



21/07/98

AN
ARCHAEOLOGICAL DESK-TOP
ASSESSMENT
ON THE ROUTE OF THE PROPOSED
WATER MAIN RENEWAL
AT LLANON
CEREDIGION

RECORD NO. 36066
CHANGED TO 54426

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Commissioned by: Welsh Water

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FIGURES AT REAR OF REPORT

Figure 1. Reduced copy of Wesh Water drawing showing route of proposed water main renewal

Figure 2. Rectified plot of iron age enclosure 14245. Scale 1:2500

INTRODUCTION

In a letter titled Consultation with Conservation Bodies of 11 June 1998, Maureen Taylor, Divisional Conservation Liaison Officer of Welsh Water Southern Division, requested comments from Archaeoleg Cambria Archaeology on the proposed route of a water main renewal at Llanon, Ceredigion. Louise Austin, Development Control Officer of Archaeoleg Cambria Archaeology responded on 18 June. During an initial appraisal of the route, Ms Austin had noted the presence of an iron age defended enclosure (Dyfed Sites and Monuments record no. 14245) close to proposed water main. She therefore recommended that a archaeological desk-top assessment of the route should be undertaken This should include:

- a re-assessment of aerial photographic evidence and where relevant a re-plotting of appropriate archaeological and topographic information by a suitably qualified specialist at scale of 1:2500

- the collation and assessment of all relevant information held in the Dyfed Sites and Monuments Record

- the collation and assessment of all relevant cartographic information

- a site visit

- a detailed assessment of areas of archaeological potential and survival based on the above research

Welsh Water agreed that the above recommendation and in a letter dated 19 June 1998 commissioned Archaeoleg Cambria Archaeology Field Operations to undertake the study. The study was carried out in early July 1998.

METHODOLOGY

Consultation of sources in the Dyfed Sites and Monuments Record and in the National Monuments Record was undertaken. Vertical and oblique aerial photographs were examined in the NMR. Manuscript and printed cartographic sources were searched for in the National Library of Wales. Copies of printed and manuscript maps were also examined in the SMR.

To ensure an accurate location of the iron age enclosure (14245), the archaeological evidence from an oblique aerial photograph (AP89-127) was digitally rectified and plotted. This was undertaken using Autocad, a computer aided drawing package. The resulting rectified drawing was plotted out at 1:2500 scale. Additional information was sketched onto this plot from vertical photographs held by the NMR. The resulting plot was then hand-traced onto Welsh Water's engineer's drawing (Fig. 2).

A site visit was made to examine the route of the proposed water main renewal. As the entire route lies alongside a public road, it was not necessary to enter individual fields: examination was possible from the road. At the time of the visit, 2 July 1998, high grass was present in most fields. This hindered the identification of any low earthworks that may have been present. The iron age enclosure lay under closely-grazed pasture.

THE HISTORIC LANDSCAPE

To the west of the western terminal of the proposed water main renewal lies the important field system known as Morfa Esgob (Davies 1973, Jones 1985). This is a medieval sub-divided field system (sometimes known as a strip- or open-field system), a system that was not enclosed with banks or hedges, but farmed communally until the quite recent past, with low earth balks separating strips or holdings. Some long, narrow fields that lay immediately to the west of the reservoir at the west end of the proposed route may originally have been part of the Morfa Esgob system, but subsequently had been enclosed by hedges; these fields have been built on over the past 30 years. To the south of the western end of the proposed water main renewal a single large field around Pant-wilog seems also originally to have been farmed communally, as on the 1846 tithe map of the parish of Llansantffraid this area is shown as partly sub-divided and farmed as three separate holdings.

The route of the proposed water main renewal traverses a landscape of small- to medium-sized, fairly regularly-shaped fields with a settlement pattern of dispersed farmsteads. The evolution of this field system is not known. It may have resulted in the engrossing and enclosing of a sub-divided field system by individual farmers in the 16th- and 17th-centuries - a period when the system of communal farming was generally beginning to break down -, or from the mass enclosure of a sub-divided system under the aegis of a powerful landowner. Alternatively neither of these methods need apply. What is certain is that by 1846, the date of the tithe survey, the field system that is evident today had been established.

A note was made of the character of individual hedgebanks/hedgerows during the site visit. The roadside hedgebank(s) is much more substantial than those separating fields, and consists of an earth bank on average 3m wide and 2m high faced with stone. This stone facing was only visible in a few areas where vegetation was low, but clearly comprised coursed stone laid herring-bone fashion. Other boundaries are generally much less substantial, and consist of banks on average 2m wide and varying in height between 0.6m and 1.5m. Due to dense vegetation cover it was not always possible to examine the type of bank construction. However, the poor condition of the hedge on the boundary between fields OS ref. nos. 0900 and 2388 revealed this bank to be faced with stone laid herring-bone fashion. In all cases, apart from the bank mentioned above, well-kept, mixed-species hedges top the banks.

Hedgebank evidence may be taken to indicate that there is a chronological difference between the construction of the massive banks alongside the road and the slighter banks dividing the fields. If this is correct, it maybe that the area was originally a part of a sub-divided or open-field which was only enclosed by a massive bank alongside the road, with the individual fields we see today created at a later date, but before the tithe survey of 1846.

GAZETTEER OF ARCHAEOLOGICAL SITES

14245. Iron age defended enclosure, lying at *c.* 75m OD, situated in Ordnance Survey field reference no. 0900 (NGR SN 521669). A crop-mark site, identified from aerial photographs taken in 1989. On aerial photographs it can be seen to consist of an egg-shaped, inner enclosure 95m by 40m defined by a crop-mark ditch some 3-4m across, with an entrance in the south side. North-west of the inner enclosure and concentric to it at a distance of 18m is second ditch. The crop-mark of this is fainter and broken, indicating a slighter, shallow ditch. A possible third ditch represented by scrub growth lies a further 18m to the south-west. To the south-west of this ditch the public road follows a curving route concentric to the enclosures. This may be significant - the road may be following the line of an outer ditch not evidenced in any other form. On the ground there is no trace of the outer ditches, and only very slight earthworks may represent the inner enclosure, though this evidence is not at all clear. To the south the ground is fairly flat with a level approach to the site. The inner enclosure, however, lies across a break of slope, with ground falling away sharply to the north.

The only other site of possible archaeological interest is a field recorded on the apportionment of the tithe survey as Cae Maen (Ordnance Survey field reference no. 9974). This may be a reference to a bronze age standing stone. However, given the long, slim shape of field 9974, it is more likely that maen is a local spelling of main, meaning thin or narrow.

ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL

Iron age enclosure 14245 is a site of regional archaeological importance. The archaeological remains usually associated with this type of site are quite well known. Originally the inner enclosure would have been defined by a defensive circuit consisting of a bank and ditch and would have contained a settlement consisting of a least one round-house and other structures. Concentric to this inner defensive circuit would have been a least one line of outer defense. Crop-mark evidence indicates that this would have been slighter than the inner defence, but nevertheless would have comprised a bank and ditch. Further lines of defence may have been present, but the archaeological evidence is not clear on this. Very few artefacts are found in association with this type of site, and those that are found generally come from the settlement area in the inner enclosure. On occasions such items as cremation burials are found away from settlement area in the vicinity of outer defences, but it must be stressed that these are very rare.

The proposed water main renewal will pass within 50m of the inner enclosure and within 15-20m of a putative outer ditch/defence and alongside the public road which may lie on a further element of the sites defensive system.

RECOMMENDATIONS

Only two recommendations are made:

The first concerns the iron age enclosure 14245. Because of the importance of this site it is recommended that Welsh Water commission an archaeologist to undertake a walk-over survey of the field OS ref. no. 0900 following topsoil stripping and also to undertake a watch brief during trench digging in field 0900 where the proposed water main passes close to the iron age enclosure. It may be possible to accommodate both these tasks in a single one-day site visit.

The second concerns restoration of the historic landscape elements following construction of the water main renewal. The landscape through which the water main passes is of considerable antiquity; it had achieved its present-day appearance by at least 1846. Restored hedgebanks, replacing sections cut through during construction, should be of a style and appearance that closely match those destroyed.

REFERENCES

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NLW, 'Llansaintfraed Tithe Map and Apportionment', 1846, copy in Dyfed SMR

NLW Lldiartau 1, 'A map of different slangs on Morfa Esgob', 1825

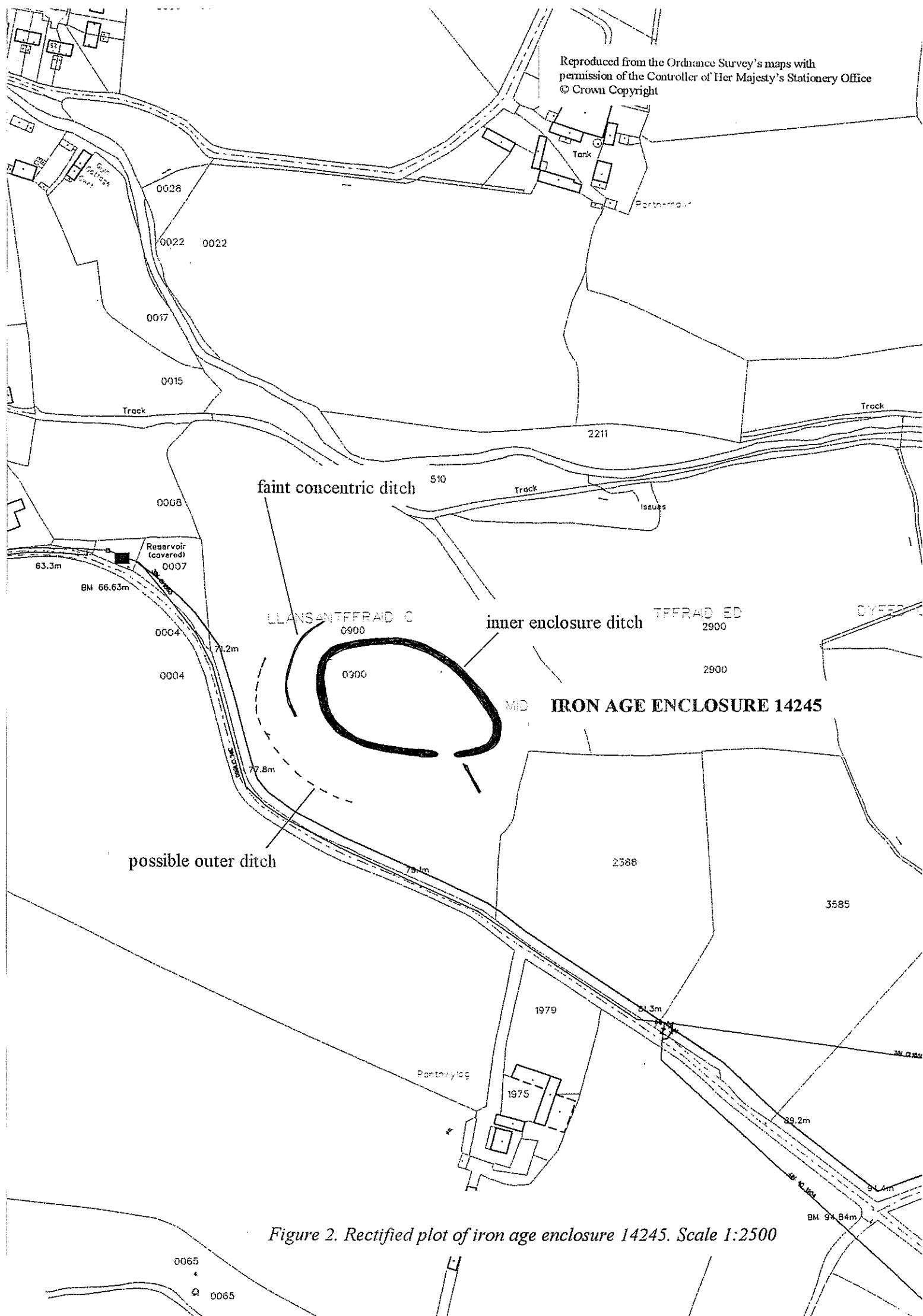
Oblique aerial photograph - 'AP89-127', taken by Musson, C. R., 1989, copy in SMR

Ordnance Survey 1820-21 'Original Surveyors' Drawings', 2" to 1 mile, Sheet 314

Ordnance Survey, 1891 *1:2500 1st Edition*, Cardigan XIV.15 and XIX.3

Ordnance Survey, 1906 *1:2500 2st Edition*, Cardigan XIV.15 and XIX.3

Vertical aerial photographs - 106/UK/ 1631 1036-37 (1946); CPE/UK/2134 3117-18 (1947)



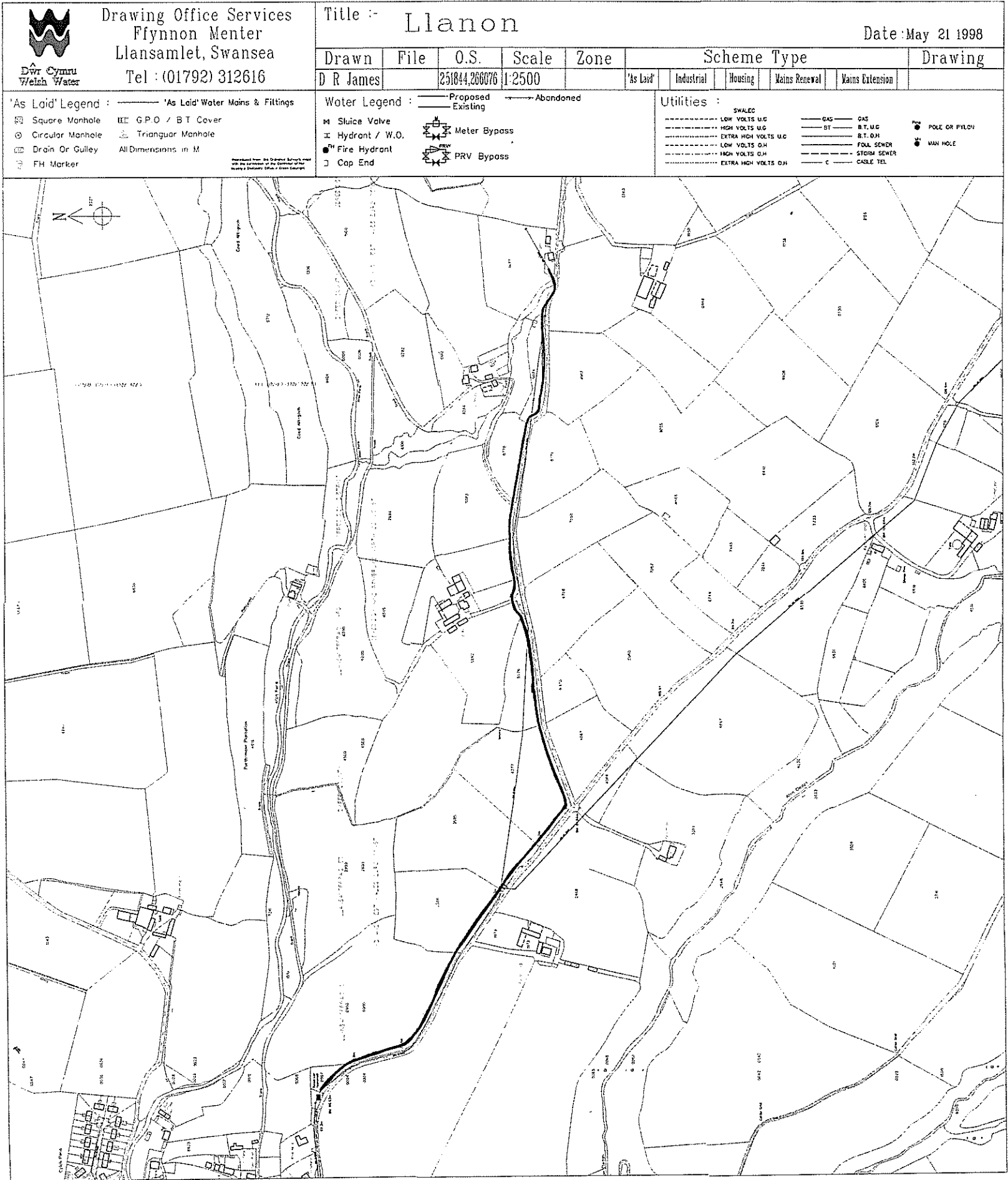


Figure 1. Reduced copy of Welsh Water drawing showing the route of the proposed water main renewal.