
BETHEL TO FELINHELI RISING MAIN

WATCHING BRIEF

GAT Project No. G1840

Report No. 588



Feature 8. Clawdd land boundary cross-section north of Carreg Goch

Prepared for
Galliford Try

July 2005

By
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| CONTENTS | Page |
|----------------------------------|-------------|
| 1. SUMMARY | 2 |
| 2. INTRODUCTION | 2 |
| 3. SPECIFICATION | 2 |
| 4. METHODS AND TECHNIQUES | 3 |
| 5. RESULTS OF THE WATCHING BRIEF | 3 |
| 6. CONCLUSIONS | 4 |
| 7. ARCHIVE CONTENTS | 5 |
| 8. DOCUMENTARY SOURCES | 5 |

FIGURES

1. Location of the development and of main historic features in the vicinity
2. Location of Features 1-16 identified during the assessment and Feature 17 recorded during the watching brief.
3. Hedge bank clawdd, Feature 8 cross-section
4. Hedge bank clawdd, Feature 8 cross-section
5. General trench section
6. General trench section
7. Hollow-way/Ditch section, Feature 17. Scale on side of ditch, not base
8. Position of Hollow-way/Ditch in relation to field boundary. Tip of ranging rod in pipe-trench indicates side of feature
9. Rock-cut ditch on hill-slope immediately south of Bush Farm house
10. Completed pipe trench across former railway line, Feature 15, Lon Las Menai, Y Felinheli

1. SUMMARY

This report describes the results of an archaeological watching brief undertaken during the construction of a new waste-water pipe-line between the treatment works at Bethel and a pumping station at Y Felinheli. The pipe-line route ran across fields of improved pasture through an area where there have been Roman finds and close to farms of medieval origin. The work was carried out on behalf of Galliford Try. A previous assessment identified sixteen historic or archaeological features or finds that were on or close to the pipe-line route (Smith 2004). Four of these were specifically identified as requiring a watching brief. One feature, a field on the line of a possible medieval boundary was recorded in detail although the actual remains were considered to be of Post-medieval construction. Three other features were avoided by construction. One new feature was identified, a ditch or possibly pack-horse hollow-way that lay approximately on the line of an existing public right of way.

2. INTRODUCTION

Gwynedd Archaeological Trust carried out an archaeological assessment (Smith 2004) of the route of a proposed rising main between the existing waste water treatment works at Bethel NGR SH 51606520 and the pumping station at Felinheli, NGR SH 52406755 (Fig. 1) as shown on Black and Veatch Drawing Nos 2469-0000-8003-PO and 2469-0000-8004-PO. The assessment was recommended as part of planning conditions, by Gwynedd Archaeological Planning Service (GAPS). The assessment was carried out by means of a desktop study of existing records and of a field search. Sixteen features were recorded of which none were existing Historic Environment records. Of these four were identified that might be affected by the pipeline construction. These were all linear boundaries or field terraces of possibly Medieval date. It was recommended that a watching brief should be carried out when the pipeline cut these features. The area was also recorded as of some general archaeological potential, because of the occurrence of Romano-British settlement in the vicinity (Longley *et al* 1998) and it was therefore recommended that an occasional watching brief should be carried out during the remainder of the works because buried features might be present that could not be identified on the surface.

Fig. 2 records the location of the features identified during the assessment, of the one additional feature identified during the watching brief and the location of the record photographs (Figs 4-10).

3. SPECIFICATION

The recommendation was that the site should be visited during the soil stripping over the easement and during the pipe trench excavation, in particular where it cut the features identified during the assessment. Notes and photographs would be taken and more detailed records made if required.

The assessment did not identify any areas in need of further assessment and the recommended mitigatory measures are summarised in Table 1.

Table 1 Summary of recommended mitigation

| Feature No. | Type | Category | Impact | Proposed mitigation |
|-------------|---------------------------------------|----------|-------------|-------------------------|
| 1 | Trackway | C | Significant | None |
| 2 | Blocked gateway | C | Possible | None |
| 3 | Pedestrian gate | C | Possible | None |
| 4 | Possible early land boundary | C | Unlikely | None |
| 5 | Track/Path | D | Significant | None |
| 6 | Site of former cottage Tyddyn Conglog | C | Unlikely | None |
| 7 | Possible early land boundary | C | Unlikely | None |
| 8 | Possible early | C | Unlikely | Detailed watching brief |

| | | | | |
|----|---|-------|--------------|----------------|
| | land boundary/enclosure | | | |
| 9 | Possible Medieval land boundary | C | Likely | Watching brief |
| 10 | Terrace/lynchet | C/Nil | Considerable | Watching brief |
| 11 | Possible Medieval land boundary | B | Significant | Watching brief |
| 12 | Crop-mark features – possible roundhouses | E | Unlikely | None |
| 13 | Trackway | D | Slight | None |
| 14 | Boundary bank | D | Slight | None |
| 15 | Railway trackbed | B | Considerable | None |
| 16 | Railway embankment | B | Considerable | None |

4. METHODS AND TECHNIQUES

The construction took place between November 2004 and February 2005 and the site was visited on 15 occasions between 11th November 2004 and 26th February 2005.

The excavation was carried out by a trench-cutting machine in the western half of the route and by a large 360⁰ excavator on most of the rest, except down the steep slope above Y Felinheli, where a small 360⁰ excavator was used.

The trenching machine exposes only a very narrow trench giving little likelihood of identifying any archaeological features. The topsoil stripping of the easement generally did not cut completely down to the subsoil over the whole width of the easement so did not provide good conditions for identification of archaeological features. In most of the route the pipe was mole-trenched under boundaries so the nature of those of possible archaeological interest was not ascertained, except in the case of one (Feature 8) north-east of Carreg Goch, through which a gap was cut to allow machine access.

5. RESULTS OF THE WATCHING BRIEF

12th November 2004: The work on the pipe trenching was already in progress using a trenching machine of Mr Griffiths of Nefyn and the site was visited to assess progress towards the field boundary, Feature 8, the first area where a specific watching brief had been recommended. Met Alun Roberts and discussed what areas of the route needed watching briefs. Discovered that Feature 8 had already been cut through in order to provide access for machinery from one farm to another. Visited Feature 8 of which there was quite a cleanly cut section and observed that it appeared to be of recent clawdd construction or re-construction.

25th November 2004: Visited site to record the exposed section of Feature 8. It appeared certainly of a single build and of relatively recent construction. It consisted of a bank of stony orange-brown loam and loose small stones with slightly inclined facing of roughly laid larger stones. There were no foundation stones and the bank was built directly on the orange-brown silty loam subsoil. There was no evidence of flanking drainage or quarry ditches (Figs 3-4). Although this irregular boundary between the two farms may have origins with some antiquity the impression was that it had been re-built within the last century or two.

10th, 16th, 21st December 2004: Brief visits to check on progress and to walk over the stripped easement. The route across Bodandreg Farm missed the lynchet, Feature 10 and the pipe was mole-trenched under the field boundaries, features 9 and 11 so they were not affected and no recording was needed. Beyond Feature 11 the subsoil on the route became stonier and the work was carried out by Hughes Bros. using a large 360⁰ excavator. The work in December and January was hampered by very wet weather which meant that ground conditions and visibility of exposures were poor (Fig. 5).

6th January 2005: The easement on the west part of Bush Farm had been stripped of topsoil but had been stripped quite shallowly so that subsoil was only visible occasionally so it was unlikely that any archaeological remains would be visible unless they were stone-built structures. In most places the subsoil was orange-brown stony till except at the highest point and the furthest east on the steeper slope which was outcropping shaley rock.

7th January 2005: The pipe trench had been cut across the small, westernmost field of Bush Farm. Work halted because of bad weather.

10th January 2005: The trench had been cut between and across two field banks at the west side of Bush Farm. Both banks consist of earth with stone facing and no evidence of any antiquity in the form of silted-in ditches, for instance. The westernmost bank had shallow, 'scoop' bordering quarry ditches. At the west end of this area the pipe trench cut through yellow-buff silty till (Fig. 6), from the second field bank through rock. The clarity of the subsoil meant that any archaeological features would be easy to identify.

13th January 2005: Two features were found cut by the pipe trench. The first was a partly decayed and therefore relatively recent sheep burial. The second was much larger feature (Feature 17), appearing in both sides of the trench and therefore possibly linear, about 4m wide and 1.40m deep with medium sloping sides, filled with dark loamy soil. It was somewhat deeper than the cut of the pipe trench, which averaged about 1.20m deep, so had to be excavated into the base of the trench to locate the base of the feature. It was not possible to take a good photographic record because the trench was so narrow (Fig. 7). The feature was measured to nearby boundaries and a measured sketch section recorded. There was no dating evidence but the feature lined up with a nearby gateway through which a public right of way runs (Fig. 8). The public right of way must have once been a well-used route because it is visible as a terraced track on the steeper slope west of Bush Farm. This suggests that the feature discovered is a worn hollow-way, perhaps because the track was a pack-horse route, not just a footpath. The hollow-way would have been filled in to improve the field once the modern road system the levelled in. The feature is surprisingly deep for its width, as a hollow-way, but could be accounted for as a pack-horse way and no other explanation seems likely.

17th January 2005: The final field south-west of Bush Farm was observed because a crop mark of a possible Iron Age/Romano-British roundhouse had been recorded as part of the assessment about 60m to the west of the pipe-trench route. There was therefore some potential for other features in the same field, however pipe-trench cut through bed-rock here with a shallow topsoil on quite a steep slope and there were no features present (Fig. 9).

21st February 2005: North of Bush Farm house the pipeline crossed the road and then followed a gravelled track as far as Pen-Rallt before turning down a very steep slope. The features in this part of the route were all identified as Post-medieval in date and not requiring mitigation. A short visit was made to observe the completed works at Y Felinheli. The trench through the redundant railway line had been backfilled but the fences had still to be reinstated (Fig. 10).

6. CONCLUSIONS

The original assessment identified sixteen historic or archaeological features that might be affected by the pipeline construction. A detailed watching brief was recommended for one of these (Feature 8) and a general watching brief for the other three with a partial (i.e. intermittent) watching brief for the remainder of the route. The watching brief recorded Feature 8 as specified. The other three features were, in the end, not affected by the construction. One, a lynchet, was just off the route, the other two, boundary banks, were mole trenched beneath rather than cut through.

The general watching brief recorded only one new feature (Feature 17), a large ditch or possibly pack-horse hollow-way. This lined up with one side of nearby field boundary to the east, which might suggest that it was associated with a former continuation of that boundary to the west. However, the boundary to the east was not shown on the 1890 Ordnance Survey 6 inch map so must be more recent and the feature found must have some other derivation. There was no dating evidence for this feature but it follows the line of an existing right of way footpath and was probably still in use until at least the beginning of the 20th century.

7. ARCHIVE CONTENTS

8 Day record sheets
1 A2 drawing sheet
18 Colour negatives and prints
18 Digital copies of colour negatives on CD
18 Colour transparencies

8. DOCUMENTARY SOURCES

Longley, D.M.T., N.M. Johnstone and J. Evans 1998. Excavations on two farms of the Romano-British period at Bryn Eryr and Bush Farm, Gwynedd, *Britannia* 29, 185-246.

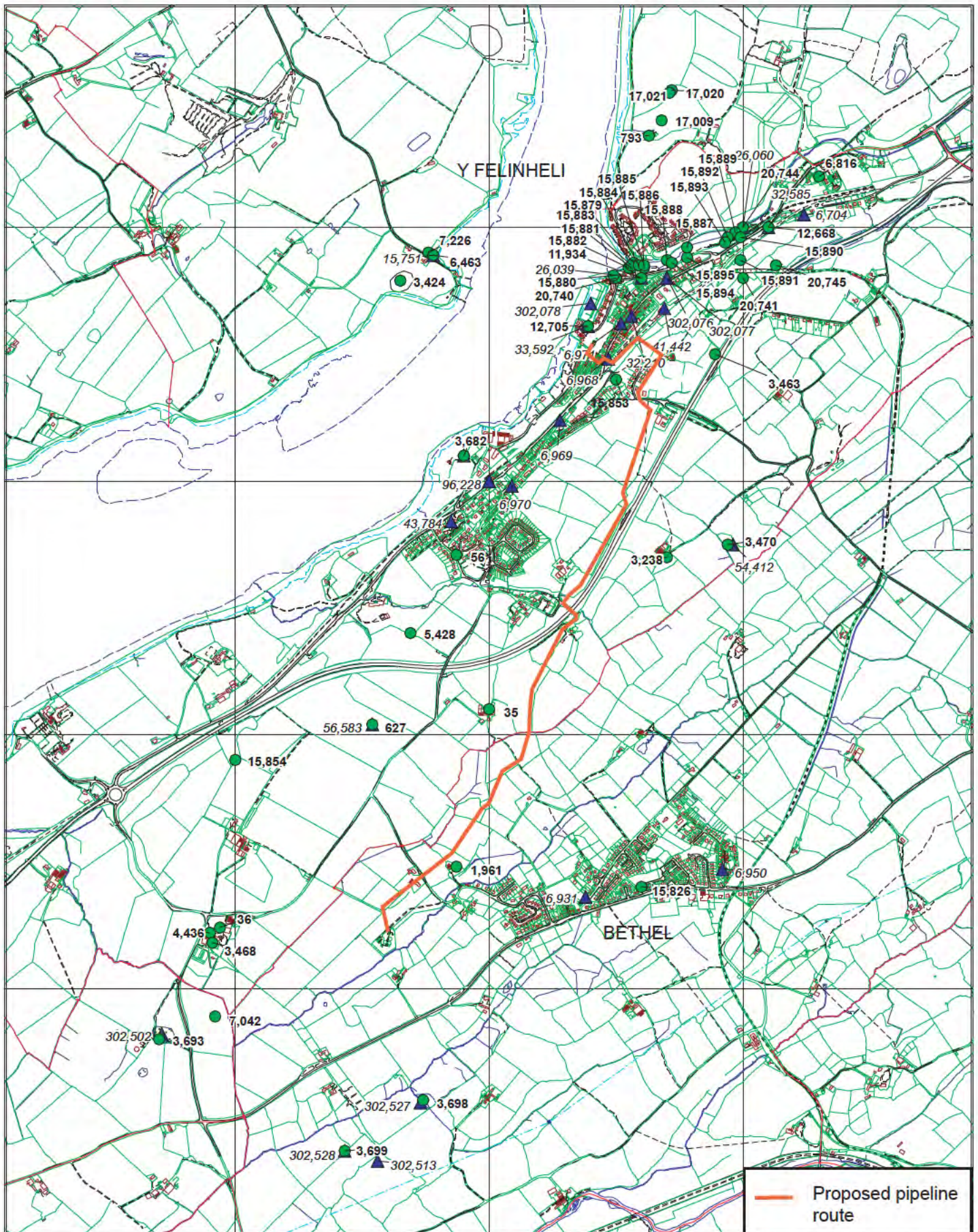
Smith, G. 2004. *Bethel to Felinheli Rising Main: Archaeological Assessment*, GAT Project No. G1840, Report No. 533.

Maps

Ordnance Survey 1st ed. 1890-91, 6 inch maps.

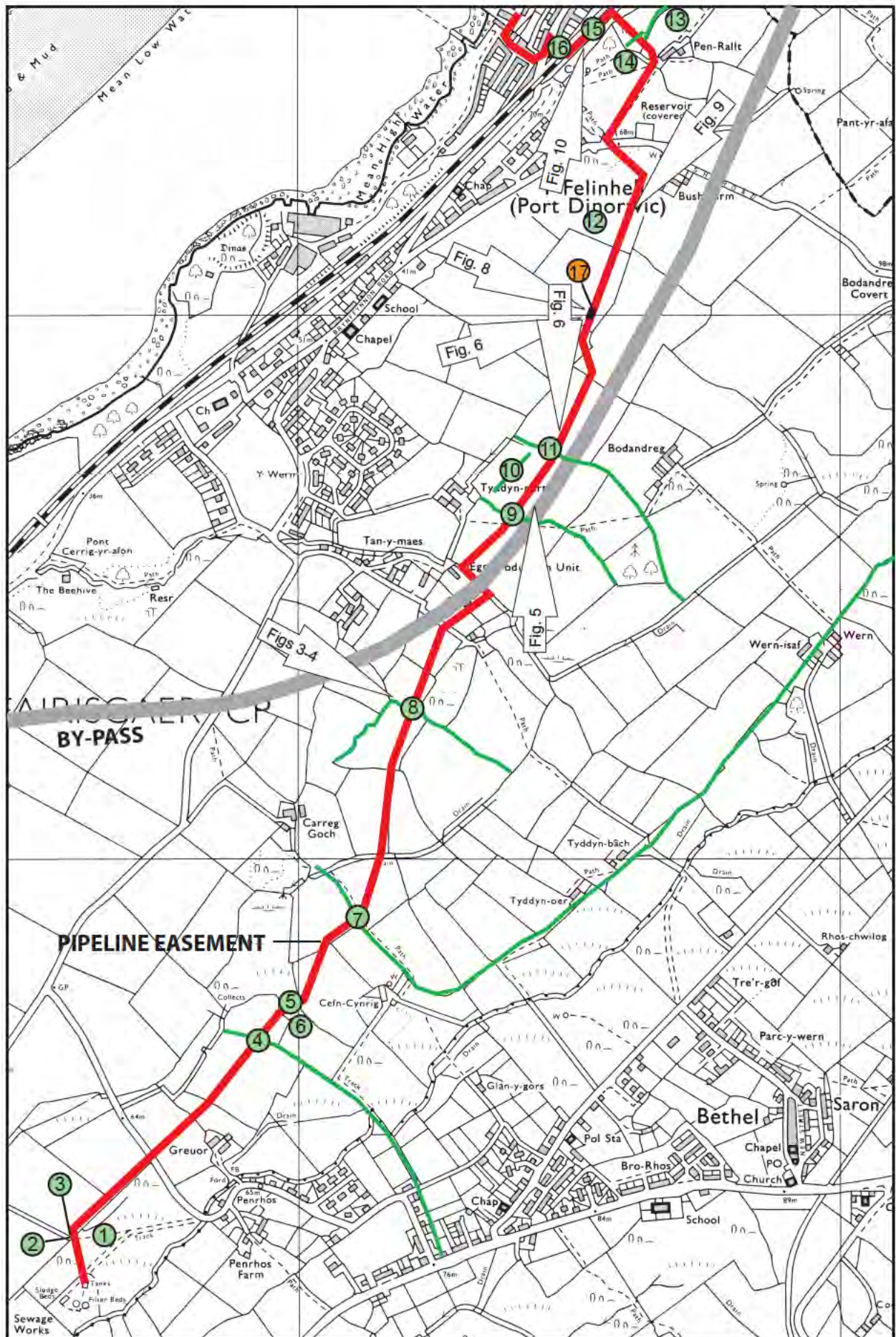
Aerial photographs

www.multimap.com



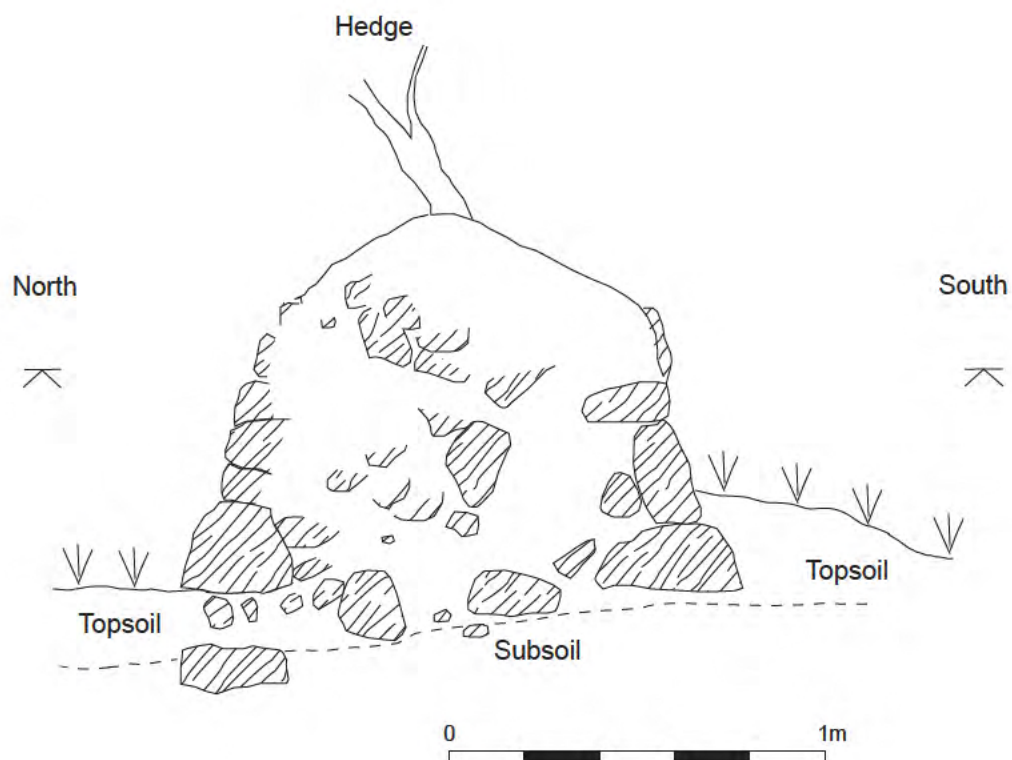
Bethel-Felinheli Rising Main Watching Brief

Fig. 1 Location of archaeological features in the vicinity of the pipeline easement



Bethel-Felinheli Rising Main Watching Brief Fig. 2 Location of Features 1-16 (Green) identified during the assessment and of Feature 17 (Orange) recorded during the watching brief.

Scale 1:10,000. Based on OS 1:10,000 scale maps. © Crown copyright. All rights reserved. Licence number AL 100020895.



Bethel-Felinheli Rising Main Watching Brief Fig. 3 Section through clawdd/ hedge bank Feature 8



Bethel-Felinheli Rising Main Watching Brief Fig. 4 Section through clawdd/ hedge bank Feature 8.
25th November 2004. From the north-west. 1m scale



Bethel-Felinheli Rising Main Watching Brief Fig. 5 General trench section 10th December 2004. From the south. 1m scale



Bethel-Felinheli Rising Main Watching Brief Fig. 6 General trench section 11th January 2005. From the north. 1m scale



Bethel-Felinheli Rising Main Watching Brief Fig. 7 Ditch?Hollow-way Feature 17 section.
13th January 2005. From the west. 1m scale



Bethel-Felinheli Rising Main Watching Brief Fig. 8 Ditch/Hollow-way Feature 17 position in relation to adjoining field boundary.
(White tip of scale showing in pipe trench at north edge of feature. 13th January 2005. From the north-west. 1m scale



Bethel-Felinheli Rising Main Watching Brief Fig. 9 General trench section in rock-cut area immediately south of Bush Farm house. 17th January 2005. From the north-east. 1m scale



Bethel-Felinheli Rising Main Watching Brief Fig. 10 Completed pipe trench across former railway line, Feature 15, Lon Las Menai, Y Felinheli. 21st February 2005. From the south. 1m scale



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