ANGLIAN WATER CHILTON LEYS WAT-06449 SCHEME, STOWMARKET, SUFFOLK: ARCHAEOLOGICAL TRIAL TRENCH EVALUATION

May 2016

PRE-CONSTRUCT ARCHAEOLOGY

R12490

Anglian Water Chilton Leys Wat-06449 Scheme, Stowmarket, Suffolk:

Archaeological Trial Trench Evaluation

Local Planning Authority:	**Mid Suffolk District Council**
Planning Reference:	**N/A**
Central National Grid Reference:	**TM 034 566**
Site Code/Event Number:	**ESF23468**
Report No.	**R12490**
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ABSTRACT

This report describes the results of an archaeological trial trench evaluation carried out by Pre-Construct Archaeology at Anglian Water Chilton Leys Wat-06449 Scheme, Stowmarket, Suffolk (TM 034 566) between the 25th and the 29th April 2016. The archaeological work was commissioned by Anglian Water in response to a planning condition attached to a 2.6km pipeline scheme. The aim of the work was to characterise the archaeological potential of the proposed development area.

The evaluation identified evidence of agricultural use of the land. A single pit, containing a highly abraded sherd of Roman reduced ware, was identified, as was post-medieval land management by drainage ditches and a plough furrow; and modern, disused field boundaries. The lack of archaeological remains or artefacts identified by the evaluation support an interpretation of agricultural utilisation of the site. The pipeline route and study area passed through sloping ground and across a valley, and it is likely that the ground was better suited to agriculture than settlement.

1 INTRODUCTION

1.1 An archaeological trial trench evaluation was undertaken by Pre-Construct Archaeology Ltd (PCA) at Anglian Water Chilton Leys Wat-06449 Scheme, Stowmarket, Suffolk (centred on Ordnance Survey National Grid Reference (NGR) TM 034 566) from the 26th to the 29th of April 2016 (Figure 1).

1.2 The archaeological work was commissioned by Anglian Water in response to an archaeological planning condition attached a 2.6km pipeline scheme (Planning Reference N/A).

1.3 The evaluation was carried out in accordance with a Written Scheme of Investigation (WSI) prepared by Mark Hinman of PCA (Hinman 2016) in response to a Brief for archaeological evaluation issued by Rachael Abraham (Abraham 2015) of the Conservation Team of Suffolk County Council's Archaeological Service (SCCAS/CT).

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 23 trial trenches were excavated and recorded.

1.6 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 the SCCAS/CT archaeological stores.

2 GEOLOGY AND TOPOGRAPHY

2.1 Geology

2.1.1 The bedrock geology of the proposed development area is that of Crag Group - Sand (British Geological Survey; Website 1). This is a sedimentary bedrock formed approximately 0 to 5 million years ago in the Quaternary and Neogene Periods when the local environment was dominated by shallow seas.

2.1.2 The superficial geological deposits are that of Alluvium - Clay, Silty and Lowestoft Formation - Diamicton (BGS; Website 1).

2.2 Topography

2.2.1 The pipeline scheme crosses an area of gently sloping valleys.

3 ARCHAEOLOGICAL BACKGROUND

3.1 General

The archaeological background detailed below has been taken from the archaeological brief (Abraham 2015).

3.1.1 The pipeline scheme passes through substantial multi-period finds scatter sites (FNG023, COM007, COM026, COM014, COM001 and COM028), which are indicative of occupation from all periods. Extensive archaeological remains were found during investigations as part of the Chiltern Leys development. Finds here included prehistoric pits, Roman settlement features and a kiln, Saxon burials and a possible sunken-featured building (HGH052). The scheme crosses the Rattlesden River and passes through an area which is topographically favourable for archaeological remains of all periods.

4 METHODOLOGY

4.1 Excavation and Sampling

4.1.1 The Written Scheme of Investigation for the evaluation proposed the excavation of 23 trial trenches, distributed along the route of the proposed pipeline (Figure 2).

4.1.2 Ground reduction was carried out under archaeological supervision using a 21-ton tracked mechanical excavator fitted with a 1.8m-wide toothless ditching bucket. Topsoil and subsoil deposits were removed in spits down to the level of the undisturbed natural geological deposits where potential archaeological features could be observed and recorded. Exposed surfaces were cleaned by trowel and hoe as appropriate and all further excavation was undertaken manually using hand tools. Overburden deposits were set aside beside each trench and examined visually and with a metal-detector for finds retrieval.

4.1.3 Metal-detecting was carried out during the topsoil and subsoil stripping and throughout the excavation process. Archaeological features and spoilheaps were scanned by metal-detector as they were encountered/ created.

4.1.4 Field excavation techniques and recording methods are detailed in the PCA Fieldwork Induction Manual (Operations Manual I) by Joanna Taylor and Gary Brown (2009).

4.1.5 All features were investigated and recorded in order to properly understand the date and nature of the archaeological remains on the site and to recover sufficient finds assemblages to assess the chronological development and socio-economic character of the site over time.

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

4.2 Recording Methodology

4.2.1 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.

4.2.2 Manual plans and section drawings of archaeological features and deposits were drawn at an appropriate scale (1:10, 1:20 or 1:50).

4.2.3 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 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]. The record numbers assigned to cuts and deposits are entirely arbitrary and in no way reflect the chronological order in which events took place. All features and deposits recorded during the evaluation are listed in Appendix 2. Artefacts recovered during excavation were assigned to the record number of the deposit from which they were retrieved.

4.2.4 High-resolution digital photographs were taken at all stages of the evaluation process. Digital photographs were taken of all archaeological features and deposits and black and white film photographs were taken when considered appropriate by the excavator and supervisor.

4.2.5 Artefacts and ecofacts were collected by hand and assigned to the record number of the deposit from which they were retrieved, receiving appropriate care prior to removal from the site (CIfA 2014; Walker 1990; Watkinson 1981).

4.2.6 The evaluation was allocated one event number (ESF23468) by Suffolk County Council for the whole length of the pipeline. As the route of the pipeline passed through three parishes however an HER code was also issued for each parish. These numbers are ONS 011 for Onehouse, FNG 054 for Great Finborough and COM 050 for Combs. The table below lists each trench of the evaluation with its corresponding parish code:

Trench Number	Parish Code	Trench Number	Parish Code
1	COM 050	13	COM 050
2	COM 050	14	COM 050
3	COM 050	15	FNG 054
4	COM 050	16	FNG 054
5	COM 050	17	FNG 054
6	COM 050	18	FNG 054
7	COM 050	19	ONS 011
8	COM 050	20	ONS 011
9	FNG 054	21	ONS 011
10	FNG 054	22	COM 050
11	FNG 054	23	COM 050
12	FNG 054		

5 ARCHAEOLOGICAL SEQUENCE

5.1 Introduction

5.1.1 The trenches are described below in numerical order, with technical data tabulated. Features and deposits are subdivided into feature type, before being described in numeric cut order within the trench. Archaeological features and deposits were sealed by the subsoil, unless otherwise stated. The archaeological features identified were distributed throughout the centre of the site.

5.2 Trench 1

5.2.1 No archaeologically significant features or deposits were present within the trench.

TRENCH 1	**Figure 2**		
Trench Alignment: NW-SE	Length: 29m	Level of Natural (m OD): 63.28	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(100)	0.19m	0.14m
Subsoil	(101)	0.39m	0.32m
Natural (max machined depth)	(102)	0.58m+	0.46m+
Summary Trench 1 was located close to the southern boundary of the site. No archaeologically significant features or deposits were present within the trench.			

5.3 Trench 2

5.3.1 No archaeologically significant features or deposits were present within the trench.

TRENCH 2	**Figure 2**		
Trench Alignment: NW-SE	Length: 29m	Level of Natural (m OD): 57.587	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(100)	0.18m	0.28m
Subsoil	(101)	0.4m	0.18m

Natural (max machined depth)	(102)	0.58m+	0.46m+

Summary

Trench 2 was located in the south of site.

No archaeologically significant features or deposits were present within the trench.

5.4 Trench 3

5.4.1 No archaeologically significant features or deposits were present within the trench.

TRENCH 3	**Figure 2**		
Trench Alignment: NW-SE	Length: 29m	Level of Natural (m OD): 48.981	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(100)	0.24m	0.28m
Subsoil	(101)	0.66m	0.66m
Natural (max machined depth)	(102)	0.9m+	0.94m+

Summary

Trench 3 was located in the south of site.

No archaeologically significant features or deposits were present within the trench.

5.5 Trench 4

5.5.1 No archaeologically significant features or deposits were present within the trench.

TRENCH 4	**Figure 2**		
Trench Alignment: NW-SE	Length: 28m	Level of Natural (m OD): 51.411	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(100)	0.3m	0.3m
Subsoil	(101)	0.35m	0.2m
Natural (max machined depth)	(102)	0.65m+	0.5m+

Summary

Trench 4 was located in the south of site. No archaeologically significant features or

deposits were present within the trench.

5.6 Trench 5

5.6.1 No archaeologically significant features or deposits were present within the trench.

TRENCH 5	**Figure 2**		
Trench Alignment: NW-SE	Length: 28.5m	Level of Natural (m OD): 53.935	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(100)	0.25m	0.25m
Subsoil	(101)	0.35m	0.15m
Natural (max machined depth)	(102)	0.6m+	0.4m+
Summary Trench 5 was located in the south of site. No archaeologically significant features or deposits were present within the trench.			

5.7 Trench 6

5.7.1 Trench 6 contained a single ditch.

5.7.2 Ditch [103] (Figure 4, Section 1) was aligned north to south and extended across Trench 6 beyond the limit of excavation. It was 1.9m wide and 0.47m deep, with steep sides and a narrow, concave base. It contained a fill of dark brownish grey silty clay (104) from which no finds were retrieved.

TRENCH 6	**Figures 2 & 4**		
Trench Alignment: NW-SE	Length: 29m	Level of Natural (m OD): 56.792	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(100)	0.45m	0.3m
Subsoil	(101)	0.6m	0.3m
Natural (max machined depth)	(102)	1.05m+	0.6m+
Summary Trench 6 was located in the south of site and contained a single ditch.			

5.8 Trench 7

5.8.1 Trench 7 contained a single pit.

5.8.2 Pit [105] (Plate 2; Figure 4; Section 2) was circular in plan with steep sides and a concave base. It contained a lower fill of dark brownish grey silty clay (107) and an upper fill of mid greyish brown silty clay (106) which contained an abraded single body sherd of Roman reduced ware (7g) and a sherd of miscellaneous greyware (1g) (pers. comm. B. Sudds).

TRENCH 7	**Figures 2 & 4**		
Trench Alignment: NW-SE	Length: 29.4m	Level of Natural (m OD): 59.64	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(100)	0.2m	0.23m
Subsoil	(101)	0.4m	0.3m
Natural (max machined depth)	(102)	0.6m+	0.53m+
Summary			
Trench 7 was located in the south of site and contained a single pit, tentatively dated to the Roman period.			

5.9 Trench 8

5.9.1 No archaeologically significant features or deposits were present within the trench.

TRENCH 8	**Figure 2**		
Trench Alignment: NW-SE	Length: 30m	Level of Natural (m OD): 63.552	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(100)	0.31m	0.20m
Subsoil	(101)	0.36m	0.26m
Natural (max machined depth)	(102)	0.67m+	0.46m+
Summary			
Trench 8 was located in the south of the site. No archaeologically significant features or deposits were present within the trench.			

5.10 Trench 9

5.10.1 Trench 9 contained a single ditch.

5.10.2 Ditch [208] (Figure 4; Section 3) was aligned north to south and extended across Trench 9 beyond the limit of excavation. It was 1.9m wide and 0.47m deep, with steep sides and a narrow, concave base. It contained a fill of mid brownish grey silty clay (207) from which no finds were retrieved.

TRENCH 9	**Figures 2 & 4**		
Trench Alignment: NW-SE	Length: 31m	Level of Natural (m OD): 62.819	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(200)	0.25m	0.2m
Subsoil	(201)	0.15m	0.2m
Natural (max machined depth)	(202)	0.4m+	0.4m+
Summary			
Trench 9 was located in the south part of the site. It contained a single ditch.			

5.11 Trench 10

5.11.1 No archaeologically significant features or deposits were present within the trench. A thick layer of colluvium was present in the north-western half of the trench.

TRENCH 10	**Figure 2**		
Trench Alignment: NW-SE	Length: 28m	Level of Natural (m OD): 57.625	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(200)	0.3m	0.3m
Subsoil	(201)	0.4m	0.3m
Colluvium	(213)	1.2m	N/A
Natural (max machined depth)	(202)	1.9m+	0.6m+
Summary			
Trench 10 was located in the south of site.			

5.12 Trench 11

5.12.1 No archaeologically significant features or deposits were present within the trench

TRENCH 11	**Figure 2**		
Trench Alignment: NW-SE	Length: 30.5m	Level of Natural (m OD): 57.43	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(200)	0.25m	0.2m
Subsoil	(201)	0.3m	0.2m
Natural (max machined depth)	(202)	0.55m+	0.4m+
Summary Trench 11 was located in the south of site. No archaeologically significant features or deposits were present within the trench			

5.13 Trench 12

5.13.1 No archaeologically significant features or deposits were present within the trench.

TRENCH 12	**Figure 2**		
Trench Alignment: NW-SE	Length: 28m	Level of Natural (m OD): 54.336	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(200)	0.3m	0.2m
Subsoil	(201)	0.1m	0.2m
Natural (max machined depth)	(202)	0.4m+	0.4m+
Summary Trench 12 was located centrally in the site. No archaeologically significant features or deposits were present within the trench.			

5.14 Trench 13

5.14.1 No archaeologically significant features or deposits were present within the trench.

TRENCH 13	**Figure 2**		
Trench Alignment: NW-SE	Length: 28m	Level of Natural (m OD): 47.756	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(100)	0.25m	0.25m
Subsoil	(101)	0.1m	0.2m
Natural (max machined depth)	(102)	0.35m+	0.45m+
Summary Trench 13 was located centrally in the site. No archaeologically significant features or deposits were present in the trench.			

5.15 Trench 14

5.15.1 No archaeologically significant features or deposits were present in the trench.

TRENCH 14	**Figure 2**		
Trench Alignment: NW-SE	Length: 28m	Level of Natural (m OD): 42.532	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(100)	0.25m	0.3m
Subsoil	(101)	0.25m	0.25m
Natural (max machined depth)	(102)	0.5m+	0.55m+
Summary Trench 14 was located centrally in the site. No archaeologically significant features or deposits were present in the trench.			

5.16 Trench 15

5.16.1 No archaeologically significant features or deposits were present in the trench.

TRENCH 15	**Figure 2**		
Trench Alignment: NW-SE	Length: 30m	Level of Natural (m OD): 43.57	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(200)	0.2m	0.3m

Subsoil	(201)	0.35m	0.25m
Natural (max machined depth)	(202)	0.55m+	0.55m+

Summary

Trench 15 was located in the north of site.

No archaeologically significant features or deposits were present in the trench.

5.17 Trench 16

5.17.1 Trench 16 contained two ditches. Ditch [203] was identified as a post-medieval drainage ditch, Ditch [205] as a modern boundary ditch.

5.17.2 Ditch [203] (Figure 3; Section 6) was aligned east to west and extended across Trench 16 beyond the limit of excavation. It was 0.56m wide and 0.25m deep, with steep sides and a flat base. It contained a fill of mid greyish brown silty clay (204) from which no finds were retrieved.

5.17.3 Ditch [205] (Plate 5; Figure 3; Section 7) was aligned north to south and extended across Trench 16 beyond the limit of excavation. It was 1.33m wide and 0.47m deep, with steep sides and a slightly concave base. It contained a fill of mid brownish grey silty clay (206) from which no finds were retrieved.

TRENCH 16	**Figure 2 & 3**		**Plate 1**	
Trench Alignment: NW-SE	Length: 30.5m	Level of Natural (m OD): 42.739		
Deposit	**Context No.**		**Average Depth (m)**	
			NW End	**SE End**
Topsoil	(200)		0.2m	0.25m
Subsoil	(201)		0.1m	0.2m
Natural (max machined depth)	(202)		0.35m+	0.45m+

Summary

Trench 16 was located in the north of site.

The trench contained two ditches. Ditch [203] was identified as a post-medieval drainage ditch, Ditch [205] as a modern boundary ditch.

5.18 Trench 17

5.18.1 Trench 17 contained two ditches. One ditch, located at the south-eastern

end of the trench, was found to contain modern glass and was on the same north to south alignment as and similar in plan to Ditch [205] in Trench 16. Ditch [210] was identified as a post-medieval drainage ditch due to its size and shape and its alignment down the slope of the valley.

5.18.2 Ditch [210] (Plate 3; Figure 3; Section 4) was aligned west to east and extended across Trench 17 beyond the limit of excavation. It was 0.68m wide and 0.2m deep, with vertical sides and flat base. It contained a fill of mid brownish grey silty clay (209) from which no finds were retrieved.

TRENCH 17	**Figure 2 & 3**		
Trench Alignment: NW-SE	Length: 30m	Level of Natural (m OD): 39.315	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**
Topsoil	(200)	0.2m	0.25m
Subsoil	(201)	0.25m	0.35m
Natural (max machined depth)	(202)	0.45m+	0.6m+

Summary

Trench 17 was located in the north of site.

The trench contained two ditches; a modern, unexcavated boundary ditch located at the south-eastern end of the trench, and Ditch [210] identified as a post-medieval drainage ditch.

5.19 Trench 18

5.19.1 Trench 18 contained a single plough furrow.

5.19.2 Furrow [212] (Figure 3; Section 5) was aligned north to south and extended across Trench 17 beyond the limit of excavation. It was 1.1m wide and 0.15m deep, with shallow sides and a flat base. It contained a fill of mid brownish grey silty clay (211) from which no finds were retrieved.

TRENCH 18	**Figure 2 & 3**		
Trench Alignment: NW-SE	Length: 30m	Level of Natural (m OD): 36.807	
Deposit	**Context No.**	**Average Depth (m)**	
		NW End	**SE End**

Topsoil	(200)	0.3m	0.3m
Subsoil	(201)	0.3m	0.3m
Natural (max machined depth)	(202)	0.6m+	0.6m+

Summary

Trench 18 was located in the north of site.

The trench contained a single plough furrow.

5.20 Trench 19

5.20.1 No archaeologically significant features or deposits were present in the trench.

TRENCH 19	**Figure 2**		
Trench Alignment: N-S	Length: 27m	Level of Natural (m OD): 36.643	
Deposit	**Context No.**	**Average Depth (m)**	
		N End	**S End**
Topsoil	(300)	0.3m	0.4m
Subsoil	(301)	0.4m	0.6m
Natural (max machined depth)	(302)	0.7m+	1m+

Summary

Trench 19 was located on the northern side of the site. No archaeologically significant features or deposits were present in the trench.

5.21 Trench 20

5.21.1 No archaeologically significant features or deposits were present in the trench.

TRENCH 20	**Figure 2**		
Trench Alignment: N-S	Length: 27m	Level of Natural (m OD): 38.862	
Deposit	**Context No.**	**Average Depth (m)**	
		N End	**S End**
Topsoil	(300)	0.35m	0.3m
Subsoil	(301)	1.3m	0.9m
Natural (max machined depth)	(302)	1.65m+	1.2m+

Summary

Trench 20 was located on the northern side of the site. No archaeologically significant features or deposits were present in the trench.

5.22 Trench 21

5.22.1 No archaeologically significant features or deposits were present in the trench.

TRENCH 21	**Figure 2**		
Trench Alignment: N-S	Length: 29m	Level of Natural (m OD): 44.116	
Deposit	**Context No.**	**Average Depth (m)**	
		N End	**S End**
Topsoil	(300)	0.35m	0.35m
Subsoil	(301)	0.4m	0.6m
Natural (max machined depth)	(302)	0.75m+	0.95m+
Summary Trench 21 was located on the northern side of the site. No archaeologically significant features or deposits were present in the trench.			

5.23 Trench 22

5.23.1 No archaeologically significant features or deposits were present in the trench.

TRENCH 22	**Figure 2**		
Trench Alignment: N-S	Length: 18m	Level of Natural (m OD): 45.442	
Deposit	**Context No.**	**Average Depth (m)**	
		N End	**S End**
Topsoil	(100)	0.3m	0.2m
Subsoil	(101)	0.2m	0.3m
Natural (max machined depth)	(102)	0.5m+	0.5m+
Summary Trench 22 was located centrally in the site. No archaeologically significant features or deposits were present in the trench.			

5.24 Trench 23

5.24.1 No archaeologically significant features or deposits were present in the trench.

TRENCH 23	**Figure 2**		
Trench Alignment: E-W	Length: 19m	Level of Natural (m OD): 45.651	

Deposit	**Context No.**	**Average Depth (m)**	
		E End	**W End**
Topsoil	(100)	0.3m	0.2m
Subsoil	(101)	0.2m	0.2m
Natural (max machined depth)	(102)	0.5m+	0.4m+

Summary

Trench 23 was located centrally in the site. No archaeologically significant features or deposits were present in the trench.

6 THE FINDS AND ENVIRONMENTAL EVIDENCE

By Kate Turner

Introduction

6.1 This report summarises the findings from the rapid assessment of the flot of one bulk sample taken from a medieval pit at the site of the proposed Chilton Leys pipeline, in Suffolk. The aim of this assessment is to determine the environmental potential of this sample and to establish whether any further analysis needs to be undertaken.

Methodology

6.2 The sample was scanned under a low-power binocular microscope in order to quantify any environmental material, in the form of seeds, chaff, charred grains, molluscs and charcoal. These were recorded using a non-linear scale to denote abundance where '1' indicates the occasional occurrence of an ecofact (1-10 items), '2' indicates that it is fairly frequent (11-30 items), '3' more frequent (31-100 items) and '4' abundant (>100 items). A note was also made of any other significant inclusions, for example roots and modern plant material. The results of this assessment are shown in table 1.

Results and discussion

6.3 At first glance the sample appears to have been heavily disturbed, with a significant amount of roots and modern plant material present. With regards to the environmental evidence contained within; there is a low frequency of charcoal fragments (>1mm), which are of insufficient size to be of further diagnostic value. Also present is a small seed assemblage, largely of the genus Brassica (mustards) the seeds of which are heavily charred, alongside single specimens of Chenopodium album (fat hen) and Polygonum sp (knotweed) and one charred grain of Barley (Hordeum sp.). In addition several species of snails have been identified, as shown in table 2. The majority of mollusc remains are recognisable as Cecilioides acicula (agate snail) a subterranean species of burrower snail that is likely to be a modern intrusion. A small number of Vallonia excentrica (eccentric grass

snail) and Punctum pygmaeum (dwarf snail) have also be identified, the former preferring a dry, open habitat and the latter usually found in well vegetated areas, for example amongst leaf litter in deciduous woodland (Kerney 1999), a larger assemblage would however be necessary in order to draw any substantial conclusions regarding the local environment. Insect remains were also found in this sample; however a proportion of these would appear to be of modern origin.

As previously mentioned, based on the level of apparently modern material present in this sample there is a significant likelihood that the deposit has been heavily disturbed post-deposition. The presence of modern snails and insects, along with a large amount of intrusive root and plant material would seem to confirm this, indicating substantial bioturbation.

Recommendations

6.4 Though there may be some environmental information to be gained from this sample it should be treated with extreme caution, and it is not recommended to carry out any further analysis due to likelihood of post depositional reworking of material.

References

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

Table 1: Assessment of flots, ESF23468

Sample number	Context number	Cut	Vol (litres)	Vol (ml)	Flot						
					Charcoal >1mm	Charcoal <1mm (discarded)	Seeds (uncharred)	Seeds (charred)	Grains	Mollusca	Other
1	106	105	20	8	2		1	2	1	2	Insects (2) Roots (3) Modern plant material (2)

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

Table 2: Identification of charred and uncharred plant remains, and snails ESF23468

Sample Number	1
Uncharred seeds	
Chenopodium album	1
Rumex/polygonum sp	1
Charred seeds	
Brassica sp	17
Charred Grain	
Hordeum sp	1
Snail species	
Cecilioides acicula	14
Vallonia excentrica	4
Punctum pygmaeum	2

7 DISCUSSION & CONCLUSIONS

7.1 Twenty-three trial trenches were excavated along the proposed route of the pipeline, a total excavation of c. 670 metres.

7.2 The evaluation identified evidence of agricultural use of the land. The archaeological features identified were distributed throughout the centre of the site.

7.3 Pit [105] in Trench 7 contained a single highly abraded body sherd of Roman reduced ware (7g) and a sherd of undiagnostic miscellaneous greyware (1g) (pers. comm. B. Sudds). The isolation of this pit indicates an opportunistic use of the land rather than forming any part of settlement activity.

7.4 Two post-medieval drainage ditches with vertical sides, flat bases and aligned down the valley slope were identified in the northern central area of the site (Trenches 16 and 17) indicating the agricultural use of the land during this period.

7.5 Three ditches identified by the evaluation conform to recent field boundaries visible in previous edition Ordnance Survey maps but which are no longer in use (Figures 3 & 4). Ditch [103] in Trench 6 is likely to represent a different phase of a boundary visible in the 1885 OS map and last seen in the 1958 edition. Ditch [208] in Trench 9 is also present in the1885 edition but has fallen into disuse by 1978. Ditch [205] in Trench 16 is also present in the 1885 map and is last seen in that of 1905.

7.6 Although all spoil heaps were scanned by metal-detector as they were created no finds were retrieved from them, despite the fact that the pipeline scheme passed through substantial multi-period finds scatter sites of all periods. Both the landowner and a local metal detectorist testified to the fact that neither had retrieved artefacts from the area. The lack of archaeological remains or artefacts identified by the evaluation support an interpretation of agricultural utilisation of the site. The pipeline route and study area passed through sloping ground and across a valley, and it is likely that the ground was better suited to agriculture than settlement.

8 ACKNOWLEDGEMENTS

8.1 Pre-Construct Archaeology Ltd would like to thank Anglian Water for commissioning the work and Anthill Hire for operating the excavator. PCA are also grateful to Rachael Abraham of the Conservation Team of Suffolk County Council's Archaeological Service for her advice and for monitoring the work. The author would like to thank Mark Hinman for managing the project. The author would also like to thank the project team: Sam Corke and Katie Hutton for their hard work on site, and finally PCA's CAD department for preparing the figures.

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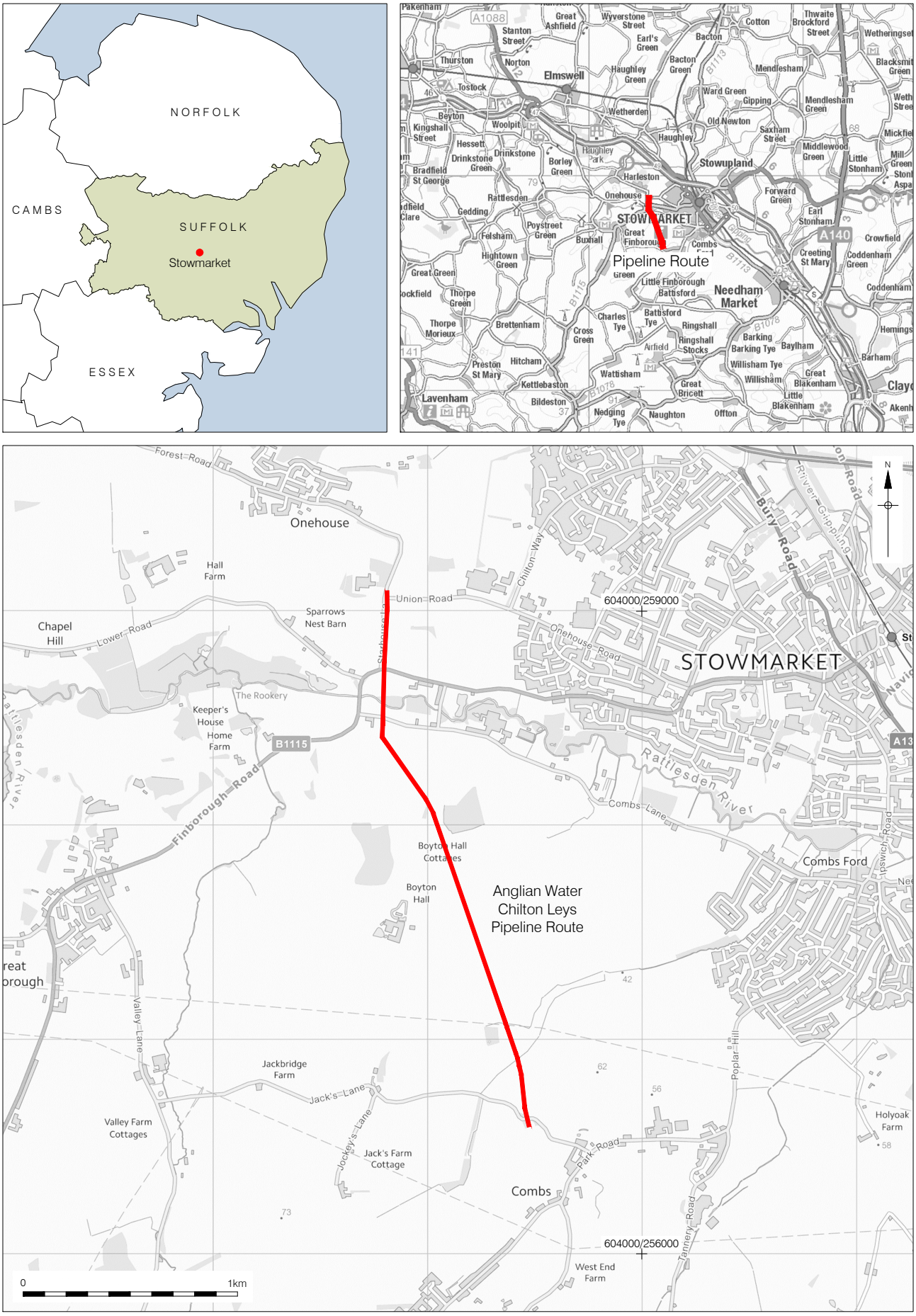
Requirements for Archaeological Evaluation 2012 Ver 1.1 (Suffolk County Council Archaeology Service Conservation Team)

9.2 Websites

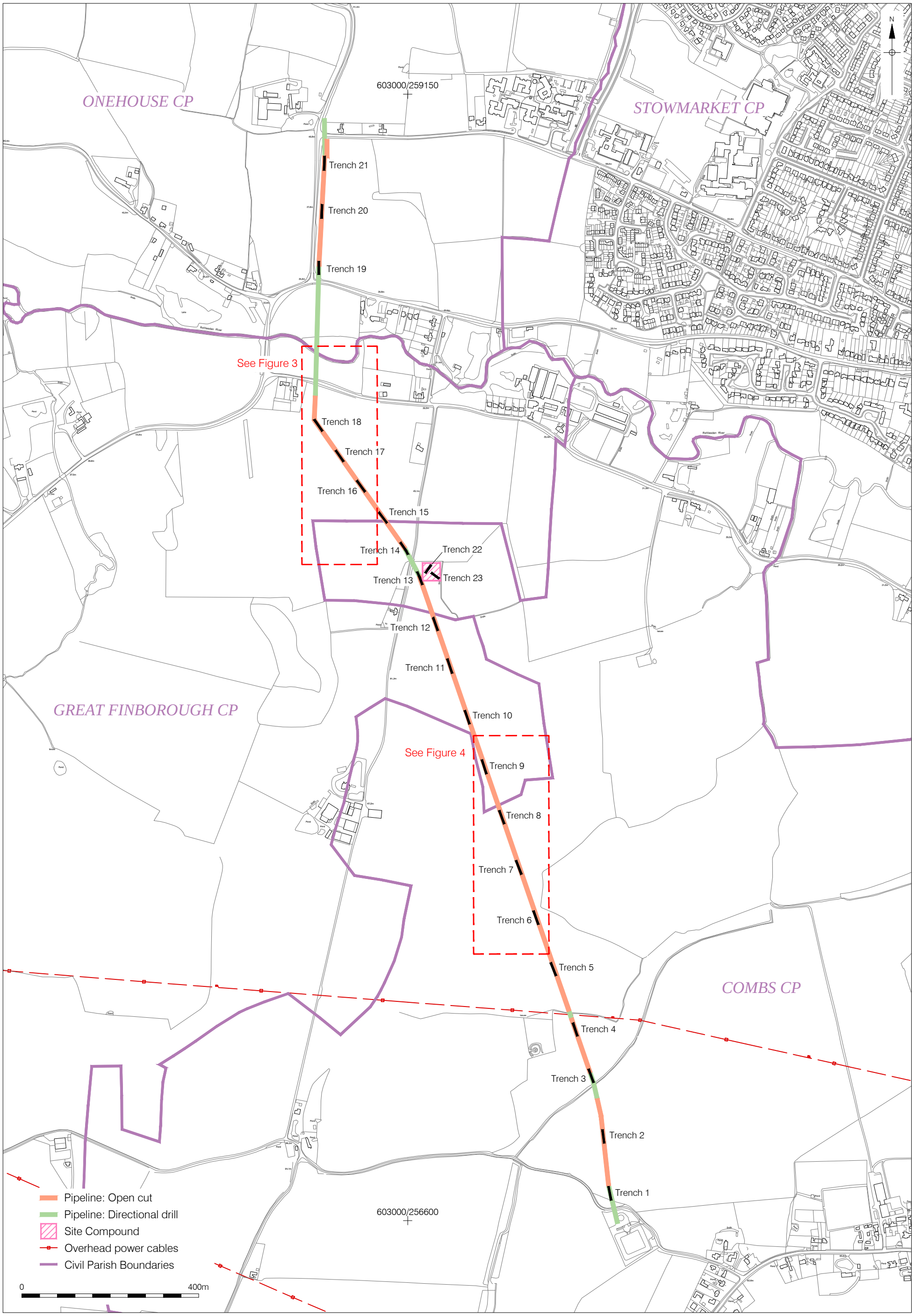
1) http://mapapps.bgs.ac.uk/geologyofbritain/home.html.

2) https://www.old-maps.co.uk



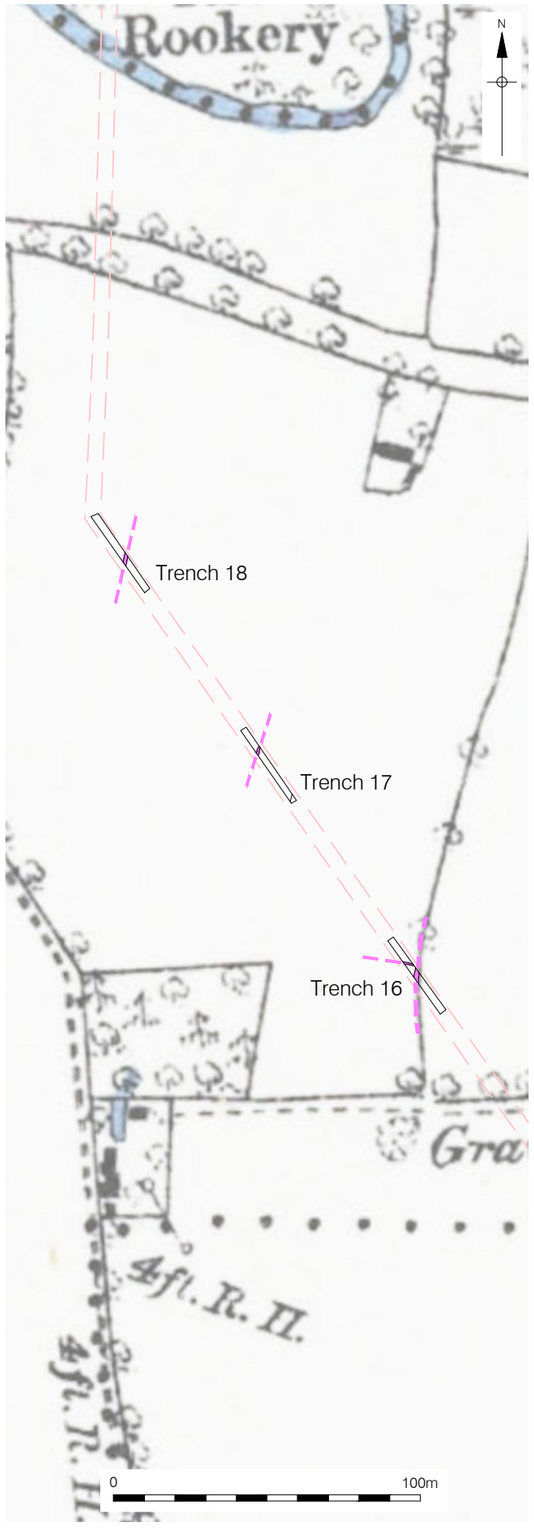
11/05/16 MR

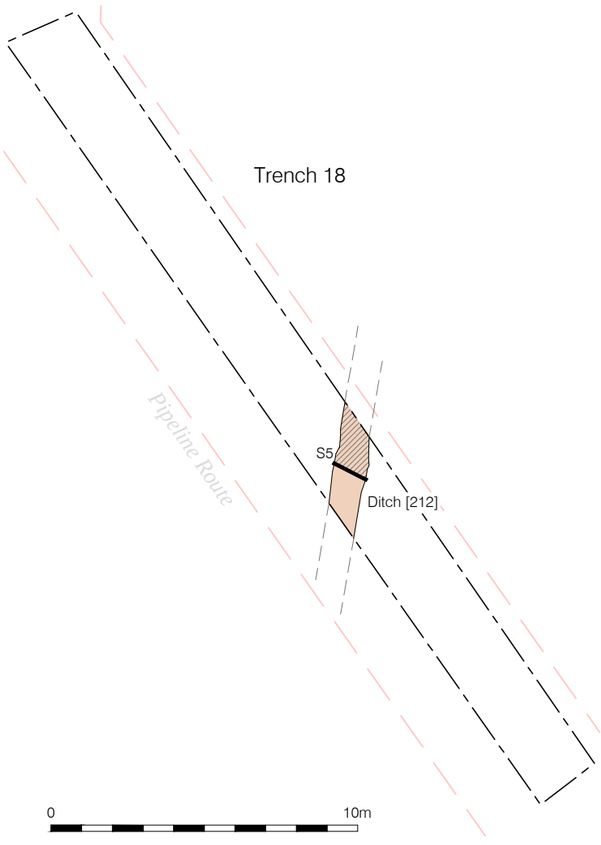
Figure 1
Site Location
1:2,000,000; 250,000 & 25,000 at A4

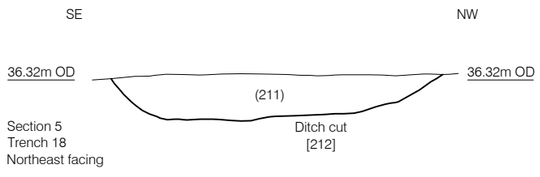


12/05/16 MR

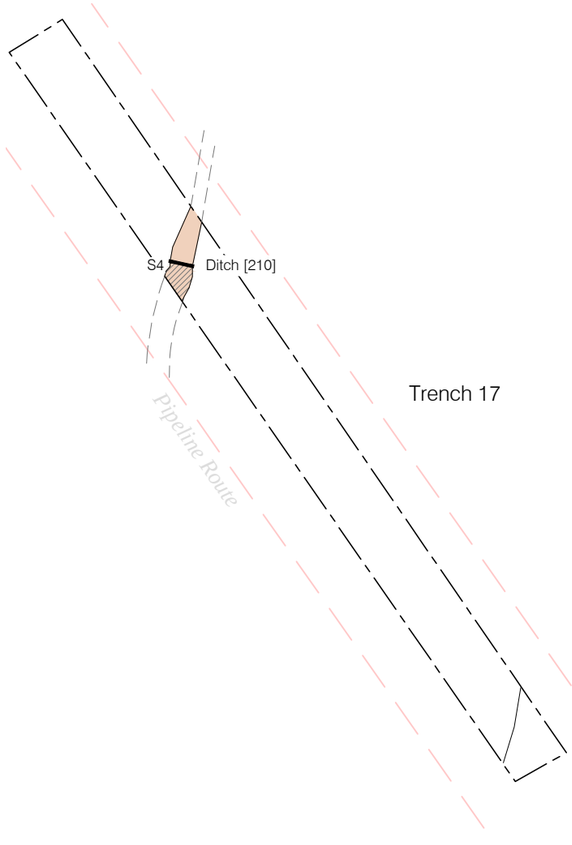
Figure 2
Trench Location plan
1:8,000 at A3

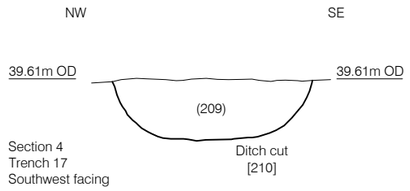




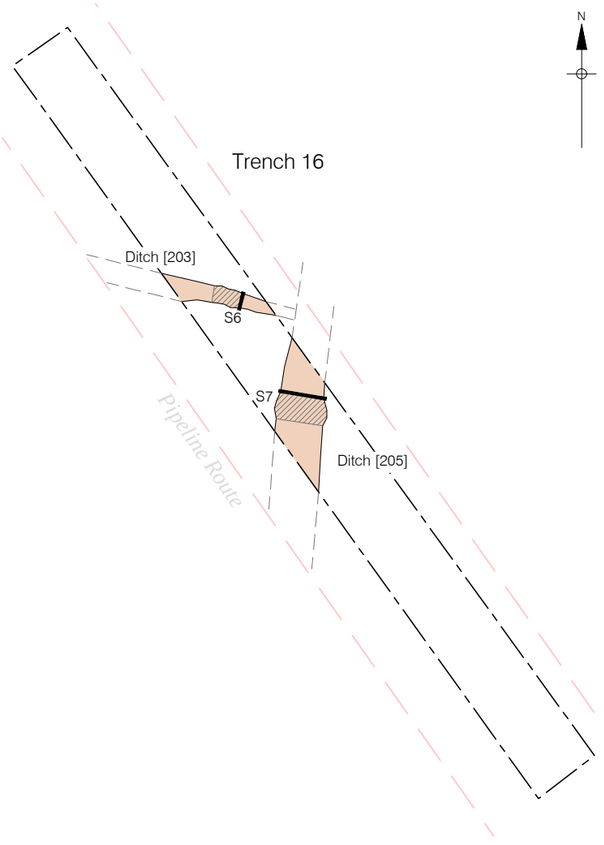


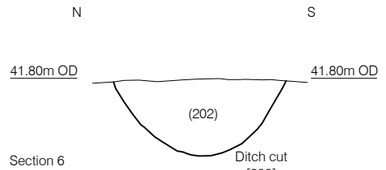
Section 5
Trench 18
Northeast facing



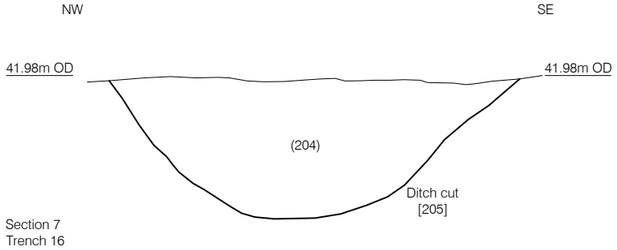


Section 4
Trench 17
Southwest facing





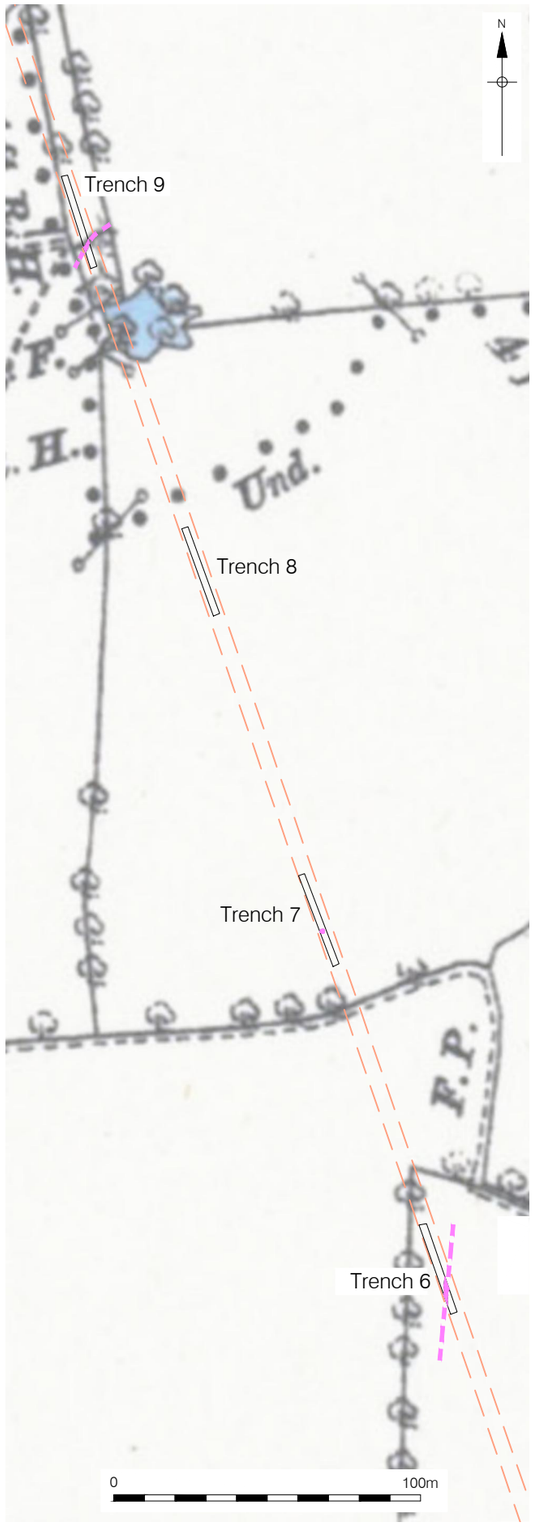
Section 6
Trench 16
West facing

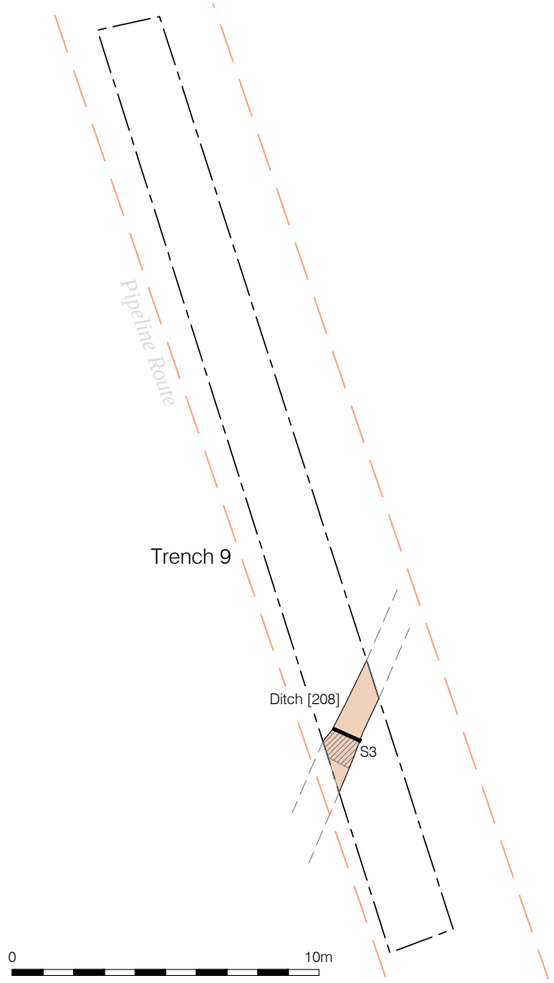


Section 7
Trench 16
Southwest facing

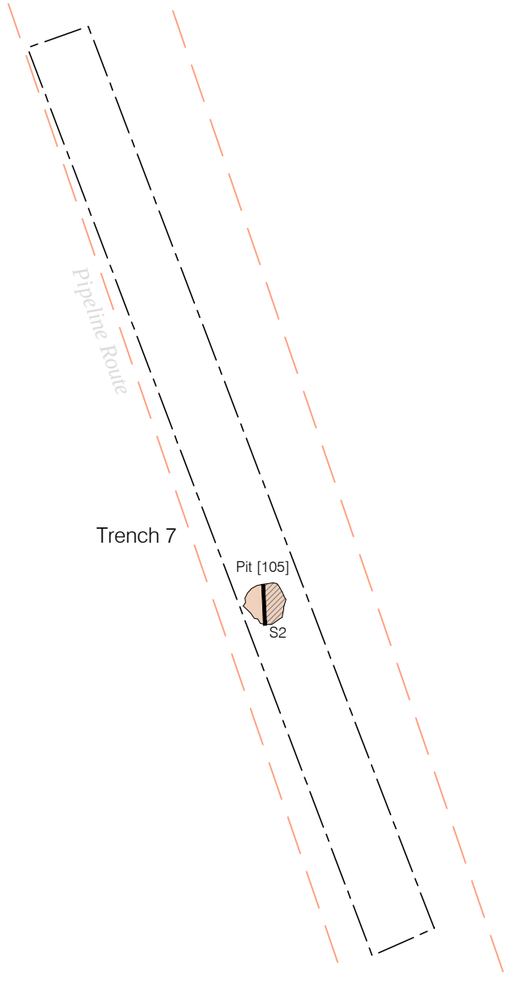
Figure 3
Detail plans of Trenches 16-18 and Sections 4-7 with features overlain on an extract from the Ordnance Survey map of 1885
1:2,000, 1:200 and 1:20 at A3

12/05/16 MR

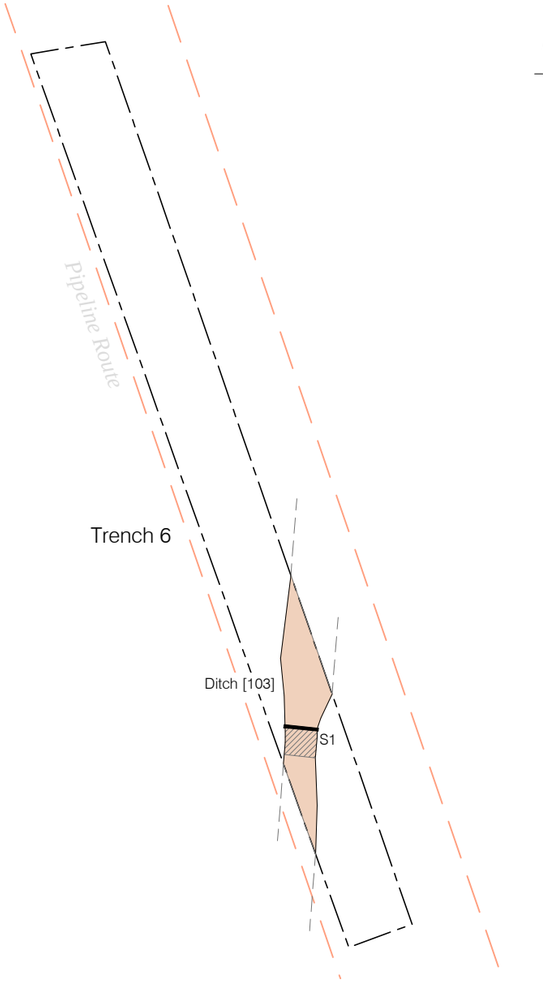




Section 3
Trench 9
Southwest facing



Section 2
Trench 7
East facing



Section 1
Trench 6
South facing

12/05/16 MR

Figure 4
Detail plans of Trenches 6, 7 and 9 and Sections 1-3 with features overlain on the Ordnance Survey map of 1885
1:2,000, 1:200 and 1:20 at A3

10 APPENDIX 1: PLATES

Plate 1: Pipeline route from Trench 16, view north-west.

Plate 2: Pit [105], view west.

Plate 3: Drainage Ditch [210], view north.

Plate 4: Pipeline route, view south-east.

Plate 5: Boundary Ditch [205], view north.

11 APPENDIX 2: CONTEXT INDEX

Context	Cut	Type	Category	Interpretation	Trench Number
100	-	Layer	Topsoil	Overburden	-
101	-	Layer	Subsoil	Overburden	-
102	-	Layer	Natural	Geological	-
103	103	Cut	Ditch	Modern Boundary Ditch	6
104	103	Fill	Ditch	Fill of [103]	6
105	105	Cut	Pit	Roman Pit	7
106	105	Fill	Pit	Fill of [105]	7
107	105	Fill	Pit	Fill of [105]	7
200	-	Layer	Topsoil	Overburden	-
201	-	Layer	Subsoil	Overburden	-
202	-	Layer	Natural	Geological	-
203	203	Cut	Ditch	Post-medieval Drain	16
204	203	Fill	Ditch	Fill of [203]	16
205	205	Cut	Ditch	Modern Boundary Ditch	16
206	205	Fill	Ditch	Fill of [205]	16
207	208	Fill	Ditch	Fill of [208]	9
208	208	Cut	Ditch	Modern Boundary Ditch	9
209	210	Fill	Ditch	Fill of [210]	17
210	210	Cut	Ditch	Post-medieval Drain	17
211	212	Fill	Ditch	Fill of [212]	18
212	212	Cut	Ditch	Plough Furrow	18
213	-	Layer	Colluvium	Geological	10
300	-	Layer	Topsoil	Overburden	-
301	-	Layer	Subsoil	Overburden	-
302	-	Layer	Natural	Geological	-

12 APPENDIX 3: OASIS FORM

OASIS ID: preconst1-250649

Project details

Project name	Anglian Water Chilton Leys Wat-06449 Scheme, Stowmarket, Suffolk: Archaeological Trial Trench Evaluation
Short description of the project	This report describes the results of an archaeological trial trench evaluation carried out by Pre-Construct Archaeology at Anglian Water Chilton Leys Wat-06449 Scheme, Stowmarket, Suffolk (TM 034 566) between the 25th and the 29th April 2016. The archaeological work was commissioned by Anglian Water in response to a planning condition attached to a 2.6km pipeline scheme. The aim of the work was to characterise the archaeological potential of the proposed development area. The evaluation identified evidence of agricultural use of the land. A single pit, containing a highly abraded sherd of Roman reduced ware, was identified, as was post-medieval land management by drainage ditches and a plough furrow; and modern, disused field boundaries. The lack of archaeological remains or artefacts identified by the evaluation support an interpretation of agricultural utilisation of the site. The pipeline route and study area passed through sloping ground and across a valley, and it is likely that the ground was better suited to agriculture than settlement.
Project dates	Start: 25-04-2016 End: 29-04-2016
Previous/future work	No / No
Any associated project reference codes	ESF23468 - HER event no.
Type of project	Field evaluation
Monument type	DITCH Post Medieval
Monument type	DITCH Modern
Monument type	PIT Roman
Significant Finds	POTTERY Roman
Methods & techniques	'"Sample Trenches"'
Development type	Pipelines/cables (e.g. gas, electric, telephone, TV cable, water, sewage, drainage 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	SUFFOLK MID SUFFOLK COMBS Anglian Water Chilton Leys Wat-06449 Scheme, Stowmarket, Suffolk: Archaeological Trial Trench Evaluation
Study area	1180 Square metres
Site coordinates	TM 034 566 52.169614978783 0.974709584838 52 10 10 N 000 58 28 E Point

Project creators

Name of Organisation	Pre-Construct Archaeology Ltd
Project brief originator	Rachael Abraham
Project design originator	Mark Hinman
Project director/manager	Mark Hinman
Project supervisor	Stephen Porter

Project archives

Physical Archive recipient	Suffolk County Council
Physical Archive ID	ESF23468
Physical Contents	"Ceramics","Environmental"
Digital Archive recipient	Suffolk County Council
Digital Archive ID	ESF23468
Digital Contents	"Ceramics","Environmental"
Digital Media available	"Images raster / digital photography","Survey"
Paper Archive recipient	Suffolk County Council
Paper Archive ID	ESF23468
Paper Contents	"Ceramics","Environmental"
Paper Media available	"Context sheet","Photograph","Plan","Report","Section","Survey "

Project bibliography 1

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