

AFON YSGETHIN, TAL-Y-BONT,  
DYFFRYN ARDUDWY, MEIRIONNYDD,  
GWYNEDD

ARCHAEOLOGICAL ASSESSMENT

Report No. 242

Ymddiriedolaeth Archaeolegol Gwynedd  
Gwynedd Archaeological Trust

AFON YSGETHIN, TAL-Y-BONT,  
DYFFRYN ARDUDWY, MEIRIONNYDD,  
GWYNEDD

ARCHAEOLOGICAL ASSESSMENT (G1439)

prepared for Shawater Ltd

February 1997

**Gwynedd Archaeological Trust Report No. 242**

**ARCHAEOLOGICAL ASSESSMENT (G1439)**

**1. INTRODUCTION**

A proposal has been made to construct a hydro-electric scheme at Cors y Gedol, which will extract water from the Afon Ysgethin at SH 6169 2265 and return it at SH 5855 2188. Gwynedd Archaeological Trust (Contracts Section) has been asked by Shawater Ltd to carry out an archaeological assessment of the proposed scheme, to form part of an Environmental Assessment, leading to an Environmental Statement which is to accompany the proposal.

The potential of this site for a hydro-generating scheme was recognised from the leats which have been used from the 18th century to supply water to both to the house and, over time, to different water wheels and pelton wheels. The principal leat still carries water, although it is no longer used to drive machinery.

**2. ASSESSMENT BRIEF**

An initial report was requested from Gwynedd Archaeological Trust, assessing the likely archaeological impact of the scheme and suggesting mitigatory measures.

The basic requirement was for a desk-top survey and field search of the proposed area in order to assess the impact of the proposals on the archaeological and heritage features within the area concerned. The importance and condition of known archaeological remains were to be assessed and areas of archaeological potential and new sites to be identified. Measures to mitigate the effects of the proposed scheme on the archaeological resource were to be suggested.

Gwynedd Archaeological Trust's proposals for fulfilling these requirements were, briefly, as follows:

- a) to identify and record the cultural heritage of the area to be affected by the proposals;
- b) to evaluate the importance of what was identified (both as a cultural landscape and as the individual items which make up that landscape); and
- c) to recommend ways in which damage to the cultural heritage can be avoided or minimised.

**3. METHODS AND TECHNIQUES**

**3.1 Desk-top Study**

This involved consultation of maps, computer records, written records and reference works, which make up the Sites and Monuments Record at Gwynedd Archaeological Trust. Records (including early Ordnance Survey maps, tithe maps, schedules, and reference works - see bibliography) were consulted in the Gwynedd Archives, Caernarfon and Dolgellau, the National Library of Wales, Aberystwyth and the University of Wales Archives, Bangor.

**3.2 Field Search**

This was undertaken on the 7th, 8th and 9th October 1996, when the whole of the proposed route of the pipeline was walked. An additional visit was made on the 16th January, 1997. Conditions were good for fieldwork but slowed, first by the considerable number of features encountered which entailed an unusual amount of recording and secondly, by the tree cover of the western part of the route which made observation of the ground more difficult.

Sites identified were marked as accurately as possible, without surveying, on copies of the 1:2,500 OS map for the western part of the route and, for the eastern part of the route, on copies of a recent detailed archaeological survey also at 1:2,500 scale (RCAHM (W), 1995). Each site was described and assessed. Detailed notes, sketch plans and photographs were made of the more important features.

### 3.3 Report

All available information was collated and the sites were then assessed and allocated to the categories listed below. These are intended to give an idea of the importance of the site and the level of response likely to be required; descriptions of the sites and specific recommendations for further assessment or mitigatory measures, as appropriate, are given in the relevant sections of this report.

The criteria used for allocating sites to categories are based on those used by the Secretary of State when considering ancient monuments for scheduling; these are set out in Welsh Office Circular 60/96 Planning and the Historic Environment: Archaeology.

### 3.4 Categories

The following categories were used to define the importance of the archaeological resource.

#### *Category A - Sites of national importance.*

Scheduled Ancient Monuments, Listed Buildings and sites of schedulable or listable quality, i.e. those which would meet the requirements for scheduling (ancient monuments) or listing (buildings) or both. Much of the present survey area is Scheduled but with many different features rather than a single 'monument'. All the features are covered by category A but in the present survey have been provisionally assessed according to their individual value within the area, thus Category A/A, A/B, etc.

Sites which are scheduled or listed have legal protection under the Ancient Monuments and Areas Act, 1979, and it is recommended that all Category A sites remain preserved and protected *in situ*.

#### *Category B - Sites of regional or county importance.*

Sites which would not fulfil the criteria for scheduling or listing, but which are nevertheless of particular importance within the region.

Preservation *in situ* is the preferred option for Category B sites, but if damage or destruction cannot be avoided, appropriate detailed recording might be an acceptable alternative.

#### *Category C - Sites of district or local importance.*

Sites which are not of sufficient importance to justify a recommendation for preservation if threatened.

Category C sites nevertheless merit adequate recording in advance of damage or destruction.

#### *Category D - Minor and damaged sites.*

Sites which are of minor importance or so badly damaged that too little remains to justify their inclusion in a higher category.

For Category D sites, rapid recording, either in advance of or during destruction, should be sufficient.

#### *Category E - Sites needing further investigation.*

Sites whose importance is as yet undetermined and which will require further work before they can be allocated to categories A - D are temporarily placed in this category, with specific recommendations for further assessment. By the end of the assessment there should be no sites remaining in this category.

### 3.5 Definition of Impact

The impact has been defined as none, slight, likely, considerable or unknown as follows:

*None:*

There is no construction impact on this particular site. (Sites identified as of particular importance are, where possible, avoided by the improvement proposals. Such sites have been identified in the tables.

*Slight:*

This has generally been used where the impact is marginal and would not by the nature of the site cause irreversible damage to the remainder of the feature, eg a track or field boundary.

*Likely:*

In some instances the site in question would not fall within the direct line of the proposed development but could be affected by construction works and therefore may, subject to its nature be removed or damaged.

*Considerable:*

The total removal of a feature or its partial removal which would effectively destroy the remainder of the site.

*Unknown*

This is used when the location of the site is unknown, but thought to be in the vicinity of the proposed development.

### **3.6 Definition of Mitigatory Recommendations**

*None:*

No impact so no requirement for mitigation measures.

*Detailed recording:*

Requiring a photographic record, surveying and the production of a measured drawing prior to commencement of works or, if accompanying a watching brief, during the course of construction.

Archaeological excavation may also be required depending on the particular feature and the extent and effect of the impact.

*Basic recording:*

Requiring a photographic record and full description prior to commencement of works.

*Watching brief:*

Requiring observation of particular identified features or areas during works in their vicinity. This may be supplemented by detailed or basic recording of exposed layers, structures or sections.

*Avoidance:*

Features which may be affected directly by the scheme, or during the construction of the scheme, should be avoided. Occasionally a minor change to the proposed route of the pipeline is recommended, but more usually it refers to the need for care to be taken during construction of the pipeline to avoid accidental damage to a site. This is often best achieved by clearly marking sites prior to the start of work.

*Reinstatement:*

The feature should be re-instated with archaeological advice and supervision.

## **4 ARCHAEOLOGICAL FINDINGS AND RECOMMENDATIONS**

### **4.1 Introduction**

The initial survey looked at as wide an area as could be used given the hydraulic constraints. The results of that survey were then used to narrow down the potential corridor to one which would have least impact upon the archaeology. A discussion of the route and its impacts follows in section 6. The gazetteer presented here reflects the narrower corridor, and does not include all the sites in the surrounding area.

### **4.2 Preliminary topographic assessment**



The area examined fell into six topographic zones:

- a. In the easternmost area, from the proposed intake for c. 250m, the route crosses medium sloping, enclosed boggy unimproved pasture.
- b. Then for c. 1600m the route runs through relict landscape, cleared, settled and used for arable farming at least as early as the Romano-British period, further used and modified in the medieval period as indicated by a number of settlements and extensive terraced field systems. The area now has statutory legal protection as a Scheduled Ancient Monument (M128) and consists of generally poor but well drained, medium to gentle sloping pasture.
- c. The route leaves the open leat east of Cors y Gedol, and a pipeline will carry the water along the track south of the house and buildings for some 1,000m before turning south into the woodland.
- d. Finally, for c. 1000m the route runs through the Cors-y-gedol woods, gently sloping at first, becoming increasingly steep as it approaches the river.

In terms of potential for archaeological remains of any human settlement or agricultural activity, areas a and b are already known to have a considerable number of features of a variety of types and periods. Most of area d is of similar topographic type to area b and so must rate as of high potential.

#### **4.2 Archaeological and historic background**

The history of the Cors-y-gedol estate and its families, the chief estate of Meirionnydd, has been written about in some detail by a number of authors, particularly Lloyd (1977 and 1978) and only a brief outline is given here.

In the medieval period, as part of the Welsh kingdom of Gwynedd, Cors-y-gedol lay in the township of Llanddwyie-is-y-graig in the commote of Ardudwy is Artro in the cantref of Dunoding. The beginnings of the estate are traced to the return to Wales from Ireland of Osborn Fitzgerald (Osborn Wyddel, 'the Irishman'), a descendant of one of the Norman conquerors of Ireland. Osborn was a favoured supporter of Llywelyn Fawr and married an heiress of Cors-y-gedol who was a royal ward. The family later acquired the name Vychan or Vaughan, supported the Lancastrian cause in the Wars of the Roses and prospered greatly under Henry Tudor. Cors-y-gedol house has been described in detail by Smith (1956). It was entirely rebuilt in 1576 and many alterations and additions were made over succeeding centuries including a farmhouse and barn of the late 17th and early 18th century. Richard Vaughan held Cors-y-gedol from 1693 to 1734 and is reported to have made many improvements to the house and the gardens, which included the straight avenue from the house to the church (The Vaughans of Cors-y-gedol, 1875, 14). He was succeeded by his eldest son William who commissioned a very fine survey of the house, gardens and 'home farm' of 1764 (Mostyn 8598). This survey gives an exceptionally detailed and useful record of the early gardens and of the layout and use of the rest of the property.

In 1791 succession to the estate passed through the female line to the Mostyn family and the estate became ever more prosperous. The greatest changes were made in the early 19th century and grand schemes were undertaken both in improving the agricultural lands, which included walling in and 'acquiring' common land, planting trees and in remodelling and expanding the house. However, from the estate map of 1764 it can be seen that the layout of the gardens was already achieved and at its most complex by that time, most of which can be seen or traced today. Of particular interest for the present survey is that the leat which supplied the house with water, the route of which is followed by the proposed pipeline, was already in place in 1764. Part of its route, in its middle section, originally ran further north, to supply the main house and gardens and joined with another leat bringing more water from a spring. It may be surmised that this spring leat was the earliest supply to the house and that this was supplemented by the longer leat from the Afon Ysgethin, largely to supply the extensive ornamental gardens, which may have been laid out as early as the 17th century. However, here the leat will be regarded as of 18th century date. The central section of the present day leat, to the east of the house must have been put in place in the early 19th century to turn a small overshot water wheel at 'the Power House', south of the main house, and would have powered a variety of agricultural machinery. In the early 20th century a more sophisticated piped supply was arranged to the house and a larger bore pipe installed from the leat about 700m upslope to run a turbo-powered generator which supplied the estate with electricity into the 1970's. The machinery was housed in a small building between 'the Power House' and the main house and the turbo unit and generator still survive mostly intact.

### 4.3 The existing archaeological record

East of the scheduled area the route passes through a very wet, boggy area within which are a number of mounds. One at least of these, and probably all, are mounds of heat-fractured stone, a recognised site type, called a 'burnt mound'. Where excavated these have mostly been shown to date to the early second millennium BC and thought to result from prolonged practice of a type of cooking in which water was heated by the introduction of hot stones. The presence of these mounds, particularly in numbers, suggests a considerable amount of early settlement nearby.

The rest of the eastern half of the route runs through an area protected as a Scheduled Ancient Monument (Me 128). This area has recently been the subject of a detailed archaeological topographic survey carried out for the Royal Commission on Ancient Monuments (Wales), (RCAHM (W), 1995). It comprises a relict landscape which includes a long cairn of Neolithic date (SAM Me 38) and a number of areas of settlement with round huts of prehistoric or Romano-British (R-B) date and rectangular huts of medieval date along with a complex of agricultural features such as enclosures, walls, banks, clearance cairns and arable terraces (lynchets). The 18th century leat cut through many of these features although fortunately none of the major settlement features were disturbed. One of them, however, closely adjoins the central, 19th century section of the leat. This is an enclosed settlement of two substantially built round huts and a small rectangular hut, partly excavated in 1956 and dated to the second century AD (Griffiths, 1958). The road (Fordd Fridd Isa) which runs through this area is also of historic interest, a droving route over Pont Fadog, the existing bridge dated to 1762 (Godwin and Toulson, 1977, 100-1).

West of the scheduled area the route runs alongside what was once part of the formally laid-out gardens and grounds of Cors-y-gedol house and these are of considerable historic value and awaiting survey and assessment (Cadw Historic Gardens Survey, M. Thompson, pers. comm.).

The rest of the route follows the line of the 18th century leat through the Cors-y-gedol woods. These are not ancient woodlands but 18th century plantation with a network of paths and 'rides'. The woods have never been the subject of archaeological survey and there are no features recorded within them. However, the present survey shows that the woods were established over a pre-existing agricultural landscape, probably similar to that of the scheduled area upslope. A number of settlement and agricultural features have been noted close to the route and there are likely to be others awaiting more extensive survey.

### 4.4 The archaeological survey

Recommendations for further assessment are made if the site cannot be sufficiently well understood from existing knowledge to allow mitigation measures to be recommended. The mitigation measure is a product of the category of importance, the impact, and the nature of the site. Where "avoidance" is recommended, this is to include both direct avoidance by the pipeline and avoidance by construction traffic.

Features are numbered from the higher end of the route downwards. All man-made features are noted, ie including those of 20th century date but excluding some field walls and tracks still in use and recorded on modern OS maps. The locations of all the features are shown on the accompanying maps at 1:2500 scale (Drawing nos. 1439/2/1a, 1439/2/1b, 1439/2/2 1439/2/3).

#### 1. Leat

*Category A/B Impact: Likely.*

A leat used to carry water to Cors y Gedol house. It is marked on the estate map of 1764, and may be part of the improvements carried out by Richard Vaughan in the early 18th century. Close to the river is a terraced area built up to divert water into the 18th century leat: this may not be an original feature, but may relate to later maintenance works.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording.*

#### 2. Boulder bank

*Category D Impact: Slight.*

A bank of large boulders, 19m south of the leat, c. 0.6m high with a possible ditch cut through the peat on the

uphill side. Function and date unknown.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording.*

### **3. Burnt mound?**

*Category B Impact: Slight.*

Grassed-over mound c. 12m diam., c. 0.8m high. Partially truncated by the leat and lying about 55m west of the river edge. It may be a burnt mound of prehistoric date.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Watching brief and detailed recording.*

### **4. Slab footbridge**

*Category D Impact: Considerable.*

Stone slab footbridge over the 18th century leat which runs in a later clay-pipe at this point.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording.*

### **5. Drainage ditches**

*Category D Impact: None.*

Modern drainage ditches in herringbone pattern.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: None.*

### **6. Burnt mound**

*Category B Impact: None.*

Mound, c. 7m diam., 0.8m high. Shape uncertain as it is truncated by a drainage ditch.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

### **7. Burnt mound**

*Category A/B Scheduled. Impact: None.*

Mound, c. 10m diam., 1m high. Crescentic shape, open at north-east.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

### **8. Burnt mound**

*Category A/B Scheduled. Impact: None.*

Mound, c. 12m diam. overall, 1.2m high. crescentic shape, open at north-west. Well grassed over but burnt stone visible in weathered patch at top of mound.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

### **9. Field wall gateway**

*Category A/D Scheduled. Impact: None.*

Stone slab-sided gap through 18th century field wall 11. No gate hinge holes.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

### **10. Field wall gateway**

*Category A/D Impact: None.*



Stone slab-sided gap through 18th century field wall 11. No gate hinge holes.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **11. Field wall**

*Category A/D Scheduled. Impact: Slight.*

Disused post-medieval wall. Tapering section from 0.8m at its base to 0.3m at the top, up to 1m high. Laid stone. Appears to be built over the leat bank.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording; Reinstate.*

#### **12. Slab footbridge**

*Category A/D Impact: Considerable.*

Stone double slab bridge over leat.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording; Reinstate.*

#### **13. Non-feature**

*Category A/D Impact: Slight.*

Linear feature recorded on previous survey (RCAHM (W), 1995), now interpreted as a feature of natural origin.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: None.*

#### **14. Mound**

*Category A/B Scheduled. Impact: Considerable.*

Mound, c. 15m diam. overall, c. 0.6m high. Crescentic shape, open at east. Well grassed over. Cut by leat. Made up of stones from c. 0.2 to 0.6m diam.. The shape of the mound suggests it is a burnt mound but the stones are larger than those in a burnt mound and suggest they might derive from clearance. However, the mound is large for a clearance cairn so it may have had some other function eg funerary cairn.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Either avoidance by narrowing not widening the leat at this point, or archaeological excavation of area to be disturbed.*

#### **15. Field bank**

*Category C Impact: Slight.*

Low rubble bank, well spread, up to 0.5m high. Cut by leat. Part of early field system.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Watching brief and detailed recording.*

#### **16. Field terrace**

*Category C Impact: Slight.*

Slight, discontinuous terrace, some clearance stone but not an obvious boundary feature. Part of early field system.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Watching brief and detailed recording.*

#### **17. Field terrace**

*Category A/D Scheduled. Impact: Slight.*

Very low terrace feature, no definite banks so could be natural. Cut by leat.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Watching brief and detailed recording.*

#### **18. Clearance cairn**

*Category A/C Scheduled. Impact: None.*

Small dump of clearance stones.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **19. Linear rubble spread**

*Category A/C Scheduled. Impact: None.*

Low wandering rubble spread. Possibly just a clearance feature rather than a boundary.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: None.*

#### **20. Linear rubble spread**

*Category A/C Scheduled. Impact: None.*

Low wandering rubble spread. Possibly just a clearance feature rather than a boundary. Probably a continuation of 19.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: None.*

#### **21. Field wall**

*Category A/C Scheduled. Impact: Slight.*

Slight wandering, well grassed over rubble bank c. 3m wide and 0.4m high. Occasional larger boulders. Cut by leat. Part of medieval? field system.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Watching brief and basic recording.*

#### **22. Clearance cairn**

*Category A/C Scheduled. Impact: Likely.*

Rubble mound c. 5m diam., 0.5m high. Adjoins north side of leat, 23m west of wall 21.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **23. Field bank**

*Category C Impact: Slight.*

Rubble bank c. 3m wide and 0.4m high forming slight terrace 0.6m high at west (not at east as shown on RCAHM plan). Cut by leat. Part of prehistoric/R-B? field system.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Watching brief and detailed recording.*

#### **24. Field bank**

*Category A/C Scheduled. Impact: None.*

Similar to 23.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: None.*

#### **25. Field bank**

*Category A/C Scheduled. Impact: None.*

Similar to, and probably a continuation of 23. Cut by leat.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

## **26. Slab footbridge**

*Category A/D Scheduled. Impact: Considerable.*

Stone, double slab bridge over leat.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording and reinstatement.*

## **27. Clearance cairn**

*Category A/C Scheduled. Impact: Slight.*

Mound of stone, cut by leat.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoid widening leat through this site, or carry out archaeological excavation.*

## **28. Field bank**

*Category A/C Scheduled. Impact: Slight.*

Rubble bank c. 3m wide and 0.4m high. Very slight terrace above. Part of prehistoric/R-B? field system. Cut by leat.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Watching brief and detailed recording.*

## **29. Field bank**

*Category A/C Scheduled. Impact: None.*

Rubble bank revetting slight terrace above, c. 1m high. Different in character to field bank 41 just to north. Part of prehistoric/R-B? field system.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

## **30. Sub-circular hut**

*Category A/A Scheduled. Impact: None.*

Hut, c. 5.5m diam. internally. Wall c. 1.2m wide and 0.5m high. Floor terraced into and above the slope. Basically circular but with straight front flanking the entrance. Romano-British period?

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

## **31. Rectangular hut**

*Category A/A Scheduled. Impact: None.*

Hut c. 7m by 4m internally. Rubble walls all laid, 1m wide and up to 0.6m high. Entrance at the south end over a slight step. Floor slightly terraced into the slope. Medieval period? Associated with adjoining rubble bank 40.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

## **32. Ditch**

*Category A/D Scheduled. Impact: Slight.*

Similar to main leat in size but perhaps just a land drain, marked as such on OS map.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: None.*

## **33. Burnt mound?**

*Category A/B Scheduled. Impact: None.*

Grassed over irregular crescentic mound open at north-east, c. 10m diam. overall, c. 0.8m high max. Not a hut circle. None of structure visible but a piece of burnt stone from the exposed edge of nearby ditch 32 suggests this might be a burnt mound.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **34. Burnt mound?**

*Category A/B Scheduled. Impact: None.*

Low grassed over mound, c. 10m diam. and c. 0.7m high. The medieval? wall 40 is built over the top of it. Possibly a burnt mound associated with 33.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **35. Clearance cairn**

*Category A/C Scheduled. Impact: None.*

Rubble dump at upslope edge of early field.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **36. Field terrace**

*Category A/C Scheduled. Impact: None.*

Rubble bank revetting lynchet terrace c. 1.2m high. Part of early field system.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **37. Rectangular huts**

*Category A/A Scheduled. Impact: None.*

Two well preserved rectangular huts. The western hut is c. 7.5m by 4.5m internally with a wall 1m wide and up to 0.6m high. The entrance is at the west side near to the south end. The eastern hut is c. 9.5m by 4m internally with a wall 0.9m wide and up to 0.6m high. The entrance is at the west side near to the south end. Both have neatly laid rubble walls. Clearly related to the adjoining field wall. Medieval period?

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **38. Field bank/terrace**

*Category A/C Scheduled. Impact: None.*

Rubble bank or terrace c. 3m wide and 0.5m high built mainly of quite small clearance? stones. Oriented up and down slope, fading away as it approaches the huts 37. Cut by leat. Part of early field system. Lies c. 27m west of the point where 40 emerges on north side of leat.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **39. Field terrace?**

*Category A/C Scheduled. Impact: Slight.*

Stony terrace c. 0.6m high. Possible traces of a field terrace pre-dating 40 and 42. Cut by leat. Part of early field system.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Detailed recording.*

#### **40. Field bank**

*Category A/C Scheduled. Impact: Slight.*

Slight, wandering well grassed rubble bank c. 3m wide and 0.4m high with occasional larger boulders. No lynchet formation. Cut by leat. Part of medieval? field system.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Detailed recording.*

#### **41. Natural boulder field**

*Category A/D Scheduled. Impact: Slight.*

A dense spread of large boulders. A 'possible homestead' (PRN 850) was previously recorded at this grid reference. However, the present survey shows only a natural, undisturbed glacial boulder spread. The original reference was probably misplaced and should refer to the hut circle and platform hut 30m to the north-west (see 44-6 below).

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: None*

#### **42. Field wall**

*Category A/C Scheduled. Impact: Slight.*

Rubble wall, well spread but not well grassed, c. 1m wide and up to 0.5m high. Occasional larger boulders and orthostats. Cut by leat. Part of medieval? field system.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Detailed recording.*

#### **43. Slab footbridge**

*Category A/D Scheduled. Impact: Considerable.*

Stone single slab bridge over leat.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording and reinstatement.*

#### **44. Rectangular hut**

*Category A/A Scheduled. Impact: None.*

Rectangular hut visible mainly as a platform terraced into the slope, c. 10m by 5m internally. The wall is c. 1.5m wide and up to 1m high from inside with occasional inner and outer facing stones both orthostatic and laid. There is a possible entrance gap near the centre of the west side. The corners seem deliberately slightly rounded. The west and south walls have been extensively robbed for the adjoining post-medieval field wall. There is a possible terraced yard? area at the south-west end of the hut and the hut lies within a larger subcircular enclosure, see 46 below. There is a clear differentiation between the structural style of this rectangular hut and those of no. 36 above which suggests that they are of different periods.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **45. Round hut**

*Category A/A Scheduled. Impact: None.*

Large round hut visible as a substantial circular bank, c. 10.5m diam. internally, c. 5m wide and 1m high. Well grassed but with some orthostatic outer facing exposed at the east side adjoining the probable entrance gap. The wall seems to have been about 1.5m wide originally. Terraced into the slope about 1m at the north. There is a small subrectangular structure, c. 3m by 2m overall at the south-east side, just outside the entrance, perhaps a porch or later feature. A slight lynchet bank runs off from the hut wall at the north-east. The way that round hut 45 and rectangular hut 44 respect each other is significant and suggests some overlap in occupation.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **46. Settlement enclosure**

*Category A/A Scheduled. Impact: None.*



Sub-circular enclosure around rectangular hut 44, visible at the south and west side as a bank c. 4m wide and up to 0.7m high slightly cut by leat. Made up mainly of small cobbles, well spread and grassed over. At the north and east the enclosure is defined by what seem to be in situ elements of the field system and which therefore probably pre-date the rectangular hut.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoid by widening leat on downslope side.*

#### **47. Slab footbridge**

*Category A/D Scheduled. Impact: None.*

Stone single slab bridge over leat.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording.*

#### **48. Field wall**

*Category A/C Scheduled. Impact: None.*

Tumbled rubble wall on top of stony bank which revets a lynchet c. 1m high. Medieval? boundary superimposed on R-B? boundary.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **49. Field bank**

*Category A/C Scheduled. Impact: Slight.*

Stony bank revetting lynchet, c. 1.2m high. Cut by leat. On south side of leat it turns to run down slope and becomes a bank rather than a lynchet.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Detailed recording.*

#### **50. Slab footbridge**

*Category A/D Scheduled. Impact: None.*

Stone, single slab bridge over leat.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording and reinstatement.*

#### **51. Field bank**

*Category A/C Scheduled. Impact: Slight.*

Stony bank, spread to c. 3m wide, up to 0.4m high, well grassed over. Cut by leat. Part of early field system.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Detailed recording.*

#### **52. Field terrace**

*Category A/C Scheduled. Impact: Slight.*

Curving lynchet/terrace, c. 0.6m high. Cut by leat. Part of early field system. Probable continuation of 53.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Detailed recording.*

#### **53. Field terrace/bank**

*Category A/C Scheduled. Impact: Slight.*

Curving lynchet, terrace or bank. Cut by leat. Probable continuation of 52. Part of early field system. Partly robbed for nearby post-medieval field wall.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Detailed recording.*

#### **54. Field bank**

*Category A/C Scheduled. Impact: Slight.*

Low stony bank with occasional orthostatic boulders. Cut by leat. Part of early field system.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Detailed recording.*

#### **55. Field bank**

*Category A/C Scheduled. Impact: Slight.*

Remnant of old field bank. Made only of small cobbles and therefore probably not primary clearance. There are some indications that it may have continued to the south-west beyond the leat.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Detailed recording.*

#### **56. Leat**

*Category A/C Impact: Slight.*

A part of site (1) i.e. the 18th century leat, which formerly continued north beyond the track (59), but in the 19th century was diverted west down a new leat. This particular length (i.e. south of pipeline (61)) is of more substantial construction to confine the water as it runs along the contour. Revetted with a faced bank c. 1m high, c. 2m wide at base, c. 1m high at top.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Detailed recording; widen leat on east, uphill, side to avoid damage to early revetting.*

#### **57. Rectangular huts and enclosure**

*Category A/A Scheduled. Impact: None.*

Settlement of two large rectangular huts of similar size. The northern is better preserved than the other. They are visible as platforms, c. 12m by 6m internally, terraced into the slope, with occasional facing stones. They both probably had double opposed entrances on the side and towards the west end. Set within a curvilinear enclosure bank, well trampled and spread, up to c. 0.6m high of small cobbles with occasional larger orthostatic boulders. The huts were respected by the 17th/18th century field wall (marked on estate map of 1764) and this suggests they may have been still extant at the time the wall was built, although the huts themselves were not marked on the 1764 estate map. Probably medieval or early post-medieval in date. Within area of Scheduled Monument M128.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **58. Stone ramp/platform**

*Category A/D Scheduled. Impact: Likely.*

First recognised on an aerial photograph (RCAHM (W), 1996). It consists of a boulder built platform, c. 8m by 4m. It is not well terraced level so it was probably just a ramp for carts/tractors to provide access to a gate which lies just to the east.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording.*

#### **59. Leat**

*Category A/C Scheduled. Impact: None.*

Disused leat, similar to the main 18th century leat (56) with a bank on downhill side. This is a former route of the leat as marked on estate map of 1764, superseded in 19th century by the present leat to supply a water wheel.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **61. Water inlet**

*Category A/C Scheduled. Impact: Slight.*

Stone-built cistern with sluice gate. Inlet for early 20th century iron piped supply (62 and 75) to electricity turbo generator (84).

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording.*

#### **62. Iron water pipe**

*Category A/D Scheduled. Impact: None.*

Cast iron pipe, c. 9ins diam., supplying water to electricity turbo generator.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **63. Leat**

*Category A/D Scheduled. Impact: Slight.*

Disused length of leat, similar in size and construction to main leat. Formerly provided overflow from water inlet (61) for turbo generator.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **64. Clearance cairns**

*Category D Impact: None.*

Several clearance cairns can be seen scattered through the woods. One is large, c. 8m diam., the others are small. Their presence suggests the area was once cleared pasture, ie before the 17/18th century plantation.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **65. Field? bank**

*Category D Impact: None.*

races of roughly piled, very spread bank in wood. Possibly a field? bank pre-dating the 17/18th C plantation.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **66. Enclosed hut circle/long hut settlement**

*Category A Impact: None.*

Ovoid enclosure c. 50m long overall defined by large, well spread rubble bank c. 3m wide and up to 0.7m high. There is an entrance gap at the west side and possibly another at the opposite side. At the south side within is an elongated amorphous stone structure c. 14m long overall, possibly a round hut with attached rectangular rooms or it may be a variety of long hut or even a hut circle modified into a long hut. The main compartment, at the west, is c. 4m across internally with a wall c. 1m wide and up to 0.6m high. There are no obvious facing stones but some larger slabs demarcate probably twin opposed entrances. There is a depression in the enclosure bank in line with this hut which may be a further 'room'.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **67. Track**

*Category C Impact: Slight.*

Abandoned narrow hollow-way track. Same as one marked on estate map of 1764.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: None.*

#### **68. Cairn**

*Category C Impact: None.*

Large, neatly built but well spread cairn, c. 8m diam. and 0.8m high. Centre at c. 30m south-east of track mid-line. Clearance cairn?

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **69. Round hut?**

*Category B Impact: None.*

Possible subcircular hut c. 8m diam. overall. Hollow-centred raised ring of rubble c. 0.6m high. No certain facing. If it is a hut it would be c. 3m diam. internally, entrance gap probably at the south. Lies about 12m south-west of cairn (98).

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **70. Rubble bank**

*Category B Impact: None.*

Low rubble clearance bank connecting huts (99) and (101).

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **71. Round hut?**

*Category B Impact: None.*

Hut? similar to (99). NB There are other banks and cairns further to the east not recorded.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Avoidance.*

#### **72, 73, 74. Field? banks**

*Category C Impact: Slight.*

Irregular, linear clearance? banks. 102 revets a considerable terrace and suggests they are part of a field system similar to that found in the Scheduled area to the north-east (M128).

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording.*

#### **75. Quarries**

*Category D Impact: None.*

Small quarries cut into slope just above the track. Undatable.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: None.*

#### **76. Boundary wall**

*Category D Impact: Slight.*

Ruinous rubble wall, robbed out close to road 106. Marked on estate map of 1764.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording.*

#### **77. Road**

*Category D Impact: Likely.*

In use, well built broad road, 4m wide, cobbled and terraced above the medium steep slope. Not on estate map of 1764. On OS 1:2,500 map of 1901. Probably a 19th century estate road.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording; Reinstate.*

## **78. Trackway**

*Category D Impact: Slight.*

Well-built but narrow cobbled track, c. 2m wide. In use as footpath. Terraced above slope. Not on estate map of 1764. On OS 1:2,500 map of 1901.

*Recommendation for further assessment: None.*

*Recommendation for mitigatory measures: Basic recording; Reinstate.*

## **5. GENERAL RECOMMENDATIONS**

### **5.1 The east section of the route**

#### *5.1.1 The route*

The most difficult part of the route for the proposed scheme, from the archaeological point of view, is the eastern area where it passes through an archaeologically rich landscape, which has been scheduled as a monument of national importance because of this wealth. The formation of the landscape constrains the proposed route to one on or close to the line of the existing leat.

The initial archaeological assessment looked at a number of options for taking the water through this area, to determine the optimum route. However, the quantity and quality of the remains meant that the excavation of a new pipeline was not deemed suitable, and two alternatives were therefore examined, both of which use the existing leat. The first involves excavating a pipe trench through the base of the existing leat, the second involves improving the capacity of the existing leat to carry sufficient water through the scheduled area to power the generator and to maintain a flow of water through the remainder of the leat.

#### *5.1.2 Pipeline option*

The first option would require a trench 60-70cm wide and 90cm deep dug into the base of the leat. The pipe would be 60cm in diameter and needs to be 30cm deep. Surplus material would therefore be created which could be left on site or removed. The impact upon the archaeology would occur during the following operations:

- excavator access to the leat
- excavation of the pipe trench
- transport of spoil out
- transport of pipes in.

#### *5.1.3 Leat option*

The second option would require enlarging the leat from the river to the track east of Cors y Gedol. The width and the depth would need to be increased by 60cm. Although having a different impact, this option would in many respects be better than the other, and would also have the merit of ensuring that the leat is maintained for its original purpose.

The impacts during construction would be:

- excavator access
- excavation of the leat
- transport of spoil out
- repair of the leat.

However, small lengths of the leat could be left at the present width, and the necessity of widening the leat through very sensitive areas could therefore be avoided.



#### 5.1.4 Archaeological impact

The sites which lie directly on the leat and which may be affected by construction works consist of stone slab foot-bridges, field boundaries, stone mounds (either cairns or some may be burnt mounds) and one settlement perimeter bank. These sites are listed below.

Stone slab footbridges 4, 12, 26, 43, 47, 50.

Field boundaries 15, 17, 23, 25, 28, 29, 40, 38, 39, 42, 49, 51, 52, 53, 55.

Other sites:

- 3 possible burnt mound
- 14 possible burnt mound
- 22 clearance cairn
- 27 clearance cairn
- 46 settlement enclosure
- 61 water sluice for pipe

The footbridges would have to be removed during construction, but could be reinstated afterwards.

The field boundaries and terraces, already cut by the leat, would have an additional 60cm to 1m in length removed.

The cairns, mounds and enclosure could all be left *in situ*. As stated above, the leat would still function with small lengths remaining at the present width, and those lengths where the leat cuts through an existing mound would therefore be left at their present width. Some cleaning out would be desirable, but this would be carried out carefully to ensure little or no disturbance of the site.

#### 5.1.5 Archaeological recommendations

Scheduled Monument Consent (SMC) would need to be sought for all works within the scheduled area from the Secretary of State for Wales, through Cadw: Welsh Historic Monuments. Consent, if granted, may impose restrictions and conditions on the method of working. However, certain recommendations are made below which would mitigate the impact of the scheme upon the archaeology.

##### *Before construction*

A. Archaeological advice would need to be sought for means of access and storage of materials, for any fencing requirements, and for planning the work schedule.

##### *During construction*

A. There should be a watching brief accompanied by detailed recording of exposed sections of all features related to the early landscape, as itemised in the main report. A programme of specialist study and sampling of exposed early soil horizons would be desirable.

B. There should be a general watching brief to allow close monitoring in order to avoid damage. Sites cut by the leat should remain *in situ*, with the exception of lengths of field boundary specified above.

##### *After construction*

A. Reinstatement of ground levels, topsoil and features should be carried out according to an archaeological brief to be defined by Cadw, and closely monitored.

B. There should be allowance for production of a proper level of archiving and production of a report and drawings with a summary for publication, if the resulting information is suitable.

## 5.2 Western section of route

The western half of the route follows largely along existing roads and woodland tracks and although there are a number of features of archaeological and historic value nearby there are none which need to be affected if construction work and associated traffic keeps to the proposed easement. However, the present survey identifies this area as a probable relict landscape of medieval and probably earlier date, preserved by 18th century tree plantation and which has yet to be adequately surveyed and recorded. It is therefore recommended that a watching brief be carried out during the construction, and that any sites identified be fully recorded.

## 6. BIBLIOGRAPHY

### 6.1 Unpublished Sources

Gwynedd Archaeological Trust, Sites and Monuments Record  
Gwynedd Council, Caernarfon Archives  
Gwynedd Council, Dolgellau Archives  
National Library of Wales Archives, Aberystwyth  
University of Wales, Bangor, Archives

### 6.2 Maps

Ordnance Survey maps:

1" first edition, c. 1838  
1:10,000 1886 (6")  
1:2,500 1901

Tithe maps and schedules c. 1840

John Evans Map of North Wales (2") 1797

### 6.3 Published Sources

Cadw: Welsh Historic Monuments, *List of Scheduled Ancient Monuments*.

Cadw: Welsh Historic Monuments, *List of Buildings of Special Architectural or Historic Interest*.

Godwin, F. and Toulson, S., 1977. *The Drovers Roads of Wales*, London.

Gresham, C.A., 1986. Ystumgwern and Prysor, medieval administrative districts of Ardudwy. *Journal of the Merioneth Historical and Records Society*, X, part II.

Lewis, S., 1833. *A Topographical Dictionary of Wales*.

Lloyd, L.L., 1977. Corsygedol, Ardudwy's principal estate. *Journal of the Merioneth Historical and Records Society*, VIII, part I, 27-80.

Lloyd, L.L., 1978. Corsygedol, Ardudwy's principal estate (continued). *Journal of the Merioneth Historical and Records Society*, VIII, part II.

RCAHM (W), 1921. Inventory of Ancient Monuments in Merioneth.

RCAHM (W), 1995. Cors-y-gedol survey by Gifford Partners, no. 6863.

RCAHM (W), 1996. Afon Ysgethin GAT Assessment, Air Photo Sites.

Smith, P., 1956. Corsygedol. *Journal of the Merioneth Historical and Records Society*, II, part IV, 285-91.

The Vaughans of Cors Y Gedol, 1875. *Archaeologia Cambrensis*, 21, 1-17.

Thomas, C., 1971. The Corsygedol Estate during the Age of Improvement, *Journal of the Merioneth Historical and Records Society*, VI, part III, 303-10.

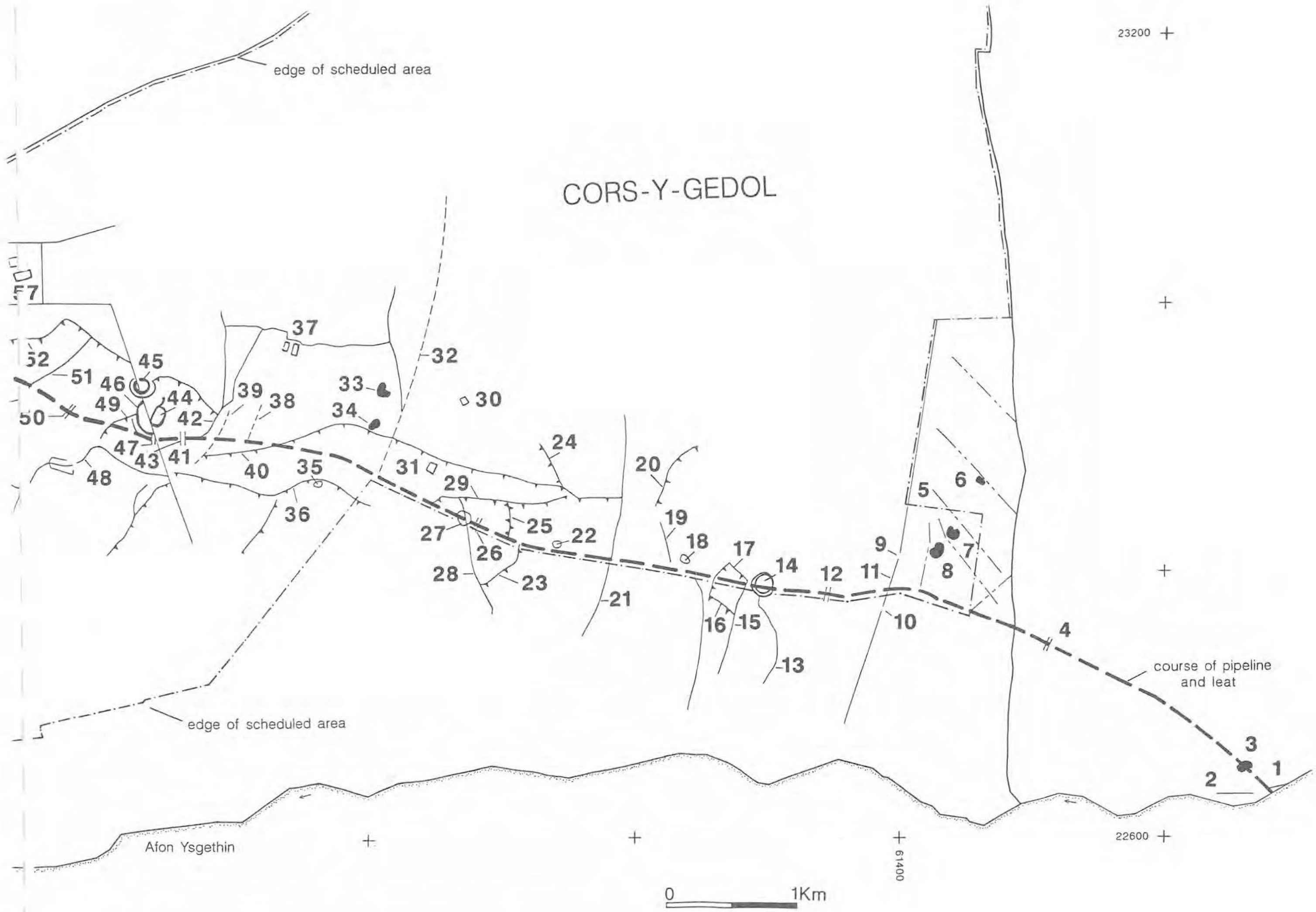
Thomas, C., 1972. Patterns and processes of estate expansion in the 15th and 16th centuries. *Journal of the Merioneth Historical and Records Society*, VI, part IV.

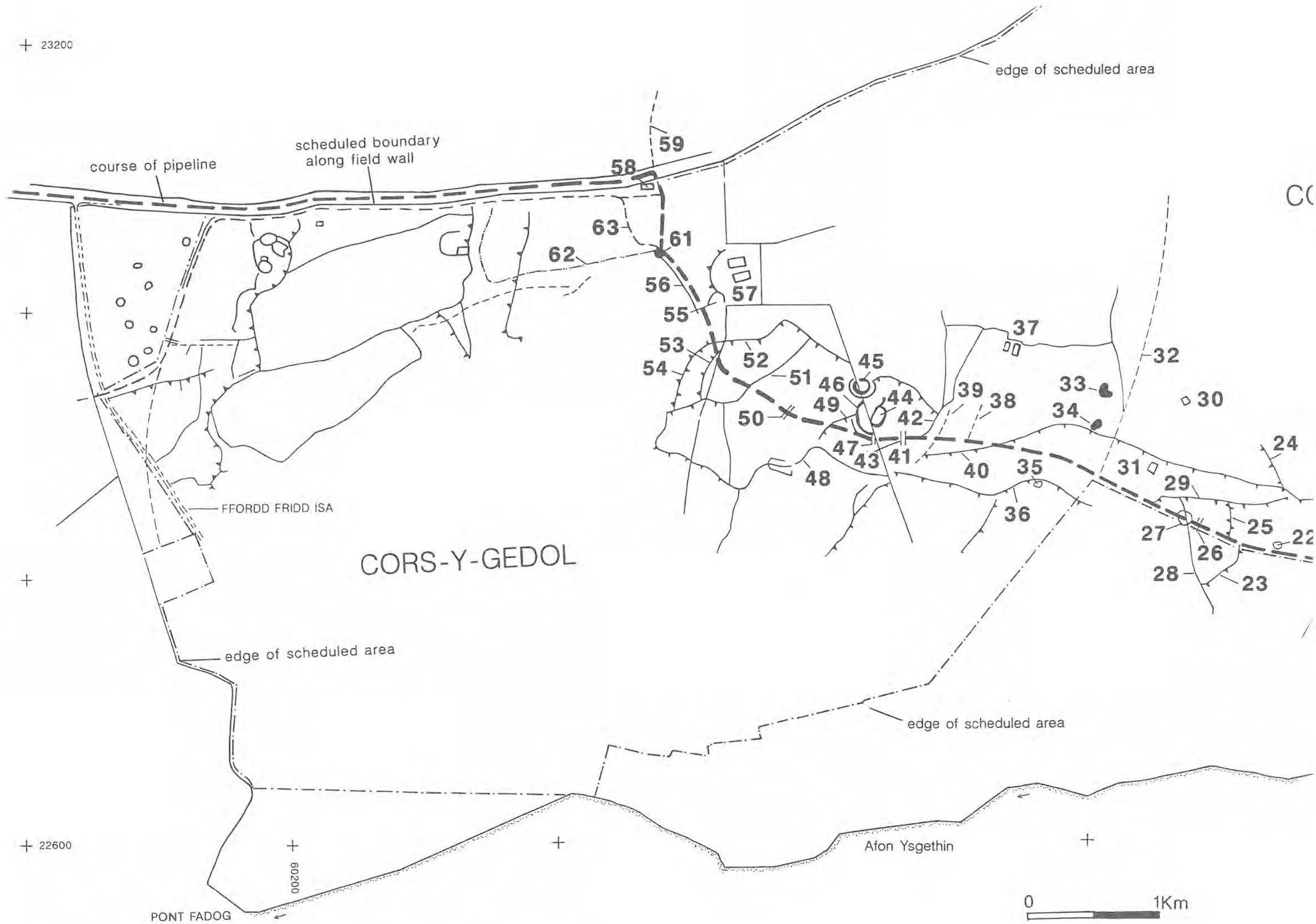
## 7. NON-TECHNICAL SUMMARY

An archaeological assessment was carried out of the route of the proposed pipeline comprising a length of approximately 3.5km. The work involved a desktop study of existing records followed by a field walkover. The desktop study included examination of records held in the Gwynedd Sites and Monuments Record and searches of other records and maps in archives at Aberystwyth, Caernarfon, Dolgellau and the University of Wales, Bangor, as well as maps and printed literature. The field work involved walking all of the route within approximately a 100m corridor with brief recording and assessment of all features except those which were clearly of modern origin. A total of 78 features were noted which can be considered in two general areas of response.

1. About 75% of all the features lay in the eastern half of the route of which most are within the area of Scheduled Ancient Monument Me 128. They included a number of settlement features but the majority were walls, banks and terraces of an early field system of Romano-British and medieval date. It was recognised that construction could not avoid some damage to the field boundaries which crossed the leat. A programme of watching briefs accompanied by detailed recording of all the affected features is therefore recommended accompanied by careful avoidance of other features.

2. The western half of the route follows largely along existing farm and woodland tracks and although there are a number of features of archaeological and historic value nearby there are none which need to be affected if construction work and associated traffic keeps to the proposed easement. However, the area is of some archaeological potential and it is therefore recommended that a watching brief is maintained during construction.









# CORS-Y-GEDOL

Proposed Hydro Electric Scheme  
Afon Ysgethin 6.2.97  
Dwrg No 1439/2/3

FFORDD GORS

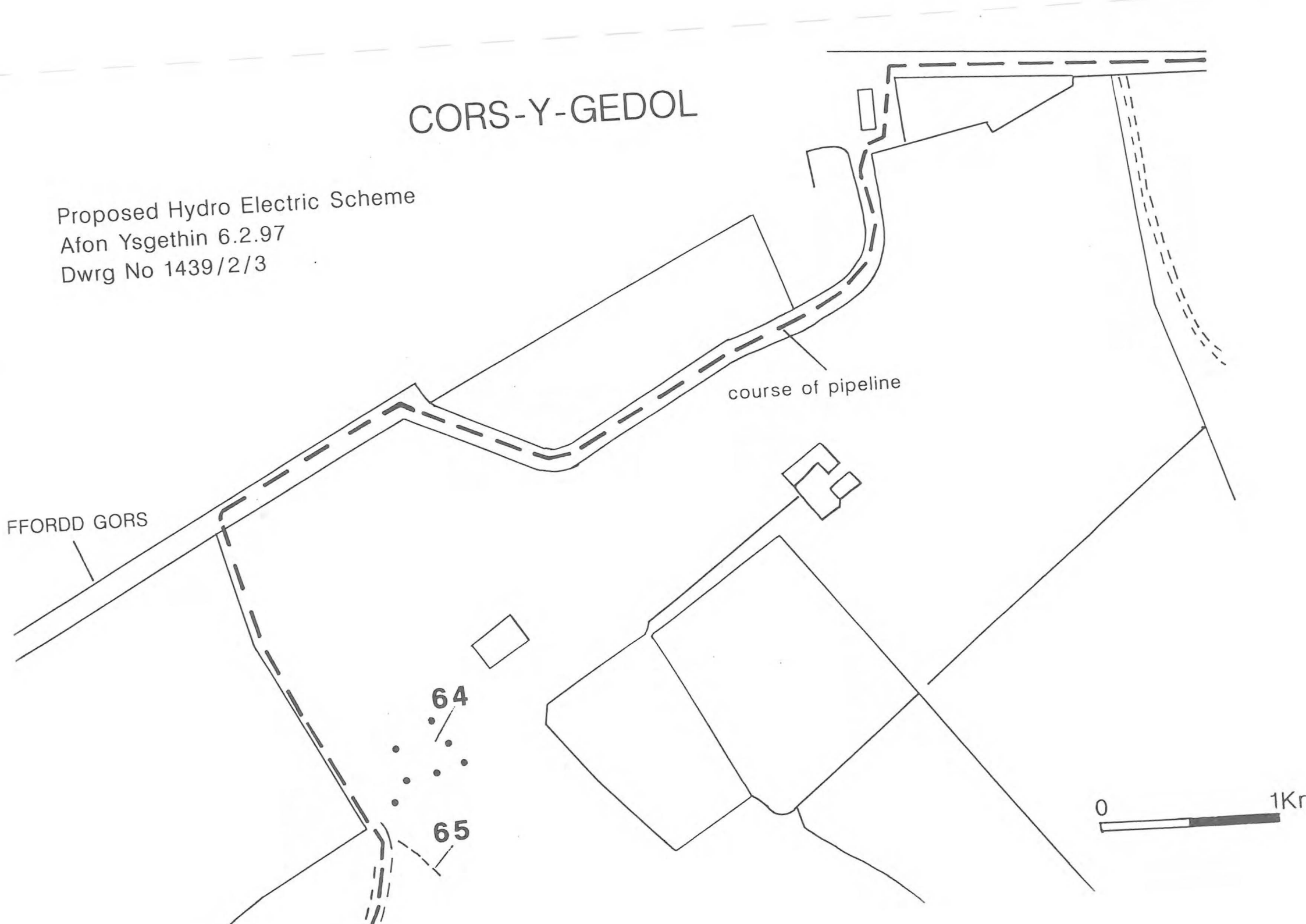
course of pipeline

64

65

0

1Km



Proposed Hydro Electric Scheme  
Afon Ysgethin 6.2.97  
Dwrg No 1439/2/4

COED CORS-Y-GEDOL

course of pipeline

Afon Ysgethin

0 1Km

