LAND AT MILL ROAD DEPOT, MILL ROAD, CAMBRIDGE, CAMBRIDGESHIRE

AN ARCHAEOLOGICAL EVALUATION

LOCAL PLANNING AUTHORITY:
CAMBRIDGE CITY COUNCIL

PLANNING APPLICATION NUMBERS:
12/2192/FUL

PCA REPORT NO: 13417

SITE CODE: ECB5412

OCTOBER 2018

PRE-CONSTRUCT ARCHAEOLOGY

Land at Mill Road Depot, Mill Road, Cambridgeshire: An Archaeological Evaluation

Local Planning Authority:	**Cambridge City Council**
Planning Reference:	**17/2192/FUL**
Central National Grid Reference:	**NGR TL 4641 5794**
Site Code:	**ECB5412**
Oasis Reference:	**preconst1-329709**
Report No.	**R13417**
Written and researched by:	**Christiane Meckseper**
Project Manager:	**Christiane Meckseper**
Commissioning Client:	**Hill Holdings Ltd**

Contractor: **Pre-Construct Archaeology Ltd**
Central Office
The Granary Rectory Farm
Brewery Road
Pampisford
Cambridgeshire
CB22 3EN
Tel: **01223 845522**
E-mail: **cmeckseper@pre-construct.com**
Website: **www.pre-construct.com**

October 2018

CONTENTS

ABSTRACT

A programme of archaeological trial trenching was undertaken by Pre-Construct Archaeology Ltd (PCA) on Land at Mill Road Depot, Mill Road, Cambridge. The archaeological work was commissioned by Hill Holdings Ltd in response to an archaeological planning condition attached to the proposed residential development of the site (Planning Reference: 17/2245/FUL). The work was undertaken in line with National Planning Policy Framework 2018.

Three trial trenches were excavated between 23 August and 17 September 2018. Two trenches measured 25m x 1.8m in width and one trench 50m x 4m in width. The trenches revealed a prehistoric paleochannel on a WNW-ESE alignment in Trench 2 and a single isolated posthole in Trench 3. A total of three pottery fragments were retrieved from the features. The pottery was mid Bronze Age to late Bronze Age/early Iron Age in date.

The evaluation revealed features and finds indicating the presence of prehistoric occupation or movement of people in the wider landscape around the Mill Road site, similar to other sites in Mill Road area, for example at the CB1 development and Brooklands Avenue located to the south-west. No concentrated activity was located on the site itself.

1 INTRODUCTION

1.1 A programme of archaeological trial trenching was undertaken by Pre-Construct Archaeology Ltd (PCA) on Land at Mill Road Depot, Mill Road, Cambridge, CB1 2AZ (centred on Ordnance Survey National Grid Reference (NGR) TL4641 5794) between 23 August and 17 September 2018 (Figure 1; Plate 1).

1.2 The archaeological work was commissioned by Hill Holdings Ltd in response to an archaeological planning condition attached to the construction of 182 dwellings, basement car park (101 spaces), surface water pumping station, open space and the alteration of the junction with Mill Road (Planning Reference: 17/2245/FUL). This was in line with National Planning Policy Framework 2018 and due to archaeological potential of the proposed development area (PDA).

1.3 The evaluation was carried out in accordance with a Written Scheme of Investigation (WSI) prepared by PCA (Meckseper 2018) in response to a Brief for archaeological evaluation issued by Andy Thomas (Thomas 2018) of Cambridgeshire County Council Historic Environment Team (CCC HET).

1.4 The aim of the evaluation was 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.

1.5 A total of 3 trenches; one measuring 50m x 4m and two measuring 25m x 2m totalling 100m of trenching were excavated and recorded (Figure 2).

This report describes the results of the evaluation and aims to inform the design of an appropriate archaeological mitigation strategy. The site archive will be deposited at Cambridgeshire County Council Archaeological Archive Facility.

2 GEOLOGY AND TOPOGRAPHY

2.1 Geology

2.2 The underlying bedrock is comprised of West Melbury Chalk Formation Chalk. This is a Sedimentary Bedrock formed approximately 94 to 101 million years ago in the Cretaceous Period, in a local environment dominated by warm chalk seas.

2.3 The superficial geological deposits are comprised of River Terrace 3 Sand and Gravel deposits, formed in the Quaternary period up to 3 million years ago in riverine environments (BGS 2018).

2.4 Topography

2.5 Topographically, the proposed development site lies on level ground at c. 17m above Ordnance Datum (AOD).

3 ARCHAEOLOGICAL BACKGROUND

3.1.1 This information was drawn from the WSI (Meckseper 2018), Heritage Statement (Beacon 2017), Archaeological Brief and accompanying HER information (Thomas 2018).

General

3.1.2 Few archaeological investigations have been undertaken in the immediate vicinity of the site. The most significant findings so far were during investigations at the former Cattle Market at Hills Road c.850m to the south which revealed Roman earthworks of a possible Roman 'camp' or habitation site and pottery (ECB159, HER 04814, HER 05145). Hills Road follows the line of a former Roman road.

Prehistoric

3.1.3 Very little evidence of prehistoric activity is recorded within the vicinity of the site. One findspot consisting of a Ptolemy soter, dating to 323-285BC was recovered from a gravel pit c.400m to the west of the site (CHER04577).

Roman

3.1.4 Roman evidence largely consists of isolated findspots. For instance, Roman coins were found in Coldham's Lane (HER 04626), a Roman cup on Coldhams Common (HER 05054), a Roman fibula brooch in Thoday Street (HER 04702), two Bronze figurines of Mercury and Hercules (CHER03420) were recovered from a gravel pit c.400m to the west of the site and Roman pottery in an allotment in Coleridge Road (HER 04868). These are isolated find spots but are part of the general activity and movement of people in the Roman hinterland of Cambridge.

3.1.5 Roman to medieval gravel extraction was recorded prior to construction of the CB1 development at Hills Road.

3.1.6 However, further Roman evidence has been identified c.500m to the south-west of the site where an evaluation identified two north-south aligned boundary ditches, with a single sherd of Roman pottery recovered. However, it is plausible that these ditches post-date the Roman period. A Roman

cemetery has been recorded c.400m west of the site consisting of two Roman glass vessels, one an elaborate cut white glass goblet (CHER02303).

Saxon

3.1.7 The main Saxon evidence consists of two Saxon burials were found in Mill Road Cemetery in 1847, together with a fragment of a shield boss and a spearhead (HER04622). Further Saxon findspots have been identified including scattered Saxon finds at Barnwell c.400m west of the site (CHER 05339).

Medieval

3.1.8 It is likely that in the medieval period the land around Mill Road comprised agricultural fields. Only a small number of medieval findspots have been identified in the vicinity of the site including an impression of a brass secretum or private seal depicting St. John the Baptist on a charger (CHER 04644) in a coprolite pit.

Post-medieval

3.1.9 Mill Road cemetery (CB15751) a Grade II registered cemetery, measuring 3.5ha, was established in 1848. It consists of a cemetery enclosed by a low brick wall with internal features such as a knapped flint and stone lodge and several listed monuments surrounded by a serpentine perimeter path. The cemetery is located 300m to the north-west of the current site.

3.1.10 The former Eagle Iron Foundry, with associated coprolite mill and timber yard, was present within the boundary of the current site (MCB20620). This has, however, been completely demolished. Former gravel extraction pits have also recorded in the area (MCB20568).

3.1.11 A number of post-medieval buildings and terraces have been identified in the vicinity of the site including South Street (MCB18567), the former Union Workhouse (MCB20132), 56& 56a Mill Road (MCB20919), the Church of St. Barnabas (CB14820). Further post-medieval features have also been identified including a pump well at 75 Norfolk Street (CB15506).

Cartographic Evidence

3.1.12 Cartographic evidence shows that the western part of Mill Road had been constructed by 1830 but the area was still very much in agricultural use until the construction of the railway in 1845 (Beacon 2017). This led to the rapid construction of houses along Mill Road and the development of its perpendicular side streets, lined with terraced housing.

3.2 The Mill Road Depot site itself was first occupied after 1846 when the Hadley brothers established the Eagle Iron Foundry. In 1888 cartographic evidence shows that the depot site was occupied by the buildings of the Eagle Foundry, a railway sidings and a coprolite mill, all adjacent to the railway line (Beacon 2017).

3.3 By 1927 the site had been re-developed with new buildings and was used as a 'Corporation Depot' and coal depot, again with a siding connecting the site with the main railway line. The siding is still on maps of the mid- 20th century, together with offices and warehouses around it, the majority of which are still on the site today.

4 METHODOLOGY

4.1 General

4.1.1 The archaeological evaluation comprised one 4m x 50m trial trench and two 2m x 25m trenches, totalling 100m. These were located in areas identified by the client as being suitable for excavation due to negligible levels of contamination and non-existent below-ground structures. The location of the trenches provided an even spread of investigation across the PDA.

4.2 Excavation methodology

4.2.1 Ground reduction during the evaluation was carried out using a 14 ton 360° tracked mechanical excavator was used to strip the each trench. Modern made ground and other overburden of low archaeological value was removed in spits down to the level of the undisturbed natural geological deposits where archaeological features could be observed and recorded.

4.2.2 Exposed surfaces were cleaned by trowel and hoe as appropriate and all further excavation was undertaken manually using hand tools.

4.3 Recording and Finds Recovery

4.3.1 The limits of excavations, heights above Ordnance Datum (m OD) and the locations of archaeological features and interventions were recorded using a Leica 1200 GPS rover unit with RTK differential correction, giving three-dimensional accuracy of 20mm or better.

4.3.2 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 on individual pre-printed forms (Taylor and Brown 2009). Archaeological processes recognised by the deposition of material are signified in this report by round brackets (thus), while events constituting the removal of deposits are referred to here as ‘cuts’ and signified by square brackets [thus]. Where more than one slot was excavated through an individual feature, each intervention was assigned additional numbers for the cutting event and for the deposits it contained (these deposits within cut

features being referred to here as 'fills'). The record numbers assigned to cuts, deposits and groups are entirely arbitrary and in no way reflect the chronological order in which events took place. All features and deposits excavated during the evaluation and excavation are listed in Appendix 1. Artefacts recovered during excavation were assigned to the record number of the deposit from which they were retrieved.

4.3.3 High-resolution digital photographs were taken of all relevant features and deposits, and were used to keep a record of the excavation process. In addition, monochrome photographs were taken of significant features.

4.4 Sampling Strategy

4.4.1 Discrete features were half-sectioned, photographed and recorded by a cross-section scaled drawing at an appropriate scale (either 1:10 or 1:20).

4.4.2 The paleochannel in Trench 2 was hand excavated by means of a 1m x 1m wide test pit into its central fill (Plate 4) and, with permission by the CCCHET, excavated to full depth by machine (Plates 5 and 6).

4.5 Environmental Sampling

4.5.1 One bulk sample (sample no: 1, 40 litres in volume) was taken from the near basal fill of the paleochannel to extract and identify micro- and macro-botanical remains. The aim of this sampling was to investigate the past environment of the site. An additional aim of the sampling was to recover small objects that are not readily recovered by hand-collection, such as metalworking debris and bones of fish and small animals. These samples were taken from sealed deposits.

5 QUANTIFICATION OF ARCHIVE

5.1 Paper Archive

Context register sheets	3
Context sheets	33
Plan registers	0
Plans at 1:50	0
Plans at 1:20	0
Plans at 1:10	0
Plans at 1:5	0
Section register sheets	1
Sections at 1:10 & 1:20 & 1:50	4
Trench record sheets	3
Photo register sheets	2
Small finds register sheets	0
Environmental register sheets	1

5.2 Digital Archive

Digital photos	49
GPS survey files	1
Digital plans	1
GIS project	
Access database	1

5.3 Physical Archive

Struck flint	3
Burnt flint	
Pottery	3
Ceramic building material (CBM)	
Glass	
Briquetage	
Small Finds	
Slag	
Animal bone	2
Shell	
Environmental bulk samples	1
Environmental bulk samples (10 litre buckets)	
Monolith samples	
Other samples (specify)	
Black and white films	
Colour slides	

6 ARCHAEOLOGICAL RESULTS BY TRENCH

6.1 Introduction

6.1.1 The trenches are described below in numerical order, with technical data tabulated (Appendix 3). Archaeological features and deposits were sealed by an old subsoil below modern made ground and tarmac. The modern made ground was c. 0.30m thick, below c. 0.2m of tarmac, while the subsoil was c. 0.5m thick.

6.1.2 The principal result of the fieldwork was that no archaeological features were revealed in the trial trenches. The exceptions were an isolated posthole in Trench 3 and a paleochannel in Trench 2. Trench 1 contained no archaeological features.

6.2 Overburden and natural geological deposits

6.2.1 Tarmac of a thickness of 0.30m was removed across the development site by the main contractors prior to the excavation of the trenches. During the archaeological excavation of the trenches made ground and underlying old subsoil were removed by machine.

6.2.2 Made ground was in the form of a mixed blackish brown coarse sandy silt with frequent fragments of brick and concrete, which was 0.5-0.6m thick in Trenches 1and 2, but only 0.15m thick in Trench 3. The underlying subsoil was sterile, orange brown silty sand with occasional small pebbles and charcoal flecks. This was 0.75m thick in Trench 1, thinning to 0.45m thickness in Trench 3 to the south.

6.2.3 Natural geological deposits comprised yellowish brown river gravels at a depth of c.0.75-1.0m below ground level in Trench 1, and 0.5-0.75m below ground level in Trench 3.

6.3 Trench 1

6.3.1 Trench 1 contained no archaeological features (Plate 1). The trench was excavated 'around' a concrete foundation [207] so this could be left in-situ. A series of four brick walls (104), (105), (106), (107) were recorded in the southern section of the trench (Plate 2). The walls were made of reddish,

machine made, frogged bricks with extensive charring along their interior faces and an infill of black, coke like material (108) in-between the walls. They represent the remains of an industrial feature, possibly a flue for a furnace, associated with the former Eagle Foundry. All features were of modern date.

6.4 Trench 2

6.4.1 A palaeochannel [203] on a ENE-WSW alignment was revealed in Trench 2 (Figure 3). The channel was 5.5m wide at the top and 3.5m at the base (Section 4, Figure 3, Plates 4, 5 and 6). It was filled with a dark reddish black basal deposit (209) below a dark greyish black deposit (208). Both of these deposits were waterlogged and represent waterborne channel deposits. Fill (205) above represents the gradual silting of the channel and yielded one fragment of middle Bronze pottery. Layer (208) represents further silting of the channel and the low lying land to its southern side. This revealed a fragment of possible late Bronze Age to middle Iron Age pottery.

6.4.2 A circular brick-built well [211] was located in the southern end of the trench. This measured 1.50m in diameter at the top, widening slightly towards the main well shaft. The depth of the well was not determined. It was built of yellow machine-made brick, either 19th or 20th century in date.

6.5 Trench 3

6.5.1 Trench 3 (Figure 4, Plate 7) contained a single posthole [306] which was 0.26m in diameter and 0.13m deep with a concave profile (Section 4, Figure 4, Plate 8). It contained a small, abraded fragment of possible late Bronze Age to middle Iron Age pottery.

7 THE FINDS AND ENVIRONMENTAL EVIDENCE

7.1 Flint

By Ella Egberts

7.1.1 Archaeological investigations at the above site resulted in the recovery of two struck flints and a core. The flake from context 205 is struck from a fine-grained, translucent black flint with a thick, slightly weathered nodular cortex. The core from this context is also made from a fine-grained, translucent black flint but with shows some yellow brown mottling. The cortex is weathered nodular and ancient recorticated surface. The flake from context [208] is made from a translucent light grey, cherty flint with a weathered and recorticated nodular cortex. The knapped surfaces are slightly recorticated.

Context	Cut	Trench	Shape	Colour	Cortex	Condition
205	203	2	Flake	Translucent black	Nodular	Slightly chipped
205	203	2	Core	Translucent black	Weathered nodular	Slightly chipped
208	203	2	Flake	Recorticated light grey	Weathered nodular	Chipped

Summary description of struck flint from Mill Road Depot, Cambridge

7.1.2 The raw material may have been obtained from river terrace deposits present in the vicinity of the site. High quality flint could have been derived from the chalk bedrock, found south east of Cambridge (BGS 2018).

7.1.3 The material from context 205 is in good, but slightly chipped condition. The flake from context 208 is more chipped. The condition of the material discussed here indicates that the flint recovered from Mill Road Depot may have moved to some extend after discard.

7.1.4 The translucent black flake (context 205) is 34mm long, 34mm wide, 8mm thick and weighs 9.6mm. The edges and distal end of the dorsal side are crotical, the proximal part along the striking platform shows three parallel negative flake scars and some edge crushing/trimming. The striking platform is recorticated ancient fractured surface. The core from context 205 weighs

60.8g and has at least five narrow flakes removed, struck from striking platform of a recorticated ancient fractured surface. The core is backed by weathered nodular surface. The flake from context 208 is a relatively thin and well struck flake. Along the left edge a rim of weathered nodular cortex remains, other than that the dorsal side is mainly shaped by one large and one imposing, smaller, negative flake scar. The right edge of the flake is chipped, possibly showing some use damage.

7.1.5 Although the flakes and core do not show any highly diagnostic characteristics, the flakes are well knapped with some platform preparation and the core is well worked, resembling Mesolithic/Early Neolithic flint working.

7.1.6 As this assemblage only concerns three pieces the significance of the material is limited but it does indicate that humans were present at the site at some point during the Mesolithic/Early Neolithic.

7.2 Prehistoric Pottery

By Lawrence Morgan-Shelbourne

Introduction

7.2.1 A very small assemblage comprising five sherds (82g) of handmade prehistoric pottery was recovered from the evaluation. The pottery derived from three contexts; fills (205) and (208) of Paleochannel [203] and fill (305) of Posthole [306]. The assemblage can be split into two main periods; the Middle Bronze Age (MBA, 2 sherds, 66g) and the Late Bronze Age to Early Iron Age (3 sherds, 16g). A single pottery crumb (<1g) was recovered during the evaluation. No other phases of archaeological work have been undertaken at the site, therefore this report describes the totality of the prehistoric pottery recovered. The ceramics are in a stable condition. This report provides a quantified description of the assemblage with a brief discussion.

Context	Cut	Feature type	Feature Group	No. of sherds	Wt(g)	Overall context spot date	Fabrics (sherd no/ weight (g)	Reason for date
205	203	Paleochannel	-	2	66	MBA	F1	Fabric
208	203	Paleochannel	-	2	14	LBA-EIA?	SH1	Decoration, fabric
305	306	Posthole	-	1	2	LBA-EIA?	Q1	Decoration, fabric

Table 1: Pottery by Context

Q1	Rare to sparse fine sand
SH1	Moderate to common fine to coarse platey shell
F1	Abundant fine to coarse calcined flint, incidental very coarse calcined flint

Table 2: Fabric Series

Methodology

7.2.2 All the pottery has been fully recorded following the recommendations laid out by the Prehistoric Ceramic Research Group (2009). After a full inspection of the assemblage, fabric groups were devised on the basis of dominant inclusion types, their density and modal size. Sherds from all contexts were counted, weighed (to the nearest whole gram) and assigned to a fabric group (sherds broken in excavation were refitted and counted as single entities). Sherd type was recorded, along with technology (wheel-made or handmade), evidence for surface treatment, decoration, and the presence of soot and/or residue. No diagnostic rim, base or form assignable sherds were present in the assemblage. The class scheme created by John Barrett (1980) for Post-Deverel-Rimbury (PDR) ceramics was also utilized when required, with designations of ‘fine’ or ‘coarse’ wares being assigned based on the presence or absence of smoothed or burnished sherd surface treatments.

7.2.3 All pottery recovered in the evaluation was subject to sherd size analysis. Sherds less than 4cm in diameter were classified as ‘small’ (4 sherds), sherds measuring 4-8cm were classified as ‘medium’ (1 sherds), and sherds over 8cm in diameter were classified as ‘large’ (0 sherds). Due to the extremely small size of the assemblage, further analysis was not attempted.

Middle Bronze Age

7.2.4 The assemblage of this period comprised two sherds (66g). As the sherds were undiagnostic bodysherds, dating was assigned mainly based on fabric composition, a method that is comparatively unreliable. The sherds were composed of an abundantly gritted calcined flint (F) fabric, a fabric recipe that is used throughout earlier and parts of later prehistory in a variety of pottery traditions. However, the sherds exhibited a number of characteristics that suggested a more restricted date range could be applied. Notably, the sherds were thick walled (>1.4cm) and appeared to derive from a simple, relatively straight-sided vessel. The calcined flint temper also appeared to have been slightly graded, in that very coarse inclusions were extremely rare and may have been incidentally included in the fabric paste. These factors suggest a MBA Deverel-Rimbury attribution (Barrett 1991) is more plausible, with the sherds present here representing a part of a barrel or bucket shaped jar, types which form the dominant part of the vessels found within the pottery tradition.

Late Bronze Age to Early Iron Age

7.2.5 The assemblage of this period comprised three sherds (16g). As the sherds were again undiagnostic bodysherds, dating was similarly assigned mainly based on fabric composition and decoration, a method that is comparatively unreliable. Two of the sherds, deriving from Paleochannel [203] were composed of a shell (SH) fabric, a fabric recipe that is relatively chronologically undiagnostic but is more commonly found from assemblages to the north and west of Cambridge, where fossiliferous clays (the Amphill, Kimmeridge and Oxford Clays) form the bedrock geology. However, the hard, well fired nature of the sherds, their consistent form and the generally smooth, even surfaces they exhibited suggest the sherds belong to the Post-Deverel-Rimbury pottery tradition (Barrett 1980) of the Late Bronze Age to Early Iron Age, as opposed to earlier pottery traditions. This was also suggested by the decoration present on the exterior surface of one of the (refitting) shell-tempered sherds, which comprised a single horizontal line of vertical fingernail impressions. Although this type of decoration is again relatively chronologically widespread, relatively restricted fingernail or fingertip decoration is the predominant form of decoration applied to coarseware vessels in the PDR tradition (Brudenell 2012, 125).

7.2.6 A further single sherd (2g), recovered from Posthole [306] was composed of a fine sand (Q) fabric, a fabric that is more commonly found from the Early Iron Age onwards. The sherd was relatively thin (>0.45cm), well fired and exhibited uniform multiple horizontal grooved lines on its exterior face. Although any designation based on only a single small sherd can only be tentative, this type of decoration is more commonly found on bowls in the PDR tradition, especially Brudenell's Type N bowls (themselves considered a characteristic of Cunliffe's southern British 'Darmsden-Linton' style, dated to the 5th-3rd CBC (2005, 624).

Summary and Discussion

7.2.7 The prehistoric pottery recovered from the evaluation can be split into two main periods, the Middle Bronze Age (1500-1150 BC) and the Late Bronze Age to Early Iron Age (1150/1100-400/350 BC). As the assemblage was extremely small, no greater definition than these broad ranges could be attempted. The majority of the assemblage derived from a single palaeochannel, which contained MBA pottery in one of its lower fills, whilst one of its upper fills contained a small assemblage of LBA-EIA pottery. Although any date designation based on such a small, relatively undiagnostic assemblage can only be tentative, this may indicate the broad date range during which the palaeochannel was open. The pottery assemblage contributes to the picture of a low level of prehistoric activity in the Mill Road area, previously identified at the CB1 development (Slater 2012) and Brooklands Avenue (Dickens & Patten 2003, Kenny 2000, Cooper 2004) both located to the south-west of the current site.

7.3 Animal Bone

By Ryan Desrosiers

7.3.1 Two fragments of animal bone were recovered from evaluation trenching at Mill Road Depot, Cambridge. Both fragments were recovered from an earlier fill (208) of a paleo-channel [203]. Right cattle (Bos taurus) proximal metatarsal fragment, and a possible sheep/goat (Ovicaprid) tibia shaft fragment. Both specimens do not display any anthropogenic modification, and are in a reasonable condition (i.e. do not show any significant signs of wear or

scavenging damage).

7.4 Plan Macrofossils

By Kate Turner

7.4.1 One environmental bulk sample, of twenty-seven litres in volume, was was taken from the basal fill of a paleochannel, feature [203]. The sample was processed using the flotation method; material was collected using a 300 µm mesh for the light fraction and a 1 mm mesh for the heavy residue. The heavy residue was then dried, sieved at 1, 2 and 4 mm and sorted to extract artefacts and ecofacts. The abundance of each category of material was recorded using a non-linear scale where '1' indicates occasional occurrence (1-10 items), '2' indicates occurrence is fairly frequent (11-30 items), '3' indicates presence is frequent (31-100 items) and '4' indicates an abundance of material (>100 items).

7.4.2 The light residue (>300 µm), once dried, was scanned under a low-power binocular microscope to quantify the level of environmental material, such as seeds, chaff, charred grains, molluscs and charcoal. Abundance was recorded as above. A note was also made of any other significant inclusions, for example roots and modern plant material. The results are recorded in the appendix.

Results and Discussion

7.4.3 Preservation of ecofacts in the sampled paleo-channel was good. Plant remains were preserved by waterlogging, and a large concentration of fragmented partially decomposed plant material and broken and complete seeds was recovered from this deposit. Over one-hundred seeds were identified in total, with the majority of species present being from plants often associated with damp, waterlogged or waste ground, including pondweeds (Potamogeton sp.), duckweed (Lemna sp.), rush (Juncus sp.) and bramble (Rubus sp.). The most common seed types were sedges (Carex spp.), cinquefoils (Potentilla spp.), buttercups (Ranunculus spp.) and common nettle (Urtica dioica), all of which were recorded in abundance. An individual grain of carbonised emmer/spelt wheat (Tritium dicoccum/spelta) was also

recognised, along with a single caryopsis of oat (Avena sp.), though it is not possible to tell if the latter is of the wild or domestic variety, as diagnostic chaff was absent. These may be an indication that agricultural activity is being undertaken in the local area.

7.4.4 Wood charcoal was frequently observed; however, this assemblage was heavily fragmented, and the bulk of the material too small for species to be recognised (<3 mm in length/width). Less than ten specimens of sizeable proportions were extracted. Preserved wood was also reported in this context, in large quantities.

7.4.5 In terms of other environmental material, a small amount of terrestrial snail shell, of Vallonia sp. and Vertigo sp., was recognised, along with several juvenile specimens. Preserved insects were also found, again in low concentrations. Water flea eggs (Daphnia ephippia) were numerous in the flot, which suggests that this deposit formed in water.

7.4.6 Cultural material was absent from this deposit.

8 DISCUSSION AND CONLUSIONS

8.1 The archaeological evaluation at Mill Road Depot, Mill Road, Cambridgeshire revealed no significant archaeological remains.

8.2 The trenches revealed a single, possibly prehistoric, posthole in Trench 3 and a prehistoric paleochannel on an ENE-WSW alignment in Trench 2. A fragment of mid- Bronze Age pottery was retrieved from its middle fill and a fragment of late Bronze Age to early Iron Age pottery from its upper fill. The fills also contained two flint flakes and one flint core of residual Mesolithic/Early Neolithic flint working.

8.3 The lower, waterlogged fill of the channel revealed a rich environmental assemblage with the majority of species present from plants often associated with damp, waterlogged or waste ground. A single grain of carbonised emmer/spelt without chaff may be an indication that agricultural activity was undertaken in the local area.

8.4 The evaluation at Mill Road Depot has revealed features and finds indicating the presence of prehistoric occupation or movement of people in the wider landscape around the Mill Road site, however, no concentrated activity was located on the site itself.

9 ACKNOWLEDGEMENTS

9.1 Pre-Construct Archaeology Ltd would like to thank Hill Holdings Ltd for commissioning and funding the work. PCA are grateful to Andy Thomas of Cambridgeshire County Council Historic Environment Team for monitoring the work on behalf of the Local Planning Authority. The project was managed for PCA by Christiane Meckseper and was supervised by Tom Learmonth, assisted by Rory Fisher. Figures accompanying this report were prepared by Rosie Scales of PCA's CAD Department.

10 BIBLIOGRAPHY

10.1 Printed Sources

Barrett, J. 1980. The pottery of the later Bronze Age in lowland England. Proceedings of the Prehistoric Society 46, 297-319

Barrett, J. 1991. 'Bronze Age Pottery and the Problem of Classification' In Barrett, J., Bradley, R. & Hall, M. Papers on the Prehistoric Archaeology of Cranborne Chase. Exeter: Oxbow Monograph 11

British Geological Survey 2018. Geology of Britain Viewer http://www.bgs.ac.uk/data/mapViewers/home.html .Accessed 31/07/18

Cappers, R.T., Bekker, R.M. and Jans, J.E., 2012. Digitale Zadenatlas van Nederland/Digital seed atlas of the Netherlands (Vol. 4). Barkhuis

CCC HET 2018. Brief for Archaeological Evaluation. Mill Road Depot, Cambridge. Andy Thomas, July 18, 2017.

Cooper, A. 2004. Former government offices, Brooklands Avenue, Cambridge; archaeological evaluation on the proposed residential redevelopment site, part 2. Cambridge Archaeological Unit Report No. 608.

Cunliffe, B. 2009. Iron Age Communities in Britain. London: Routledge

Dickens, A. & Patten, R. 2003. The former government offices site, Brooklands Avenue, Cambridge: residential site. Archaeological evaluation, part 1. Cambridge Archaeological Unit Report No. 524.

Jacomet, S., 2006. Identification of cereal remains from archaeological sites. Basel University, Basel.

Kenny, D. A. 2000. An archaeological evaluation at the former government offices site, Brooklands Avenue, Cambridge. Cambridge Archaeological Unit

Report No. 347.

Kerney, M.P. 1999. Atlas of the Land and Freshwater Molluscs of Britain and Ireland. Colchester. Harley.

Meckseper, C 2018. Mill Road Depot, Mill Road, Cambridge. Written Scheme of Investigation for a Program of Archaeological Evaluation.

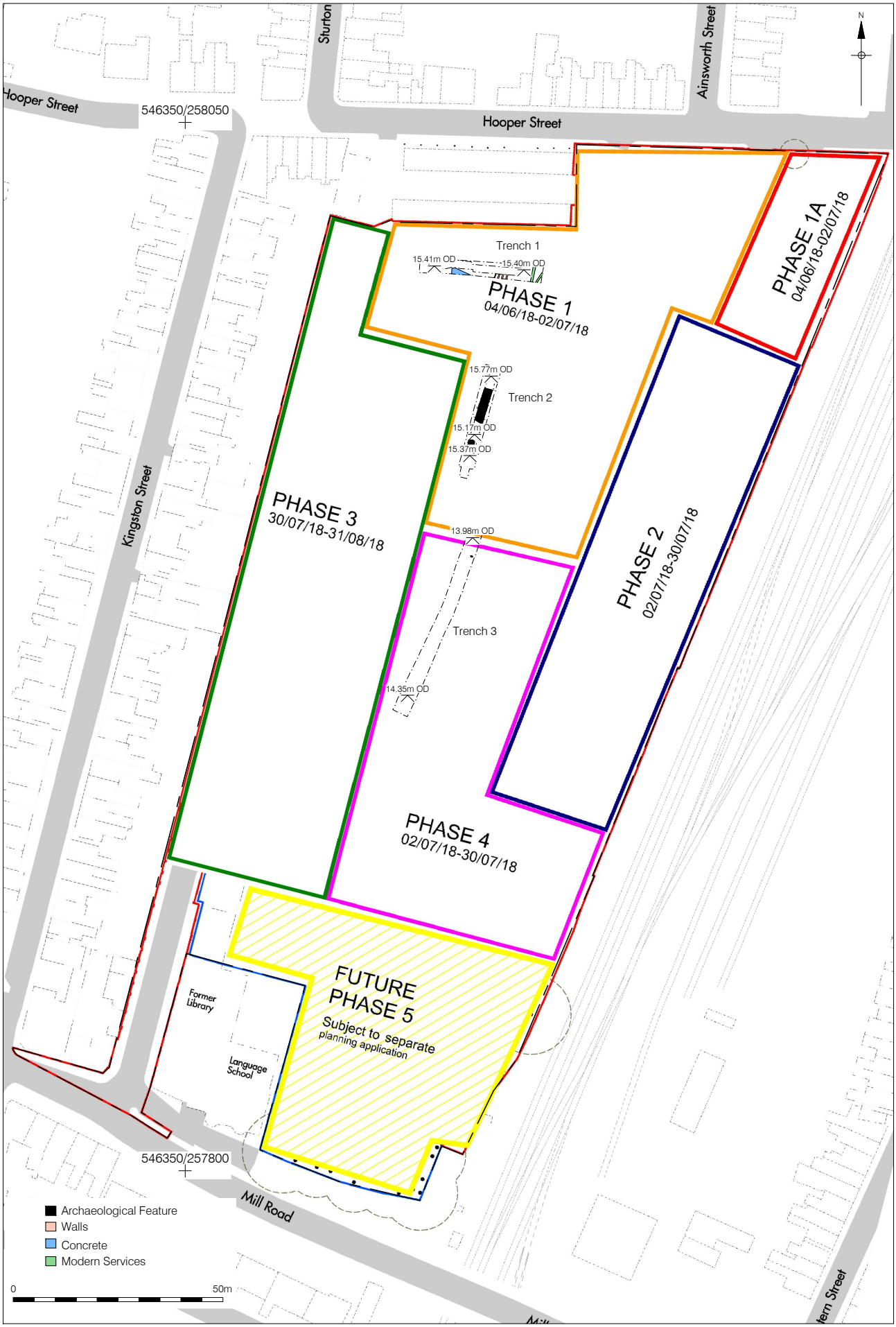
PCRG 2009. The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication. Oxford: Prehistoric Ceramics Research Group Occasional Papers 1 and 2 (third edition).

Slater, A. 2012. Excavation at the CB1 Development Site, Hills Road, Cambridge. Cambridge Archaeological Unit Report No. 933

Stace, C, 1991. New flora of the British Isles. Cambridge: Cambridge University Press.

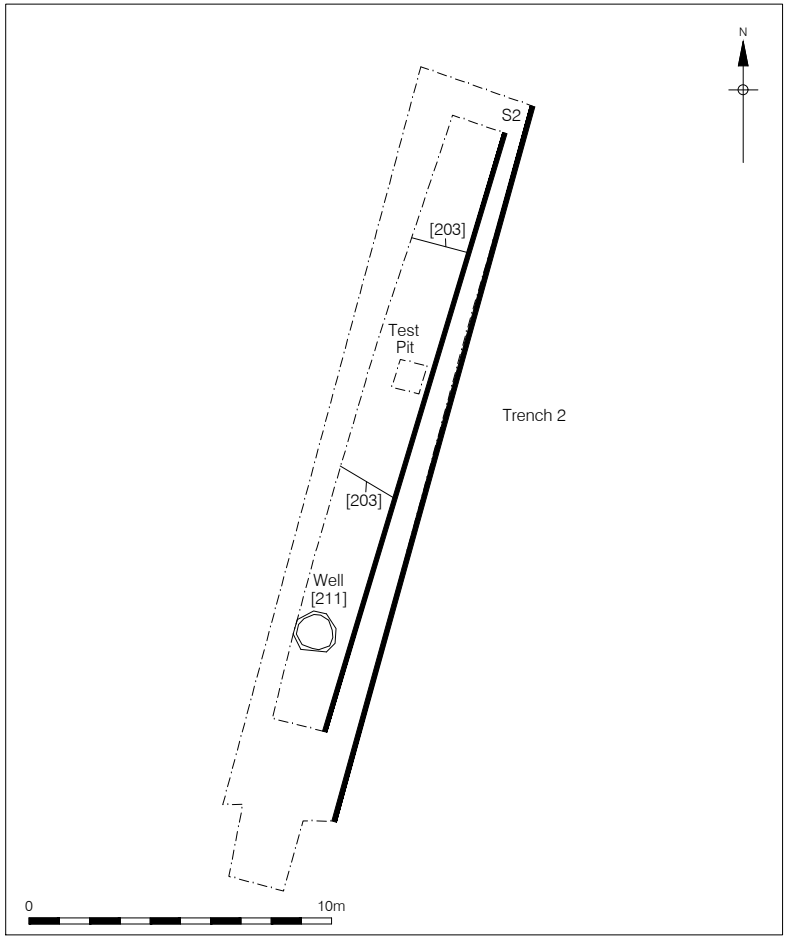
26/09/18 RS

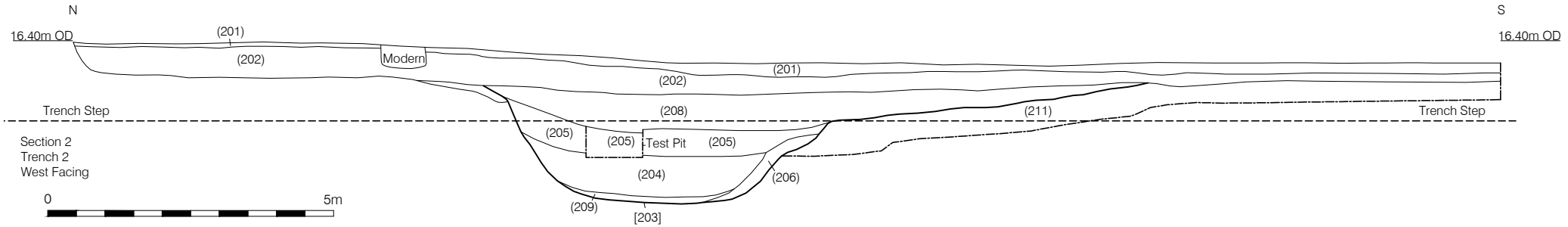
Figure 1
Site Location
1:2,000,000, 1:250,000 & 1:20,000 at A4



26/09/18 RS / MR

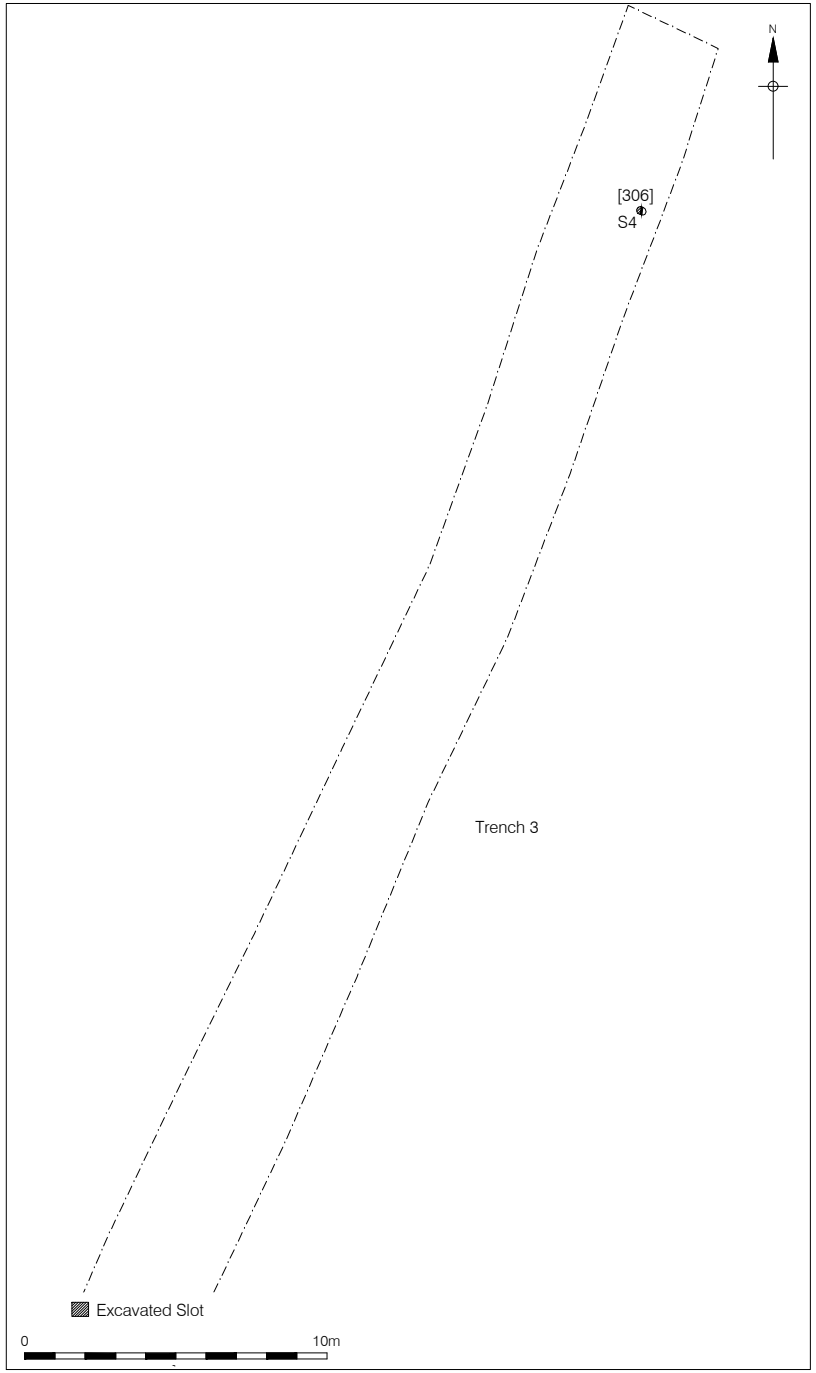
Figure 2
Trench Location
1:1250 at A4





26/09/18 RS

Figure 3
Trench 2 Plan and Section
Plan 1:250; Section 1:100 at A4



26/09/18 RS

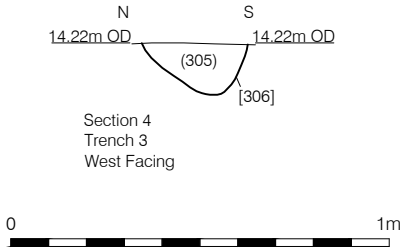


Figure 4
Trench 3 Plan and Section
Plan 1:250; Section 1:20 at A4

11 APPENDIX 1: PLATES

Plate 1: Trench 1, looking west

Plate 2: Trench 1, post-medieval or modern industrial feature, walls

Plate 3: Trench 2, looking north (well [211] in foreground)

Plate 4: Trench 2, Test pit cut into fills (208) and (205) of paleochannel [203], fill (204) exposed in base

Plate 5: Trench 2, Paleochannel [203] after full excavation by machine. Looking NNE

Plate 6: Trench 2, Paleochannel [203] after full excavation by machine. Looking E

Plate 7: Trench 3 looking south

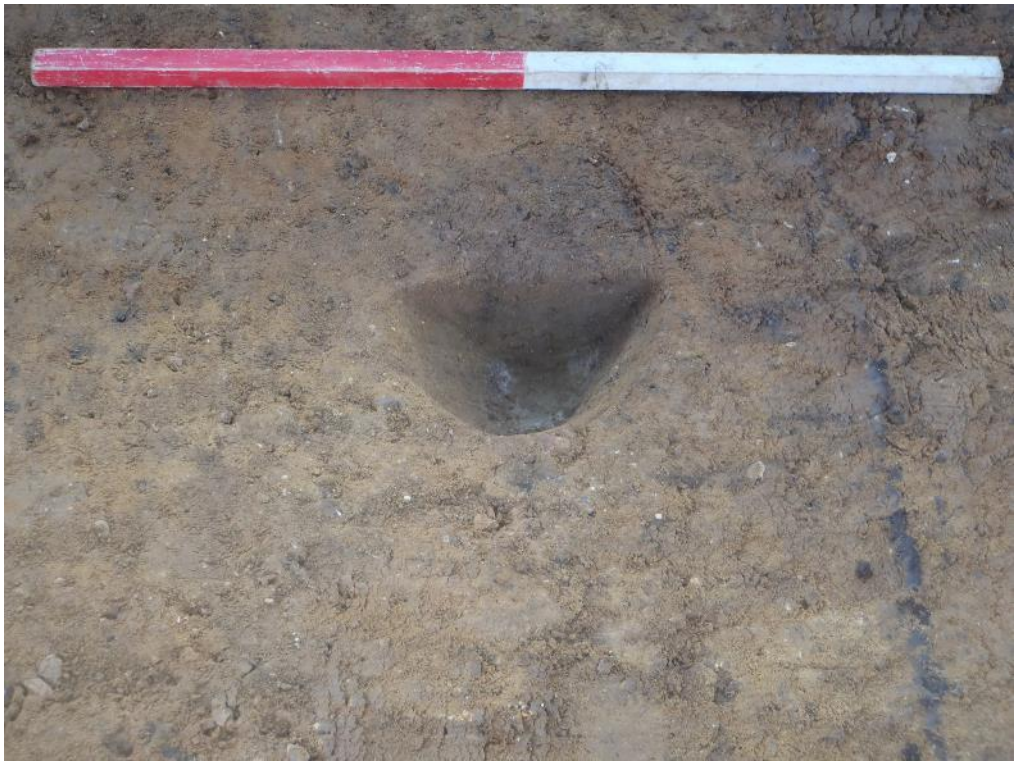


Plate 8: Trench 3, Posthole [306], looking E

12 APPENDIX 2: TRENCH DETAILS AND CONTENTS INDEX

Trench	1		**End 1**	**End 2**
Alignment	E-W	**Topsoil depth (m)**	0.5	0.2
Trench length (m)	25	**Subsoil depth (m)**	0.3	0.8
Max machine depth (m)	1.2	**Natural depth (m OD)**	15.4	15.41

Summary of archaeological features

Modern industrial features and foundations

Context	Cut	Type	Category	Length (m)	Width (m)	Depth (m)	Description
100		Layer	Surface	0	0	0.2	modern tarmac surface layer
101		Layer	Made Ground	0	0	0.5	Mid blackish brown course sandy silt with frequent pebble, concrete and cbm inclusions loose
102	102	Cut	Construction cut	0	0		steep sides, near vertical break of slope, flat base
103	102	Fill	Construction cut	0	0		mid orangey brown gravely sand loose
104	102	wall	Structure	0.5	0.35	0.45	brick structure.part of furnace
105	102	wall	Structure	0.5	0.35	0.45	part of small furnace
106	102	wall	Structure	0.5	0.35	0.45	part of small furnace
107	102	wall	Structure	0.5	0.35	0.45	part of small furnace
108	102	Fill	Construction cut	0	0.75	0.6	black fill, gravelly tarmac rubble, frequent stones, loose

109		Layer	Subsoil	25	1.8	0.75	Mid orange brown silty sand occasioal stone and charcoal inclusions
110		Layer	Foundation	4.5	1.5	0.75	concrete
111		Layer	Made Ground	0.5	2.6	0.3	dark brown silty sand with frequent cbm, coal and concrete fragments
112	113	Fill	demolition	0.5	1.2	0.75	mid brown silty sand with frequent clunch blocks and small pebbles loose
113	113	Cut	demolition	0.5	1.2	0.75	irregular, steep sided, gradual break of slope concave base
114		Layer	Subsoil	24	1.8	0.2	mid brownish yellow sandy silt with frequent small pebbles and occaisional charcoal flecks, friable
115		Layer	Natural	0	0		light brownish yellow silty sand with frequent gravel patches loose

			End 1	End 2
Trench	2			
Alignment	NE-SW	**Topsoil depth (m)**	0.1	0.5
Trench length (m)	25	**Subsoil depth (m)**	0.6	0
Max machine depth (m)	1.5	**Natural depth (m OD)**	15.77	15.37

Summary of archaeological features

Prehistoric paleo-channel and modern brick well

Context	Cut	Type	Category	Length (m)	Width (m)	Depth (m)	Description
200		Layer	Surface	0	0	0.2	modern tarmac surface layer
202		Layer	Subsoil	25	1.8	0.6	mid orange brown silty sand gravel, occaisional cbm, stone and charcoal iclusions
203	203	Cut	paleo-channel	1.8	11.5	2	linear, concave sides,gradual break of slope, flat base
204	203	Fill	paleo-channel	0	4.35	1.5	dark reddish brown friable sandy clay with occaisional stones, charcoal and wood fragments
205	203	Fill	paleo-channel	0	4.75	1	mid orangey grey friable silty sand with frequent gravel and charcoal flecks
206	203	Fill	paleo-channel	0	1.8	0.25	light grey loose gravelly sandy silt
207	203	Fill	paleo-channel	0	0.75	0.25	light yellowish grey friable silty sand with frequent gravel and charcoal.

208	203	Fill	paleo-channel	1.8	12	0.6	mid reddish brown friable silty sand with occaisional stones and charcoal flecks
209	203	Fill	paleo-channel	0	3	1	mid reddish brown plastic clayey silt with occaisional small stone and charcoal inclusions
210		Cut	Well	0	1.3		circualr in shape, vertical sides
211		Masonry	Well	0	1.3		220mmx110mmx 60mm cambridge white bricks
212		Layer	Natural	25	1.8		mid yellow gravelly sand loose

			End 1	End 2
Trench	3			
Alignment	N-S	**Topsoil depth (m)**	0.2	0.5
Trench length (m)	50	**Subsoil depth (m)**	0.3	0.5
Max machine depth (m)	0.9	**Natural depth (m OD)**	14.35	13.98

Summary of archaeological features

Posthole [306]

Context	Cut	Type	Category	Length (m)	Width (m)	Depth (m)	Description
300		Layer	Made Ground	0	0	0.4	modern tarmac surface
301		Layer	Made Ground	0	0	0.15	dark grey gravel hardcore loose
303		Layer	Subsoil	0	0	0.45	mid greyish brown loose sandy silt with rare stone inclusions
304		Layer	Natural	0	0		mixed light orangey whiteish brown loose chalky gravelly sand
305	306	Fill	Posthole	0.3	0.26	0.13	mid brownish grey loose sandy silt with rare stone inclusions
306	306	Cut	Posthole	0.3	0.26	0.13	circular with concave sides moderate break of slope concave base

13 APPENDIX 3: ENVIRONMENTAL REMAINS

Sample No.		1
Context No.		204
Feature No.		203
Volume of bulk (litres)		27
Volume of flot (millilitres)		24
Method of processing		F
HEAVY RESIDUE		
Charcoal		
Charcoal >4 mm		1
Charcoal 2-4 mm		3
Charcoal <2 mm		
Terrestrial Snail Shell		
Shell fragments - indeterminate		1
Flot Residue		
Charcoal		
Charcoal >4 mm		1
Charcoal 2 - 4 mm		2
Charcoal <2 mm		4
Frags. of ID size		x
Waterlogged Seeds		
Aethusa cynapium	Fool's parsley	1
cf. Aphanes sp.	Parsley-pierts	2
Carex spp.	Sedges	4
Chenopodium spp.	Goosefoots	1
Fumaria officinalis	Common fumitory	1
Hypericum sp.	St John's-worts	1
Juncus sp.	Rushes	1
Lemna sp.	Duckweed	2
Lythrum sp.	Purple-loosestrifes	1
Potamogeton sp.	Pondweeds	2
Potentilla spp.	Cinquefoils	4
Ranunculus bulbosus/repens	Buttercups	3
Ranunculus spp.	Buttercups	4
Rubus sp.	Brambles	2
Rumex sp.	Docks	1
Urtica dioica	Common nettles	4

Sample No.		1
Context No.		204
Feature No.		203
Volume of bulk (litres)		27
Volume of flot (millilitres)		24
Method of processing		F
Viola sp.	Violets	1
Seed cases - indeterminate		2
Broken seeds		3
Unknown		
Cereals		
Avena sp.	Oat	1
Triticum dicoccum/spelta	Emmer/Spelt wheat	1
Other Plant Macrofossils		
Fragmented plant material		4
Wood		4
Terrestrial Snail Shell		
Vallonia sp.		1
Vertigo sp.		1
Juveniles - indeterminate		1
Other Environmental Remains		
Insect remains		2
Daphnia ephippia		4
Insect eggs/worm cases		2

Key: 1- Occasional, 2- fairly frequent, 3- frequent, 4- abundant

14 APPENDIX 4: OASIS FORM

OASIS ID: preconst1-329709

Project details	
Project name	Mill Road Depot, Mill Road, Cambridge
Short description of the project	Trial trench excavation prior to residential development. Three trenches were excavated, no archaeology revealed, with the exception of an isolated posthole in Trench 3 and a paleochannel in Trench 2. Middle and upper fills of the paleochannel revealed a fragment of middle Bronze Age and late Bronze Age/early Iron Age pottery respectively. The posthole contained a very small piece of LBA/EIA pottey.
Project dates	Start: 23-08-2018 End: 17-09-2018
Previous/future work	No / Not known
Any associated project reference codes	ECB5412 - HER event no.
Type of project	Field evaluation
Monument type	POSTHOLE Iron Age
Monument type	PALEOCHANNEL Middle Bronze Age
Significant Finds	POTTERY Middle Bronze Age
Significant Finds	POTTERY Early Iron Age
Significant Finds	ANIMAL BONE Bronze Age
Significant Finds	FLINT Neolithic
Project location	
Country	England
Site location	CAMBRIDGESHIRE CAMBRIDGE CAMBRIDGE Mill Road Depot, Mill Road, Cambridge
Project creators	
Name of Organisation	Pre-Construct Archaeology Limited
Project brief originator	Andy Thomas
Project design originator	Pre-Construct Archaeology

Project director/manager	Christiane Meckseper
Project supervisor	Thomas Learmonth
Type of sponsor/funding body	Hill Partnerships Ltd

Project archives	
Physical Archive recipient	CCC County Archaeology Store
Physical Contents	''Animal Bones'',''Ceramics'',''Worked stone/lithics''
Digital Archive recipient	CCC County Archaeology Store
Digital Media available	''Database'',''Images raster / digital photography'',''Survey'',''Text''
Paper Archive recipient	CCC County Archaeology Store
Paper Media available	''Context sheet'',''Drawing'',''Section''

Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	Land at Mill Road Depot, Mill Road, Cambridgeshire: An Archaeological Evaluation
Author(s)/Editor(s)	Meckseper, C
Other bibliographic details	R13417
Date	2018
Issuer or publisher	Pre-Construct Archaeology
Place of issue or publication	Cambridge

Entered by	Christiane Meckseper (cmeckseper@pre-construct.com)
Entered on	3 October 2018

P C A

PCA CAMBRIDGE
THE GRANARY, RECTORY FARM
BREWERY ROAD, PAMPISFORD
CAMBRIDGESHIRE CB22 3EN
t: 01223 845 522
e: cambridge@pre-construct.com

PCA DURHAM
UNIT 19A, TURSDALE BUSINESS PARK
TURSDALE
DURHAM DH6 5PG
t: 0191 377 1111
e: durham@pre-construct.com

PCA LONDON
UNIT 54, BROCKLEY CROSS BUSINESS CENTRE
96 ENDWELL ROAD, BROCKLEY
LONDON SE4 2PD
t: 020 7732 3925
e: london@pre-construct.com

PCA NEWARK
OFFICE 8, ROEWOOD COURTYARD
WINKBURN, NEWARK
NOTTINGHAMSHIRE NG22 8PG
t: 01636 370410
e: newark@pre-construct.com

PCA NORWICH
QUARRY WORKS, DEREHAM ROAD
HONINGHAM
NORWICH NR9 5AP
T: 01223 845522
e: cambridge@pre-construct.com

PCA WARWICK
UNIT 9, THE MILL, MILL LANE
LITTLE SHREWLEY, WARWICK
WARWICKSHIRE CV35 7HN
t: 01926 485490
e: warwick@pre-construct.com

PCA WINCHESTER
5 RED DEER COURT, ELM ROAD
WINCHESTER
HAMPSHIRE SO22 5LX
t: 01962 849 549
e: winchester@pre-construct.com