

NORTH CARMARTHENSHIRE
CEREDIGION LINK ROAD IMPROVEMENTS
PHASE 1/1 PONTARSAIS-ALLWALIS

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ARCHAEOLOGICAL RECORDING AND WATCHING BRIEF



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By

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SUMMARY

The A485 Carmarthen-Lampeter road is currently being upgraded by Carmarthenshire County Council as part of the North Carmarthenshire - Ceredigion Link Road scheme. A programme of archaeological investigation, recording and monitoring carried out as part of the scheme recorded possible traces of the pre-turnpike road structure. The structure and construction of the 19th century Pontarsais Bridge was also investigated prior to and during its demolition. There is no doubt that the overall route followed by the present A485 (with some fairly minor deviations) is an ancient one, with its origins in the Roman period or earlier. Furthermore, it is clear that the present bridging point of the Afon Gwili is on or very close to the original crossing and that a number of structural timbers recovered from the Afon Gwili during the 1970s may be Roman or medieval in date. A variety of other roadside structures, such as, bus shelters, churn stands, post boxes and culverts were also recorded.

1. INTRODUCTION

1.1 PROJECT COMMISSION

Carmarthenshire County Council are undertaking a large-scale programme of improvements on the A485 Carmarthen to Lampeter road as part of the North Carmarthenshire and Ceredigion Link Road scheme. An initial appraisal of the route identified many areas of potential archaeological interest along the route and a programme of mitigation works was implemented. PB Kennedy and Donkin Limited commissioned Cambria Archaeology Field Operations to carry out the archaeological works. This report deals with the second phase of works and covers the section of the A485 from Pontarsais to Alltwalis, a distance of 3.5km. An earlier report covers the first phase from Abergwili to Peniel (Page 1998). The work was undertaken between January 1999 and July 2000.

1.2 SCOPE OF PROJECT

The project comprised several varied elements: a small-scale trial evaluation across the line of the pre-turnpike road; a watching brief on all groundworks, particularly where the road line crossed watercourses; recording the structure of Pontarsais Bridge prior to and during demolition; and the photographic recording of all roadside 'furniture', for example, bus shelters and churn stands. This report is based on the results of the various elements.

1.3 REPORT OUTLINE

This report describes the physical environment of the site (Section 2) before summarising the watching brief results (Section 3) and the conclusions (Section 4) based on the results of Sections 2 and 3.

1.4 ABBREVIATIONS

Sites recorded on the regional Sites and Monuments Record (SMR) will be identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Any new sites discovered during the course of the project will be allocated a new PRN and identified by their NGR.

Archaeological features and contexts will be referred to using the continuous three-figure numbering system (e.g.001) employed by Cambria Archaeology Field Operations.

2. THE SITE

2.1 LOCATION (fig 1)

This second phase of works covered a c.3.5km stretch of the A485 Carmarthen - Lampeter road between Pontarsais (NGR SN44152825) and Alltwalis NGR SN44653190). The road runs north - south through a gently undulating landscape at between 100m - 130m above Ordnance Datum (OD) and its route crosses the Afon Gwili and several minor watercourses. The A485 roughly follows the line of the Roman road from Carmarthen (Roman - *Moridunum*) to Llanio (Roman - *Bremia*) and the route is also considered to be an important route in the medieval period (Rees 1932). The current route was established as a turnpike road in 1788 (Lewis 1968, 126-134), with some deviations from the original road line. Significant deviations from the earlier route typically occur at those points where the old line becomes unsuitable for wheeled transport, such as a steep hillside or narrow valley.

One of these deviations occurred at NGR SN44443060 where the pre-turnpike road line swung to the northwest to pass around the west side of modern Dyffryn-Croes before rejoining the line of the A485 at NGR SN44473129. An investigation of this stretch of the pre-turnpike road is reported below (Section 3.2). Another deviation from the old road line occurred at Pont Rhyd-gôch (NGR SN44202775 - SN44152794), south of Pontarsais, where the original route looped eastwards to make the crossing of the narrow valley of Nant Corrwg easier. The modern road line crosses the valley on an embankment which cuts off the loop.

3. SUMMARY OF INVESTIGATION RESULTS

3.1 METHODS AND OBJECTIVES

The archaeological programme consisted of four elements which were designed to recover as much information as possible regarding the historic development of the route of the A485 and its associated structures and features. These were, small-scale trial trenching across the line of the pre-turnpike road line; a watching brief to record any structures or features during the improvement works; survey of the structure of Pontarsais Bridge; and photographic recording of the bridge and other roadside structures.

3.2 TRIAL EXCAVATION ON LINE OF PRE-TURNPIKE ROAD

A small-scale trial evaluation was carried out where the improved A485 line crossed the suspected route of the pre-turnpike road (*c.*SN44103060). The evaluation consisted of one hand dug trench, 7m x 1.5m, across the line of a shallow, but clearly defined hollow running northwest across the field to the south of Duffryn-Croes. The hollow measured *c.*3.5m wide x 0.1m deep at the surface. However, removal of the topsoil revealed that the hollow was slightly narrower, being *c.*3m for most of its length, and deeper - the average depth was 0.25m. A single deposit of shale gravel in a clayey loam matrix, up to 0.2m thick, filled most of the hollow. The upper part was filled with topsoil. The hollow was cut into the clayey loam subsoil, which at this point was a dark yellowish brown (Munsell soil colour 10YR 4/4).

Nineteenth century maps show the line of the hollow as a small watercourse, but the shale gravel layer appeared to be a surface, rather than material deposited by water action. Therefore, the evaluation does tend to confirm the hollow as the line of the pre-turnpike road, but an unequivocal interpretation.

3.3 RECORDING THE STREET FURNITURE

An unusual and interesting element of the archaeological programme was the recording of the range, form and type of road side structures along the A485. The recorded structures were all post medieval or modern in date and ranged from a bus shelter to revetment walls, churn stands and culverts. Milestones shown on the Ordnance Survey 1st and 2nd edition 1:10560 maps (1891 and 1907) were not seen during the fieldwork.

Of particular note was a group of structures consisting of , a bus shelter and a churn stand constructed from concrete blocks, a pillar mounted post box (marked ER) and a stone built drinking trough at NGR SN44333022 (plate 1) which point to this site being an important and historic stopping and collection point on the Carmarthen to Lampeter route.

3.4 PONTARSAIS BRIDGE

Pontarsais Bridge is located on the A485 over the Afon Gwili, 9km north of Carmarthen (NGR SN 44282873). The river was approximately 3m to 4m wide and approximately 0.15m deep at its shallowest point when not in flood. The road on either side of the bridge is on embankments rising towards the bridge. At this point the valley is flat bottomed with slight alluvial undulations, with a steep wooded hillside to the south and a less steep slope to the north. The adjacent fields are all arable.

It has been suggested that the present crossing point is on or near that of the Roman Route from Carmarthen to Llanio, even though the exact line of the Roman route in the area around Pontarsais Bridge has not not been firmly established (James 1991, 68). However, there is no reason to suppose that it deviates very far from the present road line. Therefore, it is reasonable to assume that the present crossing point is close to the Roman crossing. Large timbers and traces of a what appeared to be part of a stake and wattle revetment for the banks were recorded in 1978 just downstream (west) of the bridge, during work by the Water Board, who deepened the Gwili whilst laying a pipe across the river bed. It was thought that the timbers (PRN 8370) could be the remains of a Roman or medieval bridge.

The timbers were recorded as being fragments of a base plate of what was probably a trestle type bridge (OS record card, 1978 - copy held in SMR). The trestle would have consisted of a base plate with uprights affixed to it with mortice and tenon joints. Such a structure is consistent with known construction techniques of both the Roman and medieval periods (Maylan 1988, 73; 1989, 239) and the use of stake and wattle revetment of river banks and small watercourses is also well attested from both periods (Nayling 1989, 28-32). However, there is evidence to suggest that the timbers may date from the early to mid 19th century when a temporary wooden bridge costing £113.15s.9d was erected to replace an earlier, possibly 18th century, three-arched stone bridge (PRN 10083) that was washed away during a flood (Penson c.1854). Exactly when this occurred is unknown, but the timber bridge was still in use during the 1850s when an estimate of £375.10s.½d was prepared for constructing a new stone bridge (PRN 40199).

Like today, the temporary bridge would have been erected to one side to keep traffic flowing around the collapsed bridge and during construction of the new bridge. The diversion for this temporary timber bridge may be indicated on the 1831 Ordnance Survey (OS) 1" map (fig 2 - Margary 1992, 69) which appears to show a second crossing in the area just downstream of the stone bridge close to the position from where the timbers were recovered. However, if that was the case it would mean that the bridge was not replaced for at least twenty years, which seems unlikely on such an important route. Therefore, it is possible that the OS 1" map shows both the pre-turnpike road bridge and a new bridge, probably the three-arched bridge PRN 10083, on the late 18th century turnpike road. The possible second crossing is not shown on the tithe map for Llanllawddog parish (1848), nor later OS maps.

A mill race, which flowed north from a mill (PRN 24012), entered the river alongside the south abutment on the east, upstream side of the bridge. This had been covered by the new enlarged embankment prior to this watching brief.

Description of Pontarsis Bridge

Prior to demolition Pontarsais Bridge was a single span structure, with a segmental arch, constructed from randomly coursed ashlar with over-pointed joints. The arch was constructed in red brick and faced with dressed stone voussoirs. Concrete aprons had been added around the bases of the arch (plates 2 and 3).

Watching brief results

The watching brief (PRN 40632) was undertaken on an intermittent basis whenever groundworks or demolition was planned between 3rd April and 8th June 2000.

The first observations were for the works to construct a temporary bridge on the west side of the bridge (PRN 40199). This involved removing part of the north and south banks and lowering the river bed (plate 2) in the area where the timbers were found in 1978 (PRN 8370).

The river bed was made up of alluvial layers of gravel and silt. One timber was encountered at a 45 degree angle to the stream in the south bank and there was evidence of wattling and stakes to support the river bank. Three baulks of timber were recovered from the north bank. These three timbers were trunks or branches, which exhibited evidence of having been cut at either end, possibly with an axe. One of these timbers appeared to be modern and is likely to date to the 1978 Water Board activity. The other two were possibly also incorporated, or re-incorporated, into the bank at this time. The river bed and banks had been substantially disturbed by the trench for the 1978 water pipe and an associated access manhole in the north bank. In particular, massive boulders had been placed in the river bed, presumably to stop erosion around the water pipe. There was no indication of any structural timbers in this area.

The second set of observations were undertaken during the demolition of the existing bridge and the groundworks for the construction of the replacement bridge. A photographic record, measured sketch drawings and notes were made as necessary.

The earliest layers recorded were alluvial gravels and silts, similar to those encountered to the west during construction of the temporary bridge. A small amount of brush wood, which may have been the remains of a stake and wattle revetment for the north bank, was exposed following the demolition of the bridge. Wattling was also recorded in association with the earlier bridge timbers (PRN 9370), but that found during this project may not be associated with the previous material, and may not necessarily pre-date the bridge itself. No evidence was found for any earlier bridge on the site. A drain on the northeast side appeared to be contemporaneous with the bridge.

One large vertical plank was found on the inside face of the northeast side of the bridge which appears contemporaneous with construction of the bridge (plate 4). A possible weep hole or small drain had been incorporated into the bridge structure on the southwest side. The bridge arch was supported on either side by massive masonry thrust blocks, which were backed by layers of clay and stone for the raised embankments of the approach road ramps.

There was little modern disturbance to the fabric of the bridge. Concrete aprons had been constructed around the bases of the arch and extending down into the river bed to stop scouring of the bridge footings and some modern power or communication cables had been laid under the road across the bridge.

4. CONCLUSIONS

4.1 THE ARCHAEOLOGICAL PROGRAMME

The mixed programme of evaluation, recording and watching briefs undertaken during this project has provided opportunities to investigate the line and construction of the important and historic route between Carmarthen and Lampeter and to record specific structures and roadside features. Overall the various elements of the programme complemented each other and were integrated into a well structured approach which can be applied to other historic routeways.

4.2 DEVELOPMENT OF THE A485 CARMARTHEN-LAMPETER ROAD

The line of the A485 is an ancient one. It follows the Roman road from Carmarthen to Llanio and it is also a known medieval route. The present line was established as a turnpike road in the late 18th century

Evidence of a possible shale and gravel road surface recovered during the trial trenching lends weight to Lewis' supposition (Lewis 1968) that the pre-turnpike road line lay to the west of the present line at Dyffryn-Croes. Timbers dredged from the bed and banks of the Afon Gwili in 1978 were interpreted at the time as parts of a Roman bridge and whilst this interpretation remains valid, there are suggestions that the timbers may date from the medieval period or even from as late as the 19th century.

APPENDIX ONE: CATALOGUE OF WATCHING BRIEF ARCHIVE

The project archive has been indexed and catalogued according to National Monument Record (NMR) categories and contains the following:

- A.** Copy of final report.
- B.** Site records, including context record sheets and site notebook.
- C.** Drawing catalogue and site drawings.
- D.** Site photographs - catalogue, colour slide and B/W contact sheets.
- E.** Finds catalogue, individual finds record and finds report.
- G.** List of references, including primary and secondary sources.
- I.** Archive report and draft copies of final report.
- J.** Publication drawings.
- M.** Miscellaneous correspondence.

There is no material in categories **F**, **H**, **K**, **L** and **N**.

The archive is currently held by Cambria Archaeology Field Operations, Llandeilo, Dyfed as project number 37420.

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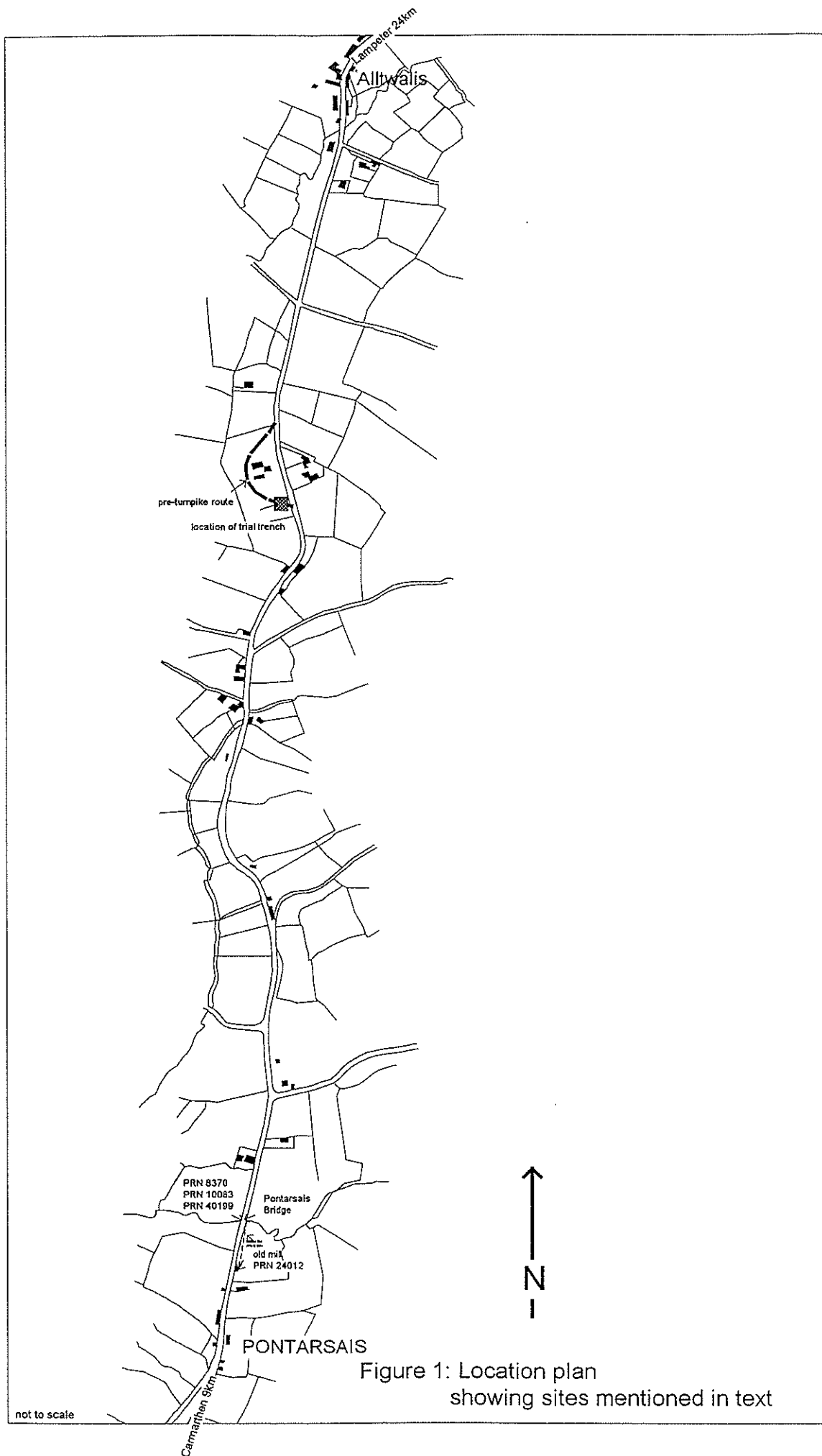


Figure 1: Location plan
showing sites mentioned in text

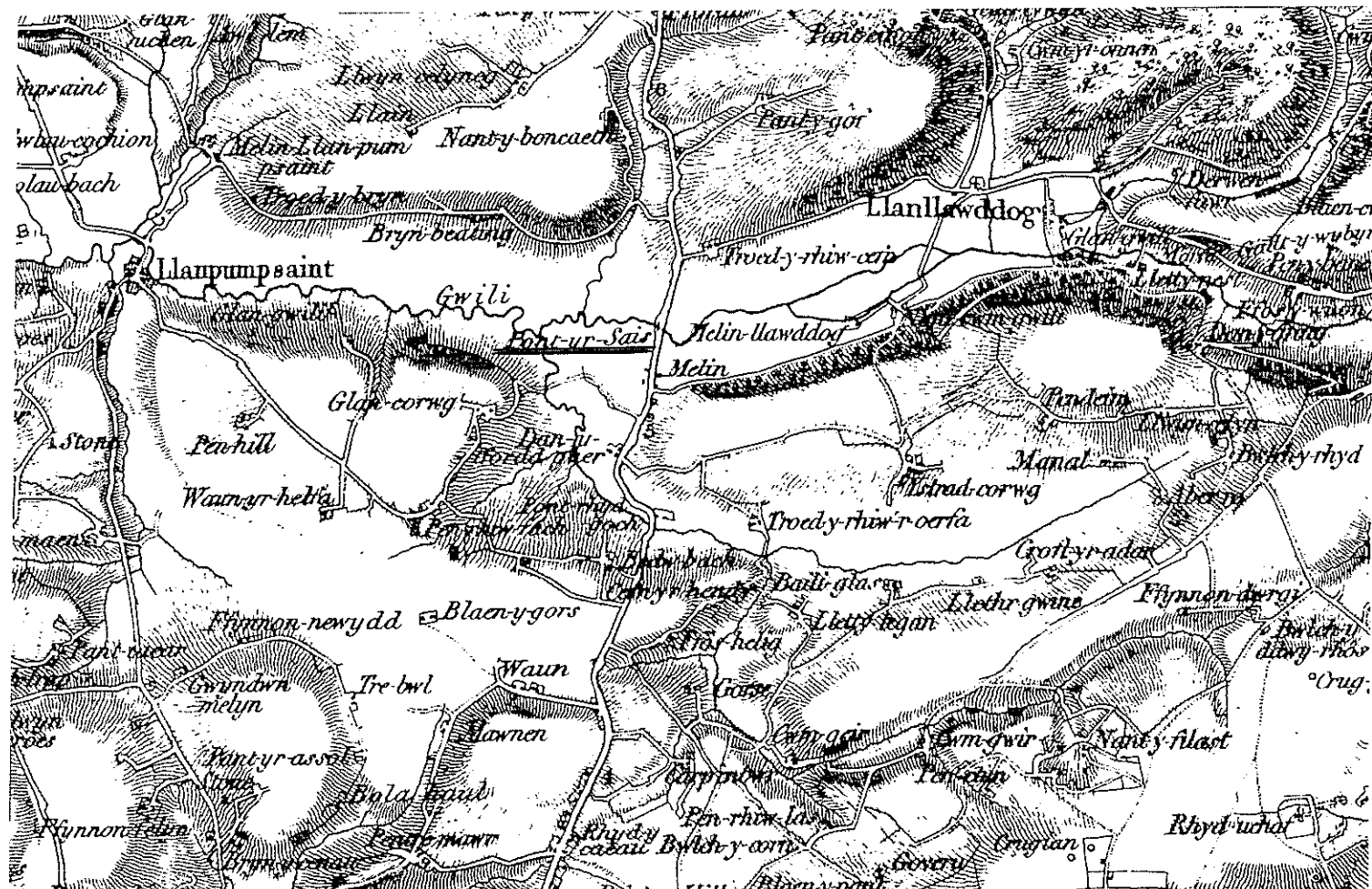


Figure 2: Extract from Ordnance Survey Old Series 1" map showing possible second crossing at Pontarsais (1831)

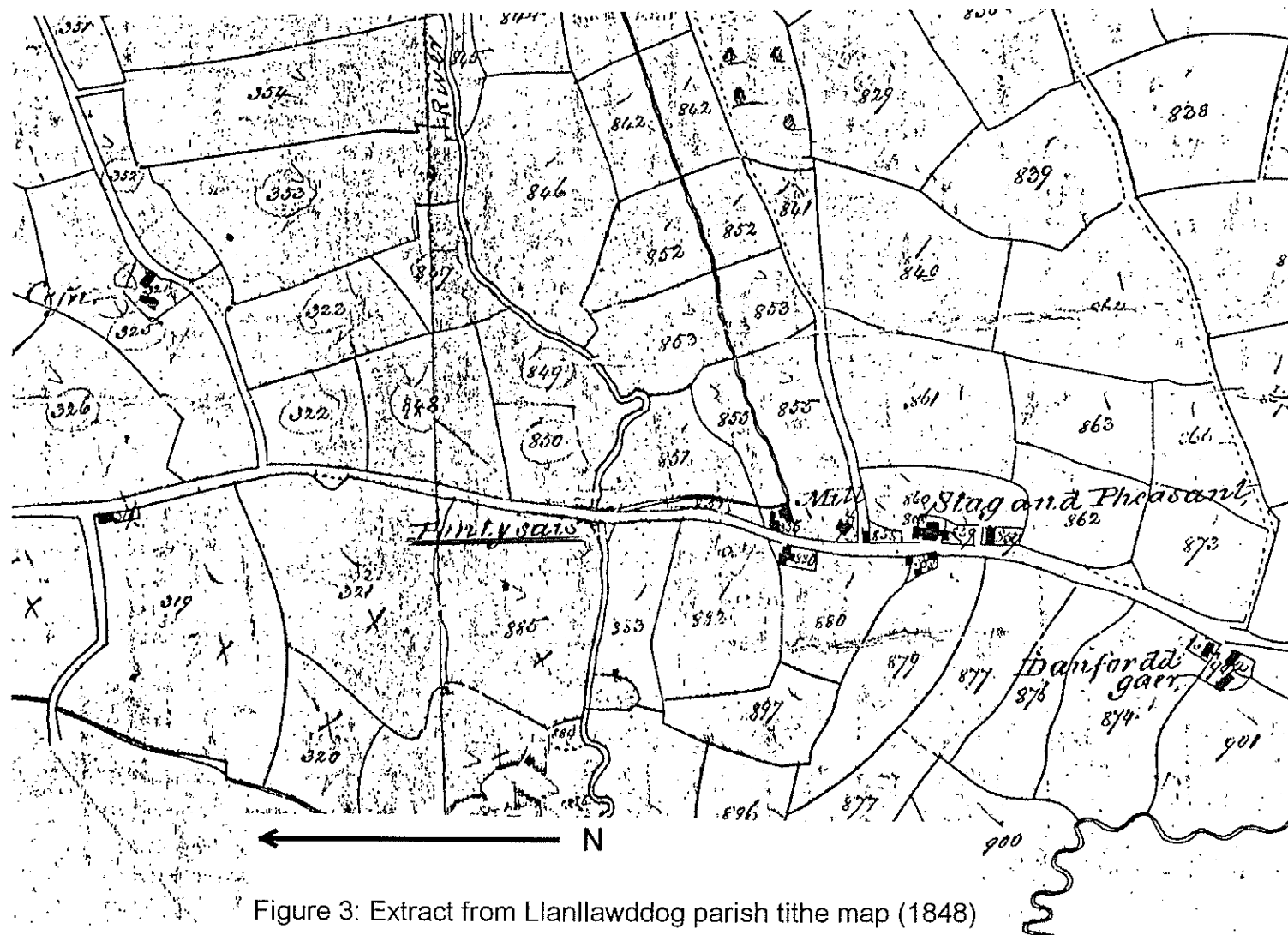


Figure 3: Extract from Llanllawddog parish tithe map (1848)

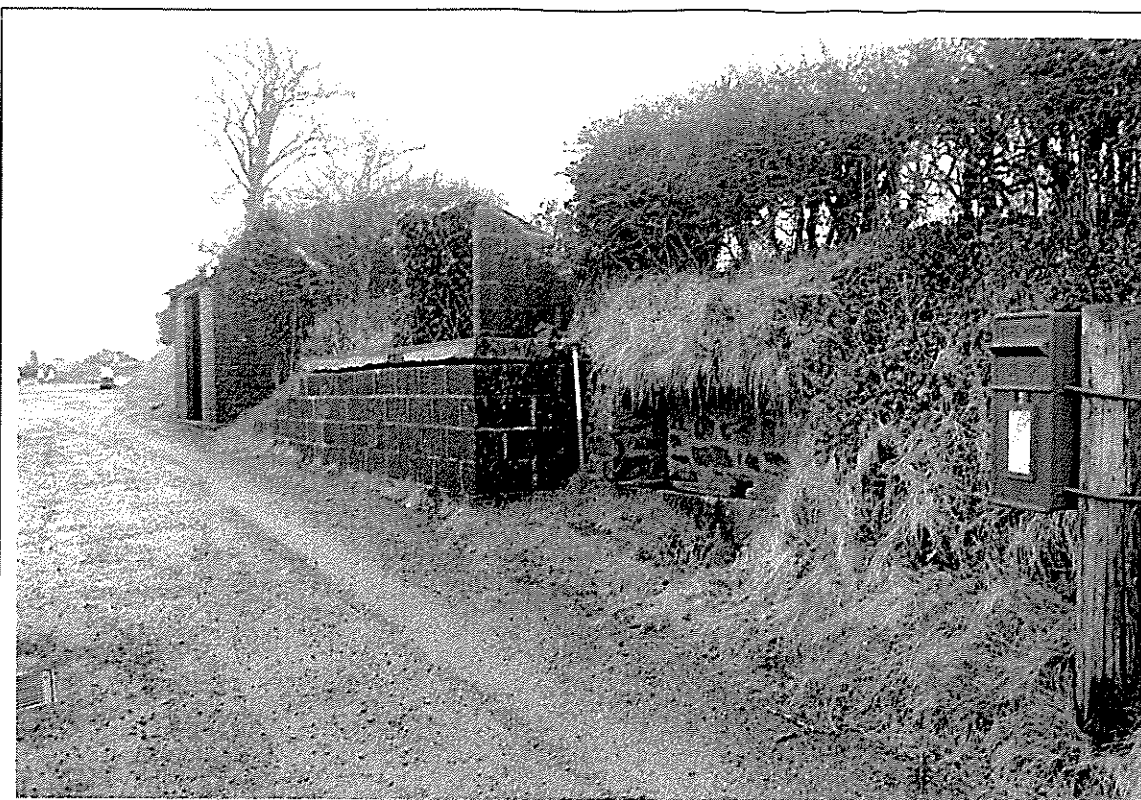


Plate One: Group of roadside structures alongside A485

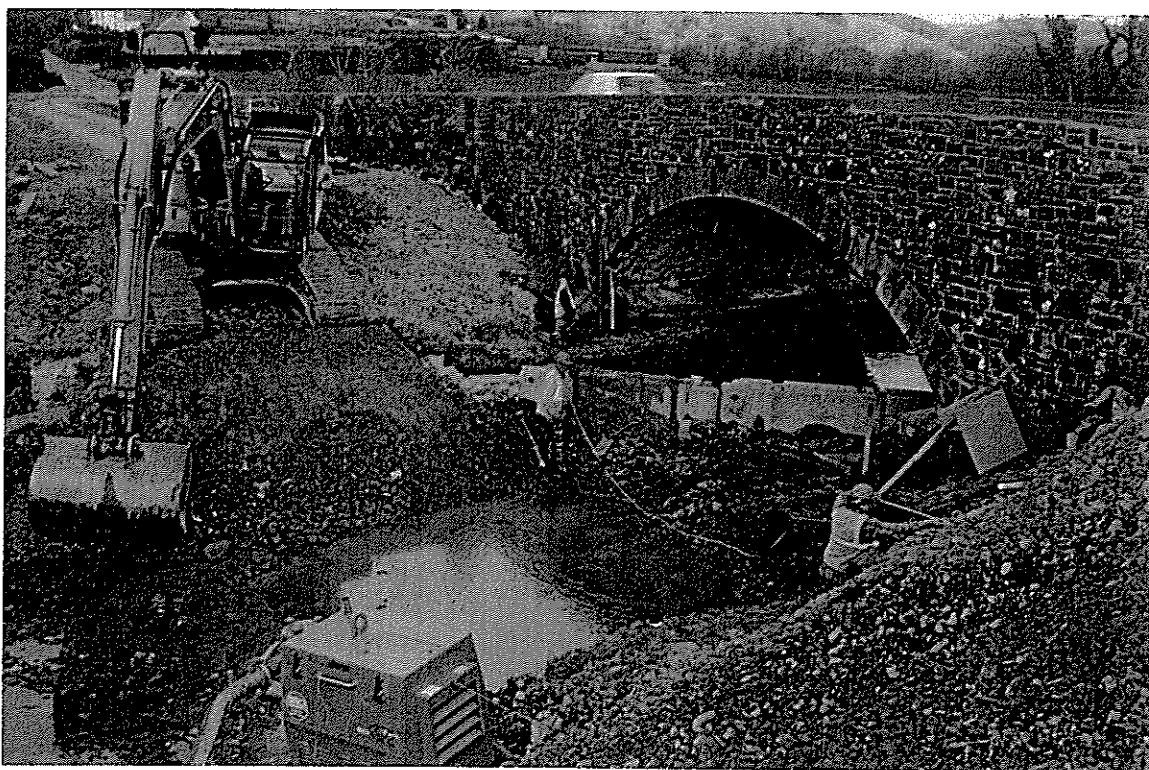


Plate Two: Pontarsais Bridge prior to demolition



Plate Three: Brick arch structure of Pontarsais Bridge during demolition



Plate Four: Upright timber, part of Pontarsais Bridge structure

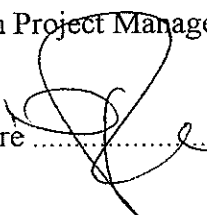


Plate Five: Demolition of the arch of Pontarsais Bridge

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