

DWR CYMRU
MONA TO LLANGFNI TRANSFER SCHEME
ARCHAEOLOGICAL ASSESSMENT

Report number : 310



Prepared for
DWR CYMRU

October 1998

Ymddiriedolaeth Archaeolegol *Gwynedd* Archaeological Trust

Event
PRN → 40470

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DWR CYMRU - MONA TO LLANGEFNI TRANSFER SYSTEM

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1. INTRODUCTION

Dwr Cymru are proposing to construct a pumping station and pressure pipeline to transfer waste water discharges from the new Mona Industrial Park to an existing station at Llangefni. Gwynedd Archaeological Trust (Contracts Section) were asked by Dwr Cymru to undertake an archaeological assessment of the proposed route of the pipeline.

2. ASSESSMENT BRIEF

The aims of the archaeological assessment were to identify and record the cultural heritage of the area concerned and to evaluate the importance of what was identified, both as a cultural landscape and as individual features which make up that landscape. It was also recommended that ways should be found to minimise the impact of the proposed development on the cultural heritage.

3. METHODOLOGY

3.1. Desk-top study

A desk-top study was undertaken which involved consulting the Regional Sites and Monuments Record, the Royal Commission on Ancient and Historic Monuments (Wales) *Inventory for Anglesey*, relevant material held by the County Archive Service at Llangefni, including tithe maps and schedules, Ordnance Survey maps, and other literary sources.

Aerial photographs of the area were consulted at both the regional and local offices of the Countryside Council for Wales in Bangor.

The cartographic, photographic and literary information was collated and plotted on the relevant OS maps at a scale of 1:2500 to form the basis for the field work.

3.2 Field search

Field visits were undertaken on 8th, 9th and 12th October 1998 to verify the results of the desk based assessment and to identify the potential for further archaeological sites along the route of the pipeline. Features identified were marked on the 1:2500 maps supplied by Montgomery Watson.

3.3 Geophysical scanning

Geophysical scanning was undertaken by Trust staff on 19th and 20th October 1998. This was accomplished using a Fluxgate Gradiometer FM36. Three longitudinal scans were made, two along the sides of the potential route and a third along the centre. Additional diagonal lines were scanned at areas of significant magnetic activity as outlined by Clark for motorway route scanning (Clark 1990, 87-88). The aim was to cover 50% of the route of the pipeline by this method but in fact only 40% of the route was surveyed. This was due to the fact that some areas were unsuitable for geophysical work due to the lithology, the topography, or that the pipeline was too close to field boundaries with wire fencing which interferes with the magnetic readings.

3.4 Report

The features along the route of the pipeline were assessed and allocated to the categories listed below. These are intended to give an idea of the importance of the site and specific recommendations for further evaluation or mitigatory measures. 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.

3.5 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 worthy of scheduling or listing *i.e.* those sites which would meet the criteria for scheduling or listing.

Sites which are scheduled or listed have legal protection and it is recommended that all Category A sites remain preserved and protected *in situ*.

Category B - Sites of Regional Importance

Sites which would not fulfil the criteria for scheduling or listing but which are 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 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 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. This category may also include areas where finds or features may be expected but no work is thought necessary in advance of the scheme.

Category E - Sites needing further investigation

Sites whose importance is as yet undetermined and which will require further evaluation before they can be allocated to a permanent category. By the end of the assessment there should be no sites remaining in this category.

3.6 Definition of evaluation and mitigatory recommendations

Where a feature of archaeological significance is affected, evaluation and/or mitigation measures will be included in accordance with current policies recommended in Welsh Office Circular 60/96 *Planning and the Historic Environment: Archaeology*.

3.6.1 Definition of Evaluation Recommendations

Two principal techniques are used for carrying out evaluation: geophysical survey and trial trenching.

Geophysical survey

The two principal types of geophysical survey used for archaeological evaluation are magnetometry and resistivity. The former involves the use of a magnetometer, which detects variation in the earth's magnetic field caused by the presence of iron in the soil. This is usually in the form of weakly magnetised iron oxides which tend to be concentrated in the topsoil. Features cut into the subsoil and back-filled or silted with topsoil contain greater amounts of iron and can therefore be detected with the gradiometer. Strong readings can be produced by the presence of iron objects, and also hearths or kilns. Surveys are carried out in areas of not less than 20m by 20m, and readings usually taken every 0.5m,

giving 800 readings per grid. Data is presented in a series of X-Y and Grey-scale plots, and location of each of the grids will be shown on a map at a scale not less than 1:2500.

Resistivity relies on the relative inability of materials to conduct an electrical current which is passed through them. As resistivity is linked to moisture content, and therefore porosity, rocky features, such as wall foundations will give relatively high resistivity response, while structures such as clay filled ditches and pits, which retain moisture, give a relatively low response. In practice the method involves the injection of a small electrical current through the earth and the measurement of the subtle sub-surface variation in the resistance over a given area.

Trial trenching

Trial trenching is carried out by excavating trenches of an appropriate size to evaluate specific sites and areas. This can mean siting trenches in order to achieve a representative sample across the proposed area of development. The trenches typically measure between 20 m. and 30 m. long by 2 m. wide. The turf and topsoil is removed by mechanical excavator, and the resulting surface cleaned by hand and examined for features. Anything noted is further examined, so that the nature of any remains can be understood, and mitigation measures can be recommended. The location of all trenches is shown on maps at a scale of not less than 1:2500. All trenches containing features of relevance are planned at a scale of 1:20, and sections recorded at a scale of 1:10. Full context records are kept for all trenches. All trenches and features are photographed in colour film and colour transparency.

3.6.2 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.

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 need not be affected but their position should be noted and avoided by all works.

Reinstatement:

The feature should be reinstated with archaeological advice and supervision.

3.7 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.

4 ARCHAEOLOGICAL RESULTS

4.1 Location and topography

The proposed pipeline extends for just over 2.5 miles from a new pumping station, to be located to the north east of Mona Industrial Park at SH42097560, to Dwr Cymru's existing pumping station to the south west of Bryn Cefni Industrial Park at SH46107465. The route of the pipeline crosses a rural landscape of shallow river valleys and low ridges, extending in height from c. 10m OD, close to Afon Cefni in the east, to c. 70m OD on the ridges.

The western end of the route begins just south of Swn y Gwynt farm passing through large fields to the summit ridge at Penyrallt. This section drains into Afon Gwna which has its outlet at Aberffraw. The next section traverses a series of small fields to the north of the B4422 near Rhostrehwfa and larger fields over the ridge to the west of the A5114. The eastern end of the route drains into Afon Cefni with an outlet at Malltraeth.

The underlying geology of the area consists of the Gwna and Fydlyn Groups in the Bedded Series of Pre-cambrian rocks which outcrop at several locations along the route of the pipeline (Richards 1972, 9). The soil is predominately a low base status brown earth with some gleying. Land use along the pipeline is primarily agricultural with an emphasis on pasture for cattle and sheep. Some of the fields contain improved grassland while others, usually containing frequent rock outcrops, remain as rough grazing. Small pockets of deciduous woodland are found to the west of the A5114 and just west of the B4422. Field boundaries are mainly stone-faced earth banks, sometimes with ditches on either side and surmounted by scrub hedges. There are a few low dry-stone walls particularly around Pydew farm with mortared stone walls adjoining the roads in several places. Other boundaries include hedges and post and wire fences.

The route of the pipeline crosses four roads at right angles. The most easterly is the A5114 running from the main A5 Holyhead road into the centre of Llangefni. The next is the B4422 running from the A5 to join the B5109 to the west of Llangefni. This road would appear to predate the A5 as it is shown on a map of 1799 (Evans 1799). The pipeline also crosses a minor road which runs parallel to the B4422 joining the B5109 350m further west. The most westerly road is a minor road running from the A5 just east of Mona Airfield to Bodffordd. The pipeline also crosses a disused railway line to the south of Llangefni.

4.2 Historical Background

4.2.1 Prehistoric

There is evidence of occupation within the area from Neolithic times. Three stone axes from this period were found near Rhostrehwfa (PRN 2139) at SH44577558 in 1960. One was a small polished flint or chert axe while the other two were unpolished Group VII Graig Llwyd axes from Penmaenmawr. There are two prehistoric standing stones in the area. One in a field on Lledwigan farm (PRN 2738) at SH45677398 is 2.3m high and another at Craig Las (PRN 2136) at SH41647503 is 1.2m high.

A Bronze Age axe-hammer (PRN 2736) was found on Lledwigan farm although the exact location was not recorded. A 15m diameter round barrow is located on a hill crest at Craig Las at SH41527487 near the west end of the route (PRN 2150). A 20m diameter burial mound was recorded at SH468-747- near the east end of the route which can no longer be located (PRN 2733).

A scheduled Iron Age hut group (SAM A122) is located at Tyddyn Sadler at SH41127373 close to Afon Gwna to the west of the route (PRN 1548). Several quern stones of undetermined date have been found in the area including one from a possible occupation site at Ynys Cefni (PRN 2154) at SH44987445 and another (PRN 2728) at SH46177434.

4.2.2 Medieval Period

Several medieval townships are known to have existed in the area. These townships were the main administrative and settlement units during the medieval period. Information on them is contained in two medieval surveys, one of 1352 covering secular townships and the other of 1306 covering ecclesiastical townships (Carr 1982). There were medieval townships in the commote of Malltraeth at Bodffordd and Heneglwys in Heneglwys parish, Bodhenlli in Cerrigceinwen parish and Lledwigan-llan and Lledwigan-llys in Llangristiolus parish (Richards 1972, 36). Townships in the medieval commote of Menai included Nanhwrfa (Rhostrehwfa) and Tregarnedd (Richards 1972, 35). Nanhwrfa and Bodffordd were episcopal townships belonging to the Bishop and Chapter of Bangor while there were independent church lands at Heneglwys and Llangefni (Richards 1972, 42). St Llwydian's church at Bodffordd (PRN 2135) has a 6th century Latin inscribed stone slab set as the sill of the vestry window. The church of St Cristiolus at Llangristiolus (PRN 2135) was probably first built in the 12th century. About 30 early Christian cist graves, some containing inhumations, which were discovered c. 1829 between Glan Hwfa farm and Fron to the south of Llangefni (PRN 2680). Although the site can no longer be positively identified it is presumed to be at SH45787530. The small fields found between the two roads at Rhostrehwfa is probably the legacy of the medieval settlement pattern although the settlement may have migrated from around Trehwfa farm further west.

4.2.3 Modern and Industrial Period

The following table shows the farms along the route of the pipeline as they occurred from west to east on the parish tithe maps and schedules between 1840 and 1842. Modern farm names have been used where possible.

PARISH	FARM	OWNER	TENANT
Heneglwys	Pydew	Thomas Prichard	Margaret Parry
Cerrigceinwen	Trehwyfa-bach	John Owen	John Jones
Cerrigceinwen	Cae'r-gog	William Wynne Sparrow	John Williams
Cerrigceinwen	Bod-halen	Beaumaris Free School	John Williams
Cerrigceinwen	Penyrallt	Lord Dinorbin	Thomas Williams
Cerrigceinwen	Cefn Nithgron?	Beaumaris Free School	Robert Williams
Cerrigceinwen	Cottages & gardens	Poor of the parish	Samuel Dew
Cerrigceinwen	Penrhos	Lord Dinorbin	David Abrahams
Llangristiolus	Cae'r-bwl	Sir John Williams	Thomas Roberts
Llangristiolus	Nant	William Bulkeley	James Roberts
Llangristiolus	Lledwigan	Sir Richard Bulkeley	William Roberts

A lime quarry is located just to the south of Llangefni on the first edition of the OS map and other lime quarries and kilns are found to the south of Lledwigan farm. These operated in the 18th and 19th centuries to provide lime for agricultural use and as a flux for metal smelting. On the 1926 edition of the OS map a series of small stone quarries are located around Rhostrehwfa.

4.3 Results of desktop assessment and fieldwork

The sites considered of archaeological importance will be described as they occur along the route of the pipeline from west to east. Eight figure National Grid References will follow the site number and name.

1 Line of old road - SH42087560c

PRN 62144

Category: D

Impact: slight

The southern end of the minor road leading from the A5 to Bodffordd has been re-routed so that it joins the A5 350m further east. This change was as a result of the extension of the runway to the south east of Mona Airfield. The line of the old road can be seen on the 1926 edition OS map (Anglesey Sheet XVIII.NW) and earlier maps. The old road can still be seen as the overgrown track illustrated below.

Evaluation : none

Mitigation : watching brief and record



2 Old field boundaries - SH42187560c + SH42257586c + SH42447587c

62145

Category: D

Impact: slight

The present field SH42187560c is shown as two on the 1926 and earlier editions of the OS maps. The old boundary running south west to north east appears as a faint line on an aerial photograph (1982, 69) but is no longer visible on the ground. This feature was probably removed when the road was realigned as it would have encroached into the western field.

The field at SH42257586c is shown as two on the 1977 and earlier editions of the OS maps but the old boundary running south west to north east appears to have been removed before 1993 when it appears as a faint line on an aerial photograph (1993, 93). It is still visible as a darker line in the pasture.

The large enclosure at SH42447587c of rough pasture is shown as being divided on the 1926 and earlier editions of the OS maps. The old boundary can be seen running north west to south east on aerial photograph (1993, 94). It is still visible as a line of juncus, shown below, following the contours of a hollow across the field. Other features which were apparent on the aerial photographs were either rock outcrops or hidden within clumps of gorse and juncus.

Evaluation : none

Mitigation : none



3 Pydew farm track - SH42527562c

62146

Category: C

Impact: slight

The farm of Pydew is shown on the first editions of the OS maps where it is called Pedaw with a track to the south (1818 - 1836). On the Heneglwys parish tithe map of 1842 the farm is called Tyddyn Pydew, again with a track to the south. This track is the only access to the farm and consists of a narrow lane 4m wide which is sunken in places between stone faced earth banks surmounted by scrub hedges. Where the proposed pipeline crosses this track there is an

earth bank to the west and a post and wire fence to the east. A well is marked on the 1926 and 1976 OS maps at SH42587562 but this could not be located during field work.

Evaluation : none

Mitigation : watching brief and record



4 Features at Trehwfa Bach farm - SH42857550c

62147

Category: D

Impact: considerable

Several linear and curvilinear features were visible on the aerial photographs in this area. The majority of the features in the west of the field were channels draining the level ground to the east of a large drainage ditch running south west to north east along the parish boundary. A feature showing at SH42887545 on aerial photograph Nos 69 & 79 as a curvilinear hollow with a mound in the centre was interpreted as a natural feature during fieldwork. Three field boundaries present on the 1920 OS map (Anglesey Sheet XVIII.2) were visible as faint lines on the aerial photographs (1971, 1982 & 1993) but only one, running west to east just south of the pipeline, was discernible on the ground.

Evaluation : none

Mitigation : none

5 Curvilinear boundaries at Cae'r-gog - SH43207535c

62148

Category: D

Impact: considerable

A c 45m wide curving track is traceable on the 1977 OS and earlier maps running from the marsh land to the south at SH43057505c, through Bod-halen farm to several narrow fields to the east of Cae'r-gog. It is believed that this track was used to transport peat on sledges from the marsh to be stacked and dried in the small enclosures. The western boundary of this track has been removed where the pipeline crosses it but is still apparent on the aerial photographs and on the ground. A narrower track c. 10m wide is shown on the 1920 OS map (Anglesey Sheet XVIII.2) running along the eastern edge of the wider track.

Evaluation : none as the feature is already largely destroyed

Mitigation : watching brief and record

6 Farm track at Penyrallt - SH43407520c

62149

Category: C

Impact: slight

Penyrallt farm occurs as Penrallt on the first editions of the OS maps and as Pen-yr-allt on the 1994 edition. All the map

sources show two tracks leading from the farm, one running south west and the other running almost due east (site 8 below). The 5m wide track to the south remains as a short 50m length between stone faced banks and mature trees, which is crossed by the pipeline at SH43407520. It would appear that this track originally led to the farm from the marsh land to the south, which was used for peat cutting. The first edition 2 inch OS map indicates that there were 'ancient remains' just to the east of this track (OS 1918) but no other reference could be found to them and nothing was apparent in the area during field work. The exact location of this feature is not known but the map evidence would suggest it lies outside the pipeline corridor.

Evaluation : none

Mitigation : watching brief and record



7 Penyrallt farm track - SH43757533c

62150-

Category: C

Impact: slight

This track forms the access to Penyrallt farm from the minor road to the east. It consists of a 5m wide track bounded by a post and wire fence along most of its length with an earth bank on the southern side at the eastern end. A large dressed limestone block stands as an old gate post on the northern side of the road entrance to this track. The pipeline runs along the northern boundary of the track from the road and crosses it at SH43737533.

Evaluation : none

Mitigation : watching brief and record



8 Cae'r-bwl farm track - SH44467500c

62151

Category: C

Impact: slight

Access to Cae'r-bwl farm from the B4422 is along a narrow lane which is shown on the first edition OS maps although on the 1 inch map the farms of Cae'r-bwl, Ty-coch and Fron have been transposed. The pipeline crosses this track along the line of the parish boundary between Cerrigceinwen and Llangristiolus at SH44407502.

Evaluation : none

Mitigation : watching brief

9 Farm track at Cae'r-bwl - SH44777502c

62152

Category: C

Impact: slight

The 5m wide track leaves the farm in a south easterly direction for 100m before turning at right angles to the north east and continuing for a further 200m. It then continues as a public footpath to Llangefni. The track is used as access from the farm to the fields to the east and north east. The route of the pipeline crosses this track at SH44747500 and joins it again at SH44657500 close to the farmyard. Several dressed limestone slabs are used as gateposts on this track, those close to the farm are illustrated below. Those at the north end of the track are possibly older and *in situ*. At the entrance to a field to the east of the track at SH44757500 is a lozenge-sectioned sandstone pillar, shown below, approximately 1.5m long. It is set lengthways in the wall with a hole in the end which previously held a gate pintle.

Evaluation : none

Mitigation : watching brief and record



10 Ridgeway track at Gwernhefin - SH45287476c

62153

Category: C

Impact: slight

A track running south west to north east along the summit ridge to the west of Gwernhefin farm is shown on the first edition OS map as a road running almost parallel to the B5114 from the A5 to Llangefni. The line of this road is retained in the track and public footpath from the A5 south west of Ty Nant farm, through that farm and along the summit of the ridge to rejoin the B5114 just south of Llangefni. The route of the pipeline crosses this track at SH45287476.

Evaluation : none

Mitigation : watching brief and record

62154
11 Farm building - SH45307475

Category: C

Impact: likely

On the brow of the ridge to the south west of Gwernhefin farm is an old farm building. It is located beside the old road described above. The construction is of roughly mortared stone under a sagging slate roof. There are several blocks of gritstone used in the walls of the building which may indicate re-use. A small area, between the south end of the building and a farm gate, is cobbled. There are four re-used dressed limestone slabs forming an edging round the south east corner. Two of these are 1.10m in length with the others being 1.85m and 1.75m. They are all c. 0.30m wide and at least 10cm depth is visible above the ground surface. Similar dressed stone is used as a rubbing stone in the field to the east where the slab, with a rounded top, measures 1.60m above the ground surface x 0.48m wide x 0.17m thick. On the 1926 and earlier OS maps a small rectangular enclosure is marked to the north of the field boundary a few metres east of the farm building.

Evaluation : none

Mitigation : watching brief is recommended for the pipeline corridor adjacent to the farm building



62155
12 Railway line - SH45977465

Category: B

Impact: slight

A disused railway line running north south crosses the route of the pipeline at right angles to the south of Llangefni. This was a branch line off the main London to Holyhead route forming part of the old Anglesey Central Railway and opened in 1865. The line was closed to passengers and public freight in 1964 after the Beeching Report of 1962 but continued to be operated by British Rail for the benefit of Octel Ethyl at Amlwch until c. 1993. The line still retains its rails and sleepers and there is a possibility that it will be reinstated in the future.

Evaluation : none

Mitigation : watching brief and record



4.4 Results of geophysical scanning

A geophysical survey was undertaken using a Fluxgate Gradiometer FM36. The lithology at the east end of the pipeline was suitable for magnetic scanning as it produced clear magnetic contrasts. The west end of the route produced more erratic background readings making it difficult to extract relevant features. Four areas were selected for magnetic scanning and these were from west to east along the route of the pipeline :

Area 1 - Trehwfa-bach farm

The route of the pipeline crosses a large field on Trehwfa-bach farm. The whole of this field was scanned with the gradiometer. The eastern side of the field produced consistent low readings of 1-6 nT. Further west a 30m wide band gave readings of 16-22 nT. At the break of slope the magnetic anomalies reduced but increased again to over 22 nT at the western side of the field. These magnetic anomalies were interpreted as geological rather than archaeological as they respected the topography.

Area 2 - Penyrallt Farm

Two fields on the route of the pipeline at Penyrallt farm were suitable for geophysical scanning. These were the large fields to the east and west of the farm. Magnetic anomalies in the eastern field outlined linear features running almost east west which followed the visible ridge and furrow pattern. In the north east corner of the field parallel lines running north south were also traced which may have been evidence of earlier or deeper ploughing. There was also irregular magnetic activity close to the former field boundary in this area.

There was increased magnetic activity at the eastern side of the western field. This began c 30m from the eastern boundary and continued for c 40m and extending across the easement corridor. The western side of the field was magnetically very quiet but with irregular erratic anomalies in the north west corner. This respected a slight mound just to the east of old pond in the corner of the field and may signify a burnt mound used as a prehistoric cooking place.

Area 3 - Ganol Rhos Farm

The two most western fields affected by the pipeline were scanned. Magnetic anomalies outlined linear features running south west to north east in both fields which followed the visible ridge and furrow pattern and an old field boundary was also highlighted. High readings at the western side of the western field signified a water pipe running parallel to the western field boundary and other isolated high readings probably signified buried iron. The magnetic readings respected a mound near the eastern boundary of the eastern field which appeared to be natural.

Area 4 - Gwernhefin farm

The route of the pipeline crosses two fields on this farm and both were scanned during the survey. The route follows the northern boundary of the eastern field, nearest to the A5114 road, so a line 8m inside this boundary had to be taken to avoid the anomalies encountered near metal fencing. The only significant anomaly was a 12m wide area of magnetic activity 83m to the east of the western field boundary. This followed the line of a slight escarpment to the south and was interpreted as a geological feature.

Scanning along the route of the pipeline in the western field at Gwernhefin revealed a curvilinear depression, approximately 50m from the eastern field boundary, the edges of which gave magnetic anomalies. This feature may have archaeological significance. Linear features running north west to south east at regular intervals across the middle of the field. These were traces of ridge and furrow plough lines. A linear feature giving high readings running north east to south west across the eastern part of the route was interpreted as a pipeline, probably for water.

Sites identified during geophysical scanning which may be of archaeological significance are listed below. Numbers follow on from sites which were identified during desktop and field work.

13 Possible burnt mound at Penyrallt - SH43217531

Category: E

Impact: considerable

Erratic magnetic readings outlined a low circular mound in the north west corner of the western field at Penyrallt farm. This could signify the existence of a prehistoric burnt mound and a more detailed geophysical survey is therefore

recommended.

Evaluation : detailed geophysical survey of 1600 sq m to be followed by trial excavation

Mitigation : dependant upon results of evaluation

14 Curvilinear depression at Gwernhefin - SH45247479

Category: E

Impact: considerable

A curvilinear depression was outlined in the field to the north west of Gwernhefin, with magnetic anomalies during the geophysical scanning. It may be of archaeological significance and a more detailed geophysical survey is therefore recommended.

Evaluation : detailed geophysical survey of 1600 sq m to be followed by trial excavation

Mitigation : dependant upon results of evaluation

5 SUMMARY OF RECOMMENDATIONS

Site No	Site name	Importance	Impact	Evaluation	Mitigation
1	Line of old road from the A5 to Bodffordd)	D	Slight	None	Watching brief and record
2	Old field boundaries to west of Pydew	D	Slight	None	None
3	Pydew farm track	C	Slight	None	Watching brief and record
4	Features at Trehwfa Bach	D	Considerable	None	None
5	Curvilinear boundaries at Cae'r Gog	D	Considerable	None	Watching brief and record
6	Farm track at Penyrallt	C	Slight	None	Watching brief and record
7	Penyrallt farm track	C	Slight	None	Watching brief and record
8	Cae'r Bwl farm track	C	Slight	None	Watching brief and record
9	Farm track at Cae'r Bwl	C	Slight	None	Watching brief and record
10	Ridgeway track at Gwernhefin	C	Slight	None	Watching brief and record
11	Farm building at Gwernhefin	C	likely	None	Watching brief
12	Railway line	B	Slight	None	Watching brief and record
13	Possible burnt mound at Penyrallt	E	Considerable	Geophysical survey	Dependant
14	Curvilinear depression at Gwernhefin	E	Considerable	Geophysical survey	Dependant

PRN =

62144

62157

General recommendations

There are no known features present on the route of the easement as advised which need hinder the construction and so there are no preconditions about the route or the positioning of the spoil dumping.

Although there are a number of features on or close to the proposed pipeline route, most are of a minor character. Those features which are of greater or potential value can either be avoided or be mitigated by watching and recording briefs.

The following recommendations are made:

During construction

1. There should be a general watching brief of the topsoil stripped easement.
2. There should be a watching brief to allow observation of the excavated trench with basic recording, as required.

After construction

There should be allowance for a proper level of archiving of any resulting records and of a report.

6 SUMMARY

An archaeological assessment has been carried out along the route of the pipeline from Mona to Llangefni. The assessment consisted of a desk-top study of relevant cartographic, archival and bibliographic sources, a field search and a geophysical scanning survey. All features identified along the route were assigned to a category of archaeological significance and recommendations were made for subsequent evaluation and mitigation.

Fourteen features were identified but none were considered of National Importance and only the old railway line was of Regional Importance and assigned to Category B. The pipeline will only destroy a narrow section of this feature but it should be recorded during a watching brief.

Seven features were considered of local importance and assigned to Category C. The majority of these were farm tracks, for which a watching brief and recording during construction work is recommended. Four features were considered of low archaeological significance for which no specific recommendations were required. Two sites have been assigned to Category E, both of which were identified during geophysical scanning, for which a more detailed geophysical survey is recommended prior to the commencement of work on the pipeline.

As Ynys Mon has such a rich and diverse cultural heritage it is recommended that a watching brief is undertaken during the top soil stripping phase of the work along the entire length of the route of the pipeline. If further archaeological sites are discovered during this phase mitigation measures will be recommended for their treatment at the time.

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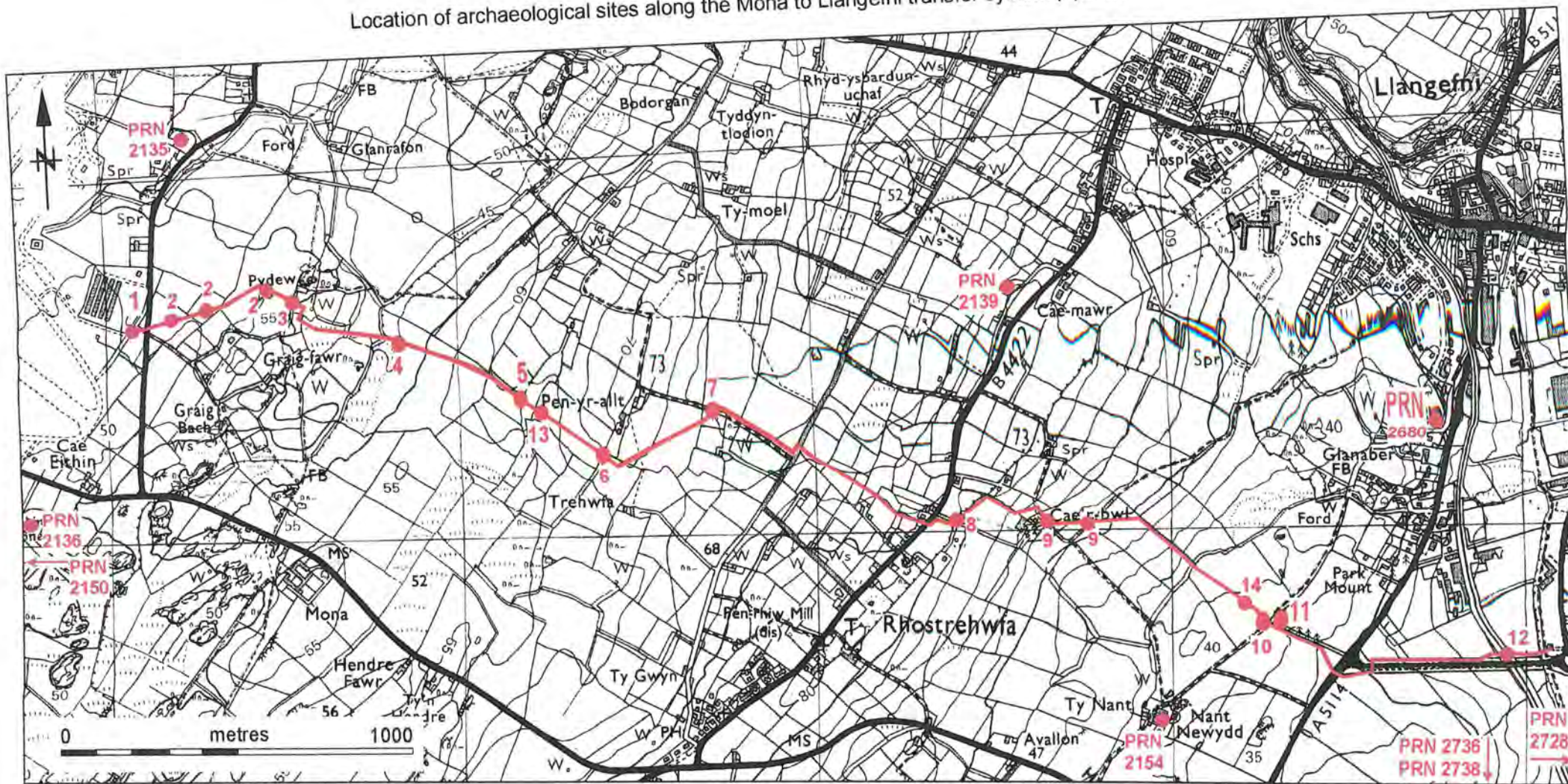
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7.3 Aerial photographs

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Location of archaeological sites along the Mona to Llangefni transfer system pipeline



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