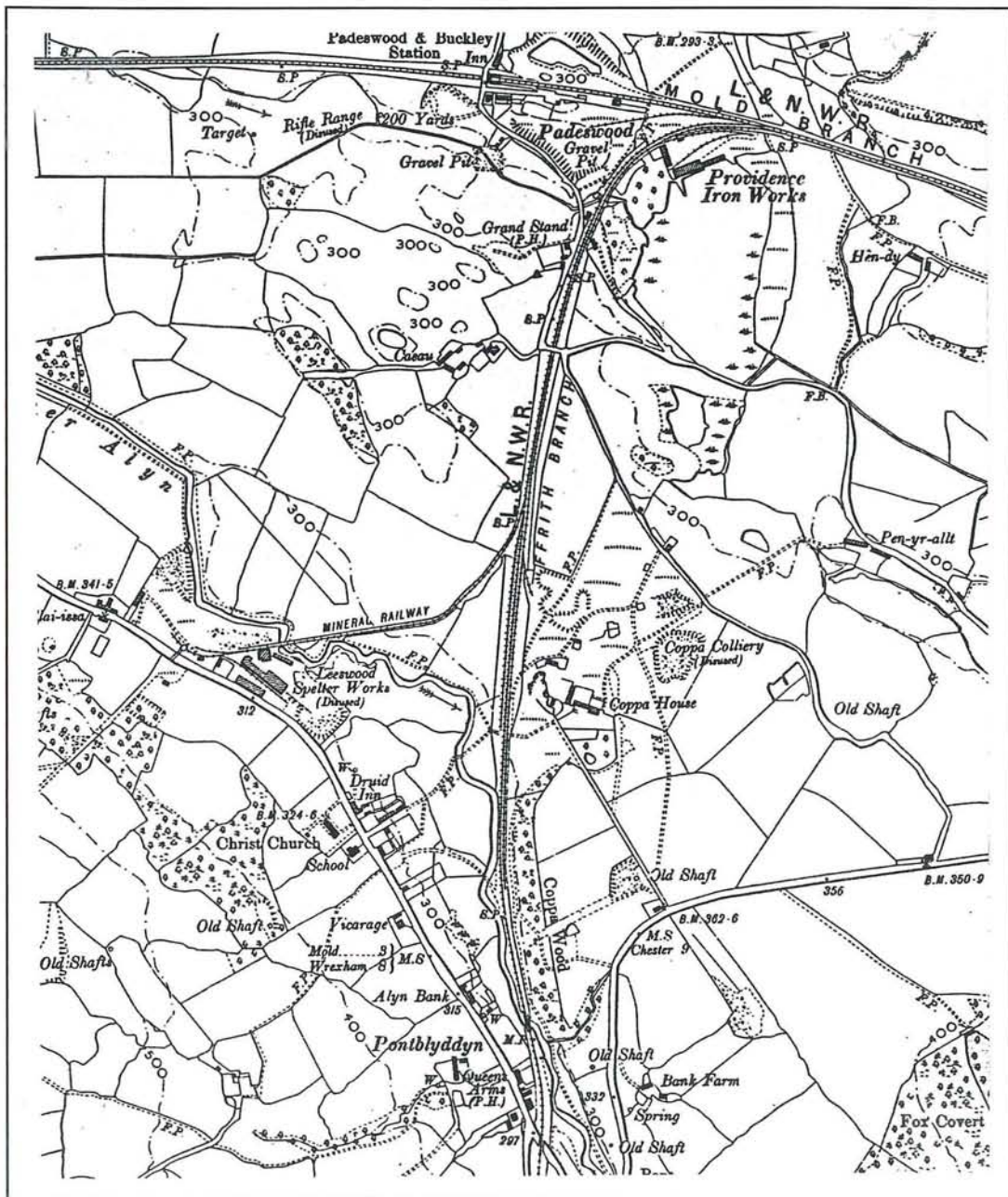


Leeswood to Buckley Wastewater Mains Transfer Scheme, Flintshire

ARCHAEOLOGICAL WATCHING BRIEF



CPAT Report No 454

Leeswood to Buckley Wastewater Mains Transfer Scheme, Flintshire

ARCHAEOLOGICAL WATCHING BRIEF

N W Jones
February 2002

Report for Galliford Northern

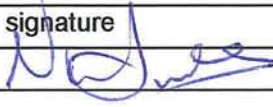
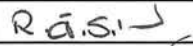

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CPAT Report Record

Report and status

CPAT Report Title	Leeswood to Buckley Wastewater Mains Transfer Scheme, Flintshire: Archaeological Watching Brief		
CPAT Project Name	Leeswood Wastewater Main		
CPAT Project No	955	CPAT Report No	454
Confidential (yes/no)	No	draft/final	Final

Internal control

	name	signature	date
prepared by	N W Jones		19/02/02
checked by	R.J. Silvester		19/02/02
approved by	R.J. Silvester		19/02/02

Revisions

no	date	made by	checked by	approved by

Internal memo

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1 INTRODUCTION

- 1.1 In August 2001 the Contracts Section of the Clwyd-Powys Archaeological Trust was invited by Galliford Northern on behalf of Welsh Water, to undertake an archaeological watching brief during construction of a new waste water main between Leeswood and Buckley, in Flintshire.
- 1.2 An archaeological assessment of the pipeline corridor had previously been undertaken, identifying a number of archaeological sites of minor significance which might be affected by the works (Jones and Hankinson 2001).

2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 2.1 The pipeline (Fig. 1) runs for a total of 2.82km, commencing at the village of Leeswood (SJ 2723 6017), before descending into the valley of the Afon Alun at Pontblyddyn. After crossing the floor of the Alun valley, the line ascends in a northerly direction, reaching a dissected plateau which it then crosses in a north-north-eastern direction to its northern terminal at the Ty Gwyn Wastewater Treatment Works, Buckley (SJ 2832 6232).
- 2.2 Soils in the area generally consist of Cambrian stagnogleys of the Brickfield 3 Association (Rudeforth *et al.* 1984). The underlying geology of the area is contained within the Westphalian division of Upper Carboniferous rocks, commonly known as 'Coal Measures'.

3 BACKGROUND

- 3.1 The archaeological assessment identified 24 archaeological sites in the vicinity of the pipeline, the majority of which were either considered to have no surviving remains, or would be unaffected by the works. At its northern end, the pipeline cut through the line of Wat's Dyke, a Scheduled Ancient Monument, and works in this area were subject to a separate programme of excavation and evaluation (Hankinson 2001), undertaken as a condition of the Scheduled Monument Consent granted by Cadw: Welsh Historic Monuments.
- 3.2 Many of the archaeological sites in the vicinity of the pipeline corridor relate to industrial activity. Extractive industry is largely represented by the coal mines (e.g. Coppia Coal mine - PRN 103346) which are widespread in the district, though iron workings (e.g. Leeswood Iron Mine - PRN 103359) are also present. Other, secondary, industrial activity is present in the area, most notably Pont Bleiddyn Mill (PRN 103356) and the Providence Iron Works (PRN 103224), although the latter is now destroyed. Poorly fired, waste brick fragments found at the Coppia clay pit (PRN 81530) could suggest that clay extracted from the pit was fired into bricks in its immediate vicinity. The line of a former colliery tramway (PRN 81531) was identified as a site which might be affected by the pipeline.
- 3.3 Although clay and sand/gravel extraction are present in the vicinity of the pipeline, the only related site along the pipeline corridor itself is a small quarry (PRN 81544).
- 3.4 The increasing industrialisation of the area during the 19th century required improved transportation and the Mold Railway (PRN 81533), with a branch line to Ffrith via Pontblyddyn (PRN 81532), was opened in 1849, the main line running from Saltney Ferry to Mold, via Hope and Padeswood. The branch line operated until 1934 when it was eventually closed following the derailment of a freight train at Pontblyddyn, while the main line was closed to freight in 1956, with the passenger service closing in 1962 (Baughan 1991, 50-51; 62-3). The pipeline crossed both former railway lines.
- 3.5 In the village of Pontblyddyn, documentary sources reveal the course of a former road alignment (PRN 81542) associated with Pontblyddyn bridge.
- 3.6 An anomalous terrace (PRN 81543) of uncertain function was identified by the assessment near Bank Farm. Further investigation revealed that it was in fact a deposit of sewage sludge rather than a feature of archaeological significance.

4 WATCHING BRIEF

- 4.1 The watching brief was undertaken between September and December 2001 during the excavation of the pipe trench in the vicinity of known archaeological sites. Although seven sites had been originally identified as being directly affected by the pipeline, following discussions with the curator it was later agreed that the former Mold Railway (PRN 81533), an earthwork terrace (PRN 81543) and a clay pit (PRN 81530), would either not be affected, or did not warrant further work. A full written record was maintained throughout, together with a photographic record in 35mm black and white and colour print and colour slide formats.
- 4.2 The general working method adopted by the contractors consisted of stripping the topsoil from the pipeline route before mechanically excavating a trench approximately 0.8m wide and up to 1.25m deep. The working methods dictated that there was only limited opportunity to identify any features of archaeological potential. Areas adjacent to the sites identified below were also monitored, but with no archaeological return (pl 1 and 2).

PRN 81532 Ffrith Branch Railway

- 4.3 The mechanical excavation of a trench 1.25m deep through the line of the former Ffrith Branch Railway at SJ 2767 6032 revealed the make up for the track-bed (pl 3), which at this point was c. 6m wide at the surface. This consisted of an upper layer of cinder, c. 0.19m thick, overlying a layer of small gravel and pebbles, c. 0.35m thick, which lay directly on the natural subsoil. The overall width of the track-bed was estimated to be 8.4m.

PRN 81542 Pontblyddyn road

- 4.4 The watching brief (pl 4) failed to reveal any evidence for the former road (PRN 81542) although excavations for the pipeline in the village of Pontblyddyn, did reveal a stone culvert (pl 5 and 6) beneath the present A5104 to the north of the Bridge Inn (SJ 2767 6055). The culvert, which was aligned ESE-WNW, was of circular cross-section, constructed of dressed sandstone blocks with lime mortar, forming an arch roughly 2m in diameter. The culvert had collapsed at the ESE end where it had been infilled with rubble, presumably to prevent subsidence of the road. An examination of the Ordnance Survey 1st edition 25" map of 1872 revealed that the culvert served a drain originating in a marshy area adjacent to the railway embankment.

PRN 81544 Pen-yr-Allt quarry I

- 4.5 The watching brief in the vicinity of a possible post-medieval sand/gravel quarry revealed no features of archaeological significance. The pipe trench passed close to the feature (pl 7), but did not actually cut through it. Examination of the trench revealed only natural deposits (pl 8) and no artefacts were recovered.

PRN 81531 Coppa Colliery Tramway

- 4.6 Due to a breakdown in communications the watching brief was not undertaken in this area.

5 CONCLUSIONS

- 5.1 The areas where the watching brief was undertaken produced little evidence for archaeological remains. The only significant exception was the identification of a stone-built culvert at Pontblyddyn. Elsewhere, although a section was recorded across the track for the former Ffrith Branch Railway, this proved to be of only limited archaeological interest.

6 ACKNOWLEDGEMENTS

- 6.1 The writer would like to thank Glyn Owen, Richard Hankinson and Bob Silvester, CPAT, for undertaking the watching brief; and John Salisbury, Galliford Northern.

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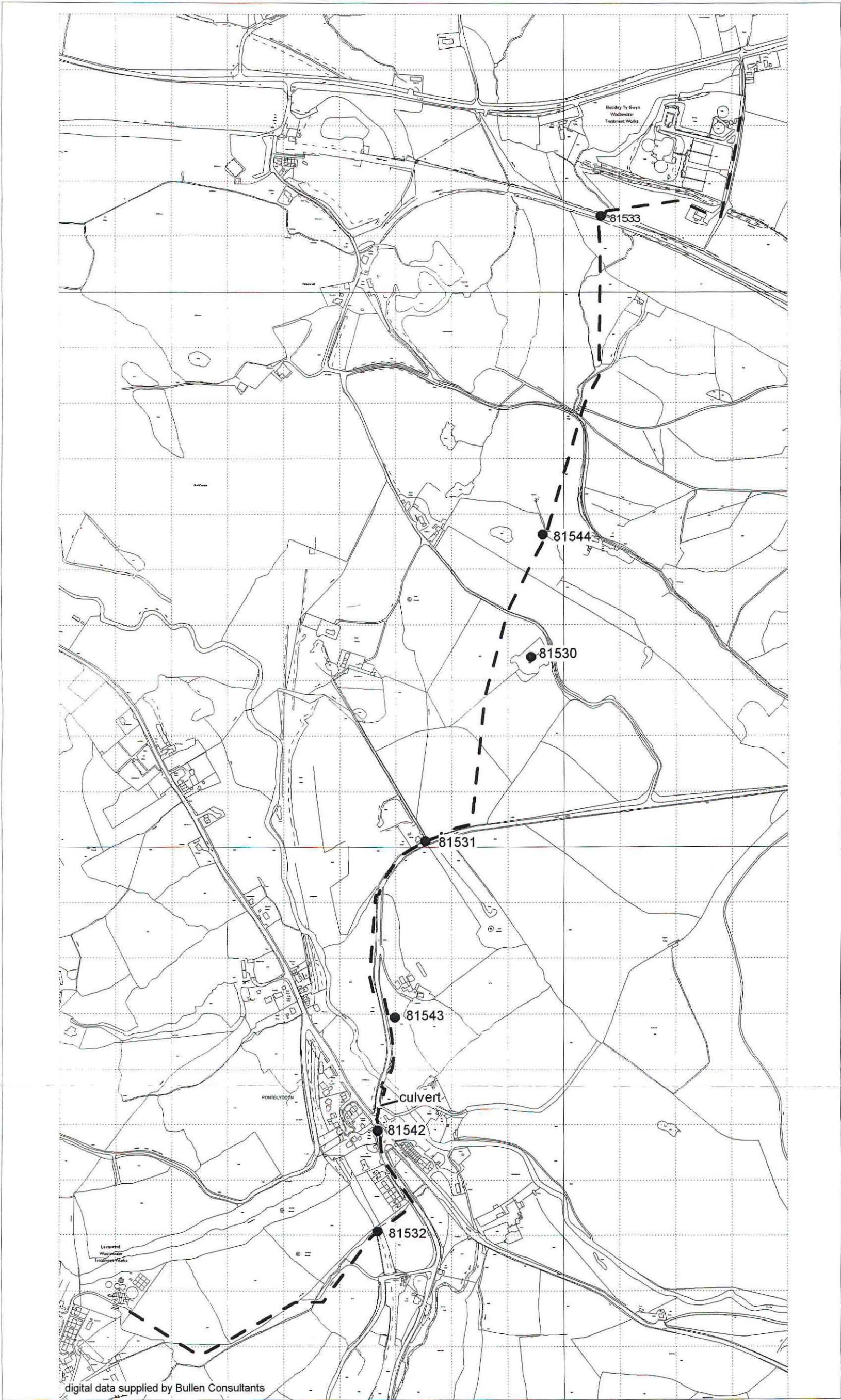


Fig. 1 Pipeline route and site location, scale 1:7,000



Plate 1 Pipe trench in the vicinity of PRN 81544 Pen-yr-Allt quarry I. Photo CPAT 1131.09



Plate 2 Pipe trench excavations at SJ 27676032. Photo CPAT CS01/25/28



Plate 3 Excavations across the line of the Ffrith branch railway (PRN 81532). Photo CPAT CS01/25/26



Plate 4 Excavations below the A5104, in the vicinity of PRN 81542. Photo CPAT 1131.18

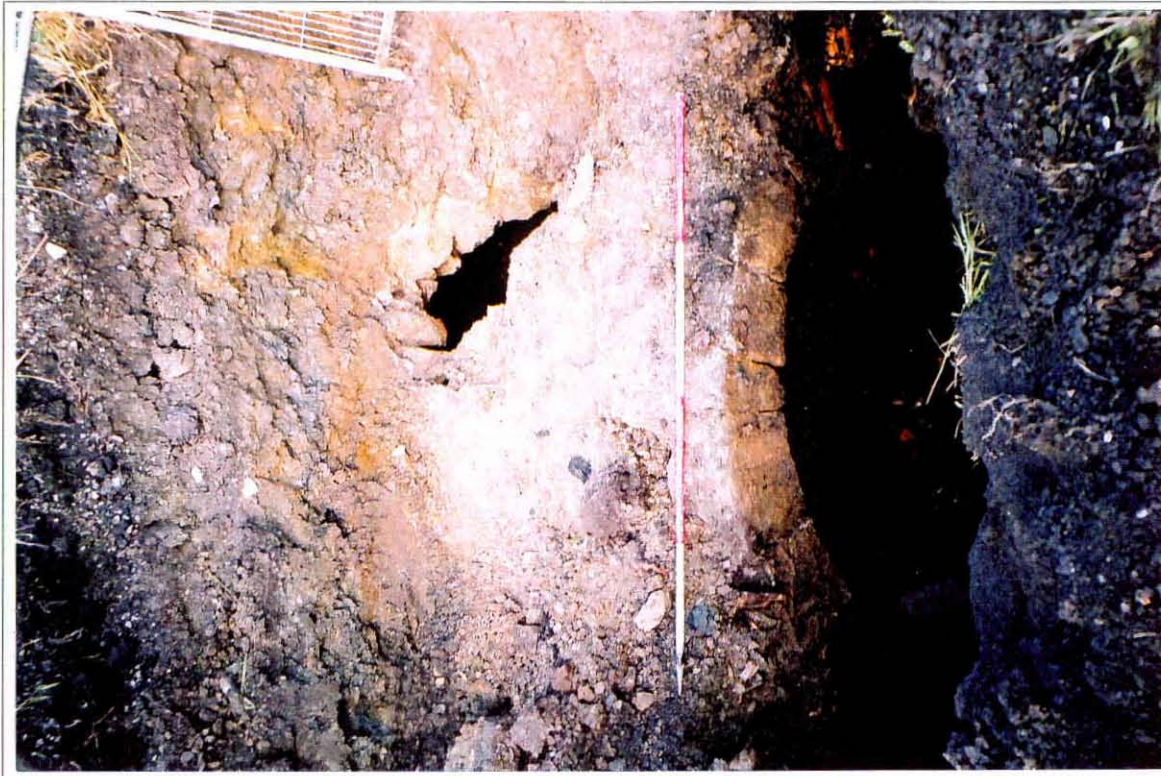


Plate 5 ESE end of culvert at SJ 2767 6055. Photo CPAT 1102.34



Plate 6 Interior of culvert at SJ 2767 6055. Photo CPAT 1102.29



Plate 7 Pipe trench adjacent to PRN 81544 Pen-yr-Allt quarry I. Photo CPAT 1131.11

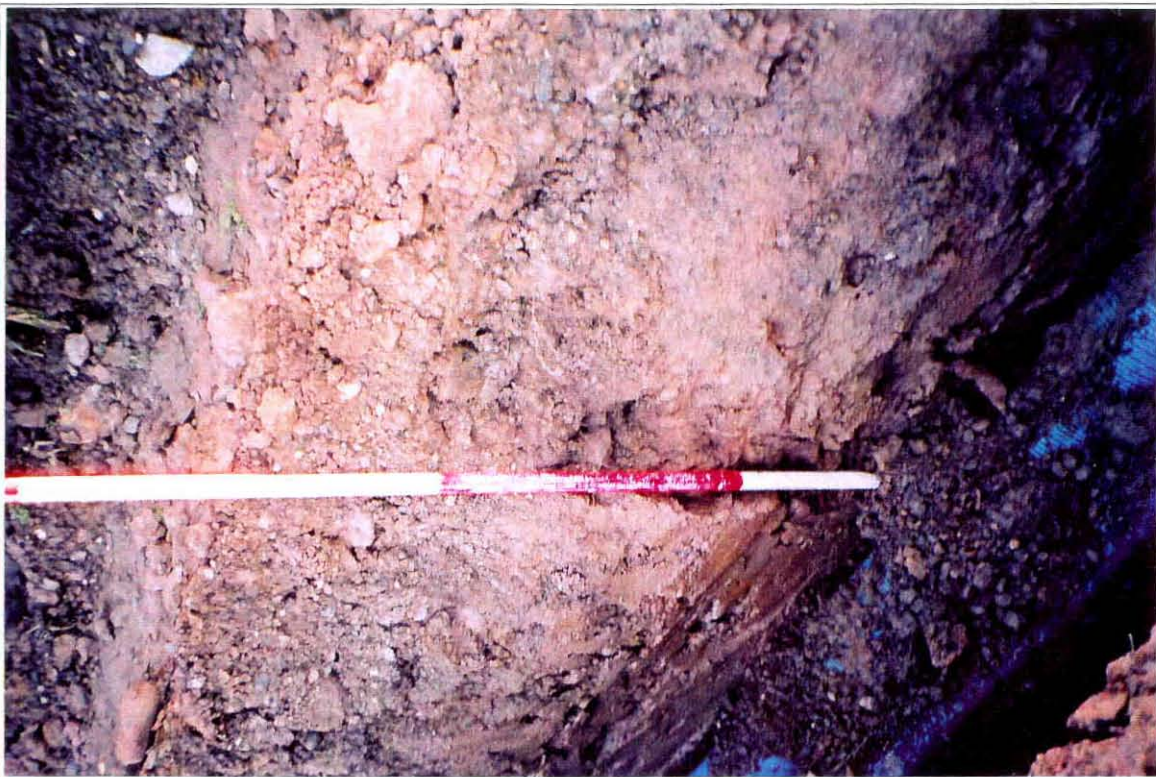


Plate 8 Pipe trench adjacent to PRN 81544 Pen-yr-Allt quarry I. Photo CPAT 1131.10