

Bronze Age and Iron Age Settlement at Dunton Water Treatment Works, Cambridge Road, Dunton, Bedfordshire



Excavation Report



October 2012

Client: Anglian Water

OA East Report No: 1392
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Bronze Age and Iron Age Settlement

at

Dunton Water Treatment Works, Cambridge Road, Dunton, Bedfordshire

By James Fairbairn

With contributions by Matt Brudenell BA MA

Editor: Stephen Macaulay BA MPhil MIFA

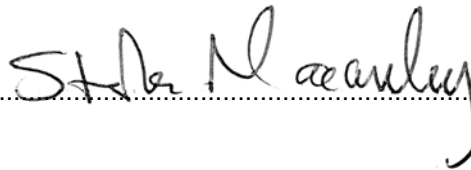
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Prepared by: James Fairbairn
Position: Supervisor
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Checked by: Stephen Macaulay
Position: Senior Project Manager
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Oxford Archaeology East,
15 Trafalgar Way,
Bar Hill,
Cambridge,
CB23 8SQ

t: 01223 850500
f: 01223 850599
e: oaeast@thehumanjourney.net
w: <http://thehumanjourney.net/oaeast>

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Summary

During July and August 2012 Oxford Archaeology East was commissioned by Anglian Water to carry out an Archaeological Observation, Investigation and recording on land at the Dunton Water Treatment Works, Cambridge Road, Dunton, Bedfordshire TL 24194476.

Evidence of Prehistoric settlement activity was recorded at the site in the form of ditches and pits containing Late Bronze Age and Middle Iron Age pottery. The results of the investigation have provided the first dating evidence of known cropmark enclosures revealed from aerial photography and suggest an earlier date for these remains, than had previously been considered.

1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 An archaeological investigation was conducted at the Dunton Water treatment Works, Cambridge road, Dunton, Bedfordshire on behalf of Anglian Water.
- 1.1.2 This archaeological observation and subsequent excavation was undertaken, in July and August 2012, in accordance with a Brief issued by the Archaeology Team of Central Bedfordshire Council Council supplemented by a Specification prepared by OA East.
- 1.1.3 The work was designed to assist in defining the character and extent of any archaeological remains within the area impacted by the pipeline, in accordance with the guidelines set out in Planning Policy Statement 5: Planning for the Historic Environment (Department for Communities and Local government 2010)
- 1.1.4 The site archive is currently held by OA East and will be deposited with Bedford Museum, Castle Lane, Bedford, MK40 3XD (Accession Number: BEDFM 2012.42) in due course.

1.2 Geology and topography

- 1.2.1 The site is located on the east side of Cambridge road 400m north of the village of Dunton, in eastern Central Bedfordshire. It is centred at TL 2419 4476.
- 1.2.2 Topographically the site sits on the crest of a low northeast – southwest aligned ridge at a height of c.53m AOD.
- 1.2.3 The superficial geology of the site consists of sand and gravels mixed with clays. The underlying geology is Gault Clay overlain by Glacial Till.

1.3 Archaeological and historical background

- 1.3.1 The Dunton Water Treatment Works lies close to an area of known archaeological features identified from cropmarks (HER 16837), located at TL 242 446, lying to the immediate south of the site. These remains comprise a block of sub-rectangular enclosures. These features are currently undated, however, similar archaeological remains investigated elsewhere in Bedfordshire suggest that these are more likely to represent later prehistoric (Iron Age) and/or Romano-British settlement and associated field systems. Investigations on sites like these show that the archaeological remains are usually more extensive and complex than that suggested by the cropmarks alone.
- 1.3.2 A minor Roman road Viatores No.176 is thought to run through Dunton, although physical evidence for this has yet to be found. Relevant HER records are listed below.

HER No.	Description	Grid Reference
16836	A Prehistoric curvilinear cropmark, East of church Farm	TL 241 442
16837	A curvilinear enclosure, North East of Dunton	TL 242 446
5342	Roman Road. Viatores No. 176	None recorded
9814	A Middle Bronze Age palstave found during ploughing at Church farm. A second unlooped example also found at Dunton maybe related to the first and possibly part of a hoard	TL 239 442

14538	Bronze Age axes	None recorded
3380	A gold Stater Showing a figure of a horse. Ascribed to the tribe of the Coritani and dating from c.100BC.	None recorded

1.4 Acknowledgements

1.4.1 The author would like to thank Steve Downen and employees of BBUSL for there help and assistance on site. Thanks to Matthew Cole, Jonathan Taylor, Jo Everitt and Vicki Taylor of Anglian Water who commissioned the work. Michael Webster, Jon House, Peter Boardman and Rihannon Phillips who assisted in the excavation. Site survey was carried out by Gareth Reese. Stephen Macaulay managed the project and Martin Oake who monitored the project on behalf of Central Bedfordshire Council.

2 AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 The objective of this monitoring and excavation 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 main aim of the project was to preserve the archaeological evidence contained within the development area by record and to attempt a reconstruction of the history and use of the site. The excavation will be conducted within the context of national, regional and local frameworks, in particular English Heritage (1991 and 1997), whilst the local and regional research contexts are provided by Oake et al (2007), Glazebrook (1997), Brown and Glazebrook (2000) and Medlycott (2011).
- 2.1.3 The original Specific Site Research Objectives relate to the following:
- The importance of investigating and understanding Iron Age and Roman rural settlements.
 - In particular Iron Age and Roman settlement in clay areas is little understood, recent investigations in the Eastern Region have begun to revised accepted settlement patterns on the clay, with far more settlements being recorded.
 - The site also has the potential to contribute to our understanding of the Iron Age-Roman transition and the process of economic and social change and the development during the late Iron Age and the Iron Age/Roman transition.
 - Investigation of the adoption of an agrarian economy and changing patterns in agricultural production and consumption through full quantification and standardised reporting of environmental remains.
 - The process of Romanisation

2.2 Methodology

- 2.2.1 The Brief required that an area of approximately 0.3ha be machine stripped to the level of natural geology or the archaeological horizon.
- 2.2.2 Machine excavation was carried out under constant archaeological supervision with a combination of a wheeled JCB and a tracked 360° excavator, both using toothless ditching buckets.
- 2.2.3 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.
- 2.2.4 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.
- 2.2.5 Two bulk samples were removed from features 113 and 117. These totalled 40L and were processed by flotation at OA East's environmental processing facility at Bourn.
- 2.2.6 Site conditions throughout the monitoring and excavation were very wet which hampered excavation and recording. Large areas of the site remained under water for

3 RESULTS

3.1 Introduction

3.1.1 The results are discussed by order of area stripped. Area 1 was located to the south east of the building, was the largest area and was investigated first. Area 2 was located at the front and to the east of the existing building and was stripped during a second phase of machining.

3.2 Area 1 (see fig.2)

3.2.1 Area 1 was dominated by a large Iron age ditch (see fig 3 and plate 2) which was comprised of a series of smaller ditches **149**, **151**, **153** and **180** and would appear to be part of a larger enclosure. Ditch **149** may be the predecessor of a later enclosure ditch. The settlement related to this enclosure ditch most probably lay to the south and west. A smaller ditch **171** radiated away (roughly perpendicular) from the larger enclosure ditch, however no definite relationship could be established as any junction between the two would have existed outside the excavation area. Both however contained pottery dating to the Late Bronze Age (residual) and Middle Iron Age. Therefore ditch **171** might be considered to be an internal division within the settlement area. Also recorded was a small curvilinear feature **155** which was truncated by the enclosure ditch, this indicates an earlier phase of activity on the site, outside (northwest) of the enclosure.

3.3 Ditch 149

3.3.1 The earliest in the sequence (**149**) consisted of a wide U shape ditch with steep sides and a concave base. It measured 1.60m wide and had a depth of 0.60m. It contained a single silty clay fill (148) which lacked finds. Traces of well sorted cobbles and flints were found overlying the ditch, these stones were again recorded alongside a second intervention in the enclosure ditch 12m to the west. These may be a reinforcing on top of an existing earlier ditch but underlying a possible bank.

3.4 Ditch 151

3.4.1 Ditch **151** was another in the series that made up the enclosure ditch. Its profile consisted of a wide U shaped ditch with a smaller vertical sided ditch cut into its base. It measured 1.10m at the top and had a depth of 0.80m. Ditch **151** contained four fills, the earliest fill (184) consisted of a dark brown-grey clayey sandy silt that contained small to large stones that most probably had slipped into the ditch from the layer of stones laid alongside the enclosure ditch. No finds were found within this fill. Above this was a yellowy brown silty sandy clay (183). This fill did contain a small amount of Iron Age pottery and animal bone. A dark brown-grey clay silt (182) sat above, this gave an indication that the ditch had backfilled or silted to this level and then had been left open for sometime. Evidence of vegetation and plant growth were noted within the fill and must have grown along the base of the ditch. The capping of the ditch was completed by a dark brown silty clay layer (150) this had very similar characteristics to the lower subsoil layer and could be the same material, the fact that this layer covers ditch **151** and partly covers ditch **149** suggests that there may just be a depression over the two ditches that has filled with lower subsoil material.

3.5 Ditch 153

3.5.1 Ditch **153** was located immediately to the north of Ditch **151** and is part of the same phase of enclosure. It had steep sides a concave base and a U shaped profile, It measured 0.40m wide and had a depth of 0.40m. This feature contained two fills. The primary fill (152) consisted of a yellowish brown sandy silty clay that contained some small stones and flints both irregular in shape. Overlying this was a dark brown silty clay (181). This fill was identical to the layer that capped the adjacent ditch **151**. A second section was excavated through the ditch further west and a similar series of ditches were discovered. The amount of water in this area made it difficult to show direct comparisons but both ditch sections clearly showed a very similar construction.

3.6 Ditch 180

3.6.1 Ditch **180** was the last in the sequence that made up the enclosure ditch. Its profile consisted of a wide shallow V shape with gently sloping sides. It measured 0.62m wide and had a depth of 0.18. Its single fill (179) was a dark brown silty clay that contained only small stones but no finds. This ditch truncated an earlier shallow curvilinear ditch or gully **155**.

3.7 Ditch 155

3.7.1 This curvilinear feature ran for approximately six metres in a northerly and terminated close to the upper sub soil suggesting that it could have been truncated at this point. Careful cleaning to the north of this point failed to show any further evidence of the feature extending northwards. The fill (154) of this feature consisted of a mid brown silty clay that contained a small amount of Late Bronze Age Pottery. The shape of this feature suggests use as a drip gulley but this is difficult to say with any certainty due to the truncation caused by the enclosure ditch **180**.

3.8 Ditch 171

3.8.1 Ditch **171** ran in a south west north easterly direction and consisted of a U shaped ditch measuring 1.30m wide and 0.42m deep. No relationship could be determined by this and the larger enclosure ditch to the west, any meeting of these two ditches would lie in the field next to the excavation area. A small amount of Late bronze age (residual) and middle Iron Age pottery was found in the lower fill (170). Ditch **171** relates to either an internal division of a larger enclosure or a different phase of activity on the site.

3.8.2 To the north of the enclosure ditch was a series of small pits, most were revealed to be natural features and depressions. The underlying geology in this area consisted almost entirely of sand and fine gravels. The geology, heavy rain and existing ground water in this area made excavation difficult.

3.9 Pits in Area 1

3.9.1 The pits in area 1 consisted of a small group close to a narrow linear ditch **112** that truncated pit **114**. This was a small post hole with a flat base and steep sides. Its single silty dark clay fill (113) contained a few small sherds of Late Bronze Age pottery.

3.9.2 Just under a metre to the north west two further post holes were found but did not seem to be associated with **114**. These consisted of an elongated post hole or pit **116** with sharp sides and a concave base truncating an earlier circular pit or post hole **118**. The

earlier pit was filled by a mid brown-grey sandy clay which again contained Late Bronze age pottery. The later steep sided pit **118** that also contained late Bronze Age pottery in its mid brownish grey sandy fill 117.

- 3.9.3 Pit 166 was found against the eastern edge of excavation and was truncated by a north-south aligned furrow . This feature consisted of a shallow gentle sided pit with a brown-yellow clay silt fill (165) that contained a small amount of Late Bronze Age Pottery. Adjacent to this was another possible lone post hole **168** that contained a mid grey brown clay silt 167.
- 3.9.4 A small pit or post hole **131** was found close to the north-south oriented furrow. This consisted of a small circular steep sided pit with a light greyish yellow silty fill (130). No other post holes or pits were found in the vicinity that were thought to have any association with this feature.
- 3.9.5 A circular feature was noted close to the east-west enclosure ditch **149**. This circular shallow pit **162** (see section 10) contained two fills. The lower fill 161 consisted of a blue, yellow clay silt. The upper mid yellowy brown clay silt (160) contained Late Bronze Age pottery which is considered to be residual and a small amount of pottery dating to the Middle Iron Age.
- 3.9.6 Four irregular shaped shallow pits **119**, **121**, **126** and **147** found within area 1 were considered to be tree throws or bowls possibly alluding to tree clearance and scrub removal in the area.

3.10 Area 2 (see fig. 2)

- 3.10.1 Area two was located to east at the front of the building and consisted of a pipe trench and was dug to a depth of approximately 0.80m and for a distance of 29m (see fig 2) The topsoil consisted of a sandy silty clay to a depth of 0.30m. A heavily truncated subsoil of silty clay mixed with brick. No archaeological features existed along the length of the pipe trench. The area had been disturbed on the recent passed by the digging of a drain and laying of electricity cables. However the underlying soils and geology had not been disturbed so any evidence of archaeological features would have remained.

3.11 Finds Summary

- 3.11.1 Finds were limited to a few ditches and pits and consisted of pottery dating to the Late Bronze Age and Middle Iron age. These finds, although not great in quantity, does add very important data to the growing body of evidence that activity in the Late Bronze Age in eastern England and the East Midlands was not just confined to the river valleys and that the clay uplands were being increasingly utilised. (e.g. Brown 1998; Clay 2002; Timby et al. 2007; Evans and Patten 2011). A few sherds of Romano-British pottery were found the plough soil but none within a secure archaeological context. This suggests Roman settlement or occupation close by but not within the excavation area itself.

3.12 Environmental Summary

- 3.12.1 Two bulk samples were taken from fills 113 and 117 both were found to be devoid of any plant remains.

4 DISCUSSION AND CONCLUSIONS

4.1 Discussion

- 4.1.1 Bronze Age and Iron Age activity was recorded at Dunton Water Treatment Plant. The presence of ditches and pits dating to the Middle Bronze Age and Middle Iron Age does suggest that this occupation/settlement of this period may be close by. The results of the investigation have provided the first dating evidence of features known only from aerial photography.
- 4.1.2 It was once thought that the clay lands of this part of Bedfordshire were avoided until the later Iron Age and in particular the Roman periods (with the introduction of the heavy plough) but it is now recognised that the valley below the escarpment was home to settlement from the Early Bronze Age. This settlement activity then continues into the latter Roman period, similar later prehistoric settlement has been recorded on the western claylands of Cambridgeshire (e.g. Loves Farm, St Neots, Cambourne etc.). A Roman settlement within an area of known Iron Age or Bronze Age origins was noted by a geophysical survey during the excavation of "The Baldock Hoard" (Burleigh, G R 2006), this is situated just to the south west of the water treatment works. Another Late Bronze Age Enclosure and Early Iron Age settlement was found at Stotfold 7km to the south of Dunton (Webley, Leo and Timby, Jane and Wilson, Martin (2007), this like Dunton lies on a prominent hill top overlooking fertile south Facing slopes. It maybe that due to greater land utilization and climate occupation and settlement was pushed up onto the higher ground during the latter Bronze Age period and contracted back in to the valley below in the latter Iron Age and Roman periods.
- 4.1.3 A minor Roman road, the Viatores No 176, runs somewhere close to the site through Dunton and although evidence still has to be found as to its route the straight line of the Cambridge road exiting Dunton and running past the water treatment works has the characteristics of a minor Roman road, although no evidence for this showed up in area 2 this could just be because the striped and recorded area stopped some 9m short of the edge of the existing road.
- 4.1.4 A Chalk ridge can be seen clearly across the valley to the south. Along this the Icknield way, the ancient trade route that links the Ridgeway in Wiltshire and the Peddars Way in Norfolk follows this escarpment, and in places and hill top settlement would have been common. To the west is Ravensburgh Castle Iron Age Hill Fort and to the north east is the site of another Hill Fort at Cherry Hinton, known as War Ditches. Both of these have strategic placements overlooking large areas of land and the position of the Dunton site share the same characteristics and it maybe that along this ridge there could have been a larger settlement at one time which the excavations here may have touched upon an outlying area of that.
- 4.1.5 Other areas of high ground lay to the west at Millow Hill which has some interesting ditches and crop marks which are as yet have not been investigated. Also to the North West at Sandy another Prehistoric Hill Fort known as Galley Hill (SAM445, HER66) is situated overlooking the town. These points would have been visible from the village at Dunton and would still be today if it were not due to modern buildings. So any occupation along the ridge at Dunton would have been another one in a chain of settlements occupying the hill tops and higher ground.

4.2 Significance

- 4.2.1 The observation, recording and excavation at the Dunton Water Treatment works has been able to date previously undated features, known from aerial photographs and appearing as cropmarks. These enclosures now appear to have origins in the Middle Bronze Age, and would appear to continue into the Iron Age and Roman periods. The focus of settlement has yet to be located but the ditches and pits discovered suggest that any future work close to these excavations may indeed discover a settlement dating back to at least the Middle Bronze Age. There is also a possibility that further work in this area may provide evidence for the existence of the minor Roman road the Viatores No 176.

APPENDIX A. TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Area 1						
General description				Orientation		E-W
Area 1 was dominated by two linear ditches, part of an enclosure.				Avg. depth (m)		0.44
				Width (m)		2.10
				Length (m)		37.70
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
101	Layer	-	0.28	Topsoil	-	-
102	Layer	-	0.22	Subsoil	Pottery	Middle Iron Age
103	Layer	-	0.1	Subsoil	Pottery	Middle Iron Age
104	Layer		0.2	Subsoil		
105	Fill			Light Grey silty clay fill of ditch 106		
106	Cut			Cut of ditch		
107	Cut			Linear U shaped ditch		
108	Fill			Mid brown yellow silty clay fill of Ditch 107		
109	Cut			Steep sided linear ditch	Pottery	Middle Iron Age
110	Fill			Mid yellowy brown silty clay fill of ditch 109		
111	Fill			Greyish brown sandy clay fill of ditch 112	Pottery	Middle Iron Age
112	Cut			Cut of linear ditch		
113	Fill			Dark grey brown sandy clay fill of small pit 114	Pottery	Late Bronze Age
114	Cut			Small pit		
115	Fill			Dark greyish brown sandy clay fill of small pit 116	Pottery	Late Bronze Age
116	Cut			Circular steep sided cut of a small pit.		
117	Fill			Mid brownish sandy clay fill of small pit 118	Pottery	Late Bronze Age
118	Cut			Small circular pit or post hole		
119	Cut			Cut of sub circular pit		
120	Fill			Mid brownish grey silty clay fill of 119		
121	Cut			Sub circular gradual sided pit		
122	Fill			Mid greyish brown silty		

				clay fill of pit 121		
123	Fill			Light greyish brown silty clay fill of pit 124	Pottery	Late Bronze Age
124	Cut			Circular pit		
125	Fill			Light yellowish grey silty sandy clay fill of tree bowl 126	Pottery	Late Bronze Age
126	Cut			Tree bowl		
127	Fill			Mid yellowy grey silty clay fill of tree bowl 128		
128	Cut			Cut of tree bowl		
129	Fill			Light yellowish brown silty clay fill of gulley 130		
130	Cut			Small linear gulley		
131	Cut			Cut of post hole		
132	Fill			Light yellow silty clay fill of post hole 131	Pottery	Late Bronze Age
133	Cut			Cut of linear ditch		
134	Fill			Mid greyish brown silty clay fill of linear ditch 133	Pottery	Middle Iron Age
135	Fill	0.52	0.34	Orangey red sandy silt fill of post hole 136		
136	Cut	0.52	0.34	Steep sided circular post hole		
137	Fill	1.56	0.48	Light grey sandy clay fill of Linear ditch 138		
138	Cut	1.56	0.48	Linear ditch		
139	Fill	0.65	0.34	Mid dark grey brown clay silt fill of Ditch 141	Pottery	Late Bronze Age
140	Fill	0.2	0.38	Mid yellow brown clay silt fill of ditch 141		
141	Cut	0.92	0.36	Cut of linear ditch		
142	Fill	0.32	0.18	Mid grey brown clay silt fill of small pit/post hole 143		
143	Cut	0.32	0.2	Sub circular cut of post hole		
144	Fill		0.22	Mid reddish brown sandy silt fill of small pit 145		
145	Cut		0.22	Cut of circular pit		
146	Fill	1.2	0.18	Mid grey brown silty clay fill of sub circular pit 147		
147	Cut	1.2	0.18	Cut of sub circular pit.		
148	Fill	1.3	0.6	Mid yellowy grey silty clay fill of ditch 149		

149	cut	1.3	0.6	Cut of steep sided ditch		
150	Fill	1.5	0.22	Dark brown silty clay fill of enclosure ditch 151		
151	Cut			Cut of steep sided enclosure ditch		
152	Fill	0.4	0.3	Yellowy brown sandy silty clay fill of enclosure ditch 153		
153	Cut	0.4	0.4	Cut of steep sided linear enclosure ditch		
154	Fill		0.14	Mid brown silt clay fill of ditch 159		
155	Cut			Curvilinear steep sided gulley		
156	Fill			Mid brown silt clay fill of ditch 159	Pottery	Late Bronze Age
157	Cut			Curvilinear steep sided gulley		
158	Fill			Mid brown silt clay fill of ditch 159		
159	Cut			Curvilinear steep sided gulley		
160	Fill	1.2	0.15	Mid yellowy silty clay fill of pit 162	Pottery	Late Bronze Age & Middle Iron Age
161	Fill	1.2	0.5	Grey blue yellow silty clay fill of pit 162		
162	Cut	1.2	0.2	Steep sided circular pit		
163	Fill		0.12	Dark brown silty clay fill of furrow 164		
164	Cut		0.12	Furrow		
165	Fill	1.8	0.38	Pale yellow brown silty clay fill of pit 166	Pottery	Late Bronze Age
166	Cut	1.8	0.38	Cut of pit		
167	Fill	0.22	0.14	Mid grey brown silty clay of post hole 168		
168	Cut	0.22	0.14	Cut of post hole		
169	Fill	1.3	0.15	Mid grey brown clay silt fill of ditch 171		
170	Fill	0.88	0.28	Mid Pale yellow Clay silt fill of 171		Late Bronze Age & Middle Iron Age
171	Cut	1.3	0.42	Cut of ditch		
172	Fill	1.4	0.2	Agricultural sub soil fill of furrow 173		
173	Cut	1.4	0.2	Furrow		
174	Fill	2.8	0.3	Dark brown silty clay		

				subsoil		
175	Layer		0.38	Mid to light brown silty sandy clay		
176	Deposit		0.2	Reddish brown silty sand deposit in natural drainage channel		
177	Deposit		0.25	Reddish brown silty sand deposit in natural drainage channel		
178	Cut	0.8	0.45	Naturally formed drainage channel		
179	Fill	0.62	0.18	Dark brown silty clay fill of enclosure ditch 180		
180	Cut	0.62	0.18	Small linear ditch		
181	Fill	0.4	0.1	Dark brown silty clay fill of ditch 153		
182	Fill	0.4	0.2	Dark brown grey silty clay fill of ditch 151		

APPENDIX B. FINDS REPORTS

B.1 Pottery

B.1.1 The excavations at the Dunton Water Treatment Works yielded 70 sherds of pottery (440g), dating from the Late Bronze Age, Middle Iron Age and Roman periods. The material was recovered from 16 contexts relating to 14 features including pits, postholes, ditches and a tree-throw (Table 1). In general the assemblage was dominated by small-sized sherds (77% measuring less than 4cm in length), with a mean sherd weight of just 6.3g. Although most pieces displayed signs of moderate to heavy abrasion, the pottery was in a fair condition with no leached calcareous inclusions or sherds with iron-rich concretions.

Context	Cut no.	Feature type	No/wt. (g) sherds	Pottery date
110	109	Ditch	2/11	Middle Iron Age
111	112	Ditch	1/1	Middle Iron Age
113	114	Pit	12/57	Late Bronze Age
115	116	Pit	15/49	Late Bronze Age
117	118	Pit	2/15	Late Bronze Age
123	124	Pit	1/5	Late Bronze Age
125	126	Tree-throw	4/12	Late Bronze Age
132	131	Posthole	1/1	Late Bronze Age
134	133	Ditch	1/13	Middle Iron Age
139	141	Ditch	6/29	Late Bronze Age
156	157	Ditch	1/2	Late Bronze Age
160	162	Pit	4/70	Late Bronze Age (residual) & Middle Iron Age
165	166	Pit	3/12	Late Bronze Age
170	171	Ditch	5/44	Late Bronze Age (residual) & Middle Iron Age
102	-	Lower sub-soil	2/20	Middle Iron Age
103	-	Lower sub-soil	2/5	Middle Iron Age
99999	-	Topsoil/unstrat.	8/94	Middle Iron Age & Romano-British
TOTAL	-	-	70/440	-

Table 1. Assemblage quantification and dating by context.

B.1.2 All the pottery was fully recorded following the recommendations laid out by the Prehistoric Ceramic Research Group (2009). The fabrics were assigned using the Bedfordshire fabrics series, which provides board-level descriptions based on inclusion type. As most of these fabric categories are now published in several major monographs (e.g. Dawson 2005; Luke 2008) their details need not be repeated here. Instead, common short-hands terms are used to discuss the fabrics (e.g. coarse flint), with reference given to the full descriptions already in print. These are presented in Table 2, with quantified data by fabric type. Fabrics are in fact crucial to the dating of the pottery in this context, since there are very few feature sherds or other diagnostic pieces on with to hang a typo-chronological scheme. Though this limits the resolution of the dating, there are fortunately recognisable changes in fabrics types in Bedfordshire and other part of Eastern England which help to position small groups of material - particularly small groups of plain prehistoric pottery.

Fabric	Common name	No./wt. (g) sherds	% of fabric	Reference
F01A	Coarse flint	24/67	15.2	Wells 2008, 294
F01B	Fine flint	4/13	3.0	Wells 2008, 294
F01C	Quartz and flint	8/28	6.4	Wells 2008, 297
F02	Grog and flint	10/76	17.3	Slowikowski 2005
F16	Coarse shell	8/110	25.0	Slowikowski 2000, 63
F16B	Fine shell	1/6	1.4	Wells 2008, 295
F19	Sand and organic	4/26	5.9	Slowikowski 2000, 63
F20	Calcareous	1/1	0.2	Slowikowski 2000, 63
F28	Fine sand	1/3	0.7	Wells 2008, 296
F29	Coarse sand	5/91	20.7	Wells 2008, 296
R06B	Coarse greyware	1/8	1.8	Wells 2008, 297
R06D	Fine greyware	1/5	1.1	Wells 2008, 297
R13	Shelly	2/6	1.4	Wells 2008, 298
TOTAL	-	70/440	100.1	-

Table 2. Assemblage quantification by fabric.

B.1.3 This report provides a characterisation of the ceramics by period. It offers a description of the pottery and a brief discussion of its significance.

Material description by period

The Late Bronze Age pottery, c. 1100-800 BC

- B.1.4** In total, 48 sherds of plain pottery (190g) were identified as being of Late Bronze Age origin. Although sherds in five different fabric types were recognised (F01A-C, F02 and F.29), only two of these (6g) did not contain varying grades and densities of crushed burnt flint in the clay matrix. In fact, sherds with a combination of flint and grog (fabric F02) dominated, accounting for 40% of the sub-assembly by weight, closely followed by sherds with just coarse flint inclusions (F01A, 30% by wt.). The remaining 30% was split between sherds with a combination of flint and quartz (F01C, 15% by wt.) or fine flint (F01B, 7%), with two fragments in coarse sandy fabric F29 (3% by wt.).
- B.1.5** The predominance of flint-tempered wares is entirely typical of assemblages belonging to the Late Bronze Age Post-Deverel Rimbury (PDR) ceramic tradition in Bedfordshire and most parts of Eastern England (Brudenell 2007; 2012). Nationally, this is now understood to have a currency between c. 1100-800 BC (Needham 2007). The high frequency of flint and grog tempered wares at Dunton, however, is slightly unusual for the period, though interestingly, these frequencies are exceeded in a contemporary assemblage from another clayland site in Bedfordshire at High Barns Road (Site 2), located along the route of the Great Barford Bypass (Webley 2007, 221, Table 8.8). At Dunton, the small size of the assemblage may well have skewed the frequency figures. That being said, it has been tentatively suggested elsewhere that flint and grog fabrics are characteristic of pottery groups dating to the beginning of the regional PDR sequence (Brudenell 2007, 245-246).
- B.1.6** In terms of material distribution, the Late Bronze Age pottery derived from 11 contexts relating to 11 separate features: six pits; three ditches, a posthole and a tree-throw. Most of the pottery derived from a cluster of four pits in the northern half of the site (114, 116, 118, and 124); three of which were intercutting. These yielded a total of 30 sherds (126g, or 66% of the Late Bronze Age assemblage by wt.), including the bases of two different vessels, a single rim sherd, and a fragment of a possible spindle whorl (the latter in fabric F29). The rim sherd is typically Late Bronze Age, displaying an everted-tapered lip with a slight bevel on the interior edge. The other feature assemblages from the site all contained fewer than seven sherds, with only those from ditch 141 and three-throw 126 yielded more than three fragments. Given the small size of these assemblages, it is hard to gauge how much of this pottery could be residual. The two sherds (4g) from ditch 171 and a single sherd (4g) from pit 162 certainly are however, since these were found alongside Middle Iron Age-type wares.

The Middle Iron Age Pottery, c.350-150 BC

- B.1.7** The assemblage of Middle Iron Age-type pottery comprised 18 sherds weighing 231g. Five fabric types were identified (F16, F16b, F19, F.20, F.28 and F.29), with a near equal split between shell/calcareous tempered wares (51% by wt.) and sandy wares (49% by wt.). By fabric type, the dominant inclusion was coarse shell (F16) accounting for 48% of sub-assembly by weight alone. This was followed by the coarse sand fabric F29, accounting for 37% of the pottery; sand and organic tempered fabric F19, accounting for 11%; fine shell (F16B) with 3%; fine sand (F28) with 1% and calcareous inclusion fabric F20 with less than 1% by weight. Shell and sand tempered wares of various kinds are typical of Middle Iron Age assemblages in Bedfordshire. Dense sandy wares normally dominate, but the frequencies are skewed by the small size of the group in this context.

- B.1.8** Feature sherds were again very rare, with only one rim and two vessel bases recovered. The rim - found in the lower sub-soil - belonged to a weakly shouldered vessel with an upright neck. This is also very characteristic of the Middle Iron Age, with similar formed pots dominated most assemblages in Eastern England. The site's only other diagnostic sherds were similarly recovered from the subsoil or as un-stratified finds. These included two coarse shelly wares with deep scoring on their exterior surface (24g, both the carbonized residue), and a fingertip decorated cordon (5g). Stylistically, the scored sherds recall assemblages belonging to the East Midland Scored Ware tradition (Elsdon 1992). Groups dominated by scored pottery are distributed widely across the East Midlands, centred on the valleys of the middle Trent, Soar, Welland and Nene (Elsdon 1992, Knight 2002, Hill and Braddock 2006). This style of pottery may have its origins as far back as the fifth or fourth centuries BC, although widespread adoption did not occur until the third and second centuries BC (Knight 2002, 133-134). In this context a date before c. 300 BC seem unlikely. Moreover as Dunton is located on the very southern fringe of the main concentration of Scored Ware sites, it is possible that these vessels were acquired through exchange networks with communities further north.
- B.1.9** Overall, the Middle Iron Age type pottery was recovered from eight contexts relating to five features and sub-soil/surface horizons: four ditches (109, 112, 133 and 171), and one pit (162). None of these yielded more than three sherds apiece, and so the possibility remains that some of the material is residual.

The Roman Pottery

- B.1.10** Four abraded sherds of Roman pottery were recovered from the topsoil, weighing 19g. The sherds included thin-walled shelly wares and sandy greywares (fabrics R06B, R06D, R13); one an everted beaded rim sherd.

Discussion

- B.1.11** The assemblage of pottery from Dunton primarily dates to the Late Bronze Age and Middle Iron Age with a small Roman component. Of greatest interest are the finds of Late Bronze Age Plainware PDR pottery, which date to c. 1100-800 BC. Late Bronze Age activity is increasingly being recognised on clay soils away from the river valleys in Eastern England and the East Midlands (e.g. Brown 1988; Clay 2002; Timby *et al.* 2007; Evans and Patten 2011), with finds from Dunton adding to the picture that most part of the landscape were being utilised by the late second millennium BC. However, the question as to whether or not the scatter of pits and postholes in this context relate to settlement *per se*, as opposed to evidence of off-site tasking or seasonal forays, is harder to gauge.

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APPENDIX D. OASIS REPORT FORM

All fields are required unless they are not applicable.

Project Details

OASIS Number	<input type="text" value="oxfadar3-131630"/>			
Project Name	<input type="text" value="Archaeological monitoring and excavation at Dunton water treatment works, Bedfordshire"/>			
Project Dates (fieldwork)	Start	<input type="text" value="02-07-2012"/>	Finish	<input type="text" value="06-08-2012"/>
Previous Work (by OA East)	<input type="text" value="No"/>	Future Work	<input type="text" value="Unknown"/>	

Project Reference Codes

Site Code	<input type="text" value="XBDDCR12"/>	Planning App. No.	<input type="text" value="none"/>
HER No.	<input type="text" value="none"/>	Related HER/OASIS No.	<input type="text"/>

Type of Project/Techniques Used

Prompt

Please select all techniques used:

<input type="checkbox"/> Field Observation (periodic visits)	<input type="checkbox"/> Part Excavation	<input type="checkbox"/> Salvage Record
<input type="checkbox"/> Full Excavation (100%)	<input type="checkbox"/> Part Survey	<input type="checkbox"/> Systematic Field Walking
<input type="checkbox"/> Full Survey	<input type="checkbox"/> Recorded Observation	<input type="checkbox"/> Systematic Metal Detector Survey
<input type="checkbox"/> Geophysical Survey	<input type="checkbox"/> Remote Operated Vehicle Survey	<input type="checkbox"/> Test Pit Survey
<input checked="" type="checkbox"/> Open-Area Excavation	<input type="checkbox"/> Salvage Excavation	<input checked="" type="checkbox"/> Watching Brief

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
<input type="text" value="ditches"/>	<input type="text" value="Iron Age -800 to 43"/>	<input type="text" value="Pottery"/>	<input type="text" value="Iron Age -800 to 43"/>
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Project Location

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District	<input type="text" value="Central Bedfordshire"/>	<input type="text" value="Dunton Water Treatment Works, Cambridge Road
Dunton,
Bedfordshire."/>	
Parish	<input type="text" value="Biggleswade"/>		
HER	<input type="text" value="Bedford"/>		
Study Area	<input type="text" value="0.3h"/>	National Grid Reference	<input type="text" value="TL 2419 4476"/>

Project Originators

Organisation	OA EAST
Project Brief Originator	Central Bedfordshire Council
Project Design Originator	Stephen Macaulay
Project Manager	Stephen Macaulay
Supervisor	James Fairbairn

Project Archives

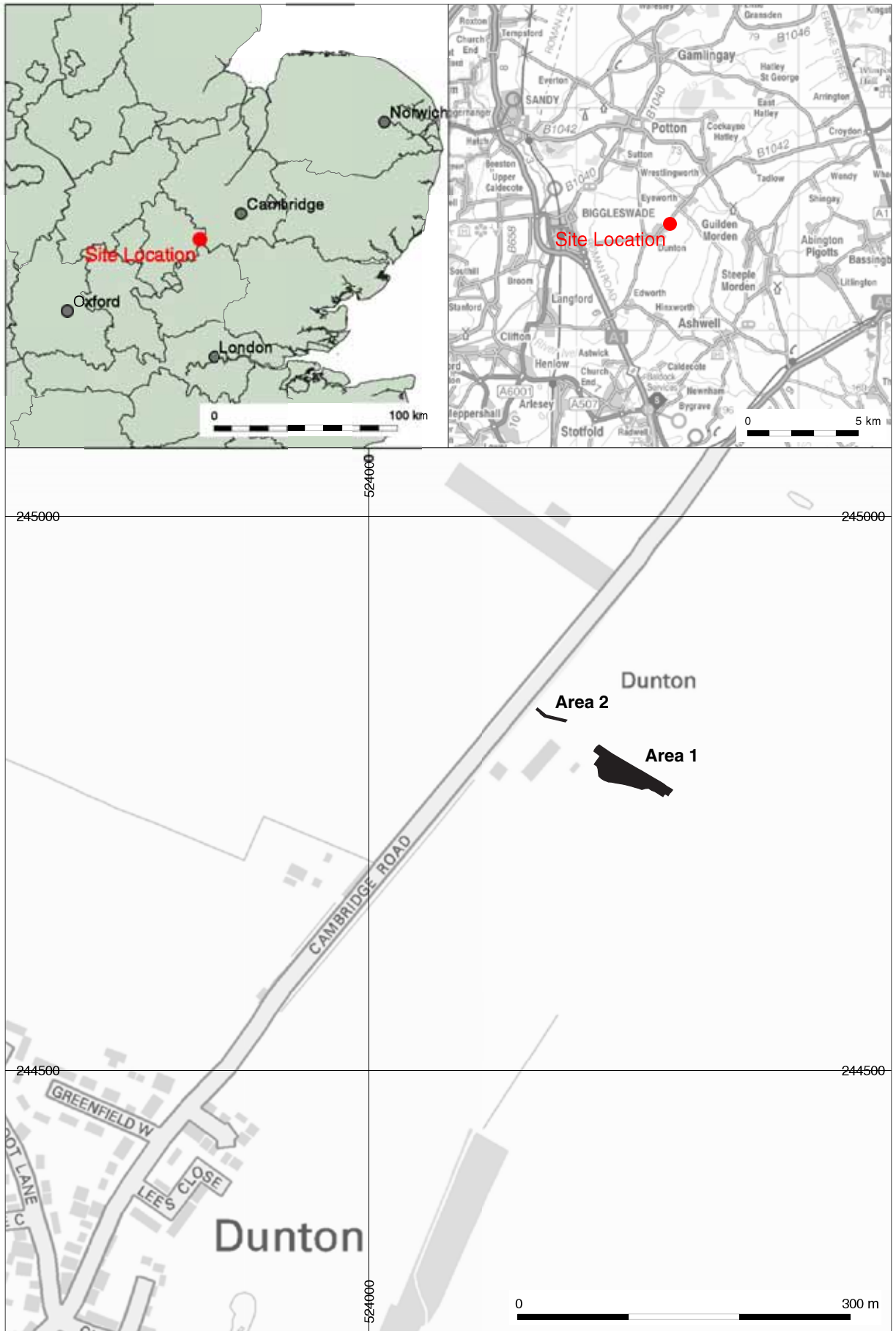
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Bedford Museum	OA East	Bedford Museum
XBDDCR12	XBDDCR12	XBDDCR12

Archive Contents/Media

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Ceramics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Digital Media	Paper Media
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<input type="checkbox"/> GIS	<input checked="" type="checkbox"/> Context Sheet
<input type="checkbox"/> Geophysics	<input checked="" type="checkbox"/> Correspondence
<input checked="" type="checkbox"/> Images	<input type="checkbox"/> Diary
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<input checked="" type="checkbox"/> Survey	<input type="checkbox"/> Matrices
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	<input type="checkbox"/> Research/Notes
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	<input checked="" type="checkbox"/> Plans
	<input checked="" type="checkbox"/> Report
	<input checked="" type="checkbox"/> Sections
	<input checked="" type="checkbox"/> Survey

Notes:

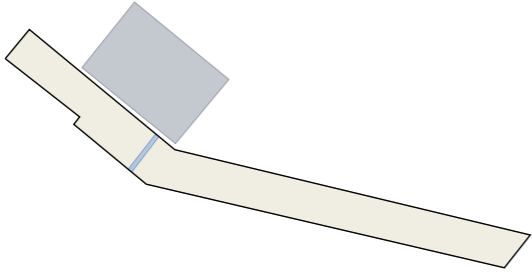


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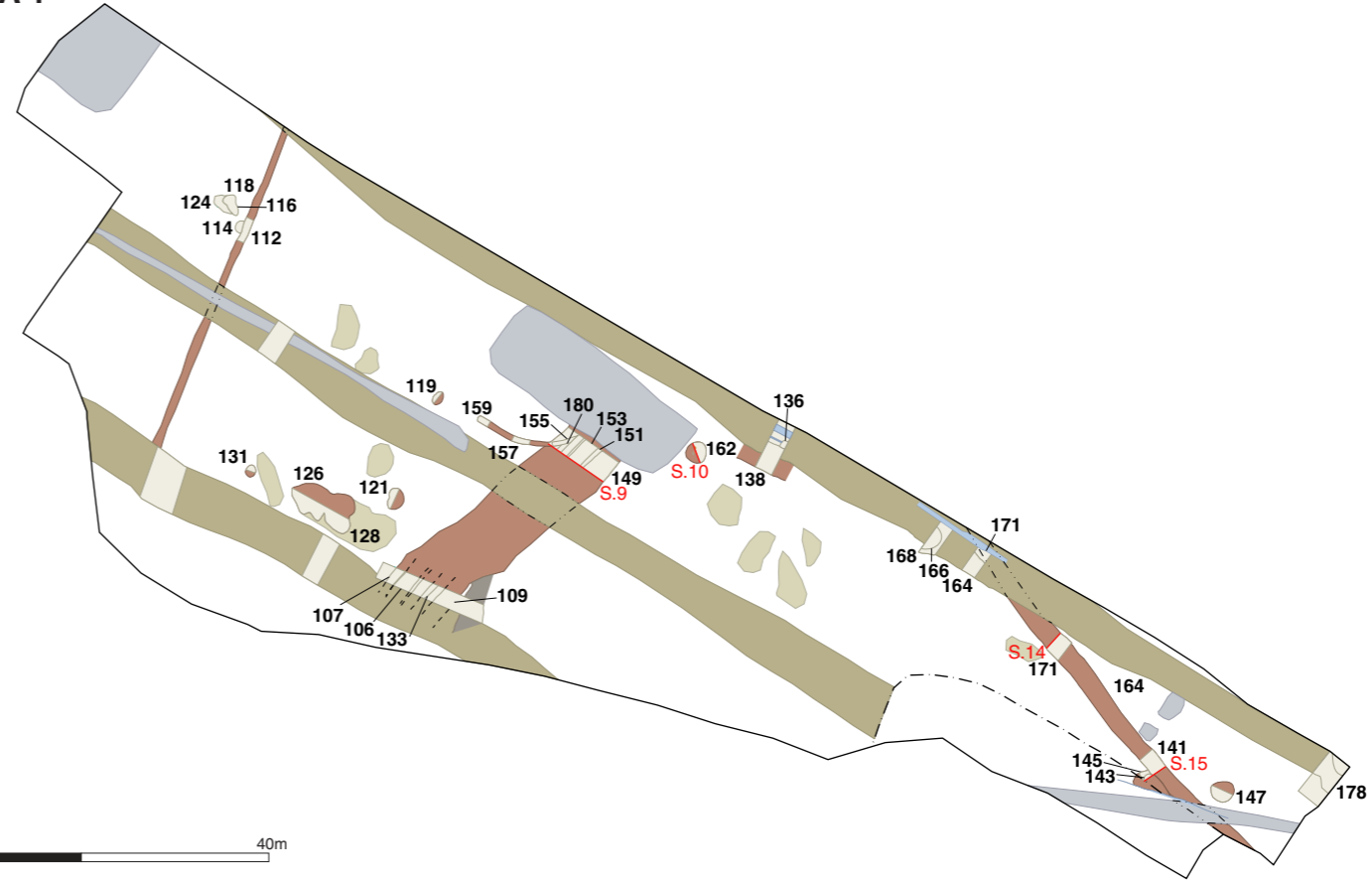
Figure 1: Site location



AREA 2



AREA 1



- Limit of Excavation
- - - Deposit - Conjectured
- - - Sondages/Machine Strip
- - - Intrusion/Truncation
- S.14** Illustrated Section
- Archaeological Feature
- Natural Feature
- Modern Deposit
- Excavated Slot
- Furrow
- Field Drain
- Bone
- Pottery
- Stone
- Stone Spread
- 118** Cut Number
- 118** Deposit Number

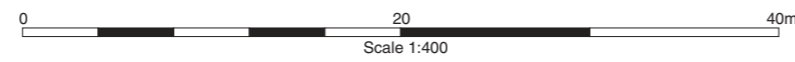


Figure 2: Plans of areas 1 and 2

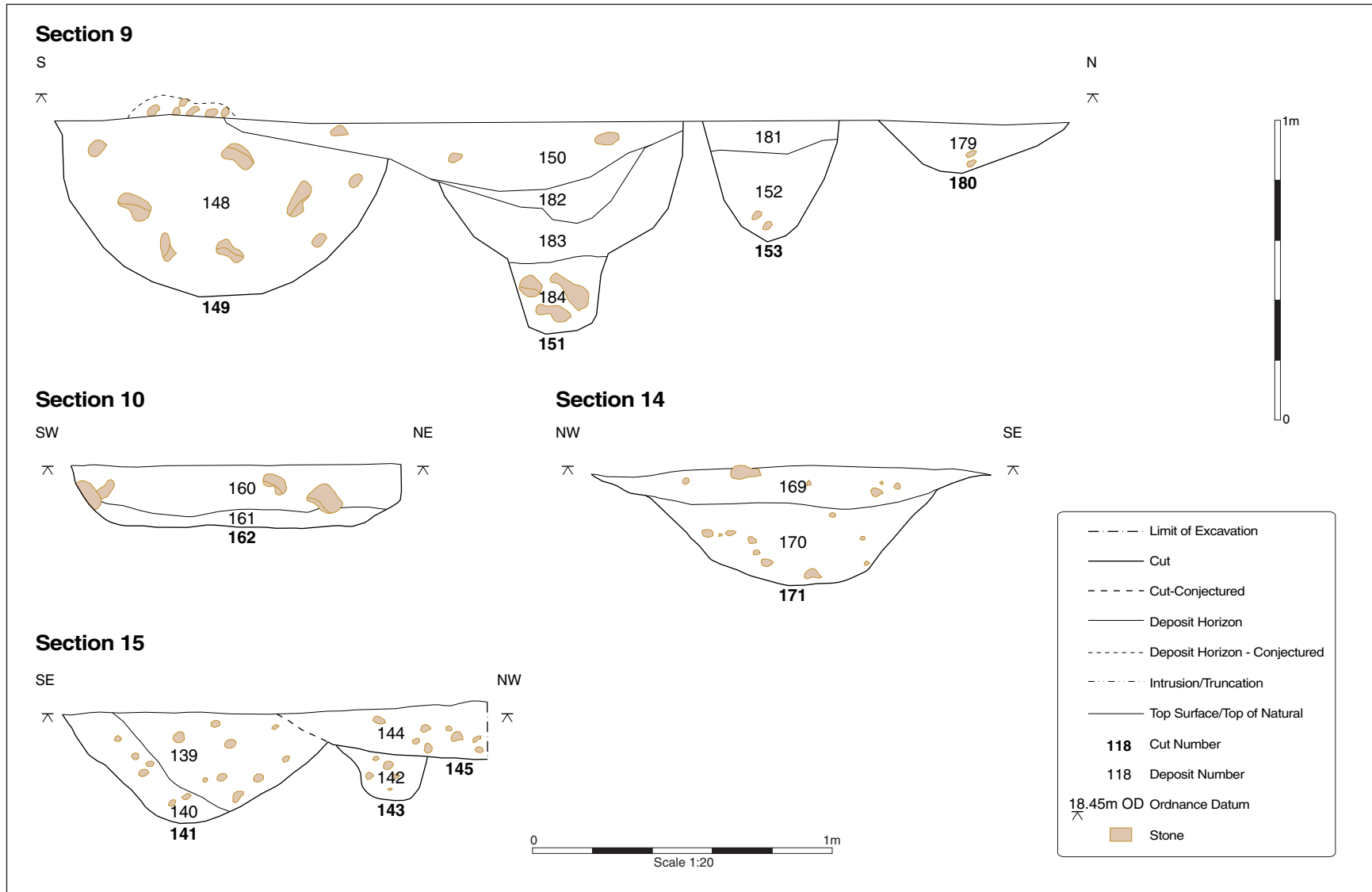


Figure 3: Selected sections



Plate 1: Soil removal



Plate 2: Enclosure ditch



Plate 3: Pit



**Head Office/Registered Office/
OA South**

Janus House
Osney Mead
Oxford OX2 0ES

t: +44 (0) 1865 263 800
f: +44 (0) 1865 793 496
e: info@oxfordarch.co.uk
w: <http://thehumanjourney.net>

OA North

Mill 3
Moor Lane
Lancaster LA1 1GF

t: +44 (0) 1524 541 000
f: +44 (0) 1524 848 606
e: [oanorth@thehumanjourney.net](mailto: oanorth@thehumanjourney.net)
w: <http://thehumanjourney.net>

OA East

15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

t: +44 (0) 1223 850500
f: +44 (0) 1223 850599
e: [oaeast@thehumanjourney.net](mailto: oaeast@thehumanjourney.net)
w: <http://thehumanjourney.net>



Director: David Jennings, BA MIFA FSA

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