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**Sand-le-Mere Caravan Park East Yorkshire** 

**Archaeological Evaluation** 

Report No. Y015/11

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Sand-le-Mere Caravan Park, East Yorkshire

Archaeological Evaluation Report No. Y015/11

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# SUMMARY

An archaeological evaluation was carried out at Sand-le-Mere Caravan Park, East Riding of Yorkshire. Four of the 11 excavated trenches contained archaeological remains representing discrete periods of activity. Up to three ring-ditches, and a number of pits, post-holes and linear ditches in Trench 4 contained handmade pottery of later Iron Age date and are suggested to represent the remains of a settlement of this period, possibly defined by an enclosure ditch. Trenches 8 and 9 contained features which are dated to the second half of the medieval period and the presence of at least one cattle burial and other domestic waste suggests that there was probably a small settlement such as a farmstead in the vicinity. Trench 10 contained a dump of 19th-century waste, as well as some earlier residual material, which may represent agricultural activity associated with manuring and the use of 'night soil' in this period. The remaining trenches were devoid of archaeological remains apart from Trench 1 which contained an undated ditch possibly representing an east to west running boundary.

# **1 INTRODUCTION**

#### 1.1. General

This report presents the results of an archaeological evaluation undertaken by CFA Archaeology Ltd (CFA) on behalf of Prospect Archaeology, between 17 and 24 May, and 20 and 21 September 2011. The CFA code and number for the project is SALM/2013.

All work was undertaken in accordance with a specification issued by Dave Evans of the Humber Archaeology Partnership (ref. PA/CONS/14503, dated 16/02/11). The evaluation was intended to assess the archaeological potential of land to the west of the existing caravan park prior to its extension and the construction of associated infrastructure, including roads and lakes. The extension is necessary due to the rapid coastal erosion of the shorefront area (e.g. Plate 7).

#### **1.2.** Site location and description

Sand-le-Mere Caravan Park is on the coast, less than 1km to the southeast of the village of Tunstall in the East Riding of Yorkshire (Fig. 1; NGR TA 312 313). The ground is undulating, lying at between 4–12m above the ordnance datum (AOD). The sea lies immediately to the east, with farmland surrounding the rest of the development area.

The solid geology of the area consists of Cretaceous Chalk, as exposed at Flamborough Head. To the south the chalk with flint seams lay beneath glacial drift and till deposited some 1200 years ago and consisting of unconsolidated clays, with cretaceous material such as nodular chalk and flint, usually classified as Withernsea or Skipsea till (BGS 2011). Soils of the area, belonging to the Burlington 2 Association (ES 2007a, 122), are described as 'Slightly acid loamy and clayey soils with impeded drainage' supporting a range of woodland grassland, arable and pasture (Landis 2011). Areas of alluvium indicate former fresh water meres.

#### 1.3. Historical and archaeological background

The development area lies within a wetland landscape exploited during later prehistoric, Romano-British and later periods. Coastal erosion during the medieval period caused the drainage of the lakes, though the area remained wet. Post-medieval and early modern drainage management improved the land, allowing for arable cultivation. Natural resources in the area included fish and fowl, with settlements likely to have been concentrated on the higher ground between the lakes and wetlands.

The shoreline was probably 1km or more further away during the prehistoric period and the environment much different; the remains of timbers (recorded as 'lake-dwellings') and animal bones were discovered in the vicinity of the Tunstall Drain c. 1898 and coastal erosion has exposed finds such as antlers, bones and teeth are which are often found by visitors to the beach (Evans 2011).

Evidence for Neolithic and Bronze Age activity in the area includes worked flint artefacts, and there is a possible late prehistoric square enclosure in a field to the north of Cliff Farm.

Iron Age pottery was recovered during the Humber Wetlands Project in the mid 1990s during field-walking to the west of the existing caravan park (Van der Noort 1995).

There is little evidence for Romano-British activity in the area, other than features possibly dating to this period identified as crop marks, though a sherd of greyware dating to this period has been found (Novell Tullet 2007a, 123).

It is thought that Tunstall church may have originated during the Saxon period. Although it is not mentioned in the Domesday Survey, it is mentioned in a document dated AD 1115 (Novell Tullet 2007b, 20). A cattle skeleton, radiocarbon-dated to the 10th century AD was exposed on Tunstall beach (Novell Tullet 2007a, 123).

There was a hamlet at Sand-le-Mere from the late medieval to post-medieval periods. Although none of the houses survive, ridge-and-furrow likely to date to these periods has been recorded and the fish and the fowl in the area were probably exploited during these periods.

There are numerous World War II defences along the coast including pill boxes and tank traps. There was an army camp on the cliffs east of Cliff Farm consisting of three nissen huts, two gun emplacements, two pillboxes, weapon pits and trenches. There were also anti-tank cubes and trenches along the beach and further pillboxes and positions further inland (e.g. Plates 3 and 6).

#### **1.4.** Previous archaeological work

A geophysical survey undertaken in 2007 on parts of the development area revealed anomalies on two small hills consistent with ditches, possibly pit groups or other archaeological remains (Geoquest 2007).

#### 1.5 Objectives

The general objectives were to establish the presence or absence of archaeological remains; assess their character, interpret them in terms of their significance, and; produce a report on the results in order to allow 'an informed decision...regarding the future treatment of the remains and any mitigatory measures appropriate either in advance of and/or during development' (Evans 2011).

# 2 WORKING METHODS

#### 2.1 Evaluation

All machining was undertaken using a toothless ditching bucket under constant archaeological supervision.

All excavation and on-site recording was carried out according to standard CFA procedures, principally by drawing, photography and by completing standard CFA recording forms.

#### 2.2 Standards and Guidance

CFA Archaeology is a Registered Organisation (RO) with the Institute for Archaeologists (IfA). All work was conducted in accordance with relevant IfA Standards and Guidance documents (IfA 1996; 2001), English Heritage guidance (EH 1998. 2002; 2005; 2006; 2008a–c), and CFA's standard methodology.

#### 2.3 Monitoring

The project was monitored by the Humber Archaeology Partnership who were informed in advance of the works taking place.

#### 2.4 Archiving

The project archive, comprising all CFA record sheets, finds, plans and reports, will be deposited with East Riding of Yorkshire Museums Service according to an agreed timescale, and will be ordered according to current guidelines and to nationally recognised standards (UKIC 1990; 2001; MGC 1994; SMA 1995; Ferguson and Murray 1997; Brown 2007). Table 1 summaries the quantities of the paper archive.

File no.	Description	Quantity
1	Trench Sheets	11
1	Context Sheets	92
Loose Sheets	A3 plans and sections	3

Table 1: Contents of the paper archive

# **3 ARCHAEOLOGICAL RESULTS**

#### 3.1 General

Eleven trenches were excavated out of an original twelve; Trench 11 was located on the site of an existing pond. Conditions for archaeological visibility were generally poor, with bright sunshine and the clayey ground very hard and difficult to machine cleanly. Despite this the contrast between the natural clay deposits and the topsoil was very evident in the lower-lying areas (Trenches 5, 6 and 12), and archaeological deposits were identified in four of the eight remaining trenches. Of those trenches, five (trenches 1, 2, 3, 5, 6, 7 and 12) were devoid of archaeological remains while four (trenches 4, 8, 9 and 10) contained archaeological features and/or finds dating from the late prehistoric to the post-medieval periods.

Each trench excavated is described below, followed by an assessment of finds and environmental samples. All trenches were 50m in length unless otherwise stated. Appendix 1 provides a summary of contexts. Figure 1 shows the location of the trenches, Figure 2 trench plans and Figure 3 sections. Photographs of each trench along with photographs of features form Plates 1, 2, 8 and 9.

#### 3.2 Trench 1

Trench 1 was orientated northeast to southwest on a hillock 250m to the northwest of a similar-sized hillock, where significant prehistoric archaeological remains had been located (Trench 4). Here however other than an east to west running ditch, possibly indicating an old field boundary, there were no archaeological remains and no finds recovered. As the field had recently been ploughed the opportunity was taken to examine the plough soil in the area around trenches 1 and 2 and to systematically (though not intensively) field walk the entire field (Plate 10). No finds were recovered from the vicinity of the trenches and apart from a single worked flint, no finds were recovered from anywhere in the field, though an abundance of modern ceramics glass and some plastic was noted on the lower slopes.

#### 3.3 Trench 2

Trench 2 was orientated northwest to southeast and was excavated through recently ploughed soil. Although some possibly linear features were suspected, on excavation they all proved to be where plough marks had run together, the distinct reddish clay subsoil was very heavily plough scarred in a predominantly east to west direction which was consistent with the orientation of the recently ploughed furrows (Plate 10). No finds were recovered from the trench or from the surrounding ploughed soil.

#### 3.4 Trench 3

Orientated northwest to southeast on flat, though rough and uneven, ground on the eastern side of the site, Trench 3 was excavated to a maximum of 1m depth (Plate 1a). Overburden consisted entirely of mixed redeposited natural clay (300) over similar but more homogeneous brown-orange natural clay (301). Neither topsoil nor subsoil were present. The redeposited natural clay was most probably the result of the excavation of the pond (at the proposed location of Trench 11) and associated landscaping. Two evenly-spaced north–south-aligned linear striations in the natural clay were most probably caused by modern machine disturbance, possibly the result of drainage construction or wheel ruts from a tractor

or other large vehicle. An identical feature was excavated in Trench 4 supports this (see below).

#### 3.5 Trench 4

On the top of a hillock Trench 4 was within a field of recently cut grass, on the western side of the site overlooking the caravan park. It was orientated east to west (Plate 1b). The trench was a maximum of 0.4m deep with topsoil (400) overlying a poorly-developed subsoil (427) above an orange-brown clay natural similar to that in Trench 3. A number of prehistoric features were recorded in this trench including ring-ditches, linear ditches, pits and possible post-holes. The fills of these features were predominantly light-grey clay. Each feature is discussed in turn below.

Ditch 1 was a possible outer ring-ditch or drip gully for a circular structure. It had a shallow U-shaped profile (403) and, if a true ring, would have had an internal diameter of approximately 4m. This ditch encircled another ditch and was filled by grey-brown clay (402), which produced coarse hand-made pottery of likely later prehistoric date. This ditch truncated a northeast to southwest running linear ditch (Ditch 8).

Ditch 2 had a shallow U-shaped profile (405) and may have been the ditch for a small structure 2–3m in diameter (Plate 2f), within a ditch or drip gully (Ditch 1). It was filled by grey-brown clay (404), very similar to the fill of Ditch 1 (402) and producing very similar pottery. The ditch appeared to truncate a small pit or possible post-hole (429).

Ditch 3 was a north–south running linear ditch with an irregular profile (407) filled by greybrown clay (406) almost identical to the fills of ditches 1 and 2 and producing similar pottery. It was truncated by Ditch 8.

Ditch 4 was possibly a ring-ditch or a curvilinear ditch. It had a U-shaped profile (409 and 410) and was again filled with the same grey-brown clay (408) and produced similar handmade pottery. The ditch may have been truncated by Ditch 8, though this was by no means clear either in plan or from the excavated section.

Ditch 5 was a north-to-south running linear ditch with a V-shaped profile (412) filled by grey-brown clay (411) producing coarse shell-tempered pottery and burnt bone; it truncated Pit 416.

Ditch 6 was large and irregular, running northeast to southwest. It had no clear-cut profile (424), and appeared to have been disturbed by machine or even wheel ruts in possibly in the same manner as ditch 418, and features observed in Trench 3. Filled by grey-brown clay (423) it produced no finds, was very probably modern and truncated a north–south running ditch (Ditch 7).

Ditch 7 was a shallow, but well defined ditch with a U-shaped profile (414), truncated by Ditch 6. It was filled by a yellow-brown silty clay (413) and produced hand-made, organic tempered pottery (or fired clay) of possible prehistoric date.

Ditch 8 ran northeast to southwest with an irregular profile (426), it was truncated by Ditch 1 and truncated Ditch 3. It was filled by grey-brown clay (425) that produced coarse hand-made pottery.

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Pit 416 had a shallow and irregular profile, and was truncated by Ditch 5. It was filled by light grey clay (415) which also produced probable prehistoric pottery.

Post-hole 419 was a shallow, vertically-sided feature, possibly a post-hole though not associated with any other features in the trench. It was filled by grey-brown clay (420).

Post-hole 422 was a shallow, vertically-sided post-hole similar to post-hole 419, and similarly not in association with any other features. It was filled by grey-brown clay (421).

Pit 429 was irregular-sided with a flat base, truncated by Ditch 2; it may have been part of the construction of a possible small round structure. It was filled by the same grey-brown clay (428) as the surrounding features.

Linear feature 418 was possibly a machine cut for a land drain or a wheel rut from a tractor or other large vehicle. It was filled by orange-brown clay (417).

#### 3.6 Trench 5

The trench was on the south side of the site orientated east-west, on low-lying flat ground, heavily overgrown with reeds and thistles; the area was dry though probably wet and boggy during the winter (Plate 1c). The trench was 0.3m deep with sandy-clay topsoil (500) over mottled grey-brown natural clay banded with orange sand (501) the same as that in trenches 6 (601) and 12 (1201). No archaeological features were identified and no finds were recovered.

#### 3.7 Trench 6

This trench was orientated east to west and located in the same low-lying area as Trenches 5 and 12 and contained very similar topsoil and natural layers (600 and 601). No archaeological features were identified and no finds were recovered (Plate 2a).

#### 3.8 Trench 7

This trench was located on higher ground overlooking the location of Trenches 5, 6 and 12 and was orientated northwest to southeast, running upslope (Plate 1e). The sea could clearly be seen in the distance to the east along with a pillbox prominent on the hill opposite (Plate 3). The trench was 1m deep with dark brown topsoil 0.45m thick over reddish-brown sandy-silt subsoil about 0.5m thick, possibly indicating ploughing in the past, though at the time of the evaluation the ground cover was rough and dense scrub. Also indicating agricultural usage in the recent past was the presence of a number of 20th-century land drains. Other than some tree boles there were no archaeological features identified and no finds recovered.

#### 3.9 Trench 8

Trench 8 was located to the south and east of the main caravan park reception and other central buildings. Orientated north to south on a fairly level plateau, the ground here had formerly been used as a football pitch (Plate 1f). A number of archaeological features were identified at the eastern end of the trench. The trench was approximately 1.1m deep with topsoil (800) over a mixed ploughsoil (801), which contained bones probably from disturbed cattle burials.

Pit 802 was a small oval pit filled by a dark-brown silty clay (803) containing fragments of CBM, some animal bones, and a bent copper-alloy pin of possible 14th-century date. It was adjacent to a larger pit (804) running under the baulk of the trench; it may have been a part of the same cow burial.

Pit 804 was a large pit over 3m in length running beneath the trench baulk, filled by darkbrown silty clay (805), containing animal bone.

Pit 808 was a large pit approximately 2m long running beneath the baulk filled by the same dark-brown silty clay containing the articulated remains of a cow (807) and 13th/14th-century pottery.

#### 3.10 Trench 9

Trench 9 was located on the south-eastern slope of a hill to the north of the main caravan park complex. It was orientated east to west and was a maximum of 0.8m deep. The land use was agricultural and at the time of the trenching the ground cover was recently cut grass (Plate 1g). The visibility of archaeological remains in this trench was poor due to the mixed nature of the clay soils, the very dry and hard conditions of the ground and the generally bright sunshine on site. A number of ditches along with two possible pits were recorded in this trench.

A possible large ditch with an irregular profile and running northeast to southwest (900) was recorded at the western end of the trench. It had two fills, a red-brown clay (907) containing late medieval pottery and a primary fill of black silty clay (908) containing medieval pottery and animal bone.

There was a narrow linear ditch or gully, about 0.3m wide with vertical sides and a flat base just over 0.2m deep (901) running northwest to south-east, possibly truncating Ditch 902 (see below) and filled by brown clay (912).

Ditch 902 was about 1.5m wide, 0.5m deep, with a U-shaped profile and ran northeast to southwest parallel to Ditch 903, filled by red-brown clay (909).

Ditch 903 was ill-defined, a little over 1m wide though very shallow and indistinct in plan, running northeast to southwest. It was possibly truncated by Ditch 902, though this could not be confirmed in section, and was filled by light-brown silty clay (920).

Ditch 904 was possibly part of a double ditch with Ditch 923, 0.7m wide and less than 0.2m deep it was well defined, running north to south, though insubstantial. It was filled by light brown silty clay (921)

Ditch 905 was shallow at about 0.2m deep, though well-defined, and 1.5m wide running northeast to southwest, and filled by light brown silty clay (913) which produced medieval pottery.

Pit 916 was a shallow, though convincingly defined, pit truncated by a northeast to southwest running ditch (919). It was 0.14m deep and 0.7m wide filled by light brown silty clay (917) which produced possible medieval pottery.

Ditch 919 ran northeast to southwest, truncating pit 919. Its eastern side was truncated by a field drain running in the same direction filled by light brown silty clay (918).

Ditch 923, was adjacent to Ditch 904 and possibly part of a double-ditch feature. It was about 1.3m wide and 0.3m deep and orientated north to south, filled by light-brown silty clay (924).

#### 3.11 Trench 10

Trench 10 was located downslope from the higher ground to the west of Trench 9. A significant amount of pottery and other finds was recovered from the topsoil (1001), ploughsoil (1002 and 1005) and from a spread of dumped material on the eastern end of the trench (1004) on the higher ground. It seems likely that material was dumped on the high ground and travelled downslope either through natural colluvial process or was ploughed in. Although containing some earlier pottery, the majority of finds in this trench included green bottle glass of 19th-century date

#### 3.12 Trench 12

Trench 12 was orientated northwest to southeast in the same low-lying area as Trenches 5 and 6, with very similar topsoil and natural deposits (1200 and 1201), though there were a number of dark grey organic inclusions indicative of degraded reed clumps, testifying to the damp and boggy environment. The trench was 20m long and 0.3m deep. No archaeological features were identified and no finds were recovered.

#### 4 FINDS ASSESSMENTS

by Sue Anderson, with contributions by Chris Cumberpatch, Martin Lightfoot and Jennifer Thoms

#### 4.1 Introduction

#### Summary quantification

Table 2 summarises the finds quantities from the evaluation. These are quantified by context in Appendix 2.

Find type	No	Wt (g)
pot: handmade	32	396
pot: medieval	63	788
pot: post-medieval	225	2106
CBM	33	1018
fired clay	6	33
stone	1	17
glass	44	588
iron	1	23
copper alloy	1	2
bone	174	4201

Table 2. Finds quantities.

#### Condition

All finds are well-preserved and unabraded. All bulk finds have been washed, air-dried and stored in polythene bags in acid-free cardboard boxes suitable for long-term storage. The metal finds have been air-dried, bagged and stored in a polythene box with silica gel in a temperature and humidity-controlled store. The finds, along with the rest of the project archive, comprising all CFA record sheets, photographs, plans and reports, will be deposited with East Riding of Yorkshire Museums Service.

#### 4.2 **Prehistoric and medieval pottery,** by Chris Cumberpatch

#### Introduction

The assemblage consisted of two components; hand-made pottery of prehistoric type from eight contexts in Trench 4 and wheel-thrown medieval pottery from ten contexts in Trenches 8, 9 and 10. The details of the assemblages are summarised in Appendix 3. Both assemblages were quantified by sherd number, sherd weight and estimated (maximum) number of vessels.

#### The hand-made pottery

The hand-made pottery assemblage consisted of thirty-two sherds and fragments weighing 398 grams and represented maximum of twenty-seven vessels (Table 3).

Туре	No	Wt	ENV
H2 Quartz	5	18	5
H2 Rock	18	253	14
H2 Rock & Quartz	4	65	3
H2 type	2	1	2
H3 Calcite & Quartz	3	59	2
Total	32	396	26

Table 3. Handmade pottery quantities by fabric group

The type codes are derived from the scheme employed in the recording and analysis of the assemblages from the Easington to Ganstead gas pipeline (Cumberpatch in prep.) which are in turn derived from Didsbury's scheme for later prehistoric pottery in the former East Riding of Yorkshire (see, for example, Didsbury 2009). The H prefix denotes hand-made pottery while the following number indicates the characteristics of the inclusions, as summarised below:

Ware type	Description	Notes	References
H1	Calcareous temper; chalk and/or calcite	Nature of inclusions where identifiable noted as modifier	Didsbury 2009:253-4
H2	Non-soluble quartz temper	Other rock fragments noted as appropriate	Didsbury 2009:253-4
H2/ETW	Non-soluble 'erratic'	Some variety in the nature of the rock	Didsbury 2009:253-4,
	temper, sometimes with quartz	fragments	Rigby 2004:24-7
Н3	Mixed calcareous and non- soluble rock temper	A rare type with a diverse range of temper	Didsbury 2009:253-4
H4	Vesicular fabrics	Generally H1 with the calcareous inclusions leached out by acidic groundwater	Didsbury 2009:253-4

These details are amplified by the modifying term (Quartz, Rock etc) intended to sub-divide the more general groups. This scheme is broadly comparable with Rigby's description of pottery from North and East Yorkshire, discussed at length elsewhere (Rigby 2004).

It should be noted that these are fabric groups rather than fabric types in that there can be a significant degree of variation between vessels within the same group in terms of the density and size of the inclusions, even while the types of inclusions do seem to be mutually exclusive and to represent a real difference within larger prehistoric pottery assemblages as a whole. Taking this further, it should not be assumed that sherds belonging to the same group are necessarily from the same precise source. The evidence from eastern and northeastern Yorkshire available at present suggests that pottery was locally manufactured on individual settlements but that manufacture was constrained by robust cultural rules which ensured considerable conformity in terms of the broad composition of the clay bodies and, particularly, in the range of vessel forms produced (Cumberpatch in prep.).

The dating of hand-made pottery of later prehistoric type is an issue that remains unresolved. It is clear from excavations on numerous sites that the manufacture of hand-made pottery continued throughout the period of Roman occupation and that calcite gritted wares enjoyed something of a renaissance in the later years of the Roman occupation when they form a substantial part of the assemblages even from Romanised sites. The question of what happened to pottery production during the 5th century is at present unclear and it appears that, while decorated 'Saxon' pottery is relatively easy to distinguish from earlier wares, undecorated types may be rather harder to differentiate with the result that traditional

archaeological techniques of dating strata and deposits with reference to known chronotypologies become difficult to apply. At present it has to be acknowledged that there is considerable room for doubt as to the precise dating of hand-made pottery over a very long period of time. The difficulties of reconciling the cost-driven imperatives of commercial archaeology with broader research priorities complicates the task of undertaking research into this (and other) issues with the result that progress in understanding matters such as chronology can be difficult to achieve.

In the case of the assemblage considered here, the fact that it was composed almost entirely of body sherds with only two very small fragments of rim and an undiagnostic flat base posed additional problems as schemes such as that devised by Rigby (2004) and the comparison of diagnostic vessels with dated examples from other sites were not applicable. While the sherds certainly conformed to the general characteristics of the later prehistoric and Roman periods and did not show the tendency towards a higher proportion of H3 fabrics (as seen, for example in the probable Saxon assemblage from Field 9 at Caythorpe; Cumberpatch 2011), it is impossible definitely to discount a late Roman or Early Saxon date simply because all the evidence points towards extremely strong and tenacious traditions of practice which ensured the survival of basic methods of clay procurement, processing and vessel manufacture which endured for almost a thousand years (i.e. from c. 700BC until at least the end of the Roman period). While the author is of the opinion that the date of the sherds considered here is most likely to be a later prehistoric one, there must remain an element of doubt as to this conclusion, given these factors. The fact that the pottery was not associated with wheelthrown wares of Romano-British type suggests a date prior to the beginning of Romano-British pottery production and the introduction of wheel-thrown wares into East Yorkshire.

There is clearly a very good case for a programme of research into later prehistoric, Roman and post-Roman society in East Yorkshire that does not take as its primary focus funerary practice and land-use patterns and looks instead at traditions of practice in the field of craft production over a long period of time.

The provisional conclusion is therefore that the assemblage belongs to the pre-Roman Iron Age or, less plausibly, the period of Roman occupation when hand-made and wheel-thrown wares seem to have been used side-by-side.

#### The medieval pottery

The medieval pottery was classified and dated with reference to the published county type series as represented by the work of Peter Didsbury and the late Gareth Watkins. The exemplary publication of excavations in Hull and Beverley (Watkins 1987, 1991, Didsbury and Watkins 1992) together with the publication of a number of sites producing Humberware by Colin Hayfield and his collaborators (Hayfield 1992a, 1992b, Hayfield and Grieg 1990, Mayes and Hayfield 1980) has provided a robust framework for the analysis and interpretation of medieval assemblages from the area and this has been employed in the provisional catalogue presented in Appendix 3 and summarised in Table 4.

The assemblage consisted of sixty sherds of pottery weighing 774 grams representing a maximum of fifty-eight vessels. With a small number of exceptions (sherds from contexts 917 and a number which could not, within the constraints of an assessment report, be positively identified) the broad date range of the assemblage lay within the high medieval period, most plausibly between the late 13th and mid 14th centuries although those contexts

which produced only Humberware or Humberware with unidentified wares might be argued to be somewhat later. The absence of distinctive late medieval and early post-medieval wares (Cistercian ware, Purple Glazed wares) from all contexts except 917 suggests an absence of later activity in those areas represented by the contexts examined for this assessment. Other than this, the assemblage seemed to be one typical of the area and to consist largely of locally manufactured wares of known types with the Humberwares exhibiting the normal range of variation within the type which reflects the dispersed nature of its manufacture.

Туре	No	Wt	ENV
?Low Countries Redware	1	3	1
Beverley 2C ware	2	17	1
Beverley type ware	2	2	2
Beverly 2 type ware	1	3	1
Beverly 2C ware	1	12	1
Coarse Sandy ware	7	43	7
Coarse Sandy ware type	1	4	1
Humberware	32	597	31
Humberware type	4	32	4
Purple Glazed Humberware	1	5	1
U/ID Fine Sandy ware	1	4	1
U/ID Sandy ware	4	43	4
Vesicular ware	3	9	3
Total	60	774	58

Table 4. Medieval pottery quantities by fabric.

#### 4.3 **Post-medieval pottery**

The largest group of pottery was recovered from Trench 10, in ploughsoil contexts. Small quantities of medieval wares were present in these contexts, but the majority of the Trench 10 assemblage was of post-medieval and modern date. It included glazed red earthenwares, iron-glazed blackwares, Nottingham-type stonewares, creamwares, pearlwares and porcelain. Table 5 shows the quantification by fabric and a brief catalogue is included in Appendix 3.

Fabric	Code	No. sherds
Glazed red earthenware	GRE	56
Iron-glazed blackware	IGBW	5
Nottingham-type stoneware	ESWN	65
Late blackwares	LBW	1
Porcelain	PORC	6
Refined factory-made whitewares	REFW	91
Unidentified	UNID	1
Total		225

Table 5. Quantification of post-medieval and modern pottery

#### 4.4 Ceramic building material (CBM)

With the exception of a small abraded fragment from (803) and a curving piece from (913), both of uncertain form, all CBM was recovered from Trench 10. The majority of fragments were pieces of pantile, but there was one piece of medieval roof tile in (1005) and two abraded fragments of medieval estuarine clay bricks in (1003). One abraded flat tile fragment in (1003) could be a piece of Roman tile or a medieval roof tile.

#### 4.5 Fired clay

Six fragments of fired clay were identified, three from Trench 4 context 413, and three from Trench 9 context 908. The fragments are abraded and function is uncertain but they may be pottery. No further work is required on this small assemblage.

#### 4.6 Stone

One fine-grained dark red fragment of stone (913) appeared to be part of a whetstone, but may be natural. Further analysis of this object will be required to determine if it is an artefact and to identify the stone type.

#### **4.7 Flint,** by Martin Lightfoot

One small flake of brown flint was recovered from the fill (913) of Ditch 905 and an unstratified small grey flint was recovered from recently ploughed soil around trenches 1 and 2. Although they are not diagnostic of any period, they are most probably prehistoric, though presumably residual. Very small fragments of flint were also recovered during the processing of bulk environmental samples (402, 404, 413, 918 and 920); this may possibly be the result of core preparation or the retouching of flint tools during the course of manufacture, though there was no other evidence to suggest that these activities occurred on the site. No further work is recommended.

#### 4.8 Glass

Forty-four shards of green glass were collected from ploughsoil contexts in Trench 10. All were post-medieval and included pieces of wine bottle bases of probable 18th/19th-century date. No further work is required on this assemblage.

#### 4.9 Metalwork

An iron nail was collected from ploughsoil (1001), and is probably post-medieval.

A copper alloy pin from pit fill (803) had a small solid globular head. There were signs of possible facetting on the sides of the head, although this may be accidental. The pin shaft was bent but may have an expanded middle section. If so, this may indicate a Saxon date for the pin. However, a close parallel for this type of pin was found in a late 14th-century context in London (Egan & Pritchard 2002, fig 200 centre) and on balance, given the association of Beverley Ware in the same pit, a medieval date seems more likely.

#### 4.10 Animal bone, by Jennifer Thoms

#### Introduction and Methodology

The bones were categorised according to basic bone type – identifiable mammal, identifiable bird, rib, vertebrae, indeterminate fragments and indeterminate calcined (burnt) fragments. The identifiable bones were then identified as far as possible to skeletal element and species. The side of the body each identifiable fragment derived from was ascertained where possible, and each fragment was examined for indicators of ageing (epiphyseal fusion and tooth-wear evidence). Each fragment was then examined under strong light and low magnification for

taphonomic indicators such as butchery marks, burning or recent breaks. The general condition of the bone was assessed according to the general amount of wear and abrasion on the surface of the bone.

A total of 192 fragments were present in the assemblage and were categorised and quantified according to bone type for each context. The results are shown in Table 6. A catalogue of the identifiable bone fragments has been produced and is presented in Appendix 4.

context	indeterminate	rib	vert	identifiable	bird	indeterminate
	fragments			mammal		burnt
801	6			3		
803	3			1		
805	4	1				
807	45	31	15	17		
907	12	3	2	5		
908	2			2	1	2
913	7					
1001	1					
1002	1		2			
1003	11			5		
1004	5	1				
1005	2			2		
Totals	99	36	19	35	1	2
<b>T</b> 1	$1 \in \mathbb{N}$ 1 $\mathbb{C}$	L C	4	10	1	

Table 6. Numbers of bone fragments retrieved from each context.

The bones were in a range of sizes from large fragments of large cattle bones down to a small fragment of goose bone and a fragment of sheep tooth. This indicates little or no preservation bias and a high standard of retrieval from the trench.

Of the identifiable fragments only four were complete and suitable for measuring. Ageing information (epiphyseal fusion or tooth wear) was present on fourteen fragments (see Appendix 4).

#### Provenance

The contexts containing the bones were mainly secure and a number contained medieval finds. However, contexts 1001–1005, described as topsoil and ploughsoil, contained post-medieval finds and have suffered some mixing due to colluvial processes and ploughing activities.

#### Range and variety of material

The material was retrieved by hand from the trench during the evaluation. The bones were mainly large fragments derived from large animals, particularly cattle. Disturbed cattle burials were noted during excavation and the majority (74%) of the identifiable bone finds are from cattle. All bones from the fill (807) of the cattle burial in Pit 808 could have derived from one animal that died at around four years old. Similarly, from the bone evidence, the few identifiable bones from contexts 801 and 803 may have derived from the same burial. It therefore would appear that most of the bones (57%) derive from one or more cattle burials. One possible exception was a fragment of cattle tibia in context 807 which had been sawn through, indicating butchery or table waste, and suggesting that this bone fragment derived from a different source from the others.

The other bone material appears to represent domestic waste, with sheep or goat, cattle and goose bone being represented. Two fragments of horse bone were retrieved from context 1003. Horse bone is not normally present in domestic bone waste, so this is likely to represent a disturbed horse burial somewhere in the vicinity.

#### 4.11 Conservation assessment and recommendations for discard

All finds, with the exception of the metalwork, have been cleaned and prepared for long-term storage. The metal finds have been dried and boxed in conditions suitable for their long-term survival.

It is recommended that all material should be retained and added to the excavation archive for full analysis, where appropriate. However, following assessment of the excavation finds, it will be possible to produce a discard policy for material such as the ceramic building material and modern finds.

### 5. ARCHAEOBOTANICAL ASSESSMENT by John Summer

#### 5.1 Methodology

Ten bulk samples from were received for assessment. Prior to flotation, the samples were presoaked in water to help soften the clay matrix. The samples were processed using the washover method of flotation (Pearsall 2000, 31–3). The light fractions were captured using a 350µm sieve, while the heavy fractions were retained in a 1mm sieve.

Once dry, the light fractions were scanned under a low-power stereo microscope (x10 to x30 magnification), with all relevant material recorded using a semi-quantitative scale (\* = rare; \*\* = occasional; \*\*\* = common; \*\*\*\* = abundant). Where necessary, reference literature (Cappers *et al.* 2006) and the botanical reference collection held in the Division of AGES, University of Bradford, were consulted.

Heavy fractions were sieved using a sieve stack (4mm; 2mm and 1mm) and sorted for relevant ecofacts and artefacts. This material was quantified using the same semi-quantitative scale. Most material was only recovered from the >4mm and >2mm fractions, while the >1mm fraction was scanned for cereal grains. Where charcoal was recovered, fragments were randomly selected and fractured for a transverse section to get an impression of the presence of different wood types. Using this method it is possible to distinguish ring-porous and diffuse-porous hardwoods, as well as oak (*Quercus* sp.), based on its distinctive flame-like vessel pattern.

#### 5.2 Results

Appendix 5 shows the composition of the light fractions (Table A5.1), and the material from the heavy fractions (Table A5.2). Taxonomic nomenclature follows Stace (1997). Cereal nomenclature is based on Zohary and Hopf (2000).

Cereal remains were identified in three contexts in Trench 9, all ditch fills (908 (900, 913 and 905) which contained wheat grains of a free-threshing type (*Triticum aestivum*). The grains were very short, wide and rounded, reminiscent of dense-eared club wheat varieties (*T. aestivo-compactum*). Probable barley grains (*Hordeum* sp.) were also recovered (908).

In Trench 4, the fill of Ditch 7 (413) contained hulled barley grains, one of which was twisted. This indicates the cultivation of a hulled, six-row variety (*Hordeum vulgare* var. *vulgare*). A single oat grain (*Avena* sp.) was also present in the heavy fraction of the same sample. Without diagnostic chaff elements it was not possible to determine whether this was a cultivated or wild variety. Cereal straw (culm) was also recorded (413). This was the only evidence of cereal chaff in the samples, although generally these elements preserve poorly compared to cereal grains (Boardman and Jones 1990).

Seeds of wild taxa were recognised in six samples. Generally small numbers were encountered. Larger assemblages were present in two contexts (908 and 413), both of which produced the most extensive evidence of cereal grains. A number of the taxa present, such as common chickweed (*Stellaria media*), goosefoot (*Cheopodium* sp.), dock (*Rumex* sp.), black bindweed (*Fallopia convolvulus*), stinking mayweed (*Anthemis cotula*) and brome grass (*Bromus* sp.), frequently occur as weeds of arable cultivation.

Charcoal was only recognised in the heavy fractions and appears not to have floated. This could have resulted from clay adhering to the surface. Charcoal was present in five contexts (908, 402, 404, 408 and 411). Only a small number of fragments were present and most were below 5mm in size. Oak (*Quercus* sp.) was noted (908) and both ring-porous and diffuse-porous woods were recognised in samples from Trench 4. This indicates that a range of tree species were utilised.

Bone was relatively rare, occurring in only two contexts (908 and 411). Only small fragments were recovered, being generally below 5mm. Many fragments were burnt (blackened) or calcined.

#### 5.3 Discussion

The presence of cereal remains in Trenches 4 and 9 indicates that hearth ash associated with domestic activity was entering features in both areas. The relatively low densities of cereals and other carbonised remains may suggest that the material in the ditch washed in from surrounding areas rather than being deliberately deposited as midden dumps.

The cereal assemblages from features in Trenches 4 and 9 show some differences. Wheat is absent from Trench 4, with only barley and oat recorded. No oat was present in samples from Trench 9.

The cereal culm (413) could be the by-product of threshing or coarse sieving activities. A number of the wild taxa in samples from both trenches could represent arable weeds, which would also be removed during crop processing. Such material helps to demonstrate the processing of cereals on the site, which would probably have been cultivated locally.

Based on the presence of bread wheat in Trench 9 (908 and 913), it is possible to suggest that these represent the remains of later activity than that present in Trench 4. Bread wheat was a common crop in Britain from the Roman period onwards (e.g. Jones 1991). Club wheat type grains (*T. aestivo-compactum*) have been recorded at Romano-British (e.g. Carrott *et al.* in Fraser and Brigham 2009) and Anglo-Saxon sites (Carrott *et al.* 1998; Dobney *et al.* 2007, 116) in the region and may represent the debris from similar periods of occupation at Sandle-Mere. This is in contrast to the material in Trench 4 which is provisionally dated to the Saxon/Prehistoric periods by artefactual remains. Although provisional, this indicates that archaeobotanical remains are present from a broad period of occupation.

#### 6 STATEMENT OF POTENTIAL AND RECOMMENDATIONS with contributions from Sue Anderson, Jennifer Thoms and John Summer

#### 6.1 Statement of potential

#### The site

There are likely to be further significant, relatively well-preserved archaeological remains around trenches 4 and 9; excavation could potentially shed light on activity on the site during the prehistoric and medieval periods.

The presence of artefacts of medieval date and associated animal bones is evidence for the presence of nearby settlement and there is high potential for features relating to this occupation to be uncovered in further fieldwork.

#### The artefacts

This assemblage includes elements of later prehistoric, medieval, post-medieval and modern date.

The earliest pottery assemblage is of importance for the interpretation of the features in Trench 8, and to add to the corpus of contemporary pottery in the region.

The medieval groups in the other three trenches have potential to provide information on the use and sourcing of pottery in a rural settlement of the period, a type of site which is rarely available for excavation. The majority of the animal bone appears to derive from disturbed cattle burial(s) which may be of medieval date. As it seems likely that diseased beasts would have been buried uneaten, the occurrence of this burial is not remarkable. The small quantity of identifiable animal bone, unrelated to the cattle burial, indicates exploitation of cattle and sheep / goats, and also the consumption of domestic or wild goose.

Much of the post-medieval and modern pottery and glass was from ploughsoil, and whilst it can provide information on the types of such pottery in use in the area, it has less potential for further work due to its context.

Although the assemblage as a whole is small and has low potential as it stands, the potential for further analysis would be greatly enhanced if further fieldwork in the form of open area excavation is carried out on the site in the future.

#### The environmental evidence

Further excavation and sampling at Sand-le-Mere is likely to recover further evidence of human occupation and activity. In terms of the archaeobotanical remains, there is the potential to examine the diet of the population over a wide time-span. This can include the crops cultivated and eaten, their relative proportions and importance to the economy. Further evidence of chaff and processing debris would help understand the way in which crops were processed and how these activities were distributed across the site. The evidence of weeds would be of value in the investigation of growing conditions in arable fields, as well as cultivation and harvesting practices.

Much of the charcoal recognised in the assessment would not be readily identifiable for full analysis. It probably represents weathered material washed into the ditches from surrounding areas of activity. However, should deposits such as hearths and middens be recorded in further excavations at the site, it is possible that more substantial pieces and quantities would be recovered. This would enable an examination of the selection of fuel woods and the exploitation/management of local woodland resources during the occupation of the site.

#### 6.2 **Recommendations for further work**

#### The site

Significant archaeological remains exist just below the topsoil in the area around Trench 4 and close to the current ground level around Trench 9. These archaeological remain are likely to be impacted by development in these areas. A programme of excavation in mitigation should be agreed in advance of development commencing in these areas. No archaeological significant archaeological remains were identified in trenches 1, 2, 5, 6, 7, 10 and 12 and no further work is recommended in these areas. Archaeological remains were encountered at a depth of 0.60m below the current ground level in Trench 8, should development impact on these remains, then a programme of mitigation should be agreed in advance, such mitigation may take the form of a watching brief during development.

#### The artefacts

The finds recovered from the evaluation have been catalogued and identified, and no further work is recommended on any of the artefacts or bones at present. However, the material should be included alongside finds resulting from future excavations on the site and be catalogued according to established standards.

A few specific requirements have been noted in the assessment with regard to particular finds. It is recommended that these tasks be included in any future assessment or analysis of excavation assemblages. These requirements are as follows:

- Identification of the stone artefact.
- The copper alloy pin requires further work to confirm the suggested date.

#### The environmental evidence

No further work is recommended on the evaluation samples, but the data recovered from them should be added to any further material recovered from further excavation.

# 7 CONCLUSIONS

The evaluation recorded archaeological remains which, despite recent agricultural activity, were relatively well preserved in three areas of the site (around trenches 4, 8 and 9/10). The finds covered a very broad date range, though it is likely that those from Trench 8 indicate predominantly medieval activity, trenches 9 and 10 predominantly medieval/post-medieval activity.

The higher ground around Trench 4 may have been a focus for settlement activity; ditches excavated are suggestive of small round structures and possibly enclosures, though a wider excavation would be needed to confirm this, relatively large amounts of pottery recovered from the excavated sections may indicate an associated settlement.

The archaeological features recorded in Trench 9 are more ambiguous, with some discrete pits along with ditches possibly indicating agricultural activity or possibly activities on the periphery of a farmstead. The small amount of finds from features in this trench may be the result of redeposited residual material, including the flint which though not in itself datable, may nevertheless indicate background prehistoric activity in the area.

The largest amount of finds was recovered from Trench 10, it seems likely that this was due to medieval and post-medieval manuring, with material being dumped upslope, then ploughed or allowed to travel downslope.

Trench 8 produced very few datable finds, though there was some medieval pottery recovered in association with what appeared to be articulated or partially articulated cow burials. It may be that the animals were deemed unfit for consumption and were simply buried in pits. This might provide further evidence that the area was in the vicinity of a medieval farmstead.

The lower lying areas sampled by trenches 5, 6 and 12 were entirely devoid of archaeological remains, perhaps because they were in an environment which was very boggy and not conducive to settlement or productive agricultural activity. Conversely, though, this area may have been valued as a natural resource, as a habitat for water fowl, and may have been managed accordingly. No significant remains were encountered in trenches 1 and 2 and though it may be possible that archaeological features have been destroyed in this heavily ploughed area, other than one flint, no finds recovered from the ploughsoil.

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# **APPENDIX 1: CONTEXT SUMMARY**

Context	Description	Finds	Sample	Date*
100	Reddish-brown silty clay plough soil			
101	Brownish-red clay with brown plough scarring, natural subsoil			
102	Grey-brown silty clay fill of Ditch 103			
103	V-shaped cut of east-west running ditch, possibly boundary			
200	Reddish-brown silty clay plough soil (same as 100)			
201	Brownish-red clay with brown plough scarring, natural subsoil (same as			
	101)			
300	Mixed re-deposited natural, grey and orange clay, 0.65m thick over (301)			
301	Mottled grey-brown natural clay truncated by machine cut drainage NE-			
	SW			
400	Grey-brown silty-clay topsoil, 0.4m thick			
401	Orange-brown natural clay			
402	Grey-brown clay single fill of putative Ring Ditch 1 (403)	Pot	6	PRIA
403	U-shaped cut of Ditch 1, 0.15m deep (outer of 2 ditches)			
404	Grey-brown clay single fill of putative Ring Ditch 2 (405)	Pot	5	PRIA
405	U-shaped cut of Ditch 2, 0.15m deep (inner of 2 ditches) filled by 404			
406	Grey-brown clay single fill of Linear Ditch 3 (407)	Pot		PRIA
407	U-shaped cut of Ditch 3 filled by 406			
408	Grey-brown clay single fill of putative Ring Ditch 4 (409 and 410)	Pot	7	PRIA
409	U-shaped cut of Ditch 4 filled by 408 same as 410			
410	U-shaped cut of Ditch 4 filled by 408 same as 409			
411	Grey-brown clay single fill of Linear Ditch 5 (412)	Pot, b. bone	8	PRIA
412	V-shaped ditch cut, truncates Pit 416, filled by 411			
413	Yellowish-grey silty clay fill of Linear Ditch 7 (414)	BA pot	9	PRIA
414	U-shaped cut of Linear Ditch 7 filled by 413, truncated by Ditch 6			
415	Light grey clay single fill of Pit 416	Pot		PRIA
416	Cut of pit filled by 415 truncated by Ditch 5			
417	Fill of linear machine cut same as observed in Trench 3 NE-SW (modern)			
418	Vertical sided, flat base, machine cut (2'') possible modern drainage			
419	Cut of possible post hole filled by 420			
420	Grey-brown clay single fill of post hole (419)			
421	Grey-brown clay single fill of post hole (422)			
422	Cut of possible post hole filled by 421			
423	Grey-brown clay single fill of Linear Ditch 6 (424)			
424	Cut of Ditch 6 filled by 423	-	-	
425	Grey-brown clay fill of Ditch 8 (426)	Pot		PRIA
426	Cut of Ditch 8, truncated by Ditches 1 truncates ditches 3 and 4			
427	Red-brown silty clay ploughsoil			
428	Grey-brown silty clay fill of Pit 429			
429	Cut of irregular pit filled by 428, truncated by Ditch 5			
500	Dark brown sandy clay topsoil			
501	Mottled grey-brown natural clay			
600	Dark brown sandy clay topsoil			
601	Brown natural sandy clay			
700	Dark brown sandy clay topsoil			
701	Brown sandy silt subsoil			
702	Streaks of grey silty clay and orange clay, with degraded roots and cuts for			
	field drains			
800	Grey-brown silty clay topsoil			
801	Reddish brown silty clay mixed ploughsoil and re-deposited natural subsoil	A. bone		
802	Cut of shallow, flat-based oval pit filled by 803			
803	Dark brown silty clay fill of Pit 802	A. bone, Cu		14th c?
		alloy pin		
804	Cut shallow N-S pit filled by 805	- •		
805	Brown grey silty clay fill of Pit 804	Pot, a. bone		E-M
				14th c

Context	Description	Finds	Sample	Date*
806	Red-orange natural clay			
807	Brown silty clay fill of Pit 808 (resembles topsoil) prob. modern	A. bone		
808	Cut of flat-based sub-oval pit, filled by 807			
900	Cut of possible ditch filled by 907 and 908			
901	Cut of small pit filled by 912			
902	Ditch cut filled by 909			
903	Ditch cut filled by 920			
904	Ditch cut filled by 921			
905	Ditch cut filled by 913, truncated by 904			
906	Red-brown natural clay			
907	Reddish-brown clay, secondary fill of Ditch 900	Pot		L. med.
908	Black silty clay, charcoal inclusions, primary fill of Ditch 900	Pot and b.		L13-
		bone		E14th c
909	Reddish-brown fill of Ditch 902			
910	Brown silty clay topsoil			
911	-			
912	Brown clay fill of Ditch 901			
913	Brown silty clay fill of Ditch 905	Pot, flint		L13-
		,		L15th c.
914	-			
915	-			
916	Cut of Pit filled by 917			
917	Brown silty clay fill of pit 916	Pot		L15th c
918	Brown silty clay fill of Ditch 919	Pot		L15th-
				16th c.
919	Cut of ditch filled by 918			
920	Brown silty clay fill of Ditch 903			
921	Brown silty clay fill of Ditch 904			
922	Brown silty clay fill of Ditch 905			
923	Ditch cut filled by 924			
924	Brown silty clay fill of Ditch 923			
1000	-Unused-			
1001	Dark brown silty clay topsoil	Pot		19th c
1002	Brown silty clay ploughsoil	Pot		19th c
1003	Brown silty clay ploughsoil	Pot		19th c
1004	Dark brown sandy clay spread	Pot		P. med.
1005	Brown silty clay ploughsoil	Pot, bone		19th c
1006	Pink-red natural clay	,		
1007	N – S running field drain			
1008	Black silty clay colluvium spreading down slope			
1009	Dark brown silty clay colluvial deposit			1
1200	Dark brown sandy clay topsoil same as 500 and 600			1
1201	Dirty orange with brown-grey mottling, natural clay			

\*Suggested date/periods

# **APPENDIX 2: FINDS QUANTIFICATION**

Trench	Context	Find type	No	Wt (g)	Notes	Spotdate
4	402	pot	6	91		PRIA
	404	pot	4	78		PRIA
	406	pot	3	9		PRIA
	408	pot	2	21		PRIA
	411	pot	12	142		PRIA
		bone	2	2	calcined frags, prob animal	PRIA
	413	fired clay	3	19		PRIA
	415	pot	2	44		PRIA
	425?	pot	2	9		PRIA
8	801	bone	9	90		
	803	bone	5	43		
		CBM	1	1	small frag, no surfaces	
		Ae	1	2	pin, solid globular head	14th c.?
	805	pot	2	17		E-M.14th c.
		bone	5	25		
	807	bone	98	3641	partial skeleton	
9	907	pot	8	95		LMed
		bone	20	96		
	908	pot	9	39	MCW, abraded, some poss tile	L13-E14th c
		bone	5	29		
	913	pot	12	84		L13th-15th c
		CBM	1	8	poss field drain or ridge tile?	
		stone	1	17	poss whetstone frag, could be natural	
		Flint	1	5		Prehistoric
		bone	7	38		
	917	pot	4	17		L15th c
	918	pot	3	38		L15-16th c.
10	1001	pot	30	177		19th c.
		CBM	9	364	2 LB, 7 PAN	pmed
		glass	2	12	green bottle	pmed
		Fe	1	23	nail	pmed
		bone	1	7		pmed
	1002	pot	19	97		19th c.
		glass	1	14	green ?bottle (thin)	pmed
		bone	3	29		
	1003	pot	181	2057		19th c.
		CBM	20	612	1 RT/RBT, 2 EB, 17 PAN	pmed
		glass	40	542	green bottles etc	18th/19th c.
		bone	12	109		
	1004	pot	4	125		pmed
		bone	3	45		
	1005 pot		15	127		19th c.
	СВМ			33	1 med RT, 1 PAN	pmed
glass			1	20	green bottle	pmed
		bone	4	47		
1/2	U/S	Flint	1	6		

CBM forms: EB – early brick; RT – roof tile; RBT – Roman tile; LB – late brick; PAN – pantile. LM – large mammal

# **APPENDIX 3: POTTERY**

#### Prehistoric

Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
402	H2 Rock	2	70	1	Flat base	Hollow ware	Smoothed	PRIA-Rom	Abundant fine quartz sand w/ sparse, well-sorted angular rock frags up to
							surfaces int		8mm
							& ext		
402	H2 Rock	4	21	4	BS &	Hollow ware	Smoothed	PRIA-Rom	Abundant fine quartz sand w/ sparse, poorly-sorted angular rock frags up to
					flakes		surfaces int		7mm
							& ext		
404	H2 Rock	4	78	3	BS	Hollow ware	Smoothed	PRIA-Rom	Hard, brown sandy body w/ angular rock frags up to 4mm w/ fine quartz &
							surfaces int		occasionally larger
							& ext		
406	H2 Quartz	1	4	1	Rim	Hollow ware	Smoothed	PRIA-Rom	Abundant fine quartz sand w/ sparse larger quartz up to 4mm
							ext		
406	H2 Quartz	2	5	2	<b>BS</b> /Flakes	Hollow ware	U/Dec	PRIA-Rom	Black body w/ dull orange ext margin; sparse to moderate quartz up to
									3mm
408	H2 Rock &	2	21	2	BS	Hollow ware	U/Dec	PRIA-Rom	Black body w/ brown ext & orange int margins; abundant fine quartz sandy
	Quartz								& sparse, well sorted angular rock frags
411	H2 Rock	7	82	6	BS	Hollow ware	U/Dec	PRIA-Rom	Abraded reduced sherds w/ orange ext margin; abundant fine quartz sand
									up to 0.2mm & rock frags up to 6mm
411	H2 Rock	1	2	2	Rim	Hollow ware	U/Dec	PRIA-Rom	Hard, brown sandy body w/ angular rock frags
411	H2 type	2	1	2	Fragments	U/ID	U/Dec	PRIA-Rom	Small flakes
411	H3 Calcite	3	59	2	BS	Hollow ware	Smoothed	PRIA-Rom	Highly vesicular fabrics w/ fine rounded quartz sand up to 0.4mm &
	& Quartz						int & ext		possible sparse grog pellets
415	H2 Rock &	2	44	1	BS	Hollow ware	Smoothed	PRIA-Rom	Hard fine black body w/ oxidised ext margin w/ sparse, well sorted rock
	Quartz						int & ext		frags up to 6mm
425?	H2 Quartz	2	9	2	BS	Hollow ware	U/Dec	PRIA-Rom	Black to dull orange body w/ abundant fine quartz sand & moderate
									angular quartz grit up to 8mm

# Medieval

Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes		
805	Beverley 2C ware	2	17	1	BS	Hollow ware	Dark green glaze ext w 'raspberry' stamps	E – MC14th	See Watkins 1987; Fig. 52:37-43; Didsbury & Watkins 1992:117		
907	Beverly 2 type ware	1	3	1	BS	Hollow ware	Green glaze ext	C13th-EC14th			
907	Coarse Sandy ware	1	10	1	BS	Hollow ware	U/Dec	LC13th-EC14th			
907	Humberware	2	32	2	BS	Hollow ware	Streaks of glaze ext	LC13th - LC15th	Pitted ext; white deposit int		
907	Humberware	1	10	1	BS	Hollow ware	Patchy green glaze ext	LC13th - LC15th	?West Cowick		
907	Humberware type	1	14	1	BS	Hollow ware	ollow ware Traces of dark LC13th – glaze on pitted ext surface		Fine oxidised sandy fabric w/ abundant fine rounded quartz& non-crystalline grit		
907	U/ID Fine Sandy ware	1	4	1	Rim	?Jug	U/Dec	Late Medieval	Fine orange fabric w/ moderate to common sub-angular quartz grains & rare non- crystalline grains up to 0.2mm		
907	U/ID Sandy ware	1	21	1	Rim	Hollow ware	U/Dec	Late Medieval	Flat-topped clubbed rim; sandy fabric w/ abundant fine round quartz & dark red iron rich grains up to 0.4mm, rarely larger		
908	Coarse Sandy ware	1	1	1	Flake	U/ID	U/Dec	LC13th-EC14th	Internal surface		
908	Coarse Sandy ware type	1	4	1	BS	Hollow ware	U/Dec	LC13th – EC14th	Slightly unusual variant on Coarse Sandy ware w/ a thin oxidised margin but reduced throughout		
908	U/ID Sandy ware	1	11	1	BS	U/ID	U/Dec	Medieval	Heavily abraded sherd w/ abundant quartz w/ occasional sandstone grains up to 4mm		
908	Vesicular ware	3	9	3	BS	U/ID	U/Dec	?Medieval	A fine oxidised body w/ abundant fine vesicles & sparse to moderate fine quartz sand; finer than conventional shelly ware		
913	Beverly 2C ware	1	12	1	BS	Hollow ware	U/Dec	E-MC14th			
913	Coarse Sandy ware	4	25	4	Base & BS	Hollow ware	U/Dec	LC13th - EC14th	See Watkins 1987: 93		
913	Humberware	1	2	1	BS	Hollow ware	Green glaze ext; flaked	LC13th - LC15th	Reduced throughout w/ orange int surface		
913	Humberware	1	22	1	BS	Hollow ware	U/Dec	LC13th-LC15th	Reduced throughout		
913	Humberware	2	8	2	BS	Hollow ware	Sparse glaze ext	LC13th - LC15th			
913	Humberware	3	15	3	BS	Hollow ware	U/Dec	LC13th - LC15th			
917	Beverley type ware	2	2	2	Frags	U/ID	U/Dec	LC13th – MC14th	Small abraded fragments		
917	Humberware type	1	9	1	BS	Hollow ware	U/Dec	LC13th - LC15th	Slightly abraded sherd		

Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
917	Purple Glazed Humberware	1	5	1	BS	Hollow ware	Traces of purple glaze ext	LC15th - C16th	Hard, dense sandy Hw fabric w/ abundant fine quartz sand
918	Humberware type	2	9	2	BS	Hollow ware	U/Dec	LC13th – LC15th	Softer than typical Humberware
918	Humberware	1	28	1	Base	Hollow ware	Spots of glaze on underside	LC13th - LC15th	West Cowick type
1002	Humberware	1	14	1	Rim	Jug	Patchy green gaze ext; collared rim	LC13th – LC15th	Sandy, quartz tempered fabric
1003	?Low Countries Redware	1	3	1	Rim	Hollow ware	Partial clear to green glaze int & ext	MC14th+	A small irregular rim in a brown sandy fabric; shiny black deposit ext
1003	Humberware	2	191	1	Base & BS	Hollow ware	Patchy glaze ext	LC13th – LC15th	Holme-upon-Spalding Moor type; oxidised ext, reduced int
1003	Humberware	6	61	6	BS	Hollow ware	Green glaze ext	LC13th - LC15th	Fine reduced fabric; possibly Cowick
1003	Humberware	2	22	2	BS	Hollow ware	Green glaze & impressed decoration ext	LC13th – LC15th	Fine reduced body; ?Cowick
1003	Humberware	1	21	1	Rim	Jug	Ridged ext	LC13th – LC15th	Clubbed flat-top rim; green glaze ext; Cowick type
1003	Humberware	2	22	2	BS	Hollow ware	Patchy glaze ext	LC13th - LC15th	Oxidised throughout; Cowick
1003	Humberware	1	11	1	BS	Hollow ware	U/Dec	LC13th - LC15th	Pitted ext; Holme-upon-Spalding Moor type
1003	Humberware	1	67	1	Base	Hollow ware	Spots of glaze on underside	LC13th – LC15th	White deposit int; pitted & abraded ext surface
1003	U/ID Sandy ware	1	6	1	BS	Hollow ware	Pale green glaze ext	Medieval	Fine oxidised sandy fabric w/ abundant fine rounded quartz grains up to 0.2mm
1003	U/ID Sandy ware	1	5	1	BS	Hollow ware	Spots of green glaze ext	Medieval	A fine sandy fabric, reduced int, oxidised ext w/ a rilled profile; abundant fine sub-rounded quartz up to 0.2mm
1004	Humberware	1	29	1	BS	Hollow ware	Streak of glaze ext	LC13th - LC15th	Holme-upon-Spalding Moor type
1005	Coarse Sandy ware	1	7	1	BS	Hollow ware	U/Dec	LC13th - EC14th	Watkins 1987; 93
1005	Humberware	1	14	1	Rim	Jug	Green glaze ext	LC13th - LC15th	Fine reduced body; West Cowick
1005	Humberware	1	16	1	BS	Hollow ware	Green glaze ext	LC13th - LC15th	Fine reduced body; West Cowick type
1005	Humberware	1	3	1	BS	Hollow ware	Green glaze ext & impressed lines ext	LC13th – LC15th	Fine reduced body; West Cowick type
1005	Humberware	1	9	1	BS	Hollow ware	Spots of glaze ext	LC13th - LC15th	Fine reduced body w/ oxidised ext margin; cf West Cowick

### Post-medieval

Trench	Context	Fabric	No	Notes	Spotdate
10	1001	REFW	6		19th c.
		ESWN	20		19th c.
		PORC	1		19th c.
		GRE	1		16th-
					18th c.
		IGBW	1		16th-
					18th c.
		UNID	1		
	1002	GRE	5		16th-
					18th c.
		IGBW	3		16th-
					18th c.
		ESWN	3		19th c.
		REFW	7		19th c.
	1003	GRE	39		16th-
					18th c.
		IGBW	1		16th-
					18th c.
		ESWN	41		19th c.
		REFW	78	mostly	19th c.
				creamware &	
				pearlware	
		PORC	5		19th c.
	1004	GRE	3		pmed
	1005	GRE	8		19th c.
		LBW	1		19th c.
		ESWN	1		19th c.

# **APPENDIX 4: CATALOGUE OF IDENTIFIABLE ANIMAL BONE**

context	element	species	side	measurable	taphonomy	pres	age	notes
801	mandiblular P4	cattle	1	no		good		
	pelvis pubis	cattle	r	no		good		
	scapula	cattle	r	no		good		
803	maxilla plus molar	cattle	r	no		good		
807	tooth - incisor	cattle	r	yes		good		
	scapula	cattle	r	no	recent break	good	> 7-10 months	
	humerus	cattle	r	no		good	< 42-48 mo	
	humerus - ep	cattle	1	no		fair	< 42-48 mo	
	humerus - ep	cattle	r	no		good	< 42-48 mo	same bone as the fragment above
	radius	cattle	1	no	recent breaks	good	> 42-48 mo	
	ulna	cattle	r	no		good	< 42-48 mo	
	pelvis ndf	cattle		no		good		
	femur	cattle	r	no	recent break	good	approx 42-48 mo	
	femur - ep	cattle	r	no		fair		probably same bone as the fragment above
	femur - distal end	cattle	1	no		fair	approx 42-48 mo	
	tibia	cattle	1	no		good	approx 42-48 mo	
	tibia	cattle	1	no	sawn through	good	> 24-30 mo	
	patella	cattle		no		fair		
	astragalus	cattle			recent break	good		
	phalanx 3	cattle	lhs	yes		good		
	phalanx 3	cattle	rhs	yes		good		
907	mandibular frag, P2, frag P3	cattle	1	no		good		
	mandible and part of dp3	cattle	1	no		fair		
	tooth fragments x 2	cattle		no		good		
	astragalus	sheep/goat		no		fair		
908	femur	sheep/goat		no	burnt, white	fair	< 30-36 mo	
	tarsal/carpal	sheep/goat		no	burnt, black	good		
	carpo-metacarpus	goose		no		good		
1003	tarsal/carpal	cattle		no		good		complete
	scapula - ndf	lge mam		no		fair	fused	
	tooth - canine	horse		no		good		
	max molar	sheep/goat		no		good		
	mandibular molar	horse		yes		good		
1005	scapula	cattle	r	no		fair	> 7-10 mo	
	radius	cattle	1	no		good	>12-18 mo	

Key: ep – epiphysis; frag – Fragment; l – left; lge mam – large mammal; mo – month; ndf – non-diagnostic fragment; pres – preservation state; r – right; unf – unfused

#### **APPENDIX 5: BOTANICAL REMAINS**

# Table A5.1: Botanical Assessment from Light Fractions

Trench	Sample	Context	Context description	Sample	Cereal	Cereal	Wild	Root/	Grass	Modern	Modern	Notes
no.	no.	no.		volume (litres)	grain	culm	taxa	tuber	culm	roots	seeds	
4	5	404	Grey-brown clay single fill of putative ring-ditch 2 (405)	2.6			*			****		Wild taxa: Atriplex sp. & Brassicaceae indet.
	6	402	Grey-brown clay single fill of putative ring-ditch 1 (403)	2						****	**	
	7	408	Grey-brown clay single fill of putative ring-ditch 4 (409 and 410)	2.3						***	*	
	8	411	Grey-brown clay single fill of linear ditch 5 (412)	2.6				*		****	*	
	9	413	Yellowish-grey silty clay fill of linear ditch 7 (414)	2.6	***	*	***			****	*	Cereal: Hordeum vulgare var. vulgare. Wild taxa: Montia fontana, Chenopodium sp., Rumex sp., Persicaria sp., small Fabaceae indet., Plantago sp., Asteraceae indet., Bromussp., small grass.
9	1	908	Black silty clay, charcoal inclusions, primary fill of ditch 900	2	***		***			***		Cereal: Triticum aestivum type & cf. Hordeum sp. Wild taxa: Stellaria media, Lychnis flos-cuculi, Fallopia convulvulus, Anthems cotula, small & large Poaceae indet. & cf. Equisetum sp.
	2	908	Black silty clay, charcoal inclusions, primary fill of ditch 901	1.7			*			***		Wild taxa: Stellaria media
	3	920	Brown silty clay fill of ditch 903	1.2						**		
	4	913	Brown silty clay fill of ditch 905	1.9	*		*			**		Cereal: Triticum aestivum type
	10	918	Brown silty clay fill of ditch 919	2.8			**			***		Wild taxa: Persicaria sp. & Asteraceae inet.

# Table A5.2: Botanical Assessment from Heavy Fractions

Trench	Sample	Context	Context description	Sample	Cereal	Cereal	Charcoal	Root/	Dicot	Amorphous	Bone	Pottery	Fired	Flint	Coal	Notes
no.	no.	no.		volume	grain	culm		tuber	stem				clay	flakes		
	-	10.1	~	(litres)												~
4	5	404	Grey-brown clay single fill of putative ring-ditch 2 (405)	2.6			*							*		Charcoal: Diffuse porous (2 frags)
	6	402	Grey-brown clay single fill of putative ring-ditch 1 (403)	2			*							*		Charcoal: Ring porous (1 frag). Modern plastic.
	7	408	Grey-brown clay single fill of putative ring-ditch 4 (409 and 410)	2.3			*									Charcoal: Diffuse porous (1 frag)
	8	411	Grey-brown clay single fill of linear ditch 5 (412)	2.6			**			*	*	**				Charcoal: Diffuse porous (1 frag); possible root wood (1 frag)
	9	413	Yellowish-grey silty clay fill of linear ditch 7 (414)	2.6	*	**		*		***				*		Cereal: Avena sp.
9	1	908	Black silty clay, primary fill of ditch 900	2			**		*	***	**		*			Charcoal: <i>Quercus</i> sp. (3 frags)
	2	908	Black silty clay, charcoal inclusions, primary fill of ditch 901	1.7						*						
	3	920	Brown silty clay fill of ditch 903	1.2						*				*		
	4	913	Brown silty clay fill of ditch 905	1.9						*						
	10	918	Brown silty clay fill of ditch 919	2.8										**	****	

**Plates 1 – 10** 







Plate 3: Coastal Pillbox from Trench 7 Looking Southeast



Plate 4: Location of Trenches 1 and 2 (pre-excavation)



Plate 5: Church of All Saints, Tunstall from Trench 10 Looking North



Plate 6: Coastal Pillbox on the Edge of Sand-le-Mere Caravan Park



Plate 7: Coastal Erosion, Sand-le-Mere, Looking North



Plate 8: Trench 1, Looking Northeast



Plate 9: Trench 2, Looking Northwest



Plate 10: Plough soil Looking East

# Figures 1 – 3











Trench 9

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