DRWS Y NANT ROAD IMPROVEMENT SCHEME

ARCHAEOLOGICAL RECORDING & WATCHING BRIEF

REPORT NO. 301

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Prepared for Cyngor Gwynedd Council May 1998

Ymddiriedolaeth Archaeolegol Gwynedd Gwynedd Archaeological Trust

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1. INTRODUCTION

Cyngor Gwynedd Highways and Engineering Department have improved a section of the A494 road to the west of Drws y Nant as part of the upgrading of the Dolgellau to the south of Birkenhead trunk road. The new section runs between SH81022237 to the north-east of Rhydymain and SH82022319 to the north-east of the bridge at Drws y Nant. The work was undertaken by the consultants Christiani & Nielsen with the contractors Jones Bros of Ruthin.

An archaeological assessment of the route was carried out in January 1994 (GAT Report No. 78) in which recommendations for mitigatory measures were made for the survey and recording of some sites prior to the commencement of construction work. It was also recommended that an archaeological watching brief should accompany the phases of top-soil stripping and subsequent construction along the route. Gwynedd Archaeological Trust (Contracts Section) submitted a project design and quotation for this archaeological work which was accepted.

2. ARCHAEOLOGICAL AIMS

The aims of the work were to record sites 1, 2, 4, 5, 6, 7, 8, 9 & 10, identified in GAT Report No. 78, at a basic level prior to the start of work. In addition a watching brief was to be carried out during relevant phases of construction to ensure any sites revealed were fully investigated and recorded.

3. METHODOLOGY

3.1 Recording

A basic record, consisting of a photographic survey and written description, was carried out for each of the sites identified in GAT Report No. 78. These included the features associated with the disused Bala to Dolgellau railway line (Sites 1a – 1l), the trackways (Sites 4 & 6), Pont Esgair-gawr footbridge (Site 5) and the features identified to the east of the bridge at Drws y Nant (Sites 9 & 10).

3.2 Watching Brief

The route of the road improvement was examined prior to and following vegetation clearance between 22nd December 1997 and 19th May 1998. Work began to the east of Drws y Nant bridge where a hard standing for the heavy machinery was laid on the track bed of the disused railway station. This enabled vehicles to get off the narrow Class III road to Bryncoedifor. The track bed of the old railway was then cleared of vegetation from the Drws y Nant bridge westwards to just east of Pont Esgair-gawr. A surface of stone chippings was laid so that it could be used as a route for heavy machinery working at the west end of the site.

The route was also examined at intervals during the course of construction between 2nd February 1998 and 19th May 1998.

4. TOPOGRAPHY

The geomorphology of the Afon Wnion valley changes at Drws Y Nant from the glacial 'U' shaped valley to the east to become a narrow 'V' shaped valley to the west. The underlying geology consists of sedimentary shales overlain by glacial drift. On the south side of Afon Wnion to the west of Drws y Nant bridge is a terminal moraine up to 7m in depth which extends westward for c. 200m. The top soil along the old railway line to the west of Drws

y Nant bridge consists of a grey brown silty clay with frequent stone inclusions. Further west and to the north of the existing A494 the top soil consists of a reddish brown sandy matrix with abundant small angular stone fragments and frequent larger stones. This is also found to the east of Drws y Nant bridge.

Afon Wnion was culverted in its present position, to the north of Drws y Nant station, when the railway was built in 1868. Previously it had flowed further to the south although the 'U' shaped valley to the east shows, through the deposits of river gravels, that the river has often changed its alignment since the last glaciation.

5. RESULTS

5.1 Archaeological background

Sites of archaeological and historical interest of all periods are present in this area. There is evidence for continued activity in the region since the Bronze Age. Known sites within the corridor of interest belong to the Roman and Post Medieval periods. Of particular note is the alignment of the Roman road (PRN 3849) which passes through the valley, the remains of early turnpike roads and the features belonging to the Bala to Dolgellau railway with its station at Drws y Nant.

The features are described as they occur from west to east along the course of the road. The features associated with the old Bala to Barmouth railway are listed separately as they occur along the old track from west to east.

5.2 Stone mounds - SH81052241 - Site 11 6 215 8

Several stone mounds were noted to the north of the road at the west end of the route during the recording of features prior to construction. Several of these features were likely to be field clearance cairns while others proved to be natural, forming part of the rough stony slope above the road. Stones from two of these mounds were used in the construction of a new boundary wall running east-west and another was destroyed during top-soil stripping.

5.3 Boundary wall - SH81072241 - Site 12 6715 9

A short section of boundary wall running north-west to south-east at right angles to the main field wall was destroyed during construction work. It was a dry stone wall c. 2m high to the west of the steep slope on the north side of the old A494. It was replaced by the new wall running west from the remaining field wall to the stream at SH81022238.

5.4 Cairn - SH81142249 - Site 3 3 6 5 2

The large grass-covered mound is a most likely to be a field clearance cairn. The low oval mound 11m long x 4m wide rests against the field wall to the south and comprises mostly small stones interspersed with a few larger boulders. It is located at the top of the steep slope 300m to the north of the road and was unaffected by the construction work.

5.5 Track - SH81282254 - SH81162251 - Site 4

This feature ran diagonally from the road north-east up the slope for 80m to the field boundary above. The 2.5m wide track was cut into the hillside with a revetment on the south side. At right angles to the northern end of the track was a 2m length of low dry stone walling and a large spread of loose stone. The track had recently been cut along its length by the insertion of a plastic drainage pipe. On 13th March 1998 a section was cut through this feature which showed that the track was originally narrower at 1.8m and the original unmetalled surface was buried beneath 0.2m of redeposited natural clay which had been removed from northern side of the track. A scaled section drawing of this feature is retained in the archive at GAT. The southern half of this feature was destroyed by the cutting and construction of a gabion wall to the north of the old A494 but the northern half remains.

5.6 Pont Esgair-gawr footbridge - SH81262250 - Site 5

This modern 20th century girder footbridge carried a designated public footpath over Afon Wnion. It consisted of a concrete slab was 8m long and 1.3m wide supporting with a wire mesh fence on both sides and a wooden stile at the south end. The cemented stone bridge abutments were probably contemporary. This feature was destroyed during construction work and replaced by a new footbridge.

5.7 Old trackway - SH81472271 - Site 6 38011

This 4m wide track runs north-south to the south of Afon Wnion and the old railway line. It follows the edge of the wooded terminal moraine up the slope to the south before joining another track running east-west. This track emerges on higher ground to the east behind the cottages at Glan Wnion and follows the slope down towards the river to the west. The track was truncated by the construction of the Bala to Dolgellau railway but there are traces of it continuing on the northern side of the old railway track. Here it cuts into the northern edge of the rocky outcrop at SH81472281 between Afon Wnion and the old railway cutting. At the eastern end of the outcrop the track merged into the line of the old railway.

This feature was damaged by construction work. Three surface water holding ponds were dug to the south of the old railway line destroying a short section of the remaining track and debris from work on the rock outcrop buried part of the track to the north. During excavation work for the new river crossing at SH81452276, on 15th-16th May 1998, the track was further truncated to the south of the old railway. A cliff above Afon Wnion, 3.5m high, was created along the north side of the track where it runs parallel to the river and a terrace was excavated down to bedrock at the north end. This exposed the track in section although it was too high to clean with a trowel or to examine in detail. Above the bedrock the grey river clays and gravels were overlain by a layer of peat up to 1m deep. At the eastern end of the section two stony layers suggested a camber to the track but the loose nature of the material would suggest an 18th century cart track rather than the Roman road which was suspected in the area. Photographs and drawings of this section are held with the archive at GAT.

5.8 Old trackway - SH81782289 - Site 8 38013

This former trackway which appeared on the 1838 OS map, followed the line of Afon Wnion before it was culverted during the construction of the Bala to Dolgellau railway. It ran east-west through the middle of the field immediately to the south of the railway line and, as it was not scheduled for disturbance, was not fully recorded. Unfortunately this feature was totally destroyed during the processing of the field to obtain stone for the gabion wall at the western end of the scheme. This involved the use of a Power Screen machine with three conveyer belts through which the field material was processed.

5.8 Linear feature - SH81812297 - Site 9 _____ 62160

This was noted as a raised linear feature situated to the south of the A494 just east of Drws y Nant bridge. This narrow area was delineated by field boundaries on the pre-railway OS map of 1862. The Roman road (PRN 3849) from Caer Gai near Bala to the camp at Brithdir is likely to have crossed the river close to Drws y Nant. This road has been identified to the north east of Drws y Nant where it follows the line of the A494 and to the south where it can be traced in the lane between the farms of Esgair-gawr and Lletty-wyn. It was therefore considered possible that this feature represented the line of the Roman road.

The feature ran parallel to and eventually joined the old A494 road in the small narrow field between the road and the river. There was a stone revetment up to 0.5m high on the southern side of the western end. The feature was badly damaged during clearance by the use of heavy machinery which destroyed the embankment at the western end. After top soil stripping it was noted that a layer of large stones formed a possible surface to this feature. On 27th April a trench 10m x 1.5m was dug up to a depth of 1.5m across this feature from the base of the road embankment to 7m north of Afon Wnion. The section revealed an old ground surface at the northern end at a depth of between 0.5-1m below a modern fill of grey brown clay with abundant stone inclusions and frequent cavities. The southern 5m of the trench contained layers of river gravels overlain by the infil material. A scaled section drawing of this feature is stored in the archive at GAT. The area was obviously severely disturbed during the culverting of Afon Wnion to the south and road improvements to the A494 to the north.

5.10 Trackway - SH81842298 - Site 10 37014

This probable trackway showed up as a curvilinear hollow way just north of the culverted Afon Wnion. It consisted of a c. 25m length of 2.5m wide track up to of 0.5m deep and located between mature trees. the surface comprised frequent small stones with occasional large boulders. The easement fence for the road corridor passed just to the north of this feature so it was not damaged during construction work.

5.11 Turnpike route -- SH81802301 - Site 7 3 8 0 1 2

The lane turning west from the A494 to Wenallt marks the original route of the Bala to Dolgellau turnpike road as it approaches Rhydymain. This part of the road was by-passed with a new road to the south under the Turnpike Act of 1777. From map evidence it appears that this change occurred some time between 1797 and 1838. The line of the old road can be traced on modern OS maps with only a short section being obscured by the forestry plantation at Coed Pen-y-rhiw.

6 RAILWAY FEATURES - Sites 1a - 1

Drws y Nant was a crossing station on the Bala to Dolgellau section of the Ruabon to Barmouth line which was completed in 1868. The line operated until 1965 when it was closed after the Beeching report. The features are described as they occur along the route of the new road from west to east.

6.1 Pont Esgair-gawr - SH81312247 - Site 1a

37497

This iron girder bridge carried the railway over Afon Wnion. The 15m span consists of two iron girders flanked by four wooden beams with both iron and wooden cross members. The iron girders are 0.45m wide and 0.95m deep while the wooden beams are 0.47m wide with a depth of 0.20m. There are two rows of round-sectioned iron railings on each side of the bridge supported by iron posts. The abutments on both sides of Afon Wnion are of red brick although assorted local stone is used for the eastern embankment. The wooden beams are showing signs of decay but the overall structure of the bridge remains sound. The new road crosses the old A494 just to the east of this feature so it has been unaffected by construction work.

6.2 Railway bridge - SH81452277 - Site 1b

This bridge over Afon Wnion was of rough stone construction with brick arch, voussoirs and parapet. The single arch consisted of four courses of dark red brick with a five course parapet above. The stone comprising the main body of the bridge was regularly coursed and cemented with embankments extending both up and down stream. This bridge was completely destroyed during construction work and a new river crossing built.

6.3 Railway cutting - SH81482280 - Site Ic -

The railway cutting through natural bedrock at this location was extended during construction work for the new road. Three terraces were excavated in the terminal moraine which surmounted the bedrock to the south. The outcrop to the north was excavated on its south side to form a more gradual gradient. Material from this work was covering the possible continuation of Site 6 to the north of the outcrop.

6.4 Railway sidings - SH81672288 - Site 1d 3 7 940

The siding at Drws y Nant was an extension of the Down loop and could accommodate seven wagons (Rear & Jones 1990, 133). It was of unusual design in that a scissors cross-over enabled movements to the Up and Down loops to be accomplished. The wagons were allowed to run into the siding by gravity to be halted by the heavy duty timber buffers at the west end. A brick built loading platform, 11m x 4.5m x 1.5m high, was located to the south of the siding surrounded by concrete posts which probably originally supported a wire enclosure. According to Rear & Jones, horses, cattle and sheep traffic was handled regularly at Drws y Nant and a holding pen was provided (Rear & Jones 1990, 133). This feature was completely destroyed during the clearance phase of the work when a surface water holding pond was excavated at the site.

6.5 Base of signal post - SH81702291 - Site 1e

A wooden beam marked the location of the signal post on the northern side of the Up line. The beam was 1.25m long and 0.25m wide with several iron bolts protruding.

6.6 Stream culvert - SH81702292 - Site 1f

A culvert carried a subsidiary stream into Afon Wnion under the embankment of the culverted section of Afon Wnion to the west of Drws y Nant bridge. The round-sectioned culvert emerged into the main river through an almost circular arch with rough cemented stone voussoirs. This feature should survive the construction work although it may become hidden under the new bridge

6.7 Drws y Nant bridge - SH81732293 - Site 1g

This bridge carried the narrow Class III road to Bryncoedifor. It was of coursed, cemented and roughly faced stone with a single arch of three courses of red brick covered in cement. The parapet had a single course of yellow and red brick at the top with signs of frequent damage at the north end where it opened onto the main A494 road. This structure was demolished under the present improvement scheme and replaced by a modern river crossing.

6.8 Station House - SH81722289 - Site 1h

Station House is a late 19th century stone built building under a slate roof located to the south of Drws y Nant bridge on the west side of the Class III road to Bryncoedifor. It has an extension with a sloping roof at the back and a porch at the front. It was built to house the station master of Drws y Nant station.

6.9 Drws y Nant station - SH81772291 - Sites 1i-1m

Drws y Nant was a crossing station on the Bala to Dolgellau section of the Ruabon to Barmouth line. The main buildings, located on the Down side, were of brick and included a booking office, a waiting room and a 23 lever signal box (Rear & Jones 1990, 134). A corrugated iron waiting shed was provided for passengers on the Up platform. Four photographs of the station as it was in the 1960's can be found in *The Llangollen Line: Ruabon to Barmouth* (Rear & Jones 1990, 133-136). Most of these features had been demolished before the present road improvement scheme but some were still traceable. The dark red brick platforms remained although the Down side was partially destroyed and rubble had been deposited on the track bed. This rubble included the remains of the signal box which had been built c. 1895, of which the wooden gable end was still recognisable. The brick wall forming the north side of the Up line platform was at least 4m high above the river from the Drws y Nant bridge to the end of the platform. A yellow brick structure supported a concrete base, 4.5m x 2.5m x 1m high, at the west end of the Up platform and was the remains of a corrugated iron goods lock-up. A red brick built storage shed, 3m x 2m x 1.5m high, with an iron roof was located to the south of the Down platform (Site 1m). The east end of the platforms should remain after completion of the construction work but all other features at the station will be destroyed by the new river crossing at Drws y Nant.

7 SUMMARY

The initial archaeological assessment of the proposed route of the new section of the A494 identified a total of 22 sites within the corridor. The recommendations for mitigatory measures outlined in GAT Report No. 78 were put into effect. Most of the features were destroyed during the construction work but a written, drawn and photographic record of relevant features is held with the archive at GAT.

No sign was found of the Roman road going through the valley at Drws y Nant but it is possible that evidence may come to light in the future. The tracks at sites 6 & 10 warrant further investigation in this context should any other work be contemplated in this region.

8 ACKNOWLEDGEMENTS

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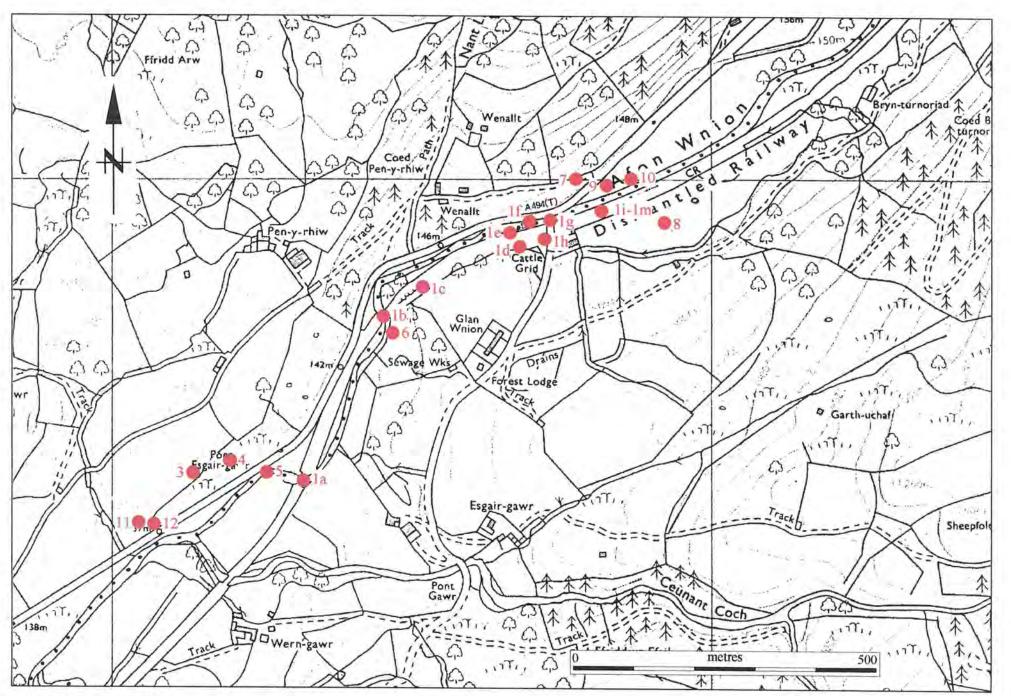
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Location of archaeological sites



Site 6 - Old track looking west



Site 7 - Old turnpike road to Wenallt



Site 1b - East side of railway bridge during demolition showing construction method



Sites 1i & 1j - Platforms at Drws y Nant station looking west

