



Harry's Walls, St Mary's Scilly. Electric pole replacement.

Archaeological Watching Brief



Historic Environment Projects

Report No 2013R008	Report Name Harry's Walls, St Mary's Scilly. Electric Pole Replacement: Archaeological Watching Brief	Report Author C. M. Thorpe
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Event Type Watching Brief			
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Client Organisation Western Power Distribution	Client Contact Paul Harris
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Monuments (MonUID) SM 15403	SM 10552				
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Fieldwork dates (From) 24/01/13	(To) 24/01/13	(Created By) CMT	(Create Date) 22/02/13
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Location (postal address; or general location and parish)
Harry's Walls, St Mary's, Isles of Scilly

(Town - for urban sites)	(Postcode) TR21 0NE
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(Easting) X co-ord SV 90992	(Northing) Y co-ord 10917		
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Historic Environment, Cornwall Council is a Registered Organisation with the Institute for Archaeologists

Project background

In December 2012 HE Projects was commissioned by Paul Harris of Western Power Distribution to undertake a watching brief during the replacement of an electricity pole at Scheduled Monument 15403, 'Harry's Walls unfinished C16th artillery fort and adjacent prehistoric standing stone at Mount Flagon, St Mary's', Isles of Scilly (Figs 1 and 2). The watching brief was required as a condition of Scheduled Monument Consent for the works.

Location and setting

The artillery castle known as 'Harry's Walls' was begun in 1551, during the reign of Edward VI, as part of a major phase of fortification of the Isles of Scilly undertaken from 1547-1554 to counter threats from France. By 1554, some of the garrison on St Mary's was transferred to Tresco, reflecting a shift to that island in the focus of islands fortification that resulted in the completion of King Charles' Castle as the principal stronghold. Harry's Walls was abandoned in an unfinished state.

It is the earliest fort in this country whose plan was wholly based on Italian-derived designs of angled bastions and orillons and as such occupies an important place in the development of military fortifications that is reflected in its mention in national reviews of the subject. The poor siting and resulting failure to complete the artillery castle, coupled with its wealth of related historical documentation, also gives a rare insight into how fortifications were planned in this period and the degree of central control and bureaucracy involved.

Standing stones are prehistoric ritual monuments dating to the later Neolithic and Bronze Age (c 2500-700 BC). Although often conspicuously sited, many are located in relatively sheltered settings. Seven examples are known to survive on the Isles of Scilly, all of which are considered to be of national importance.

The prehistoric standing stone at Mount Flagon is situated near the summit of the hill, 0.5m beyond the outer edge of the artillery castle's rock cut ditch, towards its northern end. It is visible as a tapering upright granite slab, 2.75m high. The faces and edges are heavily weathered and irregular. It is believed to be in situ and sits within a slightly raised sub-circular cairn that has been truncated on its south east edge by the rock-cut ditch of the artillery castle (Fig 2).

Potential for buried archaeology

Given that the site is within the original planned enceinte of the artillery fort (Fig 2) and close to the site of the prehistoric standing stone, there was potential for post-medieval and possibly earlier sites to survive within the project area and for the survival of unrecorded buried archaeological remains and artefacts of all periods.

Site description

The pole was to be erected alongside the hedge marking the eastern boundary of the Guardianship site. This was the site of an existing pole. It lay at a height of c 20m OD.

The underlying geology consists of Permian and Carboniferous granites of the Isles of Scilly intrusion (BGS sheet 357/360).

Aims and objectives

The site specific aims and objectives were:

- To identify and record the presence/absence of archaeological remains.
- To determine the extent, condition, nature, character, date and significance of any archaeological remains encountered.
- To establish the nature of activity on the site.

- To identify any artefacts relating to the occupation of the site.
- To provide further information on the archaeological history of the site.

Working methods

The work was carried out according to a Written Scheme of Investigation (WSI) prepared by HE Projects (Johns 2012) which had been submitted to and approved by English Heritage.

Results

The archaeologist helped to guide the machine onto site ensuring that any sensitive archaeological areas were avoided. It proved possible to remove the existing pole without the necessity to dig a new pit. The existing hole was examined to briefly record the soil profile and to see if any features were present.

The pole location was plotted onto a site plan at a scale of 1:300 based on an Ordnance Survey map of the same scale, being measured in from fixed locatable points on the ground marked on the map. Digital photographs were taken of the pole location and the hole after its removal.

The following soil profile was recorded within the posthole.

Depth	Thickness	Description	Interpretation	Context
	0.05m	Grass, roots and topsoil	Topsoil	(1)
	0.04m	Grey-brown loose sandy clay loam	Subsoil	(2)
	0.02m	Mid pinkish grey soft clay with frequent quartz grit.	Weathering zone	(3)
	0.15m	Mid reddish brown soft clay with frequent grit and occasional large granite stone.	Natural <i>ram.</i>	(4)
	0.25	Rotten granite	Natural bedrock	(5)

No archaeological features were recorded.

Discussion

As it proved possible to remove and replace the electricity pole without digging another pit this project had no impact on any significant buried remains.

References

British Geological Survey 1974, 1:50000 map Sheet 357/360 Isles of Scilly.

Johns, C, 2012. Scheduled Monument 15403, 'Harry's Walls unfinished C16th artillery fort and adjacent prehistoric standing stone at Mount Flagon, St Mary's': Written Scheme of Investigation for Archaeological Watching Brief During Pole Replacement

Project archive

The HE project number is **HEXQPR146222**

The project's documentary, photographic and drawn archive is housed at the offices of Historic Environment, Cornwall Council, Kennall Building, Old County Hall, Station Road, Truro, TR1 3AY. The contents of this archive are as listed below:

1. Projects file containing site records and notes, project correspondence and administration (**HEXQPR146222**).
2. Field plans and copies of historic maps stored in an A2-size plastic envelope (GRE782/1).
3. Digital photographs stored in the directory: R:\Historic Environment (Images)\Scilly\St Marys\Harry's Walls Pole replacement Scilly WB HEXQPR146222
4. English Heritage/ADS OASIS online reference: cornwall2- 144441
5. This report text is held in digital form as: G:\TWE\Waste & Env\Strat Waste & Land\Historic Environment\Projects\Sites\SCILLY\SITES.Q-T\ST_MARYS\Harry's Walls Pole Replacement HEXQPR146222\Report

Appendix 1. Scheduled Monument 15403, 'Harry's Walls unfinished C16th artillery fort and adjacent prehistoric standing stone at Mount Flagon, St Mary's': Written Scheme of Investigation for Archaeological Watching Brief During Pole Replacement

Client: Western Power Distribution
Client contact: Paul Harris
Client tel: 07768 511531
Client email: pharris@westernpower.co.uk

Project background

Paul Harris of Western Power Distribution has asked Historic Environment Projects (HE Projects) to provide a Written Scheme of Investigation (WSI) for an archaeological watching brief during the replacement of pole at Scheduled Monument 15403, 'Harry's Walls unfinished C16th artillery fort and adjacent prehistoric standing stone at Mount Flagon, St Mary's' Cornwall, part of Scheduled Monument 10552: Pendennis Peninsula Fortifications. The site is also held in Guardianship by English Heritage. It is understood that this WSI will support the application for Scheduled Monument Consent for the works.

Archaeological and historical background

Standing stones are prehistoric ritual monuments dating to the later Neolithic and Bronze Age (c.2500-700 BC). They comprise single or paired upright slabs, ranging in height from under 1m to over 6m where still erect. Although often conspicuously sited, many are located in relatively sheltered settings. Excavations have demonstrated sub-surface features adjacent to standing stones, including funerary cists, spreads of pebbles and various pits and hollows. In addition to having a ritual function, standing stones may have acted as markers for routeways, territorial boundaries, graves and meeting points. Standing stones are important for our understanding of ritual, territoriality and land use among prehistoric communities. Estimates suggest that about 250 standing stones are known nationally. Seven examples are known to survive on the Isles of Scilly, all of which are considered to be of national importance.

The prehistoric standing stone at Mount Flagon is situated near the summit of the hill, 0.5m beyond the outer edge of the artillery castle's rock cut ditch, towards its northern end. It is visible as an upright granite slab, 2.75m high, whose lowermost 0.6m above the ground is embedded within a modern cladding of concreted rubble to assist in the slab's support. Where it emerges from the cladding, the slab measures 0.8m WNW-ESE by 0.3m thick, and it tapers to 0.4m WNW-ESE by 0.2m thick at the tip. The faces and edges are heavily weathered and irregular. Each principal face bears a small sub triangular pit, 2cm in diameter and located 1.5m above the ground, resulting from a relatively recent unfinished attempt to perforate the slab. The base of the slab, with the modern cladding, is situated within a slightly raised sub-circular cairn whose mound measures 7m north east-south west by 4.5m north west-south east, rising up to 0.7m high on the north west. The south east edge of this cairn is truncated by the rock-cut ditch of the artillery castle, where it can be seen to be underlain by the granite bedrock, however much of the remainder of this cairn supporting the standing stone is considered to be artificial. This standing stone was recorded by the antiquary Borlase in 1756, describing it as 'on a little tumulus near Harry's Battery'. A modern navigation aid with

cross-arms on a steel post and set in a concrete plinth also stands on the cairn immediately north west of the cladding around the standing stone. All English Heritage notices, fittings, stored materials, the modern navigation aid north west of the standing stone, together with its concrete base, power line and service trench, the gate, telegraph pole, guy and supply lines at the north east edge of the monument are excluded from the scheduling, although the ground beneath is included.

Historical research has demonstrated that the artillery castle known as 'Harry's Walls' was begun in 1551, during the reign of Edward VI, as part of a major phase of fortification of the Isles of Scilly undertaken from 1547-1554 to counter threats from France. By 1554, some of the garrison on St Mary's was transferred to Tresco, reflecting a shift to that island in the focus of fortification that resulted in the completion of King Charles' Castle as the principal stronghold built in this phase. No further mention of this artillery castle is present in later accounts of the islands' defences.

The artillery castle has survived well to the point where its initial construction was abandoned. Despite some subsequent robbing of facing stone, it displays clearly the essential details of its design. As the earliest fort in this country whose plan was wholly based on Italian-derived designs of angled bastions and orillons, this monument occupies an important place in the development of military fortifications that is reflected in its mention in national reviews of the subject. In this respect, the survival of the detailed contemporary ground plan of this artillery castle's intended form is a rare and valuable supplement to the uncompleted physical remains. This is further strengthened by the other surviving contemporary documentation giving both specific and broader historical details surrounding the commencement of this castle. The premature abandonment of this artillery castle preserves rare evidence for the manner in which such strongholds were constructed, evidence usually masked or destroyed in a completed structure. The poor siting and resulting failure to complete the artillery castle, coupled with its wealth of related historical documentation, also gives a rare insight into how fortifications were planned in this period and the degree of central control and bureaucracy involved.

Scope of works

The scope of the work involved in the pole replacement was outlined in an e-mail from Phil McMahon, Inspector of Ancient Monuments, to Paul Harris on 6 December 2012.

The option preferred by both English Heritage and Western Power Distribution for is to remove the existing pole and reuse the hole it has been pulled out of. This would be minimally intrusive and would not require any archaeological input.

However, if for some reason the pole cannot be pulled out, and a pit needs to be dug next to the existing pole location, the pit will need to be dug by hand, to the depth of the natural subsoil or bedrock under archaeological supervision and appropriately recorded (i.e. an archaeological watching brief).

Aims and objectives

The site specific aims and objectives of the archaeological watching brief are:

- To identify and record the presence/absence of archaeological remains.
- To determine the extent, condition, nature, character, date and significance of any archaeological remains encountered.
- To establish the nature of activity on the site.
- To identify any artefacts relating to the occupation of the site.
- To provide further information on the archaeological history of the site.

Working methods

All recording work will be undertaken according to the Institute for Archaeologists *Standards and Guidance for Archaeological Investigation and Recording*. Staff will follow the *IfA Code of Conduct* and *Code of Approved Practice for the Regulation of Contractual Arrangements in Archaeology*. The Institute for Archaeologists is the professional body for archaeologists working in the UK.

Methodology

The archaeological recording will involve five main phases of work:

- Desk-based assessment
- Fieldwork
- Archiving, analysis and interpretation.
- Report production and dissemination.
- Archive deposition.

Desk-base assessment

This will comprise background research to assess the archaeological potential of the area where the hole will be dug.

Fieldwork

An archaeologist shall be present during all excavations. The archaeologist will be authorised to direct the contractor and temporarily halt the work if archaeological remains are revealed. Any surviving remains which will be disturbed or destroyed will be archaeologically excavated and recorded.

Note: If significant archaeological deposits are exposed, all works will cease and a meeting will be convened with the Western Power Distribution and the Inspector of Ancient Monuments (IAM) to discuss the most appropriate way forwards.

Recording

- A location plan will be made, plotting the layout of the trench and pit onto the Ordnance Survey Landline at 1:200.
- The heights of all features identified will be tied into the Ordnance Datum.
- The location of features recorded during the watching brief will be plotted onto a drafting film overlay to the prepared location plan.
- All finds from significant stratified contexts will be accurately located on the location plan at an appropriate scale.
- All archaeological contexts will be described to a standard format linked to a continuous numbering sequence. All contexts recorded will be recorded via the medium of HE Projects pro forma context recording sheets.
- Registers of drawings, photographs, finds and contexts, samples will be maintained during the fieldwork.
- The excavated spoil will be carefully inspected for finds.

Site planning policy

- Site drawings (plans, sections, locations of finds) will be made by pencil (4H) on drafting film; all plans will be linked to the prepared location map and to the national grid; all drawings will include standard information: site details, personnel, date, scale and north-point.
- Site plans will be drawn at 1:20 and sections at 1:10, unless circumstances indicate that other scales would be more appropriate.
- Site drawings (plans and sections) will be digitised and converted into AutoCAD drawings.

Photographic record

- The photographic record will consist of both black and white prints with negatives and digital photos.
- It will include both general and feature specific photographs, a photographic scale (including north arrow) will be included in the case of detailed photographs.
- The photographic record shall be accompanied by a photographic register detailing as a minimum feature number, location, and direction of shot.

Finds

- All finds will be retained from each archaeological context excavated.
- All finds, where appropriate, shall be washed.
- All pottery, and other finds where appropriate, shall be marked with the site code and context number.
- This WSI includes a list of specialist consultants (see **Project Staff**), who might be required to conserve and/or report on finds, and advise or report on other aspects of the project including environmental sampling.
- The requirements for conservation and storage shall be agreed with the isles of Scilly Museum prior to the start of work, and confirmed in writing to the IAM.
- Finds work will be to accepted professional standards and adhere to the Institute of Field Archaeologists' *Guidelines for Finds Work* (IFA 2001a).

Sampling

- The English Heritage Advisor for Archaeological Science will be consulted if necessary (Vanessa Straker 0117 975 0689).
- The archaeologist undertaking the watching brief will assess the potential for environmental sampling.
- Environmental sampling will be guided by *Environmental Archaeology* (English Heritage Centre for Archaeology Guideline 2001/02).
- Other English Heritage guidance such *Geoarchaeology* (2004) and *Archaeometallurgy* (2001) will be consulted prior to the commencement of the project.

Archiving

During this phase the results of the fieldwork will be collated for archiving. This will involve the following tasks.

- Indexing of site drawings and photographs.
- Processing and analysis of artefacts and environmental samples, if appropriate.

Note: The requirements for Archiving and Reporting will be reviewed in the light of the fieldwork results.

Report production

An archive report will be produced which will describe the results of the watching brief. This will involve:

- Producing a descriptive text.
- Producing maps, scaled plans and section drawings.
- Selecting photographs.
- Report design.
- Report editing.
- Dissemination of the finished report.

The report will have the following contents:

- Summary
- Introduction - Background, aims, methods

- Results - A concise non-technical summary of the results
- Discussion - A discussion of archaeological findings in terms of both the site specific aims and the desk based research
- Specialists' reports - Specialists' reports or assessments as appropriate
- Archive - A summary of archive contents and date of deposition
- Summary sheet - An EH summary sheet shall also be completed and included within the report
- Appendix - Copy of the WSI
- Illustrations -
 - Location map
 - Site location plan
 - A drawing showing those areas examined as part of the archaeological watching
 - Copies of relevant historical cartography & plans
 - Plan and section drawings resulting from the archaeological recording.
 - Finds drawings (if appropriate)
 - Illustrative photographs

Note: All plans will be tied to the national grid.

Contingency for analysis and publication

In the event of significant archaeological remains being uncovered a contingency may be required for specialist assessment, analysis and full publication in an appropriate journal. The IAM will notify HE projects of such a need within four weeks of receipt of the report.

Report dissemination

The full report including all specialist assessments of artefact assemblages will be submitted within a length of time (but not exceeding six months) to be agreed between English Heritage and HE Projects, with copies supplied to English Heritage (two), Cornwall County Council Historic Environment Record and the Royal Cornwall Museum, River Street, Truro. A further digital copy shall be supplied on CD-ROM preferably in 'Adobe Acrobat' PDF format. A draft will initially be submitted to the Inspector of Ancient Monuments for comment.

OASIS entry

HE Projects will complete an entry for the project on OASIS, the English Heritage/Archaeological Data Service (ADS) online access to the index of archaeological investigations.

Archive deposition

- An ordered and integrated site archive will be prepared in accordance with *the Management of Research Projects in the Historic Environment (MoRPHE)* (English Heritage 2006) upon completion of the project. The requirements for archive storage shall be agreed with the Royal Cornwall Museum, Truro.
- The archive including a copy of the written report will be deposited with the Isles of Scilly Museum within two months of the completion of the full report and confirmed in writing with the IAM.
- A summary of the contents of the archive shall be supplied to the IAM.

Timetable

It is anticipated that the work will be carried out on 24 January 2013.

The archive report will be completed within 3 months of the end of the fieldwork. The deposition of the archive will be completed within 3 months of the completion of the archive report.

Monitoring and Signing Off Condition

Monitoring of the project will be carried out by the IAM. Monitoring points during the study will include:

- Approval of the WSI
- Completion of fieldwork
- Completion of archive report
- Deposition of the archive

Historic Environment Projects

Historic Environment Projects is the contracting arm of Historic Environment, Cornwall Council (HE). HE employs some 20 project staff with a broad range of expertise, undertaking around 100 projects each year.

HE is committed to conserving and enhancing the distinctiveness of the historic environment and heritage of Cornwall and the Isles of Scilly by providing clients with a number of services including:

- Conservation works to sites and monuments
- Conservation surveys and management plans
- Historic landscape characterisation
- Town surveys for conservation and regeneration
- Historic building surveys and analysis
- Maritime and coastal zone assessments
- Air photo mapping
- Excavations and watching briefs
- Assessments and evaluations
- Post-excavation analysis and publication
- Outreach: exhibitions, publication, presentations

Standards



HE is a Registered Organisation with the Institute for Archaeologists and follows their Standards and Code of Conduct.

As part of Cornwall Council, the HES has certification in BS9001 (Quality Management), BS14001 (Environmental Management), OHSAS18001 (Health, Safety and Welfare), Investors in People and Charter Mark.

Terms and conditions

Contract

HE Projects is part of Historic Environment, Cornwall Council. If accepted, the contract for this work will be between the client and Cornwall Council.

The views and recommendations expressed will be those of the HE projects team and will be presented in good faith on the basis of professional judgement and on information currently available.

Project staff

HE Projects Staff

The project will be managed by Senior Archaeologist **Charlie Johns BA, MIFA** who has special responsibility for projects on the Isles of Scilly.

The fieldwork will be undertaken by a HE Archaeologist **Carl Thorpe BSc**. Carl has extensive experience of working in Scilly and of carrying out watching briefs at Scheduled Monuments such as Tintagel and St Mawes Castles. Carl will also carry out initial finds processing, identification and cataloguing if required.

Specialists

John Allan MPhil – Medieval/post-medieval pottery specialist: John is based in Exeter. He is the leading authority on medieval and post-medieval pottery in south-west England and author of many publications. He will carry out the pottery assessment and analysis in the event of medieval or post-medieval pottery being recovered.

Henrietta Quinnell BA, MIFA, FSA – Prehistoric, Roman, post-Roman pottery: Henrietta is a freelance pottery specialist and the leading authority on prehistoric pottery in the south-west. She will carry out the pottery assessment and analysis in the event of prehistoric pottery being recovered.

Julie Jones BA – Archaeobotanist: An experienced freelance archaeobotanical specialist based in Bristol, Julie has carried out palaeoenvironmental assessments and analyses for numerous HES projects.

Dana Challinor MA, MSc – Freelance Charcoal Specialist: Dana's main area of expertise is charcoal analysis and wood species identification, but she also has experience with charred plant remains. For her Masters degree she specialised in Archaeobotany and received a distinction for her dissertation on charcoal in Bronze Age cremation burials. She has produced numerous assessment and evaluation reports, as well as reports for publication in journal and monograph formats and was formerly Head of the Environmental Department at Oxford Archaeology. She will undertake assessment and analysis of any suitable charcoal samples, including identification of samples suitable for radiocarbon dating.

Ralph Fyfe, PhD, Palynologist: Ralph is lecturer in environmental change in the School of Geography at the University of Plymouth. He has carried out numerous archaeological evaluations for a variety of organisations, including English Heritage, County Councils, National Parks and Archaeological Consultancies and will undertake assessment and analysis of pollen samples if required.

Laura Ratcliffe, Conservationist, BSc, The Royal Cornwall Museum, Truro: Laura graduated in Archeological Conservation from Cardiff University in 2001. Since then she has gained a wide variety of experience both on excavations and in a lab working on a wide variety of archaeological and historical material. She is currently based at the Royal Cornwall Museum where she is the museum's Collections Manager. Laura will carry out the assessment and conservation of pottery and metalwork on a free lance basis if required.

Radiocarbon Dating Laboratory, University of Waikato, New Zealand: Samples for radiocarbon dating will be sent the University of Waikato.

Copyright

Copyright of all material gathered as a result of the project will be reserved to the Historic Environment, Cornwall Council. Existing copyrights of external sources will be acknowledged where required.

Use of the material will be granted to the client.

Freedom of Information Act

As Cornwall Council is a public authority it is subject to the terms of the Freedom of Information Act 2000, which came into effect from 1st January 2005.

HE will ensure that all information arising from the project shall be held in strict confidence to the extent permitted under the Act. However, the Act permits information to be released under a public right of access (a "Request"). If such a Request is received HE may need to disclose any information it holds, unless it is excluded from disclosure under the Act.

Health and safety statement

HE follows the Council's *Statement of Safety Policy*. For more specific policy and guidelines HE uses the manual *Health and Safety in Field Archaeology* (2002) endorsed by the Standing Conference of Archaeological Unit Managers and also the Council for British Archaeology's Handbook No. 6 *Safety in Archaeological Field Work* (1989).

Prior to carrying out on-site work HE will carry out a Risk Assessment.

Insurance

As part of Cornwall Council, HE is covered by Public and Employers Liability Insurance and Professional Negligence Insurance.

References

- English Heritage 2001. Centre for Archaeology Guidelines: Archaeometallurgy, English Heritage
- English Heritage, 2004. Centre for Archaeology Guidelines: Environmental Archaeology, English Heritage
- English Heritage, 2004. Centre for Archaeology Guidelines: Geoarchaeology, English Heritage
- English Heritage, 2006. Management of Research Projects in the Historic Environment (MoRPHE), English Heritage
- IfA, 2001a. Standards and Guidance for Archaeological Watching Briefs, IfA
- IfA, 2001b. Standards and Guidance for the collection, documentation, conservation and research of archaeological materials, IfA

Charles Johns

Senior Archaeologist

18 December 2012

Historic Environment Projects

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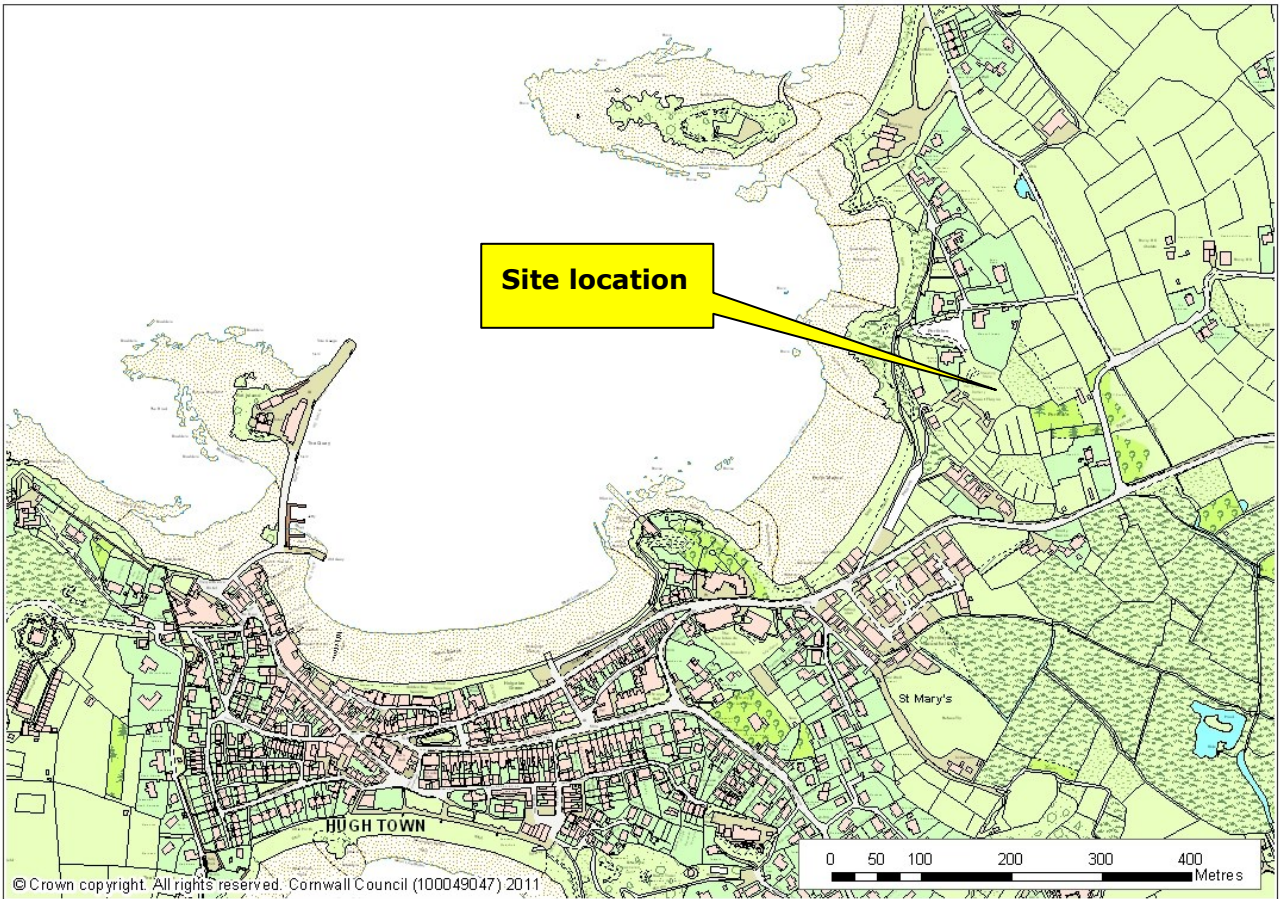


Figure 1. Site location

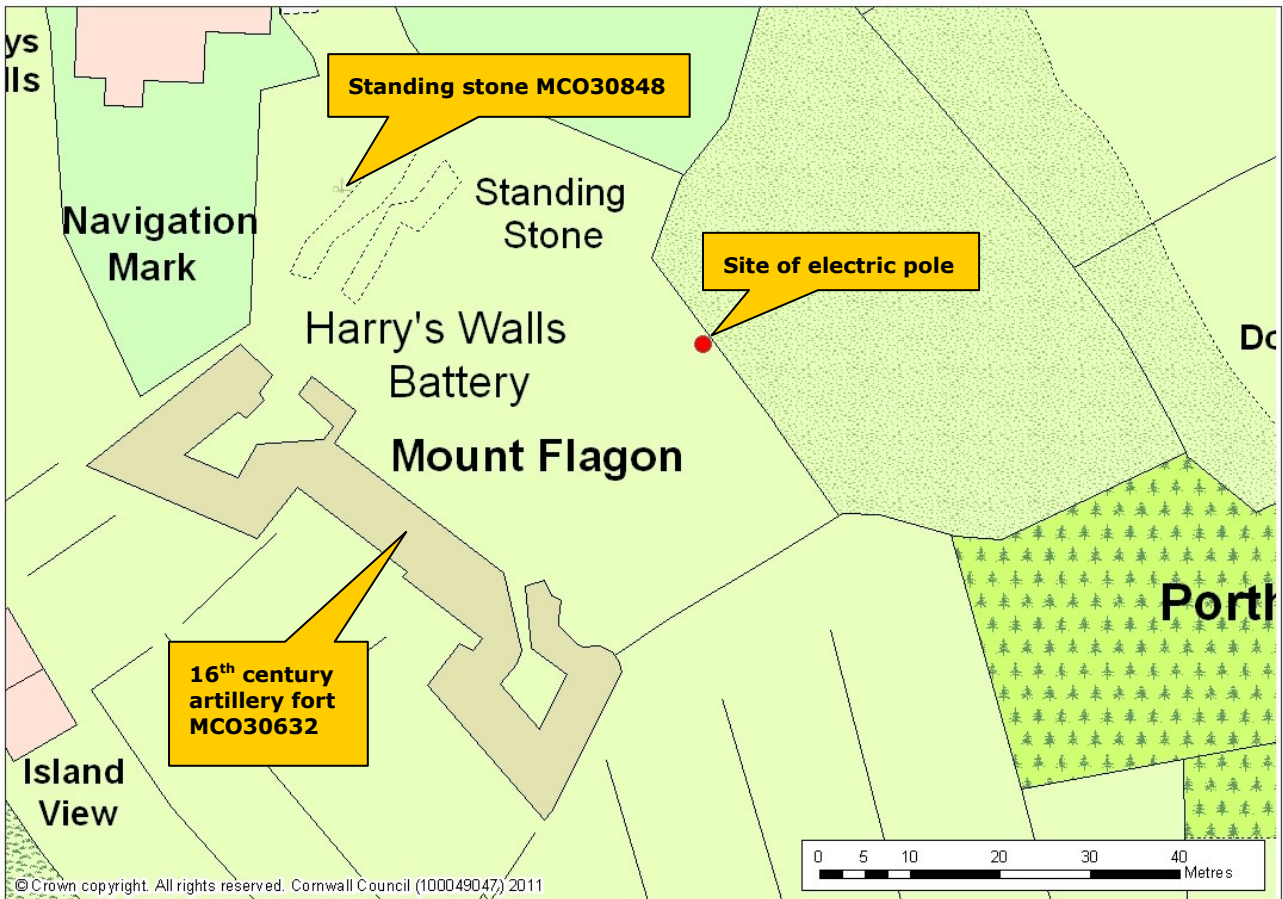


Figure 2. Site plan showing pole location and its relationship to adjacent site