

**LAND AT HULAM FARM, CASTLE EDEN,
COUNTY DURHAM**

**ARCHAEOLOGICAL
EVALUATION REPORT**

MARCH 2020

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PRE-CONSTRUCT ARCHAEOLOGY

Land at Hulam Farm, Castle Eden, County Durham

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LAND AT HULAM FARM, CASTLE EDEN, COUNTY DURHAM

EVALUATION REPORT

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CONTENTS

1.	NON-TECHNICAL SUMMARY	1
2.	INTRODUCTION	3
2.1	PROJECT BACKGROUND	3
2.2	SITE LOCATION AND DESCRIPTION	3
2.3	GEOLOGY AND TOPOGRAPHY	3
2.4	PLANNING BACKGROUND	4
2.5	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	5
3.	PROJECT AIMS AND RESEARCH OBJECTIVES	10
3.1	PROJECT AIMS	10
3.2	RESEARCH OBJECTIVES	10
4.	ARCHAEOLOGICAL METHODOLOGY	12
4.1	FIELDWORK	12
4.2	POST-EXCAVATION	13
5.	RESULTS: THE ARCHAEOLOGICAL SEQUENCE	14
5.1	PHASE 1: SUPERFICIAL GEOLOGY	14
5.2	PHASE 2: PREHISTORIC AND UNDATED	15
5.3	PHASE 3: MEDIEVAL AND UNDATED	15
5.4	PHASE 4: UNDATED FURROWS	17
5.5	PHASE 5: COLLUVIUM AND SUBSOIL	18
5.6	PHASE 6: MODERN	18
6.	CONCLUSIONS	19
7.	REFERENCES	21
8.	ACKNOWLEDGEMENTS AND CREDITS	23
	APPENDIX 1: FIGURES	24
	FIGURE 1: SITE LOCATION	25
	FIGURE 2: DETAILED SITE LOCATION (SHOWING GEOPHYSICAL SURVEY RESULTS)	26
	FIGURE 3: DETAILED SITE LOCATION (SHOWING GEOPHYSICAL INTERPRETATION)	27
	FIGURE 4: PLAN OF TRENCH 1 AND SECTION 5	28
	FIGURE 5: PLAN OF TRENCH 2 AND SECTION 7	29
	FIGURE 6: PLAN OF TRENCH 3 AND SECTION 4	30
	FIGURE 7: PLAN OF TRENCH 4 AND SECTION 1-3	31
	FIGURE 8: PLAN OF TRENCH 6 AND SECTION 6	32

APPENDIX 2: CONTEXT INDEX	33
APPENDIX 3: STRATIGRAPHIC MATRIX.....	35
APPENDIX 4: PHOTOGRAPHIC PLATES	38
<i>Plate 1: Ditch [406], view north-east, 1m scale</i>	<i>38</i>
<i>Plate 2: Ditch [411], view north-east, 1m scale</i>	<i>38</i>
<i>Plate 3: Ditch [404], view south, 0.20m scale</i>	<i>39</i>
<i>Plate 4: Ditch [104], view north-west, 0.5m scale</i>	<i>39</i>
<i>Plate 5: Sample section through feature [204], view south-east, 2m scale.....</i>	<i>40</i>
<i>Plate 6: Ditch [304], view north-west, 2m scale</i>	<i>40</i>
<i>Plate 7: Ditch [605], view north, 0.5m scale</i>	<i>41</i>
APPENDIX 5: PREHISTORIC POTTERY	42
APPENDIX 6: POST ROMAN POTTERY	43
APPENDIX 7: ANIMAL BONE.....	45
APPENDIX 8: ENVIRONMENTAL ASSESSMENT.....	46

1. NON-TECHNICAL SUMMARY

- 1.1 Pre-Construct Archaeology were commissioned by Orion Heritage Ltd on behalf of Lightsource BP to undertake an archaeological evaluation on land at Hulam farm, Castle Eden, County Durham, centred at National Grid Reference NZ 43940 37179. This work was undertaken in association with a planning application DM/19/03959/FPA for the installation of solar panels, associated infrastructure and the creation of an electricity substation. The overall proposed development comprised c. 210 acres of three enclosed arable fields.
- 1.2 Prior to this phase of works, a desk-based assessment and geophysical survey was undertaken at the site (Orion Heritage 2019). The geophysical survey of most of the proposed development area revealed the presence of an enclosure along the southern boundary of the site (to the north of Hulam Farm). This comprised the northern half of an Iron Age/early Roman farmstead which was discovered during the evaluation of the land to the south, as part of a separate project (ASDU 2017a & b). The geophysical survey also detected a penannular feature of potential prehistoric date.
- 1.3 A 6th-century copper-alloy fragment, possibly part of a cruciform object such as a brooch, was recorded during the evaluation undertaken immediately to the south of the site, leading to the suggestion that settlement at the farmstead may have continued into the early Medieval period. (ASDU 2017b). However, no other finds from the Saxon/early Medieval period were recovered during the evaluation works and evidence of settlement activity of this period is some distance from the site. It was therefore considered that there was moderate potential for early Medieval period occupation within the area of the Iron Age/Romano-British farmstead.
- 1.4 There is known potential for Medieval archaeology to be present within the site; ridge and furrow cultivation potentially dating from the Medieval has been identified in the north, west and south west of the site. Earthworks representing a deserted Medieval settlement were present in the westernmost part of the study site, though these have been levelled, and geophysical survey in this area identified anomalies probably associated with settlement of this period..
- 1.5 There is also a known potential for Post-Medieval archaeology to be present; agricultural features of this date have been identified within the site boundary along with large areas of possible extraction or deposition related to the Castle Eden Colliery to the north.
- 1.6 While the significance of many archaeological features is largely unaffected by small impacts which would result from a solar farm, occupation sites have the potential to contain more sensitive remains, such as burials and domestic or industrial evidence, whose significance could be degraded. Furthermore, some impacts such as for cable trenches and access roads, can also impact buried remains.
- 1.7 Durham County Council Archaeology Section (DCCAS) request field evaluation on greenfield sites over 1 ha such as in this case. As the area has been highlighted as having

high archaeological potential, DCCAS advised that archaeological work in the form of a trial trench evaluation was to be undertaken. This was undertaken according to a Written Scheme of Investigation prepared by PCA (PCA 2020) and approved by DCCAS prior to the commencement of work. Thirteen trenches each measuring 50m x 1.8m were sited to investigate potential archaeological assets identified by geophysical survey located across the proposed development site. Trench 4 was sited to target a possible ring gully feature and Trenches 1, 2 and 3 were sited to target features of probable Medieval date that may relate to a deserted Medieval settlement. All other trenches targeted geophysical anomalies of uncertain origin.

- 1.8 Six phases of activity were encountered: Phase 1: superficial geology; Phase 2: Prehistoric and undated; Phase 3: Medieval and undated; Phase 4: Undated furrows; Phase 5: Colluvium and subsoil and Phase 6: Modern. Trenches 1-9 & 12 were sited to test anomalies identified during the geophysical survey.
- 1.9 Three ditches were encountered in Trench 4, two of which comprised the central and north-western parts of the penannular geophysical anomaly. A single large sherd of pottery of Late Iron Age to early Roman period date was recovered from the north-easternmost ditch. The feature may represent a drainage gully surrounding a roundhouse with the gap in the ditch corresponding to an east-facing entrance into the structure; no traces of structural remains were encountered within the internal area of the ring ditch. A short length of ditch with a rounded terminus was also recorded in Trench 4; this was not identified by the geophysical survey.
- 1.10 Trenches 1-3 were sited to test variously aligned linear geophysical anomalies that probably represent Medieval occupation. Two ditches recorded in Trenches 1 & 3 closely correspond to the geophysical anomalies. In Trench 2 a substantial feature was recorded within the central portion of the trench from which three sherds of Medieval pottery were recovered, including a jug handle dating to the 13th to mid-14th century. Although this feature was not identified by the geophysical survey, three modern field drains were recorded that would account for the linear geophysical anomalies that were targeted.
- 1.11 Trench 6 was sited to target a group of variously aligned unknown linear anomalies within the central part of the proposed development site. A single undated ditch was recorded that that closely corresponds to the targeted geophysical anomaly.
- 1.12 No features or deposits of archaeological significance were observed in the remaining trenches (Trenches 5 & 7-13).

2. INTRODUCTION

2.1 Project Background

- 2.1.1 This report details the results of an archaeological evaluation undertaken on land at Hulam Farm, Castle Eden, County Durham in February 2020 in association with planning application DM/19/03959/FPA for the installation of solar panels, associated infrastructure and the creation of an electricity substation. The overall proposed development covers c. 210 acres comprising three enclosed arable fields, centred at National Grid Reference NZ 43940 37179 (Figures 1 and 2). The archaeological investigation was commissioned by Orion Heritage Ltd on behalf of Lightsource BP and was undertaken by Pre-Construct Archaeology Limited (PCA).
- 2.1.2 The archaeological potential of the site was initially established by an archaeological desk-based assessment (Orion 2019) followed by a geophysical survey of the site undertaken in 2019 (Magnitude 2019). The geophysical survey identified anomalies that were suggestive of sub-surface archaeological features.
- 2.1.3 The scope of works for the archaeological evaluation was set out in the Written Scheme of Investigation (WSI) (PCA 2020) which was approved by Durham County Council Archaeology Section (DCCAS). The aim of the evaluation was to clarify the presence, nature, date, extent and significance of any archaeological remains that might be present in the areas of proposed impact and to test the geophysical anomalies which are most likely indicative of sub-surface archaeological remains. Thirteen trenches (Trenches 1 to 13) were mechanically excavated during this phase of archaeological work.
- 2.1.4 The Online Access to the Index of Archaeological Investigation (OASIS) reference number of the project is preconst1-389130.

2.2 Site Location and Description

- 2.2.1 The proposed development area is located north-east of the A19, to the north of Hulam, County Durham at NGR NZ 43940 37179 (Figure 1 and 2). The site is comprised of three arable fields totalling 210 acres and is currently accessed by the established farm access off Bellows Burn Lane to the south (Figure 1 and 2). It is located c. 0.3km south of Hesleden, close to the villages of Eden Vale to the west, Castle Eden to the north-west and Hutton Henry to the southwest.

2.3 Geology and Topography

- 2.3.1 The site has a slight rise in its western portion with a height above Ordnance Datum (AOD) of 95m at the western boundary, rising to 110m before falling to 86m in the east. The solid geology of the site comprises Dolostone sedimentary bedrock of the Ford Formation and Dolostone sedimentary bedrock of the Ford Formation (shelf-edge Reef). Superficial

deposits consisted of Till, Devensian and Diamicton and Devensian Glaciofluvial deposits of sand and gravel (British Geological Survey website).

2.4 Planning Background

- 2.4.1 The requirement to undertake the archaeological investigation is in line with planning policy at a national level, as set out in the *National Planning Policy Framework* (NPPF) (Department for Communities and Local Government 2019). Heritage assets - those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest - are a key concept of the NPPF.
- 2.4.2 Chapter 16 of the NPPF 'Conserving and enhancing the historic environment' describes, in paragraph 185, how LPAs should *'...set out in their Local Plan a positive strategy for the conservation and enjoyment of the historic environment'* and details, in paragraph 189, that *'In determining applications, LPAs should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum, the relevant [Historic Environment Record] HER should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, LPAs should require developers to submit an appropriate desk-based assessment and where necessary [the results of] a field evaluation'*.
- 2.4.3 DCCAS has responsibility for archaeological development control in relation to the historic environment. A phased programme of archaeological work is required in association with planning application DM/19/03959/FPA for the installation of solar panels, associated infrastructure and the creation of an electricity substation on land at Hulam Farm. The geophysical survey (MS 2019; Orion Heritage 2019) has identified some anomalies which appear archaeological in origin and some which were uncertain. DCCAS archaeology officer commented that *"the results should be tested through trial trenching...the trenching should be agreed through written scheme of investigation and the results submitted in support of the application so that mitigation can be secured through condition"*.
- 2.4.4 No Specification for the archaeological work was produced by the Local Planning Authority, a Written Scheme of Investigation (WSI), was approved by DCCAS prior to works commencing.

2.5 Archaeological and Historical Background

2.5.1 Information in this section is largely extracted from the desk-based assessment undertaken by Orion Heritage Limited (2019). The research and writing of those responsible is acknowledged. Sites within the Durham Historic Environment Record are followed by the HER number.

Prehistoric

2.5.2 A number of prehistoric artefacts have been identified within the proposed development. A cluster of prehistoric flints, given findspot location of c. 750m and c. 920m to the east of the study site (HER H9708) have been reported by local residents. Approximately 1.38km to the west of the study site a Neolithic stone axe was recovered in 1994 (HER E3935). Just outside the western study site boundary another ground stone Neolithic axe (HER E305) was found in the ploughsoil along a public footpath during fieldwalking in 2003 (HER E65504).

2.5.3 The geophysical survey of the study site found remains associated with the Iron Age/Romano-British farmstead recorded on the southern boundary of the site (MS 2019, geophysics feature 2c). The geophysical survey also detected a penannular ditch, which may also date to the prehistoric period (*ibid.*; feature 2b). The study site therefore has known potential for encountering features of this period.

Roman

2.5.4 A suspected Roman Fortlet lies c. 1.23km to the south of the study site, identified from reported embankments and stones noted in October 2000 (HER H62040). Shadow marks potentially representing a Roman Road from Hart to Sheraton were also visible as cropmarks nearby, c. 430m to the south-east of the fort (HER H62044).

2.5.5 Iron Age/Romano-British settlement features have been identified directly to the south of the study site. The site consists of two sections of a large enclosure ditch (HER H63482). The excavator noted that further investigation was required to confirm the date and function of the internal features within the enclosure.

2.5.6 Geophysical survey of the study site, conducted as part of the desk-based assessment (Orion Heritage 2019) has revealed the presence of a previously unrecorded ring-ditch (feature 2b; to be targeted by Trench 4), a double-ditch sub-rectangular enclosure (feature 2c; ASDU 2017 a & b) possibly related to the Iron Age/Roman farmstead directly to the south. There is therefore a known potential for encountering features of this period.

Early Medieval

2.5.7 An early Medieval inhumation has been recorded c. 1.2km to the north-west of the site in Castle Eden (HER H162). The burial was found in 1775 associated with a fine Anglian vessel known as the *Claw Beake'r of yellow-green transparent glass ornamented with*

twelve claws, dating from between the 5th and 6th centuries. This is now in the British Museum. Occupation continued into the Medieval period in the area (HER H165).

- 2.5.8 The archaeological trenching works undertaken immediately to the south of the site recovered a copper alloy fragment which dates to the 6th century and may represent part of a cruciform object such as a brooch (ASDU 2017b). The report suggests that settlement at the farmstead here may have continued into the early Medieval period. However, no other finds from the early Medieval period were recovered during the evaluation works and other known evidence of settlement activity seems to have been at some distance from the study site during this period. As such there is a moderate potential for some limited evidence of continued occupation to be present within the area of the Iron Age/ Romano-British farmstead detected in the southern part of the study site (geophysical feature 2c).

Medieval

- 2.5.9 A scheduled deserted Medieval village is present c. 1.2km to the north-west of the study site (1015842) and comprises the remains of the village (HER H165). The settlement is referenced in the '*Historio de Sancto Cuthberto*', a document of the early 10th century when it is named as '*Iodene Australum*'. Following the Norman conquest, a planned settlement seems to have been laid out to the north-east consisting of a surfaced track running from the church with the remains of a row of Medieval timber houses along its eastern side. Pottery found here dated to the 14th and 15th centuries, indicates that the houses were still occupied at this time. Similar buildings are thought to line the western side of the road. A substantial moat and the levelled remains of a large timber building were identified in the northern end of the site, probably the remains of the original castle that had been removed by the 15th or early 16th century.
- 2.5.10 There are a number of other deserted Medieval settlements in the vicinity, c. 660m to the south-west of the site at Nesbit(t) (HER H42101); c. 840m to the east of the site at Monk Hesleden and c. 1.4km to the north-east of the study site (HER H151) at High Hesleden (H151) where the small dispersed settlements of today represent the remains of a larger Medieval village recorded as *Munkhesilden* in the 1320's. The name is originally Saxon for 'hazel valley', hinting at its earlier establishment in the Saxon period (HER H6820). The church, c. 820m to the west of the study site, dates from the 10th-11th centuries but was much altered in the 19th century and demolished in 1966 (HER H8079). Placename evidence dates the occupation at Hutton Henry, c. 1km to the south-west of the study site, to at least 1380 when Henry de Essh held the manor here (HER H4559). Hulam deserted Medieval village lies at approximately the same distance (1km) to the south-east of the site (HER H65) but no traces remain today and sources indicate its abandonment in the 16th century. The original church of Castle Eden c. 1.1km to the north of the study site was erected in c. 1150 and stood until 1764 when it was extensively rebuilt (HER H164).

- 2.5.11 Many of the farmsteads in the study area also appear to have their origins in the Medieval period. These include Hulam Farm (HER H16347), c. 280m to the south of the site, and Battersely a little further west, c. 150m to the south.
- 2.5.12 Evidence for Medieval ridge and furrow cultivation is documented throughout the wider study area (HER H3592 and H15; ALSF1272 and ALSF1071). Similar features have been noted through landscape assessment directly to the south of the study site in the area of earlier Iron Age Roman occupation (ALSF1281). Agricultural features are also recorded within the study site (ALSF1368, ALSF1372 and ALSF1362).
- 2.5.13 Earthworks, representative of Medieval occupation, are recorded in the western portion of the study site (HER H168), although the HER records that these were bulldozed and ploughed in 1971, and currently no earthworks survive. A field investigation of the area was conducted in 1972 as a result of previous damage to the site in 1971. Members of the Geography and Archaeology department at the University of Durham recorded turf covered banks, less substantial than a deserted village site, spread c.3m wide to 0.6m high, with stones and traces of walling visible in parts. Local tradition places this as the site of old Hulam farm possibly the *Holom* mentioned in c. 1050. The Council for British Archaeology published a report on the survey which notes the majority of late 13th to mid-14th century pottery found in the area. An absence of recovered finds dating from the early 16th century and during the 17th century suggests a lack of occupation at this date, with reoccupation in the 18th century in one area of the earlier green (Austin 1972). The geophysical survey of the study site conducted as part of the desk-based assessment (Orion Heritage 2019) found a number of features which may represent the remains of this settlement. The remains are targeted by Trenches 1, 2 and 3.
- 2.5.14 There is a known potential for Medieval archaeology to be present within the study site. Evidence for ridge and furrow cultivation potentially dating from the Medieval period is present in the north, west and south-west of the study site. The remains of a deserted Medieval settlement seem to have also been detected by the geophysical survey of the study site, suggesting some below ground survival despite the bulldozing and ploughing which occurred in 1971.

Post-Medieval/Modern

- 2.5.15 Evidence for Post-Medieval ridge and furrow cultivation is apparent in the north (1370/1369), centre (1072/1365), west (1366/1343/1270), southwest (1286/1206/ 1270) and south of the study site (1283/1284).
- 2.5.16 There are a number of country houses in the area which were established in the Post-Medieval or Modern period. Hutton House lies c.500m to the south-west of the study site (HER H35363) and dates from c.1844 when it was built for the reverend Thomas Slater. Nesbitt Hall, c.670m to the south east of the study site (HER H36140) is a large farmhouse

- with a date of 1697 above the front doorway but with many later additions. A 19th century barn (H36131) a detached building (H35437) and gate piers (H35381) surround the Hall.
- 2.5.17 Industry during this period and earlier is represented by gravel extraction pits c. 210m and c. 520m to the south of the study site (HER H16696/H16697). The gravel pit (HER H16369) c. 1km to the south-west of the study site is probably Georgian as it is marked as *old* on Ordnance Survey maps. A Bleach Works was operating in the early 19th century and can be seen on Ordnance Survey first edition maps. The building still appears to be extant c. 140m to the north-west of the study site (HER H16281). Approximately 430m to the south-west of the site, a steam driven corn mill was also referenced on the early OS maps (HER H16367) and given another location in the HER c. 1km to the south-west of the study site. The site of a steam mill and later the engine house for a Foundry is located c.590m to the north-west of the study site (HER H3602). To the east of the study site c. 760m was a quarry.
- 2.5.18 Geophysical survey of the study site, conducted as part of the desk-based assessment has revealed the presence of large areas of possible extraction or deposition related to Castle Eden Colliery, as well as a pond recorded on the 2nd edition Ordnance Survey (now infilled with high contrast material).
- 2.5.19 The earliest map of the area, the 1579 Christopher Saxton Map of Durham references the surrounding settlements of 'Castle Eden, Munkheselton, Nesbed and Halam'. The Sheraton and Hulam tithe map of 1839 clearly depicts the fields making up the study site, with buildings named Langish Hall in the place of Hulam, on the east side of the road leading from Bellows Burn Lane but no buildings present on the west side of the road in this area. A building named Battersly can be seen c. 130m to the south-east of the study site as well as a few buildings c. 100m to the north-west of the study site in the area of the present 'Bleachery' buildings. No other buildings are evident within the study site.
- 2.5.20 The OS map of 1861 similarly shows the site occupying a rural location with no building evident within the study site. The railway line is depicted to the north, just south of Castle Eden Colliery. Buildings described as 'The Bleachery' are situated directly to the north-west of the study site boundary. The settlement at Hulam can be seen, c. 360m to the south of the study site boundary. The settlement at Hulam can be seen, c. 360m to the south of the study site, on the eastern side of the road leading from Bellows Burn Lane. The present farm buildings which today occupy the west side of this road are not present. The building named Battersely is still in place c. 130m to the south of the study site.
- 2.5.21 By 1898 the buildings of Castle Eden Colliery to the north of the site have shifted to a new site to the east of the previous workers cottages, where new terraces have been laid out to the west of East Street. The original Colliery site is now disused and a further reservoir is present in the area.
- 2.5.22 The OS map of 1923 indicated that the majority of the original buildings associated with the colliery have been removed except the school and a fire station. The settlement is now

known as Hesleden. There has also been some development at Dene Viex in the area of Present Eden Vale. Both areas are witness to some limited further development by 1940-1950 but the study site remains unaffected.

- 2.5.23 There are no significant changes to the study area until the OS map of 1979. A building has been built in the area of present Hulam Farm, to the west of the settlement at Hulam and the building at Battersley has been demolished. The A19 has also been constructed c. 250m to the south-west of the site.
- 2.5.24 No significant changes are evident on the map of 1982 although the present building at Hulam Farm is in place. By 2000 a new farm building has been built at Hulam directly to the north-east of the original one. The farm building expanded by 2019 but there are no changes to the study site.
- 2.5.25 There is known potential for Post-Medieval archaeology to be present within the study site. Agricultural features of this date have been identified within the site boundary along with large areas of possible extraction or deposition related to the Castle Eden Colliery to the north. However, these are representative of land management practices or industrial activity in the period and are considered to be of no more than local significance.

3. PROJECT AIMS AND RESEARCH OBJECTIVES

3.1 Project Aims

3.1.1 The primary aim of the programme of works was to determine the absence/presence of archaeological remains and to test anomalies identified by geophysical survey. The archaeological work was to identify, investigate and record any archaeological remains observed during the evaluation. The results will be used to inform decisions regarding further archaeological mitigation measures that may be required at the site prior to determination and commencement of development.

3.1.2 The objective of trial trench evaluation as defined by the Chartered Institute for Archaeologists (CIfA) is to 'determine, as far as is reasonably possible, the nature of the archaeological resource within a specified area using appropriate methods and practices' (CIfA 2014a).

3.2 Research Objectives

3.2.1 Archaeological work provides potential opportunities to address key research objectives as set out in *shared Visions: The North East Regional Research Framework for the Historic Environment (NERRF) (Petts & Gerrard 2006)*. The NERRF highlights the importance of research as a vital element of development-led archaeological work. It sets out key research priorities for all periods of the past so that all elements of commercial archaeological work can be related to wider regional and national priorities for the study of archaeology and the historic environment.

3.2.2 The site is considered to have potential to provide a contribution to several 'Key Research Themes' in the NERRF 'Research Agenda and Strategy' for the Iron Age (I), Roman (R) and Medieval (MD) periods. The following list contains the research priorities for each period:

- li. Chronology;
- lii. Settlement;
- liii. Landscapes;
- Iv. Material culture: general;
- Ivi. Material culture: ceramics;
- Ri. The Iron Age to Roman transition;
- Riv. Native and civilian life;
- Rv. Material culture;
- Rix. Landscape and environment;
- Rx. Roman-early medieval transition;
- MDi. Settlement;
- MDii. Landscape;
- MDvii. Medieval ceramics and other artefacts;

- MDxi. The medieval to post-medieval transition.

3.2.3 An appropriate level of reporting on the work was required, including, if necessary, full analysis and publication of any notable archaeological findings upon completion of the evaluation. Thus, the results of the work constitute the preservation by record of any archaeological remains encountered and subsequently removed during the course of works. The full scheme of archaeological work is described in the following section.

4. ARCHAEOLOGICAL METHODOLOGY

4.1 Fieldwork

- 4.1.1 The fieldwork was undertaken in compliance with the codes and practice of the Chartered Institute for Archaeologists and the relevant ClfA standard and guidance document (ClfA 2014 a & b). PCA is a CIFA 'Registered Organisation'. All fieldwork and post-excavation was carried out in accordance with the Yorkshire, the Humber & The North East: Regional Statement of Good Practice (SYAS 2011). The works also complied with the *Standards for all Archaeological Work in County Durham and Darlington* document issued by Durham County Council Archaeology Section (DCCAS 2019).
- 4.1.2 The project was managed in line with principles set out in Historic England's *'Management of Research Projects in the Historic Environment'* (MoRPHE) published in 2006.
- 4.1.3 All archaeological staff involved in the project were suitably qualified and experienced for their project roles. The project was overseen for PCA by Jennifer Proctor, Regional Project Manager at PCA's Durham Office. All relevant Health and Safety legislation, regulations and codes of practice were respected. PCA's Health and Safety (H&S) Policy is the starting point for managing H&S at all locations where PCA carries out its operations.
- 4.1.4 The scope of the work for the archaeological evaluation was set out in a detailed WSI (PCA 2020). The archaeological evaluation comprised the mechanical excavation of 13 trial trenches (Trench 1-13), measuring c. 50m in length and c. 1.8m wide (Figure 2 & 3).
- 4.1.5 The trial trenches were positioned to avoid any obvious obstructions and to provide good coverage of the site. The trenches were sited to target anomalies identified by the geophysical survey and were also located in apparent blank areas to maximise the potential of the site.
- 4.1.6 The archaeological evaluation was carried out between the 24th to the 28th March 2020. Trenches were set-out using a Leica Viva Smart Rover Global Navigation Satellite System (GNSS), with pre-programmed co-ordinate data determined by an office-based CAD operative.
- 4.1.7 Ground level in the trenches was reduced using a tracked 20-tonne mechanical excavator utilising a toothless ditching bucket. Successive spits of no more than 100mm depth were removed until either the top of the first archaeological horizon or the top of superficial geological deposits was reached. All ground reduction was carried out under archaeological supervision.
- 4.1.8 The investigation of archaeological levels was by hand, with cleaning, examination and recording both in plan and in section, where appropriate. Investigations within the trenches followed the normal principles of stratigraphic excavation and were conducted in accordance with the methodology set out in the field manual of PCA (PCA 2009) and the Museum of London Site Manual (Museum of London 1994).

4.1.9 Deposits and cut features were individually recorded on the *pro-forma* 'Trench Recording Sheet' and 'Context Recording Sheet'. All site records were marked with the unique-number HFC20 (site code).

4.1.10 The height of all principal strata and features was calculated in metres above Ordnance Datum (m AOD). A detailed photographic record of the evaluation was prepared using SLR digital photography. All detailed photographs included a legible graduated metric scale. The photographic record illustrated both in detail and general context archaeological exposures and specific features in all trenches.

4.2 Post-excavation

4.2.1 The stratigraphic data for the project comprises written and photographic records. A total of 58 archaeological contexts were defined within the 13 trenches (Appendix 2). Post-excavation work involved checking and collating site records, grouping contexts and phasing the stratigraphic data. A written summary of the archaeological sequence was then compiled, as described in Section 5.

4.2.2 During the evaluation, a small assemblage of artefactual material was retained from archaeological deposits including pottery, bone and modern glass.

4.2.3 The complete Site Archive, in this case comprising only the written, drawn and photographic records (including all material generated electronically during post-excavation) will be packaged for long term curation. In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document (Brown 2007) will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document (Walker, UKIC 1990) and the most recent ClfA publication relating to archiving (ClfA 2014c).

4.2.4 At the time of writing the Site Archive was housed at the Durham Office of PCA, The Rope Works, Broadwood View, Chester-le-Street, County Durham, DH3 3AF. When complete, the site Archive will be deposited at an appropriate repository, under the site code HFC20.

5. RESULTS: THE ARCHAEOLOGICAL SEQUENCE

During the archaeological investigation, separate stratigraphic entities were assigned unique and individual context numbers, which are indicated in the following text as, for example [123]. The context numbers have been assigned per trench therefore contexts from Trench 1 are in the 100s and contexts from Trench 2 in the 200s etc. The archaeological sequence is described by placing stratigraphic sequences within broad phases, assigned on a site-wide basis in this case. An attempt has been made to add interpretation to the data and correlate these phases with recognised historical and geological periods. The figures can be found in Appendix 1 with the context index and stratigraphic matrix located in Appendix 2 and 3 respectively. A selection of plates can be found within Appendix 4.

5.1 Phase 1: Superficial Geology

5.1.1 Phase 1 represents superficial geological deposits that were observed within all 13 trenches. The geological material was variously coloured and comprised various compositions of gravel, sand and clay. This material represents the Devensian-Diamicton till that was deposited across the region up to two million years ago in the Quaternary Period when the local environment was dominated by ice age conditions (British Geological Survey website).

5.1.2 The table below summarises the depth below ground level and metres above Ordnance Datum (AOD) height of geological deposits within the trenches. The highest level at which natural sub-stratum was encountered was 107.45m AOD in Trench 5 and the lowest level was 91.88m AOD in Trench 10.

No.	Context	Depth (below ground level)	m AOD	
			Highest	Lowest
Trench 1	[102]	0.70m	99.72 (WSW)	97.92 (ENE)
Trench 2	[202]	0.80m	93.06 (SW)	95.66 (NE)
Trench 3	[302]	0.30m (SW) to 0.44m (NE)	96.68 (NE)	94.59 (SW)
Trench 4	[402]	0.53m	100.36 (NW)	99.27 (SE)
Trench 5	[502]	0.35m	107.45 (NW)	106.16 (SE)
Trench 6	[602]	0.60m	105.96 (WSW)	104.88 (ENE)
Trench 7	[701]	0.34m	100.15 (SE)	99.07 (NW)
Trench 8	[801]	0.31m	100.91 (W)	98.71 (E)
Trench 9	[901]	0.50m	101.79 (N)	99.43 (S)
Trench 10	[1001]	0.37m	95.87 (NNW)	91.88 (SSE)
Trench 11	[1102]	0.60m	92.93 (NE)	92.21 (SW)
Trench 12	[1201]	0.27m	92.94 (WSW)	92.23 (ENE)
Trench 13	[1301]	0.32m	90.61 (NW)	89.70 (SE)

Summary of superficial geology depths and levels

5.2 Phase 2: Prehistoric and Undated

- 5.5.1 Phase 2 represents prehistoric activity recorded in Trench 4. Trench 4 was sited to target a penannular anomaly c. 16.50m in diameter with a gap in the east (Anomaly 2b) identified by geophysical survey (Figures 2 & 3).
- 5.5.2 Two NE-SW aligned ditches, [406] & [411], were recorded truncating the superficial geology (402) at the north-western end and central part of the trench, respectively (Figure 7: Plan). These ditches closely correspond with the penannular anomaly identified by geophysical survey (Figure 2 & 3).
- 5.5.3 The north-western most ditch [406] was exposed for a distance of 1.80m and was up to 1.16m wide by 0.32m deep (Figure 7: Section 2; Plate 1). The primary fill comprised c. 90mm thick mid reddish brown silty clay (407) from which no finds were recovered. This was overlain by c. 0.31m thick dark brown clayey silt (405) from which a single sherd of prehistoric pottery was recovered (Appendix 5). The body sherd compares best to handmade Fabric 126 in the Iron Age tradition of the Stanwick fabric series (Willis 2016). This type of pottery occurred in Stanwick in phases dated to between 80/70BC and 65/75 AD. Dolerite inclusions are noted to have been a commonly used temper by Iron Age potters in the north east.
- 5.5.4 Ditch [411] was located c. 16.50m south-east of ditch [406] and was up to 1.19m wide by 0.40m deep (Figure 7: Section 3; Plate 2). No finds were recovered from its single dark greyish brown sandy clay fill (410). A soil sample taken from the ditch produced a small amount of charcoal which was in a poor state of preservation; the majority of the fragments were indeterminate but the fragments that were identifiable were oak (*Quercus* sp.) (Appendix 8). The sample also produced 42 charred grains, most were unidentifiable but a few were identified as barley (*Hordeum* sp.).
- 5.5.5 At the central part of Trench 4 a NW-SE aligned ditch [404] was exposed for a distance of 2.90m truncating the superficial geology (402) (Figure 7: Plan; Plate 3). The ditch was up to 0.57m wide by 0.23m deep (Figure 7: Section 1), had a rounded terminus to the north-west, and continued to the south-east beyond the trenches south-western limit of excavation. Its single fill comprised dark greyish brown clayey sand (403) from which no finds were recovered. A soil sample taken from the ditch produced a small amount of charcoal which was in a poor state of preservation; the majority of the fragments were indeterminate but the fragments that were identifiable were oak (*Quercus* sp.). The sample also produced two charred grains that were not identifiable. This ditch was not identified by the geophysical survey.

5.3 Phase 3: Medieval and Undated

- 5.3.1 Phase 3 represents Medieval settlement activity within the western part of the site (Trenches 1-3) and a presumed to be Medieval ditch recorded in Trench 6. Geophysical survey identified several variously aligned linear anomalies within the western part of the site that

were suggestive of sub-surface archaeological features and Trenches 1-3 were sited to target these linear anomalies (Figures 2 & 3).

5.3.2 Trench 1 was sited to test several NE-SW and NW-SE aligned linear anomalies. To this end a ditch [104] was recorded in the central part of Trench 1 that probably represents the southern corner of a field boundary (Figure 4: Plan; Plate 4). The NW-SE aligned part of the ditch was exposed for a distance of 3.00m, turning at a right angle to the southeast to a NE-SW alignment where it was exposed for a distance of 3.44m (total length 6.44m). The ditch itself was up to 0.87m wide by 0.22m deep (Figure 4: Section 5) and contained a single mid grey clayey silt fill (103) from which no finds were recovered. A soil sample taken from this fill produced two unidentifiable charred grains. This ditch probably represents an element of a much wider system of field enclosures.

5.3.3 Trench 2 was sited to target three NW-SE aligned linear anomalies. Although no archaeological features were recorded in Trench 2 that correspond with the geophysical anomalies, several modern drainage features were observed that may account for these.

5.3.4 A substantial feature [204] was recorded extending across the central portion of Trench 2 and had dimensions of up to 24.20m NE-SW and was at least 1.10m deep (Figure 5: Plan & Section 7; Plate 5). A sample excavation undertaken within the north-eastern part of this feature recorded eight fills, (203), (205), (206), (207), (208), (209), (210) & (211), from which three sherds of Medieval pottery was recovered from fill (203) (Appendix 6). The three sherds are all oxidised orange, or orange to buff sandy wares, two of which are from jugs (one glazed and the other white-slipped and glazed). The twisted rod handle probably dates to the 13th to mid-14th century. A broader date is possible for the other two sherds although there is no reason to suggest they are not contemporary. A soil sample taken from fill (203) did not produce any charred grains or charcoal, the residue contained a very small quantity of coal and ceramic building material.

5.3.5 A single fragment of Post-Medieval glass was also recovered from the upper fill of feature [204] that is likely to be intrusive. The function of this feature was unable to be determined due to its substantial size and depth, therefore, it has tentatively been interpreted as a possible refuse feature of probable Medieval date.

5.3.6 The table below summarises the fills of feature [204]:

Context	Type	Description	Interpretation
(203)	Fill	Loose black sandy silt. >10.00m NE-SW x >2.00m NW-SE x up to 0.26m thick.	Fill of feature [204]
(205)	Fill	Friable dark brown silty clay. >2.64m NE-SW x >2.00 NW-SE x up to 0.30m thick.	Fill of feature [204]
(206)	Fill	Friable mid grey silty clay. >2.20m NE-SW x >0.60m NW-SE x up to 0.35m thick.	Fill of feature [204]
(207)	Fill	Friable mid grey sandy clay. >3.45m NE-SW x >0.60m NW-SE x up to 0.35m thick.	Fill of feature [204]
(208)	Fill	Firm mid grey clay. >1.45m NE-SW x 0.60m NW-SE x up to 0.50m thick.	Fill of feature [204]

(209)	Fill	Firm mid brownish red clay. >2.40m NE-SW x 0.60m NW-SE x up to 0.30m thick.	Fill of feature [204]
(210)	Fill	Friable mid grey sandy clay. >2.40m NE-SW x >0.60m NW-SE x up to 0.35m thick.	Fill of feature [204]
(211)	Fill	Compact dark grey clayey silt. >0.17m NE-SW x >0.60m NW-SE x >80mm thick.	Fill of feature [204]

5.3.7 Trench 3 was sited to target further NW-SE aligned linear anomalies (Figures 2 & 3). To this end a single NW-SE aligned ditch [304] was recorded truncating the superficial geological material (302) at the north-eastern part of the trench that may account for the north-easternmost anomaly (Plate 6). The ditch was up to 2.48m wide by 0.21m deep and contained a single firm mid brownish grey clayey silt (303) from which single cattle sized tooth was recovered (Appendix 7). A soil sample taken from fill (303) did not produce any charred grains or charcoal, the residue contained a very small quantity of coal. As with Trench 1, this ditch probably represents an element of a wider system of field enclosures that extends across the western part of the site.

5.3.8 Trench 6 was sited to test an undetermined linear anomaly (Figure 2 & 3). To this end an NNW-SSE aligned ditch [605] was recorded at the ENE part of Trench 6 that closely corresponds with this linear anomaly (Plate 7). The ditch was exposed for a maximum distance of 1.80m and had dimensions of 1.46m wide by 0.60m deep (Figure 8: Plan & Section 6). Its earliest fill comprised c. 0.15m thick mid grey silty clay (604) that in turn was overlain by c. 0.45m thick mid brownish grey clayey silt (603). No finds were recovered from any of its fills.

5.4 Phase 4: Undated Furrows

5.4.1 Various aligned undated furrows were recorded in Trench 4: [409], Trench 5: [503], Trench 12: [1203] and Trench 13: [1303]. The furrows varied in size with the largest measuring c. 5.20m wide in Trench 5 and the smallest measuring 1.50m wide in Trench 4. The table below summarises the furrows dimensions and fills:

Context	Type	Description	Interpretation
[409]	Cut	2 No. Furrows. Aligned north-south. Dimensions: up to 1.50m wide x up to 0.15m deep.	Furrow filled by (409)
(409)	Fill	Firm dark greyish brown silty clay. Dimensions: up to 1.50m wide x up to 0.15m thick.	Fill of furrow [409]
[503]	Cut	3 No. Furrows. Aligned NNE-SSW. Dimensions: up to 5.20m wide x up to 0.15m deep.	Furrow filled by (502)
(502)	Fill	Friable mid grey clayey silt. Dimensions: up to 5.20m wide x up to 0.15m thick.	Fill of furrow [503]
[1203]	Cut	1 No. Furrow. Aligned NE-SW. Dimensions: 2.97m wide x 0.12m deep.	Fill of furrow [1202]
(1202)	Fill	Friable mid brownish grey sandy silt. Dimensions: 2.97m wide x 0.12m thick.	Fill of feature [204]
[1303]	Cut	6 No. furrows. Aligned NE-SW. Dimensions:	Fill of furrow

		up to 2.60m wide x 0.15m deep.	[1302]
(1302)	Fill	Friable mid grey clayey silt. Dimensions: up to 2.60m wide x 0.15m deep.	Fill of furrows [1303]

5.5 Phase 5: Colluvium and Subsoil

5.5.6 A deposit of mid reddish brown clayey silt colluvium (1101) was recorded extending across Trench 11. The colluvium was at least 0.42m thick within the central part of the trench becoming thinner at the NW and SE ends of the trench. No datable material was recovered from this deposit therefore the date that this deposit was formed is uncertain.

5.5.7 Subsoil was recorded in six trenches (Trenches 1 - 4, 6 & 7) and directly overlay Phase 2 prehistoric features in Trench 4 and Phase 3 Medieval features in Trenches 1, 2, 3 & 6. The subsoil comprised friable mid brown clayey silt ((101) Trench 1; (201) Trench 2; (301) Trench 3; (401) Trench 4; (601) Trench 6; (901) Trench 9) and had maximum and minimum thicknesses of 0.52m in Trench 1 and 0.13m in Trench 4, respectively.

5.6 Phase 6: Modern

5.3.1 Phase 3 represents modern ploughsoil that was encountered within all trenches. The ploughsoil comprised dark brownish grey clayey silt. The table below summarises the thickness and metres above Ordnance Datum height for topsoil within all areas:

No.	Context	Thickness	m AOD	
			Highest	Lowest
Trench 1	[100]	0.38m	100.45	98.51
Trench 2	[200]	0.26m	96.46	93.31
Trench 3	[300]	0.41m	97.23	94.86
Trench 4	[400]	0.40m	100.73	99.76
Trench 5	[500]	0.35m	107.95	106.47
Trench 6	[600]	0.35m	106.60	105.53
Trench 7	[700]	0.34m	100.46	99.36
Trench 8	[800]	0.31m	101.30	98.78
Trench 9	[900]	0.32m	102.27	99.70
Trench 10	[1000]	0.37m	96.38	91.98
Trench 11	[1100]	0.40m	92.98	92.74
Trench 12	[1200]	0.27m	93.31	92.28
Trench 13	[1300]	0.32m	90.93	89.99

Summary of topsoil thickness and levels

6. CONCLUSIONS

6.1 Conclusions

6.1.1 The archaeological investigations undertaken on land at Hulam Farm, Castle Eden, County Durham, comprised the excavation of 13 trenches. Geological deposits, Prehistoric and Medieval features and deposits, colluvium and modern ploughsoil were encountered. This activity was assigned to six phases of activity:

- Phase 1: Superficial geological deposits comprising glaciofluvial deposits of gravel, clay and sand were encountered within all trenches;
- Phase 2: Prehistoric and undated ditches were encountered in Trench 4;
- Phase 3: Medieval and undated ditches were encountered in Trenches 1, 3 and 6 and a substantial feature was encountered in Trench 2;
- Phase 4: Undated furrows were encountered in Trenches 4, 5, 12 & 13;
- Phase 5: An undated Colluvium deposit was encountered in Trench 11 and subsoil was encountered in Trenches 1, 2, 3, 6 and 9;
- Phase 6: Modern ploughsoil was encountered in all 13 trenches.

6.1.2 The earliest features encountered comprised three ditches in Trench 4. Although only a single sherd of pottery of probable Late Iron Age to early Roman period date was recovered from one of the ditches, based on the similar composition of their fills, these three ditches are all likely to be of a contemporary date. Soil samples taken from some of the Phase 2 features produced small quantities of charred grains and charcoal, barley and oak were the only identifiable species. Trench 4 was sited to target a penannular anomaly c. 16.50m in diameter (Anomaly 2b). Two ditches located at the north-western and central parts of the trench closely correspond with this anomaly. The form of the penannular feature is typical of a drainage gully surrounding a roundhouse structure. The gap in the east side presumably corresponds to an east-facing entrance into the structure as is typical for roundhouses. There was no surviving evidence for any structural remains inside the gully, but it is possible that all traces could have been plough-truncated. Roundhouses built with wall construction trenches only surviving as shallow features are known across the region and in general the drainage gullies are deeper than the wall trenches (Proctor 2009; Hodgson *et al.* 2012). The size of the ring gully indicates that the structure would have been of considerable size, structures of this size are known in the region such as the settlement at Hartburn in Northumberland which had several roundhouses up to 14m in diameter with one example measuring 16m (Jobey 1973). The south-westernmost ditch in Trench 4 assumed to be contemporary with the ring gully due to similarity in fills was not identified by the geophysical survey.

- 6.1.3 Trenches 1-3 were sited to target variously aligned geophysical anomalies (Anomalies 2a) that were interpreted as representing the potential remains of small-scale medieval settlement. Two undated ditches recorded in Trenches 1 and 3 were encountered that closely correspond to the geophysical anomalies and probably represent parts of a wider system of field enclosures. Although no features were recorded in Trench 2 that correspond with the three linear anomalies that extended across this area, a substantial feature measuring at least 24.20m NE-SW was recorded extending across the central portion of the trench. Due to the substantial size of this feature, definitive interpretation is uncertain and it is therefore tentatively interpreted as a large refuse pit from which three sherds of medieval pottery were recovered, one of which dates to the 13th to mid-14th century. Soil samples taken from Phase 3 features did not produce any charcoal or charred plant remains.
- 6.1.4 Trench 6 was sited to test a group of undetermined linear anomalies in the central part of the proposed development. To this end a single ditch was encountered that would account for the geophysical anomaly and probably represents part of a wider system of enclosures with the weaker undetermined linear anomalies within this area potentially representing further ditches. This ditch has provisionally been attributed to Phase 3 Medieval activity. However, no datable material was recovered from its fills and it could potentially represent earlier prehistoric activity.
- 6.1.5 Undated but probably Medieval furrows were recorded in Trenches 4, 5, 12 & 13, however these are of low archaeological significance.

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7.2 Online Sources

The **British Geological Survey** website: www.bgs.ac.uk. This was consulted for information regarding the geology of the study area.

8. ACKNOWLEDGEMENTS AND CREDITS

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PCA Credits

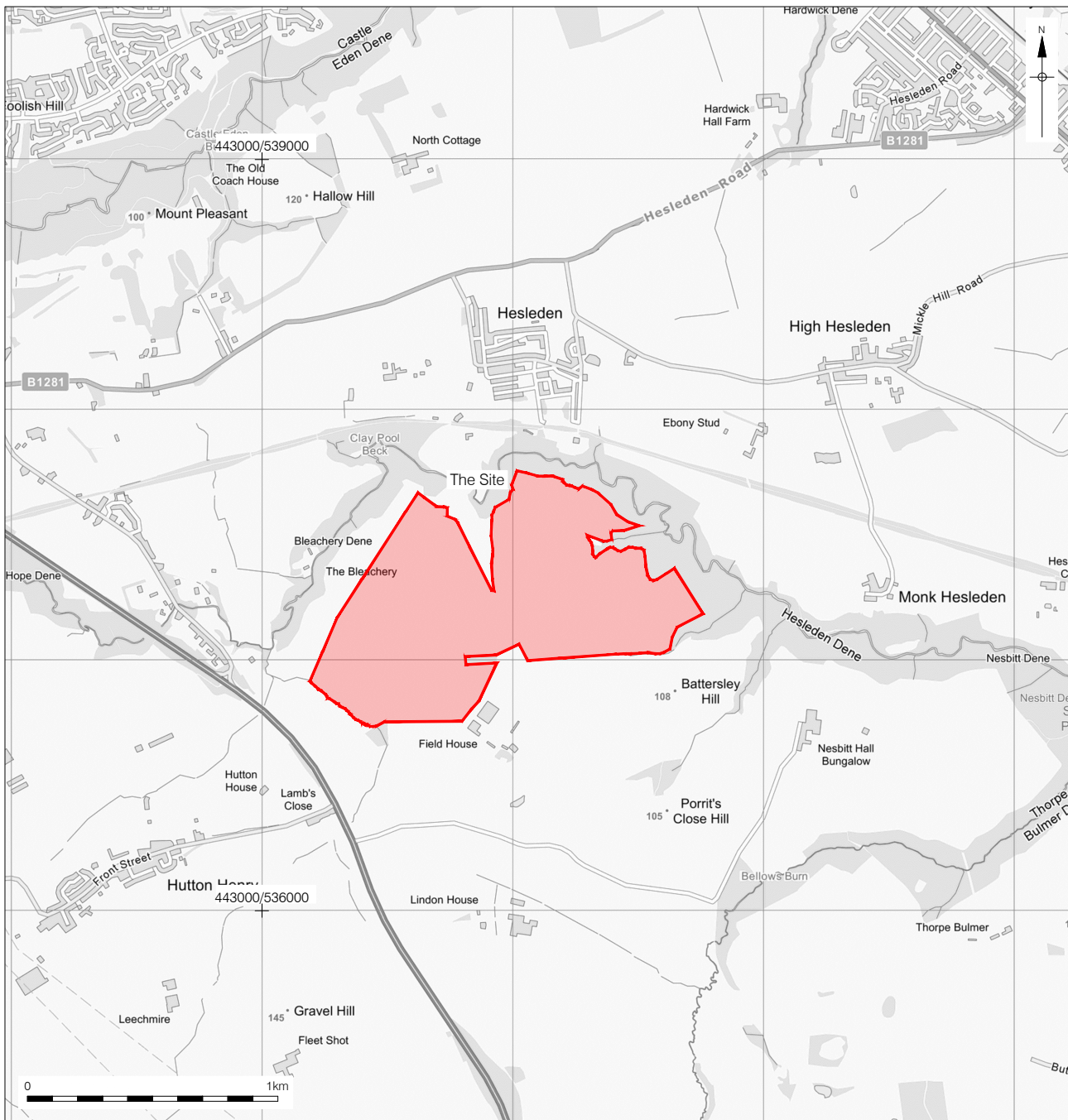
Fieldwork: Scott Vance (Supervisor), Andy Abson, James Hopper and Fred Garrett

Report: Aaron Goode

Project Manager: Jennifer Proctor and Aaron Goode

CAD: Diana Valk

APPENDIX 1: FIGURES



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 20/02/20 RM

Figure 1
 Site Location
 1:2,000,000; 1:250,000; 1:25,000 at A4

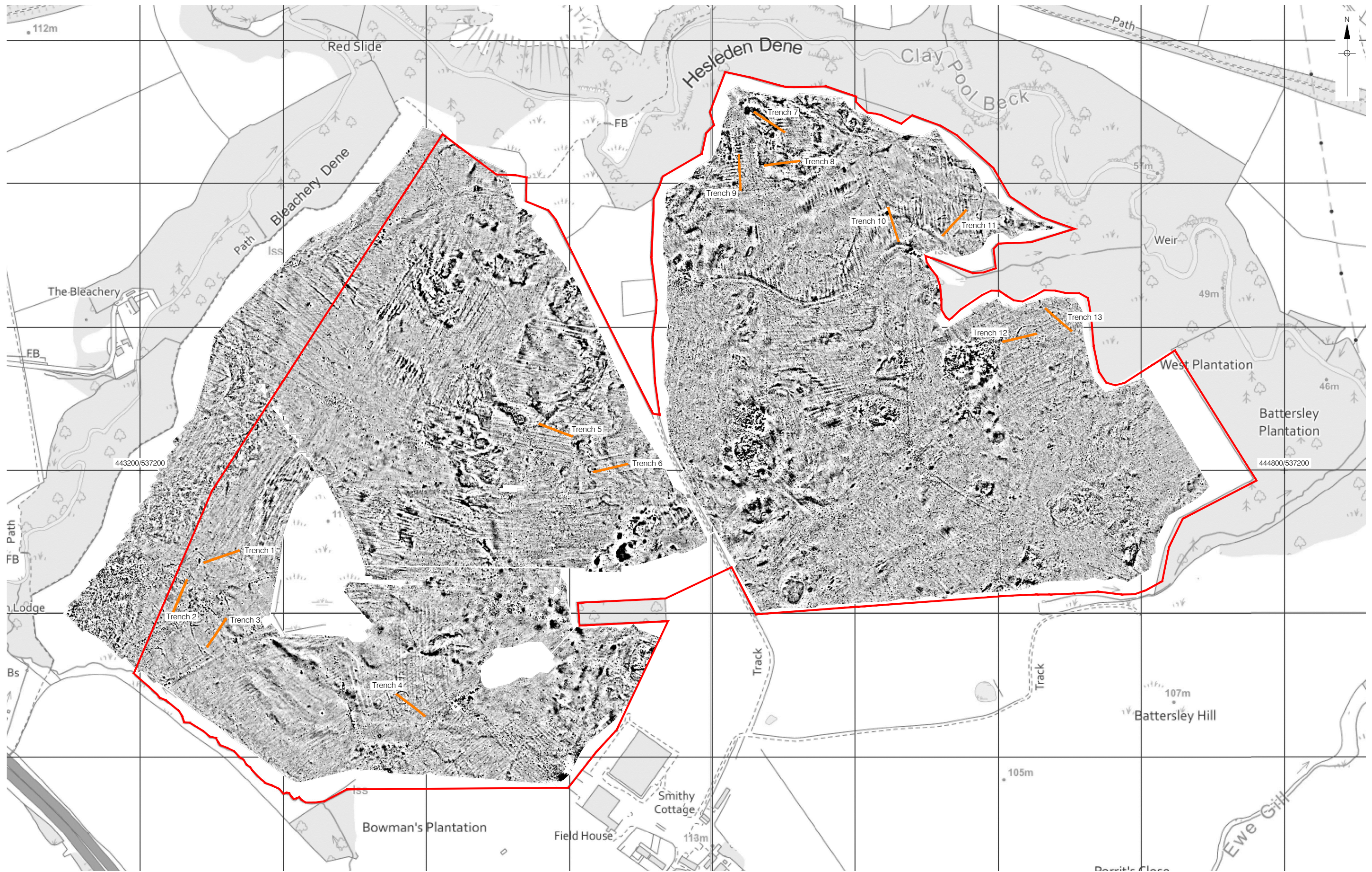


Figure 2
 Detailed Site Location (showing geophysical survey results)
 1:5,000 at A3

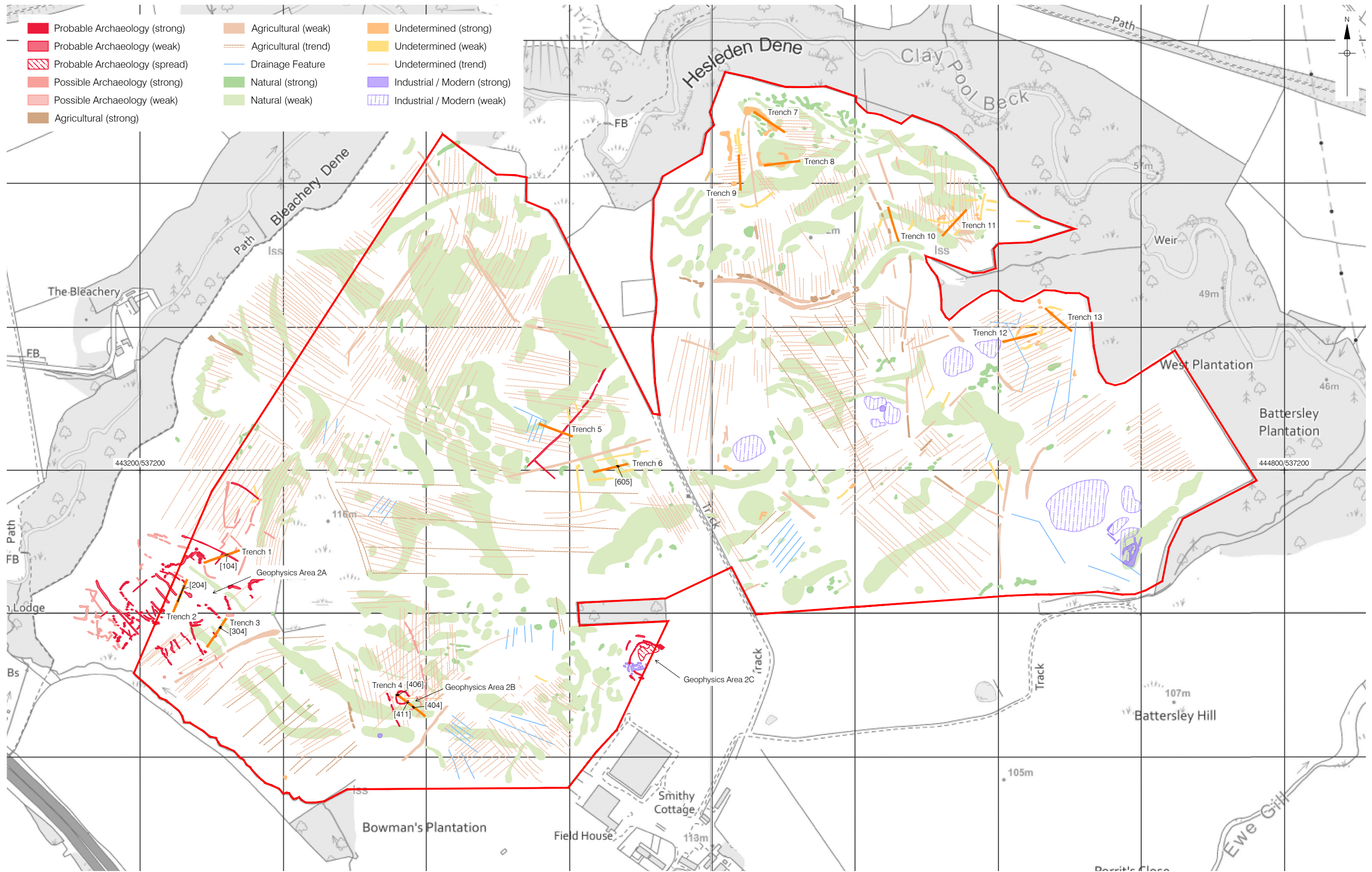


Figure 3
 Detailed Site Location (showing geophysical survey interpretation)
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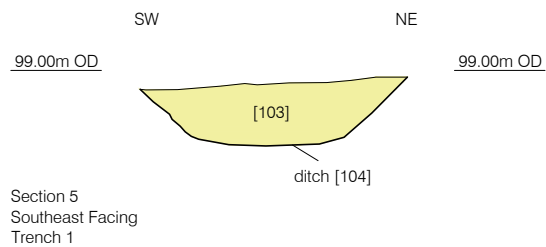
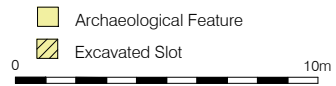
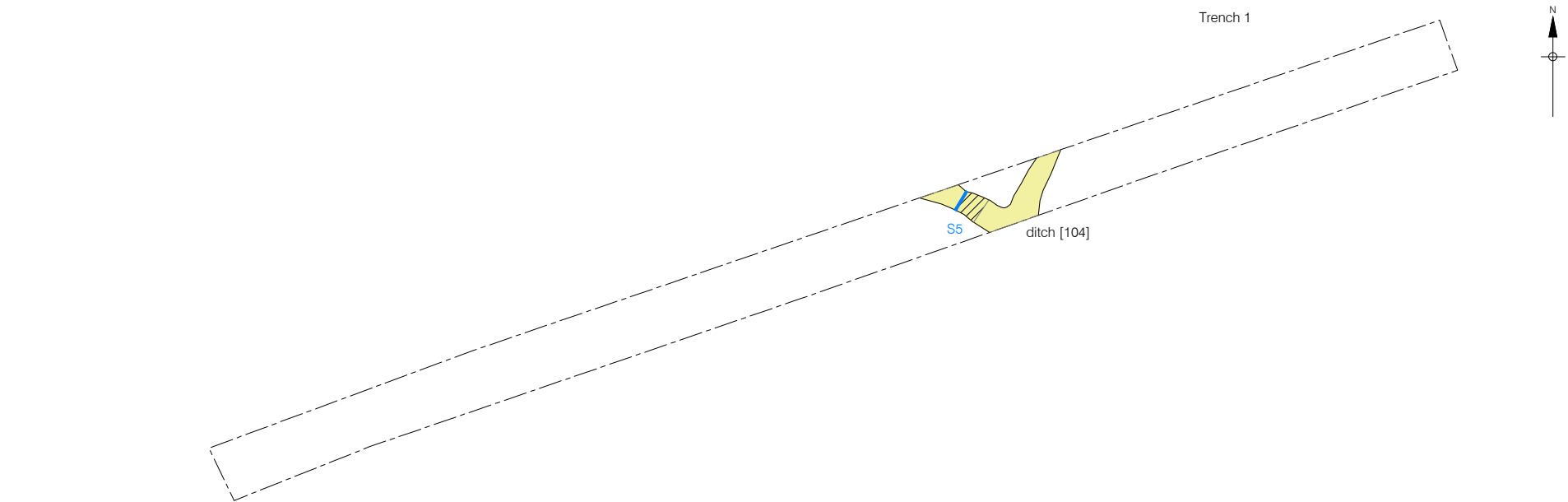
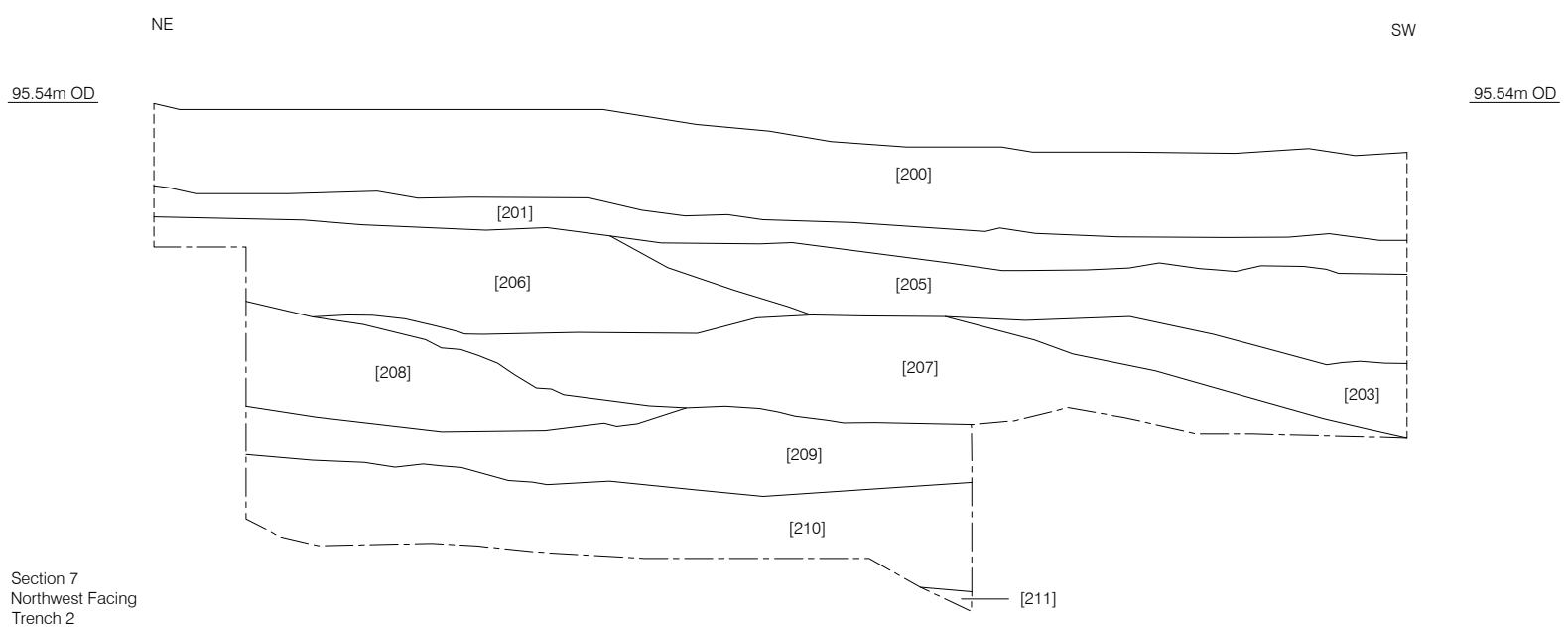
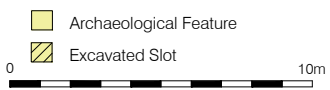
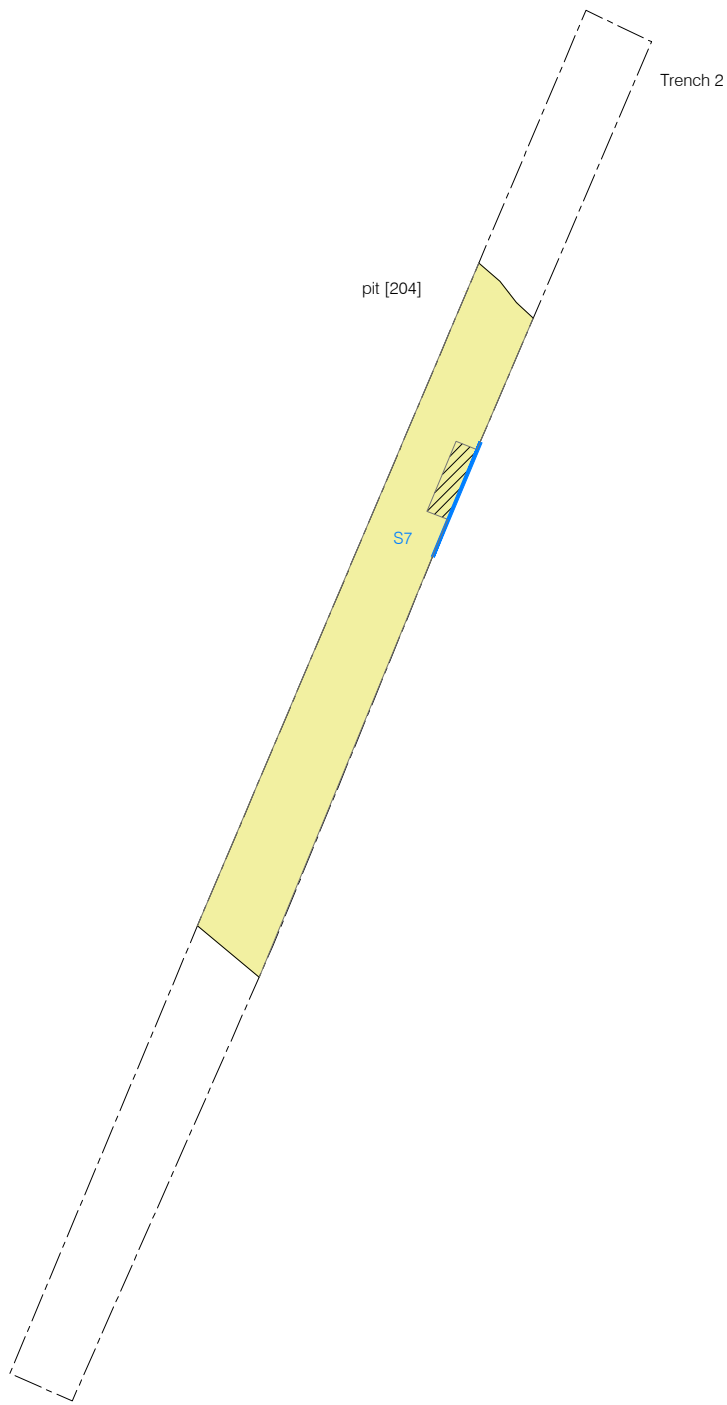


Figure 4
Plan of Trench 1 and Section 5
Plan at 1:250 and section at 1:25 at A4



Section 7
Northwest Facing
Trench 2

Figure 5
Plan of Trench 2 and Section 7
Plan at 1:250 and Section at 1:25 at A3

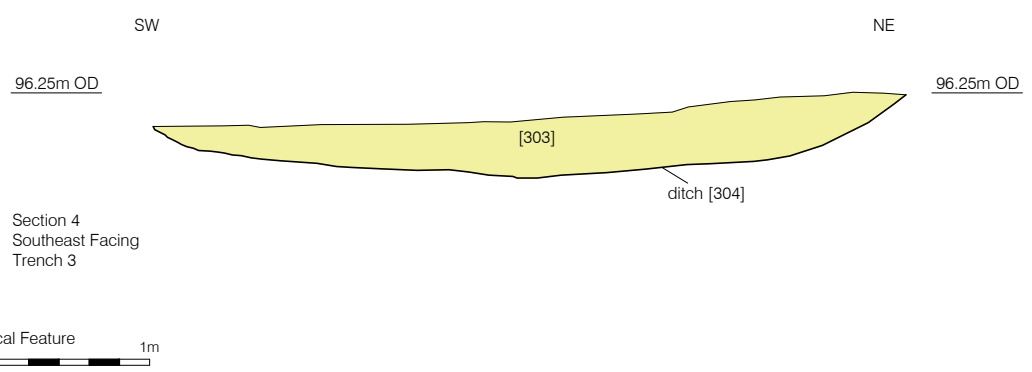
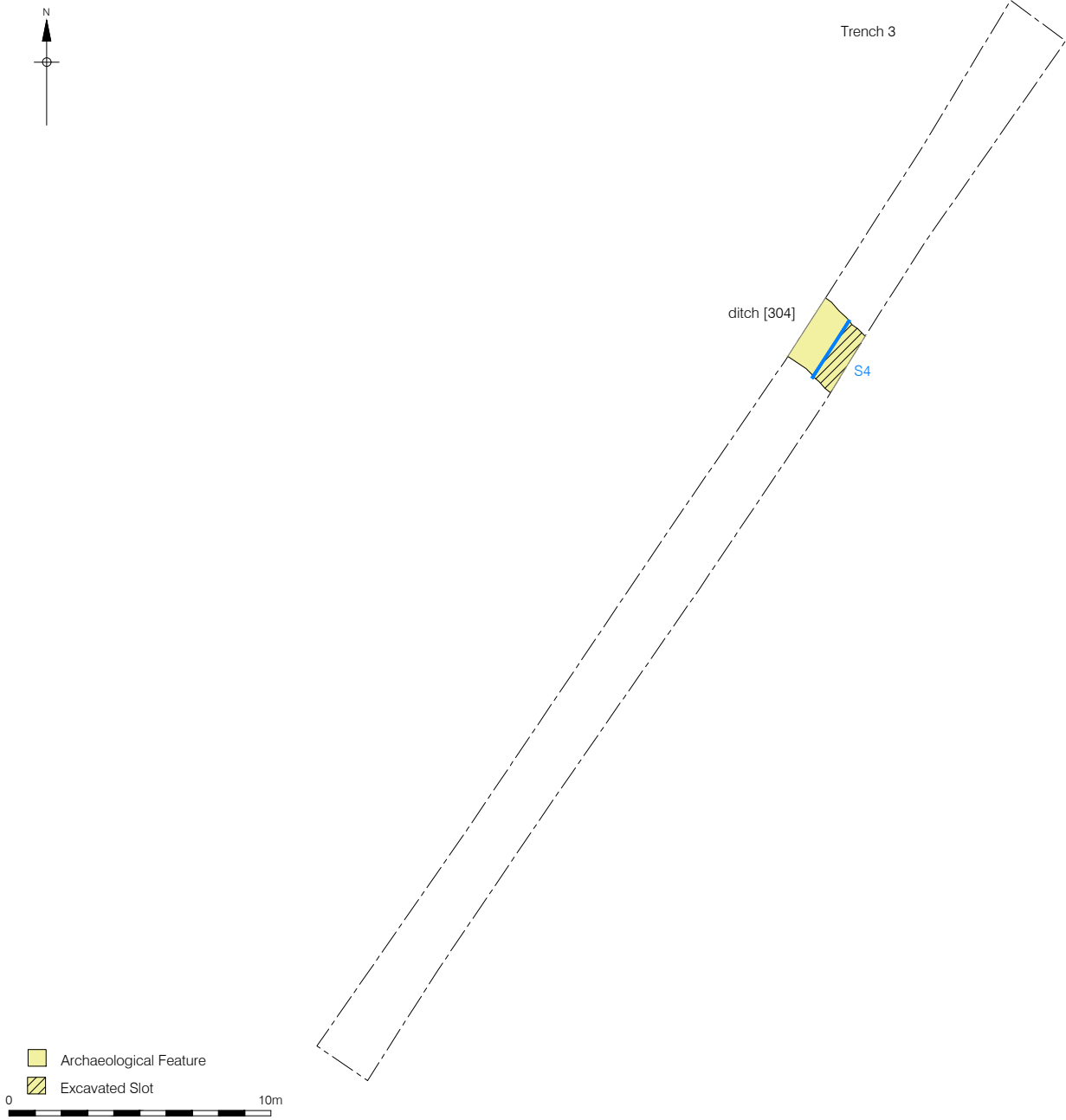


Figure 6
Plan of Trench 3 and Section 4
Plan at 1:250 and Section at 1:25 at A4

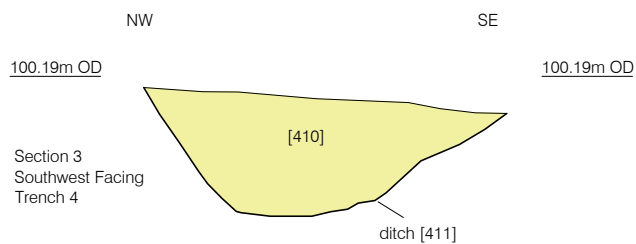
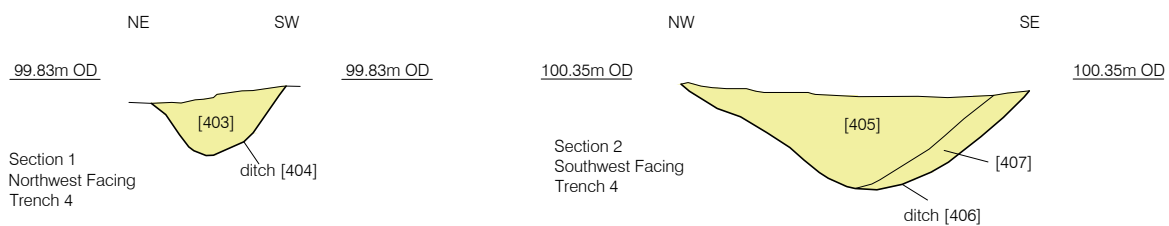
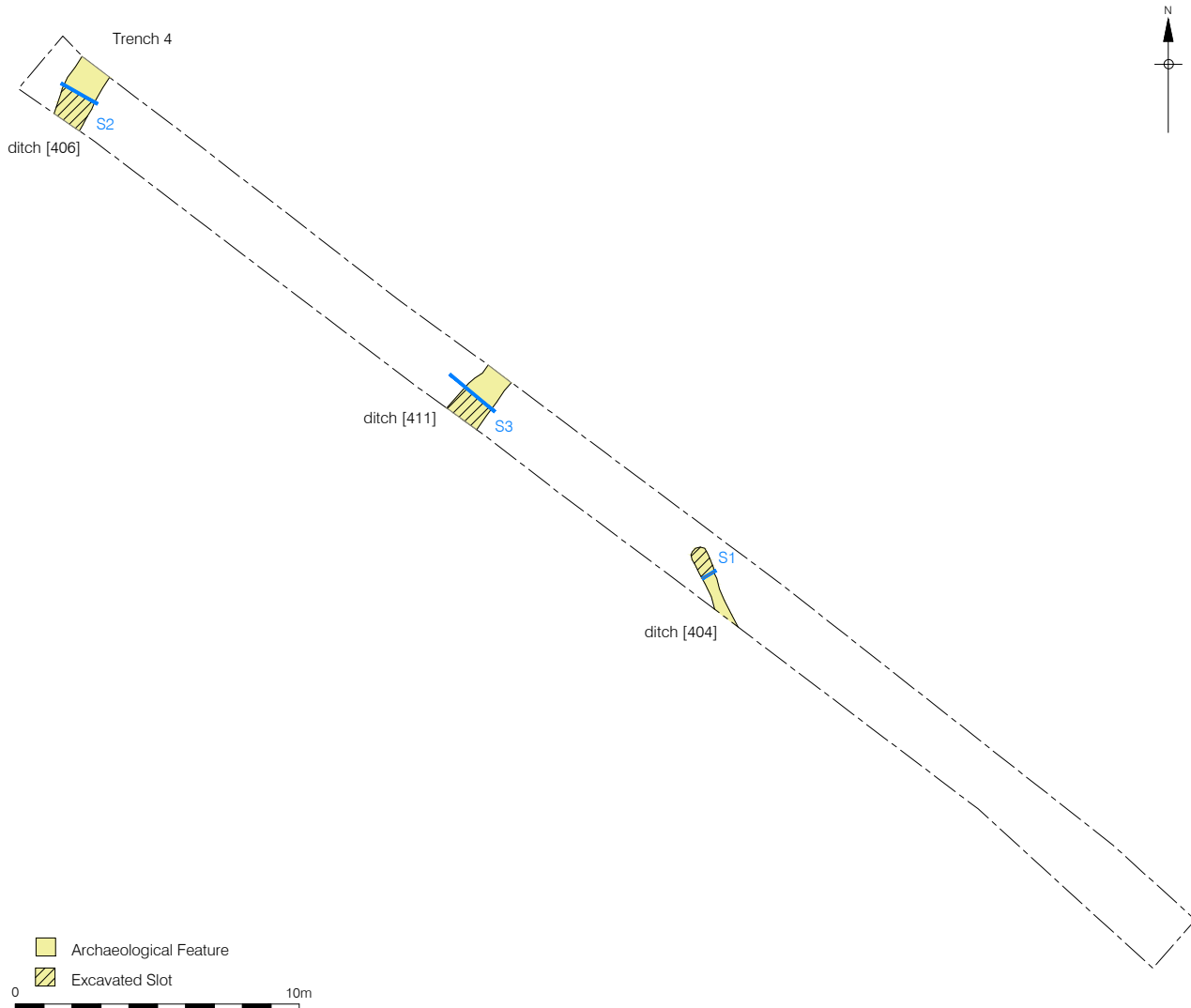


Figure 7
Plan of Trench 4 and Sections 1-3
Plan at 1:250 and Section at 1:25 at A4

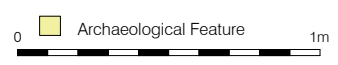
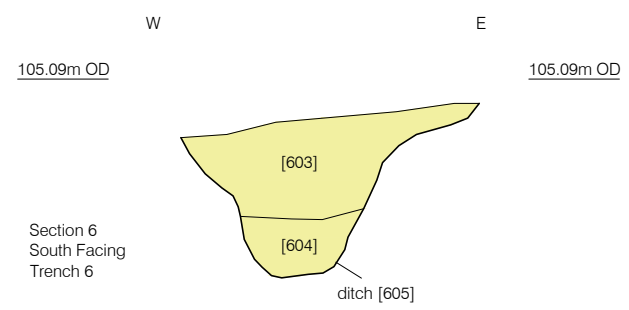
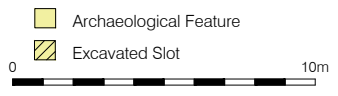
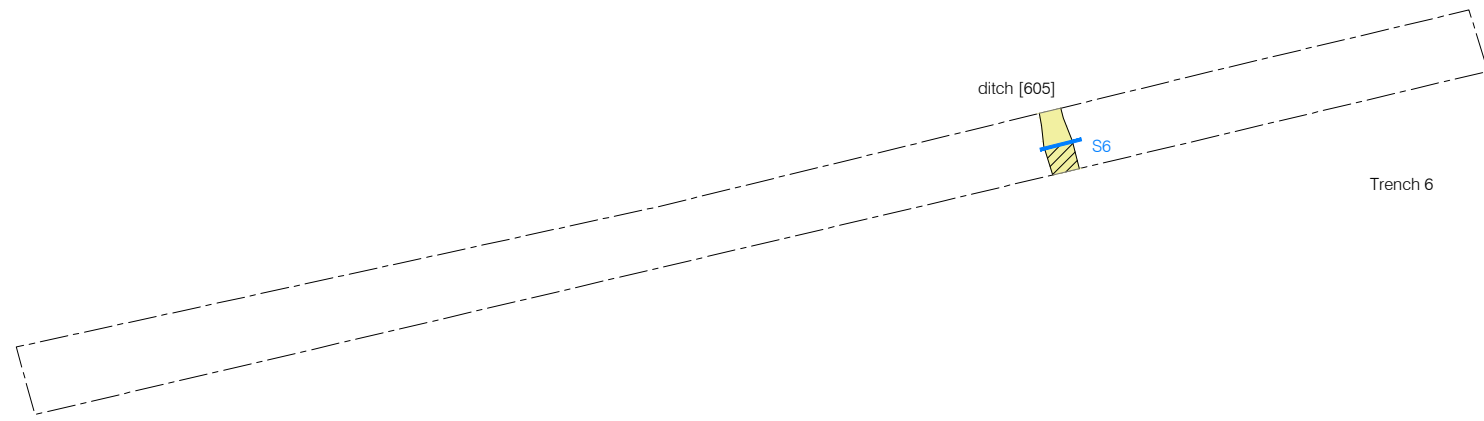


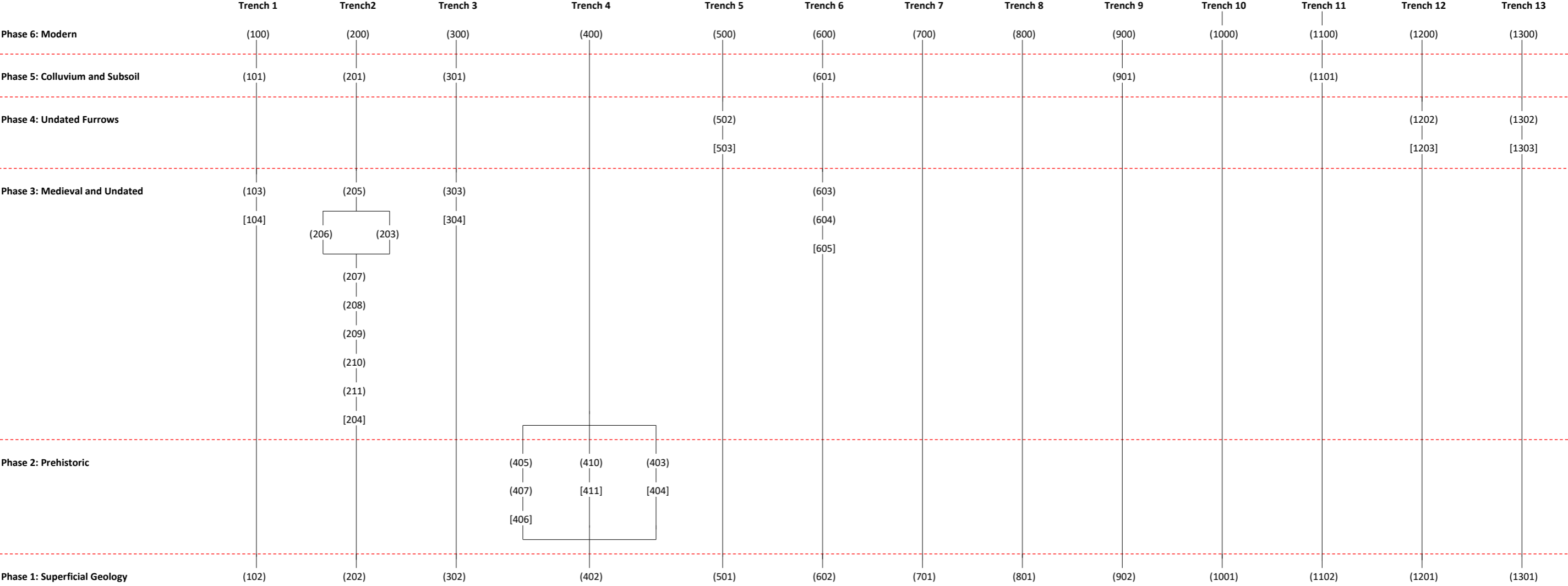
Figure 8
Plan of Trench 6 and Section 6
Plan at 1:250 and section at 1:25 at A4

APPENDIX 2: CONTEXT INDEX

Context	Phase	Type 1	Type 2	Fill of	Interpretation
Trench 1					
100	6	Deposit	Layer		Topsoil
101	5	Deposit	Layer		Subsoil
102	1	Deposit	Layer		Superficial geology
103	3	Deposit	Fill	104	Fill of ditch [104]
104	3	Cut	Linear		Ditch filled by (103)
Trench 2					
200	6	Deposit	Layer		Topsoil
201	5	Deposit	Layer		Subsoil
202	1	Deposit	Layer		Superficial geology
203	3	Deposit	Fill	204	Fill of Pit [204]
204	3	Cut	Discrete		Substantial pit filled by (203), (205), (206), (207), (208), (209), (210), (211)
205	3	Deposit	Fill	204	Fill of Pit [204]
206	3	Deposit	Fill	204	Fill of Pit [204]
207	3	Deposit	Fill	204	Fill of Pit [204]
208	3	Deposit	Fill	204	Fill of Pit [204]
209	3	Deposit	Fill	204	Fill of Pit [204]
210	3	Deposit	Fill	204	Fill of Pit [204]
211	3	Deposit	Fill	204	Fill of Pit [204]
Trench 3					
300	6	Deposit	Layer		Topsoil
301	5	Deposit	Layer		Subsoil
302	1	Deposit	Layer		Superficial geology
303	3	Deposit	Fill	304	Fill of ditch [304]
304	3	Cut	Linear		Ditch filled by (303)
Trench 4					
400	6	Deposit	Layer		Topsoil
401	5	Deposit	Layer		Subsoil
402	1	Deposit	Layer		Superficial geology
403	2	Deposit	Fill	404	Fill of ditch [404]
404	2	Cut	Linear		Ditch filled by (403)
405	2	Deposit	Fill	406	Fill of ditch [406]
406	2	Cut	Linear		Ditch filled by (405), (407)
407	2	Deposit	Fill	406	Fill of ditch [406]
408	4	Deposit	Fill	409	Fill of furrows [409]
409	4	Cut	Linear		Furrows filled by (408)
410	2	Deposit	Fill	411	Fill of ditch [411]
411	2	Cut	Linear		Ditch filled by (410)
Trench 5					
500	6	Deposit	Layer		Topsoil
501	1	Deposit	Layer		Superficial geology
502	4	Deposit	Fill	503	Fill of furrows [503]
503	4	Cut	linear		Furrows filled by [502]
Trench 6					
600	6	Deposit	Layer		Topsoil

601	5	Deposit	Layer		Subsoil
602	6	Deposit	Layer		Superficial geology
603	3	Deposit	Fill	[605]	Fill of ditch [605]
604	3	Deposit	Fill	[605]	Fill of ditch [605]
605	3	Cut	Linear		Ditch filled by (603), (604)
Trench 7					
700	6	Deposit	Layer		Topsoil
701	1	Deposit	Layer		Superficial geology
Trench 8					
800	6	Deposit	Layer		Topsoil
801	1	Deposit	Layer		Superficial geology
Trench 9					
900	6	Deposit	Layer		Topsoil
901	5	Deposit	Layer		Subsoil
902	1	Deposit	Layer		Superficial geology
Trench 10					
1000	6	Deposit	Layer		Topsoil
1001	1	Deposit	Layer		Superficial geology
Trench 11					
1100	6	Deposit	Layer		Topsoil
1101	5	Deposit	Layer		Colluvium
1102	1	Deposit	Layer		Superficial geology
Trench 12					
1200	6	Deposit	Layer		Topsoil
1201	1	Deposit	Layer		Superficial geology
1202	4	Deposit	Fill	1203	Fill of furrow [1203]
1203	4	Cut	Linear		Furrow filled by (1202)
Trench 13					
1300	6	Deposit	Layer		Topsoil
1301	1	Deposit	Layer		Superficial geology
1302	4	Deposit	Fill	1303	Fill of furrows [1303]
1303	4	Cut	Linear		Furrows filled by (1302)

Appendix 3: Stratigraphic Matrix



APPENDIX 4: PHOTOGRAPHIC PLATES

Plate 1: Ditch [406], view north-east, 1m scale



Plate 2: Ditch [411], view north-east, 1m scale



Plate 3: Ditch [404], view south, 0.20m scale



Plate 4: Ditch [104], view north-west, 0.5m scale



Plate 5: Sample section through feature [204], view south-east, 2m scale



Plate 6: Ditch [304], view north-west, 2m scale



Plate 7: Ditch [605], view north, 0.5m scale



APPENDIX 5: PREHISTORIC POTTERY

Eniko Hudak

A single sherd of prehistoric pottery was recovered from the archaeological evaluation at Hulam Farm, Castle Eden, County Durham (HFC20). It was retrieved from the upper fill (405) of Ditch [406] in Trench 4. The fragment weighs 0.210kg and is a body sherd of a substantial handmade vessel with wall thickness up to 27mm. It is a hard fabric fired black with oxidized exterior surface and sparse very large angular dolerite (up to 17mm) and possibly granite tempering.

The fabric compares best to handmade Fabric 126 in the Iron Age tradition of the Stanwick fabric series (Willis 2016). This fabric occurs at Stanwick in phases dated to between 80/70 BC and 65/75 AD, and dolerite is noted to have been a commonly used temper by Iron Age potters in the north-east (Evans 1995 cited Willis 2016: 228). Thus, the sherd from Trench 4 is most likely to be of Late Iron Age date, but as it is non-diagnostic it cannot be dated any more closely.

Context	Fabric	Count	Weight (kg)
405	126	1	0.210

Table 1 – Quantification of the prehistoric pottery

Willis, S. (2016) 'The Iron Age tradition and Roman pottery' in Haselgrove, C. (ed) *Cartimandua's capital? The late Iron Age royal site at Stanwick, North Yorkshire, fieldwork and analysis 1981-2011*, CBA Research Report 175, Council for British Archaeology, 207-255.

APPENDIX 6: POST ROMAN POTTERY

Berni Sudds

Introduction

A total of three sherds of post-Roman pottery were recovered during the evaluation, weighing 128g, all recovered from the fill of the same pit ([204] (203); see Table 1 below).

Context	Form	Description	Sherd Count	Weight	Date range	Spot date
203	Jug	Twisted rod handle from a jug. Pale grey core, oxidised pale orange to buff margins and surfaces. Partial olive-green glaze. Fabric: Fine matrix with moderate fine to medium quartz (mostly up to 0.5mm, occasionally up to 1.5mm) and sparse iron ore).	1	115g	13 th – mid 14 th century	13 th – mid 14 th century
	Jug	Body sherd from a jug. Oxidised throughout. Partial off-white slip and green glaze. Fabric: moderate fine quartz (up to 0.5mm), sparse iron-ore. Rare white streaks of clay and red clay/ silt inclusions.	1	3g	13 th – 14 th century	
	-	Base sherd, unglazed. Oxidised throughout. Fabric: moderate fine to coarse quartz (up to 2mm) and fine white mica, sparse iron-ore. Rare red clay/ silt inclusions.	1	10g	13 th – 14 th century	

Table 1: Catalogue of the post-Roman pottery.

Discussion

The three sherds are all oxidised orange, or orange to buff sandy wares, two of which are from jugs, one glazed and the other white-slipped and glazed.

The small-slipped body sherd shares characteristics in common with the published descriptions of Tees Valley B ware (TVW B), evidently a fairly common type encountered on sites in the region, but no physical comparison to type sherds of this fabric has been undertaken (Didsbury 2010; Cumberpatch and Vyner 2013). The other two sherds contain some coarser quartzes and the jug handle is less iron-rich and has pale-orange to buff surfaces. The sherds appear to be distinct from Scarborough-type, Brandsby-type and Humber-types, potentially falling under the loose Yorkshire and

Tees Valley red wares 'group' encountered in York (Mainman and Jenner 2013, 1249-1250). The degree to which these fabrics overlap, and how they can clearly be distinguished is also far from fully resolved in the region (Mainman and Jenner 2013, 1249; Slowikowski et al 2015, 12; Cumberpatch 2013).

A parallel for the twisted rod handle can be found in a number of medieval glazed traditions and it probably dates to the 13th to mid-14th century. A broader date is possible for the other two sherds, although there is no reason to suggest they are not contemporary. The sherds demonstrate some surface abrasion, and were probably exposed to some form of mechanical weathering prior to deposition, although likely originate from contemporary activity in the near vicinity.

Potential

The small assemblage should be reappraised alongside any additional material recovered, should any further investigation be undertaken on site. The fabrics should also be identified to source if possible, either by specialist conversant with the local traditions, or through direct comparison to a regional type series.

References

Cumberpatch, C. G., 2013. 'Medieval and Post-medieval Ceramics' in J. Brightman and B. Marshall 'A medieval post-built structure and multi-period remains at Vivis Lane, Pickering, North Yorkshire'. Archaeological Research Papers 3, 7-9.

Cumberpatch, C., and Vyner, B., 2013. 'Medieval and later pottery analysis' in J. Adams 'Land west of Eaglesfield Road, Hartlepool, Teesside: Post-excavation analysis'. Archaeological Services Durham University, Report 2874.

Didsbury, P., 2010. 'Medieval Pottery' in R. Daniels 'Hartlepool: an archaeology of the medieval town'. Tees Archaeology Monograph Series 4.

Mainman, A., and Jenner, A., 2013. Medieval Pottery from York: The Archaeology of York: The Pottery. Volume 16 Fascicule 9. York Archaeological Trust and the Council for British Archaeology.

Slowikowski, A., with Mainman, A., Clark, A., and Wrathmell, S., 2015. 'The medieval pottery assemblages from Wharram Percy, North Yorkshire'. Medieval Ceramics Volume 36, 1-15.

APPENDIX 7: ANIMAL BONE

Kevin Rielly

Summary

A single cattle maxillary molar was recovered from (303), most probably representing an adult individual, so in excess of 2 years old. It had suffered a moderate level of root etching but otherwise was in good condition.

Potential

The tooth should be retained as part of the site archive and should pose no problem for long term storage.

APPENDIX 8: ENVIRONMENTAL ASSESSMENT

Katherine Bostock and Lynne F. Gardiner (Wardell Armstrong)

Introduction

Five bulk environmental samples were presented for assessment following the archaeological works at Hulam Farm, Castle Eden, County Durham.

This report presents the results of the assessment of the environmental samples, palaeobotanical and charcoal remains in accordance with Campbell *et al.* (2011) and English Heritage (2008).

Methodology

The bulk environmental samples were processed by Wardell Armstrong LLP in Carlisle. The colour, lithology, weight, and volume of each sample was recorded using standard Wardell Armstrong pro forma recording sheets *cf.* Table 1. The samples were processed with 500-micron retention and flotation meshes using the Siraf method of flotation (Williams 1973). Once dried, the residues from the retention mesh were sieved to 4mm and the artefacts and ecofacts removed from the larger fraction and returned to PCA. The smaller fraction was scanned with a magnet for microslags such as hammerscales. This fraction was then examined for smaller artefacts such as beads.

The flot charcoal were retained and scanned using a stereo microscope (up to x45 magnification). Any non-palaeobotanical finds were noted on the flot pro forma.

The charcoal was identified to species as far as possible, using, Hather (2000), Schweingruber (1982) and the author's reference collection. Plant remains were identified using the author's reference collection along with Jacomet (2006) *s.* Nomenclature for plant taxa followed Stace (2010) with Cereals following Cappers and Neef (2012).

Results

A total weight of 147kg (138l) of sediment from five bulk environmental samples was presented for processing which consisted of clay mixed with sand and silt *cf.* Table 1.

Non environmental material recovered from the retent residues consisted only of ceramic building material.

Charcoal was present in two samples: Sample <1> from fill (403) of ditch [404] and weighed 1.06g and sample <3> from fill (410) of ditch [411] yielded 0.68g. The charcoal was in a relatively poor state of preservation with some abrasion. The identifiable fragments from both samples were seen to be oak (*Quercus* sp.), however the majority of the fragments were indeterminate.

Coal was recovered from four samples in a very poor state of preservation. Sample <3> yielded 3g, with 4g from sample <4> from fill (303) of ditch [304], 6g from sample <5> from fill (103) of ditch [104], and 1g was from sample <6> from fill (203) of pit [204].

Charred plant remains (CPR) were present in samples <1>, <3> and <5> and were in a very poor state of preservation and highly abraded. None of the grains were complete, however some from <3> were identified as barley (*Hordeum* sp.); the remainder, and those from <1> and <5>, were indeterminate.

Magnetic material was recovered from samples <1>, <3>, <4> and <5> and was examined for microsclags under the microscope. None were present with the material consisting entirely of small naturally occurring magnetic stone.

Discussion

The extremely small quantity of charcoal recovered does not allow for any meaningful discussion.

The coal likewise is in such small quantities that it cannot be used to discuss human agency at Hulam Farm. The site does not sit on a coal deposit so it is not likely to be present from the bedrock (BGS 2021).

The CPR was also in such small quantities does not allow for any relevant discussion about human agency.

The features from which the ecofactual material were recovered would indicate that their deposition was either through rubbish deposition or, due to the low quantities recovered, aeolian deposition.

Radiocarbon suitability

Should a radiocarbon date be required then some of the barley grains would be suitable. However, it should be noted that due to the quantities and recovery location they are only likely to date themselves and not the features from which they were recovered.

Statement of potential and recommendations

All ecofactual material should be retained until a decision upon radiocarbon requirements is made at which point it may be discarded.

The magnetic material offers no further potential and may be discarded.

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Jacomet, S. 2006. *Identifications of cereals from archaeological sites*, 2nd edition, IPAS, Basel University

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Schweingruber, F.H., 1982. *Microscopic Wood Anatomy* (2nd Ed), Swiss Federal Institute of Forestry Research, Zurich

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Williams D., 1973. 'Flotation at Siraf', *Antiquity*, 47: 198-202

Table 1: sample data

C	<>	Cut	Desc	TQ	Colour	Matrix	WP	VP	SW	SV
403	1	404	Ditch fill	2	Mid Reddish Brown	Clayey silt	18	13	4108	2260
410	3	411	Ditch fill	4	Dark Reddish Brown	Clayey silt	4	32	14738	8000
303	4	304	Ditch fill	4	Mid Yellowish Brown	Sandy clay	48	33	3351	2100
103	5	104	Ditch fill	3	Mid Yellowish Grey	Sandy clay	38	26	3756	2600
203	6	204	Pit fill	4	Mid Brownish Black	Clayey silt	39	34	267	2200

Key: C=context; <>+sample number; Cut=cut of feature; Desc=description of context; TQ=tub quantity processed; Colour=colour of processed sediment; Matrix=matrix of processed sediment; WP=weight processed(kg); VP=volume processed (l); SW=sorted weight (g); SV=sorted volume (ml)

Table 2: finds and flint data

C	<>	Desc	Flot				Residue			
			FW	FV	CPR	Ch	Ch	Co	CBM	MM
403	1	fine rootlets 5%; comminuted charcoal 15%; sand 80%	5.6	10	2	0.06	1			2
410	3	very fine rootlets 30%; comminuted charcoal 30%; charcoal 10%; sand 30%	10.9	25	42	0.68		3		6
303	4	very fine rootlets 85%; comminuted charcoal 5%; sand 10%	7.7	10				4		1
103	5	very fine rootlets 45%; comminuted charcoal 40%; sand 15%	2.3	5	2			6		1
203	6	very fine rootlets 40%; sand 60%	265.2	400				1	<1	

Key: C=context; <>=sample number; Desc=description of flint; FW=flint weight(g); FV=flint volume(ml); CPR=count of charred plant remains; Ch=charcoal (g); Co=coal(g); CBM=ceramic Building material (g); MM=magnetic material(g)

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