

group nps archaeology

2015/1089

Land at Jaguar Road/Queens Road, Hethersett, Norfolk, NR9 3DA

Archaeological Evaluation

Prepared for: Blubird Land and Planning

Planning Ref: Pre-application

HER: ENF134376

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Client:	Blubird Land and Planning
Location:	Jaguar Road/Queens Road, Hethersett, Norfolk
District:	South Norfolk
Grid Ref.:	TG 615452 305152
Planning Ref.:	Pre-planning
HER No.:	ENF134376
OASIS Ref.:	norfolka1-182956
Dates of Fieldwork:	22 May–3 June 2014

Summary

An archaeological evaluation by trial trenching was conducted by NPS Archaeology for Blubird Land and Planning Ltd ahead of proposed residential development at land south of Jaguar Road/north of Queens Road, Hethersett, Norfolk.

Three of the fifteen trenches, positioned close together in the south of the site, contained archaeological features. A large ditch with a possible bank may form the north arm of a moat that is postulated to lay a short distance to the south. The ditch was accompanied by a pair of contemporary masonry walls on its south (interior?) side, which were robbed out or otherwise destroyed. A number of smaller ditch features to the north of the large ditch followed its east–west alignment, and a possible pond feature was also identified.

Dating evidence recovered from the possible moat suggests that the feature was open throughout the medieval period: pottery spot dates from recovered material spans the 11–14th centuries to the late post-medieval period. Extant earthworks and historical cartographic evidence indicate the presence of a second possible moat or water feature directly to the north of the moated area, and present within the proposed development site.

INTRODUCTION

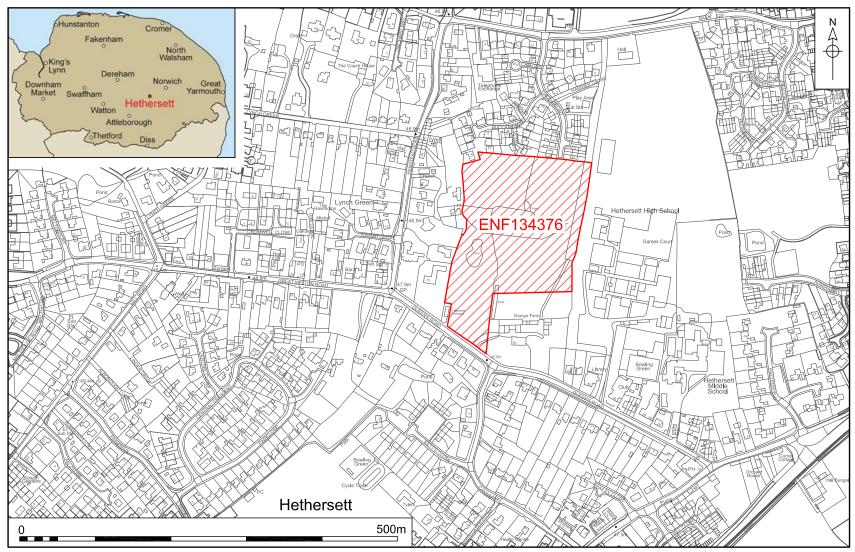
Figure 1

Project Background

- 1 NPS Archaeology was commissioned and funded by Blubird Land and Planning to conduct an archaeological evaluation of land south of Jaguar Road/north of Queens Road, Hethersett, Norfolk.
- 2 The development site comprised an area of *c*. 29,530m². Fifteen evaluation trenches were excavated in order to test a *c*. 4% sample of the proposed development. The trenches were positioned to cover areas where below-ground disturbance by the development might affect any archaeological features or deposits. Trench location was also guided to avoid areas of woodland and ponds at the centre of the site.
- **3** The site had not been subject to previous archaeological investigation or deskbased study, although records of a water feature at the site—interpreted as a possible medieval or later moat—are held by Norfolk Historic Environment Record.

Planning Background

- 4 The current work was undertaken pre-planning to fulfil requirements of a *Generic Brief for Archaeological Evaluation by Trial Trenching* issued by Norfolk County Council Historic Environment Service (ref: NCC Historic Environment Service 24/09/2012). The work was conducted in accordance with a Written Scheme of Investigation prepared by NPS Archaeology (ref: 01-04-15-2-1089).
- 5 The programme of work was designed to assist in defining the character and extent of any archaeological remains within the proposed development area, following principles in *National Planning Policy Framework* (Department for Communities and Local Government 2012).
- 6 The results of the evaluation will enable decisions to be made by the Local Planning Authority about the future treatment of any archaeological remains found.
- 7 The recipients of this report will be Blubird Land and Planning, Norfolk County Council Historic Environment Service and South Norfolk District Council.



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Figure 1. Site location. Scale 1:5000

GEOLOGY AND TOPOGRAPHY

Geology

- **9** The underlying bedrock in the area of the evaluation site is chalk (Lewes Nodular, Seaford, Newhaven, Culver and Portsdown Chalk Formations) dating from the Turonian Age to the Campanian Age (British Geological Survey 2014).
- 10 The bedrock is overlain by superficial deposits of Lowestoft Formation deposits: an extensive sheet of chalky till, together with outwash sands and gravels, silts and clays laid down during the Anglian Age. The till is characterised by its chalk and flint content (British Geological Survey 2014).
- 11 Subsoil at the site, overlying the natural geology, consisted of mid-grey clay-silt (occasionally sandy) with frequent small–large flints that ranged in size across the site from 0.10m to 0.30m.
- **12** The topsoil covering the site was dark brown–black, cultivated silty loam with occasional small stones that ranged in size from 0.20m to 0.30m.

Topography

- **13** The evaluation site is located centrally in the north part of Hethersett, a large village to the southwest of Norwich in Norfolk.
- 14 The site is surrounded to the west and north by recent residential development. To the south it is bordered in part by Queens Road and by Grange Farm, the latter now a series of barn conversions and converted 19th-century farmhouse. The site is bounded by Hethersett High School to the east.
- 15 A track running between the High School and the evaluation site has ditches to either side and is overshadowed along its length by ancient oaks. The track formerly provided access to what is now the rear of Grange Farm and it is likely to date from at least the post-medieval period, but may possibly be significantly earlier in origin.
- 16 At the time of the evaluation the site was largely under grass pasture around its edges with an area of woodland at its centre, this woodland extending to the western boundary. The site was relatively level, and very damp and poorly draining in places, perhaps due to underlying clays. Several ponds were present, some of which, along with the woodland, can be seen on early maps.
- 17 There were a number of low earthworks and some evidence of demolished buildings in the southeast corner of the site. These areas were entirely overgrown, but would once have formed part of the rear of Grange Farm.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Sources

- 18 The primary source for archaeological evidence in the county of Norfolk is the Norfolk County Council Historic Environment Record (NHER), which details archaeological discoveries and sites of historical interest. In order to characterise the likely archaeological potential of the land off Jaguar Road–Queens Road, Hethersett, record data was purchased from Norfolk County Council Historic Environment Service for a 1km radius of TG 1545 0512. This exercise returned 85 individual records, including spot finds and buildings, containing evidence of historical activity spanning the prehistoric–modern periods.
- **19** A reference table listing dates for historical periods described in this report is provided in Appendix 6.

HER data

20 The HER data that are most relevant to the current work are referenced and summarised below, along with details of previous archaeological work in the vicinity. The information presented that is sourced from Norfolk Historic Environment Record remains copyright of Norfolk County Council Historic Environment Service.

Prehistoric

21 There is a low-medium background scatter of prehistoric activity across the 1km search radius centred on the current archaeological evaluation. Undifferentiated prehistoric worked flint is found as stray or isolated finds in almost all archaeological interventions. For example, 98 worked flints were found by field-walking to the west of the evaluation site (NHER 32865). Extensive field-walking and some trial trenching to the north of Hethersett has revealed a greater concentration of later prehistoric worked flint and some pottery sherds (Neolithic–Early Bronze Age) in fields *c*. 600–800m to the north, northeast and northwest of the evaluation site (NHER 58836, NHER 58840, NHER 58841, NHER 58842, NHER 58843 and NHER 58844). The number of worked flints found at these locations hints at possible prehistoric settlement in the area. The focus of prehistoric activity appears to be to the northeast (NHER 58844), where a dense concentration of worked flints was recorded, but features of this date have not been excavated.

Palaeolithic

22 Few Palaeolithic worked flints have been identified in the vicinity of Jaguar Road, the only example to date being a single probable Palaeolithic flint blade from *c*. 750m to the northwest (NHER 23826).

Mesolithic

23 Artefacts of Mesolithic date are rare and are represented by a single find, a blade found 800m to the northeast of the evaluation site (NHER 58843).

Neolithic

24 Scarce flint and pottery finds of earlier Neolithic date to the south, east and west of the evaluation site indicate a low level of activity during this period. There are a few significant isolated finds of Neolithic date, namely a polished stone axe head from a garden at Bailey Close *c*. 800m to the southeast of the evaluation (NHER 58843),

and a second, broken polished axe (NHER 58843) found in association with eight other worked flints in a tree-throw hollow by an excavation at Myrtle Road 600m to the northwest of the evaluation site (NHER 37645).

- 25 Two Neolithic flaked flint axe heads and two scrapers were found at separate locations in fields to the northwest of the current site. One of the axe heads (NHER 36177) was found within 100m of a small flint scatter (NHER 13213), and the other (NHER 60003) within 400m of NHER 36177. The two Neolithic flint scrapers (NHER 36178) were located 100m north of flint scatter NHER 13213.
- 26 The principal areas of later Neolithic–Early Bronze Age activity nearby lie to the north and northeast of the evaluation site, where worked flint with Neolithic–Early Bronze Age affinities was identified at site NHER 58844 (1km to the northeast) and at a second site 800m to the north (NHER 58836).

Bronze Age

27 The concentration of later prehistoric evidence 600–1000m north and northeast of the current site includes Early Bronze Age components, and a few examples of later Bronze Age artefacts have also been identified (e.g. at Myrtle Road, NHER 37645). No unequivocally Bronze Age pottery has been identified: the few sherds which have been assigned to the Bronze Age or possible Middle Iron Age derive from fieldwalking to the north and northeast of Hethersett, e.g. NHER 58844.

Iron Age

- 28 The Iron Age is poorly represented in the archaeological record of the area. A few sherds of pottery, described as either Bronze Age or Iron Age were found in each of the field-walked areas to the north of the village. Pottery of more certain Iron Age date was found by metal-detecting surveys 400m the northeast of the current evaluation (NHER 58844), and from the Hethersett memorial garden 300m to the southwest (NHER 9423). Other finds include a single Late Iron Age–Early Roman terret from west of White House Farm, *c*. 500m to the northeast (NHER 9382).
- **29** The most significant Iron Age finds in the area were 60 sherds of pottery recovered from a pit during archaeological trial trenching in fields with high concentrations of Late Neolithic–Early Bronze Age worked flint 1km to the northeast (NHER 58844).

Roman

- 30 Hethersett has a relatively rich Roman heritage. The main areas of Roman activity are centred 600m northwest of the evaluation site at Myrtle Road (NHER 37645), in adjacent fields (NHER 16870, NHER 21568 and NHER 20471), and in fields further to the northwest (NHER 9270). The latter site has been extensively metal-detected and field-walked over more than 40 years and has generated evidence for Roman occupation. A Roman or prehistoric enclosure has been noted on aerial photographs at NHER 9270 and a C-shaped structure has been recorded by a geophysical survey. This evidence, together with Roman building material, 2nd–3rd-century AD pottery, and many metal artefacts suggests it is the site of a villa with other possible buildings from the same period. A small lead coffin of Roman date was also found at the site.
- 31 A second potential Roman villa site is suggested in an adjacent field, where fieldwalking and metal-detecting found a concentration of building material, 3rd–4th-

century AD pottery (including locally made Samian wares), a copper-alloy statuette and 4th-century AD coins (NHER 16870).

- 32 Myrtle Road, c. 600m to the northwest of the evaluation site, has been the subject of several archaeological interventions including an excavation (NHER 37645). These investigations produced a great number of artefacts and revealed a large enclosure ditch that partially enclosed an Early Roman farmstead. Later Roman evidence included a well-preserved grain dryer (Shelley and Green 2007).
- 33 Seven 3rd–4th-century AD coins (NHER 23826, NHER 20471 and NHER 23692) and a fragment of a Roman glass vessel (NHER 21568) were found within 200m of the Myrtle Road excavation.
- 34 To a lesser extent, Roman activity extended to the northeast of modern Hethersett, where Roman brooches and pottery have been found in association with a concentration of Early Anglo-Saxon finds (NHER 21862).
- **35** Roman-period finds have been recovered from other, disparate places in the locality. These include pottery, a 2nd-century AD coin, and a weight from a steelyard balance from 300m to the north of Jaguar Road. A 3rd-century AD coin was found to the south of the current site in the garden of Westcroft in association with flints that are potentially part of a Roman road (NHER 9466).
- 36 Virtually no Roman artefacts were found by field-walking of fields to the north and east of the village, suggesting the focus of activity at this time was to the northwest and, in part, within the modern village.

Anglo-Saxon

- **37** The Anglo-Saxon period is relatively poorly represented in Hethersett, although there is apparent continuity of occupation at the Roman farmstead on Myrtle Road into the Early Anglo-Saxon period. Elsewhere, with the exception of a possible ploughed-out Early Anglo-Saxon cemetery (NHER 21862), the only artefacts dating to the Anglo-Saxon period are isolated finds. These include two Late Anglo-Saxon brooches, one from a garden in Park Close 400m to the southwest of the current evaluation (NHER 9468), and another 500m to the northeast that was designed as an imitation Roman coin (NHER 9382).
- 38 A large number of metal-detected Early Anglo-Saxon artefacts have been recovered from a field 500m to the northeast of the present evaluation (NHER 21862). The concentration of metal finds suggests the likely presence of an inhumation cemetery, but no features of this date were found during subsequent trial trenching, implying that if this was the site of a cemetery it had been ploughed out.

Medieval

- **39** Despite medieval artefacts, both ceramics and metalwork, being found in the wider area of the village, only a small area of medieval Hethersett remains. HER evidence suggests the focus of the medieval village lay to and beyond the southeast limits of modern Hethersett, although Grange Farm buildings and other dwellings were loosely clustered at some distance around this centre.
- 40 The medieval church of St Remigius lies almost in isolation on the southeast edge of present-day Hethersett, 600m to the southeast of the evaluation site (NHER 9470). The church mostly dates to the 14th century with post-medieval and modern re-building and additions. A Venetian coin was found in the churchyard.

- 41 Aerial photographs reveal earthworks suggesting medieval or post-medieval land divisions and building platforms to the southwest of St Remigius and east of Shop Lane (NHER 54390).
- 42 Other medieval structures and features found close to the church include a section of a medieval hollow way (NHER 14202). The hollow way is the route of the former Norwich Road and is marked as a track on the First Edition Ordinance Survey map. Mockbeggar Hall (now-demolished) lay 200–300m to the east of the church and is of potential medieval or post-medieval date (NHER 12486). Although the building is not closely dated, 16th-century brick, tile and pottery have been found at the site.
- **43** The wider extent of the medieval settlement includes a 16th–17th-century timberframed house, Myrtle House on Wiffen's Loke, which is thought to be developed from a medieval open hall house (NHER 21898). Sherds of medieval pottery have been recovered from the site. The house is located over 1km to the northwest of the church and *c*. 500m northwest from present evaluation site.
- Field-walking and metal-detecting in fields surrounding Hethersett has generated a collection of medieval metalwork and some pottery. The field 1km to the northwest of Jaguar Road where Roman villa buildings were identified (NHER 9270) has also produced numerous medieval artefacts including pottery, coins, tokens, jettons, buckles, strap ends, a scabbard, cauldron fragments, and, significantly a papal bulla. The papal bulla is an exceptional find and would typically be associated with important ecclesiastical sites such as Norwich Cathedral or perhaps one of the city's monastic houses. It was likely to have been imported from Norwich–as were many of the medieval artefacts found both at NHER 9270 and in the surrounding fields (e.g. NHER 58844)—in night soil and ditch clearance, which was used to manure fields.
- Immediately to the south of, and partly within the evaluation site there is a possible medieval or post-medieval moat (NHER 52609). It is located north of Grange Farm and is shown on historic maps as an elongated pond 45m long along the west boundary of a sub-rectangular field. Perhaps significantly, the name Grange Farm is usually given to a farm belonging to and producing food for a monastic house. Granges were particularly important to urban-based monasteries and in this case the monastery was most likely in Norwich. The presence of a grange farm may account for the manuring of local fields with waste from Norwich. The historical size of Grange Farm is not known, but it may have been extensive and modified the surrounding landscape to its requirements. It is considered likely that the site currently under investigation would been part of the same farm.

Post-medieval

46 Hethersett has many post-medieval dwellings, only a few of which are described here. Some are farmhouses, which are more widely dispersed, but others cluster along the roads, or around Lynch Green. Lynch Green lies immediately to the west of the evaluation site. In the early post-medieval period houses were increasingly built on the margins of common land, and in Hethersett this occurred around the common at Lynch Green, and by the 18th century, enclosure of Lynch Green allowed it to be fully built over. Some of the 16th–17th-century houses built close to the edge of Lynch Green are still standing. For example, Apple Cottage and Sunnyside on Henstead Road, is a part timber-framed building with a probably 16thcentury origin, on the west boundary of the evaluation site (NHER 21897). Other timber-framed buildings close to Lynch Green are Myrtle House on Wiffen's Loke, which probably originated as a medieval open hall building that was altered in the 16th and 17th centuries (NHER 21898), and the 16th-century Thatched Cottage (NHER 43217).

- 47 The position of Hethersett on the main road from Norwich–London encouraged its development, and other important buildings of post-medieval date include Beech Cottage on Queens Road, a 16th-century house with later additions *c*. 300m to the southeast of the evaluation site (NHER 40020), and the late 16th- and early 17th-century Manor House and Manor House Cottage on Canns Road 200m south of the site (NHER 14203). Other important houses are built on Norwich Road, including three halls may have earlier origins. Old Hall is a late 18th-century red brick hall, now used as a school, but likely to have an older core (NHER 9467). Wood Hall is a 17th-century brick house built around an older core (NHER 9512). Aerial photography reveals gardens probably laid out in the grounds of Wood Hall (NHER 54610). Hethersett Hall possesses a 19th-century Italianate carved well-head (NHER 14201) and associated ornamental gardens (NHER 5460) and parkland.
- 48 The name of a 16th-century house on Norwich Road, the Priory may reveal some connection with a religious house either locally or at distance (NHER 14204).
- Fine farmhouses of post-medieval date built on newly acquired land (potentially former monastic farmland) include Cedar Grange, an early 17th-century brick house on the west side of Lynch Green 600m to the west of the evaluation site (HNER12484), and Whitehouse Farm, a 17th-century house with later additions *c*. 600m to the east of the site on the edge of the modern village (NHER 11614). Field-walking of many of the fields bounding the north side of Hethersett contain a range of post-medieval finds, including sherds of high status 17th–19th-century pottery, which indicate manuring of the fields with night soil (NHER 58836, NHER 58837, NHER 58840 and NHER 58841). The source of the night soil is probably Norwich, or perhaps local inns.
- 50 Hethersett continued to expand in the Victorian period and spaces infilled with housing. The village had two windmills and three smithies. One of the blacksmiths had expanded into a foundry, now known as Hethersett Old Foundry, by the mid-19th century (NHER 55351).

Modern

- **51** A railway line was built through Hethersett in 1846 as part of the Norwich and Brandon Railway, and closed in 1966. In part because of the presence of the railway, Hethersett expanded further in the 20th century.
- 52 Structures and features from the Second World War include an air-raid shelter in the grounds of Hethersett Old Hall (NHER 9467) and a possible World War Two bomb crater in a field 700m to the northeast of the evaluation site (NHER 54389).
- **53** The location of Hethersett on the southern margins of Norwich close to the A11 Norwich–London trunk road has led to proposed further expansion of the village, particularly on its northwest, north and northeast sides. In anticipation of this development, archaeological interventions have been made in most of the fields where development is planned.

Previous archaeological investigations

- 54 Previous archaeological investigations of the evaluation site are limited to NHER entries for an extant 45m-long narrow water feature (NHER 52609). The feature is marked clearly on the 1846 Hethersett tithe map and the Ordnance Survey map of 1887–91, and has been interpreted as a possible medieval or post-medieval moat. Five evaluation trenches (8–12) were located in this area.
- **55** Grange Farm lies immediately to the south of the evaluation site. The extant farm buildings are of 19th-century date, but the name suggests an earlier origin as a medieval farm belonging to one of the monastic houses, probably in Norwich. Fish ponds are an important part of medieval manorial and in particular monastic sites, therefore the presence of a grange farm hints that the ponds and water-filled elongate features (NHER 52609) in the evaluation site may be fish ponds belonging to the grange.

METHODOLOGY

Figure 2

General

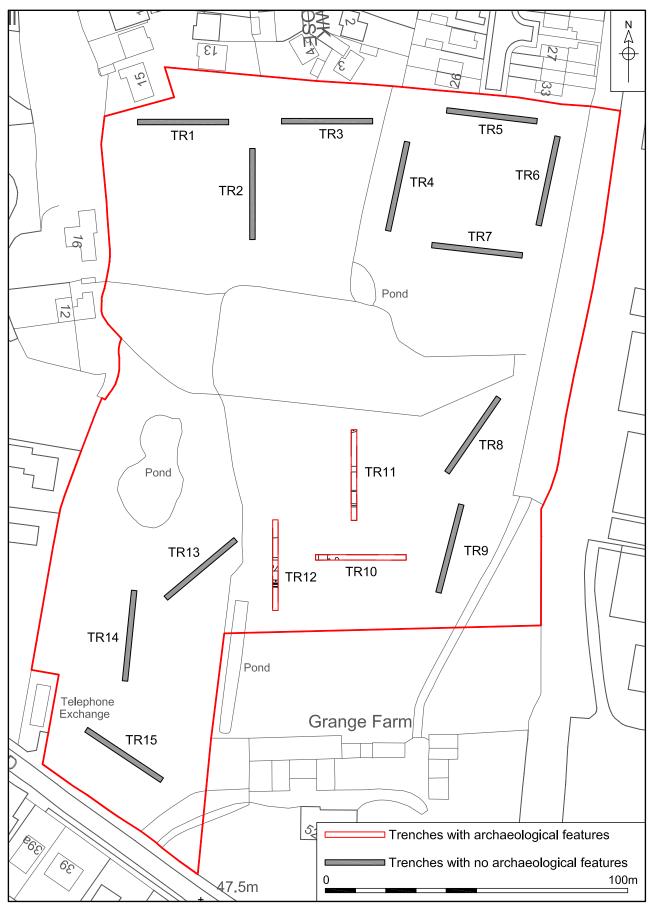
- 56 Methodology for the evaluation followed the agreed Written Scheme of Investigation (01-04-15-2-1089), where the mitigation strategy for the works is presented in full (Appendix 8).
- 57 Archaeological procedures conformed to guidelines issued by the Institute for Archaeologists (IfA 2008) and the evaluation was conducted within the context of the relevant regional archaeological framework (Medlycott 2011).

Objectives

- 58 The objective of the evaluation was to determine as far as reasonably possible the presence or absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.
- **59** The archaeological project aimed to provide appropriate and adequate data to permit informed decisions regarding any requirement for future archaeological mitigation work on the land at Jaguar Road/Queens Road, Hethersett, and to make the results of the work accessible.

Methods

- **60** The NHES Brief required that 4% of the proposed development was sample excavated by trial trenching. Fifteen trenches were situated according to the agreed plan contained in the Written Scheme of Investigation (01-04-16-2-1192), with some modification to negotiate trees and ponds. Trial trenches were located in relation to the Ordnance Survey National Grid.
- 61 Prior to mechanical excavation, each trench location was scanned with a CAT to check for buried services. The areas to be stripped of topsoil were examined for surface features and for archaeological artefacts prior to any excavation.
- 62 Machine excavation was carried out by a tracked JCB-type hydraulic 360° excavator equipped with a toothless ditching bucket. All mechanical excavation was constantly and directly monitored by a suitably experienced archaeologist. Machining was halted at the first identifiable archaeological deposits or natural geology.
- 63 All trench surfaces revealed by machine were hand-cleaned and any archaeological deposits were excavated by hand. Upon completion of the work all trenches were backfilled by machine.
- 64 Spoil, exposed surfaces and features were scanned with a metal-detector. All metaldetected and hand-collected finds other than those that were evidently modern were retained for inspection. All retained finds were identified by context number to a specific deposit and were processed and recorded in line with relevant guidelines for archaeological finds (IfA 2001).
- 65 All archaeological features and deposits were recorded using NPS Archaeology pro forma. Trench locations, plans and sections were recorded at appropriate scales. Black-and-white 35mm negatives and digital photographs were taken of all relevant deposits where appropriate.



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Figure 2. Location of trenches. Scale 1:1250

- 66 The temporary benchmark used during the course of the evaluation work was established by use of a Leica GPS9000 surveying station. Malfunction of the equipment caused a small number of spot heights at the south end of the site to not be captured.
- 67 Site conditions were poor, with the work taking place in mostly wet weather, which caused flooding of the trenches and excavated features.
- 68 All site work was undertaken with respect to Health and Safety provision. Hard hats, high-visibility vests and steel toe-capped boots were worn by all staff at all times.

Archive

- 69 The site archive is currently held at the offices of NPS Archaeology. Upon completion of the project, the documentary archive will be prepared and indexed following guidelines obtained from the relevant Museum and relevant national guidelines (IfA 2009). The archive, consisting of all paper elements created during recording of the archaeological site, including digital material, will be deposited with Norfolk Museums Service.
- **70** A summary form of the results of this project has been completed for Online AccesS to the Index of archaeological investigationS (OASIS) under the reference norfolka1-182956 (Appendix 7), and this report will be uploaded to the OASIS database.

RESULTS

Trench 1



1			
Figure 2			
Location			
Orientation	East-west		
East end	615406 305219		
West end	615433 305221		
Dimensions			
Length	30.00m		
Width	1.80m		
Depth	0.40m		
Levels			
East top	45.37m OD		
West top	45.34m OD		

Discussion

No archaeological features or deposits were present in Trench 1, and no archaeological finds were recovered.

	Figure 2		
	Location		
	Orientation	North-south	
	North end	615436 305216	
	South end	615435 305186	
	Dimensions		
	Length	30.00m	
	Width	1.80m	
	Depth	0.50m	
	Levels		
	North top	45.41m OD	
	South top	45.96m OD	
Discussion			

No archaeological features or deposits were present in Trench 2, and no archaeological finds were recovered.

	T	
	Figure 2	
	Location	
	Orientation	East-west
	Northeast end	615463 305220
	Southwest end	615438 305222
	Dimensions	
	Length	30.00m
	Width	1.80m
A Real Contraction of the second	Depth	0.50m
	Levels	
	East top	45.52m OD
	West top	45.35m OD
Discussion		

No archaeological features or deposits were present in Trench 3, and no archaeological finds were recovered.

	Figure 2			
	Location			
and the second second second	Orientation	North-south		
and the second	North end	615493 305215		
	South end	615490 305187		
	Dimensions			
	Length	30.00m		
	Width	1.80m		
	Depth	0.50m		
	Levels			
	North top	45.72m OD		
A PROVIDENCE				
	South top	46.22m OD		
Discussion	1			

No archaeological features or deposits were present in Trench 4, and no archaeological finds were recovered.



Figure 2				
Location				
Orientation	East-west			
East end	615505 305218			
West end	615534 305214			
Dimensions				
Length	30.00m			
Width	1.80m			
Depth	0.50m			
Levels				
East top	45.71m OD			
West top	45.94m OD			

Discussion

No archaeological features or deposits were present in Trench 5, and no archaeological finds were recovered.



Figure 2				
Location				
Orientation	North-south			
North end	615535 305201			
South end	615530 305173			
Dimensions				
Length	30.00m			
Width	1.80m			
Depth	0.50m			
Levels				
North top	46.04m OD			
South top	46.44m OD			

Discussion

No archaeological features or deposits were present in Trench 6, and no archaeological finds were recovered.

31	
A A	

Figure 2				
East-west				
615526 305163				
615496 305163				
30.00m				
1.80m				
0.50m				
Levels				
46.53m OD				
46.62m OD				

Discussion

No archaeological features or deposits were present in Trench 7, and no archaeological finds were recovered.

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Figure 2			
Location			
Orientation	Northeast-southwest		
Northeast end	615516 305128		
Southwest end	615499 305103		
Dimensions			
Length	30.00m		
Width	1.80m		
Depth	0.40m		
Levels			
Northeast top	46.62m OD		
Southwest top	47.09m OD		

Discussion

No archaeological features or deposits were present in Trench 8, and no archaeological finds were recovered.

Trench 9				
	Figure 2	Figure 2		
	Location			
	Orientation	Northeast-southwest		
	Northeast end	615511 305100		
	Southwest end	615498 305073		
	Dimensions			
No photograph	Length	30.00m		
	Width	1.80m		
	Depth	0.50m		
	Levels			
	Northeast top	47.11m OD		
	Southwest top	47.22m OD		
Discussion	1			

No archaeological features or deposits were present in Trench 9, and no archaeological finds were recovered.

Trench	10				
			Figures 2, 3; Plates 1, 2		
			Location		
			Orientation	East-west	
No photograph		East end	615491 305080		
		West end	615461 305083	3	
		Dimensions	1		
		Length	30.00m		
		Width	1.80m		
		Depth	0.60m		
		Levels			
			East top	47.11m OD	
			West top	47.44m OD	
Context	Туре	Description and Interpretation		Thickness	Depth BGL
01	Cut	Oval shaped pit running north- south, of which only the south end was visible		0.12m	0.60–0.72m
02	Deposit	Single fill of pit	[01]	0.12m	0.60–0.72m
03	Cut	North–south ditch running across the width of the trench		0.09m	0.60–0.69m
04	Deposit	Single fill of ditch [03]		0.99m	0.60–0.69m
31	Cut	Post-hole adjacent to ditch [03]		0.55m	0.60–1.15m
32	Deposit	Single fill of post-hole [31]		0.55m	0.60–1.15m
Disquasi		I		I	I

Discussion

Evaluation Trench 10 contained three archaeological features: ditch [03], post-hole [31] and pit [01]. All of the features were sealed by subsoil [34], a distinct deposit of mid-grey brown claysilt with frequent small–large flints, which was up to 0.50m thick.

North–south ditch [03] was a substantial feature at the west end of Trench 10. Measuring 3.00m wide x 1.00m deep the ditch had moderately sloping sides and a flat base. It was filled by midyellow grey clay-sand [04], which contained occasional small–large flints and produced nine sherds of 11th–14th century pottery.

Small post-hole [31] lay adjacent to ditch [03] on it east side. The feature was approximately circular with a diameter of c. 0.50m. It measured only 0.10m deep and contained a single grey sandy fill [32], but did not produce any finds.

Pit [01] was situated 2.50m east of ditch [03] and was partially revealed in the trench. Its visible dimensions were $1.30m \times 1.00m \times 0.15m$. The pit has very gently sloping sides down to a broad flat base. It was filled by mid-grey sandy clay [02], which produced six sherds of 11th-14th century pottery. Its shallow depth may indicate that it had been truncated.

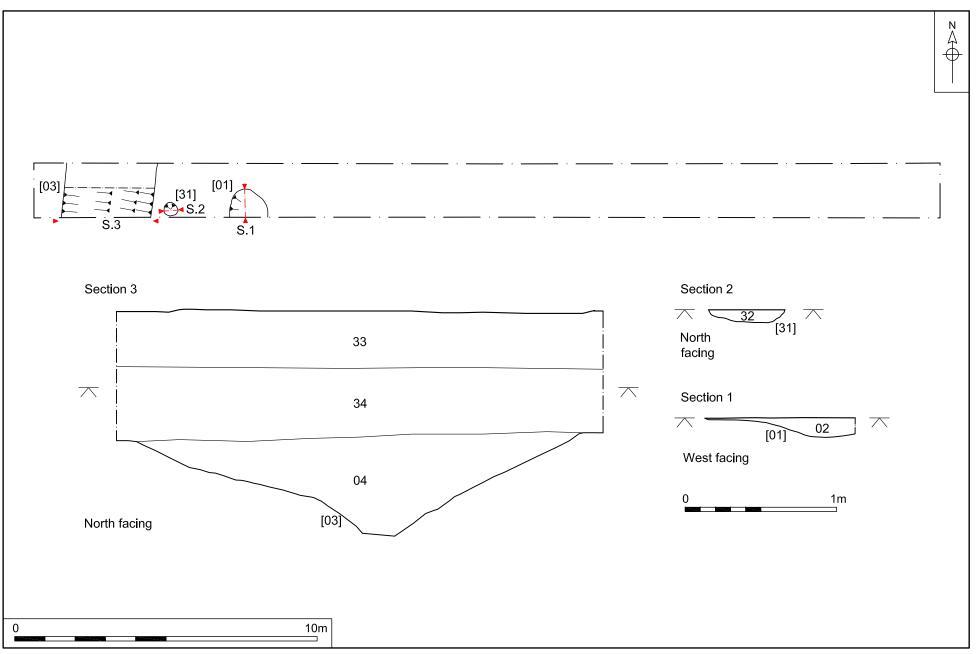




Plate 1. Trench 10, ditch [03], looking south



Plate 2. Trench 10, pit [01], looking east



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Trench 11					
			Figures 2, 4; Plate 3		
			Location		
			Orientation	North-south	
			North end	615478 305119	
			South end	615476 305089	9
	Noshotowa	ь.	Dimensions		
No photograph		Length	30.00m	30.00m	
		Width	1.80m		
			Depth	0.50m north; 1.00m south	
			Levels		
			North top	46.55m OD	
			South top	47.07m OD	
Context	Туре	-	d Interpretation	Thickness	Depth BGL
05	Cut	Large east-west ditch. This was not excavated beyond machined depth due to both safe working depth and the feature remaining full of water		>0.69m	0.51–>1.2m
06	Deposit	Deposits within ditch [06]		>0.69m	0.51– >1.2m
07	Cut	Narrow east-west ditch crossing the width of the trench		0.20m	0.35–0.55m
08	Deposit	Single fill of ditch [07]		0.20m	0.35–0.55m
09	Cut	Very narrow and shallow east- west ditch running across the width of the trench		0.09m	0.40–0.49m
10	Deposit	Single fill of ditch [09]		0.09m	0.40–0.49m
11	Cut	East–west ditch running across the width of the trench		0.27m	0.45–0.72m
12	Deposit	Single fill of dito	ch [11]	0.27m	0.45–0.72m
13	Cut	East-west ditch running across the entire width of the evaluation trench. The full width of this feature could not be ascertained as the north side of the feature continued outside the trench		0.20m	0.50–0.70m
14	Deposit	Single fill of ditch [13]		0.20m	0.50–0.70m
15	Cut	Post-hole in the base of ditch [13]		0.25	0.70–0.95m
16	Deposit	Single fill of post-hole [15]		0.25	0.70–0.95m
Discussion					

Evaluation Trench 11 contained five east–west ditches [05], [07], [09], [11], [13] and a feature identified as a post-hole in the base of ditch [13]. All of the ditches were recorded beneath the subsoil [34].

Ditch [05] was situated at the south end of Trench 11 and its visible part measured 4.50m across. Excavation of the feature was begun but not completed due to safety reasons. However, it could be seen that it potentially had several clayey fills (recorded as [06]) and along its south side a line of flint and lime mortar was noted, similar to a feature recorded in Trench 12 along the south edge of ditch [23]. It is possible that [05] represents a moat ditch.

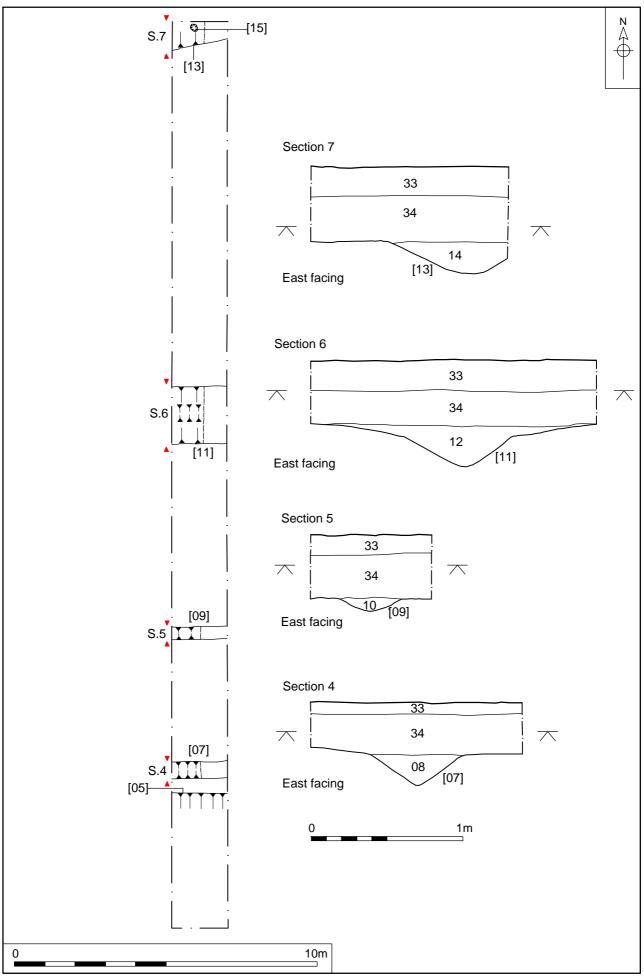
A comparatively narrow ditch [07], 0.60m wide, ran very close and parallel to the north edge of ditch [05]. It was 0.20m deep with seep sides and a pointed base. The ditch contained grey sandy clay [08], which produced a single sherd of 11th–12th-century pottery. A second, slightly narrower ditch [09] ran parallel to [07], 4.00m to the north. It was more rounded in profile but contained a similar fill [10]. The two features may possibly represent small ditches either side of a track, though the evidence for this is otherwise scant.

A broad ditch [11] was located in the approximate centre of Trench 11. Measuring at least 2.00m wide, it was less than 0.30m deep with moderately sloping sides to a concave base. The ditch contained mid-brown sandy clay [12], which produced a small assemblage of finds consisting of Roman building materials and medieval pottery dating from the 11th–14th century. Given the proximity of the evaluation site to known substantial Roman building remains, it is possible that the Roman material was transported here and represents re-use of ancient material in later activity at the site.



Plate 3. Trench 11, ditch [11], looking west

The south edge of ditch [13] was identified at the north end of Trench 11, its full width continuing to the north. Its visible dimensions were 0.80m wide x 0.20m deep. It contained grey-brown sandy clay [14] with small–large flints. Pottery of 11th–14th-century date was recovered from the ditch fill, along with 15th–16th-century sherds from the upper part of the ditch. The base of a sub-circular post-hole [15] apparently driven down into the base of ditch [13] may be of more recent date, as it contained 17th–19th-century and modern brick fragments, concrete fragments and pieces of modern glass.



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Figure 4. Trench 11, plan and sections. Scale 1:125 and 1:25

Trench 12						
			Figures 2, 5; Pla	ates 4, 5, 6, 7		
			Location			
			Orientation	North-south		
			North end	615452 305108	3	
			South end	615454 305078	3	
	No photograp	h	Dimensions	Dimensions		
	No photograp	on	Length	30.00m		
			Width	1.80m		
			Depth	0.50m		
			Levels			
			North top	46.66m OD		
			South top	47.40m OD		
Context	Туре	•	nd Interpretation	Thickness	Depth BGL	
17	Cut	Cut for robbed-	out wall	0.50m	0.40–0.90m	
18	Deposit	Single fill for rol	bbed-out wall	0.50m	0.40–0.50m	
19	Masonry	Remaining wall brick	base formed of	0.20m	0.77–0.97m	
20	Deposit	Fill between inner and outer walls [19], [39]		0.34m	0.83–1.17m	
21	Cut	Cut of robbed-out wall		0.06m	0.86–0.92m	
22	Deposit	Fill of robbed-out wall		0.06m	0.86–0.92m	
23	Cut	Large east-west ditch		1.20m	0.10–1.20m	
24	Deposit	Fill of ditch [23]. This may represent material from bank [35] that may have been pushed in		0.98m	0.10–1.08m	
26	Deposit		Part of a fill of ditch [23]; also formed a layer over wall [19], [39]		0.60–1.20m	
27	Cut	East–west ditch running across the width of the trench		0.10m	0.89–0.99m	
28	Deposit	Single fill of dito	Single fill of ditch [27]		0.89–0.99m	
29	Cut	Post-hole between wall [39] and ditch [23]		0.32m	1.00–1.32m	
30	Deposit	Fill of post-hole [29]		0.32m	1.00–1.32m	
35	Cut	Bank seen in the edge of the trench		0.48m	0.34–0.82m	
38	Cut	Large east-west ditch or possible pond edge		>0.00m	1.05– >1.05m	
39	Masonry	Base of wall for	med of flints	0.10m	0.86–0.96m	

Trenc	Trench 12					
40	Deposit	Main upper fill of ditch [23]	0.76m	0.44–1.20m		
41	Deposit	Layer lies partly in ditch [23]; also extends over the top of the wall [19], [39]	0.30m	0.36–0.66m		
42	Deposit	Fill of bank [35]	0.48m	0.34–0.82m		
43	Deposit	Fill of pond [38]	>1.05m	1.05– >1.05m		

Discussion

Trench 12 contained three east–west cut features: pond or ditch [38], ditch [27] and what was recorded as a ditch [23] with a possible associated bank [35]. The former features were sealed by subsoil [34] (more brown and sandy here than elsewhere at the site), but the putative bank and ditch may have been cut through it (the stratigraphy visible in the trench side was not entirely conclusive).

Feature [38] was situated in the north of Trench 12. Only its south edge was visible, and it extended for 6.00m to the trench end. Excavation of the feature was begun (to 1.05m depth), but was not completed due to safety considerations of depth and constant infilling by water. Its south edge sloped moderately and it was filled by clayey sand [43] with frequent small-medium flints. No finds were recovered from the feature. The land just north of Trench 12 falls steeply into an existing pond, and [38] may feasibly represent a former edge to the pond. Alternatively, it may be part of a possible second moated enclosure lying to the north of the one described by NHER 52609.



Plate 4. Trench 12, pond [38], looking northwest

A narrow and very shallow ditch [27], similar to those recorded in Trench 11, was excavated in the approximate centre of Trench 12. The ditch measured up to 0.75m wide but only 0.10m deep. It was filled by mid-brown sandy clay [28] with occasional small flints, and did not contain any archaeological finds.

To the south of ditch [27], a complex sequence of deposits was recorded as a bank [35] and an adjacent ditch [23] to its south. The south side of the ditch was flanked by a pair of robbed-out or destroyed probable walls [19], [39].

The north edge of ditch [23] was difficult to discern, principally in regard to the putative bank [35], which may have equally been a fill of the ditch or perhaps a deposit from cleaning out the ditch. The bank make-up [42] consisted of light grey-brown sandy clay. It extended north—south for *c*. 3.25m and had a low, domed or sloping profile. No finds were collected from the deposit. The stratigraphy in the trench side to the north of the bank was unclear, possibly disturbed by a later (modern) intrusion, and it is uncertain how deposit [42] related to subsoil [34].



Plate 5. Trench 12, putative bank [35], looking west

Bank deposit [42] was overlain on its south side by orange-brown sandy clay [43], which produced no finds. Because of the uncertainty of the exact edge of ditch [23], deposit [42] may have been a fill of the ditch or otherwise up-cast from maintaining it. The ditch was certainly in excess of 5.00m wide, and contained a succession of (other) fills, such as paler brown sandy clays [24], [40] and darker grey clays [26], [41]. It is suggested that [24] may represent erosion into the ditch of material on its north side. Ditch [23] was excavated to maximum safe depth 1.20m, but was considered likely to be deeper. The ditch produced pottery of a broad variety of dates, spanning 11th–18th centuries and perhaps later. A medieval strap end and postmedieval glass, brick and tile were also collected. It is argued, based on the finds considered that the feature had remained open over a long period of time, but the finds from the ditch fills were not chronologically sensitive. This major ditch may be a north arm to the moat described by NHER 52609.



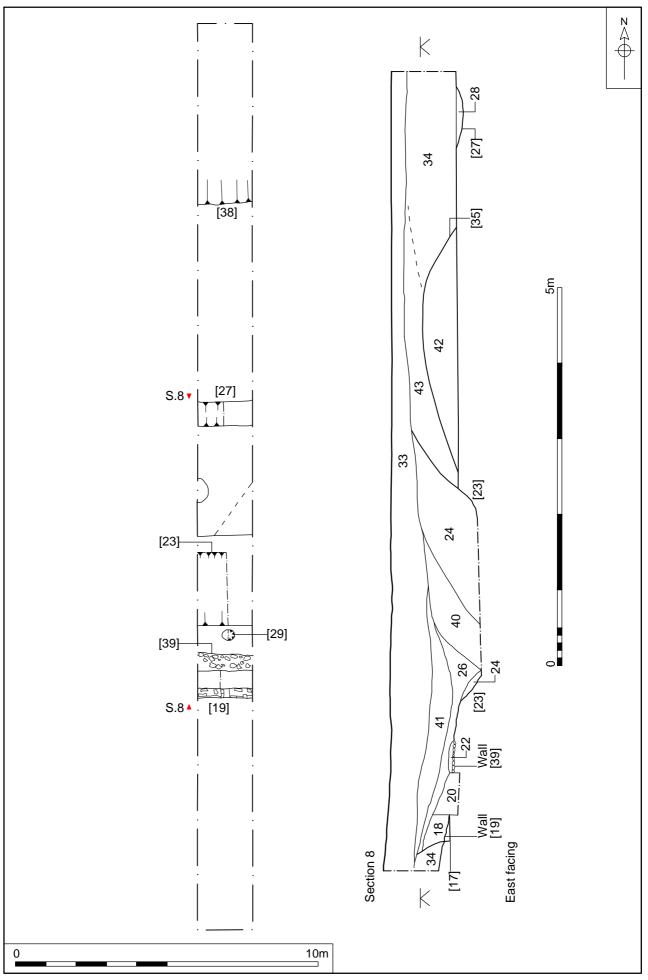
Plate 6. Trench 12, ditch [23], looking west

A small circular pit or post-hole [29], c. 0.40m wide x 0.32m deep, was excavated in the south edge of ditch [23]. Its precise stratigraphic relationship to the ditch was not certain, but its distinctive pale grey sandy fill [30] suggested that it pre-dated the later episodes of the filling of [23]. It did not produce any finds.

The remains of a pair of parallel masonry features—presumed to be walls—were situated along the southern edge of ditch [23]. Only their bases remained, having apparently been robbed for their masonry or otherwise destroyed. Wall [39], to the north, was 0.42m wide and consisted of mortared flints, above which a deposit of grey sandy clay [22] had accumulated post-robbing. Wall [19] measured 0.40m wide and consisted of mortared red brick rubble and flints, above which grey-brown sandy clay [18] had later developed. An abrupt relationship was recorded between [18] and subsoil [34], but this did not provide evidence as to whether wall [19] had been cut through the subsoil or whether the subsoil had built up against the wall. A deposit [20] of greeny brown clay had formed or had been placed between walls [19] and [39] prior to their removal. The robbing of the walls and the accumulation of the deposits above them occurred prior to the final closure of ditch [23], as all were sealed by later ditch fills. This relationship suggests that at least for some time the walls and ditch were in use contemporaneously.



Plate 7. Trench 12, remains of walls [19], [39], looking west



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Figure 5. Trench 12, plan and section. Scale 1:125 and 1:50

	Figure 2	
	Location	
	Orientation	Northeast-southwest
	Northeast end	615429 305081
	Southwest end	615406 305062
	Dimensions	
	Length	30.00m
A CONTRACTOR	Width	1.80m
	Depth	0.45m
	Levels	
	Northeast top	00.00m OD
	Southwest top	00.00m OD
Discussion		

No archaeological features or deposits were present in Trench 13, and no archaeological finds were recovered.

	Figure 2		
	Location		
	Orientation	North-south	
	North end	615395 305064	
and the second	South end	615392 305034	
	Dimensions		
	Length	30.00m	
	Width	1.80m	
	Depth	0.40m	
	Levels		
The state is a series	Northeast top	00.00m OD	
	Southwest top	00.00m OD	
Discussion			

No archaeological features or deposits were present in Trench 14, and no archaeological finds were recovered.

	Figure 2		
	Location		
	Orientation	Northwest-southeast	
	Northeast end	615379 305018	
	Southwest end	615404 305001	
	Dimensions		
	Length	30.00m	
	Width	1.80m	
	Depth	0.45m	
	Levels		
	Northwest top	00.00m OD	
	Southeast top	00.00m OD	
Discussion			

No archaeological features or deposits were present in Trench 15, and no archaeological finds were recovered.

ARCHAEOLOGICAL MATERIALS

71 The archaeological materials were washed, dried, marked and bagged and were recorded by count and weight. Data was entered onto a Microsoft Excel spreadsheet, which forms part of the project archive. A discussion of each material type is given below. Appendix 2a comprises a list of all archaeological materials found by the evaluation in context number order.

Pottery

Introduction

72 Thirty-four sherds of pottery weighing 286g were collected from nine contexts by the evaluation. Table 1 shows the quantification by fabric, and full quantification by context is included in Appendix 3.

Description	Fabric	Code	No	Wt/g	Eve	MNV
Early medieval ware	EMW	3.10	8	35		7
Local medieval unglazed	LMU	3.23	9	31	0.11	8
Grimston-type ware	GRIM	4.10	6	48		6
Hedingham ware	HFW1	4.23	1	2		1
Late medieval and transitional	LMT	5.10	3	87		3
Dutch-type slipwares	DUTS	7.28	2	30	0.08	1
Staffordshire-type slipware	STAF	6.41	2	4		1
Staffs-type slipware on red earthenware	STAFT	6.411	1	44	0.12	1
Staffordshire white salt-glazed stonewares	SWSW	8.41	1	2		1
Late post-medieval unglazed earthenwares	LPME	8.01	1	3		1
Total			34	286	0.31	30

Table 1. Pottery quantification by fabric (approximate date order)

Methodology

73 Quantification was carried out using sherd count and weight. Full quantification by fabric, context and feature is available in the archive. All fabric codes were assigned from the author's post-Roman fabric series, which includes East Anglian and Midlands fabrics, as well as imported wares. Imports were identified from Jennings (1981). Form terminology follows MPRG (1998). Recording uses a system of letters for fabric codes together with number codes for ease of sorting in database format. The results were entered in a Microsoft Access database.

Pottery by period

Medieval

74 Twenty-four sherds of medieval pottery were recovered. Early medieval handmade wares in fine/medium sandy fabrics were recovered from pit fill (02) and ditch fills (04) and (08). Norwich-type wheelmade medieval greywares (LMU) were also found in (02) and (04), and in four other contexts. Only one rim is present, a simple everted type from a jar in unstratified finds (37).

75 Medieval glazed wares comprise mainly Grimston body sherds with lead green glazes, and one example has brown slip stripes. There is also one small sherd of Hedingham fine ware with a copper green glaze.

Late medieval

76 Three sherds of LMT were recovered; a body sherd from ditch fill (14) with spots of green glaze, and a body and a base sherd from ditch fill (24). The body sherd is small and abraded and could be an earlier (?London) glazed ware. The base os near-complete and finely potted with thumbed frilling to the base angle and internal green glaze.

Post-medieval and modern

- 77 Two sherds of a Dutch slipware handled bowl were found in ditch fill (26). These bowls are sometimes found in Norwich, but are unusual outside the city. They are of 17th-century date, but this example was found in association with 18th-century pottery and may have been a prized heirloom before its breakage and eventual deposition.
- **78** Staffordshire-type slipwares of 18th-century date comprise two fragments of a yellow-glazed mug with brown trailed slip decoration from ditch [23] and fill (26), and part of a press-moulded slipware dish in a reddish fabric from ditch fill (24). A small fragment of Staffordshire white salt-glazed stoneware from (26) is of mid–late 18th-century date.
- **79** One fragment from (24) was recorded as late post-medieval unglazed earthenware, but it is in a fairly coarse fabric and the inner surface is lost. It may be a fragment of ceramic building material.

Pottery by context

80 The majority of pottery from the site was recovered from ditches, some of which may be of medieval date. A summary of the pottery by feature is provided in Table 2.

Feature	Context	Туре	Fabrics	Spot date
0	02	Pit	EMW, LMU	11th-13th c.
03	04	Ditch	EMW, LMU, HFW1, GRIM	L.12th-13th c.
07	08	Ditch	EMW	11th-12th c.
11	12	Ditch	LMU, GRIM	L.12th-14th c.
13	14	Ditch	LMU, LMT	15th-16th c.
23	23	Ditch	GRIM, STAF	L.17th-18th c.
23	24	Ditch	LMU, GRIM, LMT, STAFT, LPME	L.17th-18th c.
25	26	Ditch	DUTS, STAF, SWSW	M-L.18th c.
-	37	Finds	LMU	11th-13th c.

Table 2. Pottery fabrics by context/feature

Pottery discussion

81 This small group contains medieval coarsewares, which are typical of Norwich and surrounding areas, and contemporary glazed wares from northwest Norfolk and north Essex. Only one rim is present, and this is a typical cooking pot type of 11th–13th-century date, but it was unstratified. The fabrics present represent the whole

of the medieval period, and a few sherds of LMT indicate continuation into the late medieval period. Some of the medieval wares were residual in later features, but at least one pit and three ditches may be of high medieval date.

82 Ditches [23] and [25] contained pottery of post-medieval date, including a Dutch slipware bowl, a Staffordshire slipware mug and a fragment of white stoneware which may all be indicative of relative affluence in the 17th or 18th centuries.

Brick and tile

83 Eight fragments of brick and tile weighing 5,551g were collected from four contexts. The assemblage was quantified (count and weight) by fabric and form. Fabrics were identified on the basis of macroscopic appearance and main inclusions. Forms were identified from work in Norwich (Drury 1993), based on measurements. A full catalogue is included in Appendix 4.

rm.

Form	Code	No	Wt (g)
Roman tile	RBT	3	118
Flemish floor tile	FFT	1	210
Floor brick	FB	1	181
Late brick	LB	1	2229
Modern brick	В	2	2813

Table 3. Brick and tile by fabric and form

- 85 Three fragments of abraded Roman tile were recovered from ditch fill (12). The fragments appear to be from a single tile, although only two are joining pieces. The tile is in a fine sandy fabric pale orange with orange-red clay pellets and is *c*. 50mm thick. Tiles of this thickness were generally used in walls and floors.
- 86 A large part of a small Flemish floor tile in a fine sandy fabric was collected from ditch fill (24). There are spots of green glaze on one chamfered edge, but the upper surface has lost all traces of glazing through wear. The tile is 27mm thick. Tiles of this type were used in moderate-high status buildings during the 14th and 15th centuries.
- 87 A white firing fine sandy floor brick was found in ditch fill (26). It is very worn, with a surviving thickness of 30mm. It is likely to be of 18th- or 19th-century date.
- 88 A complete handmade red brick and two pieces of rubble were collected from posthole fill (16), where they had presumably been used as packing. The brick is in fine sandy fabric with cream streaks and measures 217mm x 102mm x 57mm. Bricks of this size and type were commonly used in the 17th–19th centuries. It has traces of lime mortar on one surface, indicating that it had previously been used elsewhere. The rubble comprises two fragments of modern compressed shale bricks embedded in buff mortar/cement, which contains large pieces of flint gravel. These fragments are likely to be of 20th-century date. One of the fragments is probably a fire brick; the surfaces are reduced to dark grey/black and are heavily sooted.

Glass

- **89** Twelve fragments of glass weighing 488g were collected from three contexts: one post-hole and two ditches.
- 90 Seven fragments of the same bottle were recovered from post-hole fill (16). The bottle is incomplete, but consists of the base with several pieces of the body, and is of green glass. It is possible to identify the embossed name of '[YOUNGS CR]AWSHAY & Y[OUNGS] NORWICH' on the front of the bottle. The base contains the maker's name 'EB&CoL^D', which refers to Edgar Breffitt of Castleford, West Yorkshire, was used between 1884–*c*. 1920, and is known as a mark on beer bottles (Society for Historical Archaeology 2014). Youngs, Crawshay & Youngs' brewery was located in Norwich on the river Wensum, a complex of buildings close to where Wensum Lodge is today.
- **91** Ditch fill (24) produced two pieces of glass, one of which is part of the base of a bottle and the other is a fragment of probable window glass. The bottle fragment is green and maybe part of an 18th- or 19th-century wine bottle. The window fragment is light green glass, opaque, with one complete edge which is rounded over and curves slightly.
- **92** Ditch fill (26) produced three fragments of glass: two pieces of undiagnostic green glass probably from the same bottle, and one piece of clear flat glass, which may have been a fragment of window glass, but is very thin, and so may be from a finer vessel such as a glass or a goblet. All are likely to be of post-medieval date.

Stone

- **93** A single fragment of lava was recovered unstratified by the evaluation (37).
- **94** The piece is an undiagnostic formless fragment, and has been discarded. Lava was widely imported and used as quernstone in the Roman and medieval periods, and was usually sourced from the Rhineland region of Germany.

Metalwork

Copper alloy

- **95** Five objects of copper alloy were recovered by the evaluation, three unstratified and two from ditch fill (26).
- 96 The copper alloy from ditch fill (26) comprises a medieval strap end and a late postmedieval button. The strap end consists of a shield-shaped sheet plate with a bar mount at the attachment edge. This is a relatively common type of object, and has a parallel from London (Egan and Pritchard 2008, 157, fig. 103, no. 735) dating to *c*. 1350–*c*. 1400. The button is flat, circular and is thickly tinned all over, both front and reverse, including the soldered loop on the reverse. This is neatly finished and is probably quite late in date.
- **97** The unstratified finds (37) include two buckles, one medieval and one medieval– early post-medieval. The medieval example is oval with a lipped frame and rectangular plate wrapped around the frame. The pin is present, but is warped at an angle to the object. Examples from London date to the 14th century (Egan and Pritchard 2008, 75, fig. 45, nos 306–310). The later buckle is a double-loop example with the iron pin wrapped around the central bar. Examples of these types of buckle

were is use from the late medieval through to the early post-medieval period (Whitehead 1996, 52).

98 The final unstratified find (37) is a Charles I royal farthing, probably of Richmond Type 2 (Everson 2007) and dating from 1625-31.

Lead

99 A single object of lead was recovered unstratified by the evaluation (37), and consists of a fragment of window came (extant length 26mm), which may be of medieval–early post-medieval date.

Silver

100 A single coin of medieval date was recovered unstratified (37). The example is worn and is in two pieces, so that little can be discerned of its details.

Animal bone

Methodology

- 101 The animal bone assemblage consists of hand-collected remains. All of the bone was identified to species wherever possible using a variety of comparative reference material. Where a complete identification to species was not possible, bone was assigned to a group, such as 'sheep/goat' or 'mammal' whenever possible. The bones were recorded using a modified version of guidelines described in Davis (1992).
- **102** Any butchering was recorded, noting the type, such as cut, chopped or sawn and the location. A note was made of any burnt bone. Pathologies were recorded, noting the type of injury or disease, the element affected and the location on the bone. Other modifications were also recorded, such as any possible industrial or craftworking waste, or animal gnawing.
- 103 Weights and total number of pieces counts were taken for each context, along with the number of pieces for each individual species present (NISP); these are given in Appendix 5. All of the information was entered into a Microsoft Excel spreadsheet. A summary table of the faunal catalogue is provided in the appendix and the full catalogue is available in the digital archive.

Quantification, provenance and preservation

104 A total of 207g of bone, consisting of ten pieces, was recovered from three ditch fills. The associated finds suggest a medieval–post-medieval date range, with some residual medieval and Roman finds. Quantification of the assemblage by feature number, feature type, fragment count and weight is presented in Table 4.

Feature Number	counts a	re Type, nd weights ch fills	Total Count by Feature Number	Total Weight by Feature Number
	Weight	Count	-	
11	116g	3	116g	3
23	85g	4	85g	4
25	6g	3	6g	3

Feature Number	Feature Type, counts and weights Ditch fills		Total Count by Feature Number	Total Weight by Feature Number	
	Weight	Count			
Totals by Feature Type	207g	10	207g	10	

Table 4. Quantification of the faunal assemblage by feature number, feature type, count and weight

105 The assemblage is in good condition, although the remains are fragmented from butchering and possibly from disturbance. No gnawing or invertebrate damage was seen, suggesting the original bone remains were rapidly buried.

Species range, modifications and discussion

106 Two species were identified in the assemblage and several fragments could not be identified further than 'mammal'.

Feature	S	pecies and I	Total by Feature		
Number	Cattle	Mammal	Pig/boar	Number	
11	2	1		3	
23		3	1	4	
25		1	2	3	
Species Total	2	5	3	10	

Table 5. Quantification of the faunal assemblage by feature number, Species and NISP

- **107** Pig was seen from two ditches [23] and [25], with the elements consisting of an incomplete butchered mandible in [23], and an isolated molar in [25]; the tooth wear and eruption stage suggests an older juvenile or sub-adult.
- **108** A chopped and cut cattle radius and ulna was seen from ditch [11]. The other fragments were only identifiable as mammal.

Animal bone conclusions

109 This is a very small assemblage that appears to be derived from butchering and food waste. The remains are likely to be from domestic stock, although given the earlier date of some residual finds, boar is a possibility. The remains and species are typical of many small assemblages of a later or mixed date range.

DISCUSSION

- 110 The evaluation carried out by NPS Archaeology of land between Jaguar Road and Queens Road, Hethersett recorded archaeological remains in three of the fifteen trenches excavated. The three trenches were situated close together, to the north of the site's boundary with Grange Farm. No archaeological features were revealed in Trenches 1–7 in the north of the evaluated area.
- 111 The evidence from the trenches suggests a potential relationship between the features identified and the extant linear water-filled feature described by NHER 52609, and perhaps with Grange Farm. Pottery and other finds from the excavated features suggest that the site was occupied or used during the medieval period and into the post-medieval period.
- 112 The most striking features were two substantial east-west ditches recorded in Trench 12. One of these was fully excavated, although the other filled with water and could not be investigated to the same extent. The first ditch contained multiple fills and a sequence of pottery that indicates the feature remained open from the high medieval period to the post-medieval period. The foundations of two parallel masonry walls survived along the south edge of the ditch.
- 113 It was considered that the second (partially excavated) large ditch may have been the former edge of a pond, although the north edge of potentially the same feature was recorded in Trench 11, which it is now thought confirms its interpretation as a ditch. A line of flint and mortar bordering the ditch may represent the vestigial remains of a wall analogous to those described above.
- 114 Between and to the north of the substantial ditches a number of minor ditches were identified following the same east-west alignment. It is postulated that the large ditches were associated with the extant linear water-filled feature, perhaps as part of an arrangement of moats, ponds or even fish pools. The smaller ditches may have provided drainage or land allotment in line with the water features. Pottery of 11th-14th-cenury and later medieval date was collected from the smaller ditches.
- 115 Extant, though low, earthworks noted at the site may relate to the large excavated ditches, perhaps representing infilled ditches or water features. From evidence on the ground and 19th-century maps, such as the local tithe and First Edition Ordnance Survey, it is evident that the shape of the linear water-filled feature and the location of ponds at the site is little changed, though the woodland block in the centre of the site is reduced. It is speculated from these observations that the square-shaped block of woodland indicated on the early maps may describe the outline of a second moated or water-filled feature in line with that extant close to Grange Farm. A date for the postulated moat feature is uncertain, although such an arrangement would perhaps logically be most likely contemporary with the surviving water feature.
- **116** The track that runs along the east edge of the evaluation site should also be considered in interpreting the landscape features here: in light of the extant water features, earthworks, and excavated and cartographic evidence it appears as an integral part of the site arrangement in the medieval period.
- 117 Whilst the origin of the name Grange Farm must necessarily be treated with caution, it is tempting to view the farm as once belonging to a monastic house. Under this interpretation, the linear water-filled feature, and the other potential ponds and

moats, could perhaps be understood as fish ponds under management of the grange. Given the recognised importance of granges to urban ecclesiastical sites, the likelihood of manuring nearby fields with waste from Norwich, and the discovery to the northwest of a papal bulla, the assembled evidence for Grange Farm being a productive site for a monastery in the city seems quite compelling.

118 Recommendations for further archaeological mitigation work (if required, based on the evidence presented in this report) will be made by Norfolk County Council Historic Environment Service.

Acknowledgements

NPS Archaeology would like to thank Jamie Bird who commissioned the work on behalf of Blubird Land and Planning.

Machining of the trenches was by Karl of Bryn Williams Machine Hire.

The evaluation was monitored on behalf of Norfolk Historic Environment Service by James Albone.

Excavation was undertaken by the author with Tom Baxter-Campbell and Steve Hunt.

The archaeological materials were processed, recorded, and reported on by Rebecca Sillwood. Specialist reports were compiled by Sue Anderson for pottery and ceramic building material, and for animal bone by Julie Curl.

An interim report of this work was illustrated by David Dobson and edited by Jayne Bown. Andrew Crowson revised and extended the interim report for this full report, Frances Green wrote the archaeological and historical background, and new illustrations were provided by David Dobson.

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Context	Category	Cut Type	Fill Of	Description	Trench
1	Cut	Pit			10
2	Deposit		1		10
3	Cut	Ditch			10
4	Deposit		3		10
5	Cut	Ditch			11
6	Deposit		5		11
7	Cut	Ditch			11
8	Deposit		7		11
9	Cut	Ditch			11
10	Deposit		9		11
11	Cut	Ditch			11
12	Deposit		11		11
13	Cut	Ditch			11
14	Deposit		13		11
15	Cut	Post-hole			11
16	Deposit		15		11
17	Cut	Wall trench		Robbed-out wall	12
18	Deposit		17		12
19	Masonry			Base of wall foundation	12
20	Deposit		36	Deposit between [17], [21]	12
21	Cut	Wall trench		Robbed-out wall	12
22	Deposit		21		12
23	Cut	Ditch			12
24	Deposit	Diterr	23		12
25	Cut	Ditch			12
26	Deposit		25		12
27	Cut	Ditch			12
28	Deposit		27		12
29	Cut	Ditch			12
30	Deposit	Diterr	29		12
31	Cut	Post-hole	20		10
32	Deposit		31	Fill of post-hole [31]	10
33	Deposit			Topsoil	
34	Deposit			Subsoil	
35	Cut	Bank		Outer edge of bank	12
36	Out	Dank		VOID	12
37	U/S finds			Unstratified finds	
38	Cut	Ditch		Large ditch not fully excavated	12
39	Masonry	Wall		Base foundation of flint wall	12
40	Deposit	vvan	23		12
40	Deposit		20	Deposit over part of ditch [23] and wall [19], [39]	12
42	Deposit		35	Material making up the bank	12
42	Deposit		38		12
43	Deposit		23	Probable fill of ditch [23]	12

Appendix 1a: Context Summary

Appendix 1b: Feature Summary

Period	Category	Total
Medieval	Pit	1
	Ditch	3
Medieval/post- medieval	Ditch	2
Uncertain	Ditch	2
	Post-hole	2

Appendix 2a: Finds by Context

Context	Material	Qty	Wt	Period	Notes		
2	Pottery	6	13g	Medieval	11th-14th century		
4	Pottery	9	36g	Medieval	11th-14th century		
8	Pottery	1	2g	Medieval	11th-12th century		
12	Animal bone	3	116g	Unknown			
12	Brick/tile	3	118g	Roman	Tile		
12	Pottery	2	7g	Medieval	11th-14th century		
14	Pottery	1	1g	Medieval	11th-14th century		
14	Pottery	1	17g	Med./Post-Med.	15th-16th century		
16	Brick/tile	1	2,229g	Post-medieval	Brick fragment; 17th-19th century		
16	Brick/tile	2	2,813g	Modern	Brick/concrete; 19th century+		
16	Glass 7 327g Moder		Modern	Bottle fragments; incomplete but likely 'YOUNGS, CRAWSHAY & YOUNGS NORWICH'; base reads 'EB & co. ld'			
23	Animal bone	4	85g	Unknown			
23	Pottery	1	2g	Post-medieval	Late 17th-18th century		
23	Pottery	1	5g	Medieval	Late 12th-14th century		
24	Brick/tile	1	210g	Medieval	Flemish floor tile; 14th-15th century		
24	Glass	1	147g	Post-medieval	Bottle fragment		
24	Glass	1	5g	Post-medieval	Window fragment		
24	Pottery	3	36g	Medieval	11th-14th century		
24	Pottery	2	70g	Med./Post-Med.	15th-16th century		
24	Pottery	2	47g	Post-medieval	Late 17th-20th century		
26	Animal bone	3	6g	Unknown			
26	Brick/tile	1	181g	Post-medieval	Floor brick; 18th-19th century		
26	Copper alloy	1	3g	Post-medieval	Button		
26	Copper alloy	1	1g	Medieval	Strap end with bar mount; L10 W5		
26	Glass	3	9g	Post-medieval	Bottle fragments; possibly one window fragment		

Context	Material	Qty	Wt	Period	Notes
26	Pottery	4	34g	Post-medieval	Late 16th-18th century
37	37 Copper alloy		1g	Post-medieval	Coin; royal farthing; OBVERSE LEGEND: CARO D G MAG BRI; REVERSE LEGEND: FRA ET HIB REX; Charles I; 1625- 1631
37	Copper alloy	1	4g	Medieval	Buckle; single-loop; with buckle plate; L25 W14
37	Copper alloy	1	3g	Med./Post-Med.	Buckle; double-loop; L17 W13
37	Lead	1	7g	Med./Post-Med.	Window came; L26
37	Pottery	1	16g	Medieval	11th-13th century
37	Silver	2	1g	Medieval	Coin; in two pieces
37	Stone	1	20g	Unknown	Formless lava fragment; DISCARDED

Appendix 2b: Finds Summary

Period	Material	Total
Roman	Brick/tile	3
Medieval	Brick/tile	1
	Copper alloy	2
	Pottery	24
	Silver	2
Med./Post-Med.	Copper alloy	1
	Lead	1
	Pottery	3
Post-medieval	Brick/tile	2
	Copper alloy	2
	Glass	5
	Pottery	7
Modern	Brick/tile	2
	Glass	7
Unknown	Animal bone	10
	Stone	1

Context	Fabric	Form	Rim	No	Wt/g	Fabric date range
2	EMW			5	12	11th-12th century
2	LMU			1	1	11th-14th century
4	EMW			2	21	11th-12th century
4	LMU			3	5	11th-14th century
4	LMU			1	2	11th-14th century
4	GRIM			2	6	L.12th-14th century
4	HFW1			1	2	M.12th-M.13th century
8	EMW			1	2	11th-12th century
12	LMU			1	1	11th-14th century
12	GRIM			1	6	L.12th-14th century
14	LMU			1	1	11th-14th century
14	LMT			1	17	15th-16th century
23	GRIM			1	5	L.12th-14th century
23	STAF	mug		1	2	L.17th-18th century
24	LMU			1	5	11th-14th century
24	GRIM			2	31	L.12th-14th century
24	LMT			1	4	15th-16th century
24	LMT			1	66	15th-16th century
24	STAFT	flatware	plain	1	44	L.17th-18th century
24	LPME			1	3	18th-20th century
26	DUTS	bowl	upright plain	2	30	L.16th-17th century
26	STAF	mug	flaring	1	2	L.17th-18th century
26	SWSW			1	2	18th century
37	LMU	jar	simple everted	1	16	11th-13th century

Appendix 3: Pottery Catalogue

Appendix 4: Brick and Tile Catalogue

Context	Fabric	Form	No	Wt/g	Abr	Length	Width	Height	Mortar	Glaze	Comments	Date
12	fscp	RBT	3	118	+			c.50				Roman
16	fsx	LB	1	2229		217	102	57	cream ms			17th-19th century
16	comp	В	1	2019					buff csf		irreg lump containing 2 pieces of shale brick with thick mortar all over	19th century+
16	comp?	В	1	794				65	buff csf		reduced (black-grey), fire brick, heavily sooted, covered in coarse mortar with large flints	19th century+
24	fs	FFT	1	210	+			27		SG	worn	14th-15th century
26	wfs	FB	1	181	+			>30			worn	18th-19th century

Appendix 5: Animal Bone Catalogue

Context	Feature No	Feature Type	Spot date	Other finds dates in fill	Ctxt Qty	Wt (g)	Species	NISP	Age	Ad	Juv	Element range	Butchering	с	U	Comments
12	11	Ditch	Medieval	Roman	3	116.00	Cattle	2	а	1		ul	c, ch	1	1	radius, proximal end and part of ulna, both chopped and cuts
12	11	Ditch	Medieval	Roman			Mammal	1								
23	23	Ditch	Post-Medieval	Medieval	4	85.00	Pig/boar	1	sa		1	mand	c, ch	1	1	rear of mandible with M3 not fully erupted and little wear evident
23	23	Ditch	Post-Medieval	Medieval			Mammal	3								
26	25	Ditch	Post-Medieval	Medieval	3	6.00	Pig/boar	2	а	1		molar				lower 2nd molar in wear
26	25	Ditch	Post-Medieval	Medieval			Mammal	2								

Appendix 6: Historical Periods

Period	Date From	Date To
Prehistoric	-500,000	42
Early Prehistoric	-500,000	-4,001
Palaeolithic	-500,000	-10,001
Lower Palaeolithic	-500,000	-150,001
Middle Palaeolithic	-150,001	-40,001
Upper Palaeolithic	-40,000	-10,001
Mesolithic	-10,000	-4,001
Early Mesolithic	-10,000	-7,001
Late Mesolithic	-7,000	-4,001
Late Prehistoric	-4,000	42
Neolithic	-4,000	-2,351
Early Neolithic	-4,000	-3,001
Middle Neolithic	-3,500	-2,701
Late Neolithic	-3,000	-2,351
Bronze Age	-2,350	-701
Early Bronze Age	-2,350	-1,501
Beaker	-2,300	-1,700
Middle Bronze Age	-1,600	-1,001
Late Bronze Age	-1,000	-701
Iron Age	-800	42
Early Iron Age	-800	-401
Middle Iron Age	-400	-101
Late Iron Age	-100	42
Roman	42	409
Post Roman	410	1900
Saxon	410	1065
Early Saxon	410	650
Middle Saxon	651	850
Late Saxon	851	1065
Medieval	1066	1539
Post-medieval	1540	1900
Modern	1900	2050
World War One	1914	1918
World War Two	1939	1945
Cold War	1945	1992
Unknown		

after English Heritage Periods List, recommended by Forum on Information Standards in Heritage available at: http://www.fish-forum.info/inscript.htm

Appendix 7: OASIS Report Summary

OASIS DATA COLLECTION FORM: England

List of Projects | Manage Projects | Search Projects | New project | Change your details | HER coverage | Change country | Log out

Printable version

OASIS ID: norfolka1-182956

Project details

Project name Land at Jaguar Road/Queens Road, Hethersett, Norfolk

Short description of the project	An archaeological evaluation by trial trenching was conducted by NPS Archaeology for Blubird Land and Planning Ltd ahead of proposed residential development at land south of Jaguar Road/north of Queens Road, Hethersett, Norfolk. Three of the fifteen trenches, positioned close together in the south of the site, located archaeological features. A large ditch and attendant possible bank may form the north arm of a moat that is postulated a short distance to the south. The ditch was accompanied by a pair of contemporary masonry walls on its south (interior?) side, which were subsequently robbed out or otherwise destroyed. A number of smaller ditch features to the north of the large ditch followed its east-west alignment, and a possible pond feature was also identified. Dating evidence recovered from the possible moat ditch suggests that the feature was open throughout the medieval period: pottery spot dates span the 11-14th centuries to the late post-medieval period. Extant earthworks and historical cartographic evidence indicate the presence of a second possible moat or water feature directly to the north of the moated area within the proposed development site.
Project dates	Start: 22-05-2014 End: 03-06-2014
Previous/future work	Not known / Not known
Any associated project reference codes	134376 - HER event no.
Type of project	Field evaluation
Site status	None
Current Land use	Grassland Heathland 5 - Character undetermined
Monument type	DITCH Medieval
Monument type	DITCH Post Medieval
Monument type	DITCH Uncertain
Monument type	POST-HOLE Uncertain
Monument type	PIT Medieval
Significant Finds	BUILDING MATERIAL Modern
Significant Finds	BUILDING MATERIAL Post Medieval
Significant Finds	BUILDING MATERIAL Medieval

Significant Finds	BUILDING MATERIAL Roman
Significant Finds	METALWORK Medieval
Significant Finds	METALWORK Post Medieval
Significant Finds	POTTERY Post Medieval
Significant Finds	POTTERY Medieval
Significant Finds	GLASS Modern
Significant Finds	GLASS Post Medieval
Significant Finds	STONE Uncertain
Significant Finds	ANIMAL BONE Uncertain
Methods & techniques	"Targeted Trenches"
Development type	Not recorded
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	Pre-application

Project location

Country	England
Site location	NORFOLK SOUTH NORFOLK HETHERSETT Land at Jaguar Road/Queens Road, Hethersett, Norfolk
Postcode	NR9 3DA
Study area	29530 Square metres
Site coordinates	TG 615452 305152 52.808022389794 1.881252679403 52 48 28 N 001 52 52 E Point
Height OD / Depth	Min: 45m Max: 47m

Project creators

Name of Organisation	NPS Archaeology
Project brief originator	Norfolk Historic Environment Service
Project design originator	NPS Archaeology
Project director/manager	Robert Brown
Project supervisor	NPS Archaeology

Project archives

Physical Archive recipient	Norfolk Museums Service
Physical Contents	"Animal Bones", "Ceramics", "Glass", "Metal", "Worked stone/lithics"
Digital Archive recipient	NPS Archaeology
Digital Contents	"other"

Digital Media available	"Images raster / digital photography","Images vector","Spreadsheets","Survey","Text"
Paper Archive recipient	Norfolk Museums Service
Paper Contents	"other"
Paper Media available	"Context sheet","Miscellaneous Material","Photograph","Plan","Report","Section"
Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	Land at Jaguar Road/Queens Road, Hethersett, Norfolk, NR9 3DA. Archaeological Evaluation
Author(s)/Editor (s)	Brown, R.
Other bibliographic details	2015/1089
Date	2015
lssuer or publisher	NPS Archaeology
Place of issue or publication	Norwich
Entered by	AC (andrew.crowson@nps.co.uk)

Appendix 8: Archaeological Specification



01-04-15-2-1089

nps archaeology

Archaeological evaluation Land off Jaguar Road, Hethersett, Norfolk Written Scheme of Investigation









Prepared for Blubird Land & Planning Ltd

NPS Archaeology

May 2014

www.nps.co.uk

Location	Land south of Beccles Road, Bradwell, Phase 1
District	South Norfolk
Client	Blubird Land & Planning Ltd

DOCUMENT CHECKLIST			
Project Manager	Nigel Page		
Completed by	Nigel Page	23/04/14	
Reviewed by	David Adams	23/04/14	
Issue 1			
Completed by	Nigel Page	01/05/2014	
Reviewed by	David Adams	01/05/2014	
Issue 2			

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01-04-15-2-1089

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Archaeological evaluation Written Scheme of Investigation

1. Introduction

- 1.1 Proposals for development of a plot of land off Jaguar Road, Hethersett, Norfolk (TG 1545 0513) require a programme of archaeological works to support it up to and through the planning process.
- 1.2 Blubird Land & Planning Ltd. requested that NPS Archaeology produce costs and this Written Scheme of Investigation for a programme of archaeological evaluation to satisfy the requirements set out in the *Brief for Archaeological Evaluation by Trial Trenching* issued by Norfolk Historic Environment Service (James Albone 1 April 2014).

2. Aims

- 2.1 The Programme of Archaeological Work is required to recover, by archaeological evaluation, information relating to the extent, date, phasing, character, function, status and significance of the site. A determination of the state of preservation of any features, deposits and structures is also required.
- 2.2 The aims of the archaeological work may therefore be summarised as follows:
 - *i.* To establish the presence or absence of archaeological remains within the proposed area.
 - *ii.* To determine the extent, condition, nature, quality and date of any archaeological remains occurring within the site and the possible impacts of the proposed development on them.
 - iii. Ensure that any archaeological features discovered during trial trenching are identified, sampled and recorded and, where it is desirable, recommendations for their preservation in situ are made.
 - iv. To establish, as far as possible, the extent, character, stratigraphic sequence and date of archaeological features and deposits, and the nature of the activities which occurred at the site during the various periods or phases of its occupation
 - v. To establish the palaeoenvironmental potential of subsurface deposits by ensuring that any deposits with the potential to yield palaeoenvironmental data are sampled and submitted for assessment to the appropriate specialists.
 - vi. To explore evidence for social, economic and industrial activity.
 - vii. To disseminate the archaeological data recovered by the evaluation in the form of a formal report which will provide the basis for decisions regarding further archaeological intervention and mitigation proposals.

3. Method Statement

3.1 Introduction

- 3.1.1 A three-stage evaluation strategy will be undertaken to assess the archaeological potential of the proposed development site. The stages of this strategy may be summarised as follows.
 - *i. Trial Trenching.* Machine and manual excavation will be employed to investigate the presence, condition, character and date of any subsurface archaeological deposits and features occurring within the site. Any archaeological features identified will be cleaned and sample excavated to determine function, form and relative date.

- *ii* Post-fieldwork Processes. The drawn and written stratigraphic/structural record will be cross-referenced and analysed to provide a synthesis of the results of the work. The cleaning and cataloguing of any artefactual and ecofactual materials recovered will be carried out throughout the duration of the fieldwork. The finds will be cleaned, marked and packaged in accordance with the archive requirements of the Norfolk Museums and Archaeology Service.
- *iii. Report and Archive.* The report will describe the results of the window sampling and trial trenching with data presented in tabular, graphic and appendix form. Copies of the reports will be submitted to the client and to Norfolk Historic Environment Service.
- 3.1.2 The procedures and methodology for each of the stages outlined above are described in detail below.

3.2 Trial Trenching

- 3.2.1 Trial trenching will be concerned with establishing the condition, character and date of any subsurface archaeological features and deposits present. Guidelines set out in the documents *Standard and Guidance for an Archaeological Field Evaluation* (Institute for Archaeologists 1994, revised 2001 and 2008) and *Standards for Field Archaeology in the East of England* (Gurney 2003) will be followed.
- 3.2.2 Fifteen trenches, 30m x 1.8m, will be excavated across the proposed development area to provide a *c*.4% sample of the site.
- 3.2.3 The trenches will be positioned to investigate the parts of the site proposed for built development (Fig. 1), although, their final locations may be determined on the basis of surface or below ground obstructions and all Health and Safety considerations.
- 3.2.3 The trenches will be set out by NPS Archaeology and CAT-scanned prior to excavation.
- 3.2.4 Excavation will be by mechanical excavator fitted with a toothless bucket in 100mm spits until natural ground or archaeological deposits are identified.
- 3.2.5 Initial excavation will be undertaken to the top of any undisturbed archaeological deposits or the surface of the underlying natural deposits, whichever is the highest. If neither is encountered it may be necessary to excavate to a maximum depth of 1.2m below the present ground surface in line with Health and Safety legislation for trenches with unsupported sides. If further excavation below 1.2m is required the trench sides may need to be locally stepped or shored. The requirement for and the scope of works below 1.2m will be determined by Norfolk Historic Environment Service and agreed and costed as a contingency.
- 3.2.6 If the deposits within the trenches are thought to extend too deep to evaluate safely or below the likely level of any development impacts a hand auger may be used to retrieve information about the nature of the lower deposits.
- 3.2.7 Any trenches, or sections of trenches, deeper than 0.5m will be fenced using Netlon highvisibility fencing throughout the excavation and appropriate warning signage will be displayed.
- 3.2.8 Spoil from the trenches will not be removed from site. The trenches will not be backfilled by NPS Archaeology until agreement to do so is given by Norfolk Historic Environment Service. This backfilling will not attempt consolidation or compaction over and above that possible with a mechanical excavator. Full surface reinstatement will not be attempted, but all trenches will be left in a safe condition.

- 3.2.9 Exposed surfaces and all archaeological features and deposits will be excavated by hand and screened by metal detector. A Tesoro Laser B3 or a Fisher 1265X metal detector will be utilised to scan excavated spoil and *in situ* horizons with the operator ensuring that it is used in a correct fashion. All artefactual and ecofactual materials will be collected and bagged by context.
- 3.2.10 Detailed strategies for levels of sampling of buried soils, structures, pits, post-holes and ditches will be determined on site. Allowance will be made for total recovery where appropriate; percentage sampling will apply in areas where complex stratified deposits are encountered. Buried soils will be sampled by sieving to determine artefact densities. In general, the feature/deposit sampling strategy will be employed throughout the evaluation in accordance with the document *Standards for Field Archaeology in the East of England* (Gurney 2003).
- 3.2.11 All archaeological deposits, features and layers will be assigned individual context numbers and recorded on standardised forms employing the NPS Archaeology's pro forma recording system. The records will include full written, graphic and photographic elements with site and context numbering compatible with the Norfolk Historic Environment Record numbering system. Plans will be made at a scale of 1:50, with provision for 1:20 and 1:10 drawings. Sections will be recorded at scales of 1:10 and 1:20 depending on the detail considered necessary. A photographic record in black and white and colour (35mm film/digital) will be maintained of all archaeological deposits, layers and features to record their characteristic and relationships. Photographs will also be taken to record the progress of the evaluation.
- 3.2.12 Human remains will be left *in situ* unless otherwise instructed by Norfolk Historic Environment Service. If any human remains or burials are encountered which must be removed an application for a Licence For the Removal of Human Remains will be made in compliance with the 1857 and 1981 Burial Acts and within all relevant Ministry of Justice guidelines. Backfilling of features containing human remains will be done manually to ensure that the remains are appropriately protected from any damage or disturbance.
- 3.2.13 Soil samples for palaeoenvironmental materials will be collected if suitable sealed and well-dated deposits are encountered. Standard 10 litre bulk soil samples, column or monolith samples and Kubiena tins will be collected from such deposits as appropriate, in consultation with the English Heritage Regional Advisor for Archaeological Science and other consultant environmentalists. In all instances, sampling procedures will follow the guidelines set out in the document *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage 2002). Full written, graphic and photographic sample records will be made using NPS Archaeology's pro forma recording system.

3.3 Post-Fieldwork Processes

- 3.3.1 The drawn and written stratigraphic/structural record will be cross-referenced and analysed to provide a synthesis of the results of the work.
- 3.3.2 The cleaning and cataloguing of any artefactual materials recovered will be undertaken on completion of the trial trenching. All retained materials will be cleaned, marked and packaged in accordance with the requirements of the Norfolk Museums and Archaeology Service.
- 3.3.3 Post-fieldwork analyses will start upon completion of the finds processing and will involve the identification and description of the artefactual materials recovered by the relevant specialists. In general, the following strategies will be employed in the analysis of the artefactual materials recovered:
 - Pottery. Analysed to determine date and tabulated by context unit.
 - Worked flint. Sorted and tabulated by context unit.

- *Metal artefacts.* Assessed for dating and significance, catalogued by context unit and where necessary conserved within four weeks of completion of fieldwork, in accordance with *UK Institute of Conservators Guidelines.*
- *Faunal Remains*. Sorted and tabulated by context unit. Assessed for the potential for further analysis and for sieving for the recovery of smaller bird and fish bones.
- Environmental Samples. Processed and assessed for content and significance.
- Other categories of artefactual materials will be analysed in a similar fashion.
- 3.3.4 All finds work will follow the procedures set out in the document *Standards and Guidelines for the collection, documentation, conservation and research of archaeological materials* (Institute *for* Archaeologists 2001). Finds data will be stored on a database to aid analysis and report preparation.

3.4 Report and Archive

- 3.4.1 An evaluation report will be prepared that presents the stratigraphic, structural, artefactual and environmental evidence and analyses, and a synthesis of the results of the trial trenching.
- 3.4.2 The report will present data in tabular, graphic and appendix form. A list of archive components generated by the work will also be included in the report. Copyright of the reports will be retained by NPS Archaeology.
- 3.4.3 Multiple copies of the report will be produced as appropriate and presented to Blubird Land & Planning Ltd. and three copies to Norfolk Historic Environment Service. An HER form will accompany the evaluation report and will include a reference to the archive and the intended place of archive deposition. The report will be submitted within eight weeks of the completion of the fieldwork.
- 3.4.4 NPS Archaeology supports the OASIS project. An online record will be initiated immediately prior to the start of fieldwork and completed when the final report is submitted to Norfolk Historic Environment Service. This will include a pdf version of the final report.
- 3.4.5 A single integrated archive for all elements of the work will be prepared according to the recommendations set out in *Environmental standards for the permanent storage of excavated material from archaeological sites* (UKIC, Conservation Guidelines 3, 1984) and *Guidelines for the preparation of excavation archives for long-term storage* (Walker 1990), and in accordance with the Norfolk Museums and Archaeology Service's own requirements for archive preparation, storage and conservation.
- 3.4.6 The archive will be fully indexed and cross-referenced. It will also be integrated with the Norfolk Museums and Archaeology Service's Project accession number and the Norfolk Historic Environment Record numbering system. Deposition of the archive and finds (by prior agreement with the landowners) will take place within six months of the completion of the final report and confirmed in writing to the Norfolk Museums and Archaeology Service. A full listing of archive contents and finds boxes will accompany the deposition of the archive and finds.
- 3.4.7 All archaeological materials, excepting those covered by the *Treasure Act, 1996*, will remain the property of the landowners. NPS Archaeology will seek to reach a formal agreement with the landowners for the donation of the finds to the Norfolk Museums and Archaeology Service.

4. Timetable

4.1 The timetable for fieldwork assumes that are no major delays to the work programme caused by vandalism, repeated plant breakdown, restricted access, programme changes by the Client or major periods of adverse weather conditions.

4.2 It is estimated that the fieldwork will take 1 week with a team of three archaeologists.

5. Staffing

- 5.1 The project will be co-ordinated by a Project Officer who will be dedicated to the project throughout its duration. The Project Manager will assume responsibility for all aspects of the project including finance, logistics, standards, health and safety, and liaison with the client and curators. The Project Officer will have substantial experience in evaluation archaeology and post-excavation analysis.
- 5.2 Other members of staff involved in the project will be the Experienced Excavators and Finds Co-ordinator staff. Experienced Excavator staff will have experience in excavation and experience with NPS Archaeology's *pro forma* recording system or similar systems. The Project Officer and/or Experienced Excavator staff will be experienced metal detector users.
- 5.3 NPS Archaeology staff associated with the project will be as follows:

Project Management		
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Archaeology Manager	Jayne Bown <i>BA, MIFA</i>	
Project Manager	Nigel Page BA AIFA	

Project Staff	
Senior Project Officer	Pete Crawley
Finds Officer	Becky Sillwood
Experienced Excavators	To be nominated

- 5.4 NPS Archaeology reserves the right, because of its developing work programme, to change its nominated personnel at any time. This will be in consultation with Norfolk Historic Environment Service
- 5.5. The analysis of artefactual and ecofactual materials will be undertaken by NPS Archaeology staff or nominated external specialists Nominated NPS Archaeology and external specialists and their areas of expertise are as follows:
- 5.5.1 Specialists used NPS Archaeology

Specialist	Research Field	
Andy Barnett	Metal-detectorist, Numismatic Items	
Andy Peachey	Prehistoric, Roman Pottery, Fired Clay, worked flint	
Becky Sillwood AIFA	Metal finds	
Debbie Forkes Conservation		
Fran Green BSc, PhD	Palaeoenvironmental	
Jo Mills	Worked Stone Artefacts	
John Shepherd	Vessel Glass	
Julie Curl	Faunal Remains	
Richard Macphail	Micromorphology	
Roger Doonan	Non-Ferrous Metalworking	
Sarah Bates	Worked Flint	
Stephen Heywood	Architectural Stonework	
Sue Anderson	Post-Roman Pottery, CBM, human remains	
Val Fryer Macrofossil analysis		

6. General Conditions

6.1 NPS Archaeology will not commence work until a written order or signed agreement is received from the Client. Where the commission is received through an Agent, the Agent is deemed to be authorised to act on behalf of the Client. NPS Archaeology reserve the right to recover unpaid fees for the service provided from the Agent where it is found that this authority is contested by said Client.

- 6.2 NPS Archaeology would expect information on any services crossing the site to be provided by the client.
- 6.3 A 7.4 hour working day is normally operated by NPS Archaeology, although their agents may work outside these hours.
- 6.4 NPS Archaeology would expect the client to arrange suitable access to the site for its staff, plant and welfare facilities on the agreed start date.
- 6.5 NPS Archaeology would expect any information concerning the presence of TPOs and/or, protected flora and fauna on the site to be provided by the client prior to the commencement of works and accept no liability if this information is not disclosed. No excavation will take place within 8m or canopy width (whichever is the greater) of any trees within or bordering the site.
- 6.6 NPS Archaeology shall not be held responsible for any delay or failure in meeting agreed deadlines resulting from circumstances beyond its reasonable control. Such circumstances would include without limitation; long periods of adverse weather conditions, flooding, repeated vandalism, ground contamination, delays in the development programme, unsafe buildings, conflicts between the archaeological excavation method and the protection of flora and fauna on the site, disease restrictions, and unexploded ordnance.
- 6.7 Whether or not CDM regulations apply to this work, NPS Archaeology would expect the client to provide information on the nature, extent and level of any soil contamination present. Should unanticipated contaminated ground be encountered during the trial trenching, excavation will cease until an assessment of risks to health has been undertaken and on-site control measures implemented. NPS Archaeology will not be liable for any costs related to the collection and analysis of soils or other assessment methods, on-site control measures, and the removal of contaminated soil or other materials from site.
- 6.8 Should any disease restrictions be implemented for the area during the evaluation, fieldwork will cease and staff redeployed until they are lifted. NPS Archaeology will not be liable for any costs related to on-site disease control measures and for any additional costs incurred to complete the fieldwork after the restrictions have been removed.
- 6.9 NPS Archaeology will not accept responsibility for any tree surgery, removal of undergrowth, shrubbery or hedges or reinstatement of gardens. NPS Archaeology will endeavour to restrict the levels of disturbance of to a minimum but wishes to bring to the attention of the client that the works will necessarily alter the appearance of any landscaped gardens.

7. Quality Standards

- 7.1 NPS Archaeology is an Institute for Archaeologists Registered Archaeological Organisation and fully endorses the Code of Practice and the Code of Practice for the Regulation of Contractual Arrangements in Field Archaeology. All staff employed or subcontracted by NPS Archaeology will be employed in line with The Institute for Archaeologists Code of Practice.
- 7.2 The guidelines set out in the document *Standards for Field Archaeology in the East of England* (Gurney 2003) will be adhered to. Provision will be made for monitoring the work by Norfolk Historic Environment Service in accordance with the procedures outlined in the document *Management of Archaeological Projects* (English Heritage 1991). Monitoring opportunities for each phase of the project are suggested as follows:
 - during Trial Trenching
 - during Post-Fieldwork Analysis
 - upon completion of the archive

- upon receipt of the Evaluation Report
- 7.3 A further monitoring opportunity will be provided at the end of the project upon deposition of the integrated archive and finds with the Norfolk Museums and Archaeology Service.
- 7.4 NPS Archaeology operates a Project Management System. Most aspects of this project will be co-ordinated by a Project Officer who is responsible for the successful completion of the project. The Project Manager retains responsibility for the delivery of the project. The Archaeology Manager has the responsibility for all of NPS Archaeology's work and ensures the maintenance of quality standards within the organisation.

8. Health and Safety

- 8.1 NPS Archaeology will ensure that all work is carried out in accordance with NPS Property Consultants Limited's Health and Safety Policy, to standards defined in *the Health and Safety at Work, etc Act, 1974* and *The Management of Health and Safety Regulations, 1992*, and in accordance with the health and safety manual *Health and Safety in Field Archaeology* (SCAUM 2007).
- 8.2 A risk assessment will be prepared for the fieldwork. All staff will be briefed on the contents of the risk assessment and required to read it. Protective clothing and equipment will be issued and used as required.
- 8.3 NPS Archaeology will provide copies of NPS Property Consultants Limited's Health and Safety policy on request.

9. Insurance

9.1 NPS Archaeology's Insurance Cover is:

Employers Liability	£ 5,000,000
Public Liability	£50,000,000
Professional Indemnity	£ 5,000,000

9.2 Full details of NPS Archaeology's Insurance cover will be supplied on request.

