

CPAT Report No 1169.1

Llanferres to Eryrys Pipeline

ARCHAEOLOGICAL WATCHING BRIEF



THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

Client name: William Hughes Ltd, on behalf of Costain Ltd/Dŵr Cymru/Welsh Water
CPAT Project No: 1832
Project Name: Llanferres to Eryrys Pipeline
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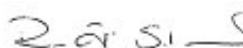
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1 Introduction

- 1.1 This report describes the results of a watching brief conducted during soil-stripping operations along the line of a new water pipeline between Llanferres and Eryrys in Denbighshire, undertaken by the Field Services Section of the Clwyd-Powys Archaeological Trust (CPAT) between July and October 2012 and in January 2013. CPAT was engaged by the contractors, William Hughes Ltd, on behalf of Costain Ltd and Dŵr Cymru/Welsh Water. The pipeline was not subject to planning permission, but Dŵr Cymru/Welsh Water committed to the watching brief as a measure of best practice.
- 1.2 The new pipeline extends for 3.6km from SJ 20232 58074 at Eryrys to a pumping station at SJ 18917 60344 close to Llanferres, with an additional 1.2km-long section replacing an existing water main to SJ 18749 61519. The watching brief was restricted to those sections of the new pipeline that crossed farmland between SJ 19823 58260 and SJ 19627 58497 and between SJ 19075 58960 and SJ 18917 60344. Elsewhere the route followed a trackway, while to the north of Llanferres the intention was to replace an existing main. A later revision to the northern section of the route required an additional watching brief to be undertaken in late January 2013 along 0.4km of new pipeline between SJ 18940 61120 and SJ 18980 60740.
- 1.3 An assessment of the cultural heritage along the route of the new pipeline conducted by CPAT in April 2012 (Jones 2012) identified fifty-five undesigned assets within 100m of the proposed pipeline. Six of these assets were identified as potential receptors of a direct impact during the construction of the pipeline. Mitigation was recommended in the form of avoidance for three assets and a general watching brief for the remaining three, and the latter was also recommended for the phase of soil stripping. There recommendation was for the watching brief to be restricted to those areas where the pipeline crossed agricultural land, excluding sections which followed existing roads or tracks.

Table 1: Recommended mitigation for assets where potential physical impacts were identified during the original cultural heritage assessment (Jones 2012)

PRN	Asset Type	NGR	Value of Asset	mitigation
122414	Mine shaft	SJ19745836	low	Avoid/demarcate
122421	Mound	SJ18665901	low	Avoid/demarcate
122422	Gully	SJ18665902	low	Watching brief
122423	Cultivation ridge	SJ18725954	low	None
122424	Platform	SJ18805960	medium	Avoid/demarcate
122426	Holloway	SJ1895360445	low	Watching brief

2 The Cultural Heritage History of the Area

- 2.1 There is little direct evidence for prehistoric activity along the pipeline route, although its presence in the wider area is evidenced by a Bronze Age burial cist on Bryn yr Orsedd (PRN 100897; SJ 1935 5931), 450m north-east of the pipeline corridor. Later prehistoric settlement is more obviously demonstrated by the presence of a number of hillforts and smaller enclosures of putative Iron Age date, the largest of which is the hillfort atop Moel Fenlli (PRN 102310; SJ 163 601), 2.5km to the west of Llanferres. The general sparsity of prehistoric sites and features is however a reflection of the limited level of past archaeological work in the region, not of the scale of prehistoric activity in the region which is likely to have been considerable but as yet remains unrecognised.

- 2.2 Roman activity in the area is evidenced by the presence of artefacts and probable Roman burials in both Big Covert Cave (PRN 102320; SJ 1979 6055) and Lynx Cave (PRN 100950; SJ 199 594), respectively 1km east of Llanferres and 1.5km north of Eryrys. And as with the prehistoric era, it is likely that there was a considerable spread of settlement and other activity in the region which has yet to be identified.
- 2.3 The origins and early history of Llanferres are unknown and it is first referenced as 'Llanverrys' as late as 1291, although an early medieval (i.e post-Roman but pre-Conquest) origin based on an association with St Berres is extremely likely. Other than a record of its existence, there is also little known about the village during the medieval period as a whole. There are, however, traces of what is likely to have been a system of medieval open-field agriculture visible in the pattern of fields visible on 1940s aerial photography, while a possible medieval house platform (PRN 122424) has been identified along the route of the proposed pipeline around 1km south of Llanferres.
- 2.4 From at least the 16th century there is evidence for lead mining in the Eryrys area (FRO D/GR/319) and the extensive workings associated with the Maeshafn (or Maes-y-safn) Lead Mine (120684; SJ 2044 6106) may date from as early as 1640 continuing through until its closure in 1907. Another large-scale mining operation, for lead and silver, was conducted at Belgrave Mine (PRN 18005; SJ 2025 5885) 800m north of Eryrys, from the early 19th century until its closure in 1857. Elsewhere there are numerous small shafts, adits and trial workings, including several in close proximity to the proposed pipeline. The underlying limestone geology was also responsible for the development of small-scale lime burning, presumably for agricultural use, and a number of limekilns are recorded by the Ordnance Survey in the later 19th century.

3 Watching Brief

- 3.1 Where the pipeline crossed farmland the method of construction involved the stripping of topsoil within a 20m-wide corridor or easement, followed by the excavation of the pipe trench as an open cut. Along existing trackways the pipe trench was excavated using a wheeled or toothed trenching machine and this was not subject to the watching brief. Upon removal of the topsoil any features identified as being of archaeological potential were subject to further investigation in order to establish their extent, nature and origin. Along the entire length of the pipeline scheme four such sites were identified which warranted such further investigation.

Site 1 (Figs 1 and 4)

- 3.2 A metalled surface at the south-eastern end of the scheme (NGR SJ 19952 58201), was constructed from small limestone cobbles and sealed by up to 0.2m of topsoil and a thin deposit of orange silty clay. It was not feasible to expose the full extent of the surface which, though it did not appear to extend further to the west, did continue beneath a ruinous boundary wall constructed of limestone blocks. The surface extended for at least 12m east to west by 3m north to south. It might represent the remains of a trackway in which case the exposed remains probably form only a small proportion of the whole, or it may perhaps be a hard-standing associated with an otherwise unidentified building.
- 3.3 Sherds of pottery, of late 18th-century date, were recovered from the overlying topsoil, although no dating evidence was recovered from the metalled surface



Fig. 1 Site 1 – viewed from the west, showing the limestone-cobbled surface underlying a field boundary of later post medieval construction.

Photo CPAT 3508.0021

Site 2 (Figs 2 and 4)

- 3.4 Located within the same field and to the west of Site 1 another archaeological feature (Site 2 NGR SJ 19892 58240), was sealed by a thin deposit (0.1m thick) of topsoil. It consisted of a doughnut-shaped mound, 7.2m in diameter, surrounding a circular depression. The mound, which had been almost levelled to the ground in part, survived to a height varying between 0.5m and 1m and appeared to be constructed from crushed limestone bonded with a yellow ‘plastic’ clay. Encompassing this was a thick band of light brown silt (possibly the remains of timber lining) surrounded by limestone rubble. Underlying the outer circuit of rubble were the remains of a circular wall constructed of limestone blocks.
- 3.5 Sherds of slipware pottery, of late 17th to early 18th-century date, were recovered from the overlying deposits of soil, but no dating evidence was recovered from the feature itself. Initially, it was believed that the feature represented the truncated remains of a small limekiln. However, the site is adjacent to Blaen y Nant lead mine (PRN 18008), and a horse whim (PRN 122409) and a spoil tip (PRN 122399) were identified in this area on 1940s aerial photography during the assessment phase of this scheme (Jones 2012). To the north of Site 2 is a large spoil tip and this suggests that the feature is probably the aforementioned horse whim.



Fig. 2 Site 2 – the remains of a possible horse whim associated with the Blaen Y Nant lead mine and viewed from the south-east. Photo CPAT 3508.12

Site 3 (Figs 3 and 4)

- 3.6 A third site was located in the base of the river valley within open pasture fields to the south of Llanferres (NGR SJ 18763 59601). The site, which lies adjacent to a possible medieval house platform (PRN 122424), consisted of a broad, 0.8m-wide ditch, orientated east to west. A 1.7m long section excavated across the feature revealed that the ditch was up to 0.45m deep but had been truncated during the topsoil stripping exercise. Unfortunately no dateable artefacts were recovered from the single ditch fill (a mid-yellowish grey silty clay). The ditch appeared to cut through a number of deposits, the earliest of which consisted of a charcoal-rich soil, believed to indicate a period of burning and clearance within the immediate environs. Underlying this deposit (visible in Fig. 3) were a number of plough scars aligned east to west, which could be of medieval date. The purpose and date of the ditch cannot be determined, but it is likely to be of medieval or post-medieval date rather than earlier

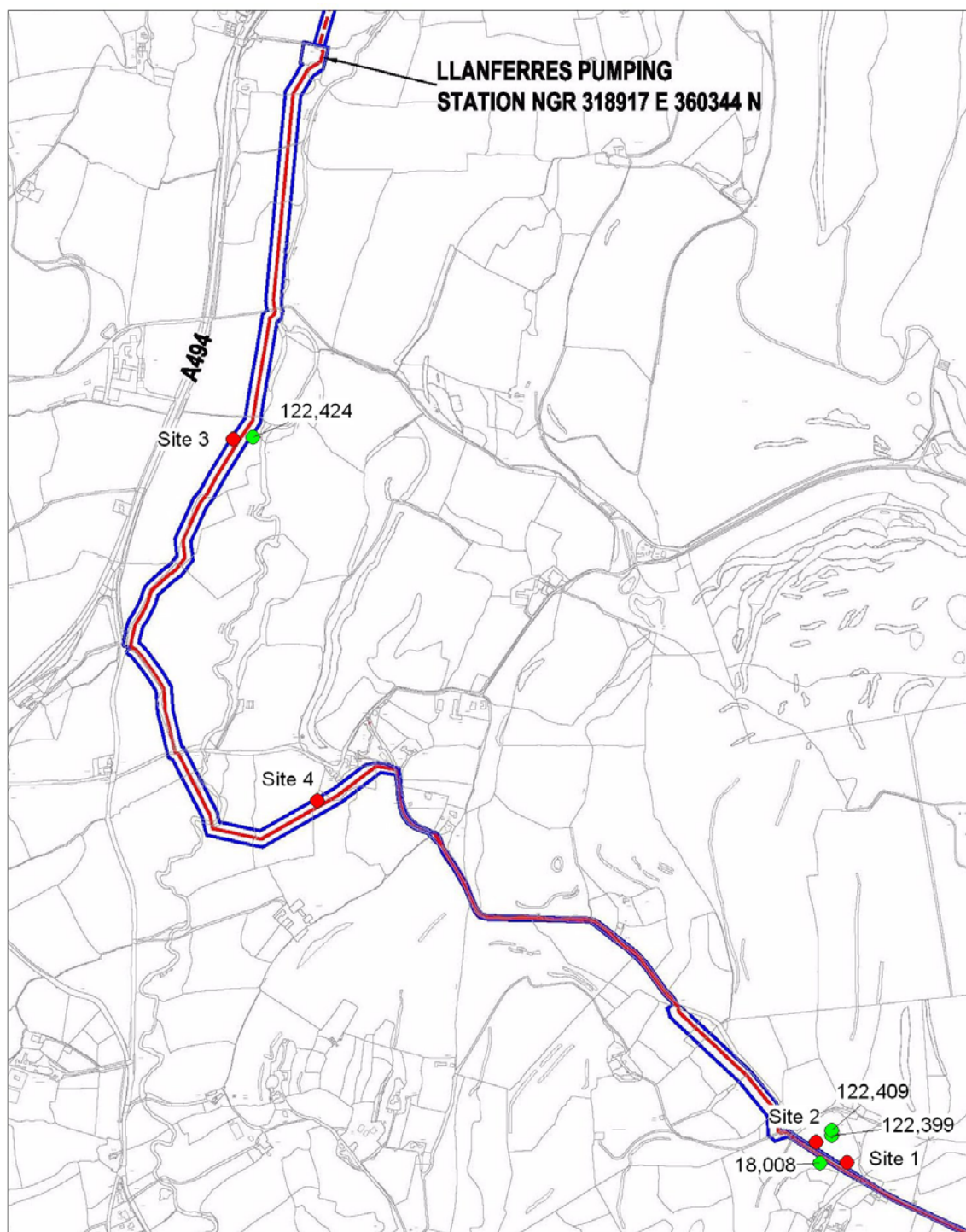
Site 4 (Fig. 4)

- 3.7 Site 4 was located at the top of a gently sloping pasture field, at the base of a limestone terrace upon which a small modern hamlet has grown up (NGR SJ 18922 58934). Although no archaeological features were recorded within the area, three sherds of medieval pottery were recovered from relict ploughsoil deposits located at the base of the terrace close to a possible house-platform site. The pottery was made from a buff cream fabric with either mottled olive or orange lead interior and exterior glaze, and is probably of 13th or 14th-century date and thus medieval.



Fig. 3 Site 3 – viewed from the east, a possible medieval field boundary or drainage ditch.
Photo CPAT 3508.0023

- 3.8 As previously stated, a later revision to the northern section of the route required an additional watching brief to be undertaken in late January 2013 along 0.4km of new pipeline between SJ 18940 61120 and SJ 18980 60740 (Fig.5). The assessment of the cultural heritage along this revised section of the route (previously conducted by CPAT in April 2012 (Jones 2012)) identified one undesignated asset as a potential receptor of a direct impact during the construction of the pipeline. The asset, PRN 122410 (SJ 18684 61454), is described in cartographic sources as ‘Bryn Bowllo open field’ indicating the probable presence of a land-use pattern of medieval date. The cultural value of the asset was considered negligible and mitigation was restricted to a general recommendation for a watching brief.



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Fig. 4 Features revealed during the watching brief (in red), together with adjacent, previously recorded cultural heritage assets (in green), scale 1:12,500

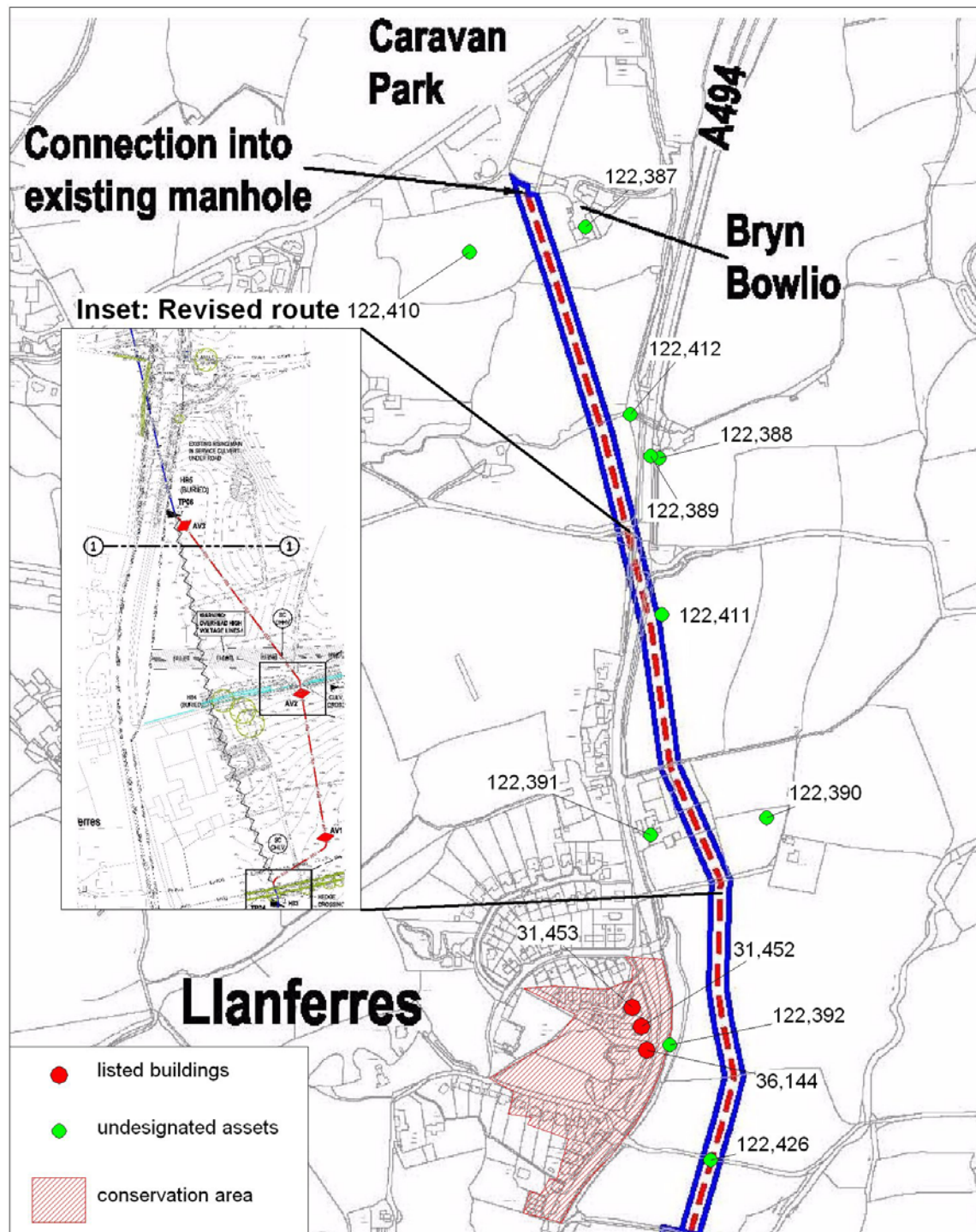


Fig. 5 Revised pipeline route to the east and north of Llanferres, together with location of Bryn Bowlio and overlying field boundary.

- 3.9 During the topsoil strip it was noted that the area around 'Bryn Bowlio' was criss-crossed by the ploughed down remains of later post-medieval field boundaries. At SJ 18900 60610 where the pipeline crossed a section of field boundary, the remains of a low-lying earthen bank consolidated with large rounded boulders was revealed (Figs 6 and 7). Sherds of slipware pottery, of 18th-century date, were recovered from within the construction material of the embankment. No further archaeological deposits of significance were recorded during the rest of the topsoil strip and consequently the watching brief was drawn to a close.



Fig. 6 Remains of post-medieval field boundaries overlying the medieval field system near Bryn Bowllo. Photo CPAT 3576-0001



Fig. 7 Section illustrating the earth and stone remains of a field boundary.
Photo CPAT 3576-0005

4 Conclusions

- 4.1 The watching brief identified four previously unknown sites within the pipeline corridor following the stripping of topsoil. This in itself demonstrates that there is considerable potential for the discovery of further sites of archaeological significance in areas adjacent to and beyond the current easement corridor. The sites, which were all of medieval or post-medieval date, were identified just below the modern topsoil. It should be noted that the soil stripping process was generally restricted to removing most though not necessarily all of the topsoil and therefore did not consistently expose the surface of the natural subsoil. It is possible therefore that further buried archaeological features remain unidentified.
- 4.2 It is likely that two of the sites were associated with Blaen y Nant lead mine (PRN 18008), one possibly equating to a previously recorded horse whim (PRN 122409) and the other forming part of a metalled track, or perhaps a hard-standing.
- 4.3 Elsewhere along the scheme a ditch was identified close to a possible medieval house platform (PRN 122424). The ditch was parallel to an existing field boundary 40m to the north and may represent a boundary that had been removed during the amalgamation of fields at some point in the past. Plough-scarring was also noted which predated the ditch, but respected the same alignment, perhaps being associated with cultivation relating to the nearby house site.
- 4.4 The presence of medieval pottery within a limited area at Site 4 suggests similarly dated activity in the area, predating the present hamlet located above the limestone terrace.
- 4.5 The revised pipeline scheme to the east and north-east of Llanferres, the subject of a watching brief in January 2013, afforded the opportunity to investigate a pattern of multi-phased fields dating from the medieval period to the present day.

5 References

- Jones, N. W., 2012. *Llanferres to Eryrys Pipeline: Cultural Heritage Assessment*. CPAT Report No. 1146.