Ventonteague, A30 Carland Cross to Chiverton Cross, Cornwall Archaeological Evaluation (updated report)

Cornwall Archaeological Unit

Report No: 2018R086

Ventonteague, A30 Carland Cross to Chiverton Cross, Cornwall

Archaeological Evaluation (updated report)

Client	Socotec
Report Number	2018R086
Date	November 2018
Status	Final
Report author	Sean R Taylor
Checked by	Andy Jones
Approved by	Andrew Young
Project number	146821
Site code	CC18
Graphic archive ref	GRE921
Data location	\\CAU\Archive\Sites\A\A30 Carland to Chiverton T32 Evaluation 2018 146821
Historic England / ADS OASIS online reference	cornwall2-324766
Planning reference	n/a

The project's documentary, digital, photographic and drawn archive is maintained by Cornwall Archaeological Unit.

Cornwall Archaeological Unit
Cornwall Council
Fal Building, County Hall, Treyew Road, Truro, Cornwall, TR1 3AY
Tel: (01872) 323603
Email: enquiries@cau.org.uk Web: www.cau.org.uk

Acknowledgements

This study was commissioned by Socotec and carried out by Cornwall Archaeological Unit, Cornwall Council.

The Project Manager was Sean Taylor. The fieldwork was undertaken by Martin Andrewes, Fuller Hughes, Ryan Smith and Sean Taylor. Ryan Smith carried out drone photography on site. Martin Andrewes processed the environmental samples. Ryan Smith digitised the site drawings and project archive. Henrietta Quinnell undertook the pottery assessment. Anna Lawson Jones undertook the flint assessment. Denise Druce of Oxford Archaeology North undertook the charcoal assessment.

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.

Cornwall Archaeological Unit is a Registered Organisation with the Chartered Institute for Archaeologists

Contents

List of Figures

Abbreviations

CAU	Cornwall Archaeological Unit
CIfA	Chartered Institute for Archaeologists
CRO	Cornwall Record Office
HER	Cornwall and the Isles of Scilly Historic Environment Record
LPA	Local Planning Authority
NGR	National Grid Reference
OD	Ordnance Datum – height above mean sea level at Newlyn
OS	Ordnance Survey

1 Summary

This report is an updated version of an earlier report (2018R056) with the results from a programme of radiocarbon dating added.

Cornwall Archaeological Unit (CAU) undertook a programme of archaeological evaluation, in the form of a strip map and sample (SMS) exercise, at Ventonteague, St Erme (Fig 1). The work had been requested by the client to investigate further some features identified by a previous evaluation (Taylor 2017) as of potentially national significance, namely a possible structure dated to the Middle Neolithic period (*c*3400-3000 cal BC) by association with Peterborough ware. The feature containing the Neolithic pottery was centred on SW 82888 53091.

A total of 38 features were identified by the evaluation of which 22 were pits, 8 postholes, 2 gullies representing a livestock track, and 5 ditches. In addition two groups of shallow pits/postholes were identified that were not given individual numbers.

Significant features identified include a pit containing Middle Neolithic Peterborough ware (identified as a ditch in the previous evaluation) and a pit containing pottery identified as Late Neolithic Grooved ware. Radiocarbon dating of material from two pits gave Late Neolithic to Early Bronze Age dates, demonstrating a degree of time depth on the site.

The remains found range in value/significance/importance from Regional Significance in the case of the pits and associated features containing Neolithic pottery, through to Local Significance in the case of the ditched field system(s) and livestock track.

Recommendations for mitigation include a programme of excavation prior to the start of groundworks should the road scheme proceed.

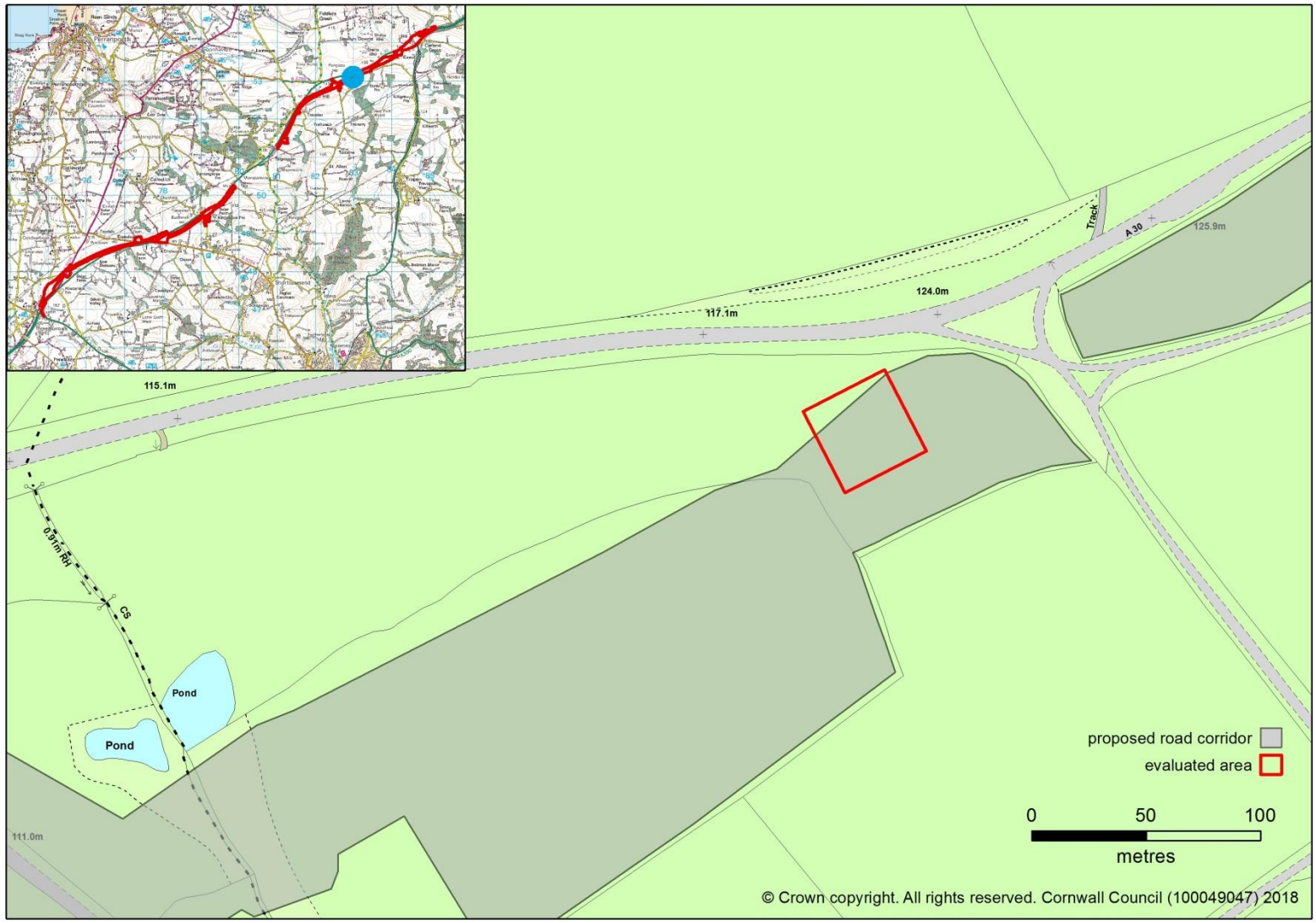

Fig 1 Location map.

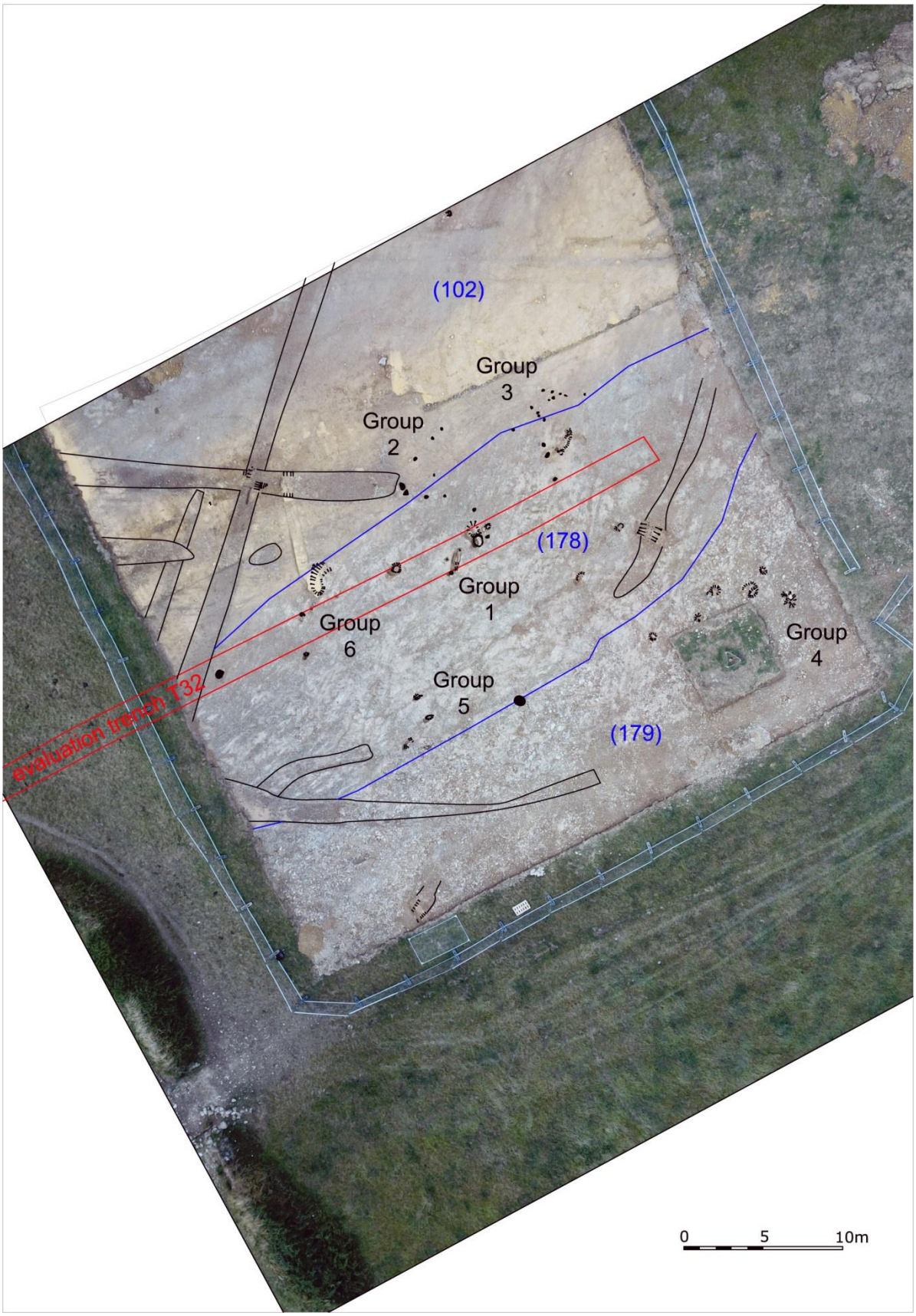

Fig 2 Site extent and pit groups (former evaluation trench in red, natural deposits in blue).

2 Introduction

2.1 Project background

Cornwall Archaeological Unit (CAU) was commissioned by Socotec to undertake a programme of archaeological evaluation. This work was carried out to inform a future planning application for a programme of road updates on the A30 between Carland Cross and Chiverton Cross (Fig 1).

Further details of the background and the aims and methods of the project can be found in the Method Statement (MS) reproduced here in Appendix 1. In summary, the site has previously been the subject of a geophysical survey (Sumo Survey 2017) and a programme of archaeological evaluation trenching (Taylor 2017). The former identified a number of linear anomalies aligned along a WNW-ESE axis with another intersecting anomaly perpendicular to these within the current project area. A number of ferrous responses were thought to represent artefacts within the ploughsoil. An evaluation trench through the centre of the current project area identified the linear features as shallow ditches but also identified a number of pits, postholes, and a feature identified as a ditch, the latter containing Peterborough ware of Middle Neolithic date (*c*3400-3000 cal BC).

The project area of the current project (referred to henceforth as the 'site') comprised a 40m square area centred on the Peterborough ware-bearing feature and aligned along the same WSW-ENE axis as the original evaluation trench. The area was stripped mechanically under archaeological supervision on 13th and 16th July 2018. An area 5.5m square around a borehole in the eastern corner of the site was left untouched.

The evaluation was undertaken over a 2 week period beginning on Tuesday 17th July. This period was marked by very hot and dry conditions and feature visibility was consequently very low. Around 70% of the site was swept with brooms and then water introduced via a tractor-towed bowser on two occasions. This increased visibility markedly. The weekend prior to the final day on site, Monday 30th July, was marked by heavy and prolonged rainfall. Consequently feature visibility was at its highest on this day and many previously unrecorded features were identified.

2.2 Location and setting

The site lies at the head of a shallow dry valley that drops from 120m OD down to 104m OD to the south-west, where it joins the valley of the River Allen. The source of this tributary of the Truro River lies 200m to the north-west of the junction.

The underlying geology of the site is mudstones/siltstones (shillet) of the Middle Devonian Porthtowan Formation (Bristow 1999). The site was found to straddle an interface in the underlying geology, with fractured bedrock to the south, giving way to a weathered clay to the north. The interface itself was represented by a band of shillet-rich clay (Fig 2).

The historic landscape character of the area is Farmland: Medieval, a form of Anciently Enclosed Land (AEL), as defined by the Cornwall HLC project (Cornwall County Council 1996).

3 Archaeological results

A total of 90 contexts were recorded of which 41 were cut features. These included 23 pits, 11 postholes, 3 ditches, 2 gullies, and two contexts representing groups of shallow pits/postholes. Context numbers were issued from a continuous sequence 101-190. Cuts are given in square brackets, for instance [104] and deposits in round brackets, (105). Full context descriptions are given in Appendix 2 and the finds are described in Appendix 3. Appendix 4 contains details of environmental samples taken.

Twenty one samples were taken from selected features. Sampled deposits were dry-sieved on site using three grades of sieve: 12mm, 6mm and 2mm. Larger stones were discarded and the remainder was then wet-sieved in a bulk flotation tank using a 1mm mesh to collect residues and 0.25mm mesh to collect the floated material. Seven of the resultant flots were sent off for further assessment (see section 4.3).

3.1 Pits and postholes

A total of 34 pits and postholes and two groups of shallow features were identified. These ranged from deep well-defined features to shallow irregular features that may represent stone throws or animal burrowing. Although few features displayed stratigraphic relationships a number of them appeared to form groupings, mostly on the basis of proximity.

This group (Fig 3) was located in the middle of the site and comprises the previously excavated pit containing Peterborough ware as well as a pair of intersecting pits and five peripheral shallow features, possibly representing truncated postholes. No other artefacts were recovered from these features. The only stratigraphic relationship between features was between pits [123] and [182] and this had been removed during the evaluation. The features are grouped on the basis of proximity.

3.1.1 Group 1

Pit [106]: this pit (Fig 4) had been identified during the previous evaluation as a linear feature, [32/9], containing two fills, (32/12) and (32/8) (Taylor 2017). Further investigation revealed it to be a linear pit, 1.45m long, 0.5m wide, and 0.31m deep with a U-shaped profile. It contained two fills, in order of deposition (126) and (105). The former made up the bulk of the fill, whilst the latter, up to 0.1m thick, contained all of the finds recovered from this pit, 10 sherds of Peterborough ware. Six sherds come from a thick-walled Mortlake vessel. The other four sherds are from one or more thinner-walled vessel(s). All are of a non-gabbroic fabric.

Small quantities of burnt organic material were recovered from fill (105). This comprised a mixed assemblage of oak and alder/hazel, with sparse fragments of possible gorse-type round wood. This pit was also the only feature containing burnt material other than charcoal, with rare charred hazelnut shell fragments.

Postholes [125] and [186]: these features (Fig 4) lay on the western side of pit [106]. Both were shallow sub-circular features that may represent truncated postholes. Negligible quantities of burnt organic material were recovered from fill (124) of [125].

Postholes [127], [188], and [189]: three shallow sub-circular features, forming an arc to the north and east of pit pair [123] and [182], which may represent truncated postholes that once held temporary posts. Negligible quantities of burnt organic material were recovered from fill (128) of [127].

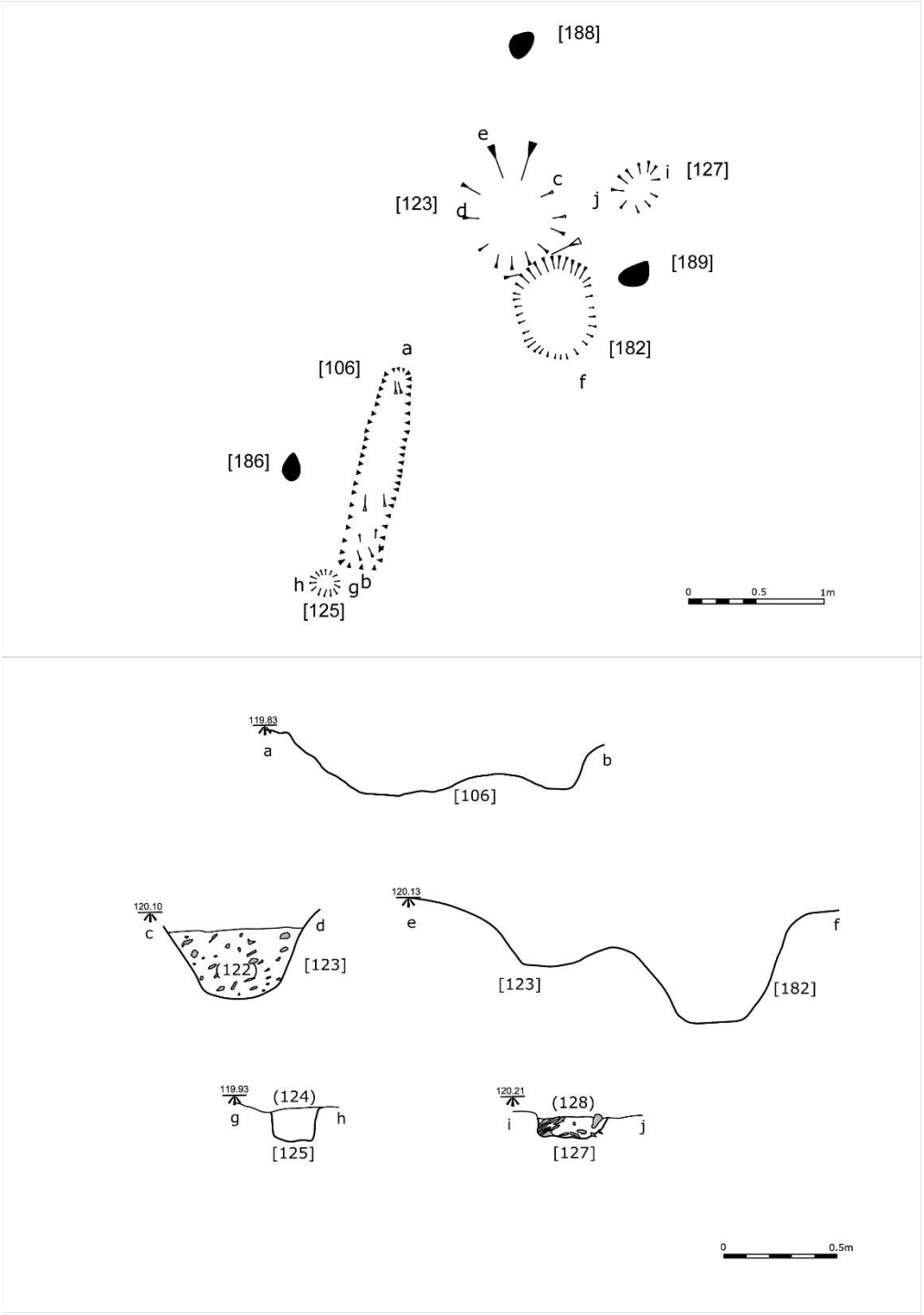

Fig 3 Group 1 pits (all plans oriented north).

Fig 4 Group 1 postholes [186] and [125], anticlockwise from left, and pit [106], right.

Pits [123] and [182]: the former was partially excavated during the previous evaluation as ditch [32/10], the latter was completely excavated as posthole [32/20], situated at the terminal of [32/10]. Both features (Fig 5) contained a single fill, (32/11). Further investigation has revealed that the features are actually two intersecting pits. Unfortunately any relationship between the two had been removed by the previous evaluation. Pit [123] was sub-circular, 0.92m by 0.71m and 0.3m deep, containing a single fill, (122), from which small quantities of burnt organic material were recovered. This sample contained oak charcoal but also modern insect remains and leaves and is considered to be contaminated.

Pit [182] was sub-oval, 0.78m by 0.54m and 0.48m deep, with vertical sides and a flat base. The entirety of the pit fill had been removed during the previous evaluation.

Interpretation: there is no evidence for these features being contemporary other than on grounds of proximity. As is common with prehistoric pit groups no structural information could be inferred. Since the degree of truncation on the site has been regarded as minimal it seems likely that the shallower features represented sockets for slight, temporary posts.

Fig 5 Group 1 pits [182], left, and [123], right.

3.1.2 Group 2

This group (Figs 6 and 8, top) was located to the north of group 1; it comprises eight shallow sub-oval features. These were emptied of fills in the course of cleaning the area and none was more than 0.05m deep. The majority were sub-oval in plan and averaged 0.15m by 0.1m in size. Seven of the features formed an arc covering an area 4.2m by 3m, with two of the larger postholes situated at the apex of the arc to the south-west. This arc was open to the north-east. One smaller feature lay at the centre of the group.

Interpretation: since the degree of truncation on the site has been regarded as minimal it seems likely that these features represented sockets for slight, temporary posts. It is possible that they represent a temporary wall or screen, perhaps in conjunction with Group 3 outlining a structure approximately 10m by 4.2m.

3.1.3 Group 3

This group (Figs 7 and 8) was located a few metres to the east of group 3. It comprises 17 shallow sub-oval features. Most of these were emptied of fills in the course of cleaning the area and the majority were less than 0.05m deep. Most were sub-oval in plan and averaged 0.15m by 0.1m in size. Some may form a sub-oval post-ring. Two features, [174] and [175], on the south-east side of this possible circuit, were excavated and recorded.

Pit [174]: a sub-linear pit, 0.8m long, 0.34m wide, 0.08m deep, located on the eastern edge of the group. It contained a single fill, (172), from which moderate quantities of burnt organic material were recovered. This was dominated by charcoal from mature oak.

Pit [175]: a sub-circular pit, 0.25m in diameter, 0.15m deep, located on the eastern edge of the group. It contained a single fill, (173), from which moderate quantities of burnt organic material were recovered. This was dominated by charcoal from mature oak. A sample was submitted for radiocarbon dating (see section 4.4) and this calibrated to 2270-2030 cal BC (SUERC-82736; 3739±24).

Interpretation: since the degree of truncation on the site has been regarded as minimal it seems likely that these features represented sockets for slight, temporary posts. It is possible that they represent a temporary wall or screen, perhaps in conjunction with Group 2 outlining a structure approximately 10m by 4.2m, or as a sub-oval post-ring covering an area of 4.1m by 2.5m. If pit [175] forms part of the group an Early Bronze Age (*c*2270-1700 cal BC) date is suggested by the radiocarbon determination from this feature, allowing for an age offset due to the dating of potentially mature oak charcoal.

Fig 6 Group 2 features.

Fig 7 Group 3 features (north arrow is pointing west).

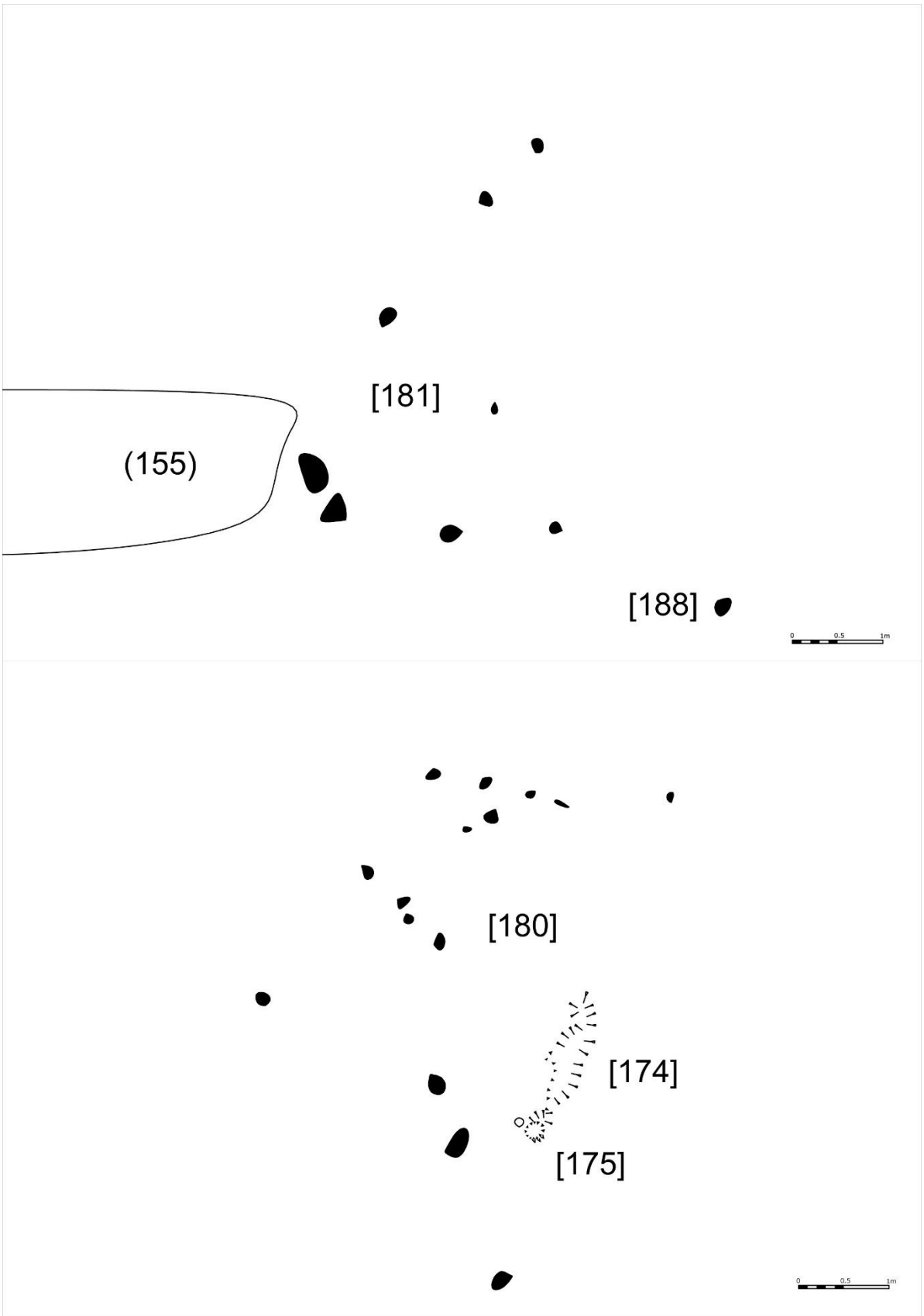

Fig 8 Groups 2 (top) and 3 (bottom) pits.

3.1.4 Group 4

This group (Fig 9) comprises eight features of various shape and size situated in the eastern corner of the site. The elements of this group appear to form an arc covering an area 10m by 8m and open to the west. However, this apparent arc formed around an area 5.5m square left unexcavated to protect a borehole in this location and therefore the extent and nature of the features, and any relationships, remains unverified.

Pit [104]: an irregular pit (Fig 10), 0.78m long, 0.56m wide, and 0.15m deep, situated on the northern edge of the group. It contained a single fill, (103), from which six sherds of decorated pottery identified as Grooved ware were recovered. A moderate amount of burnt organic material was recovered from this fill.

Pit [114]: an oval pit, 0.54m long, 0.36m wide, 0.14m deep, located on the northern edge of the group. It contained a single fill, (107), from which negligible quantities of burnt organic material were recovered.

Pit [115]: an irregular pit, 0.5m long, 0.3m wide, 0.05m deep, located on the southern edge of the group. It contained a single fill, (112), from which negligible quantities of burnt organic material were recovered.

Pit [116]: a sub-oval pit, 0.54m long, 0.45m wide, 0.12m deep, located on the north-western corner of the group. It contained a single fill, (113), from which negligible quantities of burnt organic material were recovered.

Pit [117]: a sub-oval pit (Fig 11), 1.2m long, 0.7m wide, 0.17m deep, located on the eastern edge of the group. It contained two fills, primary (118) and upper (110). The latter contained a large amount of charcoal. This was found to comprise mostly oak heartwood. A sample was submitted for radiocarbon dating (see section 4.4) and this calibrated to 2470-2300 cal BC (SUERC-82735; 3900±24).

Pit [119]: an oval pit, 0.45m long, 0.4m wide, 0.12m deep, located on the north-eastern edge of the group. It contained a single fill, (109).

Pit [120]: a sub-oval pit, 0.5m long, 0.4m wide, 0.09m deep, located on the south-eastern edge of the group. It contained a single fill, (111), from which negligible quantities of burnt organic material were recovered.

Pit [121]: an oval pit, 1.1m long, 1m wide, 0.04m-0.1m deep, located on the northern edge of the group. It contained a single fill, (108), containing a tiny sherd of pottery, possibly Roman Samian ware or a medieval fabric, and from which negligible quantities of burnt organic material were recovered.

Interpretation: despite the lack of clarity caused by the presence of an unexcavated area at the centre of this group, it was apparent that the features might prove to be unconnected due to the wide disparity between the size, form, and fills of the features. One of the features held an assemblage of Late Neolithic Grooved ware, whilst another contained a small sherd, possibly intrusive, of much later date. A third contained a large assemblage of charcoal. However, a radiocarbon date from this pit, [117], suggests a terminal Late Neolithic (*c*2470 cal BC) to Early Bronze Age (*c*2000 cal BC) date, allowing for an age offset due to the dating of potentially mature oak charcoal. This is largely inconsistent with the Grooved ware and this would seem to suggest either that at least some of these pits do not form a coherent group or that the correct date for the radiocarbon determination lies within the early part of the date range.

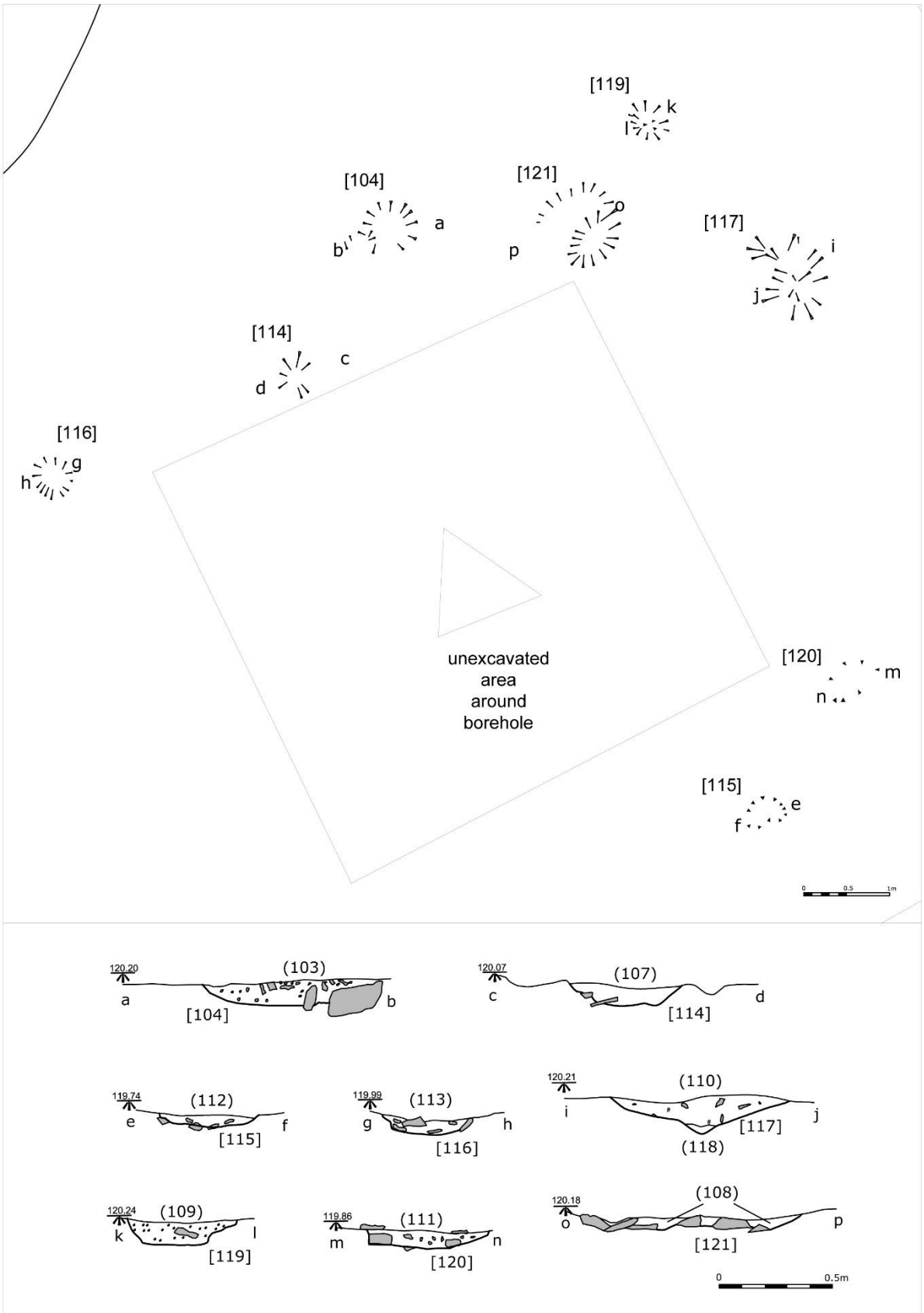

Fig 9 Group 4 pits.

Fig 10 Group 4 pit [104], section.

Fig 11 Group 4 pit [117], section.

3.1.5 Group 5

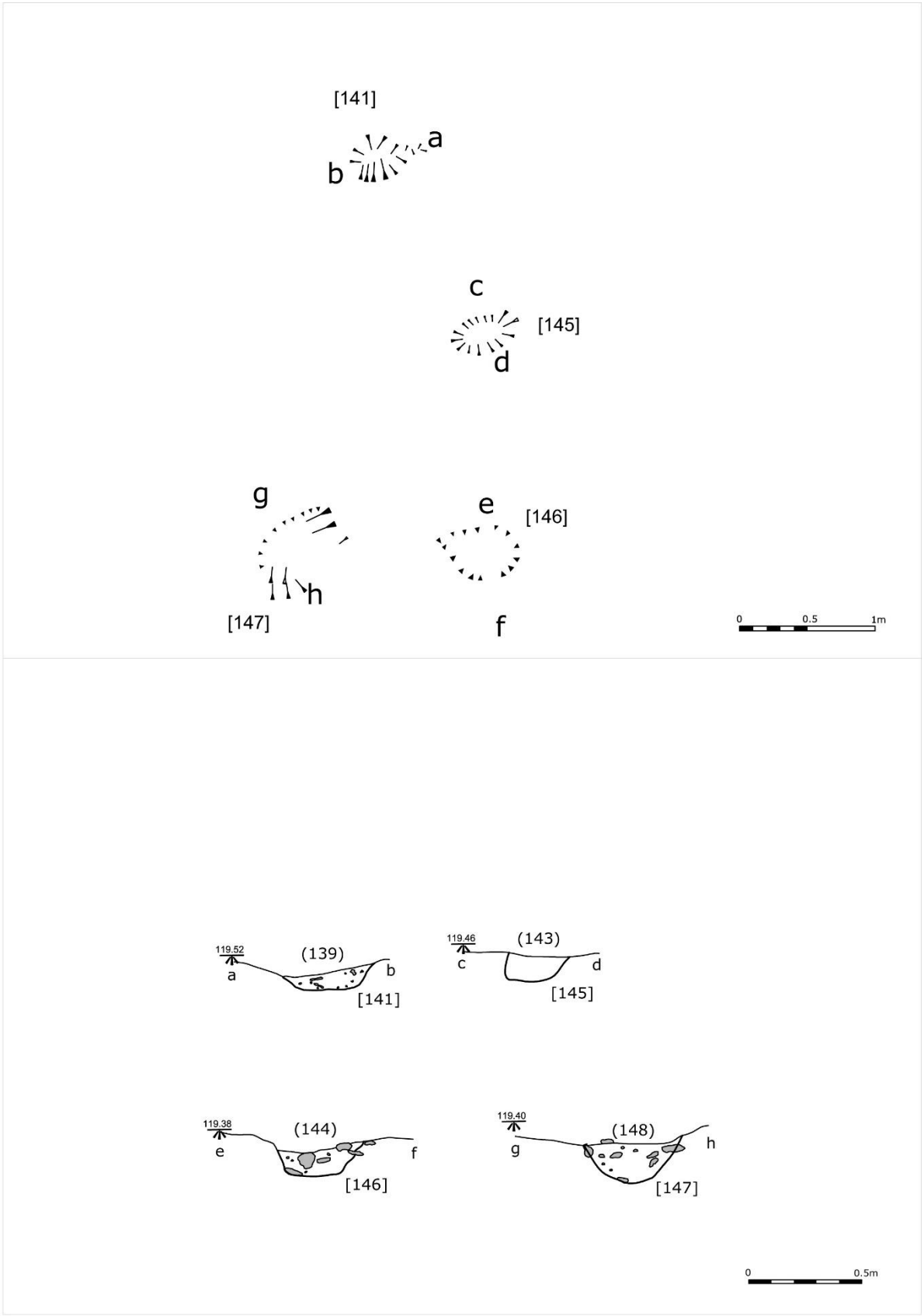

Fig 12 Group 5 pits.

This group (Fig 12) comprises four pits located in the south-western quadrant of the site. The features formed a tight reverse L-shaped group covering an area 3.6m by 1.8m. The features were largely irregular in plan and profile. None of these features were sampled.

Pit [141]: an irregular sub-oval pit, 0.44m long, 0.3m wide, 0.14m deep, located on the northern edge of the group. It contained a single fill, (139).

Pit [145]: an irregular kidney-shaped pit, 0.5m long, 0.3m wide, 0.16m deep, located between [141] and [146]. It contained a single fill, (143).

Pit [146]: an irregular pit, 0.45m long, 0.36m wide, 0.23m deep, located at the angle of the group. It contained a single fill, (144).

Pit [147]: an irregular pit, 0.7m long, 0.43m wide, 0.16m deep, located on the western edge of the group. It contained a single fill, (148).

Interpretation: the irregular nature of this group of features suggests that they represent stone throws or animal burrowing.

3.1.6 Group 6

This group (Fig 13) comprises an arc of four postholes and a kidney-shaped pit close to the western edge of the site. The arc is around 5.5m long, running north from [133] and finishing to the east at [130].

Pit [130]: an oval posthole or pit, 0.17m long, 0.15m wide, 0.15m deep, located on the eastern edge of the group. It contained a single fill, (129).

Pit [132]: an oval posthole or pit, 0.23m long, 0.22m wide, 0.2m-0.28m deep, located between [140] and [138]. It contained a single fill, (131), from which small quantities of burnt organic material were recovered. This was dominated by charcoal from mature oak.

Pit [133]: a circular posthole, 0.35m long, 0.3m wide, 0.27m deep, located at the southern edge of the group. It contained a single fill, (134), from which small quantities of burnt organic material were recovered.

Pit [138]: an oval posthole, 0.29m long, 0.18m wide, 0.14m deep, located between [132] and [133]. It contained a single fill, (137).

Pit [140]: a sub-linear pit, 2.3m long, 0.72m wide, 0.2m deep, located on the northern edge of the group. It contained two fills, primary (142) and upper (136). Moderate quantities of burnt organic material were recovered from both of these fills. This was dominated by charcoal from mature oak but some fragments from slow-growing wood were present. The pit was truncated by ditch [156].

Interpretation: the regular nature of the features within this group suggests that they represent something structural, if the majority of them are, in fact postholes, or a pit group if not.

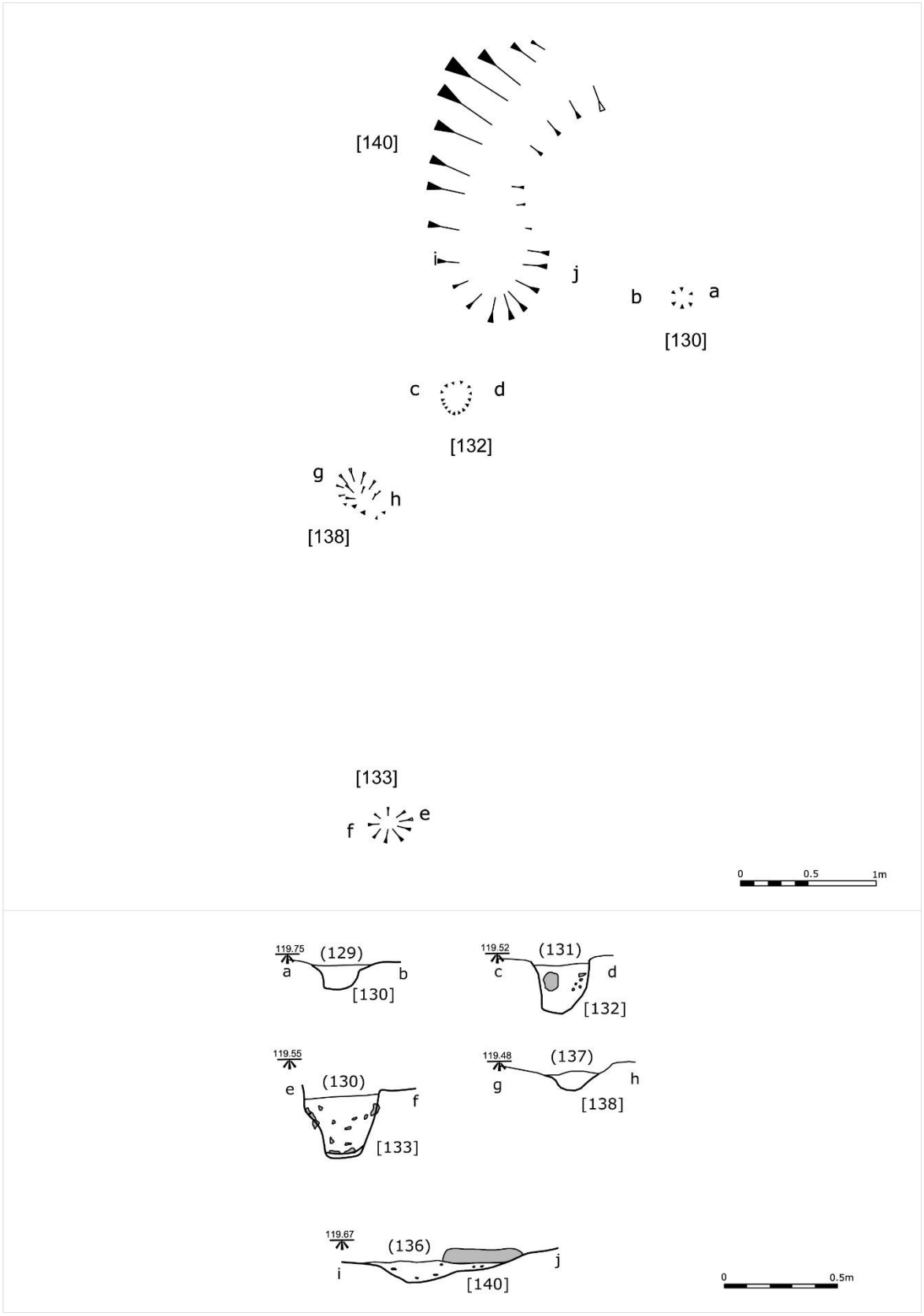

Fig 13 Group 6 pits.

3.1.7 Ungrouped pits

Seven pits or postholes (Fig 15) were isolated and could not be incorporated with any of the previous groups.

Pit [153]: an oval pit, 0.7m long, 0.34m wide, 0.23m deep, located on the western side of gully [166]. It contained a single fill, (152).

Pit [158]: an oval pit, 0.55m long, 0.3m wide, 0.09m deep, located on the western side of gully [166]. It contained a single fill, (157).

Posthole [159]: a circular posthole, 0.22m in diameter, 0.25m deep, located on the northern edge of the area. It contained a single fill, (154).

Posthole [161]: an oval posthole, 0.21m long, 0.1m wide, 0.11m deep, located between ditches [168] and [171]. It contained a single fill, (160).

Pit [164]: a sub-oval pit (Fig 14), 0.7m long, 0.6m wide, 0.2m deep, located between groups 1 and 6. It contained two fills, primary (169) and upper (163).

Pit [177]: a kidney-shaped pit, 0.8m long, 0.45m wide, 0.17m deep, located between groups 4 and 5. It contained a single fill, (176).

Pit [187]: a sub-oval pit, previously recorded as [32/19] (Taylor 2017), 0.5m long, 0.34m wide, 0.27m deep, located at the western edge of the site. It contained a single fill, previously recorded as (32/18).

Interpretation: it was unclear whether any of these features could be tied into any of the suggested groups. No interpretation of these features is offered.

Fig 14 Ungrouped pit [164], section.

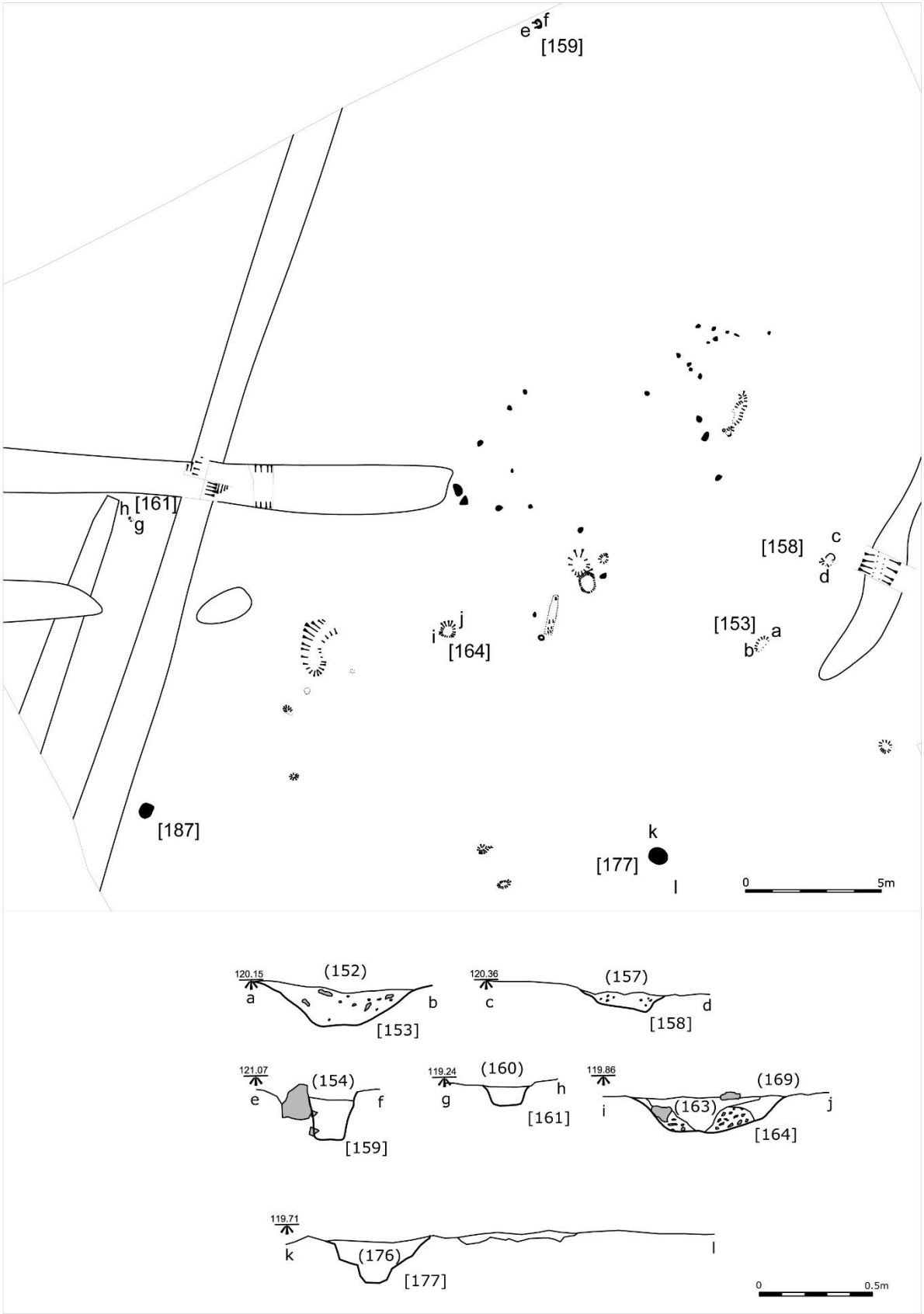

Fig 15 Ungrouped pits.

3.1.8 Linear features

Four linear features (Fig 16) were identified and investigated. A further four ditch fills were identified, mapped, but not otherwise investigated.

Gully [149]: a sub-linear feature, 1.9m long within the stripped area, 0.6m wide, 0.25m deep, located on the southern edge of the site. It followed a north-east to south-west alignment. It contained two fills, primary deposit (151) and upper fill (150). The former contained sub-rounded stones characteristic of heavy and repeated wear.

Ditch [156]: a linear feature, 20m long within the stripped area, 1.6m wide, 0.09m deep, located at the western corner of the site. It followed an east-west alignment. It contained a single fill, (155). The ditch appeared to cut ditch [168].

Gully [166]: a linear gully, at least 11m long, 1.33m wide, 0.23m deep, located at the western corner of the site. It followed a north-east to south-west alignment. It contained a single fill, (165).

Ditch [168]: a linear feature, 30m long within the stripped area, 1.4m wide, 0.17m deep, located at the western corner of the site. It followed a NNE-SSW alignment. It contained a single fill, (167). The ditch appeared to be cut by ditch [156].

Ditch fill (183): the fill of a linear feature, extending into the trench for 4.86m; 1.58m wide. Runs parallel to, and 3.3m to the south of, ditch [156].

Ditch fill (184): the fill of a linear feature, extending into the trench for 23m; 1.24m wide. Follows an east-west alignment.

Possible ditch fill (185): the fill of a linear feature, extending north-east from ditch fill (184) for 7m; 1.12m wide.

Ditch fill (190): the fill of a linear feature, extending into the trench for 9.78m; 0.9m wide. Runs parallel to, and 2.12m to the west of, ditch [168]. Terminates at, or is cut by, ditch [156].

Interpretation: Ditch [168] was identified by the geophysical survey (Sumo Survey 2018) and represents the eastern ditch of a double-ditched Cornish hedge shown on the 1880 OS 25" map but not on earlier or later historical mapping. Ditch fill (190) represents the western ditch of this boundary. It ran north-eastwards from the angle of the boundary to the south-west.

Ditch [156] / ditch fill (183) and ditch fill (184) had been identified by the geophysical survey, along with another linear anomaly that ran parallel to (184) but was not identified within the trench. These double-ditched features are characteristic of Cornish hedges and may represent short-lived enclosure of downland in the 18th or 19th centuries. It is perhaps worthy of note that the features run roughly parallel to the route of the A30, which marked the dividing line between unenclosed land to the north, and enclosed land to the south, on the 1841-2 St Erme Tithe Map.

Ditch fill (185) did not correspond to any mapped elements and appeared to be cut by the ditch containing (184). An exploratory trowel did not reveal any great depth or regularity to the feature and it may represent a natural geological or biological element.

Gullies [149] and [166] shared a common north-east to south-west alignment and may represent the same feature. A continuation of the feature to the south-west would lead to a gateway into the adjacent field. It is noteworthy that the natural geology between them consisted of a band of more solid stony geology than the surrounding clayey material that the features were cut into. They are likely to represent a livestock route between downland to the north and enclosed land to the south.

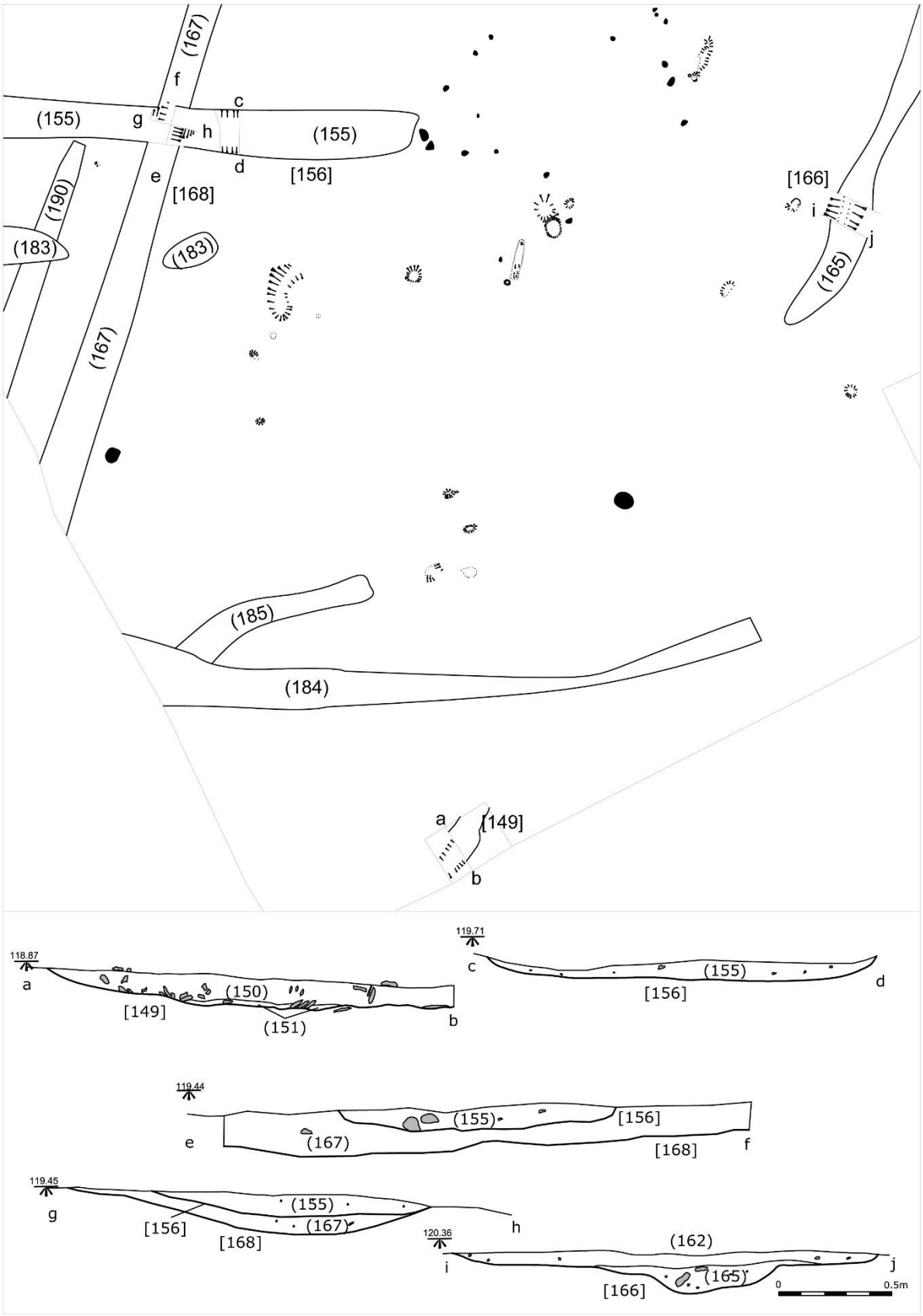

Fig 16 Linear features.

4 Assessments

Three groups of material were submitted for specialist assessment for inclusion within this report: pottery, flint, and burnt organic material. These are reported on in this section. A full list of the ceramics and flint is included within the Finds Inventory in Appendix 3. A full list of the burnt organic material is included within the Sample Inventory in Appendix 4.

4.1 Ceramics assessment by *Henrietta Quinnell*

4.1.1 General

This assemblage consists of small single pits with Middle and Late Neolithic pottery, and a single possible Roman sherd.

No attempt has been made to assess the further work needed on this material, in view of the likely future more extensive excavations, but pieces which currently merit illustration, whether drawing or photo, are indicated. Most fabrics would merit some detailed petrological comment: the non-gabbroic ones are especially important here, the gabbroic admixture ones need investigation because of the variation of the added material which gives indications of movement of clay and areas of manufacture.

4.1.2 Middle Neolithic (Fig 17)

(105) fill pit [106] 10 sherds 174g

Fig 17 Peterborough ware from pit [106].

Of these, 6 sherds come from a Peterborough, Mortlake style, vessel with a thick wall. This is decorated with rows of very close-spaced whipped cord; the narrow parts between the rows stand out as ridges. Fabric probably non-gabbroic, with added vein quartz. Illustration probably appropriate, unless further work produces a better preserved example: either drawing or photography.

4 sherds 21 g come from one or more other vessels, with thinner walls: one sherd has decoration similar to that on the first group. Fabric similar to above.

This is only the fourth find of Peterborough pottery in secure contexts in Cornwall, the others being Tregurra Valley outside Truro (Taylor, in prep), Tregunnel outside Newquay (Brett *et al*, in prep) and the Travel Lodge, Helston (Hood 2009). Reports on the first two are currently being prepared, the last is lodged as grey literature. The best parallels to the principal vessel are those found recently by AC archaeology (Devon) (ACD1692) at Newton Poppleford and at Woodly Farm, Newton St Cyres (ACD1644), both of which are being prepared for publication. Radiocarbon dates obtained from these sites generally fall within the range 3300-2900 cal BC, as is usual nationally. The discussion on the Peterborough ware prepared by the author on Tregurra Valley is currently the fullest account of this style in Cornwall (Quinnell in Taylor, in prep).

4.1.3 Late Neolithic (Fig 18)

(103) fill pit [104] 6 sherds 23 g

Some conjoining sherds but external surface generally abraded. The incised design is complex but includes part of a pattern with concentric circles and is best attributed to Grooved ware. Fabric apparently gabbroic. Illustration desirable, together with some joins work.

Finds of Grooved ware are not infrequent in Cornwall, especially from pits. A nearly complete vessel with concentric decoration similar to that from (103) comes from Trevone (2) west of Padstow and the report on this has a fairly full comment on Grooved ware in Cornwall (Quinnell 2014).

Fig 18 Grooved ware from pit [104].

4.1.4 Roman?

(108) fill pit [121] <8> 1g

Scrap could be Samian ware or medieval.

4.2 Flint assessment by *Anna Lawson Jones*

Almost without exception this small nine piece flint assemblage is Middle to Late Neolithic in date. It includes a number of typical traits (Edmonds 1995; Butler 2005) including the use of well-formed and managed multiplatform flake cores and the production of well-formed, sometimes large uniformly thick flakes designed for retouch to form a particular range of tool forms. With the exception of one piece, which clearly has a nodular flint source, probably from one of the Devon sources (Tingle 1998; Newberry 2002), all the flint with abraded cortex suggests the use of good quality flint pebbles. The remaining pieces have an uncertain origin. A further Neolithic association is the very definite use of heat treatment in at least one piece. This is a recognised feature discussed by Pannett (2011) for the Neolithic period and briefly described by Lee (2001) following experimental work.

Given the known presence of pits in the vicinity, some of which produced Middle and Late Neolithic pottery, it is very likely that this assemblage is contemporary with and directly associated. A number of the pieces do not appear to be every day and functional, suggesting that some at least may have been disturbed from pits containing specific or selected deposits including flint artefacts, during ploughing. None of the flint displays obvious post-depositional surface exposure or damage. In addition, none show heavy concerted use, accidental breakage during use or in manufacture, fire damage or intentional disposal following exhaustion. Furthermore, the assemblage as a whole does not appear to consist of any associated waste (with the exception of the tiny piece of residual debitage). The only piece to show any later alteration (other than limited incipient patination) is the large cutting flake/simple knife which shows obvious later reuse. The date of this reuse is uncertain. It is possible that the original tool was Middle Neolithic while the reuse was Late Neolithic (or later).

Reference is made in Appendix 3 to the presence of probable same core pieces. None could be refitted.

4.3 Burnt organic material assessment by *Denise Druce*

4.3.1 Introduction

In accordance with current best practice (English Heritage 2011), bulk samples were taken for the recovery of environmental remains from Neolithic (and potentially prehistoric) pits and postholes. Seven bulk samples, out of a possible 22, were sent to Oxford Archaeology North in August 2018 to assess their potential for providing information on the habitat and plant-resource utilisation at the site, and to evaluate the palaeoenvironmental potential of the site prior to further development. Each sample was also assessed for its potential for providing suitable material for radiocarbon dating.

4.3.2 Quantification

The seven bulk samples selected for palaeoenvironmental assessment had been previously processed by Cornwall Archaeological Unit. They comprised the fills from six pits ([106], [123], [174], [175], [117] and [140]) and a single posthole [132]. Pit [106] contained fragments of Peterborough ware pottery, dated regionally to *c*3400-3000 cal BC (S Taylor, pers comm).

4.3.3 Methodology

Following coarse dry-sieving on site, environmental bulk samples were processed using a Siraf-type flotation tank, where the floated material was caught in a 0.25mm mesh, and residues in a 1mm mesh. The dried flots were examined with a Leica MZ6 binocular microscope, during which any charred plant remains were extracted and/or quantified and identified. Other material, such as charcoal, was quantified using a scale of 1 to 4, where 1 represented less than five items and 4 was more than 100 items. Identification of the plant remains was aided by comparison with the modern reference collection held at OA North, and with reference to the Digital Seed Atlas of the Netherlands (Cappers *et al* 2006). Nomenclature follows Stace (2010).

Due to the anatomical similarities of some groups of trees, charcoal fragments identified as alder (*Alnus glutinosa*) and hazel (*Corylus avellana*) are difficult to differentiate if certain characteristics are not visible or have been obscured by mineral particles. Similarly, wood charcoal from the Leguminosae family (referred to as gorse-type in the text) includes a wide range of taxa, including broom (*Cytisus scoparius*), hairy greenwood (*Genista pilosa*), petty whin (*Genista anglica*), Dyer's greenwood (Genista tinctorial), and gorse (*Ulex* ssp).

Anatomical features, such as growth patterns, the possession of tyloses (a characteristic found in heartwood from mature trees), any insect damage, or radial slitting, were also noted as an aid to establishing the maturity of the wood and its condition prior to charring. Provisional charcoal identifications and group classifications followed Hather (2000).

4.3.4 Results

Plant remains and charcoal

The detailed results of the palaeoenvironmental assessment are presented in Appendix 4, which also gives information on the features/deposits assessed. The assessment demonstrated that all the samples contained charcoal fragments, which were especially abundant in pits [174], [175], [117], and [140]. This preliminary assessment indicates that oak (*Quercus* sp; some with tyloses) wood charcoal dominates the assemblages in all but one of the features; the assemblage from pit [106], which produced the Peterborough ware pottery, comprising a mixed assemblage of oak and alder/hazel (*Alnus glutinosa/Corylus avellana*), with rare fragments of possible gorse-type (Leguminosae) roundwood. This same pit was also the only feature containing charred material other than charcoal, with rare charred hazelnut shell fragments. All the samples contained abundant modern roots, which means there is the risk of contamination by intrusive material. In addition, pit [123] contained earthworm eggs, a modern leaf, and probable modern insects.

Although mature oak wood would only provide a 'ball park' date due to the 'old wood effect', small round wood fragments and/or fragments of shorter-lived taxa observed in pits [117] and [106] would provide suitable material for radiocarbon dating. Charred hazelnut-shell fragments of sufficient size from pits 106 and 117 may also be suitable, although the provenance of so few fragments is questionable.

4.3.5 Discussion

This preliminary assessment indicates that oak was the preferred fuel wood being utilised at the site. The observation of tyloses on many of the oak fragments suggests that either branches or trunks of mature trees (over 20/25 years in age; Duffraisse *et al* 2017), rather than coppiced wood, was being utilised at the site during the period/s of occupation. Although pit [106], which contained the Peterborough ware pottery, produced relatively fewer charcoal fragments than the others, its content was notably different. It is unclear at this stage, however, whether this difference is due to the types of trees locally available (and therefore possibly chronological), or whether there are other factors driving these differences, be it purely functional or otherwise.

The current Resource Assessment and Research Agenda for South West England (Webster 2007) states that the nature and scale of 'structured deposition' of a range of 'material' items, such as flint tools and bone, within prehistoric pits associated with Grooved ware often show patterns based on location (both inter- and intra-site) and chronology (Pollard and Healy 2007). There is no reason to suppose, therefore, that the same may not be true for organic remains.

4.3.6 Potential

Although further analysis of the samples already assessed would add little to our current understanding of plant use and fuel selection, and/or taphonomy, at the site, the remains have demonstrated that there is the potential for the recovery of charred material at the site. Moreover, it is possible that differences in charred assemblages may reflect differences in feature date, type, or function. All the samples contained

charcoal fragments of sufficient size for radiocarbon dating (see Appendix 4 for details). Although the lack of obvious sapwood means the results from any oak fragments would be subject to the 'old wood effect', they would provide 'range finder' dates for the features. Charred hazelnut-shell fragments may also provide suitable material for radiocarbon dating; however their provenance, in these particular samples, is questionable.

Given the significance of the site, further sampling and palaeoenvironmental assessment is recommended as part of any further archaeological investigations. This should include the assessment of any remaining samples retrieved during this phase of investigations, if they are deemed appropriate; the results of these, and the current assessment, should be incorporated into any future environmental narratives of the site.

4.4 Radiocarbon dating

Following the results of the burnt organic material assessment, material from two samples was selected and submitted for radiocarbon dating to the Scottish Universities Environmental Research Centre (SUERC). Material from pits [117] of pit group 4 and [175], of pit group 3 was selected. Both submitted samples contained potentially mature oak and consequently there may be a date offset, the 'old wood effect'. Oaks typically live to at least 150 years and if managed, by for instance pollarding, may live much longer (Rackham 1993, 151). In other words, the dates could appear to look a century or more earlier than they really are.

However, since we were attempting to identify Neolithic features contemporary with either of the ceramic-bearing pits it was felt that the 'old wood' effect was not particularly relevant here and that such material would give a sufficiently accurate date in order to assess significance. The results are presented below in Table 1.

Context	Material	Lab. no	Radiocarbon Age (BP)	Calendrical range years BC 95.4% (OxCal 4.3)
Pit [117]	Quercus sp	SUERC-82735	3900±24	2470-2300 cal BC
Pit [175]	Quercus sp	SUERC-82736	3739±24	2270-2030 cal BC

Table 1: Radiocarbon determinations.

4.4.1 Discussion

Both dates are remarkably similar given that there was nothing to link these features stratigraphically or artefactually. Allowing for a date offset due to the potential inclusion of mature oak within the material submitted gives a date range spanning the later part of the Late Neolithic (*c*2900-2400 cal BC) to the Early Bronze Age (*c*2300-1500 cal BC). Allowing for a 200 year offset gives a date range of 2470-2100 cal BC.

The determination from pit [117], assigned to pit group 4, is therefore potentially consistent with the presence of Grooved ware in another pit assigned to that group. This pottery has a currency of *c*2900-2400 cal BC in Britain. However, the bulk of the date range falls later than that and it is therefore possible that the two features are unconnected. This date range also demonstrates that the features forming pit group 3 are not contemporary with the pit containing the Peterborough ware.

The date from pit [175] is more firmly within the Early Bronze Age. Allowing for a 200 year offset gives a date range of 2270-1830 cal BC. This demonstrates that the features forming pit group 3 may be contemporary with some or all of pit group 4 but are not contemporary with the pit containing the Peterborough ware.

5 Discussion

The results from the evaluation are presented here by period, where known, followed by an assessment of significance.

5.1 Neolithic (*c*4000-2400 cal BC)

Only two features were securely dated by artefact association. These were the pit that had been previously evaluated and found to contain Peterborough ware, and an additional pit containing later Grooved ware.

A small assemblage of Neolithic flint was recovered from the site, predominately from the topsoil. The nature and condition of the assemblage suggests that they may have come from relatively recently disturbed (by ploughing) pit contexts.

5.1.1 Middle Neolithic (*c*3400-3000 cal BC)

The feature containing the Peterborough ware, part of group 1, interpreted as the terminal of a possible ditch in the previous evaluation (Taylor 2017), was revealed to be a linear pit. More Peterborough ware was recovered, confirming the date of the pit. The linear form of the pit is slightly unusual in a Cornish context for this period, although it must be stressed that dated pits from this period are rare. The form, although rather narrow, might lend itself to an interpretation involving an inhumation but evidence for burials of this period locally are restricted to cremation, as at Zennor Quoit (Jones and Quinnell 2011). Inhumations of this period nationally seem to be restricted to incorporation within monuments, as at Duggleby Howe, Yorkshire, although in this instance it has recently been demonstrated that the Early to Middle Neolithic inhumations predated the construction of a mound over them at the start of the Late Neolithic (Gibson 2011).

The recovery of Peterborough ware itself is of some significance since this is only the fifth site in Cornwall from which the material has been identified. At least two vessels, one of which was in the Mortlake style, were represented. A large assemblage has been recovered from pits in the Tregurra valley immediately east of Truro (Taylor, in prep), whilst smaller assemblages have been found in pits at Helston (Hood 2009), and Tregunnel Hill, Newquay (Brett *et al*, forthcoming). Fieldwalking produced material from Clodgy Moor, Paul (Jones *et al* 2013). The Middle Neolithic period has been somewhat enigmatic in Cornwall, although it is becoming less so. Although the period is not without dated features some of these are without artefactual associations. The bulk of the features dated so far have been pits.

Whilst adjacent and nearby features could not be stratigraphically or artefactually linked to this pit it is possible that at least some of them might be contemporary. The burnt organic remains assessment does suggest that this pit contained a rather distinct assemblage of mixed charcoal and hazelnut shells that differed from the oak-dominated charcoal of other assessed features. However, given the nearby pit containing Late Neolithic Grooved ware, the Late Neolithic to Early Bronze Age radiocarbon determinations from two pits, the presence of Early Neolithic pottery (Henrietta Quinnell, pers comm), ditches containing Trevisker ware (*ibid*), and a large flint scatter (Taylor 2017) in the field adjacent to the south-west, a considerable time-depth for the occupation of this area is implied. This suggests that without direct dating of features the identification of contemporary features will be guesswork at best.

5.1.2 Late Neolithic (*c*3000-2400 cal BC)

A pit in the eastern corner of the site, part of group 4, contained Grooved ware. The pit was irregular in plan but this may reflect the fractured stony geology in this part of the site rather than any potential natural origin for the feature. The six sherds recovered included some conjoining sherds decorated with concentric circles. Pits containing Grooved ware are becoming increasingly common discoveries in Cornwall, largely as a result of extensive open area excavations.

The pit could not be linked to the other pits in this group, nor to any other features encountered during the fieldwork. However, as noted above, the presence of the pit, in

conjunction with other dated features in the vicinity, gives considerable time-depth to the site and suggest a longevity, and possibly even continuity, of use of the area from the Early Neolithic through to the Bronze Age. Again, only direct dating of features will allow the identification of contemporary features. A radiocarbon date from another pit within this group gave a date that is potentially consistent with the presence of Grooved ware, although the bulk of the determination post-dated the accepted currency of this pottery style.

5.1.3 Early Bronze Age (*c*2300-1500 cal BC)

A radiocarbon determination from a pit forming part of group 4 gave a range spanning the early to mid part of this period. The group may represent the truncated or shallow remains of a temporary shelter. In the absence of artefacts only direct dating of other features within this group would allow the identification of contemporary features. However, given the shallowness of the features, no opportunity to obtain suitable material presented itself. The radiocarbon date does demonstrate the considerable time-depth present in this area.

5.1.4 Significance

Given the rarity of contexts containing Peterborough ware in Cornwall, and indeed in the South-west in general, the identification of this material in a secure context is of considerable significance. Although pits containing Grooved ware are more common they still remain one of the few feature types dating to this period that can be studied. The study of pit contexts can address several research aims from the regional research framework (Webster 2008). These include aims relating to spatial and temporal bias (Research Aim 3; b, h, and j), and rural settlement (Research Aim 28; a-d). The study of flint scatters may address these and the aim relating to production and trade (Research Aim 38; c).

The identification of a possible structure, or at the least activity, dating to the Early Bronze Age is of some interest. The end of this period saw the development of more archaeologically visible domestic and/or industrial structures and as such any identified features representing this development are of considerable significance. The study of this transitional phase can address the research aim from the regional research framework (Webster 2008) relating to our lack of understanding of key transitional periods (Research Aim 10; b).

The rarity of these features and their potential to address regional research aims suggests that they are of at least regional significance.

5.2 Roman (AD 43-410) or Medieval (*c*AD 600-1540)

One tiny sherd of pottery, identified as either Roman Samian ware or medieval, was recovered from a pit in Group 4. The sherd, recovered during dry-sieving of the fill, is possibly residual. No other evidence for activity on the site between the later prehistoric and post-medieval periods was identified on the site.

5.2.1 Significance

The identification of Samian ware would be of some significance if it were in a secure context. However, in this instance, given the small size of the sherd and the lack of comparable material in the vicinity, the sherd is likely to be residual. The tentative nature of the identification further reduces significance, likely to be negligible in this case.

5.3 Post-medieval

Evidence for post-medieval land use took the form of field boundary ditches, a potential livestock track, and a small assemblage of post-medieval to modern pottery recovered from the topsoil.

The field boundary ditches included one representing a short-lived boundary shown only on 1880 OS mapping. Two parallel pairs of ditches running almost perpendicular to this did not appear on historical mapping but are characteristic of post-medieval

Cornish hedges. It seems likely that they represent short-lived enclosure of downland, perhaps predating the extant boundary to the south, which is shown on the 1841-2 St Erme Tithe Map.

The suggested livestock track appears to run from an extant gateway into the field to the south-west to former downland to the north. These features are known from the periphery of former downland and have been identified, for instance, to the north-west of Castle Killibury, Egloshayle (Taylor 2011). The alignment of the track with the extant gateway may suggest a later rather than earlier date for the feature, certainly within the historic period.

5.3.1 Significance

The development of post-medieval field systems and the intake of land from unenclosed downland is of some interest. The study of their development might help to further several regional research aims (Webster 2008) including that relating to Post-Medieval to Modern food production (Research Aim 43; b). The significance of the features dating to this period is likely to be local.

5.4 Undated

The majority of the features identified during the fieldwork remain undated. These include two groups of features tentatively interpreted as possible post settings. The shallowness of the features indicates that if this is the case, the settings are likely to represent the position of a temporary structure or screen. It is also possible that the two groups represent two ends of a single contemporary structure.

It might be worth pointing out here that the majority of the charcoal assemblages that were assessed contained exclusively oak heartwood charcoal, suggesting the presence of mature oak woodland nearby. The evidence from historic mapping might suggest fairly recent enclosure from Newlyn Downs rather than the medieval fields suggested by the HLC of Farmland: Medieval. In this case the absence of any underlying ditched field systems in this area as identified by the geophysical survey (Sumo Survey 2017) or the previous evaluation (Taylor 2017) might suggest that the area had not been enclosed prior to the post-medieval period. This could indicate that the area was either rough grazing or mature oak woodland from as far back as the Bronze Age. A radiocarbon date from oak heartwood, not something that would normally be considered, could shed light on the past environment of this part of Cornwall.

5.4.1 Significance

The potential post settings remain undated and at present are of low significance. However, should suitable material provide a Neolithic date for the features this would increase their significance greatly. Evidence for Neolithic structures are rare nationally, and in Cornwall restricted to Early to Middle Neolithic occupation of tor enclosures (Mercer 1981; 1996). The study of these features could help to address Research Aim 28; a-d), relating to Neolithic settlement, from the regional research framework (Webster 2008). Should the post settings be confirmed as Neolithic their significance could be described as of national importance. However, given the ephemeral nature of the contexts and their lack of potential for further analysis, this could be downgraded to regional.

The undated pits are also of low significance at this stage. However, the study of pit contexts can address several research aims from the regional research framework (Webster 2008). These include aims relating to spatial and temporal bias (Research Aim 3; b, h, and j), and rural settlement (Research Aim 28; a-d). Should further analysis of the pits lead to their dating to the Neolithic or Early Bronze Age they would be of regional significance.

6 Conclusions

The results of the fieldwork and the assessment of significance allow for some recommendations to be made for further work. These recommendations are for guidance only and the Local Planning Authority (LPA) will guide the required work. All stages of proposed further work will need to be supported by WSIs approved by the LPA.

6.1 Radiocarbon dating

The burnt organic remains assessment had only identified two samples with high potential for providing material suitable for submission for radiocarbon dating: oak roundwood from pit [117]; and fast-growing species and hazelnut shell from pit [106]. In the event insufficient roundwood for a radiocarbon determination could be obtained from the sample from [117] and given that we had a Middle Neolithic artefactual date from pit [106] it was not recommended that material from this pit was submitted at this stage. However, the chronology and currency of this pottery style is only known at this stage from one site in Cornwall (Taylor, in prep) and is rare in the south-west region as a whole and it would be important to obtain a radiocarbon determination from this context as part of the post-excavation phase of works. Given the absence of suitable material from other contexts no further radiocarbon determinations are recommended from material obtained from this project.

6.2 Mitigation in advance of groundworks

6.2.1 Full excavation

The presence of Middle Neolithic pottery within a pit context is rare for Cornwall and is of Regional Significance. The identification of a pit containing Late Neolithic pottery is less rare but no less significant and adds an element of time depth to the site, as do the identification of features from the Late Neolithic to Early Bronze Age. The results of this evaluation exercise, combined with the results from the previous evaluation, in particular the large flint scatter in the adjacent field (Taylor 2017), suggest that activity is increasing southwards across and beyond the evaluated area. However, the features, finds, and deposits are ephemeral in nature and their preservation *in situ* is neither merited nor recommended.

A substantial part of this field within the proposed road corridor should be subject to controlled soil stripping and full excavation prior to the commencement of groundworks on the scheme. The main aims of this work should be to identify the extent of the activity of this period, the nature of that activity, the identification and recording of all elements relating to this activity, and the retrieval of artefacts and ecofacts pertaining to this activity.

6.3 Collation of archive and production of post-excavation assessment and updated WSI

Following the completion of all stages of fieldwork the results from the project should be collated as an archive and the results of a post-excavation assessment report summarising the results from the fieldwork and proposing an updated WSI for analysis and publication should be produced.

6.4 Analysis and publication

The fieldwork is likely to produce a wealth of material that will require further analysis and publication, probably as part of a standalone monograph.

6.5 Outreach

Public engagement in the form of voluntary participation in the proposed stage of pre-groundworks excavation should be built into the project. Key information from the results of the fieldwork and analyses should be made available to the public following completion of the publication, perhaps in the form of display panels at service stations

at Carland Cross and Chiverton Cross, through lectures, and through the production of a popular booklet.

7 References

7.1 Primary sources (in chronological order)

Tithe Map and Apportionment, c1840. Parish of St Erme (licensed digital copy at CRO)

Ordnance Survey, *c*1880. 25 Inch Map First Edition (licensed digital copy at CAU)

Ordnance Survey, *c*1907. 25 Inch Map Second Edition (licensed digital copy at CAU)

Ordnance Survey, MasterMap Topography

7.2 Publications

Brett, B *et al*, in prep. The excavation of a multi-period prehistoric landscape at Tregunnel Hill, Newquay, 2012, *Cornish Arch*

Bristow, C M, 1999. *Cornwall's geology and scenery*, Cornish Hillside Publications, St Austell

Butler, C. 2005. *Prehistoric flintwork,* Stroud

Cappers, R T J, Bekker, R M, and Jans, J E A, 2006. *Digitalezadenatlas van Nederland, Digital seed atlas of the Netherlands*, Groningen

Cornwall County Council, 1996. *Cornwall landscape assessment 1994*. A report prepared by Landscape Design Associates and Cornwall Archaeological Unit

Dufraisse, A, Coubray, S, Girardclos, O, Dupin, A, and Lemoine, M, 2017. Contribution of tyloses quantification in earlywood oak vessels to archaeological charcoal analyses: estimation of a minimum age and influences of physiological and environmental factors, *Quat Int* [Online] Available at: http://dx.doi-org/10.1016/j.quaint.2017.03.070 (accessed 20 April 2017)

Edmonds, M. 1995. *Stone tools and society*, London

English Heritage, 2011. *Environmental archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation*, 2nd edn, London

Gibson, A M, 2011. Report on the Excavation at the Duggleby Howe Causewayed Enclosure, North Yorkshire, May-July 2009, *Archaeological Journal* **168**, 1-63

Hather, J G, 2000. *The identification of the Northern European woods*, London

Hood, A, 2009. Land Adjacent to Tresprison, Helston, Cornwall, Archaeological Strip, Map and Sample Post Excavation Assessment, unpublished report, Foundations Archaeology report no. 628

Jones, A M and Quinnell, H, 2011. The Neolithic and Bronze Age in Cornwall, c4000 cal BC to c1000 cal BC: an overview of recent developments, *Cornish Archaeol* **50**, 197-229

Jones, A M, Tyacke A, Lawson-Jones A, Quinnell, H, Hill, G, Taylor R T, and Tapper, B, 2013. Landscapes of stone: contextualising greenstone working and lithics from Clodgy Moor, *Archaeological Journal* **170**, 2-29

Lee, K, 2001. Experimental heat-treatment of flint, *Lithics* **22**, 39-44

Mercer, R J, 1981. Excavations at Carn Brea, Illogan, Cornwall, *Cornish Archaeol* **20,** 1-204

Mercer, R J, 1996. The excavation of a Neolithic enclosure complex at Helman Tor, Lostwithiel, Cornwall, *Cornish Archaeol* **36**, 5-63

Newberry, J, 2002. Inland flint in prehistoric Devon: Sources, tool-making quality and use, *Devon Arch Soc Proc* **60**, 1-37

Pannett, A, 2011. Burning issues: fire and the manufacture of stone tools in Neolithic Britain. In A. Saville (ed), *Flint and stone in the Neolithic period,* Neolithic Studies Group seminar papers **11**, Oxford, 247-55

Pollard, J, and Healy F, 2007. Neolithic and Early Bronze Age , in: C J Webster (ed) *The Archaeology of South West England. South West Archaeological Research Framework. Resource Assessment and Research Agenda*, Taunton, 74-102

Quinnell, H, 2014. Pottery from the Harlyn Bay to Padstow pipeline, in Jones, AM and Quinnell, H, *Lines of Archaeological Investigation along the North Cornwall Coast*, 108-117. BAR Brit Ser **594**

Rackham, O, 1986. *The history of the countryside*, J M Dent, London

Stace, C, 2010. *New flora of the British Isles*, 3rd edn, Cambridge

Sumo Survey 2017. *A30 Carland to Chiverton, Cornwall, geophysical survey report* (draft)

Taylor, S R, 2011. *Benbole Farm Solar Array Electricity Cable Trenching, Cornwall, Archaeological Watching Brief*, Historic Environment Projects unpublished report 2011R084

Taylor, S R, 2017. *A30 Carland Cross to Chiverton Cross, Cornwall. Archaeological Evaluation*, CAU, Truro

Taylor, S R, 2018. *A30 Chiverton Cross to Carland Cross: Risk Assessment and Method Statement for archaeological evaluation at Ventonteague*, CAU, Truro

Taylor, S R, in prep. *Down the Bright Stream: The Prehistory of Woodcock Corner and the Tregurra Valley*, Leiden

Tingle, M, 1998. *The Prehistory of Beer Head: Field survey and excavations at an isolated flint source on the South Devon coast*. BAR Brit Ser **270**, Oxford

Webster, C J (ed), 2008. *The Archaeology of South West England: Resource Assessment and Research Agenda*, Somerset County Council

7.3 Websites

http://www.heritagegateway.org.uk/gateway/ Online database of Sites and Monuments Records, and Listed Buildings

Appendix 1: A30 Chiverton Cross to Carland Cross: Method Statement for archaeological evaluation at Ventonteague

(reproduced from the Risk Assessment and Method Statement; Taylor 2018)

PROJECT BACKGROUND

This document sets out a Risk Assessment and Method Statement (RAMS) by Cornwall Archaeological Unit (CAU) for a programme of archaeological evaluation at Ventonteague, St Erme.

The work has been requested by the client to investigate further some features identified by a previous evaluation (Taylor 2017) as of potentially national significance, namely a possible structure dated to the Middle Neolithic period (*c*3400-3000 cal BC) by association with Peterborough ware. The feature containing the Neolithic pottery was centred on SW 82888 53091.

The work is required to inform decision making prior to proposed road improvements along a 12.9km-long route of the A30 between Chiverton Cross and Carland Cross, Cornwall. The scheme is to upgrade the existing single carriageway to dual carriageway on the A30 between Chiverton Cross roundabout and Carland Cross roundabout. The scope includes addressing the junctions at Chiverton Cross, Carland Cross and the key intermediate junctions which provide connections to the local highway network.

Information on the proposed scheme is confidential and nothing will be taken on site from which the route can be inferred. The scheme as proposed will not be discussed with members of the public nor landowners.

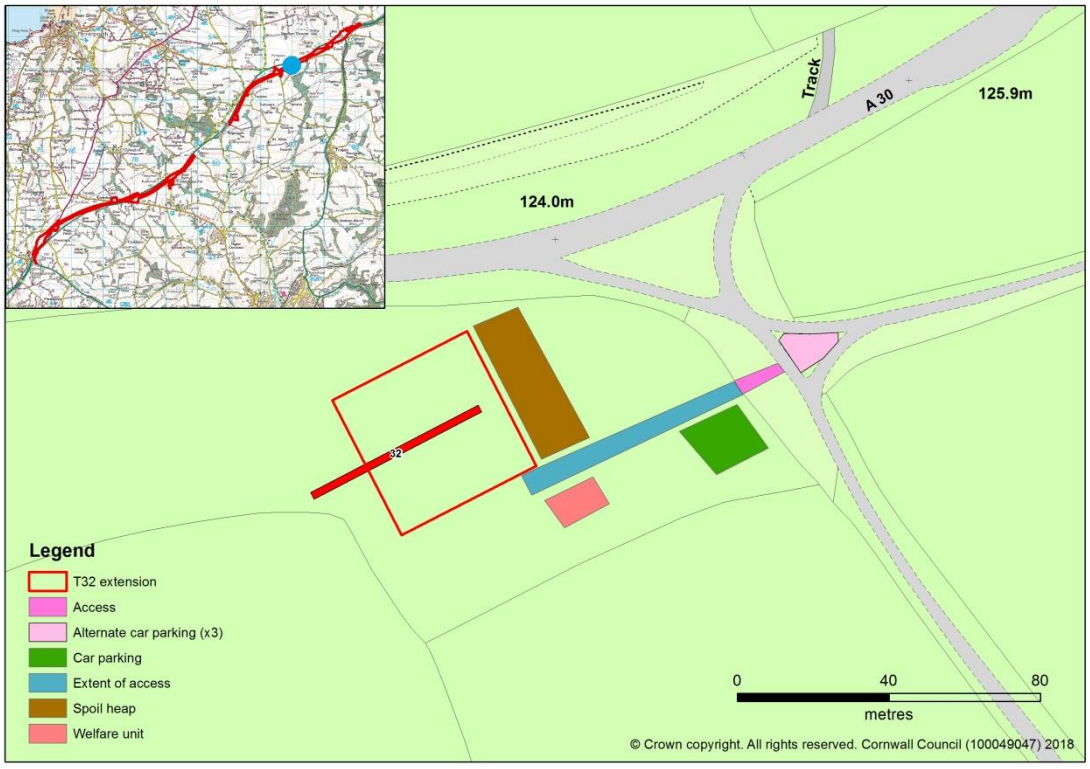

Figure 1: site location map, proposed evaluation extent, and designated areas

Site history

The area under investigation has previously been the subject of a geophysical survey (Sumo Survey 2017) and a programme of archaeological evaluation trenching (Taylor 2017). This has informed the rest of this section.

Known archaeological sites

Two lengths of ditch were evaluated within Trench 32 of the 2017 evaluation. Both terminated within the trench with a gap between them of just under 1m (Fig 2). The northernmost had a pit or posthole in the end of it, the fill of which was indistinguishable from the surrounding ditch fill. The southernmost ditch contained a single fill from which three sherds of Middle Neolithic Peterborough ware (H Quinnell pers comm) were recovered. The sherds were rusticated and unabraded, and found in three separate locations within the fill, all of which strongly suggests that they provide good dating evidence for the ditch. This is only the fourth instance of Peterborough ware found in Cornwall (previous finds at: Helston, Foundations Archaeology 2009; Tregurra, Truro, Taylor in prep; Tregunnel, Newquay, Brett *et al* in prep) and its location within a ditch is thus far unique. It is possible that the two sections of ditch are contemporary and represent a structure (beam slots/postholes), perhaps similar to the more well-known Early Neolithic rectangular houses. Currently the only substantial Neolithic structure known in Cornwall is the longhouse found at Penhale, Fraddon, but that building is much older (Nowakowski and Johns 2015). If the ditches are part of a structure the site could be of national significance since very few Middle Neolithic houses are known in Britain and currently none from Cornwall (Andy Jones pers comm).

Fig 2 Middle Neolithic ditch [32/9], left, and posthole [32/20] / ditch [32/10], right.

An adjacent field contained a dense concentration of flints centred on a trench 70m to the southwest. The flints have been identified as of Late Mesolithic to Early Neolithic date and indicate a flint-working site, the assemblage being dominated by blades and waste material. The flint scatter is likely to extend across this field since the background levels of flint in adjacent trenches were also high and may also extend into the field containing Trench 32.

Potential archaeological sites

Potential archaeological features relating to the Neolithic occupation of the site include pits, postholes, stakeholes, gullies, ditches, and artefact scatters.

RISK ASSESSMENT AND METHOD STATEMENT

ITEM 1 - Description of Work

Project extent

The proposed trench extension will comprise an area 40m by 40m, centred on the ditch terminal that contained the Peterborough ware and aligned with the original evaluation trench (Fig 1).

Aims and objectives

The principal aim of the study is to gain a better understanding of the archaeology within the evaluation area.

The objective is to:

- Undertake a strip map and sample of the evaluation area.

Key objectives are to:

- Identify the extent of the Middle Neolithic site.
- Identify the nature of the features of this period.
- Update the assessment of significance of the features to guide possible designation of the site.

Recording methods

All recording work will be undertaken according to the Chartered Institute for Archaeologists (CIfA) guidance (CIfA 2014a; 2014b; 2014c). Staff will follow the CIfA *Code of Conduct* (2014d). The Chartered Institute for Archaeologists is the professional body for archaeologists working in the UK.

Pre-fieldwork

In advance of the fieldwork CAU, will discuss and agree with the client:

- Working methods and programme.
- Health and Safety issues and requirements.
- Transfer of Title for artefacts.
- Obtaining an accession number from the appropriate archive repository.

Fieldwork: strip map and sample

The evaluation will take the form of a strip map and sample (SMS) of an area 40m by 40m, centred on the ditch terminal that contained the Peterborough ware and aligned with the original evaluation trench (Fig 1). The work will be guided by CIfA's guidance on undertaking field evaluation (CIfA 2014a) and archaeological excavation (CIfA 2014c).

The SMS area will be laid out to British National Grid coordinates using a Leica GPS device. Prior to excavation the SMS area will be scanned by a suitably trained operative with a CAT scanner to identify buried services. Adjustment of the SMS area that may subsequently be necessary will be confirmed with the client prior to excavation.

Soil stripping of the SMS area will be carried out under archaeological supervision using a machine fitted with a toothless grading bucket. The soil will be stripped cleanly to a

level at which archaeological features or layers are revealed or the natural substrate, as appropriate.

Soil removed will be stockpiled in a designated area, separated between turf, topsoil, and subsoil. This material will be inspected visually for artefacts.

The excavated area will be secured by Heras fencing around its perimeter.

Upon completion of the controlled stripping and hand cleaning of the designated archaeological area, CAU, in consultation with the client, Historic England, and Cornwall Council's Senior Development Officer Historic Environment (SDOHE), will confirm the extent of evaluative sampling that is required. Typically this will consist of the following sample levels:

- All small discrete features (postholes, pits, etc <1m in diameter) will be fully excavated (excepting large numbers of very small features such as stakeholes which will be subject to a lower sampling frequency).
- Larger discrete features (pits >1m) will be half-sectioned.
- Linear/curvilinear features will be sampled at 10-20%, depending on length.
- Spoil will be examined for artefacts visually.

If complex and/or significant archaeological deposits are encountered then the archaeological requirements will be reviewed by the client, Historic England, the SDOHE, and CAU.

Provision will be made for at least two radiocarbon dates if material suitable for dating is recovered.

If remains of national significance are identified the area will be covered in geotextile before reinstatement.

Recording

During the archaeological recording 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.
- Site drawings (plans and sections) will be made by pencil (4H) on drafting film; 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.
- All archaeological contexts will be described to a standard format linked to a continuous numbering sequence.
- Photographic recording will comprise colour photography using a digital SLR camera (with a resolution of 10 million pixels or higher; CAU will follow Historic England (2015) guidance on digital image capture and storage). Photographs will include a record of significant features and general working shots. A metric scale, site and context identifier, and a north arrow where appropriate, will be included in all record shots.

Treatment of human remains

- If human remains are discovered within an archaeological context on the site the client, the SDOHE, and Public Health, Cornwall Council will be informed.
- Any human remains should only be excavated and removed if it is considered that they will contribute towards further scientific understanding.
- A coroner's license must be obtained from the Ministry of Justice before any remains are disturbed.
- Any consents or licenses required will be obtained on behalf of the client by CAU
- If human remains are uncovered, which require excavation, they will be will be excavated with due reverence. The site will be adequately screened from public view. Once excavated, human remains must not be exposed to public view. If

human remains are not to be removed their physical security will be ensured, by backfilling as soon as possible after recording.

Treatment of finds

The fieldwork is likely to produce artefactual material. The following recording and retention policies will be followed:

- In the event that objects containing precious metal(s) are encountered, the coroner will be informed as per the provisions of the Treasure Act 1996.
- Significant finds in stratified contexts will be plotted on a scaled base plan or with a Leica GPS unit and recorded as small finds.
- All finds will be collected in sealable plastic bags which will be labelled immediately with the site code, the context number or other identifier, the type of material, and the finder's initials. The only exception to this policy will be that large assemblages of modern (post-1800) material may be representatively sampled.
- Modern (post-1800) finds may be disposed of at the cataloguing stage. This process will be reviewed ahead of its implementation.

Treatment of samples

The fieldwork may produce environmental samples. The following collection, recording and processing policies will be followed:

- Sealed/undisturbed archaeological contexts in the form of buried soils, layers or deposits within significant archaeological features that have the potential to contain palaeoenvironmental evidence and/or material suitable for scientific dating will be sampled.
- Where bulk samples are taken a minimum of 40 litres will be sampled from these deposits where feasible.
- In the event that significant organic remains are encountered, advice may be sought from the Historic England Regional Advisor for Archaeological Science.
- All samples will be described to a standard format linked to a continuous numbering sequence.
- Bulk samples will be processed using flotation with appropriate mesh sizes.

Reporting

The results from the project will be drawn together and presented in a concise report. The scope of the report will be dependent on the scale and significance of the results from the project.

An interim report on the results of the work will be provided to the client within 5-10 working days of the completion of onsite works. This will comprise a brief narrative of findings illustrated by a site plan and initial finds and environmental assessment.

A full report will be provided within 8 weeks of the completion of onsite works. In the case of limited results the findings will be presented in a concise archive report. In the case of significant and/or extensive results this will take the form of a post excavation assessment report, produced in accordance with CIfA's guidelines for post-excavation assessment (2014c). This will include a summary of the site archive and work carried out for assessment, a discussion of the potential of the data, and an updated project design (UPD) setting out proposals for analysis and publication. Which type of report is most appropriate will be agreed by CAU and the client at the conclusion of the fieldwork stage.

The report will include the following elements as appropriate:

- Summary
- Project background
- Aims and objectives

- Methodology
- Location and setting
- Site history
- Archaeological results
- Artefact assessments
- Chronology/dating evidence
- Significance
- Impacts
- Mitigation measures
- Conclusions
- References
- Project archive index
- Supporting illustrations: location map, historic maps, plans, elevations/sections, photographs

Creation of the physical and digital archive

Following review with the CAU Project Manager the results from the fieldwork will be collated as an archive.

This will involve the following.

- All finds, etc., will be washed, catalogued, and stored in a proper manner (being clearly labelled and marked and stored according to CAU guidelines).
- All records (drawings, context sheets, photographs, etc.) will be ordered, catalogued and stored in an appropriate manner (according to CAU guidelines).
- Any black and white negative film will be catalogued and deposited with the site archive.
- Colour digital images taken as part of the site archive will be either converted from colour to black and white negative film and added to the site archive, or deposited with the Archaeology Data Service (ADS).
- Completion of the Historic England/ADS OASIS online archive index.
- All correspondence relating to the project, the WSI, and a single paper copy of the report, stored in an archive standard (acid-free) documentation box.
- Drawn archive storage (plastic wallets for the annotated record drawings).
- Additional digital data (survey, external reports etc)

Archive deposition

An index to the site archive will be created and the archive contents prepared for long term storage, in accordance with CAU standards.

- The project archive will be deposited initially at ReStore PLC, Liskeard and in due course (when space permits) at Cornwall Record Office.
- Digital data will be stored on the Cornwall Council network which is regularly and frequently backed up.
- Digital data (CAU reports, external reports, survey data, geophysics data, digital photographs etc) forming part of the site archive will be deposited with the ADS.

CAU uses the following file formats for stored digital data:

DOCX	Word processed documents
XLSX	Spreadsheets
PDF	Exports of completed documents/reports/graphics
JPG	Site graphics and scanned information
DNG or TIF	Digital photographs
DWG	AutoCAD drawings, measured surveys
MXD	ArcView GIS (electronic mapping) data
AI	Adobe Illustrator graphics

Monitoring and Signing Off Condition

Monitoring of the project will be carried out by the client and the SDOHE.

- The SDOHE will monitor the work and should be kept regularly informed of progress.
- Notification of the start of work shall be given preferably in writing to the SDOHE at least one week in advance of its commencement.
- Any variations to the method statement will be agreed with the client, in writing, prior to them being carried out.
- If significant detail is discovered, all works must cease and a meeting convened with the client and the SDOHE to discuss the most appropriate way forward.

Monitoring points during the study will include:

- Approval of a WSI
- Completion of fieldwork
- Completion of archive report
- Deposition of the archive

Provisional timetable and reporting

It is anticipated that machine stripping will commence on Friday 13th July with an archaeologist in attendance. The archaeological fieldwork will commence on Tuesday 17th July 2018 and will run for 10 working days. A site meeting between CAU, the client, Historic England, and the SDOHE has been proposed for Wednesday 18th July to determine the degree of sampling required. Reinstatement of the area will take place over two days from Tuesday 31st July.

The results from the project will be drawn together and presented in a concise report. The scope of the report will be dependent on the scale and significance of the results from the project.

An interim report on the results of the work will be provided to the client within 5-10 working days of the completion of onsite works. This will comprise a brief narrative of findings illustrated by a site plan and initial finds and environmental assessment.

A full report will be provided within 8 weeks of the completion of onsite works. In the case of limited results the findings will be presented in a concise archive report. In the case of significant and/or extensive results this will take the form of a post excavation assessment report, produced in accordance with CIfA's guidelines for post-excavation assessment (2014c). This will include a summary of the site archive and work carried out for assessment, a discussion of the potential of the data, and an updated project design (UPD) setting out proposals for analysis and publication. Which type of report is most appropriate will be agreed by CAU and the client at the conclusion of the fieldwork stage.

References

CIfA, 2014a. *Standard and guidance for archaeological field evaluation*, CIfA, Reading

CIfA, 2014b. *Standard and guidance for archaeological excavation*, CIfA, Reading

CIfA, 2014c. *Code of Conduct*, CIfA, Reading

Historic England 2015. *Guidance note on Digital Image Capture and File Storage*, Historic England, Swindon

Nowakowski, J and Johns, C, 2015. *Bypassing Indian Queens. Archaeological Investigations 1992-1994*. Cornwall Council, Truro

Sumo Survey 2017. *A30 Carland to Chiverton, Cornwall, geophysical survey report* (draft)

Taylor, S R, 2017. *A30 Carland Cross to Chiverton Cross, Cornwall, Archaeological Evaluation*, CAU, Truro

Appendix 2: Table of Contexts

* Cut features are in bold

Context no.	Cut	Sub-division	Group	Type (Cut/ Deposit /Build)	Feature	Description	Plan no.	Section no.	Sample no.
101		All		D		Topsoil: a dark brown loose silty clay, less than 0.2m thick, containing frequent small fragments of shillet and quartz.			
102		All		D		Natural deposit in the northern part of the trench: a mid yellowish brown friable silty clay, containing some smaller stone fragments.			
103	104	A2	4	D		Fill of [104]: a dark brown compact silty clay <0.15m thick, common stone inclusions, small fragmented pieces of shillet unsorted, containing occasional flecks of charcoal and potsherds, initially identified as Grooved ware.		7	4
104	**104**	**A2**	**4**	**C**	**Pit**	**Cut of irregular pit, poor edge definition, 0.78m long, 0.56m wide, 0.15m deep. Filled by (103).**	**4**	**7**	
105	106	A1	1	D		Upper fill of pit [106]: A dark brown soft silty clay, 0.05m-0.1m thick, containing large shillet fragments and potsherds, initially identified as Peterborough ware.		18	9
106	**106**	**A1**	**1**	**C**	**Pit**	**Cut of linear pit, moderate edge definition, 1.45m long, 0.5m wide, 0.31m deep, U-shaped profile, straight sides, irregular base, north to south orientation. Filled by (126) and (105). Recorded in the previous evaluation as ditch [32/9] filled by (32/12) and (32/8).**	**17**	**18**	
107	114	A2	4	D		Fill of pit [114]: a light brownish red friable silty clay 0.14m thick, containing 30% large (>12mm) shillet fragments.		1	1
108	121	A2	4	D		Fill of pit [121]: a mid reddish brown friable silty clay, 0.04m thick, containing a tiny sherd of possible pottery and 50% large stone inclusions.		14	8
109	119	A2	4	D		Fill of pit [119]: a dark brown friable silty clay, containing 50% small stone inclusions.		11	
110	117	A2	4	D		Fill of pit [117]: a light greyish brown compact silty clay 0.23m thick, containing 50% large stone inclusions.		6	5
111	120	A2	4	D		Fill of pit [120]: a mid yellowish brown friable silty clay, 0.09m thick, containing 50% large stone inclusions.		12	6

Context no.	Cut	Sub-division	Group	Type (Cut/ Deposit /Build)	Feature	Description	Plan no.	Section no.	Sample no.
112	115	A2	4	D		Fill of pit [115]: a dark brown loose silty clay, 0.05m deep, containing 25% large stone inclusions.		2	2
113	116	A2	4	D		Fill of pit [116]: a dark yellowish brown silty clay 0.12m thick, containing 50% large stone inclusions.		4	3
114	**114**	**A2**	**4**	**C**	**Pit**	**Cut of oval pit: poor edge definition, measuring 0.54m long, 0.36m wide, 0.14m deep, 45° angle sides, north to south orientation. Filled by (107).**	**3**	**1**	
115	**115**	**A2**	**4**	**C**	**Pit**	**Cut of irregular pit, 0.5m long, 0.3m wide, 0.05m deep, moderate edge definition, 45° sides, east to west orientation. Filled by (112).**	**10**	**2**	
116	**116**	**A2**	**4**	**C**	**Pit**	**Cut of sub-oval pit, 0.54m long, 0.45m wide, 0.12m deep, poor edge definition, irregular sides and base. Filled by (113).**	**5**	**4**	
117	**117**	**A2**	**4**	**C**	**Pit**	**Cut of sub-oval pit, 1.2m long, 0.7m wide, 0.17m deep, irregular sides and base, poor edge definition, 30° sides. Filled by (118) and (110).**	**8**	**6**	
118	117	A2	4	D		Primary fill of [117]: a mid reddish red compact silty clay, 0.03m deep, containing flecks of charcoal and 30% large stone inclusions.		6	7
119	**119**	**A2**	**4**	**C**	**Pit**	**Cut of oval pit, 0.45m long, 0.4m wide, 0.12m deep, U-shaped profile, concave sides, irregular base, poor edge definition. Filled by (109).**	**13**	**11**	
120	**120**	**A2**	**4**	**C**	**Pit**	**Cut of sub-oval pit, 0.5m long, 0.4m wide, 0.09m deep, moderate edge definition, uneven base, east to west orientation. Filled by (111).**	**19**	**12**	
121	**121**	**A2**	**4**	**C**	**Pit**	**Cut of oval pit, 1.1m long, 1m wide, 0.04-0.1m deep, irregular profile, poor edge definition. Filled by (108).**	**15**	**14**	
122	123	A1	1	D		Fill of pit [123]: a light greyish pink compact silty clay 0.3m thick, containing 30% large stone inclusions.		24/26	11
123	**123**	**A1**	**1**	**C**	**Pit**	**Cut of one of two intersecting pits. A sub-circular feature 0.92m long, 0.71m wide, 0.3m deep, concave profile, steep sides at 60°, moderate edge definition. Filled by (122).**	**23**	**24/26**	

Context no.	Cut	Sub-division	Group	Type (Cut/ Deposit /Build)	Feature	Description	Plan no.	Section no.	Sample no.
124	125	A1	1	D		Fill of posthole [125]: A dark reddish brown friable silty clay, 0.14m thick, containing 20% large stone inclusions.		16	10
125	**125**	**A1**	**1**	**C**	**Posthole**	**Cut of oval posthole, 0.24m long, 0.2m wide, 0.14m deep, flat base, very steep sides, moderate edge definition. Filled by (124).**	**17**	**16**	
126	106	A1	1	D		Fill of pit [106]: a dark reddish brown compact silty clay, up to 0.3m thick, very common stone inclusions.		18	
127	**127**	**A1**	**1**	**C**	**Posthole**	**Cut of possible posthole. A circular feature, 0.35m in diameter, 0.12m deep, irregular profile, moderate edge definition. Filled by (128).**	**27**	**22**	**13**
128	127	A1		D		Fill of possible posthole [127]: a light yellowish grey friable silty clay, 0.12m thick, 45% large stone inclusions.		22	
129	130	A1	6	D		Fill of pit/posthole [130]: a dark brown soft silty clay, 0.15m thick, common stone inclusions.		20	12
130	**130**	**A1**	**6**	**C**	**Posthole**	**Cut of oval pit/posthole, 0.17m long, 0.15m wide, 0.15m deep. Straight sides, flat base, moderate edge definition. Filled by (129).**	**21**	**20**	
131	132	A1	6	D		Fill of pit/posthole [132]: A dark brown firm silty clay, 0.2m-0.28m thick, containing 15% large shillet inclusions.		25	14
132	**132**	**A1**	**6**	**C**	**Posthole**	**Cut of oval pit/posthole, 0.23m long, 0.22m wide, 0.2m-0.28m deep, straight sides, pointed base, moderate edge definition. Filled by (131).**	**28**	**25**	
133	**133**	**A1**	**6**	**C**	**Posthole**	**Cut of possible circular posthole, 0.35m long, 0.3m wide, 0.27m deep, irregular shaped sides, sloping base, good edge definition. Filled by (134).**	**30**	**29**	
134	133	A1	6	D		Fill of possible posthole [133]: A mid brown friable silty loam, 0.27m thick, containing 25% large shillet fragments.		29	15
135		A1		D		Fill of stone throw: a light reddish brown compact silty clay, 0.05m thick, containing 30% large stone inclusions.			
136	140	A4	6	D		Fill of pit [140]: a light pinkish brown compact silty clay, 0.2m deep, containing 30% large stone inclusions, and occasional flecks of charcoal.	33	34	16

Context no.	Cut	Sub-division	Group	Type (Cut/ Deposit /Build)	Feature	Description	Plan no.	Section no.	Sample no.
137	138	A1	6	D		Fill of possible posthole [138]: a dark reddish brown compact silty clay, 0.14m thick containing common stone inclusions.		31	
138	**138**	**A1**	**6**	**C**	**Posthole**	**Cut of possible posthole. An oval feature, 0.29m long, 0.18m wide, 0.14m deep, U-shaped profile, concave sides, irregular base. Filled by (137).**	**32**	**31**	
139	141	A1	5	D		Fill of pit [141]: a dark brown compact silty clay 0.16m thick, containing common stone inclusions.		35	
140	**140**	**A1**	**6**	**C**	**Pit**	**Cut of sub-linear pit, 2.3m long, 0.72m wide, 0.2m deep, concave profile, north to south orientation, moderate edge definition. Filled by (142) and (136).**	**33**	**34**	
141	**141**	**A1**	**5**	**C**	**Pit**	**Cut of sub-oval pit, 0.44m long, 0.3m wide, 0.14m deep, undercut sides, irregular base, poor edge definition. Filled by (139).**	**36**	**35**	
142	140	A1	6	D		Charcoal-bearing fill of pit [140]: a mid reddish brown compact silty clay, 0.05m thick, containing 30% large stone inclusions, and occasional flecks of charcoal.	33	34	17
143	145	A1	5	D		Fill of pit [145]: a light reddish brown compact clay, 0.16m thick, containing 80% large stone inclusions.		37	
144	146	A1	5	D		Fill of pit [146]: a dark brown compact silty clay, 0.12m thick, containing 80% large stone inclusions.		38	
145	**145**	**A1**	**5**	**C**	**Pit**	**Cut of kidney-shaped pit, 0.5m long, 0.3m wide, 0.16m deep, U shaped profile, irregular sides, sloping base, north-east to south-west orientation, poor edge definition. Filled by (143).**	**39**	**37**	
146	**146**	**A1**	**5**	**C**	**Pit**	**Cut of pit: Irregular shaped pit, 0.45m long, 0.36m wide, 0.23m deep, undercut on the sides, uneven base, very steep angled sides, east to west orientation, poor edge definition. Filled by (144).**	**40**	**38**	
147	**147**	**A1**	**5**	**C**	**Pit**	**Cut of pit: An irregular shaped feature, 0.7m long, 0.43m wide, 0.16m deep, concave sides, irregular uneven base, steeps sides, east to west orientation. Filled by (148).**	**44**	**43**	

Context no.	Cut	Sub-division	Group	Type (Cut/ Deposit /Build)	Feature	Description	Plan no.	Section no.	Sample no.
148	147	A1	5	D		Fill of pit [147]: A dark brown compact silty clay, 0.16m thick, containing common stone inclusions.		43	
149	**149**	**A1**		**C**	**Trackway**	**Cut of possible braided track. A sub-linear feature, 1.9m long, 0.6m wide, 0.25m deep, irregular sides and base, north-east to south-west orientation, moderate edge definition. Filled by (151) and (150).**	**42**	**41**	
150	149	A1		D		Upper fill of [149]: a mid reddish brown friable silty clay, 0.04m thick, containing shillet.		41	
151	149	A1		D		Primary fill of [149]: a light reddish brown compact silty clay, 0.02m thick.		41	
152	153	A1		D		Fill of pit [153]: A dark reddish brown compact silty clay, 0.23m thick, containing common stone inclusions.		47	
153	**153**	**A1**		**C**	**Pit**	**Cut of an oval pit, 0.7m long, 0.34m wide, 0.23m deep, concave sides, uneven base, steep edges, poor edge definition. Filled by (152).**	**48**	**47**	
154	159	A3		D		Fill of posthole [159]: a mid reddish brown friable silty clay containing small quartz stones.		51	18
155	156	A4		D		Fill of ditch [156]: a light yellowish brown compact silty clay, 0.09m thick, containing 30% large stone inclusions. Same as (170).	33	49	
156	**156**	**A4**		**C**	**Ditch**	**Cut of linear ditch, U-shaped profile, 20m long, 1.6m wide, 0.09 deep, concave sides, concave base, east to west orientation, with moderate edge definition. Filled by (155). Same as [171].**	**33**	**49**	
157	158	A1		D		Fill of pit [158]: a mid yellowish brown loose silty clay, 0.09m deep, containing common stone inclusions.		50	
158	**158**	**A1**		**C**	**Pit**	**Cut of an oval pit, 0.55m long, 0.3m wide, 0.09 deep, concave sides, sloping base, south-east to north-west orientation, poor edge definition. Filled by (157).**	**53**	**50**	
159	**159**	**A3**		**C**	**Posthole**	**Cut of circular posthole, 0.22m in diameter, 0.25m deep, U-shaped profile, straight sides, flat base, moderate edge definition. Filled by (154).**	**52**	**51**	

Context no.	Cut	Sub-division	Group	Type (Cut/ Deposit /Build)	Feature	Description	Plan no.	Section no.	Sample no.
160	161	A4		D		Fill of possible posthole [161]: a dark brown friable silty clay, 0.11m thick, containing common small fragments of shillet, and occasional flecks of charcoal.		54	
161	**161**	**A4**		**C**	**Posthole**	**Cut of possible posthole, 0.21m long, 0.1m wide, 0.11m deep, sub-linear in plan, straight sides, irregular shaped base, poor edge definition, south-east to north-west orientation. Filled by (160).**	**55**	**54**	
162	166	A2		D		Fill of possible linear feature [166]: a dark brown friable silty clay, 0.05m thick, containing sparse stone inclusions.		57	
163	164	A2		D		Fill of pit [164]: a dark reddish brown plastic silty clay, 0.09m thick, containing occasional flecks of charcoal.		56	19
164	**164**	**A2**		**C**	**Pit**	**Cut of sub-oval pit, 0.7m long, 0.6m wide, 0.2m deep, concave profile, irregular sides at 60° angle, concave base, moderate edge definition. Filled by (169) and (163).**	**63**	**56**	
165	166	A2		D		Fill of possible ditch [166]: a dark reddish brown compact silty clay, 0.15m thick, containing sparse stone inclusions.		57	
166	**166**	**A2**		**C**	**Trackway**	**Cut of linear gully, at least 11m long, 1.33m wide, 0.23m deep, stepped sides, concave base, north-west to south-east orientation, moderate edge definition. Filled by (165).**	**66**	**57**	
167	168	A4		D		Fill of ditch [168]: A mid reddish brown friable silty clay, 0.17m thick.	58	59	
168	**168**	**A4**		**C**	**Ditch**	**Cut of linear ditch, 30m long, 1.4m wide, 0.17m deep, concave profile, 30° sides, north to south orientation. Filled by (167). Appears to represent a boundary shown on the OS 1880 25" map. The boundary is not shown on the earlier c1840 St Erme Tithe map, nor the later *c*1907 OS 25" mapping.**	**58**	**59**	
169	164	A2		D		Primary fill of pit [164]: a mid reddish brown friable silty clay, 0.07m thick, containing <5% large stone inclusions.		56	
170	171	A4		D		Fill of ditch [171]: a dark reddish brown friable silty clay, 0.06m thick, containing 30% large stone inclusions.	58	62	

Context no.	Cut	Sub-division	Group	Type (Cut/ Deposit /Build)	Feature	Description	Plan no.	Section no.	Sample no.
171	**171**	**A4**		**C**	**Ditch**	**Cut of linear ditch, 20m long, 1.6m wide, 0.09m deep, concave sides, flat base, 30° sides, east to west orientation, poor edge definition. Filled by (170). Appears to cut (167). Same as [156].**	**58**	**62**	
172	174	A2	3	D		Fill of pit [174]: a dark reddish brown friable silty clay, 0.08m thick, containing small stone inclusions, and occasional flecks of charcoal.		64	20
173	175	A2	3	D		Fill of pit [175]: a dark brown plastic silty clay, 0.15m thick, sparse stone inclusions, with occasional flecks of charcoal.		65	21
174	**174**	**A2**	**3**	**C**	**Pit**	**Cut of sub-linear pit, 0.8m long, 0.34m wide, 0.08m deep, U shaped profile, concave sides, 40% sides, irregular base, north to south orientation, moderate edge definition. Filled by (172).**	**66**	**64**	
175	**175**	**A2**	**3**	**C**	**Pit**	**Cut of sub-circular pit, 0.25m in diameter, 0.15m deep, U shaped profile, concave steep sides, concave base, good edge definition. Filled by (173).**	**66**	**65**	
176	177	A2		D		Fill of pit [177]: a mid reddish brown friable silty clay, 0.17m deep, containing 20% stone inclusions.	68	67	22 (Discarded)
177	**177**	**A2**		**C**	**Pit**	**Cut of kidney-shaped pit, 0.8m long, 0.45m wide, 0.17m deep, U-shaped profile, straight sides, east to west orientation, good edge definition. Filled by (176).**	**68**	**67**	
178	-	-		D		Natural deposit in the centre of the trench: a mid reddish brown friable silty clay containing abundant shillet fragments.	GPS		
179	-	-		D		Natural deposit in the southern part of the trench: fractured mudstone bedrock aligned north-east to south-west.	GPS		

Context no.	Cut	Sub-division	Group	Type (Cut/ Deposit /Build)	Feature	Description	Plan no.	Section no.	Sample no.
180	**180**	**A2**	**3**	**C**	**Group**	**A group of 17 shallow cut features, most of which may form a sub-oval possible post-ring covering an area of 4.1m by 2.5m. The majority of these were no more than 0.05m deep and formed sub-oval features averaging 0.15m by 0.1m. Most of these were emptied in the course of trowelling and brushing the area and their fills were not recorded. Two features, [174] and [175], on the south-east side of the possible circuit, were excavated and charcoal-bearing samples recovered.**	**GPS**		
181	**181**	**A2**	**2**	**C**	**Group**	**A group of 8 shallow cut features, most of which may form a sub-oval possible post-ring, open to the north-east, covering an area of 4.2m by 3m. The majority of these were no more than 0.05m deep and formed sub-oval features averaging 0.15m by 0.1m. Two larger but shallow features lay on the western edge of the group: it was unclear whether these represented features forming part of the group or truncated pockets from the adjacent ditch fill (170). All of these were emptied in the course of trowelling and brushing the area and their fills were not recorded**	**GPS**		
182	**182**	**A2**	**1**	**C**	**Pit**	**Cut of pit excavated during the previous evaluation (recorded as posthole [32/20]) and lying adjacent to pit [123] (the edge of which was recorded as ditch [32/10]). The pit was 0.78m by 0.54m and 0.48m deep. The fill - recorded as (32/11) - had been fully excavated previously.**	**GPS**	**26**	
183	183	A2		D	Ditch fill	Fill of ditch forming one of pair with [171]. Extends into the trench for 4.86m; 1.58m wide. Not excavated.	GPS		
184	184	A2		D	Ditch fill	Fill of ditch running parallel to [171]/[183]. Extends into the trench for 23m; 1.24m wide. Not excavated.	GPS		
185	185	A2		D	Ditch fill	Fill of ditch or gully intersecting with ditch fill (184). Extends north-east from ditch fill (184) for 7m; 1.12m wide. Not excavated.	GPS		

Context no.	**Cut**	**Sub-division**	**Group**	**Type** (Cut/ Deposit /Build)	**Feature**	**Description**	**Plan no.**	**Section no.**	**Sample no.**
186	**186**	**A2**	**1**	**C**	**Posthole**	**Cut of posthole recorded during the previous evaluation to the west of pit [106] (recorded as [32/17]), truncated sub-circular posthole base with concave sides, a flattened base and poorly defined edges. 0.2m diameter by 0.05m deep.**	**GPS**		
187	**187**	**A2**		**C**	**Pit**	**Cut of sub-oval pit recorded during the previous evaluation (recorded as [32/19]), heavily truncated with vertical sides, a flat base and moderately well-defined edges. 0.5m by 0.34m by 0.27m deep. Contained a single fill - recorded as (32/18).**	**GPS**		
188	**188**	**A2**	**1**	**C**	**Posthole**	**Cut of a shallow feature to the north of pit [123], 0.21m by 0.15m and less than 0.05m deep. The fill was removed during cleaning of the area and not recorded.**	**GPS**		
189	**189**	**A2**	**1**	**C**	**Posthole**	**Cut of a shallow feature to the east of pit [182], 0.21m by 0.15m and less than 0.05m deep. The fill was removed during cleaning of the area and not recorded.**	**GPS**		
190	190	A2		D	Ditch fill	Fill of ditch or gully, apparently cut by the ditch containing fill (183). Extends into the trench for 9.78m; 0.9m wide. Not excavated.	GPS		

Appendix 3: Table of Finds

Note on the flint: P-primary/50% plus external cortex; S-secondary/1-49% cortex; T-tertiary/none to 1% cortex), and mp-multiplatform flake core. All measurements are longest (proximal to distal), by widest by thickest.

Context No	Cut No	Small find no	Feature	Material	Number of items	Weight (g)	Description		Period	Broad Period
101	-	-	Topsoil	Flint	1	10.1	Flint flake.	White-speckled grey, rhomboidal mp flint flake (T), 32 x 25 x 7mm. Broad hinged distal edge is noticeably smoothed (possibly polished?). The two main faces are noticeably smooth and soapy textured - strongly suggesting heat treatment. The retouched/utilised edges are not (indicating that the tool was worked following heating). Short straight, lateral, steep (45°), utilised scraper edge. Tapered partially worked bulbar end. Second lateral scraper-like edge with a used notch. A characteristically Neolithic multi-functional notched scraper showing some use wear.		Neolithic
101	-	-	Topsoil	Flint	1	2.7	Flint tool.	Mottled mid grey, squat, near square thick (T) piece, 14 x 17 x 7mm. Probably originally the distal end of a thick well-formed long/rectangular Late Neolithic tool. Steep thick edges showing limited use wear. Probably deliberately snapped tool.		Neolithic
101	-	-	Topsoil	Flint	1	8.3	Flint flake.	Dark grey brown (P) thick flint flake, 20 x 31 x 11mm. Ventral face and single thick edge is soapy smooth, unlike all the retouched faces. Edges show miscellaneous (scraper?) retouch. Thin, pale granular, abraded – probable pebble cortex.		Neolithic

Context No	Cut No	Small find no	Feature	Material	Number of items	Weight (g)	Description		Period	Broad Period
101	-	-	Topsoil	Flint	1	27.3	Flint flake.	Large pale grey (S) flint flake, 40 x 35 x 16mm. Originally a classic Mid/Late Neolithic well-formed cutting flake/simple knife with 36mm long thin slightly convex cutting edge showing tiny removals along length. Distal 10mm shows reuse damage /wear cutting through earlier patinated wear. Dorsal face (proximal end) also shows later reuse/modification, clearly cutting through earlier surface. Possibly Late Neolithic reuse? This large well-formed piece on notably good quality flint suggests perhaps a non-strictly utilitarian initial use. Same core as below?		Neolithic
101	-	-	Topsoil	Flint	1	79	Flint core.	Large pale grey, (P) long, well-formed opposed platform core, 58 x 39 x 25mm. Produced long flakes – largely soft hammered removals. Both platforms show retouch crushing management. Repatination in progress. Conspicuous wastage/not exhausted prior to deposition. Same core as above?		Neolithic
101	-	-	Topsoil	Flint	1	9.1	Flint flake.	Moderately large, long dark irregular (S) flake, 41 x 29 x 7mm, with short area of lateral nibbled retouch on slight projection from otherwise thin and even simple knife/cutting edge. Dorsal scarring around platform shows that it came from a well prepared long flake core. Remnant nodular cortex.		Neolithic
101	-	-	Topsoil	Flint	1	2.1	Flint flake.	Small mottled grey partially repatinated (S) flake, 25 x 15 x 6mm. Patchy retouch. Possibly hafted given thin ventral removal in centre of face. Small miscellaneous retouched piece.		Neolithic

Context No	Cut No	Small find no	Feature	Material	Number of items	Weight (g)	Description		Period	Broad Period
101	-	-	Topsoil	Glass	1	36	One shard of thick bottle glass containing the characters 'R', '&' and 'B' on the interior.	Not assessed.	19/20	Modern
101	-	-	Topsoil	Iron	3	4	Three pieces of an iron ring or fitting.	Not assessed.	19/20	Modern
101	-	-	Topsoil	Iron	1	24	Iron strap.	Not assessed.	19/20	Modern
101	-	-	Topsoil	Pottery	6	79	Four sherds of early post-medieval glazed pot including a large handle/rim sherd.	Not assessed.	17/18	Post-medieval
101	-	-	Topsoil	Pottery	5	23	Three sherds of glazed and decorated china.	Not assessed.	19/20	Modern
102	-	-	Natural	Flint	1	10.4	Flint flake.	Pale flecked and slightly faulted grey (T) mp flint flake, 37 x 26 x 9mm. Clear evidence of platform crushing/management. One long near straight, unmodified cutting edge. A simple knife with opposing blunt edge for probable finger held use. Very little use-wear.		Neolithic

Context No	Cut No	Small find no	Feature	Material	Number of items	Weight (g)	Description		Period	Broad Period
103	104	1	Pit	Pottery	6	23	Decorated potsherds.	Some conjoining sherds but external surface generally abraded. The incised design is complex but includes part of a pattern with concentric circles and is best attributed to Grooved ware. Fabric apparently gabbroic. Illustration desirable, together with some joins work. Finds of Grooved ware are not infrequent in Cornwall, especially from pits. A nearly complete vessel with concentric decoration similar to that from (103) comes from Trevone (2) west of Padstow and the report on this has a fairly full comment on Grooved ware in Cornwall (Quinnell 2014).	Middle Neolithic	Neolithic

Context No	Cut No	Small find no	Feature	Material	Number of items	Weight (g)	Description		Period	Broad Period
105	106	2	Pit	Pottery	10	174	Decorated potsherds.	Of these 6 sherds come from a Peterborough, Mortlake style, vessel with a thick wall, decorated with rows of very close-spaced whipped cord: the narrow parts between the rows stand out as ridges. Fabric probably non-gabbroic, with added vein quartz. Illustration probably, unless further work produces a better preserved example: either drawing or photography. 4 sherds 21 g come from one or more other vessels, with thinner walls: one sherd has decoration similar to that on the first group. Fabric similar to above. This is only the fourth find of Peterborough pottery from a secure context in Cornwall, the others being Tregurra Valley outside Truro, Tregunnel outside Newquay and the Travel Lodge, Helston. Reports on the first two are currently being prepared, the last is lodged as grey literature. The best parallels to the principal vessel are those found recently by AC Archaeology (Devon) (PN ACD1692) at Newton Poppleford and at Woodly Farm, Newton St Cyres (ACD1644), both of which are being prepared for publication. Radiocarbon dates obtained from these sites generally fall within the range 3300-2900 BC, as is usual nationally. The discussion on the Peterborough ware prepared by the author on Tregurra Valley is currently the fullest account of this style in Cornwall. (Quinnell in Taylor in prep).	Late Neolithic	Neolithic
108	121	-	Pit	Pottery	1	1	Small potsherd.	Scrap could be Samian ware or medieval.		Roman/ Medieval

Context No	Cut No	Small find no	Feature	Material	Number of items	Weight (g)	Description		Period	Broad Period
167	168	-	Ditch	Flint	1	0.1	Flint flake.	Very small pale grey (T) flake, 9 x 6 x 2mm, probable debitage produced during tool manufacture. A residual inclusion in later ditch fill.		Neolithic?

Appendix 4: Table of Environmental Samples

(only those in bold were submitted for assessment)

Sample Number	Context Number	Group	Description	Flot weight (g)	Flot size (ml)	Flot description	Flot Assessment	Charcoal comments	Comments
1	107	4	Fill of pit [114]	3.9					
2	112	4	Fill of pit [115]	2					
3	113	4	Fill of pit [116]	3					
4	103	4	Fill of pit [104]. Occasional flecks of charcoal and sherds of Grooved ware	9.1					
5	**110**	**4**	**Fill of pit [117]. Charcoal pieces**	**172.5**	**400**	**Large charcoal-rich flot. Abundant modern roots**	**Abundant charcoal (4). Rare charred hazelnut fragments (1). Rare earthworm eggs.**	**Dominated by oak charcoal, including rare small roundwood fragments**	**Large, well-preserved charcoal assemblage. Limited C14 dating potential (due to 'old wood' effect)**
6	111	4	Fill of pit [120]	4.4					
7	118	4	Primary fill of [117]	2.8					
8	108	4	Fill of pit [121]	3.1					
9	**105**	**1**	**Fill of pit [106]. Contained Peterborough ware.**	**12.4**	**30**	**Abundant modern roots**	**Frequent to common charcoal (2/3). Rare charred hazelnut fragments (1)**	**Mixed charcoal assemblage with oak, alder/hazel and possible gorse-type roundwood**	**Good c14 potential**
10	124	1	Fill of posthole [125]	1.4					

Sample Number	Context Number	Group	Description	Flot weight (g)	Flot size (ml)	Flot description	Flot Assessment	Charcoal comments	Comments
11	**122**	**1**	**Fill of pit [123]**	**8.5**	**10**	**Common modern roots**	**Rare to frequent charcoal (1/2). Rare to frequent modern? Insects and leaves**	**Mostly oak**	**Evidence for possible contamination (other than modern roots). Limited c14 dating potential**
12	129	n/a	Fill of posthole [130]	2					
13	128	1	Fill of posthole [127]	2.4					
14	**131**	**6**	**Fill of posthole [132]**	**8.3**	**20**	**Abundant modern roots**	**Frequent charcoal (2)**	**Mostly oak, including fragments from mature trees**	**Limited c14 dating potential**
15	134	6	Fill of posthole [133]	6.6					
16	136	6	Fill of pit [140]	23.3					
17	**142**	**6**	**Fill of pit [140]**	**18.9**	**50**	**Common modern roots**	**Abundant charcoal (4)**	**Mostly oak, including fragments from mature trees.**	**Well-preserved charcoal assemblage. Limited C14 dating potential**
18	154	n/a	Fill of posthole [159]	2.5					
19	163	n/a	Upper fill of pit [164]	4.3					
20	**172**	**3**	**Fill of pit [174]. Charcoal**	**11.5**	**30**	**Abundant modern roots**	**Abundant charcoal (4)**	**Mostly oak, including fragments from mature trees**	**Well-preserved charcoal assemblage. Limited C14 dating potential**

Sample Number	Context Number	Group	Description	Flot weight (g)	Flot size (ml)	Flot description	Flot Assessment	Charcoal comments	Comments
21	**173**	**3**	**Fill of pit [175]. Charcoal**	**13.3**	**30**	**Abundant modern roots**	**Abundant charcoal (4)**	**Mostly oak, including fragments from mature trees.**	**Well-preserved charcoal assemblage. Limited C14 dating potential**
22	176	n/a	Fill of pit [177]. Sample discarded.						

Note: Quantifications are based on a scale of (1) to (4), where (1) = 1-5 items, (2) = 6-25, (3) = 26-100, and (4) = >100 items.

Cornwall Archaeological Unit

Fal Building, County Hall, Treyew Road, Truro,
Cornwall
TR1 3AY

(01872) 323603
enquiries@cau.org.uk
www.cau.org.uk