

Environmental Planning Consultancy

# Collaton Cable Trench

## Programme of Archaeological works

**March 2014**

Reference: PA13/11698

**Prepared for:**

*W J Risdon & Sons.*

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Kilkhampton Road,

Bude,

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# Contents

# 1 INTRODUCTION

## 1.1 BACKGROUND

A programme of archaeological work was carried out on the 20th and 21st of March 2014 on behalf of Neo Environmental Planning Consultancy. The two objectives of the programme were; (a) to supervise the opening of three evaluation trenches positioned along the proposed cable route and to identify, quantify and record any buried features or groups of features; and (b) to supervise and record the removal of two sections of Cornish hedgerow, necessary to allow for temporary access tracks. This report details the findings of the programme of archaeological field work conducted by archaeologist Sean Rice. All work was carried out in accordance with the WSI (Neo 2014) and to Institute for Archaeologist standards and guidance (IFA 2008a, 2008b).

## 1.2 SITE LOCATION

The site is located to the north-east of Collaton Farm 1.4km to the south of Kirkhampton in north Cornwall. The approved wind turbine will be located within a field which is currently utilised for agricultural practices. The surrounding area consists of undeveloped agricultural land with field boundaries consisting of Cornish hedgerows on all sides.

## 1.3 GEOLOGY AND SOILS

The underlying geology is alternate beds of sandstone with mudstone and siltstone from the Bude formation (BGS, 2014).

The overlying soils across the site are from the Neath association which are typical brown earths. These consist of well drained, fine loamy soils often over rock formed over carboniferous sandstone and shale (Soil Survey of England and Wales, 1983).

# 2 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

A desk based assessment (DBA) was conducted to establish all historical and archaeological information relevant to the site and local area. The data search was conducted within a 2km radius of the site to ensure the collation of robust data that would inform the study and characterise the direct and indirect impacts of the project.

A site walkover survey and visit of historic assets within the study area was undertaken in June 2013. This was conducted by a qualified archaeologist to identify any above ground remains and any areas with archaeological potential.

The survey corridor lies within an area of "Anciently Enclosed Land". Within the wider vicinity are a number of land enclosures and defended settlements dating from the prehistoric through to the medieval periods. Post-medieval settlement and land use is also located in the close vicinity.

There are no recorded designated or non-designated sites within the confines of the development site, although there are five non-designated sites recorded within the land ownership boundary of Collaton Farm. All of the sites are either medieval or late medieval in origin, with the closest recorded sites (Collaton medieval settlement; HER No. 154, and Collaton field system; HER No. 70365) c 320m from the proposed turbine foundation. Collaton medieval settlement lies within c 215m of the cable trench of the project. The settlement of Collaton was first recorded in 1302.

A geophysical survey was also commissioned in order to determine the location and extent of any buried archaeological features along the proposed cable route (Archaeological Surveys Ltd. 2014).

A detailed magnetometry survey carried out within a 30m wide x 500m long corridor over three fields identified a number of possible archaeological features. Most notably a positive curvilinear anomaly that appears to relate to the southern half of a ring ditch, possibly of a round barrow, with a diameter of 18m; the northern half of ditch having either been fragmented or truncated by a later field boundary.

The survey areas also contained a number of positive linear, discrete and amorphous anomalies. While it is possible that some of these anomalies could relate to cut features, such as ditches and pits, their lack of coherent morphology prevented confident interpretation but it was thought likely that several related to natural [002] features and/or agricultural activity. The full geophysical survey report can be found in the Appendices.

# 3 ARCHAEOLOGICAL METHODOLOGY

All archaeological work was carried out in accordance with the WSI (Neo Environmental, 2013), which outlined archaeological methodology to be used, as well as the Standards and Guidance for archaeological watching brief work produced by the Institute for Archaeologists (IfA, 2008). Phil Copleston, the Historic Environment Planning Advice Officer for the council, provided a brief and was consulted prior to any works being undertaken.

In consultation with Phil Copleston and based upon the magnetometry results, three evaluation trenches were plotted along the proposed cable route to investigate the most coherent anomalies.

Under continuous archaeological supervision and using a wide toothless ditching bucket, topsoil [001] was machine excavated to the depth of formation, archaeological features or in-situ sub soil/natural geology, whichever came first.

## 3.1 SITE ARCHIVE

Unfortunately, no local museum was in a position to accept the archive. The archive is currently held at the offices of Neo Environmental at Wright Buisness Centre, 1 Lonmay Road, Glasgow, G33 4el. The contents of the archive are:

**TABLE 1 - QUALIFICATION OF SITE ARCHIVE**

| | |
|---|---|
| Number of Contexts | 9 |
| No. of files/paper record | 1 |
| Photographs | 19 |
| Finds | 2 (post-medieval date) |

# 4 RESULTS

## 4.1 TRENCH 1

Trench 1, the most southerly of the three evaluation trenches, measured 13m by 44m was positioned primarily to investigate the ring ditch identified by the geophysical survey.

The topsoil [001] was on average 40cm in depth and can be characterised as a loose/friable mid greyish brown sandy silt with moderate amounts of clay.

Removal of the topsoil [001] exposed the natural [002] geology which was mostly shale with some pockets and banding of clay natural [002].

No evidence of a ring ditch could be identified, however, the boundary ditch identified by the survey was located on the break of slope 1 metre from the southern limit of the evaluation trench.

A section of the boundary ditch was excavated with the machine bucket and cleaned up by hand. The ditch cut [003] ran east to west and was 0.7m in depth by 1.9m wide and had a concave base with a steep break of slope to the south and a moderate break of slope the north. The fill [004] of the cut was a clean/sterile greyish brown compact clay.

No finds were recovered either from the ditch fill [004] or from any of the topsoil [001] and no other archaeological features were identified within the trench.

## 4.2 TRENCHES 2 & 3

The location of the trenches 2 and 3 were also informed by the geophysical survey results and were positioned to maximise the number of positive linear, discrete and amorphous anomalies investigated.

Trench 2 measured 13m by 73m. The topsoil [001] was on average 35cm in depth and was very similar, if not identical, in character to that of Trench 1; as was the underlying natural [002] morphology. Several amorphous areas of clay [005 – 008] were noted and although they appeared natural these were excavated in order to be thorough. Excavation confirmed these pockets and bands of clay were part of the natural [002] geology.

No archaeological features of any description were located within Trench 2 and no finds were recovered from the topsoil [001].

Trench 3, measured 9.5m by 68m. The topsoil [001] was on average 30cm in depth but far deeper (up to 70cm) at the southern end. Again the topsoil [001] was similar in character to the first two trenches but was a little heavier and contained more clay at the deeper southern end.

Removal of the topsoil [001] revealed the underlying natural [002] shale with no archaeological features identified. One small sherd of post-medieval/modern pottery and a short length of clay tobacco pipe stem were recovered from the topsoil [001] during stripping.

## 4.3 Cornish Hedges

The archaeological field work programme also included the supervision of the removal and the recording of two sections of hedgerow.

Both of the hedge banks [009] recorded are made of earthen banks of topsoil measuring 1.5m to 1.7m in height. The base width is 2.8m to 3.0m tapering equally on both sides to 0.6m to 0.7m at full height. Neither hedge section had been faced with stone, as is often the practice with Cornish hedgerows and while there are inclusions of shale stone up to 25cm in size within the hedge bank matrix there is nothing that could be interpreted as structural.

No finds were recovered either from the removed hedgerow material or from any of the four exposed sections, providing nothing to date the hedgerow archaeologically.

An ecologist was also present and was able to confirm that the two main woody shrubs which make up the hedgerow are gorse and hawthorn and that two less common species: dog's mercury and wood sorrel are also present.

The biodiversity of a hedgerow can provide a rough indication of the age of hedge. Hooper's rule is a method of hedge ageing which states that an average of one shrub per 30m section gives us an average date of one hundred years, give or take one hundred years. This method would date the Collaton Farm hedge row at 300 to 500 years. It is important to note however that the biodiversity of a hedge can relate to vanished or existing nearby habitats, or to climate, and to the way the hedge has been trimmed and maintained, rather than to its age (Meneer 2007).

# 5 FINDS

There were two finds located during the excavations, both of which were found in the topsoil [001] in Trench 3. The first was a sherd of post-medieval/modern pottery. The second find consisted if the white stem o a clay pipe and again appears to be post-medieval in date. Neither finds are considered to be of much archaeological significance.

# 6 DISCUSSION & CONCLUSIONS

The stratigraphy within the site appears to be quite uniform, consisting of a topsoil [001] of between 0.35m and 0.45m of loose/friable mid greyish brown sandy silt, with moderate amounts of clay. The natural [002] consists of a shale with some pockets and banding of clay natural.

The site has experienced highly intensive agriculture, with ploughing and grazing being implemented across all fields. The fields in which the development lies are enclosed by Cornish hedges which are of low heritage value, but have been recorded where broken through. These hedges consist of earthen mound material with inclusions of slate angular and sub-angular stones of c.0.25m [009]. No stone facing was evident during the excavations (see figures 1.0 to 1.3, Appendix 8.2 below). The hedge banks were up to 2.8m in width and 1.7m in height. There were no discernable differences between the hedge bank and the surrounding topsoil [001] context (apart from the slate inclusions). No finds or anything of archaeological significance was identified during the hedge removal.

The trenches were excavated to identify, quantify and record the potential archaeology identified from the geophysical survey. The most obvious feature was a potential ring-ditch in trench 1. There was no evidence of such a feature identified during the machine monitoring. The only archaeological feature of any note, was the redundant field boundary ditch [003] located and excavated within trench 1. The ditch cut [003] ran east to west and was 0.7m in depth by 1.9m wide and had a concave base, with a steep break of slope to the south and a moderate break of slope the north. The fill [004] of the cut was a clean/sterile greyish brown compact clay.

No finds were located during the ditch excavation.

## 6.1 RECOMMENDATIONS

No further work has been recommended for the excavation of the cable trench, as long as the cable is moled under the existing hedges. If hedges are to be disturbed, then a program of archaeological monitoring and recording of these features, in the form of a watching brief, should be undertaken.

# 7 BIBLIOGRAPHY

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# 8 APPENDICES

## 8.1 APPENDIX 1: CABLE TRENCH LAYOUT WITH LABELS

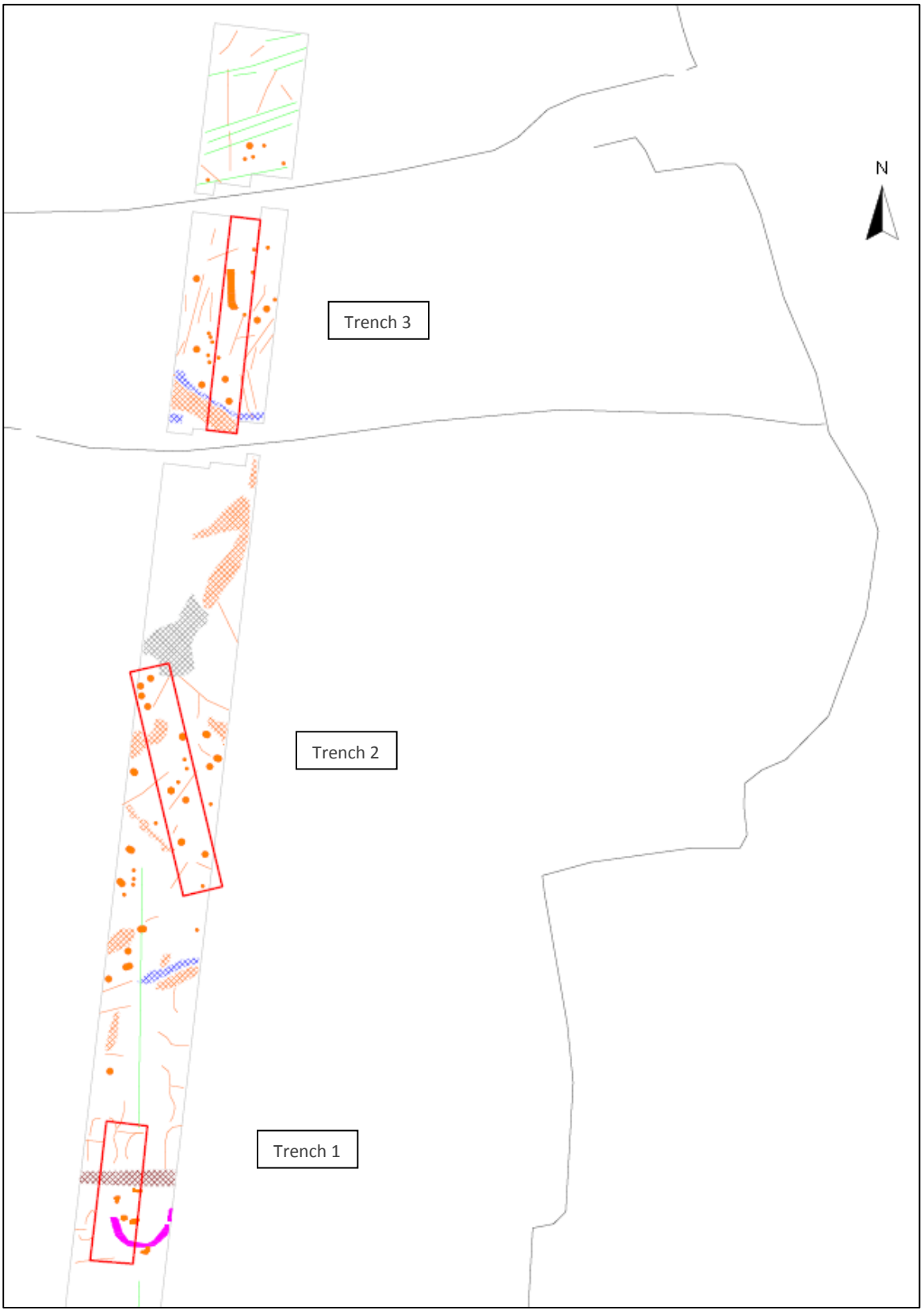
## 8.2 APPENDIX 2: PLATES

## 8.3 APPENDIX 3: CABLE TRENCH LAYOUT

## 8.4 APPENDIX 4: DEVELOPMENT LAYOUT

## 8.5 APPENDIX 5: WSI FOR COLLATION

# 8.1 Appendix 1. Trench Layout



## 8.2 APPENDIX 2. PLATES

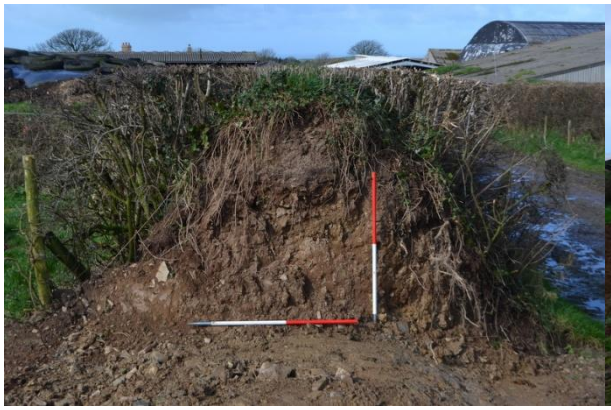


**Figure 1.0**: Hedge Section 1 removed at field boundary along existing farm access, (view west)

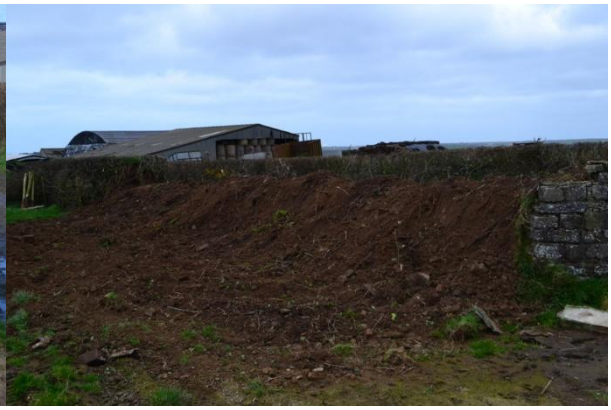


**Figure 1.1**: Hedge Section 1 stripped of vegetation and being removed

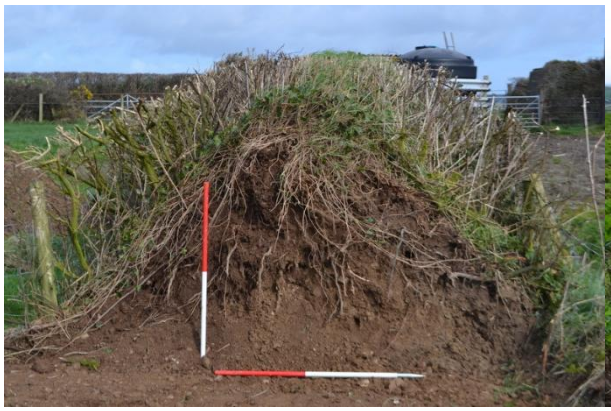


**Figure 1.2**: Field boundary 2 removed (view north)

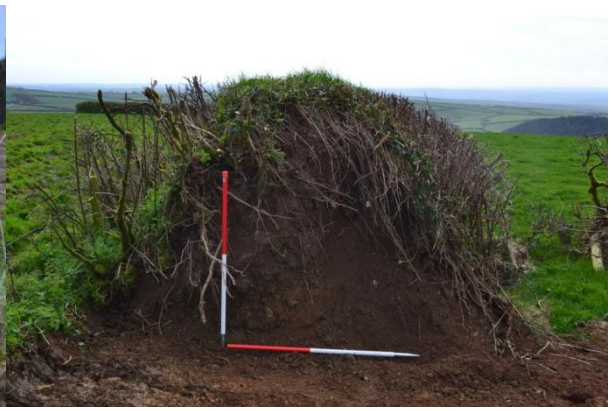


**Figure 1.3**: Hedge Section 2 removed (view south)

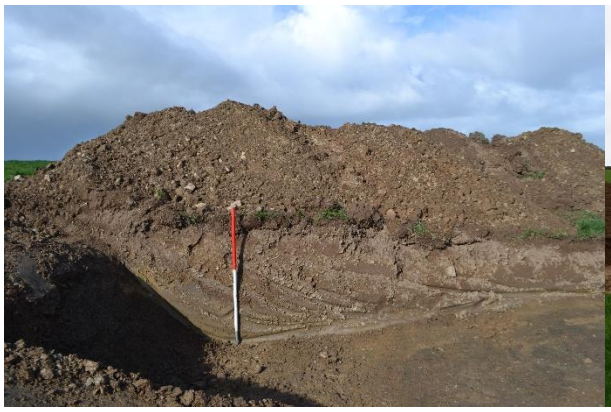


**Figure 1.4**: Section through boundary ditch in Trench 1 (view east)

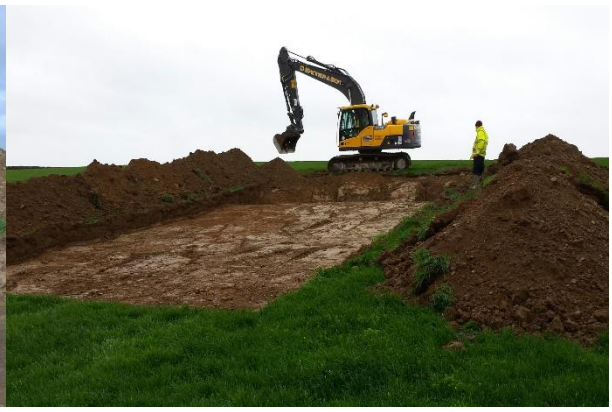


**Figure 1.5**: Trench 2 being stripped (view southeast)

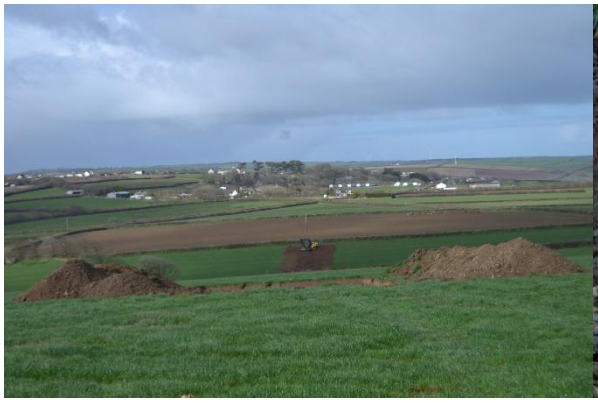


**Figure 1.6**: Trench 3 in distance and Trench 1 in foreground during backfilling (view north)

**Figure 1.7**: Trench 3 section, (view east)