Report No: 2012R074

Pendennis Castle Water leak 2012, Falmouth, Cornwall

Archaeological Watching Brief

Historic Environment Projects

Report No	Report Name	Report Author
2012R074	Pendennis Castle Water Leak 2012, Falmouth: Archaeological Watching Brief	C. M. Thorpe

Event Type

Watching Brief			

Client Organisation	Client Contact
English Heritage	Elizabeth Vause

Monuments (MonUID)

SM 10552	MCO25055				

Fieldwork dates (From)	(To)	(Created By)	(Create Date)
21/09/12	26/09/12	CMT	15/10/12

Location (postal address; or general location and parish)

Pendennis Castle

(Town – for urban sites)	(Postcode)
Falmouth	TR11 4LP

(Easting) X co-ord	(Northing) Y co-ord		
SW 82516	31673		

List of Figures

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Summary

HE Projects undertook an archaeolog ical watching brief in September 2012 during ground works for the investigation of a water leak within the moat at Pendennis Castle, Cornwall, which is part of Schedu led Monument 10552: Pe ndennis Peninsula Fortifications. The watching brief which was centred around the Maritime Rescue Co-ordination Centre (HM Coastguard) showed that the gr ound works had little impact on any archaeology with only a couple of (probably Second World War) ar moured communication cables being recorded.

Project background

In September 2012 HE Projects was commissioned by Elizabeth Va use, English Heritage Conservation Maintenance manager for the We stern Territory to undertake a watc hing brief during ground works for the investigation of a water leak in the moat at Pendennis Castle, Cornwall, which is part of Sche duled Monument 10552: Pendennis Peninsula Fortifications. The watching brief was required as a con dition of Scheduled Monument Consent for the works.

Location and setting

Pendennis Castle and its twin, St Mawes Castle, were built between 1539 and 1543 as part of Henry VIII's national defence policy. The castles were utilitarian artillery towers reinforced by the waterline blockhouses at Little Dennis and St Mawes, their purpose was to protect the mile-wide inlet of Carrick Roads (Figs 1 and 2).

Between 1597 and 1599, following a review of the defences by Sir Walter Raleigh during the hostilities with Spain, the Henrician keep was strengthened by the addition of the Italianate bastioned enceinte designed by the military engineer Paul Ivey.

The defences and armaments at Pendennis were periodically upgraded in time of war. By the time of World War 1 the main long range defences of Pendennis were at Half Moon Battery, first constructed *c*1793, situated south o f the Ca stle, facing seawards and working in tandem with the long-range battery at St Anthony Head.

In 1956 co astal defence was aba ndoned and the Castle given to the Ministry of Public Buildings and Works (now English Heritage). Pendennis Castle is part of Scheduled Monument Area, Pendennis Peninsula Fortifications 10552. The Cornwall and Scilly Historic Environment Record - Primary Record Number (PRN) is 18709.

Potential for buried archaeology

Given that the site is within part of Scheduled Monument 10552: Pendennis Peninsula Fortifications (Figs 1, and 2) there was potential for post-medieval and possibly earlier sites to su rvive within the proj ect area an d for the survival of unrecorded buried archaeological remains and artefacts of all periods.

Site description

The water main ran within the moat on the western side of the castl e from a point jus t north of the main ent rance (SW 82294 31881) down to the souther n limit of the enceinte (SW 82452 3 1724) where it exited the moat, r unning west of the Half Moon Battery before feeding the Maritime Rescue Co-ordination Centre (HM Coastguard) at SW 82522 31668.

The pipeline dropped from 50m OD at the northern end to 35m OD at the Coastguard station. The underlying geology consists of Devonian interbedded sandstones, and argillaceous rocks of the Portscatho Formation (BGS sheet 352).

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 castle.
- To provide further information on the archaeological history of the castle.

Working methods

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

The first stage of the work involved the excavation of several test pits along the length of the pipeline, all being dug by hand under archaeological observation to locate the source of the leak. The test pits were then inspected by the archaeologist.

The locations of these test pits were plotted onto a site plan at a scale of 1:1000 based on an Ordnance Survey map of the same scale, being measured in from fixed locatable points on the ground marked on the map. Trench profiles were noted recording the nature of soil depth, layers present, and any archaeology observed.

Once the leak had been located, a replacement pipeline was laid within a trench *circa* 30m long to bridge the point of the leak. The digging of this trench by mini digger was again done under archaeological observation with various soil profiles and any archaeology encountered noted along its length.

Results

Initial investigation had suggested that the water leak was at the southern end of the pipeline close to the Maritime Rescue Co-ordination Centre (HM Coastguard) so test pitting was commenced at that end in order to locate the pipeline and to isolate the area of the leak.

Three test pits were excavated and recorded.

Test Pit A (Fig 3)

Depth	Thickness	Description	Interpretation
0m – 0.05m	0.05m	Grass, roots and topsoil	Topsoil
0.05m – 0.13m	0.08m	Grey-brown clay loam	Subsoil
0.13m – 0.40m	0.27m	Grey-brown clay with large angular granite blocks brought in from off site (Quarried rubble dumped to provide soakaway)	Fill of soakaway or French Drain
0.40m - 0.45m	0.05m	Light grey-brown granitic sand revealed in NW corner of trench.	Fill of pipe trench.
At base	At base	Yellow, brown-grey clay with builders / demolition rubble	Landscaping of hillside?

This pit was placed close to the south west corner of the Maritime Rescue Co-ordination Centre.

Concrete block work in the north west corner forms part of chamber for stopcock for pipeline, metal cover of which had been buried under 0.05m of topsoil. No archaeology was encountered and no artefacts recovered.

Test Pit B (Fig 3)

Depth	Thickness	Description	Interpretation
0m – 0.05m	0.05m	Grass, roots and topsoil	Topsoil
0.05m – 0.15m	0.10m	Grey-brown clay loam	Subsoil
0.15m – 0.35m	0.20m	Grey – brown clay	Deposit
0.35m – 0.60m	0.25m	Yellow, grey-brown clay with concrete fragments and building rubble. Infill of trench.	Fill of pipe trench

This test pit was alongside the hedge some 1.5m to the north west of Trench A. It was dug to investigate an apparent blockage within the pipeline detected by wire probe. This proved to be a 'T' junction within the water pipeline. No archaeology was recorded and no artefacts recovered.

Test Pit C. (Fig 3)

Depth	Thickness	Description	Interpretation
0m – 0.05m	0.05m	Grass, roots and topsoil	Topsoil
0.05m – 0.15m	0.10m	Grey-brown clay loam	Subsoil
0.15m – 0.25m	0.10m	Grey – brown clay with numerous shillet fragments	Deposit
0.25m – 0.80m	0.55m	Yellow-brown, grey clay with some stone and builders rubble	Backfill of pipe trench
0.80m – 0.90m	0.10m	Dark brown clay loam	Deposit
0.90m – 1.40m	0.50m	Light grey-brown granite sand	Fill of pipe trench

This test pit was *circa* 30m north west of test pit B. It was dug to investigate another blockage within pipeline detected by wire probe. This proved to be a stopcock set very deep in the ground and buried nearly 1m below the current ground surface. It was not set within any sort of chamber. No archaeology was recorded or artefacts recovered.

When this stopcock was turned off it was found that the leak also ceased, indicating that the leak lay between Test Pits C and B. It was decided that rather than searching for the exact point of the leak it would be more effective to lay a new section of pipeline between these two points. As a result a *circa* 30m long trench which was 0.50m wide 0.50m deep was dug to connect them.

Five sections were recorded along the length of the trench two of which are presented here to illustrate the nature of the ground encountered (Fig 3). Details of the remainder can be found in the site archive.

Section 1. (Fig 3)

Depth	Thickness	Description	Interpretation
0m – 0.05m	0.05m	Grass, roots and topsoil	Topsoil
0.05m – 0.15m	0.10m	Grey-brown clay loam	Subsoil
0.15m – 0.40m	0.25m	Red, Grey-brown clay with shillet rubble	Deposit

0.40m – 0.50m	0.10m	Rotten shillet bedrock	Natural Bedrock

Section 5. (Fig 3)

Depth	Thickness	Description	Interpretation
0m – 0.05m	0.05m	Grass, roots and topsoil	Topsoil
0.05m – 0.15m	0.10m	Grey-brown clay loam	Subsoil
0.15m – 0.30m	0.15m	Grey-brown clay with shillet rubble	Deposit
0.30m – 0.50m	0.20m	Yellow, brown-grey clay with builders / demolition rubble	Landscaping of hillside?

It was seen that the general nature of the soil profile did not vary greatly along the whole length of the area trenched with the depths being fairly consistent.

Very few artefacts were observed within the topsoil, these were all modern in origin including china, plastic, fencing wire and posts so were not retained.

Some 3m north of test pit B two parallel iron pipes (*c* 0.30m apart) were seen crossing the line of the trench in a roughly west to east direction (Fig 4). These were actually armoured cable ducts possibly laid during the Second World War and probably connecting the main castle with sites situated on Pendennis Point, or Crab Quay.

No other features of archaeological interest were seen over the area of the site and it was observed that the intervention had very little or no impact on any significant buried remains.

References

British Geological Survey 1974, 1:50000 map Sheet 352 Falmouth

Johns, C, 2012. *Scheduled Monument 10552: Pendennis Peninsula Fortifications: Written Scheme of Investigation for Archaeological Watching Brief during Groundworks for Water Leak Repairs at Pendennis Castle.* He Projects, Truro

Project archive

The HE project number is **HEXQPR146190**

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 (**HEXQPR146190**).
2. Field plans and copies of historic maps stored in an A2-size plastic envelope (GRE738/5-6).
3. Digital photographs stored in the directory: R:\Historic Environment (Images)\SITES.M-P\PENDENNIS\Pendennis Castle water leak WB 21st September 2012
4. English Heritage/ADS OASIS online reference: cornwall2- 136204
5. This report text is held in digital form as: G:\TWE\Waste & Env\Strat Waste & Land\Historic Environment\Projects\Sites\Sites P\PENDENNIS CASTLE\Pendennis Castle Water Leak Watching Brief 2012 HEXQPR146190\Report

Appendix 1. Scheduled Monument 10552: Pendennis Peninsula Fortifications: Written Scheme of Investigation for Archaeological Watching Brief during Groundworks for Water Leak Repairs at Pendennis Castle

Client: English Heritage
Client contact: Elizabeth Vause
Client tel: 07768 511531
Client email: ElizabethVause@english-heritage.org.uk

Project background

Elizabeth Vause, English Heritage Conservation Maintenance manager for the Western Territory has asked Historic Environment Projects (HE Projects) to provide a Written Scheme of Investigation (WSI) for an archaeological watching brief during groundworks for the investigation of a water leak in the moat at Pendennis Castle, Cornwall, part of Scheduled Monument 10552: Pendennis Peninsula Fortifications. It is understood that this WSI will support the application for Scheduled Monument Consent for the works.

Archaeological and historical background

Pendennis Castle (NGR SW 824 318) and its twin, St Mawes Castle, were built between 1539 and 1543 as part of Henry VIII's national defence policy. The castles were utilitarian artillery towers reinforced by the waterline blockhouses at Little Dennis and St Mawes, their purpose was to protect the mile-wide inlet of Carrick Roads.

Between 1597 and 1599, following a review of the defences by Sir Walter Raleigh during the hostilities with Spain, the Henrician keep was strengthened by the addition of the Italianate bastioned enceinte designed by the military engineer Paul Ivey.

The defences and armaments at Pendennis were periodically upgraded in time of war. By the time of World War 1 the main long range defences of Pendennis were at Half Moon Battery, first constructed *c*1793, situated south of the Castle, facing seawards and working in tandem with the long-range battery at St Anthony Head.

In 1956 coastal defence was abandoned and the Castle given to the Ministry of Public Buildings and Works (now English Heritage). Pendennis Castle is part of Scheduled Monument Area, Pendennis Peninsula Fortifications 10552. The Cornwall and Scilly Historic Environment Record - Primary Record Number (PRN) is 18709.

Scope of works

Five trial pits will be hand excavated by Quadron Services Ltd or Pipeworks along the line of the water main to determine the source of the leak.

Aims and objectives

The site specific aims and objectives 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 castle.
- To provide further information on the archaeological history of the castle.

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 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 trial pits 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 by the groundworks shall be archaeologically excavated and recorded.

Note: If significant archaeological deposits are exposed, all works will cease and a meeting will be convened with the Property Supervisor 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 Royal Cornwall Museum, Truro, 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 Royal Cornwall Museum, Truro 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.

- If there is a documentary archive only it will be deposited initially at ReStore PLC, Liskeard and in due course (when space permits) at Cornwall Record Office.

Timetable

It is anticipated that the work will be carried out in the week beginning 17 September 2012.

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 extensive experience of managing archaeological projects and carrying out watching briefs at Pendennis Castle.

The fieldwork will be undertaken by a suitably experienced HE archaeologist.

Initial finds processing, identification and cataloguing will be carried out by Carl Thorpe BSc, HES finds archaeologist.

Specialists

John Allan MPhil – Medieval/post-medieval pottery specialist: John works for the Exeter Archaeological Field Unit. 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 freelance 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

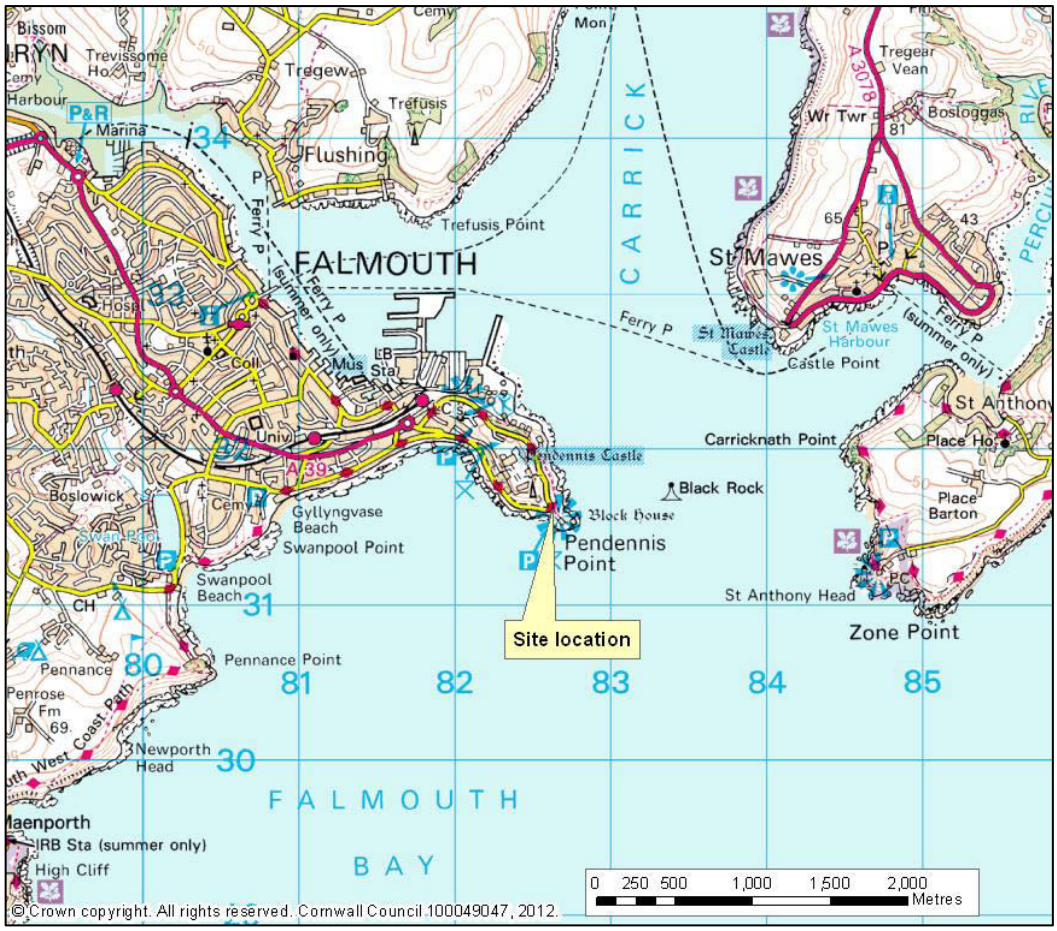

Fig 1 Site location

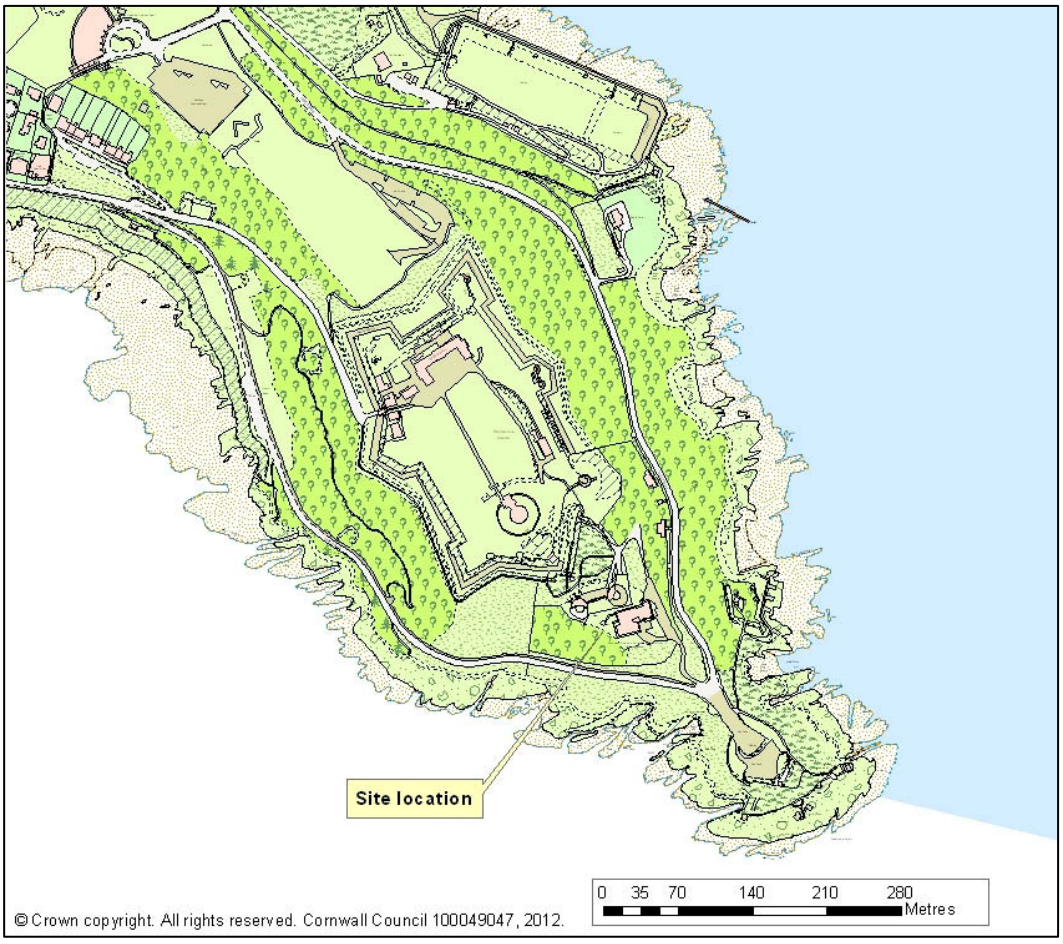

Fig 2 Detailed site location

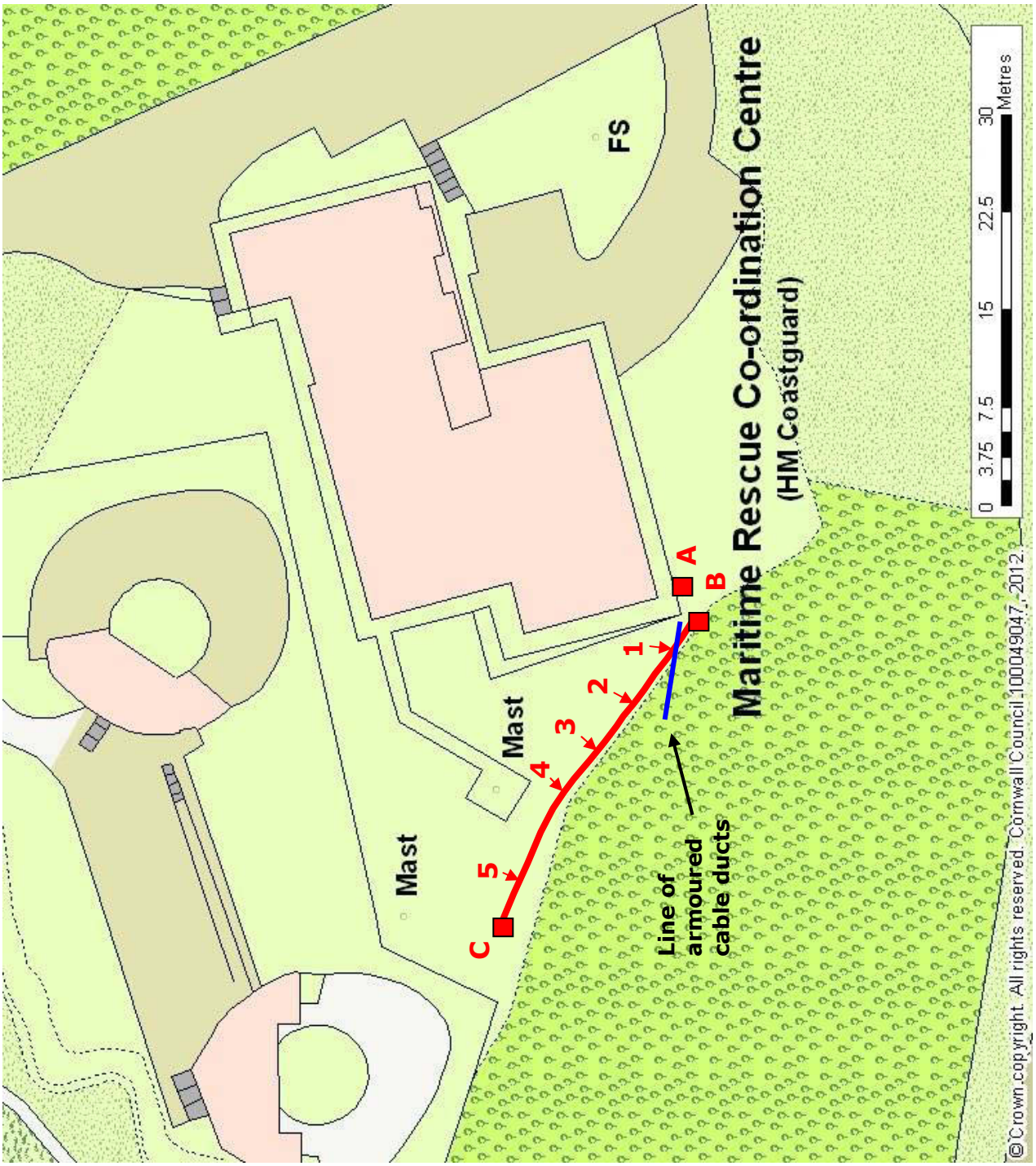

Fig 3 Plan showing location of Test pits, Water pipe trench, and position of Recorded sections

Fig 4 Armoured cable ducts at southern end of trench.