

TREWARREN FARM POWER CABLE, ST. ISHMAELS, PEMBROKESHIRE: ARCHAEOLOGICAL WATCHING BRIEF



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Gan / By

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**TREWARREN FARM POWER CABLE,
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SUMMARY

DAT Archaeological Services were commissioned by Western Power to undertake an archaeological watching brief at Trewarren Farm, St. Ishmaels, Pembrokeshire (centred on SM 82576 07476) during the creation of a power cable trench running from SM 82772 07574 to the site of a new Western Power communications mast (at SM 82413 07335).

Archaeological and historical research undertaken for the project indicated that the site had the potential to expose, damage or destroy archaeological remains, with the highest potential being for prehistoric features and finds associated with the nearby Longstone standing stone, and a Bronze Age burnt mound. Aerial photographic analysis also suggested the presence of a curving crop mark feature in a field to the south of the cable route. A group of prehistoric flint tools had also been found in the same field.

The depth of material excavated for the access track was sufficient within which to see any archaeological remains if they had been present. The method of topsoil stripping was also conducive to observing archaeological remains.

No indications of any prehistoric activity in the form of finds or features were identified during the watching brief. The remains of a modern milking shed of low archaeological significance were identified and recorded.

Whilst the results of the watching brief are mostly negative, with no significant archaeology being identified, they do not negate the possibility of significant archaeology surviving elsewhere within the near vicinity. The groundworks impacted on a small strip of land adjacent to existing field boundaries and it is possible that these areas had been subject to previous disturbance from farm traffic or cleaning/renewing the hedge banks. Such previous activity could have already removed any traces of archaeological remains if present.

1 INTRODUCTION

1.1 Project Proposals and Commission

- 1.1.1 DAT Archaeological Services were commissioned by Western Power to undertake an archaeological watching brief at Trewarren Farm, St. Ishmaels, Pembrokeshire (centred on SM 82576 07476; Figure 1) during the creation of a power cable trench to the site of a proposed new Western Power communications mast.
- 1.1.2 The route of the cabling runs west along field boundaries from SM 82772 07574 to SM 400 07386 then doglegs to the south along a field boundary to the site of the mast at SM 82413 07335. The trench was to be 0.5m wide and required a 1m depth to be excavated along its length.
- 1.1.3 The definition of archaeological watching brief, taken from the Chartered Institute for Archaeologists Standards and Guidance (CIfA 2014) is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.

1.2 Scope of the Project

- 1.2.1 A written scheme of investigation (WSI) for a watching brief was prepared by DAT Archaeological Services prior to the commencement of the works, which was approved by the planning authority and their archaeological advisors prior to the commencement of the works. The project objectives were:
 - Provision of a written scheme of investigation to outline the methodology by which DAT Archaeological Services will undertake the photographic recording and the watching brief
 - To identify the presence/absence of any archaeological deposits
 - To establish the character, extent and date range for any archaeological deposits to be affected by the proposed groundworks
 - To appropriately investigate and record any archaeological deposits to be affected by the groundworks
 - To produce an archive and report of any results
- 1.2.2 The overall work was summarised as: *Archaeological attendance during ground works associated with the construction of a new access road, erection of a communications mast and installation of associated cable route which are likely to expose, damage or destroy archaeological remains. Appropriate investigation and recording of any such remains will be undertaken if revealed. A report and archive of the results of the works will be prepared.*

1.3 Abbreviations

- 1.3.1 All sites recorded on the regional Historic Environment Record (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Sites recorded on the National Monument Record (NMR) held by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) are identified by their National Primary Record Number (NPRN). Scheduled Ancient Monument (SAM). Altitude is expressed to Ordnance Datum (OD). References to cartographic and

documentary evidence and published sources will be given in brackets throughout the text, with full details listed in the sources section at the rear of the report.

1.4 Illustrations

1.4.1 Printed map extracts are not necessarily reproduced to their original scale.

1.5 Timeline

1.5.1 The following timeline (Table 1) is used within this report to give date ranges for the various archaeological periods that may be mentioned within the text.

Period	Approximate date	
Palaeolithic –	c.450,000 – 10,000 BC	Prehistoric
Mesolithic –	c. 10,000 – 4400 BC	
Neolithic –	c.4400 – 2300 BC	
Bronze Age –	c.2300 – 700 BC	
Iron Age –	c.700 BC – AD 43	
Roman (Romano-British) Period –	AD 43 – c. AD 410	Historic
Post-Roman / Early Medieval Period –	c. AD 410 – AD 1086	
Medieval Period –	1086 – 1536	
Post-Medieval Period ¹ –	1536 – 1750	
Industrial Period –	1750 – 1899	
Modern –	20th century onwards	

Table 1: Archaeological and Historical Timeline for Wales

¹ The post-medieval and Industrial periods are combined as the post-medieval period on the Regional Historic Environment Record as held by Dyfed Archaeological Trust

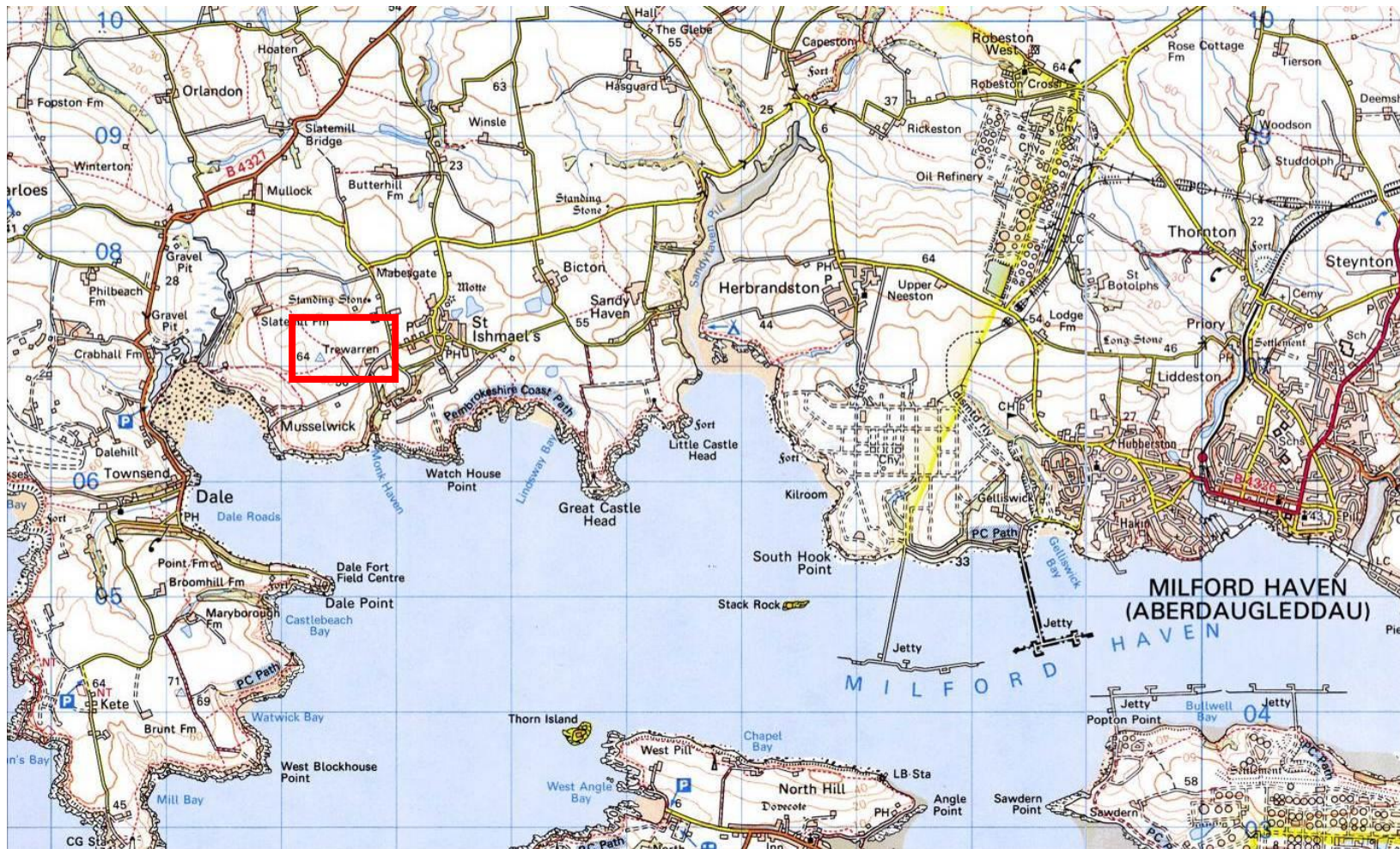


Figure 1: Site location plan showing Trewarren Farm, St Ishmaels, Pembrokeshire

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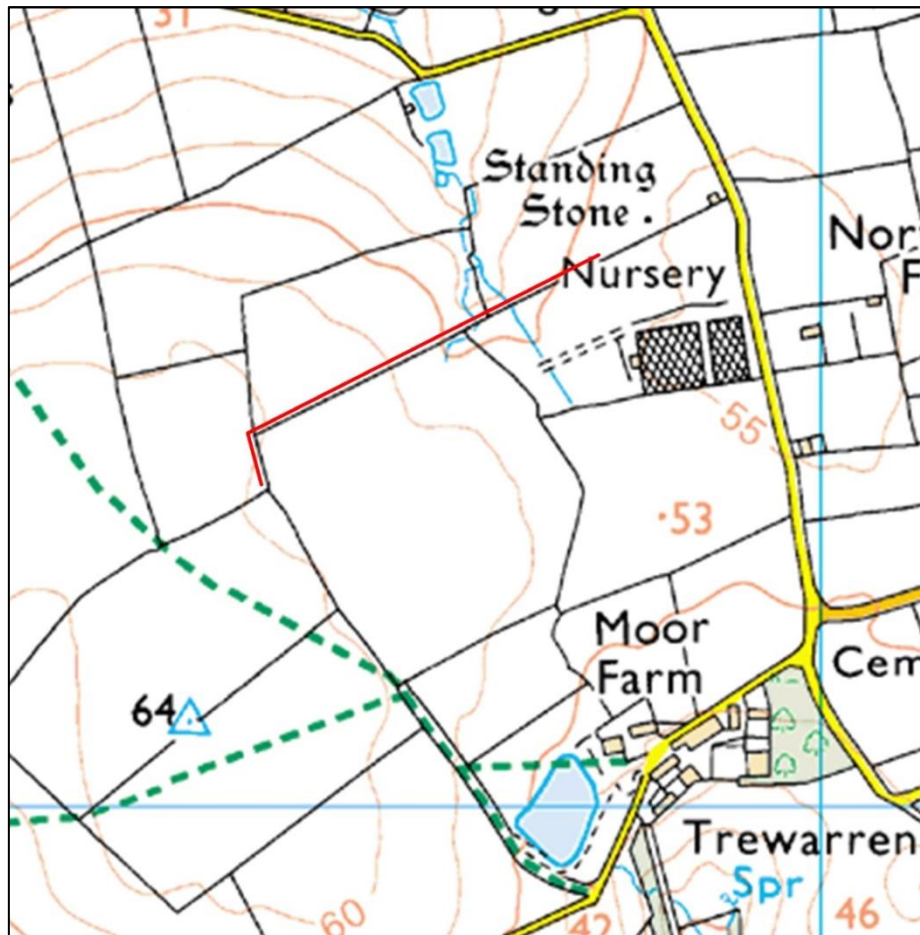


Figure 2: Route of the power cable (shown in red)

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2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 2.1 The development site is at Trewarren Farm, St. Ishmaels, Pembrokeshire (centred on SM 82576 07476; Figures 1 and 2). The new power cable trench runs from SM 82772 07574 to the site of a new communications mast roughly 0.4km to the southwest (at SM 82413 07335).
- 2.2 The trench runs through two large fields in arable farmland on gently sloping ground. The two fields slope down towards each other to a small valley containing a brook. The height of the site above OD ranges from c.52m at the eastern end of the track to c.45m at the bottom of the small valley, to c.60m at the mast, which is almost at the highest point in the surrounding landscape for some miles. South of the site the land descends gently until it meets the sea, about 1km to the south at Monk Haven.

The underlying solid geology varies along the route of the power cable. From its eastern end for about 250m, the topsoil is said to overly argillaceous rocks and [subequal/subordinate] sandstone, interbedded. This rock unit is the Milford Haven Group of the Ludlow – Early Devonian epoch. Along the remainder of the cable route the bedrock is Sandstone of the Gray Sandstone Group of the Wenlock epoch. This information has been sourced from the British Geological Survey.

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 Historic Landscape

- 3.1.1 The development site lies within the boundaries of two Historic Landscape Characterisation Areas (HCLA) recorded on the Register of Landscapes of Outstanding Historic Interest in Wales (Cadw 1998). The first, St Ishmael's HCLA is centred on the loosely clustered village of St Ishmael's where most of the buildings date to the late 19th century and 20th century. Enclosed strip fields – former open fields – surrounded the village. Also included is the parish church, standing isolated in a heavily wooded valley, and 19th century garden features. The first 150m of the cable from its east end lie within this area.
- 3.1.2 The rest of the cable is located within the Hoaten – Hasguard HLCA. This is a very large agricultural area that has many substantial farms set in a virtually treeless windswept landscape of large, regular fields. Many of the farmhouses are in the Georgian style, but with some showing signs of earlier periods of construction.
- 3.1.3 There is one registered historic park and there are two registered historic gardens within 0.75km of the development site. All are part of Trewarren Farm and the nearest is about 0.5km south-southeast of the cable run.
- 3.1.4 The development site does not lie within the boundaries of any protected environmental areas. It does lie within the Pembrokeshire Coast National Park.

3.2 Scheduled Ancient Monuments and Listed Buildings

- 3.2.1 There are two scheduled ancient monuments within 0.75km of the development site (Table 2; Figure 3). A Bronze Age standing stone known as Longstone (Photo 1) lies c.5.5m to the east-northeast of the eastern end of the cable route. There is a medieval castle motte about 0.7km to the east of the eastern end of the cable route, the just outside St Ishmael's village.
- 3.2.2 There are no grade I or grade II* listed buildings within 0.75km of the new access track, but there is one grade II listed building, also shown in Table 2 and Figure 3 below. Trewarren lies 0.5km south-southeast of the development site and is of Post-medieval date.

Number	Name	Summary	NGR
PE196	Castle Mound	A ditched mound, 32m in diameter and 5.5m high.	SM 835 076
PE113	Standing Stone 290m S of Mablesgate	A well weathered stone of hard red sandstone, 3.0m high by 2.3m by 2.0m, known as 'Longstone.'	SM 828 076
20343	Trewarren	A substantial and unaltered country house of the 1840s.	SM 82931 07039

Table 2: The Scheduled Ancient Monuments and grade II listed building within 0.75km of the new power cable

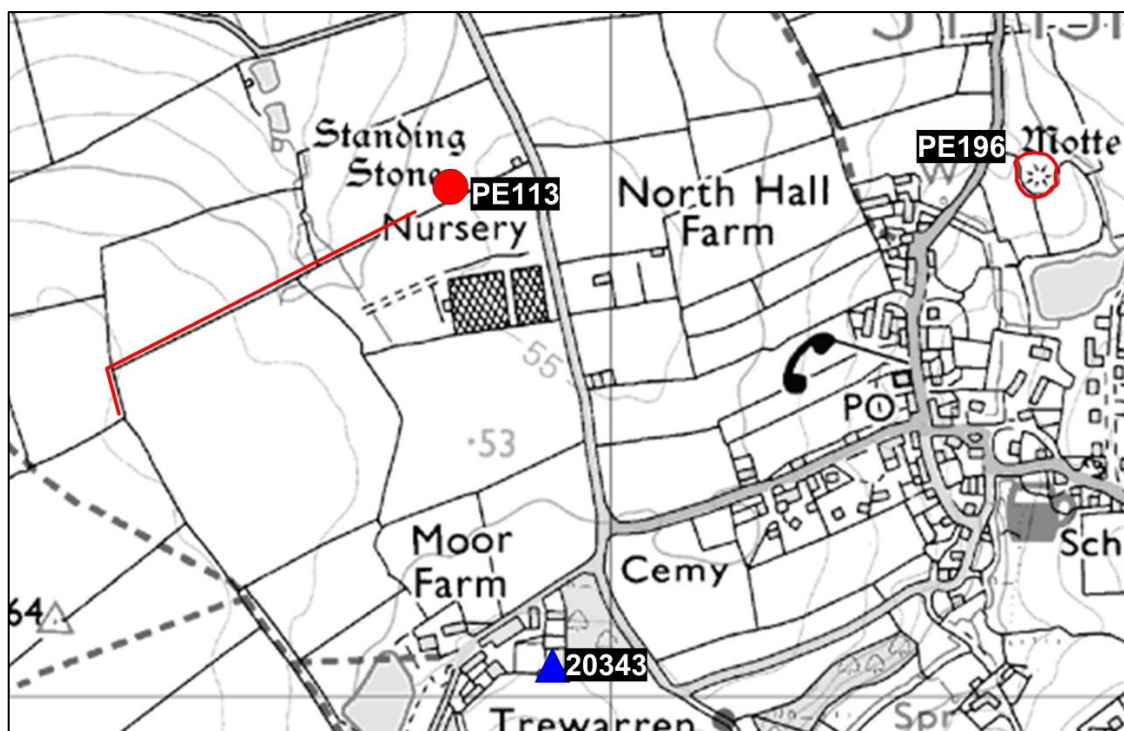


Figure 3: The Scheduled Ancient Monuments (red dot/circle) and Grade II listed building (blue triangle) within 0.75km of the new power cable route (shown in red)

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Photo 1: Looking west-northwest, the Scheduled Ancient Monument known as 'Longstone,' of probable Bronze Age date

3.3 Known Archaeological Remains

- 3.3.1 Heritage assets recorded in the HER and the NMR within 0.75km of the development site are shown in table 3 and Figure 4. Some sites are recorded in both databases. Some sites represent the SAMs and LB already mentioned.
- 3.3.2 A collection of flint artefacts (PRN 7449) have been found within the field to the east of the new mast (south of the bulk of the cable route), which indicate Neolithic and/or Mesolithic activity in the vicinity.
- 3.3.3 The cable route passes 0.5km north of the site of a possible Bronze Age Burnt Mound recorded on the Dyfed Historic Environment Record (PRN 2993). Burnt mounds are typically evident as collections of heat affected stone piled around a trough which would have held water. The stone would have been used to heat water in the trough and would then be discarded after they had been used. The function of a burnt is not known, despite the features being relatively common. They may have been used as cooking sites, processing sites for timber or cloth or possibly as saunas.
- 3.3.4 'Longstone' has already been described as a SAM, and other known stones include: a relocated standing stone near Trewarren Farm (PRN 48318); a possible standing stone located to the west of the route (PRN 2997); place name evidence for another to the south of Longstone (PRN 5398 – although this could be a mis-located record for Longstone itself).
- 3.3.5 The area has numerous other prehistoric monuments within it: There is a Bronze Age Round Barrow burial mound to the west (PRN 13312), and finds indicating flint working at Moor farm (PRN 7449), Mabesgate (PRN 12797) and Slatehill Farm (PRN 12810). A prehistoric stone axe was recovered from North Hall Farm (PRN 11143), and two Bronze Age burnt mounds are sited at North Hall and Moor (PRNs 2991; 2993). A cropmark of unknown date is also located within the search area that could potentially also be prehistoric.
- 3.3.6 Later sites recorded on the HER include medieval St Ishmaels motte, (PRN 3004: the other SAM already described). Medieval / post medieval field systems (PRN 6417) and common land (PRN 13807) are known around the village. Other known sites within 750m are of post medieval and modern date, including quarries, a smithy, a grade II listed building and a World War II searchlight battery.

3.4 Other archaeological events

- 3.4.1 A report about the heritage assets at Trewarren Farm has been previously completed as part of the Tir-Gofal Agri-environment scheme (Groom 2013). It was concluded that:

Overall, Trewarren Farm contains a density and variety of archaeological features which is seldom seen within such a contained area. The pleasure gardens and mansion house provide a coherent snapshot of a 19th century landscape, whilst time depth is provided by two hillforts and at least one standing stone.

PRN/ NPRN	Site Name	Period	Description	NGR
2988	Musselwick	Unknown	Cropmark of unknown significance.	SM 8204 0683
2991	North Hall	Prehistoric	Recorded site of burnt mound but not found again in 1995	SM 8341 0745
2993	Moor	Prehistoric	Recorded site of burnt mound but not found again in 1995	SM 8269 0694
2997	Mabesgate	Bronze Age	In 1915 Cantrill wrote that a stone standing 9 ft high was to be found in a field 150 yards northwest of Mabesgate farm.	SM 826 080
2998/ 305354	Longstone	Bronze Age	Standing Stone Scheduled Ancient Monument PE113	SM 82811 07606
3004/ 305355	St Ishmael's Tump; Castell Mound	Medieval	Scheduled Ancient Monument PE196. The surviving motte of St Ishmaels motte and bailey castle.	SM 8350 0761
5398	Longstone	Bronze Age	Standing Stone Placename Evidence	SM 8299 0730
6417	St Ishmael's	Medieval	Field System	SM 83 07
7449	Moor Farm	Neolithic, Mesolithic	A small collection of flints recovered from the surface of a field. Collection included possible fragment from arrowhead and some flakes.	SM 826 073
11143	North Hall Farm	Neolithic	A stone axe partially polished on both sides.	SM 833 080
12797	Mabesgate	Prehistoric	A small flake of white flint collected by T C Cantrill.	SM 832 077
12810	Slatehill Farm	Prehistoric	A primary flake described by Cantrill as a 'thick external flake' (Cantrill 1915, 175, No.17). NAP 2004.	SM 817 075
13312	Trewarren Round Barrow	Bronze Age	This looks a convincing barrow from the aerial photograph and also from Lidar data accessed on 23/12/2015.	SM 8192 0720
13807	The Fold Or The Green	Medieval	Common Land	SM 834 075
16063	Quarry	Post-Medieval	Quarry	SM 81738 07571
16492	Manse	Post-Medieval	Manse	SM 8297 0736
20968; 59707/ 407225	Trewarren	Post-Medieval	A substantial and unaltered country house of the 1840s. Grade II listed building no. 20343.	SM 829 070
23850	St Ishmaels	Post-Medieval	A smithy is shown at this location on the First (1887) and Second (1908) Edition Ordnance Survey maps.	SM 8338 0754
28650	Slatehill Farm	Modern	Air Defence, Searchlight Battery, two concrete hut bases.	SM 8183 0702
48318	Trewarren Standing Stone	Bronze Age	Possible standing stone cleared to a field boundary to the west of PRN 13312.	SM 81892 07221
11082	Tabernacl Congregational Chapel	Post Medieval	Chapel	SM 8338 0733
300022	St Ishmael's Townscape	Post Medieval	Village	SM 833 073

Table 3: Heritage assets recorded in the HER and NMR within 0.75km of the development site

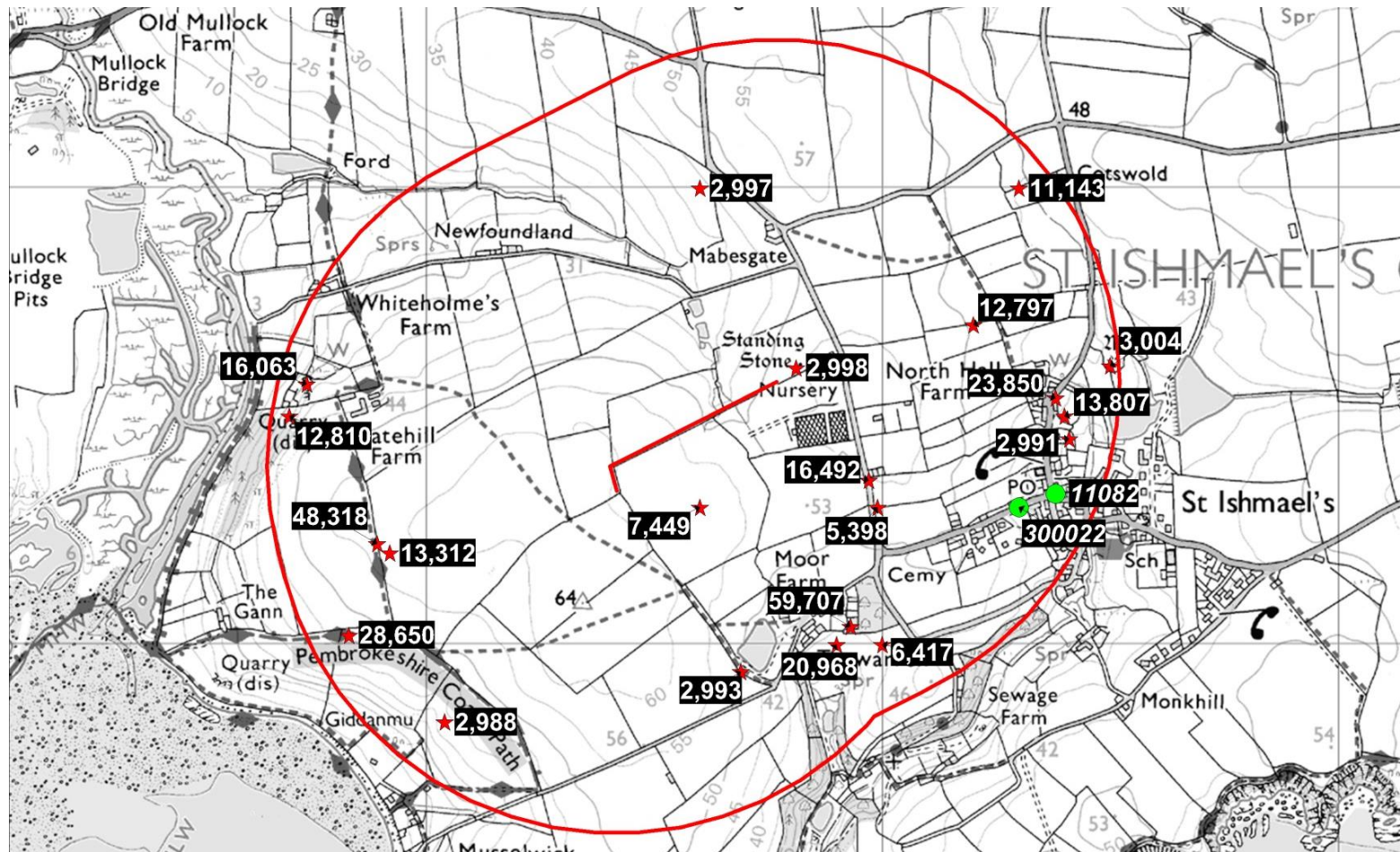


Figure 4: Heritage assets recorded in the HER (red stars, regular text) and NMR (green dots, italic text) within 0.75km of the development site (shown in red). Where the HER and NMR both record the same site, only the HER data is shown.

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3.5 Historic Mapping

- 3.5.1 The earliest map available was a 1795 estate map of Hugh Stokes' Land. Shown in Figure 5, it depicts the study area largely as open moorland, with some enclosed fields in the north part of the site development area. The open Moorland is labelled 'Henry Davies Esquire,' presumably the land owner but possibly the land occupier.
- 3.5.2 The 'References' page attached to this map gives names of fields and descriptions of their land use. Field no. 7 is named 'Long Stone Park' and is used as meadow, and field no. 11 to its west is called 'South Meade' and used for arable. Field 13 is named 'Gawdy Park' and is under arable. Moor Farm is not shown, and neither is Trewarren.

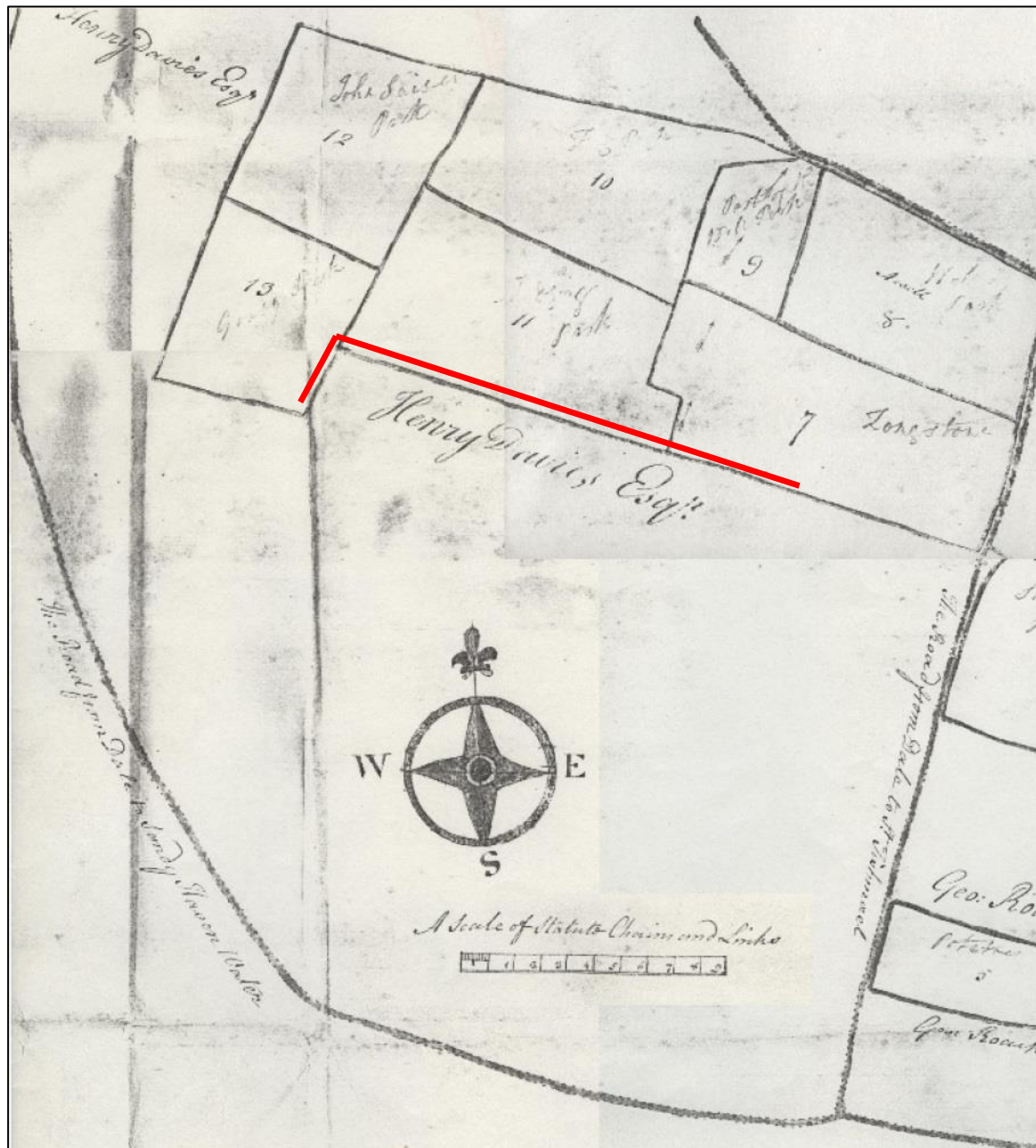


Figure 5: Estate Map from 1795 of Hugh Stokes' Land, St Ishmael's, Pembrokeshire (approximate position of new cable route shown in red)

- 3.5.3 Figure 6 shows an estate map made four decades later in 1837. The map was made to show the property of A.L. Stokes, and also once again shows the moor as belonging to / being occupied by somebody else – this time Warren Davies Esquire.
- 3.5.4 Moor Farm is now shown, and a stream heading northwards at the top right of the image. Otherwise, there are no changes to the field layout since 1795. No field descriptions were available for this map.

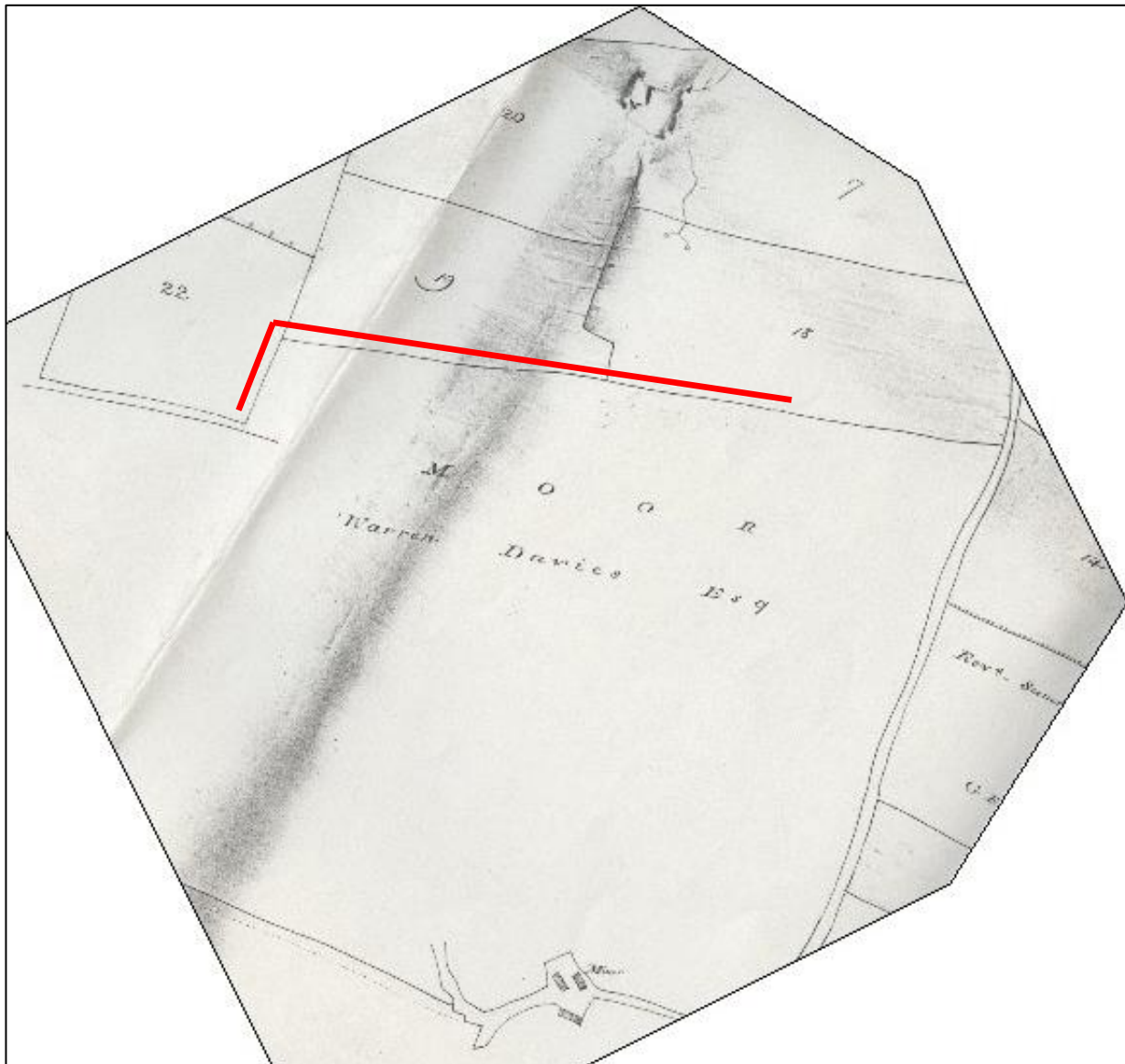


Figure 6: Estate Map of Property of A.L. Stokes, St Ishmael's, Pembrokeshire, 1837 (approximate position of new access track shown in red)

- 3.5.5 In 1841, Parish Tithe Maps were created for the whole country, and the portion covering the new access track is shown in Figure 7. By this time the moor has been enclosed (although it is possible that the last two maps did not show the detail of field boundaries on land that didn't belong to the Stokes family, and that the land was named 'Moor' after the farm, not after its contemporary use).
- 3.5.6 The tithe apportionment shows that field no. 163 at the westernmost limit of the new development site was called 'Gordy Park' and used as pasture. The 'dy' part in its name means 'house' in Welsh, which may indicate former habitation there. The field to the east (164) was called 'Gawdy Park' on the 1795 estate map, so there may have been some confusion there and again, former habitation may have existed. Field no. 164 is called 'Fog Park' on this map and is noted as being under pasture.
- 3.5.7 Field 153, known as 'Middle Way,' and is under pasture. Field 166 is called 'Longstone,' continuing its name on the 1795 map and the reflective of the standing stone in it. It is listed as being ropped for Potatoes and Wheat. Field no. 154, under pasture, was known as 'Bickning Meadow.'
- 3.5.8 The apportionment also records that Moor Farm was occupied by John Richards at this time.

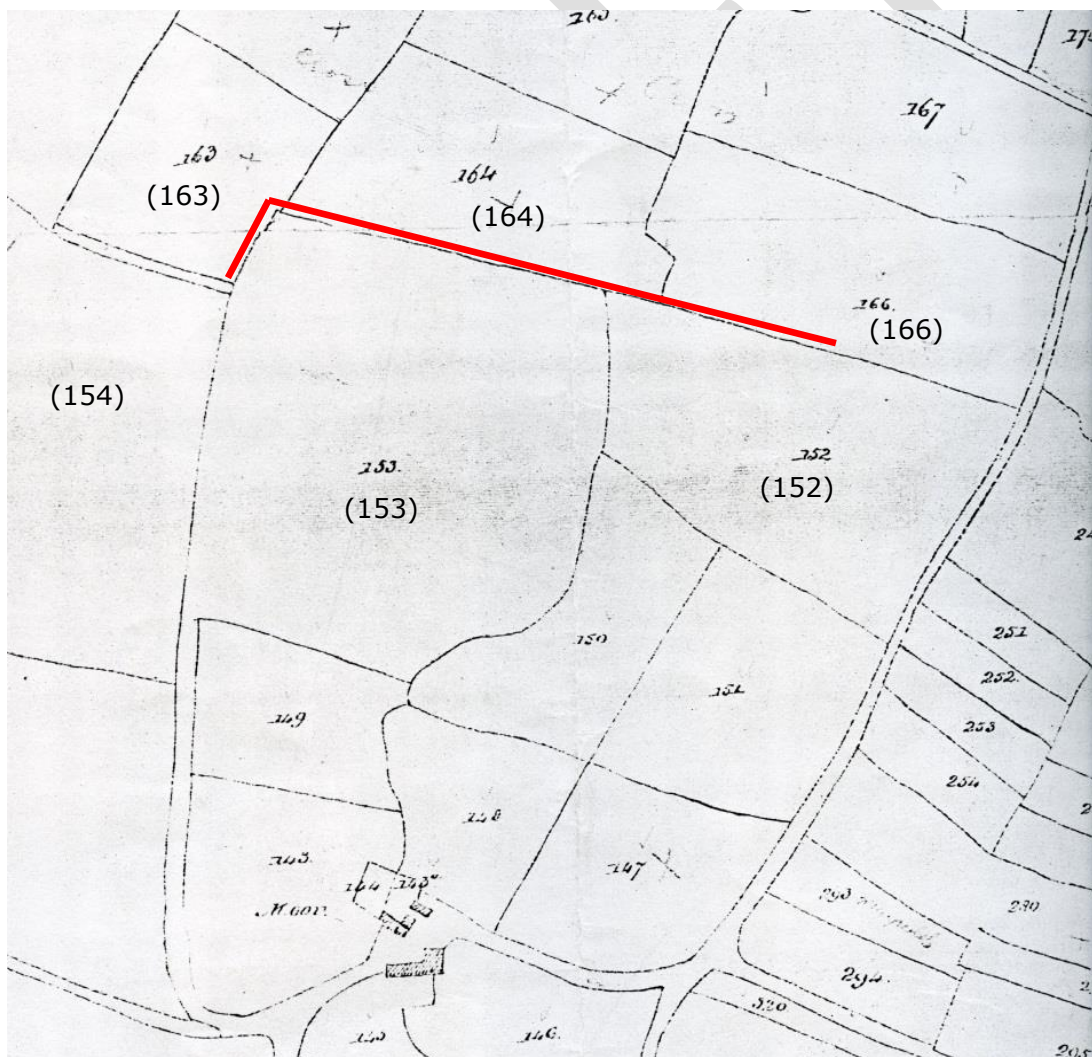


Figure 7: St Ishmael's Parish Tithe Map of 1841, with approximate position of new cable route shown in red

3.5.9 The 1st edition 1:2500 OS map of 1876 (Figure 8) shows the same field layout as the 1841 tithe, but it is more accurate and shows more detail, such as the position of trees and footpaths. It is also now that Trewarren Farm is first depicted to the southeast of Moor Farm.

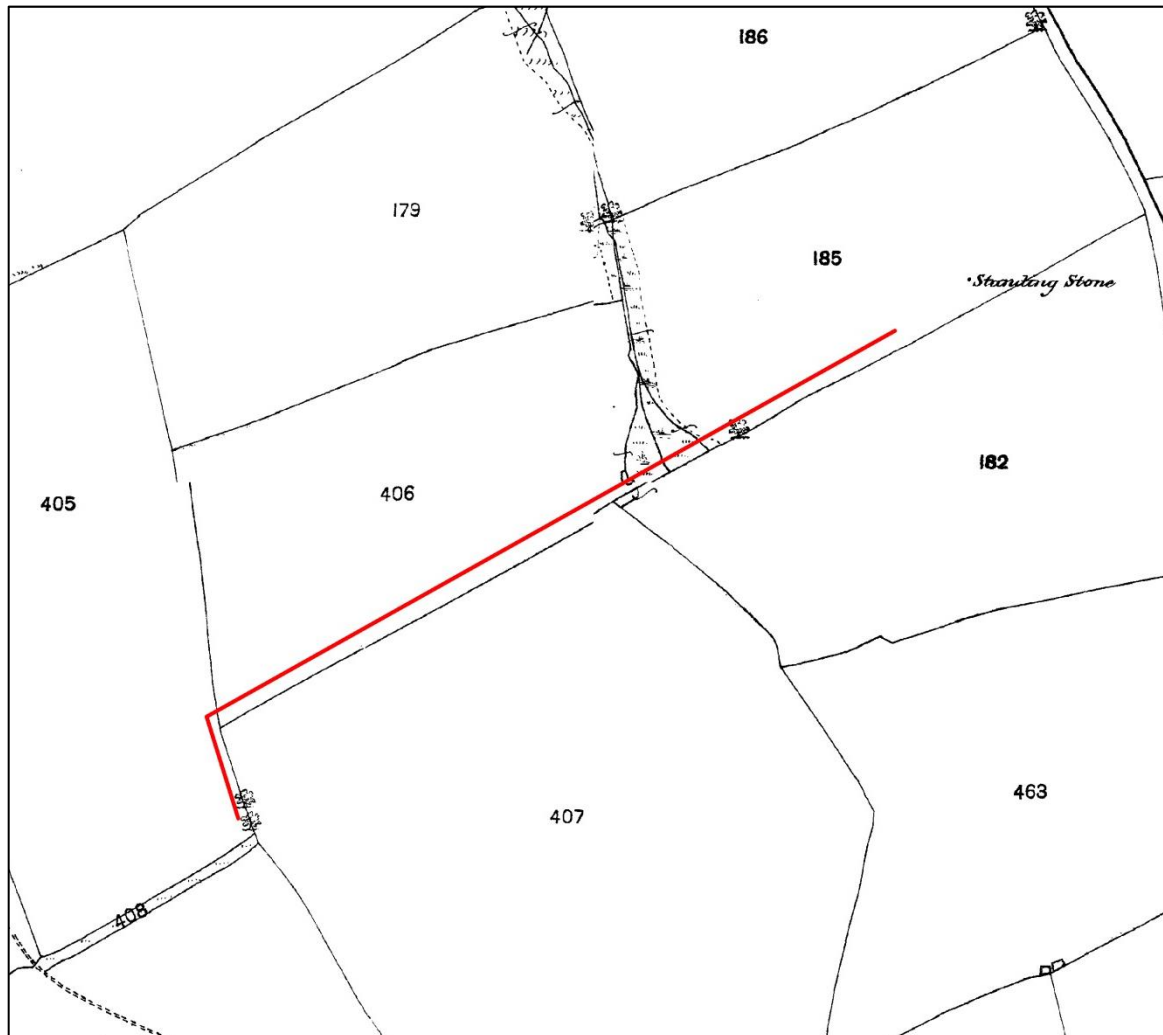


Figure 8: OS 1st edition 1:2500 Map of 1876, with approximate position of new cable route shown in red

3.5.10 Figure 9 shows the 2nd edition 1:2500 OS map, dated 1908, which is very similar to the previous 1876 map. This map is displayed here only to point out the new presence of two ponds at the head of the streams in fields 185 and 406.

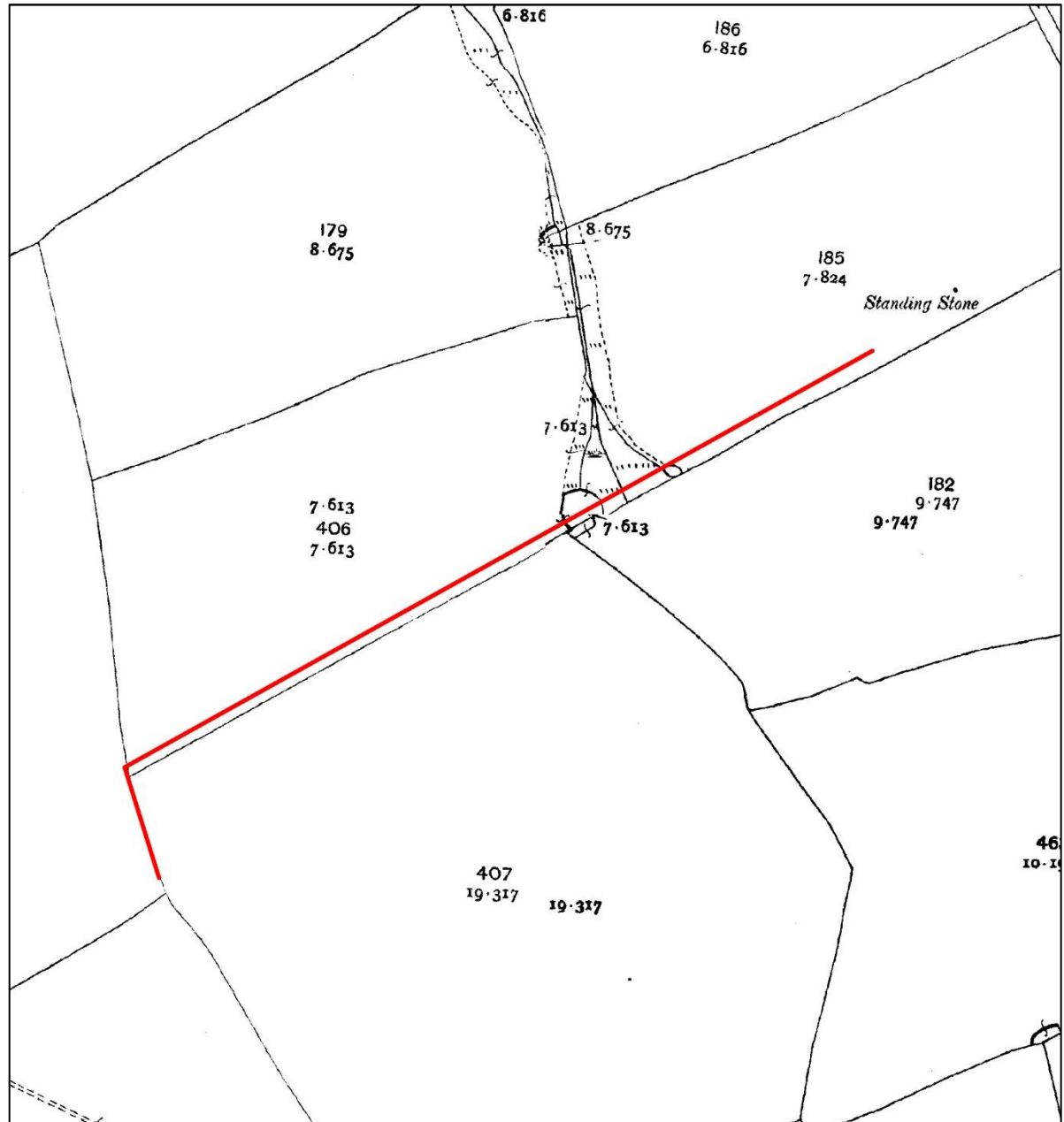


Figure 9: OS 2nd edition 1:2500 Map of 1908, with approximate position of new cable route shown in red

3.6 Aerial Photography

- 3.6.1 Modern day satellite imagery shows a possible archaeological cropmark in the large field in the northeastern part of the development site (Figure 10). The curve and size of this feature would most likely typically represent an Iron Age enclosure. A previous study has concluded that the feature is likely to be natural as it lies at the intersection of two different geological materials (Day 2016).

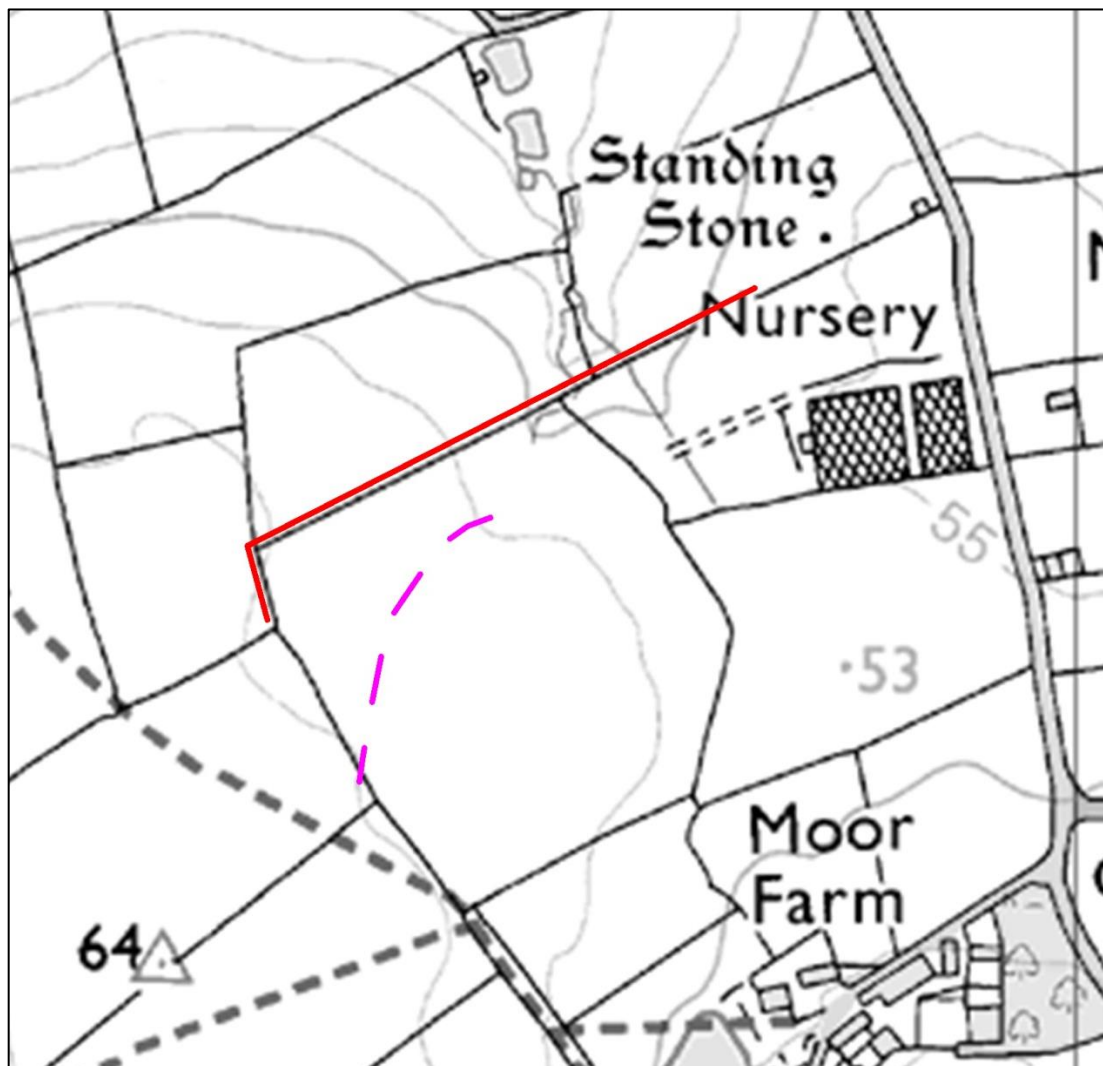


Figure 10: Map of position of possible cropmark, shown by a purple dashed line, with position of new cable route shown in red

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4 WATCHING BRIEF METHODOLOGY

4.1 Fieldwork

- 4.1.1 A watching brief was undertaken during ground level reduction works at the site which had the potential to expose, damage or destroy underlying archaeological remains.
- 4.1.2 Excavation work was conducted by a 5 ton machine with a narrow toothless bucket. All archaeological deposits revealed during the groundworks were examined and recorded to an appropriate level.
- 4.1.3 Recording of all archaeological features or deposits conformed to best current professional practice and was carried out in accordance with the Recording Manual used by DAT Archaeological Services.

5.2 Timetabling of Fieldwork

- 5.2.1 The watching brief took place at Trewarren Farm, St. Ishmaels, on the 22nd March 2016.

4.3 Post-Fieldwork Reporting and Archiving

- 4.3.1 All data recovered during the fieldwork will be collated into a site archive structured in accordance with specifications in Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation (Brown 2011), and the procedures recommended by the National Monuments Record, Aberystwyth.
- 4.3.2 The results of the fieldwork have been assessed in local, regional and wider contexts. The report includes a desk-based research element to ensure that the site is placed within its wider archaeological context.
- 4.3.3 A report fully representative of the results of the fieldwork has been prepared.

5 RESULTS AND DISCUSSION

- 5.1 The watching brief took place on the 22nd March 2016. The cable trench was excavated along its whole length; 0.5m wide and about 1m deep. The topsoil was stripped out first, followed by the subsoil and then the bedrock.
- 5.2 Field-walking within four metres to the north of the trench, on ground recently cropped, turned up small sherds of the following types of pottery: medieval Dyfed gravel-tempered glazed ware pottery, Post-medieval glazed pottery and modern glazed pottery. Fragments of thick glass, roof slate, coal and animal bone were also discovered. While these finds hint at human activity over the last thousand years in the vicinity, they may alternatively all be in the fields as the result of being added as part of soil improvement.
- 5.3 The topsoil and subsoil in the fields contained very few artefacts, and all were similar to those discovered by field walking as described above. Photo 2 shows topsoil stripping underway at point A on Figure 11 (page 22), and Photo 3 shows the depth of the bedrock at about 0.3m after excavation of the topsoil and subsoil at point B. The depth of the bedrock increased gradually between points A and B, to a depth of c.0.7m at A.



Photo 2: Looking south-southwest at topsoil stripping, at point A on Figure 11



Photo 3: The depth of the bedrock after excavation of the topsoil and subsoil at point B on Figure 11, looking west, with a 1m scale

- 5.4 In the western part of the cable trench route, changes in the sub-surface geology were confirmed. Photo 4 shows a subsoil colour of yellow, deriving from the sandstone bedrock beneath at a depth of roughly 0.2m (point C, Figure 11). Along the trench to the east of here, down the hill to the small valley, the depth of the bedrock increased steadily to c.0.8m, and in the flat valley bottom a layer of natural reddish clay was observed between the subsoil and the bedrock (photo 5).



Photo 4: Yellow sandstone and subsoil at point C on Figure 11, looking north with a 1m scale



Photo 5: Clay layer above bedrock at point D on Figure 11, looking northeast with a 1m scale

- 5.5 At point E on Figure 11, the cable trench route dug through a layer of modern concrete building rubble (Photo 6), put there presumably to convenience and/or to make-up the ground or improve drainage in this boggy area next to the two streams.



Photo 6: The cable trench excavated through a deposit of modern concrete building rubble, at point E on Figure 11, looking southeast, with a 1m scale

- 5.6 The field boundary at point F on figure 11 had been previously removed to make way for the building of a small milking shed, constructed of brick and concrete blocks and now ruinous (Photo 7). The farmer remembered it in use about thirty years ago and its demolition about fifteen years ago. He did not remember what happened to the building material, but some of it at least is evident in the rubble in this vicinity.
- 5.7 The small stream immediately to the west of the ruined building appeared to have been canalised by the constraints of the building on one side and a stone wall on the other. Photo 8 shows that the very large corner-stone of this wall was tumbling into the stream during this watching brief.



Photo 7: Ruined modern milking shed, at point F on Figure 11, looking southeast, with a 1m scale



Photo 7: The small stream running between the ruined building on the left and the stone wall on the right, looking south, with a 1m scale

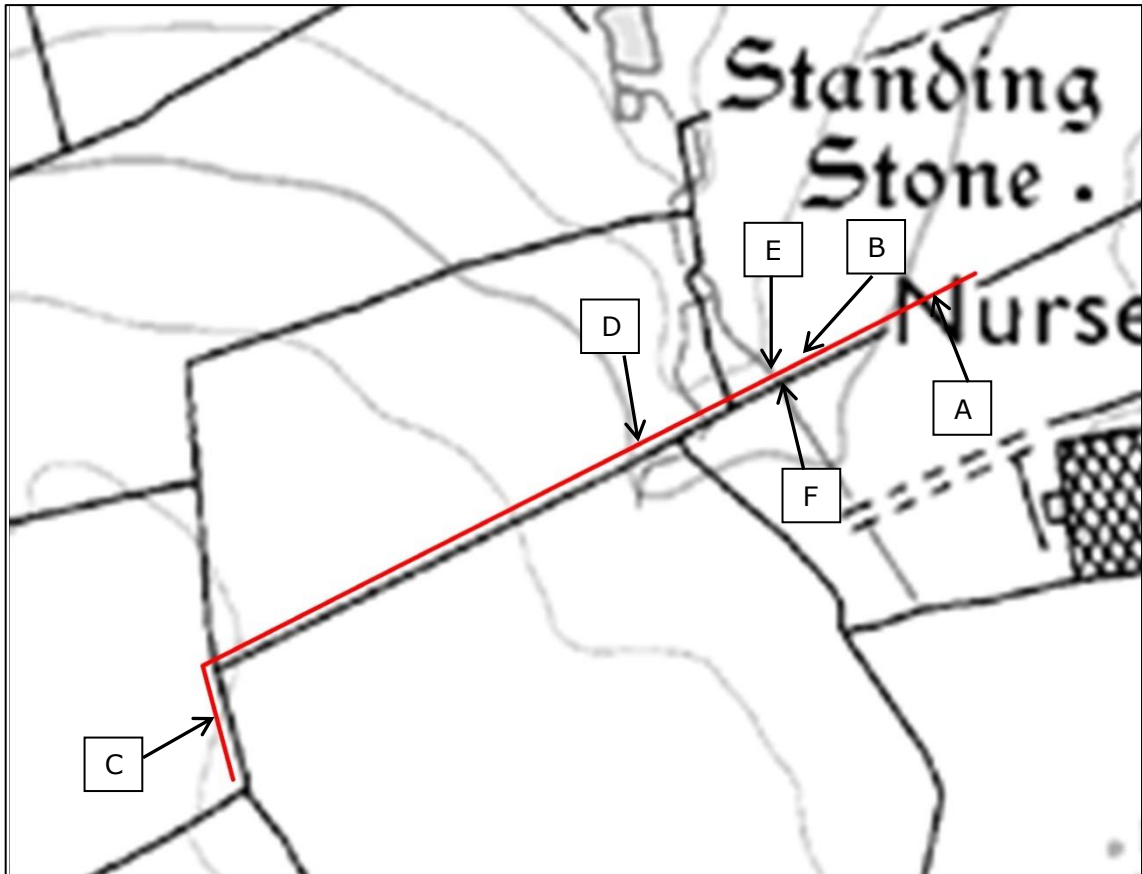


Figure 11: Map showing locations referred to in text, with new cable route in red

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6 CONCLUSION

- 6.1 An archaeological watching brief was undertaken during the construction of a power cable trench leading to the site of a proposed new Western Power communications mast at Trewarren Farm, St Ishmaels, Pembrokeshire.
- 6.2 Archaeological and historical research undertaken for the project indicated that the site had the potential to expose, damage or destroy archaeological remains. In particular, Mesolithic/Neolithic and Bronze Age remains were known within two hundred metres of the cable route.
- 6.3 Small sherds of pottery ranging in date from the medieval period to the present day were discovered through field walking within four metres of the cable trench and within the topsoil and subsoil within the trench itself. While these finds hint at human activity over the last thousand years in the vicinity, they may alternatively all be in the fields as the result of being added as part of soil improvement.
- 6.4 No archaeological deposits were discovered during the digging of the trench. A layer of concrete building rubble and a small, ruined twentieth century milking shed were observed in the small valley about halfway along the cable route.
- 6.5 Whilst the results of the watching brief are mostly negative, with no significant archaeology being identified, they do not negate the possibility of significant archaeology surviving elsewhere within the near vicinity. The groundworks impacted on a small strip of land adjacent to existing field boundaries and it is possible that these areas had been subject to previous disturbance from farm traffic or cleaning/renewing the hedge banks. Such previous activity could have already removed any traces of archaeological remains if present.

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Cartographic

Estate Map of Hugh Stokes' Land	1795	
Estate Map of Property of A.L. Stokes	1837	
St Ishmael's Parish Tithe Map and Apportionment	1841	
Ordnance Survey	1876	1:2500 Pembrokeshire
Ordnance Survey	1908	1:2500 Pembrokeshire
Ordnance Survey	1877	1:105600 Pembrokeshire
Ordnance Survey	1908	1:105600 Pembrokeshire
Ordnance Survey	1953	1:105600 Pembrokeshire
Ordnance Survey	1964	1:105600 Pembrokeshire

**WESTERN POWER NEW COMMUNICATIONS TOWER,
TREWARREN FARM, ST ISHMAELS, PEMBROKESHIRE
ARCHAEOLOGICAL WATCHING BRIEF
WRITTEN SCHEME OF INVESTIGATION**

1 INTRODUCTION

- 1.1 This written scheme of investigation (WSI) has been prepared by DAT Archaeological Services in response to a request from Western Power to provide an archaeological scheme of works for a watching brief during the construction of a new access road, installation of a new communications mast and associated cabling on land north of Trewarren farm, St Ishmaels, Pembrokeshire (Figures 1 & 2). The proposed mast is located at grid reference SM 82428 07398. The route of the associated cabling runs west along field boundaries from SM 82770 07575 to the tower site and then doglegs to the south along field boundaries to SM 82404 073333.
- 1.2 The Dyfed Historic Environment Record (HER) was searched for known archaeological sites within 750m of the proposed access road, cable route and communications tower [See tables 2-3, and Figures 3-4 in main watching brief report], which demonstrate that the area has numerous prehistoric monuments within it. The cable route starts close to the site of the Bronze Age standing stone known as Longstone, which is a scheduled ancient monument (SAM PE113; Historic Environment Record reference PRN2998). Other known remains in the area include a second relocated standing stone near Trewarren Farm (PRN 48318); a further possible standing stone located to the west of the route (PRN 2997); place name evidence for a fourth to the south of the Longstone (PRN 5398 – although this could be a mis-located record of the Longstone itself); a possible Bronze Age Round Barrow burial mound to the west (PRN 13312); finds indicating flint working at Moor farm (PRN 7449), Mabesgate (PRN 12797), Slatehill Farm (PRN 12810); a prehistoric stone axe recovered from North Hall Farm (PRN 11143); and the site of two Bronze Age Burnt Mound sites at North hall (PRN 2991) and Moor (PRN 2993). A cropmark of unknown date is also located within the search area which could potentially also be prehistoric. This evidence indicates the area has the potential for further prehistoric remains to be present, which could be disturbed by groundworks associated with the proposed cabling and communications mast.
- 1.3 Further sites recorded on the HER include the site of the medieval St Ishmaels motte, another scheduled ancient monument located to the east of the cable route (PE196; PRN 3004). Medieval / post medieval field systems (PRN 6417) and common land (PRN13807) are known around the village. Other known sites within 750m are of post medieval and modern date, including quarries, a smithy, a grade II listed building and a World War II searchlight battery. The site area itself lies within agricultural land which would have been used as such since the medieval period. The field boundaries are of post-medieval date.
- 1.4 As a consequence of this the archaeological advisor to Western Power (Planning Services of the Dyfed Archaeological Trust) has requested that an archaeological watching brief is undertaken during the groundworks associated with the scheme.
- 1.5 This written scheme of investigation outlines the methodology through which DAT Archaeological Services would undertake an archaeological watching brief during ground works at the site, which have the potential to expose, damage or destroy archaeological remains. This document has

been prepared for the client and is specifically prepared for DAT Archaeological Services to undertake the required archaeological works. The WSI cannot be used by any third party.

- 1.6 The written scheme of investigation is in accordance with the *Standard and Guidance for Archaeological Watching Briefs* (Chartered Institute for Archaeologists (CIfA), 2014).
- 1.7 DAT Archaeological Services has considerable experience of this type of project and always operates to best professional practice. DAT Archaeological Services is the contractual arm of Dyfed Archaeological Trust that has its own Health and Safety Policy, and all works are covered by appropriate Employer's Liability and Public Liability Insurances. Copies of all are available on request.
- 1.8 ***Dyfed Archaeological Trust is a CIfA Registered Organisation.***
- 1.9 ***All staff are CSCS registered.***

2. WATCHING BRIEF

- 2.1 The definition of archaeological watching brief, taken from the Chartered Institute for Archaeologists Standards and Guidance: for Archaeological Watching Briefs (CIfA S&G: AWB 2014) is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.
- 2.2 The purpose of a watching brief, as laid down in the CIfA S&G AWB is:

..to allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works;

to provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment.
- 2.3 This document provides a scheme of works for: ***Archaeological attendance during ground works associated with the construction of a new access road, erection of a communications mast and installation of associated cable route which are likely to expose, damage or destroy archaeological remains. Appropriate investigation and recording of any such remains will be undertaken if revealed. A report and archive of the results of the works will be prepared.***

3. PROJECT OBJECTIVES

- 3.1 Provision of a written scheme of investigation to outline the methodology by which DAT Archaeological Services will undertake the archaeological watching brief.
- 3.2 To monitor ground works in order to identify the presence/absence of any archaeological deposits.

- 3.3 To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works.
- 3.4 To appropriately investigate and record any archaeological deposits to be affected by the ground works.
- 3.5 To produce an archive and report of any results.

4. FIELDWORK

- 4.1 The watching brief would entail an archaeologist being present during all ground works where there is a potential for archaeological remains to be exposed, damaged or destroyed. This will be carried out during groundworks associated with the construction of a new access road, erection of the new communications mast and associated cabling.
- 4.2 It is essential coordination between the site contractor's and archaeologist is established at the outset to avoid any potential disturbance to archaeology without an archaeologist being present, or unnecessary visits to the site when works are being carried out that do not require the presence of an archaeologist.
- 4.3 Adequate time must be made available to the visiting archaeologist to ensure that appropriate recording can be undertaken of any archaeological features or deposits exposed during ground works.
- 4.4 Recording of all archaeological features or deposits will conform to best current professional practice and be carried out in accordance with the Recording Manual² used by DAT Archaeological Services. Significant archaeological features or deposits will be drawn at a suitable scale (no less than 1:20) and photographed in an appropriate format.
- 4.5 All archaeologically significant finds will be retained and, where possible, related to the contexts from which they derived. Finds will be temporarily stored by DAT Archaeological Services in stable conditions. All finds, except those deemed to be Treasure, will remain the property of the landowner.
- 4.6 Under the 1996 Treasure Act, "treasure" can be summarised as:
 - Any object other than a coin containing at least 10% gold or silver and at least 300 years old;
 - Any prehistoric assemblage of base metal;
 - Coins found together which contain 10% gold or silver (but no single coins) and groups of at least 10 coins of other metals, provided they are at least 300 years old;
 - Any object found associated with treasure except unworked natural objects; and
 - Any object which would have been Treasure Trove before the 1996 Act but not covered above.
- 4.7 In the event that unforeseen archaeological discoveries are made during the development, or that archaeological remains of high significance are exposed, DAT Archaeological Services shall have the power to halt any ground works and shall inform the site agent/project manager and the curatorial officer, and prepare a written statement with plan detailing the

² DAT Archaeological Services have adopted the Recording Manual developed by English Heritage Centre for Archaeology. A copy will be available on-site for inspection if required.

archaeological evidence. Following assessment of the archaeological remains by the curatorial officer, DAT Archaeological Services shall, if required, implement on behalf of the Client a contingency scheme for salvage excavation of affected archaeological features. In these instances it would be necessary to employ extra resources to record such features to an appropriate standard. Again this scenario is possible within the area of the former aircraft hangar.

- 4.8 In the very unlikely event that human remains are encountered, the District Coroner's Office and the Police will be notified immediately. All human remains will, where possible, be left *in situ*. If preservation *in situ* is not possible all statutory permissions will be obtained in writing before removal begins.

5. POST-FIELDWORK REPORTING AND ARCHIVING

- 5.1 All data recovered during the fieldwork will be collated into a site archive structured in accordance with the specifications in *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Brown 2011), and the procedures recommended by the National Monuments Record, Aberystwyth.
- 5.2 The results of the fieldwork will be assessed in local, regional and wider contexts. The report will include a desk-based research element to ensure that the site is placed within its wider archaeological context. A report that is fully representative of the results of the fieldwork will be prepared and digital and hard copies will be sent to the client for dissemination to all relevant parties.
- 5.3 A summary of the project results, excluding any confidential information, may be prepared for wider dissemination (e.g. Archaeology in Wales and special interest and period-specific journals).
- 5.4 The project archive, including all artefacts and ecofacts (excepting those which may be deemed to be Treasure) will be deposited with an appropriate body following agreement with the landowner.
- 5.5 A copy of the final report will be deposited with the regional HER within six months of the completion of the project.

6. STAFF

- 6.1 This project will be managed by James Meek, Head of DAT Archaeological Services.
- 6.2 Archaeological attendance during the watching brief will be undertaken by staff drawn from the team of archaeologists employed by DAT Archaeological Services.

7. MONITORING

- 7.1 The fieldwork may need to be monitored by the archaeological advisors to Western Power and the Head of DAT Archaeological Services, who should be provided access to the site at any time during the watching brief works.

8. HEALTH AND SAFETY

- 8.1 All DAT Archaeological Services staff are CSCS³ registered.

³ Construction Skills Certification Scheme (Health and Safety Tested)

- 8.2 DAT Archaeological Services will carry out a health and safety risk assessment to ensure that all potential risks are minimised.
- 8.3 All relevant health and safety regulations must be followed.
- 8.4 All site inductions, H&S procedures and site rules of the site contractor will be made known to DAT Archaeological Services staff prior to them commencing work on-site.
- 8.5 Safety helmets, safety boots and high visibility vests are to be used by all site personnel as necessary. The site contractors will make all archaeological staff aware of any other PPE⁴ that may be required and provide them. Archaeological staff must not enter any area where there is a considered to be a health and safety risk that has not or is not being appropriately mitigated against.
- 8.6 DAT Archaeological Services staff must ensure that their presence on site is communicated to all relevant site staff, especially machine operators.

⁴ *Personal Protection Equipment*

TREWARREN FARM POWER CABLE, ST. ISHMAELS, PEMBROKESHIRE: ARCHAEOLOGICAL WATCHING BRIEF

RHIF YR ADRODDIAD / REPORT NO. 2016/28
RHIF Y DIGWYDDIAD / EVENT NO. 109359

Mai 2016
May 2016

Paratowyd yr adroddiad hwn gan / This report has been prepared by

Alice Day

Swydd / Position: **Archaeologist**

Llofnod / Signature  Dyddiad / Date **17/May/2016**

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
This report has been checked and approved by

James Meek

ar ran Ymddiriedolaeth Archaeolegol Dyfed Cyf.
on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position: **Head of DAT Archaeological Services**

Llofnod / Signature  Dyddiad / Date **17/May/2016**

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau
sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any
comments you may have on the content or presentation of this report

