Archaeology South-East

ASE

Archaeological Evaluation Report
Courtsole Farm, Cliffe
Kent, ME3 7QT

NGR: 573564 176706
(TQ 7356 7670)

Planning Ref: MC2009/0712

ASE Project No: 6318
Site Code: CFC13

ASE Report No: 2013233
OASIS ID: archaeol6-160614

By Hayley Nicholls

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By Hayley Nicholls
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Abstract

Archaeology South-East was commissioned by CgMs Consulting to undertake an archaeological evaluation on land at Courtsole Farm, Cliffe, Kent (Figure 1, NGR TQ 7356 7670). Three evaluation trenches and three test pits were excavated.

An L-shaped ditch of uncertain date was identified in Trench 1. Middle to Late Bronze Age pottery was recovered alongside a fragment of brick, almost certainly a later find and some animal bone within an apparently disturbed upper fill of the ditch. Trench 2 was abandoned and immediately backfilled due to significant quantities of buried asbestos. Trench 3 revealed a sequence of cut features, including pits and a hearth or fire pit, a possible posthole, a large cut, possibly a chalk quarry and a gully. The features are difficult to date with any certainty and may range from Romano-British to medieval or post-medieval. All three of the test pits were devoid of archaeology.

Significant modern truncation was evident within the site area; most notably along the southern site boundary where the hill on which St Helen's Church sits has been heavily terraced to provide a level platform for farm buildings and storage areas within Courtsole Farmyard. Topsoil and subsoil horizons survive relatively intact towards the northern site boundary.

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1.0 INTRODUCTION

1.1 Site Background

1.1.1 Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology (CAA), Institute of Archaeology (IoA), University College London (UCL) was commissioned by CgMs Consulting to undertake an archaeological evaluation in advance of development of land at Courtsole Farm, Pond Hill, Cliffe, Kent (NGR TQ 7356 7670; Figure 1).

1.2 Geology and Topography

1.2.1 The site is a roughly rectangular parcel of land bounded by Pond Hill to the east, St Helen's Church to the south, Pickles Way to the north and open fields to the west. It lies on a north facing slope overlooking the Thames Estuary and has been subject to significant terracing towards the southern site boundary.

1.2.2 The British Geological Survey (BGS 2013) records the underlying bedrock geology as Lewes Nodular Chalk. No superficial deposits are recorded.

1.3 Planning Background

1.3.1 Planning permission has been granted by Medway Council for the construction of 13 residential units and associated parking (Ref. No.: MC2009/0712) subject to conditions. One planning condition relates to the requirement for an archaeological investigation in line with an approved Written Scheme of Investigation (WSI; ASE 2013) to establish the presence or absence of any archaeological remains that may survive on the site.

1.4 Research Aims and Objectives

1.4.1 The aims of the evaluation as set out in the WSI (*ibid*.) were:

- To establish the presence or absence of archaeological remains and deposits with palaeoenvironmental potential within the footprint of the proposed development
- To determine the survival, extent and minimum depth below modern ground level of any such remains
- To determine the nature and significance of any archaeological deposits
- Is there any evidence for remains of Roman activity particularly that related to the pottery industry?

1.5 Scope of Report

1.5.1 This document presents the results of the archaeological evaluation by Hayley Nicholls (Archaeologist), Jim Ball (Assistant Archaeologist) Kristina Krawiec (Senior Archaeologist). The project was managed by Andy Leonard (Project Manager) and Dan Swift (Post-Excavation Project Manager).

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2.0 ARCHAEOLOGICAL BACKGROUND

2.1 The following information is drawn from the Written Scheme of Investigation (ASE 2013) which in turn utilised information gathered during a Desk Based Assessment for the Cliffe Pools RSPB Reserve, *c*. 500m to the west of the site (ASE 2007).

2.2 Evidence for the early prehistoric period is sparse in the area. Three Mesolithic sites are known to the west of the site, two comprising antler mattocks and the third comprising an assemblage of worked flint.

2.3 The Bronze Age and Iron Age periods are better represented although the sites listed are predominantly finds-spots; a hoard of eight Bronze Age metal objects including a sword; a palstave found at West Court Farm and an axehead found on the clifftop overlooking the RSPB reserve. One possible settlement of possible Bronze Age or Iron Age date also exists at East Tilbury.

2.4 Cliffe is known to have been the location of a Roman pottery industry due to a number of favourable factors such as the availability of workable clay, tempering material (shell, sand and flint) and an unlimited supply of water. The industry produced a range of products, including Cliffe Peninsula Grey Wares, Hoo Flagons, Rochester Mortaria and Medway Estuary Grey and Fine Wares. The industry is known to have been in operation from the mid-1st century until the late 4th century AD.

2.5 Over the years large quantities of Roman pottery have been recovered from the surrounding marshes, particularly from the foreshore between Cliffe Creek and Lower Hope Point. Evidence for industrial structures has been located during excavations in the early 1960's. The location is vague but the remains comprised spreads of burnt clay, post-holes and a circular unfired clay structure, thought to be associated with salt extraction.

2.6 As well as industrial activity, there is also evidence for Roman settlement activity at four sites; one is represented by a rammed chalk floor while the remainder relate to burial sites including a 1st/2nd century infant cremation burial and two small inhumation burials.

2.7 There is some evidence for Saxon archaeology in the area, but this is scattered and sparse. A possible settlement site exists at West Court Farm, *c.* 1km to the south-west of the site.

2.8 From the 12th century onwards sea levels rose making the area less viable as an area for settlement. Throughout the period that followed efforts at land reclamation were made represented by embankments, sea walls and revetments.

2.9 By the 17th century the area had more or less been reclaimed, with drainage channels across the area clearly delineated on the Russell map of 1697. The reclaimed marshes were predominantly used for pasture. This farming activity continued throughout the post-medieval activity.

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3.0 ARCHAEOLOGICAL METHODOLOGY

(Figure 2)

3.1 The methodology for the evaluation is set out in the Written Scheme of Investigation (ASE 2013) and all work was carried out in accordance with this document and in line with professional standards and guidelines (ESCC 2008, IfA 2009)

3.2 It was agreed that an extension to Trench 1 be excavated to attempt to determine the presence or absence of features within an L-shaped ditch exposed within the trench. This extension is referred to as Trench 1B.

3.3 An existing large concrete slurry tank and associated catchment pit prevented Trench 1B from being excavated in close proximity to the corner of the L-shaped ditch at the northern end of Trench 1 and therefore Trench 1B was excavated at the southern end of Trench 1 and at a *c*. 90° angle, forming an L-shaped trench.

3.4 Trench 2 was relocated. *c.* 10m to the north of the proposed location shown on Figure 2 of the WSI (ASE 2013) in order to avoid excavating below the canopy of a tree. The southern end of the trench was partially excavated and immediately backfilled after a modern pit or soak-away containing significant quantity of buried asbestos was encountered.

3.5 Trench 3 was extended in length to the south by a further 9.8m to account for the loss of Trench 2. The western edge of the trench was 'stepped-out' by 0.60m – 1.00m to allow safe access into the trench due to the depth of excavation. The eastern edge of the trench lay in very close proximity to the site boundary and to the garden attached to Courtsole Farmhouse which prevented the trench from being stepped on this side.

3.6 The site archive is currently held at the offices of ASE and will be deposited at a suitable museum in due course. The contents of the archive are tabulated below.

Number of Contexts	65
No. of files/paper record	1 file
Plan and sections sheets	7
Bulk Samples	4
Photographs	53 (digital)
Bulk finds	1 bag
Environmental flots/residue	5

Table 1: Quantification of site archive

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4.0 RESULTS

(Figures 3 and 4)

4.1 Trench 1 and 1B

4.1.1 Trench 1 measured 20m x 1.9m wide and was orientated on a north-south alignment. Trench 1B measured 10.7m x 1.9m wide and extended from the south end of Trench 1 on an east-west alignment.

4.1.2 Both Trenches 1 and 1B were excavated down to the surface of the natural chalk substrate (1005) which was encountered at a depth of 9.91m AOD at the north end of Trench 1, at 11.01m AOD at the south end of Trench 1 and at the east end of Trench 1B, and at 10.88m AOD at the west end of Trench 1B.

4.1.3 A light brown friable silt – sand –clay subsoil with frequent chalk inclusions (1004) overlay the chalk at the north end of Trench 1, and was in turn overlain by a possible buried topsoil layer (1003) comprising a dark black – brown silty loam. Topsoil layer (1003) was overlain by modern layers of chalk, gravel and concrete (1001). The natural chalk directly overlain by the modern gravel and concrete at the south end of Trench 1, and for the extent of Trench 1B.

4.1.4 An L-shaped ditch [1007] was encountered in Trench 1, cutting the natural chalk and partially sealed by subsoil (1004). The ditch ran along much of the length of the trench on a north/north-west – south/south-east alignment. The ditch turned sharply to the west, *c*. 2.0m from the north end of Trench 1 suggesting that the feature originally enclosed an area to the west of Trench 1. The ditch had a maximum width of 1.8m and a depth of 0.8m.

4.1.5 Three fills were evident within ditch cut [1007]. The basal fill (1008) comprised a firm light grey-brown silt clay sand with frequent small chalk inclusions. This was overlain by fill (1009) / (1011), a light brown silt clay sand with frequent small to medium chalk inclusions in turn overlain by fill (1010) / (1012) which comprised a mid-brown clay silt with occasional chalk inclusions.

4.1.6 All finds associated with ditch [1007] were retrieved from uppermost fill (1012) and comprised two sherds of pottery dated to the Middle Bronze Age or the earliest part of the Late Bronze Age, two fragments of animal bone, and one very abraded fragment of ceramic building material, possibly from a brick of unknown date.

4.1.6 An environmental sample <01> taken from fill (1012) produced some charred grain and a small fragment of charred oak though the context is interpreted as disturbed due to the presence of roots and uncharred seeds in the sample.

4.1.7 The only other encountered feature was a cut [1013] that was immediately to the west of ditch [1007]. This measured 1.95m in length with a width of 0.53m and a depth of 0.28m. It was filled by (1014) a mid brown clay silt. Extensive rooting was evident in the feature and it's edges and base were of an irregular nature. Therefore [1013] is interpreted as the result of biological or geological activity. No dating evidence was retrieved from fill (1014).

4.1.8 No archaeological other finds or features were encountered in Trench 1 or in Trench1B.

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4.2 Trench 3

4.2.1 Trench 3 measured 19.80m x 1.9m wide and was orientated on a north-south alignment. The north end of the trench was excavated down to the surface of the natural chalk which was encountered at a depth of 9.14m AOD. Natural chalk was not encountered at the south end as the trench was located within the fill of a large feature which was deeper than 2.4m.

4.2.2 A series of cut features were encountered within Trench 3, of which none can be securely dated.

4.2.3 The earliest of these, [3024], was partially revealed at the north-east end of the trench. It had a length of 2.50m, a width of 1.20m, and a depth of 0.54m. A single small sherd of abraded 1st century AD pottery, weighing 4g, and a fragment of fire cracked flint were retrieved from the fill (3025), a mid grey-brown sand silt clay. Due to the unknown extent of cut [3024] and the limited finds retrieval from fill (3025), the function and date of this feature remains uncertain, but it is most likely a Romano-British pit.

4.2.4 A circular posthole [3009] lay immediately north of, and may have been related to feature [3024]. The posthole had a diameter of 0.60m, a wide flat base, and was cut into the natural chalk to the same depth as feature [3024]. No dating evidence was retrieved from the fill, (3010) a light grey-brown clay sand.

4.2.5 A possible fire pit or hearth [3022] cut through feature [3024]. This was recorded mostly in section and only partially revealed at the eastern edge of the trench. It measured 1.68m in length, 0.26m wide and was 0.5m deep.

4.2.6 Primary fills (3023) and (3032), both light brown-yellow sand clay with frequent chalk and flint inclusions were heat affected, *in situ*, up to a depth of 0.2m. The heat affected areas (3028). A thin layer of dark brown-purple-black charcoal-rich gritty silt (3033) lined the upper surface of the heat affected fill (3028) and a homogenous mid brown sand clay fill (3034) with frequent chalk inclusions it and represents the point at which the feature went out of use.

4.2.7 A sample of fill (3028) was taken, and analysis identified that two of the pieces of fired clay show a smoothed surface, one of which has grass impressions. This would support the interpretation that the fills were intentionally used as a lining within the pit cut.

4.2.8 Both the fire pit [3022] and pit [3024] were truncated by a very large, east-north-east – west-south-west aligned cut [3027], the southern edge of which lay beyond the limits of the trench.

4.2.9 Cut [3027] therefore, was more than 15.6m wide and deeper than the trench which was 2.4m deep from present ground surface.

4.2.10 A sequence of fills were recorded, only three of which (3017), (3019) and (3026) yielded finds.

4.2.11 The stratigraphically earliest of these, (3017) a mid grey-brown clay silt with occasional chalk inclusions contained 27 fragments of animal bone and a single fragment of fire cracked flint. Above this, (3019), a dark black-brown charcoal-rich clay silt with frequent chalk inclusions contained 18 fragments of animal bone and

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one small fragment of ceramic building material (CBM) of 14th – 19th century date; the residue of an environmental sample also produced some tiny sherds of probable Late Iron Age to earlier Roman date. Fill (3026) comprised a dark brown clay silt with occasional chalk inclusions, and contained two fragments of animal bone and three sherds of pottery of 1st century AD date.

4.2.12 Feature [3027] is therefore interpreted as of probable medieval or post-medieval date though its function remains unclear.

4.2.13 A small northeast – southwest aligned linear gully [3006] was cut into the fills of [3027]. This was 0.78m wide and 0.2m deep and was filled with a loose dark brown clay sand silt (3007) with occasional chalk inclusions. The fill yielded one fragment of fire cracked flint, a fragment of animal bone, a fragment of roofing tile of 14th – 19th century date and one fragment of pottery of 1st century date.

4.2.14 Gully [3006] was in turn cut by a circular pit cut [3003] that was only partially revealed against the east edge of the trench. It had a diameter of 3.04m, and a depth of more than 0.85m. The pit contained numerous fills suggesting that it was perhaps filled by several different materials. No dating evidence was retrieved from the pit.

4.2.15 A substantial layer of modern made ground (3002) overlay all archaeological deposits and probably formed a levelling layer for the construction of a brick-built stable block which had occupied the east side of the farmyard until it was demolished in the late 20th century.

4.3 Test Pit 1

4.3.1 Test pit 1 was located towards the southern site boundary, to the rear of an existing barn. The pit measured 2.10m x 1.80m, and was excavated onto natural chalk which was encountered at a depth of 11.43m AOD. Extensive truncation of the topsoil and subsoil horizons was evident across the test pit.

4.3.2 A single possible pit [4/003] was identified in the north-east corner of the test pit, directly underlying a modern layer of light brown-white silt chalk with brick and concrete inclusions (4/002) which in turn was overlaid by a layer of concrete (4/001). The pit had a depth of 0.45m, and a single fragment of ceramic roofing tile of 14th – 19th century was retrieved from its upper fill (4/004). A possible basal fill of very clean redeposited chalk was identified underlying (4/004). The pit appeared to be very recent.

4.3.3 An east – west aligned modern water pipe was encountered along the north edge of the test pit, and truncated the south edge of pit [4/003].

4.3.4 No archaeological finds or features were present in Test Pit 1.

4.4 Test Pit 2

4.4.1 Test pit 2 was located to the north of Test Pit 1, inside a barn. The pit measured 2.20m x 2.20m, and was excavated onto the natural chalk which was encountered at a depth of 11.23m AOD. Extensive truncation of the topsoil and subsoil horizons was evident across the test pit.

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4.4.2 No archaeological finds or features were present in Test Pit 2.

4.5 Test Pit 3

4.5.1 Test pit 3 was located to the north of Test Pit 2, inside a second existing barn. The pit measured 2.30m x 2.20m, and was excavated onto the natural chalk which was encountered at a depth of 10.03m AOD. Extensive truncation of the topsoil and subsoil horizons was evident across the test pit.

4.5.2 No archaeological finds or features were present in Test Pit 3.

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Context	Type	Description	Max. Length m	Max. Width m	Deposit Thickness m
1001	LAYER	Concrete and gravel	NA	NA	0.1 – 0.4
1002	LAYER	Light grey-white chalk with brick rubble and concrete inclusions	NA	NA	0.14
1003	LAYER	Buried topsoil	13	NA	0.2
1004	LAYER	Subsoil	13	NA	0.18 – 0.22
1005	LAYER	Natural	NA	NA	NA
1006	LAYER	Light grey-white chalk with brick rubble and concrete inclusions	NA	NA	0.52
1007	CUT	Ditch cut	20	1.8	0.8
1008	FILL	Basal fill of ditch [1007]	NA	0.65	0.35
1009	FILL	Intermediate fill of ditch [1007]	NA	0.9	0.15
1010	FILL	Uppermost fill of [1007]	NA	1.8	0.25
1011	FILL	Intermediate fill of [1007]	NA	NA	0.15
1012	FILL	Uppermost fill of [1007]	NA	NA	0.35
1013	CUT	Short linear cut	1.95	0.53	0.28
1014	FILL	Mid brown clay silt fill of [1013]	1.95	0.53	0.28

Table 2: Trench 1 and 1B list of recorded contexts

Context	Type	Description	Max. Length m	Max. Width m	Deposit Thickness m
3000	LAYER	Mid brown silt topsoil	NA	NA	0.10
3001	LAYER	Light grey-white chalk layer, made ground	NA	NA	0.40
3002	LAYER	Mid grey-brown sand clay, made ground	NA	NA	0.20 – 0.50
3003	CUT	Circular pit cut with capping layers	3.04	NA	>0.85
3004	FILL	Flint capping layer of pit [3003]	2.66	NA	0.2
3005	LAYER	Concrete	NA	NA	0.10
3006	CUT	NE-SW aligned linear gully	1.75	0.78	0.20
3007	FILL	Dark brown clay sand silt fill of gully [3006]	1.75	0.78	0.20
3008	FILL	Dark brown clay sand silt with frequent chalk. Fill of [3003]	NA	NA	0.20
3009	CUT	Circular posthole immediately north of [3024]	0.6	NA	0.18
3010	FILL	Light grey-brown clay sand fill of posthole [3009]	0.6	NA	0.18
3011	STRUCTURE	East – west aligned modern brick wall	NA	NA	0.40
3012	LAYER	Modern light grey-white chalk footing associated with (3011)	NA	2.06	0.45
3013	LAYER	Layer of modern demolition rubble	NA	NA	0.40

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Context	Type	Description	Max. Length m	Max. Width m	Deposit Thickness m
3014	STRUCTURE	East – west aligned modern brick wall	NA	NA	0.86
3015	FILL	Light grey-white silt chalk fill of [3003]	NA	NA	0.25
3016	FILL	Dark brown clay sand silt fill of pit [3003]	NA	NA	0.20
3017	FILL	Mid grey-brown sand clay silt fill of [3027]	NA	NA	>0.80
3018	FILL	Same as (3017)	NA	NA	>0.80
3019	FILL	Dark brown-black silt sand clay fill of [3027]	NA	NA	0.50
3020	FILL	Mid grey-brown silt sand clay fill of [3003]	NA	NA	0.15
3021	LAYER	Dark brown-black charcoal-rich layer overlying [3003]	1.30	NA	0.10
3022	CUT	Cut of fire pit/hearth	1.55	0.28	0.52
3023	FILL	Light brown-yellow sand clay fill of [3022]	NA	NA	0.52
3024	CUT	Irregular cut at north end of trench	2.50	1.20	0.54
3025	FILL	Mid grey-brown sand silt clay fill of [3024]	2.50	1.20	0.54
3026	FILL	Mid-dark brown sand clay silt fill of [3027]	NA	NA	0.80
3027	CUT	Very large cut of unknown dimensions	>15.60	NA	>2.40
3028	FILL	Mid orange heat-affected fill in [3022]	NA	0.20	0.52
3029	FILL	Light brown-grey-white silt chalk ring in [3003]	3.04	0.25 – 0.30	0.20
3030	LAYER	Modern chalk footing associated with wall (3014)	NA	2.70	0.34
3031	LAYER	Modern made ground towards south end of trench	6.0	NA	0.68
3032	FILL	Same as (3023)			
3033	FILL	Charcoal-rich fill in fire pit [3022]	NA	NA	0.05
3034	FILL	Mid brown sand silt clay fill in [3022]	NA	NA	0.4
3035	FILL	Light grey-brown silt chalk fill of [3027]	NA	NA	>0.40
3036	FILL	Light orange-brown sand silt fill of [3027]	NA	NA	0.20
3037	VOID				
3038	FILL	Mid brown sand clay silt fill of [3003]	NA	NA	0.52
3039	FILL	Dark brown-red silt clay fill of [3003] overlying flint fill (3004)	2.66	NA	0.04
3040	FILL	Dark orange-brown sand clay silt fill of [3027]	NA	NA	>0.25

Table 3: Trench 3 list of recorded contexts

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Context	Type	Description	Max. Length m	Max. Width m	Deposit Thickness m
4/001	LAYER	Concrete	NA	NA	0.10
4/002	LAYER	Light brown-white silt chalk with brick and concrete inclusions	NA	NA	0.06
4/003	CUT	Possible pit cut	1.0	NA	0.20
4/004	FILL	Mid brown clay silt fill of [4/003]	1.0	NA	0.20
4/005	FILL	Very clean redeposited chalk fill of [4/003]	1.0	NA	0.25

Table 4: Test Pit 1 list of recorded contexts

Context	Type	Description	Max. Length m	Max. Width m	Deposit Thickness m
5/001	LAYER	Concrete	NA	NA	0.10
5/002	LAYER	Made ground	NA	NA	0.40
5/003	LAYER	Natural chalk	NA	NA	>0.10

Table 5: Test Pit 2 list of recorded contexts

Context	Type	Description	Max. Length m	Max. Width m	Deposit Thickness m
6/001	LAYER	Mud and chalk floor	NA	NA	0.10
6/002	LAYER	Made ground	NA	NA	0.40
6/003	LAYER	Natural chalk showing some contamination from layer (6/002)	NA	NA	0.10

Table 6: Test Pit 3 list of recorded contexts

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5.0 THE FINDS

5.1 Summary

5.1.1 A small assemblage of finds was recovered during the evaluation:

Context	Pottery	Wt (g)	CBM	Wt (g)	Bone	Wt (g)	Flint	Wt (g)	FCF	Wt (g)	F. clay	Wt (g)
1012	2	14	1	18	2	<2						
3007	1	<2	1	18	1	18	1	<2				
3017					27	136			1	62		
3019			1	22	18	202					1	8
3025	1	4					1	8				
3026	3	24			2	116						
3028											3	396
4/004			1	34								
Total	**7**	**42**	**4**	**92**	**50**	**472**	**2**	**8**	**1**	**62**	**4**	**404**

Table 7: Finds quantification

5.2 **Worked Flint** by Karine Le Hégarat

5.2.1 Two pieces of flint were recovered during the course of the evaluation work at Courtsole Farm. The artefacts are in a poor condition. They consist of two shattered pieces. No striking platforms and no bulb of percussion are present, and the artefacts are not closely datable. Although ripples are evident, these may have simply been produced by modern machinery.

5.3 **The Pottery** by Anna Doherty

5.3.1 A small assemblage of seven sherds, weighing 44 grams was recovered from the site. The earliest material comes from context [1012] and consists of two cross-fitting sherds in a coarse flint-tempered fabric with moderate ill-sorted inclusions ranging from 0.2-3.5mm in a micaceous background matrix with moderate quartz of silt-size to 0.1mm and sparse black-iron-rich inclusions. This fabric type would be most typical of the Middle Bronze Age or the earliest part of the Late Bronze Age (c.1500-950BC) although no diagnostic features are present.

5.3.2 A shelly fabric containing moderately to ill-sorted inclusions of 0.5-2.5mm was found in contexts [3025] and [3026]. In the latter deposit, it was associated with a different fabric containing moderate grog of 1-2mm with sparse shell of up to 2mm. These fabric types are likely to be of 1st century AD date. A single sherd of North Kent fine grey ware (dated to c.AD50-160) was also recovered in context [3007].

5.3.3 Pottery from the residues of the environmental samples was briefly examined. This consisted of very small bodysherds in similar fabrics to the hand collected pottery.

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5.4 Ceramic Building Material (CBM) by Trista Clifford

5.4.1 Four small fragments of CBM weighing 92g were recovered from four separate contexts. Roofing tile fragments in a fine sand tempered fabric with very infrequent flint inclusions <2mm came from [3007] and [4/004], as well as an abraded flake in the same fabric which could derive from either a tile or brick. All are vitrified as a result of exposure to high temperatures. Due to the small size of the fragments no form could be identified, therefore it is only possible to assign a wide date range of 14th-19th century. Ditch slot [1012] contained a very abraded fragment, possibly from a brick. It is not possible to date this fragment

5.5 Fired Clay by Trista Clifford

5.5.1 Four fragments of fired clay were recovered from two separate contexts: [3028] contained possible hearth lining in an abundantly sandy fabric with infrequent large flint pebbles c.6mm and frequent chalk inclusions up to 7mm. Two of the pieces show a smoothed surface, one of which has grass impressions. The matrix is very friable and appears to derive from the natural soil surface having been smoothed and burned rather than showing any evidence of preparation using clay brought in from elsewhere.

5.5.2 Another smaller fragment in a similar fabric weighing 8g was recovered from [3019]. The fragment is undiagnostic of form or function.

5.6 Animal Bone by Gemma Driver

5.6.1 The animal bone assemblage is in a moderate condition and contains 50 fragments weighing 472g. The bone was hand-collected from five contexts and a limited range of domestic species have been identified including cattle, sheep/goat, pig and horse. The assemblage contains an array of elements including teeth, vertebrae and long-bone fragments. No evidence of butchery, burning, gnawing or pathology has been noted.

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6.0 The Environmental Samples by Karine Le Hégarat & Dawn Elise Mooney

6.1 Introduction

6.1.1 Four bulk soil samples with individual volume of 20 to 40L were extracted during evaluation work at the site to establish the presence of charcoal, charred macroplant remains and other palaeo-environmental remains as well as to assist finds recovery. Sample <1> was taken from ditch [1/007] which contained ceramics dated to the mid to late Bronze Age. The remaining three samples (<2, 3 and 5>) came from features of late medieval or later date.

6.2 Methodology

6.2.1 The samples were fully processed in a floatation tank and the residues and flots were retained on 500µm and 250µm meshes and air dried. The flots were scanned under a stereozoom microscope at x7-45 magnifications and an overview of their contents recorded (Table 8). Residues were sieved through 8, 4 and 2 mm geological sieves and each fraction sorted for artefact and environmental remains (Table 9). Preliminary identifications have been provided for macrobotancial remains present through reference to modern comparative material and reference manuals (Cappers *et al.* 2006, Jacomet 2006, NIAB 2004). Nomenclature used follows Stace (1997).

6.2.2 Charcoal fragments >4mm recovered from the heavy residue of each sample were fractured along three planes (transverse, radial and tangential) according to standardised procedures (Gale & Cutler 2000). Specimens were viewed under a stereozoom microscope for initial grouping, and an incident light microscope at magnifications up to 400x to facilitate identification of the woody taxa present. Taxonomic identifications were assigned by comparing suites of anatomical characteristics visible with those documented in reference atlases (Hather 2000, Schoch *et al.* 2004), and by comparison with modern reference material held at the Institute of Archaeology, University College London. Identifications have been given to species where possible, however genera, family or group names have been given where anatomical differences between taxa are not significant enough to permit satisfactory identification. Where identifications were uncertain due to poor preservation or limited size of charcoal specimens the identification is preceded by cf., denoting 'compares with'. Nomenclature used follows Stace (1997), and taxonomic identifications are recorded in Table 9.

6.3 Results

Mid to late Bronze Age: sample <01> uppermost fill [1/012] of ditch [1/007]

6.3.1 Sample <01> produced a large flot (180ml). Roots and uncharred seeds of goosefoot (*Chenopodium* sp.) were relatively abundant suggesting the possibility of post-depositional movement within the deposit and therefore the potential for contamination. The sample produced a small amount (less than 10 items) of charred grains including wheat (*Triticum* sp.) and barley (*Hordeum* sp.). A single fragment of charred wood was identified as oak (*Quercus* sp.). The preservation of the material varied from poor to fair.

6.3.2 Land snail shells were common in this sample. A small amount of bone was recorded, and the residue produced a small amount of pottery, magnetised material, burnt unworked flint and a single flint flake. The assemblage of bones

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contained two small, round vertebrae that may derive from a shark or ray (Ayton pers. comments).

Late medieval or later date: sample <02> unknown feature [3027] fill [3019], sample <03> gully [3006] fill [3007], sample <05> pit [3003] fill [3020]

6.3.3 Samples <02, 03 and 05> produced smaller flots (80ml, 35ml and 10ml respectively). Charred crop remains were present in varying quantities in all three samples. While they were uncommon in pit [3003], they were slightly more numerous in gully [3006], and unknown feature [3027] contained the richest assemblage (between 60 and 70 items). The overall preservation was fair to poor with numerous grains being too pitted and fragmented to be identified (Cerealia). While hulled barley (*Hordeum vulgare*) dominated the assemblage of identifiable grains, occasional grains of wheat with a rounded appearance typical of free-threshing wheat (bread or rivet wheat) were also recorded. No chaff was present. Infrequent large round seeded pulses representing vetches, beans or garden peas (*Vicia* / *Pisum* sp.) were evident all three samples. Charred weed seeds were mostly recorded in sample <02> including ruderals or arable weeds such as goosefoot, knotgrass/dock (*Polygonum/Rumex* sp.) and some grass seeds. Stinking chamomile (*Anthemis cotula*) are often associated with cultivation on heavy soils.

6.3.4 Only small assemblages of charcoal were recovered from these samples, and the fragments were poorly preserved, showing sediment concretion and infiltration resulting from fluctuations in groundwater level. Amongst the few identifiable charcoal fragments present, oak dominated the assemblage, with hazel/alder (*Corylus/Alnus*), maple (cf. *Acer* sp.), holly (*Ilex aquifolium*), and hawthorn/rowan/apple (cf. Maloideae) also present.

6.3.5 Land snail shells were again very common in these samples. In addition, small quantities of marine molluscs were also recorded. A small amount of mammal and fish bones was also present. Sample <2> contains a cattle phalanx, as well as evidence of anuran and small mammal. Very few of the bones from sample <3> were identifiable though a small vertebrae recovered from the 2-4mm fraction probably derives from a mouse (*Mus/Apodemus sp.*). Sample <5> contains the proximal articulation from a cattle femur (Ayton pers. comments).

6.3.6 In addition to the environmental remains, small amount of pottery, magnetised material, fuel ash slag, burnt unworked flint and flint flakes were recorded in the residues. The presence of fuel ash slag in sample <02> confirms the late date of this unspecified feature ([3027]).

6.4 Discussion

6.4.1 Sampling has confirmed the presence of environmental remains including charcoal, charred macroplants, bones and shells.

6.4.2 The charred macroplants were present in all the samples, but were more numerous in sample <02>, unknown feature [3027]. Overall, charred grains of wheat and barley as well as charred pulses provide evidence for the use and possible cultivation of crops. These could have been used for human consumption but also or as fodder. Given the varying state of preservation of the material and the presence of bones, shells and artefacts within the samples, it is likely that the assemblage of macroplants represent a background scatter of domestic waste. Overall, the assemblages of charred macroplants are too limited and too poorly

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preserved to reveal the scale and nature of arable activities at the site. The charred weed seeds are varied but too limited to provide significant information regarding the conditions under which the cereals were grown or the past vegetation environment.

6.4.3 The small and poorly preserved charcoal assemblage has limited potential to contribute to discussions of local environment and fuel acquisition strategies. The single fragment of oak from the context [1/012] is insufficient to draw any conclusions.

6.4.4 The assemblage from Medieval or later samples <2>, <3>, and <5> suggests that fuel wood was procured from oak-dominated deciduous woodland. The presence of holly and Maloideae indicates that woodland margin or hedgerow environments may also have been exploited for fuel wood. However, while the charcoal assemblage indicates that these taxa were present in the local landscape and used as fuel, the assemblage is too small to provide any further information.

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Table 8: Residue quantification (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and weights in grams

Sample Number	Context	Context / deposit type	Sample Volume litres	Sub-Sample Volume litres	Charcoal >4mm	Weight (g)	Charcoal <4mm	Weight (g)	Charcoal Identifications	Bone and Teeth	Weight (g)	Marine Molluscs	Weight (g)	Land Snail shells	Weight (g)	Other (eg ind, pot, cbm)
1	1/012	ditch	40	40	*	<2	***	2	*Quercus* sp. (1)	**	2			***	4	FCF **/ 358g - Pottery */ 6g - Flint */ 1g - Mag. Mat. ***/ <2g
2	3/019	unknown feature	40	40	*	2	***	2	*Quercus* sp. (6), cf. *Acer* sp. (2), *Ilex aquifolium* (1)	***	56	**	6	**	2	FCF */ 94g - Pottery */ 10g - Mag. Mat. ****/ 4g - Fuel ash slag ***/ 28g
3	3/007	gully	40	40	*	<2	**	<2	*Corylus/Alnus* (3), *Quercus* sp. (2), cf. Maloideae (1)	***	26	***	22	**	2	FCF */ 22g - Pottery */ 4g - Mag. Mat. **/ <2g
5	3/020	pit	20	20	*	<2	**	<2	*Corylus/Alnus* (1), *Quercus* sp. (2)	***	42	**	4	**	<2	FCF */ 2g - Flint */ 6g - Mag. Mat. **/ <2g

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Table 9: Flot quantification (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and preservation (+ = poor, ++ = moderate, +++ = good)

Sample Number	Context	Weight g	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds uncharred	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Crop seeds charred	Identifications	Preservation	Weed seeds charred	Identifications	Preservation	Land Snail Shells	Industrial debris
1	1/012	20	180	180	55	2	*** *Chenopodium* sp.		*	**	*	*Hordeum* sp. (3), *Triticum* sp. (2)	+ to +++				*** 40%	
2	3/019	22	80	80	10	3	* *Sambucus nigra* (1), *Euphorbia peplus* (1), Lamiaceae (1), *Sonchus* sp. (1)	**	***	***	***	*Hordeum vulgare* (20-28), *Triticum* sp. (*), Cerealia (25-35), *Vicia* sp. / *Pisum* sp. (4)	+ to +++	**	*Rumex* cf. *acetosella* (2), *Chenopodium* sp. (*), *Anthemis cotula* (*), cf. *Silene* sp., Asteraceae (*), Poaceae	+ to ++	*** 45%	*
3	3/007	10	35	35	1	1	*Sambucus nigra* (1)	**	**	****	**	*Hordeum vulgare* (20-25), *Triticum* sp. (2), Cerealia, *Vicia* sp. / *Pisum* sp. (2)	+ to +++	*	*Rumex* cf. *acetosella* (1)	++	**** 85%	
5	3/020	2	10	10	5	1	* *Sambucus nigra* (frags)		**	***	**	*Hordeum vulgare* (7), Cerealia (6-10), *Vicia* sp. / *Pisum* sp. (1)	+ to +++	*	Poaceae (5)	+ to ++	*** 85%	

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7.0 DISCUSSION AND CONCLUSIONS

7.1 Significant modern truncation was evident within the site area; most notably along the southern site boundary where the hill on which St Helen's Church sits has been heavily terraced to provide a level platform for farm buildings and storage areas within Courtsole farmyard. Topsoil and subsoil horizons survive relatively intact towards the northern site boundary.

7.2 In Trench 1 an L-shaped ditch was recorded along most of the length of the trench. Intact subsoil and buried topsoil horizons were present towards the north end of the trench. These had been truncated towards the south end, but surviving archaeology was still present below the depth of truncation. An environmental sample taken from the upper fill of the ditch suggests that the upper deposits of the feature are disturbed, probably through root action. Finds, also from the upper fill of the ditch, are mixed and comprise 2 undiagnostic sherds of probable Middle or Late Bronze Age fabric, an undateable abraded fragment of possible brick and fragments of animal bone.

7.3 Trench 1B was excavated in order to attempt to determine the presence or lack of archaeology enclosed by the ditch but this revealed no further archaeological finds or features.

7.4 Trench 2 was only partially excavated and was immediately backfilled due to significant quantities of buried asbestos encountered.

7.5 Trench 3 revealed a sequence of cut features, including a pit, a hearth or fire pit and a possible posthole. None of these can be securely dated; however, the pit and posthole at the northern end of the trench were apparently superseded by a large pit in which very hot material was placed. These features could be of Romano-British date and were cut through by a massive feature which may be a backfilled chalk quarry possibly used in the foundations of St Helen's Church which is immediately to the south of the site. Into the top of the backfilled quarry, a south-west – north-east aligned gully was cut through it which was in turn cut by a later pit. Modern deposits capped the sequence.

7.6 All three of the smaller test pits were devoid of archaeology and were excavated onto natural chalk at depths of between 0.40m to 0.60m.

7.7 The evaluation has positively identified archaeology in the eastern and western parts of the site however this is poorly understood and/or dated.

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HER Summary Form

Site Code	CFC13					
Identification Name and Address	Courtsole Farm Cliffe Kent					
County, District &/or Borough	Kent, Medway, Cliffe					
OS Grid Refs.	TQ 7356 7670					
Geology	Chalk					
Arch. South-East Project Number	6318					
Type of Fieldwork	Eval.					
Type of Site				Other		
Dates of Fieldwork	Eval. Sept 2013					
Sponsor/Client	CgMs					
Project Manager	Andy Leonard					
Project Supervisor	Hayley Nicholls					
Period Summary				BA		RB
		MED	PM			

Summary

Archaeology South-East was commissioned by CgMs Consulting to undertake an archaeological evaluation on land at Courtsole Farm, Cliffe, Kent (Figure 1, NGR TQ 7356 7670). Three evaluation trenches and three test pits were excavated.

An L-shaped ditch of uncertain date was identified in Trench 1. Middle to Late Bronze Age pottery was recovered alongside a fragment of brick, almost certainly a later find and some animal bone within an apparently disturbed upper fill of the ditch. Trench 2 was abandoned and immediately backfilled due to significant quantities of buried asbestos. Trench 3 revealed a sequence of cut features, including pits and a hearth or fire pit, a possible posthole, a large cut, possibly a chalk quarry and a gully. The features are difficult to date with any certainty and may range from Romano-British to medieval or post-medieval. All three of the test pits were devoid of archaeology.

Significant modern truncation was evident within the site area; most notably along the southern site boundary where the hill on which St Helen's Church sits has been heavily terraced to provide a level platform for farm buildings and storage areas within Courtsole Farmyard. Topsoil and subsoil horizons survive relatively intact towards the northern site boundary.

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OASIS Form

OASIS ID: archaeol6-160614

Project details

Project name	Archaeological evaluation at Courtsole Farm, Cliffe, Kent
Short description of the project	Archaeology South-East was commissioned by CgMs Consulting to undertake an archaeological evaluation on land at Courtsole Farm, Cliffe, Kent (Figure 1, NGR TQ 7356 7670). Three evaluation trenches and three test pits were excavated. An L-shaped ditch of uncertain date was identified in Trench 1. Middle to Late Bronze Age pottery was recovered alongside a fragment of brick, almost certainly a later find and some animal bone within an apparently disturbed upper fill of the ditch. Trench 2 was abandoned and immediately backfilled due to significant quantities of buried asbestos. Trench 3 revealed a sequence of cut features, including pits and a hearth or fire pit, a possible posthole, a large cut, possibly a chalk quarry and a gully. The features are difficult to date with any certainty and may range from Romano-British to medieval or post-medieval. All three of the test pits were devoid of archaeology. Significant modern truncation was evident within the site area; most notably along the southern site boundary where the hill on which St Helen's Church sits has been heavily terraced to provide a level platform for farm buildings and storage areas within Courtsole Farmyard. Topsoil and subsoil horizons survive relatively intact towards the northern site boundary.
Project dates	Start: 18-09-2013 End: 20-09-2013
Any associated project reference codes	CFC13 - Sitecode
Type of project	Field evaluation
Current Land use	Other 3 - Built over
Monument type	DITCH Bronze Age
Monument type	HEARTH/FIRE PIT Uncertain
Monument type	POSTHOLE Uncertain
Monument type	GULLY Uncertain
Significant Finds	POTTERY Bronze Age
Significant Finds	POTTERY Roman
Significant Finds	CBM Uncertain
Significant Finds	FIRED CLAY Uncertain
Methods & techniques	''Test Pits''
Development type	Rural residential
Prompt	National Planning Policy Framework - NPPF

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Position in the planning process	After full determination (eg. As a condition)

Project location

Country	England
Site location	KENT MEDWAY CLIFFE AND CLIFF WOODS Courtsole Farm
Postcode	ME3 7QT
Study area	3000.00 Square metres
Site coordinates	TQ 7356 7670 51 0 51 27 43 N 000 29 55 E Point
Height OD / Depth	Min: 9.91m Max: 11.43m

Project creators

Name of Organisation	Archaeology South-East
Project brief originator	CgMs Consulting
Project design originator	Archaeology South-East
Project director/manager	Andy Leonard
Project supervisor	Hayley Nicholls
Type of sponsor/funding body	Client
Name of sponsor/funding body	CgMs Consulting

Project archives

Physical Archive recipient	Local Museum
Physical Archive ID	CFC13
Physical Contents	''Animal Bones'',''Ceramics'',''Environmental''
Digital Archive recipient	Local Museum
Digital Archive ID	CFC13
Digital Contents	''Animal Bones'',''Ceramics'',''Environmental'',''Stratigraphic'',''Survey''
Digital Media available	''Images raster / digital photography'',''Text''
Paper Archive recipient	Local Museum
Paper Archive ID	CFC13

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Paper Contents	''Animal Bones'',''Ceramics'',''Environmental'',''Stratigraphic'',''Survey''
Paper Media available	''Context sheet'',''Miscellaneous Material'',''Photograph'',''Plan'',''Report''

Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	Archaeological evaluation Report, Courtsole Farm, Cliffe, Kent
Author(s)/Editor(s)	Nichols, H
Other bibliographic details	ASE Report No. 2013233
Date	2013
Issuer or publisher	ASE
Place of issue or publication	Portslade
Description	grey lit bound rep

Entered by	Dan Swift (d.swift@ucl.ac.uk)
Entered on	7 October 2013

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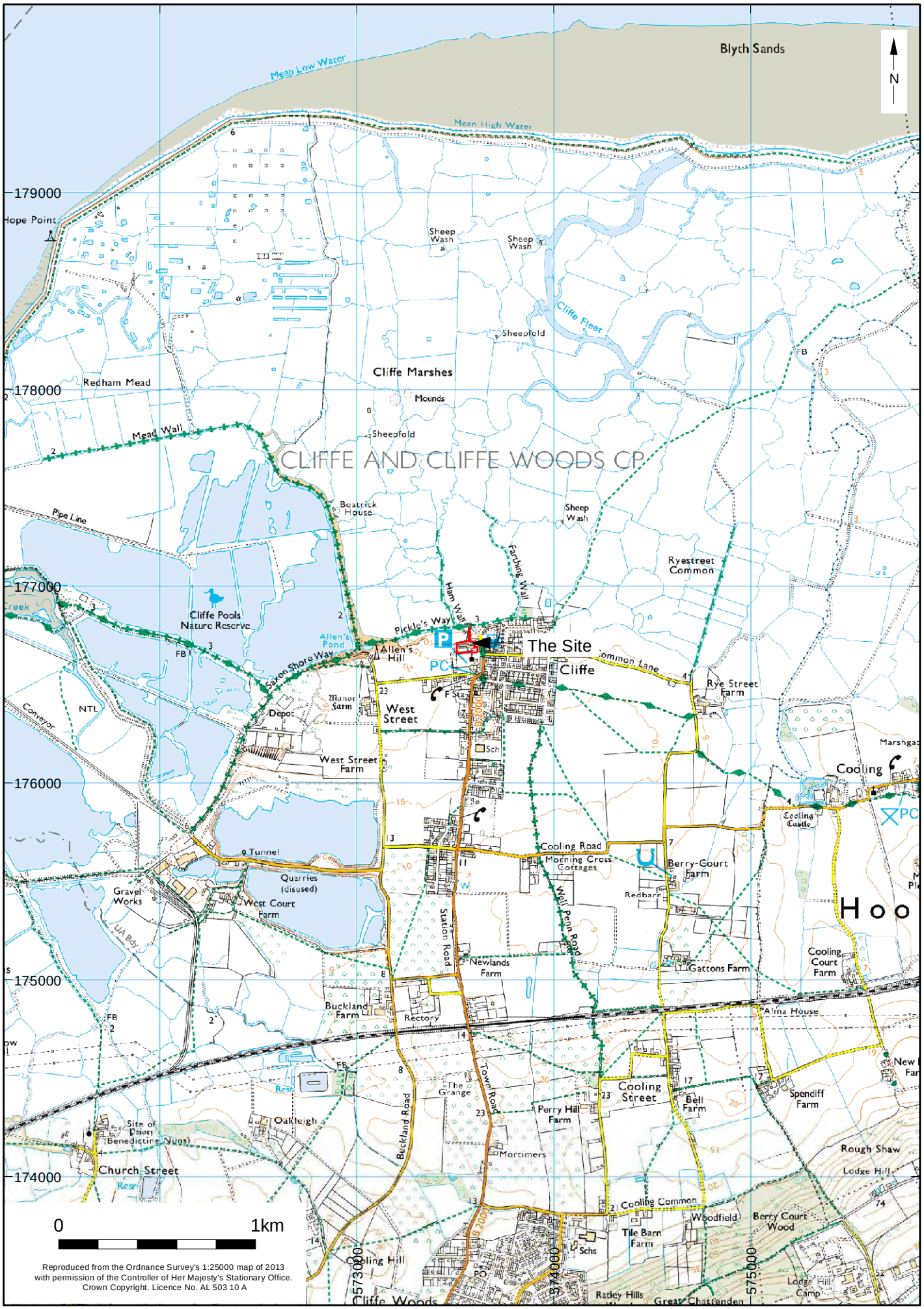

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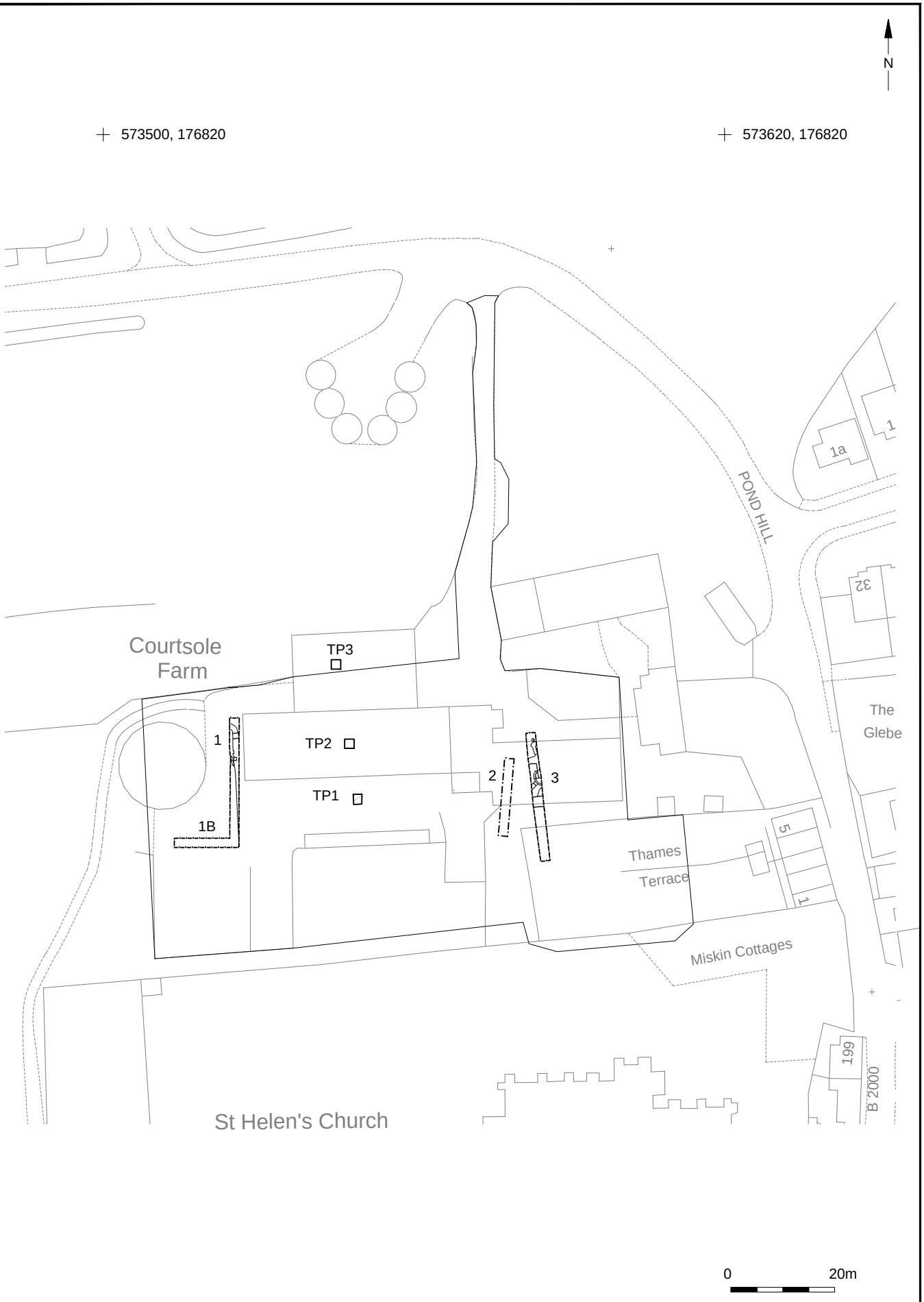
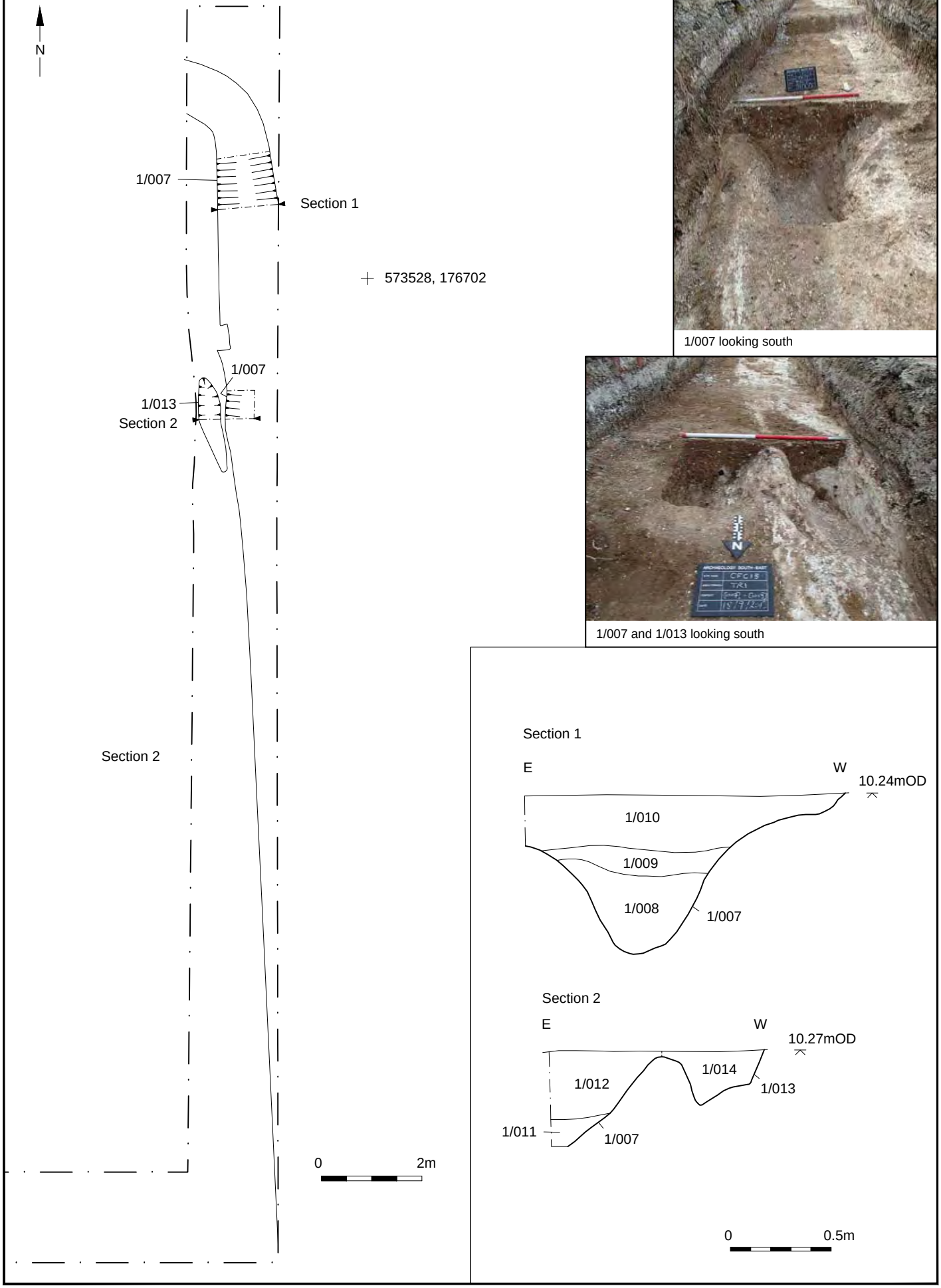
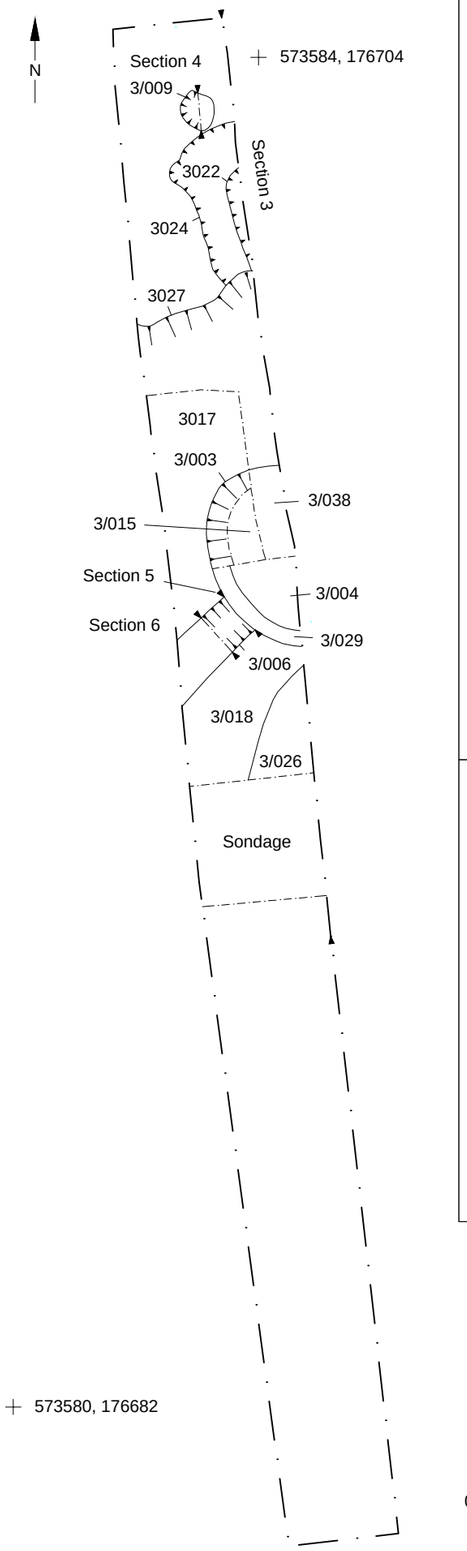
© Archaeology South-East		Coursole Farm, Cliffe	Fig. 1
Project Ref: 6318	Sept 2013	Site location	
Report Ref: 2013233	Drawn by: JLR		

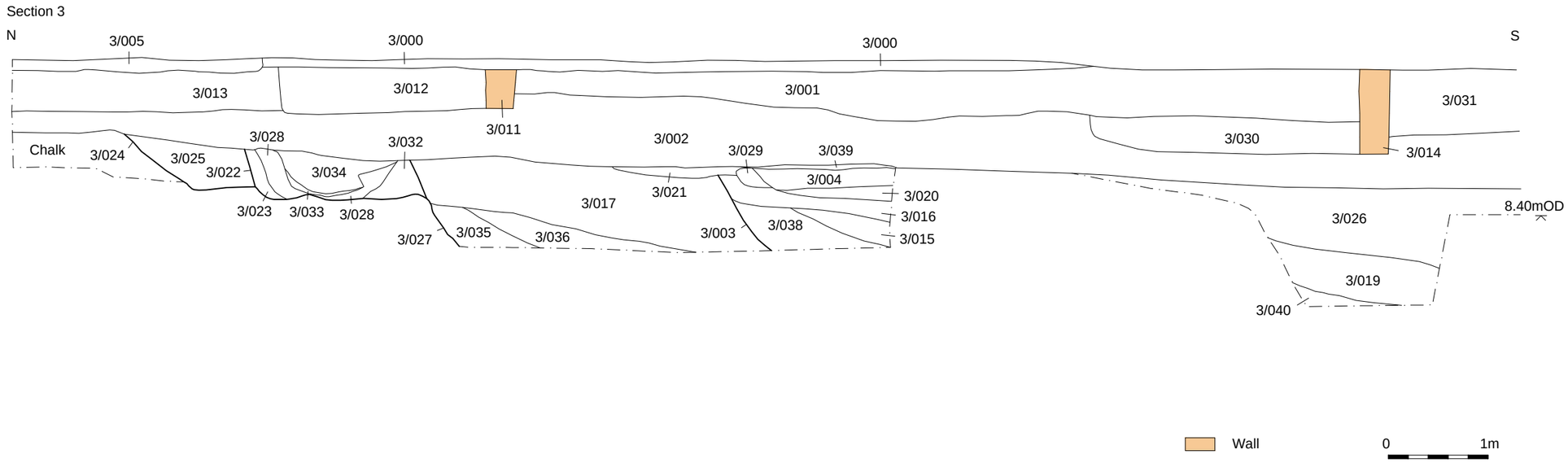


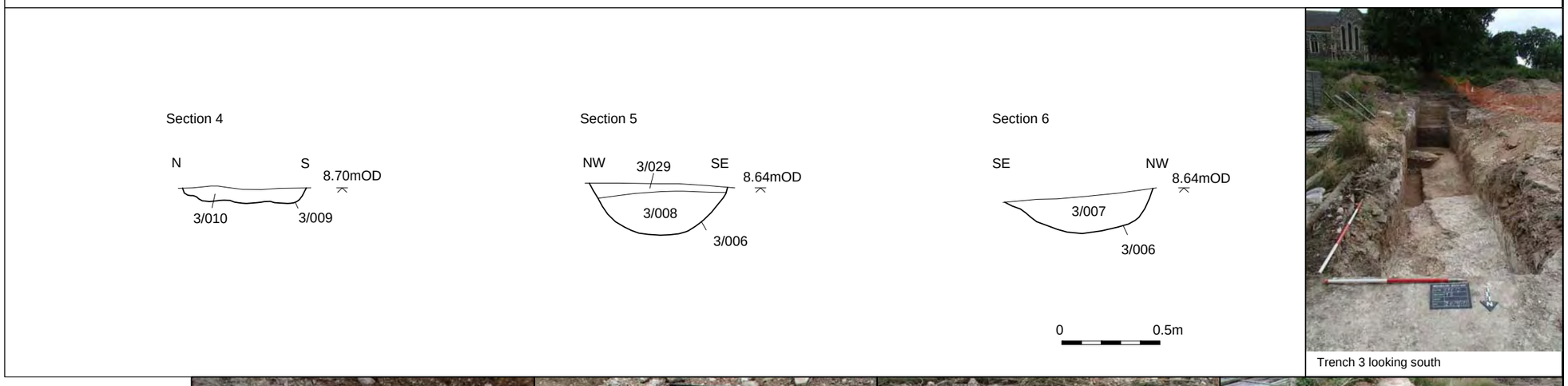
© **Archaeology South-East**		Cliffe, Courtsole Farm	Fig. 2
Project Ref: 6318	Sep 2013	Evaluation trench and test pit location	
Report Ref: 2013233	Drawn by: JLR		



© **Archaeology South-East**		Cliffe, Courtsole Farm	Fig. 3
Project Ref: 6318	Sept 2013	Trench 1: plan, sections and photographs	
Report Ref: 2013233	Drawn by: JLR		







Trench 3 looking south


3/009 looking east

3/006 looking north-east


3/022 looking east


3/003 looking south-east

© Archaeology South-East		Cliffe, Courtsole Farm	Fig. 4
Project Ref: 6318	Sept 2013	Trench 3: plan, sections and photographs	
Report Ref: 2013233	Drawn by: JLR		

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