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PHASE 4, WATTON GREEN, WATTON, NORFOLK

ARCHAEOLOGICAL TRIAL TRENCH EVALUATION AND EXCAVATION: RESEARCH ARCHIVE REPORT

ENF 134955

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NGR: TF 92910 00880	Report No: 4736
District: Breckland	Site Code: ENF 134955
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OASIS SUMMARY SHEET

Project details			
Project name	*Phase 4, Watton Green, Watton, Norfolk*		
Between the 30th of September and the 7th of October 2014, Archaeological Solutions Ltd (AS) conducted an archaeological excavation at Watton Green, Watton, Norfolk (Phase 4). The excavation was undertaken in compliance with a planning condition attached to planning permission for the construction of 18 dwellings (Breckland Council Ref. 3PL/2014/0330/F), and was preceded by an archaeological trial trench evaluation, also conducted by AS (dated 26/08/2014). *The project revealed elements of a ditched middle Iron Age trackway/ droveway running north to south across the site. An arrangement of Gullies forming the south of this 'system' may have served to 'funnel' livestock, thus controlling access to the trackway/ droveway. One Bronze Age and one possible Bronze Age pit were also encountered, while earlier Neolithic material (pottery and struck flint) was present in the fill of a ?tree hollow. A number of undated features were also recorded.*			
Project dates (fieldwork)	*26/08/2014 and 30/09/2014 – 07/10/2014*		
Previous work (Y/N/?)	*N*	Future work (Y/N/?)	*N*
P. number	*5930*	Site code	*ENF 134955*
Type of project	*Archaeological Trial Trench Evaluation and 'Strip, Map & Sample' Investigation*		
Site status	*None*		
Current land use	*Private garden*		
Planned development	*Residential*		
Main features (+dates)	*Earlier Neolithic* *Bronze Age* *Middle Iron Age*	*?Tree hollow* *Pit(s)* *Ditches; gullies*	
Significant finds (+dates)	*Earlier Neolithic* *Bronze Age* *Middle Iron Age*	*Struck flint* *Struck flint* *Pottery*	
Project location			
County/ District/ Parish	*Norfolk*	*Breckland*	*Watton*
HER/ SMR for area	*Norfolk Historic Environment Record*		
Post code (if known)	*IP25 6RB*		
Area of site	*c.* 8850m^2		
NGR	*TF 92910 00880*		
Height AOD (min/max)	*c. 50m*		
Project creators			
Brief issued by	*Norfolk County Council Historic Environment Service*		
Project supervisor/s (PO)	*Egan, S. and Baker, M.*		
Funded by	*Abel Homes Ltd*		
Full title	*Phase 4, Watton Green, Watton, Norfolk. Archaeological Trial Trench Evaluation and Excavation: Research Archive Report*		
Authors	*Mustchin, A.R.R.*		
Report no.	*4736*		
Date (of report)	26th November 2014 (Revised 11/05/2015)		

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Summary

Between the 30th of September and the 7th of October 2014, Archaeological Solutions Ltd (AS) conducted an archaeological excavation at Watton Green, Watton, Norfolk (Phase 4). The excavation was undertaken in compliance with a planning condition attached to planning permission for the construction of 18 dwellings (Breckland Council Ref. 3PL/2014/0330/F), and was preceded by an archaeological trial trench evaluation, also conducted by AS (dated 26/08/2014).

The site occupies an area of archaeological potential with known prehistoric, Romano-British, medieval and later activity within relatively close proximity. Finds from within 100m of the site include a possible Iron Age pit and a silver coin, probably dating to the reign of Henry V. Extant post-medieval structures are also present within this radius.

The project revealed elements of a ditched middle Iron Age trackway/ droveway running north to south across the site. An arrangement of Gullies forming the south of this 'system' may have served to 'funnel' livestock, thus controlling access to the trackway/ droveway. One Bronze Age and one possible Bronze Age pit were also encountered, while earlier Neolithic material (pottery and struck flint) was present in the fill of a ?tree hollow. A number of undated features were also recorded.

1 Introduction

1.1 Between the 30th of September and the 7th of October 2014, Archaeological Solutions Ltd (AS) conducted an archaeological excavation at Watton Green, Watton, Norfolk (Phase 4; NGR TF 92910 00880; Figs. 1-2). The excavation was undertaken in compliance with a planning condition attached to planning permission for the construction of 18 dwellings (Breckland Council Ref. 3PL/2014/0330/F), and was preceded by and archaeological trial trench evaluation, also conducted by AS (dated 26/08/2014).

1.2 The project was undertaken in accordance with a generic brief prepared by Norfolk County Council Historic Environment Service (NCC HES), dated 24/09/2012, and a specification prepared by AS (dated 11/09/2014) and approved by NCC HES. The project conformed to the Institute for Archaeologists' *Standard and Guidance for Archaeological Excavation* (2013) and Gurney's (2003) *Standards for Field Archaeology in the East of England*.

2 THE SITE

2.1 The market town of Watton is located *c.* 30km west of Norwich city centre. Watton Green is located on the east side of the town, between Norwich Road and a minor road (Watton Green) running north-eastwards to Carbrooke. The parishes of Ovington and Griston lay *c.* 1.5km to the north and 2km to the south-east of Watton Green, respectively. RAF Watton, a former Royal Air Force station, lies less than 1km to the south. The development area comprises lawns, trees, grassy areas and part of an adjacent garden (all recently stripped of topsoil).

Topography, Geology and Soils

2.2 The site sits at *c.* 50m AOD in a fairly level landscape; the valley of an east-west flowing stream – an eventual tributary of the River Wissey – is situated *c.* 600m to the north. The local soils are of the Ollerton Association, comprising 'deep permeable sandy and coarse loamy soils affected by groundwater' and 'some coarse loamy soils with slowly permeable subsoils and slight seasonal Waterlogging' (Soil Survey of England and Wales 1983, 11). These soils are suitable for the cultivation of cereals, peas, beans and some coniferous woodland (*ibid.*). The underlying geology comprises glaciofluvial drift and chalky till (*ibid.*). The solid geology is Cretaceous Upper Chalk.

2.3 The current project encountered a firm, silty clay subsoil (with frequent angular flint and stones, and occasional chalk flecks), some 0.16m to 0.27m thick overlying a natural geology of firm clay with frequent angular flints and occasional chalk flecks, up to 0.27m below the subsoil horizon. All topsoil had been removed prior to archaeological works.

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Prehistoric

3.1 In 1958, six Bronze Age socketed axeheads were recovered from a local field. The axes were all of the same type with ribbed wing decoration on each face; some appeared unfinished. In 1964 another Bronze Age socketed axehead was found in the same area (NHER[1] 8777). Archaeological evaluations at RAF Watton, some 300m to the south-west of the current site, encountered a Bronze Age round barrow with central cremation urn, together with a possible associated inhumation (NHER 42674). A Bronze Age ditch containing fragments of a bucket urn was also discovered. A prehistoric perforated stone macehead of Mesolithic or later date was also found in a garden at the airfield (NHER 8778).

3.2 Cropmarks associated with undated linear features and enclosures are recorded some 650m to the south of the site (NHER 36702). An archaeological evaluation carried out *c.* 30m to the west of the site recorded further undated linear features and a pit containing a single sherd of probable Iron Age pottery (NHER

[1] Norfolk Historic Environment Record

39786). Undated prehistoric flint flakes were found some 270m to the south of the site (NHER 40428).

Romano-British

3.3 Norwich Road is suggested as following the course of a Roman Road, possibly linking with the 'Norwich east to west road' (NHER 8786). Fieldwalking of the area to the north of St Mary's Church (see below) recovered Roman coins and brooches (NHER 1031).

Medieval

3.4 St Mary's Church, some 735m to the west of the site, dates from the 13th century and is Grade II* listed (NHER 8795). The area to the north of the church is the possible site of the medieval town of Watton, which was destroyed by fire in the 17th century. Fieldwalking and metal detecting on this site between 1974 and 1990, recovered a variety of finds including medieval and Middle Saxon pottery sherds, (NHER 1031). A silver coin, probably of Henry V, was also found by metal detecting in the area of Green Farmhouse, some 60m to the north-east of the site (NHER 21006).

Post-Medieval and Modern

3.5 Grade II listed Green Farmhouse, 60m to the north-east of the site, dates from the 17th century (NHER 46123). Grade II listed Rokeles Hall also dates from the 17th and century but may occupy the site of a former hall built in 1237 (NHER 8788).

3.6 Post-medieval plough furrows and a World War II pillbox are recorded at RAF Watton (NHER 42674). This former Royal Air Force station opened in 1937 and ceased as an operational airfield in 1968 (NHER 8908; www.historyofwatton.org.uk). A second pillbox is located approximately 215m south of the site (NHER 32423), while a post-medieval milestone is situated adjacent to Norwich Road, *c.* 170m to the south-west (NHER 56314).

The Archaeological Trial Trench Evaluation

3.7 The site was subject to an archaeological trial trench evaluation, carried out by AS on the 26th of August 2014 (Egan 2014). The evaluation encountered five ditches, one gully and a single pit (within three trial trenches, each measuring up to 30m x 1.6m). Over fifty per cent of features were devoid of diagnostic material. Both Ditch F1004 (L1005) and Pit F1008 (L1009) in Trial Trench 1 (Fig. 3) yielded single struck flints of possible late Neolithic to early Bronze Age date. That from F1008 may have been utilised as a thumbnail scraper. Ditch F1012 (Trial Trench 3) yielded five undiagnostic sherds (23g) of early to middle Iron Age pottery in two 'bonfire-fired' fabrics. A single, unstratified sherd of the same date was recovered from the subsoil.

4 EXCAVATION METHODOLOGY

4.1 All topsoil had been removed prior to archaeological works. Subsoil L2001 was mechanically stripped under close archaeological supervision using a 360º mechanical excavator fitted with a toothless ditching bucket. All subsequent excavation was undertaken by hand. The exposed archaeological horizon was cleaned and examined for a features and finds. Encountered features and deposits were recorded using *pro forma* recording sheets, drawn to scale and photographed as appropriate. Spoil heaps were examined for finds.

5 DESCRIPTION OF RESULTS

Chronological Phasing

5.1 Based on the stratigraphic sequence and diagnostic artefact assemblage (pottery and struck flint), three chronological phases of activity were interpreted at the site, dating to the early Neolithic, Bronze Age and middle Iron Age respectively (Table 1; Fig. 3). The pre-Iron Age evidence comprised just two Bronze Age pits (one tentatively dated) and a single ?Tree Hollow containing early Neolithic material. Some features that did not yield diagnostic material were phased based on their similarities to and/ or stratigraphic/ spatial relationships with dated features. A number of undated features were also encountered.

Phase	Period	Date
1	Early Neolithic	4300 to 3300 BC
2	Bronze Age	2100 to 750 BC
3	Middle Iron Age	400 to 100 BC

Table 1: Chronological Phasing

Phase 1: Early Neolithic (4300 to 3300 BC)

5.2 ?Tree Hollow F2015 (L2016; Table 2; Plate 1; Fig. 3) yielded 33 pieces (61g) of early Neolithic struck flint and three sherds of intrusive early Iron Age pottery. The lack of large flint groups from features assigned to the early Iron Age (Phase 3; see below) suggests a low level of residuality at the site and supports an earlier prehistoric date for F2015. The struck flint assemblage from Fill L2016 comprises a blade-based technology characteristic of the earlier Neolithic. A single blade consistent with this group was also found within Subsoil L2001. An environmental sample of Fill L2016 yielded only sparse charcoal (see *The Environmental Samples*, this report).

Phase 2: Bronze Age (2100 to 750 BC)

5.3 Pit F2007, some 17m to the north-west of F2015 contained 30 pieces of struck flint (447g) of probable Bronze Age date. The single fill of this feature (L2006) comprised charcoal-rich silty clay and was thought by the excavator to represent possible ‘fire waste’ (Plate 2). No burning/ discolouration of the surrounding natural was evident, suggesting that any burnt material had been introduced to this feature from elsewhere. An environmental sample of L2006 yielded ‘seven barley grains, including two angular hulled specimens’ (see *The Environmental Samples*, this

report). Further, indeterminate cereal grains were also present in addition to charcoal and *c.* 1g of charred hazelnut shell. The edible taxa are thought to represent food preparation waste. The uppermost fill of nearby Pit F2003 (L2004) appeared compositionally similar to L2006 (Plate 3), possibly suggesting that these features were contemporary; both were also similar in plan and profile. However environmental samples from the fills of Pit F2003 (L2004 and L2005) were comparatively poor, yielding only five pieces of charcoal (see *The Environmental Samples*, this report).

Phase	Feature	context(s)	Plan/ profile (dimensions)	description	Comments/ relationships	Finds
1	2015	2016	Sub-circular/ moderately sloping to steep sides, irregular base (1.04 x 0.90 x 0.24m)	Firm, dark grey brown silty sand with moderate charcoal flecks and small sub-angular flint. Environmental sample 4 taken	?Tree hollow; cut L1001=2002; sealed by 1000=2001	Pottery (5g); struck flint (61g); burnt flint (51g)
2	2003	2005 (primary)	Sub-circular/ steep sides, concave base (1.20 x 0.90 x 0.40m)	Friable, light yellow brown silty clay. Environmental Sample 2 taken	Pit; cut L1001=2002; sealed by 1000=2001	-
		2004 (uppermost)		Friable, dark brown/ black silty clay with moderate charcoal flecks and occasional medium angular flint. Environmental Sample 1 taken		CBM (6g)
	2007	2006	Sub-circular/ steep sides, concave base (0.85 x 0.71 x 0.43m)	Friable, dark brown/ black silty clay with frequent charcoal flecks and medium angular flint. Environmental Sample 3 taken	Pit; cut L1001=2002; sealed by 1000=2001	Struck flint (182g); burnt flint (521g); flint (627g); burnt bone (1g)

Table 2: Summary of pre-Iron Age features

5.4 Given the scant nature of the pre-Iron Age evidence (Phases 1 and 2), it is possible that any activity represented was transient (possibly seasonal) and/ or peripheral to a core of 'settlement' located elsewhere.

Phase 3: Middle Iron Age (400 to 100 BC)

5.5 The only substantial phase of archaeological activity at the site is dated to the middle Iron Age (400 to 100 BC; Phase 3). The precise dating of this phase remains uncertain, however, based on the presence of possible late Iron Age sherds within the Phase 3 pottery assemblage (see *The Prehistoric and Roman Pottery*, this report). The assemblage is of a very limited size and is generally in a highly abraded condition.

5.6 Phase 3 comprised three ditches (F1004=2012, F1012=2038 and F1008=2008) and two gullies (F2028 and F2030) (Table 3; Fig. 3). Bar Gully F2028, which comprised a stratigraphically later addition, the Phase 3 linear features all followed a *c.* N-S alignment. Ditches F1004 (=2012) and F1008 (=2008) ran parallel to one another, *c.* 4.4m to 6.2m apart, possibly representing a section of delineated trackway/ droveway that survived to a length of at least 82.5m (Figure 3). Both ditches varied in profile and depth along their lengths (Plates 4-5; Fig. 4). Ditch F1008 (=2008) was originally interpreted as a pit within the central part of Trial Trench 1 (see Section 3.7, above).

5.7 The southernmost Phase 3 feature, Ditch F1012 (=2038), was originally recorded in Trial Trench 3 of the evaluation, where it appeared wider than elsewhere along its length (Fig. 3). It is possible that mechanical subsoil removal in this area of the site (prior to excavation) resulted in the minor truncation of the ditch's upper profile.

Feature	context(s)	Plan/ profile (dimensions)	description	Comments/ relationships	Finds
1004=2012	2014 (primary)	Linear/ moderately sloping to steep sides, concave base (54.50+ x 1.05 x 0.45m)	Friable, light red brown silty sand	Ditch; cut L1001=2002; cut by F2036	Pottery (23g); struck flint (26g)
	1005=2013 (uppermost)		Firm, mid to dark brown silty clay with moderate small sub-rounded and sub-angular flint		-
1008=2008	2009	Linear/ moderately sloping sides, concave base (51.80+ x 1.10 x 0.37m)	Friable, light yellow brown silty clay with occasional small sub-rounded flint	Ditch; cut L1001=2002; sealed by F2028	Pottery (22g)
1012=2038	1013=2039 (primary)	Linear/ steep sides, concave base (13.10+ x 0.52 x 0.16m)	Compact, mid orange brown silty clay with occasional charcoal flecks and moderate small grit	Ditch; cut L1001=2002; sealed by L1000=2001	-
	2040 (uppermost)		Firm, dark orange brown silty sand with moderate small sub-rounded flint		Pottery (8g)
2028	2029	Linear/ steep sides, V-shaped base (15.20 x 0.53 x 0.34m)	Friable, dark orange brown silty sand with occasional small sub-rounded flint and frequent grit	Gully; cut L2009, L2031 and L2033; sealed by L1000=2001	-
2030	2031	Linear/ moderately sloping sides, flat base (0.90 x 0.41 x 0.08m)	Firm, mid orange brown silty clay with moderate small sub-rounded flint and grit	Gully; cut L1001=2002; cut by F2028	-

Table 3: Summary of Phase 3 features

5.8 A short section of gully (F2030) was present at the southern end of Ditch F1008 (=2008) (the relationship between these features was masked by the cut of stratigraphically later Gully F2028), while the southern alignment of the latter was continued to the south by Ditch F2038 (Table 3; Fig. 3). It is possible, based on the clear alignment of Ditches F2038 and F1008 (=2008) that the above trackway/ droveway continued southwards beyond the southern terminus of Ditch F1004 (=2012; see above). The *c.* 2.15m gap between the exposed termini of Ditch F2038 and Ditch F2008/ Gully F2030 might have marked the location of an access point between the trackway/ droveway and an adjacent area to the west (Fig. 3).

5.9 The 'entrance' between the termini of Ditches F2038 and F1008 (=2008)/ Gully F2030 (if genuine) appears to have been modified at a later date by the digging of Gully F2028 (Table 3; Fig. 3). This feature cut the fills of F1008 (=2008) and F2030 and followed a *c.* NNE-SSW route. The very southern part of Ditch F1008 (=2008) appears to have curved slightly in the same direction, possibly indicating that the course of Gully F2028 was a premeditated element of this 'system' of features, perhaps designed to 'funnel' livestock. The gap between Gully F2028 and adjacent Ditch F1012 (=2038) narrowed from *c.* 4m in the south to *c.* 1.5m adjacent to the Phase 3 trackway/ droveway (Fig. 3), perhaps indicating that entry to the latter was deliberately controlled in some way (possibly by a gate/ hurdles, or simply by the constricting of space). Comparable ditched trackways/ droveways include a middle Iron Age example at South Witham Quarry, Lincolnshire (Nicholson 2006), a late Iron Age/ early 1st century AD example at Balls Park, Hertford (Stone

forthcoming) and a late Iron Age example associated with a rectilinear system of enclosures at Bridge House Dairies in Mildenhall (Suffolk; Woolhouse 2013).

5.10 A single environmental sample from the Phase 1 trackway/ droveway, taken from Fill L2009 of Ditch F2008 (Seg.B), yielded only sparse, undiagnostic charcoal (see *The Environmental Samples*, this report). This suggests that the constituent features were not regularly receiving domestic waste (*ibid.*) and were perhaps located a reasonable distance from the nearest settlement(s).

Undated Features

5.11 Nine undated features were encountered (Table 4). These were distributed across the central and southern areas of the site and displayed no obvious spatial patterning. The largest was Pit F2023 (Plate 6; Fig. 3). This sub-oval feature measured 8.40 x 5.80 x 0.90m and was thought by the excavator to represent a possible backfilled pond. However, the fills of F2023 (L2024 and L2027) were both relatively poorly sorted and the manner of their deposition remains inconclusive. Although this feature may have been a pond, perhaps purposefully backfilled, it may equally have represented a clay extraction/ quarry pit. No finds were recovered from this feature. Small- and large-scale quarrying activity is common to most periods; extraction of boulder clay was identified at an Iron Age site at Silfield, Norfolk (Ashwin 1996) and the large clunch (chalk) quarries at Reach, Cambridgeshire were first worked during the Romano-British period (McKenny Hughes and Hughes 2013, 113). Later examples of quarrying include 12th to 13th century AD gravel extraction pits at Willingham, Cambridgeshire (Fletcher 2008) and large, late medieval/ early post-medieval sand and gravel extraction pits at Eye in Suffolk (Brooks 2012).

5.12 ?Tree Hollows F2017 and F2036 were encountered in the central area of the site. The latter 'cut' the fill of Phase 3 Ditch F1004 (=2012). Both were similar in size and were devoid of diagnostic finds; the only material from either comprises 15g of fired clay from Fill L2018 (F2017). It is possible that the remaining undated pits (F2021, F2025 and F2032) were also naturally occurring. Pits F2021 and F2025, especially, displayed irregular profiles atypical of features dug for a specific purpose. It is possible, however, that these features were the result of small-scale clay extraction. None yielded finds of any description.

5.13 Undated Ditch F1002 may have been part of the Phase 3 (middle Iron Age) 'system' (Fig. 3). However, this feature was only recorded within the confines of Trial Trench 1 and its single fill (L1003) was devoid of finds (Table 4). As the excavation did not encounter any clear continuation of this feature to the north or south of the trial trench it is possible that it represented an elongated pit, the termini of which may have been disturbed by the stripping of Subsoil L2001.

5.14 Ditch F1014 was present in the far south-west of the site. Like F1002, this feature was only recoded by the evaluation and lacked datable material. Once again, it is possible that any continuation of this feature had been disturbed by topsoil stripping. The apparent *c.* NW-SE orientation of F1014 does not suggest an obvious association with the Phase 3 trackway/ droveway, although too little of this feature was identified to draw any firm conclusions. Two short sections of undated gully (F1006 and F1010) were also identified in Trial Trenches 1 and 2, respectively

(Table 4; Fig. 3). The *c.* N-S orientation of F1006 might suggest an association with nearby Phase 3 Ditch F1008 (=2008) although this cannot be stated with any degree of certainty. No continuation of this feature or Gully F1010 was identified beyond the confines of the evaluation trenches, possibly suggesting that they were, in fact, elongated pits.

Feature	context(s)	Plan/ profile (dimensions)	description	Comments/ relationships	Finds
1002	1003	Linear/ steep sides, concave base (1.60+ x 1.20 x 0.29m)	Firm, mid orange brown silty clay with occasional small sub-rounded and sub-angular flint	Ditch; cut L1001=2002; sealed by L1000=2001	-
1006	1007	Linear/ steep sides, concave base (1.60+ x 0.96 x 0.35m)	Friable, mid orange brown silty sand with moderate small sub-rounded and sub-angular flint	Gully; cut L1001=2002; sealed by L1000=2001	-
1010	1011	Linear/ steep sides, flattish base (1.00+ x 0.47 x 0.28m)	Friable, mid orange brown silty sand with moderate small sub-rounded and sub-angular flint	Gully; cut L1001=2002; sealed by L1000=2001	-
1014	1015	Linear/ steep sides, flattish base (1.60+ x 0.80+ x 0.41m)	Friable, mid orange brown silty sand with moderate small sub-rounded and sub-angular flint	Ditch; cut L1001=2002; sealed by L1000=2001	-
2017	2018	Sub-circular/ moderately sloping sides, concave base	Friable, mid orange brown clay sand with frequent small to large sub-angular flint and gravel	?Tree hollow; cut L1001=2002; sealed by L1000=2001	Fired clay (15g)
2021	2022	Sub-circular/ moderately sloping sides, irregular base (2.50 x 1.70 x 0.51m)	Friable, mid orange brown clay sand with frequent small to large sub-angular flint and gravel	Pit; cut L1001=2002; sealed by L1000=2001	-
2023	2027 (primary)	Sub-oval/ moderately sloping to steep, stepped sides, flattish base (8.40 x 5.80 x 0.90m)	Friable, dark orange brown gritty clay with occasional small sub-rounded flint	Pit; cut L1001=2002; sealed by L1000=2001	-
	2024 (uppermost)		Friable, mid orange brown silty clay with occasional flint		-
2025	2026	Sub-circular/ moderately sloping to steep sides, irregular base (1.30 x 1.60 x 0.52m)	Friable, mid orange/ red brown clay sand with moderate small to large sub-angular flint	Pit; cut L1001=2002; sealed by L1000=2001	-
2032	2033	Sub-circular/ moderately sloping to steep sides, concave base	Friable, mid orange brown silty sand with occasional small sub-rounded flint	Pit; cut L1001=2002; cut by F2028	-
2036	2037	Sub-oval/ moderately sloping sides, flattish base (1.60 x 1.20 x 0.46m)	Friable, mid brown silty clay with moderate small to large sub-angular flint	?Tree hollow; cut 1013=2039; sealed by L1000=2001	-

Table 4: Summary of undated features

6 SPECIALIST REPORTS

The Prehistoric and Roman Pottery
Andrew Peachey

Excavations recovered a total of 20 sherds (90g) of prehistoric and Roman pottery, predominantly of probable middle Iron Age date, comprised of small, highly abraded fragments.

Three sherds (5g) contained in ?Tree Hollow F2015 were manufactured in a fabric tempered with medium sand and sparse calcined flint (1-3mm), typical of the early

Iron Age in the region, although based on such limited sherds earlier prehistoric dates cannot be discounted, in particular the earlier Neolithic period.

Ditch F2008 contained 10 sherds (22g) derived from a single vessel, with several cross-joining. The fabric of the hand-made vessel contained common, moderately-sorted quartz sand (0.25-0.5mm), while the vessel has a slightly everted plain rim, indicative of jars and bowls manufactured in the middle to late Iron Age in Norfolk. Ditch F1012 (=F2038) also contained non-diagnostic body sherds in this fabric, associated with body sherds tempered with moderately-sorted medium calcined flint. Sand-tempered fabrics began to supersede flint-tempered fabrics towards the end of the early Iron Age, probably in the 5th century BC; however the predominance of the sand-tempered sherds including a jar or bowl suggest the origins of these sherds lie in the middle to late Iron Age, but the very limited quantity and condition of the sherds renders any conclusion tentative.

A single sherd (8g) of generic Roman sandy grey ware, almost certainly produced locally, was also contained in Ditch F2038 (L2040 (Seg.B)), and comprised the plain shoulder cordon of a jar.

The Struck Flint
Andrew Peachey

Excavations recovered a total of 75 pieces (602g) of struck flint with 58 fragments (884g) of burnt flint (Table 5). The assemblage presents a clear technological divide, with the struck flint in ?Tree Hollow F2015 produced using the blade-based technology characteristic of the earlier Neolithic; while that in Pit F2007 utilised hard-hammer struck, unsystematic flake cores utilised in the Bronze Age. Preservation is similarly split, with the earlier Neolithic struck flint including a proportion of slightly patinated flakes and dulled surfaces, while the later prehistoric struck flint appears sharp and fresh.

Struck Flint Type	F	W
Core	1	102
Core Fragment	4	253
Blade	4	24
End Scraper	1	2
Debitage (blade-like)	29	49
Debitage (slightly irregular)	27	118
Burnt Flint	67	938
Total	*133*	*1486*

Table 5: Quantification of struck flint implements and debitage by frequency (F) and weight (W, in grams)

Methodology and Terminology

The flint was quantified by fragment count and weight (g), with all data entered into a Microsoft Excel spreadsheet that will be deposited as part of the archive. Flake type (see 'Dorsal cortex,' below) or implement type, patination, colour and condition were also recorded as part of this data set, along with free-text comments.

The term 'cortex' refers to the natural weathered exterior surface of a piece of flint, and the term 'patination' to the colouration of a flaked surface exposed by human or natural agency. Dorsal cortex is categorised after Andrefsky (2005, 104 and 115)

with ‘primary flake’ referring to those with cortex covering 100% of the dorsal face; ‘secondary flake’ with 50-99%; ‘tertiary’ with 1-49% and ‘un-corticated’ to those with no dorsal cortex. A ‘blade’ is defined as an elongated flake whose length is at least twice as great as its breadth, often exhibiting parallel dorsal flake scars (a feature that can assist in the identification of broken blades that, by definition, have an indeterminate length/breadth ratio). Terms used to describe implement and core types follow the system adopted by Healy (1988, 48-9).

Raw Material

The raw flint in the assemblage varies between mid to dark grey with, where extant, a slightly chalky white cortex. The earlier Neolithic flint tends includes all the flint in a paler tone, while the later material is uniformly dark grey. This type if flint is typical of that sourced from the local Breckland landscape, albeit not the very high quality, near black flint mined from the underlying chalk, suggesting the exploitation of shallow secondary and tertiary deposits.

Distribution and Technology

?Tree Hollow F2015 (L2016) contained a total of 33 pieces of struck flint (61g) including three blades and a snapped end scraper. The blades were consistently 40-45mm in length but did not exhibit any evidence of wear, while the end scraper comprised the snapped tip of a blade that had been modified with abrupt retouch and possibly snapped during manufacture rather than use. All the flakes were removed using a soft hammer with very small bulbs of percussion. The debitage was entirely comprised of small blade-like flakes (<30mm in length), predominantly un-corticated; with many that could potentially be classified as chips or bladelets, suggesting they were the bi-product of platform trimming or maintenance and indicative of in-situ earlier Neolithic blade production on the site. ?Tree Hollow F2015 also contained nine fragments (54g) of un-modified burnt flint; while a further blade consistent with this group was recovered from Subsoil L2001.

Pit F2007 (L2006) contained 30 pieces of struck flint (447g) including a single flake core, and four shattered fragments of comparable cores. The cores were unsystematic, having been rotated to utilise an expedient platform for the hard-hammer removal of a flake, frequently resulting in irregular terminations and stepped removal scars. The debitage flakes include only two with the potential to be utilised, though no evidence of re-touch, with the remainder comprising small tertiary and un-corticated flakes (<30mm in length) suggesting probable trimming and core preparation. This type of core technology emerges in the later Neolithic, but the lack of any systematic removals suggests a probable date in the Bronze Age, which is supported by the limited re-touched implements present. Phase 3 Ditch F1008 (=2008; L1009) contained a single small un-corticated flake (4g), with wear (but not re-touch) around its edges, suggesting it may have been utilised as a thumbnail scraper; albeit a more expedient informal tool than those characteristic of the early Bronze Age, therefore possibly post-dating this period. Ditch F1004 (L1005) also contained an utilised flake (26g), but employing a broad-squat tertiary flake. Limited, abrupt re-touch has been applied to three edges but not continuously around the flake, and not consistent with a formal tool type. The limited technology and flake type are consistent early Bronze Age flint technology, possibly continuing into the

mid to late Bronze Age, but the very low quantity of struck flint renders any conclusion tentative. Pit F2007 also contained 58 fragments (884g) of burnt flint, with a notably larger fragment size than that in ?Tree Hollow F2015, though equally un-worked.

The Environmental Samples
Dr John Summers

Introduction

Five bulk soil samples for environmental archaeological assessment were taken and processed during excavations at Watton Green. All of the samples were from prehistoric features, dating to the early Neolithic (?Tree Hollow F2015), Bronze Age (Pits F2003 and F2007) and the middle Iron Age (Ditch F1008=2008). This report presents the results from the assessment of the bulk sample light fractions and discusses the significance and potential of any remains recovered.

Methods

Samples were processed at the Archaeological Solutions Ltd facilities in Bury St. Edmunds using standard flotation methods. The light fractions were washed onto a mesh of 500µm (microns), while the heavy fractions were sieved to 1mm. The dried light fractions were scanned under a low power stereomicroscope (x10-x30 magnification). Botanical and molluscan remains were identified and recorded using reference literature (Cappers *et al.* 2006; Jacomet 2006; Kerney and Cameron 1979; Kerney 1999) and a reference collection of modern seeds. Potential contaminants, such as modern roots, seeds and invertebrate fauna were also recorded in order to gain an insight into possible disturbance of the deposits.

The samples were initially 50% sub-sampled for the assessment. All samples containing carbonised plant macrofossils were subsequently fully processed and recorded.

Results

The assessment data from the bulk sample light fractions are presented in Table 6.

<u>Phase 1: Early Neolithic</u>

The earliest sampled deposit was the fill of a possible tree hollow dated to the early Neolithic (L2016). Very little material was present in the fill, with only small fragments of charcoal recorded.

<u>Phase 2: Bronze Age</u>

The fills of the two Bronze Age pits (F2003 (L2004 and L2005) and F2007 (L2006)) contained carbonised macrofossils and charcoal. Context L2006 was richest and contained seven barley grains, including two angular hulled specimens. A number of other indeterminate cereal grains were also present. In addition was about 1g of carbonised hazelnut shell and abundant charcoal fragments. Some of the charcoal

was fractured to produce a transverse section, showing that oak (*Quercus* sp.) and another diffuse-porous wood type were represented. The hazelnut and the cereals in this deposit may represent remains from food preparation activities, discarded with spent fuel debris. Whether this was from nearby settlement or a temporary cooking fire is impossible to determine from the current evidence. The range of taxa is comparable to other Bronze Age assemblages, where cereals and wild fruits and nuts form part of the diet (e.g. Ballantyne 2006; 91; Carruthers 2008, 34.3-34.6).

Pit fills L2004 and L2005 (F2003) were not so rich and contained only charcoal fragments. The charcoal in L2005 was quite well preserved and transverse sections demonstrated the presence of diffuse porous wood types. This probably represents discarded fuel debris from nearby burning events.

Phase 3: Middle Iron Age

A single sample was examined from Phase 3 ditch fill L2009B (F2008). No carbonised plant macrofossils were recorded and only a small amount of un-diagnostic charcoal fragments were present. This suggests that the feature was not regularly receiving debris from domestic activity, such as hearth rake-out material.

Contaminants

Modern rootlets and seeds were present in the samples, along with a small number of earthworm egg capsules in L2005. None of these suggest extensive biological disturbance of the deposits.

Conclusions and Statement of Potential

With the exception of Bronze Age Pit Fill L2006, the bulk samples from Watton Green produced few remains of environmental archaeological significance. The remains from L2006 seem likely to represent material from a single cooking fire, with remains from Pit F2003 (L2005) potentially having a similar origin. Such remains may represent transient activity rather than direct settlement of the site itself, although the limited area of excavation may mean that other features remain undiscovered in the vicinity. Deposits from other periods of activity indicate little domestic activity in the vicinity of the excavated features.

Sample number	Context	Feature	Description	Phase	Volume taken (litres)	Volume processed (litres)	% processed	Cereals			Non-cereal taxa		Hazelnut shell	Charcoal		Molluscs		Contaminants					Other remains
								Cereal grains	Cereal chaff	Notes	Seeds	Notes		Charcoal>2mm	Notes	Molluscs	Notes	Roots	Molluscs	Modern seeds	Insects	Earthworm capsules	
1	2004	2003	Pit fill	2	20	10	50%	-	-	-	-	-	-	-	-	X	*Cochlicopa* sp.	X	-	X	-	-	-
2	2005	2003	Pit fill	2	40	20	50%	-	-	-	-	-	-	XX	Diffuse porous	-	-	XX	-	X	-	X	-
3	2006	2007	Pit fill	2	40	40	100%	X	-	HB (2), Hord (5), NFI (8)	-	-	48 (1.020g)	XXX	*Quercus* sp. (occ. Woodworm holes), Diffuse porous	-	-	X	-	X	-	-	Fuel ash slag (X)
4	2016	2015	?Tree hollow fill	1	40	20	50%	-	-	-	-	-	-	X	-	-	-	X	-	-	-	-	-
5	2009B	2008B	Ditch fill	3	40	20	50%	-	-	-	-	-	-	X	-	-	-	XX	-	X	-	-	-

Table 6: Results from the assessment of bulk sample light fractions from Watton Green. Abbreviations: HB = hulled barley (Hordeum sp.); Hord = barley (Hordeum sp.); NFI = not formally identified (indeterminate cereal grain)

7 DISCUSSION

Pre-Iron Age Evidence

7.1 Pre-Iron Age evidence from the Watton Green site is relatively superficial. The earliest finds are from the fill of Phase 1 ?Tree Hollow F2015 and comprise a modest assemblage of earlier Neolithic struck flint and intrusive Iron Age pottery. The pottery is in a highly abraded condition and is unlikely to have been recovered from its original depositional context. A Mesolithic or later mace head found at the nearby airfield (NHER 8778) is the only other documented early prehistoric find within 2km of the current site. It is unlikely, therefore, based on the current evidence, that early prehistoric activity at the site was anything more than transitory, or perhaps seasonal. A seasonal Neolithic flint-working site was excavated at Shouldham, Norfolk, *c.* 26km to the north-west of Watton Green (Crowson *et al.* 2000, 172-4).

7.2 Evidence of Bronze Age activity was equally sparse. Phase 2 Pit F2007 contained a modest assemblage of struck flint, including a single flake core and four core fragments within a matrix of redeposited burnt material. The excavations encountered frequent small to large angular flints within the underlying clay geology (L1001=2002) and it is possible that a limited amount of Bronze Age flint extraction and working was occurring at the site. The redeposited burnt material from F2007 (L2006) suggests possible domestic activity on or very near to the site and was mirrored by a similar deposit within neighbouring Pit F2003 (L2004). The latter was devoid of finds and less rich (environmentally speaking), however, and was only very tentatively assigned to Phase 2. A Bronze Age or later ?thumbnail scraper (4g) was also found as residual material within the fill of Phase 3 Ditch F1008 (=2008). Like the preceding Neolithic phase, it appears that Bronze Age activity at the Watton Green site was relatively small-scale. It is impossible to state, however, whether this activity was sedentary or not. Nonetheless, local Bronze Age finds/ features including socketed axeheads (NHER 8777), a ditch and a round barrow with associated funerary deposits (NHER 42674) indicate a more 'permanent' local settlement pattern at this time.

Phase 3: Middle Iron Age (400 to 100 BC)

7.3 The middle Iron Age comprised the only significant phase of archaeological activity at the site. However, all Phase 3 features formed associated elements of a ditched trackway/ droveway and evidence of actual 'occupation' was largely limited to a small, poorly preserved pottery assemblage. The only 'probable' Iron Age material previously reported within 100m of the site comprised a pit containing a single sherd of pottery (NHER 39786). However, undated linear features present to the west and south of the site (NHERs 36702 and 39786) may attest to further prehistoric activity. A possible access point, perhaps associated with the 'funneling' of domestic livestock between the Phase 3 trackway/ droveway and an adjacent area to the west, was present in the south of the site.

7.4 Ditched Iron Age droveways are well attested across East Anglia and comparable examples are outlined above (i.e. Nicholson 2006; Stone forthcoming; Woolhouse 2013). Although the site's soils – those of the Ollerton Association – are not suitable for grazing, potentially good pasture is present to the north and south, on

soils of the Beccles 1 Association (Soil Survey of England and Wales 1983, 17). A stream valley is also present a short distance to the north of the site. It is possible, therefore, that the Phase 3 trackway/ droveway was installed as part of a system of local/ small-scale transhumance, facilitating controlled livestock movement between areas of good grazing and the local water supply. Martin (1988, 68) suggests that Iron Age settlement patterns across neighboring Suffolk were dictated by access to water; the primary limiting factor being the need to water livestock (particularly cattle). Large areas of the Breckland – a generally dry environment – are devoid of prehistoric settlement (*ibid.*). Although Phase 1 features at the current site were devoid of animal bone, this may simply reflect the distance from local settlement(s) and/ or the strategies of waste disposal in place. The single ?Iron age pit and undated linear features recorded to the west of the site (NHER 39786) might suggest a possible settlement location.

7.5 An environmental sample from the Phase 3 trackway/ droveway contained only sparse charcoal and did not suggest that the constituent features regularly received domestic refuse. This would not necessarily be expected, however, if the features served an agricultural function removed from any local core(s) of settlement.

8 CONCLUSIONS

8.1 Although quite limited, evidence from the current site adds usefully to our understanding of the Iron Age around Watton Green. A local pastoral economy (at least in part) is strongly suggested by the Phase 1 trackway/ droveway, which may have provided access between areas of potential grazing and the local water supply. Previous findings in the immediate area of the site, including a possible Iron Age pit, suggest that a settlement associated with this trackway may have existed a short distance to the west.

8.2 Pre-Iron Age evidence was more ephemeral, signifying little more than small-scale or occasional use of the site. Bronze Age features and finds from the parish appear to indicate the presence of a local, sedentary population, however, and might suggest that activity at the site was peripheral to a core of settlement rather than being seasonal or otherwise transitory.

9 DEPOSITION OF THE ARCHIVE

9.1 Archive records, with inventory, will be deposited at Norwich Castle Museum in accordance with their requirements. 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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BIBLIOGRAPHY

Andrefsky, W., 2005
Lithics: Macroscopic Approaches to Analysis (2nd edition, Cambridge, Cambridge University Press)

Ashwin, T., 1996
'Excavation of Iron Age Site at Silfield, Wymondham, Norfolk 1992-3', *Norfolk Archaeology* XLII, 241-82

Ballantyne, R., 2006
'Environmental and faunal remains', in Garrow, D., Lucy, S. and Gibson, D., *Excavations at Kilverstone, Norfolk: An Episodic Landscape History*, East Anglian Archaeology Report No. 113 (Cambridge, Cambridge Archaeological Unit)

Brooks, R., 2012
Hartismere Hopital, Eye. EYE 111. Archaeological Evaluation Report, SCCAS Report No. 2012/001

Cappers, R.T.J., Bekker, R.M. and Jans, J.E.A., 2006
Digital Seed Atlas of the Netherlands. Groningen Archaeological Studies Volume 4 (Eelde, Barkhuis Publishing)

Carruthers, W.J., 2008
'Charred, mineralized and waterlogged plant remains', in Framework Archaeology, *From Hunter-Gatherers to Huntsmen: A History of the Stansted Landscape* (Salisbury, Wessex Archaeology), Chapter 34 on CD

Crowson, A., Lane, T. and Reeve, J., 2000
Fenland Management Project Excavations 1991-1995, Lincolnshire Archaeology and Heritage Reports Series. No 3

Egan, S., 2014
Phase 4, Watton Green, Watton, Norfolk. Archaeological Evaluation, Archaeological Solutions Report No. 4670

Fletcher, T., 2008
Anglo-Saxon Settlement and Medieval Pits at 1 High Street, Willingham, Cambridgeshire. Excavation, CAM ARC Report No. 1013

Gurney, D., 2003
Standards for Field Archaeology in the East of England, East Anglian Archaeology Occasional Paper No. 14

Healy, F., 1988
The Anglo-Saxon Cemetery at Spong Hill, North Elmham, Part VI: Occupation During the Seventh to Second Millennium BC, East Anglian Archaeology Report No. 39

Institute for Archaeologists (IfA), 2013
Standard and Guidance for Archaeological Excavation (Reading, IfA)

Jacomet, S., 2006
Identification of Cereal Remains from Archaeological Sites (2nd edition, Basel University, Laboratory of Palinology and Palaeoecology)

Kerney, M.P., 1999
Atlas of the Land and Freshwater Molluscs of Britain and Ireland (Colchester, Harley Books)

Kerney, M.P. and Cameron, R.A.D., 1979
A Field Guide to Land Snails of Britain and North-West Europe (London, Collins)

Martin, E., 1988
Burgh: Iron Age and Roman Enclosure, East Anglian Archaeology Report No. 40 (Ipswich, Suffolk County Council)

McKenny Hughes, T. and Hughes, M.C., 2013
Cambridge County Geographies: Cambridgeshire (paperback edition, Cambridge, Cambridge University Press)

Nicholson, K., 2006
'An Iron Age Site at South Witham Quarry, Lincolnshire', *Lincolnshire History and Archaeology* 41, 22-40

Soil Survey of England and Wales (SSEW), 1983
Legend for the 1:250,000 Soil Map of England and Wales (Harpenden, SSEW)

Stone, P., forthcoming
'A Middle Iron Age Settlement at Balls Park, Hertford', *Hertfordshire Archaeology and History*

Woolhouse, T., 2013
Bridge House Dairies, Worlington Road, Mildenhall, Suffolk. Research Archive Report, Archaeological Solutions Ltd Report No. 3569

Web-based Resources

www.historyofwatton.org.uk (consulted 17/11/2014)

APPENDIX 1 CONCORDANCE OF FINDS

Feature	Context	Seg.	Description	Spot Date	Pottery	CBM (g)	Animal Bone (g)	Other
-	1000=2001		Subsoil	Early to middle Iron Age	(1) 22g			Struck flint (1) - 14g Fe Fragment (1) - 380g
1004=2012	1005		Ditch fill					Struck flint (1) - 26g
1008=2008	1009=2009	B	Ditch fill	Middle to late Iron Age	(10) 22g			Struck flint (1) - 4g
1012=2038	1013 2040	B	Ditch fill Ditch fill	Early to middle Iron Age Roman	(5) 23g (1) 8g			
2003	2004		Pit fill			6		
2007	2006		Pit fill					Struck flint (25) - 182g Burnt flint - 521g Flint - 627g Burnt bone - 1g
2015	2015		Tree hollow fill	Early Iron Age	(3) 5g			Struck flint (32) - 61g Burnt flint - 51g
2017	2018		Tree hollow fill					Fired clay - 15g

PLATES

Plate 1: ?Tree Hollow F2015 (post-excavation), looking N

Plate 2: Pit 2007 (post-excavation), looking S

Plate 3: Pit F2003 (post-excavation), looking S

Plate 4: Ditch F1004 (=2012; Seg.C) (post-excavation), looking S

Plate 5: Ditch F2008 (Seg.B) (post-excavation), looking S

Plate 6: Pit F2023 (post-excavation), looking E

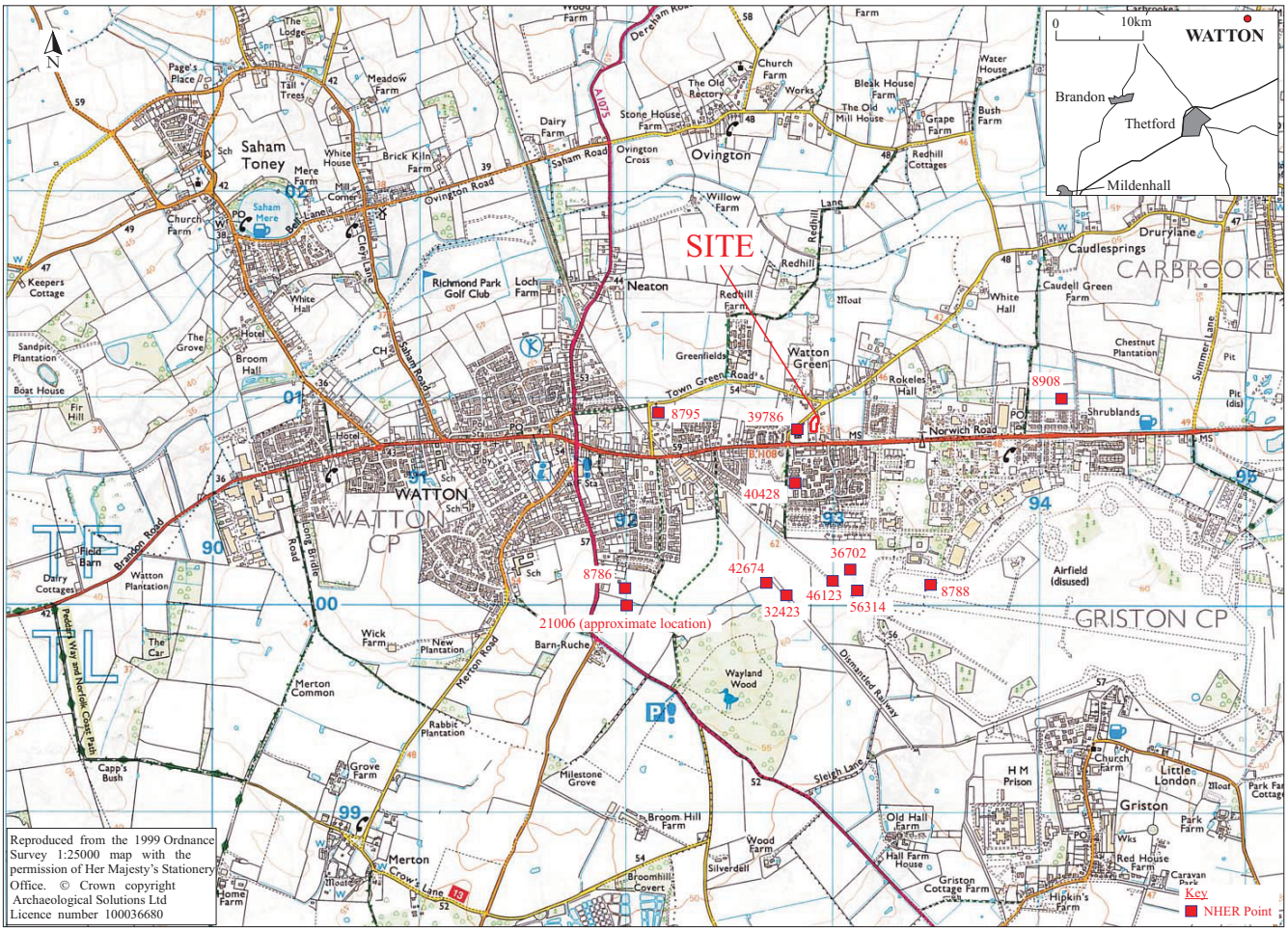

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Fig. 1 Site location plan

Scale 1:25,000 at A4

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Fig. 2 Detailed site location plan

Scale 1:1000 at A4

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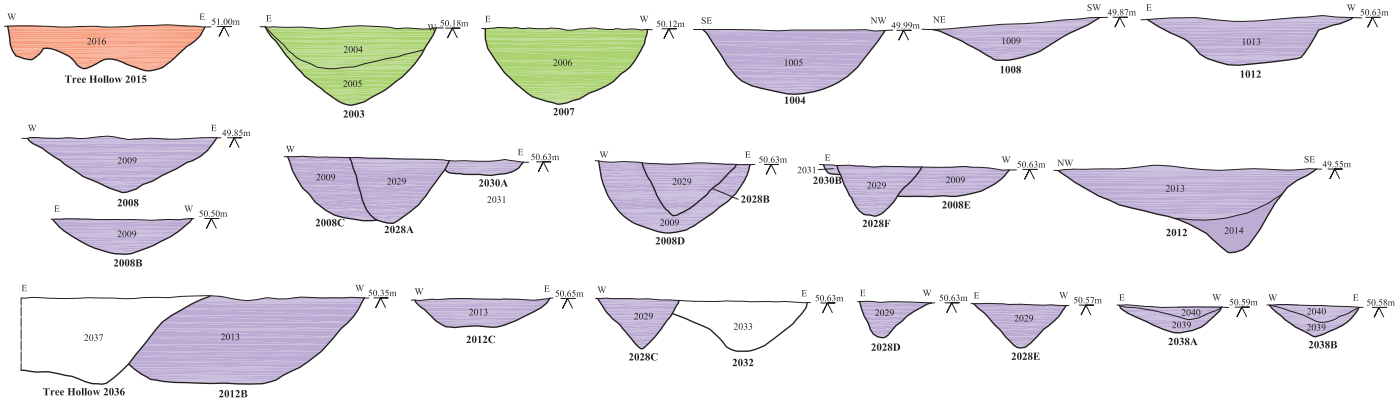
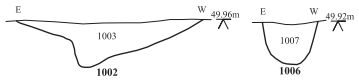
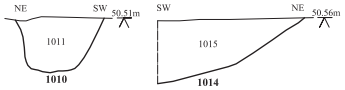
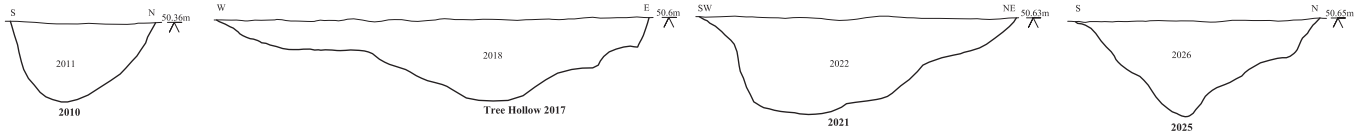
Fig. 3 Features plan

Scale 1:250 at A3









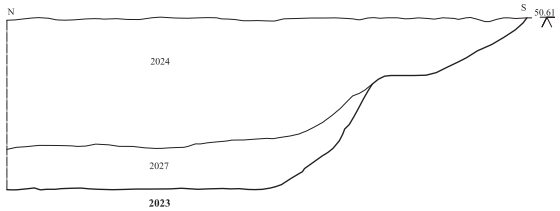


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Fig. 4 Sections

Scale 1:20 at A3