

---

# PONT BRYN Y FELIN, BEDDGELERT

---



## ARCHAEOLOGICAL WATCHING BRIEF

**GAT Project No. G2007**

**Report No. 731**

**May 2008**



---

# **PONT BRYN Y FELIN, BEDDGELERT**

---

## **ARCHAEOLOGICAL WATCHING BRIEF**

**Report No. 731**

**Prepared for Prepared for Ymgynghoriaeth GWYNEDD Consultancy**

**May 2008**

**By**

**John Roberts**



---

# PONT BRYN Y FELIN, BEDDGELERT

---

## ARCHAEOLOGICAL WATCHING BRIEF

### Figure List

Figure 01: Site Location Map

Figure 02: location of boundary wall identified during watching brief

### Plate List

Plate 01: Existing A498 Road and field entrance used as start point for temporary relief road

Plate 02: Route of temporary relief road prior to excavation

Plate 03: close-up view looking north of temporary relief road area

Plate 04: close-up view looking south of temporary relief road area

Plate 05: view north of temporary relief road area during excavation

Plate 06: view north of temporary relief road area during excavation

Plate 07: view northeast of temporary relief road

Plate 08: view west of boundary wall prior to breach. Ranging pole is positioned across a stone-built culvert incorporated into the wall

Plate 09: view southwest of boundary wall prior to breach

Plate 10: view southwest of boundary wall during breach

Plate 11: location of temporary relief road across railtrack prior to works

Plate 12: existing north elevation of road bridge prior to demolition

Plate 13: close-up of north-facing elevation prior to demolition, detailing steel parapet, road plate, concrete abutment and steel girder shell

Plate 14: close-up of concrete abutment attached to north-facing elevation

Plate 15: detail of steel girders supporting bridge superstructure

Plate 16: detail of short concrete abutment attached to north facing elevation

Plate 17: south-facing elevation comprising two concrete abutments, steel girder shell, road plate and steel parapet

Plate 18: short concrete abutment attached to south-facing elevation

Plate 19: detail of steel girders supporting road plate and existing parapet

Plate 20: view northeast of existing road bridge prior to demolition

Plate 21: View west of Pont y Felin road bridge during initial demolition phase

Plate 22: View west of Pont y Felin road bridge during final demolition phase

Plate 23: View west of the southern embankment during the excavation phase

Plate 24: View east after excavation of southern embankment complete, detailing the glacial activity at the limit of excavation



## **PONT BRYN Y FELIN, BEDDGELERT**

### **ARCHAEOLOGICAL WATCHING BRIEF (G2007)**

*An archaeological watching brief has been conducted during the Pont Bryn y Felin alteration works. The watching brief monitored the topsoil stripping associated with the construction of a temporary relief road and the subsequent demolition of the existing bridge and embankment.*

*The temporary relief road was located c.680.0m to the southeast of Beddgelert and measured 100.0m in length and 6.0m in width and was attached to the existing A498. The relief road was constructed within a large enclosed pasture field (centred on NGR SH59054739) to enable diverted traffic flow during the demolition and rebuilding of a road bridge over the Welsh Highland Railway railtrack.*

*The route of the current A498 road is thought to include the former route of the Segontium to Tomen Mur Roman Road (PRN 17539) and the watching brief was conducted during the initial excavation phase to identify any examples of this or other archaeological activity.*

*No archaeological activity was identified within the excavation area. A short length of field boundary wall was breached during the construction of the road. A photographic record was maintained of both this and the road bridge. The latter was photographed prior to the commencement of work.*

*The subsequent demolition of the bridge abutments and the excavation of the associated embankments were also monitored. No evidence of the Roman road was forthcoming, but the truncated remains of a wall was identified within the southern embankment, which appeared to be a former boundary wall that followed the original alignment of the road prior to the construction of the WHR railway.*

### **1.0 INTRODUCTION**

Gwynedd Archaeological Trust has been asked by Ymgynghoriaeth GWYNEDD Consultancy to conduct an archaeological watching brief during the demolition of the Pont Bryn y Felin road bridge and the construction of a temporary relief road, located to the southeast of Beddgelert, Gwynedd (centred on NGR SH59054739).

The temporary relief road measured 100.0m in length and 6.0m in width and was attached to the existing A498. The relief road was constructed within a large enclosed pasture field (centred on NGR SH59054739) to enable diverted traffic flow during the demolition and rebuilding of a road bridge over the Welsh Highland Railway railtrack (Figure 01).

No brief has been prepared for this work by Snowdonia National Park Authority (SNPA), but guidance has been given in the form of a summary of requirements and reference will also be made to the guidelines specified in Standard and Guidance for Archaeological Watching brief (Institute of Field Archaeologists, 1994, rev. 2001).

### **2.0 PROJECT BACKGROUND**

The route along the present A498 at this location has been designated within the Regional Historic Environment Record (Gwynedd Archaeological trust) as PRN 17539 and is thought to include the former route of the Segontium to Tomen Mur Roman Road (Hopewell 2007, GAT Report 668). The exact location of the Roman road within this area has not been confirmed to date and the route remains postulated.

An **intermittent watching brief** (see Appendix I for a definition) was proposed along the route of the temporary relief road. A photographic record of the road bridge was also recommended (Ref.: 2106EB01/D1081) and was undertaken prior to works.

### **3.0 METHODS AND TECHNIQUES**

#### Temporary Relief Road

The watching brief for the temporary relief road was undertaken on the 18<sup>th</sup> of March 2008.

The aim of the watching brief was to monitor the topsoil strip of the temporary relief road (Figure 1).

A Volvo ECR-88 8-tonne 360°-tracked excavator was used throughout the watching brief.

A photographic record was maintained throughout, using a Nikon D40 DSLR. The archive is held by GAT under the project number **G2007**.

#### Pont Bryn y Felin

The watching brief for the demolition of the Pont Bryn y Felin road bridge was undertaken between the 6<sup>th</sup> and 16<sup>th</sup> of May 2008.

The aim of the watching brief was to monitor the demolition of the existing bridge abutments and the excavation of the associated embankment that carried the road.

A JCB 8060 8-tonne 360°-tracked excavator and a Komatsu PC130 13-tonne 360°-tracked excavator were used throughout the watching brief.

A photographic record was maintained throughout, using a Nikon D40 DSLR. The archive is held by GAT under the project number **G2007**.

### **4.0 TOPOGRAPHY**

The development area is located c.680m to the southeast of Beddgelert, along the route of the A498 road, within a large enclosed field currently used for pasture. The field slopes from west to east and is separated from the A498 and the Welsh Highland Railway track by a stone built wall. The railway track approaches the A498 from the southeast and crosses beneath the road via a road bridge to then continue northwards on a parallel alignment with the road (Figure 01).

### **5.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

#### The Welsh Highland Railway

The road bridge due for replacement was originally built to cross the Welsh Highland railway line and was constructed c.1922-23 (Ref.: 2106EB01/D1081). The Welsh Highland Railway was formed in 1922 from the merger of two companies - the North Wales Narrow Gauge Railways (NWNGR) and the Portmadoc, Beddgelert and South Snowdon Railway (PBSSR) (successor to the Portmadoc, Croesor and Beddgelert Tram Railway). The section of the railtrack within the watching brief area utilised the existing road layout during its construction: the road was diverted to cross the railway via the road bridge and the railway followed the alignment of the existing road (Ref.: 2106EB01/D1081).

### **6.0 RESULTS OF THE PHOTOGRAPHIC RECORD**

The photographic record was completed using a Nikon D40 DSLR (Image Size: 3008 x 2000/1.5 megabytes). The archive is held by Gwynedd Archaeological Trust under the project number (**G2007**), with the photographic images stored on the JPEG Interchange Format.

The road bridge was constructed between 1922 and 1923 and is built from concrete with a steel girder shell. The alteration works will include the demolition of this current structure and its replacement with a new concrete structure.

The existing structure measures 4.97m in height c.10.0m in length and 6.00m in width (Plates 12 to 19). Concrete abutments are attached to the existing north and south elevations (Plates 14 to 18). Eight steel girders onto which the road plate is set (Plate 15), support the road. The parapet is also constructed from steel.

### **7.0 RESULTS OF THE WATCHING BRIEF**

#### Temporary Relief Road



The route of the relief road exploited the southeastern end of an enclosed field and utilised an existing field entrance as the starting point of the road (Figure 01; Plate 01). The road then continued through the field and breached an existing field boundary to then continue across the Welsh Highland railway track to rejoin the A498 (Plates 02 to 04).

The depth of excavation was shallow and was limited mainly to the topsoil horizon (Plates 05 to 07). As a result, there was limited potential for identifying archaeological activity. The only “feature” identified was a former watercourse, which was visible at the northern end of the relief road strip as a gravel-rich deposit (Plate 06). This feature could be seen as a depression running down the slope prior to the excavation works.

A field boundary wall was breached during the works (Plates 07 to 09). This area was also monitored and particular attention was paid to the construction of the wall. The wall measured 1.0m in height and comprised roughly coursed stonework (sub-angular and sub-rounded), comprising horizontally laid slabs, which were capped with smaller sub-rounded stones (Plate 09). The breach measured 6.0m and the wall was removed within this area down to foundation level (Plate 10). A stone-built culvert was identified within the wall, built from the same material and located at foundation level (Plate 08). The culvert measured 0.75m in width and was exposed but not removed during the works.

### Pont Bryn y Felin

Prior to the watching brief, the road and its support structure had been removed and the watching brief focused on the demolition of the main concrete abutments (north and south) and the excavation of the associated embankments that carried the road (Plates 21 and 22).

The embankments were constructed from imported material comprising building waste and bioturbated soil. Within the southern embankment, c.4.0m below the current road surface and sealed by the imported material, was a short length of stone walling, c.2.0m long and one course high, built from irregular sub-angular stone (Plate 23). This structure was interpreted as a truncated boundary wall that existed prior to the construction of the WHR railway track. An examination of the available map evidence (25” Ordnance Survey Map (1915) LXXX.5; Figure 02) suggested that the wall formed the western boundary of the original road prior to construction of the railway line/road bridge.

No further activity was visible in either embankment and limit of excavation in both examples comprised Morainic Drift geology (Plate 24). No definitive evidence of the Roman Road was forthcoming at this location. The final excavation depth was 6.50m below the existing road surface.

## **8.0 BIBLIOGRAPHY**

Hopewell, D., 2006. “Roman roads in North-West Wales”. GAT Report 668 Parts I & II.

IFA. 2001. *Institute of Field Archaeologists 2001 Standard and Guidance for an archaeological watching brief.*

## Appendix I

### Definition of an archaeological watching brief

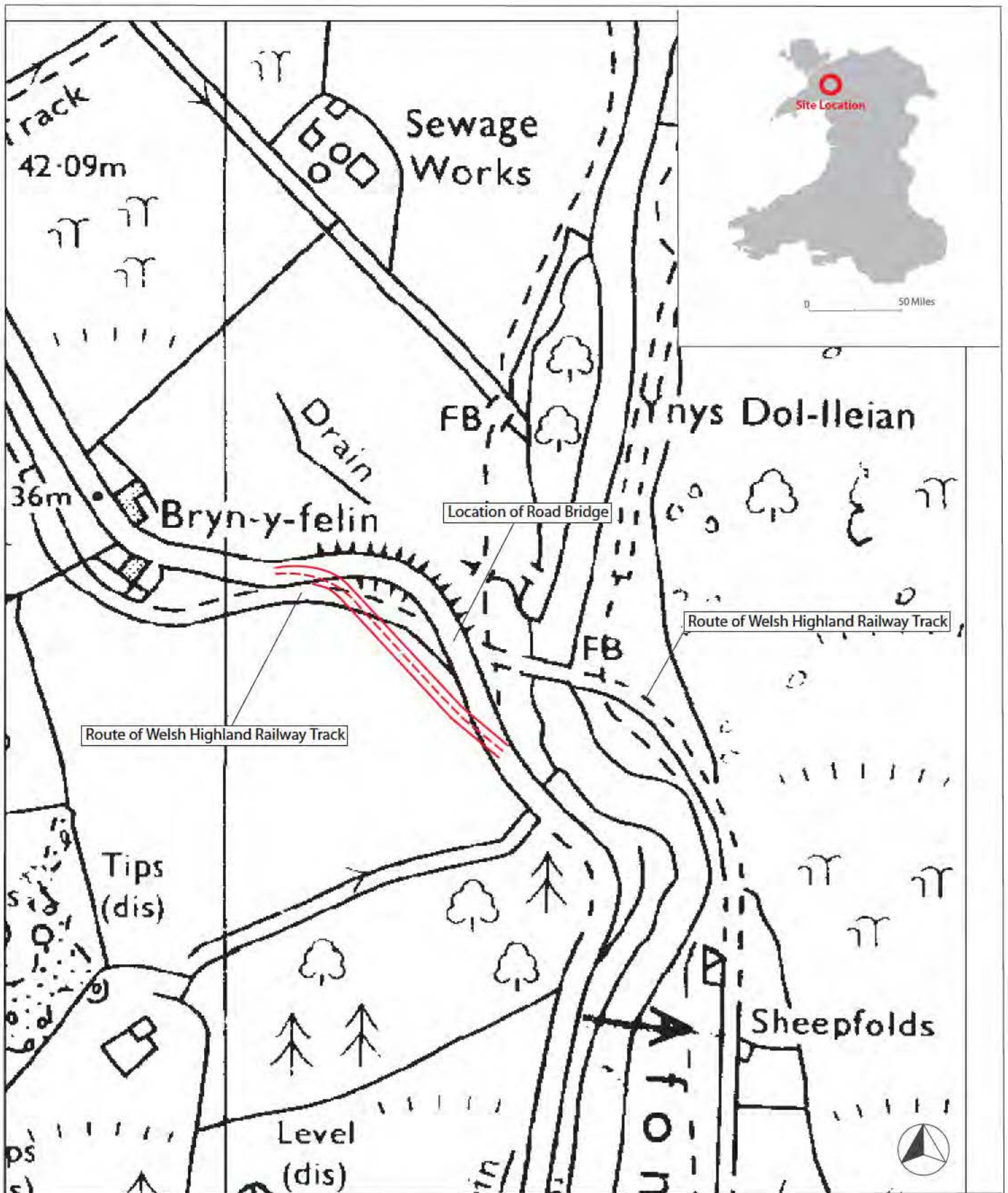
(Reproduced from IFA. 2001. *Institute of Field Archaeologists 2001 Standard and Guidance for an archaeological watching brief*)

The definition of an archaeological watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.

This definition and *Standard* do not cover chance observations, which should lead to an appropriate archaeological project being designed and implemented, nor do they apply to monitoring for preservation of remains *in situ*.

An archaeological watching brief is divided in to four categories according the IFA. 2001. *Institute of Field Archaeologists 2001 Standard and Guidance for an archaeological watching brief*:

- comprehensive (present during all ground disturbance)
- intensive (present during sensitive ground disturbance)
- intermittent (viewing the trenches after machining)
- partial (as and when seems appropriate).



Temporary relief road is highlighted in RED.

GWYNEDD  
ARCHAEOLOGICAL  
TRUST

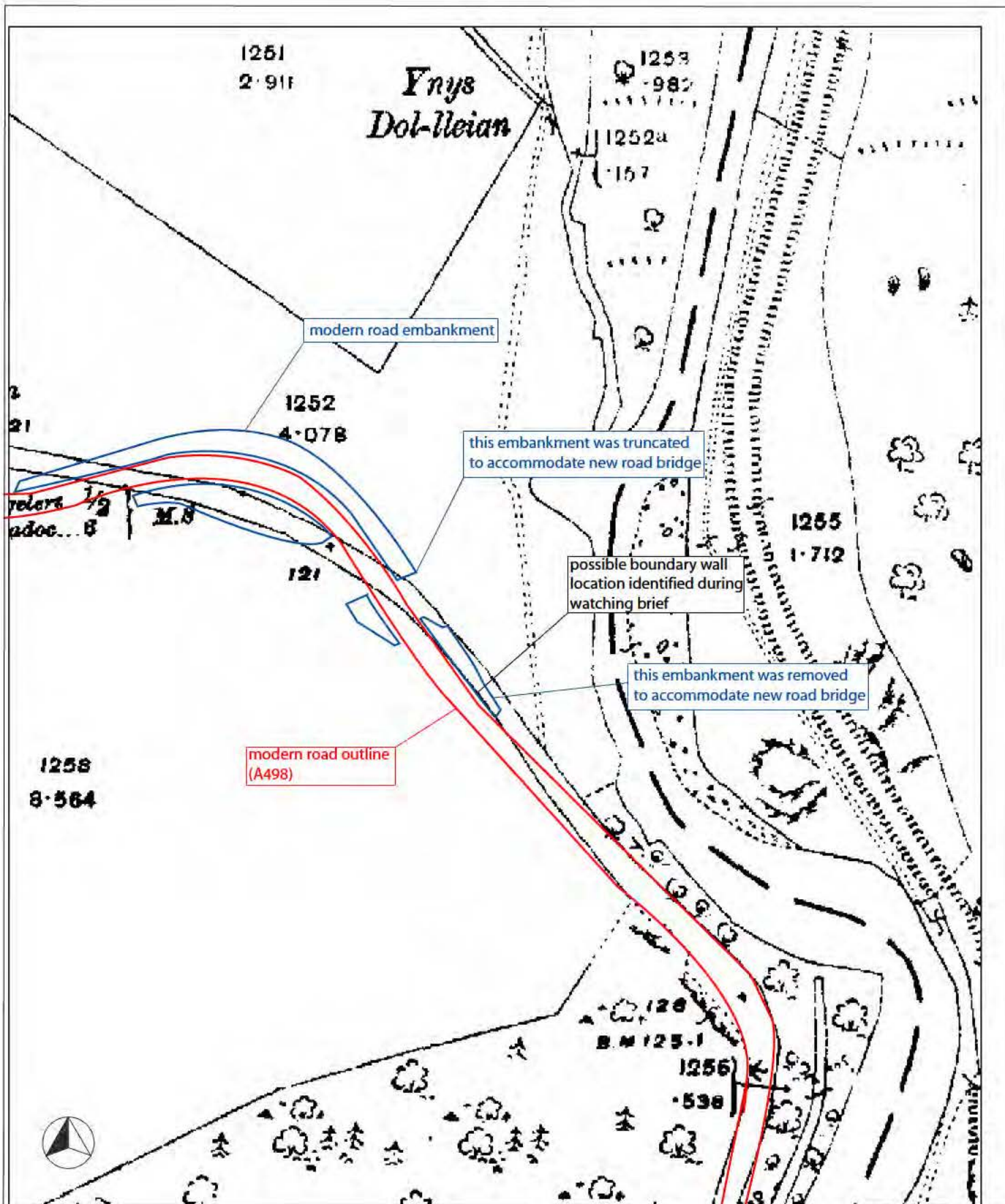


GWYNEDD  
ARCHAEOLOGICAL  
TRUST

Craig Beuno, Ffordd y Garth, Bangor, Gwynedd LL57 2RT  
Ffôn: 01248 352535. Ffacs: 01248 370925. email: g@heneb.co.uk

Figure 01: Location Map  
Scale: 1:1250@A4





modern road outline (A498) highlighted in RED

modern road embankment highlighted in BLUE

Source: 25" Ordnance Survey Map (1915) LXXX.5 with modern information overlay

WYDREDDOLLETH  
RICHARD GOSSEL  
GWYNEDD



GWYNEDD  
ARCHAEOLOGICAL  
TRUST

Craig Beuno, Ffordd y Gath, Bangor Gwynedd LL57 2RT  
Ffon: 01248 352535. Ffacs: 01248 370925. email: gath@wreth.co.uk

**Figure 02: location of boundary wall identified during watching brief**

**Scale: 1:1250@A4**





**Plate 01: Existing A498 Road and field entrance used as start point for temporary relief road**



**Plate 02: Route of temporary relief road prior to excavation**





**Plate 03: close-up view looking north of temporary relief road area**



**Plate 04: close-up view looking south of temporary relief road area**





**Plate 05: view north of temporary relief road area during excavation. Note the shallow excavation depth; a geotextile membrane was placed over this area and the road surface on top**



**Plate 06: view north of temporary relief road area during excavation. Note waterchannel in foreground**





**Plate 07: view northeast of temporary relief road. The ranging pole is positioned against a boundary wall that was breached during works to allow the relief road to cross the railtrack**



**Plate 08: view west of boundary wall prior to breach. Ranging pole is positioned across a stone-built culvert incorporated into the wall**





**Plate 09: view southwest of boundary wall prior to breach**



**Plate 10: view southwest of boundary wall during breach**





**Plate 11: location of temporary relief road across railtrack prior to works**



**Plate 12: existing north elevation of road bridge prior to demolition**





**Plate 13: close-up of north-facing elevation prior to demolition, detailing steel parapet, road plate, concrete abutment and steel girder shell**



**Plate 14: close-up of concrete abutment attached to north-facing elevaton. Measures 4.97m in height and 12.2m in length**





**Plate 15: detail of steel girders supporting bridge superstructure**



**Plate 16: detail of short concrete abutment attached to north facing elevation. Measures up to 4.97m in height and 4.06 in length**





**Plate 17: south-facing elevation comprising two concrete abutments, steel girder shell, road plate and steel parapet**



**Plate 18: short concrete abutment attached to south-facing elevation. Measures 4.97m and 3.26m in length**





**Plate 19: detail of steel girders supporting road plate and existing parapet**



**Plate 20: view northeast of existing road bridge prior to demolition**





**Plate 21: View west of Pont y Felin road bridge during initial demolition phase**



**Plate 22: View west of Pont y Felin road bridge during final demolition phase**





**Plate 23:** View west of the southern embankment during the excavation phase. Note the possible truncated wall to the left of the machine bucket



**Plate 24:** View east after excavation of southern embankment complete, detailing the glacial activity at the limit of excavation





YMDDIRIEDOLAETH  
ARCHAEOLEGOL  
GWYNEDD



GWYNEDD  
ARCHAEOLOGICAL  
TRUST

Craig Beuno, Ffordd y Garth, Bangor, Gwynedd. LL57 2RT  
Ffon: 01248 352535. Ffacs: 01248 370925. email: [gat@heneb.co.uk](mailto:gat@heneb.co.uk)