



NORTHLIGHT HERITAGE	Torness Cable Undergrounding
REPORT: 184	Archaeological Watching Brief
PROJECT ID: 54	
DATA STRUCTURE REPORT	Torness Power Station, East Lothian

NORTHLIGHT
HERITAGE

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Torness Power Station

East Lothian

NGR NT 74485, 74827 - NT 74052, 72976

Data Structure Report

on behalf of

Cnoclee Ltd.

Cover Plate: Underground cable corridor stripped of topsoil with Torness Power Station in the background

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Figure 1: Site Location

Abstract

An archaeological watching brief was undertaken during the undergrounding of approximately 2 km of electricity cable between Torness Power Station in the north (NT 74485, 74827) and an existing substation in the south (NT 74052, 72976). The work was conducted by Northlight Heritage, on behalf of Cnoclee Ltd., variously between 11th January 2016 and 8th December 2016. The topsoil strip corridor averaged around 30 m in width but was up to 50 m in places. No significant archaeological remains were uncovered during the watching brief other than two isolated pits that were heavily disturbed by burrowing.

1. Introduction

1.1

This report presents the results of an archaeological watching brief that was undertaken to the south of Torness Power Station, East Lothian between 11th January and 8th December 2016. The work was conducted by Northlight Heritage on behalf of Cnoclee Ltd. in advance of the undergrounding of electricity cables between the Power Station and an existing substation located some 2 km to the south.

2. Location, Geology and Topography

2.1

The underground cable route extended some 2 km (Figure 1-4) between Torness Power Station in the north (NT 74485, 74827) to an existing substation in the south (NT 74052, 72976). The corridor ran through a landscape of gently undulating fields whilst also crossing the A1 road, a railway line and the Thornton Burn. The site compound was located just south of the A1 to the east of the underground cable corridor (Figure 1 & 2).

2.2

The underlying geology consists of Sandstone, Siltstone And Dolomitic Limestone, formed approximately 343 to 359 million years ago, while the superficial deposits comprise glaciofluvial gravels, sands and silts formed up to 3 million years ago (1:50000, British Geological Survey online data).

3. Archaeological and Historical Context

3.1

No previously recorded archaeology was noted directly within the working areas of the underground cable route or site compound, however, a series of potentially significant archaeological remains existed in close proximity to the undergrounding corridor (Figure 1).

3.2

Just to the east of the site compound area lies crop-mark evidence for a ring ditch (Site 10, HER No. MEL1869) along with a trackway, pit and rig and furrow (Site 30, HER No. MEL9636) while, to the west, lies a further four sites recorded as crop-marks and one as a quarry (Site 29, HER No, MEL9614). These crop-mark sites included one of unknown nature (Site 8, HER No. MEL1860), an enclosed settlement (Site 18, HER No. MEL1960), a ring ditch (Site 24, HER No. MEL2786) and an enclosure (Site 17, HER No. MEL1896).

3.3

Further to the south the route of the undergrounding cable passes close to the crop-mark defined remains of a double ditched settlement (Site 21, HER No. MEL2562) while another crop-mark enclosed settlement is present a little further to the west (Site 20, HER No. MEL2561). A short distance to the south-east of this point are further crop-marks defining pits, a possible ring ditch and a barrow (Site 11, HER No. MEL1870). This site is also protected as a Scheduled Monument (SAM No. 3990).



Figure 2: Northern section of cable corridor

3.4

Just to the east of the southern end of the route lies further crop-marks defining an enclosed settlement (Site 12, HER No. MEL1872) and linear features (Site 12, HER No. MEL1031). Both of these sites are also protected as a Scheduled Monument (SAM No. 5958).

4. Summary Objectives

The project objectives were to:

- establish the presence or absence of any archaeological remains which may have been encountered during ground breaking works;
- determine the character, extent and significance of any archaeological deposits encountered;
- achieve preservation *in situ* of any significant archaeological features or sites encountered during the watching brief which could be avoided by the development;
- where necessary, and following the development of a separate Stage 2 'Project Design' to be agreed by the East Lothian Council Archaeology Service, excavate and record any significant archaeological features or sites encountered during the watching brief that could not be avoided to ensure preservation through record;
- make sure that the needs for archaeological conservation and recording are met without causing any unnecessary delay or disturbance to the development.

5. Methodology

5.1

All topsoil stripping works relating to the undergrounding of the electricity cables along with associated access tracks and site compound was monitored by a suitably qualified archaeologist. Topsoil was removed by an excavator fitted with a flat-bladed ditching bucket to the first archaeological horizon or to natural subsoil, whichever was encountered first. The topsoil strip corridor was on average 30 m in width but reached 50 m in specific places. Areas containing potential archaeology were marked off to ensure no works occurred within these area until the features had been investigated.

5.2

Any archaeological features encountered were be cleaned by hand to help determine their date, character and extent. Where limited archaeological remains were encountered during the watching brief features and deposits were excavated and recorded by written description on pro forma recording sheets, by digital photography and by measured drawing.

6. Results

6.1

The results of the watching brief are given below. In the following paragraphs numbers in round brackets indicate unique deposit or fill numbers issued in the field while numbers in square brackets represent unique cut or structure numbers. Full details of contexts encountered across the watching brief area is given in Appendix 1, Table 1.

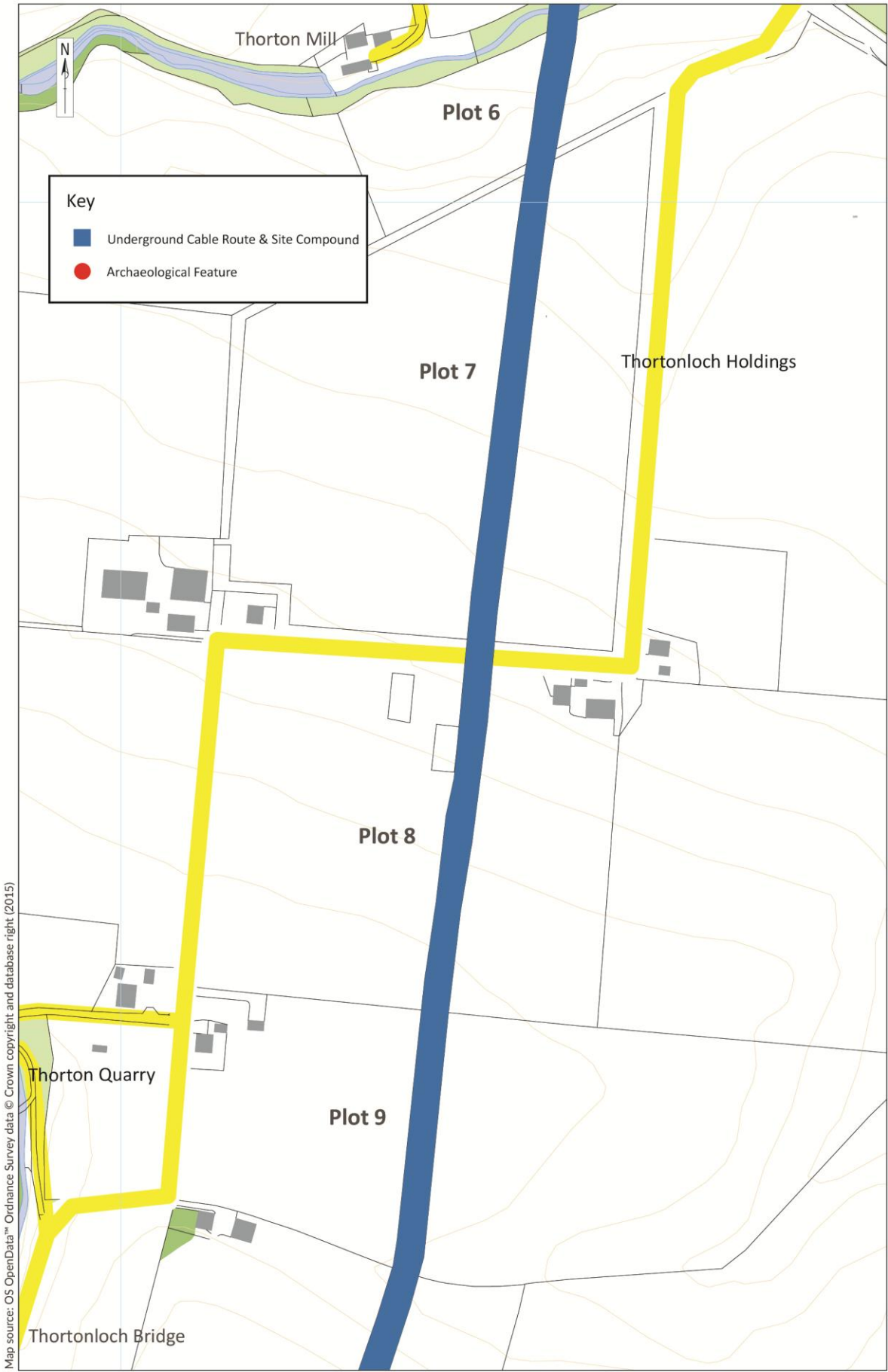


Figure 3: Mid section of cable corridor

6.2

The 2 km underground cable route was divided into 10 separate plots, running from Plot 1 at Torness Power station to Plot 10 at the southern substation (Figures 2-4). Plot 1, located between the access road for Torness Power Station and the power station itself (Figure 2), was not subject to an archaeological watching brief due to the ground having been heavily distributed in the past, possibly during the construction of the power station. Plots 2 to 9 were void of any archaeological features or deposits and all held a dark grey/red/brown sandy silt topsoil (001) containing a small amount of clay. It varied from approximately 0.03m to 0.50 m in depth, had been heavily ploughed and lay on top of a variable red/brown clay/sand/silt subsoil containing a occasional to frequent rounded pebble and gravel inclusions. Within Plot 5 (Figure 2) a series of 4 deep plough scores were identified in the subsoil (042). They were all filled with a dark greyish brown silt/clay (048, 050, 052 & 054) and were interpreted as relatively modern in origin being a sign of the intensive agriculture the area had been subject to.

6.3

Within Plot 3 (Figure 2) the topsoil comprised a red/brown clay sand (003) which covered all of the plot. The area had been extensively ploughed over a long period of time creating deep score marks in a red/brown clay/sand subsoil containing an occasional amount of rounded pebble and gravel inclusions (004). Several possible archaeological features (003-017) were uncovered during the watching brief here, however, all were natural in origin relating to the burnt out or decayed remains of trees and/or bushes. Patches of a shallow plough soil (015), present beneath the topsoil, was also noted across Plot 3.

6.4

Stripping within Plot 10 revealed the topsoil to be a light brown/grey clay loam (018) that lay on top of a variable clay subsoil (019) containing some patches of bedrock. Some rudimentary north to south orientated French drains were also present across Plot 10.

6.5

Two possible negative features [025 & 026] were identified and investigated within Plot 10 (Figure 4) near to the top of the hill. Pit [025] was oval in shape measuring 0.8 m by 0.5 m in plan and was up to 0.2 m in depth. It contained a lower fill of yellowish brown silty clay (023) containing occasional flecks of charcoal and upper fills comprising a very shallow light grey sandy silt (022), a light reddish brown silty sand (021) and a mottled yellow/brown clay silt (024) that were all variously disturbed by animal burrowing.

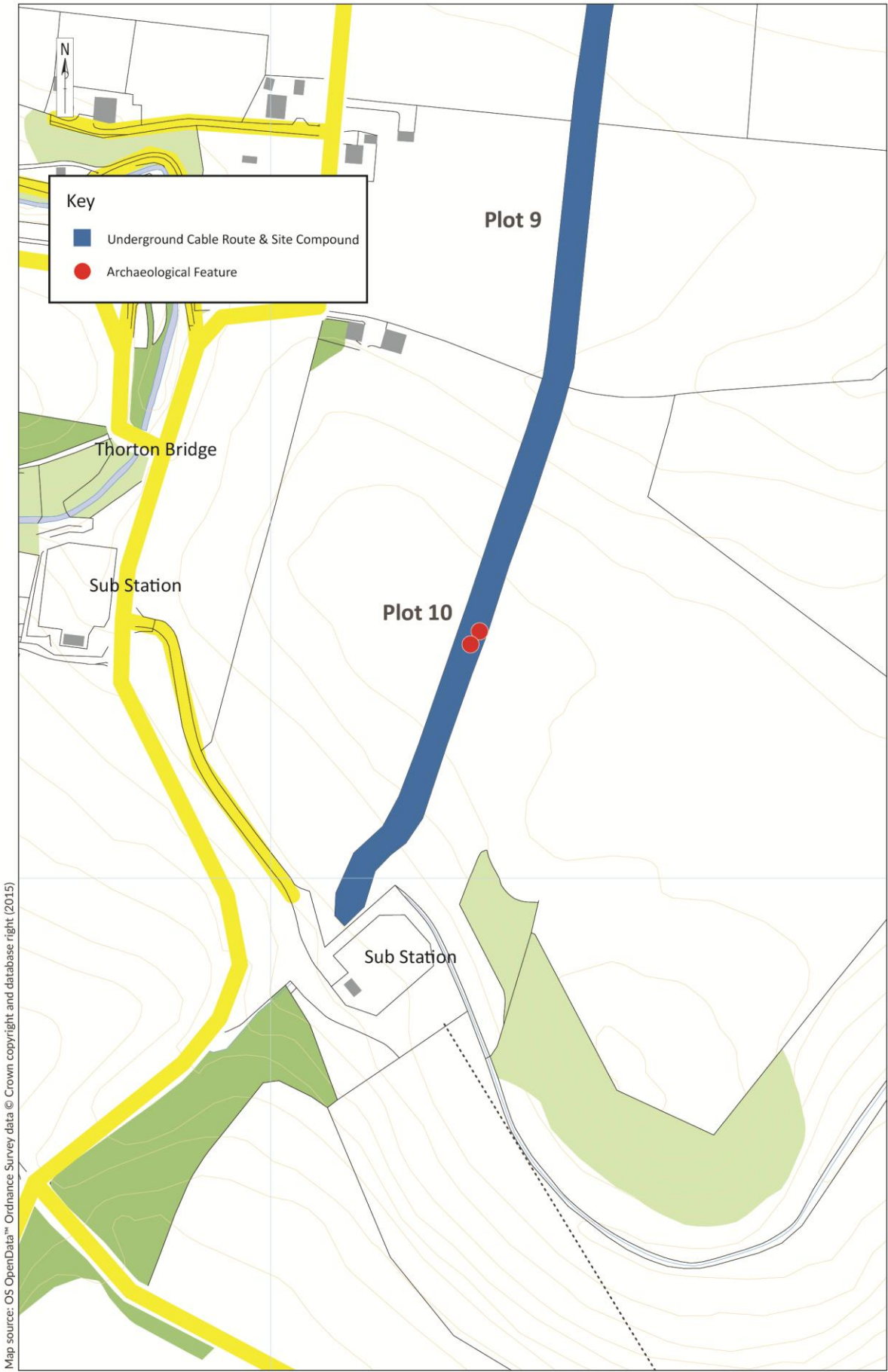
6.6

Pit [026] was circular in shape measuring 0.9 m in diameter. It contained a lower fill (029) comprising a very dark greyish brown/black deposit of silt containing charcoal and patches of red scorched earth that existed to 0.1 m in depth. Above this lay an upper fill (028) of grey/brown silty sand containing a moderate amount of charcoal flecks and wood ash. Much of both fills had been heavily disturbed by animal burrowing although the evidence of burning, particularly in the lower fill, suggests the feature could represent some form of fire pit.

7. Discussion and Summary

7.1

Overall only two features of any potential archaeological significance were uncovered and excavated during the course of the watching brief reported on above. These included a possible circular fire pit [026] and an oval shaped pit both located at the southern end of the route near the top of a hill. Both these features had also been heavily disturbed by animal burrowing.



Map source: OS OpenData™ Ordnance Survey data © Crown copyright and database right (2015)

Figure 4: Southern section of cable corridor

7.2

The general lack of archaeological remains within the underground cable corridor is surprising given the relatively high number of archaeological sites, particularly crop mark sites, present in the area and the location of some in very close proximity to the cable corridor. The closest of these sites was the crop-mark defined remains of a double ditched settlement (HER No. MEL2562) which was located just to the west of the underground cable corridor at Thornton Mill. Oblique aerial photography held by Historic Environment Scotland shows that the cable corridor was in a location that avoided the remains of the double ditch enclosure and no associated remains were uncovered during the watching brief. This aerial photography also confirmed that at least four previous cables, undergrounded sometime in the twentieth century, had cut across the double ditched enclosure site.

7.3

The unexpected lack of archaeological remains could be explained by the possibility that the underground cable route had avoided areas of previous habitation or activity. The clear evidence of intensive ploughing across the corridor, including the presence of large plough marks in Plot 5 and the deeper plough soil in Plot 3, also suggests that any more ephemeral remains could easily have been truncated away now leaving only the more substantial features seen in the crop mark evidence.

8. Recommendations

8.1

Overall, given the lack of significant archaeological remains uncovered during the watching brief and the heavily disturbed nature of the two features that were excavated, it is recommended that no further archaeological work is required in relation to this project.

8.2

Northlight Heritage would stress that these recommendations are intended for guidance only. Final decisions on the requirement for further mitigation rests with the planning authority.

9. List of Sources

British Geological Survey, 1:50 000 scale, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> (accessed 28/11/2015).

10. Appendices

APPENDIX 1: Tables / Concordances

Table 1: Context Information

<i>Context No.</i>	<i>Area</i>	<i>Type</i>	<i>Length (m)</i>	<i>Width (m)</i>	<i>Depth (m)</i>	<i>Compaction</i>	<i>Colour</i>	<i>Composition</i>	<i>Interpretation</i>	<i>Stratigraphy and/or phasing info</i>
001	Area 1	Topsoil	\	\	0.40	Pliable	Dark greyish brown	Clay-Sand	Turf and Ploughsoil across area 1 (area for compound)	Overlies site
002	Area 1	Subsoil	\	\	0.10	Pliable	Reddish brown	Clay-Sand	Subsoil in area 1 with rounded pebbles <150mm and gravel inclusions (area for compound)	Under (002)
003	Plot 3	Topsoil	\	\	<0.5	Semi-Pliable	Dark reddish brown	Clay-Sand	Turf and Ploughsoil across area	Overlies site
004	Plot 3	Subsoil	\	\		Friable	Dark red	Clay-Sand	Subsoil in area	Under all
005	Plot 3	Deposit	0.05	\	0.10	Friable	Very dark greyish brown	Sand	Amorphous deposit of burnt natural containing charcoal identified beneath the deep ploughmarks seen across area	Under (015); over (004)
006	Plot 3	Deposit	\	\	0.03	Friable	Greyish brown	Sand	Amorphous deposit of greyish brown material, very shallow. Disturbed by ploughing. Possibly burnt out tree root.	Under (015); over (004)
007	Plot 3	Deposit	\	\	\	Friable/pliable	Very dark greyish brown	Charcoal	Small length of decayed/burnt wood, so damp its context material is pliable	Under (015); over (004)

<i>Context No.</i>	<i>Area</i>	<i>Type</i>	<i>Length (m)</i>	<i>Width (m)</i>	<i>Depth (m)</i>	<i>Compaction</i>	<i>Colour</i>	<i>Composition</i>	<i>Interpretation</i>	<i>Stratigraphy and/or phasing info</i>
008	Plot 3	Deposit	\	\	\	Friable	Dark greyish brown	Sand Charcoal	An ephemeral, amorphous deposit of charcoal rich material. Possibly a burnt out tree root.	Under (015); over (004)
009	Plot 3	Deposit	\	\	\	Friable	Dark greyish brown	Sand & Charcoal	A small sub-angular deposit of burnt material. Possibly a burnt out tree root.	Under (015); over (004)
010	Plot 3	Deposit	\	\	\	Friable	Very dark greyish brown	Sand & Charcoal	A sub-circular deposit of burnt material which relates to a burnt out/decayed tree root	Under (015); over (004)
011	Plot 3	Deposit	\	\	\	Friable	Very dark greyish brown	Sand & Charcoal	An ephemeral, amorphous deposit of charcoal rich material. Possibly a burnt out tree root.	Under (015); over (004)
012	Plot 3	Deposit	\	\	\	Friable	Dark greyish brown	Sand & Charcoal	A patch of burnt material deemed as burnt/decayed tree root	Under (015); over (004)
013	Plot 3	Deposit	\	\	\	Friable	Very dark greyish brown	Sand & Charcoal	A sub-oval deposit of burnt/decayed tree root	Under (015); over (004)
014	Plot 3	Deposit	\	\	\	Friable	Dark yellowish brown	Sand	A patch of burnt material deemed as burnt/decayed tree root.	Under (015); over (004)
015	Plot 3	Deposit	\	\	0.10	Firm	Dark reddish brown	Clay-Sand	A shallow and patchy overburden created during deep ploughing events across field but allowed to compact	Under (003); over all

<i>Context No.</i>	<i>Area</i>	<i>Type</i>	<i>Length (m)</i>	<i>Width (m)</i>	<i>Depth (m)</i>	<i>Compaction</i>	<i>Colour</i>	<i>Composition</i>	<i>Interpretation</i>	<i>Stratigraphy and/or phasing info</i>
									and separate from ploughsoil (003) due to more frequent shallow ploughing.	
016	Plot 3	Deposit	\	\	0.10	Friable	Dark greyish brown	Clay-Sand	Fill of [017] contained a lot of gravel and large pebbles <0.02m	Under (015); over (017)
017	Plot 3	Cut	\	\	0.10	\	\	\	Cut of probable tree bowl on crest of low hill. Irregular sides, including some apparent undercutting at southern end suggests it is a tree bowl	Under (016); over (004)
018	Plot 10	Topsoil	\	\	0.40	Soft	Light brownish grey	Clay-Loam	Topsoil across Area 4 (plot 10). Heavily ploughed soil with heavy overburden due to hillwash and plough drag	Overlies site
019	Plot 10	Subsoil	\	\	\	Firm/pliable/firm & platy	Dark red/light brownish yellow/very light blue grey	Clay	Subsoil. Variable across plot, includes some patches of bedrock and rudimentary French drains running in N-S orientation.	Under (018)
020	Plot 10	Deposit	\	0.50	0.15	Pliable	Mottled yellowish brown	Clay-Sand	Fill of small rodent burrow seen in section.	Under (024); over (024)
021	Plot 10	Deposit	\	0.30-0.50	0.15	Friable	Light reddish brown	Silty sand	Shallow deposit of light reddish brown material filling top of small pit [025].	Under (024); over (022)

<i>Context No.</i>	<i>Area</i>	<i>Type</i>	<i>Length (m)</i>	<i>Width (m)</i>	<i>Depth (m)</i>	<i>Compaction</i>	<i>Colour</i>	<i>Composition</i>	<i>Interpretation</i>	<i>Stratigraphy and/or phasing info</i>
022	Plot 10	Deposit	\	>0.30	0.03	Friable	Light grey	Sandy silt	Very shallow deposit of light grey-almost white material seen during excavation of small pit [025].	Under (021); over (023)
023	Plot 10	Deposit	\	1	0.15	Pliable	Yellowish brown	Silty clay	Basal fill of possible small pit [025] containing flecks of charcoal that may have been lensed	Under (022); over (025)
024	Plot 10	Deposit	\	<0.30	0.05	Semi-Pliable	Mottled yellowish brown	Clay silt	Upper fill of possible pit [025] only small amount observed due to burrowing	Under (018); over (020)
025	Plot 10	Cut	0.8	0.50	0.2	\	\	\	Cut of possible pit or tree bowl near summit of hill. Shape and makeup suggests shallow pit but sides indicative of a tree bowl	Under (0230); over (019)
026	Plot 10	Cut	\	0.9	0.2	\	\	\	Cut of possible fire pit near top of hill. No signs of burning seen on surface but basal fill was a very black material with occasional pockets of red material(028) and heavily flecked with charcoal.	Under (029); over (019)
027	Plot 10	Deposit	\	0.30	0.2	Friable	Greyish brown	Clay-sand	Fill of burrowing through middle of deposits in fire pit [026]	Under (018); over (028)
028	Plot 10	Deposit	\	0.80	0.10	Friable	Greyish	Silty sand	Upper fill of possible	Under (027); over

<i>Context No.</i>	<i>Area</i>	<i>Type</i>	<i>Length (m)</i>	<i>Width (m)</i>	<i>Depth (m)</i>	<i>Compaction</i>	<i>Colour</i>	<i>Composition</i>	<i>Interpretation</i>	<i>Stratigraphy and/or phasing info</i>
							brown		fire pit. Showed no signs of burning itself, other than presence of charcoal and inclusions consist of wood ash	(029)
029	Plot 10	Deposit	\	1.15	0.10	Pliable	Very dark greyish brown	Silt	Basal fill of fire pit [026] comprised of very dark greyish brown/black deposit of silt. Probably represents remnant charcoal from a fire as contains patches of bright red material.	Under (028); over (026)
030	Plot 4	Topsoil	\	\	0.40	Friable	Dark greyish brown	Clay-Sand	Topsoil across Area 3. Heavily ploughed mixed loam soil	Overlies site
031	Plot 4	Subsoil	\	\	\	Semi-Pliable/soft	Reddish brown	Clay-Sand	Subsoil across site, very similar to all areas. Includes some modern land drains.	Under (030)
032	Plot 9	Topsoil	\	\	0.40	Moderate	Mid brown	Silty sand	Contains small sub-angular stone inclusions.	Overlies site
033	Plot 9	Subsoil	\	\	\	Firm	Dark reddish brown	Clay	Subsoil	Under (032)
034	Plot 7	Topsoil	\	\	0.45	Moderate	Dark reddish brown	Silty sand	Contains small sub-angular stone inclusions.	Over (035)
035	Plot 7	Subsoil	\	\	\	Moderate	Dark reddish brown	Clay	Subsoil	Under (034)
036	Plot 7	Subsoil	\	\	\	Loose	Orange-grey	Sand	Natural subsoil in N half of area 6.	Under (034)

<i>Context No.</i>	<i>Area</i>	<i>Type</i>	<i>Length (m)</i>	<i>Width (m)</i>	<i>Depth (m)</i>	<i>Compaction</i>	<i>Colour</i>	<i>Composition</i>	<i>Interpretation</i>	<i>Stratigraphy and/or phasing info</i>
									Contains occasional small sub angular stone inclusions.	
037	Plot 6	Topsoil	\	\	0.4	Moderate	Mid brown	Silty sand	Contains small sub-angular stone inclusions (found in N of plot).	Overlies site
38	Plot 6	Subsoil	\	\	\	Firm	Dark reddish brown	Clay	Subsoil (found in N of plot).	Under (037)
39	Plot 6	Topsoil	\	\	0.40	Pliable	Dark red/dark brown	Clay sand	Topsoil. Heavily ploughed soil.	Overlies site
40	Plot 6	Subsoil	\	\	\	Pliable	Dark red/dark brown	Sand	Subsoil	Under (039)
41	Plot 5	Topsoil	\	\	0.40	Pliable	Dark brown	Sand	Topsoil. Heavily ploughed soil.	Overlies site
42	Plot 5	Subsoil	\	\	\	Pliable	Dark red/dark brown	Sand	Subsoil.	Under (041)
43	Plot 8	Topsoil	\	\	0.35	Friable	Dark brown/red	Silty sand	Topsoil. Heavily ploughed soil.	Overlies site
44	Plot 8	Subsoil	\	\	\	Pliable	Red/light brown	Clay	Subsoil.	Under (043)
45	Plot 5	Cut	4	2	0.10	\	\	\	Thought to be cut of possible ditch but deemed natural lens in subsoil	Under (046)
46	Plot 5	Fill	4	2	0.10	Pliable	Red/light brown	Gravely sand	Thought to be fill of possible ditch but deemed natural lens in subsoil	Above (045)
47	Plot 5	Cut	2	0.24	0.09	\	\	\	Deep plough marks, possible wheel rutting. 1 of 4 marks	Under (048)

<i>Context No.</i>	<i>Area</i>	<i>Type</i>	<i>Length (m)</i>	<i>Width (m)</i>	<i>Depth (m)</i>	<i>Compaction</i>	<i>Colour</i>	<i>Composition</i>	<i>Interpretation</i>	<i>Stratigraphy and/or phasing info</i>
									found in subsoil filled with dark grey/brown silty soil. Small pebbles and grit present.	
48	Plot 5	Fill	2	0.24	0.09	Firm	Dark greyish brown	Silt	Deep plough marks, possible wheel rutting. 1 of 4 marks found in subsoil filled with dark grey/brown silty soil. Small pebbles and grit present.	Under (048)
49	Plot 5	Cut	3	0.23	0.08	\	\	\	Deep plough marks, possible wheel rutting. 1 of 4 marks found in subsoil filled with dark grey/brown silty soil. Small pebbles and grit present.	Under (050)
50	Plot 5	Fill	3	0.23	0.08	Firm	Dark greyish brown	Silt-Clay	Deep plough marks, possible wheel rutting. 1 of 4 marks found in subsoil filled with dark grey/brown silty soil. Small pebbles and grit present.	Above (049)
51	Plot 5	Cut	2	0.45	0.05	\	\	\	Deep plough marks, possible wheel rutting. 1 of 4 marks found in subsoil filled with dark grey/brown silty soil. Small pebbles and grit	Under (050)

<i>Context No.</i>	<i>Area</i>	<i>Type</i>	<i>Length (m)</i>	<i>Width (m)</i>	<i>Depth (m)</i>	<i>Compaction</i>	<i>Colour</i>	<i>Composition</i>	<i>Interpretation</i>	<i>Stratigraphy and/or phasing info</i>
									present.	
52	Plot 5	Fill	2	0.45	0.05	Firm	Dark greyish brown	Silt-Clay	Deep plough marks, possible wheel rutting. 1 of 4 marks found in subsoil filled with dark grey/brown silty soil. Small pebbles and grit present.	Over (051)
53	Plot 5	Cut	2	0.22	0.14	\	\	\	Deep plough marks, possible wheel rutting. 1 of 4 marks found in subsoil filled with dark grey/brown silty soil. Small pebbles and grit present.	Under (054)
54	Plot 5	Fill	2	0.22	0.14	Firm	Greyish brown	Silt-Clay	Deep plough marks, possible wheel rutting. 1 of 4 marks found in subsoil filled with dark grey/brown silty soil. Small pebbles and grit present.	Over (049)
55	Plot 2	Topsoil	\	\	0.5	Friable	Dark greyish brown	Silt-Clay	Topsoil. Heavily ploughed soil.	Over (056)
56	Plot 2	Subsoil	\	\	\	Firm	Dark reddish brown	Silty sand	Subsoil. Signs of previous excavation by farmer, drainage pit and channel	Under (055)

Table 2: Drawings

<i>Drawin g No.</i>	<i>Sheet No.</i>	<i>Context</i>	<i>Subject</i>	<i>Scale</i>
1	1	(005)(006)(007)(008)	Pre ex of possible features	01:20
1a	2	(010)(011)(012)(013)(014)	Pre ex of possible features	01:20
2	3	(004)(016)[017]	N facing section of (016)[017]	01:10
3	3	[017]	Post ex plan of [017]	01:20
4	3	(020)(021)(022)(023)(024)(025)	ESE facing section [025]	01:10
5	3	[025]	Post ex plan of [026]	01:20
6	4	[026](027)(028)(029)	S facing section of [026]	01:10
7	4	[026]	Post ex plan of [026]	01:20
8	5	(044)[043]	East facing section [043]	01:10
9	5	(052)[051](050)[049](048)[047] (046) [045]	East facing section [051][049][047][045]	01:10

Table 3: Digital Photographs

<i>Photo No.</i>	<i>Area</i>	<i>Description</i>	<i>From (Compass)</i>
1	Plot 3	Site before top soil strip	E
2	Plot 3	Site before top soil strip	N
3	Plot 3	Site before top soil strip	W
4	Plot 3	Area of site after section of topsoil stripped	W
5	Plot 3	Area of site after section of topsoil stripped	W
6	Plot 3	Area of site after section of topsoil stripped	W
7	Plot 3	Area of site after section of topsoil stripped	W
8	Plot 3	Area of site after section of topsoil stripped	N
9	Plot 7	Area of site after section of topsoil stripped	N
10	Plot 7	Area of site after section of topsoil stripped	N
11	Plot 7	Area of site after section of topsoil stripped	N
12	Plot 7	Area of site after section of topsoil stripped	S
13	Plot 7	Area of site after section of topsoil stripped	N
14	Plot 7	Area of site after section of topsoil stripped	N
15	Plot 7	Area of site after section of topsoil stripped	N
16	Plot 7	Area of site after section of topsoil stripped	N
17	Plot 7	Area of site after section of topsoil stripped	S
18	Plot 7	Area of site after section of topsoil stripped	N
19	Plot 7	Area of site after section of topsoil stripped	S
20	Plot 7	Area of site after section of topsoil stripped	S
21	Plot 7	Working shot	S
22	Plot 7	Working shot	SE
23	Plot 7	Area of site after section of topsoil stripped	S
24	Plot 7	Area of site after section of topsoil stripped	S
25	Plot 7	Area of site after section of topsoil stripped	S
26	Plot 7	Area of site after section of topsoil stripped	N
27	Plot 7	Area of site after section of topsoil stripped	S
28	Plot 7	Area of site after section of topsoil stripped	S
29	Plot 7	Area of site after section of topsoil stripped	S
30	Plot 7	Area of site after section of topsoil stripped	S

<i>Photo No.</i>	<i>Area</i>	<i>Description</i>	<i>From (Compass)</i>
31	Plot 7	Area of site after section of topsoil stripped	S
32	Plot 7	Working shot	N
33	Plot 7	Area of site after section of topsoil stripped	S
34	Plot 7	Area of site after section of topsoil stripped	S
35	Plot 7	Area of site after section of topsoil stripped	S
36	Plot 7	Area of site after section of topsoil stripped	S
37	Plot 7	Area of site after section of topsoil stripped	S
38	Plot 7	Area of site after section of topsoil stripped	S
39	Plot 7	Area of site after section of topsoil stripped	S
40	Plot 7	Area of site after section of topsoil stripped	S
41	Plot 7	Area of site after section of topsoil stripped	S
42	Plot 7	Area of site after section of topsoil stripped	N
43	Plot 7	Area of site after section of topsoil stripped	S
44	Plot 7	Area of site after section of topsoil stripped	S
45	Plot 7	Area of site after section of topsoil stripped	N
46	Plot 7	Area of site after section of topsoil stripped	N
47	Plot 6	Site before top soil strip	E
48	Plot 6	Area of site after section of topsoil stripped	NE
49	Plot 6	Area of site after section of topsoil stripped	NE
50	Plot 6	Site before top soil strip	NW
51	Plot 5	Site before top soil strip	NW
52	Plot 5	Area of site after section of topsoil stripped	NW
53	Plot 5	Working shot	NW
54	Plot 5	Area of site after section of topsoil stripped	NW
55	Plot 5	Area of site after section of topsoil stripped	NW
56	Plot 5	Area of site after section of topsoil stripped	NW
57	Plot 6	Area of site after section of topsoil stripped	S
58	Plot 6	Area of site after section of topsoil stripped	N
59	Plot 6	Area of site after section of topsoil stripped	E
60	Plot 6	Area of site after section of topsoil stripped	E
61	Plot 5	Area of site after section of topsoil stripped	NW
62	Plot 5	Area of site after section of topsoil stripped	NW
63	Plot 5	Area of site after section of topsoil stripped	NW
64	Plot 5	Area of site after section of topsoil stripped	E
65	Plot 5	Area of site after section of topsoil stripped	NW
66	Plot 6	Working shot	N
67	Plot 5	Area of site after section of topsoil stripped	NW
68	Plot 5	Area of site after section of topsoil stripped	NW
69	Plot 5	Area of site after section of topsoil stripped	NW
70	Plot 3	Working shot	NE
71	Plot 3	Area of site after section of topsoil stripped	NE
72	Plot 4	Site before top soil strip	E
73	Plot 7	Area of site after section of topsoil stripped	S
74	Plot 7	Working shot	SE
75	Plot 7	Working shot	SE
76	Plot 8	Area of site after section of topsoil stripped	S
77	Plot 8	Area of site after section of topsoil stripped	S
78	Plot 8	Working shot	N
79	Plot 8	Working shot	N
80	Plot 8	Area of site after section of topsoil stripped	S
81	Plot 8	Working shot	N
82	Plot 8	Working shot	N

<i>Photo No.</i>	<i>Area</i>	<i>Description</i>	<i>From (Compass)</i>
83	Plot 8	Area of site after section of topsoil stripped	N
84	Plot 8	Area of site after section of topsoil stripped	S
85	Plot 8	Working shot	SE
86	Plot 8	Area of site after section of topsoil stripped	SE
87	Plot 8	Area of site after section of topsoil stripped	N
88	Plot 8	Area of site after section of topsoil stripped	N
89	Plot 8	French drains visible during TS stripping	N
90	Plot 8	Area of site after section of topsoil stripped	W
91	Plot 8	Area of site after section of topsoil stripped	S
92	Plot 8	Area of site after section of topsoil stripped	N
93	Plot 8	Area of site after section of topsoil stripped	N
94	Plot 8	Area of site after section of topsoil stripped	N
95	Plot 8	Flooded area of site during stripping	NW
96	Plot 8	Area of site after section of topsoil stripped	N
97	Plot 8	Area of site after section of topsoil stripped	N
98	Plot 8	Area of site after section of topsoil stripped	S
99	Plot 8	Area of site after section of topsoil stripped	S
100	Plot 8	Area of site after section of topsoil stripped	N
101	Plot 8	Area of site after section of topsoil stripped	S
102	Plot 8	Area of site after section of topsoil stripped	N
103	Plot 8	Area of site after section of topsoil stripped	S
104	Plot 5	Area of site after section of topsoil stripped	N
105	Plot 5	Area of site after section of topsoil stripped	N
106	Plot 5	Area of site after section of topsoil stripped	E
107	Plot 5	Working shot	E
108	Plot 5	Area of site after section of topsoil stripped	E
109	Plot 7	Area of site after section of topsoil stripped	SE
110	Plot 6	Working shot	S
111	Plot 8	Area of site after section of topsoil stripped	E
112	Plot 7	Area of site after section of topsoil stripped	E
113	Plot 5	Area of site after section of topsoil stripped	E
114	Plot 5	Area of site after section of topsoil stripped	E
115	Plot 5	Pre excavation shot of possible feature	E
116	Plot 5	East facing section of possible feature	E
117	Plot 5	Natural lens in subsoil	E
118	Plot 5	Natural lens in subsoil	E
119	Plot 5	East facing section of possible feature	E
120	Plot 5	East facing section of possible feature	E
121	Plot 5	Area of site after section of topsoil stripped	SE
122	Plot 5	Working shot	N
123	Plot 5	Area of site after section of topsoil stripped	N
124	Plot 5	Area of site after section of topsoil stripped	N
125	Plot 5	Area of site after section of topsoil stripped	E
126	Plot 5	Area of site after section of topsoil stripped	N
127	Plot 5	Area of site after section of topsoil stripped	N
128	Plot 5	Area of site after section of topsoil stripped	N
129	Plot 5	Site before top soil strip	N
130	Plot 5	Site before top soil strip	N
131	Plot 5	Embankment pre topsoil strip	N
132	Plot 5	Embankment pre topsoil strip	E
133	Plot 5	Site before top soil strip	S
134	Plot 5	Embankment pre topsoil strip	N

<i>Photo No.</i>	<i>Area</i>	<i>Description</i>	<i>From (Compass)</i>
135	Plot 5	Site before top soil strip	E
136	Plot 5	Working shot	S
137	Plot 5	Area of site after section of topsoil stripped	S
138	Plot 5	Area of site after section of topsoil stripped	E
139	Plot 5	Area of site after section of topsoil stripped	E
140	Plot 5	Pre excavation shot of possible feature [047](048)[049](50)[051](052)[053](054)	E
141	Plot 5	East facing section of possible feature [047](048)[049](50)[051](052)[053](054)	E
142	Plot 5	East facing section [047](048)	E
143	Plot 5	East facing section [049](050)[051](052)	E
144	Plot 5	East facing section [053](054)	E
145	Plot 5	Area of site after section of topsoil stripped	N
146	Plot 5	Area of site after section of topsoil stripped	W
147	Plot 5	Area of site after section of topsoil stripped	E
148	Plot 5	Area of site after section of topsoil stripped	E
149	Plot 5	Area of site after section of topsoil stripped	N
150	Plot 5	Area of site after section of topsoil stripped	N
151	Plot 5	Area of site after section of topsoil stripped	N
152	Plot 5	Area of site after section of topsoil stripped	S
153	Plot 5	Area of site after section of topsoil stripped	N
154	Plot 5	Area of site after section of topsoil stripped	N
155	Plot 5	Area of site after section of topsoil stripped	E
156	Plot 5	Area of site after section of topsoil stripped	E
157	Plot 5	Area of site after section of topsoil stripped	E
158	Plot 5	Working shot	SE
159	Plot 5	Area of site after section of topsoil stripped	E
160	Plot 5	Area of site after section of topsoil stripped	E
161	Plot 5	Area of site after section of topsoil stripped	E
162	Plot 5	Area of site after section of topsoil stripped	S
163	Plot 5	Area of site after section of topsoil stripped	SW
164	Plot 5	Area of site after section of topsoil stripped	S
165	Plot 5	Working shot	S
166	Plot 5	Working shot	SE
167	Plot 5	Area of site after section of topsoil stripped	S
168	Plot 5	Area of site after section of topsoil stripped	N
169	Plot 5	Area of site after section of topsoil stripped	N
170	Plot 5	Working shot	N
171	Plot 5	Working shot	SE
172	Plot 5	Topsoil strip complete	NE
173	Plot 5	Topsoil strip complete	N
174	Plot 5	Topsoil strip complete	N
175	Plot 5	Topsoil strip complete	N
176	Plot 5	Working shot	N
177	Plot 5	Embankment pre topsoil strip	E
178	Plot 5	Embankment pre topsoil strip	NW
179	Plot 5	Embankment topsoil strip complete	E
180	Plot 5	Embankment topsoil strip complete	E
181	Plot 5	River bed pre topsoil strip and drainage	NE
182	Plot 5	Drainage for river diversion	E
183	Plot 5	Drainage for river diversion	W
184	Plot 5	Area of site after section of topsoil stripped	N

<i>Photo No.</i>	<i>Area</i>	<i>Description</i>	<i>From (Compass)</i>
185	Plot 5	Area of site after section of topsoil stripped	N
186	Plot 5	Embankment pre topsoil strip	W
187	Plot 5	Tree root removal	W
188	Plot 5	Post tree root removal	W
189	Plot 5	Embankment excavation	S
190	Plot 5	Embankment excavation	S
191	Plot 5	Embankment excavation	S
192	Plot 5	Small area after embankment removal	S
193	Plot 5	Small area after embankment removal	E
194	Plot 5	Small area after embankment removal	S
195	Plot 5	Working shot	S
196	Plot 5	Small area after embankment removal	S
197	Plot 5	Area of site after section of topsoil stripped	W
198	Plot 5	Working shot	W
199	Plot 5	Embankment excavation	S
200	Plot 5	Embankment excavation	S
201	Plot 5	Embankment excavation	SE
202	Plot 5	Post Embankment excavation	S
203	Plot 5	Post Embankment excavation	E
204	Plot 5	Post Embankment excavation	E
205	Plot 5	Post Embankment excavation	E
206	Plot 2	Post topsoil strip	W
207	Plot 2	Area post A1 undergrounding	N
208	Plot 2	Area of site after section of topsoil stripped	SW
209	Plot 2	Area of site after section of topsoil stripped	SW
210	Plot 2	Area of site after section of topsoil stripped	SE
211	Plot 2	Equipment storage area	SE
212	Plot 2	Area of site after section of topsoil stripped	N
213	Plot 2	Area post A1 undergrounding	NW
214	Plot 2	Storage of drystone wall material	W
215	Plot 2	Storage of drystone wall material	W
216	Plot 2	Area of site after section of topsoil stripped	W
217	Plot 2	Area of site post cable installation	S
218	Plot 2	Working shot	N
219	Plot 2	Equipment storage area	E
220	Plot 2	Post excavation of a haul road	S
221	Plot 2	Post excavation of a haul road	N
222	Plot 2	Post excavation of a haul road	N
223	Plot 2	Post excavation of a haul road	N
224	Plot 2	Post excavation of a haul road	N
225	Plot 2	Material storage	W
226	Plot 2	Material storage	W
227	Plot 2	Material storage	SW
228	Plot 2	Area of site after section of topsoil stripped	SE
229	Plot 2	Area of site after section of topsoil stripped	W
230	Plot 2	Area of site after section of topsoil stripped	NW
231	Plot 2	Working shot	NW
232	Plot 2	Area of site after section of topsoil stripped	NW
233	Plot 2	Working shot	S
234	Plot 2	Area of site after section of topsoil stripped	W
235	Plot 2	Area of site after section of topsoil stripped	NW
236	Plot 2	Area of site after section of topsoil stripped	W

<i>Photo No.</i>	<i>Area</i>	<i>Description</i>	<i>From (Compass)</i>
237	Plot 2	Area of site after section of topsoil stripped	W
238	Plot 2	Area of site after section of topsoil stripped	W
239	Plot 2	Area of site after section of topsoil stripped	SW
240	Plot 2	Area of site after section of topsoil stripped	SW
241	Plot 2	Area of site after section of topsoil stripped	W
242	Plot 2	Area of site after section of topsoil stripped	W
243	Plot 2	Area of site after section of topsoil stripped	W
244	Plot 2	Area of site after section of topsoil stripped	NW
245	Plot 2	Area of site after section of topsoil stripped	W
246	Plot 2	Area of site after section of topsoil stripped	W
247	Plot 2	Area of site after section of topsoil stripped	W
248	Plot 2	Area of site after section of topsoil stripped	S
249	Plot 2	Area of site after section of topsoil stripped	N
250	Plot 2	Area of site after section of topsoil stripped	S
251	Plot 2	Area of site after section of topsoil stripped	N
252	Plot 2	Working shot	E
253	Plot 2	Area of site after section of topsoil stripped	S
254	Plot 2	Area of site after section of topsoil stripped	S
255	Plot 2	Void	
256	Plot 2	Area of site after section of topsoil stripped	SW
257	Plot 2	Area of site after section of topsoil stripped	W
258	Plot 2	Void	
259	Plot 2	Area of site after section of topsoil stripped	SW
260	Plot 2	Area of site after section of topsoil stripped	E
261	Plot 2	Area of site after section of topsoil stripped	W
262	Plot 2	Area of site after section of topsoil stripped	W
263	Plot 2	Area of site after section of topsoil stripped	W
264	Plot 2	Area of site after section of topsoil stripped	S
265	Plot 2	Void	
266	Plot 2	Area of site after section of topsoil stripped	W
267	Plot 2	Area of site after section of topsoil stripped	W
268	Plot 2	Area of site after section of topsoil stripped	SW
269	Plot 2	Area of site after section of topsoil stripped	SW
270	Plot 2	Area of site after section of topsoil stripped	SW
271	Plot 2	Site before top soil strip	W
272	Plot 2	Area of site after section of topsoil stripped	W
273	Plot 2	Area of site after section of topsoil stripped	W
274	Plot 2	Area of site after section of topsoil stripped	E
275	Plot 2	Area of site after section of topsoil stripped	E
276	Plot 2	Area of site after section of topsoil stripped	W
277	Plot 2	Area of site after section of topsoil stripped	E
278	Plot 2	Area of site after section of topsoil stripped	E
279	Plot 2	Area of site after section of topsoil stripped	E
280	Plot 2	Site before verge topsoil strip and tree removal	W
281	Plot 2	Site before verge topsoil strip and tree removal	E
282	Plot 2	Working shot	E
283	Plot 2	Tree removal	S
284	Plot 2	Tree removal	S
285	Plot 2	Tree removal	S
286	Plot 2	Tree removal	E
287	Plot 2	Void	E
288	Plot 2	Tree removal	E

<i>Photo No.</i>	<i>Area</i>	<i>Description</i>	<i>From (Compass)</i>
289	Plot 2	Farmers flood drain	N
290	Plot 2	Farmers flood drain	N
291	Plot 2	Farmers flood drain	N
292	Plot 2	Void	
293	Plot 2	Site before top soil strip	W
294	Plot 2	Area of site after section of topsoil stripped	W
295	Void	Void	Void
296	Plot 2	Area of site after section of topsoil stripped	S
297	Plot 2	Area of site after section of topsoil stripped	NE
298	Plot 2	Area of site after section of topsoil stripped	NE

APPENDIX 2: Stage 1 Written Scheme of Investigation

Torness 400 kV Option 2
Underground Cabling
Torness Power Station, East Lothian

Archaeological Written Scheme of Investigation

Prepared by David Sneddon

1.0 Non-Technical Summary

This document sets out Northlight Heritage's Written Scheme of Investigation, on behalf of J. Murphy & Sons Ltd., for archaeological works relating to the undergrounding of a 400 kV overhead line at Torness, East Lothian.

This document establishes actions and products required to achieve Stage 1 of a potentially three-stage process, Stage 2 being any further work, including fieldwork arising from Stage 1, such as the development and implementation of a mitigation strategy to deal with any significant archaeology identified or recovered during Stage 1, and Stage 3 being the further analysis of any materials recovered during the field work in either or both Stages 1 and 2 and/or the preparation of a final report on all works constituting preservation by record for publication, as appropriate.

2.0 Site Location and Description

The underground cable route runs over a distance of some 2 km (Figure 1), from Torness Power Station in the north (NGR NT 74485, 74827) to an existing substation in the south (NGR NT 74052, 72976).

The route generally runs through gently undulating arable fields and crosses the A1, a railway line, the Thornton Burn and a series of minor roads.

A site compound will be established to the east of the underground cable route, just to the south of the A1 (Figure 1).

3.0 Archaeological and Historical Background

No previously recorded archaeology is present directly within the working areas of the underground cable route or site compound (Figure 1), however, a series of potentially significant archaeological remains exist in close proximity to the undergrounding route.

Just to the east of the site compound area lies crop-mark evidence for a ring ditch (Site 10, HER No. MEL1869)

along with a trackway, pit and rig and furrow (Site 30, HER No. MEL9636) while, to the west, lies a further four sites recorded as crop-marks and one as a quarry (Site 29, HER No. MEL9614). These crop-mark sites include one of unknown nature (Site 8, HER No. MEL1860), an enclosed settlement (Site 18, HER No. MEL1960), a ring ditch (Site 24, HER No. MEL2786) and an enclosure (Site 17, HER No. MEL1896).

Further to the south the route of the underground cable passes close to the crop-mark defined remains of a double ditched settlement (Site 21, HER No. MEL2562) while another crop-mark enclosed settlement is present a little further to the west (Site 20, HER No. MEL2561). A short distance to the south-east of this point are further crop-marks defining pits, a possible ring ditch and a barrow (Site 11, HER No. MEL1870). This site is also protected as a Scheduled Monument (SAM No. 3990).

Just to the east of the southern end of the route lies further crop-marks defining an enclosed settlement (Site 12, HER No. MEL1872) and linear features (Site 12, HER No. MEL1031). Both these sites are also protected as a Scheduled Monument (SAM No. 5958).

Given this large quantity of potentially significant crop-mark sites that are located close to the route of the underground cable, some being protected as Scheduled Monuments, there exists good potential that further, as yet unrecorded, archaeological remains exist buried along the route of the underground cable. While intensive agriculture in the area may have removed surface traces of archaeological sites the crop mark evidence clearly shows that archaeology is preserved beneath the ploughsoil and may, therefore, also survive within the underground cable area.

4.0 Project Objectives

The project objectives are to:

- establish the presence or absence of any archaeological remains which may be encountered during ground breaking works;
- determine the character, extent and significance of any archaeological deposits encountered;
- achieve preservation *in situ* of any significant archaeological features or sites encountered during the watching brief which can be avoided by the development;
- where necessary, and following the development of a separate Stage 2 'Project Design' to be agreed by the East Lothian Council Archaeology Service, excavate and record any significant archaeological features or sites encountered during the watching brief that cannot be avoided to ensure preservation through record;
- make sure that the needs for archaeological conservation and recording are met without causing any unnecessary delay or disturbance to the development.

5.0 Methodology

5.1 *Watching Brief*

All topsoil stripping works relating to the undergrounding of the electricity cable(s), along with associated access tracks and site compounds, will be monitored by a suitably qualified archaeologist. Presuming that topsoil stripping will not be undertaken on different areas of the site simultaneously it is likely that one archaeologists will be sufficient on site to monitor the works.

Topsoil will be removed by an excavator fitted with a flat-bladed ditching bucket to the first archaeological horizon or to natural subsoil, whichever is encountered first. The topsoil strip corridor is likely to average 30 m in width but may reach 50 m at a few specific locations. Areas containing potential archaeology will be marked off to ensure no works occur within these areas until after they have been investigated.

Sufficient time will be allowed for the archaeologist conducting the topsoil strip watching brief to obtain an appropriate record of any identified archaeology prior to any further construction work taking place in that area. Should individual or small groups of ephemeral archaeological features be encountered during the watching brief, they will be investigated immediately on their discovery by the on-site archaeologist. The archaeologist will record them, determine which if any require full excavation and then excavate accordingly. Where archaeology is uncovered that cannot be appropriately dealt with by the archaeologist conducting the watching brief, without causing undue delay to the topsoil stripping, the developer will be informed and appropriate additional resource will be put in place.

Any archaeological features encountered will be cleaned by hand to help determine their date, character and extent. Where limited archaeological remains are encountered during the watching brief features and deposits will be excavated and recorded by written description on pro forma recording sheets, by digital photography and by measured drawing. Should discrete negative cut features be encountered they will be 50% excavated in order to determine their significance, date and function. In the event that they are deemed to be important discoveries they will be fully excavated. Should isolated linear features be uncovered they will be initially investigated through a series of sections excavated at specific places along the feature in order to determine its significance, date and function. These will amount to a maximum of 10% of the feature unless a specific reason exists to excavate more than this.

All archaeologically significant excavated feature fills and deposits will be sampled for artefactual and palaeo-environmental evidence. Where appropriate this will also include micromorphological sampling in order to address key issues relating to soil development at the site.

All archaeological finds will be dealt with by the on-site archaeologists. The general practice will be to bulk recover artefacts by context which date from the nineteenth or twentieth century's. Should significant finds be encountered from earlier occupation phases of the site there may be the requirement for three-dimensionally recording prior to up-lifting. Finds which are of particular sensitivity or importance may require specialist conservation assessment.

Where particularly extensive, numerous or complex archaeological deposits or features are proven to be present the developer and the local authority will be informed and discussions, including a site meeting if deemed necessary and appropriate, will be held between all relevant parties to agree the most appropriate strategy. Where preservation *in situ* is not feasible this will generally comprise a need to develop a stage 2 mitigation strategy to excavate and record any significant archaeological features or sites to ensure preservation through record.

If, once topsoil stripping is complete, there remains a potential that archaeological features or deposits remain at lower levels then there may be a requirement to monitor the excavation of the cable trench at specific locations.

5.2 *Human Remains*

Should human remains be encountered, the local police, East Lothian Council Archaeology Service and the developer will be notified immediately and thereafter prescribed procedure for their treatment will be followed, in accordance with legal requirements.

5.3 *Project Monitoring*

The East Lothian Council Archaeology Service and the developer will be notified immediately of any unexpectedly significant or complex discoveries, or other unexpected occurrences which might significantly affect the archaeological work and/or the development. In that event, all finds and features will be left *in situ* until arrangements have been agreed for safeguarding or recording them.

An archaeological project manager will be appointed for all the works outlined above and the manager will be the first point of contact for any project-related liaison with East Lothian Council Archaeology Service and the developer or the developer's agent for all formal logistical, administrative and financial aspects of the project.

It will be important to ensure that all formal communications, instructions and/or requests (including any proposed amendments to on-site strategies) are ultimately made in writing to the project manager, to ensure organisational, administrative and financial efficiency.

Any site visitors, including representatives of East Lothian Council Archaeology Service will be required to conform to the health and safety regime in place during the fieldwork programme.

6.0 Reporting, Archive & Small Finds Arrangements

Following completion of the fieldwork, a report on the fieldwork will be prepared, outlining the main results and incorporating lists of all features, finds, samples, photographs and drawings. This report will be produced as an electronic report (and a desk-top published document where this is required). The report will also include recommendations for further mitigation measures appropriate to the remains encountered. Implementation of any recommendations offered would, however, only follow consultation with East Lothian Council Archaeology Service.

The report will be prepared, in structural and textual content terms, to the standard of the traditional Data Structure Report as defined by Historic Scotland, in their "Project Design, Implementation and Archiving" document (Historic Scotland Archaeological Procedure Paper 2, 1996). The report will provide "a structure or organisation to the primary records" of the fieldwork, forming "a basis for further work". It will be "essentially, an initial organisation on paper of the information retrieved from the site" and consist "of a narrative account of the contexts...discovered, including field interpretations and a set of lists. It is not intended for publication, but will itself be archived." A project archive will be prepared and made ready for submission within six months of the completion of all fieldwork or post-excavation work (as appropriate). The resultant site archive will be deposited with the National Monuments Records for Scotland.

A short report detailing the results will also be submitted for publication in *Discovery and Excavation in Scotland* and to *OASIS*.

Copies of the Data Structure Report will be provided to East Lothian Council Archaeology Service, the developer and to the National Monuments Record for Scotland. Further copies can be distributed to other recipients if requested and specified.

The results of this work will inform the need for further (Stage 2) fieldwork or further (Stage 3) analysis of materials/generation of a report for publication, the report will, on request, be followed by a costed assessment specifying any work deemed necessary in order to complete the project. Publication, where required, would normally be sought in a suitable academic journal. The post-excavation process is essential to bring a piece of archaeological work to completion.

The laws relating to Treasure Trove and *Bona Vacantia* in Scotland apply to all finds where the original owner cannot be identified. This includes all material recovered during archaeological fieldwork. Accordingly, all assemblages recovered from archaeological fieldwork are claimed automatically by the Crown and must be reported to the Scottish Archaeological Finds Allocation Panel through its secretariat, the Treasure Trove Unit. In the event of the discovery of small finds during the evaluation or any subsequent stages of work, a filled-out copy of the form "Declaration of an Archaeological Assemblage from Fieldwork" and two copies of the pertinent Data Structure Report will be submitted to the Panel at the conclusion of the fieldwork. The Panel will then be responsible for recommending to the Queen's and Lord Treasurer's Remembrancer (QLTR) which museum should be allocated the finds.

All artefacts will be stored temporarily by Northlight until a decision has been made by the Panel regarding the museum which will be allocated the finds for permanent curation. All finds will be transferred to the appropriate museum within six months of completion of the fieldwork, if no post-excavation work is required, or at the end of the latest finishing post-excavation programme.

In the event that unallocated finds recovered from the evaluation or any later stages of work require to be removed from Scotland, for the purposes of post-excavation analysis, there is a legal requirement to obtain the consent of the QLTR, in the form of a loan agreement. Initially, an indication of intent would be registered with the Treasure Trove Secretariat at the National Museums of Scotland, after which formal consent would be applied for using the form "Application for authority to borrow unallocated Treasure Trove for research purposes". A consent form, signed by the QLTR and specifying conditions (such as the period during which finds may be held outside Scotland) would then be issued. Receipt of this signed consent form will be required before items may be removed from the country.

7.0 Timetable

The watching brief will provisionally be undertaken during July 2015.

8.0 Staffing

Project Manager – David Sneddon

Project Director(s) – TBC

9.0 Health and Safety

Prior to fieldwork commencing a risk assessment of the project will be undertaken. Northlight Heritage, as part of York Archaeological Trust, adheres to all standard Health and Safety regulations governing fieldwork projects.

Northlight Heritage also possess appropriate third party/public liability insurance cover, proof of which may be supplied upon request.

Appendix 3: DES

LOCAL AUTHORITY:	East Lothian
PROJECT TITLE/SITE NAME:	Torness Power Station Underground Cabling
PROJECT CODE:	54
PARISH:	Innerwick
NAME OF CONTRIBUTOR:	Dawn Ferry
NAME OF ORGANISATION:	Northlight Heritage
TYPE(S) OF PROJECT:	Archaeological Watching Brief
NMRS NO(S):	n/a
SITE/MONUMENT TYPE(S):	n/a
SIGNIFICANT FINDS:	None
NGR (2 letters, 8 or 10 figures)	NT 74485, 74827 - NT 74052, 72976
START DATE (this season)	11/01/2016
END DATE (this season)	8/12/2016
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological watching brief was undertaken during the undergrounding of approximately 2 km of electricity cable between Torness Power Station in the north (NT 74485, 74827) and an existing substation in the south (NT 74052, 72976). The work was conducted variously between 11 th January 2016 and 8 th December 2016. The topsoil strip corridor averaged around 30 m in width but was up to 50 m in places. No significant archaeological remains were uncovered during the watching brief other than two isolated pits that were heavily disturbed by burrowing.
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	n/a
SPONSOR OR FUNDING BODY:	Cnoclee Ltd.
ADDRESS OF MAIN CONTRIBUTOR:	Northlight Heritage, Studio 406, South Block, 64 Osborne Street, Glasgow G1 5QH
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ARCHIVE LOCATION (intended/deposited)	National Monuments Record for Scotland (intended)