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LAND ADJACENT TO 2 OLD GREAT NORTH ROAD, WATER NEWTON, CAMBRIDGESHIRE

AN ARCHAEOLOGICAL EXCAVATION RESEARCH ARCHIVE REPORT

ECB NO. 3753

Authors: Christopher Leonard (F	ieldwork and report),
Andrew A. S. Newton M	A (Research)
Discussion)	
NGR: TL 1092 9719	Report No: 4107
District: Huntingdonshire	Site Code: AS1480
Approved: C Halpin MIfA	Project No: 4788
	Date: August 2012
Signed:	

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ARCHAEOLOGICAL SOLUTIONS LTD

98-100 Fore Street, Hertford SG14 1AB Tel 01992 558170

Unit 6, Brunel Business Court, Eastern Way, Bury St Edmunds IP32 7AJ Tel 01284 765210

e-mail <u>info@ascontracts.co.uk</u> www.archaeologicalsolutions.co.uk





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OASIS SUMMARY SHEET

Project name	Land adjacent to	2 Old Great North	Road, Water Newton,
	Cambridgeshire. An	Archaeological Evaluatio	n.
In June 2012 Archaeological	Solutions Limited (AS) of	carried out an archaeologic	al excavation on land adjacent
to 2 Uld Great North Road	, Water Newton, Camp	ttached to planning approv	9719). The excavation was
site comprising the construct	ion of a residential dwelli	ing and garage (Hunts DC F	Ref. 0900813FUL).
The site lies in an area of ar	chaeological potential o	n the northern side of the	Old North Road, now a minor
road adjacent to the A1 Trunk	Road to the south. Th	e site lies on deposits of cl	ays and gravels, at a height of
c.14m AOD.			
The site was to be subject to	an archaeological eval	uation but groundworks as	sociated with the development
had commenced (site strip a	nd ground reduction) an	d negated the value of an	evaluation. The groundworks
had revealed archaeological	features and the brief	f required a programme c	f archaeological investigation
comprising a full open area ex	kcavation.		
Madarn disturbance was evic	lant particularly on the w	vestern side of the site. Th	a avapuation revealed pits and
ditches and the majority of fea	atures were medieval (1)	$\Omega^{th} = 13^{th}$ century).	e excavation revealed pits and
		<i>,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Project dates (fieldwork)	June and July 20	12	
Previous work (Y/N/?)	N	Future work (Y/N/?)	TBC
P. number	4788	Site code	AS1480
Type of project	Archaeological Ev	aluation	
Site status	None		
Current land use	Overgrown scrub/ east	/grassland with trees & o	utbuildings to the south-
Planned development	Single residential	dwelling with garage, se	rvices & access
Main features (+dates)	Pits and ditches		
Significant finds (+dates)	Medieval (10 th – 1	3 th century)	
Project location			
County/ District/ Parish	Cambridgeshire	Huntingdonshire	Water Newton
HER for area	Cambridge Histor	ic Environment Record (CHER)
Post code (if known)	PE8 6LR		
Area of site	c. 932.62m ²		
NGR	TL 1092 9719		
Height AOD (min/max)	c. 14m AOD		
Project creators			
Brief issued by	Cambridgeshire C	County Council Historic E	nvironment Team
Project supervisor/s (PO)	Archaeological Sc	olutions Ltd	
Funded by	Mr Robin Waterw	orth	
Full title	Land adjacent to 2	2 Old Great North Road,	Water Newton,
	Cambridgeshire.	An Archaeological Excav	vation
Authors	Chris Leonard, Me	egan Stoakley & Andrew	A. S. Newton
Report no.	4107		
Date (of report)	Aug 2012		

LAND ADJACENT TO 2 OLD GREAT NORTH ROAD, WATER NEWTON, CAMBRIDGESHIRE

AN ARCHAEOLOGICAL EXCAVATION

SUMMARY

In June 2012 Archaeological Solutions Limited (AS) carried out an archaeological excavation on land adjacent to 2 Old Great North Road, Water Newton, Cambridgeshire (NGR TL 1092 9719). The excavation was undertaken in compliance with a planning condition attached to planning approval for the redevelopment of the site comprising the construction of a residential dwelling and garage (Hunts DC Ref. 0900813FUL).

The site lies in an area of archaeological potential on the northern side of the Old North Road, now a minor road adjacent to the A1 Trunk Road to the south. It lies on deposits of clays and gravels, at a height of c.14m AOD.

The Cambridgeshire Historic Environment Record records the presence of a rich archaeological landscape, with intensely developed Roman settlement, principally associated with the Roman walled town of Durobrivae and its hinterland. The town and adjacent areas included suburban development, cemeteries, villas and industrial production sites. Much of it is Scheduled as an Ancient Monument. Investigations by HAT (now AS) to the east of the current site at Mill Lane identified Roman and Saxo-Norman/medieval activity (HER ECB 1007, O'Brien 2002). Here, Roman, Saxo-Norman and medieval field boundaries and drainage ditches were recorded in the low-lying flood plain of the river Nene. Roman ditches may be associated with pastoral grazing on the periphery of a villa estate to the east. Later ditches and drystone walls also reflect stockraising, but may be associated with a probable settlement to the south at Elton Road. Settlement at Water Newton only appears to have moved close to the southern bank of the Nene in the 10th century and later. Despite these changes in the focus of settlement, field boundaries on this site seem to have remained fairly stable, with Roman ditches being recut in the Saxo-Norman period. The site was levelled in the 13th century. Little activity of later medieval and post-medieval date was recorded on the site, suggesting that the area reverted to a larger pasture or arable field until it became a farmyard at a later date.

The site was to be subject to an archaeological evaluation but groundworks associated with the development had commenced (site strip and ground reduction) and negated the value of an evaluation. The groundworks had revealed archaeological features and the brief require a programme of archaeological investigation comprising a full open area excavation.

Modern disturbance was evident particularly on the western side of the site. The excavation revealed pits and ditches and the majority of features were medieval $(10^{th} - 13^{th} \text{ century})$.

1 INTRODUCTION

1.1 In June 2012 Archaeological Solutions Limited (AS) carried out an archaeological excavation on land adjacent to 2 Old Great North Road, Water Newton, Cambridgeshire (NGR TL 1092 9719; Figs. 1-2). The excavation was undertaken in compliance with a planning condition attached to planning approval for the redevelopment of the site comprising the construction of a residential dwelling and garage (Hunts DC Ref. 0900813FUL).

1.2 The excavation was carried out in accordance with a brief prepared by Andy Thomas at the Cambridgeshire County Council Historic Environment Team (CCC HET; dated 14th May 2012), and a specification prepared by AS (dated 21st May 2012). The project adhered to appropriate sections of Gurney (2003) 'Standards for Field Archaeology in the East of England', *East Anglian Archaeology Occasional Paper 14*, and the Institute for Archaeologists' *Code of Conduct* and *Standard* and *Guidance for Archaeological Field Excavation* (revised 2008).

1.3 The site was to be subject to an archaeological evaluation but groundworks associated with the development had commenced (site strip and ground reduction) and negated the value of an evaluation. The groundworks revealed archaeological features and the brief require a programme of archaeological investigation comprising a full open area excavation.

Aims and Objectives

1.4 The primary objective of the excavation was to preserve the archaeological evidence contained within the site by record and to attempt a reconstruction of the history and use of the site

Research Priorities

To contribute towards further knowledge of Water Newton

1.5 The excavation has the potential to reveal evidence relating to the character and morphology of settlement in the area. This evidence should be placed within the context of the landscape with specific reference to urbanisation, local economy and communications.

Environmental reconstruction

1.6 Analysis of palaeoenvironmental remains from the site has the potential to inform evidence for the early landscape and its transformation by the Roman inhabitants and by natural processes

Planning Policy Context

1.7 The National Planning Policy Framework (NPPF 2012) states that those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are heritage assets. The NPPF aims to deliver sustainable development by ensuring that policies and decisions that concern the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation, and

recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. The NPPF requires applications to describe the significance of any heritage asset, including its setting that may be affected in proportion to the asset's importance and the potential impact of the proposal.

1.8 The NPPF aims to conserve England's heritage assets in a manner appropriate to their significance, with substantial harm to designated heritage assets (i.e. listed buildings, scheduled monuments) only permitted in exceptional circumstances when the public benefit of a proposal outweighs the conservation of the asset. The effect of proposals on non-designated heritage assets must be balanced against the scale of loss and significance of the asset, but non-designated heritage assets of demonstrably equivalent significance may be considered subject to the same policies as those that are designated. The NPPF states that opportunities to capture evidence from the historic environment, to record and advance the understanding of heritage assets and to make this publicly available is a requirement of development management. This opportunity should be taken in a manner proportionate to the significance of a heritage asset and to impact of the proposal, particularly where a heritage asset is to be lost.

2 DESCRIPTION OF THE SITE (Figs. 1-2)

2.1 Water Newton is a small village in the district of Huntingdonshire, Cambridgeshire. It is c.10.6km to the west of Peterborough and c.32km north-east of Corby. Chesterton is 2.5km to the south-east, Sibson cum Stibbington c.1.5km to the west, Upton c.3km to the north and Castor c.10.4km to the east. The A1 road runs NW/SE through Water Newton and the A605 (Oundle Road) runs north-south to the south of the village. The Old Great North Road is parallel to the A1.

2.2 The site is situated between 2 Old Great North Road to the west and Hop Corner to the east (Fig. 2). It comprises a roughly rectangular plot of scrub/grassland with an area of $c.933m^2$. The entire site was overgrown; trees are located in the south-east corner of the site and brick and corrugated iron outbuildings/sheds were located in the south-west and south-east corners of the site.

3 THE EVIDENCE

3.1 Topography, Geology and Soils

3.1.1 The site lies on the southern edge of the historic village of Water Newton and is located in a river basin *c*.125m to the south of the River Nene (Nene Way). It is relatively level at *c*.14m AOD. The solid geology comprises middle to lower Jurassic limestone clays and gravels ('jt', Toarcian) (Sheet 52, BGS 1975). Local soils belong to the Sutton 1 association (571u) and are defined as shallow, well-drained brashy chalk and loamy soils (SSEW 1983).

3.2 Archaeological and Historical Background

Prehistoric

3.2.1 A Levallois core (HER 01928) was found c.250m to the south-east of the site. Mesolithic flint implements (HER 07852) have been discovered at Chesteron c.2.5km to

the south-east and a Neolithic arrowhead (HER 01721) was found at Sibson cum Stibbington *c*.1.5km to the south-west of the site. A large number of enclosures and ring ditches thought to be of prehistoric date are located at Chesterton *c*.2.5km to the south-east (MCBs 17601, 17602, 17603, 17593 & 17594). An enclosure and trackway (HER 05659) are present in Elton *c*.4km to the south-west of the site.

Romano-British

3.2.2 The site is located in an area that has yielded a wealth of Roman archaeological remains. The river Nene flows through the village of Water Newton and would have provided an important route for trade and communication. Excavations in the Nene Valley have revealed substantial evidence for the wealth of the region during the Roman period. High status burials and a mausoleum have been discovered at Normangate Field in Castor c.1km to the north-east and an aisled building thought to be part domestic and part agricultural was discovered at Lynch Farm in Orton Waterville c.12km to the east and at Barnwell c.3.4km to the west (Upex 2008, 223). An aerial photograph assessment at Ashton c.14.2km to the north revealed roads, pits and ditches covering several hectares (*Ibid*, 130) while cropmarks, enclosures and field systems were discovered in the Welland valley near Etton c.17km to the north (*Ibid*, 129).

3.2.3 Settlement and industrial activity flourished following the establishment of a fort (HER 05316) and a later civilian town at *Durobrivae* (HER 01901) *c*.250m to the southeast of the site. *Durobrivae*, or 'Fort at the Ford', developed around the junction of Ermine Street and King Street and was enclosed by ramparts in the late 2nd century AD. Excavations at the site of *Durobrivae* (or 'the Castles' HER 01877, SAM 35551), have uncovered a wealth of Roman archaeological remains including burials, structural remains, road surfaces and hypocausts as well as building material, pottery and a significant quantity of metal objects (Butcher & Garwood 1994). A hoard of one gold and 27 silver objects was discovered in fields to the east during ploughing in 1975 (Upex 2008, 226). Comprising bowls, dishes, jugs, spoons and triangular plates, the 'Water Newton Treasure' (HER 01867) is thought to be the earliest Christian liturgical silver as many of the artefacts are engraved with the first two letters of Christ's name (*Chi* (X) & *Rho* (P)) which made this discovery one of substantial importance (*Ibid*).

3.2.4 The close location of the town to the river Nene and a large network of interconnecting roads off Ermine Street meant *Durobrivae* was within easy reach of London, East Anglia, the Midlands and the North. This network was important particularly for the distribution and trade of pottery. *Durobrivae* was a centre of pottery production and numerous kilns are known throughout the area including two sites located c.750m - 1km to the north-east and south-east of the site. Within the vicinity of the site, a large kiln complex (HER 09095) was discovered by the 19th century antiquarian E.T. Artis in Coneygee field c.500m to the east of the site. Ten kilns were excavated as well as numerous small buildings.

3.2.5 The landscape surrounding Water Newton contains the sites of Roman villas. Two villas are located c.600 - 750m to the north of the Nene Way whilst another site is situated at Chesterton c.2km to the east. Villas have been revealed within the vicinity of the site c.300 - 400m to the south (HERs 01710 & 01876) and c.250 - 400m to the north-east (HERs 04457 & 09094). An excavation at Kate's Cabin Farm in 1957 c.200m to the south-east revealed the site of another villa (HER 09692) (Greenfield 1958). The majority of the villa sites had tessellated mosaic floors and hypocausts. A suburban road and enclosures (HERs 09292 & 09093) are located c.250 - 600m to the south-east of the site and the site

of a Roman camp is located *c*.2km to the north at the cross-roads where the old Roman road Ermine Street and the modern A47 meet.

3.2.6 Other evidence for Roman settlement was discovered on land east of Mill Lane situated *c*.40m to the east of the site (CB15353). A large number of ditches and gullies were discovered as well as a quarry (Crank *et al* 2002). An archaeological evaluation on Mill Reach *c*.225m to the north-east of the site (MCB 15845) revealed well preserved and extensive Roman archaeological remains including post holes, pits, an occupation layer and a possible fence/boundary ditch (Macaulay 2000). Most of the archaeological features contained tesserae, worked stone, roof tile and local Nene Valley pottery wares, dating from the early 3rd to 4th centuries AD (*Ibid*).

Saxon

3.2.7 In 972 AD a manor at Water Newton was acquired for the Abbey of Thorney by Æthelwold, Bishop of Winchester, from a knight called Ælfric Child, and confirmed to the abbey by King Edgar's foundation charter of 973 (Page *et al* 1936). Evidence of late Saxon occupation of Water Newton comprises gullies and ditches revealed during an excavation on land to the east of Mill Lane (CB15353) *c*.40m to the east of the site (Crank *et al* 2002). Pits and postholes of Saxo-Norman date were also discovered. An archaeological excavation conducted on land to the rear of the Manor House (HER 01578) located *c*.225m to the south-west of the site revealed the remains of a late Saxon stockade and ditch, which may have been a hall (Green 1964). In 1086 the Abbey of Thorney had a manor of 5 hides in Newton, with 2 mills rendering 32 s., a priest and a church and 60 acres of meadow (*Ibid*).

Medieval

3.2.8 An archaeological excavation (HER 01579) conducted *c*.175m to the west of the site revealed $12^{\text{th}} - 13^{\text{th}}$ century metal objects including a horseshoe fragment, a tanged blade, iron shears and a harness buckle (Green 1964). A schist whetstone fragment and bone dice were also recovered (*Ibid*). Excavations conducted to the rear of the Manor House (HER 01578) *c*.225m to the south-west of the site revealed a series of 13^{th} century drystone walls of sheepfolds with ditches, ovens and small pits (*Ibid*). The 13^{th} century church of Saint Remigius (HER 10332) is located *c*.120m to the north of the site.

Post-medieval

3.2.9 Post-medieval archaeological remains comprise the 17^{th} century Manor House (HER 01582) located *c*.150m to the west of the site. The 18^{th} century former farmhouse and inn at 2 Old Great North Road (DCB 3072) is located adjacent to the site on the western side and 19^{th} century archaeological remains comprise the site of a blacksmith's workshop (MCB 17591) located *c*.30m to the north-east of the site (Tann 2001).

Cartographic Sources (Figs. 3-6)

3.2.10 The 1674 map of Water Newton (Fig. 3) records the river Nene to the north of the village. The Great North Road (labelled London Road) is south of the river. The Manor House is west of the village (Plot A). A linear development comprising narrow land-strips (Plots L - Q) is recorded to the east and possibly originated as medieval burgage tenements. The buildings are located to the north of the plots indicating that the street frontage faced north towards the river. Plots H, K and I are located between the Manor

House (Plot A) and Plots L and Q and comprise the church, a homestead and the parsonage. The site is located in plot G and comprises the garden of a property owned by Richard Holtham and the dwelling is depicted on the west side of the site. The plot was valued at one acre and twenty perches.

3.2.11 The 1837 Tithe Map (Fig. 4) depicts several changes. The narrow land strips recorded in 1674 (Fig. 3) are now open fields (Plots 7 - 10). Mill Lane is to the east of Plot 24 and to the west of the old tenement plots (abutting plot L in 1674, plot 7 in 1837) (Figs. 3 & 4). The dwellings depicted on the northern sections of these plots in 1674 have been replaced with five rectangular and L-plan buildings (Plot 79). A watermill is adjacent to the river Nene (Plot 80). A cluster of five buildings are located to the south-west of the site (Plot 2: the Manor House, not labelled). The site is open (Plot 24) and is the garden of a farmhouse/homestead and an outbuilding (modern day 2 Old Great North Road) owned by Reverend Richard Randolph Knife and occupied by Edward Compton. The plot was valued at two acres and 20 perches.

3.2.12 The 1902 Ordnance Survey map (Fig. 5) records further changes. The Water Newton Mill is located to the north-east and a ford is recorded immediately east of the mill. A smithy is located to the east and an old brick works to the west of the site. Rectangular and L-plan buildings to the north and north-west of the site have been extended and are now recorded as a post office, the Rectory and a school. Water Newton House (formerly the Manor House) is depicted to the south-west of the site and comprises two buildings. The site is situated to the east of an L-plan building (2 Old Great North Road, not labelled). The site comprises two rectangular strips of garden with two outbuildings; a narrow rectangular outbuilding is depicted in the mid-section of the site whilst a smaller rectangular outbuilding is depicted immediately to the north-east. The 1950 Ordnance Survey map (Fig. 6) records no changes.

4 METHOD OF WORK

4.1 The site was to be subject to an archaeological evaluation but groundworks associated with the development had commenced (site strip and ground reduction) and negated the value of an evaluation. The groundworks revealed archaeological features and CCC HEU required a programme of archaeological investigation comprising a full open area excavation.

4.2 The overburden had largely been removed. Exposed surfaces were cleaned as appropriate and examined for archaeological features and finds. Deposits were recorded using *pro forma* recording sheets, drawn to scale and photographed. Excavated spoil was checked for finds.

5 RESULTS

Description: Modern disturbance was evident particularly on the western side of the site. The excavation revealed pits and ditches and the majority of features were medieval $(10^{th} - 13^{th} \text{ century})$.

Medieval features occurred mostly in the southern and eastern parts of the site (Fig. 7). Those recorded towards the eastern part of the site comprised three ditches (one of which was a recut of an earlier feature), aligned broadly north to south, possibly representing a

boundary. The majority of the remaining medieval features were located to the west of these, suggesting that this area represented the interior of an enclosure bounded by these ditches. A series of possible beamslots in the southern part of the site may represent some form of structure, but the character of these suggests that it would have been small and is unlikely to have been a dwelling or barn/byre-type building.

A medieval to early post-medieval pit was recorded indicating continued, but apparently reduced, activity beyond the focus of activity in the 10th to 13th centuries.

Several undated features were also recorded. Stratigraphic relationships indicate that some of these may have been contemporary with or earlier than the medieval activity. Further features, however, clearly post-dated the medieval features suggesting that they may have been contemporary with the medieval to post-medieval pits.

Modern activity in the western part of the site is likely to relate to the use of this part of the site as yards and stable areas associated with the buildings depicted within the site on the 1902 and 1950 Ordnance Survey maps of the area (Figs. 5 and 6).

5.1 Phase 1: Early medieval/medieval

Early medieval/medieval Pits Figs. 7, 8 and 9

Context	Grid Square	Description	Above	Below	Finds/Date
F1036	A5	Cut of Pit. Sub-circular pit with moderately sloping sides and flat base. 3.2m x 1.76m x 0.86m	L1041, L1040, L1031, L1001	L1037, L1038, L1039, F1032, L1033, L1034, L1000	
L1037	A5	Basal fill of Pit F1036. Mid blueish green, moderately compact, silty clay with orange mottling.	F1036, L1041, L1040, L1031, L1001	L1038, L1039, F1032, L1033, L1034, L1000	
L1038	A5	Middle fill of Pit F1036. Dark blackish blue, firmly compacted, clayey silt with occasional small stones	L1037, F1036, L1041, L1040, L1031, L1001	L1039, F1032, L1033, L1034, L1000	
L1039	A5	Top fill of Pit F1036. Dark greenish grey, firmly compacted, clayey silt with a moderate amount of medium sized stones	L1038, L1037, F1036, L1041, L1040, L1031, L1001	F1032, L1033, L1034, L1000	Medieval Pottery (3) 10 th -13 th century, (1) 11 th -13 th century
L1042	A5	Additional fill under L1038 on western side of Pit F1036. Mid greyish green, moderately compact silty clay, with yellowish orange mottling	F1036, L1041, L1040, L1031, L1001	L1038, L1039, F1032, L1033, L1034, L1000	
F1003	C3	Cut of Pit. Sub-circular in plan with gently sloping sides and a flat/irregular base. 0.85m x 0.74m x 0.17m	L1001	L1003, F1017, L1018, F1015, L1016, L1000	
L1004	C3	Fill of Pit F1003. Dark brownish grey, firmly compacted, sandy silt with occasional small stones	F1003, L1001	F1017, L1018, F1015, L1016, L1000	Medieval Pottery (3) 10 th -12/13 th century, (2) late 9 th -12 th century
F1007	C3	Cut of Pit. Oval in plan with near vertical sides and a concave base. 1.4 x 0.9m x 0.76m	L1001	L1008, F1015, L1016, L1000	

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Medieval Pottery (20) 10 th – 12/13 th century		Medieval Pottery (18) $10^{\text{th}} - 12^{\text{th}}$ century, (11) $10^{\text{th}} - 12/13^{\text{th}}$ century, (11) $10^{\text{th}} -$ 13^{th} century		Medieval Pottery (11) 10 th – 12 th century		Medieval Pottery (11) mid 12 th – mid 13 th century		Medieval Pottery (12) 10 th – 12 th century, (6) 13 th – 14 th century
F1015, L1016, L1000	L1010, F1015, L1016, L1000	F1015, L1016, L1000	L1012, L1013, L1014, F1015, L1016, L1000	L1013, L1014, F1015, L1016, L1000	L1014, F1015, L1016, L1000	F1015, L1016, L1000	L1016, L1000	L1016
F1007, L1001	L1004, F1003, L1001	F1009, L1004, F1003, L1001	L1001	F1011, L1001	L1012, F1011, L1001	L1013, L1012, F1011, L1001	L1014, L1013, L1012, F1011, L1004, F1003, L1008, F1007, L1010, F1009, L1006, F1005, L1001	F1015, L1014, L1013, L1012, F1011, L1004, F1003, L1008, F1007, L1010, F1009, L1006, F1005, L1001
Fill of Pit F1007. Dark greyish brown, firmly compacted, sandy silt with occasional small stones	Cut of Pit. Oval in plan with irregular sides and concave base. 2.05m x 0.72m x 0.72m	Fill of Pit F1009. Dark brownish grey, firmly compacted, sandy silt with occasional small stones	Cut of Pit. Sub-circular in plan with near vertical sides and flat base. 0.88m x 0.68m x 0.72m	Basal fill of Pit F1011. Dark brownish grey, firmly compacted, sandy silt with occasional small stones	Middle fill of Pit F1011. Dark brownish grey, firmly compacted, sandy silt with occasional small stones	Top fill of Pit F1011. Dark brownish grey, firmly compacted, sandy silt with occasional small stones	Cut of Pit. Sub-circular in plan with moderately sloping sides and a flat base. 2.12m x 2.0m x 0.41m	Fill of Pit F1015. Dark brownish grey, firmly compacted, sandy silt with occasional small stones
C	C3	е	C3	C3	C3	C3	C3	C
L1008	F1009	L1010	F1011	L1012	L1013	L1014	F1015	L1016

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F1017	ទ	Cut of Pit. Sub-circular in plan with moderately sloping sides and a small concave base. 0.87m x 0.7m x 0.29m	L1004, F1003, L1001	L1018, L1000	
L1018	C	Fill of Pit F1017. Dark brownish grey, firmly compacted, sandy silt with occasional small stones	F1017, L1004, F1003, L1001	L1000	Medieval Pottery (11) mid 12 th – 13 th /14 th century
F1019	D5	Cut of Pit. Sub-circular in plan with steep sides and concave base. 0.45m x 0.37m x 0.23m	L1001	L1020	
L1020	D5	Fill of Pit F1019. Dark brownish grey, firmly compacted, sandy silt. Occasional small stones. 0.45m x 0.37m x 0.23m	F1019, L1001	L1000	Medieval Pottery (1) 12 th -13 th century
F1021	D6	Cut of Pit. Sub-oval shape in plan with moderately sloping sides and a slightly concave base. Cut by pit F1023. 0.8m x 0.7m x 0.08m	L1001	L1022, F1023, L1024, L1000	
L1022	D6	Fill of Pit F1021. Dark brownish grey, firmly compacted, sandy silt. Cut by Pit 1023. 0.8m x 0.7m x 0.08m	F1021, L1001	F1023, L1024, L1000	Medieval Pottery (4) 9 th – 12 th century
F1023	D6	Cut of Pit. Sub-oval shape in plan with moderately sloping sides and a concave base. Cut through Pit F1021. 0.98m x 0.28m x 0.18m	L1022, F1021, L1001	L1024, L1000	
L1024	D6	Fill of Pit F1023. Dark brownish grey, firmly compacted, sandy silt. Cut through Pit F1021.Very occasional small stones. 0.98m x 0.28m x 0.18m	F1023, L1022, F1021, L1001	L1000	Medieval Pottery (7) 10 th – 12 th century
F1043	E6	Cut of Pit. Sub-rectangular in plan with near vertical sides and a flat base. 0.54m x 0.47m x 0.25m	L1001	L1044, L1000	
L1044	E6	Fill of Pit F1043. Dark greyish brown, friable, sandy silt with occasional clay patches. Occasional small stones. 0.54m x 0.47m x 0.25m	F1043, L1001	L1000	Medieval Pottery (4) 10 th – 12 th century
F1045	E6	Cut of Pit. Oval in plan with steep and near vertical sides and a concave base. 0.98m x 0.56m x 0.31m	L1001	L1046, L1000	
L1046	E6	Fill of Pit F1045. Dark greyish brown, firmly compacted clayey silt with occasional small stones. 0.98m x 0.56m x 0.31m	F1045, L1001	L1000	Medieval Pottery (3) 10 th – 12 th century

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F1067	F4	Cut of Pit. Sub-rectangular in plan with steeply	L1072, L1071, E1060, 11020	L1068, L1000	
		Sidding Sides and a nat base. 2.34m X 0.30m X 0.62m	F1027, L1001		
L1068	F4	Fill of Pit F1067. Dark greyish brown,	F1069, L1072,	L1000	Medieval Pottery (22)
		moderately compact, clayey silt with frequent	L1071, F1069,		11 th -12 th century
		small stones and occasional medium sized	L1028, F1027,		
		stones. 2.34m x 0.96m x 0.62m	L1001		
F1061	F5	Cut of Pit. Oval in plan with irregular sides and	L1064, F1063,	L1062, L1000	
		an irregular base. 0.8m x 0.54m x 0.14m	L1066, F1065,		
			L1001		
L1062	F5	Fill of Pit F1061. Dark brownish grey, firmly	F1061, L1064,	L1000	Medieval Pottery (1)
		compacted, clayey silt with occasional flecks of	F1063, L1066,		10 th – 12 th century
		charcoal. 0.8m x 0.54m x 0.14m	F1065, L1001		
F1063	F5	Cut of Pit. Oval in plan with steeply sloping sides	L1066, F1065,	L1064, F1061,	
		and a concave base. 0.54m x 0.48m x 0.21m	L1001	L1062, L1000	
L1064	F5	Fill of Pit F1063. Dark brownish grey mottled	F1063, L1066,	F1061, L1062,	Medieval Pottery (1)
		with reddish orange, firmly compacted, sandy	F1065, L1001	L1000	10 th – 12 th century
		silt. 0.54m x 0.48m x 0.21m			
F1065	F5	Cut of Pit. Elongated linear shape in plan with	L1001	L1066, F1063,	
		irregular sides and concave base. 1.6m x 0.25m		L1064, F1061,	
		x 0.12m		L1062, L1000	
L1066	F5	Fill of Pit F1065.Dark brownish grey, firmly	F1065, L1001	F1063, L1064,	Medieval Pottery (4)
		compacted clayey silt with very occasional small		F1061, L1062,	11 th -13 th century
		stones. 1.6m x 0.25m x 0.12m		L1000	
F1121	G4	Cut of Pit. Oval in plan with gently sloping sides	L1140, L1119,	L1122, L1000	
		and a concave base. ? x 0.8m x 0.22m	L1120, F1123, I 1001		
L1122	G4	Fill of Pit F1121. Mid greyish brown, firmly	L1121, L1140,	L1000	Medieval Pottery (6)
		compacted sandy silt with a moderate amount of	L1119, L1120,		11th -13th century
		small stones	F1123, L1001		
F1117	F4	Cut of Pit F1117. A small pit that was exposed	L1001	L1120, L1119,	
		under Ditch F1123 in the area where Slot B was		L1140, F1123,	
		excavated. Only 1m of this feature was exposed		L1124, F1115,	
		in the slot, but it was shown to be at least 1.3m		L1116, L1000	
		wide, and have a neat curving edge at the north.			
		It was excavated to a maximum depth of 1.22m			

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L1119	F4	Upper fill of Pit F1117. Mid greyish brown,	L1120, F1117,	L1140, F1123,	
		friable, silt sand with frequent small stones	L1001	L1124, F1115,	
				L1116, L1000	
L1120	F4	Basal fill of Pit F1117. Mid greyish brown, firmly	F1117, L1001	L1119, L1140,	
		compacted, sandy silt with occasional small		F1123, L1124,	
		stones		F1115, L1116,	
				L1000	

Early medieval/medieval Ditches Figs. 7, 8 and 9

			~ >	
Finds/Date			Medieval Pottery (11 10 th – 12 th century, (1) 11 th – 13 th centur	
Below	L1111, L1130, L1000	L1130, L1000	L1000	L1046, L1000
Above	L1113, F1112, L1001	F1129, L1113, F1112, L1001	L1111, F1129, L1113, F1112, L1001	L1001
Description	Cut of Ditch. Irregular linear cut at least 26m long. Typically it is quite a wide feature with gently sloping sides and a slightly concave base. At the south however it first becomes very narrow and shallow before opening up again into a vertically sided channel. The width therefore varies between 0.98m and 0.27m, whilst the depth varies between 0.43m and 0.03m.	Small basal fill localised to the area where ditch F1129 cuts through the top of Pit F1112. Mid orangish brown, moderately compact, silty clay	Fill of Ditch F1129. A greyish brown, firmly compacted sandy silt with occasional small stones	Cut of Ditch. Irregular linear feature that runs for at least 10m. At the south it is 0.6m wide and 0.25m deep, but it narrows to the north, becoming just 0.25m wide and 0.08m deep. It has moderately sloping sides and a concave base. It is likely that the northern continuation of this ditch was removed by previous activity on the site.
Square	F1-F6	F3	F1-F6	F2-F3
Context	F1129	L1111	L1130	F1145

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Medieval Pottery (12) 11 th – 13 th century		Medieval Pottery (2) 10 th – 12 th century, (24) 11 th – 13 th century	Relationship with Ditch F1123 not established due to flooding of the site	Medieval Pottery (2) 9 th – 12 th century		Medieval pottery (21; 198g) late 9 th to 12 th century. CBM 135g. A. Bone 40g. Mussel Shell 2g.	
L1000	L1124, L1000	L1000	L1126, L1000	L1000	L1074	F1087	L1076
F1045, L1001	L1140, L1119, L1120, F1117, L1001	F1123, L1140, L1119, L1120, F1117, L1001	L1001	F1125, L1001	F1075, L1076	F1073	L1001
Fill of Ditch F1146. Dark greyish brown, firmly compacted, sandy silt with frequent small stones	Cut of Ditch. Irregular linear cut at least 26m long. Typically it is quite a wide feature with steeply sloping sides and a flat base. The width varies between 1.3m in the widest middle section to 0.8m in the narrower northern and southern parts. The depth varies between 1.22m in the middle, 0.6m at the north and 0.36m at the south where the ditch had been heavily truncated.	Fill of Ditch F1123. Dark orangish brown, firmly compacted, sandy silt with frequent small stones	Cut of ditch just visible to west of Ditch F1123 near Slot A. The Ditch ran for 0.8m before apparently coming to a terminus at its northern end, and was up to 0.4m wide but may originally have extended further to the east. It was up to 0.1m deep.	Fill of Ditch F1125. Dark greyish brown, firmly compacted, sandy silt	Cut of Linear (possible beamslot) F1073. Gently sloping, shallow sides with a flat base. Aligned E-W. Upper portions of feature cut by modern wall at its eastern extent. Cut similar feature F1075. 1.65 x 0.8 x 0.35m	Single fill of F1073. Firm, mid brown clayey silt.	Cut of Linear (possible beamslot) F1075. Moderately sloping sides with a flat base. Aligned E-W. Upper portions of feature cut by modern wall at its eastern extent. Cut by F1073
F2-F3	F2-F7	F2-F7	F5-F6	F5-F6	D2-E2	D2-E2	D2-E2
L1146	F1123	L1124	F1125	L1126	F1073	L1074	F1075

	ery 10; 12 th 73g entury. 10 3g. 5g. H.		ery (6; 12 th 1e
	Medieval pott 121g late 9 th – century, 41; 4 10 th -12 th -13 th CBM 2g. A. bo 505g. St. Flint Oyster Shell 2 bone 14g		Medieval pott 24g) late 9 th – century. A. bo 183g
	F1073, F1077	L1078	
	F1075	L1001, L1076	F1077
to N. 1.2 x 0.6 x 0.4m.	Single fill of F1075. Firm, mid brown clayey silt.	Cut of Linear (possible beamslot) F1077. Moderately sloping sides with a flat base. Aligned E-W. Upper portions of feature cut by modern wall at its eastern extent. 2.5 x 0.7 x 0.2m.	Single fill of F1077. Firm, mid brown sandy sillt with occ. Small regular, rounded stones.
	D2-E2	D2-E2	D2-E2
	L1076	F1077	L1078

Other Early medieval/medieval contexts

Figs. 7, 8 and 9

Context	Grid Square	Description	Above	Below	Finds/Date
L1025	D6	Accumulation of material in natural depression. Firm, dark greyish brown sandy silt incorporating medieval finds. 1.62 x 0.66 x 0.07m.	L1001	L1000	Medieval pottery (14; 100g) mid 12 th -13 th century. A. bone 3g. Burnt flint 3g.

5.2 Phase 2: Medieval – Early Post Medieval

Medieval to early post-medieval pits

Figs. 7 and 9

Context	Square	Description	Above	Below	Finds/Date
F1047	D3/4	Cut of Pit. Rectangular in plan with vertical sides and flat base. 2.25m x 0.9m x 0.5m	L1001	L1048, L1049, L1050, L1000	
L1048	D3/4	Basal fill of Pit F1047. Dark brown, loosely compacted, sandy silt	F1047, L1001	L1049, L1050, L1000	
L1049	D3/4	Middle fill of Pit F1049. Reddish brown, loosely compacted sandy silt	L1048, F1047, L1001	L1050, L1000	Medieval Pottery (11) 11 th -13 th century, Clay Pipe (7g) and partially articulated cow/horse skeleton
L1050	D3/4	Top fill of Pit F1047. Dark brown, loosely compacted sandy silt	L1049, L1048, F1047, L1001	L1000	

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5.3 Phase 3: Modern

Modern features and contexts

Figs. 7 and 9

		I.				
Finds/Date	Above Medieval pit F1036. Contained fragments of wooden post			Modern pottery (3; 32g) 18 th -19 th century. Glass 6g.		Early modern pottery (11; 76g) 17 th -18 th century. Fe Frag. 16g.
Below	L1033, L1034, L1000	L1034, L1000	L1000	L1000	L1084	L1002
Above	L1039, L1038, L1037, F1036, L1001	F1032, L1039, L1038, I1037, F1036, L1001	L1033, F1032, L1039, L1038, 11037, F1036, L1001	F1036, L1039	L1149	L1083
Description	Cut of Modern Posthole. Square in plan with almost vertical sides and a concave base. 0.48m x 0.44m x 0.5m	Basal fill of Posthole F1032. Mid reddish brown, well compacted, slightly silty coarse sand with a moderate amount of small stones and occasional medium sized stones	Top fill of Posthole F1032. Dark brownish grey, firmly compacted clayey silt with occasional patches of red sand	Modern deposit in NW corner of site. Moderately compact dark greenish black clay silt with patches of compact orange red coarse sand and moderate small and medium sub-angular to rounded stones. Possible levelling layer deposited in large natural depression. 10.00 x 7.00 x 0.16m.	Compact layer of small rounded pebbles in a yellow sandy matrix. Comprises a layer of fine metalling beneath cobbled surface L1002, located at modern entrance to the site. Disturbed, worn and dispersed. Possible original surfacing for yard/stable area within western part of the site.	Layer of loose, dark reddish brown silt partially overlying L1083.
Square	A5	A5	A5	A5-7, B5-7, C5-7	A/B2-4	B3, C3
Context	F1032	L1033	L1034	L1035	L1083	L1084

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F1115	F4	Cut of Pit. Sub-rectangular in plan with steeply sloping sides and a flat base. 1.8m x 1.0m(+) x 0.87m	L1140, L1124, F1123, L1119, L1120, F117, L1001	L1116, L1000	
L1116	F4	Fill of Pit F1115. Dark slightly brownish grey, firmly compacted, sandy silt with a moderate amount of small and medium sized stones and occasional flecks of charcoal	F1115, L1124, F1123, L118, L119, L1120, F117, L1001	L1000	17 th -18 th century pottery

5.4 Undated

Undated pits Figs. 7 and 9

Context	Square	Description	Above	Below	Finds/Date
F1030	A5	Cut of Pit. Oval in plan with steep sides and a concave base. 1.2m x 0.54m (+) x 0.72m	L1001	L1031, L1040, L1041, F1036, L1037, L1038, L1039, L1000	Below Medieval pit F1036
L1031	A5	Basal fill of Pit F1030. Dark bluish grey, friable, slightly clayey silt	F1030, L1001	L1040, L1041, F1036, L1037, L1038, L1039, L1000	
L1040	A5	Middle fill of Pit F1030. Mid greyish blue, well compacted, slightly silty clay	L1031, F1030, L1001	L1041, F1036, L1037, L1038, L1039, L1000	
L1041	A5	Top fill of Pit F1030. Dark greenish grey, firmly compacted clayey silt with occasional small stones	L1040, L1031, F1030, L1001	F1036, L1037, L1038, L1039, L1000	
F1051	C4	Cut of Pit. Oval in plan with steeply sloping sides and an irregular base. 0.45m x 0.4m x 0.3m	L1001	L1052, L1000	
L1052	C4	Fill of Pit F1051. Dark brown, loosely compacted silt	F1051, L1001	L1000	

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		Below Medieval pit F1015					Medieval (?) coin					Under Medieval ditch F1029
L1054, L1000	L1000	L1006, L1000	L1000	L1096, F1093, L1094, L1000	F1093, L1094, L1000	L1027, L1000	L1000	L1029, L1000	L1000	L1056, L1000	L1000	L1113, F1129, L1111, L1110, L1000
L1001	F1053, L1001	L1016, F1015, L1001	F1005, L1016, F1015, L1001	L1098, F1097, L1001	F1095, L1098, F1097, L1001	L1001	F1026, L1001	L1001	F1028, L1001	L1001	F1055, L1001	L1001
Cut of Pit. Oval in plan, with irregular sides and base. 1.0m x 0.6m x 0.3m	Fill of Pit F1053. Dark brown, loosely compacted silt	Cut of Pit. Oval in plan with gently sloping sides and flat base. 1.64m x 1.02m x 0.12m	Fill of Pit F1005. Dark brownish grey, firmly compacted, sandy silt with occasional small stones	Cut of Posthole F1095. Circular in plan with vertical sides and a flat base. 0.11m (+) x 0.11m (+) x 0.2m	Fill of Posthole L1096. Light greyish yellow, very loosely compacted, sandy silt	Tree hollow. Irregular oval feature. 0.9m x 0.56m (+) x 0.15m	Fill of Tree hollow F1026. Dark greyish brown, firmly compacted, sandy silt with occasional flecks of charcoal and a moderate amount of small stones	Cut of Posthole. Sub-circular in plan with steeply sloping sides and a small concave base. 0.3m x 0.25m x 0.15m	Fill of Posthole F1028. Dark brownish grey, firmly compact, sandy silt	Cut of Pit. Irregular in plan with steeply sloping sides and a concave base. Had been truncated during machining of site. 0.75m x 0.75m x 0.6 – 1.8m	Fill of Pit F1055. Dark brown, loosely compacted, silty sand with occasional small stones	Cut of Pit. Sub-circular in plan with vertical sides and a concave base. 0.5m x 0.43m x 0.45m
C4	C4	C3	ü	D2	D2	D2	D2	D2	D2	D2	D2	F3
F1053	L1054	F1005	L1006	F1095	L1096	F1026	L1027	F1028	L1029	F1055	L1056	F1012

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L1113	Е3	Fill of Pit F1112. Mid orangish brown,	F1012, L1001	F1129, L1111,	
		moderately compact, silty clay with frequent		L1110, L1000	
		flecks of charcoal and small stones			
F1069	F3	Cut of Pit. Elongated oval shape in plan with	L1001	L1070, L1071,	Under Medieval pit
		steeply sloping sides and a narrow fat base.		L1072, F1067,	F1067
		1.02m x 0.4m (+) x 0.3m		L1068, L1000	
L1070	F3	Basal fill of Pit F1069. Dark orangish brown,	F1069, L1001	L1071, L1072,	
		moderately compact, sandy silt with moderate		F1067, L1068,	
		amounts of small stones		L1000	
L1071	F3	Middle fill of Pit F1069. Mid creamy brown, firmly	L1070, F1069,	L1072, F1067,	
		compacted, sandy silt with frequent small stones	L1001	L1068, L1000	
L1072	F3	Top fill of Pit F1069. Dark brownish grey, firmly	L1071, L1070,	F1067, L1068,	
		compacted, sandy clayey silt with very	F1069, L1001	L1000	
		occasional small stones			
F1027	F3	Cut of Pit. Sub-rectangular in plan with vertical	L1001	L1028	Relationship with Pit
		sides and concave base. 0.5m (+) x 0.5m x			F1067 not
		0.64m			established
L1028	F3	Fill of Pit F1027. Dark greyish brown,	L1000	F1027	Relationship with Pit
		moderately compact clayey silt with frequent			F1067 not
		small stones			established
F1081	F5	Cut of Pit. Sub triangular in plan with irregular	L1001	L1082, L1000	
		sides and base. 0.25m x 0.2m x 0.05m.			
		Probably heavily truncated during machining			
L1082	F5	Fill of Pit F1081. Dark greenish grey, firmly	F1081, L1001	L1000	
		compacted clay			
F1079	F5	Cut of Pit. Irregular in plan with vertical sides	L1001	L1080, L1000	
		and flat base. 0.2m x 0.2m x 0.03m. Probably			
		heavily truncated during machining			
L1080	F5	Fill of Pit F1079. Dark greyish brown, firmly	F1079, L1001	L1000	
		compacted, silty clay			

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Figs. 7 and 9 Undated ditches

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Context	Grid	Description	Above	Below	Finds/Date
	Square				
F1085=1150	G2	Cut of Ditch F1085, located in SE corner of	F1089, L1090, E1123 1124		
		excavated area: Linear in plan with real vertical sides and a near flat-slightly concave	1 1 1 Z O, C 1 1 Z T		
		base. Aligned E-W. Extended beyond the			
		eastern limit of the excavated area. This is an			
		apparent recut of F1085.			
L1086=1151	G2	Fill of Ditch F1085. Compact dark green-brown	F1089, L1090,		
		clayey silt	F1123, L1124		
F1089	G2	Cut of Ditch F1089, located in SE corner of site	L1001	F1085=1150,	
		and cut by F1085. Dimensions: Length 4.00m;		L1086=1151	
		Width 0.45m; Depth 0.45m. Linear in plan with			
		near vertical sides and a rounded base. Aligned E-W.			
L1090	G2	Basal fill of Ditch F1089.	F1085=1150, L1086=1151	L1091	
L1091	G2	Upper fill of Ditch F1089. Compact light brown	L1090,		
		sandy silt.	F1085=1150, L1086=1151		
F1106	F1	Cut of undated Ditch F1106. Visible only in	L1001	F1099, L1100	
		section. Dimensions: Width 0.26m; Depth		F1129, L1130	
		0.17m. Truncated by modern disturbance and			
		cut to the west by F1099 and to the east by F1129			
L1107	F1	Single fill of Ditch F1106.			
F1102	E2	Cut of Ditch/Beamslot F1102. Visible in section	L1101, L1108	L1105, L1104, E1114 1103	
		Vertical sides with a flat base. Alianed E-W.			
		Recorded in Section No. 49- possible eastern			
		extension of beamslot recorded in Section No.			

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L1105	E2	Basal fill of F1102. Shallow. Firm, grey brown sandy silt with occ. Small angular stones.	F1102	L1104	
L1104	E2	Upper fill of Ditch/Beamslot F1102. Firm, light grey brown sandy silt	L1105	F1114, L1103	
F1114	E2	Cut of Beamslot F1114. Vertical sides, flat base. Recut of F1102. Aligned E-W. Visible in section only. 0.65 x 0.28m.	L1104	L1103	
L1103	E2	Fill of F1114. Firm, mid brown clayey silt.	F1114	L1000	
F1087	D2-E2	Cut of possible Beamslot F1087. Cut adjacent to medieval linear (possible Beamslot) F1073 (cut this feature) and thought to represent possibly similar feature. Observed in section only. Truncated by modern wall. Gently sloping concave sides with rounded base. Aligned E- W. 0.5 x 0.18m.	L1074	L1088	
L1088	D2-E2	Single fill of F1087. Firm, dark grey brown clayey silt.	F1087		
F1099	F1	Cut of possible Ditch F1099. Observed in section only. Only W side visible. Steep sided with rounded base. Alignment likely to have been N-S. 0.5 x 0.35m		L1100	
L1100	Е 1	Single fill of F1099. Hard, compact, mid orange brown sandy silt.	F1099		
F1093	D2-3	Cut of possible Beamslot F1093. Linear in plan with an asymmetric profile; northern side vertical, southern side gently sloping. Flat base. Aligned E-W. Possibly related to medieval beamslots (F1073, F1075, F1077) located to the east. 0.46 x 0.16m (length not recorded)	F1095, L1096	L1094	
L1094	D2-3	Single fill of F1093. Moderately loose, dark orange brown clayey silt.	F1093	Modern wall	
F1097	D2	Cut of possible linear F1097. Recorded in section only. Located adjacent to similar undated features F1095 and F1093. Possible	F1095, L1096	L1098	

	F1095, L1096
	F1097
related to medieval beamslots (F1073, F1075, F1077) located to the east. In section, gently sloping sides with a flat base. Cut by F1095 Length not recorded. 0.13 x 0.26m.	Single fill of F1097. Very loose, light grey yellow sandy silt.
	D2
	L1098

Other undated contexts Figs. 7and 9

Finds/Date				
Below	L1183	L1149	L1152	Modern wall
Above	L1152	F1153	L1001	F1095, L1096, F1097, L1098
Description	Firm mid brown clayey silt. Spread of silt over a layer of placed stones (L1152) and under fine metalling (L1083)	Layer of river pebbles and dressed sandstone placed along the western edge of hollow/treebole F1153.	Possible eroded hollow or tree hollow. Irregular in plan, with irregular sides and an irregular base. 1.8 x 1.3 x 0.3m. Located at modern entrance to site	Spread of material beneath modern wall. Friable, mid brown grey sandy silt. Overlying undated features F1097 and F1095. Width- 0.35m, depth- 0.03m.
Grid Square	A/B3	A/B3	A/B3	D2
Context	L1149	L1152	F1153	L1101

6 CONFIDENCE RATING

6.1 The commencement of groundworks associated with the proposed development prior to archaeological investigation may have removed or disturbed archaeological deposits within the parts of the site that were affected. Therefore, certain stratigraphic or spatial relationships between the surviving features may have been imperfectly understood. Artefacts may have been removed from their original depositional contexts. Excepting this, however, there were no factor affecting the identification of archaeological features and finds.

7 DISCUSSION

Summary of the archaeology

7.1 The earliest dateable features recorded during excavation of this site were of early medieval date (10th to 13th century). These comprised three broadly parallel ditches aligned north to south at the eastern side of the excavated area (F1123, F1145 and F1129), a series of shorter linear features towards the southern part of the excavated area which may represent beamslots (F1073, F1075 and F1077), and a number of pits, both discrete and intercutting, distributed across the excavated area. Some slightly later pottery was recorded in some of these features; notably Pit F1017, which formed part of a group of intercutting pits (with F1003, F1007, F1009, F1011 and F1015).

7.2 A second phase of activity, dated as medieval to early post-medieval, was represented by a single regular rectangular pit (F1047).

7.3 A posthole, a larger sub-rectangular pit (F1115) observed cutting the medieval ditches in the eastern part of the site, and a series of levelling layers or surfaces comprise a third phase of activity dated as late post-medieval to modern. These are likely to relate to the use of the site in association with the buildings recorded within its boundaries on early Ordnance Survey maps or buildings in its vicinity, as depicted on earlier cartographic sources.

7.4 Artefacts of earlier dates, primarily Neolithic worked flint and Roman coins and CBM, were recovered as residual material from some of these contexts. Peachey (this report) notes that the presence of Roman artefacts at this site is unsurprising given the proximity of the high status Roman settlement of *Durobrivae* but that the character of the CBM assemblage is not indicative of a high status building at this location. The presence of Neolithic artefacts also conforms to what is known regarding the history of human occupation in the surrounding area; environmental analyses have demonstrated the presence of cereal pollen, implying deliberate cultivation, in the Nene valley from the Neolithic onwards (Brown and Allen 2008, 99-102).

The development of medieval Water Newton

7.5 The earliest reference to a manor at *Niwantune* is in a charter dated to AD 937 (Cambridgeshire County Council 2002, 18). The manor of *Niwanton* was confirmed as an endowment of the Abbey of St Mary of Thorney in Edgar's foundation charter of AD 973. It is likely that the manor had also belonged to the earlier abbey which was destroyed by the Danes in AD 870 (Page *et al* (eds.) 1936, 230). The Domesday Book also mentions the

church, two mills on the Nene at *Neweton*, 60 acres of meadow, ploughland and the habitual use of the wood of the Abbot of Peterborough.

Despite this documentary evidence, physical evidence for Saxon settlement in the 7.6 area is lacking until late in the period (Cambridgeshire County Council 2002, 18). Excavations south of Water Newton in 1958 at Elton Road (now beneath the A1) revealed evidence for a late Saxon hall. This was represented by a post-built stockade and a defensive ditch. Later features comprised a system of multi-phase drystone walled enclosures that may have been sheepfolds, cobbled areas, a hearth, oven, postholes, and a broad but shallow north to south aligned ditch (Cambridgeshire County Council 2002, 14). Ancillary buildings appear to have developed around the hall. The hall itself has been dated to the 10th to 12th centuries while later partition of the enclosure is considered to have occurred in the 12th to 13th centuries (Cambridgeshire County Council 2002, 18). The location of this site south of the later medieval church and village suggests that land to the north may then have been part of the Nene floodplain and unsuitable for settlement (O'Brien 2002). The site does not appear to have continued into the medieval period and may have been abandoned as settlement developed close to the ford in the area in which the church of St Regimius (HER 10332) was built in the 13th century.

7.7 Although the extent of medieval Water Newton remains uncertain, it is considered likely that the 13^{th} century church of Saint Remigius acted as focus for settlement development (Cambridgeshire County Council 2002, 24). The position of the Old North Road site, *c*. 120m to the south of the church, and *c*. 200m from the site of the late Saxon hall, suggests that it lay in fairly close proximity to the focus of settlement in both of these periods. As such, it is conceivable that the recorded features relate to domestic occupation of the Old North Road site.

Function of the site

7.8 The medieval ditches (F1123, F1129 and F1145) recorded towards the eastern side of the excavated area may be seen to run perpendicular to the Old Great North Road, adjacent to which the site lies. The route that this road followed is unlikely to have changed greatly since the medieval period and so it may be seen that these ditches represent a boundary demarcating a roadside plot. Furthermore, these ditches run broadly parallel to boundaries depicted on the 1674 estate map (Fig. 3), including those associated with street frontage buildings to the north-east of the current site.

7.9 It is possible that Ditches F1123, F1129 and F1145 represent a boundary associated with an enclosed croft. Most peasant houses in a medieval village had attached yards and gardens; a smaller 'toft' fronting the street and a larger 'croft' at the rear (Gies and Gies 1991, 34). These would have been similar in layout to the plots of land associated with the medieval burgage tenements depicted to the north-east of the site on the 1674 estate map. Within this type of land holding it may be expected that a domestic building would have been present towards the street frontage. The series of possible beam slots (F1073, F1075 and F1077) recorded within the southern part of the site could potentially represent elements of such a structure. These were not particularly substantial features, suggesting that any structure they formed part of may have been of quite flimsy construction. This is in keeping with Hurst's (1971, 533) observation that medieval peasant houses were intentionally not strongly built as each new generation would rebuild the structure when it inherited it from the previous generation. However, the profiles of these features may indicate that they did not in fact function as beamslots; all displayed

moderately gently sloping sides, although this may be a result of the removal of groundbeams when the structure was dismantled. While similar but undated features, which may represent part of the same postulated structure, were present in section to the west, no further elements of a possible building were identified; however, this may, in part, be a result of groundworks associated with the development having commenced prior to archaeological intervention.

7.10 Crofts could be used either for arable cultivation or for pastoral agriculture (Dyer 2000, 69). With the exception of F1123, the dimensions of these ditches suggests that they would not have been capable of preventing the movement of animals unless the ditch was supplemented by other features, such as a fence, for which no evidence exists. An alternative interpretation recognises that the ditches may have simply demarcated areas of land or property rather than acting as a physical barrier; crofts were commonly demarcated by boundary ditches (Gies and Gies 1991, 34).

The numerous medieval pits recorded within the excavated area may represent 7.11 domestic and/or semi-agricultural activity of the type that may be expected within a toft and croft type landholding. The majority of these pits contained small to moderate quantities of early medieval/medieval pottery and small quantities of animal bone; small quantities of residual Romano-British CBM were also present in several of these features. Such assemblages may be understood as refuse deposits. Cussans (pers. comm.), however, suggests that the animal bone assemblage recovered from the site is not particularly indicative of domestic occupation in the immediate vicinity. Evidence from the archaeobotanical assemblage indicates that the site was probably located close to areas of human activity but may have been on the peripheries of the settlement. It should be noted, however, that a lack of apparent refuse deposits does not necessarily indicate that a domestic dwelling did not exist in this area. Evidence from Wharram Percy shows that the tofts here were kept remarkably clean and contained little refuse material; the majority appears to have been collected into middens before being spread on the open fields (Beresford & Hurst 1990, 44). This line of argument, however, suggests that presence of a partially articulated pig burial, as was recovered from Pit F1067, may be considered unlikely in an area of domestic occupation.

Internal development of the site

7.12 Stratigraphic relationships indicate that it is unlikely that all of the features assigned to Phase 1 were directly contemporary with one another, but the available dating evidence indicates that they were all created within the same timeframe. Insufficient evidence is available for clear definition of sub-phases within this timeframe. Stratigraphic and spatial relationships provide evidence for the development of the site in this period; this especially true of the possible boundary ditches (F1123, F1145 and F1129) at the east of the site and the possible structural features (F1073, F1075 and F1077) at the south. Hurst (1971, 533) cites the example of a toft at Wharram Percy in East Yorkshire where the alignments of structures and boundaries can be seen to have been rearranged in succeeding periods. This is presented as evidence to support the notion that peasant dwellings in this period may have been rebuilt and rearranged by successive generations. It is possible, therefore, that the three different boundary ditches and the three successive beamslot features represent similar generational alteration to the landholding represented here. Evidence from the pottery assemblage suggests that Ditch F1129 may have been the earliest of these three ditches; the pottery recovered from it was suggestive of a date in the 10th to 12th centuries, whereas the pottery from F1145 was more indicative of an 11th-12th century

date and that from F1123 of an 11th-13th century date.

7.13 Following the cessation of Phase 1 activity it appears that the site was abandoned or turned over to an archaeologically invisible agricultural usage until the modern period. Pottery possibly as late as the late 14th century was recovered from Phase 1 Pit F1017, forming part of an intercutting group of pits towards the south of the excavated area. This could indicate that Phase 1 activity continued up until this date, perhaps reduced in scale by this time.

7.14 Pit F1047, which contained a partial horse burial, represents the only identified postmedieval activity at the site. It is possible that further evidence of this period was present but was removed during groundworks prior to archaeological intervention. Furthermore, it remains possible that amongst the several undated features there are features contemporary with this period.

7.15 Cartographic sources indicate that the site comprised a yard and garden associated with nearby buildings, before becoming developed sometime prior to the publication of the 1902 Ordnance Survey map. The modern levelling, surfaces and associated features clearly relate to the use of the site in this period.

The position of the Old Great North Road site in medieval Water Newton

7.16 As stated in the draft Extensive Urban Survey (EUS) for Water Newton (Cambridgeshire County Council 2002, 24), little is known about the extent or the layout of medieval Water Newton. The identification of the site on the Old Great North Road therefore adds to the body of information regarding this period which currently comprises of the site of the parish church (CHER 10332), the possible late Saxon hall and medieval enclosures at Elton Road (CHER 1578; Green 1964) and the medieval finds from this area (CHER 1579), and the Saxo-Norman features recorded at Mill Street (CHER CB15353; O'Brien 2002).

7.17 The enclosed site recorded at Elton Road (CHER 1578; Green 1964) appears to have been in use up until the late 12th to 13th century. O'Brien (2002) asserts that the focus of the earlier Saxo-Norman settlement was to the south of the village around the Elton Road site. The EUS suggests that hall was abandoned due to the development of settlement further to the north around the church of St Regimius (Cambridgeshire County Council 2002, 5). The 12th century was a period of rapid change and expansion with increasing social complexity, major economic growth, population expansion and the development of new and the expansion of existing rural settlements (Taylor 2009, 103). These factors may have been significant in the apparent shift in the focus of the settlement from the area to the south of the modern village to the area around the church.

7.18 The dating evidence recovered from the Old Great North Road site indicates that Phase 1 activity is likely to have been broadly contemporary with the use of the Elton Road site. Its position in relation to this suggests that it may have lain close to, but possibly on the peripheries of, the main area of the earlier Saxo-Norman settlement. The 12th/13th century shift in the focus of settlement to the north provides an obvious explanation for the reduced level of activity at the site in the later medieval and early post-medieval period, as represented by Phase 2 features.

7.19 The full of extent of settlement focussed on the 'hall' and associated features

recorded at Elton Road is not known as only the area threatened by the construction of the A1 bypass was investigated at this time (Cambridgeshire County Council 2004, 24). It has been predicted, however, that associated remains may be present on either side of the A1 trunk road (*ibid*.) and the identification of broadly contemporary remains at the current site would appear to prove this prediction accurate.

7.20 Saxo-Norman remains, earlier in date (AD875-1150) than those at the Old Great North Road site and considered to represent domestic occupation, have been recorded further to the north, closer to the site of the church and the perceived focus of the later medieval settlement (O'Brien 2002). This may indicate that the Saxo-Norman pattern of settlement was more dispersed. Indeed, the 13th century church of St Regimius contains some earlier fabric- medieval builders were highly skilled at incorporating parts of earlier structures into later buildings (Taylor 1976, 5)- suggesting that a precursor may have existed at this location for some time. Newton (2009, 29-30) has noted that the true age of many churches may be significantly greater than even the first documentary references to them and may only be indicated if funerary and religious stonework associated with an earlier building has been fortuitously retained by antiguarian vicars or other interested parties as it has been uncovered. It is possible that the manor house of unknown date located to the west of the church (Cambridgeshire County Council 2004, 6) was originally a Saxon foundation; the construction of a church adjacent to a manor house is often considered characteristic of late Saxon activity and has been noted at sites such as Furnells, Raunds, Northamptonshire (Dix 1987) and The Old Bell, Marham, Norfolk (Newton 2010). Hall-and-church complexes are considered to be characteristic of the eastern region (Medlycott 2011, 70). The construction of churches was an element of 'thegnly culture' that the late Saxon elite could indulge in to distinguish themselves from the less well-to-do. (Senecal 2000). The church is described as an integral part of the thegnly estate in the *Gebyncdo* the 11th century 'promotion law' that describes how a ceorl may attain thegnly status (Williams 1992, 232). If a manor house and church had been established at the site of the current St Regimius, this may suggest that Water Newton was a polyfocal or dispersed settlement during the period represented by Phase 1.

7.21 That activity at the site should effectively cease in the 13th century (though some elements of the pottery assemblage may extend in to the 14th century) may be unusual in light of its proximity to the Great North Road. During the 13th century the route was growing in importance as a major route from London to northern England (Connor 2009, 89). The Great North Road fuelled the growth of other settlements through which it passed (O'Brien 2002) and the current site would have been an ideally suited location to take advantage of passing trade. The river Nene, however, was also an important communications route, forming part of the navigation system across the fens to Thorney Abbey (Cambridgeshire County Council 2004, 5) and may have taken precedence over the Great North Road.

7.22 The later development of the site in the late post-medieval/modern period (Phase 3) may be seen to reflect the evidence from the available cartographic sources. Cobbled surfaces and the various levelling layers may be consistent with the site's status as undeveloped, semi-agricultural land or gardens associated with the farmhouse/homestead to the east, as depicted on the 1837 Tithe Map (Fig. 4). Alternatively, these layers and deposits may relate to the buildings that had been developed on the site between the production of this source and the 1902 Ordnance Survey map (Fig. 5). Certainly, the parallel walls identified at the southern edge of the excavated, which truncated several earlier features, can be identified as the walls of the north to south aligned building depicted on the 1902 OS Maps (Figs. 5 & 6).

Economic evidence

7.23 Rowley (1982, 27) states that much, if not most, English medieval agriculture operated on an open-field basis. This implies, for the most part, a mixed agricultural economy. However, there is no evidence for the ridge and furrow earthworks characteristic of such as system within or immediately around Water Newton (Cambridgeshire County Council 2004, 24).

7.24 Evidence from the faunal assemblage would appear to be consistent with the norm for the period in eastern England (Cussans, this report). The assemblage is dominated by sheep/goat and cattle with pig, horse and dog also present. Sheep were particularly important for their wool in the medieval period and cattle are likely to have been the main meat providers; both species may also have been used in dairying. A relatively high density of carbonised cereals present within the environmental samples taken from Phase 1 features indicates that, in addition to animal husbandry, pastoral agricultural practices were being carried out in the area (Summers, this report). Wheat, which appears to have been exclusively of a free-threshing variety, was the dominant cereal species and is understood to have been an economic staple during this period.

7.25 The pottery assemblage gives some insight into the relative wealth of the population occupying or utilising this site. The earlier medieval assemblage is a fairly average one with local St Neots and other shelly wares the main fabrics represented. Stamford ware is also present, making up 24% of the assemblage; this is a fairly local product, glazed versions of which were widely traded and are considered to expensive and of quite high status. The examples recovered from this site were mostly unglazed, indicating no particular degree of wealth. This fits neatly with the suggestion that the site, if inhabited at all, represents a fairly low status, peasant holding.

8 CONCLUSION

8.1 Medlycott (2011) identifies the study of the origins and development of medieval rural settlements as an important research subject. Although the Old Great North Road site is small, and the evidence regarding the nature of the activity carried out there is somewhat inconclusive, its identification comprises a significant addition to the corpus of information regarding Water Newton in the early medieval period. It increases the number of locations in the village at which Saxo-Norman activity has been identified and it can be confirmed that activity ceased, or began to cease, here at or around the 13th century; this is consistent with the theory that, at this time, there was a shift in the focus of settlement to the area around the church of St Regimius, the current building of which was constructed in the 13th century.

8.2 Whether the site represents a peasant holding comprising domestic activity and small-scale agricultural activity or semi-agricultural enclosures on the periphery of the Elton Road site, the faunal and archaeobotanical evidence recovered has been sufficient to provide a clear insight into the early medieval agricultural economy practised in Water Newton. While the character of animal husbandry appears to conform to what may be expected for this period in eastern England the evidence for cereal production is notable as it indicates that the fertile soils of the area were of sufficient quality for an agricultural surplus to be produced and for a range of cereals and garden crops to be produced.

9 DEPOSITION OF THE ARCHIVE

9.1 Archive records, with an inventory, will be deposited with the finds from the site, at Cambridgeshire County Store. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency. In addition to the overall site summary, it will be necessary to produce a summary of the artefactual and ecofactual data.

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AS1480, Water Newton Concordance of finds by feature

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Pottery (g) A.Bone (g) Other (3) 12g (3) 12g (2) 14g (2) 14g (2) 14g 5 Str. Flint (1) - 1G (20) 6 Str. Flint (1) - 1G (20) 161g 161g
Pottery (g) A.Bone (g) Other (3) 12g (3) 12g (2) 14g (1) - 1G
Pottery (g) A.Bone (g) Other (3) 12g (2) 14g (2) 14g (2) 14g
Pottery (g) A.Bone (g) Other
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Shell - 7g	Str. Flint - 3g Clay Pipe - 7g					Mussel Shell - 2g	I			Str. Flint (1) - 3g	O. Shell - 6g	O. Shell - 19g	11. DUIE - 149				Fe. Frag (1) - 16g		Fe. Frag (1) - 67g			Fe. Frag (1) - 13g				B. Stone - 73g	Shell - 2g	W. Stone - 200g	Glass (1) - 3g	Str. Flint (1) - 3g		
4378		e			2611			40	2	68		435		180	с С	5		195	124	98	312	780	158	676	263	29	30			91	2	
24		10			80			135				2						46	186	89		248	164	104		122	142			243		
(11) 52g		(1) 5g	(1) 4g	(4) 35g	(22) 177g	(7) 123g	(2) 5g	(12) 70g	(2) 11g (41)	473g		(8) 110g		(1) 9g	(5) 15g		(11) 76g	(5) 21g		(6) 29g	(1) 22g (24)	201g	(1) 14g		(2) 18g	(3) 30g	(1) 4g			(8) 32g	(2) 24g	(1) 15g
11th-13th	(residual?)	10th-12th	10th-12th	11th-13th	10th-12th	10th-12th	late 9th-12th	late 9th-12th	late 9th-12th	10th-12th/13th		late 9th - 12th		late 9th - 12th	late 9th - 12th		17th-18th	17th-18th		11th-13th	10th-12th	11th-13th	10th-12th		late 9th-12th	10th-12th	11th-13th	(residual?)		10th-12th	11th-13th	Roman
Fill of Pit		Fill of Pit	Fill of Pit	Fill of Pit	Fill of Burial Pit	Fill of Beam Slot			Fill of Beam Slot					Fill of Beam Slot		Fill of Pit/Posthole	Layer	Fill of Pit		Fill of Pit	Fill of Ditch			Fill of Ditch	Fill of Ditch Terminus	Fill of Ditch					Fill of Ditch	Fill of Ditch Terminus
							∢	В		∢		Ш		∢	Ю			٨	В	В	∢	ш	Δ			A	ш			ပ		
1049		1062	1064	1066	1068	1074			1076					1078		1080		1116		1122	1124			1138	1126	1130					1146	1157
1047		1061	1063	1065	1067	1073			1075					1077		1079	1084	1115		1121	1123				1125	1129					1145	1150

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	Str. Flint (1) - 1g	Fe. Frag (1) - 14g	Coin - 1g	Glass (1) - 7g
	140			
	379			
(42)	350g			
	10th-13th	(residual)		
	S/L			

The Pottery

by Peter Thompson

The excavation recovered 391 sherds weighing 2.704kg from 32 features and layers, with 42 of the sherds (350g) unstratified. The majority of the stratified assemblage (373 sherds weighing 2,567 kg) dates between the Saxo-Norman and High Medieval periods. The pottery ranges by, and within contexts, from being abraded to surviving in fairly good condition. The remaining 18 sherds (126g) are early post-medieval to early modern in date. The pottery has been recorded by context on Excel which is included as part of the archive. The wares present have been recorded by sherd number and fabric weight and are recorded in Table 1 below.

Ware	Date	Sherd	% of	Fabric	Average
		Count	sherds	Weight (g)	sherd size
					(g)
Stamford	10 th -12 th	94	24	627	6.6
St Neots	10 th -12 th	124	31.7	720	5.8
Thetford	10 th -12 th	18	4.6	45	2.5
Grimston-	11 th -12 th	2	0.5	39	19.5
Thetford					
South	?10 th -13 th	19	4.9	111	5.8
Lincolnshire					
ooltic					
Developed St	12 th -13 th	18	4.6	221	12.3
Neots					
Developed	Mid 12 th -mid	3	0.8	11	3.6
Stamford	13 th				
Medieval shelly	12 th -14 th	72	18.5	602	8.3
coarse ware					
Medieval	?12 th -14 th	4	1	11	2.7
calcareous gritty					
ware					
Bourne A	13 th -14 th	2	0.5	28	14
Bourne B	13 th -14 th	5	1.3	24	4
Lyveden B	Early 13 th -14 th	10	2.6	130	13
Unprovenanced	13 th -15 th	1	0.3	9	9
medieval glazed					
ware					
Glapthorne-type	Mid 15 th -mid	1	0.3	2	2
	16 th				
Bourne D	Mid 15 th -early	8	2	37	4.6
	17 th				
Post-medieval	Late 16 th -18 th	7	1.8	55	7.8
red earthenware					
White salt glazed	18 th	1	0.3	14	14
stoneware					
Creamware	Early 18 th -late	1	0.3	18	18
	19 ^m				
		391		2,704	

Table 1: Quantification of pottery by sherd number, percentage of total, fabric weight and average sherd size.

The Saxo-Norman Pottery

Two hundred and fifty seven sherds (65.7% of the sherd total) weighing 1.427kg are made up of the Saxo-Norman trio of St Neots, Stamford and Thetford wares dating between the 10th and 12th centuries. St Neots ware is the commonest making up 31.7% of the site assemblage with 124 sherds weighing 720g. Identifiable forms include 9 cooking pot rims and 4 bowl rims; three of the latter represent shallow vessels while the fourth has a hammerhead rim.

Stamford ware makes up 24% of the assemblage total with 94 sherds (0.623kg). Nineteen sherds contain glaze and one sherd has roulette decoration (Fig. 10.1). According to Kilmurry's typologies the rims present comprise 4 xT1 straight sided bowls, 3 x T12 small bowls, 2 xT2 cooking pots, 2 xT4 cooking pots and 1x T5 spouted pitcher. Two strap handles from jugs or spouted pitchers were also present

Eighteen sherds (45g) are grey sandy Thetford-type wares which include an unstratified bowl rim with roulette decoration. Two further sherds (39g) with pale brown surfaces are Grimston-type wares including a sagging cooking pot base.

The Medieval wares

Shelly wares

Medieval shelly wares make up the bulk of the medieval group providing 19.3% of the site total. These were mainly medieval shelly coarse wares (72/599g) and include a rim each from a bowl, jug and jar, the latter with "pie crust" decoration. Three body sherds also contain wavy line decoration. Also in this group is Developed St Neots ware accounting for 18 sherds weighing 221g. The fabric is similar to St Neots ware but includes more sand; a cooking pot with an expanded rim and a large open bowl were the rim forms present (Fig. 10. 2).

Oolitic wares

South Lincolnshire oolitic ware probably dating from the later 10th to 13th centuries accounts for 19 sherds weighing 111g (4.9% of the total). Two jug rims are present, one with a finger decorated neck cordon, while a body sherd contains a double line of roulette decoration. Ten sherds (130g) of Lyveden B ware from Northamptonshire include six with glaze. Three of these are highly decorated with white slip lines and one also having grid stamped clay pads (Fig. 10.4).

Miscellaneous wares

The remaining medieval pottery comprises 3 sherds (11g) of Developed Stamford ware with distinctive copper green speckling, including a body sherd with a double horizontal rilled cordon. Two sherds (28g) of reduced Bourne A and 5 sherds (20g) of oxidised Bourne B ware, and 4 sherds (11g) of calcareous gritty ware. The remaining sherd is from an unprovenanced glazed jug from Pit F1017 (L1018).

The Post-medieval sherds

A small unstratified sherd (2g) in fine orange red fabric with sparse ooliths is probably a Glapthorne ware. Eight brick red sherds (37g) with fine shelly inclusions are early post-medieval Bourne B ware. In addition seven post-medieval sherds, and a sherd each of white salt glazed stone ware and Creamware are present.

Dating the main groups of features

Ditches F1125, F1129, F1123, F1145

The most prominent archaeological features on the site are three or four N-S running ditches to the east. Ditch Terminus F1125 (L1126) contained a sherd each of Stamford ware and South Lincolnshire oolitic ware suggesting an 11th-12th centuries date, or possibly slightly earlier. The overlying ditch, F1123 (L1124), contained a piece (14g) of asbestos suggesting a modern date, although the material could be intrusive as the feature was cut by a modern pit; pottery recovered from this feature was suggestive of an 11th-13th century date. Ditch F1129 (L1130) immediately to the west, contained a Stamford straight sided bowl rim and a sherd of St Neots ware suggesting a 10th-12th century date. Ditch F1145 (L1146) in between the last two above mentioned ditches contained a St Neots cooking pot rim and a small sherd of South Lincolnshire oolitic ware again indicating the 11th-12th centuries.

Ditches F1073, F1075, F1077

Three truncated E-W running linears are to the south centre of the site. Possibly the earliest stratigraphically is F1075 (L1076) which contained 42 sherds in St Neots and Stamford ware (Fig. 10.1), and medieval shelly wares including a Developed St Neots bowl rim (Fig. 10.2). The combination suggests a 12th century date. Overlying this was Beam Slot F1073 (L1074) which contained 21 sherds comprising Stamford, Thetford and St Neots wares, and medieval shelly coarse ware including a hollow jar rim in good condition (Fig. 10.3). The combination would also suggest a 12th or possibly early 13th century date. The third linear, F1077 contained a St Neots sherd and 4 medieval shelly coarse wares suggesting a date centred on the 12th century or early 13th centuries.

Intercutting Pits F1003, F1007, F1009, F1011, F1015, F1017

Pit F1003 (L1004) contained a sherd each of Stamford ware and medieval shelly ware and an oxidised sherd with fine grey core and calcitic inclusions which is probably a Bourne B product, showing that the feature is not likely to be earlier than the 13th century. Pit F1007 (L1008) contained 17 sherds including all three Saxo-Norman ware types, along with medieval shelly coarse ware, medieval calcareous gritty ware, and South Lincolnshire oolitic ware. The latter included an early medieval jug rim almost certainly of late 11th-12th century. Pit F1009 (L1010) contained 27 sherds including a St Neots hammerhead bowl rim, a Developed St Neots-type thickened cooking pot rim and a medieval coarse shelly ware with "pie crust" decoration. This feature is again 12th or more likely 13th century in date. Pit F1011 (L1012) yielded 22 sherds with the most closely datable comprising a Developed Stamford Ware manufactured between the mid 12th and mid 13th centuries. Pit

F1015 contained 37 sherds including a South Lincolnshire oolitic ware with double roulette decoration, and three sherds of Lyveden B ware (Fig. 10.4), indicating a date of not earlier than the second quarter of the 13th century. Pit F1017 (L1018) contained 6 residual Stamford and St Neots ware sherds, and a sherd each of medieval shelly coarse ware, Lyveden B ware and an unprovenanced glazed sherd. The combination would suit a date range of c.1225-1400.

Intercutting features F1061, F1063, F1065

Pit F1065 (L1066) contained three sherds of South Lincolnshire oolitic ware including a jug rim indicating an 11th-12th/13th centuries date. The overlying Pit F1063 (L1064) produced a single sherd of Stamford ware while the stratigraphically most recent pit, F1061 (L1062), contained a small sherd of St Neots ware. It is possible therefore, that the whole group is not later than the 12th century.

Other features

Large pit F1036 (L1039) contained a sherd of St Neots ware, two sherds of South Lincolnshire oolitic ware and a Bourne B indicating a 13th-14th centuries date. Twenty sherds were recovered from Burial Pit F1067 including Saxo-Norman wares and medieval wares. The latest pottery comprised a sherd each of Bourne B and Lyveden B ware, but as a sherd of modern asbestos was also present the pottery could all be residual. Pit F1021 contained three sherds of Stamford ware and one Developed Stamford ware, and so is likely to date to the second half of the 12th century when both fabrics were concurrent. Overlying pit F1023 (L1024) which contained 7 sherds including Stamford and St Neots ware, South Lincolnshire oolitic ware, and medieval shelly wares would therefore match a late 12th or possibly early 13th centuries date.

Conclusion

The fabrics and vessel forms present are all consistent with pottery assemblages of late Saxon to earlier medieval date in this region.

Illustrations

Fig. 10.1	Linear F1075 (L1076 B) Stamford roulette decorated bowl rim
Fig. 10.2	Linear F1075 (L1076A) Developed St Neots bowl rim
Fig. 10.3	Pit F1073 (L1074) Medieval shelly coarse ware jar
Fig. 10.4	Pit F1015 (L1016 A) highly decorated Lyveden B ware

Acknowledgement

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The Ceramic Building Materials

Andrew Peachey MIfA

The excavation recovered a total of 43 fragments (2669g) of Romano-British CBM, including a single fragment (32g) of *opus signinum*. The Romano-British CBM was recovered in a highly fragmented, slightly abraded condition as residual material in medieval contexts. The bulk of the CBM appears to be flat tile, probably *tegula* roof tile although rare fragments of box flue tile and brick are also present.

Methodology

The CBM was quantified by fragment count and weight with fabrics examined at x20 magnification and all data entered into a Microsoft Excel spreadsheet that will be deposited as part of the archive. Roman CBM forms were identified using the conventions defined by Brodribb (1987).

The Romano-British CBM

The Romano-British CBM occurred in two fabrics and as opus signinum, described below. Fabric 1 accounts for 30 fragments (2128g), predominantly tegula roof tile with brick and box flue tile also occurring. Fabric 2, accounting for 12 fragments (509g), occurs entirely as *tegula* roof tile.

Romano-British CBM Fabrics

- Fabric 1 Orange-red to red-brown surfaces contrasting with a thick mid grey core. Inclusions comprise common quartz, sparse calcareous inclusions (often oolitic) and sparse red iron rich grains (all 0.1-0.25mm). A very hard, near vitrified fabric with a smooth to slightly abrasive feel.
- Fabric 2Red-orange throughout.Inclusions comprise common quartz (0.1-0.25mm) with sparse
red/black iron rich grains (0.1-0.5mm).A hard fabric with a slightly abrasive feel.
- Opus Signinum Lime mortar with common-abundant inclusions of crushed red brick/tile (generally 1-5mm, occasionally larger)

The bulk of the Romano-British CBM, in Fabrics 1 and 2 occurs as 20mm thick flat tile that appears to be derived from *tegula* roof tile. Fragments in Burial Pit F1067, Ditches F1123, F1137, and as un-stratified material exhibit flanges that confirm the presence of this type of tile; however a single fragment in Pit F1115 of comparable thickness but exhibiting a partial key mark suggests that the presence of box flue tile may be masked by the apparently common roof tile. In addition to the tile, Posthole F1032, Ditch F1129 and Pit F1115 contained small fragments of 50mm thick brick that may be derived from *bessalis* or *pedalis* type Roman bricks. A single small fragment of *opus signinum*, or crushed tile mixed with mortar to form a concrete, was also contained in Pit F1011, but like the CBM was highly fragmented and did not preserve any extant surfaces.

The presence of this quantity of residual CBM in medieval features at Water Newton is unsurprising due to the close vicinity of structures and enclosures that would have formed part of the high status Roman town of *Durobrivae* (Water Newton), but the limited size and preservation of the fragments in this assemblage suggests that such a building was not located on the site.

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The Coins

Andrew Peachey MlfA

Unstratified (spoil heap)	Roman, probably 4 th century AD, copper
	radiate (15mm diameter), no detail extant
L1027 (Small Find 1)	Roman, 4 th century AD, copper radiate (16mm diameter). Detail partially obscured, better identification may follow conservation.
	<i>Obverse</i> : Helmeted head of Constantinopolis <i>Reverse</i> : Victory on prow with sceptre and shield, mint mark ?TRPS (Trier)

The Struck Flint

Andrew Peachey MIfA

The excavations recovered seven flakes (17g) of struck flint, contained as residual material in medieval contexts. The struck flint is relatively poorly-preserved with the flakes frequently snapped, with slight white patination or with rolled edges. A blade-like tertiary flake contained in Pit F1047 exhibited an abraded striking platform, while a similar flake in Beam Slot F1075 was distinctly soft-hammer-struck, and the remainder appear to have had blade-like proportions. These characteristics suggest this limited collection of small flakes may have originated as debitage from earlier Neolithic flint core reduction, but this conclusion is limited by the constraints of the evidence.

Human Bone

Dr Julia E. M. Cussans

During the recording of animal bone a single fragment of human bone was identified. This was a skull fragment from L1076 B, fill of Linear F1075. It seems likely that this represents redeposited material; several Roman burials are noted within the local area (see *Archaeological Background*) and may well be the source of this stray bone. Other than being broken the bone did not appear to have been modified by either pathological or human action.

The Shell

Dr Julia E. M. Cussans

A very small quantity of shell was recovered from excavations at Water Newton. Only four contexts yielded archaeological shell, a further two contexts contained fossilised specimens, which are likely to have been redeposited or were part of the natural sub-soil.

Shell remains came from L1039 A, L1074, L1076 A and L1076 B. The shells were highly fragmented and abraded with preservation being rated from poor to ok. The majority of the shells belonged to mussel (*Mytilus edulis*), with 13 umbos and 32 fragments being identified. A single fragment of probable cockle was identified. These marine molluscs are likely to have formed part of the diet of the inhabitants of the site.

The fossilised remains came from L1049, L1076 A and L1130 B. These included two fragments of an unidentified oyster species and two Brachiopods of the genus *Tetrarhynchia*; these creatures date to the Jurassic period and are now extinct. These fossils may have been picked up as curiosities by the site inhabitants or may be natural inclusions within redeposited material.

The Animal Bone

Dr Julia E. M. Cussans

Introduction

Animal bones (mammal and bird) were recovered from 34 deposits (Table 2) the majority of which were pit or ditch fills from Phase 1. Only one deposit was designated as Phase 2 (L1049, F1047) and contained a partial horse burial; a small number of bones belonged to Phase 3. Bone was in a fairly fragmentary state and a large proportion could only be identified as large (LTM) or medium (MTM) mammal. Identified mammal bones all belonged to domestic species; a small quantity of bird bones was present. Two semi-articulated animal burials were identified, one from Phase 1 and one from Phase 2 (mentioned above).

Method

Animal bones were examined on a context by context basis and were rated for overall preservation on a qualitative scale from very poor through to excellent. Other taphonomic indicators such as colour, abrasion, fresh breaks and canid gnawing were noted; the latter three on a semi-quantitative scale of none, few, some, many. Bones were identified with reference to in house reference material and manuals such as Schmid (1972) and Cohen and Serjeantson (1996). The number of bones assigned to each species was noted as well as specific elements or body part represented. The presence of butchered, ageable (mandibles, teeth & unfused epiphyses), measurable and pathological elements were noted by species on the same semi-quantitative scale as used for the taphonomic indicators. Bones that could not be identified to species were assigned to size categories. For mammals these were large (cattle or horse sized) or medium (sheep or goat sized). Species were quantified by number of identified specimens (NISP) and ubiquity (the number of deposits they appeared in).

Taphonomy

Overall, bone preservation was a rated as good or ok for the majority of contexts, one context (L1146) was rated as poor and one was noted as having variable preservation (L1076 A). Some level of bone abrasion was noted for most deposits, but this was generally only slight. Fresh breaks were present in 21 of 34 deposits, the majority of which were noted as only having a few breaks. Generally the bone was fairly fragmented as a result of both old and fresh breaks. Canid gnawing was noted in 16 deposits, again the majority of these being noted as only containing a few examples. A single burnt bone was noted from Pit Fill L1010 A (F1009) and L1076 B (fill of Linear F1075) was noted as having some bones that appeared cracked or weathered.

Quantification

Numbers of bone fragments by species and context are shown in Table 2. Over 700 bone fragments are present in total, a large proportion of these being made up of bones that could only be identified as large or medium mammal. Significant proportions of these fragments come from semi-articulated deposits of a horse (Pit F1047, L1049) and a pig (Pit F1067, L1068) and are discussed together with these species below. As a result of these animal burials figures for horse and pig are also somewhat inflated. If these figures are discounted the order of abundance of identified species is sheep/goat, cattle, pig, dog and horse; of the unidentified remains, medium mammal bones were more abundant than large mammal bones. A very small quantity of bird bones was present. The order of species ubiquity is in general agreement with the NISP figures, with sheep/goat and cattle dominating the assemblage followed by pig and smaller quantity of horse and dog; unidentified fragments are again the most ubiquitous. The bones of each of the identified species will be described in more detail below.

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Feature	,	;	i	;	Sheep/	i	:	1				
	Context	Description	Phase	Cattle	Goat	Pig	Horse	Dog	LIM	MIM	Bird	Total
1005	1006 B	Pit	/						-			1
1009	1010	Pit	~		1							٦
	1010 A	Pit	1							1		1
	1010 C	Pit	Ļ							4		4
1011	1012	Pit	、	-		~			~	2		5
	1013	Pit	.	~						-		2
	1014	Pit	.						2	2		4
1015	1016	Pit	、							2		2
1017	1018	Pit	.						2	-	~	4
1025		Deposit	.		Ł							-
1036	1038 A	Pit	.		-	-						2
	1039 A	Pit	Ļ		1	ſ						2
1047	1049	Pit	2	1	S		28*		100*	2		134
1061	1062	Pit	~							-		-
1067	1068	Burial Pit	.	9	ę	88*				300*		397
1073	1074 B	Beam Slot	Ļ		2				Ļ	٢	Ļ	5
1075	1076	Linear	Ļ							1		1
	1076 A	Linear	1	1					5	4	1	11
	1076 B	Linear	Ļ		1		1		5	18		25
1077	1078 A	Beam Slot	1	1					4			5
	1078 B	Beam Slot	1							2		2
1079	1080	Pit/Posthole	/						-			1
1115	1116 A	Pit	3	1				۱,		1		3
	1116 B	Pit	3				1	2	2			5
1121	1122 B	Pit	~	1	1							2
1123	1124 A	Ditch	Ļ	3	4	ſ	2	4	8	З		25
	1124 B	Ditch	1	3	5		1		1	10		20
	1124 D	Ditch	-		2			4	-			7
	1138	Ditch	/	2		1		1				4
1125	1126	Ditch Terminus	-	1		13			2	2		18
1129	1130 A	Ditch	-		4				-			5
	1130 B	Ditch	-			-						-
	1130 C	Ditch	1	5	1				7			13

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1145	1146	Ditch	-							2		2
			Total NISP	27	30	107	33	12	144	360	3	716
			Ubiquity	13	14	8	5	5	17	20	3	
Table 2. G	Nuantification	n of animal bones fro	m Water Nu	∋wton, * ii	indicates NISP i	nflated b	y presen	se of part	ial anima	l burial.		

Cattle

For cattle a mix of elements is present, with no obvious selection of body parts being noted. Butchered elements are present in six deposits, one notable example being a radius that has been sawn through at an oblique angle essentially removing the distal end from the shaft (L1126). No ageable mandibles or teeth are present; unfused epiphyses are present in four deposits including one neonate bone, indicating the presence of some juvenile and neonate animals. A small number of measurable bones are present; no pathologies are noted.

Sheep/goat

None of the bones of sheep/goat could be identified to species, but as sheep were particularly important in medieval England (Grant 1984, Sykes 2006) it would seem likely that the majority of bones were from sheep rather than goat. Butchered elements are present in seven deposits, these included a distal tibia with fine cut marks on the shaft and a chop through the distal articulation, and a calcaneus baring disarticulation marks. As for cattle no ageable mandibles or teeth are present; a singe bone with unfused epiphyses is present in L1124 A. This is a femur which, judging by its size came from a very young animal, possibly a neonate. Interestingly this bone came from the same deposit that the only neonate cattle and horse bones came from. The lack of other unfused sheep/goat elements would indicate that the majority of these bones came from adult animals. This is also supported by the presence of a number of measurable bones in the assemblage; measurable bones being designated as complete, fully fused bones or ends of bones. Two pathologies are noted, one is a possible growth line or hypoplasia in the enamel of a molar and the other is a humerus with exostosis on the distal articulation, this is similar to pathologies seen at Anglo-Saxon Flixborough, thought to be characteristic of 'penning elbow' (Dobney et al. 2007).

Pigs

Pig remains are largely dominated by the partially articulated animal recovered from Pit F1067, these are discussed in more detail below. Aside from this burial, pigs are represented by a variety of elements, although no foot bones are present. No butchery marks are present on any of the pig bones. One ageable mandible is present in L1039 A, with a 3rd molar (M3) in the early stages of wear. Neonate pig bones are present from L1126; these are the only unfused bones noted outside of Pit F1067. No measurable bones are present. A pathological pig radius was recovered from L1038 A, which has porous additional bone growth over a large proportion of the shaft.

The partially articulated pig burial from Pit F1067 consists of the skull, mandible, atlas, axis, bones of the left forelimb, a femur and a small number of foot bones; there is also a quantity of ribs and vertebrae assigned as MTM but likely belonging to this pig. While this deposit was recognised as a burial during excavation it was excavated in section (rather than in plan) in order to establish relationships with other surrounding features, as a result no photos of this animal *in situ* are available. The pit was however excavated in it entirety and all of its contents were available for analysis; as such no parts are missing due partial excavation, any missing parts were either never deposited or were removed in antiquity. The bones of the left forelimb were partially fused and hence it was possible to make and age estimate of the animal based on Silver's (1969) bone fusion ages. Given the bones

present and their estimated fusion ages (Table 3) it was determined that the pig was aged between 1 and 3 years at death. Examination of the teeth in the mandible showed the M3 to be at Grant's (1982) wear stage c, placing the mandible in Hambleton's (1999) age stage E with an age estimate of 21-27 months (*c*. 2 years) old. Examination of the canines present in the mandible and maxilla indicate that this was a female pig. Several pathological bones were present. Firstly the upper left 1st premolar (P1) was rotated. The remainder of the pathologies were found on the ribs and vertebrae. Similar deformities just below the articular end are seen on a number of the ribs and a thoracic vertebra has a deformed dorsal process. It appears that a number of the ribs and at least on of the thoracic vertebrae may have been broken and then healed during the pig's life. A small quantity of cattle and sheep/goat bones as well as a possible dog vertebra were also found within this deposit.

Bone	End	Fusion State	Fusion Age in Years Silver (1969)
Humerus	Proximal	Unfused	3.5
	Distal	Fused	1
Radius	Proximal	Fused	1
	Distal	Unfused	3.5
Ulna	Proximal	Unfused	3-3.5
	Distal	Unfused	3-3.5

Table 3. Age data for pig left forelimb from F1067.

Horse

As for pig the majority of horse bones came from a single partially articulated animal from Pit F1047; bones from other deposits will be described first. A mixture of horse bones is present with butchered elements being coming from two deposits. There are no ageable jaws or unfused epiphyses, although one bone (mentioned above) is noted as coming from a neonate animal. Very few measurable bones are present.

The partially articulated horse from Pit F1047 is shown in Plate A. These remains consist of the skull, vertebrae and ribs, no limb bones are present. The majority of the vertebrae and all of the ribs are recorded as LTM but given the evidence from the photo are thought to certainly to belong with the horse skull. The skull was lifted as a block with its surrounding deposit, but despite careful excavation and cleaning was found to be in a very fragmentary state. From the *in situ* photograph it appears that the top part of the skull (frontal bone) was missing, indicating the possibility that the animal may have been poleaxed. All of the teeth present are loose, so can not be identified to specific position in the jaw and used to determine the age of the animal. However the presence of one very heavily worn tooth with partially reabsorbed roots that sits neatly over an unworn tooth indicating the presence of both milk and adult teeth suggest that this animal was not fully mature at death. No butchery is present on any of these bones. A patch of odd looking bone on one of the occipital articulations is the only evidence of pathology; it is uncertain what the cause of this may have been. A small quantity of bones of cattle and sheep/goat were also found within this deposit.

Dog

Dog is represented by a mix of elements, one of which is a mandible with possible cut marks on the lingual side. The majority of the teeth from this mandible have been lost post mortem but the alveoli indicate that full adult dentition was in place at death, the only other

dog mandible present in the assemblage is in a similar condition. Unfused epiphyses are present from a couple of deposits, indicating that some of the dogs present were not fully mature. A small number of measurable bones are present; no pathologies are noted.

Bird

Only three bird bones are present in the assemblage. One belongs to domestic fowl (L1018), one is noted as goose-sized (L1074 B) and the third is a Corvid (crow family) bone (L1076 A). No butchery or pathology is noted on any of these bones.

Discussion

Whilst the Water Newton animal bone assemblage comprises several hundred bone fragments the identified assemblage is small and largely made up of two partial animal burials. A small amount of information can however be gained from the assemblage. In summary, sheep/goat and cattle are the dominant species at the site with pig, horse and dog also being present. Very young animals are present for cattle, sheep/goat, horse and pig. The majority of sheep/goat bones come from adult animals, whereas cattle show a presence of some younger animals. The two ageable pig specimens came from pigs of around two years old, and although not fully mature these animals would have had some use in breeding before they died. Dog bones appeared to be a mix of mature and immature animals, whereas the majority of the non-articulated horse bones came from adult animals; the horse burial did not appear to be fully mature at death. Butchery marks are noted on sheep/goat, cattle, horse and dog bones. A small quantity of bird bones is present.

The species represented are fairly usual for medieval sites in the region (Wilson 1995, Wade 1996, Hutton 2004, Philips & Cussans forthcoming) as is the dominance of sheep/goat and cattle (Bedwin 1992, Wilson 1995, Sykes 2006, Philips & Cussans forthcoming). It seems likely that the majority of sheep/goat bones belonged to sheep as this was the dominant species on the majority of sites where distinctions could be made (e.g. Cartledge 1989). Sheep were particularly important for their wool in the medieval period (Grant 1984, Sykes 2006) especially in the 12th-14th centuries (Ryder 1983) and hence were kept to a fairly advanced age. Given their larger size and the greater presence of immature/sub-adult animals, cattle are likely to have been the main meat providers; pigs would also have provided meat. Dogs and horses are likely to have been kept as work animals; the latter were particularly important as pack animals in relation to the wool trade (Grant 1984).

The nature of the two partial animal burials is difficult to determine. Both are incomplete carcasses, largely made up of the cranial and axial skeleton, with no signs of butchery. Neither animal was fully mature at death and both were buried along with a selection of bones from other animals. Morris (2011) examined medieval animal bones groups (ABGs) from sites in the south of England and found that while axial elements were one of the commonest forms of partial pig ABG none of the six examined in his study contained head, axis and limb bones. For horse the combination of axis and head was the least common for partial ABG deposition (Morris 2011, fig. 8.3). Morris (2011) points out that in the past the majority of medieval ABGs have been interpreted as having practical rather than ritual meaning, although in more recent years patterns of interpretations of ABGs from historical

periods. The current author feels that given the inclusion of a selection of disarticulated bones of other species within the pits at Water Newton a mundane interpretation of waste disposal, currently feels like the most likely, although by no means definitive interpretation.

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Environmental Samples

Dr John Summers

Introduction

During excavations on land adjacent to 2 Old Great North Road, Water Newton, a total of 19 bulk soil samples were taken for environmental archaeological analysis. The samples ranged from 2.5 to 20 litres and were mostly taken from deposits attributable to the medieval period (broadly 10th-13th century), with some post-medieval (17th-18th century) activity also present. This report presents the results from the analysis of the samples, which contained plant macrofossils preserved by carbonisation and waterlogging.

Methods

The bulk samples were processed by water flotation at the Archaeological Solutions Ltd facilities in Bury St. Edmunds using a Siraf-type flotation tank. The light fractions were captured on a 250µm mesh, while the heavy fractions were retained in a 500µm mesh. Light fractions were sorted under a low power stereomicroscope (x10-x30 magnification). Identifications were made with the aid of reference literature (Cappers *et al.* 2006; Jacomet 2006; Kerney and Cameron 1979) and a reference collection of modern plant tissues. Due to the relatively small number of samples, all carbonised plant macrofossils were fully quantified. Modern contaminants, such as rootlets, seeds and invertebrate fauna were recorded using a semi-quantitative scale in order to assess the effects of bioturbation on the deposits.

Results

The results from the analysis of the bulk sample light fractions are presented in Tables 4 and 5.

Carbonised plant macrofossils

Carbonised macrofossils were common throughout most of the samples, with charred cereal grains representing the most abundant class of remains. Four cereal taxa were represented: free-threshing type wheat (*Triticum aestivum/ compactum* type); hulled barley

(*Hordeum* sp.); oat (*Avena* sp.); and rye (*Secale cereale*). A single asymmetric barley grain may indicate the presence of a six-row variety (*Hordeum vulgare var. vulgare*) but the evidence is inconclusive. In addition to cereals, remains of pea/ bean (large Fabaceae indet.) were identified in L1008, L1014, L1039A and L1071). The specimen in L1008 was oblong in shape and may have been an example of Celtic bean (*Vicia faba var. faba*). Pea and Celtic bean are commonly recorded medieval crops (e.g. Greig 1996) and their frequent occurrence in the samples suggests that they were used and probably cultivated by the site's inhabitants.

Cereal chaff was present in the form of occasional culm nodes. Such material often does not preserve as well as cereal grains and is likely to be under-represented in the archaeobotanical record (Boardman and Jones 1990). The presence of straw can be taken to imply processing of cereals in the vicinity of the site, although straw is a valuable economic resource which can have a number of uses, such as thatch (e.g. de Moulins 2007), bedding or course fodder (e.g. van der Veen 1999).

A number of non-cereal taxa were also recorded in the samples. These included goosefoot (*Chenopodium* sp.), knotgrass (*Polygonum aviculare*), dock (*Rumex* sp.), vetch/ wild pea (*Vicia/ Lathyrus* sp.), cornflower (*Centaurea cyanus*) and wild grasses (Poaceae indet.). All of these are likely to have grown as arable weeds which are recorded elsewhere in the medieval period (e.g. de Moulins 2007). The presence of sedge (*Carex* sp.) may indicate some wetness of cultivated land.

Unfortunately the richest deposit (sample 7 of L1071 in F1069) was un-dated, although its stratigraphic relationship with F1067 suggests that it is of a similar date. This was the only sample to contain a density of charred plant remains in excess of 10 items per litre, a concentration which may suggest the deposition of a discrete dump of carbonised material, as opposed to general refuse disposal (cf. Campbell 2000, 55). This deposit fitted the overall pattern of wheat dominance, accompanied by a lesser number of barley and oat grains. A single specimen of pea/ bean (large Fabaceae indet.) was also present.

Waterlogged plant remains

Sample 1 of L1039A appears the most likely to contain a genuine waterlogged assemblage. The range of taxa included common nettle (*Urtica dioica*), knotgrass (*Polygonum* sp.), dock (*Rumex* sp.), henbane (*Hyoscyamus niger*), black horehound (*Ballota nigra*), elder (*Sambucus nigra*), daisy family (Asteraceae indet.) and sedge (*Carex* sp.). These can mostly be considered plants of disturbed and wet ground, with some, such as henbane, nettle and dock, showing enriched soil fertility. The presence of sedge is indicative of wet conditions. These plants probably grew on the margins of the feature, with the seeds becoming incorporated into deposits through natural processes.

<u>Charcoal</u>

A small number of charcoal fragments were encountered, some of which could be recognised as diffuse-porous types. However, the number of fragments large enough for identification was insufficient to merit any further analysis.

Terrestrial molluscs

The shells of terrestrial molluscs were present in a small number of samples. All are either catholic or occupy dry grassland habitats. The assemblage is far too small to draw any useful interpretations.

Contaminants

Modern rootlets were common to abundant in a number of the samples. Modern burrowing molluscs (*Cecilioides acicula*) were also occasionally recorded. Some disturbance of the deposits could have been caused by root action but it is not considered that the impact was been significant.

Discussion (medieval deposits)

Based on the relatively high density of carbonised cereals within the samples it is reasonable to suggest that the site represents an agricultural settlement. Chaff remains were sparse but the cultivation of free-threshing cereals means that the chaff would be separated at an early stage of processing, possibly away from the excavated site. The majority of the non-cereal taxa were larger seeded plants, such as large grasses (Poaceae) and vetch/ wild pea (*Vicia/ Lathyrus* sp.). Both would have been common medieval weed species (e.g. de Moulins 2007) and could only be effectively removed from the crop by hand sorting prior to use and consumption (e.g. Stevens 2003). A relatively low level of contamination from such taxa is likely to have been tolerated and was probably unavoidable if cereals were bulk processed for storage and export.

Wheat, which appears to have been exclusively of a free-threshing variety, was numerically dominant in the Phase 1 deposits (Chart 1). This pattern is replicated when all features, including un-dated deposits, are considered. Wheat is likely to have been the primary economic staple, as is recorded at other medieval sites in the region (e.g. Ballantyne 2005; Fryer and Summers forthcoming) and further afield (e.g. Straker *et al.* 2007).



Chart 1: Pie chart showing the proportion of each cultivar in all Phase 1 samples (10 samples, 87 specimens)

It is likely that the majority of the cereals represent the charred remains of a fully processed crop (threshed, winnowed and sieved), with the relatively high concentrations of material possibly representing waste from bulk drying accidents. Such an activity is likely to have been undertaken to prepare grain for storage or export. It is possible that the lower representation of barley, oat and rye in comparison to wheat reflects the goals of the economic system at the site. It is possible that these had a greater role in domestic consumption or as fodder. The treatment of such crops is likely to have differed from the bulk processing of the wheat crop, resulting in a lower likelihood of accidents involving large volumes of grain.

The Nene Valley has a long history of occupation (e.g. Meadows *et al.* 2008) and the soils along the course of the River Nene are likely to have represented a valuable asset for arable cultivation in the area. Environmental analyses show the presence of cereal pollen from the Neolithic onwards (Brown and Allen 2008, 99-102). The distribution of ridge and furrow along the River Nene suggests that medieval arable cultivation did not extend into the flood plain, although cultivation is likely to have extended up to this area (Meadows *et al.* 132-134). The flood plain itself was probably used primarily for grazing and hay meadows (*ibid.*).

The waterlogged plant remains from some of the excavated features are indicative of vegetation growing on the site which became incorporated into the deposits by natural processes. The assemblage suggests waste ground vegetation, although how far this extended beyond the margins of the excavated features is indeterminate.

Concluding remarks

The archaeobotanical assemblage from this site provides an interesting insight into the cereal economy around Water Newton during the medieval period. It is predicted that a

range of cereals, along with other garden crops were cultivated on the rich soils of the Nene Valley. Such fertile soils are likely to have been quite productive and facilitated the production of a cereal surplus. The predominance of wheat in the assemblage suggests that surplus production was targeted towards this more desirable crop, which was probably bulk processed and dried for use as a tradable commodity. It is possible that the other crops were produced more for domestic consumption and/ or use as high value fodder.

It is not recommended that any further work is conducted using this assemblage.

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Site Code	AS1480	AS1480	AS1480	AS1480	AS1480	AS1480	AS1480	AS1480	AS1480	AS1480
Sample number	1	2	6	11	14	16	17	18	19	22
Context number	1039A	1046	1074	1146	1122B	1008	1014	1004	1010	1068
Feature number	1036	1045	1073	1145	1121	1007	1011	1003	1009	1067
Feature type	Pit	Pit	Beam slot	Ditch	Pit	Pit	Pit	Pit	Pit	Burial pit
Phase	1	٢	-	-	1	٢	1	٢	Ł	-
Volume (litres)	20	10	10	10	10	10	10	10	10	10
Flot (ml)	50	50	10	5	2	35	50	150	06	5
Cereal grains:										
Indet. cereal grain frags	-	Х	×	Х		×	Х	×	×	ı
Cereal NFI	2	12	9			5	10	4	4	ı
Hordeum sp Barley		4				2	З	~		ı
Hordeum vulgare - Hulled barley	-	1				-	-	1	1	
(Hordeum vulgare - Twisted grain)	-	(1)			-	-		-		
<i>Triticum</i> sp Wheat		5	2		1	Ļ	3	1	1	
Triticum aestivum/ compactum type - Free-threshing type wheat	1	8	2	1	1	10	13	9	1	-
cf. A <i>vena</i> sp Oat	-	3			-	Ļ		-		
Avena sp Oat	ı	2	ı	ı	ı	2	2	I	Ļ	·
Secale cereale - Rye					ı	Ļ	2			
Cereal chaff:										
Cereal indet. culm node			1		-		2			-
Other cultivars:										
Large Fabaceae indet Pea/ bean	Ċ		ı			Ļ	<i>-</i>	-	ı	ı
Wild taxa:										
Chenopodium sp. L Goosefoot					-		1			
Polygonum aviculare L Knotgrass						~				
Rumex sp. L Dock		-			-		1			
Vicia/Lathyrus sp. L Vetch/wild pea	-				-	-		2		-
Fabaceae indet Pea family (medium)		1			-		1		1	-
Fabaceae indet Pea family (small)	1						2			-
Sambucus nigra L Elder							-			
Centaurea cyanus L Cornflower	-		-		-	-	-			
Carex sp. L Sedge					-		-	1		-
Poaceae indet Grass (large)	ı	-	,	<u>_</u>		ı		ı	~	ı
Seeds indet.		1	1		-	2	-	1		-

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Charcoal:										
Charcoal >2mm	•		×	ı		ı	Х	Х	•	Х
Waterlogged:										
Urtica dioica L Common nettle	7	1				8		1		
Chenopodium sp. L Goosefoot	•	1		ı		4	ı	2	•	
Silene sp. L Campions		1		1		6	1			
Polygonum sp. L Knotgrass	~		ı			,				,
Rumex sp. L Dock	-					,				
Aethusa cynapium L Fool's parsley				1		1	1			
Apiaceae indet Carrot family						1				
Hyoscyamus niger L Henbane	37		-	ı		ı	ı	ı	•	
Ballota nigra L Black horehound	10			ı						
Lamiaceae indet Dead-nettle family	2	I	-						-	
Sambucus nigra L Elder	4	-					1	1		
Asteraceae indet Daisy family	-									-
Carex sp. L Sedge	8									
Terrestrial molluscs:										
Vertigo pygmaeum	-		-						-	Х
Other:										
Fish scale	×		•	ı		I	ı	ı	-	
Fuel ash slag	Х					×				Х
Contaminants:										
Modern roots	XXX	×	XX	XX	×	XX	XXX	XXX	XXX	×
Modern seeds	Х			×						
Modern insect		-	×		-	XX	-			
Modern mollusc								×		×

X = present
XX = common
XX = abundant
Table 4: Archaeobotanical remains from Phase 1

Site Code	AS1480	AS1480	AS1480	AS1480	AS1480	AS1480	AS1480	AS1480	AS1480
Sample number	5	8	4	7	6	10	12	13	15
Context number	1049	1048	1096	1071	1058	1060	1090	1116A	1006
Feature number	1047	1047	1095	1069	1129f	1123e	1089	1115	1005
Feature type	Pit	Pit	Posthole	Pit	Linear	Linear	Linear	Pit	Pit
Phase	2	2	DD	DD	an	DD	DD	3	UD
Volume (litres)	10	10	2.5	10	10	10	10	10	10
Flot (ml)	75	15	-	25	15	5	2	10	25
Cereal grains:									
Indet. cereal grain frags	-	XX	-	XX			-	-	××
Cereal NFI	1	21	-	44	-	2	1	1	15
<i>Hordeum</i> sp Barley		2	I	6	-	ı	,	Ļ	ю
Hordeum vulgare - Hulled barley		,	ı	2	-		,	-	ę
<i>Triticum</i> sp Wheat		,	I	9	-	ı	,	-	S
(<i>Triticum</i> sp Tail grain)			ı	(1)	-	I	,	-	
Triticum aestivum/ compactum type - Free-threshing type wheat	5	0		24					12
cf. Avena sp Oat	ı	-	I	4	I	ı			-
cf. Secale cereale - Rye	1			~					ı
Cereal chaff:									
Cereal indet. culm node	1								~
Other cultivars:									
Large Fabaceae indet Pea/ bean	-			1					
Wild taxa:									
<i>Chenopodium</i> sp. L Goosefoot		1		-	-	•	ı		-
Chenopodiaceae - Goosefoot family	-								-
<i>Rumex</i> sp. L Dock	-	1	-		-		1		
<i>Vicia/Lathyru</i> s sp. L Vetch/wild pea	1	1		ı	-	•	I		-
Fabaceae indet Pea family (medium)	ı	٢		ı	I	I	ı	-	2
Fabaceae indet Pea family (small)	-		-		-	-	1		-
Lithospermum arvense L Field gromwell				-	•		ı		
Galium aparine L Cleavers	-				1				
Centaurea cyanus L Cornflower		-		-			-	-	
Anisantha sterilis (L.) Nevski type - Barren brome	,		ı	~	ı	ı			ı
Poaceae indet Grass (large)	'	-	ı	~	I	ı			3
Poaceae indet Grass (medium)	•	'		З					
Poaceae indet Grass (small)		,							,

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Seeds indet.		,	-	2					2
Charcoal:									
Charcoal >2mm		Х	ı	Х		-	-		×
Waterlogged:									
cf. Rhamnus cathartica L Buckthorn					~		I		ı
Sambucus nigra L Elder	-		-		۲	-	-		
Terrestrial molluscs:									
Helicella itala	-					×	-		ı
<i>Trichia hispida</i> group		ı		,		Х	-		ı
Vallonia pulchella		Х	1				-		
Other:									
Small mammal bone				×					×
Fish scale	-		ı	Х		·	-		
Contaminants:									
Modern roots	XXX	XX	×	XX	XX	×	×	×	×
Modern seeds		Х	1		Х	Х	×		
Modern insect		Х			Х				
Modern mollusc	ı	ı		I	×	I	×	ı	ı

x = present xx = common xxx = abundant Table 5: Archaeobotanical remains from Phases 2,3 and un-dated samples



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Fig. 1 Site location plan	
Scale 1:25,000 at A4	



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> Archaeological Solutions Ltd Fig. 2 Detailed site location plan Scale 1:1000 at A4



Archaeological Solutions Ltd Fig. 3 Map of the Manor of Water Newton, 1674 Not to scale



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Fig. 4	Tithe map of Water Newton, 183	7
Not to scale		













Phase 1: Medieval





Phase 2: Medieval - early post-medieval



Phase 3: Late post-medieval - modern



Undated

083

1003

1084 1083





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Fig. 10 Pottery illustrations	
Scale 1:4 at A4	