



# **St Breock Wind Farm Access Road, St Breock, Cornwall**

## **Archaeological Watching Brief**



**Historic Environment Projects**



**St Breock Wind Farm Access Road,  
St Breock, Cornwall**

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<b>Client</b>	<b>Reg Power</b>
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The Project Manager was Dr Andy Jones.

The views and recommendations expressed in this report are those of Historic Environment Projects and are presented in good faith on the basis of professional judgement and on information currently available.

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## **Cover illustration**

*St Breock Monolith with St Breock Windfarm in the background*

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## **Abbreviations**

HE	Historic Environment, Cornwall Council
HEPAO	Historic Environment Planning Advice Officer
HER	Cornwall and the Isles of Scilly Historic Environment Record
MAGIC	Multi Agency Geographic Information for the Countryside
MCO	Monument number in Cornwall HER
NMP	National Mapping Programme
OD	Ordnance Datum – height above mean sea level at Newlyn
OS	Ordnance Survey





## **1 Summary**

Archaeological recording along the route of an access track was carried out, following the granting of planning permission to replace the existing 11 wind turbines at St Breock Downs wind farm (SW 9726 6874) with 5 larger wind turbines.

The site works involved the construction of a new access route to the site, which would provide a more direct route to the site for larger vehicles and reduce potential traffic congestion on the minor approach roads in the area.

In light of the results from a geophysical survey in 2011, Phil Copleston, Historic Environment Officer Planning Advice (HEPAO) specified a selective archaeological watching brief be carried out along the route of the new track, as well as the recording of hedges breached during the construction of the road.

In September 2013, the Historic Environment Projects team was commissioned by Mr David Nixon of REG St Breock Ltd to undertake archaeological recording of sections of the proposed route in the form of an archaeological watching brief.

The new track was approximately 3.3km in length to the site entrance by utilising and widening a farm road currently connected to the A39 near St Jidgey (SW 94407 69414), which then proceeds south east ascending a gradual slope, gently turning east where it terminates (SW 95027 68459). From this location a new trackway was constructed across various fields, eventually exiting pasture land adjacent to the wind farm (SW 96782 68396). The trackway in its entirety was extended to a width of 6 metres by removing the upper layer of topsoil to a depth not exceeding 0.25m and covered with hard core material for the duration of the wind farm construction project. Several boundaries were breached and a drainage ditch excavated along the side of the new track to a depth of 0.3m.

No significant archaeological features were encountered; however, detailed sections were recorded through the breached boundaries, and these have shed light on the enclosure of the downland.



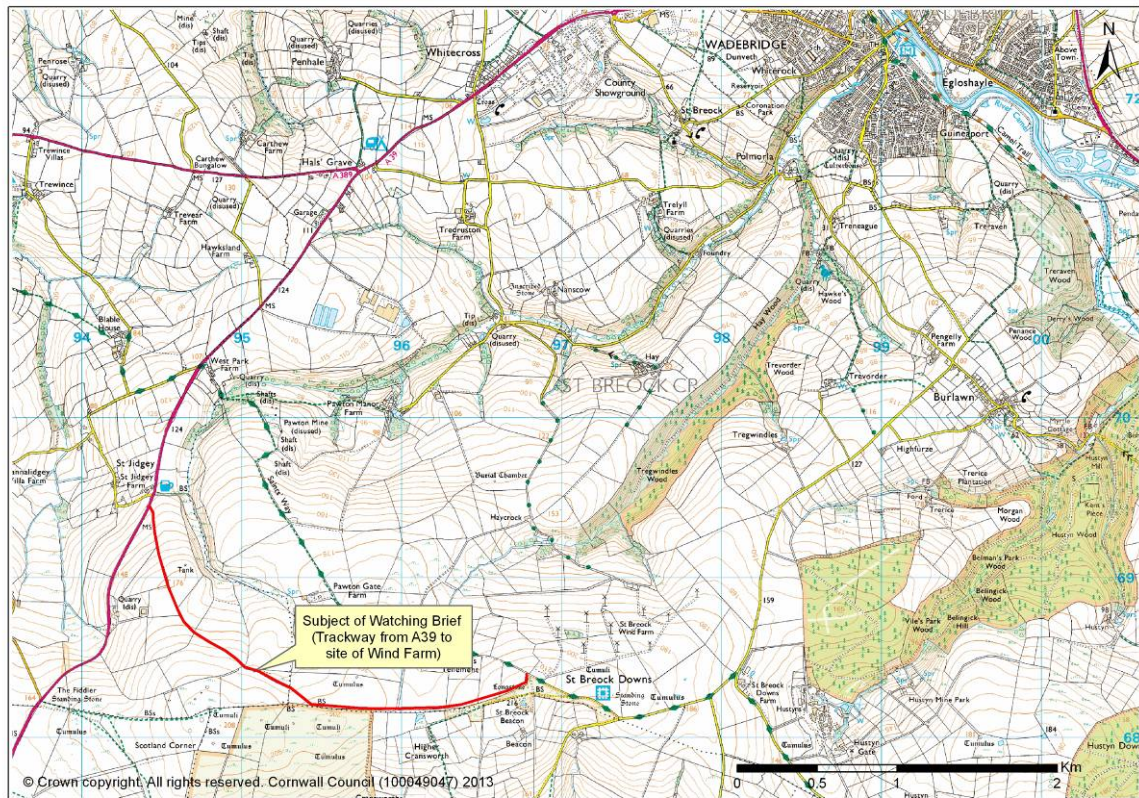


Figure 1: Location and path of new road (red line denotes route).

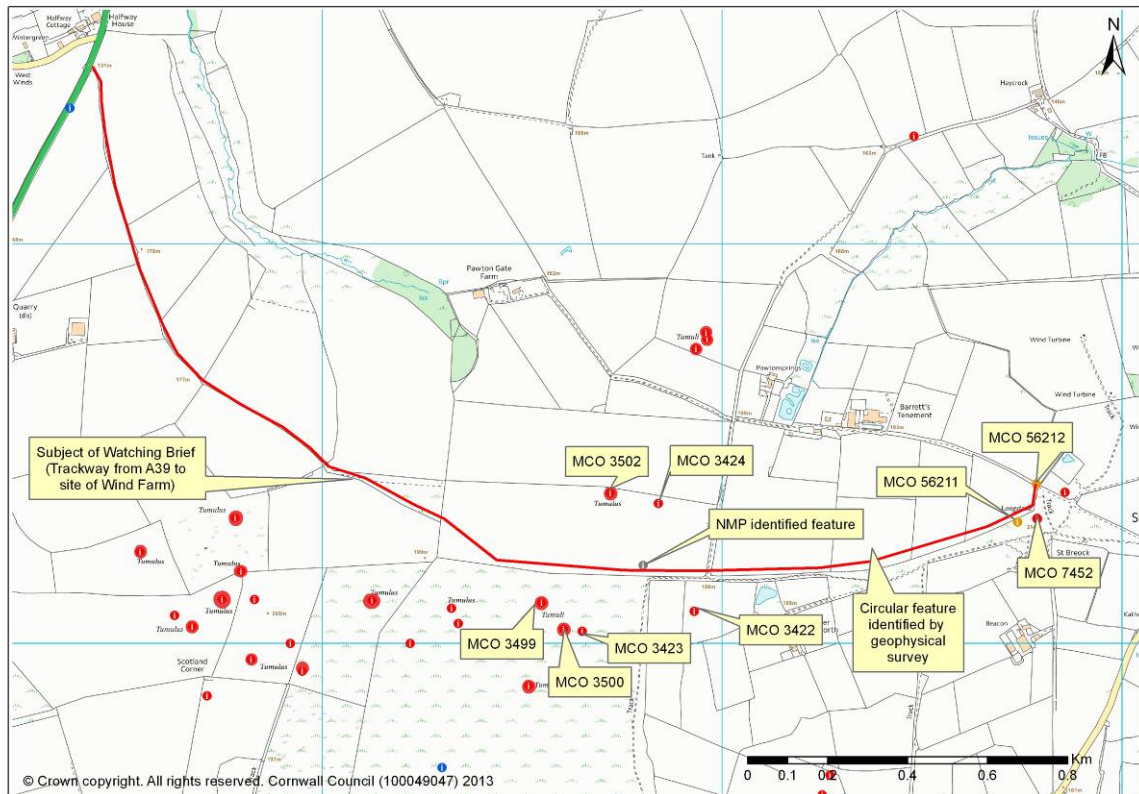


Figure 2: Identified archaeological sites in the area of the new access road.

## **2 Introduction**

### **2.1 Project background**

St Breock Downs wind turbine farm has been operation since 1994 (Kudrin and Allen 2012). On the 3<sup>rd</sup> October 2012 REG Power received planning permission (PA12/02907) to replace the present eleven wind turbines with five larger units each with a reach of 100m (base to tip). To gain access to the present site a new access road across the downs had been proposed partially using the path of an existing farm track, but due to the large size of the vehicles and equipment needing access to the wind farm, the present road was inadequate for the task and needed to be extended and widened, the width of the new road was in excess of 5m from its present 2.5m, and was extended by over 1.8km to reach the location of the wind farm across the summit of the moor.

Prior to the commencement of the project a geophysical survey was carried out by Bartlett-Clark Consultancy for CgMs Consulting (Bartlett 2011). The survey together with sites plotted from aerial photographs by the National Mapping Programme (NMP) revealed the potential for archaeological features to survive in several locations along the track (Fig 2). As a result of these findings, Phil Copleston (Historic Environment Advice Officer, Cornwall Council) recommended that the scheme be the subject of a programme of archaeological recording in selected areas (Fields 1 and 6) (email dated 12 January 2012). The requirement for the archaeological recording also included the recording of any boundaries that were to be breached during the site works.

Historic Environment Projects (Cornwall Council) produced a written scheme of Investigation for the archaeological recording (Appendix 2) and were commissioned by REG St Breock Ltd to undertake selective archaeological recording of the construction of an access road from the A39 near St Jidgey (SW 94407 69414) to the site of the present St Breock Down wind farm (SW 95797 68189) (Fig 1).

This report details the results of the watching brief.

### **2.2 Aims**

The purpose of the monitoring was:

- To record archaeological features and deposits affected by the access track in Fields 1 and 6.
- To record 5 Cornish hedge boundaries that were to be breached along the route of the access track.

### **2.3 Methods**

The archaeological recording consisted of three stages, fieldwork, archiving and archive report.

#### **2.3.1 Fieldwork**

An archaeological watching brief was undertaken during the soil stripping works associated with the construction of the access road corridor in Fields 1 and 6 (Fig 3). The fieldwork was carried out between October and November 2013. All contexts uncovered during the fieldwork were recorded and a full context list can be found towards the end of this report (Appendix 1).

The field boundaries (numbered 1-5) where breached by the contractors in the east section of the new trackway were recorded in section at a scale of 1:10, layer were allocated numbers and descriptions recorded for each feature. Images were also recorded of each section using digital photography.

No sealed/undisturbed archaeological contexts such as buried soils/layers, or deposits were considered suitable for environment sampling. No artefacts were recovered.

### 3 Location and setting

The route of the new access road passed through the parishes of St Issey and St Breock skirting the parish of St Wenn to the south (Fig 4), initially proceeding south east from the A39 (SW 94397 69419) for approximately 1.25 Km, the track/road turned east for approximately 1.87 Km before turning north for 0.06 Km where is joined an unclassified road adjacent to the St Breock Downs wind farm (SW 96787 68394).

#### *Landscape*

The land is undulating and rises from the west onto the downland, the road passes almost directly over 176m OD point and continues along the side of the slope passing close to the 205m OD point before gently rising again to the site of the St Breock Downs wind farm.

The British Geological Survey (BGS) defines the geology within the path of the new trackway as comprised of:

- Staddon Formation – Sandstone, Siltstone and Mudstone. Sedimentary bedrock formed approximately 398 to 407 million years ago in the Devonian Period and
- Bedruthan Formation, Sandstone, Siltstone and mudstone. Sedimentary bedrock formed approximately 392 to 407 million years ago in the Devonian Period.

The land is classified as stock rearing and grazing, classed as Grade 4 and 5 (MAGIC 2013).

#### *Known archaeological sites*

The sites recorded in the HER near to the area of the development include:

Ref	Feature
MCO 3453	One of a group of eight barrows clustered at Scotland Corner.
MCO 3452	One of a group of eight barrows clustered at Scotland Corner
MCO 3451	One of a group of eight barrows clustered at Scotland Corner.
MCO 3450	One of a group of eight barrows clustered at Scotland Corner.
MCO 3448	The site of one of a group of eight barrows clustered at Scotland Corner.
MCO 3449	One of a group of eight barrows clustered at Scotland Corner.
MCO 3502	The mutilated remains of a probable disc barrow, first recorded in 1880.
MCO 3501	A mutilated bowl barrow, first recorded in 1880.
MCO 21789	Polygonal enclosure, 60m wide, partially visible on aerial photographs as a low earth and stone bank.

Table 1: Scheduled Monuments near the study area

### 4 Historic Background

The St Breock Downs contain a large number of Early Bronze Age barrows (2000 BC – 1500 BC). They form one of the most significant concentrations in Cornwall and follow the ridge of the downs to form a long linear band of intermittent monument complexes.

The barrows have survived because much of the downland was not enclosed and cultivated until the twentieth century. However, to date no prehistoric settlements have been found on St Breock Downs, they are located in the lower lying land to the north, away from the areas where the barrows are found.

The standing stone, known as Men Gurta (SW 9678 6831) is the largest in Cornwall. It is unexcavated but is likely to be as least as old as the adjacent ploughed out Early Bronze Age barrow. The number of prehistoric ceremonial monuments in the area of the access track provide testament to the activity within the downland and its importance to prehistoric communities.

The route of the new track follows an older track for at least a kilometre before diverting north away from the barrows, historical mapping would suggest that the downs was criss-crossed with a network of tracks North – South and East - West orientation (Fig 7), although by the mid 20<sup>th</sup> century the OS mapping suggests that these had all but fallen into decline.

Agriculture on the downlands appears to have been sporadic, historical mapping (Ordnance Survey 1880) indicates that the land was nominally enclosed, but not under the plough, suggesting much of it was still used as rough grazing. Cultivation appears to have commenced in the 20<sup>th</sup> century. During this period encroachment by local farms was in progress and smaller fields had been introduced but the majority of the downs remained untouched. Communication with several farmers would suggest that it was only by the mid to late 20<sup>th</sup> century the last of the non-protected part of the downs came under cultivation, while the southern half of the downs remains protected.

The need for food during WW2 appears to have led to increased activity within the area of the downs mostly on the east side. Activity associated with wartime defence is also evident, with the remnants of buildings classified on the HER as an observer post (MCO56211) and guard room (MCO56212), both located very close to the Men Gurta (standing stone) (MCO7452), further east and south of this position are more remains from WW2 (1939-45), not recorded on the HER, possibly of a RADAR or communications tower.

## **5 Archaeological results**

The results of the watching brief are presented by field, followed by boundaries.

### **Fields**

#### **Field 1** (Figs 3, 4, 7, 9, 10, 11 and 12)

Between Monday 14<sup>th</sup> October and Tuesday 22<sup>nd</sup> October 2013, an archaeological watching brief was carried out on the area of track designated Field 1 (Fig 3). This field and part of the trackway is situated on the north facing edge of the St Breock Downs area, and continues uphill for approximately 400 metres. Consequently it is exposed to the elements.

The removal of material from the path of the trackway was carried out by either a 13 tonne swing shovel fitted with a 1.8m grading bucket or a 20 tonne swing shovel fitted with a 2.1m grading bucket. Material to a depth of no more than 0.4m was removed from the path of the track, whilst the majority of the stripping involved the removal of no more than 0.2m of material.

The topsoil (1101) varied in depth between 0.05m and 0.2m, consisted of mid to dark brown stony soil, stones were common, varied in sizes, irregular in form and appeared to be a mix of quartz and mud stones, the topsoil was sat directly on top of the natural material (1102). There was no secondary interface between the layers.

The natural subsoil (1102) appeared to be a yellow/red clay material with common stone inclusions. There were indications of plough marks within the surface of this



deposit but these were recent, remains of some roots were still present within their tracks and the edge of the excavation displayed young vegetable plants. The matrix of the natural appeared to remain consistent in colour and content as the track proceeded up the slope of the hill, the existing trackway, when removed did produce patches of quartz stones and mudstones; although it was clear that the edge of the existing track had been machine cut.

The anomalies identified by the geophysical survey carried out in 2011 were not revealed by the construction works. A very shallow gully was present along the path of the old fence line and track and appeared to be still in use. A conversation with the local landowner indicated this part of the site experienced severe water ingress and a deep plough was used in recent years to construct a drainage gully and divert the water away from the main road (A39).

During the construction material from the existing track was removed by the mechanical digger, its construction appeared to be comprised of different types of stone and it looked to have been repaired on numerous occasions in its recent past using various stones which had been imported onto site, probably from local quarries

No archaeological material or features were observed during this phase of the watching brief.

**Field 6** (Figs 3, 4, 7, 8, 13, 15, 17, 18 and 19)

In November 2013, an archaeological watching brief was carried out on the area of the track designated as Field 6, this field and part of the trackway are located on the plateau area of the downs, in close proximity (100-150m) to two Scheduled Bronze Age barrows (MCO3499 and MCO3500).

Field 6 measures approximately 700m in length and continued the route of the new track in a west east orientation, with the exception of the westerly end, which is orientated in a south easterly direction for approximately 50m (Fig 8).

The removal of topsoil (601) from the path of the trackway was accomplished by the use of a 13 tonne swing shovel fitted with a 1.8m grading bucket. Soil to the depth of no more than 0.2m was removed from the surface of the field and placed adjacent to the trackway; the width of the area being stripped of topsoil had been increased to 9m and further widened for areas designated as passing places for larger vehicles.

The underlying geology on this part of the down appeared to change in the central area of the field. To the west the natural was easily distinguished by yellow clay (602) and red clay with ferrous appearing content (603), which was deeply furrowed (Fig 16). On the east side of the field, the ground contained a more stony layer (604) comprised of irregular shaped quartz stones mixed in with a dark organic layer of peaty soil, which sat on top of the yellow stony clays.

The west side of the field contained a thin layer of topsoil (601) less than 0.2m in depth. This was a darker more organic looking layer with some stone inclusions, the stone inclusions appeared to be quartz stones less than 0.01m in size irregular in shape. The depth of the topsoil varied, but never exceeded 0.2m. The underlying natural was a yellow brown clay layer (602), with common stone inclusions, predominantly quartz stones of various sizes (Fig 17).

As the route of the road climbed a south easterly gentle incline to the edge of the ridge, a natural gully was observed on the west side of the field, the gully contained a single fill of dark organic material (topsoil) (601) with quartz stone inclusions, small and irregular in shape, extending across the path of the track in the direction of a natural watercourse. It was no more than 0.1m in depth and less than 0.6m in width, although the width was defined by the fill and not an actual cut. The plough furrows were more distinct (Fig 16), examination of these found they did not exceed 0.05m in depth within the surface of the natural material.

As the road began to turn east, what appeared to be a retaining wire for possibly a telegraph pole was found within the path of the track (Fig 14), a second and similar wire was observed on the south side of the perimeter fence and is possibly a second guide wire for a now defunct telegraph post. No cut or posthole was found, and it can be surmised that this was within the SSSI or perimeter fence line. A third guide wire was found within the path of the trackway (SW 95608 63188).

Toward the centre of Field 6, the geology and terrain appeared to change, from the distinct yellow natural with plough marks to a less disturbed geological matrix.

The topsoil was very shallow less than 0.1m in depth. The upper part of the layer was a mixture, depending on location within the area of either a mid brown loamy material with some quartz inclusions (605); this was slightly deeper in depth on the south side of the excavation adjacent to the edge of the Rosenannon nature reserve. The more predominant material was a very thin dark soil (606), containing quartz stones; these were of various sizes and shapes. At least five large quartz stones were found during the construction works. All of these were examined and found to be natural and comparable to those found in the boundaries. The path of the new track also cut across the mouth of an old gateway (SW 95724 68177) (Fig 18) which exited Rosenannon Downs to the south. This gateway is no longer in use and had been sealed by a four strand barbed wire fence on the Rosenannon Downs side, two indents within the natural (presumably tracks) emanated from the gateway. These appeared to follow the northerly course of the old track toward Pawton Springs (Fig 7).

Proceeding from the edge of Field 6 on the south east side were two deep modern wheel ruts cut into the natural clay (Fig 19). They exited the old track on the south east side of the field and headed towards the west.

On the St Breock Downs side of the dividing fence line was a large pond, approximately 8 metres wide and 0.5m in depth (variable), It was initially thought to be natural, but it became evident that the base was lined with clay and the presence of blue water pipe and the raised lip of the pond that it was artificial and probably of recent date.

Just outside the corridor, to the south of the stripped area was an *in situ* boundary stone, which is marked on the 1:25,000 OS mapping (SW 95469 68193)(Fig 15).

## **Boundary recording** (Figs 5, 6, 20-29)

Five boundaries were recorded as part of the project

The section through the boundaries were all cut by a mechanical digger and recorded by hand.

### **Boundary 1** (Figs 20, 21 and 26)

Located at SW 95974 68189 (Fig 5) between Fields 6 and 7, boundary 1, typical of a stone faced bank, is the most substantive (and established of the five recoded examples), achieving a height of around 1.2m and a spread of over 2m. The section did not display any facing stones, but these were evident away from the area of the breach undamaged by the breach. Situated adjacent to the west side of the boundary, but not recorded in section was a ditch approximately 1m deep by 1.2m wide. A track is shown on Ordnance Survey mapping running along its west side. This track appeared to be overgrown and not in constant use, although aerial imaging distinctly shows a path running along the full extent of the track. Where the breach had been made; the ditch had been filled in across the path of the new access road.

The boundary appears to have been constructed directly onto the old ground surface, which where revealed was a dark grey/black peaty/organic material, prevalent within these fields and the topsoil of the downs.



This boundary appears to be a stone faced bank containing a soil and stone core. No phasing was evident from the section recorded, however, the boundary is shown on the 1843 St Breock Tithe map.

No	Description/Interpretation	Depth
(100)	Thin covering of loamy soil mixed with organic material (plants) Dark brown/grey in colour some stone inclusions, small irregular shapes, sparse, unsorted. Large roots present.	<0.05m
(101)	Fine dark grey/brown material, almost powder in form, stone inclusions (quartz) irregular shapes, unsorted, variation in colour due to drying out.	
(102)	Similar to (101) variation in colour is probably due to variation in drying rather than material content.	
(103)	Patches of light grey soil, almost powder in content, some stone inclusions, quartz, small irregular less than 0.01m in size. Some larger stones present. Probably the core material for the boundary. Lighter colour could be as a result of drying out.	

Table 1: Layers within Boundary 1 (Field 6/7) (Fig 26)

### Boundary 2 (Figs 22 and 27)

First recorded on the 1843 St Breock Tithe map, this section of the boundary is located at SW 96472 68224, between Field's 8 and 9, and measures approximately 1m high by 1.6m in width. It appears to be a stone faced bank The south face of the breach was recorded due to the damage caused during its removal. The boundary appeared to be comprised of a single layer (201) topped with a layer of grass and hawthorn was growing in close proximity, although within the section only a few large roots were present. The east side of the wall was faced with small blocks of quartz bonded together using fine soil. A thick matting of grass was present on the east side and appeared to bond the wall. An examination of the ground surface appeared to indicate that the wall was resting on the surface of an older land surface (202) and not on the natural yellow clay subsoil.

No	Description/Interpretation	Depth
(200)	Thin covering of silty soil with organic material (plants). Mid brown in colour, few stone inclusions, irregular shapes, quartz, <0.01m in size.	<0.05m
(201)	Dark brown/black silt loam, few stone inclusions, irregular shapes, <0.01m in size.	
(202)	Dark peaty soil, with quartz inclusions irregular shapes <0.02m, original ground level.	
(203)	Stone facing comprising quartz stones of various sizes.	

Table 2: Layers within boundary 2 (Field 8/9) (Fig 27)

### Boundary 3 (Fig 23 and 28)

First recorded on the 1843 St Breock Tithe map, this section of what appears to be a stone faced earth wall is located at SW 96613 68277, between Field's 9 and 10, measuring approximately 1m high by 1.8m wide. Both sides of the boundary were

faced with large quartz stones, packed with silty material. The layer forming the boundary consisted of large stones and a very fine soil with small stone inclusions, predominantly quartz. The angle of the wall face was about 70 degrees and relied on the stones to maintain the shape of the wall. The stone faced wall appears to have been constructed directly upon the original topsoil (303).

No	Description/Interpretation	Depth
(300)	Thin covering of silty soil with organic material (grass). Dark brown in colour, sparse stone inclusions, irregular shapes, quartz, <0.01m in size.	<0.05m
(301)	Dark brown/black silt loam, common stone inclusions, irregular shapes, varying in size (0.01-0.10m in size). Colour of material was variable due to drying out.	
(302)	Stone facing comprising quartz stones of various sizes.	
(303)	Dark brown/black silty loam, common stone inclusions, irregular shapes, varying in size (0.01-0.010m in size).	

Table 3: Layers within boundary 3 (Field 9/10) (Fig 28)

#### Boundary 4 (Figs 24 and 29)

First recorded on the 1843 St Breock Tithe map, boundary 4 is located on the north east side of Field 10 (SW 96787 68394) and appears to be a stone faced bank. The main core of the boundary (402) appears to be comprised of a mid to dark brown clay loam material with small stone inclusions, on the north face of the boundary a second layer of material (401) similar in make-up to (402) again containing stones or various sizes and shapes sat adjacent and down the slope of (402) toward the base of the feature. Orange banding was present within (402) and appeared to be from the natural material seen at the base of the wall in the cut made by the excavator. The texture of the upper material above 0.50m from the floor of the structure, appeared to be sandier in content, this could be attributed to contamination from the excavator bucket as the boundary was removed.

A stone facing (403) was recorded on the southern side of the boundary. This looked into the field rather than towards road on its northern flank. The stones forming the face were predominantly quartz, and varied in shape and size; appears to be typical of the boundaries in the area. The north face sloped more gently down to the surface of the unclassified road. The vegetation covering the boundary was predominantly grasses with some gorse and brambles, although all were small or young in growth, probably as a result of cutting.

No	Description/Interpretation	Depth
(400)	Thin covering of brown loam with organic material (grass). Mid to dark brown in colour, common stone inclusions, irregular shapes, quartz, <0.01m in size.	<0.05m
(401)	Mid to dark brown clay loam, common stone inclusions, irregular shapes, common, varying in size (0.01-0.10m in size). Orange banding indicating re-deposited natural present within the fill could also have been as a result of the excavator bucket. Colour of material was variable due to drying out.	
(402)	Similar in appearance to (401) slightly different shade.	
(403)	Stone facing comprising quartz stones of various sizes.	

Table 4: Layers within Boundary 4 (Field 10 and unclassified road) (Fig 29)

### **Boundary 5 (Fig 26)**

First recorded on the 1843 St Breock Tithe map, located at SW 96270 68199, between Fields 7 and 8, this low earth bank did not have any facing stones and was constructed from a clay loam soil (401). It measured approximately 2.5m wide by 0.6m high and was topped with grass and loose soil (400).

## **6 Discussion**

Although no features of archaeological significance was discovered during the watching brief, the upstanding archaeological sites found across St Breock Downs would indicate there is still much to learn about this downland.

Because of its upland character, formal enclosure and agriculture was much later than in adjacent areas and this has meant that many sites survive above ground and have not been ploughed out. Historic mapping and conversation with local farmers reveal that the much of the plateau area has only been ploughed since the Second World War.

The historic landscape character of the area is also reflected in the results from the boundary recording. The boundaries breached by the mechanical excavator were all less than 200 years old. Historical mapping, in particular the 1808 Ordnance Survey mapping indicates that no field boundaries were present at this time, although all boundaries are shown on the 1843 St Breock Tithe map.

Boundary 1 (Figs 5 and 6), appears to be the oldest of the breached boundaries. Historical mapping (1801 Ordnance Survey) appears to show the trackway running along the west side of this boundary was in existence prior to 1805 (1808 Padstow and 1805 Bodmin Ordnance Survey drawings) and almost certainly before this date. It is therefore likely that although constructed relatively recently, Boundary 1 formalised an existing division in the landscape.

It would appear that the construction of all the recorded boundaries was a single event, each having been topped with a turf layer. Two (1 and 4) appear to be stone faced earth banks, while boundaries 2 and 3 appear to have stone faces on both sides of a earth or earth and stone core. Boundary 5, a field boundary remains only as a low earth bank, probably constructed from tamped earth topped with turf to retain its shape.

Aside from boundary 1, all the other boundaries, appear to have been constructed directly on to the surface of the fields, as there did not appear to have been any attempt to remove the original ground surface.

Likewise, there was little evidence for rebuilding or heightening and simplicity of construction methods is typical of those found in Recently Enclosed land.

## **7 References**

### **7.1 Primary sources**

Cornwall Council 2012. *Grant of Planning Permission PA12/02907* (Electronic copy)

Ordnance Survey, c 1810, St Columb Major (Online copy at British Library)

Ordnance Survey, c1880. *25 Inch Map* First Edition (licensed digital copy at HE)

Ordnance Survey, c1907. *25 Inch Map* Second Edition (licensed digital copy at HE)

Ordnance Survey, 2007. *Mastermap Digital Mapping*

Tithe Map and Apportionment, c1843. *Parish of St Breock* (licensed digital copy at HE)

Tithe Map and Apportionment, c1841. *Parish of St Issey* (licensed digital copy at HE)

Tithe Map and Apportionment, c1842. *Parish of St Wenn* (licensed digital copy at HE)

## 7.2 Publications

Bartlett, A.D.H. 2011, *St Breock Windfarm, Cornwall, Report on Archaeological Geophysical Survey 2011*. Electronic copy.

Kudrin, A. & Allen, S. 2012. *St Breock Downs Windfarm Repower Environmental Statement. Design and Access Statement*, available online at <http://www.stbreockwindfarm.co.uk/Resources/Design%20and%20Access%20Statement%20FINAL%20copy.pdf>

## 7.3 Websites

<http://www.bl.uk/onlinegallery/onlineex/ordsurvdraw/s/002osd000000018u00005000.html> British Library online gallery Ordnance survey drawings

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

[http://www.historic-cornwall.org.uk/flyingpast/images/PDF\\_downloads/ceremony%20and%20ritual/The%20Living%20and%20the%20Dead.pdf](http://www.historic-cornwall.org.uk/flyingpast/images/PDF_downloads/ceremony%20and%20ritual/The%20Living%20and%20the%20Dead.pdf)

<http://maps.nls.uk/geo/explore> National Library of Scotland, Map images

<http://mapapps.bgs.ac.uk/geologyofbritain/home.html> British Geological Survey, Geology of Britain Viewer

<http://magic.defra.gov.uk/MagicMap.aspx> Magic Map Defra

## 7.4 Project archive

The HE project number is **146310**

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

1. A project file containing site records and notes, project correspondence and administration.
2. Field plans and copies of historic maps stored in an A2-size plastic envelope (GRE801/1-4).
3. Electronic drawings stored in the directory ..\Historic Environment (CAD)\CAD Archive\Sites S\St Breock Wind Farm WB – 146310
4. Digital photographs stored in the directory..\Historic Environment (Images)\SITES.Q-T\St Breock Downs Wind Farm - 146310
5. English Heritage/ADS OASIS online reference: cornwall2-167486

This report text is held in digital form as: ..\TWE\Waste & Env\Strat Waste & Land\Historic Environment\Projects\Sites\Sites S\St Breock wind farm\Report\St Breock Access Track Wind Farm\_WB-146310.doc

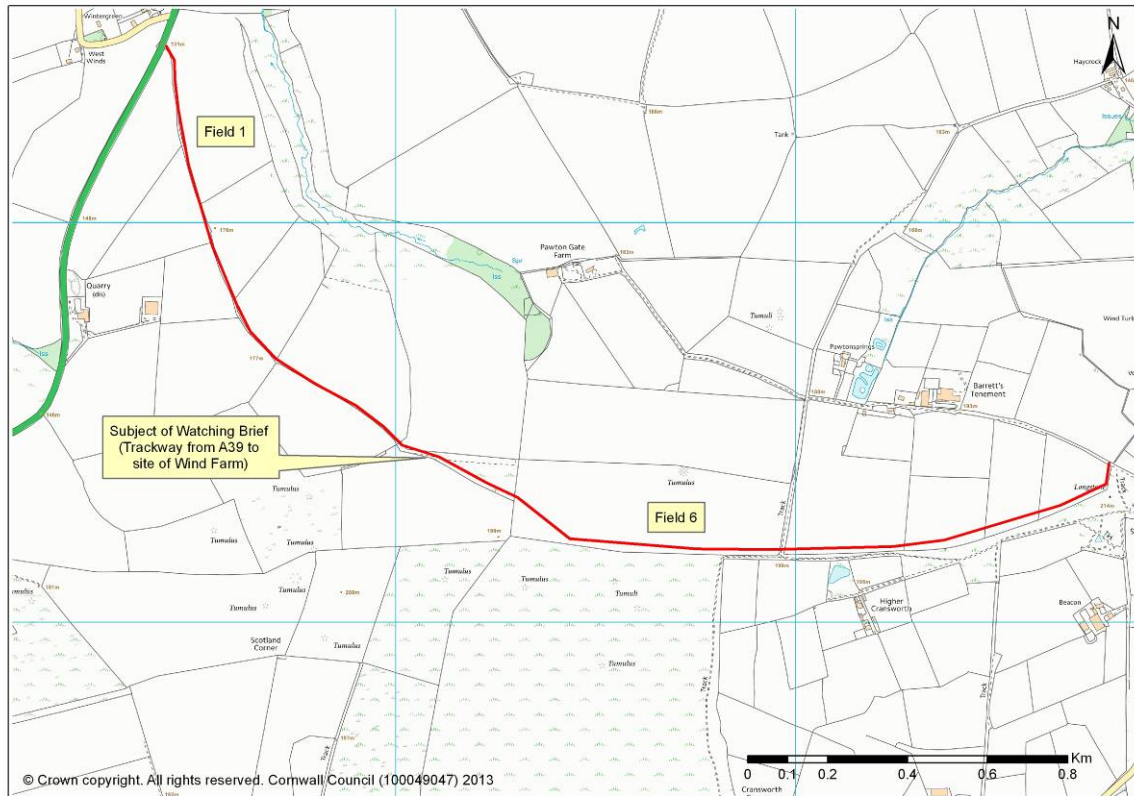


Figure 3: Location of fields 1 & 6 along the route of the track (shown in red).

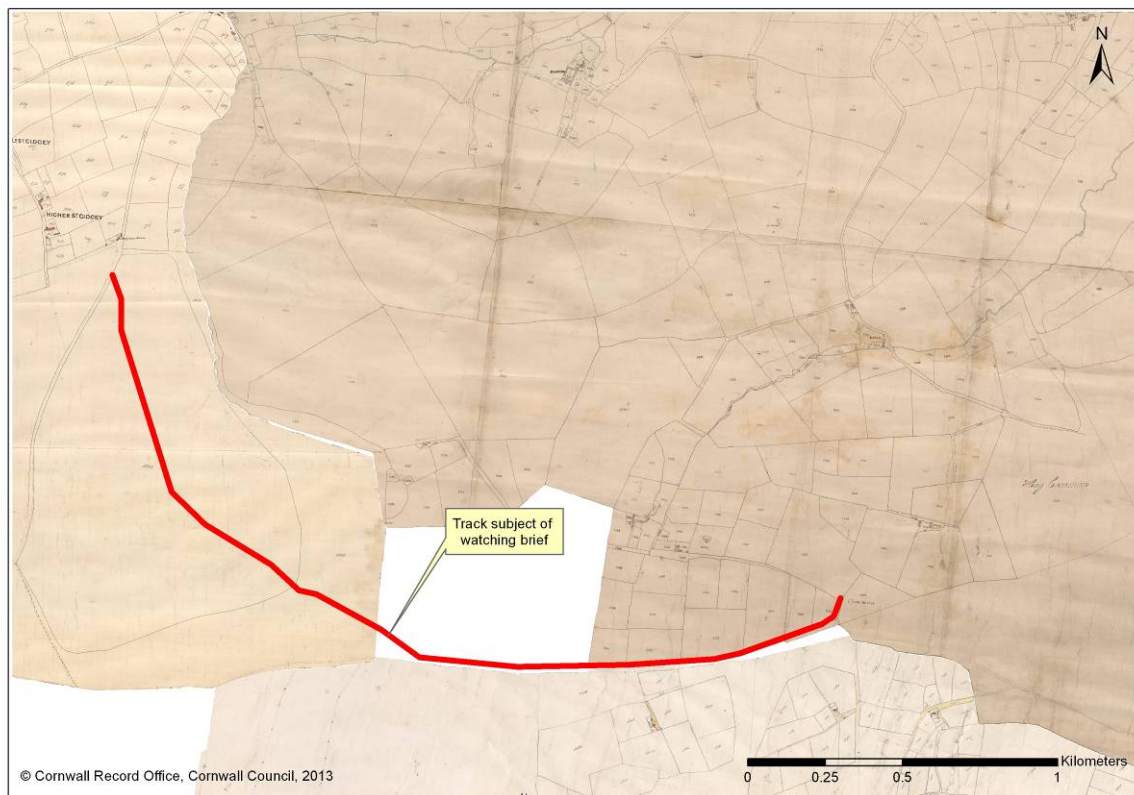


Figure 4: Tithe maps of St Issey (c1841), St Wenn (c1842) & St Breock (c1843) (access track shown in red).

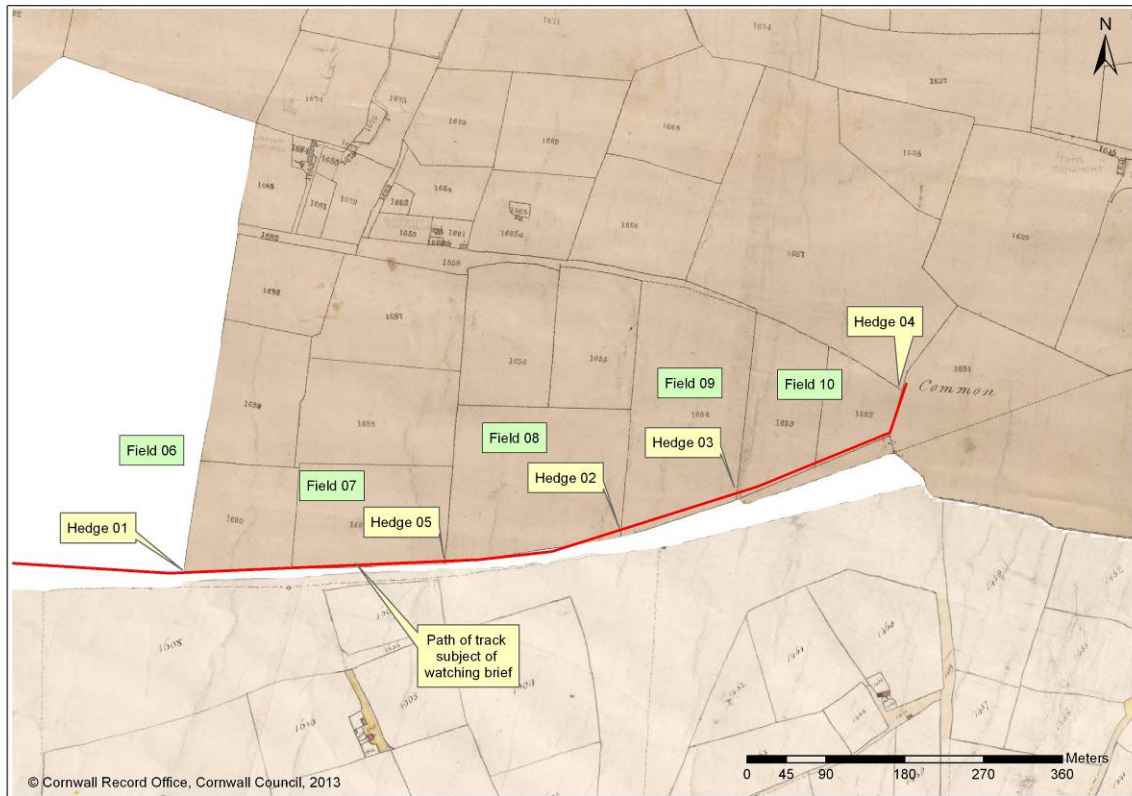


Figure 5: Tithe maps of St Breock (c1843) & St Wenn (c1842) showing location of field boundaries (access track shown in red).

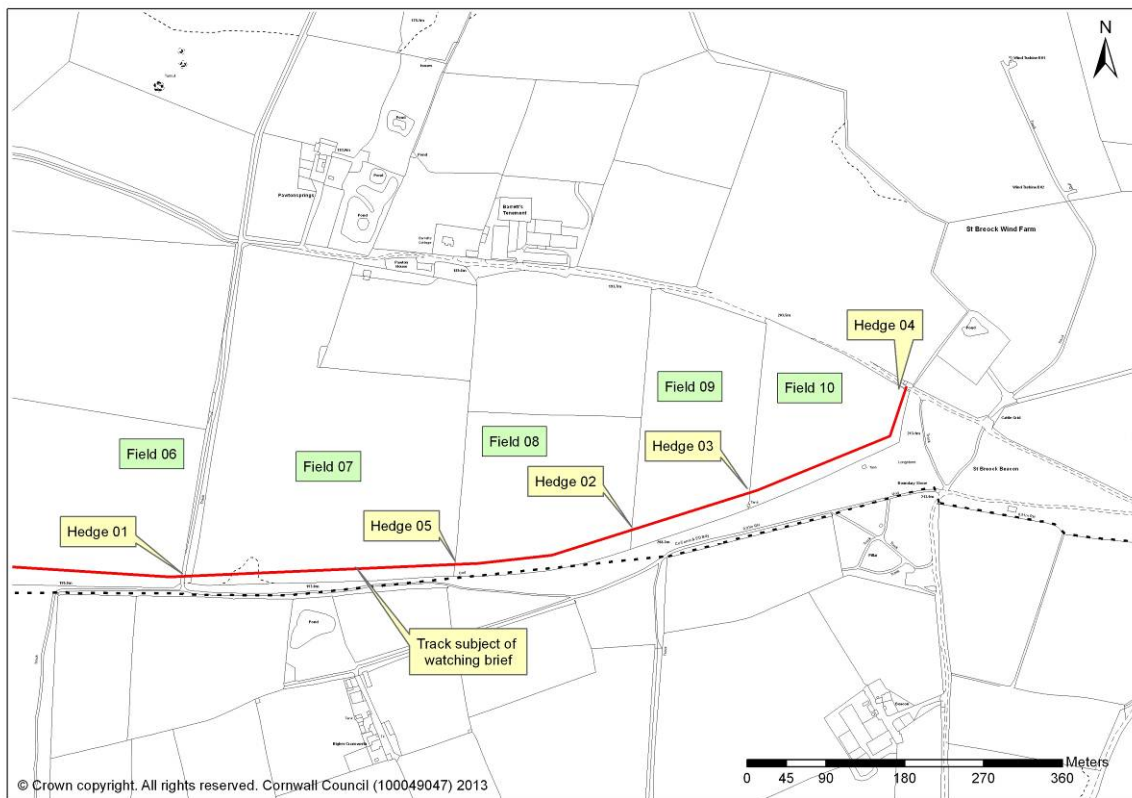


Figure 6: Location of breaches in boundaries 1-5.



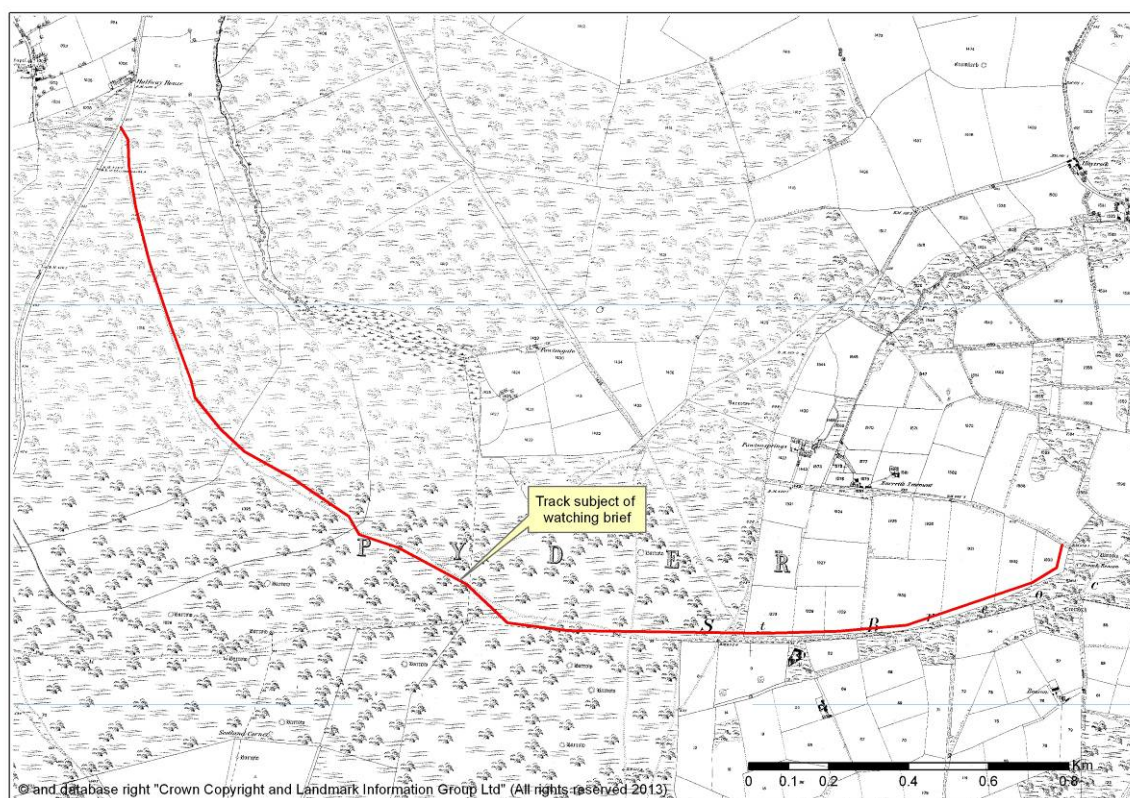


Figure 7: Ordnance Survey c1880 showing route of trackway through St Breock Downs.

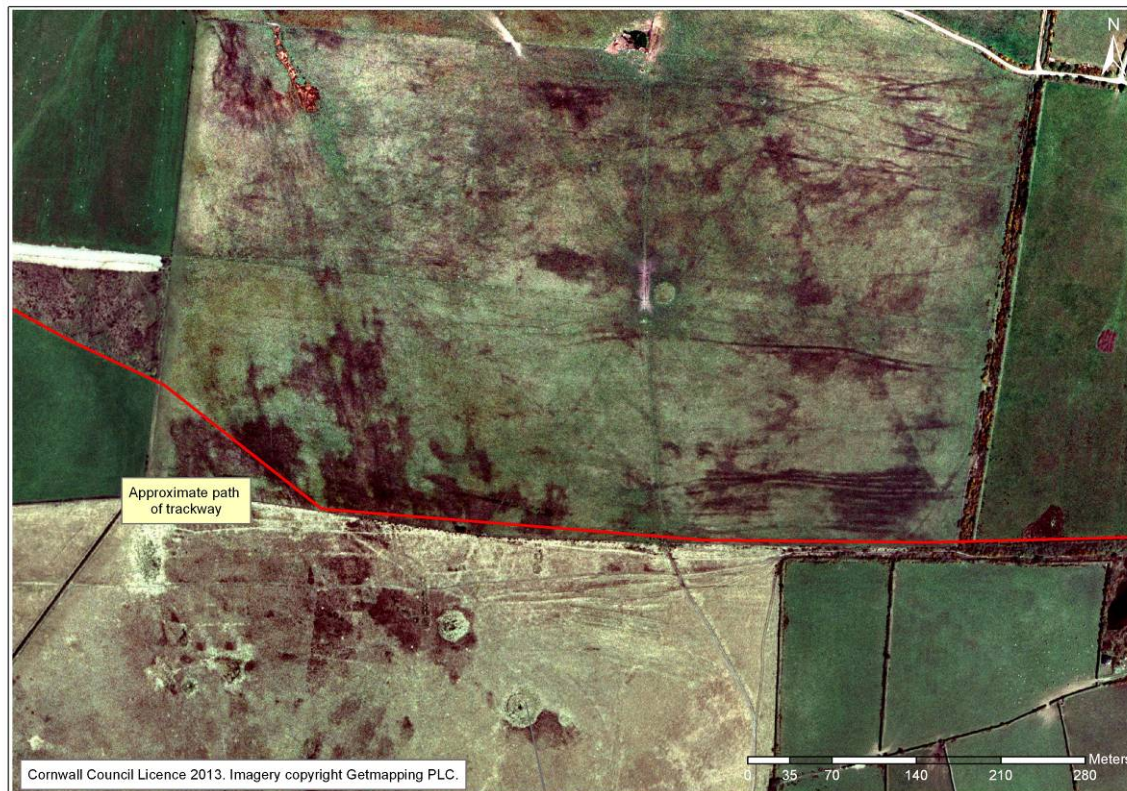


Figure 8: Aerial image of field 6, St Breock Downs plateau. (Red line denotes route of track).



*Figure 9: View north along route of track in field 1.*





*Figure 10: Field 1 area adjacent to the A30, looking SW.*



*Figure 11: Field 1, looking north along route of the new road and old track.*



*Figure 12: Looking north from the end of field 1 after removal of topsoil.*



*Figure 13: Pre excavation of field 6 looking east across plateau.*





*Figure 14: Telegraph pole guide wire in situ (field 6).*



*Figure 15: Boundary stone in situ (Field 6 looking SW, Rosenannon Downs fence line at the rear of image).*





*Figure 16: Plough marks west side of field 6.*



*Figure 17: View of field 6 looking west with top soil removed, striation marks in image are from a tractor.*





*Figure 18: View of old gateway between St Breock Downs and Rosenannon Downs taken from field 6 looking south.*



*Figure 19: View of heavy duty vehicle tracks impressed into natural material within field 6 (looking west).*





Figure 20: View of stone faced bank (boundary 1), ditch and N-S trackway are to the left of the boundary, this is the border between fields 6 & 7 looking north.



Figure 21: Looking into field 7 from field 6 showing breach in boundary 1 (looking east).





Figure 22: North facing section of stone faced bank (boundary 2), note the damage making structure unstable (looking south).



Figure 23: South facing section of stone faced wall (boundary 3) (looking north). Inset image shows construction of face.





Figure 24: South facing section of stone faced bank (boundary 4) (looking north).



Figure 25: South facing section of low earth bank (boundary 5) (looking north)



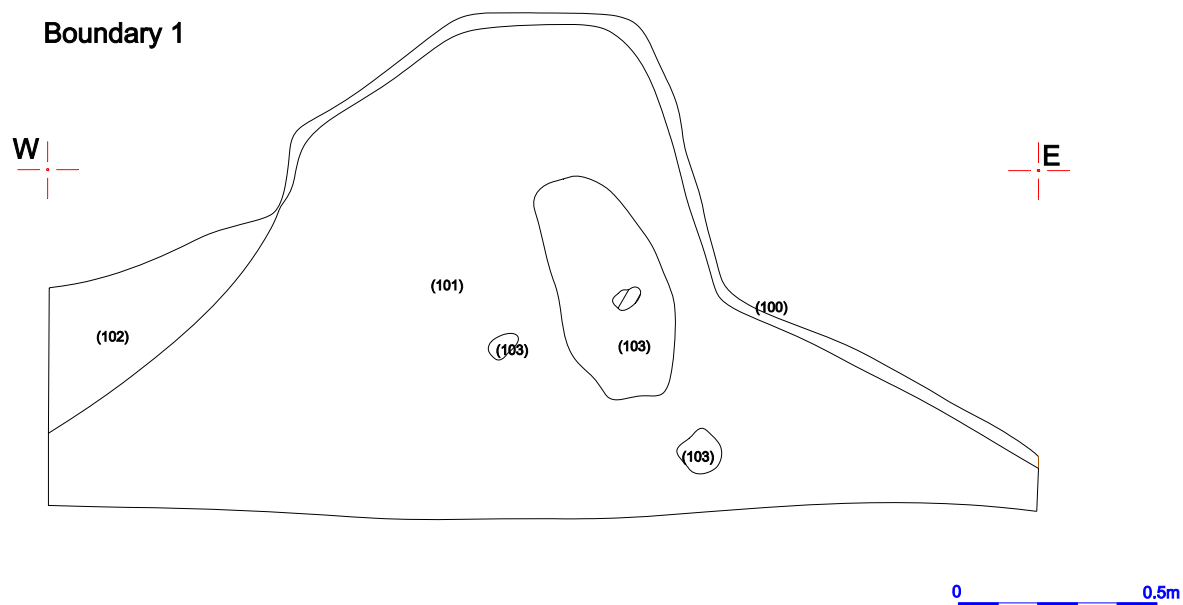


Figure 26: Section through boundary 1.

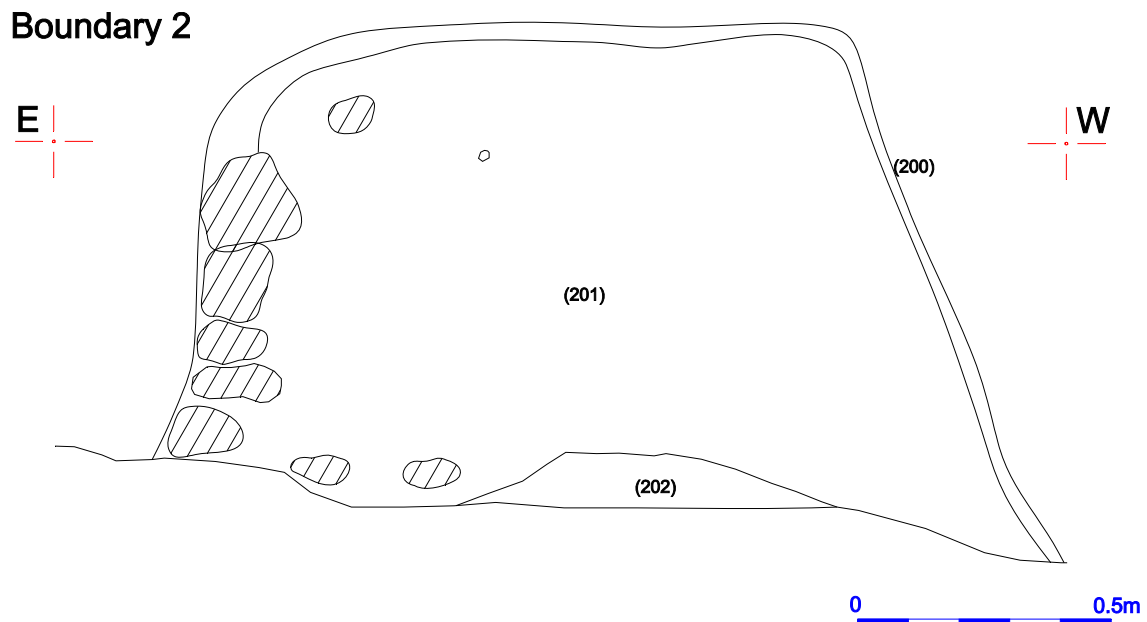


Figure 27: Section through boundary 2.

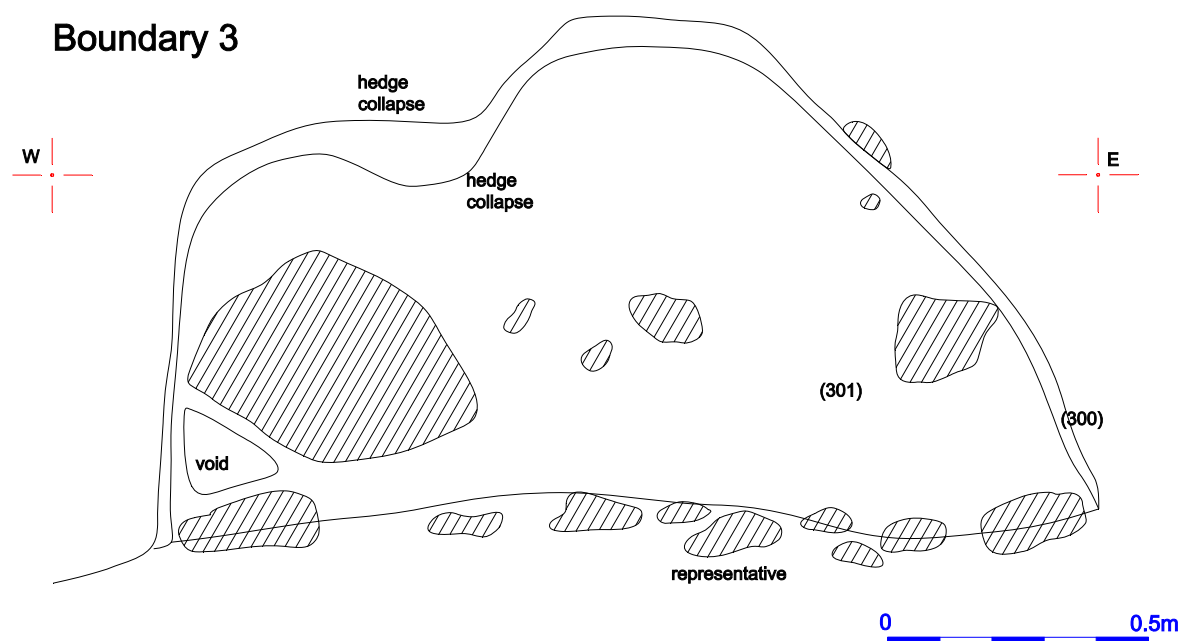


Figure 28: Section through boundary 3.

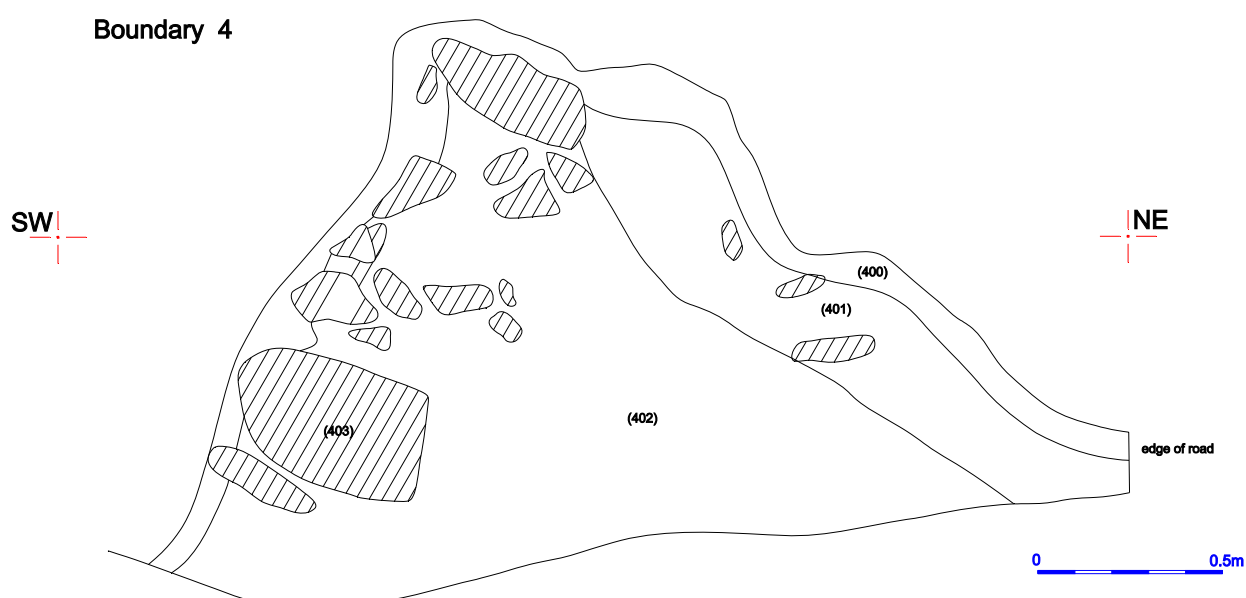


Figure 29: Section through boundary 4.

## Appendix 1: Table of contexts associated with this project

No	Description/Interpretation	Depth
	Field 1	
(1101)	Topsoil – Thin covering of loamy soil mixed with organic material (grass) mid to dark brown in colour, common stone inclusions, small irregular shapes. Mixture of quartz and mudstone.	<0.20m
(1102)	Yellow/brown in colour very stony material, directly beneath the top soil, common stone inclusions, some clay content, stones <0.05m in size, irregular. Evidence of plough marks within the material less than 0.05m in depth.	
	Field 6	
(601)	Topsoil – Thin covering of dark organic soil topped with grass, very organic and peaty in appearance, which had been subject to ploughing, stone inclusions, small irregular shapes, predominantly quartz, <0.01m in size,	<0.20m
(602)	Yellow clay material, stone inclusions, common, irregular shapes, varying in size, common, <0.03m.	
(603)	Red ferrous or oxidised appearing clay material, similar in content to (602), these contexts appeared as banding on the west side of the plateau.	
(604)	Irregular stony layer of quartz material, <0.04m in thickness, predominantly small irregular shaped quartz stones.	
(605)	Mid to dark brown loamy soil, with sparse quartz stone inclusions, irregular in shape, <0.01m.	<0.02m
(606)	Dark organic material similar to (601), may have been topsoil re-deposited by farming activity, not direct ploughing.	<0.05m

## Appendix 2: Historic Environment Projects Written Scheme of Investigation

### HISTORIC ENVIRONMENT PROJECTS

Written Scheme of investigation for an Archaeological Watching Brief along the St Breock Wind farm Access track

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#### 1. Introduction

HE Projects has been requested by David Nixon of REG Windpower Ltd to provide a project design for an archaeological monitoring along the route of a an access track for the wind farm at St Breock. A geophysical survey was undertaken which identified a number of potential buried archaeological features in two of the fields (ADH Bartlett 2011).

The requirements for archaeological recording were stipulated by Phil Copleston (Historic Environment Planning Advice Archaeologist, Cornwall Council), who in an email dated 12/1/13 has stipulated that archaeological monitoring should take place during the excavation of the access road in two places along the route of the access track (geophysical survey Fields I and 6).

**This project design is for a watching brief and report in Fields 1 and 6. However, in the event significant remains are uncovered, an updated project design for post excavation work will be needed to cover environmental processing, artefact analyses and final publication.**

##### 1.1 Historical background

The Access track passes through an area which has been classified as ‘‘Recently Enclosed Land’ with a high potential for upstanding archaeological remains such as round barrows. A large number of Early Bronze Age round barrows are known in the area to the south, north and east of the road corridor, and a crop-mark enclosure (MCO21789), appears to fall within the route of the access track. A small number of anomalies of potential archaeological origin were also identified by the geophysical survey in Fields 1 and 6.

##### *Potential sites*

There is potential for buried archaeological sites to survive within the project area and there is the scope for the survival of artefacts of all periods.

#### 2. Aims and objectives

The purpose of the monitoring is:

To record archaeological features and deposits affected by the access track in Fields 1 and 6.

To record 3 Cornish hedge boundaries that will be breached by the access track.

#### 3. Methodology

The archaeological recording will consist of three stages: fieldwork, archiving and archive report.

##### 3.1 Fieldwork

The archaeological recording along the route of the access road will be undertaken in two Fields 1 and 6. It will be undertaken as an ‘archaeological watching brief’, with a member of HE present during the soil stripping to identify and record any

archaeological features, layers and finds exposed during the site works. The groundwork excavations will be monitored by an HE archaeologist. Where significant deposits are encountered HE will be given the opportunity to excavate them by hand.

If archaeological deposits of regional or national importance are uncovered, then a contingency should be allowed within the construction programme to review options to ensure their preservation *in situ*. 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 the archaeologist and the Historic Environment Advice Officer.

During the site monitoring the archaeologist will:

Identify and record any archaeological features that are revealed; the level of recording will be appropriate to the character/importance of the archaeological remains.

Where necessary the detailed archaeological recording may include:

The production of plans and section drawings of the excavated features.

The recording of features, using a continuous numbering system.

### **Recording – general**

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 map; all drawings will include standard information: site details, personnel, date, scale, north-point.

All features and stratified finds from below the level of the modern disturbance will be accurately located at an appropriate scale.

All archaeological contexts will be described to a standard format linked to a continuous numbering sequence.

Spoil will be inspected systematically for artefacts and recovered finds will be bagged and labelled (as above).

Photography: scaled monochrome photography will be used as the main record medium, with colour images used more selectively and for illustrative purposes.

Features recorded during the excavation will be plotted and tied into the Ordnance Survey.

### **Treatment of finds**

The fieldwork will produce artefactual material.

All artefacts in stratified contexts should be plotted on a scaled base plan/section and described.

All non-metallic finds will be collected in sealable plastic bags which will be labelled immediately with the context number or other identifier.

#### **3.2 Archiving**

Following review with the HE 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 retained finds and samples, etc will be stored in a proper manner (being clearly labelled and marked and stored according to HE guidelines).

All records (context sheets, photographs, etc) will be ordered, catalogued and stored in an appropriate manner (according to HE guidelines).

#### **3.3 Archive report**

The results of the archaeological monitoring will be gathered together and assimilated into the overall archive report for the project.

The archive report will follow the standard HE format. Copies of the report will be distributed to the Client, the County Archaeologist and the local and main archaeological record libraries. A PDF copy of the report will be produced.

Tasks include:

- producing a descriptive text;
- producing maps and line drawings;
- selecting photographs;
- report design;
- report editing;
- dissemination of the finished report

The report will have the following contents:

Summary

- |              |   |
|--------------|---|
| Introduction | - Background, objectives, methods.  |
| Results      | - Factual description of the results of the data  |
| Discussion   | - Brief summary of the results, highlighting, the significance of the site and the potential for further recording. |
| Archive      | - A brief summary and index to the project archive.   |

*References*

*Illustrations:*

- Location plan showing the site of the enclosure to the OS map.
- Location plan linking the access track to the OS map.
- Location of identified deposits (if appropriate).
- Illustrative photographs (if appropriate).

An English Heritage/ADS online access to the index of archaeological investigations (OASIS) record will be made.

4. Health and safety during the fieldwork

4.1 Health and safety statement

**Historic Environment is within the Environment, Planning and Economy Directorate of Cornwall Council. The HE projects team follows Cornwall Council's *Statement of Safety Policy*.**

**Prior to carrying out the fieldwork HE Projects will carry out a risk assessment.**

5. Insurance

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

6. Standards

HE follows the Institute for Archaeologists' Standards and Code of Conduct and is a Registered Archaeological Organization.

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

7. Copyright

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

This project design and estimate is the copyright of Historic Environment, Cornwall Council.

Use of the material will be granted to the client.

#### 8. Monitoring

The project will be monitored. The Historic Environment Planning Advice Officer should be informed in advance of the intention to start the archaeological recording. HE Projects will liaise with the Historic Environment Planning Advice Officer to advise on the programme and progress of work.

#### 9. Freedom of Information

All information gathered during the implementation of the project will be subject to the rules and regulations of the Freedom of Information Act 2000.

#### 10. Project staff

The project will be managed by Andrew Jones, a member of staff who is a Member of the Institute for Archaeologists; he will:

Discuss the objectives and programme of the project with project staff, including arrangements for Health and Safety.

Monitor progress and results for each stage.

Edit the project report.

An experienced member of HE Projects staff will undertake the archaeological fieldwork and produce the archive report.

Andy Jones      24/9/13  
Historic Environment Projects  
Cornwall Council  
Fal Building  
County Hall  
Treyew Road  
Truro  
TR1 3AY  
Tel: 01872 323691