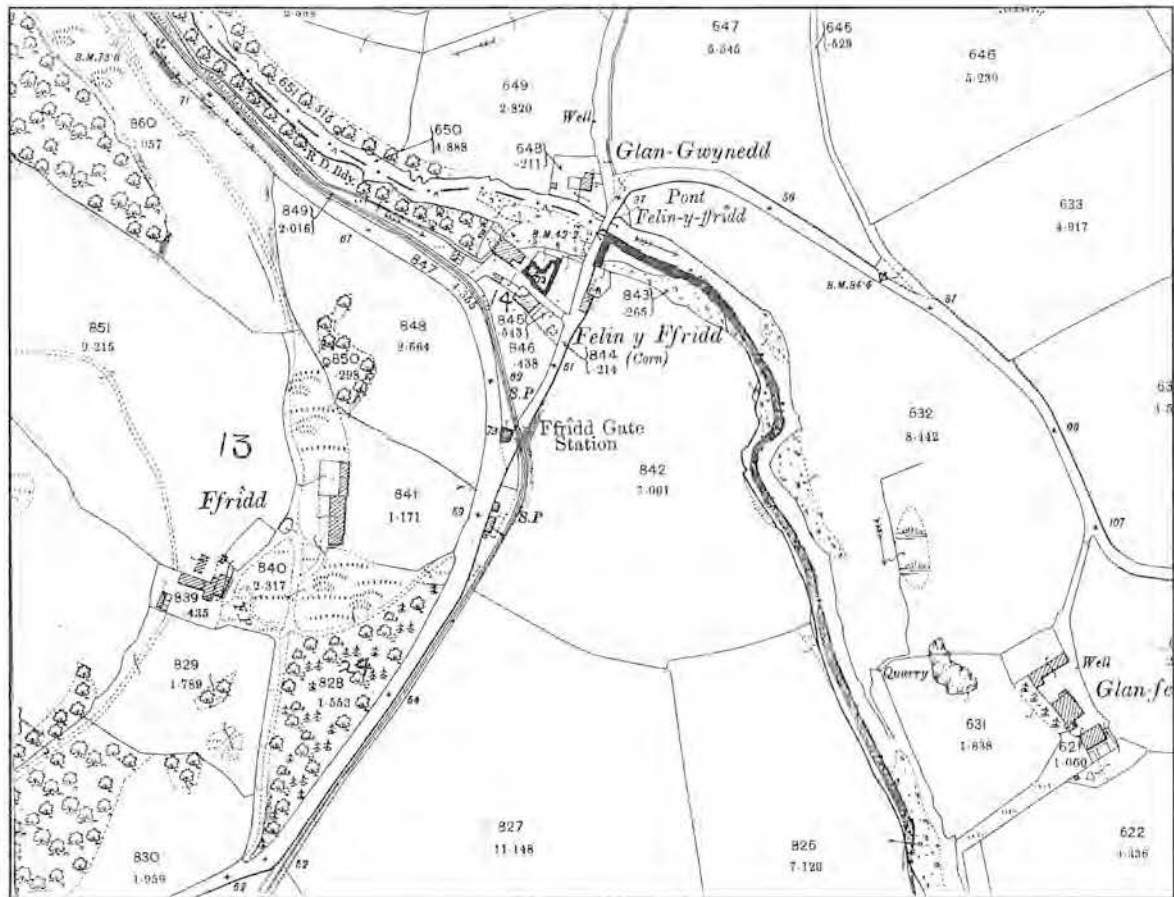


Figure 3: 25" County Series map, 1901

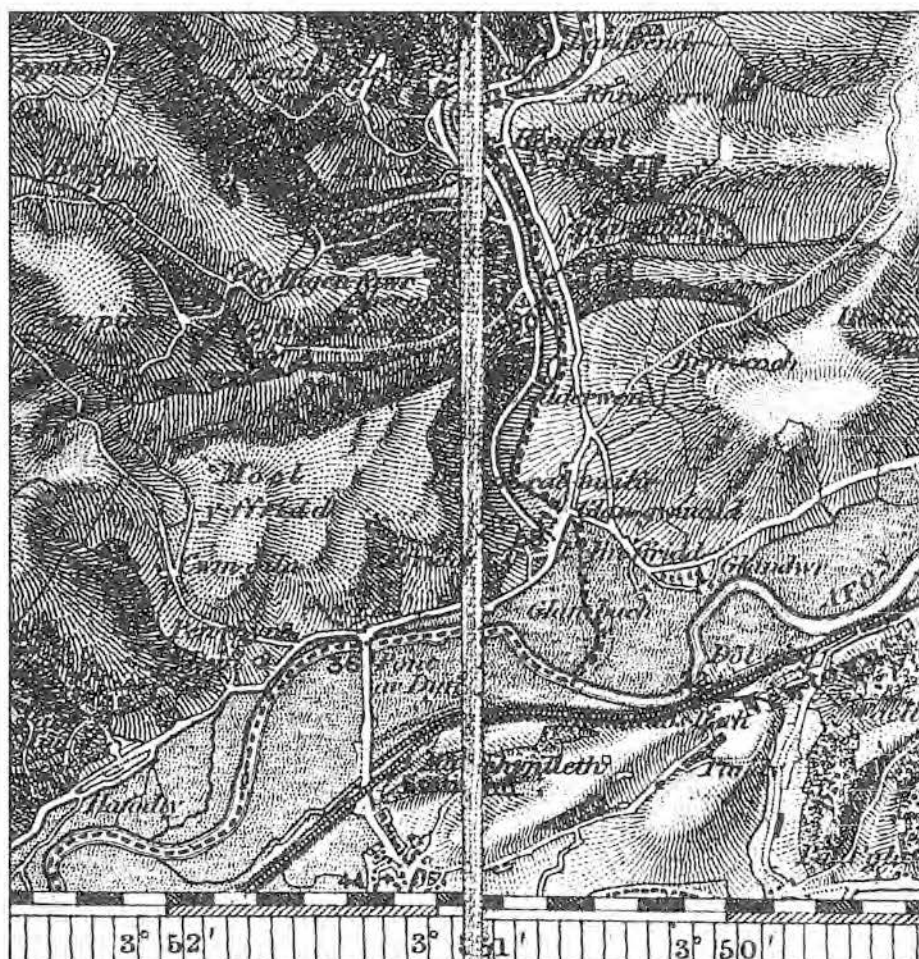


Figure 4: First edition 1" map, c1860s



Plate 1: Felin y Ffridd, feature 1



Plate 2: Pont Felin y Ffridd, feature 3





Plate 3a: Railway line at north end of study area

Plate 3b: Railway line north of Turnpike Cottage



Plate 3c: Line south of Haulfryn

Plate 3d: Line converted to cycle track  
in southern part of study area







Plate 4a: Ffridd Gate station (LGRP, in Morgan 1991, p46)



Plate 4b: Ffridd Gate station in use (Chris Hawkins Collection, in Morgan 1991, p46)



Plate 4c: The site of the station today, looking from NE.



Plate 5: Feature 7, Turnpike Cottage



Plate 6: Feature 8, Haulfryn



Plate 7: Feature 9, small structure



Plate 8: Feature 10, parallel scarps



Plate 9: Feature 11, two round barrows





Plate 10a: Timber bridge over the Dyfi (Brian Hilton Collection, in Morgan 1991, p9)



Plate 10b: New railway bridge over the Dyfi (Brian Hilton Collection, in Morgan 1991, p42)



Plate 10c: Millennium Project cycle bridge over the Dyfi

## **Appendix I**

List of archaeological sites around Ffridd Gate, as recorded on the Gwynedd Sites and Monuments Record.

## SMR sites around Ffridd Gate

---

### Period: MODERN

#### Prn: 6534

Sitename: PANTILUDW HOUSE, DOVEY VALLEY

Ngr: SH73400149 Century: 19th

Class: DOMESTIC Sitetype: HOUSE Form: BUILDING - ROOFED

Descatype: BUILDING

Notes:

---

#### Prn: 6535

Sitename: ESGAIRFOELEIRIN, PANT PERTHOG

Ngr: SH74500423 Century: 19th

Class: DOMESTIC Sitetype: HOUSE Form: BUILDING - ROOFED

Descatype: BUILDING

Notes:

---

### Period: POST MEDIEVAL

#### Prn: 5114

Sitename: MACHYNLLETH BRIDGE

Ngr: SH74410193 Century: 18th

Class: TRANSPORT Sitetype: BRIDGE Form: STONE BUILT FEATURE

Descatype: BRIDGE

Notes: PONT AR DYFI IS A STONE ROAD BRIDGE OF FIVE SEGMENTAL ARCHES CROSSING THE AFON DYFI. IT HAS A SPAN OF 30 YDS AND IS 18FT WIDE BETWEEN PARAPETS. A BRIDGE APPEARS TO HAVE EXISTED HERE IN THE EARLY C16TH, BUT IT IS NOT KNOWN WHEN THE PRESENT BRIDGE WAS BUILT.<1>

AS DESCRIBED.<2>

---

#### Prn: 6533

Sitename: FELIN Y FFRIDD, NR MACHYNLLETH

Ngr: SH75170239 Century:

Class: INDUSTRIAL Sitetype: MILL Form: BUILDING - ROOFED

Descatype: BUILDING

Notes:

---



## SMR sites around Ffridd Gate

---

### Prn: 7977

Sitename: GWYN - FYNYYDD MINE STRUCTURE

Ngr: SH739002760

Century:

Class: INDUSTRIAL Sitetype: INDUSTRIAL BUILDI Form:

Descatype:

Notes: Mine structure associated with the gold mine which lies outside FE land. Possibly a loading bay which measures 10m across and 2.5m high. Semi - circular in shape.

---

### Prn: 9273

Sitename: PEN-PINER HOUSE

Ngr: SH73710327

Century:

Class: DOMESTIC

Sitetype: HOUSE

Form:

Descatype:

Notes: House, east facing. The roof and upper floor have collapsed but much of the structure survives with wooden window frames still in place. The lintels and wall plates were originally timber these have begun to collapse leading to the eventual collapse

---

### Prn: 9274

Sitename: PEN-PINER

Ngr: SH73730328

Century:

Class: AGRICULTUR

Sitetype: FARMSTEAD

Form:

Descatype:

Notes: Farmstead comprising a house and two ranges of buildings on the west and north sides of a yard. The boundaries on the east side of the yard and garden were originally laid hedges. The garden area contains mature flowering currant and box.

---

### Prn: 9291

Sitename: HAFOTTY-CILGWYN

Ngr: SH77020432

Century:

Class: UNASSIGNED

Sitetype: BUILDING

Form:

Descatype:

Notes: Building c.18m x 5m aligned NE SW, divided internally into two compartments of which the southern has tree doorways and would appear to have been loose boxes. Construction is of coursed slate with random blocks of quartzite.

---

## SMR sites around Ffridd Gate

---

### Prn: 9341

Sitename: PEN-PINER BUILDING 1

Ngr: SH73730330

Century:

Class: UNASSIGNED Sitetype: BUILDING

Form:

Desctype:

Notes: The buildings on the west side comprise a loose box and a cow shed with three doors onto the yard.

---

### Prn: 9342

Sitename: PEN-PINER BUILDING 2

Ngr: SH73740330

Century:

Class: UNASSIGNED Sitetype: BUILDING

Form:

Desctype:

Notes: The northern range comprise a loose box and a barn with opposed entrances c.5m by 8m

---

### Prn: 12456

Sitename: PONT AR DDYFI 1-6

Ngr: SH74400196

Century:

Class: DOMESTIC Sitetype: BUILDING

Form:

Desctype: BUILDING

Notes:

---

### Prn: 20440

Sitename: NANT YR ERYR

Ngr: SH73500150

Century:

Class: INDUSTRIAL Sitetype: SLATE QUARRY

Form:

Desctype:

Notes:

---

### Prn: 20470

Sitename: AFON DULAIS

Ngr: SH74900290

Century:

Class: INDUSTRIAL Sitetype: SLATE QUARRY

Form:

Desctype:

Notes:

---

## SMR sites around Ffridd Gate

---

**Prn: 20843**

Sitename: LEAD TRIALS, BRON YR AUR/FOEL GOCH

Ngr: SH73500270

Century:

Class: INDUSTRIAL Sitetype: TRIAL

Form: OTHER STRUCTURE

Descatype: PIT, TUNNEL

Notes:

---

**Prn: 20844**

Sitename: LEAD MINE, FOEL Y FFRIDD, MACHYNLLETH

Ngr: SH74700300

Century:

Class: INDUSTRIAL Sitetype: MINE

Form: OTHER STRUCTURE

Descatype: PIT, TUNNEL

Notes:

---

**Prn: 20847**

Sitename: LEVELS, COED SLATER, MACHYNLLETH

Ngr: SH74900140

Century:

Class: INDUSTRIAL Sitetype: LEVEL

Form: OTHER STRUCTURE

Descatype: PIT, TUNNEL

Notes:

---

**Prn: 20849**

Sitename: QUARRY/LEVEL, COED Y MARCHLYN, MACHYNLLETH

Ngr: SH72900120

Century:

Class: INDUSTRIAL Sitetype: QUARRY

Form: OTHER STRUCTURE

Descatype: PIT, TUNNEL

Notes:

---

**Prn: 20851**

Sitename: QUARRY, PEN YR ALLT, MACHYNLLETH

Ngr: SH74600130

Century:

Class: INDUSTRIAL Sitetype: QUARRY

Form: OTHER STRUCTURE

Descatype: PIT, TUNNEL

Notes:

---

## SMR sites around Ffridd Gate

---

### Prn: 21795

Sitename: FOEL GOCH MINE

Ngr: SH73500270 Century: 18th

Class: INDUSTRIAL Sitetype: LEAD MINE Form: EARTHWORK

Descatype: PIT, MOUND

Notes: History: produced some ore c. 1760.

---

### Period: UNDETERMINED

### Prn: 5117

Sitename: CIRCULAR CROPMARK, FOEL-Y-FFRIDD

Ngr: SH73870257 Century:

Class: UNASSIGNED Sitetype: CROPMARK Form: AP SITE

Descatype:

Notes:

---

### Prn: 7872

Sitename: WORKED WOOD, AFON DULAS NR PANT PERTHOG

Ngr: SH75130334 Century:

Class: OBJECT Sitetype: FINDSPOT Form: FIND ONLY

Descatype:

Notes: A SMALL QUANTITY OF WOOD, PROBABLY OAK, WITH AXE MARKS AT ONE END BUT OTHERWISE ROUND IN SECTION, CAN BE SEEN ERODING OUT OF THE WEST BANK OF THE AFON DULAS, NEAR PANT PERTHOG. SIGNIFICANT EROSION OF THE RIVER BANK AT THIS POINT HAS REVEALED A SECTION CONSISTING PLOUGH SOIL, A NUMBER OF LAYERS OF WATER WORN PEBBLES OF VARIOUS SIZES, SOME OF WHICH ARE STAINED ORANGE AND SOME BLACK. THE WOOD CAME FROM THE BASE OF A DEEP LAYER OF CLAY, 0.5 - 1.0M THICK WHICH ENDS WITH THE RIVER BED. THE LOCATION OF THE WOOD IS C.1.75M BELOW PRESENT GROUND LEVEL.

A PIECE OF WOOD HAS BEEN REMOVED FROM THE BANK BY THE FINDER. THIS IS ALSO PROBABLY OAK AND SHOWS SIMILAR AXE MARKS.<1>

---

### Period: UNKNOWN

## SMR sites around Ffridd Gate

---

**Prn: 9275**

Sitename: PEN PINER WELL

Ngr: SH73680313

Century:

Class: WATER AND

Sitetype: WELL

Form:

Descype:

Notes: Not found OS map shows a well lying between a boundary and a track way, both of these features survive but no surface indication of a well.

---

## **Appendix II**

Listed Buildings around Ffridd Gate, as recorded in the Register of Buildings of Special Architectural or Historic Interest compiled by Cadw: Welsh Historic Monuments for the communities of Corris and Pennal.



## Listed buildings around Ffridd Gate

---

**RecNo:** 22719      Grade II

Name Neuadd Bentref

Function: Village school

Grid ref.: 274910      304290

---

**RecNo:** 22720      Grade II

Name Turnpike Cottage

Function: Turnpike Cottage

Grid ref.: 275130      302320

---

**RecNo:** 22721      Grade II

Name Dol-y-dderwin

Function: Gentry house

Grid ref.: 275090      303020

---

**RecNo:** 22722      Grade II

Name Pont Felin-y-ffridd

Function: Bridge

Grid ref.: 275180      302430

---

**RecNo:** 22723      Grade II\*

Name Pont ar Ddyfi

Function: Bridge

Grid ref.: 274420      301920

---

**RecNo:** 22744      Grade II

Name Milestone

Function: Milestone

Grid ref.: 275110      304680

---

**RecNo:** 22745      Grade II

Name Milestone

Function: Milestone

Grid ref.: 275920      305760

---

## Listed buildings around Ffridd Gate

---

**RecNo: 22753**                      Grade    II

Name   Llidwy

Function: Park lodge

Grid ref.:    274850            303880

---

**RecNo: 22754**                      Grade    II

Name   Pont Llwyngwern

Function: Bridge

Grid ref.:    275240            304490

---

**RecNo: 22891**                      Grade    II

Name   2 Pen-y-bont Cottages

Function: Cottage

Grid ref.:    274380            301950

---

**RecNo: 22892**                      Grade    II

Name   3 Pen-y-bont Cottages

Function: Cottage

Grid ref.:    274380            301950

---

**RecNo: 22893**                      Grade    II

Name   4 Pen-y-bont Cottages

Function: Cottage

Grid ref.:    274380            301950

---

**RecNo: 22894**                      Grade    II

Name   5 Pen-y-bont Cottages

Function: Cottage

Grid ref.:    274390            301950

---

**RecNo: 22895**                      Grade    II

Name   6 Pen-y-bont Cottages

Function: Cottage

Grid ref.:    274380            301950

---

### Listed buildings around Ffridd Gate

---

**RecNo: 23328**                      Grade   II

Name   Dolgelynen

Function: Farmhouse

Grid ref.:    272640            300250

---

**RecNo: 23329**                      Grade   II

Name   Llugwy Lodge

Function: Lodge

Grid ref.:    271130            300040

---

**RecNo: 23330**                      Grade   II

Name   Gelligan Fawr

Function: Farmhouse

Grid ref.:    273950            303490

---

**RecNo: 23333-6**                    Grade   II

Name   1-4 Tithe Barn Cottages

Function: Row of cottages

Grid ref.:    270040            300380

---

**RecNo: 23338**                      Grade   II

Name   Farm range at Penrhyn-dyfi

Function: Farm buildings

Grid ref.:    273980            301790

---

**RecNo: 23339**                      Grade   II

Name   Pigsty at Penrhyn-dyfi

Function: Pigsties

Grid ref.:    273970            301800

---

**RecNo: 23340**                      Grade   II

Name   Pant Lludw

Function: Lodge

Grid ref.:    273300            301520

---

### Listed buildings around Ffridd Gate

---

**RecNo:** 23341      Grade II

Name Milestone

Function: Milestone

Grid ref.: 272750      300900

---

**RecNo:** 5233      Grade II

Name 1 Pen-y-bont Cottages

Function: Cottage

Grid ref.: 274380      301950

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