GREENLINK INTERCONNECTOR PROJECT, PEMBROKESHIRE: ARCHAEOLOGICAL EVALUATION 2019

DAT Archaeological Services

Prepared by DAT Archaeological Services

For: Greenlink

ymddiriedolaeth archaeolegol DYFED archaeological trust

DYFED ARCHAEOLOGICAL TRUST

REPORT NO. 2019-39
PROJECT RECORD NO. 118117

December 2019

GREENLINK INTERCONNECTOR PROJECT, PEMBROKESHIRE: ARCHAEOLOGICAL EVALUATION 2019

By

Charles Enright and Hubert Wilson

Ymddiriedolaeth Archaeolegol Dyfed Cyf
Corner House, 6 Stryd Caerfyrddin, Llandeilo, Sir Gaerfyrddin SA19 6AE
Ffon: Ymholiadau Cyffredinol 01558 823121
Adran Rheoli Treftadaeth 01558 823131
Ebost: info@dyfedarchaeology.org.uk
Gwefan: www.archaeolegdyfed.org.uk

Dyfed Archaeological Trust Limited
Corner House, 6 Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AE
Tel: General Enquiries 01558 823121
Heritage Management Section 01558 823131
Email: info@dyfedarchaeology.org.uk
*Website: www.*dyfedarchaeology*.org.uk*

GREENLINK INTERCONNECTOR PROJECT, PEMBROKESHIRE: ARCHAEOLOGICAL EVALUATION 2019

CONTENTS

APPENDIX 1:

TABLES

FIGURES

PHOTOGRAPHS

EXECUTIVE SUMMARY

DAT Archaeological Services were commissioned to undertake a series of trial trenches targeting possible archaeological anomalies identified by a geophysical survey along a proposed 6.3km cable route between Freshwater West and Pembroke Power Station, Pembrokeshire.

The cable route follows an undulating landscape consisting of large fields of arable and pasture with grassed over dunes to the south.

The trial trench evaluation revealed a sequence of natural and anthropogenic deposits. A number of the anomalies identified by the geophysical survey were revealed in the trenches; a number of which proved to be prehistoric in origin.

The prehistoric features included the remains of two Bronze Age barrow mounds, one of which contained the rim of an inverted pottery vessel whose fabric suggests a Bronze Age Collared Urn c.1700-1500 BC; typically associated with human burial.

CRYNODEB GWEITHREDOL

Comisiynwyd Gwasanaethau Archeolegol YAD i gynnal cyfres o ffosydd prawf yn targedu anomaleddau archeolegol posibl a nodwyd gan arolwg geoffisegol ar hyd llwybr cebl 6.3km arfaethedig rhwng Freshwater West a Gorsaf Drydan Penfro, Sir Benfro.

Mae'r llwybr cebl yn dilyn tirwedd ymdoniad sy'n cynnwys caeau mawr o dir âr a phorfa gyda thwyni glaswelltog i'r de.

Datgelodd gwerthusiad ffos prawf ddilyniant o ddyddodion naturiol ac anthropogenig. Datgelwyd nifer o'r anghysonderau a nodwyd gan yr arolwg geoffisegol yn y ffosydd; tarddiad sawl un ohonynt yn darddiad cynhanesyddol.

Roedd y nodweddion cynhanesyddol yn cynnwys olion dwy dwmpath crug o'r Oes Efydd, ac roedd un ohonynt yn cynnwys ymyl llestr grochenwaith gwrthdro y mae ei ffabrig yn awgrymu Wrn colerog o'r Oes Efydd c.1700-1500 CC; sy'n gysylltiedig yn nodweddiadol â chladdu dynol.

GREENLINK INTERCONNECTOR PROJECT, PEMBROKESHIRE: ARCHAEOLOGICAL EVALUATION 2019

SUMMARY

Following a Historic Environment Desk-Based Assessment, an Archaeology and Cultural Heritage chapter for an Environmental Impact Assessment and a geophysical survey along a proposed cable route between Freshwater West and Pembroke Power Station (roughly NGR SM 87830039 to SM 93500239) DAT Archaeological Services were commissioned by Arup (on behalf of Greenlink Interconnector Project) to fulfil a condition placed by the planning authority to undertake a series of trial trenches targeting possible archaeological anomalies identified by the geophysical survey.

This condition was placed following advice from the archaeological advisor to the planning authority, Dyfed Archaeological Trust - Development Management in order to provide information on the character and significance of any below ground archaeological remains that may be present within the development corridor as indicated by the geophysical survey

The proposals cover a roughly 6.3km east to west strip through the southwestern part of Pembrokeshire from Freshwater West beach to Pembroke Power Station.

The cable route follows an undulating landscape consisting of large fields of arable and pasture with grassed over dunes to the south.

The evaluation was carried out over two periods between 19th to 23rd of August and 25th to 26th of November. Eight 30m and two 15m trenches were excavated down to the natural horizon under archaeological supervision. The majority of trenches were trowelled by hand to highlight any surviving archaeological features. Eight of the trenches contained archaeological features of which at least three revealed archaeological features of prehistoric origin.

In Trench 1, within the centre of a sub-circular anomaly identified by the geophysical interpretation, three small pits were uncovered together with a linear feature. Interpreting the nature of such activity is difficult within such a small excavated area but it is possible that these are burial pits and the sub-circular anomaly the remains of a burial mound or barrow constructed above the pits.

Also within Trench 1 a band of oyster shells traversed the trench. It is uncertain whether this is a natural deposition of whether it is indicative of some form of human occupation.

Trench 3 revealed a shallow sub-circular pit whose fill contained charcoal and flecks of burnt bone.

Trench 6 contained the rim of an inverted pottery vessel whose fabric suggests a Bronze Age Collared Urn c.1700-1500 BC; typically associated with human burial. The pottery vessel was uncovered within the remains of a low lying mound and it is suggested that it may have originally been an upstanding earthwork likely to be a Bronze Age round barrow or burial mound.

Should the route of the proposed development have a direct impact upon these regionally important archaeological remains, it is likely that further archaeological mitigation would be required prior to development. After having defined the extent of the area of surviving features within the development area; this is expected to include full excavation of all archaeological deposits and features that will be impacted upon.

1. INTRODUCTION

1.1 Project Commission

1.1.1 DAT Archaeological Services were commissioned by Greenlink to undertake an archaeological evaluation along the line the proposed Greenlink Interconnector scheme on land between Freshwater West and the Pembroke Power Station in southwest Pembrokeshire (Figure 1 and Figures 2 - 5).

1.1.2 The site has previously been subjected to a historic environment desk-based assessment (Meek 2018), and geophysical survey along the proposed cable route and associated infrastructure by Sumo Survey (Davies 2019). Following the results of this geophysical survey a trial trench evaluation was implemented targeting a number of the possible archaeological anomalies identified by the survey (Figures 2 – 5). The results of both the geophysical survey and trial trench evaluation will be included within the Archaeology and Cultural Heritage Chapter for an Environmental Impact Assessment being prepared by Arup.

1.1.3 The aim of this trial trench evaluation was to provide information on the character and significance of the potential below ground archaeological remains identified through geophysical survey within the development area. Using this information an informed decision can be made regarding any further required mitigation.

1.2 Scope of Project

1.2.1 A Written Scheme of Investigation (WSI) for the archaeological evaluation was prepared by DAT Archaeological Services prior to the commencement of works. This was approved by the archaeological advisors to the planning authority, Dyfed Archaeological Trust – Development Management prior to the start of the works. The WSI outlined the following tasks for the project:

- Provision of a written scheme of investigation to outline the methodology for the intrusive trial trench evaluation which DAT Archaeological Services will undertake;
- To establish the state of preservation, character, extent and date range for the targeted archaeological deposits (identified by the geophysical survey);
- To use the information to design future mitigation at the site which will enable any identified remains to be appropriately investigated and recorded where they will be affected by the proposed development;
- Production of a report and an archive of the results.

1.2.2 The overall scheme of works was summarised as:

The implementation of a scheme of archaeological evaluation using trial trenching in advance of the proposed Greenlink Interconnector scheme in Pembrokeshire. Trenches will target potential archaeological features identified through geophysical survey by Sumo Services (Davies 2019). Further mitigation may be required where significant remains are identified, the scope of which would be determined following this stage of work. A report shall be prepared on the results of the evaluation and an archive created of all finds, records, photographs and plans created by this mitigation strategy.

1.3 Report Outline

1.3.1 This report provides a summary and discussion of the archaeological evaluation and its results and puts those results within their regional and national context where possible.

1.4 Abbreviations

1.4.1 Sites recorded on the Regional Historic Environment Record[1] (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). DAT Archaeological Services – DAT-AS; Dyfed Archaeological Trust Development Management – DAT-DM; Scheduled Ancient Monument – SAM; Written Scheme of Investigation – WSI; RCAHMW – Royal Commission on the Ancient and Historical Monuments of Wales.

1.5 Illustrations

1.5.1 Printed map extracts are not necessarily produced to their original scale.

1.6 Timeline

1.6.1 The following timeline (Table 1) is used within this report to give date ranges for the various archaeological periods that may be mentioned within the text.

Period	Approximate date	
Palaeolithic –	*c*.450,000 – 10,000 BC	Prehistoric
Mesolithic –	*c*. 10,000 – 4400 BC	
Neolithic –	*c*.4400 – 2300 BC	
Bronze Age –	*c*.2300 – 700 BC	
Iron Age –	*c*.700 BC – AD 43	
Roman (Romano-British) Period –	AD 43 – *c.* AD 410	Historic
Post-Roman / Early Medieval Period –	*c*. AD 410 – AD 1086	
Medieval Period –	1086 – 1536	
Post-Medieval Period[2] –	1536 – 1750	
Industrial Period –	1750 – 1899	
Modern –	20th century onwards	

Table 1: Archaeological and Historical Timeline for Wales.

[1] Held and managed by Dyfed Archaeological Trust, Corner House, 6 Carmarthen Street, Llandeilo SA19 6AE

[2] The post-medieval and industrial periods are combined as the post-medieval period on the Regional Historic Environment Record as held by Dyfed Archaeological Trust

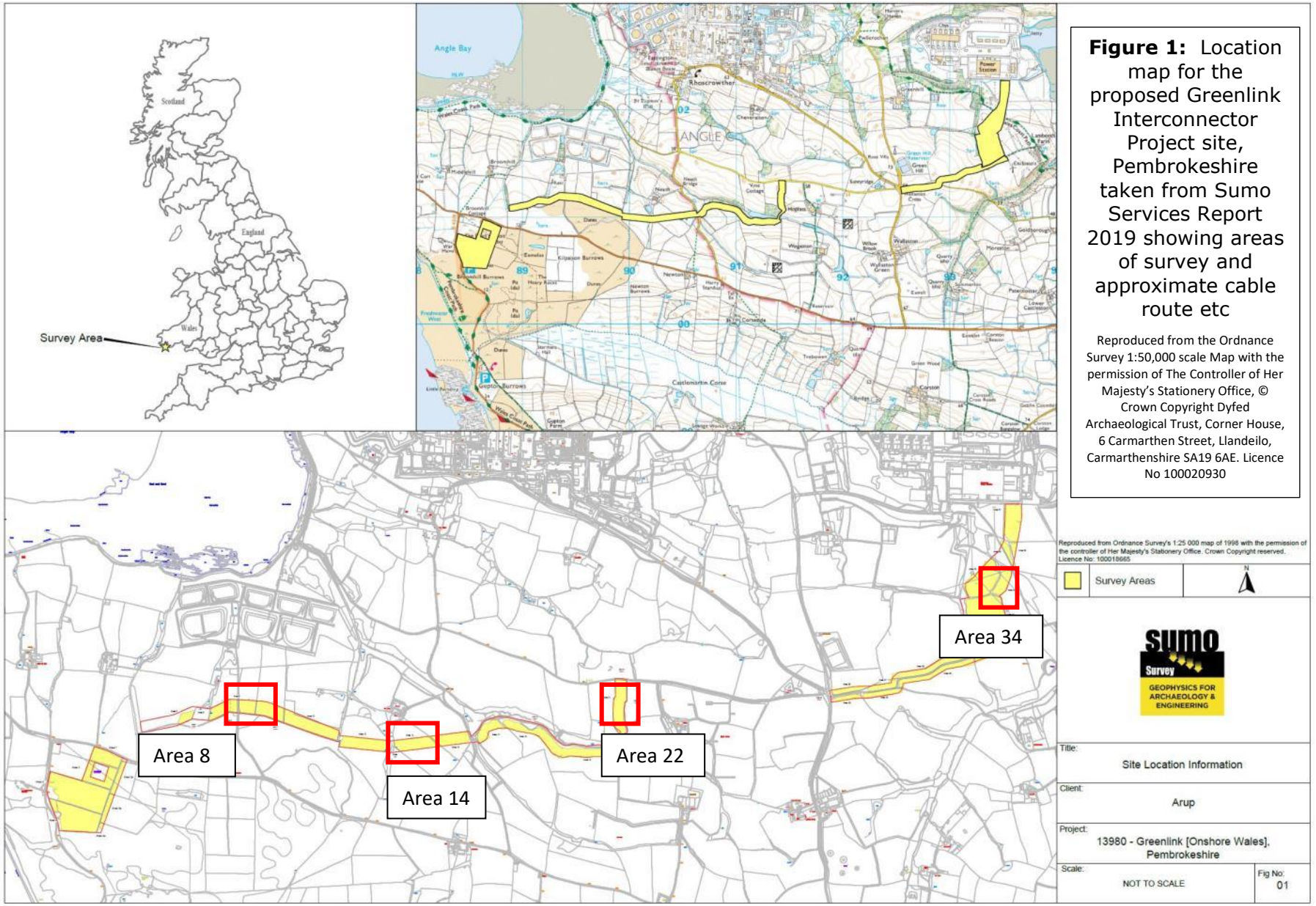


Figure 1: Location map for the proposed Greenlink Interconnector Project site, Pembrokeshire taken from Sumo Services Report 2019 showing areas of survey and approximate cable route etc

Figure 2: Trench 1 and 2 locations overlaid on the geophysical survey interpretation in Area 8.

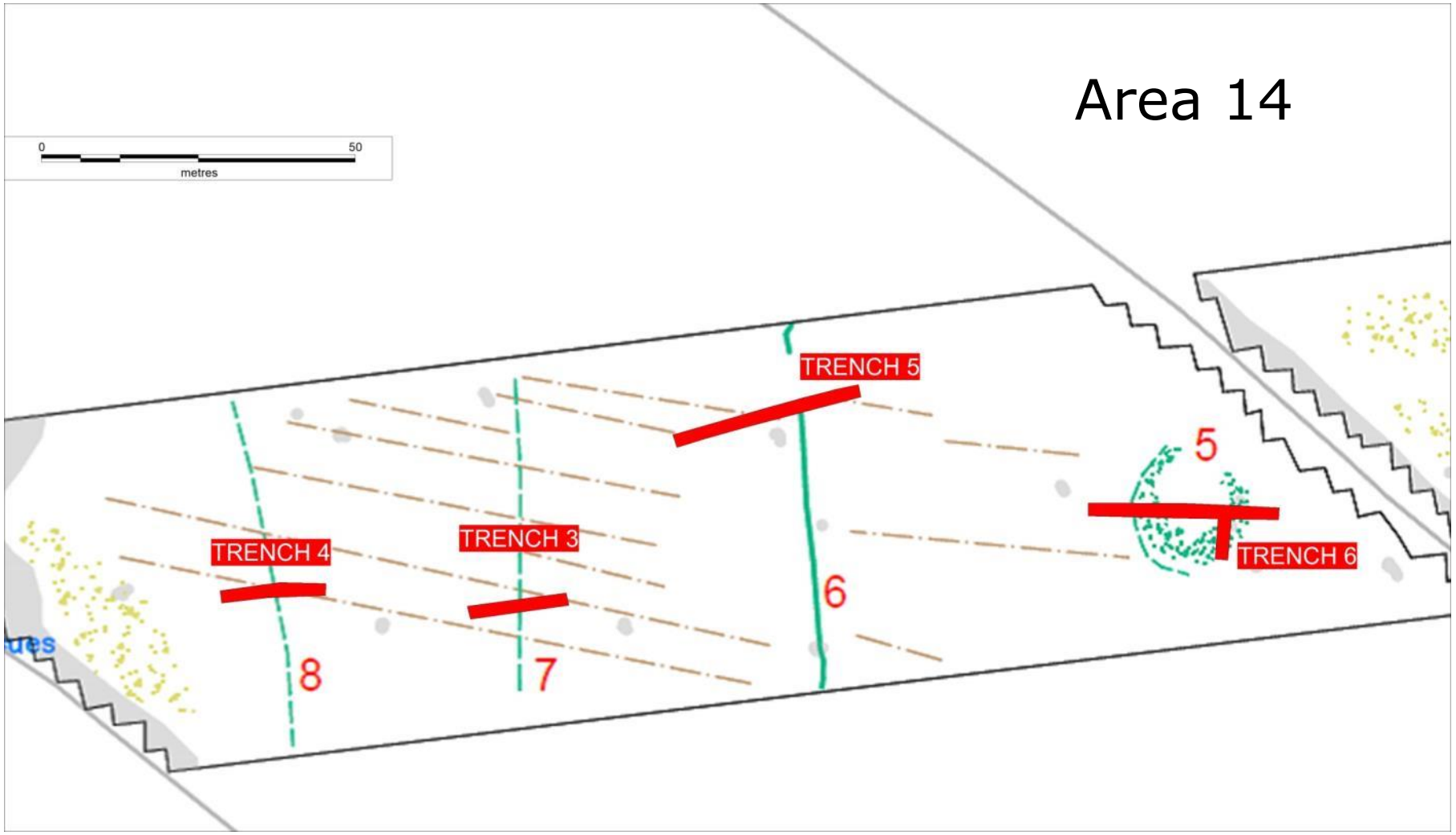


Figure 3: Trench 3 – 6 locations overlaid on the geophysical survey interpretation in Area 14.

Figure 4: Trench 7 and 8 locations overlaid on the geophysical survey interpretation in Area 22.

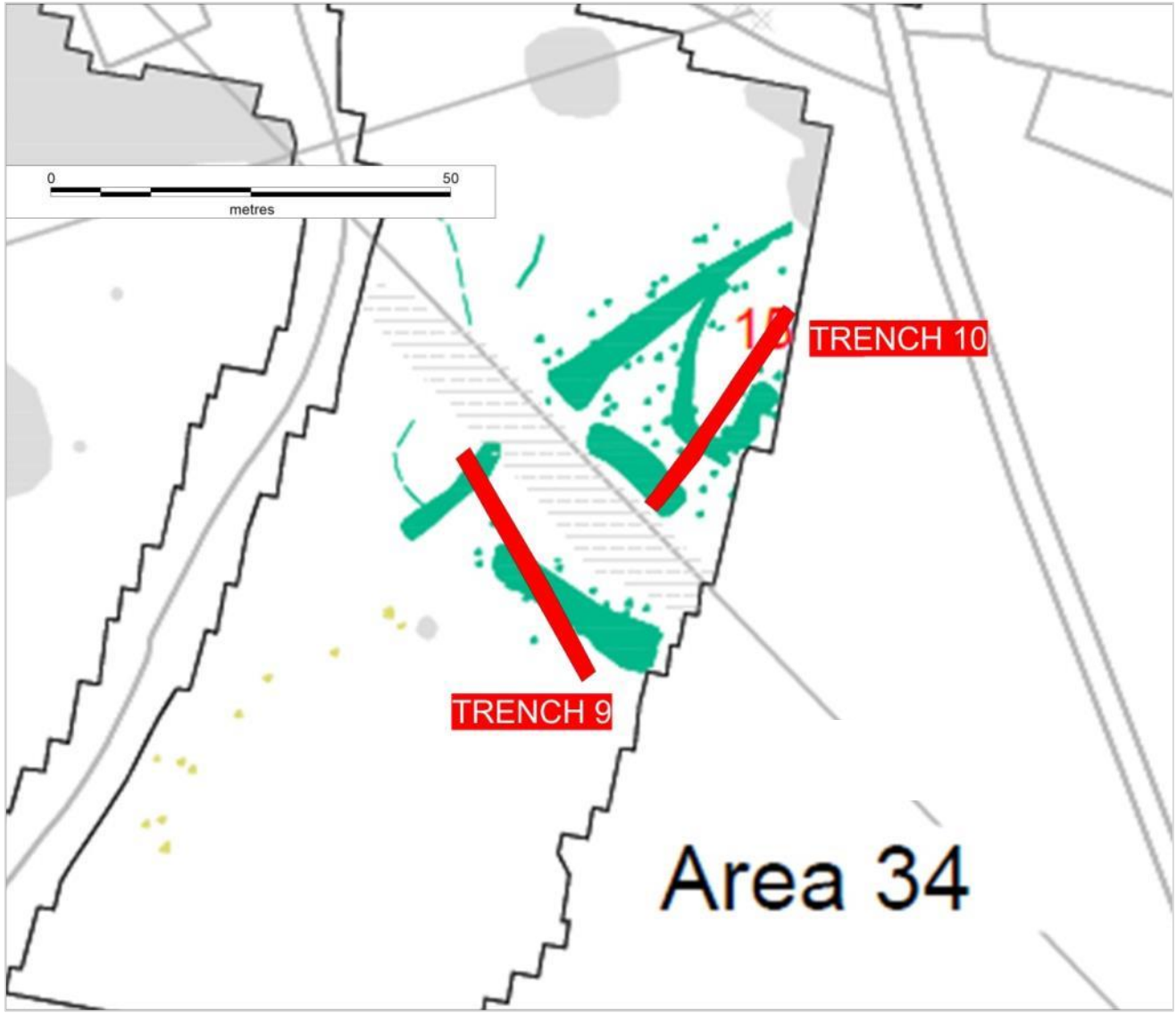


Figure 5: Trench 9 and 10 locations overlaid on the geophysical survey interpretation in Area 34.

2. THE SITE

2.1 Location, Topography and Geology

2.1.1 The following information has been extracted from the historic environment desk-based assessment conducted by DAT Archaeological Services (Meek 2018).

The Greenlink Interconnector project proposals cover a roughly 6.3km east to west strip through the southwestern part of Pembrokeshire from the landfall site at Freshwater West beach through to the Pembroke Substation (Roughly NGR SM 8783 0039 to SM 9350 0239).

The site lies within Pembrokeshire, the western part within the Pembrokeshire Coast National Park. The majority lies within the planning jurisdiction of Pembrokeshire County Council.

The proposed Greenlink Interconnector Project crosses a number of different geological bedrock types all of which are sedimentary, including Ludlow Rocks (sandstones), Milford Haven Group sandstones, Ridgeway Conglomerate, Skrinkle Sandstone, Avon Group Limestone and Mudstone, and Black Rock Subgroup and Gully Oolite Formation Limestone.

Superficial Geological deposits within the area include Tidal Flat Deposits of Sand, Silt and Clay on the northern edge and Blown Sand (dunes) across the majority of the western and south western parts of the scheme (British Geological Survey online).

2.2 Archaeological Potential

2.2.1 A detailed assessment of the archaeological potential and historical background of the development site has already been produced by DAT Archaeological Services (Meek 2019) and has not been reproduced in its entirety here. A summary of the findings follows:

The proposed development site lies within an area of archaeological significance and potential, with evidence of known human activity within the site dating back to the Mesolithic period. The majority of assets are from the post-medieval and modern periods, associated with the settlement, industry, agriculture and defence sites. The settlement pattern of the area is likely to have been established during the medieval period, although some farms may have earlier origins.

The potential for remains of Palaeolithic date is considered to be negligible, based on the fact that there are no known sites within 1km of the development area and the fact that any remains of that date are unlikely to have survived glaciation.

The potential for Mesolithic archaeological remains is considered high due to the amount of flint scatters recorded within the study area around the Greenlink Interconnector Project.

The potential for Neolithic archaeological remains is considered very high due to the amount of flint scatters recorded within the study area and the presence of the Devil's Quoit burial chamber in the western part of the proposed development site.

The potential for Bronze Age remains is also considered to be high, due to the number of flint finds recovered from the area and the presence of the known round barrow burial mounds at Kilpaison Burrows, Wallaston Green and the Corston Beacon.

The potential for Iron Age sites to be present is considered to be medium. Most Iron Age archaeology is centred on settlement sites such as the promontory and other forts recorded within the 2km and 1km buffer zones around the site. There are no known Iron Age enclosures within the Greenlink Interconnector Project area, although there is a low potential for unenclosed settlement to be present.

The potential for Roman remains is thought to be low because there are very few Roman sites within the buffer zones.

Early-Medieval archaeological sites are scarce in the region and centred on the known church sites at Pwllcrochan and Rhoscrowther. The potential for discovery of remains of this date within the development site is considered to be low to negligible.

There is considered to be a medium to high potential for archaeological remains of medieval date within the proposed development area. Settlement remains would likely be centred on the settlements at Angle, Pwllcrochan, Rhoscrowther and Hundleton or in the areas of the existing farms around the development area. The Greenlink Interconnector Project area runs through land which has been used for agriculture since the medieval period and as such former field boundaries and ridge and furrow is likely to be present.

There is a high potential for remains of post-medieval date to be present within the area, although as with medieval archaeology, it is most likely to be associated with agricultural practices, with settlement focussed on the existing settlement and farm layout.

3. ARCHAEOLOGICAL EVALUATION METHODOLOGY

3.1 Fieldwork Methodology

3.1.1 To ascertain the significance and state of preservation of archaeological features within the proposed development area, a phase of trial trench evaluation was implemented targeting possible archaeological anomalies identified by the geophysical survey.

3.1.2 The following trenches were excavated (See Figures 2 – 5).

Trench 1: 30m x 1.5m trench targeting linear anomaly 3 and circular anomaly 2

Trench 2: 30m x 1.5m trench targeting linear anomaly 4

Trench 3: 15m x 1.5m trench targeting linear anomalies 7;

Trench 4: 15m x 1.5m trench targeting linear anomalies 8;

Trench 5: 30m x 1.5m trench targeting both linear anomaly 6 and also a small possible unnumbered circular feature near its northern end;

Trench 6: 30m x 1.5m trench targeting circular anomaly 5;

Trench 7: 30m x 1.5m trench targeting the possible linear enclosures within anomaly 11;

Trench 8: 30m x 1.5m trench targeting three parallel linear anomalies 10; and

Trenches 9 & 10: Two x 30m x 1.5m trenches to target the large linear features at anomaly 15. The locations of these two trenches were constrained by land ownership issues.

3.1.3 All trenches were accurately located to the National Grid and had their levels calculated using a Trimble R10 VRS Rover Differential Global Position System (DGPS).

3.1.4 The trenches were excavated using a tracked 360° mechanical excavator fitted with a flat bladed bucket under the supervision of an archaeologist as set out in the Written Scheme of investigation produced by DAT Archaeological Services (2019). All non-archaeologically significant overburden was removed, and the trenches were excavated down on to the archaeological levels or undisturbed natural ground, whichever was reached first.

3.1.5 Following machine excavation, the trenches were hand cleaned using trowels to best determine the presence or absence of archaeological remains. Certain areas were re-trowelled a number of times to improve the definition of features. Sample excavation was undertaken of features identified during the evaluation.

3.1.6 All deposits were recorded by archaeological context recording sheet, scale drawing, photography and site note books. All individual deposits were numbered using the open-ended numbering system in accordance with DAT Archaeological Services Recording System. Trench plans and sections were recorded by means of measured drawings and sketches. A photographic record was maintained using digital cameras.

3.1.7 Trenches 3-10 were excavated in August 2019 and trenches 1-2 were excavated in November 2019.

3.2 Post-Fieldwork Reporting and Archiving

3.2.1 All data recovered during the fieldwork will be collated into a site archive structured in accordance with specifications in *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Brown 2011), and the procedures recommended by the National Monuments Record, Aberystwyth.

3.2.2 The results of the fieldwork have been assessed in local, regional and wider contexts. The report includes a desk-based research element to ensure that the site is placed within its wider archaeological context.

4. EVALUATION RESULTS

4.1 The trenches were recorded with plan and section drawings where appropriate. The results are discussed here in chronological order of events, with the oldest deposit discussed first (typically natural deposits) moving forward to the most recent layers (present ground surface). Archaeological fills and layers are represented in ( ), whilst cut numbers are represented in [ ].

4.2 Area 8 (Figure 2)

4.2.1 Two trenches were opened in Area 8 (Trenches 1 and 2) targeting anomalies identified from the geophysical survey. In both trenches the earliest deposit observed was the natural geology consisting of a firm, reddish-brown clay containing a large percentage of small to medium angular stone.

4.2.2 The natural geology in both trenches was overlain with discrete deposits of sand; this was up to 0.9m deep in Trench 1 and 0.7m deep in Trench 2. These deposits are the remains of former sand dunes which were truncated when the land was improved for agricultural purposes in the latter part of the 20th century (Photo 3).

4.2.3 The topsoil in both trenches was a loose greyish-brown silty-sand.

4.2.4 ***Trench 1*** (Figures 6 and 7)

Context Number	Thickness	Description/interpretation
101	0.25m	Topsoil: loose, greyish-brown, silty-sand.
102	0.1m	Medium orange/ brown sand.
103	0.3m	Dark pink/brown sand.
104	0.18	Yellow sand.
105	0.1m	1.6m wide band of oyster shells with rare cockle shells.
106		Cut of sub circular pit: 0.5m diameter, 0.27m deep.
107	0.12m	Upper fill of [106]: Friable, very dark grey, clay-sand; occasional small/medium stone.
108		Cut of sub circular pit: 0.55m diameter, 0.24m deep.
109	0.13	Upper fill of [108]: Friable, grey/brown, clay-sand.
110		Two stones: one lying flat on top of (109), the other an upright protruding 0.08m alongside the flat stone. Possible remnant of small cist grave.
111		Band of white, slightly sandy clay which lines the north, south and west sides of pit [108]. Does not line base of pit. Lining on south side is approx. 0.07m deep rising to 0.03m on north side. It averages 0.05m thick.
112	0.02m	Red/brown clay containing charcoal flecks. Approx. 0.5m wide and 1.5m long. Very shallow.
113		Red/brown, silt-clay with high percentage of stone: Natural.

114		Cut of sub circular pit with rounded base. Approx. 0.3m wide, 0.13m deep.
115	0.13m	Fill of pit [114]. Dark brown, sandy-clay contains high percentage of small/medium angular stone.
116	0.07m	Fill of pit [106]. Reddish-brown clay containing high percentage of small angular stone. Lies below 107.
117	0.12m	Fill of pit [106]. Layer of medium sized angular stone at bottom of pit.
118	0.06m	Fill of pit [108]. Haphazardly placed, medium sized, angular stone.
119	0.04m	Primary fill of pit [108]. Dark grey, sandy clay. Charcoal flecked.
120	0.04	Fill of [122]. Linear band of pink-orange mottled clay. Runs alongside 121 for 0.35m.
121	0.1m	Fill of [122]. Linear band of brown clay-sand, approx. 0.08m wide and 1m long.
122		Linear cut, approx. 0.1m deep. V-shaped in profile.

Table 2: List of stratigraphic layers in Trench 1

4.2.5 Trench 1 measured 30m x 1.8m and was roughly aligned northeast to southwest. Two linear anomalies and a sub-circular anomaly at the centre of the trench were targeted (Photo 1).

Photo 1: View northeast along Trench 1; (105) in foreground. 1m scale

4.2.6 The linear anomaly at the southwest end of the trench was a 1.6m wide, 0.1m deep band of oyster shells (105), roughly aligned east to west. The shells did not appear to fill a cut. Both ends of this linear deposit extended into the trench sides (Photo 2).

Photo 2: View northeast at band of oyster shells (105) crossing trench. 1m scale

4.2.7 It could be seen in section that layer (105) was overlain by a deposit of yellow sand (104). It was noted that (104) terminated in line with (105) (Photo 3).

4.2.8 At the mid-point of the trench a group of small pits were uncovered [106, 108 and 114] (Figures 6 & 70. Pit [114] was slightly truncated by a sand and clay filled linear anomaly [122]. The pits and linear anomaly were cut into the natural ground (113). (Photo 4)

Photo 3: View northwest: topsoil and sand deposits (101 to 104) overlying oyster shell deposit (105). Yellow sand (104) terminates in line with (105). 1m scale

Photo 4: View northwest at [106, 108, 114 and 122], prior to excavation. 1m scale

4.2.9 Pit [106] was 0.5m in diameter and 0.27m deep, with steep sides and a relatively flat base. It was filled with three distinct fills. Its primary fill was a deposit of medium sized angular stone (117) this was overlain by a deposit of reddish-brown clay (116) containing a high percentage of small angular stone. Above this stood a friable, very dark grey, clay-sand (107) containing the occasional small/medium stone (Photo 5).

Photo 5: View north of half-sectioned pit [106]. 0.5m scale

4.2.10 Pit [108] was situated immediately to the east of pit [106]. It was sub-circular in plan with steep sides and a slightly curved base. The pit was capped by a flat stone (110) *c*. 0.42m x 0.23m, beside which a small stone (110), set into the side of the pit, protruded (Photo 6). Immediately below (110) lay (109), a friable, greyish brown, clayey-sand (Photo 7). Beneath this deposit was (118), a deposit of medium-sized, angular stone (Photo 8). The primary fill (119) consisted of a dark grey, sandy-clay with charcoal flecks (Photo 9). Situated approximately 0.05m below the top of the pit, and lining three of its sides but not the eastern side, was a c. 0.05m wide band of white, slightly gritty clay (111). The band was deeper at the southern edge *c*. 0.07m, rising to *c*. 0.03 at its northern edge. It did not extend to the bottom of the pit (Photo 10).

Photo 6: View north at horizontal and upright stones. Possible remains of stone cist. 0.5m scale

Photo 7: View north at deposit (109) upright stone (110) and clay deposit (111). 0.5m scale

Photo 8: View north at stony fill(118) and clay lining (111). 0.5m scale

Photo 9: View north of primary fill (119) and clay lining (111). 0.5m scale

Photo 10: View west at clay deposit (111) within pit [108]. 0.5m scale

4.2.11 Pit [114] lay 0.12m southeast of [108] and was sub-circular in plan with a curved base. It measured 0.32m across and was 0.12m deep. It was filled by a very stony, dark brown, sandy clay deposit (115). The south eastern edge of [114] was clipped by linear anomaly [122] (Photos 11 and 12).

Photo 11: View east at pit (108) and linear anomaly [122]. 0.5m scale

Photo 12: View east at half-sectioned pit [114] and linear anomaly [122]. 0.5m scale

4.2.12 Linear anomaly [122] extended from beneath the east side of the trench and continued westward, in a straight line, for 1.0m. The linear cut was V-shaped in profile and contained two fills (120 and 121) which, in plan, lay side by side but excavation revealed that (120) was the uppermost fill. This fill consisted of yellow/orange mixed clay and was 0.04m wide: it extended for 0.35m into the trench. Fill (121) was a c. 0.07m wide deposit of medium brown, slightly clayey sand which extended 1.0m from the trench side.

Photo 13: View north showing half sectioned pits [106, 114], pit [108] with clay deposit (111) and linear [122]. 1m scale

4.2.13 At the north end of the trench a 0.5m wide, shallow band of reddish-brown clay containing charcoal flecks (112), extended from beneath the west side for approximately 1.5m.

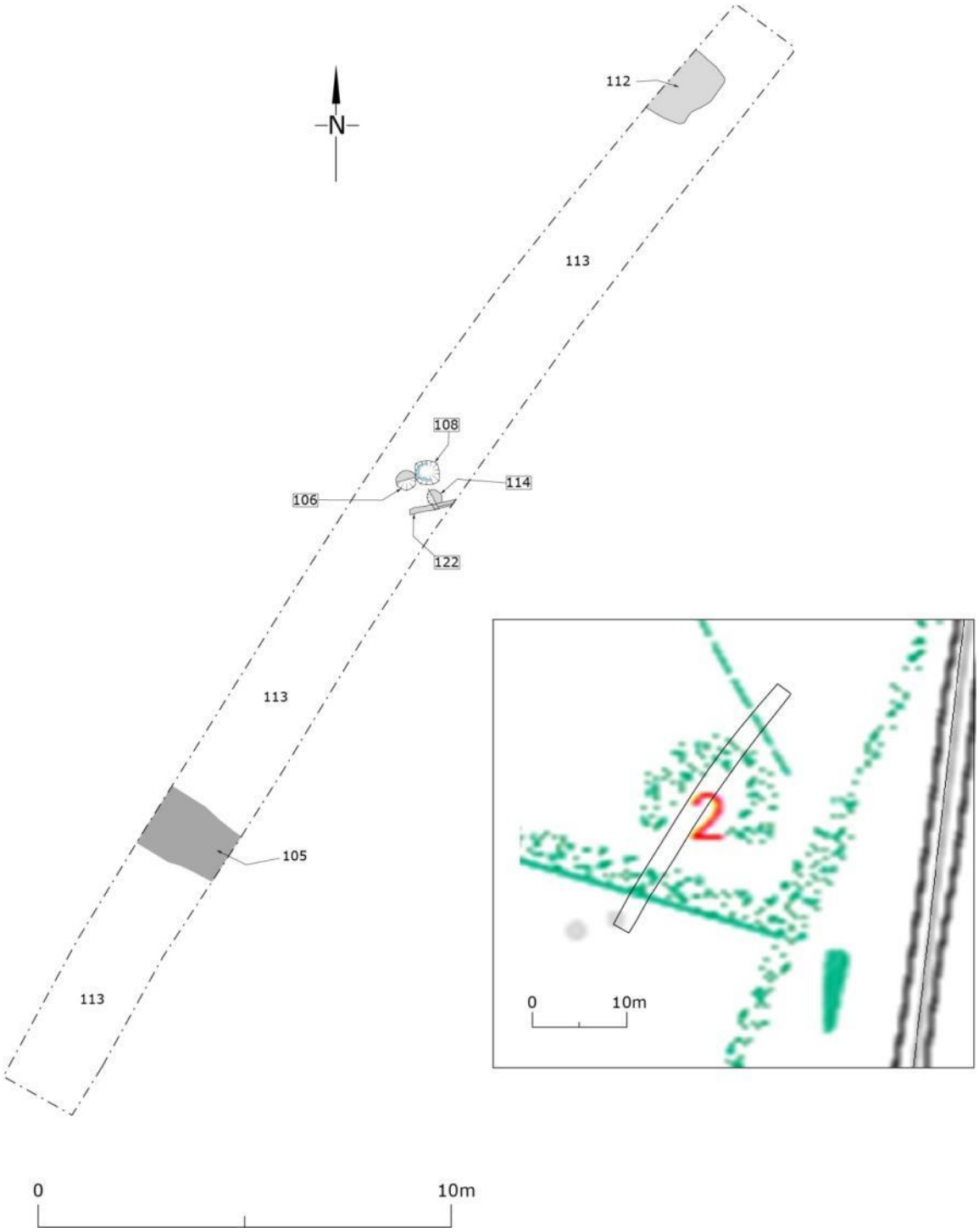


Figure 6: Plan of archaeological features within Trench 1 and geophysics interpretation overlay

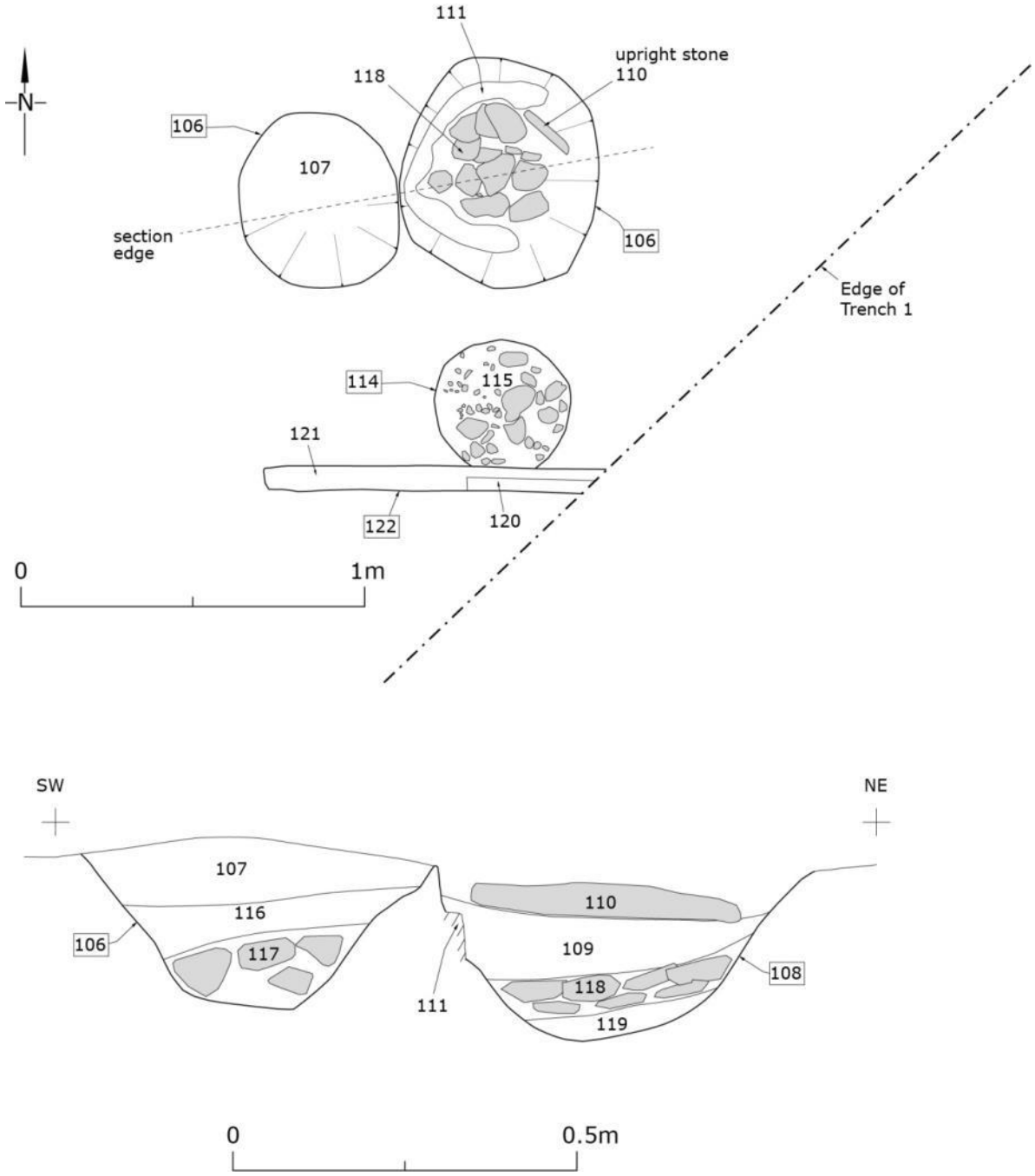


Figure 7: Plan of pits and linear anomaly (top) and section drawing of pits [106] and [108] (bottom)

4.2.14 ***Trench 2*** (Figure 2)

Context Number	Thickness	Description/interpretation
201	0.24m	Topsoil: loose, dark grey/brown, silty-sand.
202	0.14m	Loose, medium brown, sand
203	0.28	Loose, orange/brown sand
204	0.05	Loose, yellow sand

Table 3: List of stratigraphic layers Trench 2

4.2.15 Trench 2 measured 30m x 1.8m and was northwest to southeast. It targeted the wide linear anomaly (4) seen in the geophysical survey.

4.2.16 There was no obvious evidence relating to the linear anomaly (4) identified in the geophysical survey nor any other features of archaeological origin (Photo 14).

Photo 14: View southeast along Trench 2

4.3 Area 14 (Figure 3)

4.3.1 In Area 14 four trenches (Trenches 3 – 6) were opened; targeting anomalies identified on the geophysical survey. In each trench the earliest deposit observed was the natural geology consisting of firm, light brown coloured clay silt.

4.3.2 In Trenches 5 and 6 the natural was overlain by a buried soil comprising stiff purple coloured clayey sand. In Trenches 3 and 6 the natural was overlain by intermittent deposits of a similar buried soil and light sand. A further layer of light sand was seen overlying the buried soil in Trench 5. These deposits of sand were the remains of former sand dunes removed when the land was improved for agricultural purposes in the latter part of the 20th century.

4.3.3 Overlying the layer of sand, or directly overlying the natural in the case of Trench 4 (where no sand or buried soil was observed), was a loose brown coloured sandy clay subsoil.

4.3.4 The topsoil in all four trenches was loose dark purple/grey coloured silt.

4.3.5 ***Trench 3*** (Figure 8)

Context Number	Thickness	Description/interpretation
301	0.30m	Topsoil: loose, dark purple/grey coloured silt.
302	0.20m	Subsoil: loose, brown sand with clay.
303	0.20m	Sand inundation: Occasional sand layer.
304	0.16m	Buried soil: buried soil: Stiff purple/brown clayey sand.
305	Not excavated	Natural: firm, light brown coloured clay silt.
306	0.08m	Cut of pit
307	0.08m	Fill of pit [306] loose, black silt with sand with charcoal

Table 4: List of stratigraphic layers Trench 3

4.3.6 Trench 3 measured 15m x 1.8m and was roughly aligned east to west. The target of the trench was linear anomaly (7) aligned north to south.

4.3.7 Towards the western end of the trench a discrete sub-circular pit feature [306] was seen to be cutting the buried soil layer (304) (Photo 15). The pit was approximately 0.70m in diameter and excavation revealed it was 0.08m deep and filled with loose, black silt with sand (307). Frequent charcoal and flecks of burnt bone were also noted to be within the fill (Photo 16). Around the pit a number of stake holes were seen, two to the north, four to the south and two within the pit on the southern edge (Photos 16 and 17).

4.3.8 Above the thin remnant of buried soil was an irregular layer of sand seen throughout the trench (303). In turn this was overlain by loose, brown sandy clay subsoil (302); above which was 0.30m of topsoil (301) comprising loose, dark purple/grey coloured silt. Photo 18 shows a representative sample of the strata encountered in Trench 3.

4.3.9 Within the excavated trench no evidence of any feature that would explain linear anomaly (7) as identified in the geophysical survey, was recorded.

Photo 15: Pit [306] pre-excavation. View north, 1m scale. The pit was easily discernible due to its black fill.

Photo 16: Half sectioned view of pit [306]. View south, 0.5m scale. Two stake holes are also visible in the foreground of the photo.

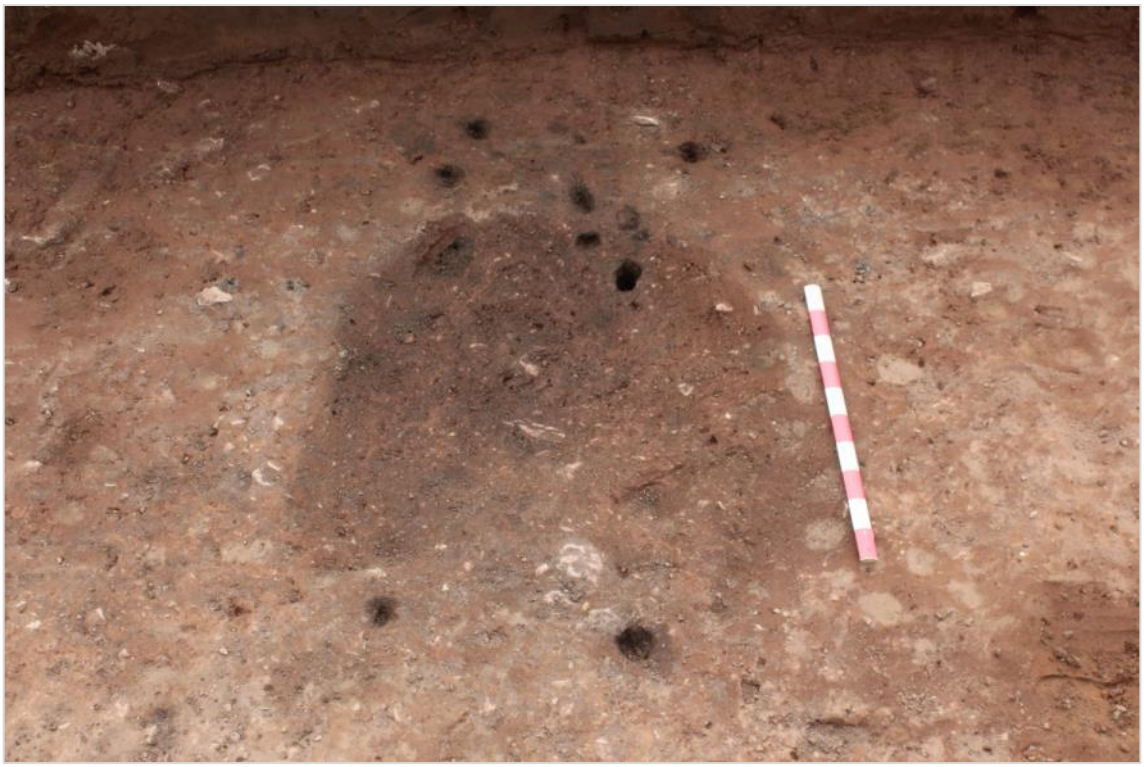
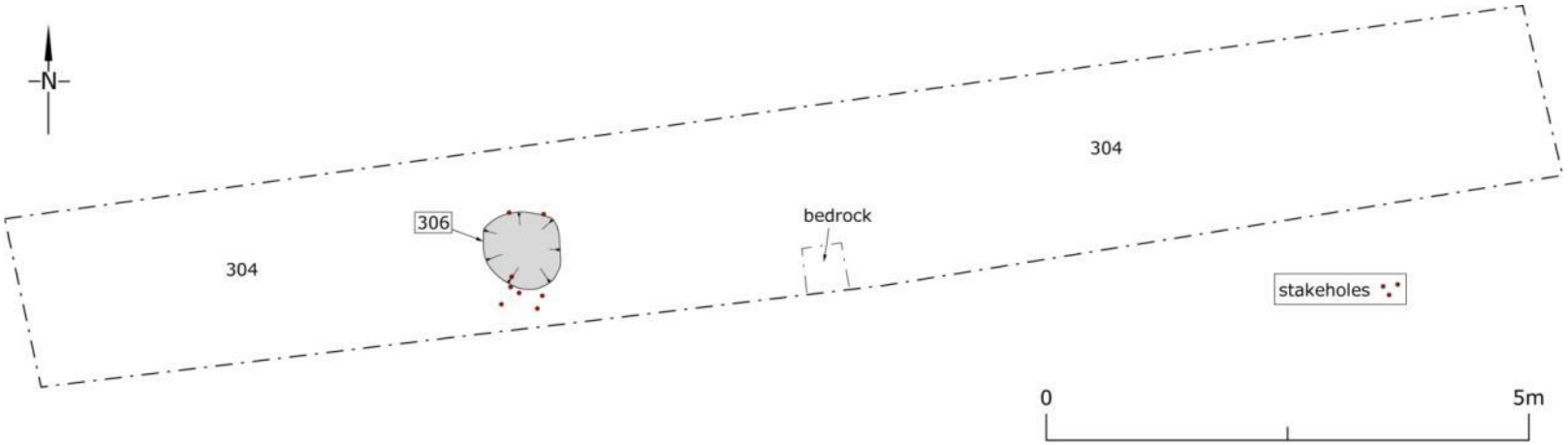


Photo 17: View south of excavated pit [306] showing arrangement of stake holes. 0.5m scale

Photo 18: South facing section of Trench 3 showing form bottom to top: natural horizon, buried soil, sand inundation and upper subsoil deposits. 0.5m scale



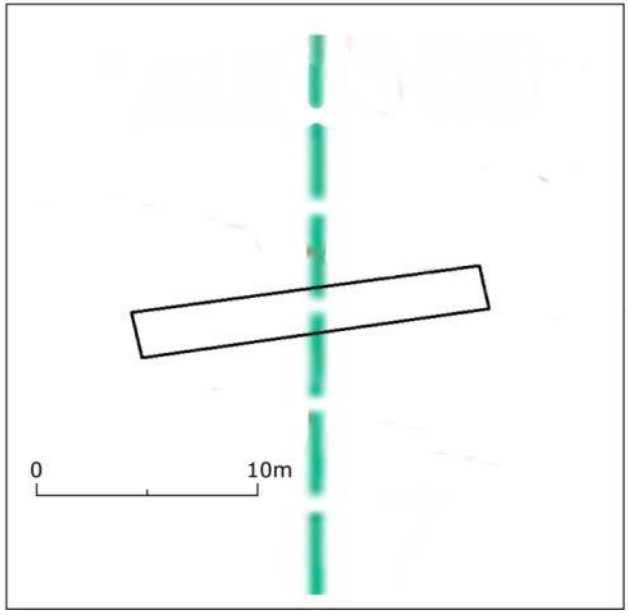


Figure 8: Plan of Trench 3 (above) and geophysics interpretation overlay (below).

4.3.10 ***Trench 4*** (Figure 3)

Context Number	Thickness	Description/interpretation
401	0.28m	Topsoil: loose, purple/grey coloured silt.
402	0.22m	Subsoil: loose, brown sand with clay.
403	Not excavated	Natural: firm, light brown coloured clay silt.

Table 5: List of stratigraphic layers Trench 4

4.3.11 Trench 4 measured 15m x 1.8m and was roughly aligned east to west. The target of the trench was linear anomaly (8) aligned north to south.

4.3.12 There was no obvious evidence relating to linear anomaly (8) as identified in the geophysical survey. No features of archaeological origin were recorded within this trench (Photo 19).

Photo 19: Trench 4 after excavation. View west, 1m scale.

4.3.13 ***Trench 5*** (Figure 9)

Context Number	Thickness	Description/interpretation
501	0.15m	Topsoil: loose, purple/grey coloured silt.
502	0.40m	Subsoil: loose, brown sand with clay.
503	0.14m	Layer: loose, purple/brown coloured sand with clay.
504	0.11	Possible buried soil: stiff purple/brown clayey sand.
505		Upper fill of linear feature [507] stiff brown coloured clayey sand
506		Lower fill of linear feature [507] stiff grey clayey, silty sand with rare flecks of charcoal
507		Linear feature cut
508		Possible pit fill of [509]
509		Possible pit cut
510	Not excavated.	Natural: firm, light brown coloured clay silt.
511	Not excavated	Possible outcrop of bedrock

Table 6: List of stratigraphic layers Trench 5

4.3.14 Trench 5 measured 30m x 1.8m and was roughly aligned east to west. The target of the trench was linear anomaly (6) aligned north to south.

4.3.15 At the approximate location of geophysical anomaly (6) a linear feature was observed cutting the natural geology. This ditch [507] was aligned north to south across the midsection of the trench. During excavation a clear edge was defined on its western edge but its eastern edge was more tentative, based on this the ditch was estimated to measure 1.0m in width. The ditch had gradual sloping sides with a broad flat base at 1.15m deep (Photo 20). The ditch contained two fills. The earliest (506) was stiff grey, clayey, silty sand with rare flecks of charcoal. The upper fill (505) was stiff brown coloured clayey sand. It contained flint debitage and occasional flecks of charcoal. The ditch was sealed by a possible remnant of a buried soil (504), which in turn was overlain by later deposit (503). Overlying (503) were subsoil (502) and topsoil (501).

4.3.16 To the west of linear feature [507] was an amorphous feature [509] (Photo 21), the fill (508) of which did contain charcoal but the edges were difficult to determine and it could not be ascertained if this was an archaeological or natural feature.

4.3.17 Situated to the east and west of ditch [507] two variable deposits were observed. To the west was layer (510), a possible outcrop of bedrock within the light brown coloured clay silt, visible where it had been cut by [507]. The stone was of variable density, both loose and very firm. To the east of was (511); a discrete area of stone within a clayey sand matrix. Both features (510) and (511) are most likely of natural origin and are outcrops of bedrock.

4.3.18 Linear ditch [507] appeared to correspond to linear anomaly (6) as identified in the geophysical survey.

Photo 20: Looking south at ditch [507] after partial excavation. 1.0m scale

Photo 21: Possible feature [508] found adjacent to ditch [507].

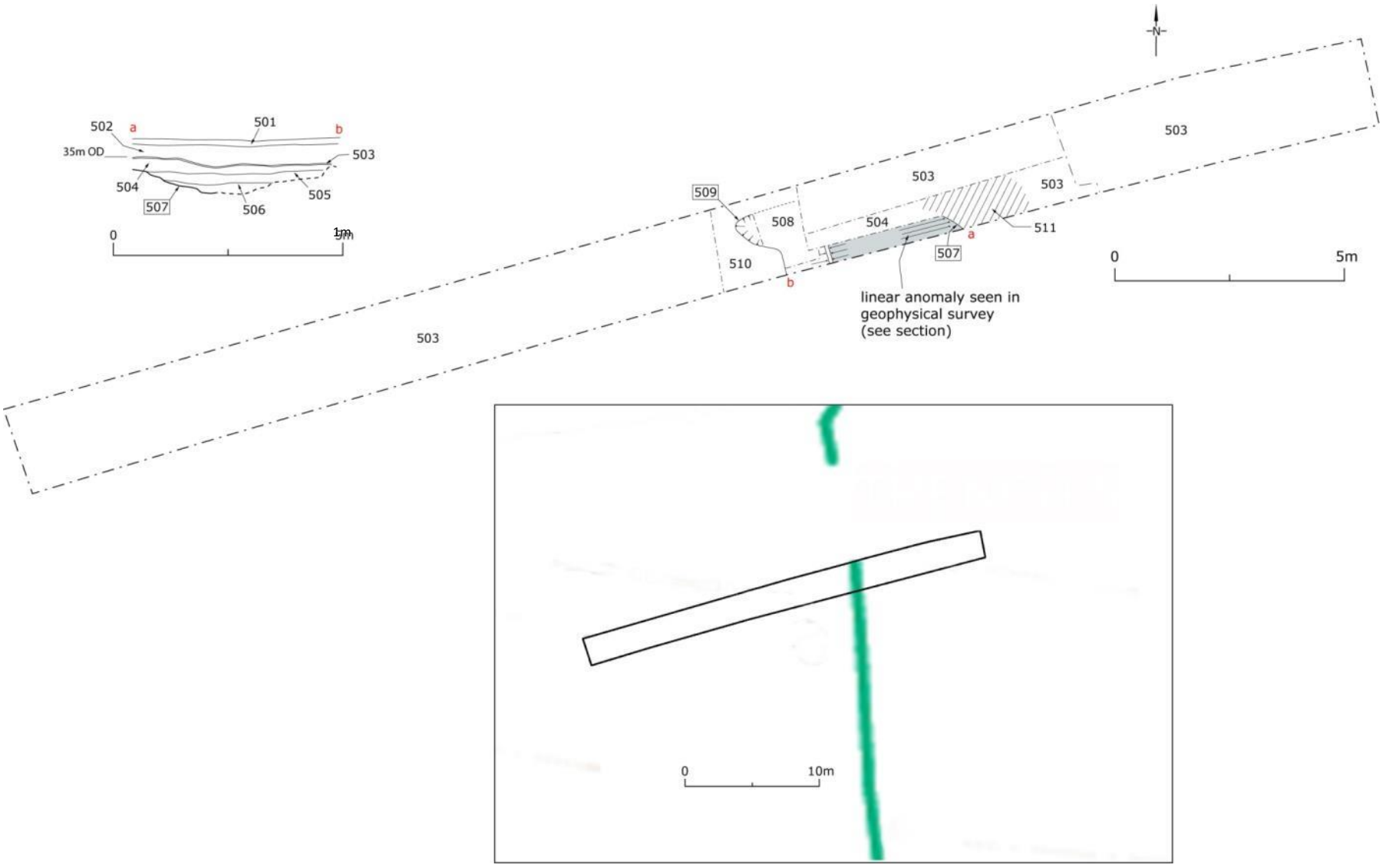


Figure 9: Plan and section drawing of Trench 5 (above) and geophysics interpretation overlay (below).

4.3.19 ***Trench 6*** (Figure 10)

Context Number	Thickness	Description/interpretation
601	0.30m	Topsoil: loose, purple/grey coloured silt.
602	0.20m	Subsoil: loose, brown sand with clay.
603	0.35	Buried soil: stiff purple/brown clayey sand.
604	Not excavated	Natural: firm, light brown coloured clay silt.
605		Uncertain, group of stones in (603)
606	0.10m	Sand inundation: Occasional sand layer.
607		Cut of an amorphous shaped ditch or pit with an irregular profile.
608		Fill of pit or ditch [607] – very loose brown silt with no inclusions

Table 7: List of stratigraphic layers Trench 6

4.3.20 Trench 6 measured 30m x 1.8m and was roughly aligned east to west. The target of the trench was circular anomaly (5) as identified in the geophysical survey.

4.3.21 Natural ground was only exposed at the western and eastern ends of Trench 6. Towards the centre of the trench, during machining of upper deposits, the remains of an inverted *in-situ* pottery vessel were exposed within deposit (603) located adjacent to a large boulder (Photos 22 & 23). Deposit (603) was possibly a remnant of a former buried soil. Across this deposit plough scars were visible, evidenced by linear cuts filled with darker soil criss-crossing the trench (Photo 22). Many were orientated in the same direction as nearby current field boundaries suggesting they are of recent date.

4.3.22 Upon excavation it became evident that the remains of the pottery vessel comprised only the rim of the vessel. The vessel had originally been placed upside down into the ground. Many years of ploughing has destroyed the body of the vessel; leaving only fragments of the rim pressed into the ground. No cut for what survived of the pottery vessel was evident. The rim was roughly 0.30m in diameter.

4.3.23 Buried soil deposit (603) extended for 15.76m along the trench. At its western and eastern edges (as seen in the trench) it appeared to slope downwards; thereby creating an impression of a raised area of soil. Where deposit (603) petered out it was clear that sand deposit (606) overlapped and rose over its sloping edges but did not fully extend across it (Photo 24). Towards the centre of deposit (603) was a small cluster of medium sized angular stones protruding from buried layer (603) (Photo 25). It was thought possible that these could be a remnant of a central feature beneath or cut into buried soil (603) but this was not investigated further.

4.3.24 In order to understand better the deposits in Trench 6 a small trench c. 7.0m long was excavated at right angles to Trench 6 to the south (Figure 10). The trench was excavated to the top of the buried soil (606). A cut feature [607] was identified in this trench extension that appeared to be an amorphous shaped ditch or pit with an irregular profile. The fill

(608) was very loose brown silt with no inclusions except for one piece of modern glass found near the top. It was difficult to determine whether this feature was of archaeological origin or a result of animal disturbance.

Photo 22: The exposed remains of the circular rim of a pottery vessel (background) and large boulder (foreground) both lying within (603). Plough scars can also be seen cut into deposit (603). View west, 0.5m scale.

Photo 23: *In-situ* remains of rim of pottery vessel. 0.5m scale

Photo 24: Eastern edge of buried soil (603) slopes down to the east where it is covered by sand (606). View north, 0.5m scale.

Photo 25: Cluster of stones situated centrally within area of buried soil (603). 1m scale

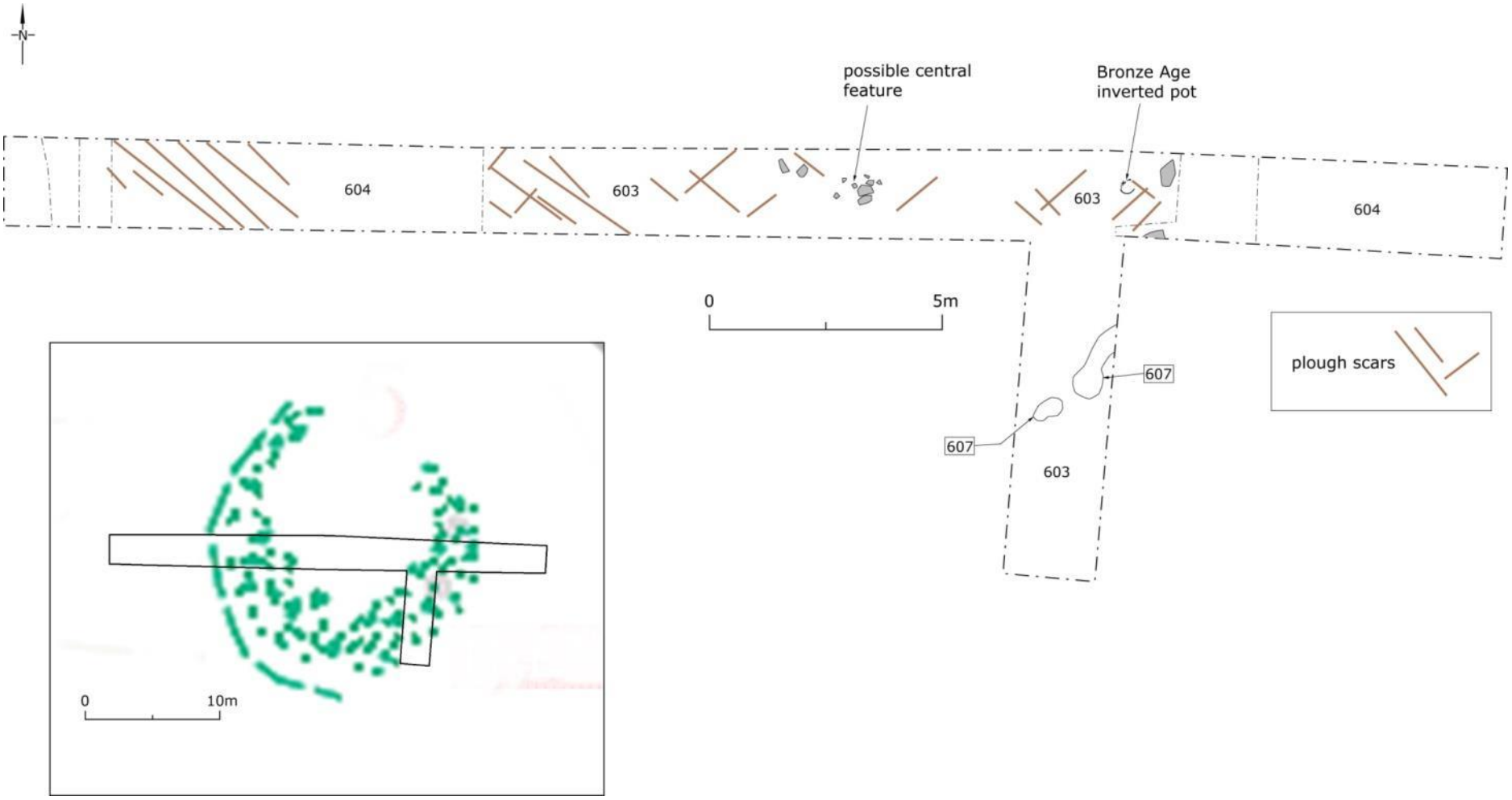


Figure 10: Plan of Trench 6 (above) and geophysics interpretation overlay (below).

4.4 **Area 22** (Figure 4)

4.4.1 In Area 22 Trenches 7 and 8 were excavated.

4.4.2 The earliest deposit encountered in each trench was the natural horizon which was formed of shattered old red sandstone mixed with silty-clay.

4.4.3 Overlying this was a subsoil layer comprised of a mid to dark brown coloured silty clay with contained frequent inclusions of small sub angular stones.

4.4.4 Each trench was overlain by dark brown silty-clay topsoil.

4.4.5 ***Trench 7*** (Figure11)

Context Number	Thickness	Description/interpretation
701	0.19m	Topsoil: dark brown coloured silty clay
702	0.10m	Subsoil: mid to dark brown coloured silty clay
703	Not fully excavated	Natural: shattered old red sand stone mixed with silty clay
704	0.13m	Possible gully cut
705	0.13m	Fill of possible gully [704] reddish/brown silty clay
706	0.22m	Post hole cut
707	0.22m	Fill of post hole [706] dark brown silty clay
708		Possible stone post packing in post hole cut [706]

Table 8: List of stratigraphic layers Trench 7

4.4.6 Trench 7 measured 30m x 1.8m and was roughly aligned north to south. The target of the trench was the possible linear enclosures with geophysical anomaly (11).

4.4.7 Located towards the middle of Trench 7 a linear gully [704] orientated roughly east to west and a possible post hole [706] cut through the bottom of the gully were exposed cutting the natural horizon (Photo 26). The section of the gully [704] exposed within the trench measured 0.43 wide and 0.13m deep and extended across the width of the trench. The gully was filled with reddish/brown silty clay (705) which contained occasional small sub-angular stones and very rare flecks of charcoal.

4.4.8 At the eastern end of the gully a circular post hole [706] cut through the gully. The post hole appeared to extend into the west facing side of the trench. The post hole had moderate to steep sloped sides leading to a flattish base. It measured approximately 0.30m wide and 0.22m deep. The post hole seemingly contained several small to medium sized sub angular stones possibly used as packing (708) (Photo 27) and a dark brown silty clay fill (707) with occasional small sub angular stones.

4.4.9 The fills of both gully and post hole were near identical and both features may be contemporary in date. Gully [704] appeared to correspond with the southern part of linear anomaly (11) as identified by the geophysical survey.

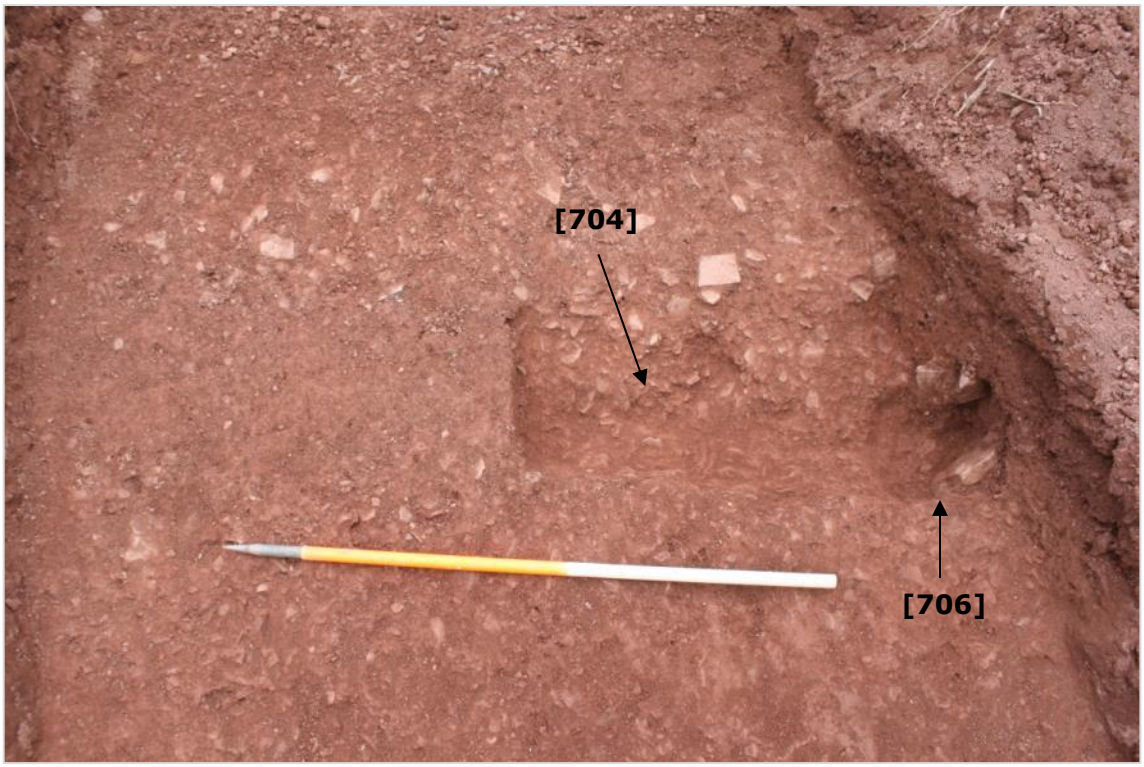


Photo 26: View north of gully [704] and post hole [706]. 1m scale

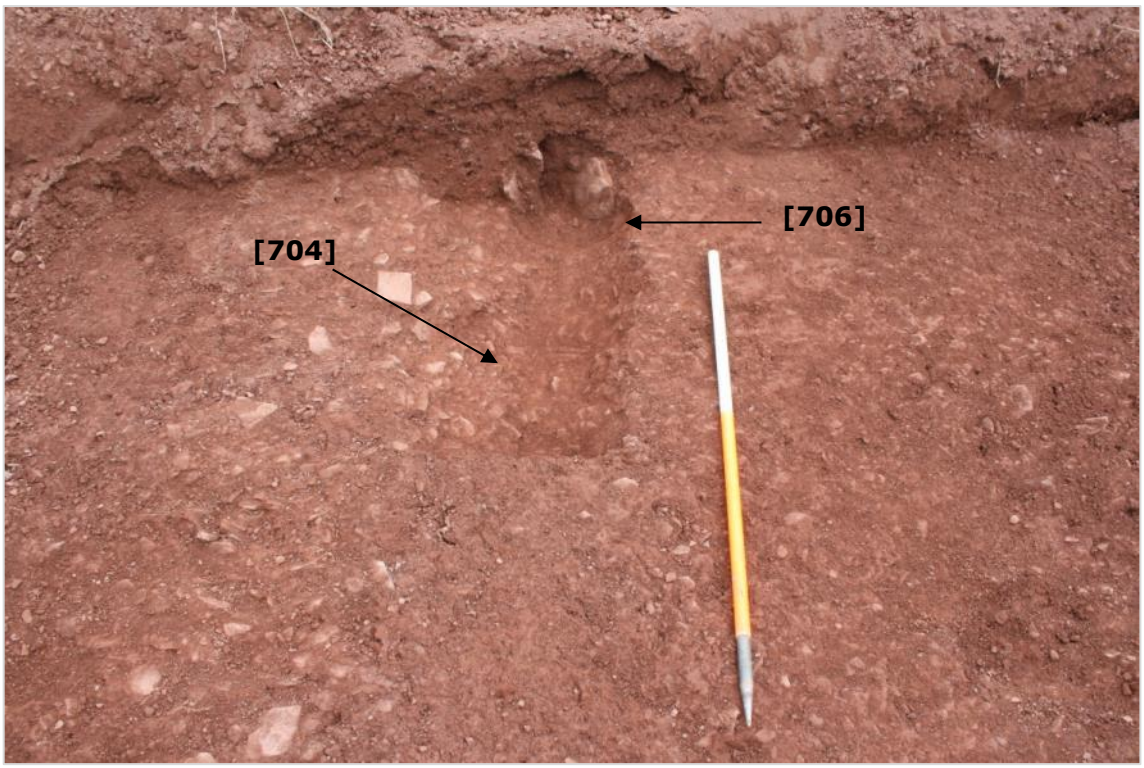


Photo 27: West facing section of Trench 7 showing gully [704] and post hole [706] with packing stones [708]. 1.0m scale

Figure 11: Plan of Trench 7 and geophysics interpretation overlay.

4.4.10 ***Trench 8*** (Figure 12)

Context Number	Thickness	Description/interpretation
801	0.35m	Topsoil: dark brown coloured silty clay
802	Not fully excavated.	Natural: shattered old red sandstone mixed with silty clay
803	0.65m	Cut of southern ditch
804	0.10m	Lower fill of ditch [803] mid reddish/brown silty clay
805	0.60m	Upper fill of ditch [803] light reddish brown silty clay
806	0.22m	Cut of middle ditch
807	0.22m	Fill of ditch [806] light reddish/brown silty clay
808	Unexcavated	Cut of northern ditch

Table 9: List of stratigraphic layers Trench 8

4.4.11 Trench 8 measured 30m x 1.8m and was roughly aligned north to south. The trench was located to target three parallel linear anomalies (10) as identified by the geophysical survey.

4.4.12 Located toward the middle of Trench 8 three parallel linear features [803], [806] and [808] were identified orientated east to west running across the width of the trench (Photo 28).

4.4.13 Ditch [803] measured approximately 0.96m wide and 0.65m deep containing two fills, the earliest of which, (804), was formed of a compacted mid reddish/brown silty clay that appeared to have slumped into the ditch from its northern side; possibly the remains of erosion from a pre-existing hedge bank. The upper fill (805) was a light reddish brown silty clay, which was less stony than (804) and more silty.

4.4.14 The second ditch [806] was approximately 0.84m wide and 0.22m deep with one fill (807) comprised of a light reddish/brown silty clay with occasional small sub angular stones.

4.4.15 Ditch [808], the most northerly ditch, was not excavated, but characteristically appeared similar to [803] and [806], and presumably of similar origin.

4.4.16 The three ditches appear to correspond to the location of the three anomalies (10) identified in the geophysical survey interpretation.

Photo 28: Looking south at linear ditches [803] and [806] pre excavation. 1.0m scale

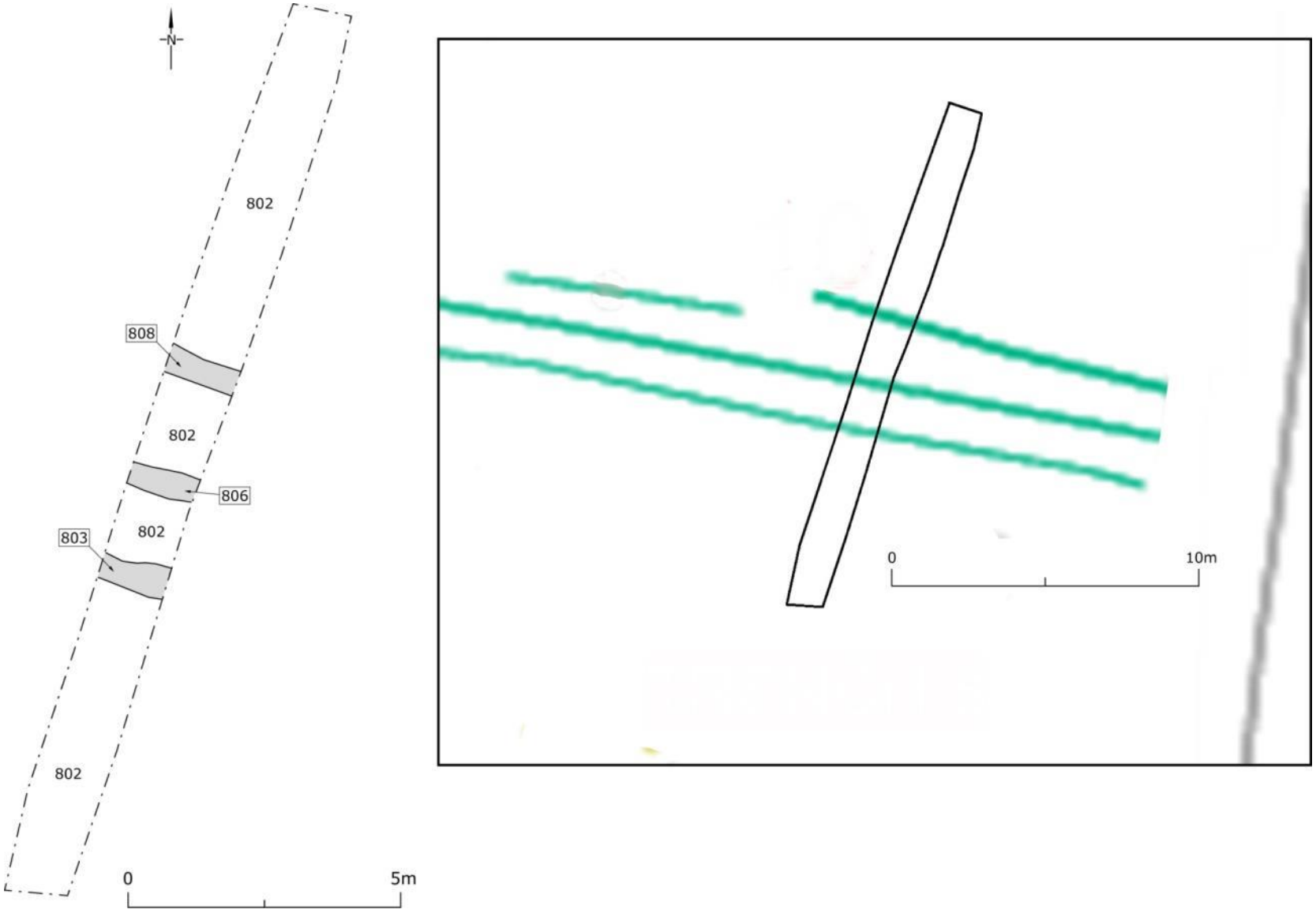


Figure 12: Plan of Trench 8 and geophysics interpretation overlay.

4.5 **Area 34** (Figure 5)

4.5.1 Within both trenches 9 and 10 the topsoil comprised dark brown silty clay.

4.5.2 Beneath this each trench exhibited significant signs of modern disturbance, possibly as a result of machine digging/backfilling. Large depressions or cuts containing a mixture of mixed yellow silty clay, shattered degraded sand stone and red/brown silty clay were recorded.

4.5.3 ***Trench 9*** (Figure 13)

Context Number	Thickness	Description/interpretation
901	0.20m	Topsoil: dark brown coloured silty clay
902	Not excavated	Natural: yellow silty clay and shattered degraded sand stone

Table 10: List of stratigraphic layers Trench 9

4.5.4 Trench 9 measured 30m x 1.8m and was roughly aligned northwest to southeast. The trench targeted the group of large linear anomalies (15) as identified by the geophysical survey.

4.5.5 Towards the northern end of the trench a probable modern cut was observed (Photo 29 and 30). The cut appeared to be a wide broad scoop over 1.0m deep. It seems most likely to have been excavated by a machine and quickly backfilled with the removed material; a mix of topsoil, subsoil and underlying natural.

4.5.6 Further south along the trench two similar features were recorded that displayed similar characteristics suggesting they are also the result of modern disturbance. Each of these features appears to correspond to an anomaly on the geophysical survey interpretation (Figure 13).

Photo 29: Looking northeast at probable modern cut seen beneath the topsoil in the northern end of the trench. 1m scale

Photo 30: Looking southwest at sondage excavated through probable modern cut. 1m scale

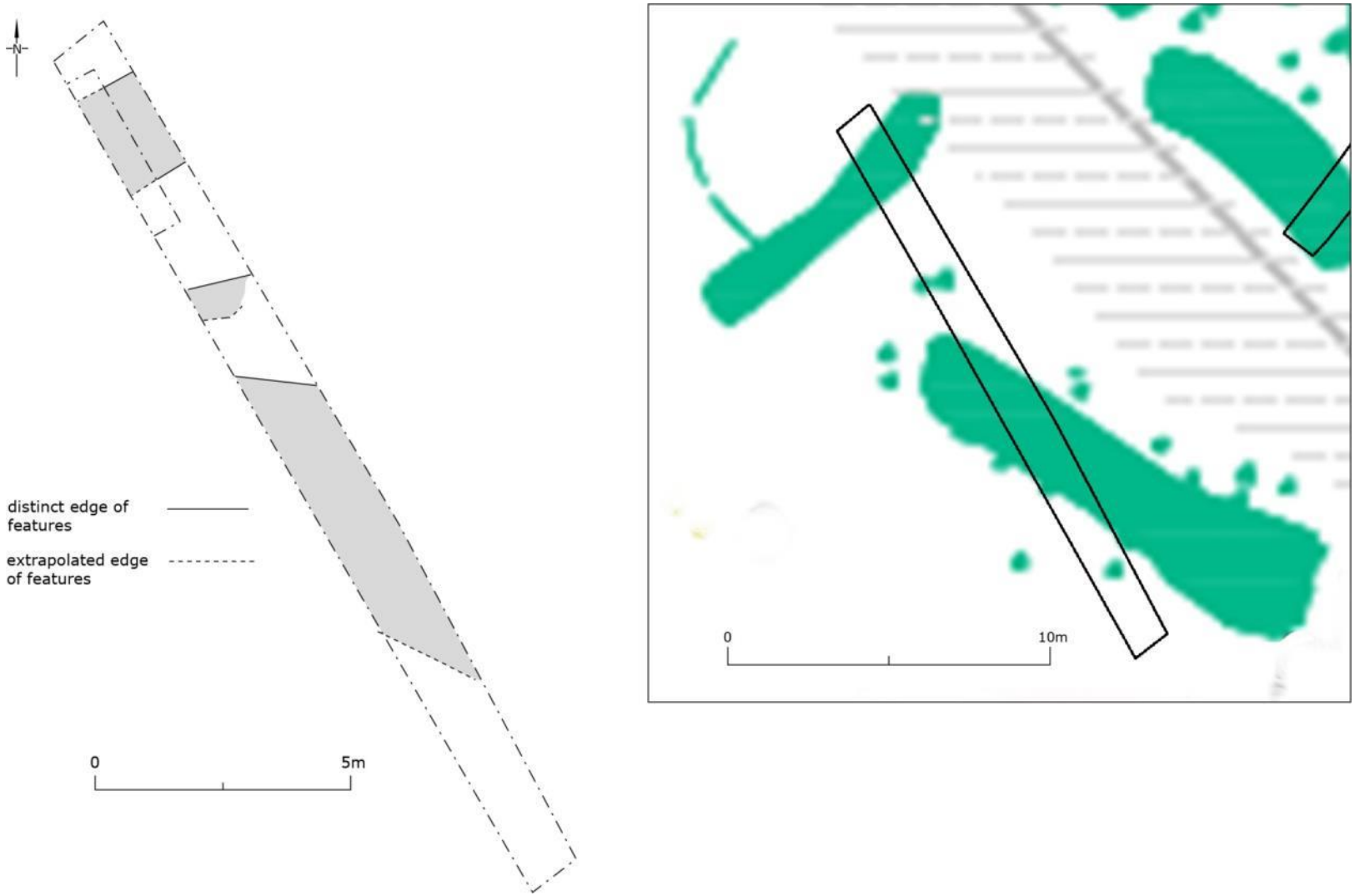


Figure 13: Plan drawing of Trench 9 and geophysics interpretation overlay.

4.5.7 ***Trench 10*** (Figure 14)

Context Number	Thickness	Description/interpretation
1001	0.20m	Topsoil: a dark brown coloured silty clay
1002	Not excavated	Natural: yellow silty clay and shattered degraded sand stone

Table 11: List of stratigraphic layers Trench 10

4.5.8 Trench 10 measured 30m x 1.8m and was roughly aligned northeast to southwest. The trench was situated to target a group of large linear anomalies (15) identified by the geophysical survey.

4.5.9 At the mid-section of the trench a possible modern service trench was exposed denoted by a loose stone filled feature running northwest to southeast across the width of the trench (Photo 31). This was not investigated further as it was evidently of modern origin.

4.5.10 At the southwestern end of the trench below the topsoil a large feature was recorded. A sondage was excavated through the feature to reveal a broad scoop (Photo 32), similar in characteristic to those features recorded in Trench 9 and is again believed to be of modern origin.

4.5.11 Both features appear to correspond with parts of the large anomaly group (10) identified by the geophysical survey interpretation.

Photo 31: Looking northeast at possible service in Trench 10 capped with loose stone. 1m scale

Photo 32: Looking northwest at broad scoop cut through natural observed in Trench 10; probably of modern origin. 1m scale

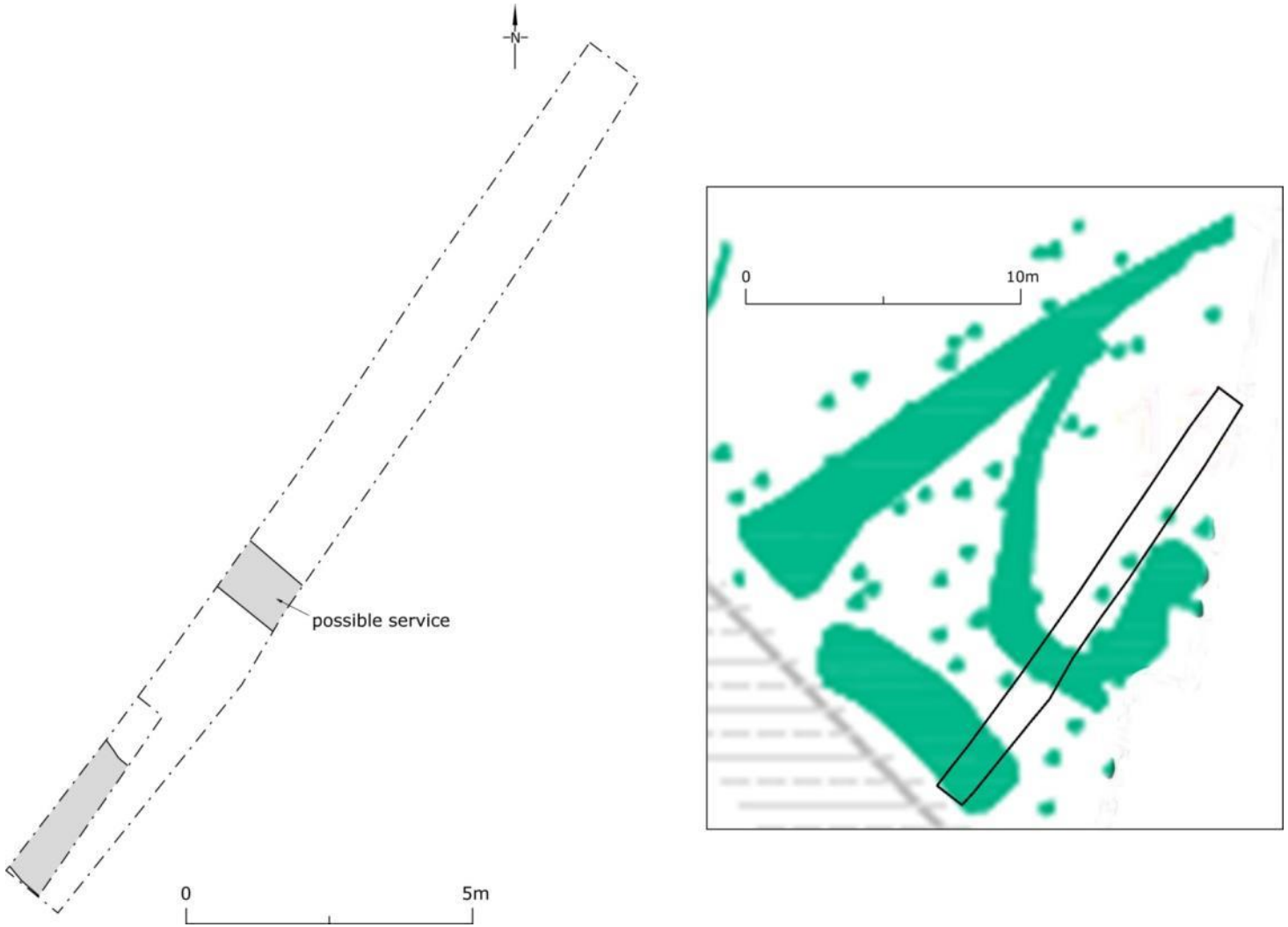


Figure 14: Plan of Trench 10 and geophysics interpretation overlay.

5 CONCLUSIONS

5.1 The trial trench evaluation along the proposed Greenlink Interconnector scheme revealed a sequence of natural and anthropogenic deposits. A number of the anomalies identified by the geophysical survey were revealed in the trenches.

5.2 The areas of greatest archaeological potential were Areas 8 and 14 (Trenches 1 and 2, and 3 to 6). Within Trenches 1, 5 and 6 archaeological features that appear to correspond to, or be associated with anomalies identified during the geophysical survey were recorded. However in Trenches 2, 3 and 4 no further evidence was recorded during the evaluation for a number of linear anomalies identified by geophysical survey.

5.3 In Area 8, Trench 1, a series of sand deposits overlay the natural horizon. These deposits are the remains of sand dunes cleared in the latter part of the 20th century as part of land improvements to prepare the land for agriculture. The dune material is believed to have accumulated through inundations caused by a series of storms in the later medieval period and especially those in the early 1600s that produced a great deal of destruction along the Bristol Channel and deposited swathes of sand across coastal areas of southwest Pembrokeshire. The sand dunes are still present on land immediately south of the trench (Kilpaison Burrows) and across much of the land to the southwest of Area 8 towards Freshwater West.

5.4 At the north end of Trench 1 a thin band of charcoal flecked clay (112) was recorded. This feature might possibly be the one categorised in the geophysical survey interpretation. This clay (112) was a deposit and did not appear to fill an obvious cut.

5.5 At the centre of the trench a group of small pits [106, 108 and 114] and a linear feature [122] were revealed. When the topographic survey of Trench 1 was superimposed over the geophysical survey, the pits were seen to be situated in the centre of a crescent shaped anomaly. The location of the pits at the centre of this anomaly suggests that it is probably the remains of a round barrow; and the crescent shaped anomaly is a shadow of the former earthen mound of the barrow. Round barrows within this area are not uncommon, the nearest being 560m to the south in Kilpaison Burrows, where a group of three survive (PRNs11640, 11641 and 11642).

5.6 All the pits seem to have been deliberately backfilled. Pit [108] is particularly interesting, apart from containing three fills, three quarters of the pit has been partially lined with clay (111). It might also contain the remains of a cist in the form of a capstone and one surviving upright stone (110). Although no evidence for human remains survives (unlikely in the acidic soils); this pit was rich in charcoal and it is possible that it represents the remains of a small cist burial.

5.7 The function of linear slot [122] that slightly truncates pit [114] is unclear. It runs beneath the eastern section of the trench and appears to be a later feature.

5.8 The 1.6m wide band of oyster shells (105) that traverses the trench at its southern end might possibly be associated with an anomaly identified in the geophysical survey interpretation. Interestingly, the southern edge of the oyster shell deposit (105) coincided with the southern limit of the lowest sand deposit (104). This might possibly mean that (105) was naturally deposited; part of the inundation of sand in the later period. Nevertheless, shells have been discovered alongside archaeological sites in the vicinity. Roughly 790m to the south of the trench a pounder stone, pottery sherds and sea shells (thought to be food debris) were recovered from a Neolithic/ Bronze Age occupation site in Kilpaison Burrows (PRN7594) and 1.1km southwest, a collection of flints were recovered from a possible Neolithic shell midden (PRN 3075) at Broomhill burrows.

5.9 One interesting aspect of Trench 1 is that the lowest sand deposit (104) appeared to lie directly in the natural horizon; there was no indication of a former land surface, which one would assume any earthwork such as a barrow mound would have been constructed upon. It is as if it was completely removed prior to the deposition of sand.

5.10 Unlike Trench 1 in trenches 3, 5 and 6 overlying the natural horizon evidence of a surviving buried soil was recorded. These buried soils appear to have survived beneath deposits of sand believed to have accumulated through inundations caused by a result of a series of storms in the later medieval period.

5.11 In Trench 3 a shallow pit [306] was recorded that had not been identified in the geophysical survey report. The pit cut through the buried soil which lay below former sand dune material. The pit, though shallow, was filled with charcoal and was surrounded by a number of stakeholes. The feature could represent the remains of a prehistoric food dryer used to cure fruits, meats or fish. Similar examples have been excavated in the region, indicating that a small fire was set in the pit and a vessel suspended over the fire via a wicker hood or screen supported by the stake holes. Found in isolation, this interpretation would be questionable, but the features recorded in Trenches 5 and 6 do indicate further prehistoric activity in the area.

5.12 Trench 5 contained evidence of a possible ditch, probably representing the remains of a former boundary ditch. The feature corresponded with a linear anomaly identified during the geophysical survey. It again cut into what appeared to be a buried soil layer that has survived beneath former sand dune deposits; suggesting it is pre-medieval in date or even prehistoric as the ditch does not correspond with any of the field boundaries shown on historic maping.

5.13 The most interesting archaeological find came from Trench 6, where the rim of an inverted pottery vessel was found. The fabric of the pottery appears to be from a Bronze Age Collared Urn typically associated with burial; that often contained cremations. The rim of the urn survived within a buried soil layer (603) seen across the central part of Trench 6. The depth of deposit (603), substantially more than similar buried soils recorded in Trenches 3 and 5, suggests that (603) is all that survives of a raised mound

5.14 The collared urn has been reported on by Alex Gibson (Appendix I) who concludes that the absence of decoration makes the precise identification and dating of the vessel problematic but that the pottery has characteristics of both the Collared and Cordoned/Barrel/Bucket Urn traditions in terms of size, form and fabric. He suggests a broad date range of c.1700-1500 BC may be assigned to the pottery.

5.15 Layer (603) sloped down to the east and west and it was possible to see that the former sand dune layer (606) overlapped the sloping edges but was not present above it. This also suggests that (603) represents a former earthen mound

5.16 The recorded evidence, including the remains of the inverted pottery vessel, indicates that buried layer (603) is the remains of what was once an upstanding earthwork likely to be a Bronze Age round barrow or burial mound roughly 20m in diameter. The large boulders recorded in several places around the edge of layer (603) to the east and west may represent the remnants of former kerbing around the base of the barrow. In support of this theory the geophysical survey anomaly targeted in this area was a large circular feature the edges of which correspond very well with the eastern and western edges of (603) seen in the trench. There are a number of other round barrows known in the area in relatively close proximity to the site.

5.17 The location of the inverted pottery vessel rim within layer (603) on the eastern edge of the mound suggests it was a secondary burial, rather than the original one (or ones) which would have been located below the barrow mound material

most usually towards the centre. It is possible that the group of stones revealed almost exactly in the centre of the circular anomaly may mark the location of a central burial below the mound but these were not investigated further.

5.18 The three ditches revealed in Trench 8 correspond exactly with the three linear anomalies identified by the geophysical survey in this area. The ditches likely represent a former field boundary. A boundary does appear in this location on a sales map dated 1824 but appears to have been removed by the production of the tithe map in 1839. Field boundaries in this area are typically represented by two ditches, one either side of a former field bank. The presence of three ditches could indicate an earlier boundary, that was later replaced by a later double ditch.

5.19 The features identified in Trenches 9 and 10 of Area 34 are considered likely to be of modern date, possibly associated with construction of the nearby electricity pylons or even Pembroke Power Station. The stone filled service trench was not further investigated.

5.20 The archaeological trial trench evaluation has shown that archaeological features, of varying significance, survive within the corridor of the Greenlink Interconnector cable route.

5.21 Within Trench 1 (Area 8) the remains of a possible prehistoric Bronze Age barrow sealed by deposits of sand were recorded. The archaeological potential of this area would thus be considered medium to high causing a constraint to the proposals. Some form of archaeological mitigation before or during development may be required in this area.

5.22 The buried soil layer identified in Area 14 in Trenches 3-6 contained archaeological features cut through it. These, similarly to Trench 1, will likely be pre-medieval in origin as they lie beneath the surviving remnant layer of sand dunes that were a result of late medieval/early post medieval sand inundation. The potential for further archaeological remains to survive in this area is considered quite high. Such remains would be of medium to high archaeological significance and could cause a constraint to the proposed Greenlink Interconnector cable route. Some form of archaeological mitigation before or during development may be required.

5.23 The likely presence of a surviving Bronze Age burial mound in Trench 6 in Area 14, the potential for burials to survive within it, is considered to be of particular high archaeological importance and a constraint to the proposals. The proposed Greenlink Interconnector cable route should try and avoid this area or if this is not possible it should be archaeologically excavated before development commences.

5.24 The archaeological features recorded within Trench 7 of Area 22 are of unknown date but appeared to correspond with the southern part of linear anomaly (11) as identified by the geophysical survey. The archaeological potential of this area would thus be considered medium causing a constraint to the proposals. Some form of archaeological mitigation before or during development may be required in this area.

5.25 The three ditches identified within Trench 8 of Area 22 are of low archaeological potential. They form no constraint to the proposed Greenlink Interconnector cable route. The line of the anomalies is shown on the geophysical survey.

5.26 The features identified within Trenches 9 and 10 of Area 34 are of modern date and are considered to be of very low archaeological importance. They will form no constraint to the proposed Greenlink Interconnector cable route.

6. SOURCES

Publications

Brown, D.H., 2011. *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation.* Chartered Institute for Archaeologists.

Davies, R., 2019. Geophysical Survey Report Greenlink [Onshore Wales], Pembrokeshire. Sumo Survey Report 13980.

Meek, J., 2018. Greenlink Interconnector, Pembrokeshire: Archaeological Desk-Based Assessment (revised as Historic Baseline Information for ARUP), DAT Report No. 2018/44.

Database

British Geological Survey [online] Available at: [Accessed January 2019]

Dyfed Archaeological Trust Historic Environment Record.

Websites

British Geological Survey mapping portal. Available at: http://mapapps.bgs.ac.uk/geologyofbritain/home.html

APPENDIX 1:

THE BRONZE AGE POTTERY FROM GREENLINK INTERCONNECTOR PROJECT 2019

Alex Gibson, BA PhD FSA MCIFA FSA (Scot)

Introduction

In January 2020, the writer was asked by DAT to report on the small pottery assemblage from Trench 6 in Area 14 of the Greenlink Interconnector 2019 from near Freshwater West to Pembroke Power Station (Trench 6, context 602 & unstratified). Trench 14 lay in the area near Newton.

The pottery had been wrapped in acid free tissue and packed in a plastic box. The pottery was unpacked, laid out onto a plastic finds tray and examined in good light. A x10 hand lense was used to examine the material to aid in compiling the fabric description. No microscopic or petrological analyses have been undertaken and so the fabric description here is liable to modification should such work be undertaken in the future.

The rim was discovered inverted into the buried sub-soil (602) which was interpreted as the possible truncated remains of an earthen round barrow mound. The rim seems to have been embedded in this layer without evidence for a cut or traces of cremated bone.

Description

The assemblage comprised 19 sherds (11 conjoining) plus small fragments weighing a total of 299g. Two further sherds (3g) from an unstratified context undoubtedly belong to the same vessel. The sherds are hard and well-fired with a near black outer surface (fig 1), grey-brown inner surface (fig 2) and with a grey to dark grey core. The fabric has a good finish with smooth surfaces though the inner surface is slightly sandier to the touch and some crushed stone inclusions can be seen to break the surface. The fabric averages some 12-15mm thick and stone inclusions within the fabric measure up to 8mm across.

Fig 1: Exterior view of the rim

The rim, some 320mm in diameter and with *c.* 50% of the circumference surviving, gives to a broad, well-defined sloping internal bevel some 20mm wide and with a

well-pronounced internal lip (fig 2). The exterior of the rim is unmodified though the body slopes slightly outwards, with a slightly convex curve, from the rim top suggesting an external sloping collar or a barrel-shaped profile. There is nothing to suggest and externally concave collar as found on many Collared Urns.

Fig 2: Interior view of the rim showing well-defined and internally lipped bevel.

The vessel has been built by the coiling method and join voids between coils, rings or straps, can be seen in the breaks sloping downwards from outside to inside. The rim has also been modelled by the application of strips of clay and again join voids resulting from this process can be detected in the breaks.

All the sherds are undecorated. Some small fingernail impressions on the outside of the rim are a result from the forming process (fig 3).

Fig 3: showing fingernail marks resulting from the forming process.

Discussion

The determination of vessel type is restricted by the small amount of the vessel wall that survives and few post-Neolithic prehistoric vessels can be identified by rim-type alone. Internal rim bevels are present in Food Vessels as well as a variety of Bronze Age Urn types from Collared Urns to later Cordoned, Bucket and Barrel forms. The rim diameter is too great for a Food Vessel identification and Food Vessel Urns frequently also exhibit externally moulded rims and such is not the case here. The

vessel clearly, therefore, belongs to another Bronze Age Urn type. Had the upper part of the exterior demonstrated a slight concavity, then a Collared Urn identification may have outweighed the others but unfortunately this is not the case in this instance. Whilst undecorated Collared Urns are known from Wales, examples with straight or slightly convex collars are rare, examples being a tripartite Collared Urn from Letterston, (Pembs) and another tripartite example with a very slack shoulder from Welsh St. Donat's (Glam) (Savory 1980, Fig 66, 316:3 & 342:1). Neither of these vessels have rim bevels and this is the case for all the undecorated Collared Urns illustrated in Savory's catalogue (ibid. Figs 66-68). Undecorated Collared Urns are also found in N Wales at Bedd Branwen and Plas Penrhyn, both on Anglesey (Lynch 1991, Fig 43 & 57). The latter vessel in particular may be the best rim parallel for the present vessel and was associated with cremated remains.

A greater number of undecorated Collared Urns are, however, illustrated in Longworth's (1984) corpus and examples with convex collars and well-defined internal rim bevels are represented in both his primary and secondary series Collared Urns from over much of Britain. Primary Series undecorated urns with convex collars and internal bevels can be found at Bournemouth (Dorset) (*op. cit.* plate 75g), Kettering (Northants) (plate 75f), Cleethorpes (Humberside) (plate 76e), Cawthorne (N. Yorks) (plate 77d), and Bury (Lancs) Plate 78c). Secondary Series urns can be seen at sites such as Winter Steepleton (Dorset) (*op. cit.* plate 231g), Salmonby (Lincs) (plate 240c), Broughton (Humberside) (plate 237e) and Blairgowrie (Tayside) (plate 242a). These urns all belong to Longworth's Secondary series and may also be late in Burgess's scheme (Burgess 1986) but, in the absence of decoration, it is difficult to be proscriptive.

It must be remembered, however, that there is no definitive proof for a collar amongst the surviving sherds and, as stated above, we may be better considering the Cordoned, Bucket or Barrel Urn traditions. Savory (1980, Fig 70) illustrates Cordoned Urns with well-pronounced internal rim bevels from Llanddyfnan (Anglesey) but, unlike the present vessel, these are highly decorated pots. A comparable assemblage was found at Glanfeinion in Powys (Britnell *et al.* 1997) associated with the remains of a roundhouse. Vessels 2, 3 5 and 8 from Glanfeinion have rim forms comparable to the present vessel and Glanfeinion 8, in particular, has an internal lip and a join void indicating bevel augmentation during the forming stage (Britnell *et al.* 1997, Fig 3, No. 8). As with the present vessel, these Cordoned Barrel Urns had crushed stone inclusions but set within a non-igneous-derived clay. Two statistically different radiocarbon dates from Glanfeinion place these vessels between c.1420 – 1160 cal BC (Britnell, *et al.* 1997, Table 4) which is in keeping with the dates obtained from Scotland which attest to Cordoned Urns spanning the period *c.* 1800-1400 BC and Bucket Urns slightly later at 1700-750 BC though the longevity of this latter class is doubtless the effect of their unelaborated simplicity (Sheridan 2004). In Ireland, once again, though predominantly decorated, well-developed rim bevels match that of the present vessel on Urns such as that from Altanagh (Co. Tyrone) or those from Gorteen (Co. Louth) (Brindley 2007, Fig.127). Bridley's dating of the Cordoned Urn tradition sees it spanning some 230 years between *c.* 1730 – 1500 BC. The Scottish and Irish dates indicate that the Glanfienion pottery is very late in the sequence but clearly more dates are needed to define the period of currency more reliably. It is interesting that the Late bronze Age Pottery from Bayvil Farm (Pembrokeshire) appears very different in character (Parker Pearson *et al.* 2018).

Conclusion

Though having characteristics of both the Collared and Cordoned/Barrel/Bucket Urn traditions in terms of size, form and fabric, the absence of decoration makes the precise identification and dating of this vessel problematic. The heavy and well-

defined rim bevel, however, weighs the vessel towards the Cordoned or Barrel Urn traditions, the former in particular being Collared Urn derived. A broad date range of *c.*1700-1500 BC may be assigned to the pottery though the dates from Glanfeinion indicate that the tradition may have lasted longer in Wales.

References

Brindley, A.L. 2007. *The Dating of Food Vessels and Urns in Ireland.* Bronze Age Studies 7. Galway: Department of Archaeology, National University of Ireland, Galway.

Burgess, C.B. 1986. 'Urnes of no small variety': Collared Urns Reviewed. *Proceedings of the Prehistoric Society,* 52, 339-351.

Longworth, I.H. 1984. *Collared Urns of the Bronze Age in Great Britain and Ireland.* Cambridge: Cambridge University Press.

Lynch, F. 1991. *Prehistoric Anglesey.* 2nd edn. Llangefni: Anglesey Antiquarian Society.

Parker Pearson, M., Casswell, C. & Welham, K. 2018. A Late bronze Age ring-fort at Bayvil Farm, north Pembrokeshire. *Archaeologia Cambrensis,* 167, 113-142.

Savory, H.N.1980. *Guide Catalogue of the Bronze Age Collections.* Cardiff: National Museum of Wales.

Sheridan, A. 2004. Scottish Food Vessel Chronology Revisited. In Gibson, A. & Sheridan, A. (eds) *From Sickles to Circles: Britain and Ireland at the Time of Stonehenge,* 243-269. Stroud: Tempus Publishing.

GREENLINK INTERCONNECTOR PROJECT, PEMBROKESHIRE: ARCHAEOLOGICAL EVALUATION 2019

REPORT NUMBER: 2019-39

EVENT RECORD NO. 118117

December 2019

Paratowyd yr adroddiad hwn gan / This report has been prepared by

Charles Enright

Swydd / Position: Archaeologist DAT Archaeological Services

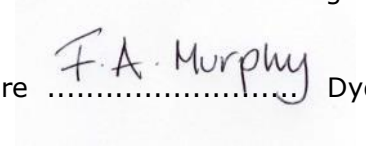
Llofnod / Signature  Dyddiad / Date: 12/12/19

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
This report has been checked and approved by

Fran Murphy

ar ran Ymddiriedolaeth Archaeolegol Dyfed Cyf.
on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position: Head of DAT Archaeological Services

Llofnod / Signature  Dyddiad / Date: 13/02/2020

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any comments you may have on the content or presentation of this report

ymddiriedolaeth archaeolegol

DYFED

archaeological trust