

ARCHAEOLOGICAL
SERVICES
DURHAM UNIVERSITY

on behalf of
J R Power Ltd

Land at Eastcott Cross
Cornwall

archaeological desk-based assessment
and geophysical survey

report 2511
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1. Summary

The project

- 1.1 This report presents the results of an archaeological desk-based assessment and geophysical survey, which were conducted in advance of a proposed development at Eastcott Cross, Cornwall. The assessment comprised a search of pertinent documentary, photographic and cartographic records, records of archaeological interventions, the Historic Environment Record and a site walk-over survey. The geophysical survey comprised fluxgate gradiometry over all surveyable parts of the proposed development area.
- 1.2 The works were commissioned by J R Power Ltd and conducted by Archaeological Services Durham University.

The archaeological resource

- 1.3 There is no evidence for activity prior to the Neolithic within the study area, but an as yet unidentified resource has the potential to exist.
- 1.4 Aerial photographs of the site have been used to identify a potential prehistoric round barrow in the eastern part of the proposed development area; the presence of a ring-ditch and possible associated features there has been confirmed by the geophysical survey. Also, the presence of Woolley Barrows, a Neolithic long barrow and Bronze Age round barrow, 200m to the north of the site, and the number of confirmed and possible barrows to the north and south, indicate the presence of a Neolithic and Bronze Age cemetery in the area. There is a potential for further such monuments to exist within the proposed development area, along with other satellite burials and evidence of ritual activity. A possible hollow way has also been identified 200m to the north of the site and its orientation indicates that there is the potential for this feature to extend into the western part of the proposed development area; the results of the geophysical survey indicate that a continuation of this feature or a ditched boundary does cross the western part of the site.
- 1.5 There is no direct evidence for activity during the Iron Age and Roman periods within the proposed development area, but the presence of an enclosure 650m to the northeast suggests an as yet unidentified resource has the potential to exist.
- 1.6 There is no evidence for settlement activity after the end of the Roman period. The first edition Ordnance Survey map of 1880 indicates that the proposed development area was part of Eastcott Moor, and this had been divided into two areas, and may have been used as pasture. It is possible that this use of the land dates from the medieval period.
- 1.7 During the 20th century the Moor was divided and enclosed. The northern and western parts of the site were used for arable, and parts of the site were planted with trees in the 1980s, 2001 and 2003. Ploughing of the fields may have caused some damage to any potential surviving archaeological remains, and deep ploughing in the area of the plantations is likely to have caused more severe damage.

Impact assessment

- 1.8 The construction of access roads, compounds, service trenches, foundation trenches and any ground reduction operations has the potential to impact upon any surviving archaeological resource, including the possible barrow in the east of the site, the track or hollow way and various other possible ditch and pit remains.

Recommendations

- 1.9 It is recommended that, should planning approval be granted, the potential of the archaeological resource should be evaluated through excavating a series of trial trenches across the site in order to establish the nature and extent of any archaeological resource present which may be impacted upon. A Written Scheme of Investigation for this work would be agreed with the Local Authority and the work completed prior to construction.

2. Project background

Location (Figure 1)

- 2.1 The proposed development area is located at Eastcott Cross, in the parish of Morwentstow, Cornwall (NGR centre: SS 2637 1632). It is bounded to the west by the A39 Atlantic Highway, linking Bideford to Bude, and covers an area of approximately 18.13 hectares.

Development proposal

- 2.2 The development proposal is for a solar farm. The details of the proposed construction techniques, including any associated works that will have a below-ground impact, are detailed in a separate environmental report.

Objective

- 2.3 The objective of this scheme of works was to assess the nature, extent and potential significance of any surviving archaeological resource within the proposed development area, so that an informed decision may be made regarding the nature and scope of any further scheme of archaeological works that may be required in relation to the proposed development.

Specification

- 2.4 The works have been undertaken in accordance with a Written Scheme of Investigation provided by Archaeological Services Durham University (reference DS10.381) and approved by the Historic Environment Service at Cornwall Council.

Planning guidance

- 2.5 This assessment and its recommendations are a considered response to the proposed development in relation to Government policy, as it is set out in *Planning Policy Statement 5: Planning for the Historic Environment*, and the *Historic Environment Planning Practice Guide*.

Dates

- 2.6 The field visit for the assessment took place on 27th October 2010 and the geophysical survey was undertaken between 25-29th October 2010. This report was prepared for 19th November 2010.

Personnel

- 2.7 The desk-based research was conducted by Andy Platell and Jamie Armstrong, with a field visit by David Graham. The geophysical survey was conducted by Edward Davies, David Graham and Richie Villis (Supervisor). The geophysical data were processed and interpreted by Duncan Hale. This report was prepared by Andy Platell, Jamie Armstrong and Duncan Hale, with illustrations by David Graham and Janine Watson. The Project Manager was Daniel Still.

OASIS

- 2.8 Archaeological Services Durham University is registered with the Online Access to the Index of archaeological investigationS project (**OASIS**). The OASIS ID number for this project is **archaeol3-85639**.

Acknowledgements

- 2.9 Archaeological Services Durham University is grateful for the assistance of Jane Powning of Cornwall Historic Environment Service, Phil Copleston, Historic Environment Planning Advice Officer for the east of Cornwall, and personnel of Cornwall County Record Office in facilitating this scheme of works.

3. Landuse, topography and geology

- 3.1 At the time of this assessment, the proposed development area comprised three large enclosed fields of pasture, one enclosed field mainly of pasture with a mixture of scrubland and sparse small trees, and one enclosed field of dense small trees.
- 3.2 The proposed development area was predominantly level with a slight upwards slope from east to west. It had a minimum elevation of approximately 200m OD and a maximum elevation of 215m OD.
- 3.3 The underlying solid geology of the area comprises Bude Formation sandstone of the Carboniferous.

4. Site walk-over survey

- 4.1 A walk-over survey was conducted, to help ascertain the potential of the proposed development area to contain any archaeological resource. The survey noted site topography, earthworks and areas of modern overburden, modern services, boundaries, buildings and other upstanding remains. A *pro forma* recording sheet was completed.
- 4.2 The proposed development area consists of five fields: Areas 1, 2 and 3 are almost level fields of sheep pasture (Figures 27-29). Apart from slight depressions caused by modern land drains, no earthworks are visible in these three fields. Area 4, in the southeast of the site, consists of pasture partly overgrown with scrub vegetation, particularly towards its eastern end (Figure 30). The ground surface in this field is rough, and appears to have been deep-ploughed in the past for tree planting. Area 5, in the south-central part of the site, contains a conifer plantation. In the west of this area the conifers are freshly planted, but towards the east they are semi-mature (Figures 31-32); it was not possible to conduct geomagnetic survey in this area. This whole field has been deep-ploughed for tree planting.
- 4.3 The three areas of pasture (Areas 1-3) show no sign of landscaping or development, aside from ploughing. The area of pasture and scrub (Area 4) was formerly part of a plantation. This area and the area of trees have been heavily disturbed by the planting and growing of trees, and this will have impacted upon any surviving archaeological deposits in this area.

5. Historical and archaeological development

Historic Environment Record (HER) reference numbers are provided in brackets throughout the text of this report, and are listed in Appendix 1.

Previous archaeological works

- 5.1 Excavations have been undertaken within 200m of the northern boundary of the proposed development area, in the area of Woolley Barrows; no excavation of the monument is recorded prior to 1967, but it is possible that work was undertaken before this time (Dudley 1968; Higginbotham 1977, 11). In 1967 one of the round barrows associated with Woolley long barrow (HER MCO3994) was excavated before it was completely destroyed by ploughing (ECO1238). This was found to be constructed with a central area of a low wall of flat stones, overlain by a mound of alternating layers of clay and soil. Primary and secondary cremations were found, and finds included a Bronze Age flint, an amber pin-head, some fine plaster, which may have been the backing of a flat metal object, and a broken late Roman bead (Dudley 1968).
- 5.2 The most recent excavations were in 1976 during a road-straightening scheme (ECO1245). These established that the project would slightly truncate part of the ditch of the long barrow (HER MCO11012), but that the main area of the monument would be unaffected. A stone surface, presumed to be contemporary with the construction of the barrow, was located to the west and northwest of the barrow; two undated hearths were found on this surface. The finds recovered were fragments of fired red clay, a quartzite pebble and 12 flints, which were either lying on the stone surface or from the topsoil above it. During this excavation further work was undertaken on the round barrow to the southwest (HER MCO3994), but this found that ploughing had removed all archaeologically significant deposits except the surrounding ditch scoop (Higginbotham 1977).
- 5.3 A Rapid Identification Survey (ECO2788) was conducted in the Stratton area, which extended across most of the site, terminating at the Cornish/Devon border. The survey did not establish the presence of any new sites in the study area.

The prehistoric period (up to AD 43)

- 5.4 There is no direct evidence of prehistoric activity in the proposed development area or within the 1km radius study area prior to the Neolithic period. However, there is the potential for an as yet unidentified resource to survive within the proposed development area.
- 5.5 Several barrows in the study area have been identified as being prehistoric in date, but no firmer dating has yet been established for these monuments. Additionally, aerial photographs taken in 1978 have recorded a cropmark in the eastern end of the proposed development area which has been interpreted as a bowl barrow (HER MCO39977) measuring 12m in diameter, with an outer bank separated by 3m from the barrow; it is possible that a ditch is located between the two earthworks. The cropmark is not visible on earlier aerial photographs, taken in 1946, but is discernible on modern photographs on Google Earth. This feature has also been identified in the current geophysical survey (see para. 6.20, below). Further cropmarks of probable barrows have been identified 650m to the north (HER MCO39982) and less than 200m to the south (HER MCO 39976). Another possible barrow (HER MCO3997) has been reported 450m to the north, although no

earthworks have been verified to support this claim. The distribution of prehistoric barrows in the vicinity of the proposed development area, as well as the presence of a potential barrow in the eastern part of the site itself, raises the possibility that there are further barrows in the area that are yet to be identified.

- 5.6 Less than 200m to the north of the proposed development area is a cropmark comprising two parallel ditches 10m apart orientated southwest-northeast. These have been interpreted as a possible hollow way (HER MCO39995) which is currently suggested as being possibly prehistoric or medieval in date. A further cropmarked ditch continues in a westerly direction, just to the north of the proposed development area. A prominent ditch feature and a lesser ditch, identified by the geophysical survey in Areas 1 and 3, could be associated with these ditches and hollow way (see paras. 6.14 and 6.22, below).

Neolithic (c.4000 – 2300 BC)

- 5.7 Neolithic activity has been identified to the north of the proposed development area. Woolley long barrow (HER MCO11012) lies less than 200m to the north of the site and is a Scheduled Ancient Monument (see below). This is a large earthen mound 21m long and 2.45m high which was used during the Neolithic as a burial chamber. It was surrounded by a shallow ditch. Some excavations have been undertaken on this monument (see above, para. 5.2) but the main body of the barrow remains untouched. A Neolithic flint arrow head (HER MCO1337) was found 600m to the north during a field-walking survey, along with several other flints. There is presently no evidence for Neolithic activity within the proposed development area, but the close proximity of Woolley long barrow indicates the potential for ritual or other activity.

Bronze Age (c.2300 -700 BC)

- 5.8 Bronze Age barrows have been identified to the north and south of the proposed development area. To date, none have been confirmed within the proposed development area, although a potential barrow has been detected by the present geophysical survey and noted on aerial photographs. One lies less than 200m to the north (HER MCO3994) and is included in the scheduling of Woolley long barrow. It was excavated in 1967 (Dudley 1968) before being levelled by ploughing and re-investigated in 1976 (Higginbotham 1977) (see above paras. 5.1 and 5.2). Only the ditch scoop survives. Between 650m and 750m further to the north are four further barrows (HER MCO3461, MCO3462, MCO3463, and MCO39981): two of these (HER MCO3461 and MCO3462) are Scheduled Ancient Monuments (see below). Between 300m and 700m to the south of the proposed development area are three further barrows (HER MCO2950, MCO39980, and MCO46414): one of these (HER MCO2950) is a Scheduled Ancient Monument (see below). These barrows and the other barrows in the study area identified as being generally prehistoric or dating to the Neolithic (see paras. 5.6-5.7) are located on the ridge of higher land that the proposed development area is situated across. There is the potential for further barrows to be present within the site boundaries.

Iron Age (c.700 BC – AD 43)

- 5.9 There is little evidence for Iron Age activity in the wider study area, and no evidence for any activity in the proposed development area. The cropmark of a rectangular enclosure 650m northeast of the site has been identified from aerial photographs. This has been interpreted as an Iron Age round settlement (HER MCO39978) which

has the potential to continue to be occupied into the Roman period. This site is too far away to have any direct relationship to the proposed development area, however, there is the potential that an as yet unidentified resource relating to this exploitation may survive within the site boundary.

The Roman period (AD 43 to 5th century)

- 5.10 There is no direct evidence of Roman activity in the proposed development area or in the wider study area, aside from the Iron Age settlement identified above (see para. 5.8). However, there is the potential that an as yet unidentified resource relating to this period may survive within the proposed development area.

The medieval period (5th century to 1540)

- 5.11 There is no evidence of medieval activity in the proposed development area. A number of settlements in the study area have medieval origins. Eastcott (HER MCO14370) lies 800m to the west of the site and is first recorded in 1302. Holloborough (HER MCO15019) lies 700m to the southwest and is first recorded in 1280. Shortstone (HER MCO16759) lies 1km to the north and is first recorded in 1201. West Youlstone (HER MCO18311) lies 850m to the south and is first recorded in 1302. Woolley (HER MCO18404) lies 700m to the northwest and is first recorded in 1306. Based on field names it is possible that a chapel was located to the east of Woolley (HER MCO10376), 700m northwest of the site, although it is possible that the field was simply allotted to support a chapel that stood elsewhere. Similar evidence has been used to argue for the location of two further potential chapels 700m-1km to the southeast (HER 19597 and 75578), and also for a medieval cross (HER MCO5162) 750m to the southwest of the site. These sites demonstrate that the study area was characterised by small rural settlements during the medieval period, but there is no indication that there was any settlement within the proposed development area at this time.

- 5.12 The presence of field systems, field boundaries and ridge and furrow associated with some of these medieval settlements is evidence that the wider landscape was used for farming. Field systems and field boundaries survive 450m to the north (HER MCO39995 and MCO39996), 800m to the north (HER MCO39998), 1km to the southeast (HER 35114), 400m to the south (HER MCO39994), 500m to the south (HER MCO21882), 750m to the south (HER MCO39993) and 550m to the southwest (HER MCO39991). Areas of ridge and furrow survive 900m to the south (HER MCO39975) and 850m to the southwest (HER MCO39965). This evidence for medieval agricultural practices has the potential to be encountered elsewhere in the study area. 19th-century maps indicate that the proposed development area was part of Eastcott Moor, and was divided into two parts, presumably for pasture. It is possible that this use of the land dates from the medieval period, and that therefore the proposed development area was undeveloped at this time.

The post-medieval period (1541 to 1899)

- 5.13 Early maps of Cornwall by Saxton (1576; Figure 2) and Bill (1626; Figure 3) do not depict the proposed development area in any detail and it is not possible to establish what sort of activity may have been taking place on the site at that time. Donne's map of 1765 (Figure 4) and Cary's map of 1817 (Figure 5) are slightly more accurate and detailed maps of the county but still lack enough detail to show how the proposed development area was being exploited in the early 19th century.

- 5.14 Post-medieval activity in the study area mainly reflects quarrying and agriculture, with the settlements established in the medieval period continuing to develop. A total of seven quarries are located close to the proposed development area. Five of these (HER MCO39964, MCO39966, MCO39967, MCO39968, and MCO39971) are concentrated around Eastcott, between 600m and 900m southwest of the site. Further quarries are located 250m to the northeast (HER MCO39974) and 300m to the south (HER MCO39972). There is no indication that there was quarrying on the site of the proposed development.
- 5.15 During the 19th century further developments were undertaken in the study area, but these did not impact upon the proposed development area. Milestones were established for the Launcestone Turnpike, 200m to the north (HER CMO52487) and 800m to the southwest (HER CMO52488). A blacksmith's workshop (HER CMO9446) was constructed 750m to the northwest at Woolley; this building is still standing. A boundary stone (HER MCO46413) was erected 600m to the east in the early 19th century marking the parishes of Bradworthy and Morwenstow; this is a Listed Building. The importance of religion in the area is marked by the presence of two non-conformist chapels at Woolley (HER MCO32642), 800m to the northwest, and at Eastcott (HER MCO46415), 800m to the west.
- 5.16 The 1840 Tithe Map (Figure 6) indicates that the proposed development area was used for rough pasture and arable at that time, and that it formed part of Eastcott Moor and Home Moor. The first edition Ordnance Survey map of 1880 (Figure 7) shows the proposed development area was part of Eastcott Moor. The northern and western boundaries of the Moor approximately form the present northern and western boundaries of the site. The Moor was divided into two areas, presumably to allow the land to be used for pasture, and this boundary is retained in the present layout of the fields. There was no sign of development of the proposed development area, but the map depicts a number of enclosed fields in the wider area, indicating that the area was used for agriculture.

The modern period (1900 to present)

- 5.17 The second edition Ordnance Survey map of 1907 (Figure 8) shows no alterations to the first edition. The only known development of the site took place later in the 20th century: by the 1960s the Moor was enclosed and used for arable farming. Ploughing of the fields is likely to have caused some damage to any potential surviving archaeological remains. By the 1980s, and again in 2001 and 2003, tree plantations had been established in the southeast and southern parts of the site. Deep ploughing in the area of the plantations is likely to have caused severe damage to any potential surviving archaeology. Further subdivision of the proposed development area was undertaken until it reached its present layout. The Historic Landscape Characterisation study (Figure 9) shows that the proposed development area is chiefly composed of modern enclosed land, with an area of upland rough pasture along the southern side.

The buildings

- 5.18 There are no statutorily protected buildings within the site or in immediate proximity to the study area. There are two Listed Buildings in the wider study area: Woolley Cottage (64925), 800 to the northwest, and a boundary stone (91903), 600m to the east.