

CPAT Report No. 1330

Ground Investigations in Advance of 132kV Cable Diversions at Wylfa Power Station, Anglesey,

Archaeological Watching Brief



**YMDDIRIEDOLAETH ARCHAEOLEGOL CLWYD-POWYS
CLWYD-POWYS ARCHAEOLOGICAL TRUST**

Client name: O' Connor Utilities Ltd

CPAT Project No: 1983

Project Name: Wylfa Powerlines

Grid Reference: SH 3528 9376

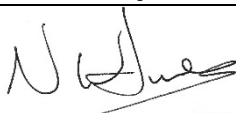
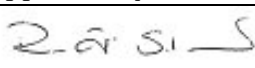
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Summary

The Field Services Section of the Clwyd-Powys Archaeological Trust (CPAT) were commissioned in October 2014 by O' Connor Utilities on behalf of their clients, Iberdrola and Horizon Nuclear Power, to conduct an archaeological watching brief during ground investigations. The works were in connection with a proposed diversion of existing 132kV powerlines associated with the Wylfa Power Station on Anglesey (SH 3528 9376).

Fifteen investigative test pits excavated along the route of the new underground powerline were archaeologically monitored, including trial holes and joint bay trenches.

Archaeological monitoring recorded an undated feature in Joint Bay 3, the stone structure of Felin Cefn Coch Bridge in Trial Hole 13 and a distinct linear feature of degraded schist fragments in Trial Hole R4.

1 Introduction

- 1.1 The Field Services Section of the Clwyd-Powys Archaeological Trust (CPAT) were commissioned by O' Connor Utilities on behalf of their clients Iberdrola, working on behalf of Horizon Nuclear Power (HNP), to conduct an archaeological watching brief during ground investigations. These were in connection with a proposed diversion of existing 132kV powerlines associated with the Wylfa Power Station on Anglesey (SH 3528 9376).
- 1.2 The scheme involves the construction of a new underground powerline, the majority of which will be laid along existing roads, together with the dismantling of an existing overhead powerline. The potential impact on heritage assets has been assessed in parallel with the ground investigation works and the results from the watching brief have been incorporated into the resulting assessment report (Hankinson 2015). The programme of mitigation for the ground investigations was developed through consultation between CPAT and the Gwynedd Archaeological Planning Services (GAPS), the archaeological curators for the region, and is outlined in the Written Scheme of Investigation (WSI) presented in Annex 1.
- 1.3 It is understood that there are no elements of the scheme which require planning permission from the local authority, but the works are subject to the Electricity Act of 1989 which makes provision for the supply, generation and transmission of electricity. Schedule 9 of the Act details the preservation of amenity and fisheries, stating that:
- ‘In formulating any relevant proposals, a licence holder or a person authorised by exemption to generate or supply electricity:
- (a) shall have regard to the desirability of ... protecting sites, buildings and objects of architectural, historical or archaeological interest; and
- (b) shall do what he reasonably can to mitigate any effects which the proposals would have on ... any such flora, fauna, features, sites, buildings or objects.’
- 1.3 Four types of ground investigation were undertaken for the preliminary works: firstly a series of three boreholes (BH), all in the south-western section of the route and secondly a total of seventeen trial holes (TH), each involving the excavation of trenches 1.0m wide by about 3.0m long and up to 1.5m deep; thirteen were in public roads, three were in the ground attached to the existing Wylfa power station and one was in an adjoining field owned by HNP. The third form of ground investigation involved trial holes at joint bays (JB), seven in total, each with an H-shaped trench, comprising two parallel trenches, 3.0m long and 1.0m wide, joined centrally by a trench of 0.5m in width and 8.0m long. These were excavated to a depth of 2.0m where possible. The final type of investigation concerned works designed to examine the nature of the underlying soils and these comprised five trenches (THR), measuring 1.5m by 1.5m.
- 1.4 Fifteen investigative test pits excavated along the route of the new underground powerline required archaeological monitoring, which included trial holes and joint bays (see Fig. 1).

- 1.5 The agreed mitigation consisted of an archaeological watching brief during the excavation of test pits in proximity to heritage assets (see Fig. 2, Table 1). In addition THR₁ was monitored owing to its location in proximity to asset 23.

Table 1: Heritage Assets and Trial Holes that required a watching brief

Asset No	Name	Type	Value	Ground Investigation
29	Pen Lon, Tregele	Farmstead	Unknown	TH _{4A}
32	Ysgubor-ddegwm	Tithe barn	Unknown	TH ₈
62	Felin Cefn Coch bridge	Bridge	Low	TH ₁₃
68	Fugro anomaly A-13	Archaeological feature	Unknown	THR ₃
69	Fugro anomaly A-14	Archaeological feature	Unknown	THR ₃
72	Fugro anomaly A-20	Archaeological feature	Unknown	THR ₂ , JB _{1A} , JB _{1B}
73	Fugro anomaly A-30	Archaeological feature	Negligible	THR ₄
75	Bristol Beaufighter	Aircraft crash site	Unknown	TH ₆
	Potential for unrecorded buried assets			JB _{2A} , JB _{2B} , JB ₃ , JB ₄ , JB ₅

2 The Cultural Heritage History of the Area

- 2.1 The general archaeological background for the development area has been thoroughly researched and presented in the baseline assessments for the nuclear power station at Wylfa (Davidson 2009; Cooke *et al* 2012), while the following section has been compiled from the assessment conducted by CPAT for the 132kV cable diversions (Hankinson 2015), which drew on the previous surveys. Some of the information relating to the heritage and its assets lying at a considerable distance from the Wylfa area has been omitted, as has much of the documented history which is not heritage- or landscape-specific. Otherwise only occasional and minor modifications and corrections to those existing texts have been made.

The later prehistoric era (4000 BC - 43 AD)

- 2.2 The later prehistoric period is well represented both on Anglesey and within the study area that encompasses the present development. The settlements most frequently encountered as buried archaeological remains are the round house settlements of the late prehistoric and Romano-British periods. Assets of other periods occur at a much lower density. Archaeological excavations in advance of the construction of a business park at Holyhead, around 16km to the south-west of the proposed development site,

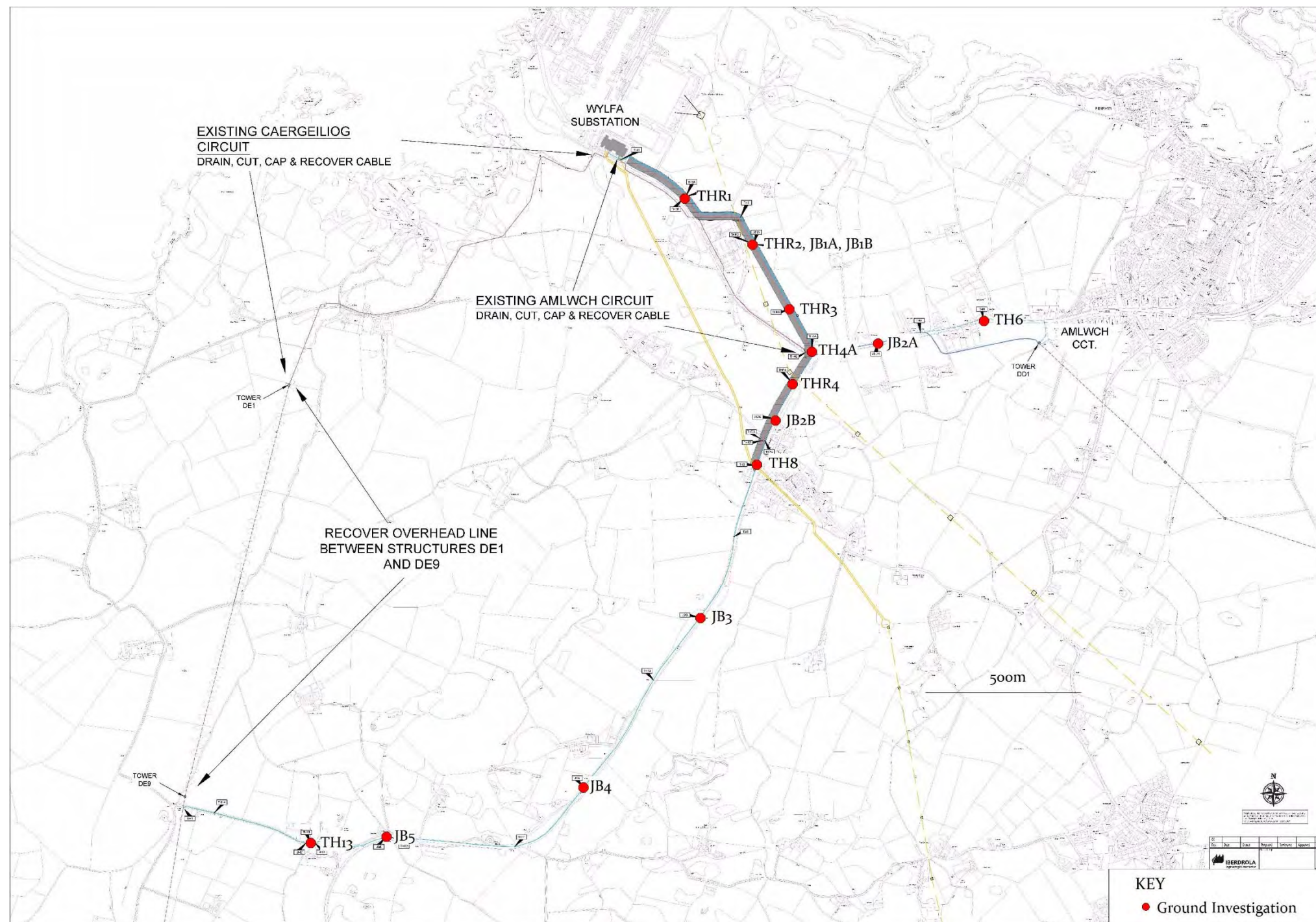


Fig. 1: Location of the archaeologically monitored ground investigations (information provided by Iberdrola)

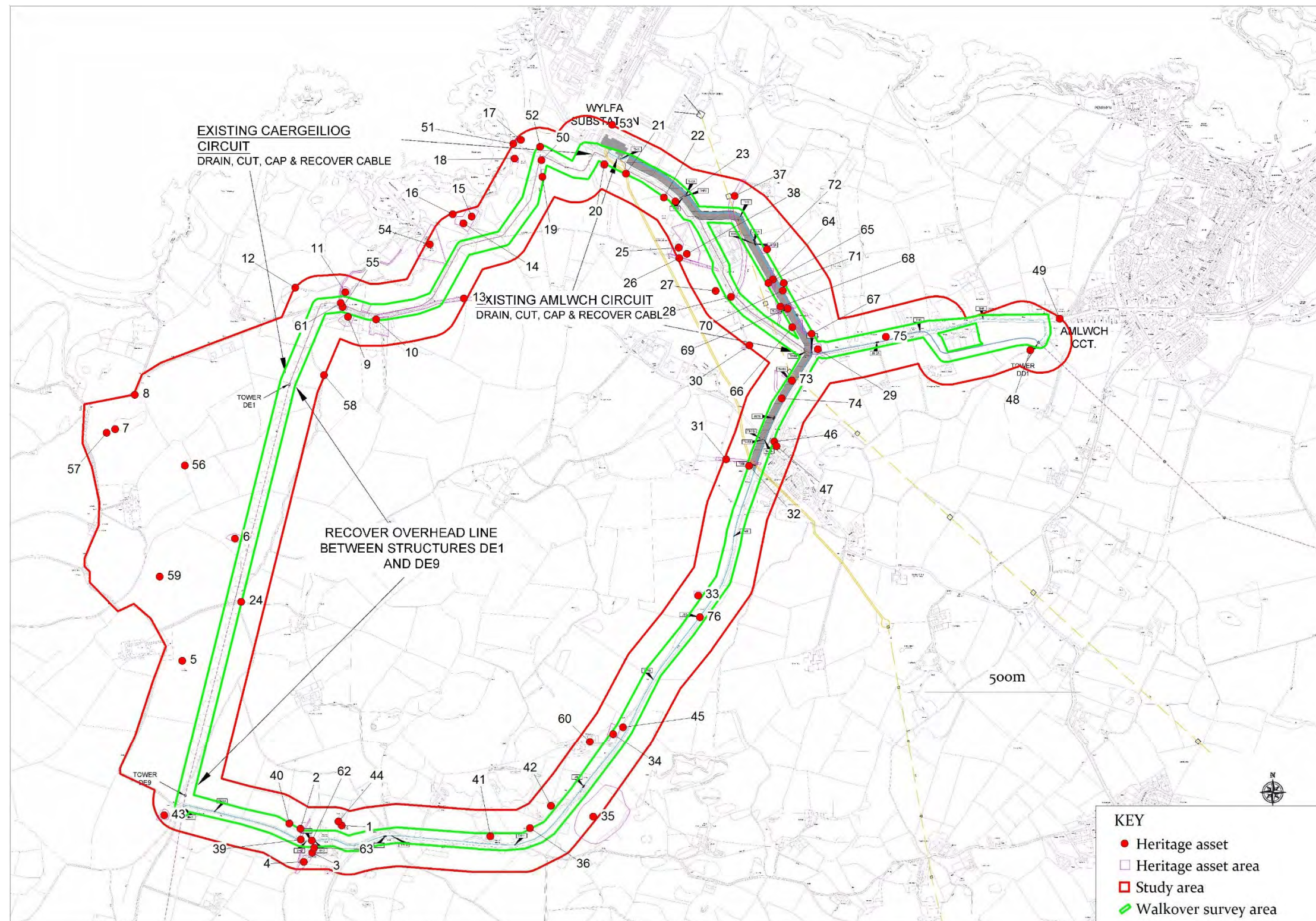


Fig. 2: The study area showing identified heritage assets.

revealed the presence of a much greater density of settlement than had formerly been appreciated, hidden by many years of cultivation, but still retaining considerable archaeological evidence, with indications of Neolithic, Bronze Age, Iron Age, and Romano-British settlement all clustered around a wetland area.

- 2.3 Evidence of Mesolithic settlement has been found on Anglesey, typically as flint scatters around coastal edges, as at Aberffraw (PRN 24043) approximately 23km south of the development area, and on the fringes of Llyn Alaw approximately 6.4km to the south-east. The wetland of Tre'r Gof, which lies to the east of the Wylfa power station complex may once have been a lake prior to silting and offers further potential for this era, yet overall Mesolithic sites on Anglesey are rare and the likelihood of further discoveries during the development are very low.
- 2.4 Within 5km of the development area an important if well dispersed group of Neolithic and Early Bronze Age ceremonial monuments include a single standing stone and a remarkable group of three standing stones in a triangular arrangement near Llanfechell, together with a ruinous chamber tomb, typically occupying ridges of elevated ground near the coast but also inland. Three probable Bronze Age ring barrows also lie near Llanfechell.
- 2.5 To the south of the existing power station a putative Bronze Age burnt mound was exposed during test-pitting, with subsequent geophysical survey revealing its presence close to a palaeochannel. Burnt mounds are typically located near watercourses, and can be found in groups or singly on their own, but are frequently remote from settlements that were of contemporary date; they are usually considered to be cooking places although other interpretations have been advanced, and most are attributed to the Bronze Age. Anglesey has seen the recognition of quite a number in recent years, and general development could well expose new examples.
- 2.6 Late prehistoric activity on Anglesey is largely evidenced by defended enclosures and settlements typified by circular houses. The place-name 'Cestyll' (English: 'castles') at the western neck of the Wylfa headland at Porth y Pistyll might signpost a former coastal promontory fort, although nothing now survives, and Lewis Morris' coastal survey of c.1730 marks a 'fort' on the flanks of the headlands which define nearby Cemlyn Bay. The enclosure near Bwlch close to the development corridor falls within this broad category, more so now that all the available aerial photos have been examined.
- 2.7 There is a significant spread of prehistoric settlement, funerary and ritual monument sites across Anglesey and thus a possibility that the powerline development could encounter previously unrecognised heritage assets.

Roman period (43 AD - 400 AD)

- 2.8 Direct evidence of settlement activity in the Roman period is currently absent from the north coast of Anglesey and its hinterland, but Romano-British settlements are found elsewhere on the island and it can only be a matter of time before Romano-British settlement is encountered in the area. Certainly stray finds have come to light, as with the copper ingot discovered to the west of Tregele, and the saddle quern, coins, and a brooch found about 2.7km to the south-east of Wylfa.

Early Middle Ages (400 AD to 1100 AD)

- 2.9 As for many areas of Wales, the tangible evidence of activity during this period is thin. A church was almost certainly established at Llanfechell, just over one kilometre to the east of the development area, and there is some tangential evidence to suggest that this was a *clas* church, the mother church for the general area which may have overseen other churches and chapels, perhaps at Llanbadrig, Llanrhwydrys and Llanfairynghornwy. Secular activity is even more obscure than its religious counterpart and is unlikely to emerge during the course of the present development.

Late Middle Ages (1100 AD to 1485 AD)

- 2.10 By the 12th century the Kingdom of Gwynedd, including Anglesey, had been sub-divided into a number of regional districts for the purposes of royal administration. Regional units were called commotes (Welsh *cwmwd*), and in each was a royal manorial centre (Welsh *maerdref*) which provided a focus for administration and taxation, and had extensive demesne lands worked by estate bondmen that provided the supplies for a nearby court (*llys*). In the wider landscape of the commote there existed other bond tenants of the king or prince, as well as free men whose farmholdings fell within townships (*tref/trefi*).
- 2.11 The commotal *maerdref* in northern Anglesey was at Cemais. South of this was the free township of Clegyrrog and to the west of the latter was the township of Caerdegog which appears to have included a substantial part of the study area. Hamlets formed of loose agglomerations of dwellings also existed, and Cafnan in the development area, is one that is known by name. As to whether the farms of today point to the locations of holdings of the Middle Ages is impossible to determine in the absence of any substantive evidence, though there are hints of former open field systems which could relate to these holdings.
- 2.12 Changes resulted from the English conquest of Gwynedd in 1283, many of them social. Lands formerly held by the Welsh prince were acquired by the Crown, tenures were leased as fee-farms to royal favourites and local men of standing, and while there was undoubtedly some consolidation, the pattern of landholding remained much the same. The township of Caerdegog retained a number of settlements of varying sizes with an agricultural base. But while medieval settlement is known from documentary evidence, none of the settlements has been located; some perhaps lie underneath later farms and cottages, others must have become deserted, leaving potential for the survival of medieval buried archaeology within the study area. Medieval strip fields may also have left traces.

Post-medieval and Early Modern periods (1485 AD to 1900 AD)

- 2.13 By the 16th century the enclosure of the open fields with banks and ditches had begun, coupled with the consolidation of dispersed arable quillies into closes. How extensive these open fields were is not clear – in some parts of Wales they represented a minority of the agrarian landscape with the rest in defined field enclosures. In turn these boundaries too have been subject to change and rationalisation, particularly in the 19th and 20th centuries, and it is these that can be identified through the desk-based assessment and on-site surveys. By way of example, Caedegog Isaf whose land slightly impinges on the development corridor now has 13 fields around it. But an estate map

prepared in 1815 and now in the Caernarfonshire Record Office shows 21 fields over exactly the same area.

- 2.14 New small holdings also emerged, and as a general rule of thumb and based on fuller evidence from elsewhere in the country, the cottages are likely to be more recent than the established farms. Not all of the area, however, was farmed. Small pockets of common or waste remained, even into the 19th century in some places. One small patch lay to the south-west of Groes-fechan and east of Ty-mynydd and was still shown on late 19th-century Ordnance Survey maps. The proposed route for the power line passes through the middle of it.
- 2.15 The cartographic evidence from the later part of the 18th through to the end of the 19th century, provides a sound base for identifying the settlement and associated evidence of the area in more recent times. Farms, cottages, mills and their appurtenances can be recognised, and where appropriate these have been listed in the gazetteer accompanying this report, together with sufficient information to indicate their form and significance.

The 20th century

- 2.16 During the Second World War a Chain Home radar defence station was established at Wylfa and it appears that there were outlying features also related to this establishment; these have been recorded where known. The nuclear power station itself was constructed in the 1960s.

3 Watching Brief

- 3.1 Archaeological monitoring of the relevant preliminary ground investigations was undertaken intermittently during November 2014 and January 2015.

Joint Bays

- 3.2 **Joint Bay 1A**, located in pasture, revealed natural schist rubble in a clay matrix at 0.3m below the present surface. This was sealed by 0.3m of loam topsoil. No archaeology was present within this trench.
- 3.3 **Joint Bay 1B**, located in pasture, revealed natural schist fragments in a clay matrix at 0.5m below the present surface. This was sealed by 0.5m of loam topsoil. No archaeology was visible.
- 3.4 **Joint Bay 2A** was excavated through the western carriageway of the A5025 (see Figure 3). Natural brown clay was revealed at a depth of 0.7m below the present road surface. The clay was sealed by modern road makeup, 0.3m in thickness, of hardcore rubble and stone fragments. This was capped with a layer of tarmac of an earlier modern carriageway, with further gravel layers above totalling 0.3m in thickness being sealed by the 0.1m thick present tarmac surface above. No archaeology was visible within this joint bay.

- 3.5 **Joint Bay 2B**, located in pasture, revealed natural schist rubble in a clay matrix at 0.4m below the present surface. This was sealed by 0.4m of loam topsoil. No archaeology was present within this trench.



Figure 3: Joint Bay 2A , east facing section. Photo CPAT 3932-0016

- 3.6 **Joint Bay 3** was excavated through the western carriageway of the A5025 (see Figure 4). Limestone bedrock was at 0.75m below the present tarmac surface, with natural yellowish-brown clay at a depth of 0.49m below the present road surface. Cut into the clay, an anomaly 1.2m in width and 0.26m in depth, with a fill of loose mid orange-brown sandy silt and occasional stone fragments 0.1m in length. This may be a ditch, although the loose, sandy nature of this feature suggested modern activity associated with the road construction. Above, makeup for the modern road consisted of hardcore rubble 0.28m in thickness, capped with a layer of tarmac gravel 0.1m in thickness and the 0.11m thick present tarmac surface above.
- 3.7 **Joint Bay 4** was excavated through the western carriageway of the A5025, adjacent to the site of a late prehistoric or Romano-British hill-top enclosure (PRN 3144; see Figure 5). At this point the road was raised and supported with a retaining wall to span a natural depression in the western slope of the hill. Natural brown clay was revealed at a depth of 1.27m below the present road surface. A layer of redeposited yellow clay with stone boulders and shale fragments sealed the natural clay, 0.5m to 1m in thickness, and was infilling for the road. Above, makeup for the road consisted of hardcore rubble 0.55m in thickness, capped with a layer of tarmac gravel 0.1m in thickness and the 0.12m thick present tarmac surface above.



Figure 4: Joint Bay 3, north-west facing section. Photo CPAT 3932-0009

- 3.8 **Joint Bay 5** was excavated through the western carriageway of the A5025. Natural clay at 1.6m below the present road surface was overlain by 0.3m of silty alluvium, with makeup for the road above that consisted of a layer of hardcore rubble 1.1m in thickness, capped with a layer of tarmac gravel 0.1m in thickness and the 0.1m thick present tarmac surface. No archaeology was present.



Figure 5: Joint Bay 4, north-west facing section. Photo CPAT 3932-0001

Trial Holes

- 3.9 Trial Hole 4A was positioned on the north-western verge of the junction of the A5025 and the road to Wylfa Power Station (see Figure 6). Bedrock was at 1.1m and natural clay at 0.66m below the present surface. A previous modern tarmac carriageway surface and its associated hardcore makeup was at 0.2m below the present verge surface. This was heavily truncated by multiple BT service cables running west to east alongside the road to Wylfa Power Station and therefore no archaeology was visible.



Figure 6: Trial Hole 4A, from the east. Photo CPAT 3932-0013

- 3.10 **Trial Hole 6**, located on the western carriageway of the A5025, exposed natural brown clay at 0.55m below the present road surface, with the road hardcore makeup 0.25m in thickness, tarmac gravel 0.2m in thickness and the present carriageway tarmac above (see Figure 7). No archaeology was present within this trench.
- 3.11 **Trial Hole 8**, located in pasture, revealed natural clay at 0.4m below the present surface. The majority of the deposits within the trial hole had been truncated by modern electrical services. This was sealed by 0.4m of loam topsoil. No archaeology was present.
- 3.12 **Trial Hole 13**, located on Felin Cefn Coch Bridge, revealed rubble stone blocks at 0.4m below the present road surface. These extended beyond the limit of excavations which ceased at 0.6m below the present road surface (see Figure 8). The road hardcore makeup of gravels in a grey sandy matrix 0.3m in thickness sealed this stone structure, with the present carriageway of concrete 0.1m in thickness above.

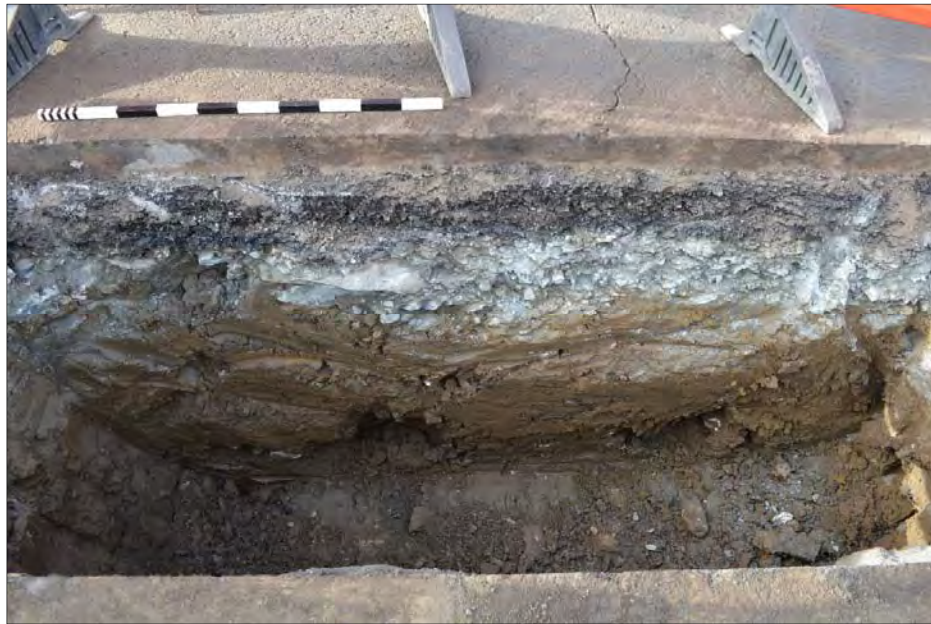


Figure 7: Trial Hole 6, from the north. Photo CPAT 3932-0014



Figure 8: Trial Hole 13, from the north-west. Photo CPAT 3932-0027

- 3.13 Trial Hole 13 was located directly above the centre of the bridge, which was constructed from irregular flat stone slabs of limestone and quartz. The upper part of the bridge structure, below the road, had a grey sandy infill between the dry-stone structure. The bridge carried the road over two culverts (see Figure 9). The road was flanked by dry stone walls that extended from the sides of the bridge. Trial Hole 13 did not reveal the interior faces of the bridge walls or extend beyond 0.6m in depth as this might have compromised the bridge structure and was deemed unnecessary.



Figure 9: Trial Hole 13 located on the bridge, from the north. Photo CPAT 3932-0030

- 3.14 **Trial Hole R₁**, located in grass landscaping adjacent to the drive of Wylfa Power Station, revealed a natural rocky outcrop at 0.2m below the present surface, which dropped away to reveal 0.7m of angular schist rubble in a clay matrix with occasional stoneware pipe fragments, the result of the landscaping. This was sealed by 0.2m of loam topsoil. No archaeology was present.
- 3.15 **Trial Hole R₂**, located in pasture, revealed natural schist rubble in a clay matrix at 0.6m below the present surface. This was sealed by 0.6m of loam topsoil. No archaeology was present.
- 3.16 **Trial Hole R₃**, located in pasture, revealed natural schist rubble in a clay matrix at 0.35m below the present surface. This was sealed by 0.35m of loam topsoil. No archaeology was present.
- 3.17 **Trial Hole R₄**, located in pasture, revealed natural orange clay at 0.4m below the present surface (see Figure 10). A distinct linear feature was visible, oriented north-west to south-east. It was up to 0.5m in depth and comprised degraded schist fragments with very occasional coal. This was sealed by 0.4m of loam topsoil. Trial Hole R₄ had been located to investigate asset 73 identified during a geophysical survey and interpreted as a former boundary and footpath on the 1889 Ordnance Survey map.



Figure 10: Trial Hole R4, from the south-east. Photo CPAT 3932-0045

4 Conclusions and Observations

- 4.1 Archaeological monitoring recorded an undated feature in Joint Bay 3, possibly a ditch, although it is perhaps more likely to be modern activity associated with the road construction. The central segment of the joint bay was narrow, being 0.4m in width, and weather conditions gale force so investigations were limited.
- 4.2 The stone structure of Felin Cefn Coch Bridge was only partly revealed during the excavation of Trial Hole 13, revealing a dry stone structure.
- 4.3 Trial Hole R4, located in pasture, revealed a distinct linear feature of degraded schist fragments and very occasional coal pieces. This feature was oriented north-west to south-east, possibly being part of a former boundary and footpath seen on the 1889 OS map.
- 4.4 The majority of the ground investigations revealed modern road construction deposits and were devoid of archaeology. It should be stressed that these investigations were no more than keyholes into the general area.

5 Acknowledgements

- 5.1 The author would like to thank Tony Emm and the O' Connors staff for their co-operation during the archaeological watching brief.

6 Sources

- Cooke, R., Davidson, J. and Hopewell, D., 2011. *Proposed Nuclear Power Station, Wylfa, Ynys Mon, Archaeological Baseline Assessment Report 1.0*, Bangor: Gwynedd Archaeological Trust Report 999.
- Davidson, A., 2009. *Wylfa: Anglesey, Archaeological Assessment*, Bangor: Gwynedd Archaeological Trust Report 842.
- Hankinson, R., 2015. *132kV Cable Diversions at Wylfa Power Station, Anglesey: Cultural Heritage Assessment*. Unpublished report. CPAT Report 1291.

Annex 1: Written Scheme of Investigation

1 Introduction

- 1.1 The Field Services Section of the Clwyd-Powys Archaeological Trust has been invited by Iberdrola to submit a proposal for conducting an archaeological watching brief during ground investigations in connection with a proposed diversion of existing 132kV powerlines associated with Wylfa Power Station on Anglesey (SH 3528 9376).
- 1.2 The scheme involves the construction of a new underground powerline, the majority of which will be laid along existing roads, together with the dismantling of an existing overhead powerline. A series of test pits are to be excavated along the route of the new underground powerline and the potential impact on heritage assets has already been assessed and a programme of mitigation agreed with Gwynedd Archaeological Planning Services (GAPS).
- 1.3 Four types of ground investigation are proposed for the preliminary works: firstly a series of three boreholes (BH), all in the south-western section of the route and secondly a total of seventeen trial holes (TH), each involving the excavation of trenches 1.0m wide by about 3.0m long and up to 1.5m deep, of which thirteen are in public roads, three are in the ground attached to the existing Wylfa power station and one is in an adjoining field owned by HNP. The third form of ground investigation involves trial holes at joint bays (JB), seven in total, where an H-shaped trench is proposed. These investigations comprise two parallel trenches, each 3.0m long and 1.0m wide, joined centrally by a trench of the same width and 8.0m long; these will be excavated to a depth of 2.0m. The final type of investigation concerns works designed to examine the nature of the underlying soils and these comprise five trenches (THR), measuring 1.5m by 1.5m.
- 1.4 The agreed mitigation consists of an archaeological watching brief during the excavation of test pits in proximity to the following heritage assets (see Fig. 1):

Table 1: Heritage Assets and Trial Holes requiring a watching brief

Asset No	Name	Type	Value	Ground Investigation
29	Pen Lon, Tregele	Farmstead	Unknown	TH4A
32	Ysgubor-ddegwm	Tithe barn	Unknown	TH8
62	Felin Cefn Coch bridge	Bridge	Low	TH13
68	Fugro anomaly A-13	Archaeological feature	Unknown	THR3
69	Fugro anomaly A-14	Archaeological feature	Unknown	THR3
72	Fugro anomaly A-20	Archaeological feature	Unknown	THR2, JB1A, JB1B
73	Fugro anomaly A-30	Archaeological feature	Negligible	THR4

75	Bristol Beaufighter	Aircraft crash site	Unknown	TH6
	Potential for unrecorded buried assets			JB2A, JB2B, JB3, JB4, JB5

2 Methodology

- 2.1 The watching brief will monitor the excavation by machine of the test pits outlined in Table 1
- 2.2 The watching brief will be conducted according to the Institute for Archaeologists' (IfA) *Standard and Guidance for an Archaeological Watching Brief* (2008). Should any archaeological deposits be encountered work will cease to allow adequate archaeological excavation and recording. The excavation of any archaeological features or deposits will be undertaken by hand using the conventional techniques for archaeological excavation:
- The presence or absence of archaeological features encountered during the ground investigations will be noted.
 - Where features of archaeological interest are identified during the ground investigations they will be systematically investigated by hand with sufficient work being undertaken to determine their date, character and function, using the conventional techniques for archaeological excavation and in accordance with IfA Standard and Guidance.
 - All features will be located as accurately as possible on an overall plan of the development at an appropriate scale, showing boundaries depicted on Ordnance Survey mapping.
 - A sampling strategy will be developed as appropriate, but typically might include up to 50% excavation of isolated features and up to 25% excavation of linear features.
 - Contexts will be recorded on individual record forms, using a continuous numbering system, and be drawn and photographed as appropriate.
 - Plans will be drawn on permatrace to a scale of 1:10, 1:20 or 1:50, as appropriate.
 - All photography will be taken using a digital SLR camera with a minimum resolution of 8 mega pixels, including a metric scale in each view, with views logged in a photographic register.
 - In the event of human burials being discovered the Ministry of Justice will be informed. The remains will initially be left *in situ*, and if removal is required, an MoJ licences will be applied for under the Burial Act 1857.
 - In the event of finding any artefacts covered by the provisions of the Treasures Act 1996, the appropriate procedures under this legislation will be followed.
- 2.3 All artefacts and environmental samples will be treated in a manner appropriate to their composition and a sampling strategy will be developed as appropriate:
- All stratified finds will be collected by context, or where appropriate, individually recorded in three dimensions. Unstratified finds will only be collected where they

contribute significantly to the project objectives or are of particular intrinsic interest.

- All finds and samples will be collected, processed, sorted, quantified, recorded, labelled, packed, stored, marked, assessed, analysed and conserved in a manner appropriate to their composition and in line with appropriate guidance.
- Arrangements to assess and study any artefacts, assemblages and environment samples.
- Any artefacts recovered during the evaluation will be deposited with an appropriate museum, subject to the permission of the owner.

- 2.4 Following the on-site work an illustrated report will be prepared which will include the following:
- a copy of the agreed specification
 - a location plan
 - description of the works monitored
 - description of the archaeological results from each test pit
 - all identified features and significant finds plotted on an appropriately scaled site plan
 - a gazetteer of all located feature/assets with full dimensional and descriptive detail including grid reference and, where possible, period
 - a full bibliography of sources consulted
- 2.5 The site archive will be prepared to specifications in English Heritage's Management of Research Projects in the Historic Environment (MoRPHE) system and the *IfA Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (2008), to be deposited with the regional Historic Environment Record (HER).

3 Resources and Programming

- 3.1 The watching brief will be undertaken by Ian Grant (MIfA) or Richard Hankinson (AIfA), under the overall supervision of Nigel Jones (MIfA). CPAT is also an Institute for Archaeologist Registered Organisation.
- 3.2 CPAT is covered by appropriate Public and Employer's Liability insurance, as well as Professional Indemnity insurance.
- 3.3 The timing of the project has yet to be agreed with the client but GAPS will be informed of the programme once this has been developed.
- 3.4 The report will be deposited with the regional HER within six months after completion.
- 3.5 The project will conform as and where appropriate to the following standard professional guidelines:
- English Heritage, 1991. *Management of Archaeological Projects (MAP2)*.
 - English Heritage, 2006. *Management of Research Projects in the Historic Environment (MORPHE)*.

- The Institute for Archaeologists, 1985 (revised 2010). *Code of Conduct*.
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- The Institute for Archaeologists, 2001 (revised 2008). *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*.
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N W Jones

22 September 2014

Annex 2: Catalogue of Photographs

Photo No	Date	View From	Description
3932-0001	5.11.14	NW	JB4
3932-0002	5.11.14	N	JB4
3932-0003	5.11.14	N	JB4
3932-0004	5.11.14	N	JB4
3932-0005	5.11.14	NW	JB4
3932-0006	5.11.14	N	JB4
3932-0007	5.11.14	S	JB4
3932-0008	6.11.14	SW	JB3
3932-0009	6.11.14	NW	JB3
3932-0010	6.11.14	SW	JB3
3932-0011	6.11.14	SW	JB3
3932-0012	7.11.14	N	TH4A
3932-0013	7.11.14	E	TH4A
3932-0014	10.11.14	N	TH6
3932-0015	10.11.14	S	JB2A
3932-0016	10.11.14	E	JB2A
3932-0017	10.11.14	N	JB2A
3932-0018	8.12.14	NNW	Pylons in landscape SH3586 9305
3932-0019	8.12.14	NNW	Pylons in landscape SH3586 9305
3932-0020	8.12.14	NE	Pylons in landscape from TH5
3932-0021	8.12.14	NNE	Pylons in landscape from TH5
3932-0022	8.12.14	S	Pylons in landscape JB3
3932-0023	8.12.14	SW	Pylons in landscape JB3
3932-0024	8.12.14	S	Pylons in landscape JB3
3932-0025	8.12.14	W	TH13
3932-0026	8.12.14	N	TH13
3932-0027	8.12.14	NW	TH13
3932-0028	8.12.14	SE	TH13
3932-0029	8.12.14	S	TH13
3932-0030	8.12.14	N	TH13
3932-0031	8.12.14	NE	TH13
3932-0032	3.11.14	E	JB5
3932-0033	3.11.14	N	JB5
3932-0034	3.11.14	N	JB5
3932-0035	3.11.14	S	JB5
3932-0036	5.1.15	SE	THR1
3932-0037	6.1.15	SE	JB1A
3932-0038	6.1.15	SE	JB1A
3932-0039	6.1.15	SE	JB1A
3932-0040	6.1.15	SE	THR2
	7.1.15	SE	JB1B

3932-0041			
3932-0042	7.1.15	SE	JB1B
3932-0043	7.1.15	NW	JB1B
3932-0044	7.1.15	NW	JB1B
3932-0045	7.1.15	SE	THR4
3932-0046	7.1.15	SW	THR4
3932-0047	7.1.15	NE	THR4
3932-0048	8.1.15	NE	JB2B
3932-0049	8.1.15	NE	JB2B
3932-0050	8.1.15	E	JB2B
3932-0051	8.1.15	SW	JB2B
3932-0052	9.1.15	E	TH8

Annex 3: Index Print of Photographs

