

**LAND SOUTH OF
BATES FARM,
BEGGARS BRIDGE,
RIVER DROVE, COATES,
CAMBRIDGESHIRE**

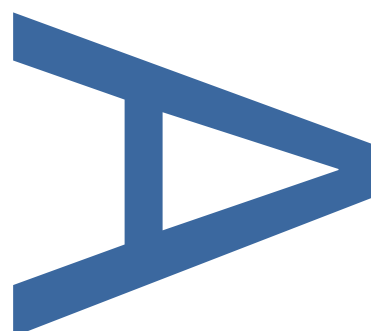
**REPORT ON AN
ARCHAEOLOGICAL
EVALUATION**

Planning Reference: F/YR17/0825/F

HER Event No: ECB5425

PCA Report Number: R13354

August 2018



PRE-CONSTRUCT ARCHAEOLOGY LTD

DOCUMENT VERIFICATION

**LAND SOUTH OF BATES FARM,
BEGGARS BRIDGE, RIVER DROVE,
COATES, CAMBRIDGESHIRE:**

**REPORT ON AN
ARCHAEOLOGICAL EVALUATION**

Quality Control

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Report Number	R13354

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**Land South of Bates Farm, Beggars Bridge, River Drove, Coates,
Cambridgeshire:
Report on an Archaeological Evaluation**

Local Planning Authority: Fenland District Council

Central National Grid Reference: TL 3228 9652

Planning Reference: F/YR17/0825/F

CHER Event Number: ECB5425

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August 2018

PCA Report Number: R13354

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ABSTRACT

This report describes the results of an archaeological evaluation carried out by Pre-Construct Archaeology on land south of Bates Farm, River Drove, Coates, Cambridgeshire (NGR TF 3228 9652). The evaluation was undertaken from 31st May – 6th June 2018. The archaeological work was commissioned by J Bates and Sons, for whom the Robert Doughty Consultancy Ltd acts in this matter, and the evaluation took place in anticipation of the development of the land. The aim of the work was to characterise the archaeological potential of the proposed development area.

The archaeological evaluation identified evidence of palaeochannels, post-medieval 'claying' trenches, and three undated linear features. The paleochannels allow characterisation of the past landscape. The 'claying' trenches, while undated, are a typical post-medieval feature relating to soil improvement and thus indicate agricultural usage of the site during this period. Of the three undated linear features, two are probably modern. Other than these, no remains of archaeological significance were observed on the site.

1 INTRODUCTION

- 1.1 An archaeological evaluation was undertaken by Pre-Construct Archaeology Ltd (PCA) on land immediately to the south of Bates Farm, Beggars Bridge, River Drove, Coates, Whittlesey, Cambridgeshire (centred on Ordnance Survey National Grid Reference (NGR) TL 3228 9652). The evaluation took place from 31st May - 6th June 2018 (**Figures 1 and 2**).
- 1.2 The archaeological work was commissioned by J Bates & Sons, for whom the Robert Doughty Consultancy Ltd. acts in this matter. A planning application F/YR17/0825/F has been submitted to Fenland District Council for a development comprising two pig rearing units, feed stock storage area, anaerobic digester plant with heat and power unit and process building, formation of a digestate lagoon and construction of a 2m high earth bund.
- 1.3 The archaeological works were carried out in accordance with a Written Scheme of Investigation (WSI) prepared by Pre-Construct Archaeology (PCA 2018) following consultation with the Historic Environment Officer.
- 1.4 The planned archaeological works involved the excavation of four 40m trenches and a 30m trench. An extra 20m trench (Trench 6) was added during the investigation to make up for a large area of modern disturbance in Trench 5 (**Figure 2**).
- 1.5 The aim of the trial trenching evaluation was to identify and record any surviving archaeological remains and /or deposits that may be impacted upon during the proposed development.
- 1.6 The archaeological works sought to determine the location, date, extent, character, condition, and quality of any archaeological remains on the site, to assess the significance of any such remains in a local, regional, or national context, as appropriate, and to assess the potential impact of the development proposals on the site's archaeology.
- 1.7 This report describes the results of the archaeological works. The site archive will be deposited with Cambridgeshire Historic Environment Team.

2 GEOLOGY AND TOPOGRAPHY

- 2.1 Geology
- 2.2 The solid geology of the site is Oxford Clay of the Jurassic period. This is overlain by tidal flat deposits of clay and silt, deposited up to 3 million years ago in the Quaternary period. Former water courses have been identified close by and at the site which is located on a roddon, an ancient in-filled watercourse (Hall 1987, fig 38). A major roddon is located 1km to the south (British Geological Survey Viewer www.bgs.ac.uk).
- 2.3 Topography
- 2.3.1 The site is on level ground of the Fenland at about 1m OD.

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.1 Prehistoric, Roman and later remains have been identified in the Coates area. Most evidence for prehistoric settlement and ceremonial activity is found on and immediately adjacent to the gravel islands of the parish, at Horsey Toll/King's Delph, Whittlesey, and Eastrea and Coates (Hall 1987, fig 38). North of the site, close to the southern edge of the Eastrea and Coates island, a perforated axe-hammer of Late Neolithic-Early Bronze Age date was found associated with bog oaks (CHER 01445). Roddons, as identified at the site and nearby, provided drier land elevated above the surrounding fens and often formed a focus for occupation, Iron Age-Roman salt-making and settlement. The rodden at the site is aligned approximately north-northwest to south-southeast and a further former watercourse merges from the west immediately south of the site (Hall 1987, fig 38). No archaeological features or finds are known on the rodden at the site or immediately close by, though significant Bronze Age remains have been identified on the major rodden located 1km to the south. The watercourse system that gave rise to the roddons developed in the prehistoric, period, probably during the Neolithic era (*ibid.*, 56). Cropmarks of ring ditches and linear features including a possible enclosure have been identified to the northwest (CHER 00161). These are undated but probably prehistoric. Roman pottery and human remains (CHER 03789) have been found near to these cropmarks. Further evidence of prehistoric (CHER 03736, 03949, 01445) and Roman occupation (CHER 03754, 03938), including coffins (CHER 03758) has been found in the surrounding area.
- 3.2 Immediately north of the site is the Twenty Foot River, cut in 1651 (CHER 05937). Crossing this river just north of the site is a section of the Great Eastern Railway (Ely and Peterborough Branch), opened in 1847 (CHER MCB 24025). A number of later post-medieval farms are located in the vicinity of the site (CHER MCB24959, 24960), and a 19th beer house (CHER MCB24961) was situated close by. A World War II searchlight battery was located about 1km to the west (CHER MCB17107).

4 PLANNING BACKGROUND, PROJECT AIMS AND RESEARCH OBJECTIVES

- 4.1 The Site is the subject of a planning application (F/YR17/0825/F), submitted to Fenland District Council, for development comprising two pig rearing units, feed stock storage area, anaerobic digester plant with heat and power unit and process building, formation of a digestate lagoon and construction of a 2m high earth bund.
- 4.2 Due to the archaeological potential of the site a condition was placed on the planning consent requiring a scheme of archaeological works. The first phase of this was to be an archaeological evaluation to assess the nature and potential of the site. However, the development was commenced prior to the evaluation being carried out. The trial trench evaluation described herein is the remediation works required as a result.

4.3 National Planning Policy on archaeology and built heritage is set out in National Planning Policy Framework (NPPF). Published in March 2012, National Planning Framework: Planning for the Historic Environment (NPPF) provides guidance for planning authorities, property owners, developers and others on the investigation and preservation of archaeological remains.

4.4 In considering any planning application for development, the local planning authority will be guided by the policy framework set by government guidance, in this instance NPPF, by Local policy and by other material considerations.

4.5 There are no Scheduled Ancient Monuments or Historic buildings within the study site or immediately adjacent to its boundaries.

4.6 Project Aims

4.6.1 The project is 'threat-led' with potential to disturb or destroy important sub-surface archaeological remains, if present. Therefore, the broad aim of the archaeological project was to inform the Local Planning Authority and the Client regarding the character, date, extent and degree of survival of archaeological remains at the site. Archaeological trial trenching was selected as the most appropriate investigative tool to test the archaeological potential of the site.

4.6.2 Additional aims of the project were:

- To compile a site archive consisting of all site and project documentary and photographic records, as well as all artefactual and palaeoenvironmental material recovered;
- To compile a report that contains an assessment of the nature and significance of all data categories, stratigraphic, artefactual, etc.

4.7 Research Objectives

4.7.1 The regional research framework *Research and Archaeology Revisited: a revised framework for the East of England* (Medlycott 2011) will be referenced for specific research criteria. The archaeological evaluation will address the following objectives:

- To record the nature, extent, date, character, quality, significance and state of preservation any archaeological remains affected by the investigation.
- To assess where appropriate any ecofactual and palaeo-environmental potential of archaeological deposits and features from within the site.

In addition, the evaluation will seek to address the following research questions:

- To set the site and its potential archaeological remains into the context of the wider landscape;
- To confirm the presence or absence of any prehistoric to late Iron Age activity;
- To confirm the presence or absence of any Romano British within the area;

- To confirm the presence or absence of Saxon/medieval activity; and
- To confirm the presence or absence of any post medieval activity.

5 METHODOLOGY

5.1 Fieldwork Methodology

5.1.1 The Evaluation took place from 31st May – 6th June 2018 in compliance with the relevant guidance document of the Chartered Institute for Archaeologists (ClfA 2014a); PCA is a Registered Organisation (number 23) with the Chartered Institute for Archaeologists and will operate within the Institute's 'Code of Conduct'.

5.1.2 The evaluation trenches were laid out in accordance with the Written Scheme of Investigation for the evaluation, as accepted by the Historic Environment Officer (**Figure 2**). During the investigation it was found that a large portion of Trench 5 had been disturbed by modern excavation. In order to make up for this, an extra 20m trench was added on the same alignment a short distance to the north (Trench 6, **Figure 2**)

5.1.3 All trial trenches were excavated under archaeological supervision using a JCB tracked excavator (13 tonnes). Deposits were removed in spits to the top of the first significant archaeological horizon, or the clearly defined top of the natural sub-stratum, whichever was reached first. All potential archaeological features were identified and marked at the time of machine clearance of overburden.

5.1.4 All exposed deposits/layers were cleaned using hand tools and recorded as set out in the PCA fieldwork manual (Taylor and Brown 2009). Contexts were recorded in accordance with PCA's fieldwork manual approved for use in Cambridgeshire, including written, photographic and drawn records.

5.1.5 Discrete features such as pits and postholes were at least 50% excavated and, where considered appropriate, 100% excavated.

5.1.6 An environmental sample of desiccated peat deposit (**105**) lying within a palaeochannel in Trench 1 was taken in order to obtain organic material that may be suitable for acquiring a carbon date. The sample has not been processed but has been retained should a radiometric date be required in future.

5.1.7 A linear sequence of auger holes was executed in trenches 1, 3, 4 and 5 in order to determine the sequence of deposits below the trench bases. This is referred to as the Auger Survey in the Results section.

5.1.8 Hand sorting of c. 90 litres (a machine buckets contents) of ploughsoil was carried out either end of each 40m trench and both ends and middle of Trench 2 as this trench was over 50m in length.

5.2 Recording Methodology

- 5.2.1 The trench locations were established by GPS.
- 5.2.2 Manual plans and section drawings of archaeological features and deposits were drawn at an appropriate scale (1:10, 1:20 or 1:50).
- 5.2.3 Deposits or the removal of deposits judged by the excavating archaeologist to constitute individual events were each assigned a unique record number (often referred to within British archaeology as 'context numbers') and recorded utilising PCAs printed *pro forma*.
- 5.2.4 High-resolution digital photographs were taken at all stages of the evaluation process.
- 5.2.5 All finds encountered were collected by hand and assigned to the record number of the deposits from which they were retrieved, receiving appropriate care prior to removal from the site (ClfA 2014a).
- 5.3 Post-Fieldwork Methodology
- 5.3.1 Historic England's Management of Research Projects in the Historic Environment: The MoRPHE Project Managers Guide (HE 2015) was used as the framework for post-excavation work.
- 5.3.2 The stratigraphic data for the project comprises written, drawn and photographic records. Post-excavation work involved checking and collating site records, and phasing the stratigraphic data (**Appendix 1**).
- 5.3.3 A single sherd of white glazed modern pottery from an area of modern disturbance was identified in Trench 5 but not retained.
- 5.3.4 No other categories of organic or inorganic artefactual material was represented. None of the material recovered during the evaluation required specialist stabilisation or an assessment of its potential for conservation research.
- 5.3.5 The complete site archive will be packaged for long-term curation. The site archive will be prepared for deposition in accordance with *Deposition of Archaeological Archives in Cambridgeshire* (Cambridgeshire County Council 2017) and following the guidelines specified in the Archaeological Archives Forum guidelines document (Brown 2011), the United Kingdom Institute for Conservation (UKIC) document (Walker 1990) and the relevant ClfA publication (ClfA 2014b). The depositional requirements of the body to which the Site Archive will be ultimately transferred will be met in full.

6 THE RESULTS

During the archaeological evaluation, separate stratigraphic entities were assigned unique and individual 'context' numbers, which are indicated in the following text as, for example (123).

6.1 Natural deposits

6.1.1 Natural deposits across the site consisted mid to light yellowish brown and greyish yellowish brown clayey silts and laminated clayey silts (contexts **108, 201, 301, 401, 501, 603**) which represent roddon deposits. Alluvial mid bluish grey and brownish grey silty clays (contexts **208** and **302**) were also recorded in Trenches 3 and 2 where they overlay the roddon silts.

6.2 Additional deposits

6.2.1 Topsoil across the site consisted of firm dark brown to dark greyish brown clayey silt (contexts **100, 200, 300, 400, 500, 600**).

6.3 Natural Features

6.4 Trench 1

6.4.1 Cut through the natural (**108**) in Trench 1 was a wide linear feature [**107**] oriented on a roughly N-S alignment, measuring at least 2.08m wide by 0.57m deep with concave sides and base. The western side was steep while the eastern side sloped much more gently and it may be that this cut was curving somewhat to the east. Interpreted as a natural palaeochannel, this feature contained a sequence of four fills. The primary fill comprised 0.35m thick, firm mid bluish grey clayey silt (**106**) with orange mottle. This was overlain by a 0.22m thick deposit of friable, dark reddish brown desiccated peat (**105**). Overlying the peat was a thin layer of firm, mid grey to bluish grey clayey silt (**104**), measuring 0.12m thick with orange mottle. The final uppermost fill consisted of friable, black dry peat (**103**), 0.11m thick.

6.5 Trench 2

6.5.1 The natural silt (**201**) was truncated by a linear cut [**202**] oriented on a east-northeast to west-southwest alignment measuring 2.9m wide by 0.5m deep with concave sides and a concave base. This natural palaeochannel contained a sequence of five fills, the earliest of which consisted of firm, mid blue grey silty clay (**203**), 0.3m thick. This was overlain by a 0.1m thick deposit of firm, mid reddish brown clayey silt (**204**). The third deposit in the sequence comprised firm orange clay (**205**), 40mm thick. Overlying this thin band of clay was 0.18m thick, dark brownish black, loose peat (**206**). The final uppermost fill comprised firm to friable, dark grey clayey silt (**207**), 80mm thick.

6.6 Trench 5

6.6.1 A roughly north-south aligned feature [**502**], identified as a natural palaeochannel, cut through

the natural (**501**) in this trench, measuring 5m wide by 0.56m deep with concave sides and a concave base. A total of five fills were recorded in this feature. The primary fill comprised firm, mid grey clayey silt (**503**) with orange mottle, 0.29m thick. This was overlain by a 0.17m thick deposit of friable, mid to dark reddish brown desiccated peat (**504**). The next deposit in this sequence consisted of firm, mid bluish grey, orange mottled clayey silt (**505**), 0.12m thick. The uppermost fill of this feature comprised, 0.16m thick, loose dry peat (**506**) which was black with dark reddish brown patches. This fill was truncated by claying trench [**507**] (see below). Deposit (**509**) was probably the same deposit as (**506**) but was located on the other side of the claying trench cut.

6.7 Archaeological Sequence

6.8 Trench 1

6.8.1 Truncating the upper fill of palaeochannel [**107**] was the cut of a 'claying' trench [**102**]. This was linear and oriented on a north-south alignment, measuring 0.7m wide by at least 0.28m deep with steep near vertical sides and a flat base. This was filled with friable, dark greyish brown, slightly clayey humic silt (**101**).

6.8.2 Topsoil (**100**) of 0.38m thick average thickness overlay claying trench [**102**].

6.9 Trench 2

6.9.1 The natural in Trench 2 consisted of alluvial clay (**208**) and roddon (**201**).

6.9.2 A claying trench was also observed intermittently cutting through the natural in this trench and was recorded in plan by GPS survey.

6.10 Trench 3

6.10.1 Natural deposits in this trench consisted of alluvial clay (**302**) and roddon silts (**301**). Natural deposits were directly overlain by topsoil (**300**) of 0.40m thickness. No features were observed in Trench 3.

6.11 Trench 4

6.11.1 Sealing the natural (**401**) in this trench was a 0.45m thick layer of topsoil (**400**). The only feature recorded in this trench was the remains of a north-south aligned 'claying' trench cut through the natural. This was recorded in plan by GPS survey.

6.12 Trench 5

6.12.1 Truncating the uppermost fills (**506** and **509**) of palaeochannel [**502**] was claying trench [**507**].

6.12.2 Claying trench [**507**] was oriented on a north-south alignment, measuring 0.75m wide by 0.44m deep with vertical to undercut straight sides and a flat base. It was filled with friable to loose, black and reddish brown peat (**508**) with grey silt patches.

6.13 Trench 6

- 6.13.1 A number of features were cut through the natural silt (**603**) in this trench. At the eastern end of the trench was a series of two linear features and another possible linear feature.
- 6.13.2 Feature [**607**] was possibly linear, although this was difficult to ascertain as it was truncated on one side by feature [**605**] and possibly on the other side by [**609**]. If linear, it would have been oriented on a roughly north-south alignment. It measured at least 1.4m wide by 0.34m deep and had a moderately steep side breaking gradually to a concave base. It was filled with firm, dark brown clayey silt (**606**).
- 6.13.3 Feature [**609**] was located adjacent to [**607**] on its western side. Cut [**609**] was oriented on a roughly north-south axis, measuring 0.72m wide by 0.52m deep with steep near vertical sides breaking sharply to a flat base. It contained a single fill of firm, dark greyish brown clayey silt (**608**), containing occasional small fragments of ceramic building material (CBM).
- 6.13.4 Truncating [**607**] on its east side was a north-south aligned linear cut [**605**], measuring 0.33m wide by 0.26m deep with vertical straight sides breaking sharply to a flat base. This was filled with dark greyish brown to black, firm silty clay (**604**).
- 6.13.5 To the west of this group of three features was the remains of a 'claying trench' [**602**] extending through the width of the trench on north-south alignment. This measured 0.95m wide by 0.20m deep with vertical to undercut straight sides and a flat base. It contained a single fill which consisted of very dark brown to black, friable humic clayey silt (**601**).

6.14 **The Auger Survey**

- 6.14.1 The auger survey revealed a deep sequence of mineral soils (silts and clays) beneath the bases of the trenches. Auger holes were assigned numbers and will be referred to as AH1-11.
- 6.14.2 In Trench 1 (AH1-4) the earliest of these was a mid grey clayey silt which occurred throughout the trench between 0.85m to 1.25m below the trench base and was assigned context numbers A100, 105, 108, and 112. This deposit was at least 1.25m thick. In AH4 it was overlain by a 0.32m thick deposit of mid greyish brown clayey silt (A111) with orange mottle. In AH1-3 the grey silt was overlain by firm, mid yellowish brown clayey silt, assigned context numbers A101, A104 and A107 in AH 1-3 respectively. This deposit was also observed in AH4 where it overlain A111 and was assigned context number A110. This silt deposit measured up to 1.02m thick. The latest deposit observed in the auger holes (as well as the base of the trench) measured up to 0.38m thick and comprised firm laminated silts of mid yellowish and greyish brown colour (A100, A103, A106, A109).
- 6.14.3 In Trench 3 (AH5-6) the earliest deposit encountered in the AH5 consisted of soft, mid grey clayey silt (A116). This deposit was at least 0.93m thick and occurred 1.32m below the base of the trench at -2.10m OD. In AH6, the earliest deposit comprised soft, mid grey silty sand (A120), at least 0.35m thick with the top of the deposit lying at -2.18m OD. These grey deposits are very similar and occur at a similar level. However, there was significantly higher sand content in A120. In AH5, the grey clayey silt was overlain by a sequence of lighter coloured clayey silts

and silty clays. The earliest of which consisted of firm, light yellowish brown clayey silt (A115), 1m thick. This was overlain by 0.24m thick, firm, mid greyish brown silty clay (A114) with orange mottle. The final deposit comprised firm, mid greyish brown clayey silt (A113) with some orange mottle.

6.14.4 In AH6 the sandy grey clay (A120) was overlain by a 0.62m thick deposit of soft to loose, mid greyish reddish yellowish brown sandy silt (A119). Above this deposit was a firm, mid to light yellowish brown silt (A118), 0.64m thick with some red mottle. The uppermost deposit in the sequence consisted of firm to plastic, mid grey slightly silty clay (A117) with red and brown mottle.

6.14.5 In Trench 4 (AH7-10) the auger traverse revealed the same sequence of underlying deposits observed in Trench 1. Mid grey clayey silt (A123, A127, A130, A133 in AH 7-10 respectively) overlain by mid greyish brown clayey silts (A122, A126, A129, A132), sealed by laminated mid yellowish to greyish brown clayey silt (A121, A125, A128, A131). The mid grey clayey silt lay at approximately -1.80m OD in this trench. AH7 was executed to a slightly greater depth (2.3m) than other auger holes. As a result, a deposit underneath the mid grey silt was identified. This was a firm, dark grey sandy silt (A124) occurring at -2.88m OD and 2.2m from the base of the trench.

6.14.6 A single auger hole was executed in Trench 5 and again revealed the same sequence of mid grey clayey silt (A136) overlain by mid greyish yellowish brown clayey silt (A135) with orange mottle, sealed by laminated clayey silts (A134), light yellowish brown and grey in colour.

6.15 Hand sorting

6.15.1 The hand sorting revealed no artefacts of any antiquity within the ploughsoil.

7 DISCUSSION – THE ARCHAEOLOGICAL SEQUENCE

7.1 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.

7.2 Summary

7.2.1 The archaeological evaluation uncovered a limited sequence of archaeology including three undated linear features which are probably geological in nature and represent former palaeochannels, a number of post-medieval 'claying trenches' observed in trenches 1, 2, 4, 5 and 6 and three undated features, two of which are probably modern in date.

7.3 Phase 1: Natural sub-stratum

7.3.1 Phase 1 represents natural geological material exposed within all trenches. This consisted of

light to mid yellowish brown silts, often with greyish brown clay laminations. These are typical roddon silts, marine deposits of mineral soils (silts and clays) that have filled formerly deep channels of rivers and brooks in the peat fenland. These mineral deposits contained little peat and as a result now stand as high banks having been exposed by surrounding peat wastage (Hall 1987, 9). The clay natural deposits recorded in Trenches 2 and 3 represent later alluvial deposits which overlap the edges of the roddon.

7.3.2 The auger survey confirmed that clayey silt roddon deposits extended in depth to greater than 2.3m below the base of the trenches. In Trench 3 the survey showed that the alluvial clay was overlying the roddon silts (AH6).

7.3.3 The natural silts and clays were directly overlain by clayey silt ploughsoil which has formed due to modern agricultural use.

7.4 Phase 2: Natural Palaeochannels

7.4.1 Linear features [**107, 202, 502**] recorded in Trenches 1, 2 and 5 all contain a similar sequence of fills which include desiccated reddish brown and black peat deposits. It is probable that these represent former channels of a watercourse, quite possibly the same watercourse which may be meandering or have a dendritic pattern. The gentle sloping edge of this feature in Trench 2 compared to its steeper opposite edge is suggestive of the erosion pattern of a meander in a river.

7.4.2 The peat deposits within these features likely represent vegetation forming within the channel when it was blocked or had moved elsewhere and have formed due to standing freshwater within the feature. A sample was taken from the reddish peat deposit in Trench 2 which contained some wood fragments which may be suitable for carbon dating. Although otherwise undated, the channels truncate, and hence post-date, the roddon deposits which were probably laid down during the Neolithic period. The palaeochannels may be later prehistoric.

7.5 Phase 3: Post-Medieval

7.5.1 A number of 'claying trenches' were recorded oriented on north-south alignments throughout the majority of the site. The process of 'claying' involved digging trenches through ploughsoil in order to obtain the underlying clay and spreading the clay on the surface to be mixed with soil (Fussell 1951). This was done as a way to improve soil fertility. Claying trenches and marl pits are a common feature of the Cambridgeshire Fenland and are thought to span the 18th-19th centuries.

7.5.2 Claying trenches have an interesting social history. The first farmers to 'clay' their land dug haphazard holes across fields to extract clay, as such, this was a slow laborious process. That was until the 'old toolmen' or 'dykers' (the specialised workers who dug and maintained the dykes in the fenland) employed their dyke digging methods (and tools) to dig claying trenches. These were trenches cut c. 2 ft wide with clay spread 4 yards on either side with trenches spaced c. 8 ft apart to ensure coverage (Fussell 1951). This was shown to be a quicker and

better way to extract the clay and as a result the 'old toolmen' secured a weekly wage for themselves during the winter months when the high water table in the fens prohibited 'dyking' (Porter 1969, 169).

7.6 Phase 4: Undated

- 7.6.1 A group of three undated features were recorded in Trench 6. Two of these features had very steep sides and flat bases, containing single fills, one of which contained fragments of CBM, which suggest they are probably modern and possibly associated with the adjacent farm. At least one of these features truncated an earlier undated feature which was possibly linear, with concave sides and base.

8 CONCLUSIONS

- 8.1.1 The investigation fulfilled the aims of the archaeological evaluation and identified the remains of palaeochannels of probable significant antiquity, along with post-medieval claying trenches, an undated possible linear feature and two other linear features which are probably modern in date.
- 8.1.2 Natural layers on the site generally consisted of silts and clayey silts typical of roddons, with clay alluvium overlapping the edges of the roddon deposits in places.
- 8.1.3 It is unlikely that future archaeological work will be required; any further work will be decided at the discretion of the Historic Environment Officer.

9 ACKNOWLEDGEMENTS

Pre-Construct Archaeology Ltd would like to thank the Robert Doughty Consultancy for commissioning the work on behalf of J Bates & Sons. The investigation was supervised by Andrew Failes. Gary Taylor of PCA Newark managed the site & edited this report. Figures accompanying this report were prepared by PCA's CAD department.

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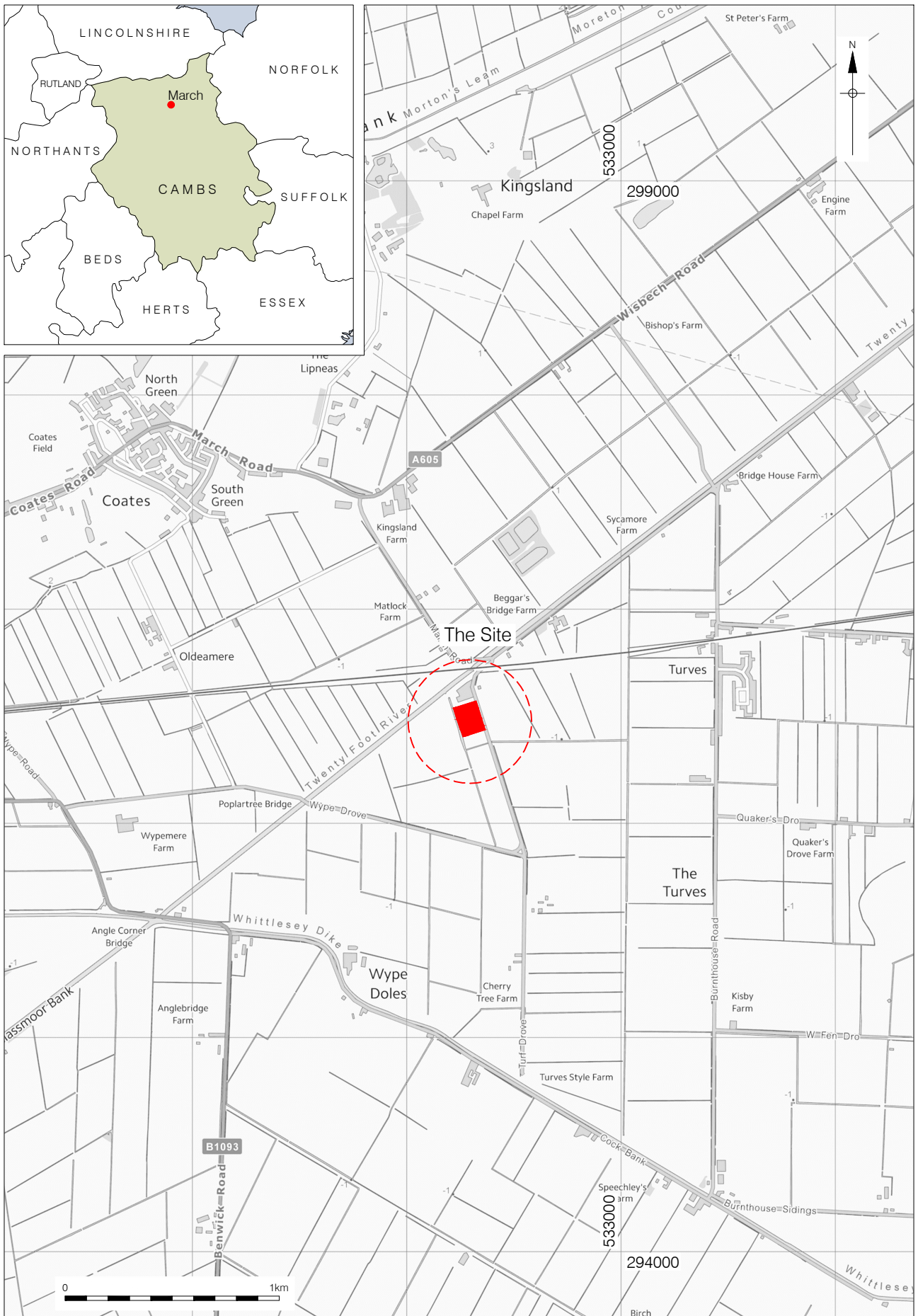
10.2 Websites

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<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

Accessed on 30/07/2018

Old Maps - <https://www.old-maps.co.uk/#/Map/523560/309670/12/100670>

Accessed on 30/07/2018

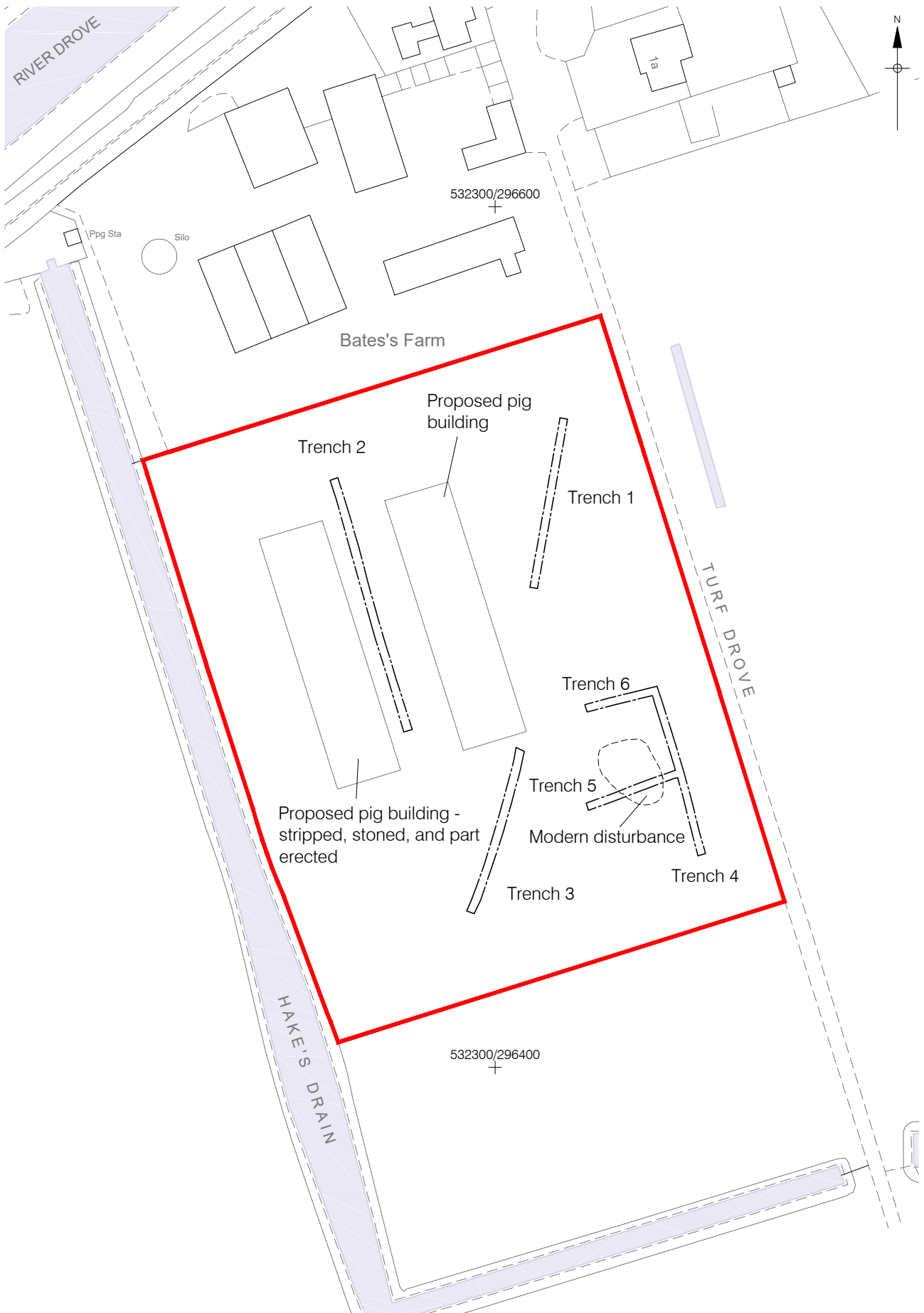


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Figure 1
 Site Location
 1:2,000,000 and 1:25,000 at A4



0 50m

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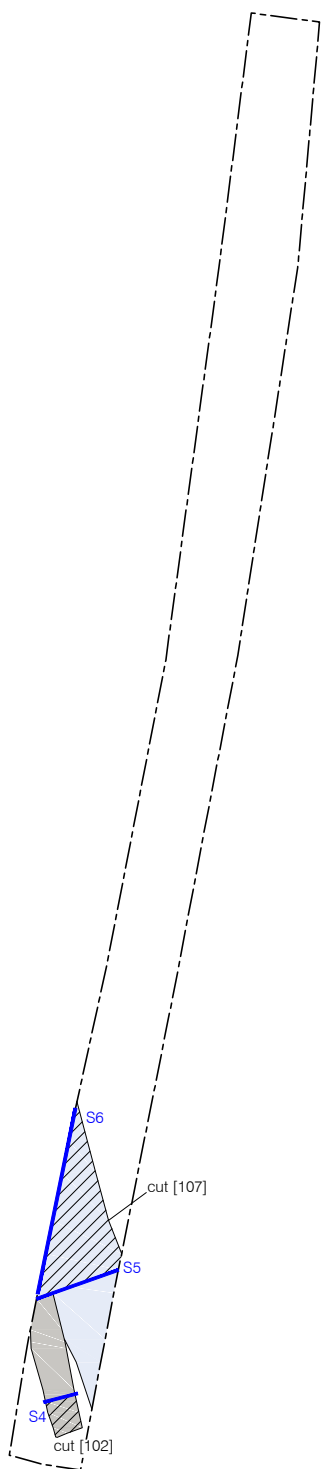
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05/09/18 DV

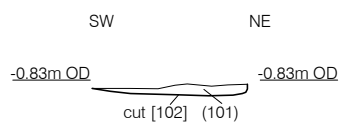
Figure 2
Trench Location Plan
1:1,250 at A4



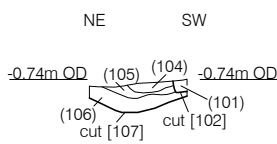
Trench 1



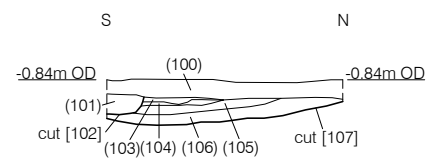
- Palaeochannel
- Claying Pit
- Excavated Slot



Section 4
Trench 1
Southeast Facing



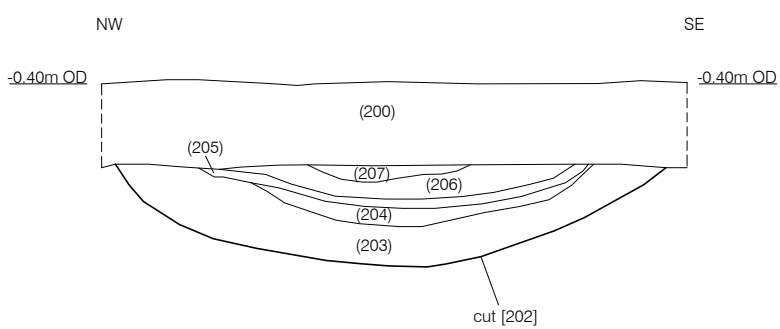
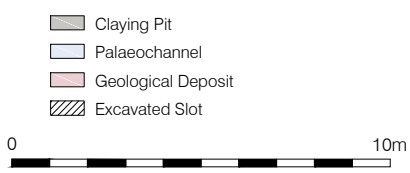
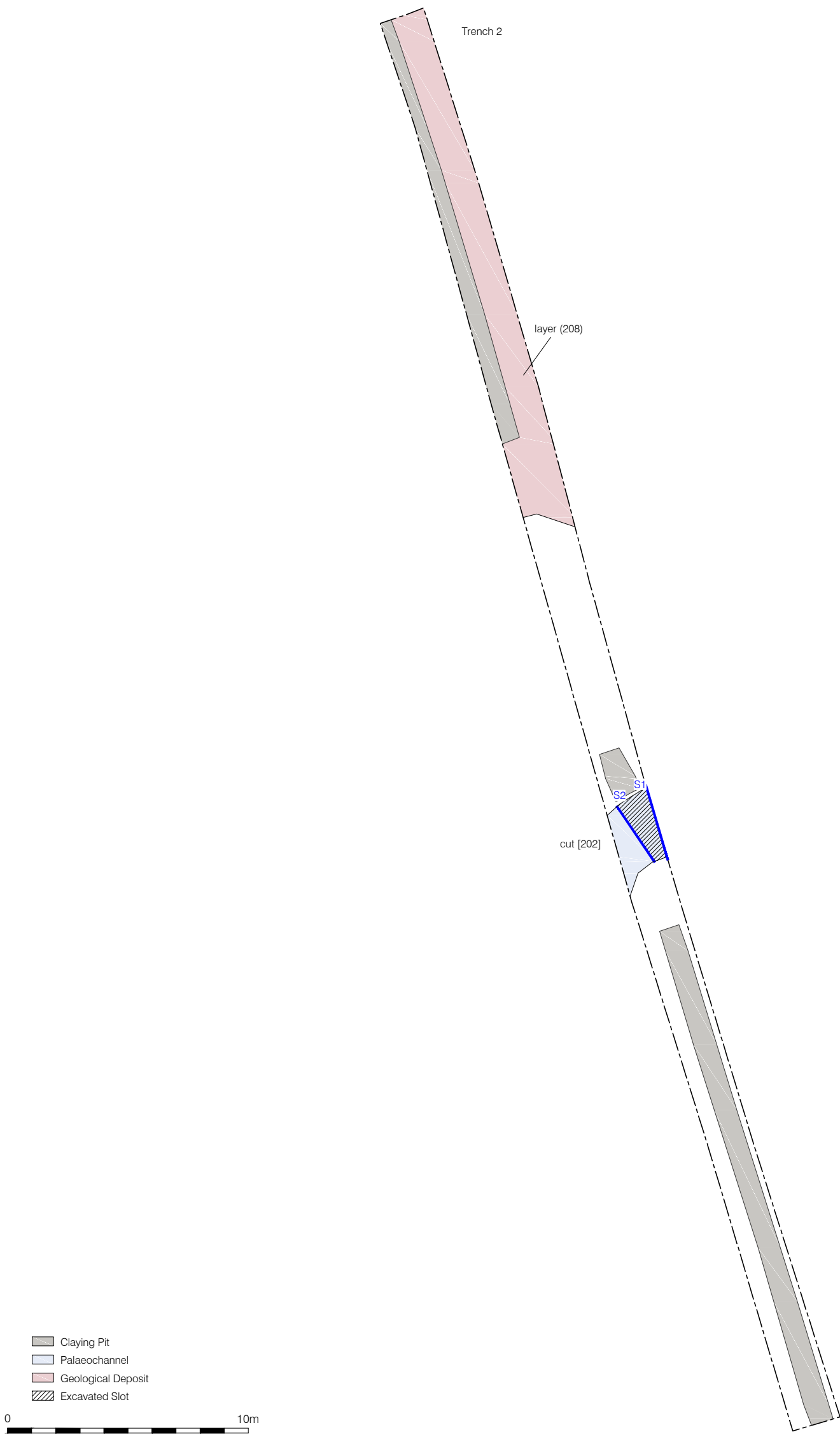
Section 5
Trench 1
Northwest Facing



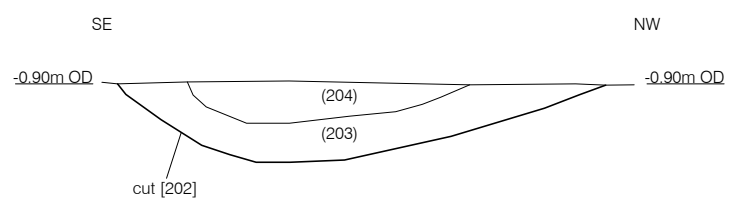
Section 6
Trench 1
East Facing



Figure 3
Plan and Sections of Trench 1
Plan 1:200 and Sections 1:40 at A3

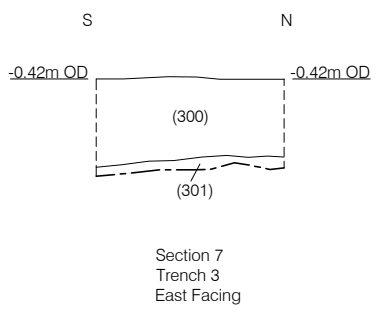
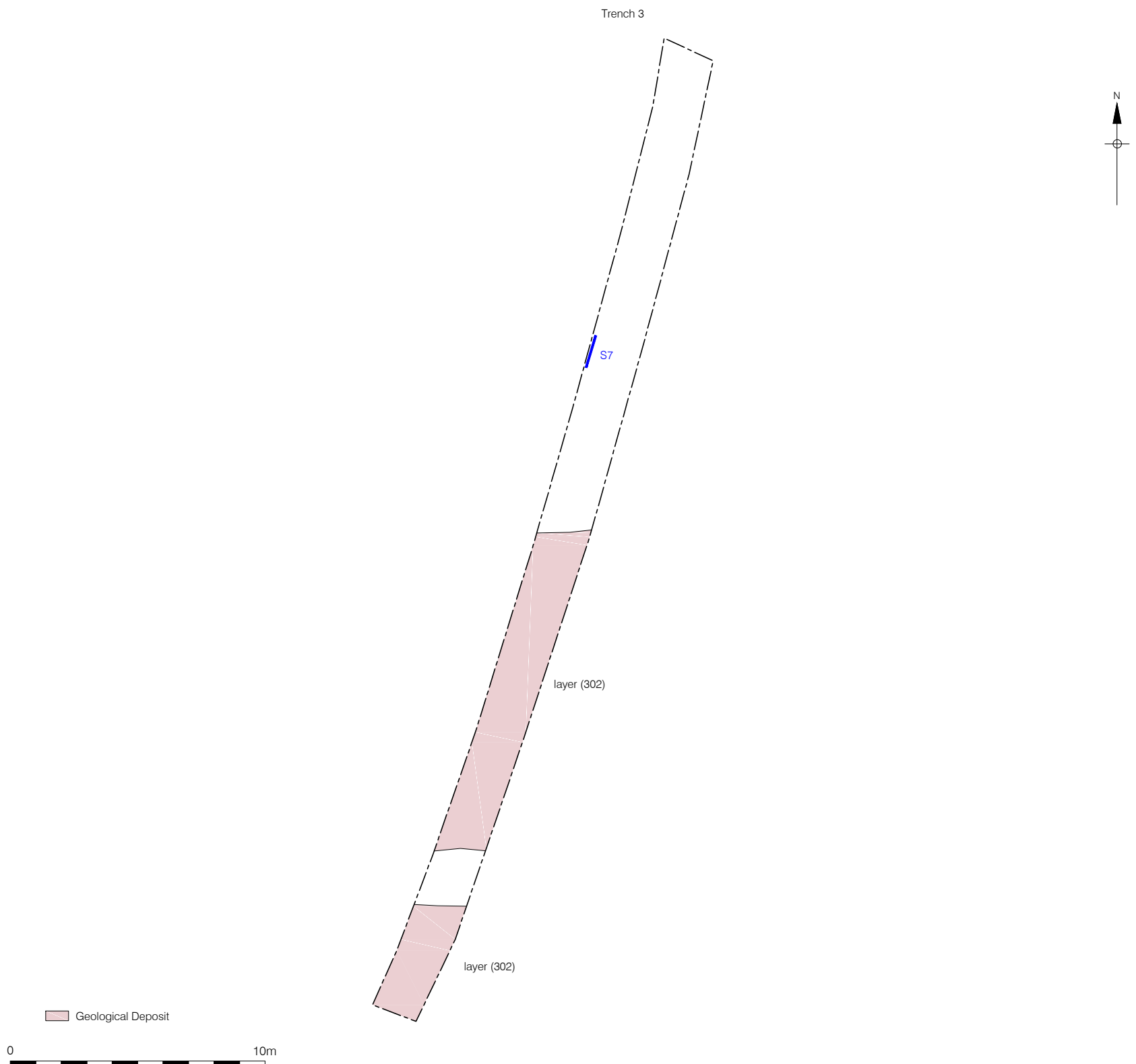


Section 1
Trench 2
Southwest Facing



Section 2
Trench 2
Northeast Facing





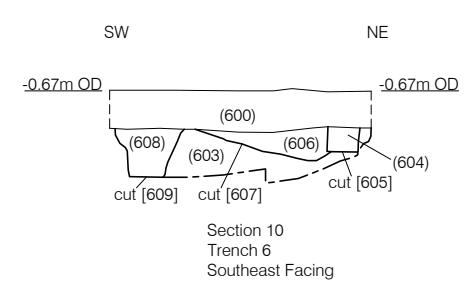
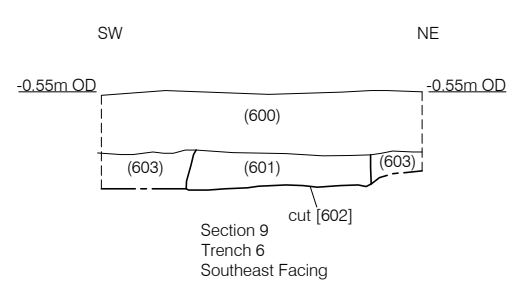
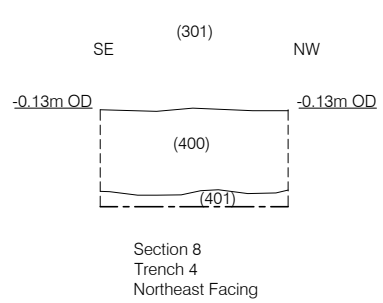
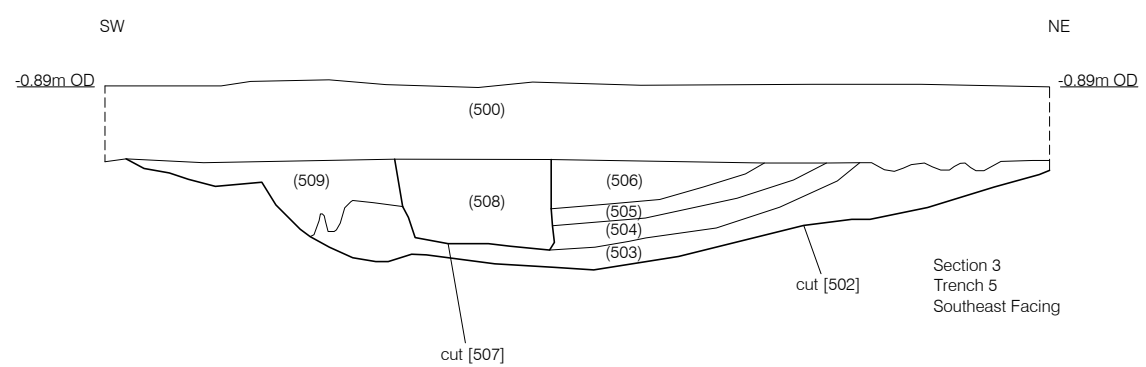
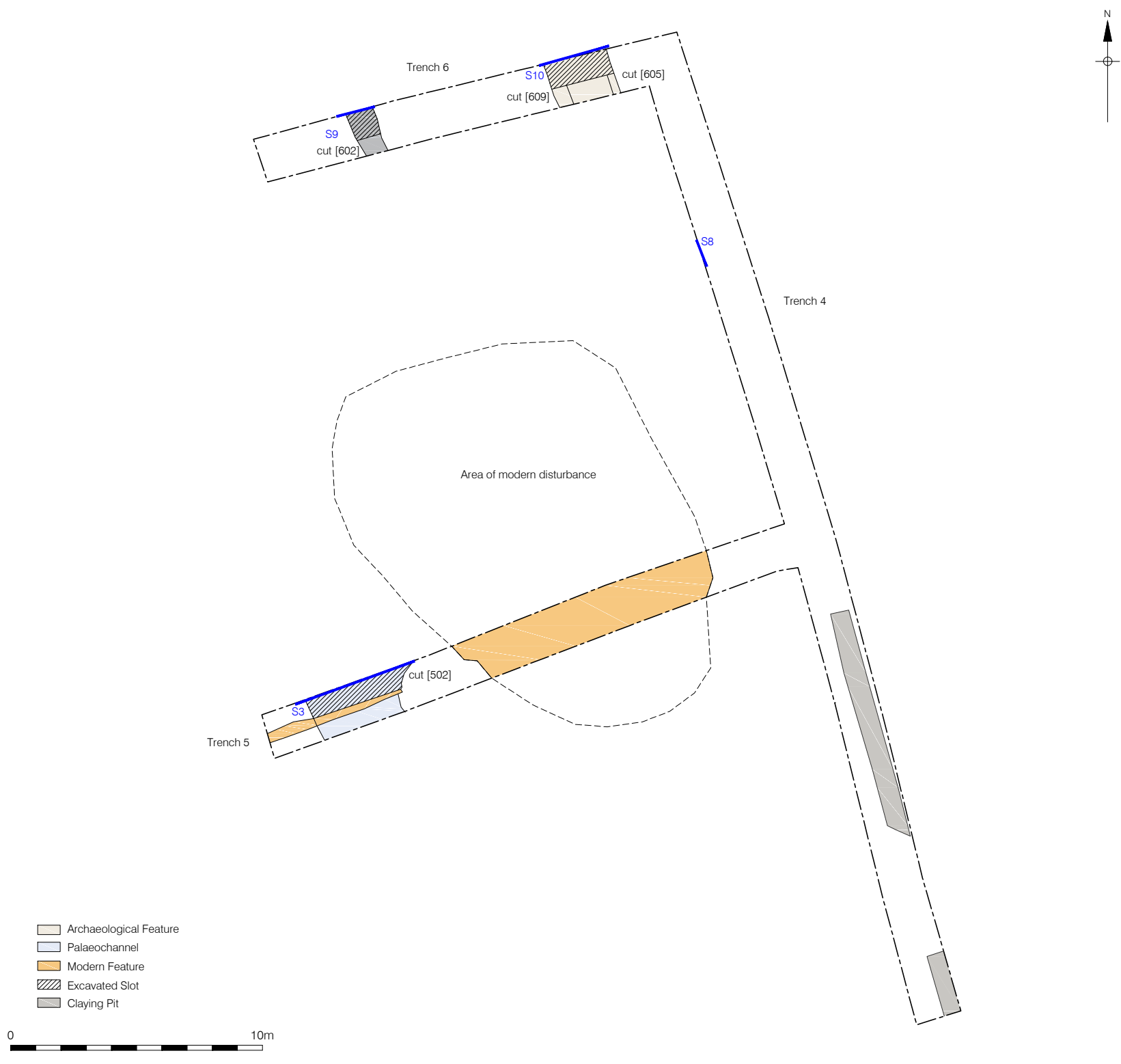
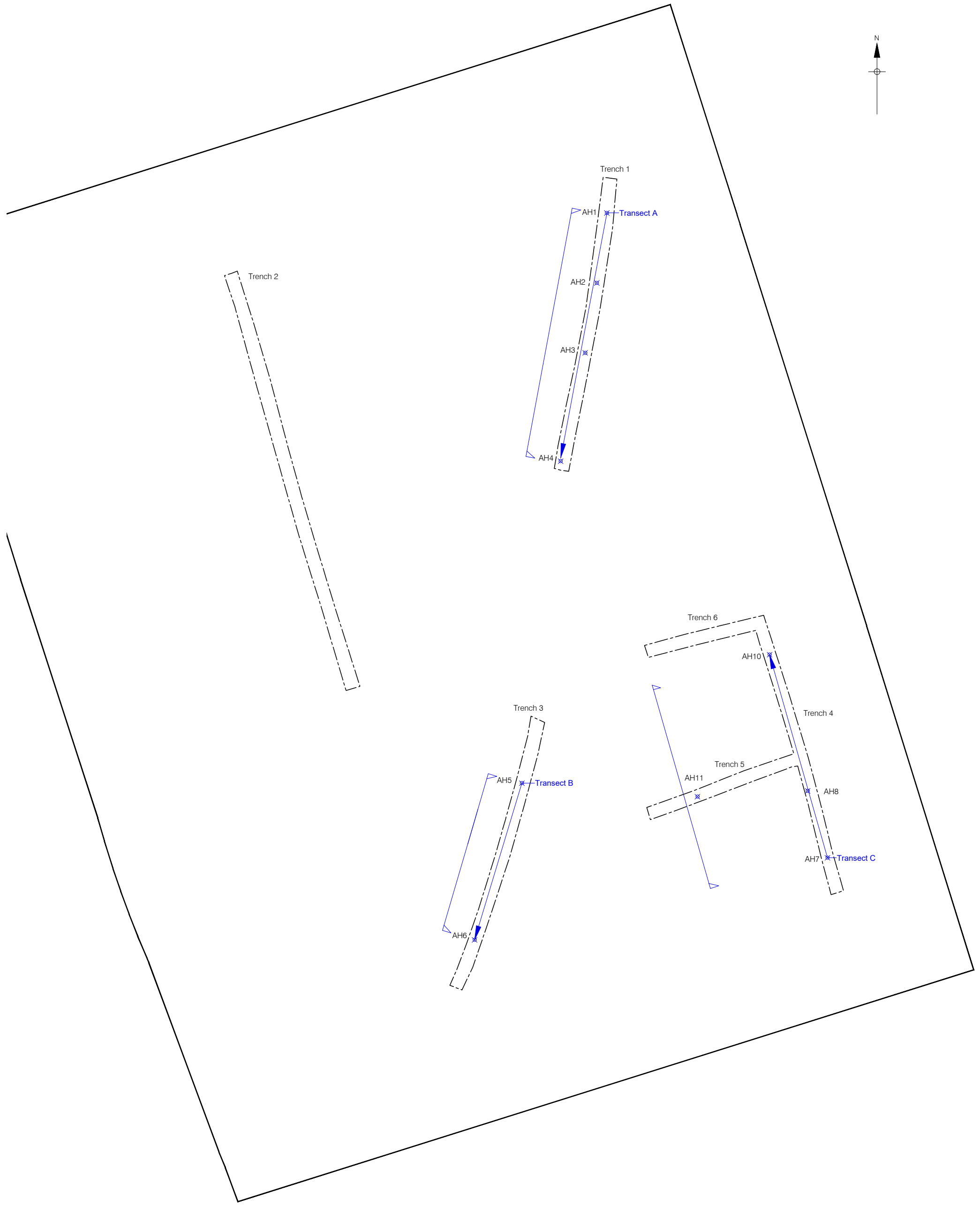


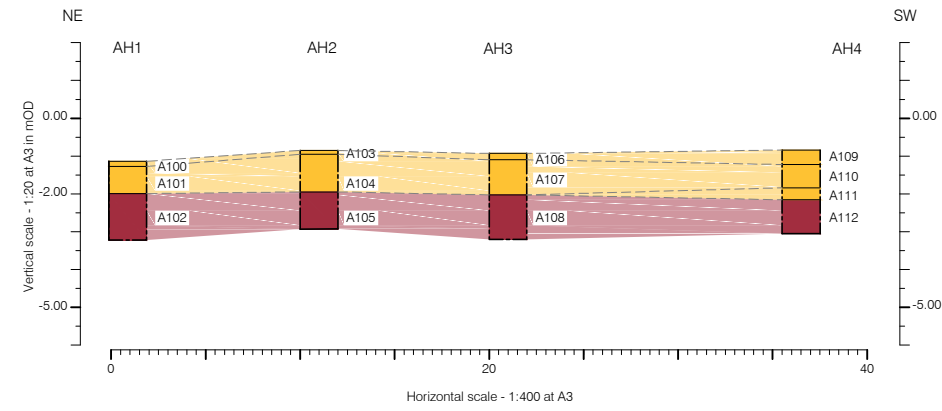
Figure 6
Plan 1:200 and Sections 1:40 at A3



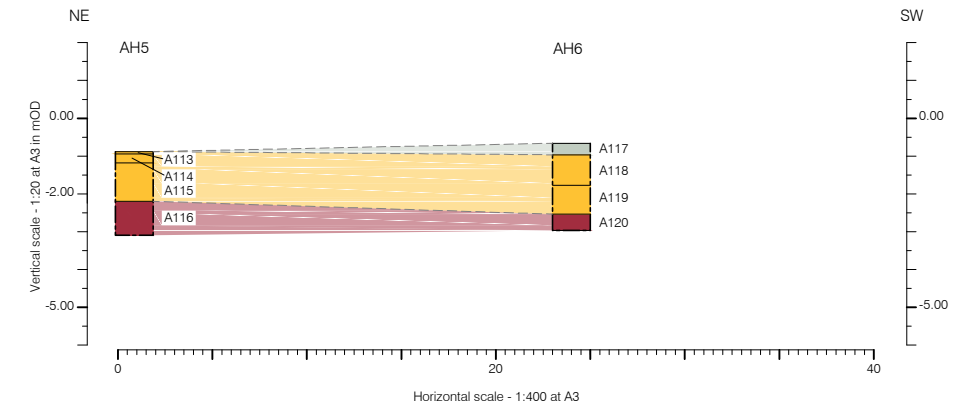
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Figure 7
Auger Survey Location Plan
1:500 at A3

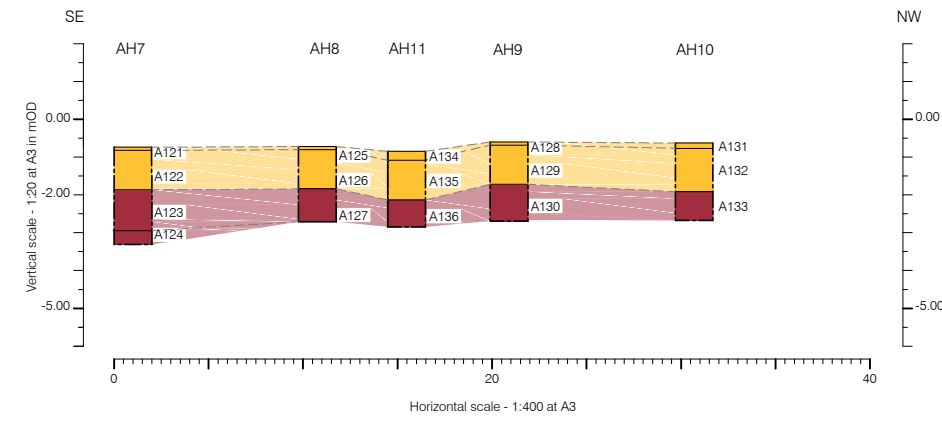
TRANSECT A



TRANSECT B



TRANSECT C



- Alluvial Clay
- Mid/Light Roddon Silt
- Dark Roddon Silt

Appendix 1: Context Index

Abbreviations: UE means 'unexcavated'; N/A means 'not applicable'; > means 'greater than'; < means 'up to'; Context numbers are followed by a brief description and interpretation; their dimensions in metres (in the order length x width x depth; or diameter x depth); and their critical stratigraphic relationships.

Context	Category	Description			Interpretation	Dimensions (m)	Above	Below
		Colour	Compaction and Composition	Inclusions				
A100	Layer	Mid greyish yellowish brown	Firm laminated clayey silt	-	Roddon silt	0.14	-	A101
A101	Layer	Mid yellowish brown	Firm clayey silt	-	Roddon silt	0.71	A100	A102
A102	Layer	Mid grey	Firm clayey silt	-	Roddon silt	>1.24	A101	-
A103	Layer	Mid greyish yellowish brown	Firm laminated clayey silt	-	Roddon silt	0.10	-	A104
A104	Layer	Mid yellowish brown	Firm clayey silt	-	Roddon silt	1	A103	A105
A105	Layer	Mid grey	Firm clayey silt	-	Roddon silt	>1	A104	-

A106	Layer	Mid greyish yellowish brown	Firm laminated clayey silt	-	Roddon silt	0.17	-	A107
A107	Layer	Mid yellowish brown	Firm clayey silt	-	Roddon silt	0.95	A106	A108
A108	Layer	Mid grey	Firm clayey silt	-	Roddon silt	>1.16	A107	-
A109	Layer	Mid yellowish greyish brown	Firm laminated clayey silt	-	Roddon silt	0.38	-	A110
A110	Layer	Mid yellowish brown	Clayey silt	-	Roddon silt	0.62	A109	A111
A111	Layer	Mid greyish brown with orange mottle	Firm clayey silt	-	Roddon silt	0.32	A110	A112
A112	Layer	Mid grey	Firm clayey silt	-	Roddon silt	>0.91	A111	-
A113	Layer	Mid greyish brown with some orange mottle	Firm clayey silt	-	Roddon silt	0.07	-	A114
A114	Layer	Mid greyish brown with orange mottle	Firm clayey silt	-	Roddon silt	0.24	A113	A115
A115	Layer	Light yellowish greyish brown	Firm clayey silt	-	Roddon silt	1.01	A114	A116

A116	Layer	Mid grey	Soft clayey silt	-	Roddon silt	>1.13	A115	-
A117	Layer	Mid grey with red brown mottle	Firm to plastic slightly silty clay	-	Alluvial clay	0.26	-	A118
A118	Layer	Mid to light yellowish brown with greyish red mottle	Firm silt	-	Roddon silt	0.64	A117	A119
A119	Layer	Mid greyish brown with reddish yellow hue	Soft to loose sandy silt	-	Roddon fill	0.62	A118	A120
A120	Layer	Mid grey	Soft silty sand	-	Roddon fill	>0.35	A119	-
A121	Layer	Light greyish yellowish brown	Firm laminated clayey silt	-	Roddon silt	0.09	-	A122
A122	Layer	Mid greyish brown with brownish red mottle	Firm clayey silt	-	Roddon silt	1.03	A121	A123
A123	Layer	Mid grey	Firm clayey silt	-	Roddon silt	1.08	A122	A124
A124	Layer	Dark grey	Firm sandy silt	-	Roddon silt	>0.10	A123	-
A125	Layer	Light greyish yellowish brown	Firm laminated clayey silt	-	Roddon silt	0.18	-	A126

A126	Layer	Mid greyish brown with brownish red mottle	Firm clayey silt	-	Roddon silt	1.09	A125	A127
A127	Layer	Mid grey	Firm clayey silt	-	Roddon silt	>0.73	A126	-
A128	Layer	Light greyish yellowish brown	Firm laminated clayey silt	-	Roddon silt	0.39	-	A129
A129	Layer	Mid greyish brown with brownish red mottle	Slightly clayey silt	-	Roddon silt	1.01	A128	A130
A130	Layer	Mid grey	Clayey silt	-	Roddon silt	>0.70	A129	-
A131	Layer	Light greyish yellowish brown	Firm laminated clayey silt	-	Roddon silt	0.14	-	A132
A132	Layer	Mid greyish brown with brownish red mottle	Firm clayey silt	-	Roddon silt	1.14	A131	A133
A133	Layer	Mid grey	Firm clayey silt	-	Roddon silt	>0.76	A132	-
A134	Layer	Light greyish yellowish brown	Firm laminated clayey silt	-	Roddon silt	0.24	-	A135
A135	Layer	Mid greyish brown with brownish red mottle	Firm clayey silt	-	Roddon silt	0.91	A134	A136

A136	Layer	Mid grey	Firm clayey silt	-	Roddon silt	>0.86	A135	-
100	Layer	Dark brown	Firm clayey silt	-	Topsoil	0.38	-	101
101	Fill	Dark greyish brown with patches of light yellow and greyish brown	Slightly clayey humic silt	-	Fill of claying trench	>0.26	100	102
102	Cut	Cut of N-S aligned linear trench, 0.78m Wide by >0.28m deep with steep near vertical sides and a flat base			Cut of claying trench	>0.28	100	103
103	Fill	Black	Friable dry peat	-	Fill of palaeochannel [107]	0.11	102	104
104	Fill	Mid grey to mid blue grey with orange mottle	Firm clayey silt	-	Fill of palaeochannel [107]	0.12	103	105
105	Fill	Dark reddish brown	Friable desiccated peat	-	Fill of palaeochannel [107]	0.22	104	106
106	Fill	Mid blue grey with orange mottle	Firm clayey silt	-	Fill of palaeochannel [107]	0.35	105	107
107	Cut	Cut of possible palaeochannel, oriented roughly N-S, probably curving, measuring at least 2.08m wide x 0.57m deep with concave sides and concave base			Cut of palaeochannel	0.57	106	108
108	Layer	Mid to light yellowish brown with mid grey	Firm laminated silt	-	Natural roddon silt	-	107	-

200	Layer	Mid brownish grey	Firm clayey silt	-	Topsoil	0.45	-	207
201	Layer	Light to mid brownish yellow	Firm clayey silt	-	Natural roddon silt	-	202	-
202	Cut	Cut of possible palaeochannel, oriented on a ENW-WSW alignment, measuring 2.9m wide x 0.5m deep with concave sides and concave base			Cut of palaeochannel	0.5	203	201
203	Fill	Mid blue grey	Firm silty clay	-	Fill of palaeochannel [202]	0.3	204	202
204	Fill	Mid reddish brown	Firm clayey silt	-	Fill of palaeochannel [202]	0.1	205	203
205	Fill	Orange	Firm clay	-	Fill of palaeochannel [202]	0.04	206	204
206	Fill	Dark brownish black	Loose peat	-	Fill of palaeochannel [202]	0.18	207	205
207	Fill	Dark grey	Firm to friable clayey silt	-	Fill of palaeochannel [202]	0.08	200	206
208	Layer	Mid bluish grey with mid yellowish brown patches	Firm	-	Alluvial silty clay	-	200	-
300	Layer	Mid greyish brown	Firm clayey silt	-	Topsoil	0.40	-	301

301	Layer	Mid to light yellowish brown with mid grey laminations	Firm laminated clayey silt	-	Natural roddon silt	-	300	-
302	Layer	Mid greyish blue to brownish blue	Silty clay	-	Alluvial clay	-	300	-
400	Layer	Dark greyish brown	Firm to hard clayey silt	-	Topsoil	0.45	-	401
401	Layer	Mid to light yellowish brown with mid grey and orange laminations	Firm laminated clayey silt	-	Natural roddon silt	-	400	-
500	Layer	Dark brown	Firm slightly clayey silt	-	Topsoil	0.40	-	508
501	Layer	Light yellowish brown to mid greyish yellowish brown	Firm laminated silts	-	Natural roddon silt		502	-
502	Cut	Cut of possible palaeochannel oriented on a roughly N-S alignment, measuring 5m wide x 0.56m deep with concave sides and concave base			Cut of palaeochannel	0.56	503	501
503	Fill	Mid grey with some orange mottle	Firm clayey silt	-	Fill of palaeochannel [502]	0.29	504	502
504	Fill	Mid to dark reddish brown	Friable desiccated peat	-	Fill of palaeochannel [502]	0.17	505	503
505	Fill	Mid bluish grey with orange mottle	Firm clayey silt	-	Fill of palaeochannel [502]	0.12	506	504

506	Fill	Black with dark reddish brown patches	Loose dry peat	-	Fill of palaeochannel [502]	0.16	507	505
507	Cut	Cut of N-S aligned linear trench, 0.75m wide by 0.44m deep with vertical to undercut sides and flat base			Cut of claying trench	>0.37	508	505
508	Fill	Black with dark reddish brown patches and grey silt patches	Friable to loose dry peat	-	Fill of claying trench [507]	0.44	500	507
509	Fill	Black with dark reddish brown patches	Loose dry peat	-	Fill of palaeochannel [502]	0.25	507	503
600	Layer	Dark greyish brown	Hard silty clay	-	Topsoil	0.32	-	601, 604, 608
601	Fill	Very dark brown to black	Friable humic clayey silt	-	Fill of claying trench [602]	0.20	600	602
602	Cut	Cut of N-S aligned linear trench, measuring 0.95m wide x 0.20m deep with vertical to undercut sides and flat base			Cut of claying trench	0.20	601	603
603	Layer	Light to mid yellowish brown	Firm clayey silt	-	Natural roddon silt	-	602, 605, 609	-
604	Fill	Dark greyish brown to black	Firm silty clay	-	Fill of [605]	0.26	600	605
605	Cut	Linear cut aligned roughly N-S with vertical straight sides breaking sharply to a flat base, 0.33m wide x 0.26m deep			Modern cut	0.26	604	606

606	Fill	Dark brown	Firm clayey silt	-	Fill of [607]	0.34	605	607
607	Cut	Possible linear cut, possibly oriented N-S, at least 1.4m wide x 0.34m deep with moderately steep sides and concave base			Undated cut	0.34	606	603
608	Fill	Dark greyish brown	Firm clayey silt	Occasional small fragments of CBM	Fill of [609]	0.52	600	609
609	Cut	Linear cut oriented roughly N-S, 0.72m wide by 0.52m deep with steep to near vertical sides and flat base			Probable modern cut	0.52	608	603

Appendix 2: Site Photographs



Plate 1: View of the site, looking north.



Plate 2: Trench 5, looking east, showing palaeochannel [502] running north-south, as well as modern disturbance in the foreground and middle distance.



Plate 3: Palaeochannel [202], in trench 2, looking east.



Plate 4: Palaeochannel [502] and claying trench [507] in trench 5, looking north.



Plate 5: Palaeochannel [107] in trench 1, looking south-southwest.



Plate 6: Modern features [605], [607] and [609] in trench 6, looking north-northeast.

Appendix 3: OASIS Report

OASIS DATA COLLECTION FORM: England

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Printable version

OASIS ID: preconst1-324813

Project details

Project name	Land South of Bates Farm, Beggars Bridge, River Drove, Coates, Cambridgeshire: Report on an Archaeological Evaluation
Short description of the project	This archaeological evaluation identified evidence of palaeochannels, post-medieval 'claying' trenches, and three undated linear features. The paleochannels allow characterisation of the past landscape. The 'claying' trenches, while undated, are a typical post-medieval feature relating to soil improvement and thus indicate agricultural usage of the site during this period. Of the three undated linear features, two are probably modern. Other than these, no remains of archaeological significance were observed on the site.
Project dates	Start: 31-05-2018 End: 06-06-2018
Previous/future work	No / No
Any associated project reference codes	ECB5425 - Sitecode
Any associated project reference codes	F/YR17/0825/F - Planning Application No.
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 4 - Character Undetermined
Monument type	CLAYING TRENCH Post Medieval
Significant Finds	NONE None
Methods & techniques	"Augering", "Sample Trenches"
Development type	Farm infrastructure (e.g. barns, grain stores, equipment stores, etc.)
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	After full determination (eg. As a condition)

Project location

Country	England
Site location	CAMBRIDGESHIRE FENLAND WHITTLESEY Land South of Bates Farm, Beggars Bridge, River Drove, Coates
Postcode	PE7 2DH
Study area	610 Square metres
Site coordinates	TL 3228 9652 52.550052273015 -0.048851810566 52 33 00 N 000 02 55 W Point
Height OD / Depth	Min: -0.9m Max: -0.3m

Project creators

Name of Organisation	PCA Newark
Project brief originator	Cambridgeshire Archaeology Planning and Countryside Advice
Project design originator	Pre-Construct Archaeology
Project director/manager	Gary Taylor
Project supervisor	Andy Failes
Type of sponsor/funding body	Developer

Project archives

Physical Archive Exists?	No
Digital Archive recipient	Cambridgeshire County Council Archaeology Store
Digital Contents	"Stratigraphic","Survey"
Digital Media available	"Images raster / digital photography","Images vector","Survey","Text"
Paper Archive recipient	Cambridgeshire County Council Archaeology Store
Paper Contents	"Survey","Stratigraphic"
Paper Media available	"Context sheet","Correspondence","Diary","Map","Matrices","Photograph","Plan","Report","Section","Survey"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Land South of Bates Farm, Beggars Bridge, River Drove, Coates, Cambridgeshire: Report on an Archaeological Evaluation
Author(s)/Editor(s)	Failes, A.
Other bibliographic details	R13354
Date	2018
Issuer or publisher	PCA Newark
Place of issue or publication	Winkburn
Description	A4 Comb-bound
Entered by	Gary Taylor (gtaylor@pre-construct.com)
Entered on	7 August 2018

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