



Warbstow Bury, Cornwall Archaeological watching brief during path construction works



Cornwall Archaeological Unit

Warbstow Bury, Cornwall

Archaeological watching brief during path construction works

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This work was commissioned by Coralie Barrow, Countryside Officer with Cornwall Council's Environment Directorate, and carried out by Cornwall Archaeological Unit, Cornwall Council.

Support was provided by Gareth Cann, Area 5 PROW and Countryside Ranger with Cormac Solutions; the drainage work was carried out under the leadership of Tom David of The Conservation Volunteers.

The CAU Project Manager was Jacky Nowakowski.

The views and recommendations expressed in this report are those of Cornwall Archaeological Unit and are presented in good faith on the basis of professional judgement and on information currently available.

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.



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Cover illustration

The inner rampart of Warbstow Bury: an outstandingly well preserved hillfort in north-east Cornwall

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Fig 14 The new path and drainage trench (on the right) from the north-west. Rushes, growing in the waterlogged ditch, can be seen in the bottom right corner of the picture.

Abbreviations

CAU	Cornwall Archaeological Unit
CIfA	Chartered Institute for Archaeologists
CRO	Cornwall Record Office
EH	English Heritage
HER	Cornwall and the Isles of Scilly Historic Environment Record
HAP	Historic and Archaeological Features Protection
HLS	Higher level Stewardship
MCO	Monument number in Cornwall HER
NE	Natural England
NGR	National Grid Reference
OD	Ordnance Datum – height above mean sea level at Newlyn
OS	Ordnance Survey
RIC	Royal Institution of Cornwall
TCV	The Conservation Volunteers
WSI	Written Scheme of Investigation

1 Summary

A watching brief was carried out by Cornwall Archaeological Unit when a surfaced path and associated drainage trench were constructed at a point on the south-east perimeter of Warbstow Bury hillfort, at the main point of visitor access. Extending over an area of approximately 7.5 ha and with the remains of three ramparts, one of early prehistoric origin, Warbstow Bury is the most substantial and significant hillfort in north Cornwall. Visitor access utilises an original entrance to the hillfort and the drainage trench was to be cut across the line of a counterscarp bank through the outer rampart. In the event, no significant features were encountered, the route having been eroded by water flowing from the ditch and by its continued use from prehistoric to modern times. This work was carried out in November 2014.

Warbstow Bury is a Scheduled Monument, Cornwall number 86; Unified Designation number 1006710. It is located at SX 201 907 and is number 2156 in the Cornwall Historic Environment Record (HER).



Fig 1 Location map.

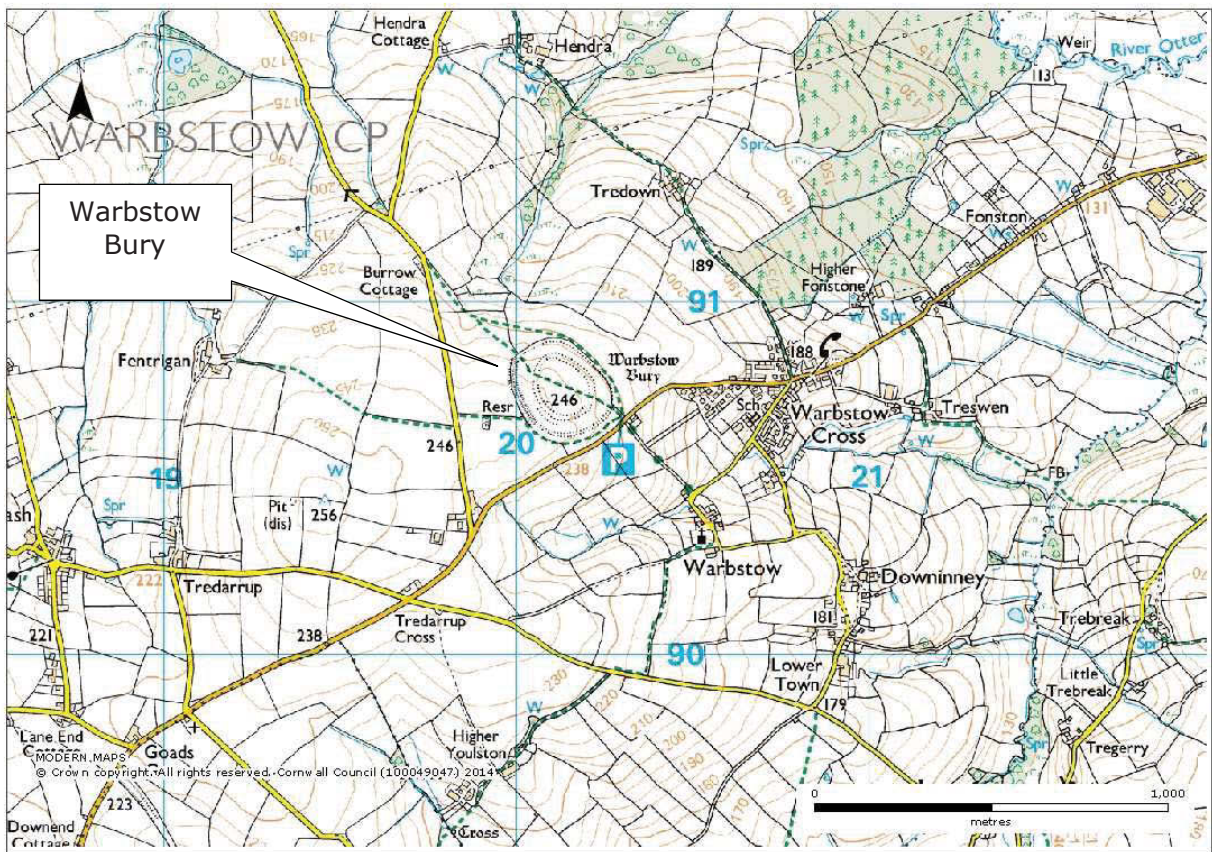


Fig 2 Location map and site.

2 Introduction

2.1 Project background

Warbstow Bury is a large multivallate hillfort, situated above the headwaters of the River Ottery. It survives as an oval enclosed area of approximately 7.5 hectares defined by two concentric, massively-constructed, widely spaced ramparts up to 5.8m high with ditches up to 2.7m deep and an outer counterscarp bank. Between these main ramparts, and confined to the south-western half of the hillfort, lies a slighter middle rampart and ditch. The outer rampart has two simple entrance gaps to the north-west and south-east and the inner rampart has two corresponding inturned entrances. In the centre of the hillfort is ridge and furrow and a large pillow mound which survives as a rectangular mound measuring up to 22m long, 10m wide and 0.6m high with buried side ditches. The hillfort is a Scheduled Monument, number 1006710.

Warbstow Bury entered a Higher Level Stewardship agreement (HLS) in 2012. The main objective of the agreement is the improved management of the hillfort. To date, work towards this end has involved scrub clearance and bracken spraying, while stocking levels have been adjusted to reduce the threat of animal erosion. A section of fence has been moved out from the edge of the monument to provide space for visitors to move around the site without walking on the earthworks.

The final phase of capital work associated with the HLS agreement has been to improve drainage and resurface the main path onto the site from the car park on the south-east (Fig 3), to make access easier and help prevent erosion.

As this work was to involve ground disturbance on the Scheduled Monument, an archaeological watching brief was requested by English Heritage (EH) as a condition of the Scheduled Monument Consent. Cornwall Archaeological Unit was commissioned by Coralie Barrow of Cornwall Council to undertake this watching brief.

2.2 Aims

As stated in the project design (given in full in appendix 2), the principal aim of the watching brief was to carry out archaeological monitoring during construction works and:

- To record archaeological features, layers and finds affected by the works.
- To establish the extent, condition, significance and character of any archaeological resource disturbed during the works.
- To establish the presence/absence of archaeological remains.
- To identify any artefacts relating to the occupation of the site.
- Ensure that contractors undertaking the work are aware of the significance of the monument.
- Ensure that there is no disturbance to the monument in the process of undertaking the work, other than that for which Scheduled Monument Consent has been granted.
- Discuss and agree with the English Heritage Heritage at Risk Project Officer any necessary variation to the agreed work if required.
- The dissemination and publication of the results.
- The long-term conservation of the project archive in appropriate conditions.

In particular, a key objective of all elements of the project was to investigate and recover evidence in the form of artefacts, structures and deposits associated with prehistoric activity, to enhance our knowledge of the extent, form and potential of the site as a whole.

2.3 Methods

The ground-works for the new track and drain were to be undertaken using a mini-digger and carried out under archaeological supervision. The open drainage ditches were then to be inspected by the archaeologist and archaeologically recorded as appropriate.

The recording methodology proposed and subsequently agreed by EH is described in more detail in the Written Scheme of Investigation (WSI) in appendix 2.

3 Location and setting

Warbstow Bury is located in north-east Cornwall, just under 10 miles (15.76 km) due south of Bude, on the headwaters of the River Ottery (Figs 1 and 2). It lies on a gentle north-east facing slope on high ground forming the periphery of Bodmin Moor, at 250 m OD, in a location which gives it remarkable vistas to the north, east, and south. From here it is possible to look down the Tamar Valley to Kit Hill and beyond to Plymouth Sound, across the Tamar valley and the Devon/Cornwall border to Dartmoor, north to cliffs at Morwenstow and north-east over the Bristol Channel, with Lundy in prospect on a fine clear day.

The hillfort is on mudstones and siltstones of the Carboniferous Boscastle Formation, with freely draining slightly acidic loamy soils.

4 Designations

4.1 National

Warbstow Bury is a Scheduled Monument, Cornwall number 86 (Unified Designation number 1006710).

There are no other environmental designations affecting the monument or the area, other than the fact that the monument is in a Higher Level Stewardship agreement.

5 Condition of the monument prior to undertaking works

Warbstow Bury has been assessed by English Heritage as being at high risk of damage.

This assessment is primarily related to the extent of bracken, bramble and scrub growth on the site, allied with some stock erosion. In addition there has been significant muddiness and erosion in the main entrance on the south-east, where water flowing from the outer rampart's ditch runs down the main path giving access to the site from a small car park. It is uncertain whether this water is from a spring in the ditch or simply due to the fact that water which collects in the ditches runs around to and exits from the ditch at this point because it is at the lowest elevation of the entire rampart circuit. Either way, the path here can be extremely muddy and unpleasant during the winter months (Fig 6). For these reasons, the monument is included on the Heritage at Risk register, is a priority for management for both EH and for Natural England (NE), and entered a Higher Level Stewardship agreement (HLS) in 2012. Over the hillfort as a whole, there has since been extensive gorse clearance and bracken spraying; and the work described in this report took place in the winter of 2014, as the final phase of a Historic and Archaeological Protection (HAP) plan.

6 The path and drainage works

The new path and drainage works at Warbstow Bury were undertaken with funding from Natural England (NE) as part of a Historic and Archaeological Protection Plan. The

aim was to improve drainage and create a new path surface from the car park on the south-east side of the monument, as far as the outer rampart (Fig 5).

Drawings showing the construction of the path and drainage are shown in Fig 4. In effect, this involved:

- Cutting a trench 0.35 m deep and on average 0.3 m wide from the point where water flowed from the ditch onto the path, and down to the car park. This was done using a mini-digger, with spoil being put into a small dumper and then totally removed from site.
- Placing a perforated pipe in the bottom of the trench, connected to the main drain in the car park, and topping the trench up with granite chippings.
- Laying a new path, 1.5 m wide and 25 m long, edged with timber and surfaced with stone from Penhill Quarry north of Bude to a total depth of 5 ½ inches (14 cm), laid directly on the ground surface, to the east of the drainage trench.

The work was carried out on 12th and 13th of November 2014 by Tom David and James Denny of The Conservation Volunteers (TCV). The weather was fine and the ground dry at the time the work was undertaken so that ground disturbance was associated with the work was minimal.

The completed new path was inspected on 3rd December. It is comfortable and easy to walk on and leads uphill from the car park to a point beyond the wet ditch and onto well-drained turf (Figs 13 and 14). The work has been neatly done, and the site left tidy. At the moment the path looks a little stark, but no doubt will blend in after a few months, as the grass grows back around it.

7 Archaeological results

7.1 Consent

Because of their sensitive location, and because the trench and path lie within the scheduled area associated with Warbstow Bury hillfort, Scheduled Monument Consent was obtained by Coralie Barrow in advance of the site works.

7.2 The location of the path and drain and their relationship to the fort

A plan of Warbstow Bury hillfort made by English Heritage in 2013 (Edwards 2014; see Fig 5) shows that the line of the new path and trench cuts at right angles across the line of a counterscarp bank associated with the hillfort's outer rampart. The path and drain also follow the line of an original entrance to the fort, where a causeway through the bank and ditch might be expected. Clearly therefore, this is a sensitive location, in which gateway structures, road metalling and other features associated with the hillfort's use might be expected. However, the plan also shows that at the exit from the fort to the car park, there is a sloping holloway bounded on the south-west by a steep scarp and on the north-east by Cornish hedge. The holloway associated with this is substantial, and up to nearly a metre deep, although its depth may partly be due to the fact that the path cuts through the counterscarp (as emphasised by the natural contours as the land falls to the south). As well as being an Iron Age entrance and the main route used for modern access to the fort, this path represents a historic way onto the hillfort from Warbstow Church and the village of Downinney – a manorial centre in medieval times (Edwards 2013, 6, 26-7). Ridge and furrow and a pillow mound in the centre of the fort bear clear testimony to continued use of the site during medieval times and apart from this, the site will have been used for pasturing stock. During World War 2 it was the site of a Home Guards' look-out (HER 57942). So, although the path might be expected to disturb very sensitive remains associated with the hillfort, it is also possible that any remains will have been disturbed by erosion associated with the holloway as well as water runoff from the ditch.

Nonetheless, given the extreme importance and sensitivity of the site it was essential that a watching brief should be carried out when the trench was cut.

7.3 Watching brief results

Ground disturbance caused by the trenching this was minimised by careful operation on a dry day. As noted above, the trench itself was 25 m long, 0.3 m wide and 0.35 m deep (Figs 4 and 5) After the trench had been cut, the north-east side was examined from south to north. A tape was laid out along the side of the trench and the stratigraphy visible in the side of the trench was photographed and recorded by description.

In summary, no significant features were seen in the trench, which was cut through turf and a thin, yellow-brown shillety topsoil layer down onto subsoil in the lower half of the trench and stone in the uphill, north-west half.

At the upper north-west end of the trench, a very thin turf and top-soil lay directly above shillet (the slatey local stone). Here, topsoil is assumed to have been almost completely removed by erosion in the area where water flows from the ditch; and much of the stone here was black-stained – presumably from iron (Fig 9). Reflecting this, the spoil arising from the trench contained a much greater amount of stone in its upper half.

In the lower, south-eastern half of the trench, towards the car park, the base of the trench was cut into subsoil. At the bottom end, a couple of shallow (approximately 10 cm high) vertical cuts were seen in the subsoil, at 2.8 m and 6.8 m from the gate (see Fig 10).

The only 'find' was a small piece of stone approximately 3 cm long. This was picked up from the spoil excavated from the drainage trench about half way along its length. It is sandstone, bright red from iron staining, incorporating small pieces of slate and a thin vein of quartz. Although likely to be from the same overall geological formation as the bedrock at Warbstow, it is not native to the site and data from boreholes drilled in the near vicinity contained nothing resembling it

(<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>).

7.4 Interpretation

There is no evident reason for the cuts in the subsoil seen in the lower part of the trench. The best that can be suggested is that they may represent cuts made by a digger when the site was first acquired by North Cornwall District Council and the car park was laid out approximately 25 years ago. In the upper part of the trench, the stoniness may represent bedrock, or alternatively, since the trench is cutting through the counterscarp bank of the outer rampart, the amount of stone may reflect loose stone associated with this. No features likely to be associated with the hillfort were identified along the line of the trench and no finds of any sort made.

8 Conclusions/discussion

The path and drain appear to have been effective in limiting wetness at the main access point to Warbstow Bury hillfort. In the long-term, this should reduce erosion and therefore be of much benefit for the site.

Despite the fact that the drain was cut at a potentially sensitive location, in a probable original entranceway to the hillfort through its outer rampart, no features associated with the entrance were observed. This may be because continued use of the entrance since the fort was first constructed, allied with wetness caused by water draining from the ditch at this point, have truncated the ground and removed any relevant evidence.

9 References

9.1 Publications

Edwards, Z, 2014. *Warbstow Bury, Warbstow, Cornwall: archaeological survey report*, English Heritage Research Report No 3-2014

9.2 Websites

<http://www.heritagegateway.org.uk/gateway/> English Heritage's online database of Sites and Monuments Records, and Listed Buildings

http://services.english-heritage.org.uk/ResearchReportsPdfs/003_2014WEB.pdf

<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

10 Project archive

The CAU project number is **146430**

The project's documentary, digital, photographic and drawn archive is maintained by Cornwall Archaeological Unit, Cornwall Council, Fal Building, County Hall, Treyew Road, Truro, TR1 3AY.

English Heritage/ADS OASIS online reference: cornwall2-202290

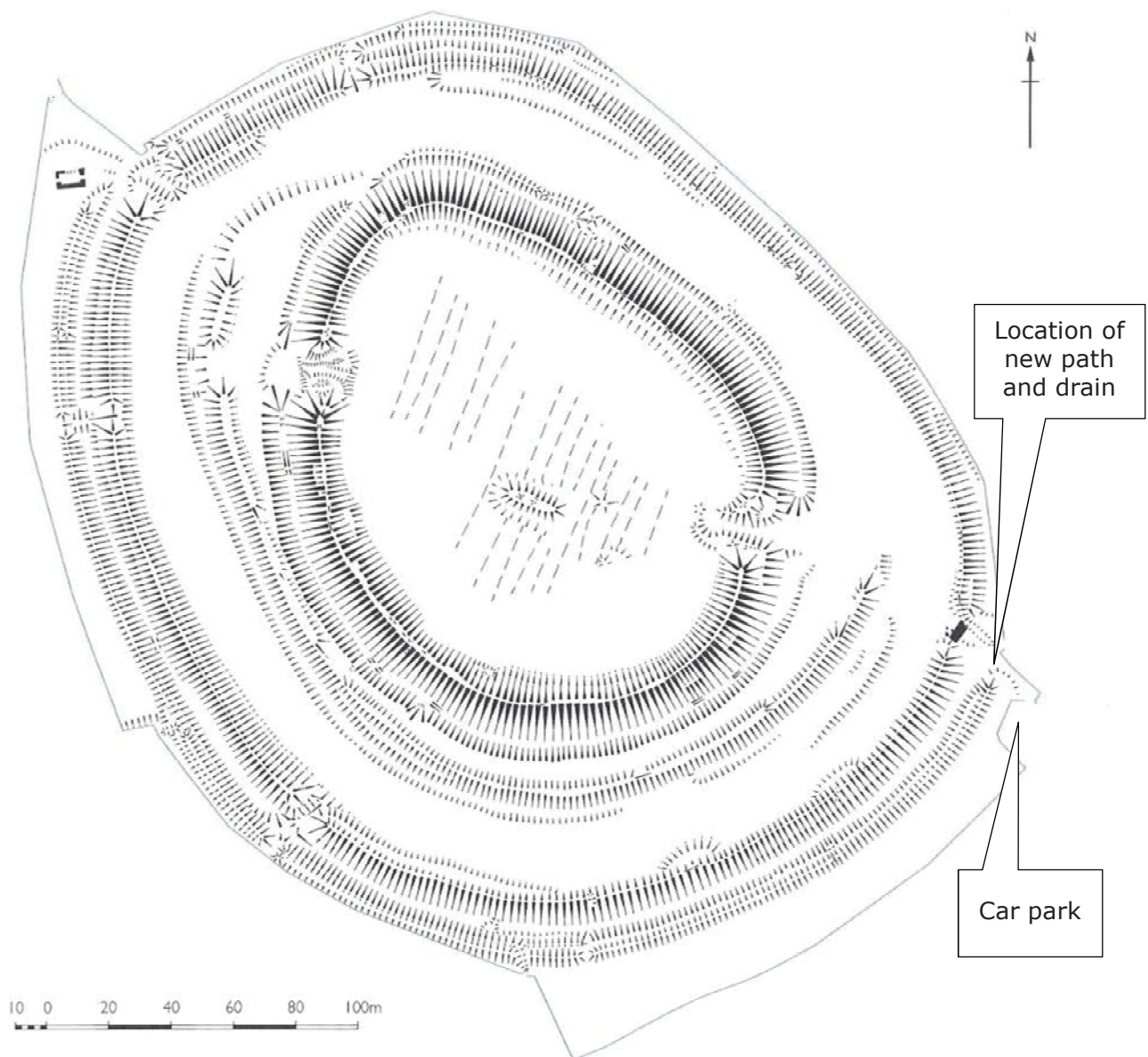


Fig 3 English Heritage plan of Warbstow Bury, showing the location of the new path and drain (Edwards 2014).

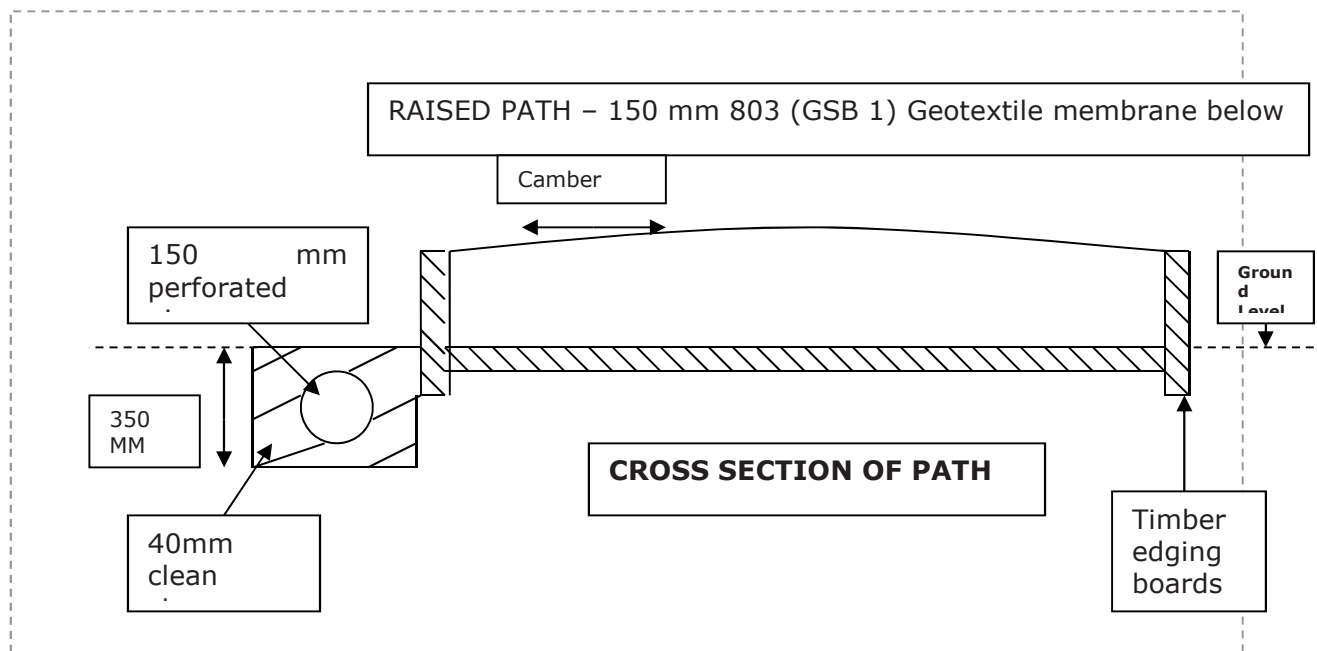


Fig 4 The cross-section design for the new raised path and drain at the entrance to Warbstow Bury.

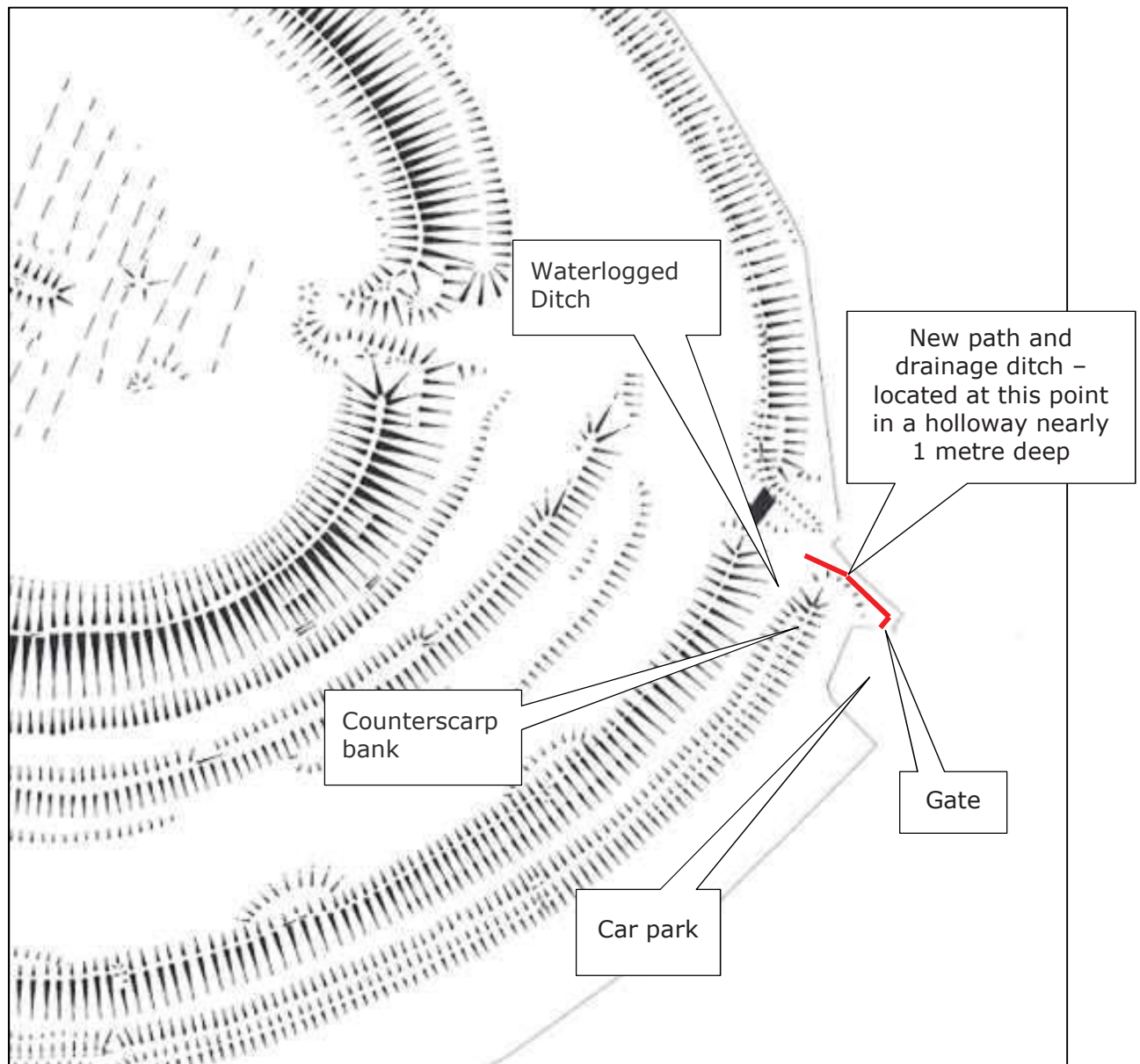


Fig 5 English Heritage plan showing, in red, the location of the path and drainage trench in more detail.

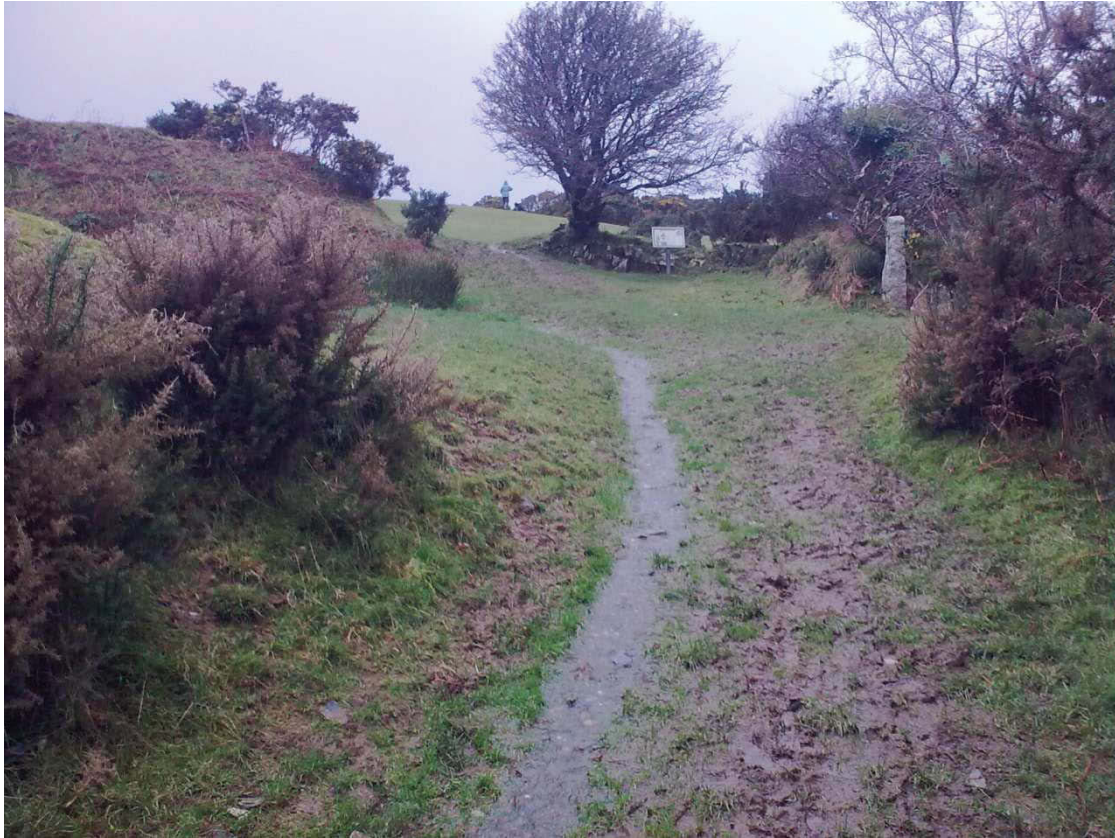


Fig 6 Path from car park to centre of hillfort in December 2011, before the new path and drain were installed. Above, looking from the car park towards the outer rampart; the small stream in the centre is water flowing from the rampart. Below, the rushes lie within the outer rampart's ditch, from which the stream can be seen flowing downhill towards the car park



New path and drainage ditch. The trench has been excavated and the spoil, on the site of the path, has not yet been removed.

Rush-filled and waterlogged ditch of hilfort

Fig 7 General view from the north-west, showing the location of the new drainage trench and path. The mini-digger is just inside the car park.



Fig 8 View of the excavated drainage ditch, from the north-west. The spoil on the left (west) side of the trench, on the site of the new path, has yet to be removed.



Fig 9 Stone and very thin turf revealed near the north-west end of the drainage trench, at the point where water flows from the ditch. Here much of the stone is black from iron-staining associated with the waterlogged conditions.



Cut in
subsoil

Fig 10 Cut in subsoil revealed in the lower part of the drainage trench, 2.8 m from the car park's gate.



Fig 11 Drainage trench with perforated drainage pipe in position, being infilled with granite chippings.



Fig 12 Drainage trench infilled with granite chippings; spoil being removed prior to construction of path.



Fig 13 The new path with the drainage trench (on the left) from the south-east, from the car park up towards the hillfort, whose outer rampart can be seen on the left.



Fig 14 The new path and drainage trench (on the right) from the north-west. Rushes, growing in the waterlogged ditch, can be seen in the bottom right corner of the picture.

Appendix 1: Project brief

Brief for archaeological watching brief at Warbstow Bury hillfort, Warbstow, Cornwall

Introduction

Warbstow Bury near Bude in north Cornwall is a large, well preserved, multivallate hillfort located on a high commanding spur at the heads of two tributaries to the River Ottery in north-east Cornwall. The hillfort, defined by two concentric, massively-constructed, widely spaced ramparts, encloses an area of approximately 7.5 hectares. Between these two main ramparts, and confined to the southern half of the hillfort, lies a slighter middle rampart and ditch. Air photos show traces of medieval ridge and furrow cultivation in the interior of the fort and near the centre is a long low mound, possibly a medieval pillow mound (an earth mound used for keeping rabbits), known as the Giant's Grave.

This brief is for work associated with improved management of the hillfort by improving an access path with associated drainage to prevent erosion and drainage of surface water across the entrance way. This brief is for a watching brief to be undertaken while the work takes place on the scheduled monument.

Background information

Warbstow Bury was acquired by North Cornwall District Council some 25 years ago and is now owned by the successor organisation, Cornwall Council. Day-to-day management is carried out by Cormac Solutions Ltd on behalf of Cornwall Council.

In 2012, Warbstow Bury entered a Higher Level Stewardship agreement (HLS) whose main objective is improved management of the hillfort. Work has recently begun. Gorse clearance and bracken spraying have taken place and stocking levels adjusted to reduce the threat of animal erosion. A section of fence has been moved out from the edge of the monument to provide space for visitors to move around the site without walking on the earthworks.

In the summer of 2014, drainage and the main access path will be improved to make access easier and help prevent erosion. As this work will involve ground disturbance on the scheduled monument, Scheduled Monument Consent and an archaeological watching brief will be required.

Historic Environment Designations

Warbstow Bury is a Scheduled Ancient Monument, Cornwall number 86.

Unified Designation number 1006710

HER number 2156

Location

SX 201 907

Outline brief

A professional archaeologist or archaeological organisation should on behalf of the applicants prepare a Written Scheme of Investigation (WSI) for an archaeological watching brief to be undertaken when works which involve breaking the ground on the scheduled monument are undertaken. This work will include new drainage of water in the main entrance.

The existing main path on to the site has become badly eroded due to extensive surface water run-off. The path improvement is required to provide a raised path with minimal disturbance to the existing surface, and a drain to direct surface water into existing car park drainage.

Specifications and location map for both these pieces of work are attached to this brief.

The WSI and estimate should be submitted to and agreed in writing by Cornwall Council (Coralie Barrow), the Natural England Project Officer (Mark Beard) and the English Heritage Heritage at Risk Project Officer (Ann Preston-Jones). All addresses will be found at the end of the brief.

Provision of this guidance is for the benefit of the HLS agreement holder to help ensure relevant tenders which fulfil HLS scheme requirements are received. Any contract however would be between the agreement holder and the contractors. All day to day agreements, health and safety requirements etc are matters between these parties.

Note: Cornwall Council will use the successful WSI to support an application for Scheduled Monument Consent for the work.

Note: that Natural England cannot accept 'contingency' amounts.

Watching brief

Aims:

The aims of the work are to

- Ensure that any remains uncovered or disturbed in the process of undertaking the work are fully recorded
- Ensure that contractors undertaking the work are aware of the significance of the monument
- Ensure that there is no disturbance to the monument in the process of undertaking the work, other than that for which Scheduled Monument Consent has been granted
- Discuss and agree with the English Heritage Heritage at Risk Project Officer any necessary variation to the agreed work if required

General Methodology:

All stages of the investigation shall be supported by a written scheme of investigation (WSI).

The archaeological contractor is expected to follow the code of the Institute of Field Archaeologists (IFA).

Details including the name, qualifications and experience of the site director and all other personnel (including specialist staff) shall be included within the WSI.

All of the latest Health and Safety guidelines shall be followed on site, noting particularly any specific requirements that the EA may have in relation to the constitution of the track.

The IFA's Standards and Guidance should be used for additional guidance in the production of the WSI, the content of the report and the general execution of the project.

Archaeological Recording Methodology

Prior to the commencement of on-site works the archaeological contractor should familiarise themselves with the site by examining the information held by the Cornwall and Scilly Historic Environment record (HER).

An archaeologist shall be present during all works involving ground disturbance associated with the project, unless circumstances dictate a different approach.

Details of how all archaeological contexts and artefacts will be surveyed, recovered and recorded shall be provided. The site will be tied into the national grid.

Details of the site planning policy shall be given in the WSI. The normal preferred policy for the scale of archaeological site plans is 1:20 and sections 1:10, unless circumstances indicate that other scales would be more appropriate.

The photographic record shall consist of prints in black and white together with the negatives. Digital photography may be used for report illustration. For both general and specific photographs, a photographic scale shall be included. In the case of detailed photographs it may be appropriate to include a north arrow. The photographic record shall be accompanied by a photographic register detailing as a minimum, feature number, location and direction of shot.

If any remains of particular significance are uncovered, stop work, inform and discuss with the English Heritage Heritage at Risk Project Officer before proceeding

Finds

- All finds, where appropriate, 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.
- The WSI shall include an agreed list of specialist consultants, who may be required to conserve and/or report on finds, and advise or report on other aspects of the work including environmental sampling.
- Finds work should be to accepted professional standards and adhere to the Institute of Field Archaeologists *Guidelines for Finds Work*.
- Environmental sampling should be guided by *Environmental Archaeology* (English Heritage Centre for Archaeological Guidelines. 2001/02).

Further English Heritage guidance that may be helpful includes *Geoarchaeology* (2004) and *Archaeometallurgy* (2001).

The English Heritage Advisor for Archaeological Science may be able to provide archaeological science advice if required (Vanessa Straker 0117 975 0689).

Results

The draft report including all specialist assessments of artefact assemblages shall be submitted four weeks after the completion of the ground works and the full final report three weeks later.

This report will be held by the Cornwall and Scilly Historic Environment Record (HER) and made available for public consultation.

Report

The report must contain:

- A concise non-technical summary of the project results
 - The aims and methods
 - A discussion of the archaeological findings
 - A location map, a drawing showing those areas examined as part of the archaeological recording, and copies of any archaeological plans and sections. All plans shall be tied to the national grid
 - Any specialist reports and assessments
 - A summary of the archive contents and date of deposition
 - A context register with brief descriptions shall be included as an appendix
 - A copy of the brief and the approved WSI will be included as an appendix
-
- **Report Deposition**

Establish ahead of report production whether a hard copy or digital copy (CD-ROM preferably in 'Adobe Acrobat' PDF format) is preferred by the following:

The NE Project Officer at Truro.

The Natural England Historic Environment Advisor at Exeter

The agreement holder

English Heritage

Cornwall Council Historic Environment Countryside Advice Officer

Historic Environment Record held by Cornwall Council (along with archived site notes, plans and photographs).

Dissemination & Publication

A summary of the results of the work should be sent to the Principal Archaeologist (Historic Environment Record Officer), Cornwall Council either through an Event Record Proforma or concise summary containing equivalent information.

The work should be registered on OASIS (Online Access to the Index of Archaeological Investigations).

Monitoring

The English Heritage Heritage at Risk Project Officer must be kept informed of progress and any problems reported immediately.

Notification of the start of work shall be given preferably in writing to the Heritage at Risk Project officer.

Any variations to the WSI shall be agreed with the Heritage at Risk Project officer

- **Timetable**

The Full report should be completed and submitted 7 weeks after the completion of the ground works.

- **Personnel**

Each aspect of the work should be carried out by suitably experienced and qualified professionals with specialist expertise in their area of competence. The names and titles of the Project Manager and all staff should be listed with a précis of their relevant and recent experience.

It would be preferable for the professional organisation to be a Registered Archaeological Organisation with the Institute of Field Archaeologist and the Project Manager and key personnel should be individual members of the IFA.

Appendix 2: Written Scheme of Investigation

CORNWALL ARCHAEOLOGICAL UNIT

Warbstow Bury works to improve drainage improvement: updated written scheme of investigation for archaeological recording

Project Background

Cornwall Archaeological Unit have been requested by Coralie Barrow Countryside Officer, Cornwall Council to provide a project design and estimate for a programme of archaeological recording required as part of the Scheduled Monument Consent during repairs to a pathway and associated drainage works at Warbstow Bury Hillfort.

A brief for the archaeological recording was produced by Coralie Barrow (18/8/14) and this project design has been produced in response to that document.

The track/drain runs through the outer ramparts of Warbstow Bury hillfort which is a Scheduled Monument of Iron Age date (SAM CO86). The track will run along an existing route, however, there is the potential for the site to be impacted upon by works associated with the resurfacing and drainage works, and Scheduled Monument Consent will be required.

Given the density of prehistoric and historic sites in the near vicinity, there is potential for important below ground archaeological remains to survive within the proposed development area.

In light of the fact that the track runs through the Scheduled Monument and the potential for buried archaeology, the applicant will need to obtain Scheduled Monument Consent (SMC) from English Heritage for the upgrading of the track.

This project design therefore covers works involving the following:

- A new path measuring 1.5m wide by 25m in length alongside the hedge with a side drain.

It is anticipated that the site recording will take place in the late Summer/Autumn of 2014.

Historical Background

The monument includes a large multivallate hillfort, which contains a pillow mound, situated on a prominent upland ridge at the heads of two tributaries to the River Ottery. The hillfort survives as an oval enclosed area of approximately 7.5 hectares defined by two concentric, massively-constructed, widely spaced ramparts up to 5.8m high with ditches up to 2.7m deep and an outer counterscarp bank. Between these main ramparts, and confined to the southern half of the hillfort, lies a slighter middle rampart and ditch. The outer rampart has two simple entrance gaps to the north west and south east and the inner rampart has two corresponding inturned entrances. In the centre of the hillfort is a large pillow mound (an artificial earthen mound used for the keeping of rabbits) which survives as a rectangular mound measuring up to 22m long, 10m wide and 0.6m high with buried side ditches. The hillfort was first depicted on the 1813 Ordnance Survey map and was much discussed by 19th century historians including Lysons and Lake. The pillow mound is traditionally the burial place of the Giant of Warbstow who was killed by the Giant of Beacon.

The sites which have been identified in the vicinity include:

- Iron Age hillfort (MCO88).
- Medieval pillow mound (MCO22454).
- Twentieth century Home Guard sentry post (MCO57942).

Potential sites

There is potential for the survival of unrecorded buried archaeological remains and artefacts of all periods.

Aims and objectives

The purpose of the archaeological project will be:

Archaeological monitoring during construction works and reporting

- To record archaeological features, layers and finds affected by the works.
- To establish the extent, condition, significance and character of any archaeological resource disturbed during the works.
- To establish the presence/absence of archaeological remains.
- To identify any artefacts relating to the occupation of the site.
- Ensure that contractors undertaking the work are aware of the significance of the monument.
- Ensure that there is no disturbance to the monument in the process of undertaking the work, other than that for which Scheduled Monument Consent has been granted.
- Discuss and agree with the English Heritage Heritage at Risk Project Officer any necessary variation to the agreed work if required.
- The dissemination and publication of the results.
- The long-term conservation of the project archive in appropriate conditions.

In particular the key objective of all elements of the project will be:

- To investigate and recover evidence in the form of artefacts, structures and deposits associated with prehistoric activity in order to enhance our knowledge of the extent, form and potential of the site as a whole.

Methods

Scheduled Monument Consent will need to be obtained in advance of the site works.

Preparation

In advance of site works a meeting will be held between Cornwall Archaeological Unit and the client to discuss and agree:

- Working methods and programme.
- Health and Safety arrangements.

Archaeological recording

Archaeological recording along the route of the track

The ground-works for the new track/drain will be using a mini-digger and carried out under archaeological supervision. Any open drainage ditches will then be inspected by an archaeologist and archaeological features or layers exposed in the stripped area will be carefully excavated by hand and archaeologically recorded by written description, plan and section and photographic record as appropriate.

If complex and / or significant archaeological deposits are encountered then the archaeological requirements should be reviewed by the client, English Heritage and Cornwall Archaeological Unit. **In the event that remains cannot be preserved *in situ* then full-scale excavation may be required.** The significance of the remains should be agreed between English Heritage, the client and Cornwall Archaeological Unit.

Where necessary the detailed archaeological recording may include:

- Excavation of archaeological features exposed in the stripped area and plotting them onto a base map.
- Production of plans and section drawings of the excavated features and recording of features using a continuous numbering system.
- Retrieval of artefacts.

Recording - general

- The position of all archaeological features will be marked onto a scaled base map (linked to the National Grid).
- All features shall be hand-dug and recorded in plan and section at scales of 1:10, 1:20 or 1:50. All scale drawings shall be undertaken at a scale appropriate to the complexity of the deposit/feature and to allow accurate depiction and interpretation. Site drawings (plans, sections, locations of finds) will be made by pencil (4H) on drafting film; all plans will be linked to the Ordnance Survey Landline (electronic) map; all drawings will include standard information: site details, personnel, date, scale, north-point.
- All features and finds will be accurately located at an appropriate scale. Sections will normally be drawn at 1:10 and plans at 1:20.
- All archaeological contexts will be described to a standard format linked to a continuous numbering sequence.
- Photography: scaled monochrome photography will be used as the main record medium, with colour digital images used more selectively and for illustrative purposes. This will include both general and site specific photographs. Photographs should have a scale and detailed ones should include a north arrow. Photographs will be taken to illustrate the principal features and finds discovered, in detail and in context. The photographic record will also include colour digital working shots to illustrate more generally the nature of the archaeological operation. All photographs of archaeological detail will feature an appropriately-sized scale.
- Drawings and photographs will be recorded in a register giving details of feature number and location.
- Sealed/undisturbed archaeological contexts in the form of buried soils, layers or deposits within significant archaeological features (ditches and pits, etc) will be sampled for environmental evidence and dating material. Advice may be needed from Vanessa Straker English Heritage (Regional Advisor for Archaeological Science).
- All spoil from the excavations will be adequately inspected for finds

- If human remains are discovered on the site they will be treated with respect. Human remains must initially be left *in-situ*, covered and protected. English Heritage, Public Health, Cornwall Council and the Ministry of Justice will be informed. All recording will conform to best practice and legal requirements.
- Where any artefacts are identified as treasure or potential treasure, including precious metals, groups of coins or prehistoric metalwork these will be removed to a safe place and reported to the local coroner according to the procedures relating to the *Treasure Act 1996 Code of Practice (2nd Revision)*. Where removal cannot be effected on the same working day as the discovery suitable security measures will be taken to protect the finds from theft.

Treatment of finds

The archaeological fieldwork may produce artefactual material.

- All finds in significant stratified contexts predating 1800 AD (eg, settlement features) should be collected by context and described. Post medieval or modern finds may be disposed of at the cataloguing stage. This process will be reviewed ahead of its implementation.
- All finds will be collected in sealable plastic bags which will be labelled immediately with the context number or other identifier.

Archiving

Following review with the CAU Project Manager the results from the fieldwork will be collated as an archive. This will involve washing and cataloguing of finds, the indexing and cross-referencing of photographs, drawings and context records.

All finds, etc will be stored in a proper manner (being clearly labelled and marked and stored according to CAU guidelines).

- All records (context sheets, photographs, etc) will be ordered, catalogued and stored in an appropriate manner (according to CAU guidelines).
- The site archive and finds will initially be stored at CAU premises and transferred to the Royal Cornwall Museum and the RCM conditions for archives will be followed.
- In the event that there are no finds, the documentary archive in due course shall be deposited with the Cornwall Record Office, but in the medium term will be stored at ReStore. All digital records will be filed on the Cornwall Council network.

Archive report

The results from the project will be drawn together and presented in a concise report.

A draft report will be submitted to English Heritage for comment prior to its formal submission.

Hard and digital copies of the report shall be supplied to the following:

The NE Project Officer at Truro.

The Natural England Historic Environment Advisor at Exeter

The agreement holder

English Heritage

Cornwall Council Historic Environment Countryside Advice Officer.

In addition to the hard copies of the report, one copy shall be provided to the National Record of the Historic Environment (NRHE) and the Cornwall Historic Environment Service in digital format.

This will involve:

- producing a descriptive text;
- producing maps and line drawings;
- selecting photographs;
- report design;
- report editing;
- dissemination of the finished report;
- Deposition of archive and finds in the Royal Cornwall Museum, Truro.

The report will have the following contents:

- Summary - Concise non-technical summary.
- Introduction - Background, objectives, aims and project methodology.
- Results - Factual description of the results of the various aspects of the project with separate sections as necessary for discussion and interpretation.
- Discussion - Discussion of the interpretation of the results, highlighting information gained on a chronological or thematic basis.
A consideration of evidence within its wider context.
Recommendations for further analysis and publication.
- Summary table - A summary table and showing the features, classes and numbers of artefacts recovered and soil profiles with interpretation
- Archive - A brief summary and index to the project archive.
- Appendices - List of contexts.
- List of finds and soil samples (as appropriate).
- Copies of the Brief and the approved written scheme of investigation.
- Illustrations - General location plan.
- Detailed location plans to link fieldwork results to OS map.
- Selected plans and section drawings as appropriate. Archaeologically sterile areas will not be illustrated unless this can provide information on the development of the site stratigraphy or show palaeoenvironmental deposits that have influenced the site stratigraphy.
Finds drawings (if appropriate).
Photographs showing the general site layout and exposed significant features and deposits that are referred to in the text. All photographs will contain appropriate scales.
- An online OASIS (Online AccesS to the Index of archaeological investigationS) form shall be completed in respect of the archaeological work. This will include a digital version of the report. The report will also include the OASIS ID number.

In the event that significant deposits which require further study or conservation are recovered from the watching brief it may be appropriate for further stages of analyses

and publication to take place. **Costs for this work are not included within the estimate.**

Monitoring

- The English Heritage Heritage at Risk Project Officer will be kept informed of progress and any problems reported immediately.
- Notification of the start of work shall be given in writing to the Heritage at Risk Project officer.
- Any variations to the WSI shall be agreed with the Heritage at Risk Project officer.
- In the event that significant remains are encountered an updated project design will be agreed with English Heritage.

Project Staff

An experienced archaeologist employed by Cornwall Archaeological Unit will carry out the archaeological fieldwork.

The report will be compiled by experienced archaeologist(s) employed by Cornwall Archaeological Unit.

Relevant experienced and qualified specialists will be employed to undertake appropriate tasks during the analysis stages of the project.

The project will be managed by a manager who is a Member of the Institute for Archaeologists, who will:

- Take responsibility for the overall direction of the project.
- Discuss and agree the objectives and programme of each stage of the project with project staff, including arrangements for Health and Safety.
- Monitor progress and results for each stage.
- Edit the project report.

Timetable

The archiving and a draft copy of the archive report will be completed within four weeks of the ending of the fieldwork. The timetable for any further stages of analyses and publication will be agreed with English Heritage in the light of the results of the fieldwork.

Appendix 2: Path work specification

Path Works HLS - Warbstow Bury

DESCRIPTION OF WORKS

(please read with accompanying drawings).

Site Information

- The site of the work is Warbstow Bury, access is through the site car park situated at SX201908 on the Canworthy Water road from Camelford.
- Warbstow Bury is a scheduled ancient monument where disturbance to the ground within the scheduled area is strictly prohibited without prior consent.
- Care should be taken to avoid any damage to the site which includes compaction due to vehicular access because of the sensitivity of the underlying archaeology.

Site Set Up

- The contractor is to make suitable arrangements for access from the main car park
- The contractor will be responsible for matters of welfare, safe working etc that should include all means of safe access etc.

• **PATH WORKS REQUIREMENT**

General information

- The existing path in areas has become badly eroded due to extensive surface water run-off. The contractor is required to provide a raised path with minimal disturbance to the existing surface, and a drain to direct surface water into existing car park drainage.
- All surface disturbance requires Scheduled Ancient Monument Consent which will be sort by Cornwall Council as the land owner prior to works and in discussion with the contractor.
- Disposal of material must be off site and in accordance to Scheduled Ancient Monument consent.
- The contractor must provide all necessary temporary warning signs, fencing and remove on completion.
- The path should be 1.5m width
- All timber edging should be treated softwood and FSC
- The contractor will nee to give 21 days notice to English Heritage of when they intend to start work.

Path specification

To lay a new path 33m in length along side the hedge with side drain to following specifications: (See accompanying drawings)

- Removal of topsoil / loose material to no more than 100mm
- Timber edging should be fixed to timber pegs with 2 galvanised steel nails.
- All timber edging should be 6" 1"
- Timber pegs should be 50x50x500mm at 1m centres.
- Cross fall of no more than 1:30
- Base layer 4" deep of 40mm down
- Surface finish to 1.5" thick of Penhill stone using 6mm to dust.

Time scales:

There are no seasonal constraints to path works however it must be completed between April 2011 and April 2012.

ADDITIONAL INFORMATION AND HEALTH AND SAFETY INFORMATION

As part of the quoting process we will require the following information.

- Notification of whether or not you are CHAS registered.
- A copy of your public liability insurance certificate to the value of £5 million.
- A provisional method statement which will show how the project will be implemented on the including a safe system of work.
- A copy of your H & S policy.