A497 Pipeline Diversion Scheme Abererch to Llanystumdwy Gwynedd

Archaeological Evaluation, Excavation and Watching Brief 2005

GAT Project No. 1858

Report No. 624

August 2006

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust
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Prepared for Cyngor Gwynedd Council

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AN ARCHAEOLOGICAL EVALUATION, EXCAVATION AND WATCHING BRIEF

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A497 Pipeline Diversion Scheme Abererch to Llanystumdwy Gwynedd

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A497 Pipeline Diversion, Abererch to Llanystumdwy, Gwynedd (G1858):

Archaeological Evaluation, Excavation & Watching Brief

An archaeological evaluation and watching brief has been conducted in advance of the gas pipeline diversion phase of the A497 Road Improvement Scheme. The Road Improvement Scheme was monitored and recorded at the same time as the pipeline diversion and has been published separately (GAT Project G1692; Report No.: 625). Both schemes utilised a similar route and large portions of the pipeline cut through land developed for the road improvement, limiting the archaeological potential of the pipeline project. The evaluation focussed on the areas mainly at the eastern and western ends of the scheme that were located directly south of the new road alignment and identified an area of prehistoric funerary activity towards the western end of the project as well as more general evidence for post-medieval farming activity. The archaeological watching brief followed on from the evaluation and was conducted across the entire length of the scheme and the results consisted only of evidence for post-medieval farming activity.

1.0 INTRODUCTION

Cyngor Gwynedd Council commissioned Gwynedd Archaeological Trust (GAT) to undertake an archaeological evaluation and watching brief in advance of the partial diversion and replacement of a high pressure gas main as part of the improvement of the current A497 between Abererch and Llanystumdwy, Gwynedd. It was a three-phase project, consisting of an initial evaluation of the proposed route followed by an excavation of a prehistoric site at the western end of the scheme and a subsequent watching brief of the ensuing groundworks. The project ran in tandem with the evaluation and watching brief conducted for the road scheme, which was also commissioned by Cyngor Gwynedd Council (GAT Project **G1692**; Report No.: 625)

An archaeological assessment of the pipeline route was undertaken in February 2005 RSK ENSR Environment Ltd (RSK ENSR Project No. 40109). Recommendations were made for evaluation and recording, which were undertaken by Gwynedd Archaeological Trust between February and March 2005. A total of twenty-four trenches were opened along the scheme. The subsequent watching brief took place between March and August 2005. The areas affected are shown on Figure 1.

Land and Marine Ltd undertook all groundworks. The archive is held by GAT under the project number **G1858**.

1.1 ARCHAEOLOGICAL AIMS

The aim of the project was to mitigate the impact upon the archaeological resource. This would involve a programme of trial trenching, to be followed by excavation and a watching brief. The known archaeological remains were used both to help determine the likely location of, and the character of, new archaeological findings.

The site-specific recommendations in RSK ENSR Project No. 40109 identified one area to be avoided and six sites to be investigated via trial trenching. The site locations were identified according to the gazetteer of sites produced in the RSK report and reproduced in this report as Appendix I and Figure 1.

The site to be avoided was RSK Site 32 (SH42793688), identified as The Pont Llwyn Gwyn Hut Circles, where the working width fencing should be strategically placed to avoid the actual hut circles, with trial trenching to be conducted in the area adjacent to the hut circles (RSK ENSR Project No. 40109: 32).

It was recommended that archaeological trial trenching was to be undertaken at specific areas containing known sites, on which the proposed scheme was likely to have an impact or on which the impact was uncertain. The trial trenching was to be undertaken at the following:

RSK Site 16 (Diversion 2): To examine the archaeological potential of the possible enclosure as indicated by the results of the *Stratascan* geophysical survey undertaken on behalf the Gwynedd Archaeological Trust.

RSK Site 32 (Diversion 2): To establish the nature and extent of any archaeological deposits associated with the Pont Llwyn Gwyn Hut Group, which will be affected by the construction of the pipeline.

RSK Site 33 (Diversion 3): To examine the archaeological potential of the circular arrangement of pits as indicated by the results of the *Stratascan* geophysical survey.

RSK Site 54 (Diversion 2): To establish if the archaeological remains identified by the trial trenching undertaken by GAT extend into the area of the proposed gas pipeline.

RSK Site 55 (Diversion 2): To establish if the archaeological remains identified by the trial trenching undertaken by GAT extend into the area of the proposed gas pipeline.

RSK Site 63 (Diversion 2): To establish if the archaeological remains identified by the trial trenching undertaken by GAT extend into the area of the proposed gas pipeline.

In addition, archaeological trial trenching was to be carried out at the beginning of the pipeline at Diversion 1, as no previous archaeological testing work had been undertaken in this area (*ibid*.: 23-24).

The results of the trial trenching are included in Appendix II.

1.2 TOPOGRAPHY & GEOLOGY

The geology of the study area is mostly Ordovician sedimentary rocks with igneous intrusions, such as that forming the Penychain peninsula to the southwest (Bassett & Davies 1977, 19). Grey slates and mudstones of the Tremadoc series underlie the area, with the most intrusive rocks being rhyolites (Roberts 1979).

The soils comprise mainly typical brown earths with a concentration of alluvial gley soils at the southwestern end of the scheme (1:250,000 Soil Map Series: Sheet 2, Wales).

The study area lies on the periphery of the coastal plain overlooking Cardigan Bay and comprises mainly enclosed, undulating farmland located on a plateau sloping towards the sea to form a coastal flood plain. Within this area are a number of river valleys, bridged by the current A497. Drainage on the farmland is often poor and the main land use is pasture. The main exception is at the eastern end of the scheme where the farmland is devoted to crops. Two specific areas differ from the general topography: an area of marsh below Tanyrallt farm and another area of marsh in an overgrown enclosed field north of Haven Holiday camp.

1.3 ARCHAEOLOGICAL BACKGROUND

No settlements or burial sites were known from the prehistoric period within the projected pipeline scheme, but chance finds suggest that the area was settled in this period: two possible loom weights were found separately near Penbryn Neuadd, whilst a polished stone axe and two axe hammers were found in the park of Broom Hall. None of these finds is securely dated but all are of prehistoric type: the polished stone axe is Neolithic, the axe hammers possibly Early Bronze Age, whilst the loom weights could be from either period (but most likely Iron Age).

Settlement in the area during the medieval period is fairly well documented but limited physical evidence exists. The study area includes the parishes of Abererch, Llanarmon and Llanystumdwy. The medieval townships of Bothach, Penarth, Chwilog and Penychain were located in the study area. Medieval sites in the area which survive include the remains of a settlement within the township of Bothach, located within Broom Hall park. Other medieval sites include Penarth Fawr medieval house and Tomen Fawr ring-work (a defended site).

Tomen Fawr now stands in isolation; the associated fieldwork systems have disappeared under modern ploughing. The Tomen itself is a good example of a Norman ring-work, later reused by the Welsh Princes and eventually serving as the centre of the township of Ffriddlwyd. The township was later given to the Cistercians and became a grange of Aberconwy Abbey, but returned to the Crown through an exchange. Traces of a possible rectangular structure survive within the ringwork and small depressions in the grass may indicate the positions of gateposts.

Documentary evidence refers to Edward I staying in this area on his way to Pwllheli following the Edwardian conquest of North Wales. The most likely location would have been the township of Penychain, now reduced to a farm and headland southeast of Haven Holiday Camp. A sizeable house or hall would have been required for the royal retinue, but no evidence for this has been discovered. One explanation may have been that any substantial building would have succumbed to the latent coastal erosion extant in this area.

Penychain was a bond township, becoming Crown land soon after the Edwardian Conquest in the late 13th century. In 1590 there were 91 people living in 16 dwellings in Penychain (Gresham 1973, 345-6).

By 1784, the township belonged to Sir Thomas Wynn, the first Baron Newborough of Glynllifon, and the numerous small holdings were rationalised into larger farms; a single farm called Penychain included much of the original demesne land (*ibid*., 350).

There have been relatively few changes to the area since the 18th century and some of the early buildings survive along with the general layout of the fields and roads. The present A497 is approximately along the line of a route which has been used since at least the 12th century and was turnpiked in 1803 by the Porthdinllaen Turnpike Trust (Bassett & Davies 1977, 78; 164-166). John Evans' 1795 map of North Wales shows the main road here along its present route. Minor improvements have taken place along the road; which, by comparison with early maps, appears to have been straightened between 1839 and 1889.

2.0 EXCAVATION RESULTS

2.1 Site 1: Afon Wen Early Bronze Age Funerary Site (PRN 19659) (Figure 5; Plates 1 to 6)

Introduction*:*
The site is located in an enclosed field to the east of Afon Wen Farm at SH44923772. It comprised a circular enclosure ditch *c.*28.0m diameter, in the centre of which were found traces of a small cairn covering two human cremations in pots (Figure 5). The enclosure was unknown when the desktop assessments of the route of the road were carried out in 1993, 1996 and 1997 (GAT Report: 60, Project No. G1142; GAT Report: 224, Project No. G1429 and GAT Project No. G1513, respectively). The Royal Commission on Ancient and Historic Monuments, Wales first noted the site in 2004 as a crop mark on an aerial photograph. It was recorded as a 'cropmark of a sub-circular enclosure, in the region of 30m in diameter, having a rather flattened north-west face & giving indications of possible structures within; set on generally level, low-lying ground' (RCAHMW NPRN 401,896, AP895046/10-11, 2004). The site was subsequently given a PRN by the Historic Environment Record: PRN 19659.

The enclosure was not identified by the geophysical survey of the road assessment phase (GAT Project No. G1692; Stratascan Report Job Ref. 1899, August 2004). The field was excluded from survey as the new road here was to be simply an improvement of the line of the existing road and only a very narrow strip of the field was due to be affected.

The enclosure ditch was discovered during the archaeological evaluation of Diversion 3 and was identified in Trench 7. At this stage there was little evidence from the enclosure to suggest its function or date and it was hoped that further investigation within the proposed route of the road corridor would provide an answer (GAT Project No.: G1692; Report No.: 625). A larger area of 560 sq. m. (Trench 99) was excavated along the road improvement scheme, exposing the whole circumference of the enclosure ditch and revealing several pits and other features (Figure 5). The excavation results from Trench 99 are included in this report.

Topographic location
The site lies at SH 44923772, on a fairly level slight natural terrace at the edge of an area of low undulating land at the point where it dips in a gentle slope towards the coastal plain. This provides good views over the coast and a natural route above the marshy lowland that has long been utilised for a road and may well have been a route originating in prehistoric times. The subsoil is a silty fluvio-glacial till and the soils of the area are rated as land capability Grade 2: moderate to good quality, suitable for intensive pasture with some arable (MAFF 1977, 1988).

Excavation
Trench 7 was located *c*.20m west of Trench 6 (Figure 4). It was inserted across a low-lying slope that extended westwards from the modern field boundary. The ditch of a large circular enclosure was identified within the trench, cutting a glacial deposit of sand and gravel (Plate 3). Only the southern part of the enclosure lay within the trench, its curvature suggested that initially it had an internal diameter of *c*.25.0m. The ditch cut was 1.30m wide and 0.80m deep. Five sections were inserted at various points along the ditch to determine the process of infilling, to ascertain whether the ditch had been re-cut and to look for evidence of function and date (Plate 2). The ditch was initially filled by natural erosion, followed by deliberate infilling. A secondary narrow ditch was then cut into this infill, but it appeared to have been truncated, probably by modern farming (Plate 6). There was no evidence to suggest that any external or internal banks surrounded the original ditch. Two sub-circular pits were identified towards the centre of the enclosure with one (context 707) cutting the other (context 712; Figure 5; Plate 4). The later pit contained extensive charcoal remains in the primary fill, with the base of the pit, reddened by heat, suggesting *in-situ* burning. The later pit had truncated the southwestern end of the earlier pit. There was less evidence of *in-situ* burning in the earlier pit, but both were interpreted as hearth pits. Another pit was identified in Trench 14, a couple of metres to the east but it contained no burning so presumably was of a different function. There were two external patches of burning on the western side of the ditch (contexts 730 and 748), as well as two amorphous sub-circular features that were cut by the ditch, identified as redundant tree boles (contexts 738 and 3027).
There was no evidence for any post-holes or stake-holes within the enclosure to suggest the presence of any internal structures.

Discussion and Dating*:*
The exact function of the enclosure ditch was not fully understood until the northern half of the enclosure was located and excavated during the road improvement scheme project (GAT Project G1692; Report No. 625). When this area was exposed, it proved that the ditch was virtually circular, and in the centre were two pits each containing a cremation burial urn. Radiocarbon dates were obtained for the primary fill of the earlier burial pit (GAT Project G1692; Report No. 625; context 9961) as well as several other deposits within the site that supplied a date range within the second millennium BC, equivalent to the Early Bronze Age (2-Sigma calibration; Beta-210121 to Beta-210124). This was matched by the typological analysis of the cremation urns, which also identified an Early Bronze Age date (GAT Project G1692; Report No. 625; Appendix I). The radiocarbon date obtained from the primary fill of the later hearth pit in Trench 7 (context 704) was CAL AD 400 to AD 640 (2-Sigma calibration; Beta 210125; see Appendix V), an early Medieval date unlike anything else on the site. The macrobotanical analysis of the carbonised remains from the same context produced cereal grains, including hulled barley (*Hordeum distichon* L./*H. vulgare* L.), oat (*Avena*) and naked wheat (*Triticum aestivum* L./*T. turgidum* L.) (PRS 2005/121), species indicative of a Medieval date (see Appendix IV). This proved that the site was used for two distinctly different purposes: one ritual, one domestic, separated by a considerable length of time. A watching brief was maintained on this area (as well as on the fields to the east and the west), both for the road improvement scheme and for the gas pipeline realignment, covering a strip, *c*.50m wide. Several amorphous patches of charcoal were identified in the field to the west but nothing as distinctive as that found in Trench 7 (see Appendix III for a more detailed description of the watching brief).

3.0 DISCUSSION

(Reproduced from GAT Report 625; with amendments)

3.1 Introduction
The evaluation and recording work along the new Pipeline Diversion Scheme identified and investigated a previously unexcavated prehistoric site (Site 1; PRN 19659). The details of this work have been described above. This information is valuable in providing new evidence about the past in Llŷn, an area where there has been relatively little previous archaeological work in any period. This is largely because of its isolated rural position. It had little attention from early antiquaries because the local landed gentry belonged to relatively small working estates, and therefore were less likely to have leisure to be involved in academic pastimes. The area was visited by Richard Farrington (1772) and Pennant (1783) who noted a few sites, but the first locally focussed work was done by the Rev. J. Daniel in the late 19th century to whom we owe records of several chance discoveries (Daniel 1892).

The majority of the extant prehistoric archaeological remains are to be found on the higher hills of Llŷn where they have survived because they lay outside the area of arable cultivation. Remains there include many hut circles of later prehistoric or Romano-British date as well as several major hillforts The southern part of Llŷn is of lower land and the predominant soil type in the area is brown earth which, together with the mild maritime climate, produces land that is of Grade 2: moderate to good quality, suitable for intensive pasture with some arable (MAFF 1977, 1988). It can be expected, then, that the area would be attractive for prehistoric settlement. Recent work carrying out aerial photographic survey and evaluation of crop-marks on Llŷn has helped to demonstrate that there exist a range of monuments, both funerary and settlement belonging to the second and first millennia BC that survive only as subsoil features (Ward and Smith 2001). It was to be expected, therefore, that a number of previously unknown archaeological features would be discovered during the course of the work on the road scheme.

3.2 The early environment and coastal change

The whole surface of Llŷn has been affected by the passage of the Irish Sea ice sheet that left, in retreat, thick deposits of drift, fluvio-glacial clay and gravel and these have had a strong influence on soil formation. The glacial boulder clay is exposed in many places in the coastal cliffs and extensive deposits of gravels provide better-drained land in the Graeanog and Bryncir areas. In places features deriving from glacial or near-glacial conditions are to be found and ice-contorted layers have been described in the coastal cliffs at Glanllynnau, close to the eastern end of the road scheme (Harris and McCarroll 1990) where peat deposits also occur in relict hollows called kettle-holes formed where blocks of ice left from the ice-sheet melted in situ. The peat was thought to belong with the Pre-Boreal period at which time climate ameliorated rapidly towards present day temperate conditions.

Despite the scarcity of known archaeological monuments in southern Llŷn, there have been quite a number of chance finds of artefacts, notably of worked flints. These flint findspots are concentrated along the southern coast, notably on headlands. They include material of Early and Later Mesolithic and Neolithic date and have been interpreted as casual scatters left by nomadic hunters who were seasonally exploiting coastal resources such as shellfish. An alternative interpretation is that the scatters derive from flint working close to where flint pebbles used as raw material were available, rather than denoting settlement as such. However, the wide distribution of such finds suggests that they derive from exploitation of food resources rather than just flint. The occurrence of such flints also on the island of Enlli (Bardsey) shows that people with sea-going craft were exploiting the coast as early as the Later Mesolithic (c. 6th millennia BC).

One significant scatter of flint finds is known in the area of the present work on the headland of Penychain, south of the Haven Holiday Park.

As it reaches the coastal plain the River Erch runs parallel to the sea here before finding an outlet at Pwllheli. The marsh of Morfa Abererch consists of a former lagoon, partly drained for agriculture. Similar coastal marshes occur along the coast of Meirionnydd at Tywyn, Llanaber and Harlech. In places layers of clay were succeeded by peat development. At Llanaber, Barmouth, animal bones have been found in the clay underlying the intertidal peat there, including shed red deer antlers, mature and immature, as well as red deer and bovid bones (Kelly 1981-4). Nearby a portion of timber trackway that was preserved in a linear hollow in the peat was excavated. This produced radiocarbon dates in the 12th to 14th centuries AD. A nearby tree stump, however, produced a date within the Roman period (Musson *et al* 1989).

Development of the lagoon environments and their change to marshes clearly took place over a long period and they may have been affected by several phases of sea-level changes or exceptional storms creating shingle storm banks or dune fields

3.3 Neolithic period

There is evidence of scattered Early Neolithic settlement in Llŷn in the form of eight chambered tombs, concentrated towards the southern coast, but the nearest are some way north of the A497 road scheme and it was not surprising that no evidence of Neolithic activity was found during the project.

3.4 Bronze Age activity

The commonest type of monument in Gwynedd representative of the second millennium BC is the burial mound represented chiefly by stone-built cairns. About 50 such burial mounds are known in

Llŷn. Most of these are located in the upland at the north and east where they have survived well, partly through their stone construction and partly because they lie in areas marginal to agriculture where they have not been affected by cultivation. In the lowland however, below about 250m OD, burial mounds were more likely to be of clay or gravel derived from quarry ditches and very few are known because the above ground remains of most have been destroyed by clearance or cultivation. Recent studies of crop marks on aerial photographs indicate that there may be many burial mounds in the lowland surviving as ring ditches. Most of the evidence of activity in Llŷn during the second millennium BC takes the form of such burial monuments, either as extant burial mounds or the ring ditches of ploughed-down burial mounds. One such ring ditch was found during the road scheme towards its east end at Afon Wen. This proved to be the ditch of a burial mound of Early Bronze Age date and at its centre two cremation burials were found in decorated urns (Site 1 above). The Afon Wen ring ditch appeared originally to have had a small central cairn covering the burials and possibly a ring bank inside the ditch. This is a recognised type of barrow, but not one that has been discovered in north-west Wales previously.

The mound was situated on the crest of a low rise overlooking the coast. This is not a very prominent or distinctive position and quite similar to many low rises in this area. Burial mounds in the upland areas are notable for their prominent positions. However, the discovery of burial mounds in the lowlands here and elsewhere suggests that they may also be found in other types of topographic setting, perhaps placed to provide a purely local prominence or to be visible from local routes or settlement areas. This is the case with the Afon Wen barrow, which would have been close to a presumed early route approximately along the line of the present A497, but would also have been visible form the coast edge or even from the sea.

Evidence of settlement in Llŷn during the second millennium is very sparse although the evidence suggests that the better soils were being widely exploited by this time. The distribution of chance finds of artefacts of that period, although covering a wide variety of soils, still reflects a preference for freely drained soils. A significant concentration of artefact finds and monuments occurs on the uplands at the east side of Llŷn while it is sparser on the better quality, lower lying land, although the presence of several standing stones suggests that there was early settlement somewhere in the vicinity. Settlement of the second millennium BC has so far only been discovered at one site in Llŷn, that of Meyllteyrn Uchaf, Sarn (Ward and Smith 2001). This was a small settlement of two roundhouses surrounded by two concentric ditches. The discovery at Meyllteyrn Uchaf proves that settlement of that period was present in the area and it is possible that other sub-circular enclosures known from aerial photographs might be of a similar period. It shows what such settlement might look like and demonstrates that such settlement can be identified from the air. When the distribution of all chance finds of bronze tools and weapons, stone axe hammers as well as of cairns, barrows, beakers and urns is taken into account it can be suggested that Llŷn was probably a fairly fully settled landscape by the 2nd millennium BC and this agrees with the environmental information from Meyllteyrn and elsewhere (Caseldine 1990 and 2001). The Meyllteyrn settlement lies on a slope and three other concentric circle enclosures identified during the same project lie on low hill summits. Similar topographic situations can be found widely in the undulating landscapes of Llŷn and there could be many more similar settlements. One possible sub-circular settlement enclosure, *c*. 30m diameter was identified during the geophysical survey part of the assessment phase of the present project south-west of Llwyngwyn Farm. The edge of this extended into the road easement but could not be traced during the evaluation (Trench 42).

There are several known sites and finds in the vicinity of Afon Wen, which indicate that the area was well-populated during the Neolithic and Bronze Age. These include two Neolithic chambered tombs, three Neolithic stone axes, four standing stones, a stone battle-axe and three stone axe-hammers, all probably of Early Bronze Age date and a bronze palstave of Middle Bronze Age date (Fig. 29b). Some evidence of settlement was found not far to the south-east of Llwyngwyn Farm where fragments of a large coarsely-made, undecorated cooking pot were found in a pit (Site 3 above). This seemed to be an isolated feature with no other evidence of settlement activity. An isolated pot would normally be most likely to be a cremation burial but in this case the pot seemed to have been broken when deposited and no cremated bone was found in the fill of the pit. Charcoal from the pit gave a radiocarbon date of Cal BC 1360 to 1360 or Cal BC 1320 to 970 (Beta-204431).

Other evidence of presumed domestic cooking activity of a broadly similar date was found at Bryn Bachau during the road improvement scheme, about 2km to the west (GAT Project No.: G1692; Report No.: 625; Site 2), where several pits were found filled with burnt stones as well as spreads of burnt

stone, close to a small stream. These types of site, known as burnt mounds, are quite frequent and are interpreted as communal cooking places, where meat was cooked in pits of water heated by hot stones. However, they are generally found without trace of actual settlement, so that they have sometimes been thought to derive from transient hunting or herding activity. However, it is clear that the places suitable for burnt mounds, being at the side of streams are not themselves suitable for settlement while at the same time it is clear that such sites were not 'temporary' cooking places but used repeatedly over a considerable period. It seems more likely therefore that there was settlement nearby but at a little distance away on higher, better-drained land. Such settlement may be identified in future, by study of crop marks on aerial photographs.

Such sites of burnt mound type are quite frequent in the landscape and were not isolated here either because similar activity, but dating to late in the second millennium, was also found to the east of Afon Wen during the road improvement scheme, where a large pit was found filled with burnt stones, radiocarbon dated to Cal BC 1280 to 970 (Beta-204433) (GAT Project No.: G1692; Report No.: 625; Site 4) a date that overlaps with that from the pit with pottery from south of Llwyngwyn (GAT Project No.: G1692; Report No.: 625; Site 3).

3.5 Iron Age and Romano-British period

A substantial round house that is likely to be of this period is known just to the north of the pipeline route and just to the east of Pont Llwyngwyn. An area close to it at this point was going to be affected by the re-routing of a gas pipeline but in the event the route was changed to avoid the settlement site. Several round-houses are also known at Clogwyn Bach, just to the north-west of the road scheme but no other evidence of similar settlement was found during the scheme, perhaps surprisingly since through Gwynedd as a whole such settlement is quite numerous, with about a thousand recorded sites. Also, during another recent road scheme, the A55 across Anglesey, some 17.0km in length, several areas of such settlement were found. However, existing evidence of settlement of that period in Llŷn is relatively slight and it may be that this area was less densely settled than Anglesey and northwest Gwynedd and more may have been destroyed for agriculture.

Nevertheless, two areas of probable transitory activity in this period were identified during the road improvement scheme, both by radiocarbon dating rather than by diagnostic artefacts (GAT Project No.: G1692; Report No.: 625). The first consisted of two hearths with no accompanying structures in Trench 13 (*ibid*.: Site 6). The second was by a stream west of Llwyngwyn Farm in Trench 40 (*ibid*.: Site 5). This comprised a hearth on a clay floor within a rough sub-rectangular structure defined by lines of stones. This could have been walled structure largely removed by clearance for later agriculture but seems more likely to have been a rough hut of which the stones were simply a foundation or defining line. Whichever, it seems to have been a fairly impermanent structure compared, to the typical round house such as that at Pont Llwyngwyn. The radiocarbon date produced was Cal BC 50 to AD 110 (Beta-204430) and analysis of the charcoal showed the presence of spelt wheat. The date suggests that the structure dates to the Late Iron Age or Early Romano-British period and the spelt wheat was a crop that was grown in both periods.

3.6 Early Medieval and Medieval periods

The peninsula of Llŷn or Lleyn, or *Penllŷn*, is thought to take its name from the same root as the Irish tribal name Laigin (as in Leinster), probably reflecting early Irish settlement and influence in the area (Carr, 1972, 69). A large, presumably Iron Age, promontory fort near Nefyn on the north coast, Dinas Dinllaen, incorporates the same root, which also gave its name to the medieval commote or administrative district. However, historically, in terms of administrative areas under the Welsh kingdom, this area comprised two *cantrefs* (hundreds): that of Llŷn to the west, and Eifionydd to the east, in which is the area of the present road scheme. As described in the introduction, above, the area of the road scheme was certainly settled and farmed during the medieval period. The hillfort on the prominent hill of Garn Bentyrch, 5km to the north, which overlooks the area had several phases of rebuilding and the latest has been interpreted as an Early Medieval fortification. There are traces of medieval settlement within the grounds of Broom Hall on the north side of the road scheme area (Fig. 1) and there must have been fields associated with this and other settlements, such as that of Penychain, to the south-east. However, the field pattern was re-organised on a large scale during the 18th century when much of the land became part of large estates. The Medieval ploughland would have been concentrated around scattered individual townships with quite large areas of 'waste' and woodland between. No trace was found of any field boundaries earlier that the 19th century during the project and

it seems likely that the explanation is that the area of the pipeline was either waste or woodland during the Medieval period and only cleared for cultivation during the 18th to 19th centuries.

The lack of medieval finds is also partly explained by the topographic line taken by the route. The eastern part of the route was largely an improvement of the existing road, which runs along the edge of the inland plateau, before it drops towards the coastal marshes. This is likely to be an ancient route, with origins at least as early as the medieval period. This was suggested by Gresham (1973) who noted that the line of the road formed the southern boundary between Demesne land and the medieval townships of Penychen and Ffriwlwyd at the eastern end of the present road scheme. Here, therefore, the new road was running through a landscape on a pre-existing route, and so would not cut through known areas of medieval settlement. The western part of the new road followed a route by-passing the ancient route, which diverged inland through Aberech and instead ran through the fringes of the coastal marshes, an area that would not be expected to have been well-settled or used in the Medieval or earlier periods.

3.7 Post-medieval period

The main finds of the historic period were identified during the road improvement scheme (GAT Project No.: G1692; Report No.: 625) and included evidence for the construction of the Porthdinllaen Turnpike Trust Road (*ibid*.: Site 8). Within the pipeline route, the evidence was limited to evidence of post-medieval farming activity.

4.0 REFERENCES AND OTHER SOURCES CONSULTED

Published Sources

Bassett, TM and Davies, BL (eds.), 1977 *Atlas of Caernarvonshire*.

Gresham, C A 1973, *Eifionydd*, 343-351.

Roberts, B, 1979, *The Geology of Snowdonia and Llyn: an outline and field guide*. British Geological Society.

Unpublished Sources

GAT Report: 60 Project No. G1142 1993
GAT Report: 224 Project No. G1429 1996
GAT Project No. G1513 1997
GAT Report: 573 Project No. G1692 2005
GAT Report: 625 Project No. G1692 2006
Donaldson, KT Geophysical Survey Report: Abererch to Llanystumdwy, Gwynedd. (Stratascan Report Job Ref. 1899, August 2004)
Fairburn, N Desk-based Assessment, A497 Improvement Pipeline Diversions. (RSK-ESN Report Job Ref. 40109, February 2004)

Documentary sources

Caernarvonshire county series 25” ordnance survey XXXIII.14, XXXIII.15, XLI.2, XLI.3 (1889, 1900, 1917)

1:250,000 Soil Map Series: Sheet 2, Wales

Appendices

Appendix I

Gazetteer of Archaeological & Heritage Resources (as reproduced from RSK-ESN Report Job Ref. 40109, February 2004). For there individual locations, see Figure 1.

RSK No.	NGR	Site Name	Description	Recommendations
1	SH39613633	Dwelling	Derelict 19th Century Cottage	None
2	SH39753631	Trackway	Trackway	Basic recording/Watching Brief
3	SH39763635	Dwelling	Late 19th Century Cottage	None
4	SH39773633	Trackway	Trackway	None
5	SH39723646	Findspot	Two perforated stones at Penbryn Neuadd	None
6	SH40093639	Trackway	Trackway, Bodriala Farm	Basic recording/Watching Brief
7	SH40433650	Trackway	Trackway, Efail Bach	None
8	SH40453643	Walled Enclosure	A small walled enclosure	Basic recording/Watching Brief
9	SH40453637	Bank	Low bank/Field Boundary	None
10	SH40653635	Trackway	Trackway	None
11	SH40653634	House	Derelict pre-19th Century House	None
12	SH40903632	Trackway	Possible Trackway	None
13	SH41383643	Enclosed Wood	Triangular Enclosure	None
14	SH41703656	Earthworks	Earthworks near Tanclogwyn	None
15	SH41883662	Trackway	Trackway, Glan y Morfa	None
16	SH41803670	Enclosure	Possible Prehistoric Enclosure and Field System	Trial Trenching
17	SH42043672	Demesne Wall	3m High Estate Demesne Wall	None
18	SH42003667	Hollow way	Hollow way or Trackway	None
19	SH43613729	Trackway	Walled trackway at Tyddyn Berth	None
20	SH43803740	Railway Line	Disused Railway Line: Machynlleth to Caernarfon (1866 to 1964)	None
21	SH43853754	Dwellings	Afon Wen 19th Century Cottages	None
22	SH43893756	Dwellings	Two 19th Century Cottages at Penbont	None
23	SH43893757	Stone Bridge	A single-arched stone bridge	None
24	SH43903761	Woollen Mill	19th Century Industrial building	None
25	SH44383765	Bank	Low wide bank	None

26	SH44553771	Trackway	Walled trackway @ Afon Wen Farm	Basic recording/Watching Brief
27	SH44673777	Dwelling	19th Century Two Storey House	None
28	SH45273783	Dwelling	19th Century House	None
29	SH45323787	Toll house	Single Storey Toll house Grade II Listed building	None
30	SH45403760	Tomen Fawr	Medieval Ringwork	None
31	SH41203720	Broomhall Historic Park and Garden	Broomhall Historic Park and Garden	None
32	SH42793688	Hut Circles	Hut Group at Pont Llwyngwyn	Avoidance and Trial Trenching in Vicinity of Hut Group
33	SH45003750	Pit Group	Possible Circular Arrangement of Pits	Trial Trenching
34	SH41203720	Findspot	Polished stone axe and two axe hammers	None
35	SH39833661	Dwelling	Pen y Don	None
36	SH43823792	House	Plas y Nant; Ty'n y Coed Isaf; Listed Building	None
37	SH39613658	Dwelling	Ty Uchaf; Listed building	None
38	SH39623661	Dwelling	Geigin Aber-Erch	None
39	SH39663657	Church	St Cawdref's Church, Listed Building	None
40	SH39733642	Country House Garden	Penbryn Neuadd Garden	None
41	SH40623642	Nursery Garden	Tan yr Allt, Nursery Garden	None
42	SH43753732	Earthworks	Earthworks South of Tyddyn Berth	None
43	SH43823792	House	Plas y Nant, Chwilog, Listed Building	None
44	SH39583659	Chapel	Ebenezer Welsh Independent Chapel	None
45	SH45443768	Area of Interest	Area of Interest around Medieval Ringwork	None
46	SH45403760	Township	Site Ffridd Llwyd Township	None
47	SH43143698	Chapel	Brynbachau Chapel	None
48	SH39713663	Dwelling	Ty Gwyn, Listed Building	None
49	SH39913668	Bridge	Pont Abererch	None
50	SH39583662	House	Gwyndy	None
51	SH40523677	Dwelling	Hendre	None
52	SH42853649	Railway Station	Pen y Chain Railway Station	None
53	SH45323787	The Porthdinllaen Turnpike – Toll Road	The Porthdinllaen Turnpike – Toll Road	None
54	SH42443672	GAT Trial Trench 45	Archaeological Trial Trench with Prehistoric	Trial trenching

		(Project G1692)	Pottery	
55	SH43243714	Burnt Mound	GAT Trial Trench 67	Trial Trenching
56	SH39423632	1928 Road Sign	Cast Iron 1928 Road Sign	None
57	SH39903643	Bridge	Concrete Bridge, possibly built *c.*1928	None
58	SH39913663	Ford	Ford crossing Afon Ddu with possible traces of Bridge Abutment	None
59	SH40103645	Large Hollow West of Bodriala	Old River Course	None
60	SH41203639	Tan yr Allt	18th Century two storey house	None
61	SH43183699	Garreg Lwyd Cottage	A row of four two storey cottages	None
62	SH44143766	Circular Hollow	Circular Hollow, south of Tanyrallt, possibly natural	None
63	SH42053667	Hearth	GAT Archaeological Trial Trench	None

Appendix II

EVALUATION RESULTS

Methodology

The project took place between the 23rd of February and 9th March 2005.
The pipeline route was divided into three diversion areas: Diversion 1 (SH393369 to SH404364; 1.9km in length; Figure 2); Diversion 2 (SH418366 to SH431371; 1.6km in length; Figure 3); and Diversion 3 (SH447377 to SH450377; 0.65km in length; Figure 4). The trenches are described in order of the Diversion, moving from west to east.

A total of twenty-four trenches were inserted across the diversion areas. They were placed in the areas of most likely archaeological activity suggested by the information derived from the desk-based assessment (RSK ENSR Project No. 40109) and the evaluation undertaken during the road improvement scheme (GAT Project **G1692**; Report No.: 625), as well as an inspection of the local topography.

The route of the pipeline assessed by RSK ENSR Environment Ltd (RSK Project No. 40109) and evaluated by GAT was altered during its inception, meaning that some of the evaluation trenches did not follow the final route. These changes affected Diversions 1 and 2, whilst the route of Diversion 3 was not changed. Figure 1 locates both the original route of the three diversion areas and the final route, whilst Figures 2 to 4 detail the individual routes and the location of the evaluation trenches.

In response to the changes to Diversions 1 and 2, the construction of the pipelines was monitored as a continuous watching brief. The results are discussed in Appendix III.

In response to the results of the initial evaluation, Trench 7 was subsequently expanded and excavated following the identification of a large prehistoric enclosure ditch. The results of the excavation area are discussed below.

A 180° wheeled excavator was used throughout the project. Topsoil and unwanted material overlying the archaeological remains were removed by machine. All subsequent features were excavated by hand.

For the location and orientation of individual trenches, see Figures 2-3.

Identified features were recorded photographically and by notes, sketches and plans. Trenches were fixed by measuring from the field boundaries.

Trench size is expressed in square metres, most trenches being 2.0m wide. The dimensions of deposits and features are expressed in metres. The dimensions of structural stonework are expressed in millimetres.

Summary site narrative by trench

Diversion 1 (SH393369 to SH404364; Figure 2)

Trench 13
Size: 40m²
Description:
Trench 13 was located in Diversion 1 south of Cemlyn Farmhouse, which had been abandoned prior to demolition (Figure 2; RSK Project No. 40109). The trench was orientated east-west within a flat coastal plain. The area appeared to be reclaimed salt marsh, utilised for pasture. There were no visible earthworks or distinct topographical changes. A wide, shallow drainage channel defined the eastern side of the field. The topsoil was extant to a depth of 0.30m and contained several sherds of post-medieval pottery. Below the topsoil was a deposit of clean, grey sand with frequent flecks of iron. This deposit was identified as a natural subsoil, indicative of waterborne activity.
Interpretation:

The trench was archaeologically sterile. The post-medieval sherds recovered from the topsoil suggest the farming activity within this area has been limited to this period.

Trench 14
Size: 40m²
Description:
Trench 14 was located east of Trench 13, two metres south of a trackway (Feature 2) that also defined the northern boundary of the field (see Figure 2). The trench was orientated northwest-southeast. Several sherds of post-medieval pottery were recovered from the topsoil. Below this was a deposit of grey sand and gravel, again indicative of waterborne activity, but also devoid of any archaeological features.
Interpretation:
No features were identified or recorded. The trench was archaeologically sterile. The post-medieval sherds recovered from the topsoil suggest the farming activity within this area has been limited to this period.

Trench 15
Size: 40m²
Description:
Trench 15 was located east of Trench 13 on the opposite side of the drainage channel (Plate 2). No archaeological features were found, just alluvial deposits of clay and sand, with a shallow topsoil depth of 0.15m.
Interpretation:
The trench was recorded as archaeologically sterile. The shallowness of the topsoil was indicative of the limited amount of previous human activity had taken place in this area.

Trench 16
Size: 40m²
Description:
Trench 16 was located in the field to the west of that containing Trenches 13 and 14, separated by the drainage channel described above (*q.v.*) (Figure 2). No features were present in the subsoil, which was identified as a sand/gravel.
Interpretation:
The trench was recorded as archaeologically sterile.

Trench 17
Size: 20m²
Description:
Trench 17 was located within the same field as Trenches 15 and 16 (Figure 2). No archaeological features were found, just alluvial deposits of clay and sand. The post-medieval sherds recovered from the topsoil suggest the farming activity within this area has been limited to this period.
Interpretation:
The trench was recorded as archaeologically sterile.

Trench 19
Size: 20m²
Description:
Trench 19 was located to the northeast of Trench 14 on the opposite side of a trackway (Feature 2; Figure 2). It was inserted on a slight rise to the north of the coastal plain that contained Trenches 14 to 17. Two small sub-circular features were identified within the trench, roughly in the centre (contexts 1901 and 1903). They both cut dark red-brown silt/clay (context 1905). Both features were amorphous in shape with dark silty fills of an organic nature, suggesting that they were the result of bioturbation rather than specific human action. Below the subsoil was a deposit of sand and gravels (context 1908).
Interpretation:
The trench was recorded as archaeologically sterile.

Diversion 2 (SH418366 to SH431371; Figure 3)

Trench 20
Size: 40m²

Description:
Trench 20 was located in Diversion 2 to the east of the trackway running to Glan Morfa Bach Farm, within a large enclosed field used for pasture (Figure 3). It was known from the A497 Improvement Scheme evaluation (GAT Project Number G1692; Report Number 573), that a post-medieval toll road ran across the field on a general east-west orientation. The road was well constructed from locally sourced sand and gravels that were built upon a thick deposit of red-brown subsoil, which in turn sealed Morrainic Drift geology. Trench 20 was located *c.*30m south of the toll road where the land started to slope gently towards the coastal plain and was inserted across a slight rise which ran parallel with the field boundary. The topsoil was *c.*0.40m deep and sealed an equally thick subsoil that overlay the natural Morrainic Drift geology. Set into the topsoil was a number of large sub-rounded boulders up to 600mm in width. They appeared to have been gathered through field clearance and were the reason behind the slight rise. It was noted at the time that a similar phenomenon was observed during the evaluation of the A497 Improvement Scheme. No artefacts or features were found within the trench.
Interpretation:
The trench was recorded as archaeologically sterile.

Trench 21
Size: 40m²
Description:
Trench 21was located *c.*25m east of Trench 20 and was inserted across the crest of the easterly slope of a narrow river valley (Figure 3). The topsoil measured only 0.20m in depth and sealed a very thin deposit of subsoil that overlay a distinct outcrop of shale bedrock. No artefacts or features were noted within the trench.
Interpretation:
The trench was recorded as archaeologically sterile.

Trench 22
Size: 40m²
Description:
Trench 22 was located *c.*40m west of Trench 21 (Figure 3). The topsoil measured *c.*0.40m in depth and sealed a glacial deposit of sand and gravel. No artefacts or features were noted within the trench.
Interpretation:
The trench was recorded as archaeologically sterile.

Trench 23
Size: 40m²
Description:
Trench 23 was located *c.*40m east of Trench 22 where the easterly slope began to flatten (Figure 3). The stratigraphy within the trench was very similar to that within Trench 22, with the topsoil sealing a glacial deposit of sand and gravel. No artefacts or features were noted within the trench.
Interpretation:
The trench was recorded as archaeologically sterile.

Trench 24
Size: 40m²
Description:
Trench 24 was located at the base of the slope, *c.*20m from the local river on a general east west orientation (Figure 3). As with the trenches above, the stratigraphy was simply a thick deposit of topsoil sealing a glacial deposit of sand and gravel. Three sherds of modern glazed pottery were recovered from the topsoil, but no other artefacts or features were noted within the trench.
Interpretation:
The trench was recorded as archaeologically sterile.

Diversion 3 (SH447377 to SH450377; Figure 4)

Trench 1
Size: 75m²
Description:
Trench 1 was located in Diversion 3 within a large field east of Afon Wen farmhouse, south of the current A497 (Figure 4), in response to a geophysics signal that identified a series of discrete sub

circular features that may have formed a larger pit alignment. No archaeological features were identified.
Interpretation:
The trench was recorded as archaeologically sterile.

Trench 2
Size: 60m²
Description:
Trench 2 was located *c.*20m east of Trench 1 along the northern end of the Diversion area (Figure 4). No archaeological features were identified.
Interpretation:
The trench was recorded as archaeologically sterile.

Trench 3
Size: 40m²
Description:
Trench 3 was located *c.*2m east of Trench 2 at the base of a low-lying slope (Figure 4). It was positioned there because of the proximity of a known archaeological feature: a large circular pit containing burnt stone discovered during the A497 Improvement Scheme evaluation (GAT Project Number G1692; Report Number 625). No archaeological features were identified.
Interpretation:
The trench was recorded as archaeologically sterile: the topsoil/ploughsoil horizon sealed a sequence of colluvial deposits that overlaid a gravel-rich glacial deposit. There was evidence of water solution, *viz.*, manganese staining and iron panning but no evidence for human activity.

Trench 4
Size: 50.2m²
Description:
Trench 4 was located *c.*45m east of Trench 3 on the crest of a shallow sloping hill (Figure 4). The topsoil was shallow, only 0.20m deep and was directly above a periglacial deposit. No archaeological features were identified.
Interpretation:
The trench was recorded as archaeologically sterile.

Trench 5
Size: 40m²
Description:
Trench 5 was located *c.*10m south of Trench 2 (Figure 4). No archaeological features were identified.
Interpretation:
The trench was recorded as archaeologically sterile: the topsoil/ploughsoil horizon sealed a sequence of colluvial deposits that overlaid a gravel-rich glacial deposit.

Trench 6
Size: 40m²
Description:
Trench 6 was located in a field east of Afon Wen farmhouse, south of the current A497 (Figure 4). The trench was located close to the current field boundary. No archaeological features were identified.
Interpretation:
The trench was recorded as archaeologically sterile.

Trench 7
Size: 320m²
Description:
Trench 7 was located *c.*20m west of Trench 6 (Figure 4). It was inserted across a low-lying slope that extended westwards from the modern field boundary. The ditch of a large circular enclosure was identified within the trench, cutting a glacial deposit of sand and gravel. A full description of the excavation phase is in paragraph 2.1 (above).
Interpretation:
The interpretation and discussion of the results from this trench can be found in paragraph

Trench 8
Size: 40m²
Description:
Trench 8 was located in the centre of the same field as Trench 7 to accommodate the eastern slope of a low-lying hollow (Figure 4). It was thought that the slope could have led to an old watercourse. One feature was present: a shallow linear cut ran across the trench on a north-south orientation, *c.*8.0m from the western end of the trench (context 801).
Interpretation:
The linear cut was identified as a redundant agricultural feature of post-medieval date, possibly a deep ploughscar.

Trench 9
Size: 40m²
Description:
Trench 9 was located *c.*10m southwest of Trench 8 on the western slope of a low-lying hollow (Figure 4). No features were identified.
Interpretation:
The trench was recorded as archaeologically sterile: the topsoil/ploughsoil horizon sealed a sequence of colluvial deposits.

Trench 10
Size: 23.4m²
Description:
Trench 10 was located at the western end of the same field close to the field boundary (Figure 4). It was located to investigate a narrow watercourse and an associated bank that defined the field boundary. It was known at the time of the evaluation that the watercourse and bank had been constructed several years previously in an attempt to control the drainage within the field. It was hoped, however, that the dyke had utilised an earlier, natural watercourse, which may have had associated human activity. A shallow linear feature was located in the centre of the trench (context 1002). The fill of the feature, context (1003), contained a high concentration of manganese, suggesting waterborne activity.
Interpretation:
The trench contained only one identifiable feature, which was recorded as a redundant post-medieval drainage channel.

Trench 11
Size: 16m²
Description:
Trench 11 was located *c.*5m west of the original Trench 7 in an attempt to locate the extent of the archaeological activity identified within that trench (Figure 4). No archaeological features were identified but the area around Trench 7, including Trench 11, was eventually extended to examine the curvilinear feature in more detail (*q.v.*).
Interpretation:
See Trench 7.

Trench 12
Size: 40m²
Description:
Trench 12 was located to the southeast of Trench 7, down the slope from Trench 6 (Figure 4). It was hoped the trench would identify any extraneous features associated with Trench 7. However, no features were identified.
Interpretation:
The trench was recorded as archaeologically sterile.

Trench 18
Size: 30m²
Description:
Trench 18 was located *c.*5.0m west of Trench 7 in an attempt to locate any extraneous features associated with Trench 7 (*q.v.*) (Figure 4). The only activity noted within the subsoil was a tree bole. No other features were extant.
Interpretation:

The trench was recorded as archaeologically sterile.

Conclusion:
A total of twenty-four trenches were opened along the line of the proposed route: six trenches in Diversion 1; five trenches in Diversion 2 and thirteen trenches in Diversion 3. The fields evaluated within Diversions 1 and 2 revealed evidence for post-medieval farming activity, whilst the trenches opened in Diversion 3 were rather more informative. The best example was Trench 7, which contained the southern half of a ring barrow ditch. This feature was investigated further as part of the road improvement scheme: the northern half of the ring ditch was exposed and excavated and two pits with individual cremation urns were identified in the centre (for a detailed description of the cremation urns see GAT Project: G1692; Report No.: 625). The subsequent radiocarbon dates gave an Early Bronze Age date to the enclosure ditch. However, the radiocarbon date from the primary fill of the hearth pit within the enclosure on the pipeline side (context 704), had a 2-sigma calibration date of CAL AD 400 to AD 640 (Beta 210125) and the macrobotanical analysis from the same context contained cereal remains that would have been used for food or fodder (PRS 2005/121), showing that the area was also used in the early medieval period. Diversion 3 was the only area to be fully evaluated, however, as the route for the other two diversions had not been finalised during the course of the evaluation. These areas were subjected to a continuous watching brief.

Appendix III

WATCHING BRIEF RESULTS

Methodology

The project took place between the 24th of February and 11th August 2005. The gas pipeline diversion was divided into three areas (Figure 1). The groundworks involved stripping a twenty-metre wide working area within which the pipe trench would be dug. The average depth of the pipe trench was 1.50m with an average width of 0.50m. At selected intervals a welding pit was dug to join the lengths of pipe; these welding pits measured an average 4m² in size, with a depth of *c*.2.00m. The groundworks included the removal of field boundary walls within the working area, which were reinstated after the pipe trenches were complete.

A wide variety of machinery was used throughout the project, but the majority of the work was conducted using 13-tonne and 21-tonne 360° tracked excavators.

As stated above, the project was divided into three Diversion areas. The areas listed in the archaeological assessment undertaken by RSK (Project No. 40109) differed quite significantly from the final ground plan, especially in Diversion 2, where the central part of the diversion utilised the route of the A497 road improvement scheme rather than farmland outside of that scheme (as was originally proposed). The RSK report listed 63 known archaeological sites within the study area, with only ten sites affected by the scheme (*ibid*, pp21-22; Appendix I). Of these sites numbers 32 and 55, an Iron Age Hut Group and a burnt mound respectively, were no longer affected as the route within Diversion 2 was significantly altered. Site number 33: a possible group of pits identified by a magnetometer survey, was investigated as part of the evaluation phase. The remaining sites were affected and will be described in detail below.
The three diversion areas will be described separately and individual sites described in detail. Other archaeological sites or areas of interest that were not listed but were identified during the watching brief will also be described in detail.

Diversion 1 (SH393369 to SH404364; Figure 2)

Description:
Diversion 1 incorporated a 1.9km stretch south of the current A497. The area had been extensively altered as part of the A497 Improvement Scheme (which continued throughout the pipeline diversion project), with the derelict farmhouse identified in the RSK report as Site No. 3: Cemlyn (RSK ENSR Project No. 40109) demolished prior to the start of the watching brief. A new bridge crossing over the Afon Erch had been built as part of the new road layout as well as a new road link and roundabout system to the Abererch Sands Holiday Centre. The pipeline diversion utilised a large portion of the area stripped for the new road, with only the first fifty-metres and the final forty metres of the diversion (at the western and eastern ends of the route respectively), being trenched through undisturbed land. A short spur, *c*.100m long, was also dug west of Bodriala farm, linking the diversion to a local substation (Figure 2). The only feature that was affected by the diversion was a small walled enclosure, identified in the RSK report as Site No. 8 (Appendix I; Figure 2).
Impact:
The first fifty metres of the diversion was investigated as part of the evaluation but the route of the diversion was altered prior to the start of the groundworks so a detailed watching brief was conducted during the initial topsoil removal. The watching brief confirmed the results of the evaluation, which recorded that the archaeological record was limited to evidence for post-medieval farming. As stated above, the central portion of the diversion utilised land cleared for the road scheme and therefore did not reveal anything of note. This continued as far as Bodriala Farm, *c*.1.2km along the route where a large welding pit was dug linking the pipeline to the substation spur. The pipeline was then tunnelled below the new roundabout, exiting into another welding pit, where it continued for a further forty metres before terminating east of Site No. 8 (Walled Enclosure RSK ENSR Project No. 40109).

Site No.8 was a walled enclosure was roughly rectangular in shape covering an area of *c*.50m² and was defined on the eastern, southern and western sides by a partly demolished low-lying stone-built wall, standing to an average height of 0.50m above ground level (Plate 7). The A497 boundary wall defined the northern side. The pipeline breached the eastern wall, cutting a 5.00m wide slot through the wall,

into which a 1.50m deep pipe trench was sunk, exposing the foundations of the wall, which sat on the subsoil horizon (no foundation cut was visible, see Plate 7). The wall was built of several courses of drystone walling using irregularly shaped igneous stone. The wall was heavily overgrown and damaged by root action. An inspection of the stripped area within the walled enclosure revealed little more than a random scatter of post-medieval pottery. No features of any size were identified. An inspection of the pipe trench west of the enclosure revealed evidence for modern drainage as well as a plastic water pipe. The walled enclosure was visible on the First Edition 25" Ordnance Survey Map (1889) and was probably a former orchard associated with Tanyrallt, which was then a garden nursery.

The substation spur ran in a northerly direction from the diversion, to the east of Bodriala Farm. The spur was *c*.25.0m long and *c*.10.0m wide and was designed to tie-in with the local substation. The topsoil was removed to an average depth of 0.30m, barely exposing the subsoil. This affected the ability to see any potential archaeology, but equally it was assumed that any substantial features would be quite visible, but none were identified.

Diversion 2 (SH418366 to SH431371; Figure 3)

Description:
Diversion 2 was the longest diversion in the scheme, measuring 1.6km in total length. The diversion route had been altered since the evaluation stage, particularly at the western end of the scheme, where the route through the land of Glan Morfa Farm was moved north to utilise the easement of the road scheme. This was also done in the land across Llwyngwyn Farm, but this area had not been evaluated. Further east, the central part of the diversion was moved south into the Haven Holiday Park day car park, thus avoiding the Hut Circle identified in RSK report as Site No. 32. The scheme then crossed an enclosed marshy field of particular environmental sensitivity, as the field was host to a variety of undisturbed flora and fauna. Finally, the diversion terminated in a pasture field to the northeast of Haven Holiday Park, where it tied into the existing gas main (Figure 3). The majority of this route had not been evaluated and was therefore subjected to an intensive watching brief. The field that contained the undisturbed flora and fauna was of particular interest, as the area had not been developed to any great extent in the post-medieval period, due to the excessive waterlogging throughout the field. The final field affected by the diversion contained a Middle Bronze Age "burnt mound" (RSK Site No. 55), which was identified and excavated as part of the A497 Road Improvement Scheme (GAT Report 573).
Impact:
The diversion route through Glan Morfa and Llwyngwyn farmland utilised made ground created for the A497 Road Improvement Scheme, so the majority of the pipe trenches and welding pits were dug through material deposited for the new road, thus severely limiting the potential for visible archaeological activity. Moreover, the field boundaries had also been removed as part of the road project. The trenches did go deep enough in most areas to expose the subsoil, but no features were identified within these areas. The diversion route crossed the existing A497 road into the Haven day car park via a tunnel bored beneath the road, exiting into the car park through a welding pit (Figure 3). This southern half of the car park had been disturbed by the new road and was monitored as part of that project (GAT Report 625). The diversion route then continued into the northern half of the car park. The car park was built during the latter half of the twentieth century and the evaluation of the area during the road project revealed little more than layers of hardcore material sealing glacial deposits. Even with the close proximity of the Hut Circles to the north (RSK ENSR Project No. 40109: Site No. 32), it was not expected that any archaeology would be recovered because the extensive levelling and landscaping that went into creating the car park effectively removed any earlier activity (agricultural if not archaeological). A 2.50m wide area was stripped in advance of the pipe trenching. This removed the hardcore surface and exposed a deposit of made ground, comprising imported sand and clay. Fragments of modern glass and white glazed pottery sherds were visible within this deposit, which was identified as the primary construction layer for the car park. The pipe trench was then cut through the middle of this stripped area to an average depth of 1.50m, exposing glacial deposits and outcrops of bedrock. At the western end of the car park, a slope leading towards a row of terraced houses had been levelled with up to 1.20m of imported demolition material, included in which were fragments of twentieth century frogged brick and floor tile. This deposit was also part of the car park construction phase.

The diversion continued eastwards from the car park, into a heavily overgrown area north of an electricity substation (Plate 9). The overgrowth was cleared, exposing, *c*.15.0m north of the substation,

a rectangular spread of concrete, *c*.30m² in size. There was little indication as to its exact function, although it was thought to be the foundation for a small structure. A slot was cut into the side of the concrete, revealing that it was *c*.0.30m thick, atop a 0.10m thick sandy deposit, presumably a levelling deposit (Plate 8). The thickness of the concrete suggested it could equally be a dump of excess concrete associated with the construction of the electricity substation. Either way, it was clearly mid to late twentieth century in origin. The eastern end of this overgrown area was defined by a 0.50m deep drainage ditch that also represented the former eastern boundary of the field prior to it becoming the car park (Figure 3). A distinctive bank was noted by the ditch, *c*.1.20m high and *c*.7.0m long with a north-south alignment. The bank had been used as a badger sett and then a rabbit warren and was removed prior to the topsoil strip. The bank comprised humic soil and was identified as the upcast created when the ditch was dug. A single white glazed sherd was recovered from the bank. Below the bank and cut by the ditch was the remains of a brick floor. The bricks were frogged and twentieth century in date and covered an area of *c*.15m². The surface was partially fragmented so the full extent of the surface was unclear. There was no evidence for the brick surface extending much further, however. What was visible were fragments of asbestos floor tile and other building material that had been scattered loosely around. This material suggested there may have been a small structure standing in this area. What could be hypothesised was that as no such building was visible on any maps up to the 1948 OS County Series Map and the trees which covered the area were identified as roughly thirty years old (pers.comm.), then the structure was built and demolished some time during the 1950's and 1970's. Another possibility is that the structure could have been of World War II date from when the site of Haven Holiday Camp belonged to Ministry of War, as structures of that date were often built but not mapped. Either way it was distinctly twentieth century in origin.

The diversion continued into a marsh field defined by an array of undisturbed flora and fauna. Strict environmental constraints governed the removal of the topsoil so only a narrow strip 3.0m wide was removed prior to the cutting of the pipe trench. The southern portion of the field had already been removed as part of the road improvement scheme, revealing in the process that the field was subject to excessive waterlogging due to extensive glacial clay deposits. Mid-nineteenth century field drains were discovered during the evaluation of the road project. The watching brief through the field confirmed the existence of further field drains within the diversion area (Plate 10). They were all similarly constructed: narrow cuts into the boulder clay filled with small stones to drain water. They were not equidistant but were aligned north to south to take advantage of the topography. Two examples contained fragments of nineteenth century brick. As with the road, the results of the watching brief confirmed that the mid-nineteenth century attempts to drain the field were unsuccessful and that any attempts to cultivate the field or turn it to pasture were abandoned. The final stretch of Diversion 2 continued into a pasture field east of the marsh field. This final stretch was limited to a thirty metre long and ten-metre wide strip, after which the diversion was linked into the existing gas main. This final strip did not reveal anything of note.

Diversion 3 (SH447377 to SH450377; Figure 4)

Description:
The final diversion was also the shortest at 650m long. As with the other two diversions, Diversion 3 was orientated east to west. In this instance, the diversion ran south of both the existing road and the subsequent road improvement scheme, continuing through land belonging to Afon Wen Farm. Three field boundaries were removed as part of the general land strip, with a subsequent working corridor twenty metres wide. Two features were noted in the RSK Report: Feature 26, a post-medieval trackway to Afon Wen Farm, extensively modernised; and Feature 33, a sub-circular pit of Middle Bronze Age date, identified during the road improvement scheme and located *c*.500m east of Afon Wen Farm. This pit was thought to be part of a larger series of pits suggested by a magnetometer survey of the area. These possible pits were subsequently evaluated, but no further evidence was identified. The southern half of an Early Bronze Age ring barrow was identified during the evaluation, however (Trench 7: see paragraph 2.1 for a full description). It was located *c*.350m east of Afon Wen Farm (NGR SH45033775) and was identified as a large circular enclosure ditch with the remnants of a central stone cairn covering two burial pits, each of which contained a single cremation urn. The burial features and the majority of the enclosure ditch were located within the area apportioned for the road scheme, whilst the southern end of the enclosure ditch was located within the pipeline diversion area. This area was fully investigated during the evaluation stage. It was hoped that the watching brief phase would identify any extraneous features or similar activity.

Impact:
Overall, the information recovered from the watching brief was fairly limited: a shallow, circular pit was identified *c*.60.0m west of Afon Wen Farm. It contained a large amount of charcoal that suggested *in-situ* burning, but no artefacts were recovered from within the pit. The overall shape of the pit was fairly amorphous, suggesting it may even have been a redundant tree hole. However, as it was the only feature within this area, its exact purpose remained elusive. Further examples of burning were identified to the northeast of the farm, with several discrete patches of burning identified in the field opposite Ty'n Lon cottage (contexts 3013 and 3016; Figure 4 and Plate 12). Several similar examples were also noted during the evaluation of the same field as part of the road scheme (Figure 4; Plates 11 and 13). In all instances, the patches of burning were rather amorphous and not indicative of any specific activity, other than small fires or the burning of rubbish. Their exact provenance was unclear but they were interpreted as examples of farming activity rather than anything of greater antiquity. This theory was derived from the knowledge that the area had been used as a marketplace for the local agricultural community, with Ty'n Lon cottage serving as a tavern (pers. comm.); the patches of burning could have derived from this activity. Another example of *in-situ* burning was identified at the western boundary of the field containing the ring barrow, where a shallow pit, *c*.1.50m in diameter was identified (context 3017; Figure 4, Plate 12). As with the other examples, this pit was thought to represent agricultural activity, probably rubbish and/or field clearance.

The pipeline cut through the trackway to Afon Wen Farm (Feature 26), with a 0.50m channel, wide enough to accommodate the pipe. The trackway had been heavily modernised, so the archaeological impact was negligible. The diversion strip through the ring barrow field revealed no further evidence of extraneous activity. No further evidence for any pits, as suggested by the magnetometer survey, was forthcoming and the only potential archaeology were two discrete sub-circular features (contexts 3021 and 3033) on the west facing slope, *c*.100m east of RSK ENSR Feature 33. Both features were cut into the glacial soil and filled by an orange sand-silt. On investigation, they did not appear to be postholes or pits but were rather evidence for glacial activity or field clearance (i.e., the removal of large stones from the field). No further archaeology was identified prior to the tie-in to the existing gas main.

An additional strip was added to the diversion that was not included on the original plan. This involved a 15.0m spur northwards to an existing gas substation south of Hen-Efail Farm. The pipeline crossed the A497 Road via a tunnel that exited into a welding pit. The area disturbed by the welding pit was minimal and no archaeological evidence was forthcoming.

Conclusion:
The archaeological activity identified within the scheme was mainly post-medieval in date. The three diversion areas did not reveal any significant archaeological activity: Diversion 1 was limited to post-medieval agricultural activity; Diversion 2 to twentieth century building activity east of the Haven car park and nineteenth century drainage activity in the field north of the holiday park.; Diversion 3 revealed more discrete examples of post-medieval field clearance. The area around the ring ditch was monitored closely but no further evidence for prehistoric activity was identified here nor anywhere else along the scheme. Diversion 3 followed the original proposed route and had been effectively evaluated during that phase.

Appendix IV

Palaeoecology Research Services ***PRS* 2005/121**

Assessment of plant remains from excavations at various sites encountered during improvement works to the A497, Abererch to Llanystumdwy, Gwynedd, Wales (G1692/G1858)

by

Örni Akeret

Summary

Archaeological excavations were undertaken by Gwynedd Archaeological Trust at various sites along the route of the A497, between Abererch to Llanystumdwy, Gwynedd, Wales, as part of works associated with a road improvement scheme. Plant remains recovered from samples of nine deposits, representing six of the excavated trenches, were submitted for an assessment of their bioarchaeological potential.

Of the nine contexts, only five contained low concentrations of ancient plant macrofossils other than unidentified charcoal. Cereal remains were recovered from two deposits, with spelt wheat recorded from one and grains of hulled barley, oats and naked wheat from the other. One of the samples contained material which suggested the possible use of peat for fuel. A few fragments of non-charred remains from two of the deposits were considered to be of modern origin.

Given the small quantities of ancient plant remains recovered, and their poor state of preservation no further study is warranted.

KEYWORDS: A497 IMPROVEMENT SCHEME; ABERERCH TO LLANYSTUMDWY; GWYNEDD; WALES; ASSESSMENT; LATE NEOLITHIC; BRONZE AGE; ROMANO-BRITISH; PLANT REMAINS; CHARRED PLANT REMAINS; CHARRED GRAIN

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21 November 2005

Introduction

Archaeological excavations were undertaken by Gwynedd Archaeological Trust (GAT) in advance of the partial replacement and improvement of the A497 between Abererch and Llanystumdwy, Gwynedd, Wales, between September and December 2004, with further work carried out during April and May 2005.

The initial evaluation exercise involved the excavation of 98 trenches located following the results of a geophysical survey. Five of the trenches were subsequently extended to assess the extent of the archaeological deposits in these areas. Remains from samples from six of the 98 trenches were examined, and these were recovered from a range of features including a possible burnt mound of late Neolithic to early Bronze Age date, a Middle Bronze Age ring barrow, pit features of mid to late Bronze Age and hearth features with associated domestic debris of Romano-British date.

Nine sediment samples were processed by the excavator. Some of the resultant fractions (the 'flots' hereafter termed 'washovers' and one of the residues) were submitted to Palaeoecology Research Services Limited (PRS), County Durham, UK, for an assessment of their bioarchaeological potential.

Methods

The sediment samples were processed by GAT prior to delivery to PRS, and the remains recovered submitted for assessment. 'Flotation' was carried out using 300 micron mesh for the washover and 1000 micron mesh for the residue. There was some confusion over the finer mesh sheets, and, as a result, some 500 micron mesh may have been used instead of 300 micron. For Context 343 (Sample 23; Trench 80) only the residue was submitted to PRS, because all of the charred remains from the washover had been used for radiocarbon dating.

Plant remains were identified using a reference collection of modern seeds and fruits; cereals were identified according to Jacomet (1987). Nomenclature for plant species follows Stace (1997).

Results

The results are presented in trench and context number order. All of the plant remains listed below were charred unless noted otherwise. Charcoal fragments were largely excluded from the current assessment as this component had already been reported by another specialist and identifiable fragments submitted for radiocarbon dating.

Trench 7 (NGR SH 4503 3775)

This trench was located to the south of the A497, in a field belonging to Afon Wen Farm. The features revealed were interpreted as the southern half of an enclosure ditch of a Middle Bronze Age ring barrow. Charcoal from one of the pit fills (Context 704) has been submitted for radiocarbon dating for confirmation of the date (results pending).
Context 704 [small pit with charcoal-rich fill within barrow/ring ditch, possibly burial related activity] Sample 1 (6 litres sieved to 1 mm by the excavator with 300/500 micron washover)

Other than charcoal, the washover produced a few dozen cereal grains, mainly hulled barley (*Hordeum distichon* L./*H. vulgare* L.), but also some oat (*Avena*) and naked wheat (*Triticum aestivum* L./*T. durum* Desf./*T. turgidum* L.). Additionally, there were several weed 'seeds' of black-bindweed (*Fallopia convolvulus* (L.) Á. Löve) and knotweed (*Persicaria*).

Recommendations

Other than the larger charcoal fragments reported elsewhere, ancient biological remains recovered from these deposits were restricted to small quantities of poorly preserved seeds and fruits. No further analysis of the remains is warranted.

Retention and disposal

All of the recovered remains should be retained as part of the physical archive for the site.

Archive

All material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here.

Acknowledgements

The author is grateful to George Smith, of Gwynedd Archaeological Trust, for providing the material and the archaeological information.

References

Greig, J. R. A. (1991). *The British Isles*, pp. 299-334 in Van Zeist, W., Wasylikowa, K. and Behre, K.-E (eds), Progress in Old World palaeoethnobotany. Rotterdam/Brrokfield: Balkema.

Jacomet, S. (1987). *Prähistorische Getreidefunde. Eine Anleitung zur Bestimmung Prähistorischer Gersten- und Weizenfunde*. Basel: Eigenverlag.

Stace, C. (1997). *New Flora of the British Isles: second edition*. Cambridge: Cambridge University Press.

Appendix V

Mr. Andrew Davidson

Report Date: 11/30/2005

Gwynedd Archaeological Trust

Material Received: 11/1/2005

Sample Data	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age(*)
Beta - 210125	1540 +/- 60 BP	-24.7 o/oo	1540 +/- 60 BP

SAMPLE : G185870401
ANALYSIS : Radiometric-Standard delivery
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid
2 SIGMA CALIBRATION : Cal AD 400 to 640 (Cal BP 1550 to 1310)

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-24.7:lab. mult=1)

Laboratory number: **Beta-210125**

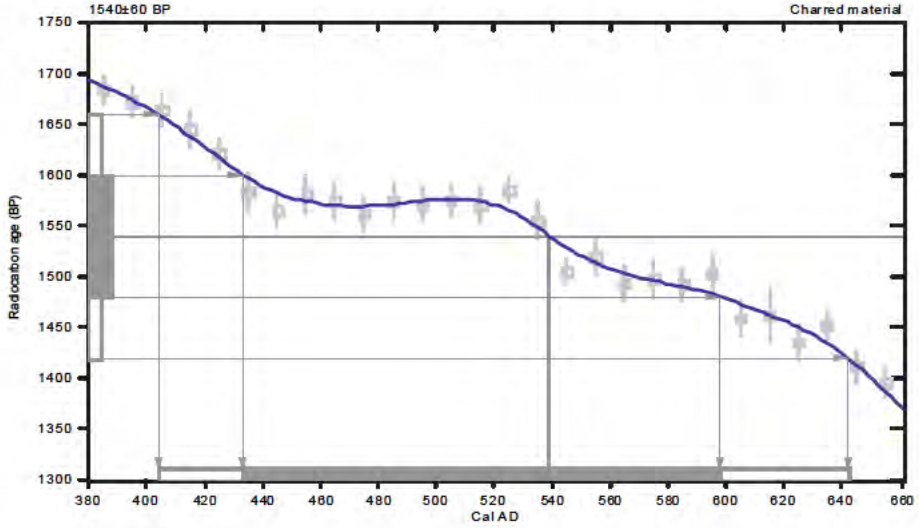
Conventional radiocarbon age: **1540±60 BP**

2 Sigma calibrated result: (95% probability) **Cal AD 400 to 640 (Cal BP 1550 to 1310)**

Intercept data

Intercept of radiocarbon age with calibration curve: Cal AD 540 (Cal BP 1410)

1 Sigma calibrated result: (68% probability) Cal AD 430 to 600 (Cal BP 1520 to 1350)



References:

Database used
INTCAL98
Calibration Database
Editorial Comment
Stuiver, M., van der Plicht, H., 1998, Radiocarbon 40(3), pxii-xiii
INTCAL98 Radiocarbon Age Calibration
Stuiver, M., et. al., 1998, Radiocarbon 40(3), p1041-1083
Mathematics
A Simplified Approach to Calibrating C14 Dates
Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

Beta Analytic Radiocarbon Dating Laboratory
4985 S.W. 74th Court, Miami, Florida 33155 • Tel: (305)667-5167 • Fax: (305)663-0964 • E-Mail: beta@radiocarbon.com

01 C19th Derelict Cottage
02 Trackway
03 Late C19th Farmhouse
04 Trackway
05 2x Perforated Stones at Penbryn Neuadd
06 Trackway
07 Trackway
08 Walled Enclosure
09 Bank, Possible Field Boundary
10 Trackway
11 Derelict Pre C19th House
12 Trackway
13 Enclosed Wood
14 Earthworks
15 Trackway
16 Enclosure
17 Demesne Wall
18 Hollow Way or Trackway
19 Walled Trackway
20 Railway Line Machynlleth to Caernarfon (1866-1964)
21 Afon Wen C19th Cottages
22 Two C19th Cottages at Tyddyn Berth
23 Single Arched Stone Bridge
24 C19th Woollen Mill
25 Bank
26 Walled Trackway
27 C19th two Storey House
28 C19th House
29 Toll House. Grade II Listed
30 Tomen Fawr. Ring Work
31 Broom Hall Historic Park and Garden
32 Hut Group at Llwyn Gwyn
33 Pit Group
34 Polished Stone Axes and Two Axe Hammers
35 Pan y Don. Dwelling
36 Plas y Nant. Listed Buiding
37 Ty Uchaf. Listed Building
38 Gegin Aber-Erch. Dwelling
39 St Cawdref's Church. Listed Building
40 Penbryn Neuadd
41 Tan yr Allt. Nursery Garden
42 Earthworks South of Tyddyn Berth
43 Plas y Nant. Listed Building
44 Ebenezer Welsh independant Chapel
45 Area of Interest Around Ringwork
46 Site of Ffridd Llwyd Township
47 Brynbachau Chapel
48 Ty Gwyn. Listed Building
49 Pont Aberach Bridge
50 Gwyndy House
51 Hendre. Dwelling
52 Pen y Chain Railway Station
53 Porth Dinllaen Turnpike-Toll Road
54 GAT (2004)Archaeological Trial Trench
55 Burnt Mound
56 1928 Road Sign
57 c.1928 Bridge
58 Ford on Afon Ddu
59 Large Hollow West of Bodriala
60 C18th Two Storey House
61 Garreg Lwyd. Four Cottages
62 Circular Hollow
63 Hearth found within GAT (2004) Trial Trench.

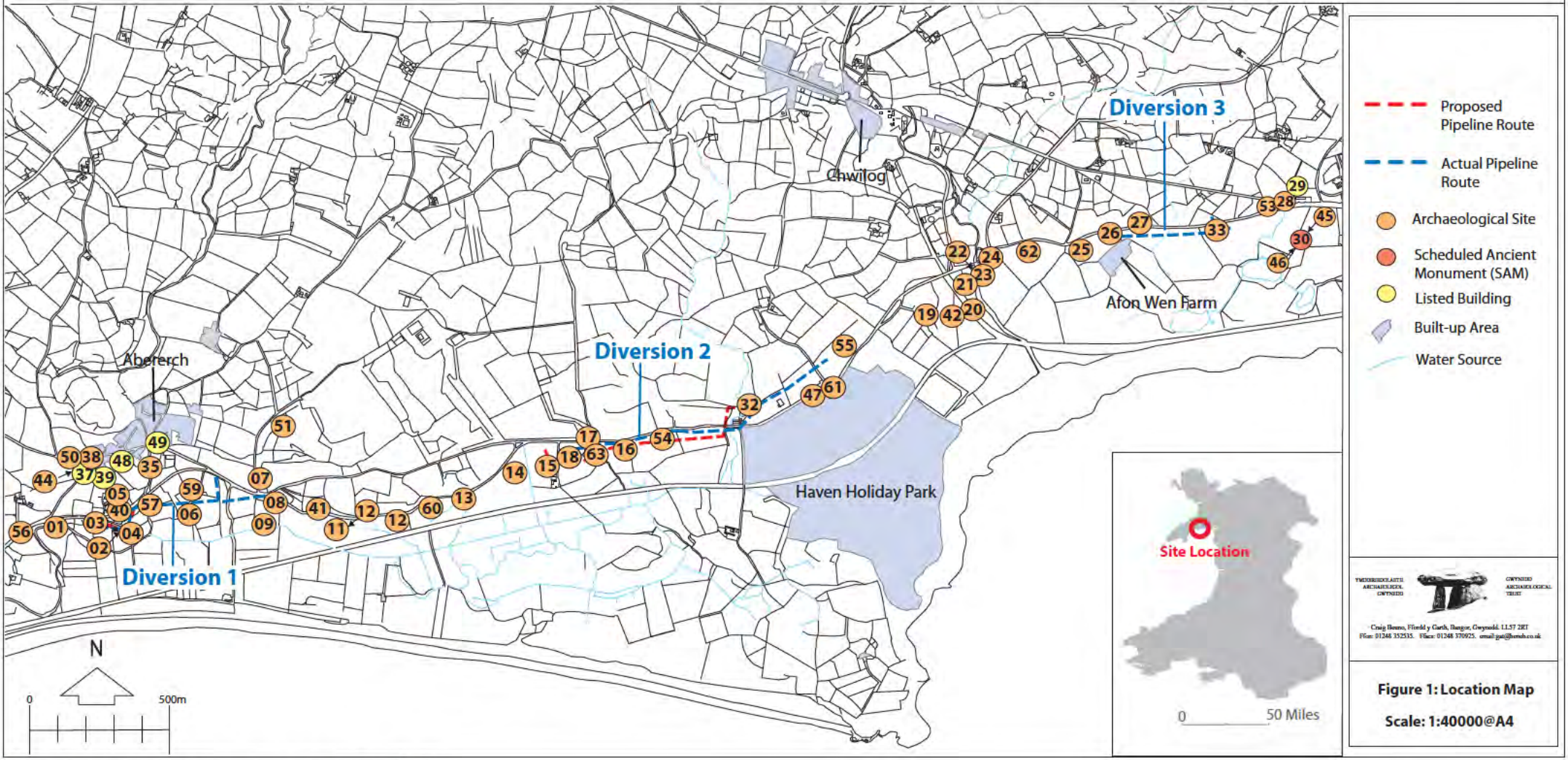


Figure 1: Location Map

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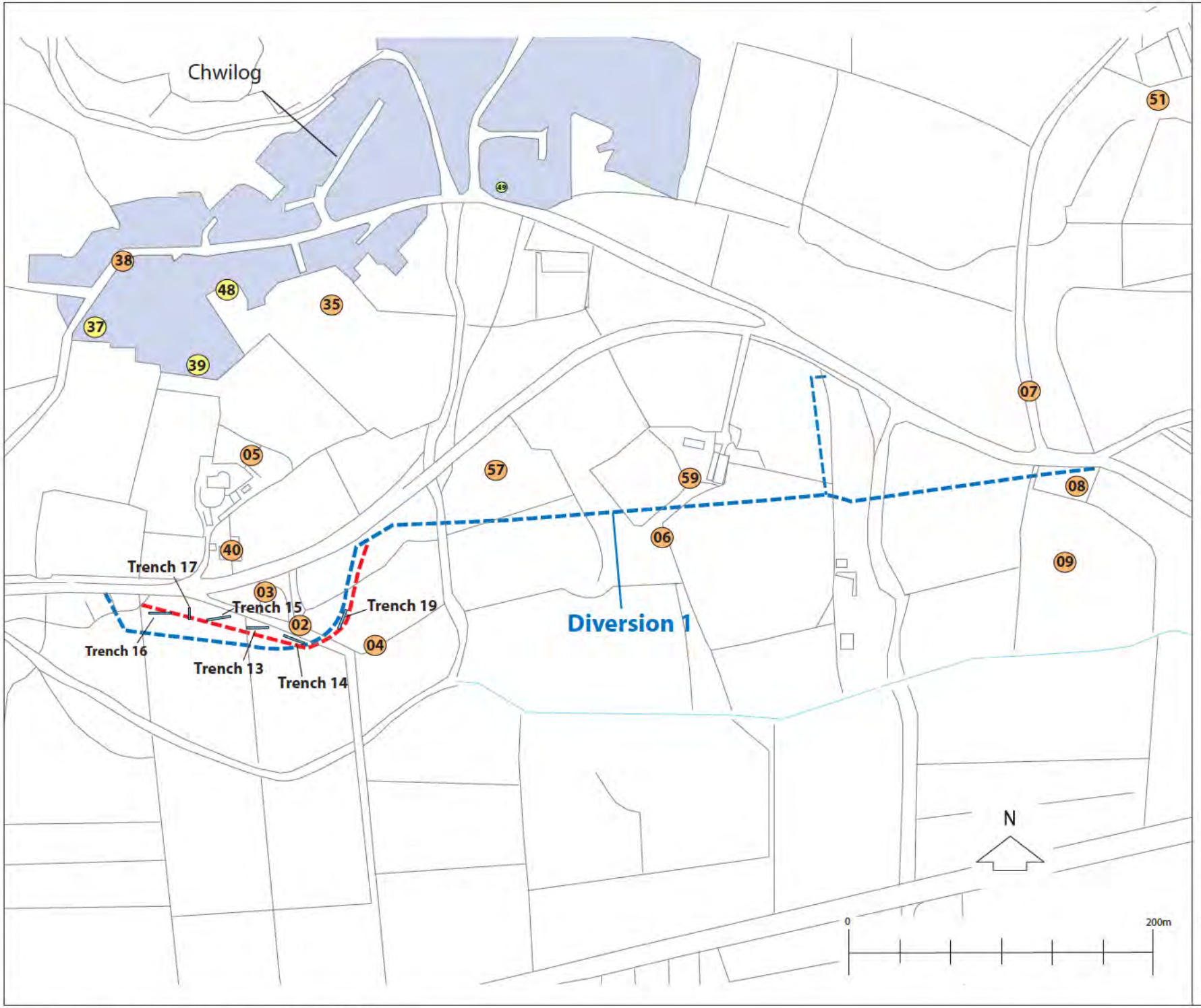

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GWYNEDD ARCHAEOLOGICAL TRUST
Craig Beuno, Ffordd y Garth, Bangor, Gwynedd. LL57 2RT
Ffôn: 01248 352535. Ffacs: 01248 370925. email:gat@heneb.co.uk

Figure 2: Diversion 1
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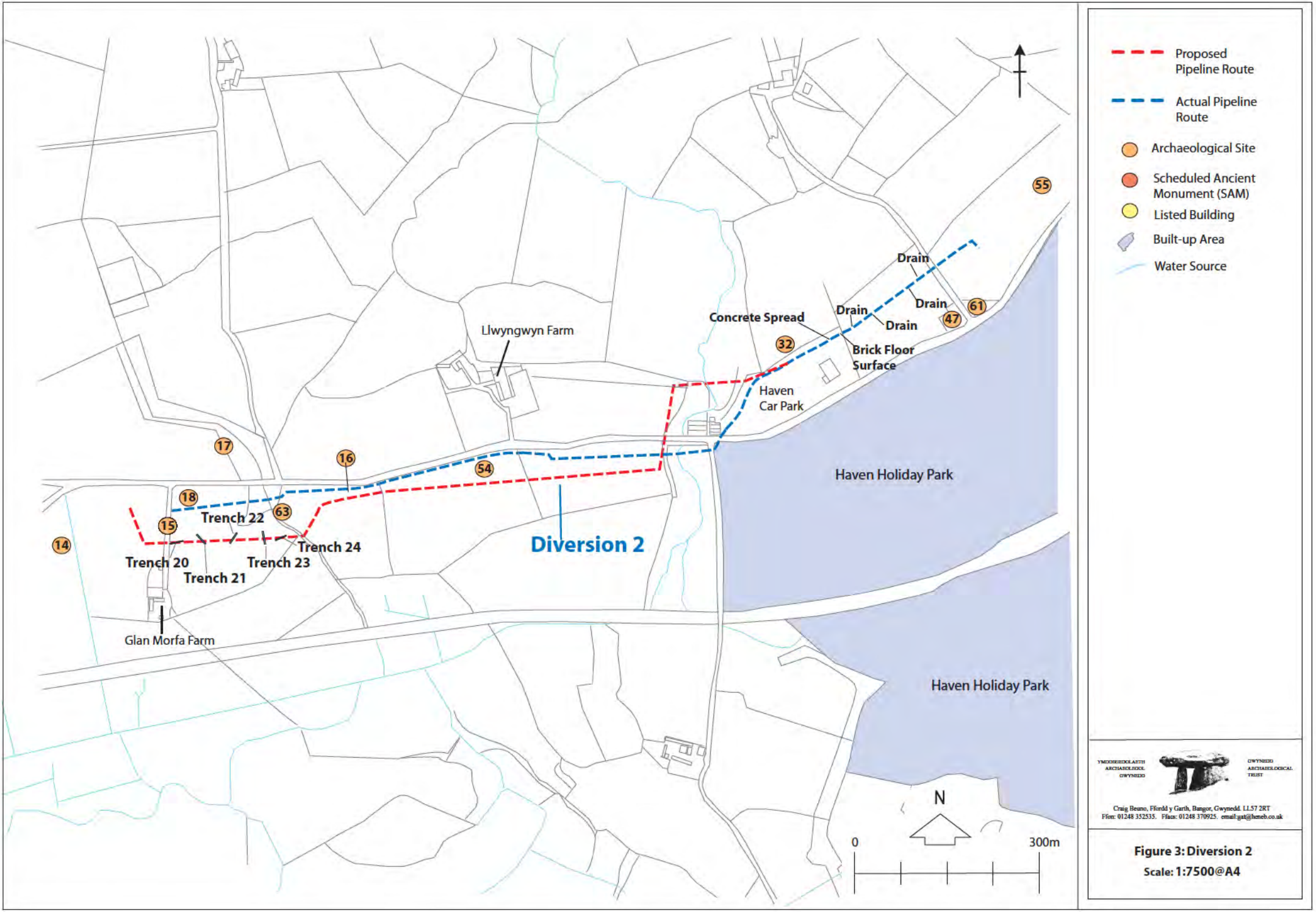

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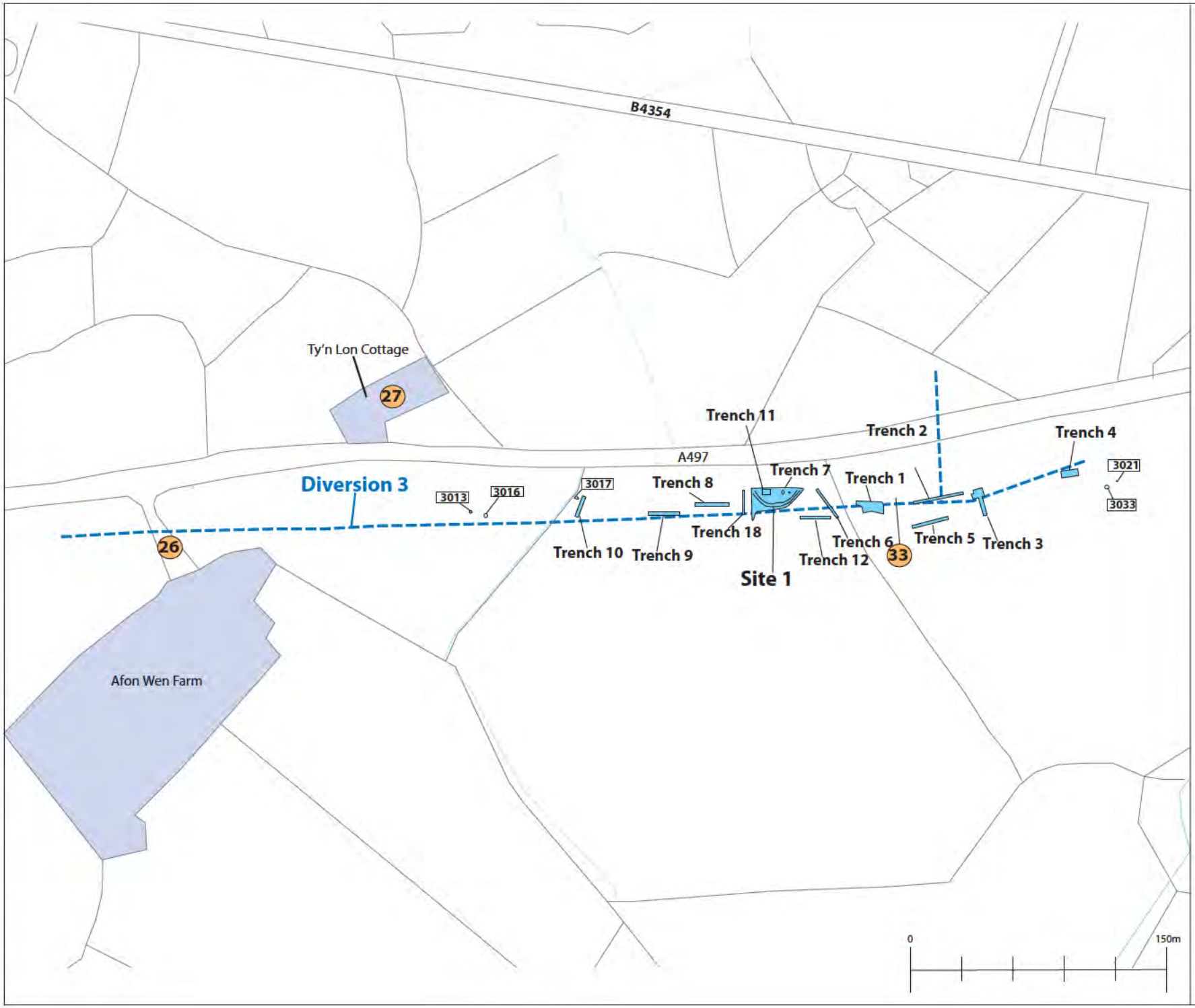
Figure 3: Diversion 2

Scale: 1:7500@A4



Proposed Pipeline Route

Actual Pipeline Route

Archaeological Site

Scheduled Ancient Monument (SAM)

Listed Building

Built-up Area

Water Source

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Figure 4: Diversion 3
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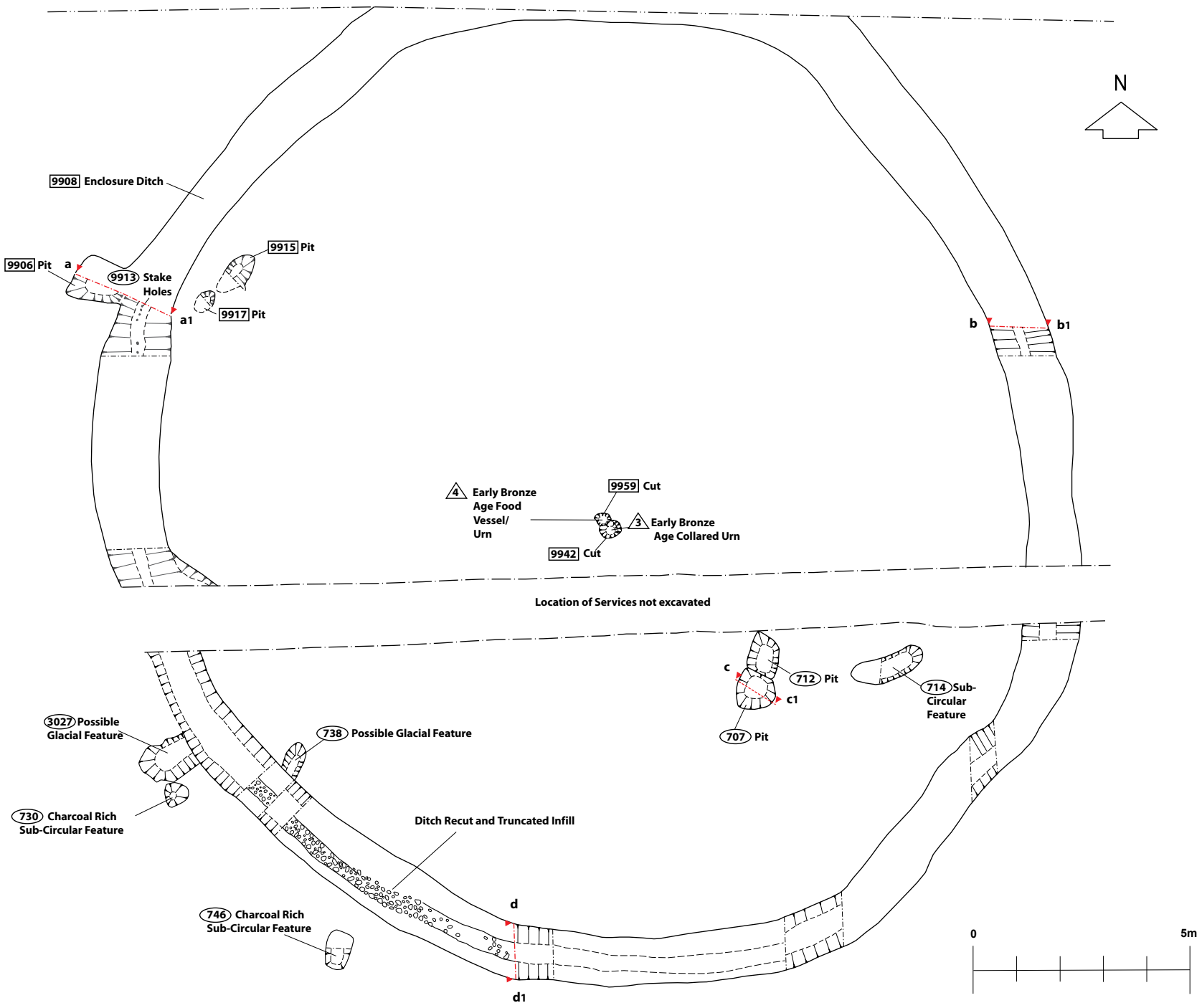

a a1 **Section (cf. Fig. 6)**

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Figure 5: Site 1: Plan
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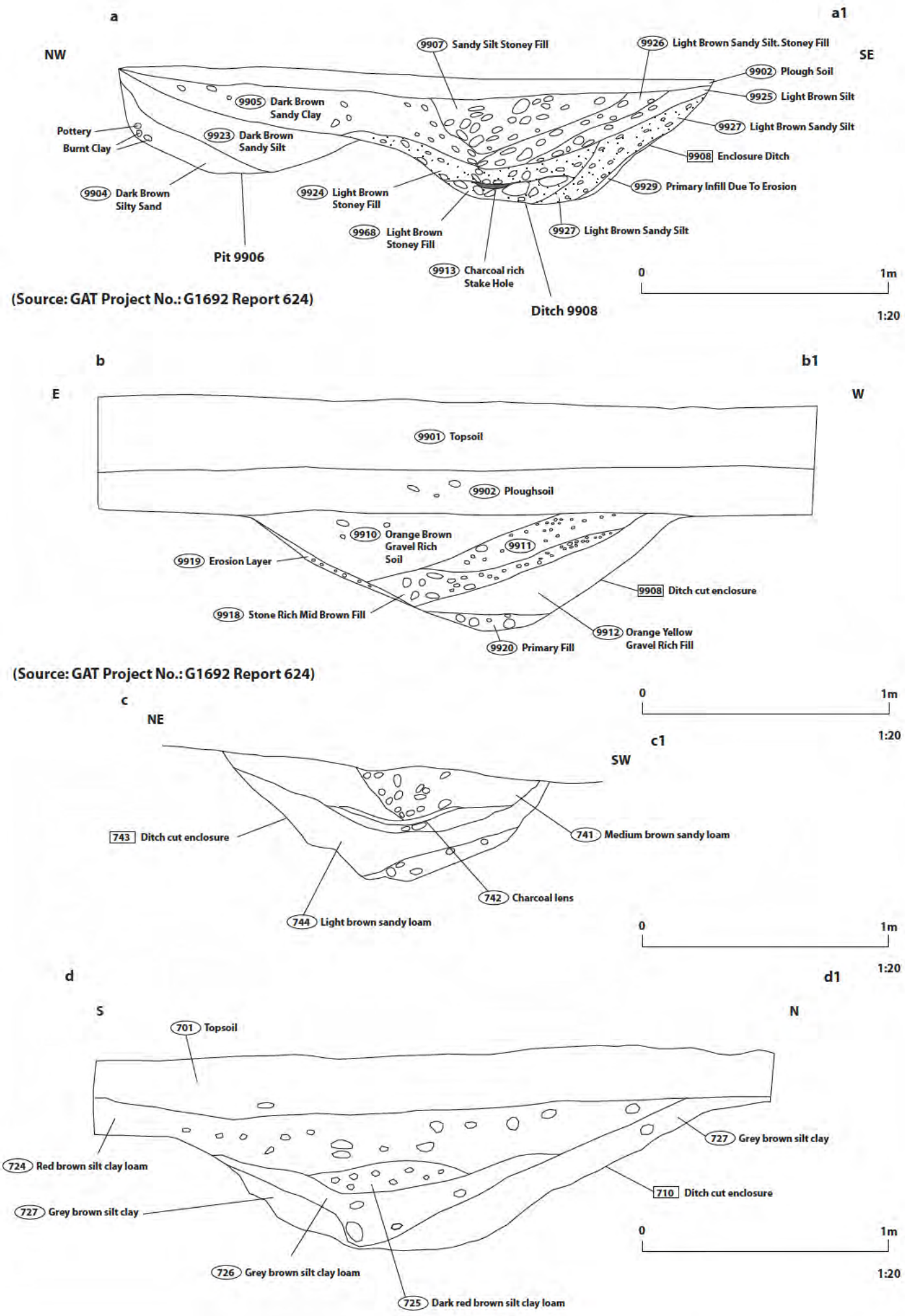

Figure 6: Site 1: Enclosure Ditch Sections (GAT Project Nos. G1858 & G1692)

Plate 1: Site 1: East-Facing View of the Prehistoric Enclosure Ditch (PRN 19659)

Plate 2: Site 1: West-Facing View of the Prehistoric Enclosure Ditch (PRN 19659)

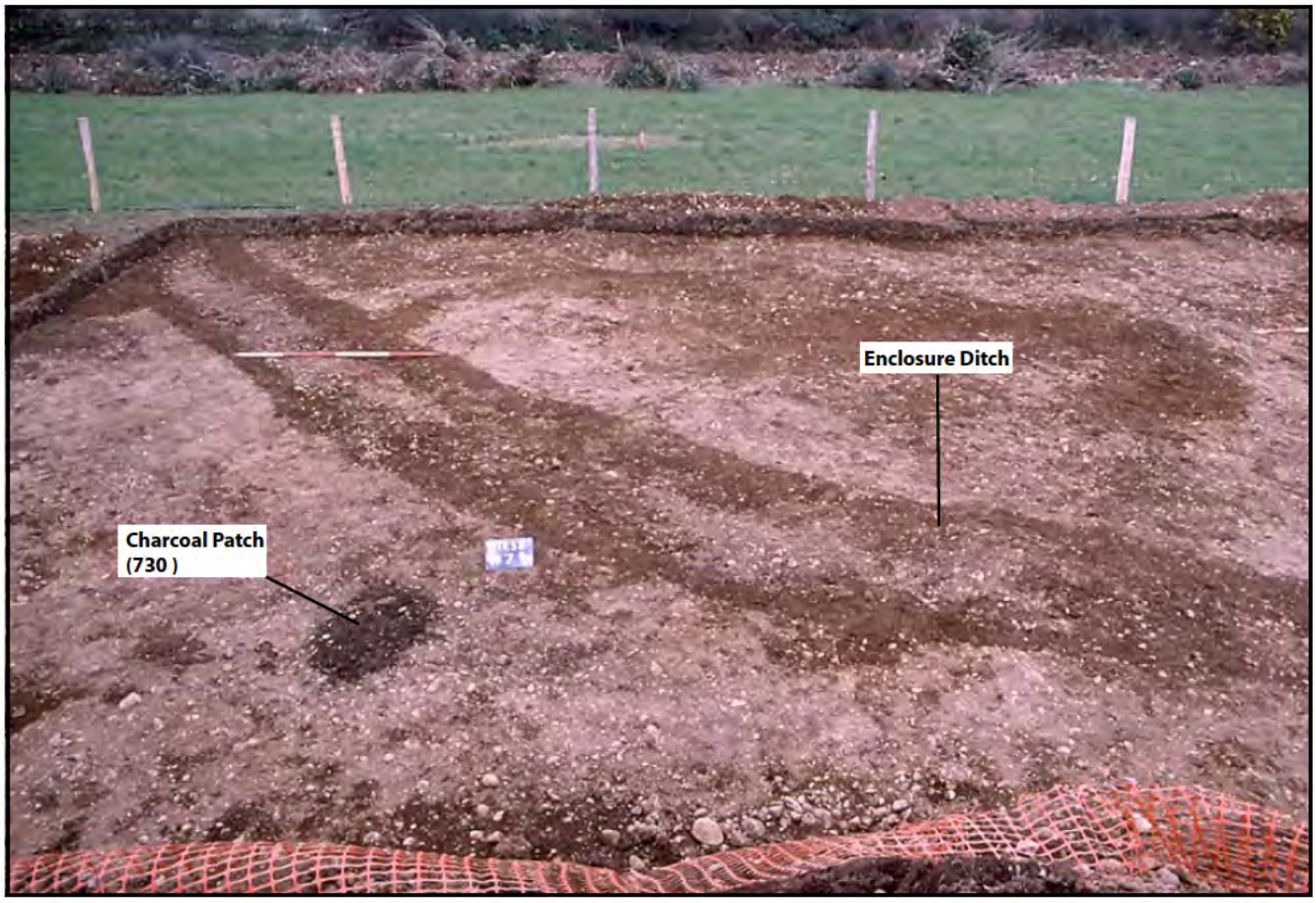

Plate 3: Site 1: West End of Enclosure Ditch (PRN 19569)

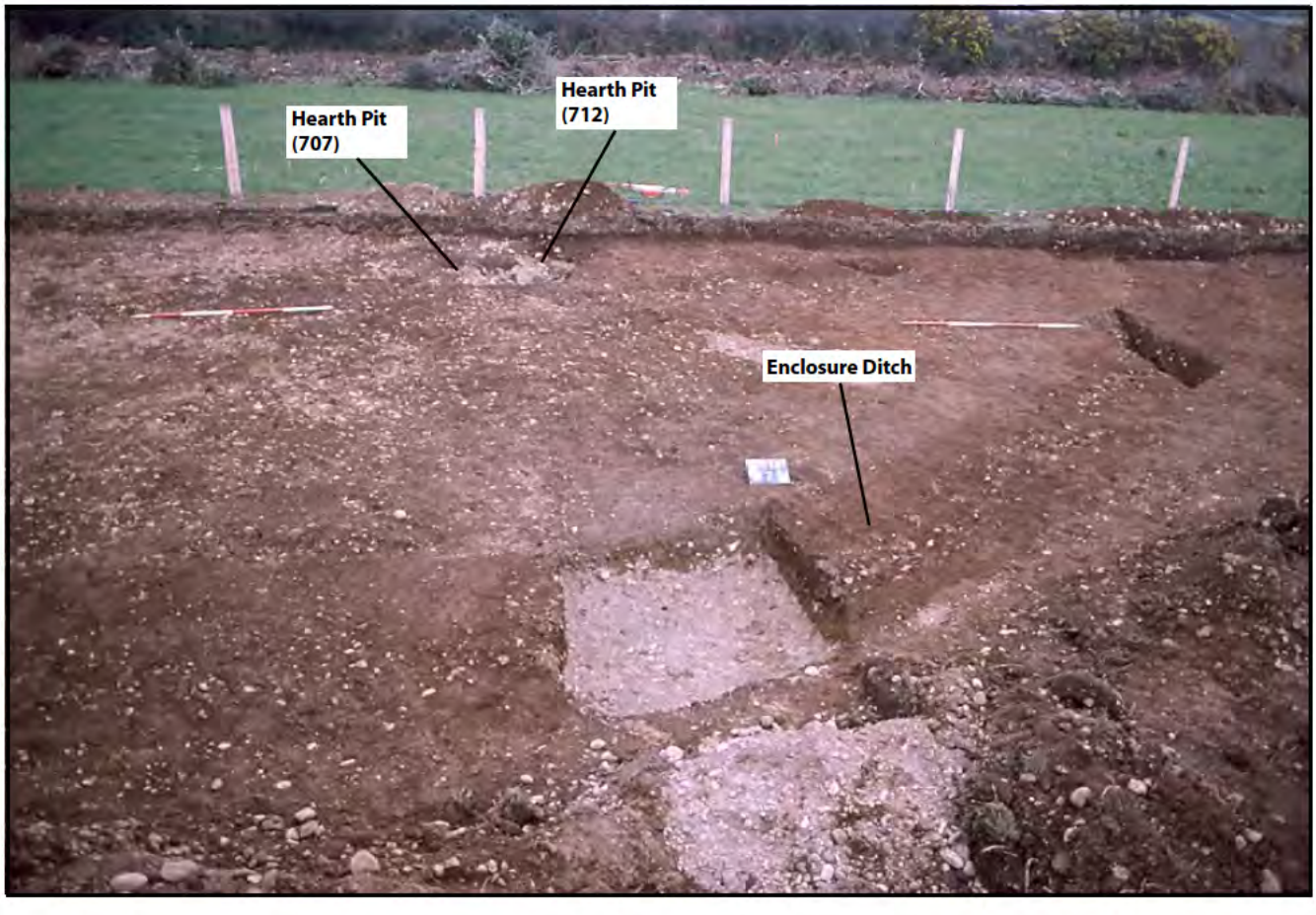

Plate 4: Site 1: Centre and East End of Enclosure Ditch (PRN 19569)

Plate 5: Site 1: Enclosure Ditch: East-Facing Section (PRN 19569)

Plate 6: Site 1: Enclosure Ditch: Southeast-Facing Section (PRN 19569)

Plate 7: Watching Brief: Diversion 1: Close-up of Pipe Trench Feature 8

Plate 8: Watching Brief: Diversion 2: Close-up of Pipe Trench through a Concrete Spread

Plate 9: Watching Brief: Diversion 2: Pipe Trench North of Electricty Substation

Plate 10: Watching Brief: Diversion 2: Field Drain

Plate 11: Watching Brief: Diversion 3: Sub-Circular Feature [3016]

Plate 12: Watching Brief: Diversion 3: Close-up of Feature [3017]

Plate 13: Watching Brief: Diversion 3: Close-up of Amorphous Sub-Circular Pit [3002]

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