

Archaeological evaluation on land north of Merton, Oxfordshire November to December 2013

Accession number: OXCMS:2013.177

Report No. 14/13

Authors: Mo Muldowney and Carol Simmonds Author and illustrator of geophysical survey: John Walford Illustrators: James Ladocha and Amir Bassir





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Project Manager: Adam Yates Site Code: OXCMS:2013.177

NGR: SP 5771 1787

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Quality control and sign off:

Issue No.	Date approved:	Checked by:	Verified by:	Approved by:	Reason for Issue:
1	28.01.2014	Pat Chapman	Adam Yates	Andy Chapman	Draft for client review
2					

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Querns: Andy Chapman

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Animal bone: Justine Biddle

OASIS REPORT FORM

PROJECT DETAILS	Oasis No: molanort1-	169576			
Project title	Archaeological evaluation on land north of Merton, Oxfordshire				
An archaeological evaluation was undertaken by Northamptonshire Archaeology (now MOLA), on land north of Merton, Oxfordshire. The proposed development area falls within recorded earthwork remains pertaining to the Shrunken Medieval Village of Merton. Geophysical survey (magnetometry) was followed by targeted earth resistance survey which identified the location of two possible stone building groups. Earthworks surveyed comprise hollow-ways, banks and possible building platforms. However, during the survey it became clear that they were masked by a layer of modern material spread after the site was used as a storage area during the construction of the nearby Nursing Home. Eight trenches targeted the earthworks and geophysical anomalies. The western part of the site was occupied from at least 11th century and may have been occupied until the 18th century. It is possible that earlier remains lie beneath. The earthwork bank in the centre of the area appears to have formed a physical boundary between occupation to the west and outfield areas which may have been agricultural or pastoral in nature to the east.					
Project type	Trial trench evaluation				
Site Status	None				
Previous work	Geophysical and earthwork survey (NA 2013)				
Current land use	Unused/ grass/scrub				
Future work	Unknown				
Monument type and period	Ditches and layers; medieval				
Significant finds	Pottery, clay tobacco-pipe, animal bone				
PROJECT LOCATION					
County	Oxfordshire				
Site address	Land north of Merton, C	Oxfordshire			
Post code	OX25				
OS co-ordinates	NGR SP 5771 1787				
Area (sq m/ha)	2.9 hectares				
Height aOD	62m- 66m				
PROJECT CREATORS					
Organisation	MOLA formerly known	as Northamptonshire Archaeology (NA)			
Project brief originator	Richard Oram, Oxfordshire CC Planning Archaeologist				
Project Design originator	Northamptonshire Archaeology (NA)				
Director/Supervisor	lan Fisher and John Walford (geophysical survey) Mo Muldowney				
Project Managers	For NA Adam Yates and Mark Holmes (geophysical surveys)				
Sponsor or funding body	Welland Design and Build Ltd				
PROJECT DATE	siidiid Doolgii diid Do	of 1.1 and I bear to not			
Start date	14/11/2013				
End date	19/12/2013				
ARCHIVES	Location (Accession no.)	Contents			
Physical	OXCMS:2013.177	Pottery, animal bone, oyster shell, lava quern, metalwork			
Paper		Site records			
Digital		Survey data, report, photographs			
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report (NA report)				
Title	Archaeological Evaluation on land north of Merton, Oxfordshire, December 2013				
Serial title & volume	14/13				
Author(s)	Mo Muldowney and Carol Simmonds				
Page numbers	71 pages of text, appendices and illustrations				
Date	January 2014				
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ARCHAEOLOGICAL EVALUATION ON LAND NORTH OF MERTON, OXFORDSHIRE

NOVEMBER - DECEMBER 2013

Abstract

An archaeological evaluation was undertaken by Northamptonshire Archaeology (now MOLA), on land north of Merton, Oxfordshire. The proposed development area falls within recorded earthwork remains pertaining to the Shrunken Medieval Village of Merton. Geophysical survey (magnetometry) was followed by targeted earth resistance survey which identified the location of two possible stone building groups. Earthworks surveyed comprise hollow-ways, banks and possible building platforms. However, during the survey it became clear that they were masked by a layer of modern material spread after the site was used as a storage area during the construction of the nearby Nursing Home. Eight trenches targeted the earthworks and geophysical anomalies.

The western part of the site was occupied from at least 11th century and may have been occupied until the 18th century. It is possible that earlier remains lie beneath. The earthwork bank in the centre of the area appears to have formed a physical boundary between occupation to the west and outfield areas which may have been agricultural or pastoral in nature to the east.

1 INTRODUCTION

Northamptonshire Archaeology (now trading as MOLA), was commissioned by Welland Design & Build to carry out a program of archaeological evaluation on 2.9ha of rough grass land to the north of Merton, Oxfordshire (NGR SP 5771 1787; Fig 1). The evaluation comprised magnetometry and earth resistance survey, earthwork survey of upstanding remains followed by trial trenching.

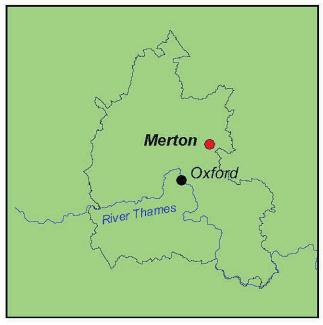
All works were undertaken in accordance with *the National Planning Policy Framework* (DCLG 2012) and followed consultation with Richard Oram (Oxfordshire County Council Planning Archaeologist), and a Written Scheme of Investigation prepared by Northamptonshire Archaeology (NA 2013).

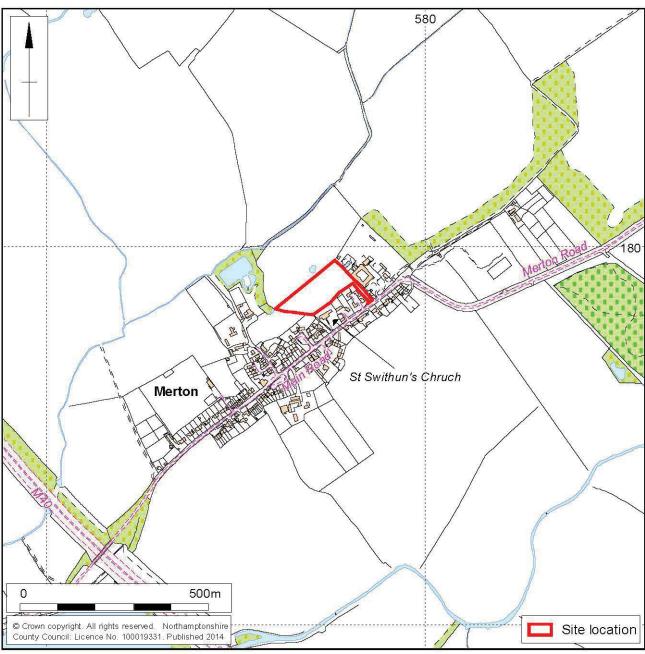
2 BACKGROUND

2.1 Topography and geology

The development area, which lies on the north side of Main Road in Merton, on the north-west side of the village, is currently fallow land with a public footpath crossing from the corner near the church to the north-east. It is bordered to the north and south-west by pasture and agricultural land, to the east by the Manor House Nursing Home and to the south by residential development and the churchyard (Fig 1).







Scale 1:10,000 Site Location Fig 1

The geological mapping for the area indicates that the site was located on Lias Group – mudstone, siltstone, limestone and sandstone (BGS-http://www.bgs.ac.uk/geoindex/). The evaluation showed that the superficial deposits comprised Cornbrash in the south part of the site changing to Kellaway clay in the north. This change was visible in the geophysical survey results.

2.2 Archaeological background

The site is located in an area of high archaeological potential in the historic core of Merton village. The Oxfordshire Historic Environment Record (HER) has a small number of entries relating to archaeological and historic events, buildings and artefacts that have been identified within a 500m radius (the search area) of the site.

The earliest recorded and only prehistoric artefact within the search area is a Bronze Age, side-looped, spearhead (HER 12634) found at West End Farm, west of the site.

Roman remains within the search area comprise finds of pottery and animal bone, and a bronze coin from the reign of Antoninus Pius (HER 1806, 13188, 13189 and 42189), as well as a large ditch on the line of a Roman road (HER 10599) south-west of the village, by the M40.

Within the site there are a number of earthworks that are thought to relate to the shrunken medieval settlement of Merton including probable house platforms (HER 4717). The location of the earthworks is marked on the Ordnance Survey maps, but during the non-intrusive survey, they were seen to have been damaged and, as a result, are now less pronounced. In addition to the remaining upstanding remains it is likely that below ground remains will survive.

There are a small number of medieval buildings near the site, the closest of which is the 13th/14th-century Grade I listed Church of St Swithun, immediately adjacent to the development area. The church is likely to have formed the focus of the medieval village. The Manor House Nursing Home complex at the north-east end of site contains buildings of 16th-century origin and evidence for limestone walls and a stone surface thought to be associated with the manor house (HER 16119). To the south-west of the site lies a building probably dating to the 16th century. 'Little Chippers' is a house of 17th-century origin that stands across the road from the site. There is also a possible Knight's Templar's Preceptory or Grange located 120m north-east of the site.

To the west of the site there are also some house platforms and a hollow-way that stand on the site of a former medieval homestead (HER 4717). These platforms appear to be a continuation of the earthworks in the development area and indicate that the village was of 'nucleated' form during the medieval period, with buildings clustering around the focal point of the church.

Later medieval and post-medieval entries document former farmhouses and crofts of 17th and 18th-century origin (HER 18061, 18057 and 18059), as well as a Congregational Chapel and the remains of a cross in the churchyard and a dovecote, both of which stand close to the site.

3 AIMS AND METHODOLOGIES

3.1 Aims

The main aim of the investigation was to determine if archaeological remains were present within the proposed development area.

The specific objectives of the project were to provide further information on the:

- Location, extent, nature and date of any archaeological features or deposits that might be present at the proposed development site;
- Integrity and state of preservation of any archaeological features or deposits that might be present at the proposed development site.

A programme of evaluation was carried out in accordance with a Written Scheme of Investigation (WSI) prepared by Northamptonshire Archaeology (NA 2013) in response to consultation with the Oxfordshire County Council Planning Archaeologist. The evaluation comprised detailed geophysical survey (magnetometry and targeted earth resistance survey), topographic and earthwork survey and trial trenching. The works took place between November and December 2013.

Two complementary geophysical techniques, earth resistance survey and magnetometer survey, were deployed on this site. Although both surveys were carried out on a common site grid, using a shared baseline and origin, different grid unit sizes were used for each, as detailed below. The magnetometer survey was undertaken first, on 13 November 2013, and covered the entire field. The resistance survey was undertaken on 21 to 22 November and was restricted to the south-western half of the field, where the magnetometer and earthwork surveys suggested the greatest archaeological potential. The fieldwork methods for each survey complied with the guidelines issued by English Heritage and by the Institute for Archaeologists (EH 2008; IfA 2011).

3.2 Methodologies

Magnetometry

The magnetometer survey was conducted with Bartington Grad 601-2, twin sensor array (Fig 2), vertical component fluxgate gradiometers (Bartington and Chapman 2003). These are standard instruments for archaeological survey and can resolve magnetic variations as slight as 0.1 nanoTesla (nT).

The survey data was collected in 30m grid squares. The gradiometers were carried at a brisk but steady pace through each grid, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 3600 measurements per square.

The survey data was processed using Geoplot 3.00v software. Striping was removed using the 'zero mean traverse' function, and destaggering of the data was performed as necessary.



Magnetometry survey in progress, looking south-east Fig 2

Earth Resistance

This survey was conducted with a Geoscan Instruments RM15 resistance meter connected to a 0.5m 'twin-probe' electrode array. Such an instrument and probe configuration are standard for archaeological earth resistance survey (EH 2008, 25). The data was collected in 20m grid squares, at a resolution of 1m x 1m.

At the time of the survey the weather was overcast and damp. The ground was in a favourable condition for earth resistance survey, being moist but not sodden.

Following completion of the survey, the data was processed using Geoplot 3.00v software. The 'edge match' function was applied to level out imbalances between grids caused by the re-location of the remote probes. High-pass filtering was attempted, but it did not clarify the results in any significant way, so the data presented here is unfiltered.

Data presentation

The processed magnetometer and earth resistance data are presented in this report as grey-tone plots, at scales of +4nT to -4nT (black to white) and 55Ω to 10Ω (black to white) respectively. These plots have been scaled, rotated and re-sampled (georectified) for display against the Ordnance Survey base mapping (Figs 3 & 5), and are shown with interpretative overlays in Figures 4 and 6. Grey-tone plots of the unprocessed survey data are presented in Appendix 4.

Topographic Survey

Topographic survey was undertaken using a Leica System 1200 Global Positioning System (GPS) operating using SMARTNET realtime corrections to a 3D accuracy of +/- 0.1m to Ordnance Survey National Grid (OSGB36). The survey comprised the general topographic survey of the development area as well as survey of the earthworks. Survey points across the proposed development area were recorded with a GPS and the top and bottoms of slopes were identified and recorded along with

sufficient data to generate an image of the natural topography. The relationships and the condition of features were of particular interest.

The measured survey was supplemented by feature descriptions using pro-forma sheets as well as black and white and digital photography.

Survey data was processed using Leica GeoOffice 8.1 and the results overlain on Ordnance Survey base mapping. The results are illustrated using interpretive hachure plans at 1:1,000 scale (Fig 7). This is supported by a gazetteer of the features recorded (Appendix 1), together with written descriptions and photographs. Profiles of upstanding earthwork features have been produced derived from the GPS point (x, y, z) data (Fig 8).

Trial trenching

Eight trenches, each measuring 30m long by 1.8m wide were positioned to investigate the potential impact of the proposed development on any archaeological remains within the development area (Fig 9). Owing to logistical reasons on site the trench numbers differ to those listed in the WSI, although the trench positions remain the same.

All trenches were excavated using a tracked excavator, fitted with a 1.8m wide toothless ditching bucket, operated under constant archaeological supervision. The trenches were excavated to the top of the natural geological horizon or the upper archaeological levels, whichever was the highest.

The excavation and recording were carried out in accordance with NA guidelines and all records were created using NA pro-forma (NA 2011). Photographs were taken of all relevant deposits on 35mm monochrome print film, high resolution digital images were also taken. Work was carried out in accordance with the Institute for Archaeologists' Standard and guidance for archaeological field evaluation (IfA 2008).

Levels in metres above Ordnance Datum were established for all trenches using GPS and for all excavated features using a dumpy level from a temporary bench mark (TBM) established using GPS.

Artefacts were recovered from individual contexts and stored and packed according to type. Three bulk soil samples were taken from securely sealed features.

All records and materials will be compiled in a structured archive in accordance with the guidelines of Appendix 3 in the English Heritage procedural document, Management of Archaeological Projects 2 (EH 1991).

4 SURVEY RESULTS

4.1 Magnetometry survey by John Walford

The magnetometer survey has identified six irregular areas of magnetic disturbance which likely represent spreads of made ground containing brick rubble and ferrous scrap (Figs 3 & 4). The large area of disturbance at the north-east end of the site may relate to the construction work which took place at Manor House Nursing Home, to the immediate east, but the other areas, in the south-western half of the site, could represent either modern construction debris or earlier rubble from collapsed walls.

In the southern part of the site, close to the eastern edge of Bank 1 (see Topographic survey below) the survey detected a short (c8m long) positive magnetic linear anomaly, aligned south-west to north-east, which possibly represents a ditch. It occurs in between two longer sinuous linear anomalies that are approximately parallel with each other. These may indicate the location of a ditch or ditches or may be a reflection of the change in slope.

A number of small discrete positive anomalies, with typical intensities of around 5 – 10nT, have been detected in the central part of the survey area. They are generally irregular in shape, and are not highly diagnostic, but it is possible that they could represent infilled pits, concentrations of brickwork, small hearths or other moderately magnetic features. However, there is also a possibility that some could represent localised variations in the geology underlying the site.

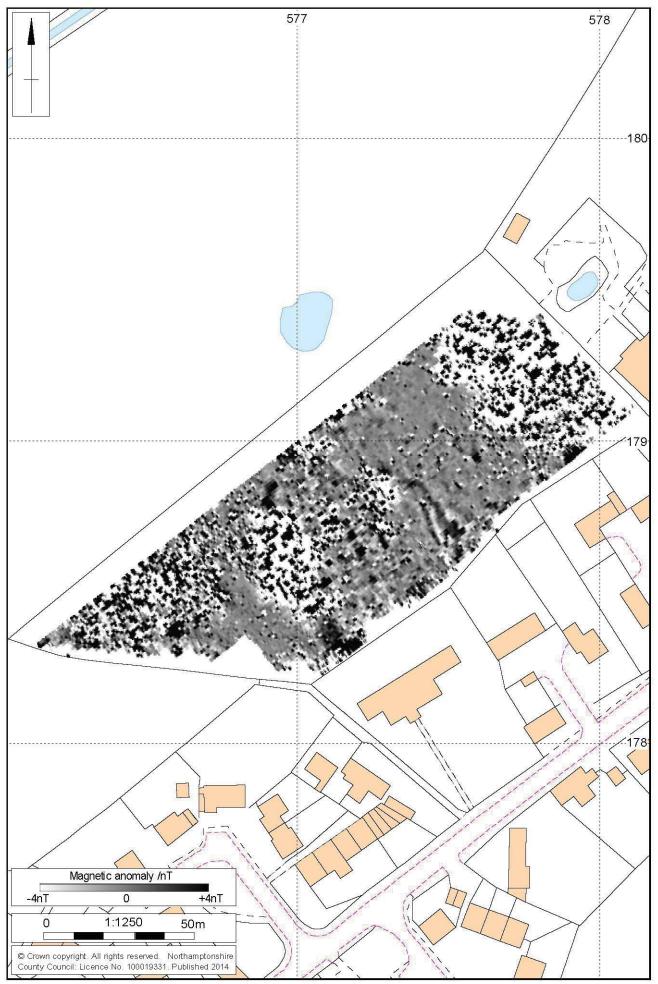
4.2 Earth Resistance by John Walford

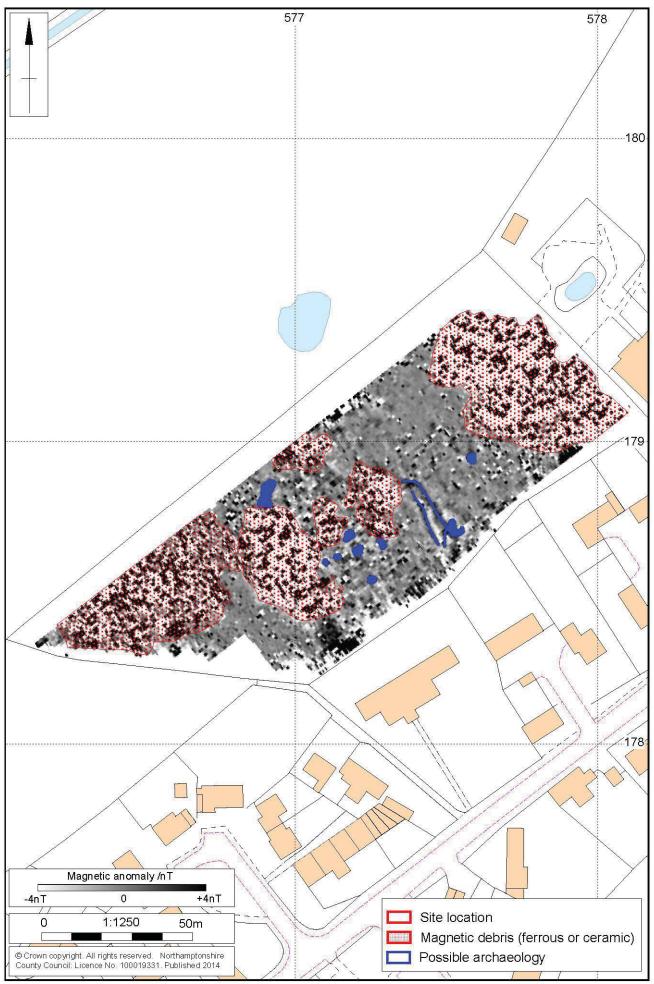
The resistance survey detected a large and well-defined rectilinear feature at the south-western end of the site, corresponding loosely with the location of Platform 2 (see below). This feature seems to represent part of an enclosed plot with a small rectangular sub-division in its south-eastern corner.

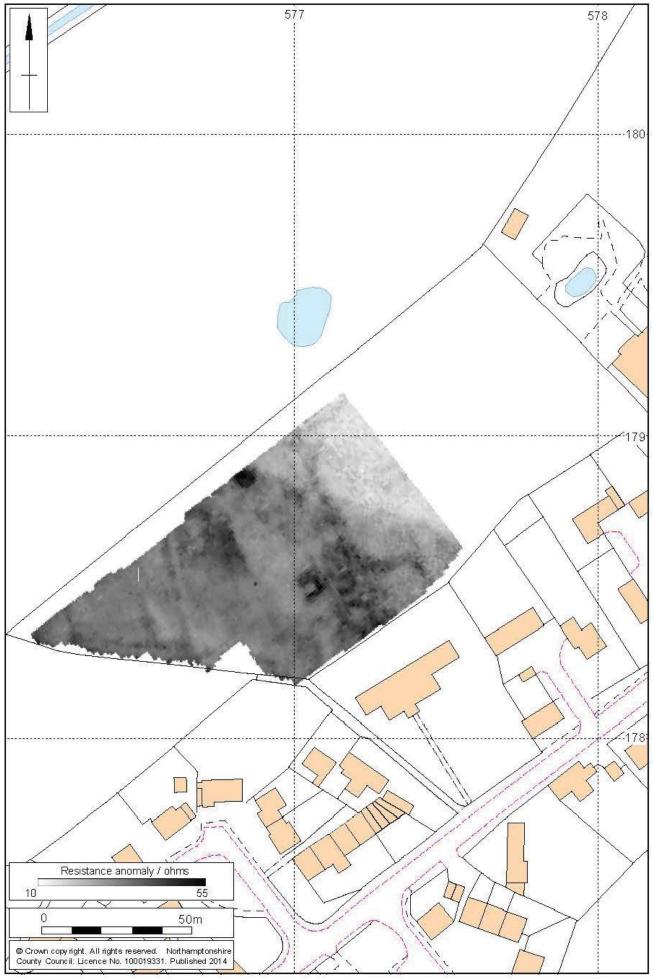
To the north-east of the rectilinear feature there are two areas of high resistance, one sub-circular and approximately 10m across, and the other larger and more amorphous. Both are likely to represent concentrations of stony material in the soil and the latter, which seems to incorporate a sub-rectangular element, perhaps indicates an area of building remains. A third, larger area of high resistance extends north-westwards from the southern boundary of the site. It comprises several elements. To the west there is a sub-square anomaly, c10m across and open to the west, which has the appearance of a structural feature. The main part of the anomaly contains some fine linear elements of lower resistance perhaps the stone walls of a building group. This lies to the north of Trench 3.

Immediately east of the third high resistance area there is a broad and sinuous high resistance anomaly which corresponds very well with the edge of Bank 1.

At the eastern end of the resistance survey area there is an abrupt change in the level of the background resistance values. Although the exact significance of this is unclear, such a uniform change on such a broad scale is more likely to have a geological cause than an archaeological one.

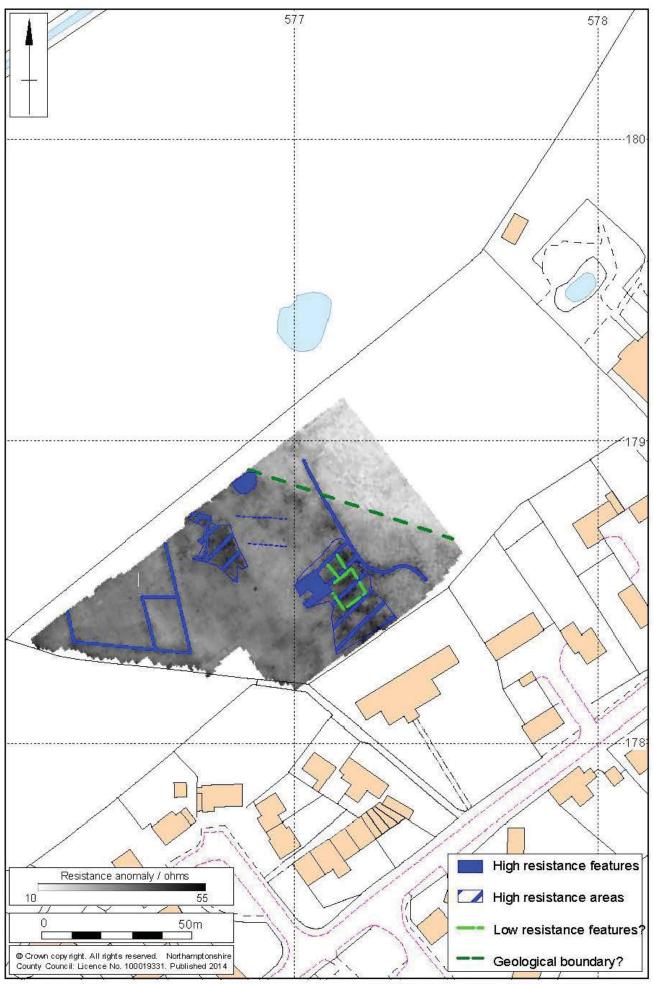






Scale 1:1,250

Earth Resistance survey results F



4.3 Topographic survey

Prior to the topographic survey the site had been ploughed, which appears to have severely degraded the earthworks shown on the Ordnance Survey mapping (Figs 7, 21 & 22). The earthworks were less pronounced at the time of survey than are indicated on the map. Despite the loss of definition to the earthworks, it was possible to determine a small number of potential archaeological and modern features (Fig 7). In general the earthworks were subtle but clearly defined. Appendix 1 presents an illustrated Gazetteer (short and long entry) of the surveyed features.

Feature 1 is a sinuous earthwork, forming an approximate S-shape aligned northwest to south-east. It was probably associated with a ditch on its east side, the location of which may be denoted by a line of mole hills. The bank forms the east side of house Platform 1 and slopes down to the east.

Feature 2 is an L-shaped earthwork that forms the west side of Platform 1 and the east side of Bank 1. It has been degraded by plough damage. Bank 1 is defined by Feature 1 and 3 and is sinuous (Figs 7 and 8, section 12 & 13). There is a small possibility that this may be a third house platform, but the sinuous nature of the bank might preclude this interpretation.

Feature 3, aligned north-west to south-east, sloped gradually down to the west from Bank 1 and may be associated with a ditch. The line of this ditch is again denoted by mole hills and also a distinctly dark soil. The slope of Feature 3 becomes more pronounced towards the north end.

At the north end of Bank 1 there is a sub-circular hollow (Feature 4) that extends beyond the north-west boundary of the site. It lies adjacent to Feature 5 which is the remnant of an L-shaped scarp defining the south edge of a slight hollow, possibly a pond.

Feature 6 lies at the south end of the site, located on the north edge of Bank 2, and slopes down to a hollow, the other side of which is formed by Feature 3.

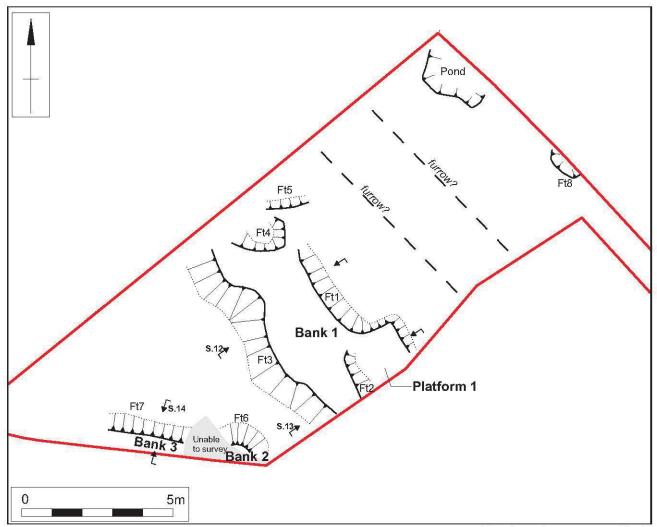
Feature 7 is a slope aligned east to west which may be a continuation of Feature 6 to the east. It tapers away at the west end to an area of considerable plough damage where no earthworks survive. Bank 3 stands at the top of Feature 7, still forming part of the site's south boundary which is a wall (Figs 7 and 8, section 14). Similar to Feature 6 and 7, Bank 3 may be a continuation of Bank 2.

Feature 8 is a small sub-circular hollow that corresponds with a property boundary on Church Close. It may be a relic of the previous boundary; either a robbed out wall or partially infilled ditch.

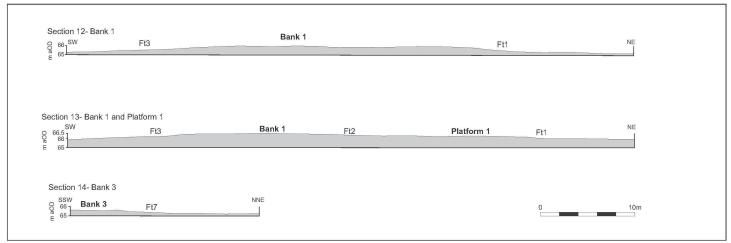
Platform 1 is a sub-rectangular area, approximately 15m wide by 18m long. It is defined by Feature 1 to the east and Feature 2 (Figs 7 and 8, section 13) to the west and is cut by the modern fenceline forming the east boundary of the site.

At the east end of the site there are a series of slight undulations aligned north-west to south-east that may indicate the location of remnant ridge and furrow.

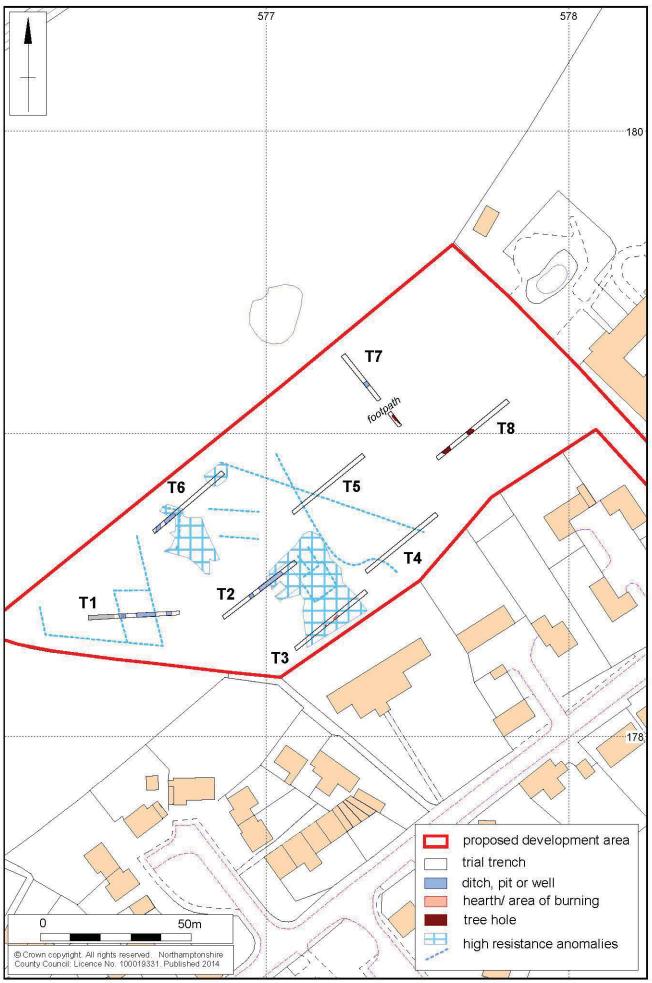
Modern features comprise two sub-rounded hollows located on the north-east boundary. They may be ponds or features associated with the building works which took place on the adjacent land.



Scale 1:1,250 (A4) Earthwork survey Fig 7



Scale 1:200 Profiles across earthworks, Sections 12, 13 and 14 Fig 8



Scale 1: 1,250 The excavated trenches in relation to the Earth Resistance survey

5 THE EXCAVATED EVEIDENCE

Full context descriptions are recorded in Appendix 2 (Context Inventory).

Archaeological features were recorded in all the excavated trenches. The natural horizon where seen in Trenches 1, 2 and 6, was light yellow-white cornbrash, whilst in Trenches 7 and 8 the natural was mid orange silts and light yellow-blue clay. Each trench contained a different sequence of overlying deposits which will be described as appropriate.

Trench 1

Trench 1 was located at the south end of the site. It was located to target two linear anomalies identified by the resistivity survey as well as a large area of magnetic disturbance. The earthwork survey results indicated that this area could contain a house platform (Fig 7). There were three ditches and a large pit/ditch and also what appeared to be a continuation of a hollow-way that can be seen in the adjoining field as an earthwork (Figs 9 & 10). All features cut the natural cornbrash unless otherwise stated.

A wide, shallow ditch [105], 10m from the west end of the trench, aligned north to south. It had gently sloping sides with a flat base, 2.68m wide by 0.29m deep. No finds were recovered from the fill (104), which was truncated by a ditch [107] which was on the same alignment as ditch [105]. It had steeply sloping sides and a flat base, 1.30m wide by 0.49m deep. Pottery dating from the13th to 14th centuries AD and animal bone came from the fill (106). These two ditches corresponded with the westernmost geophysical linear anomaly.

Large ditch/pit [109], 8m from the north-east end of the trench, was 6.30m wide by more than 1.90m deep. It could not be fully excavated due to the increasing depth and the unstable nature of the overlying deposits. An augur was used in an attempt to determine its depth but the stony nature of the fills made it impossible to reach the base. Pottery dating from between the 13th and 14th centuries AD, iron nails and animal bone were recovered from fills (113) - (116) but as these were not identified as separate deposits until after excavation, all have been assigned to upper fill (113). A small amount of residual Romano-British pottery was also recovered. This feature, despite appearing to taper in plan, matches the position of the second, easternmost geophysical linear anomaly.

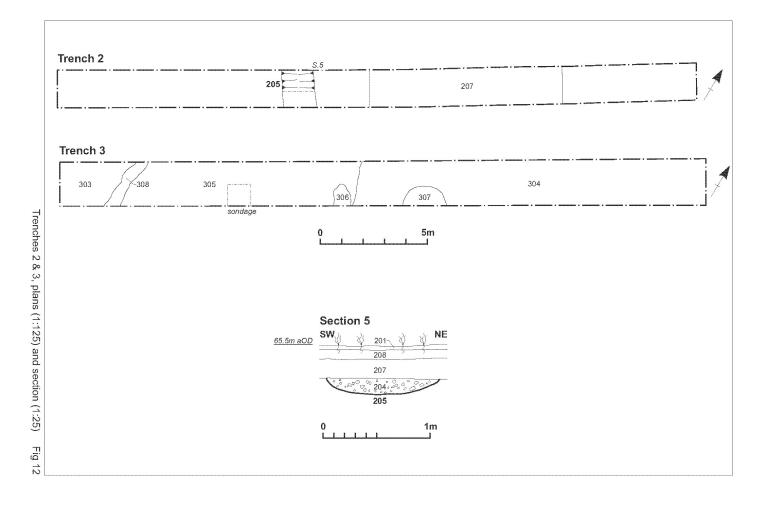
To the east, ditch [112] which was also aligned north to south, was 1.85m wide by 0.71m deep, with a slightly-stepped V-shaped profile with a flat base. The fills (110) and (111) contained a small amount of pottery dated to the mid 16th century AD and animal bone. This feature was not identified in the geophysical survey

The hollow-way, at least 8m wide (Figs 9, 10, section 10 and Fig 11) was located at the western end of the trench. The fill comprised silty layers (122) and (121) overlain by a layer of limestone rubble, 3 0m wide and 0.1m deep (120). This had presumably been deposited to consolidate part of the track. The line of the former earthwork had been lost due to infilling by approximately 0.60m of modern levelling deposit (102) and imported topsoil (101), see below.



The hollow-way in trench 1, looking south Fig 11

A number of additional deposits were observed overlying the features in this trench, including a mid grey silty clay subsoil (110/123) which had slumped into the upper part of ditch [112] where the fill had settled. It was 0.17m thick. The subsoil was overlain by buried topsoil (108) a stoneless, dark grey silt which was present intermittently across the length of the trench and was up to 0.15m thick. The uppermost deposits in this trench were a thick layer of modern building rubble and waste (102), up to 0.62m thick, and modern imported topsoil (101), mid grey silty clay with abundant root intrusion.



Trench 2

This trench was located in the southern half of the development area, to investigate the bank seen in the earlier survey and a strong geophysical anomaly on its western slope. The trench contains a shallow feature, bank and a silt filled hollow (Figs 12 & 13).



General view of Trench 2, looking north-east Fig 13

Near the centre of the trench was a shallow linear feature [205], aligned south-east to north-west, 1.5m wide by 0.15m deep. The base was very uneven which suggests that the feature may have been a hedgeline. The fill (204) produced one fragment of ceramic building material.

This feature corresponded with the western edge of a broad magnetic anomaly seen in the survey. The hedgeline was directly overlain by buried topsoil (207) which was in turn sealed by a modern building rubble deposit (208), similar to (102), again overlain by imported modern topsoil (201).

A hollow, 9m wide was recorded in the centre of the trench, corresponded with the strong sub-square resistivity anomaly (Figs 9 & 12). The buried topsoil layer (207) sealed the hollow and the depth of this deposit was established by augur to be 0.40m at this point. Above this the hollow had been levelled out with the modern layer of building rubble and debris (208) which at this point was over 1m deep. Because of the depth of the trench it was not possible to establish if the buried topsoil within the hollow directly overlay natural, or whether the stony deposit encountered below it was a further fill. This feature was identified by local residents as being known as 'the old stone pit'.

To the north-east end the trench was sited over the bank, observed during the earlier survey, running across the site from the south-east to the north-west from the boundary at the rear of the churchyard. The upper layer of bank material (206), at least 0.43m thick, comprising yellowy-brown sandy silt with frequent medium subangular limestone fragments was recorded in the trench. The bank was sealed by the buried topsoil (207) then by the modern building debris (208) below the imported topsoil (201).

Trench 3

This trench (Figs 12 & 14) was located in the southern half of the development area close to the boundary with the churchyard. It was positioned to target an area of uncertain geophysical response and an upstanding wide bank observed during the earthwork survey. The trench contained a series of four layers relating to the raised bank.

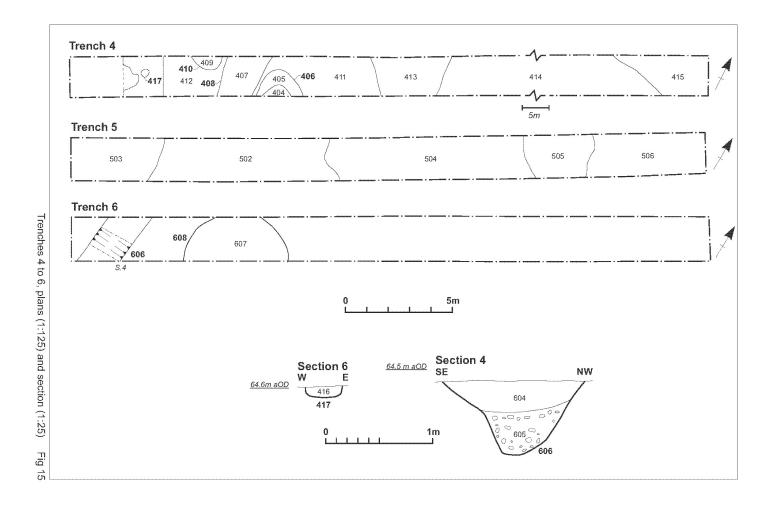


General view of Trench 3, looking south-west Fig 14

The lowest visible deposit was a layer of light grey silty clay with abundant ironstone fragments (303) at the bottom of the slope at the south-west end of the trench. Pottery dating from the late 11th to 12th century AD and animal bone were recovered from this deposit. It was overlain by a layer of mid yellow silty sand also containing a high percentage of ironstone fragments (308). Most of this layer was obscured by layer (305) a deposit of mid brown-orange silty clay with rare ironstone fragments. This deposit was explored in a sondage where its thickness was established as 0.3m. It contained a small amount of pottery dating from between the late 11th to 15th centuries.

The majority of the trench was covered by the overlying upper bank material (304), this comprised light brown-yellow sandy silt with abundant small to medium tabular ironstone fragments. This deposit was uneven in thickness and in some areas within the trench underlying deposits were observed, these included patches of very dark burnt material, indicating a more complex sequence of deposition than could be established within the trench.

The layers of modern building debris and imported topsoil were absent in this trench and the upper bank material (304) was sealed by remnant original subsoil (302) and then by the original topsoil (301).



Trench 4

This trench was located in the southern half of the development area just to the northeast of trench 3 (Fig 9). It was positioned to target an area of uncertain geophysical response and the south-eastern portion of Bank 1 as well as the width of Platform 1, observed during the earthwork survey.



General view of Trench 4, looking north-east Fig 16

A sequence of deposits which probably form Platform 1, were identified (Figs 15 & 16). Deposit (415), comprising a firm dark brown-red silty /sandy clay at the eastern end of the trench and a layer (403) of firm light yellow-brown sands with limestone at the western end of the trench represent the earliest horizons. Layer (403) may be the remnants of a surface but its full extent could not be determined as it was beneath later deposits. A small circular posthole [417] at the south-western end of the trench cut into layer/surface (403) (Fig 15, section 6).

The later material (including (414), (413), (412) and (411)) overlay these deposits with (411), in the centre of the trench, being the latest deposit. The later deposits generally comprised brown-grey of brown-yellow silty clays.

In the centre of the trench were three features which cut into the later deposits. The features comprised two circular pits [406] and [410] and a ditch/furrow [408]. Pit [406] was filled with burnt material (404) and brown sandy/silty clay (405) (Fig 17). Sherds of 11th-century pottery were recovered from fill (404) which was the upper fill of [406].



Pit [406], looking south Fig 17

The features seem to be largely undisturbed by later truncation and the dumping of modern material is absent. Layers of subsoil (402) and topsoil (401) overlay the features in this trench

Trench 5

Trench 5 (Figs 9 & 15) was located in the central portion of the proposed development area across an area of magnetic debris recorded in the geophysical survey and across Ft1 (part of Bank 1).

The trench was excavated to a 0.40m and natural substrate was not encountered. However, there was a sequence of four layers (503,504, 505 and 506) which tipped from the south-west to the north-east. The lowest visible deposit (506) comprised friable dark brown silty clay. The overlying layers were similar in character to layer (506). A late 18th-century provincial token (SF5) was recovered from layer (505). In trench 5, the subsoil (502) comprised a loose mid yellow-brown clayey sand which was overlain by a topsoil (501) deposit of the same character as topsoil (101)/ trench 1.

Trench 6

Trench 6 (Figs 9, 15 & 18) was positioned approximately 20m to the south-east of the northern boundary of the proposed development area, over linear high resistance anomalies. To the north-eastern end of the trench, a large, ovoid-shaped high resistance anomaly was recorded. The trench was also positioned across the north-western end of Bank1, a large sinuous earthwork. Two features, a ditch [606] and a possible pit [608] were recorded at the south-western end of the trench. Neither feature corresponds with any of the surveyed anomalies.

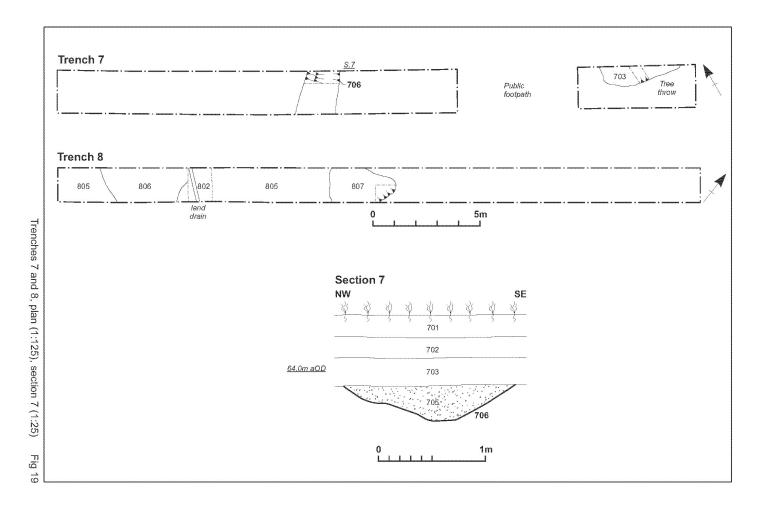


General view of Trench 6, looking north-east Fig 18

At the south-western end of the trench was a ditch [606], aligned north-north-east to south-south-west, 1.36m wide and 0.70m deep with asymmetrical U- shaped profile. The lower fill (605) comprised a loose, dark brown-grey silty/sandy clay, from which fragments of cow bone and small amounts of cereal grains were recovered. This was overlain with a firm, dark grey silty clay (604), up to 0.30m thick.

Approximately 2m to the north-east of ditch [606] was a large oval feature perhaps a pit [608]. The pit was 5m long (south-west to north-east) and its upper surviving fill (604) comprised a firm dark brown silty clay with frequent medium sized limestone fragments (Fig 15, section 4).

Both the ditch and the pit were overlain with a layer (602) of brown silty sandy clay with abundant brick, concrete fragments and plastic.



Trench 7

In the north-eastern part of the development area and in a 'blank' area of geophysical survey was trench 7, divided where a public footpath crossed its location (Fig 9). The trench was aligned parallel to the recorded, discrete remnants of probable furrows located north-east of the medieval village.

Within the trench (Fig 19) was a ditch [706] aligned east to west, 1.60m wide and 0.34m deep. Its profile comprised a flattish base rising to straight, eroded gradual sloping sides. It was filled with firm brown-grey silty clay (705). Small amounts of Oat (Avena sp.), barley (Hordeum sp.) and wheat (Triticum sp.) grains were recovered from Sample 2 (705).

An amorphous shaped tree hole, comprising firm, mid grey-brown silty clay (707) lay at the south-eastern end of the trench.

Both the tree bole (707) and ditch [706]/ (705) were overlain by a thin colluvial layer (703) comprising friable, mid grey-brown silty sand, between 0.20m to 0.50m thick. This was overlain with a subsoil (702) of friable mid brown sandy/silty clay.

Trench 8

Trench 8 was positioned across the western edge of an area of magnetic disturbance which was recorded in the geophysical survey (Figs 9 & 20). Located in the area of the south-western end of the trench was a ferrous anomaly.



General view of Trench 8, looking north-east Fig 20

No definitive archaeological features were identified within trench 8 (Fig 19) apart from a tree hole (807) in the centre of the trench and what was thought to have been a ditch but was revealed to be a natural hollow (806). This feature (806) roughly corresponds with the location of the ferrous anomaly recorded in the geophysical survey. Sherds of 12th-century pottery were recovered from (806).

The natural features were overlain with a sequence of layers (804), (803) and (802) generally comprising dark grey or brown-grey silty clays. Fragments of tile and animal bone were noted in layer (803) but were not retained. A layer of modern rubble (808) was recorded at the north-eastern end of the trench. The area of magnetic debris in the area of trench 8 may be as a result of the modern rubble (808) as well as a reflection of the made ground layers (802)-(804).

6 THE ARTEFACTUAL AND ENVIRONMENTAL EVIDENCE

6.1 Pottery by Paul Blinkhorn

The pottery assemblage comprised 79 sherds with a total weight of 978g. It was recorded utilizing the coding system and chronology of the Oxfordshire County typeseries (Mellor 1984; 1994), as follows:

OXB: Late Saxon Oxford Shelly Ware (late 8th- early 11th century), 1 sherd, 63g

OXR: St. Neots Ware (c AD850-1200), 9 sherds, 41g

OXAC: Cotswold-type ware (AD975-1350), 15 sherds, 108g

OXBF: North-East Wiltshire Ware (AD1050 - 1400), 12 sherds, 100g

OXY: Medieval Oxford ware (AD1075 - 1350), 15 sherds, 172g

OXBK: Medieval Shelly Coarseware (AD1100-1350), 2 sherds, 38g

OXBB: Minety-type ware (early 13th - 16th century), 1 sherd, 43g

OXAM: Brill/Boarstall ware (AD1200 - 1600), 11 sherds, 255g

OX68: Potterspury ware (Late 13th - 17th century), 6 sherds, 57g

OXDR: Red Earthenwares (1550+), 3 sherds, 79g

In addition, three sherds (21g) of Romano-British pottery and a single unstratified fragment of early/middle Saxon material (1g) were also noted. The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*. The range of fabric types is typical of sites in the region, and suggests that there was activity at the site from the late Saxon period, if not earlier, until around the 14th century, after which time the site was abandoned until the post-medieval period. The assemblage comprises largely fragments of jars and glazed jugs, which is typical of the period, although two sherds of medieval Oxford ware (OXY) from layer (305) may be from an aquamanile, a vessel used for containing water for washing the hands during formal dining or communion. If so, this would suggest that the site is of somewhat greater than normal status.

All of the mid-late Anglo-Saxon pottery (late Saxon Oxford shelly ware and St Neots ware) is redeposited in later contexts, but its presence suggests that there was activity of such date in the vicinity of these excavations, although it obviously has been to some extent disturbed by later activity.

The sherds are, in the main, fairly large and in reasonably fresh condition, indicating that they are reliably stratified.

MERTON, OXFORDSHIRE

Table 1: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

	R	В	E/I	VIS	0	(B	0)	KR	ОХ	AC	0)	(BF	0	XY	ОХ	ВК	ОХ	ВВ	OX	MAX	0)	(68	ОХ	DR	
Fill/ Cut	No	Wt (g)	No	Wt (g)	No	Wt (g)	No	Wt (g)	No	Wt (g)	No	Wt (g)	No	Wt (g)	No	Wt (g)	No	Wt (g)	No	Wt (g)	No	Wt (g)	No	Wt (g)	Date
U/S		-	-	-	1	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	-	-	U/S
106/ 107	-1	-	-	-	-	-	-	-	3	38	-	-	1	7	1	9	-	-	3	47	-	-	-	-	13thC
108	1	6	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	65	-	-	1	15	M16thC
111/ 112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	43	-	-	6	57	2	64	M16thC
113/ 109	2	15	-	-	-	-	9	41	12	70	1	21	4	23	-	-	-	-	4	57	-	1-	-	-	13thC
303		-	-	-	-	-	-	-	-	-	10	65	1	7	-	-	-	-	-	-	-	-	-	-	L11thC
305	_	-	-	-	-	-	-	-	-	-	_	_	2	31	-	-	-	-	2	31	-	-	-	_	13thC
404/ 406	-1	-	-	-	-1	-	-	-	-	-	-	-	5	67	-	-	-	-	-	-	-	-	-	-1	L11thC
412	-	-	12	-	_	-	-	_	-	-	1	14	-	-	-	-	-	_	-	-	-	12	-	-	M11thC
414	-	-	-	-	-	-	-	-	-	-	-	-	2	37	-	u	-	-	1	55	-	1-	-	-	14thC
707	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U/S
806	=1	-	1.5	-	-	-	-	-	-	-	-	-	-	-	1	29	-	-	-	-	-	1.5	-	-	12thC
Total	3	21	1	1	1	63	9	41	15	108	12	100	15	172	2	38	1	43	11	255	6	57	3	79	

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6.2 Ceramic roof tile by Pat Chapman

The five sherds from trenches 1 and 2, weighing 363g, come from plain flat roof tiles. The two sherds from buried topsoil (108) are 14mm thick and made with reddishorange-brown sandy clay with frequent tiny gravel inclusions, one sherd has a trace of white lime mortar adhering to one side. The sherds from fill (113) well [109] and layer (206) are 13mm thick and made with orange clay with a medium grey core. The fragment from fill (204) furrow [205] is 18mm thick, made with brown clay with some small calcareous inclusions and a partial dark grey core.

These tile sherds could date from the late 14th to the early 19th centuries.

A small piece of coarse sandy dark reddish-brown clay, weighing 20g, from context (404) probable hearth [406], could be a brick fragment of unknown date.

6.3 Querns by Andy Chapman

From the buried topsoil deposit (108) there is a fragment, weighing 277g, from the circumference of an upper stone of a rotary quern in lava. The quern was 400-450mm in diameter (with 8% of the circumference present). The stone has a smoothly-ground surface and is only 25mm thick, which suggests that it had seen a long period of use. No other diagnostic features survive.

A small irregular fragment of lava, weighing 9g, was found unstratified in Trench 8.

Lava querns were imported in considerable numbers from the Eifel region of Germany through the Roman and Saxon periods. They continued to be imported throughout the medieval period, but are less frequently found in post-Conquest deposits given both the requirement, not always obeyed, to have grain milled at the lords' watermill or windmill, and due to the use of a wider variety of stone types.

6.4 Other finds by Tora Hylton

The evaluation produced 11 small finds dating from the *c*13th to 19th centuries. Full descriptions of the artefacts are presented in the 'Finds Catalogue' (Appendix 3). Five medieval finds were recovered from stratified deposits in Trenches 1 and 3, and finds of 17th-19th century in date were retrieved from deposits overlying Trenches 3, 5, 6 and 7.

The earliest datable object is a copper alloy buckle (SF 7) recovered from a silt/dumping layer in Trench 3 (305), together with a lead off cut (SF6) and a piece of possible metalworking debris (SF 8). The buckle is complete, it has an oval frame with offset narrowed bar with a pin attached and it displays similarities to an example from London which dates to c1270-1350 (Egan 1991, fig 42, 274). Two iron nails were also recovered from a medieval well/pit (113)/ [109].

Unstratified finds from post-medieval deposits include a small number of 17th and 18/19th-century items which may have been casually lost, these include a buckle (SF 2), a token (SF 1) and a button (SF 1). In addition two pieces of lead shot and an undiagnostic copper alloy strip were also recovered.

The copper alloy buckle was recovered from Trench 3. It has a double-loop frame with an iron pin attached to the central bar. It may be paralleled by two examples from Norwich (Margeson 1993, fig 16, 164, 165).

An 18th-century provincial token (SF5) was recovered from Trench 5. Provincial tokens are a form of minted coinage struck and used in the late 18th century and early part of the 19th century in answer to the shortage of small denomination coins for everyday transactions.

The token was issued by the Birmingham Mining and Copper Company, a company set up in 1790.

Obverse: Female holding fasces and seated on a large rock.

Legend: "BIRMINGHAM MINING AND COPPER COMPANY 1792"

Reverse: Stork standing on cornucopia. Legend: "HALFPENNY PAYABLE AT"

Diameter: 30mm

The button comprising a circular metal plate with soldered loop (Omega-type shank) is made from a white metal alloy and dates to the 19th century.

Two pieces of lead shot were recovered from Trenches 3 and 7. The size, 12mm and 15mm in diameter suggests that they would have been for use with a pistol rather than a musket.

6.5 Animal bone by Justine Biddle

In total 65 fragments of faunal material were recorded from six contexts. All of the material was hand-collected and it was possible to indentify 45% (29 fragments) of the assemblage to species and element. Table 2 shows the number of fragments and total weight by context.

Table 2: Quantification of animal bone

Fill/cut	No. of ragments	Weight (g)
106/ditch 107	9	1020
111/ditch 112	22	673
113/pit 109	16	237
303 layer	4	16
305 layer	12	151
605/ditch 606	2	247
Total	65	2344

Table 3 shows the number of fragments by species. The assemblage comprises a variety of elements with a relatively high percentage of horse (28%) of those identified to species. The variation in spot dates supplied by the pottery suggests that very little of the assemblage is contemporary and the features represent separate isolated events. However, the composition does suggest that the area was more likely to have been used for primary butchery, or possibly knackering in the case of the horse remains, rather than consumption due to the higher proportion of skull fragments and fragments from extremities.

Table 3: Animal bone quantification by species

Fill/cut	Cow	Pig	Horse	Sheep/ Goat	Large Mammal	Small Mammal
106/ ditch [107]	3	3	3	-	-	
111/ ditch [112]	2	3	5	1	10	1
113/	2	-	-	-	14	-
well/pit [109]						
303 layer	-	-	-	-	4	-
305 layer	1	-	-	4	7	-
605/ ditch [606]	2	-	-	-	-	-
Total	10	6	8	5	35	1

There are no specific butchery techniques or other details which would suggest a particular period for this assemblage. Additionally, there is very little further information which can be discerned such as the age or sex of the animals due to the limited size of the assemblage. However, there is evidence of infected arthritis on the cow pelvis from (106)/ [107] which suggests an elderly animal and signs of gnawing on the two horse metacarpals from (111)/ [112] indicating that these were above ground and accessible to scavengers prior to burial.

6.6 Charred plant remains by Val Fryer

Bulk soil samples for the evaluation of the content and preservation of the plant macrofossil assemblages were taken from fills within ditch [606] (sample 1 context (605)), ditch [706] (sample 2 context (705)) and pit/well [109] (sample 3 context (115)).

The samples were bulk floated by NA and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Table 4. Nomenclature within the table follows Stace (1997). All plant remains were charred. Modern roots, straw, seeds, leaves and arthropod remains were also abundant within all three assemblages.

Results

Although cereals, chaff and weed seeds are recorded, the density of material is generally low and preservation is quite poor. Many of the surviving macrofossils are fragmentary and abraded, with the charcoal in particular being extremely comminuted.

Oat (Avena sp.), barley (Hordeum sp.) and wheat (Triticum sp.) grains are recorded, with wheat occurring most frequently. Cereal chaff is scarce, but the assemblage from sample 1 includes a fragment of wheat glume base, and a bread wheat (T. aestivum/compactum) type rachis node is noted within sample 2 (fill (705) of ditch [706]). Sample 1 (lower fill (605) of ditch [606]) also includes what appears to be a charred grape (Vitis vinifera) seed, although preservation is very poor. Weed seeds are very scarce, with all occurring as single specimens within an assemblage. All are of common segetal weeds/grassland herbs including mallow (Malva sp.), grasses (Poaceae), knotgrass (Polygonum aviculare) and dock (Rumex sp.). A single spikerush (Eleocharis sp.) fruit from sample 3 (fill (113) of well/pit [109]) is the only wetland plant macrofossil recorded. Minute charcoal/charred wood fragments are present throughout, but other plant macrofossils are very scarce.

Few other material types are recorded, although the ditch fills both contain irregular brown/black spherules with what appears to be a high ferrous content. It is considered most likely that these are natural in origin. Shells of common terrestrial molluscs are also recorded, but at the time of writing, it is unclear whether these are contemporary with the contexts from which the samples were taken, or modern contaminants.

Conclusions and recommendations for further work

In summary, although the recovered plant macrofossils are almost certainly anthropogenic in origin, the paucity of the assemblages suggests that the excavated features were probably peripheral to any main focus of either domestic or agricultural activity. The remains which are recorded appear to be derived from scattered or wind-dispersed cereal processing waste and/or midden detritus, much of which was probably accidentally incorporated within the feature fills.

Although the current assemblages are sparse, they do illustrate that plant macrofossils are preserved within the archaeological horizon in this area of Merton. Therefore, if further interventions are planned, it is recommended that additional plant macrofossil samples of approximately 40 litres in volume are taken from all features recorded during excavation, particularly those which may be of either domestic or agricultural import.

Key to Table 4 (next page): x = 1-10 specimens; xx = 11-50 specimens; xxx = 51-100 specimens; xxxx = 100+ specimens. xxx = 100+ specimens. xxx = 100+ specimens.

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Table 4: Quantification of charred plant remains

Sample No.	1	2	3
Fill/cut	605/606	705/706	115/109
Feature type	Ditch	Ditch	Pit/well
Cereals and other potential food plants			
Avena sp. (grains)	-	Х	-
Hordeum sp. (grains)	-	Х	-
Hordeum/Secale cereale type (rachis node)	-		Х
Triticum sp. (grains)	-	X	X
(glume base)	X	-	-
T. aestivum/compactum type (rachis node)	1-	X	===
Cereal indet. (grains)	xcffg	xfg	Х
Vitis vinifera L.	xcf	-	-
Dry land herbs			
Anthemis cotula L.	1-	xcf	-
Asteraceae indet.	;-	-	Х
Chenopodiaceae indet.	(=	X	-0
Malva sp.	-	-	Х
Small Poaceae indet.	X	-	-
Large Poaceae indet.	1-	-	Х
Polygonum aviculare L.	Х	-1	- 0
Rumex sp.	r <u>=</u>	-	Х
Wetland plants			
Eleocharis sp.	-	-1	Х
Other plant macrofossils			
Charcoal <2mm	XX	XXXX	XXX
Charcoal >2mm	Х	Χ	Х
Charcoal >5mm	-	X	-
Charred root/stem	7=	Х	-
Indet.seeds	Х	-	Х
Other remains			
Black porous 'cokey' material	X	Х	XX
Ferrous material	X	XXX	-
Small coal frags.	X	Χ	-
Small mammal/amphibian bones	X	-	Х
Mollusc shells: Open country species			
Pupilla muscorum	X	-	Х
Vallonia sp.	X	-	Х
V. excentrica	Х	-	=:
V. pulchella	xcf	-	xcf
Vertigo pygmaea	I =	Χ	-1
Catholic species: Trichia hispida group	XX	Х	Х
Sample volume (litres)	40	40	10
Volume of flot (litres)	<0.1	0.1	<0.1
% flot sorted	100%	100%	100%

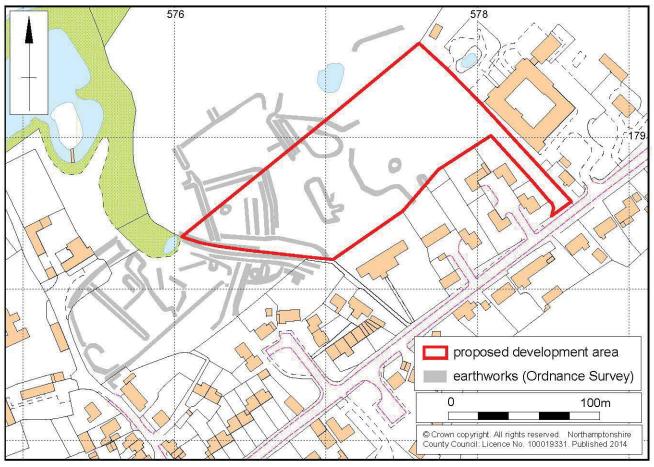
7 CONCLUSION

The evaluation, which comprised geophysical survey and topographic survey, trial trenching, identified a range of features and deposits indicating that the site was occupied from at least the 8th-century to the post-medieval period. The few sherds of Roman pottery are residual. The works indicate that archaeological deposits survived between 0.3m and 0.5m below the ground level across the area.

The medieval village of Merton was likely to have been nucleated, and was centred on St Swithun's Church. The site lies on the eastern edge of the known village remains and is bounded to the west by a hollow-way leading north-west from the church. The earthwork remains, including possible building platforms, sit either side of this hollow-way. Within the site the bulk of the earthwork and buried archaeological remains are concentrated in the western part. The ditches recorded in trenches 1, 2, 6 and 7 may be associated with the now masked earthworks. The earthwork bank (Bank 1), recorded during the works, may indicate the boundary between occupation and outfield use (agricultural or pastoral). The archaeological features in this area, such as the sterile ditch [706] in trench 7, were more discrete and sparse.

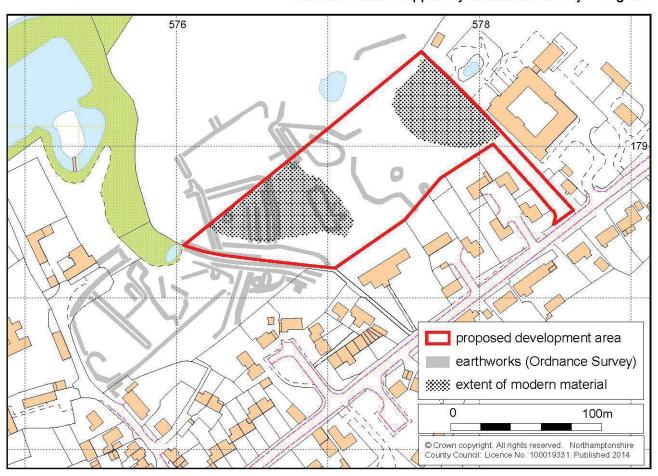
The earthworks, particularly Bank 1 and Platform 1 were formed by generally even deposition of soils. The tentative dating evidence (the pottery from trench 4) indicates that the site was almost certainly in use between 11th and 14th centuries. However, the full depth of deposits was not ascertained during the evaluation and it is likely that there are earlier deposits and features beneath those recorded. No definitive buildings were identified although it is possible that some of the layers recorded may indicate rural dark earth where former buildings were left to decay. The presence of at least two hearths, which overlay the later deposits, indicates that there was some domestic or small scale industrial use of the site. It is probable that there were houses and crofts on the site until the 18th century, although the upper layers which sealed medieval activity may have been compacted and disturbed when the modern debris was spread on the site.

The earthworks recorded on modern Ordnance Survey mapping suggest that the area north of the modern village had terraced enclosures and hollow-ways with a number of building platforms (Fig 21). In recent years the visibility of the earthworks has been adversely affected by the dumping of modern hardcore (Fig 22). This reportedly took place during the construction of the Nursing Home to the east of the site. During construction, the proposed development area was used a storage area for hardcore and other building products. When construction was finished the remaining material was spread across the site. This material was recorded as ferrous or ceramic disturbance in the geophysical survey and was confirmed in trenches 1, 2 and 6. The dumping of the material does not appear to have impacted the physical integrity of below ground remains.



Scale 1: 2,500

Earthworks as mapped by Ordnance Survey Fig 21



Scale 1: 2,500

BIBLIOGRAPHY

Crutchley, A, 2012 Land North of Aynho Road, Adderbury, Oxfordshire (Draft) Archaeology and Cultural Heritage Assessment, The Environmental Dimension Partnership 1250_03_Draft

DCLG 2012 National Planning Policy Framework, Department of Communities and Local Government

Egan, G E, 1991 Dress Accessories c.1150-c.1450: Medieval Finds from Excavations in London

EH 1991 Management of Archaeological Projects 2, English Heritage

Hassall, T G, Halpin, C, et al, 1984 Excavations at St Ebbe's Oxoniensia, 49, 53-276

If A 2008 Standard and Guidance for Archaeological Field Evaluation, Institute for Archaeologists

Margeson, S, 1993 Norwich Households: The Medieval and Post-Medieval Finds from Norwich Survey Excavations 1971-1978, East Anglian Archaeology, **58**

Mellor, M, 1984 A summary of the key assemblages. A study of pottery, clay pipes, glass and other finds from fourteen pits, dating from the 16th to the 19th century, in T G Hassall *et al*, 181-219

Mellor, M, 1994 Oxford Pottery: A Synthesis of middle and late Saxon, medieval and early post-medieval pottery in the Oxford Region, *Oxoniensia*, **59**, 17-217

NA 2011 Archaeological Fieldwork Manual, Northamptonshire Archaeology

NA 2013 Archaeological trial trench evaluation of land north of Aynho Road, Adderbury, Oxfordshire Written Scheme of Investigation, Northamptonshire Archaeology

Stace, C, 1997 New Flora of the British Isles, 2nd edition, Cambridge University Press

Websites

BGS 2013 Geology Viewer, (accessed 2nd December 2013)

Old Maps.com 2013, http://www.old-maps.co.uk/index.html (accessed 2 December 2013)

MOLA 28 January 2014

APPENDIX 1: EARTHWORK SURVEY (GAZETTEER)

Feature number: Ft1



Ft1 looking north-west

DESCRIPTION

Sinuous 'S'-shaped earthwork aligned north-west to south-east. It measures 36m long, 5.5m wide and 0.35m high. Gradual slope down from west to east.

INTERPRETATION

Component forming the eastern boundary of Platform 1 and Bank 1.

CONDITION Fair RELATED FEATURES Plat

Fair but masked by modern made ground Platform 1, Bank 1, Ft 2

MOLA Report 14/13



Ft2, looking west

DESCRIPTION

L-shaped earthwork bank, aligned north-west to south- east. It measures 15m long, 4m wide and up to 0.20m high.

INTERPRETATION

Defines the known eastern extent of Bank 1 and further to the south, the eastern extent of Platform 1.

CONDITION Fair

RELATED FEATURES Platform 1, Bank 1



Ft3, looking east

DESCRIPTION

Sinuous slope, aligned north-west to south-east defined by a very gradual slope which becomes a slightly steeper incline further to the north.

INTERPRETATION

Western extent of Bank 1. Its northern end has been disturbed by the spread of modern material on the ground surface.

CONDITION Fair
RELATED FEATURES Bank 1, Ft1



Ft4, looking south-west

DESCRIPTION

Horseshoe shaped depression located against the northern boundary of the proposed development area. Aligned north-west to south-east, measuring at least 18m long, 15m wide and 0.60m high.

Defined by a gradual, gentle slope and a flattish base.

INTERPRETATION

Depression which is also recorded on the Ordnance Survey mapping. Unknown function.

CONDITION Fair RELATED FEATURES Bank 1, Ft5



Ft5, looking north north-east

DESCRIPTION

Located c15m south of the northern boundary of the proposed development areas and to the north of Ft4.

Discrete, short length (12m) of a north-facing slope. Approximately 4m wide and up to 0.20m high.

INTERPRETATION

With reference to Ordnance Survey mapping, earthwork Ft5 is visible as the southern end of an L-shaped slope flanking the area of a pond (which lies outside the proposed development area).

CONDITION Poor/fair RELATED FEATURES Ft4

Feature number: Ft6/ Bank 2



Ft6/ Bank 2, looking north-west

DESCRIPTION

Remnants of a north-east facing slope, 18m long (south-east to north-west), c10m wide and up to 0.20m high.

It forms the north-eastern slope of Bank 2.

INTERPRETATION

North-eastern boundary of a hollow-way which largely falls outside of the proposed development area. The hollow-way forms the south-western boundary of the proposed development area and leads from the existing footpath (west of the church) to the woodland and lake to the north-west.

CONDITION Good

RELATED FEATURES Ft7/ Bank 3 and hollow-way to south-west

MOLA Report 14/13 Gazetteer- Appendix 1

Feature number: Ft7/ Bank 3



Ft7/ Bank 3, looking south-east

DESCRIPTION

Clearly defined north-east facing slope, measuring *c*25m long (north-west to south-east), at least 4.5m wide and up to 0.35m high.

The visibility of the north-western end has been affected by the spread of modern material.

INTERPRETATION

North-eastern boundary of a hollow-way which largely falls outside of the proposed development area. The hollow-way forms the south-western boundary of the proposed development area and leads from the existing footpath (west of the church) to the woodland and lake to the north-west.

CONDITION Fair

RELATED FEATURES Ft6/ Bank 2



Ft8, looking north-east

DESCRIPTION

Horseshoe shaped slope, facing north-east, located against north-eastern boundary of the proposed development area. Measures 13m long (north-west to south-east), 6m wide and up to 0.40m high.

INTERPRETATION

Probably the south-western cut boundary associated with the construction of the Nursing Home.

CONDITION RELATED FEATURES

Good

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Gazetteer- Appendix 1

Feature number: Bank 1



Bank 1, looking north-west

DESCRIPTION

Large sinuous earthwork bank, located in the central portion of the proposed development area. Aligned south-east to north-west, at least 60m long, 40m wide and up to 0.35m high. The visibility of the north-western end has been affected by the dumping and spread of modern construction material.

INTERPRETATION

Unknown function.

CONDITION
RELATED FEATURES

Fair, but north-western end affected by modern dumping. Ft1, Ft2, Ft3 and Platform 1

MOLA Report 14/13 Gazetteer- Appendix 1

Feature number: Platform 1



Platform 1, looking south-east

DESCRIPTION

Rectangular area of raised ground located in the south-eastern corner of Bank 1. Aligned north-west to south-east, at least 15m long, 18m wide and up to 0.20m high.

INTERPRETATION

Possible building platform.

CONDITION Fair

RELATED FEATURES Ft1, Ft2, bank 1

Feature number: Pond



Pond, looking north

DESCRIPTION

Ovoid-shaped depression located in the north-eastern corner of the proposed development area. Gradual sloping sides and flattish base, 28m (north-west to south-east) and at least 20m north-east to south-west.

INTERPRETATION

Modern depression, which may originally have been ground disturbance during the construction of the Nursing Home compound to the east. Currently it appears to function as a pond or 'Bog Garden'. Modern in date.

CONDITION RELATED FEATURES Fair

Feature number: Furrows

DESCRIPTION

Shallow linear depressions, aligned north-west to south-east. They are located in the north-eastern part of the site between Ft1 and the north-eastern boundary of the proposed development area.

INTERPRETATION

Probable remnants of medieval furrows. However visibility and survival of this set of earthworks has been impaired by spread of modern material dumped on the ground surface.

CONDITION RELATED FEATURES

Poor

APPENDIX 1: EARTHWORK SURVEY (SHORT ENTRY GAZETTEER)

Feature #	Short description	Part of	Associated features
Ft1	S-shaped, shallow slope aligned SE-NW	Platform 1	-
Ft2	L-shaped shallow slope aligned SE-NW	Bank 1/ Platform 1	Ξ
Ft3	Sinuous shallow slope, aligned NW-SE	Bank 1	-
Ft4	Sub-ovoid depression, north of Bank 1	-	Ft5
Ft5	Short length of slope, linear, aligned E-W	=	Ft4
Ft6/	Semi-circular earthwork in SW corner of the	-	Ft7/ Bank 3
Bank 2	site		
Ft7/	Linear, shallow slope aligned roughly E-W	-	Ft6/ Bank 2
Bank 3			
Ft8	Possible pond, recorded remains are semi- circular in plan	-	-
Bank 1	Broad earthwork bank in centre of the site	-	Platform 1
Platform 1	Rectangular-shaped platform	-	Bank 1
Pond 1	Ovoid-shaped pond in north-eastern corner of the site	-	=
Furrows	Heavily truncated remains of furrows, aligned NW-SE	-	-

APPENDIX 2: CONTEXT INVENTORY

Trench No	Length, width & alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
1	30m, 2m & NW-SE	457656 217839	65.20m	0.62m & 64.58m
Context	Context type	Description	Dimensions	Artefacts/ Samples
101	Topsoil	Loose, dark grey-brown sand, rare small stones	0.12m- 0.30m thick	-
102	Modern makeup layer	Loose mid brown-grey sandy silt with hardcore fragments	0.10m – 0.50m thick	-
103	Natural	Compact, mid/light orange- brown clay with limestone	-	-
104	Fill of ditch 105	Loose, dark grey silty-clay, with moderate small limestone fragments. Cut by ditch 107	2.68m wide 0.29m thick	-
105	Ditch Filled with 104	Linear ditch aligned north-east to south-west, dish-shaped profile comprising straight sloping sides, flat base	2.68m wide 0.29m deep	-
106	Fill of ditch 107	Loose mid orange-brown sandy clay with frequent medium sized limestone fragments	1.30m wide 0.49m thick	Pottery (13th century) animal bone
107	Ditch Filled with 106	Linear ditch aligned north-east to south-west, bowl shaped profile comprising flat base rising to concave sides. Cuts 104	1.30m wide 0.49m thick	-
108	Buried topsoil	Compact dark red-brown silty peat Seals 102	0.20m thick	-
109	Cut of well/ pit? Filled with 113- 118	Ovoid shaped in plan, not fully excavated. Eastern edge comprises near vertical slope with sharp break of slope.	6.20m (E-W) At least 2m (N-S) At least 0.65m deep	-
110	Upper fill of ditch 112	Friable, mid grey-brown clayey- silt, with occasional small stones and charcoal flecking Overlies fill 111	1.85m wide 0.19m thick	-
111	Lower fill of ditch 112	Friable, mid brown-grey silty clay sand with frequent small-large fragments of limestone, rare charcoal flecking	1.65m wide 0.52m thick	Pottery (mid 16th century Animal bone
112	Cut of ditch Filled with 110 & 111	Linear ditch aligned north-east to south-west, 'V'-shaped profile	1.85m wide 0.71m deep	1-
113	Upper fill of well/pit 109	Friable, mid brown-grey clayey silt, frequent small corn-brash fragments	0.13m thick	Pottery (13th century) Animal bone Iron nails

114	Fill of well/pit 109	Firm, mid brown-grey clayey silt, with small-medium medium sized corn brash fragments	0.34m thick	-
115	Fill of well/pit 109	Firm, mid green-grey orange silt, occasional small corn brash fragments, rare charcoal flecking and rare small CBM fragments	0.12m thick	Sample 3
116	Fill of well/pit 109	Compact, mid brown-grey clayey silt, small frequent corn brash fragments	0.10m thick	-
117	Fill of well/pit 109	Compact mid orange-yellow limestone Redeposited natural	Not fully excavated at least 0.30m thick	-
118	Fill of well/pit 109	Loose dark blackish-brown clayey silt, occasional charcoal and cbm flecks	Not fully excavated at least 0.10m thick	-
120	Layer- surface	Crushed limestone rubble	3m wide 0.10m thick	-
121	Layer	Brown silts	At least 0.20m thick	-
122	Layer	Dark grey-brown silts	At least 0.05m thick	-

Trench No	Length, width & alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
2	30m, 2m & E- W	457697 217848	66m	0.43m & 65.57m
Context	Context type	Description	Dimensions	Artefacts/ Samples
201	Topsoil	Loose dark brown-grey loamey silt with frequent root disturbance	0.17m thick	-
202	Subsoil	Friable, very dark brown-grey clayey silt with moderate root	0.25m thick	-
203	Natural	Light yellow-grey limestone corn brash	-	-
204	Fill of furrow? 205	Friable mid brown-grey clayey silt with frequent limestone fragments.	1.16m wide 0.04m thick	CBM
205	Furrow? Filled with 204	Furrow aligned north to south	1.16m wide 0.04m deep	-1
206	Layer	Firm yellow-brown sand with frequent large limestone fragments. At eastern end of trench only	6.30m long At least 0.43m thick	-
207	Buried topsoil layer	Same as 108	At least 0.40m thick	
208	Layer	Modern building debris including hardcore	-	=

Trench No	Length, width & alignment	NGR 457721 217838	Surface height (aOD)	Depth & height of natural (aOD)
	NE-SW	101121211000		65.16m
Context	Context type	Description	Dimensions	Artefacts/ Samples
301	Topsoil	Dark black-brown sands, occasional small stones, root disturbance	0.20m- 0.38m thick	-
302	Subsoil	Loose, mid yellow-brown sand with limestone fragments	0.14m- 0.25m thick	-
303	Layer	Light grey limestone in a silty clay matrix. Not excavated	-	Pottery Animal bone
304	Layer	Light brown-yellow sandy silt, abundant limestone fragments. Overlies 306, overlain with 307. Not excavated	-	-
305	Layer	Firm mid brown-orange silty clay, rare limestone fragments. Overlain with 304. Overlies 308	At least 0,29m thick	Pottery (11th-15th centuries) Animal bone SF6, SF7 and 8
306	Oven/ hearth?	Small area of burnt material, unexcavated Overlain with 304	At least 0.40m long (NW-SE) 0.30m wide	-
307	Oven/ hearth?	Unexcavated area of burnt material, cutting into 304	1.6m long At least 1.4m wide	-
308	Layer	Firm mid yellow silty sand with abundant limestone fragments. Overlies 303. Not excavated	-	-

Trench No	Length, width & alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
4	30m, 2m & NE-SW	457744 217864	66.00m	Not identified
Context	Context type	Description	Dimensions	Artefacts/ Samples
401	Topsoil	Same as 101	0.20- 0.27m	-
402	Subsoil	Friable dark brown-grey silty clay, occasional small stones	0.20- 0.25m	-
403	Surface	Firm, light yellow-brown sands and limestone	-	-
404	Fill of Hearth 406	Loose, red-brown with dark grey patches sandy clay (burnt). Unexcavated	-	Pottery (11th century)
405	Fill of Hearth 406	Firm, brown sandy/silty clay with occasional small limestone fragments Unexcavated	-	1-
406	Hearth? Filled with 404 & 405	Circular (only part visible within the trench). Unexcavated	2.30m (E-W) At least 1.30m wide	-
407	Fill of 408	Firm yellow-brown silty/sandy clay, occasional small limestone fragments	1.60m wide	-
408	Ditch/Furrow? Filled with 407	Linear aligned north-east to south-west. unexcavated	1.60m wide	-
409	Fill of Pit? 410	Firm, dark grey-brown silty clay with occasional small limestone fragments. Unexcavated	1.50m (E-W) At least 0.50m (N-S)	-
410	Pit? Filled with 409	Circular? Unexcavated	1.50m (E-W) At least 0.50m (N-S)	-
411	Layer	Firm dark brown-grey silty clay, occasional small angular limestone	-	-
412	Layer	Firm dark brown silty clay, occasional small limestone	At least 0.20m thick	Pottery (mid 11th century)
413	Layer	Loose brown-yellow sandy/silty clay with occasional small to medium sized limestone fragments. Overlies 414	At least 0.08m thick	-
414	Layer	Firm dark brown-grey silty clay with frequent small to medium limestone fragments. Overlies 415.	-	Pottery (14th century)
415	Layer	Friable/firm dark brown-red silty/sandy clay with occasional small limestone fragments	-	-
416	Fill of Post hole 417	Friable dark grey-brown clayey silt, frequent small limestone	0.34m wide 0.11m thick	-
417	Posthole Filled with 416	Circular with and uneven base and near vertical regular sides	0.34m wide 0.11m deep	-

Trench No	Length, width & alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
5	30m, 2m & E- W	457720 217883	65.50m	Not identified
Context	Context type	Description	Dimensions	Artefacts/ Samples
501	Topsoil	Same as 101	0.20- 0.38m thick	-
502	Subsoil	Loose, mid yellow-brown clay sand, moderate limestone fragments	0.10m thick	-
503	Layer	Loose, dark black-brown silty clay, frequent small gravelly limestone pieces. Overlies 504	-	-
504	Layer	Friable, dark black-brown silty clay, moderate limestone chunks. Overlies 505	-	-
505	Layer	Loose, dark black-brown silty clay, occasional limestone fragments. overlies 506	-	SF5
506	Layer	Friable, mid dark brown silty clay, occasional limestone chunks	At least 0.20m thick	-

Trench No	Length, width & alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
6	30m, 2m & NE-SW	457674 217877	65.00m	0.58m & 64.42m
Context	Context type	Description	Dimensions	Artefacts/ Samples
601	Topsoil	Same as 101	0.24m thick	-
602	Layer	Loose, mid brown silty sandy clay, with abundant brick, concrete, plastic fragments	0.34m thick	-
603	Natural	Firm, light yellow-brown sand with limestone	-	-
604	Upper fill of ditch 606	Firm, dark grey silty clay	1.36m wide 0.30m thick	-
605	Lower fill of ditch 606	Loose, dark brown-grey silty/sandy clay, frequent small to medium limestone fragments	0.85m wide 0.40m thick	Animal bone Sample 1
606	Ditch Filled with 604 & 605	Linear ditch aligned north, north-east to south, south-west , flattish base rising to straight, gradual sloping sides	1.36m wide 0.70m deep	-
607	Fill of pit? 608	Firm, dark brown silty clay with frequent medium sized limestone fragments. Unexcavated	-	-
608	Pit? Filled with 607	Ovoid in plan. Unexcavated	-	-

Trench No	Length, width & alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
7	30m, 2m & NW-SE	457735 217913	64.50m	0.58m & 63.92m
Context	Context type	Description	Dimensions	Artefacts/ Samples
701	Topsoil	Same as 101	0.20m	-
702	Subsoil	Friable mid brown sandy/silty clay, rare small stones	0.16m	-
703	Colluvium	Friable mid grey-brown silty sand, rare small stones	0.20- 0.50m thick	=
704	Natural	Friable mid orange clay sand	-	-
705	Fill of ditch 706	Firm mid brown-grey silty sandy clay	1.60m wide 0.34m thick	Sample 2
706	Ditch Filled with 705	Linear, aligned east to west with flattish base rising to straight eroded gradual sloping sides.	1.60m wide 0.34m deep	-
707	Tree bole	Firm, mid grey-brown silty clay, occasional small stones	-	-

Trench No	Length, width & alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
8	30m, 2m & SW-NE	457767 217901	65.30m	0.87m & 64.43m
Context	Context type	Description	Dimensions	Artefacts/ Samples
801	Topsoil	Same as 101	0.25m	-
802	Layer	Dark grey silty clay	0.10- 0.22m	-
803	Layer	Dark brown-grey silty clay with frequent cornbrash fragments and very small to medium sized occasional charcoal flecking	0.14-0.18m	Fragments of tile and animal bone- not retained
804	Layer	Dark grey clay with occasional charcoal and very small cornbrash fragments	0.18m- 0.25m	-
805	Natural	Natural orange-yellow clay silts and bands of grey-blue clay	-	-
806	Natural feature?	Mid orange-grey silty clay infilling a shallow hollow with uneven base and sides	-	Pottery (12th century)
807	Tree bole	Mid grey-orange silty clay	=	Animal bone fragments- not retained
808	Layer	Modern rubble located at the north-eastern end of the trench	Circa 5m long	=

APPENDIX 3: FINDS CATALOGUE

SF 1 Token, copper alloy. Provincial token issued in the late 18th century.

Obverse: Female holding fasces and seated on a large rock.

Legend: "BIRMINGHAM MINING AND COPPER COMPANY 1792"

Reverse: Stork standing on cornucopia. Legend: "HALFPENNY PAYABLE AT"

Dia: 30mm

Button, metal alloy. Circular metal plate with soldered loop (Omega-type shank).

Date: c. 1800. Diameter: 16mm

Trench 5, spoil, unstratified

SF2 Buckle, copper alloy. Cast double loop frame (spectacle buckle) with iron pin attached to central bar. Buckle appears crudely manufactured, filing marks evident on the upper surface. Date: Early 17th century type (Margeson 1993, fig 16, 164, 165). Dimensions: 23 x 18mm Trench 3, spoil, unstratified

SF 3 Shot, lead. Spherical ball with casting seam. Size suggests that it would have been for use with a pistol. Diameter: 12mm Trench 7, spoil, unstratified

SF 4 Shot, lead. Sub-spherical, possibly damage from having been fired. Diameter: 15mm Trench 3, spoil, unstratified

SF 5 Offcut, copper alloy. Tapered strip, with rough edges and bent at right angles. Nature of object difficult to determine. Dimensions: 18 x 18mm Trench 6, spoil, unstratified

SF 6 Offcut, lead. Parallel -sided strip, bent in half with twisted terminals forming a loop. No measurements. Layer 305

SF 7 Buckle, copper alloy. Complete frame with pin attached. Oval frame with offset narrowed bar. Pin of sheet metal attached. Length: 8mm Width: 17mm Date: Medieval c. 1270-1350. For similar example see Egan 1991 (fig 42, 274).

SF 8 Metal working waste, copper alloy. Weight: 39.1g Layer305

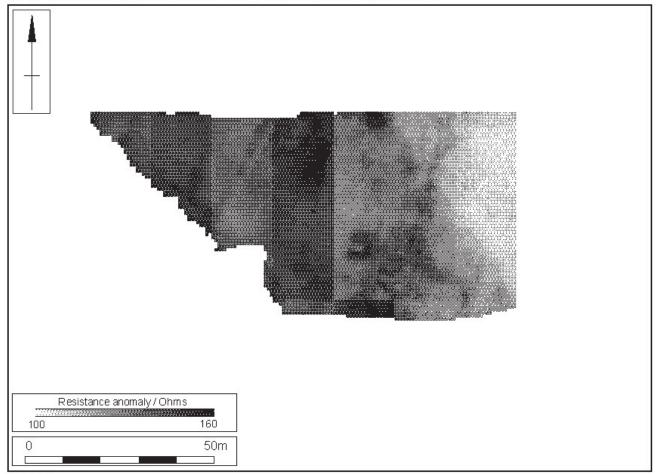
Nails x 2, iron.

Nail with large expanded head, tapered square-sectioned shank, clenched. Measurements: Head - 28 x 22 x 22mm Length (incomplete): 40mm

Nail, iron. Flat sub-circular head with tapered square-sectioned shank. Terminal missing. Length (incomplete): 33mm

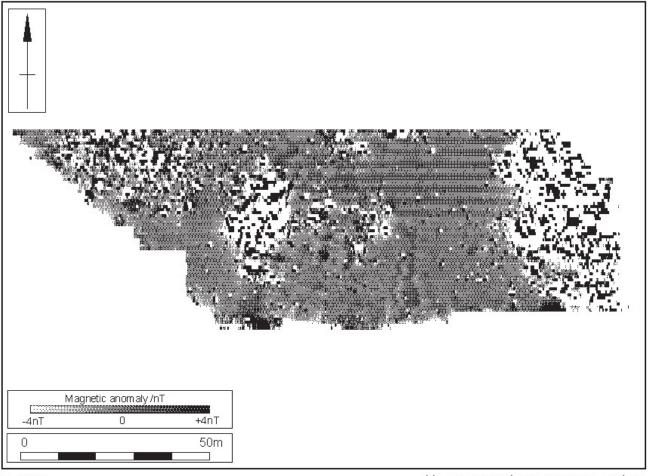
*1790 After the failure of various schemes to provide Birmingham with its own copper smelters, the manufacturers set up the Birmingham Mining and Copper Co on similar lines to the Birmingham Metal Co, with smelting works at Swansea. Its formation was part of the reaction in the Midlands against the monopolistic practices of the Anglesey and Cornish mining interests led by Thomas Williams. The company initially had a capital of £ 50,000 in £ 100 shares, each subscriber being limited to five shares and obliged to buy a certain amount of metal per share held.

APPENDIX 4: UNPROCESSED GEOPHYSCIAL SURVEY DATA



1:1000

Unprocessed earth resistance data



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