

16 Station Road Littleport



Archaeological Evaluation Report



November 2016

**Client: Plan Surv on behalf of
Mr Perry Sharman**

OA East Report No: 1997

OASIS No: oxfordar3-266526

NGR: TL 5706 8691

16 Station Road, Littleport

Archaeological Evaluation

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Summary

During the 10th and 11th October 2016 Oxford Archaeology East undertook a two trench evaluation at 16 Station Road, Littleport (TL 5706 8691). Trench one, at the rear of the plot, contained no archaeological features. Trench two revealed evidence for Roman salt production, including an assemblage of briquetage, a possible in situ structure and patches of burning, all located c.1.5m below modern ground level. Although not fully excavated the presence of a potentially in-situ structure suggests this was part of a much larger saltern site; an associated Romano-British pottery assemblage, including some imported wares, suggests the activity was taking place during the late 2nd and early 3rd centuries AD.

A number of sherds of medieval pottery, including Grimston ware (AD 1200-1500), were found within the layers sealing the saltern.

1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 An archaeological evaluation was conducted at 16 Station Road, Littleport, Cambridgeshire (TL 5706 8691).
- 1.1.2 This archaeological evaluation was undertaken in accordance with a Brief issued by Andy Thomas of Cambridgeshire County Council (CCC; Planning Application 16/00341/FUL), supplemented by a Specification prepared by OA East (Phillips 2016).
- 1.1.3 The work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, in accordance with the guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government March 2012). The results will enable decisions to be made by CCC, on behalf of the Local Planning Authority, with regard to the treatment of any archaeological remains found.
- 1.1.4 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

1.2 Geology and topography

- 1.2.1 The bedrock geology of the area is mudstone of the Kimmeridge Clay formation. This is overlain by Tidal Flat Deposits – clay and silt – formed up to 2 million years ago in the Quaternary Period (Geological Survey of England and Wales 1:63,360/1:50,000 geological map series, New Series map sheet 173). The site lies at c. 2.5m OD, on the north-east edge of Littleport and in the vicinity of the southern bank of the Old Croft river (part of the ancient Great Ouse river).
- 1.2.2 The site, which until recently was a builders yard, is located on the outskirts of Littleport within an area of residential housing.

1.3 Archaeological and historical background

- 1.3.1 The site lies approximately 250m north-east of the core of Littleport. Historic mapping suggests that the majority of the plot has remained undeveloped during the modern period.

Prehistoric

- 1.3.2 The Old Croft was the principal channel of the Ouse river system during prehistory. Its course can be followed to the north of Littleport and extended roughly north-west to south-east, passing the current site approximately 750m to the north.
- 1.3.3 Early prehistoric remains lie to the east of the parish on higher land/islands (e.g. Peacock's Farm at Shippea Hill – Clark *et al* 1935). Other notable prehistoric activity in the parish has been found at Apes Hall (3.5km to the north of the development site), again on higher ground overlooking the Old Croft, where Mesolithic and Neolithic worked flint scatters have been recorded, along with Bronze Age flints and settlement evidence. Bronze axes and chance finds have been discovered in Littleport, with a settlement site at Plantation Farm excavated by Clark in 1932. Early Bronze Age material was also discovered at Peacock's Farm (Clark *et al* 1935). On Littleport island

itself the Fenland Survey records two sparse lithic scatters, both assigned to the Bronze Age and lying over 1km to the south-west of the current site. During the Bronze Age the landscape around Littleport would have consisted of a peat fen which would have covered the minor roddons and waterways, although the Old Croft remained active.

- 1.3.4 Until recently the Iron Age was very poorly represented at Littleport with only two sites recorded in the whole parish during the Fenland Survey. Recent archaeological investigations have changed this picture with Bronze Age and Iron Age sites being identified at Littleport, most notably at a site off Wisbech Road, 600m to the west-north-west (MCB 17425 and 19320). Excavations by Archaeological Project Services in 2010 (MCB19320/ECB3373) identified Bronze Age and Iron Age settlement remains, including a burnt flint mound, radiocarbon dated to the Middle Bronze Age (1500-1380 cal BC).

Roman

- 1.3.5 Evidence of Roman occupation and industry have been found close to the development site, particularly in the form of salt-making. An evaluation at The Hythe, only 75m to the west, encountered materials relating to Roman salt-production, in particular briquetage, within a layer of mixed alluvium/levelling on the site (MCB15677). The pottery assemblage consistently indicated a later 4th century date.
- 1.3.6 Excavations at Camel Road, 500m to the north-west, revealed part of a Roman settlement, with enclosures and structures recorded (MCB14077). The domestic character of the site was confirmed by the pottery recovered, which included Samian ware, large quantities of transport vessels, storage jars, and food preparation wares. The presence of glass vessels, tile and a box flue suggested the presence of a high status Roman dwelling nearby. There was also evidence of salt-making in the form of briquetage and processing tanks. Just to the north, also on Camel Road, a large man-made channel of Roman date was found during an evaluation and was interpreted as a Roman canal (MCB15678).
- 1.3.7 At least one Roman ditch was recorded during an evaluation on Victoria Street, c. 150m to the south (MCB16277).
- 1.3.8 The Fenland Survey (Hall 1996) identified an array of saltern sites which occur in great density along the roddon of the Old Croft River. There are potentially as many as thirty such sites along the Old Croft, the largest of which may cover over 3 hectares, although it is important to note that these sites have not been excavated. Immediately to the north of Camel Road, on the north bank of the modern Blackbank Drain, but on the southern bank of the Old Croft River, is another potential Roman saltern site. This site (No:19 in Fenland Survey, Littleport, Hall 1996) would have been on the edge of Littleport itself, rather than upstream linked to the other roddon sites (e.g. CHER 07221, 07261, 10939). Aerial photography has revealed ditches and enclosures, to augment the existing earthworks. Both Roman and medieval pottery have been recovered.

Saxon and Medieval

- 1.3.9 Saxon settlement at Littleport was probably based around the hithe where the Old Croft ran close to the island. The Domesday Book records a vill and it is assumed that the present town covers part (if not all) of the medieval centre. Littleport was allotted to the Bishop of Ely on the formation of the See of Ely in 1109. The church of St. George,

450m to the west, dates from the 14th century and was almost entirely rebuilt in the 15th century and restored in 1857.

- 1.3.10 An evaluation at Victoria Street uncovered medieval activity along the street frontage in the form of intercutting pits spanning four centuries (MCB16277).

Post-medieval

- 1.3.11 Post-medieval boundaries and drainage ditches have been found on several sites close to the development area, including directly to the north on Station Road (MCB20347), adjacent to Back Lane (MCB20956) and at 71 Victoria Street to the south-east (MCB17878).

1.4 Acknowledgements

- 1.4.1 The author would like to thank Plan Surv who commissioned the work on behalf of Mr Perry Sharman. The author would also like to thank Andy Thomas who monitored the works for CCC Historic Environment Team. All site work was carried out by the author and the project was managed by Tom Phillips. Survey was carried out by Dave Brown and the illustrations were produced by Charlotte Walton.

2 AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 The objective of this evaluation was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.
- 2.1.2 The scheme of works also detailed the following aims:
- To establish the presence or absence of archaeological remains on the site, characterise where they are found (location, depth and extent), and establish the quality of preservation of any archaeology and environmental remains
 - To provide sufficient coverage to establish the form, date and purpose of any archaeological deposits
 - To provide sufficient coverage to evaluate the likely impact of past land uses, and the possible presence of masking deposits
 - To provide – in the event that archaeological remains are found – sufficient information to construct an archaeological mitigation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables, and orders of cost.

2.2 Methodology

- 2.2.1 The Brief required that a 5% evaluation of the site was carried out. This equated to two 15m trenches. Do to the depth of the sequence in trench 2 it was decided to extend the width of the trench by 2m beyond the original planned limits to allow access to archaeological features.
- 2.2.2 Machine excavation was carried out under constant archaeological supervision with a wheeled JCB-type excavator using a toothless ditching bucket.
- 2.2.3 The site survey was carried out by Dave Brown using Leica GS08.
- 2.2.4 Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those which were obviously modern.
- 2.2.5 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.
- 2.2.6 Environmental samples were taken from a range of deposits within the site make up, including layers of burning, water deposited silts and layers of peat to determine the preservation and quality of the environmental deposits.
- 2.2.7 The site was excavated in largely good conditions with good light. Occasional rain showers and ground water meant that some areas of the trench were flooded during the excavation.
- 2.2.8 Bucket sampling of the machined deposits did not produce any archaeological material. Modern Layer/topsoil (1) produced modern bricks and hardcore fragments, topsoil (2) did not produce any finds and subsoil/levelling deposit (3) produced fragments of coal that were not retained.

3 RESULTS

3.1 Introduction

3.1.1 The results are presented by trench. Detailed trench information can be found in Appendix A. Finds and environmental data are referenced where relevant. Detailed finds and environmental reports are presented in appendices B and C respectively.

3.2 Trench 1

3.2.1 Located at the eastern end of the site, trench 1 was aligned north-north-east to south-south-west (Fig. 2) and was machine excavated to the natural geology, which comprised a layer of mid yellowish brown silty clay (Plate 1). No archaeological features were present. The natural geology was sealed by a 0.36m thick layer of mid greyish-brown silty clay, which in turn was sealed by a 0.49m thick topsoil layer.

3.3 Trench 2

3.3.1 Located towards the western end of the site, trench 2 was aligned east-south-east to west-north-west and measured up to 1.5m deep (Fig. 2 and 3). Due to the depth of deposits and the archaeological finds in the base, the width of the trench at the western end was extended by c. 1.5m. The base of the trench comprised a naturally formed peat deposit (8) – exposed in several test boreholes and within a small test pit (Fig. 3, section 3). Finds recovered from layer 8 comprised two small sherds of Romano-British pottery (3g) and briquetage (62g). Layer 8 also contained the most diverse assemblage of waterlogged plant remains including sedges, yellow iris, bog-bean and pondweed (App. C.2). The deposit was sealed by a 0.2m thick layer of water lain blueish-grey clay (9), which contained frequent water snail shells (species id on site of Ramshorn - Planorbidae and Bladder snails – Physidae) and a small assemblage of Romano-British pottery (9 sherds, 329g; App B.2).

3.3.2 Truncating layer (9) at the western end of the trench was part of a possible structure (10), associated with fragments of briquetage and patches of burnt material (Plate 2). It was difficult to determine exactly what the structure represented because only its surviving upper horizon was exposed. The narrow width of the trench meant it was not appropriate to investigate the feature without knowing its full extent. The interior deposit (11) was a densely packed layer of burning and briquetage, which was not excavated. This was sealed by a 0.06m thick ash-rich reddish-brown to purple-grey silty clay layer (7) (Fig. 3, section 1), which produced a large amount of briquetage (4100g) including a partial pedestal or support (App B.4), and Romano-British pottery (40 sherds, 812g), dated to the late 2nd and early 3rd centuries. The pottery included single sherds of imported samian ware and black-slipped Trier beaker ware (App B.2).

3.3.3 This was sealed in turn by layer (6), which was similar in composition to layer (9). Layer 6 consisted of a 0.16m thick layer of water lain mid to light blueish-grey silty clay, which contained a large assemblage of domestic and industrial rubbish. Romano-British pottery (108 sherds, 2044g) again dated predominantly to the late 2nd and early 3rd centuries. The assemblage included the base of a central Gaulish samian cup (Dr33) manufactured in Lezoux, which bore the stamp of its maker: MUXTULLUS who was working between AD140-175 (App B.2). Layer (6) also produced briquetage (638g) and animal bone (773g). Environmental remains comprised a single elderberry seed as well

as evidence of poorly preserved insect remains and a single ostracod carapace, which is smooth suggesting it originates from freshwater rather than a marine environment.

- 3.3.4 A layer of degraded peat (5) measuring up to 0.3m thick sealed layer 6. Layer 5 was a dark blackish-brown peat, which was compact and poorly preserved, similar to gyttja (a fine-grained, organic mud, or peat, deposited in lakes and ponds). The layer increased in depth as it extended to the east towards the ancient fen edge. Layer 5 produced fragments of medieval pottery (2 sherds, 15g) dated between AD 1200 – 1500 (App B.3). A further layer of light blueish-grey to grey clay (4), measuring 0.1m thick, sealed layer 5. Layer 4 produced a larger assemblage of medieval pottery dated between AD 1200 – 1500 (32 sherds, 378g), including eleven sherds of Grimston-type Glazed ware from a single large decorated jug, dated c. AD 1200-1350 (App B.3). Also recovered from layer 4 were eight sherds of Romano-British pottery (183g), animal bone (65g) and a lead weight or spindle whorl of probable Roman date.
- 3.3.5 A 0.64m thick layer of mid brownish-yellow clayey silt (3), containing fragments of coal, sealed layer 4 (Fig. 3, section 2 and Plate 3). Layer 3 was potentially made ground formed along the fen edge to level the site out, but equally could be a water lain silt deposit. Layer 3 was in turn sealed by a 0.3m thick buried topsoil layer (2) and this in turn was sealed by a modern rubble and topsoil layer (1). Layer 1 produced modern frogged bricks (not retained), which formed a hard standing, stamped with either Whittlesey or LBC (London Brick Company).

3.4 Finds Summary

Roman Pottery (App B.2)

- 3.4.1 A total of 161 sherds, weighing 3492g, of Romano-British pottery was recovered during the evaluation. Nine Roman pottery fabrics were identified, the majority of which are Horningsea coarse ware jars and storage jars. Also found were a limited range of lower Nene Valley products, including fine ware beaker fragments. Imports from the wider Roman empire are also present and include a small amount of central Gaulish samian. The base of a central Gaulish cup (Dr33) manufactured in Lezoux bore the stamp of its maker: MUXTULLUS who was working between AD140-175 (Hartley and Dickinson 2010). A single piece from a black-slipped Trier beaker was also found. In addition, several pieces of Spanish olive oil amphora were identified, some of which were burnt and may have been utilised in the salt-making process.
- 3.4.2 The fabrics and forms suggests people were working at this site in the late 2nd to early 3rd century, associated with the nearby urban settlement which had the means (economic surplus) to buy imported goods.
- 3.4.3 A further 134g of Romano-British pottery was recovered from the environmental samples and included a similar range of wares including Horningsea coarse ware and local Nene valley wares. It included two sherds (3g) from layer 8 and a further 26 sherds from layer 6 (131g). This material has not been included in the above total and has not been fully assessed at the time of this report.

Post Roman Pottery (App B.3)

- 3.4.4 The evaluation produced a small medieval pottery assemblage of 34 sherds, weighing 352g. This domestic assemblage, dating between AD 1200-1500, is moderately abraded to abraded and does not represent primary deposition, although the larger

Grimston-type ware sherds do not appear to have been overly reworked. The remainder of the material may be the result of rubbish deposition, flooding or middening. The presence of potentially salt affect sherds may indicate that unidentified medieval salt production was carried out near to the site.

Briquetage (App B.4)

- 3.4.5 The evaluation produced 320 fragments (4764g) of fired clay from three contexts. Fragments of briquetage make up the majority of the assemblage (314 fragments, 4302g). Its form and fabrics are consistent with the technology used to collect salt from brackish water, which took place throughout the fenland of Cambridgeshire and Lincolnshire in the Late Iron Age and Romano-British periods (See Lane and Morris 2001).
- 3.4.6 The assemblage consists of a large proportion of body sherds of salt/brine pans, including the pan ends, but has a significantly smaller proportion of pedestals and support material as well as a scant representation of the lining and superstructure. This is most likely due to the fact that excavation ceased at what appeared to be an *in situ* structure.

Metalwork (App B.1)

- 3.4.7 A Romano-British Pb spindle whorl, a fragment of copper alloy brooch pin and several bent and concreted iron nails were recovered from the evaluation.

3.5 Environmental Summary

Faunal Remains

- 3.5.1 An assemblage of 45 animal bones (weighing 1090g) was recovered from trench 2. The assemblage contained a mix of species with sheep/goat the most dominant taxa, closely followed by cattle. Pig and dog were also present in lower numbers.

Environmental samples

- 3.5.2 The environmental samples produced a small assemblage of waterlogged plant remains that represent plants growing in the near vicinity in antiquity. There are no preserved plant remains that directly relate to the salt-making activity other than fine charcoal flecks.

4 DISCUSSION AND CONCLUSIONS

4.1 Romano-British saltern

- 4.1.1 The main finding of the evaluation was evidence for salt production during the Romano-British period, more specifically during the 2nd – 3rd centuries AD. The large assemblage of briquetage recovered, along with hints of a possible structure, suggest the small area investigated is part of a much larger saltern site. During the production of salt, salt water/brackish water was moved into settlement tanks from the water source via man-made channels. After the water had settled so that the silt had sunk to the bottom, it was moved to clay vessels or pans. These were suspended over supports and heated, causing the water to evaporate. The light weight burnt and fired clay left over from these vessels is briquetage.
- 4.1.2 At least 30 separate saltern sites have been identified along the course of the Old Croft river within the environs of Littleport. The earliest evidence for salt making is located to the north of Littleport (Hall 1996, 24-25; sites 36-40). Further salt making sites are identified along the course of the Old Croft river with significant occupation and salt production identified at Apes Hall (3.5km to the north of the development site). Further potential for salt making has been recovered in Littleport itself. An evaluation at The Hythe, only 75m to the west, encountered materials relating to Roman salt-production, in particular briquetage (Last and Crank 2001). Excavations at Camel Road, 500m to the north-west, revealed part of a Roman settlement as well as evidence of salt-making in the form of briquetage and processing tanks (Macaulay 2002 and Hall 1996; site 19). An evaluation to the north-east of Camel Road also identified a layer of possible Romano-British briquetage, alongside a roddon (Collins 2013).
- 4.1.3 The briquetage found within the excavation area was not fully excavated and it is unclear whether it was a levelling deposit as seen at the Hythe (Last and Crank 2001) or the location of *in-situ* salt production. The presence of large pieces of what seem to be burnt structural clay, which were partially exposed during the excavation, along with fragments of pedestals and the ash rich deposits overlying the unexcavated layer would suggest that the site does represent *in-situ* salt production.
- 4.1.4 The pottery assemblage recovered from the site contains a high proportion of Horningsea storage vessels and these are potentially being used to transport the salt away from the production areas. The domestic coarse and fine wares suggest settlement near by and the imported wares in particular suggest the economic means to buy imported goods. The depositional sequence identified at Station Road, as well as the pottery assemblage, is similar to the excavated material at Camel Road (Macaulay 2002; Roberts 1997). In particular the two flood events identified at Camel Road could have formed by the same processes as the water deposited shell-rich blue-grey clays found during the current works (layers 6 & 9).
- 4.1.5 Although the salt production at Station Road is dated to the late 2nd and early 3rd centuries, the proximity of the Hythe deposits, only 75m away and dated to the 4th century, would suggest continuing salt production within this area of the old river, supporting the evidence for extensive salt production at Littleport, either as part of a small urban town or potentially within the immediate environs of a putative villa site (Macaulay 2002).

4.2 Post-Roman

- 4.2.1 The evidence suggests that the site was sealed by a flood event and peat formation (Layer 5) in the post-Roman period. The silts from a further potential flood event, formed from blue-grey silty sand (layer 4) contained medieval pottery dating between AD 1200 – 1500.
- 4.2.2 Although no direct evidence of medieval salt making was found the discolouration of some of the medieval pottery may be indicative of salt production near to the site.

4.3 Recommendations

- 4.3.1 Recommendations for any future work based upon this report will be made by the County Archaeology Office.

APPENDIX A. TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
General description				Orientation		NNE-SSW
Trench devoid of archaeology. Consists of soil and subsoil overlying a natural of silty clay.				Avg. depth (m)		0.84
				Width (m)		1.5
				Length (m)		15
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
2	Layer	-	0.49	Topsoil	-	-
3	Layer	-	0.36	Subsoil	-	-
	Layer	-	-	Natural	-	-
Trench 2						
General description				Orientation		ESE-WNW
Trench contained a possible saltern site buried underneath a series of silts and clays. Overlying natural peats and clays.				Avg. depth (m)		1.5m
				Width (m)		3m – 1.5m
				Length (m)		15m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
1	Layer	-	0.2	Modern Topsoil and Rubble	Mod bricks	-
2	Layer	-	0.3	Buried topsoil	-	-
3	Layer	-	0.64	Possible made ground or silting	-	-
4	Layer	-	0.1	Water deposited clay	Pottery	Medieval AD1200-1500
5	Layer	-	0.3	Degraded peat similar to gyttja	Pottery	Medieval AD1200-1500
6	Layer	-	0.16	Water deposited clay similar to 9	Pottery	Romano-British late 2nd - early 3rd century
7	Layer	-	0.06	Briquetage and Ash rich layer	Pottery	Romano-British late 2nd - early 3rd century
8	Layer	-	1+	Peat	Pottery	-
9	Layer	-	0.2	Water deposited clay similar to 6	Pottery	-
10	Structure	-	-	Possible Saltern	-	Romano-British late 2nd - early 3rd century
11	Layer	-	-	Unexcavated Saltern deposit	-	Romano-British late 2nd - early 3rd century

APPENDIX B. FINDS REPORTS

B.1 Small finds

by James Fairbairn

Small Find 1, layer 4

B.1.1 Object type: Spindle Whorl

Broad period: Roman AD 43 – 410

B.1.2 A complete cast lead weight or spindle whorl of probable Roman date. The object is bi-conical with a flat base and has a slightly domed top. A perforation runs through the centre. All surfaces appear to be undecorated. The object is 27mm in diameter, 20mm thick and weighs 106g. The perforation is 7mm in diameter, slightly off centre but well formed. Lead spindle whorls and weights were commonly used from the Iron Age through to the post-medieval period and are difficult to date with any certainty without supporting archaeological context.

Small Find 2, layer 4

B.1.3 Object type: Nail head

Broad period: Roman AD 43 – 410

B.1.4 A heavily concreted large square nail of probable Roman date. The object is constructed of a ferrous material and is hand made. The nail head is flat and is 30mm wide. The remains of a shaft extend to 25mm. The shaft has a diameter of 10mm and it has a weight of 31g.

Small Find 3, layer 6

B.1.5 Object type: Nail head

Broad period: Roman AD 43 – 410

B.1.6 A very heavily concreted shaft section of a probable nail. The object is constructed of a ferrous material, hand made and bent at the lower end. The object is so heavily concreted that precise dimensions are impossible to gauge. The object has an estimated length of 70mm and weighs 168g.

Small Find 4, layer 7

B.1.7 Object type: Pin

Broad period: Roman AD 43 – 410

B.1.8 A fragment of a copper alloy pin. Most probably of Roman date and belonging to a brooch. Only the lower portion survives with the point intact. Pins of this type were a common way to fasten brooches throughout the Roman period. The object is 25mm long. The diameter is 2mm and it has a weight of 0.4g.

Small Find 5, layer 6

B.1.9 Object type: Nail

Broad period: Roman AD 43 – 410

B.1.10 A heavily concreted small nail of probable Roman date. The object is constructed of a ferrous material, hand made and has been bent into a U shape. The nail head is flat and has a diameter of 12mm. The object is 45mm long. The shaft has a diameter of 4mm and it has a weight of 3.8g.

B.2 Roman Pottery

by Alice Lyons

Introduction

- B.2.1 A total of 161 sherds, weighing 3492g, of Romano-British pottery was recovered during the evaluation. The pottery, which represents a minimum of 38 vessels, was recovered from four distinct layers within a small area where salt-making had taken place during the Roman period. Despite damp conditions the pottery has survived in reasonable condition and has an average sherd weight of 21g.

Methodology

- B.2.2 The Roman pottery was analysed following the guidelines of the Study Group for Roman Pottery (Barclay *et al* 2016, 14-18). The fabrics and forms used within this report reference those published by Perrin (1999), supported with references to the national fabric series (Tomber and Dore 1998), also Tyers (2006).
- B.2.3 The total assemblage was scanned and a catalogue was prepared (Appendix 1). The sherds were examined using a hand lens (x10 magnification) and were divided into fabric groups defined on the basis of inclusion types present. Vessel forms (jar, bowl) were recorded. The sherds were counted and weighed to the nearest whole gram and recorded by context. Decoration, residues and abrasion were also noted.

Acknowledgements

- B.2.4 Thanks to Stephen Wadeson (OA East) for identifying the samian makers stamp.

The Pottery

- B.2.5 A total of nine Roman pottery fabrics were identified (Table 1), the majority of which are Horningsea coarse ware jars and storage jars, also local Sandy grey ware wheel made jars of utilitarian type. Also found were a limited range of lower Nene Valley products, including fine ware beaker fragments (Perrin 1999).
- B.2.6 Imports from the wider Roman empire are also present and include a small amount of central Gaulish samian. The base of a central Gaulish cup (Dr33) manufactured in Lezoux bore the stamp of its maker: MUXTULLUS who was working between AD140-175 (Hartley and Dickinson 2010). A single piece from a black-slipped Trier beaker was also found.
- B.2.7 In addition, several pieces of Spanish olive oil amphora were identified, some of which were burnt and may have been utilised in the salt-making process. It is of interest that no mortaria (Tyers 1996 117-135) were found as part of this assemblage.

Fabric name	Reference	Form	Sherd Count	Weight (g)	Weight (%)
Horningsea coarse ware	Tomber and Dore 1998, 116	Storage jar, jar	60	1477	42.29
Sandy grey ware: SGW	Perrin 1999, 112-116	Jar, dish, storage jar, lid	87	742	21.24
South Spanish amphora: BAT AM	Tyers 1996, 87-89	Amphora	4	653	18.69
Shell tempered ware: STW	Perrin 1999, 116-126	Jar, storage jar	10	208	6.00
Nene Valley Colour Coat: NVCC	Tomber and Dore 1998, 118; Tyers 1996, 173-175; Perrin 1999, 87-106	Beaker, Castor Box, dish, jar, pinched neck flagon	15	149	4.20
Central Gaulish Samian: SAM (CG)	Tyers 1996, 113; Webster 1996, 13-14	Dish, cup	7	106	3.03
Nene valley grey ware: NVGW	Perrin 1999, 78-87	Dish, jar	4	80	2.29
Sandy oxidised ware: SOW		Flagon, jar	3	74	2.11
Trier black slipped ware	Tyers 1996, 138-139	Beaker	1	3	0.15
Total			191	3492	100.00

Table 1: The Early Roman pottery fabric and forms, listed in descending order of weight (%)

Discussion

- B.2.8 A small assemblage of Romano-British pottery was recovered from a small site on the Cambridgeshire/Norfolk fen-edge. Roman salt production at Littleport and associated Roman pottery, has been previously recorded as part of the Fenland project (Hall 1996, 25-27; Gurney 1996, 199-201). More recently, as part of a review of the Horningsea Roman pottery industry, a new small urban site has also been identified at Littleport (Evans Forthcoming).
- B.2.9 The majority of pottery found during this evaluation are Horningsea coarse ware utilitarian jars and storage jars, also Spanish olive oil amphora, some of which are scorched and may have been (re)used in the salt-making process. It is worthy of note, however, that finer wares were also found including small fragments of local Nene Valley fine ware beakers and imported Gaulish samian table wares and also a Trier black slipped beaker fragment. This combination of fabrics and forms suggests people were working at this site in the late 2nd to early 3rd century, moreover it may have been associated with a nearby small urban settlement which had not only the means (economic surplus) to buy imported goods but also had adopted a Roman ceramic repertoire (Evans Forthcoming).
- B.2.10 This material is typical for the region at this time (Hartley and Hartley 1970; Gurney 1996, 200, table 5; Copleston 1997) and adds to the growing corpus of fen-edge working salt-making ceramic assemblages available for future research.

Context	Fabric	Dsc	Form	Count	Weight (g)	Spot Date	Context Date
4	HORN	D	SJAR	1	131	C2-C3	RB/MED
4	HORN GW	U	JAR	1	10	C2-C3	RB/MED
4	SAM CG	B	DISH	1	8	C2	RB/MED
4	SAM CG	U	DISH	1	4	C2	RB/MED
6	BAT AM	U	AMPH	3	584	C1BC-ADC3(C2)	LC2
6	STW	U	JAR/BOWL	6	58	C1-C4	LC2
6	SGW	UD	JAR/SJAR	47	385	E/MC2	LC2
6	SGW	R	JAR	5	40	LC1-C4	LC2
6	SGW	R	DISH	1	11	MC2-MC3	LC2
6	SGW	R	DISH	1	9	C2-C4	LC2
6	SGW	R	LID	1	4	MC1-C3	LC2
6	HORN	UD	SJAR	28	713	C2-C3	LC2
6	NVGW	U	JAR	3	39	LC2-EC4	LC2
6	NVCC	UB	BEAK	7	101	MC2-C3	LC2
6	NVCC	D	CBOX	1	3	LC2-MC4	LC2
6	NVCC	R	DISH	1	17	LC2-C3	LC2
6	SAM CG(LEZOUX)	B	CUP	4	80	AD140-175	LC2
7	SCW	U	SJAR	1	75	A	LC2+
7	SOW(GRITTY)	U	JAR	1	19	C2-C3	LC2+
7	STW	U	SJAR	2	122	C1-C4	LC2+
7	STW	R	JAR	1	21	LC1-C4	LC2+
7	SOW	UH	FLAG	2	55	MC1-C3	LC2+
7	HORN	UD	SJAR	7	208	C2-C3	LC2+
7	BAT AM	U	AMPH	1	69	C1BC-ADC3(C2)	LC2+
7	HORN GW	UD	JAR	12	104	E/MC2-C3	LC2+
7	SGW(BS)	R	DISH	3	51	MC2-C3	LC2+
7	SGW(MICA)	UD	JAR	4	34	E/MC2	LC2+
7	SGW	R	JAR	2	25	LC1-C4	LC2+
7	SAM CG	R	DISH	1	14	C2	LC2+
7	TRIER(BS)	B	BEAK	1	3	LC2-C3	LC2+
7	NVCC	U	BEAK	1	3	MC2-C3	LC2+
7	NVCC	RU	PINCHED NECK FLAG	1	9	C3-C4	LC2+
9	HORN	D	SJAR	3	145	C2-C3	C3
9	NVCC	U	JAR	1	7	C3-C4	C3
9	SGW	R	JAR	1	17	LC1-C3	C3
9	HORN	D	SJAR	1	87	C2-C3	C3
9	NVGW	P	DISH	1	41	LC2-EC4	C3
9	HORN	R	SJAR	1	28	C2-C3	C3
9	SGW	U	JAR	1	4	LC1-C4	C3

Table 2: The Roman Pottery Catalogue. KEY: B = base, C=century, D = decorated body sherd, Dsc = description, E=early, Eval = evaluation, Ex = excavation, H = Handle, L=late M=mid, R = rim, U=undecorated body sherd. For full fabric names see RB Pot Table 1

B.3 Post-Roman Pottery

by Carole Fletcher

Introduction

- B.3.1 The evaluation produced a small medieval pottery assemblage of 34 sherds, weighing 352g, recovered from two layers across a single trench that produced what was otherwise a mainly Roman assemblage. The condition of the overall post-Roman assemblage is moderately abraded to abraded. The average sherd weight is low at approximately 10g.

Methodology

- B.3.2 The Prehistoric Ceramics Research Group (PCRG), Study Group for Roman Pottery (SGRP), The Medieval Pottery Research Group (MPRG), 2016 *A Standard for Pottery Studies in Archaeology* and the MPRG *A guide to the classification of medieval ceramic forms* (MPRG, 1998) act as a standard.
- B.3.3 Dating was carried out using OA East's in-house system based on that previously used at the Museum of London. Fabric classification has been carried out for all previously described medieval and post-medieval types. All sherds have been counted, classified and weighed. All the pottery has been recorded and dated on a context-by-context basis and the summary catalogue is recorded in Table 3. The archives are curated by Oxford Archaeology East until formal deposition.

Assemblage

- B.3.4 The pottery recovered is mainly medieval including sherds of high and late medieval forms and fabrics. Grimston-type Glazed ware sherds recovered from layer 4 include eleven sherds from a single large decorated jug c. AD 1200-1350. Several other sherds from this context appear somewhat paler than normal and it is possible that they have been affected by salt. The Littleport area was the site of extensive salt production in the Roman period, although there is no evidence for medieval salt extraction from this evaluation. The pottery is indicative of medieval settlement and, by 1086, Littleport is recorded as a manorial settlement belonging to the Abbey at Ely, continuing to expand as a settlement throughout the medieval period.

Discussion

- B.3.5 Domestic in origin, the medieval sherds from the excavation are moderately abraded to abraded and do not represent primary deposition, although the larger Grimston-type ware sherds do not appear to have been overly reworked; the remainder of the material may be the result of rubbish deposition or middening. If further work is undertaken, this material should be taken into consideration alongside any new finds. However, if no further work on the site is undertaken, the following catalogue acts as a full record and the pottery may be deselected prior to archival deposition.

Context	Full Name	Basic Form	Abrasion	Count	Weight (kg)	Pottery Date
4	Grimston-type Glazed ware	Jug body sherds, external green glaze and incised and applied decoration	Moderately abraded	11	0.207	1200–1350
	Grimston-type Glazed ware	Jug body sherd, pale surfaces and patch of green glaze	Moderately abraded to abraded	1	0.005	1200–1500
	Grimston-type Glazed ware (unglazed)	Jug base angle	Abraded	1	0.009	
	Unprovenanced Glazed ware	Jug body sherd, external pale green glaze	Moderately abraded	1	0.005	1200–1500
	Unprovenanced Glazed ware	Jug body sherd, external glaze spots	Abraded	1	0.005	1200–1500
	Late Medieval Reduced ware	Bowl rim	Moderately abraded to abraded	1	0.020	1350-1500
	Medieval Ely-type ware	Body sherds	Abraded	4	0.033	1150-1350
	Medieval Sandy Coarseware	Body sherds	Abraded	5	0.019	1150-1500
	Medieval Sandy Greyware	Body sherd sooted externally	Moderately abraded to abraded	1	0.006	1150-1500
	Medieval Sandy Greyware	Body sherds	Moderately abraded	3	0.015	1150-1500
	Early Medieval Essex Micaceous Sandy ware/Medieval Essex-type Micaceous Grey Sandy wares	Body sherd	Moderately abraded to abraded	1	0.007	1100-1400
	Unprovenanced Glazed ware/East Anglian Redware	Jug body sherds, external thin clear glaze with occasional copper flecking and traces of slip decoration	Moderately abraded to abraded	2	0.008	1200–1500
	5	Medieval Essex-type Micaceous Grey Sandy wares (Essex Fabric 20)	Body sherd	Moderately abraded to abraded	1	0.008
Grimston-type Glazed ware		Jug body sherd	Moderately abraded	1	0.005	1200–1500
Total				34	0.352	

Table 3: Medieval pottery summary catalogue

B.4 Fired Clay and Briquetage

by Ted Levermore

Introduction

- B.4.1 The evaluation produced 320 fragments (4764g) of fired clay from three contexts (Table 4). The fired clay from layers 6 and 7 have been identified as briquetage used in the production of salt in the Romano-British period. The briquetage fragments make up the majority of the assemblage assessed (314 fragments, 4302g).
- B.4.2 The assemblage is fragmentary and not complete as the excavator was unable to fully expose and dig the saltern area. Nevertheless, the assemblage includes fragments of container, pedestal and other supports and fragments of superstructure and is positive evidence for Romano-British salt production at this site.

Context	Count	Weight (g)	Comment
4	5	26	Medieval layer.
6	21	638	RB Briquetage and Lining.
7	294	4100	RB Briquetage and Lining.
Total	320	4764	

Table 4: Summary of Fired Clay Catalogue

Methodology

- B.4.1 The assemblage was analysed and recorded using the methodology devised for the briquetage recovered during the Fenland Management Project (Lane and Morris 2001). The complete assemblage was analysed and the briquetage recorded by context, grouped by class, form and fabric, and counted and weighed to the nearest whole gram. Container wall thickness was recorded, diameter, width and height of pedestals and other supports were noted where complete measurements were available.
- B.4.2 The quantified data and fabric descriptions are presented on an Excel spreadsheet held with the site archive and reproduced in Table 6.

Fabrics

- B.4.3 Eight fabrics were identified within the assemblage. The briquetage forms seven of these fabrics, which can be divided into two groups; vegetable tempered silt clays (F1-F4) and sandy-quartz clays (F5-F8).
- B.4.4 The first group shows moderate paste preparation with the addition of high quantities of organic material, which have burnt out leaving elongated linear and rounded voids. This temper is most likely chopped grass and harvest waste such as chaff and straw. One fragment of briquetage in this assemblage still contains a fragment of vegetable temper. With further work the species of plant matter used could be identified. The second group contains naturally occurring inclusions of quartz, chalk and iron pellets and is likely locally sourced. The division of fabrics is common to salt making sites where vegetable tempers are used for specific structural purposes over other more *ad hoc* uses of less processed clays.
- B.4.5 Chaff was widely used to form briquetage supports and containers, from the early Roman period, as it helped in the forming and shaping of briquetage objects and

improved the porosity of the containers (Lane and Morris 2001, 354). This will have aided in their transport and use of the salt making objects because it will have reduced the weight and density of large objects.

- B.4.6 The use of different fabrics for different purposes is concurrent with other sites in the area including the new Littleport Cemetery site where the porous vegetable clays were used for the salt pans and the denser more sandy clays were used for bricks and superstructure related to the fire chamber (Timberlake 2013, 6-7).

Assemblage

Fired Clay

- B.4.7 Four fragments of amorphous fired clay in one fabric were found in layer 4. This context was a medieval layer with no distinct function. This fired clay is undiagnostic and may originate from the salterns on site or from a kiln, hearth or oven contemporary with the pottery recovered.

Briquetage

- B.4.8 The briquetage assemblage (Table 5) consists largely of container fragments which are undiagnostic 'body sherds', bases or pan-ends. There are also support fragments made up of pedestals, *ad hoc* clay clips/spacers and superstructure fragments/slabs most likely related to the construction of the firing chamber and saltern as a whole. These types and forms have parallels with salt making sites described by Lane and Morris (2001) as well as within the Littleport area (Hall 1996, 19-29).

Class	Form	Quantity	Weight (g)
Container	Rim	2	12
	Body Sherd	275	2553
	Base/Pan-End	9	217
	Total	286	2782
Support	Clip/Spacer	3	31
	Pedestal	4	880
	Total	7	911
Structure	Lining/Misc	11	538
Miscellaneous	Miscellaneous	10	71
Total		314	4302

Table 5: Quantity and weight of briquetage by class and form

- B.4.9 The assemblage included 286 fragments of container including two rim fragments. These were rounded off as opposed to showing signs of being cut, which can be seen on some rim types in Late Iron Age/Romano-British salt making (Lane and Morris 2001). Nine fragments of pan-end/base were recorded. These are fragments that exhibit a sharp angle and a join, which is concurrent with a flattened, often thicker piece of clay being attached at the ends of the barrel shaped brine pans before being fired (*ibid.*). The base ends show some diversity and suggest they originate from more than one pan-end.
- B.4.10 Seven fragments of support material were recovered. Four pedestal fragments were assessed, these include three pieces of pedestal for supporting the pans, which are made in a denser fabric and likely represent off-site manufacture. There are also three

examples of clay clips or spacers. These fragments, along with a hand squeezed pedestal/support fragment, represent the on-site *ad hoc* use of clay, applied during the construction of the pans in order to stabilise the structure.

- B.4.11 The large pieces of structural material are probably from the wall or lining of the oven and are made of local sandy clay. These thick pieces have a flattened, smoothed surface. The pieces are fired but not burnt suggesting that they are from the walls or superstructure of the oven, which unlike the flue or hearth lining would not have been subject to intense heat. A fired fragment of mud/silt stone (436g) was found amongst the assemblage. It shows evidence of being used within the saltern and has been included in the total weight and count for this assemblage of fired clay.

Discussion

- B.4.12 The assemblage, its form and fabrics, is consistent with the technology used to collect salt from brackish water, taking place throughout the fenland of Cambridgeshire and Lincolnshire in the Late Iron Age and Romano-British periods (See Lane and Morris 2001).
- B.4.13 The assemblage consists of a large proportion of body sherds of salt/brine pans, including the pan ends, but has a significantly smaller proportion of pedestals and support material as well as a scant representation of the lining and superstructure. This is most likely due to the fact that excavation ceased at what appeared to be an *in situ* structure.



Context	Feature Type	Fabric	Fragment Class	Fragment Form	Notes	No. Fragments	Weight (g)	Thickness (mm)	Width (mm)	Height (mm)	Small <4cm	Medium 4-8cm	Large >8cm	No. Surfaces	Surface Colour	Interior Colour
4 Layer	F7	Undiag	Misc		Amorphous Fired Clay Lumps. Undiag.	5	26				4	1				
6 Layer	F5	C	Body			2	6				2				Pink-Reddish	Pink-Reddish
6 Layer	F4	C	Body			9	161				1	8	1	2	Pink-Reddish	Pink-Reddish; Whiteish Yellow
6 Layer	F5	Sup	Pedestal		Fragment of sub-rounded pedestal. Tapers towards top, 65mm to 40mm fragment. White/yellow exterior, fired to purple-pink interior.	1	86						1	1	Buff, Whiteish-Yellow	
6 Layer	F5	C	Body			2	13				2				Pink-Reddish	Pink-Reddish
6 Layer	F5	C	Base		Pan end. Square-end.	1	10				1				Pink-Reddish	Pink-Reddish
6 Layer	F2	SS	?Brick		Large fragments of Superstructure or Support. Flattened surfaces.	3	172					2	2	2	Pink-Reddish	Pink-Reddish
6 Layer	F8	Sup	Pedestal		Brick or Pedestal Fragment. Hand formed, rectangular. 55mm wide	1	177					1			Pink-Reddish	
6 Layer	F5	C	Body			2	13				2				Buff, Whiteish-Yellow	Buff, Whiteish-Yellow
7 Layer	F1	C	Body		Evidence of surface wiping	4	61	10			2	2		4	Grey, Brown	Buff, Whiteish-Yellow
7 Layer	F2	C	Base		Flared base fragment	1	21	9mm body; 18mm pan end			1			3	Pink-Reddish	Pink-Reddish
7 Layer	F2	C	Body			27	153	7 to 10			20	7		2	Buff, Whiteish-Yellow	Buff, Whiteish-Yellow
7 Layer	F2	C	Rim		Tapers from 9mm to 4mm and rounded off	1	4	9 to 4			1			2	Pink-Reddish; White	



Context	Feature Type	Fabric	Fragment Class	Fragment Form	Notes	No. Fragments	Weight (g)	Thickness (mm)	Width (mm)	Height (mm)	Small <4cm	Medium 4-8cm	Large >8cm	No. Surfaces	Surface Colour	Interior Colour
7	Layer	F2	C	?Rim	Tapers from 12mm to 5mm and rounded off	1	85	5 to 12			1			2	Orangey, Reddish Brown	Orangey, Reddish Brown
7	Layer	F2	C	Body		31	178	7 to 10			21	10		2	Grey, Brown	Buff, Whiteish-Yellow
7	Layer	F1	C	Base	Corner fragment	1	7	10			1			2	Pink-Reddish	Pink-Reddish
7	Layer	F1	Sup	Pedestal	Hand squeezed support/pedestal. Cylindrical form, with a flattened surface (due to pressing against a surface) and thumb/hand squeeze impressions. 75mm long, 35mm wide	1	49		35	75			1	3	Reddish Grey-Brown	
7	Layer	F2	C	Base	Pan end	1	29	20 to 10				1		2	Pink-Reddish; White	Pink-Reddish; Whiteish Yellow
7	Layer	F1	C	Body		45	571	6 to 10			13	20	12	2	Pink-Reddish	Buff, Whiteish-Yellow
7	Layer	F3	C	Body		14	108	7 to 10			8	6		2	Pink-Reddish	Pink-Reddish
7	Layer	F1	C	Body		4	85	8 to 13				2	2	2	Pink-Reddish	Buff, Whiteish-Yellow
7	Layer	F1	C	Body		35	256	6 to 10			7	20	8	2	Buff, Whiteish-Yellow	Buff, Whiteish-Yellow
7	Layer	F1	C	Base	Flared Base fragments. Three that refit.	4	123	10mm body; 15mm pan end			1	3		3	Buff, Whiteish-Yellow	Buff, Whiteish-Yellow
7	Layer	F1	C	Body		12	123	5 to 10			4	7	1	2	Pink-Reddish	Pink-Reddish
7	Layer	F3	C	Body		30	305	6 to 10			8	12	8	2	Grey, Brown	Buff, Whiteish-Yellow



Context	Feature Type	Fabric	Fragment Class	Fragment Form	Notes	No. Fragments	Weight (g)	Thickness (mm)	Width (mm)	Height (mm)	Small <4cm	Medium 4-8cm	Large >8cm	No. Surfaces	Surface Colour	Interior Colour
7 Layer	F7	SS	Misc	Misc	Misc. fragments. Superstructure or Support?	6	118						6			
7 Layer	F7	SS	Misc	Misc	Brick fragments. Superstructure? Support?	2	248						2	3		
7 Layer	F6	SS	Misc	Misc	Fired Mud Stone. Shell impressions on surfaces would suggest naturally formed. Exposed to salt. Used as a support?	1	436						1		Pink-Reddish	Pink-Reddish; Whiteish Yellow
7 Layer	F5	Sup	Clip/Spacer	Clip/Spacer	Small flattened fragment that tapers from a platform, with thumb impression present. Hand squeezed spacer. 55mm long, 35mm wide.	1	172	2 to 15	35	50		1		2	Brownish-White	
7 Layer	F5	Sup	Clip/Spacer	Clip/Spacer	Small flattened fragment with central raised ridge. Ad hoc clay spacer or clip. 30mm wide, 45mm long.	1	84	4 to 15	30	45	1			2	Pink-Reddish	
7 Layer	F3	C	Body	Body		14	114	7 to 10, one frag 15mm			13	1		2	Reddish Grey-Brown	Buff, Whiteish-Yellow
7 Layer	F4	C	Body	Body		6	48	5 to 9			4	2		6	Grey, Brown	Grey, Brown
7 Layer	F2	Sup	Misc	Misc	Misc. support fragments.	2	27	10 to 20			1	1			Pink-Reddish	Pink-Reddish
7 Layer	F3	C	Base	Base	Flared base fragment	1	27	10mm body; 12mm pan end				1		3	Pink-Reddish, Yellow patches	Buff, Whiteish-Yellow
7 Layer	F3	C	Body	Body	Curved	3	77	7 to 10				3		2	Reddish Grey-Brown	Buff, Whiteish-Yellow



Context	Feature Type	Fabric	Fragment Class	Fragment Form	Notes	No. Fragments	Weight (g)	Thickness (mm)	Width (mm)	Height (mm)	Small <4cm	Medium 4-8cm	Large >8cm	No. Surfaces	Surface Colour	Interior Colour
7	Layer	F3	C	Body	Has organic thing (?chaff) still present!	1	279					1		2	Pink-Reddish	Pink-Reddish
7	Layer	F1	Sup	Pedestal	Pyramidal pedestal, with missing upper platform. Rounded edges, angled at 75 degrees inwards from base	1	568			Base: 80, Upper: 52				5	Buff, Pink patches	Buff
7	Layer	F3	C	Body		34	254	7 to 10			23	10	1	2	Pink-Reddish, Yellow patches	Buff, Whiteish-Yellow
7	Layer	F2	C	Misc	Misc. fragments. Sherds of body or support.	8	44				2	4	1	2		
7	Layer	F5	Sup	Clip/Spacer	Small flattened fragment with central raised ridge. Ad hoc clay spacer or clip. 45mm long, 25mm wide.	1	62	2 to 10	25	45	1			2	Pink-Reddish	

Table 6: Briquetage catalogue

APPENDIX C. ENVIRONMENTAL REPORTS

C.1 Faunal Remains

By Anthony Haskins

Introduction

- 4.3.2 An assemblage of 45 animal bones (weighing 1090g) was recovered from trench 2. This is a brief assessment of the material.

Methodology

- 4.3.3 The entire assemblage was scanned by context and all countable bones were recorded within an Access database.

Assessment

- 4.3.4 The recovered remains were generally in a good state of preservation with the bone surface intact. The assemblage contained a mix of species with sheep/goat the most dominant taxa, closely followed by cattle. Pig and dog were also present in lower numbers (Table 7).
- 4.3.5 A small amount of visible butchery marks are present and a large proportion of the remains had been gnawed by dogs.

Species	Number of Identified elements present
Sheep/Goat	12
Cattle	7
Pig	2
Dog	1
Total	22

Table 7: Animal bone quantification

Conclusion

- 4.3.6 The small amount of material recovered makes it difficult to add many details to the development of the site. The majority of the material had been gnawed by dogs or wild animals and it would suggest that this area is on the outskirts of the settlement away from the main areas of occupation.

C.2 Environmental samples

By Rachel Fosberry

Introduction

- C.2.1 Four bulk samples were taken from deposits within the evaluation in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations.

Methodology

- C.2.1 For this initial assessment, one bucket (approximately 10 litres) of each bulk sample was processed by water flotation (using a modified Siraff three-tank system) for the recovery of preserved plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve. Both flot and residues were allowed to air dry. A magnet was dragged through each residue fraction prior to sorting for artefacts. The dried flots were subsequently sorted using a binocular microscope at magnifications up to x 60 and an abbreviated list of the recorded remains are presented in Table 8. Identification of plant remains is with reference to the *Digital Seed Atlas of the Netherlands* (Cappers *et al.* 2006) and the authors' own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (1997) for other plants.

Quantification

- C.2.1 For the purpose of this initial assessment, items such as seeds have been scanned and recorded qualitatively according to the following categories

= 1-5, ## = 6-25, ### = 26-100, #### = 100+ specimens

Items that cannot be easily quantified such as charcoal and waterlogged plant material have been scored for abundance

+ = rare, ++ = moderate, +++ = abundant

Results

- C.2.2 Preservation is predominantly by waterlogging through which plant remains have been preserved through the exclusion of oxygen. Fine charcoal flecks were noted in the three upper deposits, which is likely to relate to the fuel used in the saltern. Preservation is too poor for species identification and quantities are too small for radiocarbon dating.
- C.2.3 Seeds preserved by waterlogging include elderberry (*Sambucus nigra*), sedges (*Carex* spp.), bog-bean (*Menyanthes trifoliata*), Yellow flag (*Iris Pseudacorus*), club-rush (*Scirpus* sp.) and pondweed (*Potamogeton* sp.). Layer 8 contains the most diverse assemblage and represents the original peat layer. Layers 5 and the burnt layer 7 contain only a few preserved seeds. Layer 6, which produced the most finds, contains only a single elderberry seed but there is evidence of poorly preserved insect remains and a single ostracod carapace which is smooth suggesting it originates from freshwater rather than a marine environment.

Sample no.		1	2	3	4
Context no.		5	6	7	8
Feature type		Layer	Layer	Briquetage layer	Layer
Sample volume (L)		9	8	8	8
Flot volume (ml)		300	80	60	200
Wetland/aquatic plants					
Small trigonous <i>Carex</i> spp. (<2mm) nut	small triangular-seeded Sedges			1	
Elongate lenticular <i>Carex</i> spp. nut	elongate & flat-seeded Sedges				2
<i>Iris pseudacorus</i> L. seed	Yellow Iris				1
<i>Menyanthes trifoliata</i> L. seed	Bogbean	6		1	5
<i>Potamogeton</i> sp. achene	Pondweed				3
<i>Scirpus</i> sp. Achene	Club rush	1		1	
Other remains					
Molluscs		+	+++	+	+
Waterlogged root/stem		+++	++	+++	+++
Ostracods			+		
Waterlogged arthropod remains			++		

Table 8: Environmental samples

Discussion

C.2.1 The environmental samples have produced a small assemblage of waterlogged plant remains that represent plants growing in the near vicinity in antiquity. There are no preserved plant remains that directly relate to the salt-making activity other than fine charcoal flecks.

APPENDIX D. BIBLIOGRAPHY

- Barclay, A., Knight, D., Booth, P., Evans, J., Brown, D.H., Wood, I., 2016, *A Standard for Pottery Studies in Archaeology*, Prehistoric Ceramics Research Group, Study Group for Roman Pottery (Historic England)
- Collins, M., 2013, *Littleport Cemetery, Littleport, Cambridgeshire: An Archaeological evaluation Assessment*, CAU report 1195
- Copleston, P., 1997, 'Appendix II: Finds Assessment' in Roberts, J., *Roman Occupation on the Fen Edge at Camel Road, Littleport*. CCC AFU report No. A114, p. 18
- Evans, J., Forthcoming, *The Horningsea Roman Pottery Industry in Context*, East Anglian Archaeology
- Gurney, D., 1996, 'Appendix 2: The Roman Pottery', in Hall, D., *The Fenland Project, Number 10: Cambridgeshire Survey, Isle of Ely and Wisbech*, East Anglian Archaeology 79, pp 199-201
- Hall, D., 1996, *The Fenland Project, Number 10: Cambridgeshire Survey, Isle of Ely and Wisbech*, East Anglian Archaeology 79
- Hartley, B. R., Dickinson, B. M., (eds), 2010, *Names on Terra Sigillata: An index of Makers' Stamps and Signatures on Gallo-Roman Terra Sigillata (Samian Ware) Volume 6 MASCLUS I-BALBUS to OXITTUS*. Bulletin of the Institute of Classical Studies, pp 198-201
- Hartley, K.F., and Hartley, B.R., 1970, 'Pottery in the Romano-British Fenland' in Phillips, C.W., *The Fenland in Roman Times*, Royal Geog. Soc. Res. Ser. 5, 165-9
- Lane, T. and Morris, E., 2001, *A Millennium of Saltmaking: Prehistoric and Romano-British salt Production in the Fenland*. Lincolnshire Archaeology and Heritage Reports Series No 4.
- Last, J. and Crank, N., 2001, *The Hythe, Littleport, Cambridgeshire. An Archaeological Evaluation* Hertfordshire Archaeological Trust Report 881
- Macaulay, S., 2002, *Romano-British Settlement at Camel Road, Littleport, Cambridgeshire* CCC AFU report 205
- Medieval Pottery Research Group, 1998, *A Guide to the Classification of Medieval Ceramic Forms*. Medieval Pottery Research Group Occasional Paper I
- Perrin, J.R., 1999, 'Roman Pottery from Excavations at and near to the Roman Small Town of Durobrivae, Water Newton, Cambridgeshire 1956-58', *J. Roman Pottery Stud.* 8
- Roberts, J., 1997, *Roman Occupation on the Fen Edge at Camel Road, Littleport*, CCC AFU Report A114
- Timberlake, S., 2013, 'The Briquetage', in Collins, M., *Littleport Cemetery, Littleport, Cambridgeshire: An Archaeological evaluation Assessment*, CAU report 1195
- Tomber, R. and Dore, J., 1998, *The National Roman Fabric Reference Collection. A Handbook* MOLAS
- Tyers P., 1996, *Roman Pottery in Britain*, London, Batsford
- Webster, P., 1996, *Roman Samian Pottery in Britain*, Practical Handbook in Archaeology 13, Council for British Archaeology

APPENDIX E. OASIS REPORT FORM

Project Details

OASIS Number	<input type="text"/>		
Project Name	<input type="text"/>		
Project Dates (fieldwork) Start	<input type="text"/>	Finish	<input type="text"/>
Previous Work (by OA East)	<input type="text"/>	Future Work	<input type="text"/>

Project Reference Codes

Site Code	<input type="text"/>	Planning App. No.	<input type="text"/>
HER No.	<input type="text"/>	Related HER/OASIS No.	<input type="text"/>

Type of Project/Techniques Used

Prompt	<input type="text"/>
Development Type	<input type="text"/>

Please select all techniques used:

<input type="checkbox"/> Aerial Photography - interpretation	<input type="checkbox"/> Grab-Sampling	<input type="checkbox"/> Remote Operated Vehicle Survey
<input type="checkbox"/> Aerial Photography - new	<input type="checkbox"/> Gravity-Core	<input type="checkbox"/> Sample Trenches
<input type="checkbox"/> Annotated Sketch	<input type="checkbox"/> Laser Scanning	<input type="checkbox"/> Survey/Recording Of Fabric/Structure
<input type="checkbox"/> Augering	<input type="checkbox"/> Measured Survey	<input type="checkbox"/> Targeted Trenches
<input type="checkbox"/> Dendrochronological Survey	<input type="checkbox"/> Metal Detectors	<input type="checkbox"/> Test Pits
<input type="checkbox"/> Documentary Search	<input type="checkbox"/> Phosphate Survey	<input type="checkbox"/> Topographic Survey
<input type="checkbox"/> Environmental Sampling	<input type="checkbox"/> Photogrammetric Survey	<input type="checkbox"/> Vibro-core
<input type="checkbox"/> Fieldwalking	<input type="checkbox"/> Photographic Survey	<input type="checkbox"/> Visual Inspection (Initial Site Visit)
<input type="checkbox"/> Geophysical Survey	<input type="checkbox"/> Rectified Photography	

Monument Types/Significant Finds & Their Periods

List feature types using the [NMR Monument Type Thesaurus](#) and significant finds using the [MDA Object type Thesaurus](#) together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
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<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Project Location

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District	<input type="text"/>	<input type="text"/>
Parish	<input type="text"/>	
HER	<input type="text"/>	
Study Area	<input type="text"/>	National Grid Reference <input type="text"/>

Project Originators

Organisation	<input type="text"/>
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Project Design Originator	<input type="text"/>
Project Manager	<input type="text"/>
Supervisor	<input type="text"/>

Project Archives

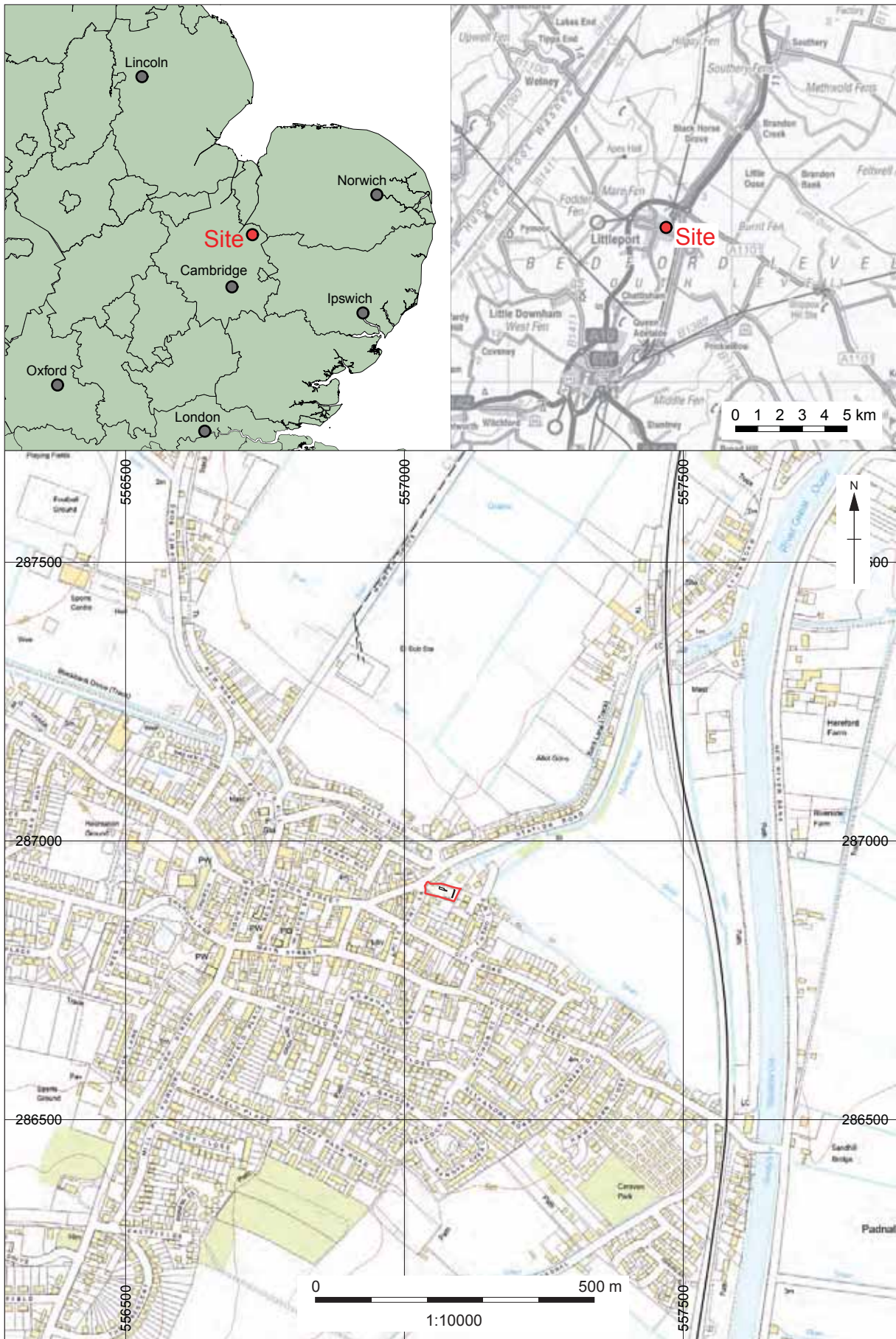
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Archive Contents/Media

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Digital Media	Paper Media
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<input type="checkbox"/> GIS	<input type="checkbox"/> Context Sheet
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<input type="checkbox"/> Survey	<input type="checkbox"/> Matrices
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<input type="checkbox"/> Virtual Reality	<input type="checkbox"/> Misc.
	<input type="checkbox"/> Research/Notes
	<input type="checkbox"/> Photos
	<input type="checkbox"/> Plans
	<input type="checkbox"/> Report
	<input type="checkbox"/> Sections
	<input type="checkbox"/> Survey

Notes:



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Figure 1: Site location showing archaeological trenches (black) in development area (red)



Figure 2: Trench location plan, OS data supplied by the client

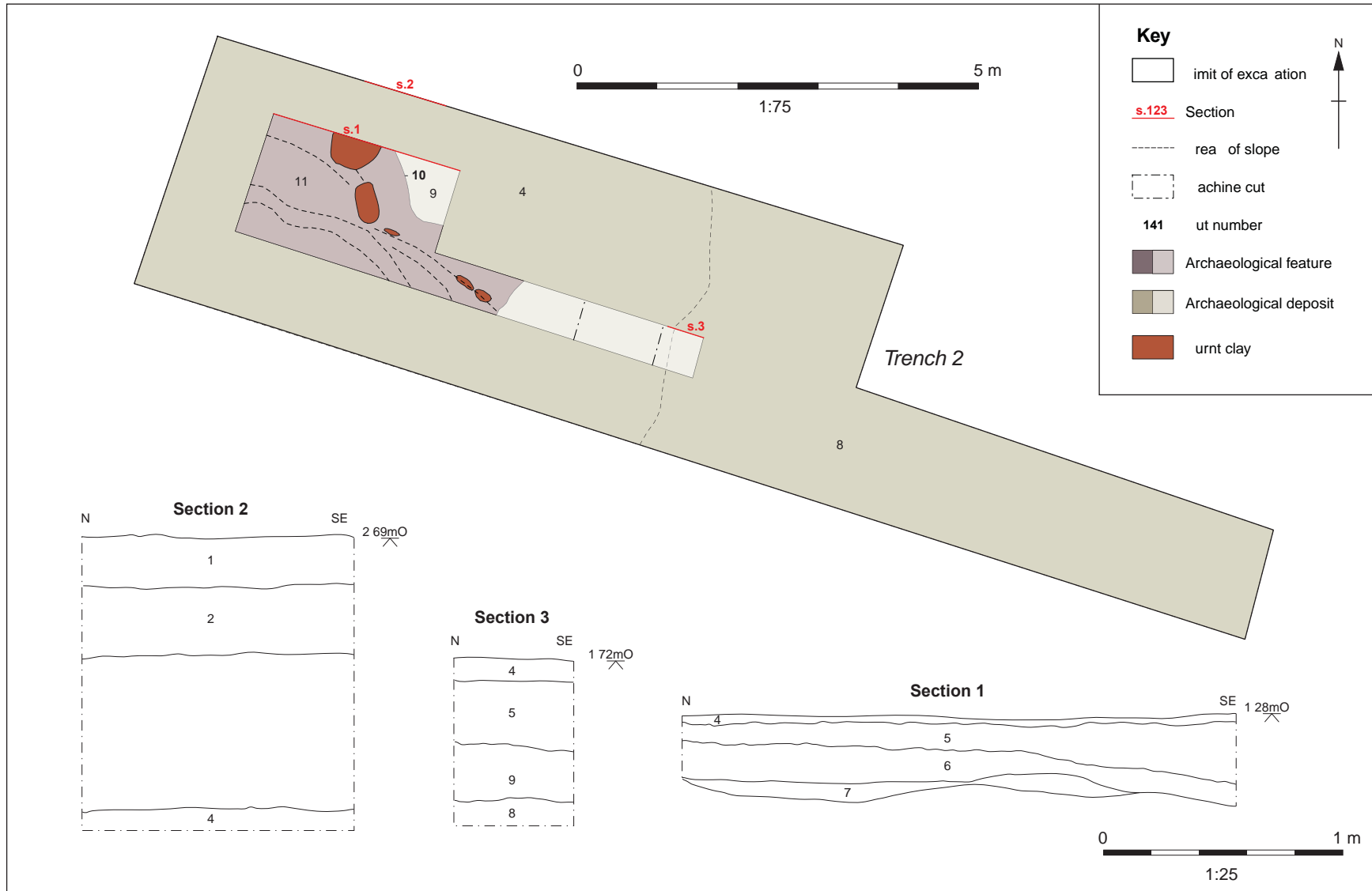


Figure : detail plan of Trench 2 and sections



Plate 1: Trench 1, from south



Plate 2: Possible briquetage structure **10** in trench 2, from west



Plate 3: South facing section of trench 2 showing overburden layers sealing possible briquetage structure **10**



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