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CHADWELL SPRINGS GOLF COURSE, WARE, HERTFORDSHIRE

AN ARCHAEOLOGICAL EVALUATION

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NGR: TL 3520 1350		Report No: 4027
District: East Herts		Site Code: AS 1476
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OASIS SUMMARY SHEET

Project details			
Project name		<i>Chadwell Springs Golf Course, Ware, Hertfordshire</i>	
<p><i>In February and March 2012 Archaeological Solutions (AS) carried an archaeological evaluation of land at Chadwell Springs Golf Course, Ware, Hertfordshire (NGR TL 3520 1350). The evaluation was commissioned by McMullens & Sons Ltd, and was undertaken in the pre-planning stage of a proposal to redesign and remodel the golf course.</i></p> <p><i>The earliest features consistently contained Neolithic / Bronze Age pottery and struck flint (Tr. 10 F1070 & F1072; Tr.11 F1053; Tr.12 F1049 & F1058; Tr.14 F1051 & F1053; and Tr.17 F1037). The features comprised mostly pits and also a gully (Tr.12 F1049) and a ditch (Tr.10 F1072). The features spanned Trenches 10 (F1071 & F1073), 11 (F1053), 12 (F1049), 14 (F1006 & F1051) and 17 (F1037), and the trenches were adjacent and located in the southern area of the site. The desk based assessment suggested the present of multi-period remains. It also stated that evidence of prehistoric occupation in the area appears to be focused to the west of the site and may suggest a Bronze Age settlement occurred either on the western border of, or within, the site. The settlement evidence described was recorded in Trenches 10 – 12, 14 and 17.</i></p>			
Project dates (fieldwork)		22/02/2013 – 01/03/2012	
Previous work (Y/N/?)		Y	Future work (Y/N/?) Y
P. number		3136	Site code AS 1476
Type of project		An Archaeological Evaluation	
Site status		Within Area of Archaeological Significance 174	
Current land use		Golf course	
Planned development		Redesign of golf course	
Main features (+dates)		Pits	
Significant finds (+dates)		Neolithic / Bronze Age pottery and struck flint	
Project location			
County/ District/ Parish		Hertfordshire	East Herts Ware
HER/ SMR for area		Hertfordshire HER	
Post code (if known)		-	
Area of site		c.1.5ha.	
NGR		TL 3520 1350	
Height AOD (min/max)		55/72m	
Project creators			
Brief issued by		HCC HEU	
Project supervisor/s (PO)		Zbigniew Pozorski	
Funded by		McMullen & Sons Ltd	
Full title		Chadwell Springs Golf Course, Ware, Hertfordshire. An Archaeological Evaluation	
Authors		Pozorski, Z.	
Report no.		4027	
Date (of report)		March 2012 (Revised 27/09/2013)	

CHADWELL SPRINGS GOLF COURSE, WARE, HERTFORDSHIRE

AN ARCHAEOLOGICAL EVALUATION

SUMMARY

In February and March 2012 Archaeological Solutions (AS) carried an archaeological evaluation of land at Chadwell Springs Golf Course, Ware, Hertfordshire (NGR TL 3520 1350). The evaluation was commissioned by McMullens & Sons Ltd, and was undertaken in the pre-planning stage of a proposal to redesign and remodel the golf course.

The site lies within Area of Archaeological Significance 174, as identified on the Local Plan. AAS No.174 encompasses an area of Bronze Age occupation recorded during road construction in 1972, at the western edge of the golf course. The course of Roman Ermine Street also traverses the golf course roughly from north to south, leading southwards from its crossing point of the river Lea at the Roman town of Ware. Therefore the site had a potential for prehistoric and Roman archaeological remains.

Post-medieval and modern ditches were recorded in Trench 15 (F1030), 18 (F1032) and 17 (F1082), and post-medieval or modern pits were recorded in Trenches 15 (F1010), 13 (F1014), and 12 (F1060). Numerous undated features were recorded in Trenches 9 - 11, 13 - 14, 17 and 19, and the majority were pits. It is tempting to associate the undated cluster of post holes in Trench 17 (F1039, F1041, F1043 and F1045) but this suggestion is tentative. Ditch F1047 (Tr.19) contained the majority of the struck flint (6 pieces; struck flint report below) and may date to the prehistoric period, but again this suggestion is tentative.

The earliest features consistently contained Neolithic / Bronze Age pottery and struck flint (Tr. 10 F1070 & F1072; Tr.11 F1053; Tr.12 F1049 & F1058; Tr.14 F1051 & F1053; and Tr.17 F1037). The features comprised mostly pits and also a gully (Tr.12 F1049) and a ditch (Tr.10 F1072). The features spanned Trenches 10 (F1071 & F1073), 11 (F1053), 12 (F1049), 14 (F1006 & F1051) and 17 (F1037), and the trenches were adjacent and located in the southern area of the site. The desk based assessment suggested the present of multi-period remains. It also stated that evidence of prehistoric occupation in the area appears to be focused to the west of the site and may suggest a Bronze Age settlement occurred either on the western border of, or within, the site. The settlement evidence described was recorded in Trenches 10 – 12, 14 and 17.

1 INTRODUCTION

1.1 In February and March 2012 Archaeological Solutions (AS) carried an archaeological evaluation of land at Chadwell Springs Golf Course, Ware, Hertfordshire (NGR TL 3520 1350; Figs. 1 & 2). The evaluation was commissioned by McMullens & Sons Ltd, and was undertaken in the pre-planning stage of a proposal to redesign and remodel the golf course (Fig. 8).

1.2 The evaluation was undertaken in accordance with a brief issued by Hertfordshire County Council Historic Environment Unit (HCC HEU; dated 10/01/2012) and a written scheme of investigation (specification) prepared by AS (dated 31/01/2012) and approved by HCC HEU. The project conformed to the Institute for Archaeologists (IfA) *Code of Conduct* and *Standard and Guidance for Archaeological Field Evaluation* (revised 2008), as well as the document *Standards for Field Archaeology in the East of England* (Gurney 2003).

1.3 The archaeological evaluation aimed to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development. In particular, it aimed to establish the presence or absence of any remains relating to the Bronze Age and Roman use of the site.

Planning policy context

1.4 Planning Policy Statement 5 (PPS5; 2010) states that those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are heritage assets. The Planning Policy Statement 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. It aims to conserve England's heritage assets in a manner appropriate to their significance. It states that opportunities to capture evidence from the historic environment and to contribute to our knowledge and understanding of our past, and to make this publicly available, should be taken, particularly where a heritage asset is to be lost.

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

2.1 Chadwell Springs Golf Course lies c. 2km to the east of Hertford (the county town) and c. 1 km north east of Ware. Hertford is located in the district of East Hertfordshire. The rivers Rib, Beane, and Mimram join the river Lea at Hertford which then forms the Lee navigation flowing south towards the Thames.

2.2 The site is located immediately south of the A119 road, the main road from Hertford to Ware. It is within an Area of Archaeological Significance and part of Hertford's Green Belt area. Bordering the site to the north and west is residential housing. Further residential areas are located to the east. The main A10 trunk road borders the site to the west, with a main junction situated to the south west of the site. The New River, a man-made feature is located to the north of the site, curving past Ware towards the south east. The site is currently the Chadwell Springs Golf Course.

3 TOPOGRAPHY, GEOLOGY AND SOILS

3.1 The site lies at a relatively high elevation of c. 65m AOD to the north east of the site, rising to 70m AOD to the south west, on the edge of the southern terrace of the river Lea. The geology of Hertford and the surrounding area consists of river alluvium overlying river terrace gravels associated with the River Lea (Kiln and Partridge 1994, 6). There are small areas where basal chalk has been revealed and one of these areas is Chadwell Springs, on the south side of the Hertford to Ware road (Kiln and Partridge 1994, 6). It is difficult to ascertain the type of soils which are on the site as it crosses into both urban unsurveyed soils and soils of the Ludford association (SSEW 1983). The Ludford soils consist of Deep well drained fine loamy (with coarse loamy and sandy soils) with slight risk of water erosion (SSEW 1983). This traditionally supports cereal, sugar beat and other arable crops (SSEW 1983).

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1 In April 2008, Archaeological Solutions Ltd conducted an archaeological desk-based assessment of land at Chadwell Springs Golf Course, Hertford, Hertfordshire (NGR centred TL 3520 1350) in advance of any future proposals for development of the site (Unger 2008). In summary:

The desk based assessment demonstrated moderate potential for multi-phase archaeological remains. Evidence of Prehistoric occupation in the area appears to be focused to the west of the site and may suggest a Bronze Age settlement occurred either on the western border of, or within, the site. It is likely that the course of the Roman road, Ermine Street, did pass through the site and remains/occupation related to the road may be encountered. Both Hertford and Ware were occupied in the Anglo-Saxon period and if Ermine Street was in continuous use, then evidence of settlement in this period may also be discovered. Despite the settlements at both Ware and Hertford in the medieval period, it is thought that Chadwell Springs was not occupied. Industry played a large role in the development of both the towns in the post-medieval period with Hertford overtaking Ware both in size and stature.

Cartographic sources suggest the site was little developed through the post-medieval period, with ground disturbance only seen in two small areas to the north and centre of the site. The remainder of Chadwell Springs has continued to be mostly undisturbed up until the modern period when the golf course was constructed.

5 METHODOLOGY

5.1 Nineteen trenches were excavated using a mechanical 360° excavator fitted with a toothless ditching bucket (Fig. 2). The trenches measured 40 x 2.10m, with the exceptions of Trench 6 which measured 30 x 2.10m.

5.2 Topsoil and undifferentiated overburden were mechanically excavated under close archaeological supervision. Exposed surfaces were cleaned by hand and examined for archaeological features. Deposits were recorded using *pro forma*

recording sheets, drawn to scale, and photographed as appropriate. Excavated spoil was searched for finds and the trenches were scanned by a metal detector.

6 DESCRIPTION OF RESULTS

Trench 1 (Fig. 2, DP 5)

<i>Sample section 1A (DP 6): west end, south-south-east facing</i> <i>0.00 = 56.90m AOD</i>		
0.00 – 0.10m	L1000	Topsoil. Brownish dark grey, soft, loam.
0.10 – 0.33m	L1086	Subsoil. White, friable, chalk with brown silty sand.
0.33m +	L1087	Natural white, compact, chalk.

<i>Sample section 1B (DP 7): east end, south-south-east facing</i> <i>0.00 = 55.13m AOD</i>		
0.00 – 0.15m	L1000	Topsoil. As above.
0.15 – 0.35m	L1002	Subsoil. Mid to dark brownish yellow, friable, silty sand with frequent gravel.
0.35m +	L1003	Natural dark brownish yellow, loose sandy gravel and friable, sandy silt lenses.

Description: No archaeological features or finds were present.

Trench 2 (Fig. 2, DP 8)

<i>Sample section 2 (DP 9): west end, south-south-east facing</i> <i>0.00 = 57.94m AOD</i>		
0.00 – 0.13m	L1000	Topsoil. As above, Tr. 1.
0.13 – 0.48m	L1001	Subsoil. Mid brownish grey, friable, silty sand with moderate gravel.
0.48m +	L1087	Natural chalk. As above, Tr. 1.

<i>Sample section 2B (DP 10): east end, south-south-east facing</i> <i>0.00 = 57.56m AOD</i>		
0.00 – 0.10m	L1000	Topsoil. As above, Tr. 1.
0.10m +	L1088	Made ground. Mixed up yellow clay, chalk, sand and modern CBM.

Description: No archaeological features or finds were present.

Trench 3 (Fig. 2, DP 11)

<i>Sample section 3A (DP 12): west end, south-south-east facing</i> <i>0.00 = 62.04m AOD</i>		
0.00 – 0.12m	L1000	Topsoil. As above, Tr. 1.
0.12 – 0.36m	L1001	Subsoil. As above, Tr. 2.
0.36 – 0.56m	L1002	Subsoil. As above, Tr. 1.
0.56m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 3B (DP 13): east end, south-south-east facing</i> <i>0.00 = 60.68m AOD</i>		
0.00 – 0.12m	L1000	Topsoil. As above, Tr. 1.
0.12 – 0.36m	L1001	Subsoil. As above, Tr. 2.
0.36 – 0.58m	L1002	Subsoil. As above, Tr. 1.
0.58m +	L1003	Natural gravel. As above, Tr. 1.

Description: No archaeological features or finds were present.

Trench 4 (Fig. 2, DP 14)

<i>Sample section 4A (DP 15): west end, south-south-east facing</i> <i>0.00 = 62.91m AOD</i>		
0.00 – 0.12m	L1000	Topsoil. As above, Tr. 1.
0.12 – 0.26m	L1001	Subsoil. As above, Tr. 2.
0.26 – 0.45m	L1002	Subsoil. As above, Tr. 1.
0.45m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 3B (DP 16): east end, south-south-east facing</i> <i>0.00 = 62.41m AOD</i>		
0.00 – 0.15m	L1000	Topsoil. As above, Tr. 1.
0.15 – 0.40m	L1001	Subsoil. As above, Tr. 2.
0.40 – 0.76m	L1002	Subsoil. As above, Tr. 1.
0.76m +	L1087	Natural chalk. As above, Tr. 1.

Description: No archaeological features or finds were present.

Trench 5 (Fig. 2, DP 17)

<i>Sample section 5A (DP 18): west end, south-east facing</i> <i>0.00 = 62.88m AOD</i>		
0.00 – 0.18m	L1000	Topsoil. As above, Tr. 1.
0.18 – 0.33m	L1001	Subsoil. As above, Tr. 2.
0.33 – 0.63m	L1002	Subsoil. As above, Tr. 1.
0.63m +	L1087	Natural chalk. As above, Tr. 1.

<i>Sample section 5B (DP 19): east end, south-east facing</i> <i>0.00 = 62.86m AOD</i>		
0.00 – 0.14m	L1000	Topsoil. As above, Tr. 1.
0.14 – 0.28m	L1001	Subsoil. As above, Tr. 2.
0.28 – 0.44m	L1002	Subsoil. As above, Tr. 1.
0.44m +	L1087	Natural chalk. As above, Tr. 1.

Description: No archaeological features or finds were present.

Trench 6 (Fig. 2, DP 20)

<i>Sample section 6A (DP 21): north end, south-east facing</i> <i>0.00 = 70.29m AOD</i>		
0.00 – 0.12m	L1000	Topsoil. As above, Tr. 1.
0.12 – 0.40m	L1001	Subsoil. As above, Tr. 2.
0.40m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 6B (DP 22): south end, south-east facing</i> <i>0.00 = 70.60m AOD</i>		
0.00 – 0.16m	L1000	Topsoil. As above, Tr. 1.
0.16 – 0.36m	L1001	Subsoil. As above, Tr. 2.
0.36m +	L1003	Natural gravel. As above, Tr. 1.

Description: No archaeological features or finds were present.

Trench 7 (Fig. 2, DP 23)

<i>Sample section 7A (DP 24): west end, north-north-west facing</i> <i>0.00 = 70.86m AOD</i>		
0.00 – 0.08m	L1000	Topsoil. As above, Tr. 1.
0.08 – 0.22m	L1001	Subsoil. As above, Tr. 2.
0.22 – 0.40m	L1002	Subsoil. As above, Tr. 1.
0.40m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 7B (DP 25): east end, north-north-west facing</i> <i>0.00 = 70.86m AOD</i>		
0.00 – 0.08m	L1000	Topsoil. As above, Tr. 1.
0.08 – 0.28m	L1001	Subsoil. As above, Tr. 2.
0.28 – 0.45m	L1002	Subsoil. As above, Tr. 1.
0.45m +	L1003	Natural gravel. As above, Tr. 1.

Description: No archaeological features or finds were present.

Trench 8 (Fig. 2, DP 26)

<i>Sample section 8A (DP 27): north end, east facing</i> <i>0.00 = 70.68m AOD</i>		
0.00 – 0.06m	L1000	Topsoil. As above, Tr. 1.
0.06 – 0.16m	L1001	Subsoil. As above, Tr. 2.
0.16 – 0.35m	L1002	Subsoil. As above, Tr. 1.
0.35m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 8B (DP 28): south end, east facing</i> <i>0.00 = 71.15m AOD</i>		
0.00 – 0.12m	L1000	Topsoil. As above, Tr. 1.
0.12 – 0.32m	L1001	Subsoil. As above, Tr. 2.
0.32 – 0.46m	L1002	Subsoil. As above, Tr. 1.
0.46m +	L1003	Natural gravel. As above, Tr. 1.

Description: No archaeological features or finds were present.

Trench 9 (Figs. 2 & 3, DP 29)

<i>Sample section 9A (DP 30): north end, west-south-west facing</i> <i>0.00 = 71.27m AOD</i>		
0.00 – 0.08m	L1000	Topsoil. As above, Tr. 1.
0.08 – 0.24m	L1001	Subsoil. As above, Tr. 2.
0.24 – 0.42m	L1002	Subsoil. As above, Tr. 1.
0.42m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 9B (DP 31): south end, west-south-west facing</i> <i>0.00 = 71.23m AOD</i>		
0.00 – 0.12m	L1000	Topsoil. As above, Tr. 1.
0.12 – 0.38m	L1001	Subsoil. As above, Tr. 2.
0.38m +	L1003	Natural gravel. As above, Tr. 1.

Description: A pit (F1074) and a ?gully (F1078) were present within the trench. Neither feature contained finds.

Pit F1074 (DP 32) was oval (1.42+ x 1.30 x 0.46m) and it had steep sides and a concave base. Its single fill was L1015, a dark orangey brown, compact, sandy silt with frequent sub-angular stones. No finds were present.

?Gully F1078 was a roughly curvilinear feature (2m in diameter, 0.50m width, 0.42m depth; DP 33). It contained L1079, a dark orangey brown, loose, sandy silt. No finds were present. F1078 may have been a gully; however, it also may have been a feature of natural origin.

Trench 10 (Figs. 2 & 3, DP 34)

<i>Sample section 10A (DP 35): north end, east facing</i> <i>0.00 = 71.24m AOD</i>		
0.00 – 0.15m	L1000	Topsoil. As above, Tr. 1.
0.15 – 0.31m	L1001	Subsoil. As above, Tr. 2.
0.31 – 0.49m	L1002	Subsoil. As above, Tr. 1.
0.49m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 10B (DP 36): south end, east facing</i> <i>0.00 = 71.52m AOD</i>		
0.00 – 0.09m	L1000	Topsoil. As above, Tr. 1.
0.09 – 0.24m	L1001	Subsoil. As above, Tr. 2.
0.24 – 0.37m	L1002	Subsoil. As above, Tr. 1.
0.37m +	L1003	Natural gravel. As above, Tr. 1.

Description: Three pits (F1062, F1070 and F1076), a post hole (F1064) and a ditch (F1072) were present within the trench.

Pit F1076 was circular (0.76 x 0.73 x 0.18m; DP 37) and it had moderately sloping sides and a concave base. Its single fill, L1077, was a mid orange brown, friable, clayey silt with moderate small pebbles and sub-angular flint. No finds were present.

Pit F1070 (DP 38) was oval (0.66 x 0.63 x 0.17m) and it had gently sloping sides and a flattish base. Its single fill, L1071, was a mid orange brown, friable, clayey silt with moderate sub-angular flint and occasional small pebbles. were recovered from the fill. F1070 was cut by F1072.

Ditch F1072 was linear (3.50+ x 0.68 x 0.19m; DP 38) orientated north-west/south-east. It had steep sides and a concave base. Its fill, L1073, was a dark orange brown, friable, silty sand with frequent small pebbles and moderate sub-angular flint. Struck flint (7g) and prehistoric (Neolithic/Bronze Age) pottery (22g) were recovered. It cut Pit F1070

Post Hole F1064 was oval (0.37 x 0.31 x 0.11m; DP 39) and it had moderately sloping sides and a concave base. Its single fill, L1065, was a mid to dark orangey brown, loose, silty sand with frequent small pebbles and moderate sub-angular flint. No finds were present.

Pit F1062 was oval (1.45 x 0.69+ x 0.12m; DP 40) and it irregular sides and a flattish base. Its fill, L1063, was a mid to dark orange brown, loose, silty sand with frequent small pebbles and moderate sub-angular flint. No finds were present.

Trench 11 (Figs. 2 & 3, DP 41)

<i>Sample section 11A (DP 42): north end, east facing</i> <i>0.00 = 70.59m AOD</i>		
0.00 – 0.07m	L1000	Topsoil. As above, Tr. 1.
0.07 – 0.35m	L1001	Subsoil. As above, Tr. 2.
0.35m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 11B (DP 43): south end, east facing</i> <i>0.00 = 71.22m AOD</i>		
0.00 – 0.07m	L1000	Topsoil. As above, Tr. 1.
0.07 – 0.50m	L1001	Subsoil. As above, Tr. 2.
0.50m +	L1003	Natural gravel. As above, Tr. 1.

Description: Two pits (F1053 and F1068) and a gully (F1066) were present.

Pit F1053 was oval (1.26 x 0.48 x 0.28; DP 44) and it had steep sides and a concave base. Its fill, L1054, was a brownish orange, loose, sandy silt with moderate sub-angular flint. Struck flint (4g) and prehistoric (Neolithic/Bronze Age) pottery (14g) were present.

Pit F1068 was oval (1.06 x 0.58 x 0.12m; DP 45) and it had gently sloping sides and a concave base. Its fill, L1069, was an orange brown, loose, silty sand with frequent sub-angular flint. No finds were present.

Gully F1066 was curvilinear (2.68 x 0.37 x 0.20m; DP 45) orientated north-south/west-east. It had steep sides and a flattish base. Its fill, L1067, was an orange brown, loose, silty sand with occasional sub-angular flint. No finds were present.

Trench 12 (Figs. 2 & 4, DP 46)

<i>Sample section 12A (DP 47): north end, east facing</i> <i>0.00 = 70.47m AOD</i>		
0.00 – 0.10m	L1000	Topsoil. As above, Tr. 1.
0.10 – 0.30m	L1001	Subsoil. As above, Tr. 2.
0.30m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 12B (DP 48): south end, east facing</i> <i>0.00 = 70.84m AOD</i>		
0.00 – 0.10m	L1000	Topsoil. As above, Tr. 1.
0.10 – 0.31m	L1001	Subsoil. As above, Tr. 2.
0.31 – 0.50m	L1002	Subsoil. As above, Tr. 1.
0.50m +	L1003	Natural gravel. As above, Tr. 1.

Description: A gully (F1049) and two pits (F1058 and F1060) were present.

Gully F1049 was a linear feature (2.30+ x 0.98 x 0.59m; DP 49) turning slightly from north-east to west. It irregular sides and a concave base. Its single fill, L1050, was a mid brown, friable, silty sand with frequent sub-angular flint and small pebbles.

Struck flint (10g), burnt flint (15g) and prehistoric (Neolithic/Bronze Age) pottery (4g) were recovered from the fill.

Pit F1058 was oval (1.75 x 0.47+ x 0.43m; DP 50) and it had steep sides and possibly a concave base. Its fill, L1059, was a light to mid yellowish brown, friable, silty sand with frequent sub-angular flint and small pebbles. One fragment of struck flint (2g) was recovered.

Pit F1060 (DP 510 was oval (1.28 x 0.98 x 0.09m) and it had gently sloping sides and a flattish base. Its fill, L1061, was a mid to dark brown, loose, silty sand with frequent sub-angular flint and small pebbles. Fragments of CBM (10g) and clay pipe (4g) were recovered.

Trench 13 (Figs. 2 & 4, DP 52)

<i>Sample section 13A (DP 53): north end, east facing</i> <i>0.00 = 70.28m AOD</i>		
0.00 – 0.17m	L1000	Topsoil. As above, Tr. 1.
0.17 – 0.37m	L1001	Subsoil. As above, Tr. 2.
0.37m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 13B (DP 54): south end, east facing</i> <i>0.00 = 70.45m AOD</i>		
0.00 – 0.15m	L1000	Topsoil. As above, Tr. 1.
0.15 – 0.28m	L1001	Subsoil. As above, Tr. 2.
0.28m +	L1003	Natural gravel. As above, Tr. 1.

Description: Five pits (F1012, F1014, F1019, F1021 and F1023) and a post hole (F1017) were present.

Pit F1012 was oval (2.10 x 0.70+ 0.17m; DP 55) and it had gently sloping sides and an irregular base. Its fill, L1013, was a mid orange brown, loose, sandy silt. No finds were present.

Pit F1014 (DP 56) was oval (2.16 x 0.62+ x 0.17m) and it had moderately sloping sides and an irregular base. It contained two fills. Its basal fill, L1015, was a mid orange brown, loose, sandy silt with moderated sub-angular flint. One fragment of CBM (27g) and roof slate (11g) was recovered. Its upper fill, L1016, was a mid brown sandy silt which contained no finds.

Pit F1023 was circular (0.65 x 0.56 x 0.35m; DP 57) and it had steep sides and a concave base. It contained two fills. Its basal fill, L1025 was an orange brown sandy silt. Its upper fill, L1024, was a mid orange brown, loose, sandy silt with moderate sub-angular flint. No finds were present.

Post Hole F1017 was irregular in plan (0.40 x 0.25 x 0.21m; DP 58) and it had steep sides and a concave base. Its fill, L1018, was a mid greyish brown, loose, sandy silt. No finds were present.

Pit F1019 was oval (0.90 x 0.72 x 0.22m; DP 58) and it had steep sides and a concave base. Its fill, L1020, was a mid greyish brown, loose, sandy silt with moderate sub-angular flint. No finds were present.

F1021 was oval (0.70 x 0.30 x 0.21m) and it had steep sides and an irregular base. Its fill, L1022, was a mid orange brown, compact, sandy silt with occasional sub-angular flint. No finds were present.

Trench 14 (Figs. 2 & 5, DP 59)

Sample section 14A (DP 60): west end, south facing
0.00 = 69.19m AOD

0.00 – 0.05m	L1000	Topsoil. As above, Tr. 1.
0.05 – 0.25m	L1001	Subsoil. As above, Tr. 2.
0.25 – 0.55m	L1002	Subsoil. As above, Tr. 1.
0.55m +	L1003	Natural gravel. As above, Tr. 1.

Sample section 14B (DP 61): east end, south facing
0.00 = 70.01m AOD

0.00 – 0.05m	L1000	Topsoil. As above, Tr. 1.
0.05 – 0.18m	L1001	Subsoil. As above, Tr. 2.
0.18 – 0.45m	L1002	Subsoil. As above, Tr. 1.
0.45m +	L1003	Natural gravel. As above, Tr. 1.

Description: Three pits (F1006, F1008 and F1051) and a ditch (F1004) were present.

Pit F1006 (DP 62) was oval (1.70 x 1+ x 0.90m) and it had stepped sides and concave base. Its fill, L1007, was a mid orange brown, loose, sandy silt with occasional stones. One fragment of ?prehistoric pottery was recovered from the fill.

Pit F1008 (DP 62) was oval (0.80 x 0.70+ x 0.13m) with steep sides and an irregular base. Its fill, L1009, was a mid orange brown, loose, sandy silt with occasional stones. No finds were present.

Pit F1051 was oval (0.80 x 0.75+ x 0.23m) with steep sides and a concave base. Its fill, L1052, was a dark greyish brown, sandy silt with occasional stones. It contained Neolithic / Bronze Age pottery (9g).

Ditch F1004 was linear (2.30+ x 1.20 x 0.60m; DP 63) orientated north to south. It had steep, nearly vertical sides and a concave base. Its fill, L1005, was a mid orange brown, loose sandy silt with occasional stones. No finds were present.

Trench 15 (Figs. 2 & 5, DP 64)

<i>Sample section 15A (DP 65): north end, east facing</i> <i>0.00 = 69.35m AOD</i>		
0.00 – 0.09m	L1000	Topsoil. As above, Tr. 1.
0.09 – 0.23m	L1001	Subsoil. As above, Tr. 2.
0.23 – 0.60m	L1002	Subsoil. As above, Tr. 1.
0.60m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 15B (DP 66): south end, east facing</i> <i>0.00 = 69.75m AOD</i>		
0.00 – 0.08m	L1000	Topsoil. As above, Tr. 1.
0.08 – 0.24m	L1001	Subsoil. As above, Tr. 2.
0.24 – 0.60m	L1034	Made ground. Re-deposited white, compact, chalk.
0.60 – 0.80m	L1002	Subsoil. As above, Tr. 1.
0.80m +	L1003	Natural gravel. As above, Tr. 1.

Description: A pit (F1010) and a ditch (F1030) were present within the trench.

Ditch F1030 (DP 67) was linear (2.30+ 1.04 x 0.23m) orientated east-north-east/west-south-west. It had steep sides and a flattish base. Its fill, L1031, was a mid orange brown, soft, silty sand. Fragments of CBM (13g) and struck flint (5g) were recovered from the fill.

Pit F1010 was circular (1.52 x 0.90+ x 0.11m; DP 68) and it had gently sloping sides and a flattish base. Its fill, L1011, was a mid orange brown, loose, silty sand with frequent small stones. It contained modern pottery (2g) an fe fragment (3g) and coal (1g).

Trench 16 (Figs. 2 & 5, DP 69)

<i>Sample section 16A (DP 70): north end, west facing</i> <i>0.00 = 68.19m AOD</i>		
0.00 – 0.05m	L1000	Topsoil. As above, Tr. 1.
0.05 – 0.37m	L1001	Subsoil. As above, Tr. 2.
0.37 – 0.59m	L1002	Subsoil. As above, Tr. 1.
0.59m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 16B (DP 71): south end, west facing</i> <i>0.00 = 68.43m AOD</i>		
0.00 – 0.05m	L1000	Topsoil. As above, Tr. 1.
0.05 – 0.41m	L1001	Subsoil. As above, Tr. 2.
0.41 – 0.58m	L1002	Subsoil. As above, Tr. 1.
0.58m +	L1003	Natural gravel. As above, Tr. 1.

Description: A pit (F1026) was present within the trench.

Pit F1026 (0.54 x 0.42 x 0.14m; DP 72) was irregular in plan and it had moderate to steep sides and a flattish base. Its fill, L1027, was a mid brownish grey, compact, silty sand. No finds were present.

Trench 17 (Figs. 2 & 6, DP 73)

<i>Sample section 17A (DP 74): west end, south facing</i> <i>0.00 = 68.89m AOD</i>		
0.00 – 0.40m	L1000	Topsoil. As above, Tr. 1.
0.40 – 0.60m	L1001	Subsoil. As above, Tr. 2.
0.60m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 17B (DP 75): east end, south facing</i> <i>0.00 = 69.01m AOD</i>		
0.00 – 0.20m	L1000	Topsoil. As above, Tr. 1.
0.20 – 0.30m	L1001	Subsoil. As above, Tr. 2.
0.30m +	L1003	Natural gravel. As above, Tr. 1.

Description: Three ditches (F1055, F1080 and F1082), a ditch or pit (F1028), a pit (F1037) and five postholes (F1035, F1039, F1041, F1043 and F1045) were present.

Ditch or Pit F1028 (DP 76) was elongated (1.70+ x 1.42 x 0.20m). It had gently sloping sides and a flattish base. Its fill, L1029, was a mid orange brown, loose, silty sand with frequent gravel. No finds were present. F1028 may have been a pit or the terminus of a ditch.

Ditch F1055 was a large linear feature (2.10+ x 4.90 x 0.60m; DP 77) orientated north to south. It had moderately sloping sides and an uneven concave base. It contained two fills. The upper fill was L1057, a mid to dark yellowish brown, friable, silty sand with frequent gravel. The basal fill, L1056, was a light to mid brownish yellow, compact, silty sand with frequent sub-angular flint and gravel. Neither fill contained finds.

A group of oval and circular post holes was located in the central part of the trench. All features contained similar fills comprising of mid to dark orange brown, friable, silty sand with occasional gravel. None of the features contained finds.

Posthole	Fill	Dimensions	DP
F1035	L1036	0.38 x 0.28 x 0.07m	78
F1039	L1040	0.35 x 0.22 x 0.12m	80
F1041	L1042	0.38 x 0.32 x 0.11m	80
F1043	L1044	0.40 x 0.34 x 0.23m	81
F1045	L1047	0.30 x 0.20 x 0.15m	82

Pit F1037 was oval (0.90+ x 0.44+ x 0.57m; DP 79) and it had nearly vertical sides and an uneven base. Its fill, L1038, was a mid orange brown, friable, silty sand with occasional gravel. No finds were present.

Ditch F1082 was a large linear feature (2.10+ x 4.80 x 0.95m; DP 83) orientated north to south. It had moderately sloping sides and a concave base. It contained three fills. The upper fill (L1085; 0.41m thick) was a mid orange brown, firm, silty sand with moderate sub-angular flint and occasional chalk flecks. It contained post-medieval pottery (1g) and struck flint (8g). Below L1085 was L1084 (0.10m thick), a layer of light brownish yellow, compact silty sand with frequent chalk chunks. It contained no finds. The basal fill, L1083, was a light brownish yellow, compact, silty sand with moderate sub-angular flint. It contained struck flint (20g).

Ditch F1080 was linear (2.10+ x 0.96 x 0.32m; DP 84) orientated north to south. It had moderately steep sides and a concave base. Its fill, L1081, was a mid reddish brown, loose, silty sand with moderate sub-angular flint. No finds were present.

Trench 18 (Figs. 2 & 7, DP 85)

<i>Sample section 18A (DP 86): north end, west facing</i> <i>0.00 = 67.11m AOD</i>		
0.00 – 0.07m	L1000	Topsoil. As above, Tr. 1.
0.07 – 0.27m	L1001	Subsoil. As above, Tr. 2.
0.27m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 18B (DP 87): south end, west facing</i> <i>0.00 = 68.42m AOD</i>		
0.00 – 0.08m	L1000	Topsoil. As above, Tr. 1.
0.08 – 0.29m	L1001	Subsoil. As above, Tr. 2.
0.29m +	L1003	Natural gravel. As above, Tr. 1.

Description: A ditch (F1032) was present within the trench.

Ditch F1032 (DP 88) was linear (2.10+ x 2.27 x 0.28m) orientated west to east. It had steep to moderate sides and a flattish base. Its fill, L1033, was a mid yellowish brown, friable, sand with frequent sub-angular flint and small stones. It contained post-medieval pottery (5g), CBM (13g) and struck flint (13g).

Trench 19 (Figs. 2 & 7, DP 89)

<i>Sample section 19A (DP 90): west end, south facing</i> <i>0.00 = 67.21m AOD</i>		
0.00 – 0.09m	L1000	Topsoil. As above, Tr. 1.
0.09 – 0.20m	L1001	Subsoil. As above, Tr. 2.
0.26 – 0.36m	L1002	Subsoil. As above, Tr. 1.
0.36m +	L1003	Natural gravel. As above, Tr. 1.

<i>Sample section 19B (DP 91): south end, west facing</i> <i>0.00 = 67.33m AOD</i>		
0.00 – 0.15m	L1000	Topsoil. As above, Tr. 1.
0.15 – 0.26m	L1001	Subsoil. As above, Tr. 2.
0.26 – 0.47m	L1002	Subsoil. As above, Tr. 1.
0.47m +	L1003	Natural gravel. As above, Tr. 1.

Description: A ditch (F1047) was present within the trench.

Ditch F1047 was linear (2.10+ x 2.80 x 0.38m; DP 92) orientated north to south. It had gently sloping sides and concave base. Its fill, L1048, was a mid greyish brown, firm, sandy silt with occasional small and medium sub-angular flint. No find were present.

7 CONFIDENCE RATING

7.1 It is not felt that any factors inhibited the recognition of archaeological features or finds.

8 DEPOSIT MODEL

8.1 The site was commonly overlain by Topsoil L1000, a brownish dark grey, soft, loam (0.05 – 0.15). L1000 overlay subsoils. Subsoil L1001 was a mid brownish grey, friable, silty sand with moderate gravel (0.10 – 0.30m thick). Subsoil L1002 was a mid to dark brownish yellow, friable, silty sand with frequent gravel (0.10 – 0.35m thick).

8.2 The natural geology was present at c.0.30 – 0.50m below the existing ground level and comprised a dark brownish yellow, loose sandy gravel and localised friable, sandy silt lenses. In the northern part of the site the natural geology consisted of white, compact, chalk (L1087).

9 DISCUSSION

9.1 The excavated features are tabulated:

Trench	Context	Description	Date
9	1074	Pit	Undated
	1078	?Gully	Undated
10	1062	Pit	Undated
	1064	Post hole	Undated
	1070	Pit	Neolithic / BA
	1072	Ditch	Neolithic / BA
	1076	Pit	Undated
11	1053	Pit	Neolithic / BA
	1066	Gully	Undated
	1068	Pit	Undated
12	1049	Gully	Neolithic / BA
	1058	Pit	? Neolithic / BA
	1060	Pit	Post-medieval
13	1012	Pit	Undated
	1014	Pit	Post-medieval/modern
	1017	Post hole	Undated

	1019	Pit	Undated
	1021	Pit	Undated
	1023	Pit	Undated
14	1004	Ditch	Undated
	1006	Pit	?Prehistoric
	1008	Pit	Undated
	1051	Pit	Neolithic / BA
	1053	Pit	Neolithic / BA
15	1010	Pit	Modern
	1030	Ditch	?post-medieval/modern
16	1026	Pit	Undated
17	1028	Ditch/Pit	Undated
	1035	Post hole	Undated
	1037	Pit	Neolithic / BA
	1039	Post hole	Undated
	1041	Post hole	Undated
	1043	Post hole	Undated
	1045	Post hole	Undated
	1055	Ditch	Undated
	1080	Ditch	Undated
	1082	Ditch	Post-medieval
18	1032	Ditch	Post-medieval
19	1047	Ditch	Prehistoric

9.2 Post-medieval and modern ditches were recorded in Trench 15 (F1030), 18 (F1032) and 17 (F1082), and post-medieval or modern pits were recorded in Trenches 15 (F1010), 13 (F1014), and 12 (F1060)

9.3 Numerous undated features were recorded in Trenches 9 - 11, 13 - 14, 17 and 19, and the majority were pits. It is tempting to associate the undated cluster of post holes in Trench 17 (F1039, F1041, F1043 and F1045) but this suggestion is tentative. Ditch F1047 (Tr.19) contained the majority of the struck flint (6 pieces; struck flint report below) and may date to the prehistoric period, but again this suggestion is tentative.

9.4 The earliest features consistently contained Neolithic / Bronze Age pottery and struck flint (Tr. 10 F1070 & F1072; Tr.11 F1053; Tr.12 F1049 & F1058; Tr.14 F1051 & F1053; and Tr.17 F1037). The features comprised mostly pits and also a gully (Tr.12 F1049) and a ditch (Tr.10 F1072). The features spanned Trenches 10 (F1071 & F1073), 11 (F1053), 12 (F1049), 14 (F1006 & F1051) and 17 (F1037), and the trenches were adjacent and located in the southern area of the site.

9.5 The evaluation recovered a total of 23 flakes (153g) of struck flint, predominantly comprised of scrapers and blade-like debitage that are indicative of earlier Neolithic lithic technology (struck flint report below). The prehistoric pottery occurs in a moderately abraded, friable condition (pottery report below). The most notable sherds, contained as un-stratified material in Tr.12 comprise two cross-joining grog-tempered sherds (38g) decorated with at least two rows of stabbed decoration, possibly made using a bone. These sherds are probably derived from a

later Neolithic Peterborough impressed ware vessel, although similar decoration was also used on early Bronze Age Food vessels.

9.6 The desk based assessment suggested the present of multi-period remains. It also stated that evidence of prehistoric occupation in the area appears to be focused to the west of the site and may suggest a Bronze Age settlement occurred either on the western border of, or within, the site. The settlement evidence described was recorded in Trenches 10 – 12, 14 and 17.

10 DEPOSITION OF THE ARCHIVE

10.1 Archive records, with an inventory, will be deposited with any donated finds from the site at Ware Museum. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency.

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APPENDIX 1 HISTORIC ENVIRONMENT RECORD DATA

The following sites are those that lie within a c. 1km radius of the assessment site. The table has been compiled from data held by the Hertfordshire Historic Environment Record (HHER).

HER No.	NGR TL	Description
Prehistoric (c. 700,000 BC – AD 43)		
98	3475 1311	Barrow, 1.6m high. Diameter varies between 40m and 46m. The north side of the mound has been damaged by the construction of a bunker for the former golf course. Field called barrow field. On the crest of a hill overlooking the River Lea. The bowl barrow, now surrounded by a housing estate, is of large size, and has never been excavated.
1875	3483 1346	Bronze Age Occupation evidence found during road construction in Oct 1972. Comprised a 3m sq depression 3.5m deep with stake-holes in the side. To the south, a 'beaten floor'. Timber slots and gully also found with many flints and pottery.
6512	350 129	During the construction of the A10 by-pass an oval Bronze Age pit was uncovered, measuring 43cm x 39cm, of a bowl shape and 10cm deep. Within it were four evenly placed cylindrical loomweights and pottery. Thought to be part of a larger area of occupation.
Roman (AD 43- 410)		
78	3522 1403	A section of Ermine Street revealed in a sewer trench in 1951 and 1952, and in a 'scope' at TL 35201391. Observations revealed a three tracked road for wheeled vehicles, foot and horses, 19.5m wide with a central c. 7m wide hard surface of small flints 60cm thick
1351	3505 1305	A section through Roman Ermine Street - On this high ground it comprised a gravel build-up of 0.5m thickness with sandy verges. No paving, surfacing ditches or banks. Originally 5m wide, but doubled in width.
1779	35241 14176	In July 1959 when electric cable-laying cut a trench through Ermine Street a section was taken for comparison with 1952 section [HER 78]. Finds included 4th century coins & pottery, bones; building debris occurred near the surface of the road.
4115	352 141	Roman coins and a lead circlet were dug up in a field adjacent to where Ermine Street crosses the River Lea.
4752	3524 1417	An excavation 1974 in Ware discovered part of Ermine Street and two ditches with at least two phases of timber structures on the west side. At the beginning of the 4 th century a structure was built with destruction layers dated by coins to c. 355. A chalk raft was then overlaid of the remains of an earlier building and another building was built on top of this. It could be a possible toll booth for the River Lea crossing due to a dense roman coin hoard (probably votive). There were numerous other domestic finds revealed. The later building was likely to have been destroyed in the late 5 th century.
9163	35244 14225	Area between probable southern extent of the Roman urban settlement [6521] and occupation recorded to the south of the river Lea [4752]. Excavation evidence indicates this area contained possible riverside wharves and a possible temple or shrine.
Anglo-Saxon (AD 410 – 1066)		
1506	35 14	A find spot of an Anglo-Saxon urn found in Ware.

Post-medieval and modern (AD 1550 – present)		
4001	3475 1311	In the 16 th century a beacon was maintained by the River Lea. Saxton's map of Hertford shows a beacon on a hill on the S side of the Lea in the area of what is now the golf course. The most suitable spot was probably at or near the barrow [HER 98].
5007	3517 1378	A post-medieval milestone made of stone, c. 77cm high by 45cm square. It has a slightly domed top, indented for a metal mileage plate, but the plate is missing. Plaque still missing in 1994.
5328	3532 1397	A pumping station and adjoining house, built by the New River Company, in 1881 listed as Broadmeads Pumping Station and Chimney.
5703	3482 1392	Marble river intake gauge of 1770. Stone sarcophagus-shaped monument on marble base spanning the cut from the Lea to the New River.
5815	353 142	Former steam corn mill. It is a large yellow brick block of 3 floors with a tower at the west end. There are many outbuildings, some of recent date, a possible manager's house, and an office at the mill gates. The mill probably dates from 1850/60.
5999	3500 1370	Built 1608-13, aqueduct carrying water from Ware to London.
6675	3552 1307	A modern hexagonal, brick & concrete pillbox at the side of a field backing on to Thieves Lane. It remained unused.
6904	3468 1300	A modern pillbox once stood on the W corner of the junction of Hamels Drive and Stanstead Road.
7278	352 135	A mine, known to have been worked for chalk and flints in 1897. The earliest wall date found was 1893.
7279	345 134	A brick framed opening in an old chalk quarry leads to passages, c 3m high, which form 3 sides of a rectangle. A second entrance is probably buried beneath debris at the quarry bottom.
7339	3567 1383	18 th century grotto [see HER 9462] and summerhouse in a fragment of 18 th century gardens, 0.1 ha. In the mid and later 18 th century John Scott of Amwell House laid out extensive gardens to the south and south-west of Amwell House, with numerous small structures.
9462	3568 1383	An 18 th century grotto surviving within a fragment of 18 th century garden (c.1.0 ha.). Constructed by John Scott of Amwell House as part of an extensive garden with many small ornamental structures and a summer house [see HER 7339].
13064	35250 14175	Spoil heap probably connected with reconstruction of Ware Lock in the 19 th century.

APPENDIX 2 CONCORDANCE OF FINDS

Feature	Context	TT	Description	Spot Date	Pottery	CBM (g)	A.Bone (g)	Other
U/S	U/S	12			(2) 38			
1001			Subsoil	Post med	(1) 69g	39		
1006	1007	14	Pit	?prehistoric	(1) <1g			
1010	1011	15	Pit	Modern	(1) 2g	34		Fe. Frag. - (1) 3g Coal - 1g
1014	1015	13	Pit	Post-medieval / modern		27		Roof Slate - 11g
1030	1031	15	Ditch	Post-medieval / modern		13		Str. Flint - (1) 5g
1032	1033	18	Ditch	Post med	(1) 5g	13		Str. Flint - (1) 13g
1037	1038	17	Pit	Neolithic / BA	(1) 3g			Str. Flint - (1) 8g
1047	1048	19	Ditch	Prehistoric				Str. Flint - (6) 121g
1049	1050	12	Gully	Neolithic / BA	(1) 4g			Str. Flint - (4) 10g B. Flint - 15g
1051	1052	14	Pit	Neolithic / BA	(1) 9g	5		
1053	1054	11	Pit	Neolithic / BA	(3) 14g			Str. Flint - (1) 4g
1058	1059	12	Pit					Str. Flint - (1) 2g
1060	1061	12	Pit	Post-medieval		10		Clay Pipe - 4g
1070	1071	10	Pit	Neolithic / BA	(1) 41g			Str. Flint - (1) 5g
1072	1073	10	Ditch	Neolithic / BA	(3) 22g			Str. Flint - (3) 7g
1082	1083 1085	17	Ditch	Post med	(1) 1g			Str. Flint - (3) 20g Str. Flint - (2) 8g

APPENDIX 3 SPECIALIST REPORTS

The Struck Flint

Andrew Peachey

The evaluation recovered a total of 23 flakes (153g) of struck flint, predominantly comprised of scrapers and blade-like debitage that are indicative of earlier Neolithic lithic technology.

The highest concentration of flint (5 flakes, 63g) was contained in Ditch F1047 (L1048) and included a side scraper, notched flake, blade and debitage. The side scraper and notched flake were both formed by the application of abrupt retouch to the edges of blade like flakes. A similar end scraper was also contained in Ditch F1032 (L1033). The remaining struck flint was comprised of very low quantities of blade-like tertiary and un-corticated debitage flakes, contained in Pits F1037, F1053, F1058, F1070, Ditches F1072, F1082 and Gully F1049.

The Pottery

Andrew Peachey

The trial trench evaluation recovered a total of 17 sherds (209g) of pottery, comprising 13 sherds (132g) of prehistoric pottery and 4 sherds (77g) of post-medieval pottery.

The prehistoric pottery occurs in a moderately abraded, friable condition. The most notable sherds, contained as un-stratified material in Tr.12 comprise two cross-joining grog-tempered sherds (38g) decorated with at least two rows of stabbed decoration, possibly made using a bone. These sherds are probably derived from a later Neolithic Peterborough impressed ware vessel, although similar decoration was also used on early Bronze Age Food vessels. The remaining prehistoric pottery is limited to small body sherds in fabrics tempered with carrying quantities coarse, calcined flint that may be of Neolithic or Bronze Age origin. These sherds were contained in Pits F1037, F1051, F1053, F1070, Gully F1049 and Ditch F1072.

The post-medieval pottery comprises single body sherds of highly abraded post-medieval glazed red earthen ware contained in Ditches F1032, F1085 and Subsoil L1001, with a further sherd of early modern refined white earthen ware contained in Pit F1010.

The Ceramic Building Materials

Andrew Peachey

The trial trench evaluation recovered a total of 11 fragments (141g) of post-medieval CBM. The CBM is entirely comprised of small, highly-abraded fragments of peg tile (roof tile) in an oxidised, sand tempered fabric that would have produced locally in the 17th to 19th centuries. These fragments were contained in very low quantities in Pits F1010, F1014, F1051, F1060, Ditches F1030, F1032 and Subsoil L1001.

The Environmental Samples

Dr John R Summers

Introduction

During evaluation 15 bulk soil samples were taken for environmental archaeological assessment. The excavated features date from the Neolithic/ Bronze Age, along with a number of post-medieval features. Samples of up to 20 litres were taken and processed by water flotation.

This report presents the results from the assessment of the environmental samples and discusses the significance and potential of the remains in relation to future investigations at the site.

Methodology

Samples were processed at Archaeological Solutions Ltd offices in Bury St. Edmunds using a Siraf style flotation tank. The light fractions were washed onto a mesh of 250µm (microns), while the heavy fractions were sieved to 500µm.

Once dry, the light fractions were scanned under a low power stereo microscope (x10-x30 magnification). Botanical remains were identified and recorded using a semi-quantitative scale (X = present; XX = common; XXX = abundant). Reference literature (Cappers *et al.* 2006; Jacomet 2006) and a reference collection of modern seeds was consulted where necessary. 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.

Results

The results from the assessment of the bulk sample light fractions are detailed in Table 1.

Carbonised plant macrofossils

Carbonised plant remains were very sparse in the samples, with only a single barley grain (*Hordeum* sp.) recovered from early modern pit F1010 (L1011). No carbonised plant macrofossils were present in any of the features spot-dated to the Neolithic/ Bronze Age.

Charcoal

Only very low densities of charcoal were present in the samples, representing an assemblage too small to be of analytical value.

Molluscs

Molluscs were only present in post-medieval ditch F1082 (L1085). These were not identified and have no analytical value.

Contaminants

Modern roots were common to abundant in most samples. Together with occasional earthworm egg capsules, this suggests that some disturbance of deposits through bioturbation is likely to have occurred.

Discussion

The density of remains in all of the samples was very low. Although Neolithic assemblages of charred plant remains are noted for their low concentrations of material (Jones and Rowley-Conwy 2007), carbonised remains were practically absent from Neolithic/ Bronze Age deposits at Chadwell Springs. The small amounts of charcoal probably represent scattered fuel waste debris. There is no evidence of food production, processing or preparations in the samples from the evaluation trenches. At present it must be assumed that such activities had little or no importance in the Neolithic/ Bronze Age occupation of the site.

Statement of potential

Based on the samples available for assessment, it can be seen that charred plant remains and other environmental archaeological materials are uncommon in deposits at Chadwell Springs Golf Course. It seems unlikely that an analytically viable assemblage of Neolithic/ Bronze Age charred plant remains would be recovered through further excavation and sampling at the site.

References

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

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

Jones, G. and Rowley-Conwy, P. 2007, 'On the importance of cereal cultivation in the British Neolithic', in Colledge, S. and Conolly, J (eds) *The Origins and Spread of Domestic Plants in South-West Asia and Europe*, University College London, London, 391-420

Site code	Sample number	Context	Feature	Feature type	Spot date	Volume (litres)	Cereals		Charcoal		Molluscs	Contaminants					Other	Potential - CPR	Potential - Charcoal
							Cereal grains					Roots	Molluscs	Modern seeds	Insects	Earthworm capsules			
AS1476	1	1005	1004	Ditch	Post-med	20	-					XXX	-	XX	-	-	-	D	D
AS1476	2	1007	1006	Pit	-	20	-					XX	-	-	-	X	-	D	D
AS1476	3	1011	1010	Pit	Early modern	20	X					XXX	X	-	XX	-	Bubbled, vitreous slag	D	D
AS1476	9	1033	1032	Ditch	Post-med	20	-					XXX	-	-	-	X	-	D	D
AS1476	10	1031	1030	Ditch	Neolithic/BA	20	-			Small frags		XX	X	-	-	-	-	D	D
AS1476	11	1048	1047	Ditch	Neolithic/BA	20	-					X	-	-	-	-	-	D	D
AS1476	12	1052	1051	Pit	Neolithic/BA	20	-			Small frags		XX	-	-	-	-	-	D	D
AS1476	13	1030	1037	Pit	Neolithic/BA	20	-					XXX	-	-	-	X	-	D	D
AS1476	14	1054	1053	Pit	Neolithic/BA	20	-			Small frags		XXX	-	-	-	-	-	D	D
AS1476	15	1050	1049	Gully	Neolithic/BA	20	-			Small frags		XXX	-	-	-	X	-	D	D
AS1476	17	1069	1068	Pit	-	10	-					XXX	-	-	-	X	-	D	D
AS1476	19	1063	1062	Pit	-	20	-					XX	-	-	-	-	-	D	D
AS1476	20	1073	1072	Ditch	Neolithic/BA	20	-					XXX	-	XX	-	-	-	D	D
AS1476	21	1071	1070	Pit	Neolithic/BA	10	-			Small frags		XXX	-	-	-	-	-	D	D
AS1476	22	1085	1082	Ditch	Post-med	20	-			Small frags		XXX	-	XX	-	-	-	D	D

Table 1: Data from the assessment of environmental samples from trial excavations at Chadwell Springs Golf Course, Ware.
Abbreviations: Hord (barley, Hordeum sp.)

APPENDIX 4 CONTENTS OF THE ARCHIVE

Records	Number
Brief	Y
Specification	Y
Registers	6 (Context, Drawing Sheet, Drawing, Sample, Photographic, Digital photo
Context Sheets	89
Site drawings A1	0
Site drawings A3	11
Site drawings A4	1
Site photographs b/w	92
Site photographs colour slides	92
Digital Photographs	98

APPENDIX 5 HER SUMMARY SHEET

Site name and address:	Chadwell Springs Golf Course, Ware, Hertfordshire
County: Herts	District: East Herts
Village/Town:	Parish: Ware
Planning application reference:	
Client name/address/tel:	McMullens, Hertford
Nature of application:	Pre-determination
Present land use:	Golf course
Size of application area: <i>c.1.5ha.</i>	Size of area investigated 1600m ²
NGR (8 figures):	TL 3520 1350
Site Code:	AS 1476
Site director/Organization:	Archaeological Solutions Ltd
Type of work:	Trial trench evaluation
Date of work:	23/02 – 01/03/2012
Location of finds/Curating museum:	Ware Museum
Related SMR Nos:	Periods represented: -
Relevant previous summaries/reports: -	Unger, S., 2008. Chadwell Springs Golf Course, Hertford, Hertfordshire. An Archaeological Desk-Based Assessment AS Report No. 3060
Summary of fieldwork results:	<p><i>In February and March 2012 Archaeological Solutions (AS) carried an archaeological evaluation of land at Chadwell Springs Golf Course, Ware, Hertfordshire (NGR TL 3520 1350). The evaluation was commissioned by McMullens & Sons Ltd, and was undertaken in the pre-planning stage of a proposal to redesign and remodel the golf course.</i></p> <p><i>The earliest features consistently contained Neolithic / Bronze Age pottery and struck flint (Tr. 10 F1070 & F1072; Tr.11 F1053; Tr.12 F1049 & F1058; Tr.14 F1051 & F1053; and Tr.17 F1037). The features comprised mostly pits and also a gully (Tr.12 F1049) and a ditch (Tr.10 F1072). The features spanned Trenches 10 (F1071 & F1073), 11 (F1053), 12 (F1049), 14 (F1006 & F1051) and 17 (F1037), and the trenches were adjacent and located in the southern area of the site. The desk based assessment suggested the presence of multi-period remains. It also stated that evidence of prehistoric occupation in the area appears to be focused to the west of the site and may suggest a Bronze Age settlement occurred either on the western border of, or within, the site. The settlement evidence described was recorded in Trenches 10 – 12, 14 and 17.</i></p>
Author of summary: Z Pozorski	Date of Summary: March 2012

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DP 4. The site. Looking north-east.



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DP 7. Trench 1, east end. Sample section 1B. Looking north-north-west.



DP 8. Trench 2. Looking east.



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DP 18. Trench 5, west end. Sample section 5A. Looking north-north-west.



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DP 80. Postholes F1039 and F1041. Looking east.



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DP 84. Ditch F1080. Looking north.



DP 85. Trench 18. Looking south.



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DP 87. Trench 18, south end. Sample section 18B. Looking east.



DP 88. Ditch F1032. Looking east.



DP 89. Trench 19. Looking east.



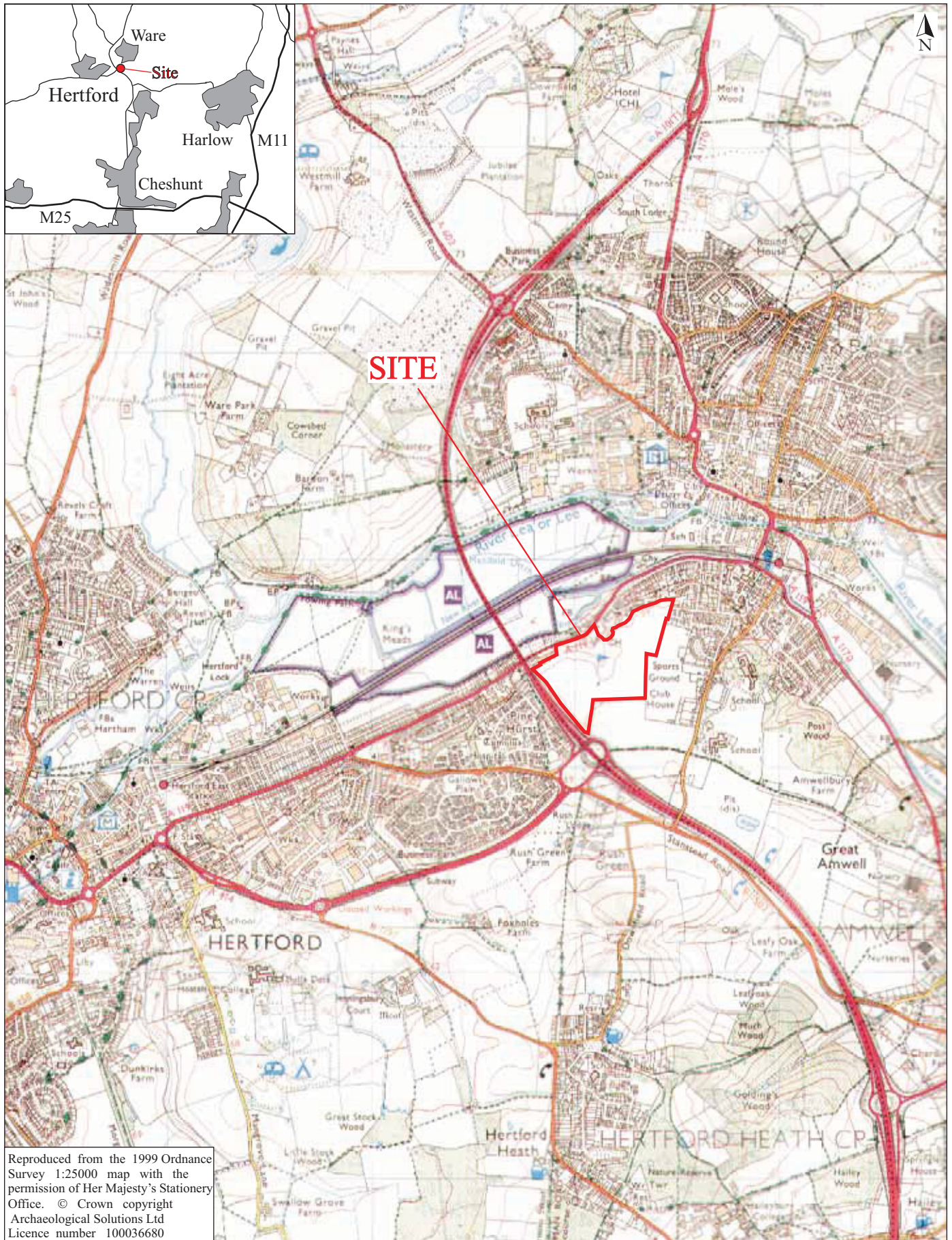
DP 90. Trench 19, west end. Sample section 19A. Looking north.



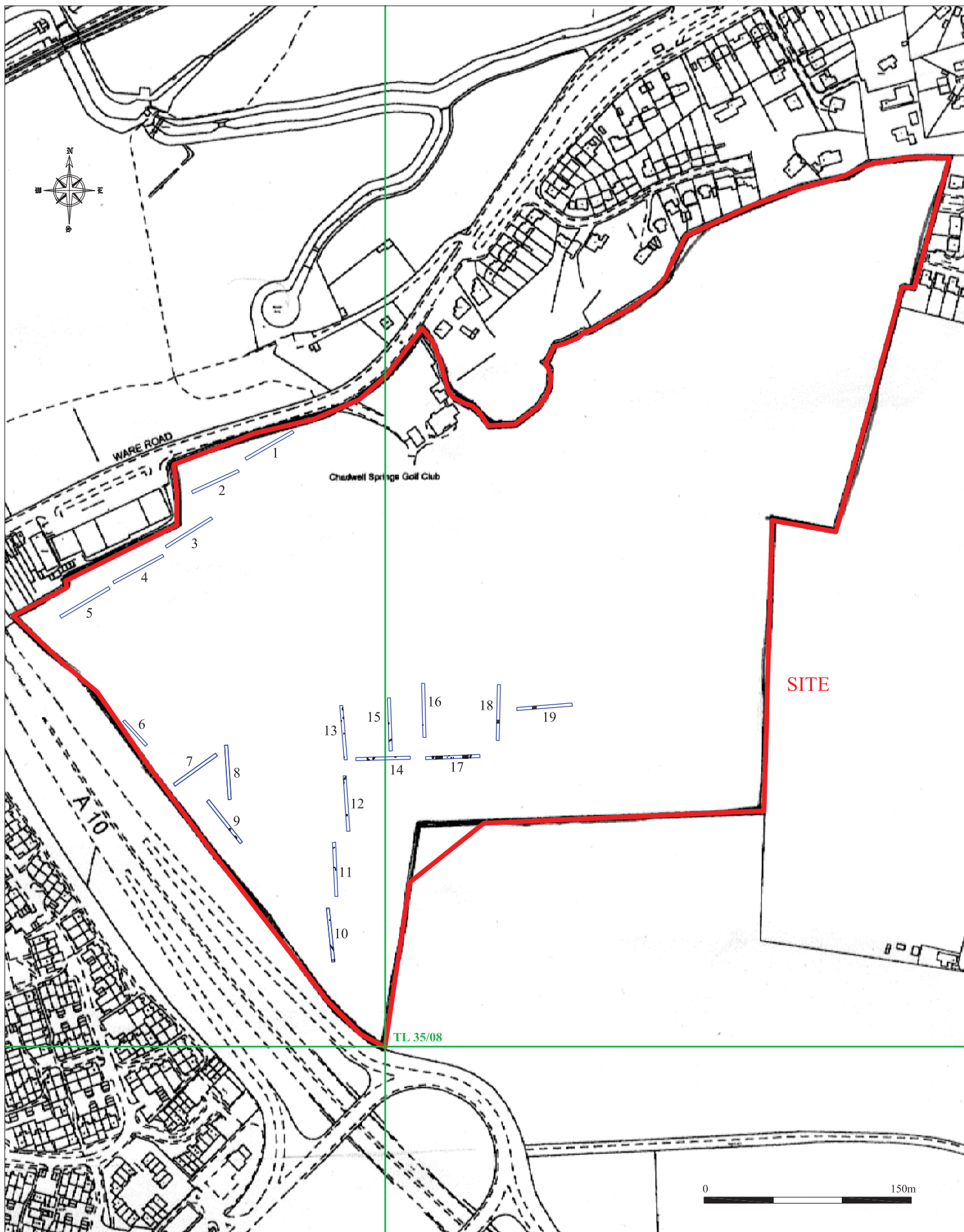
DP 91. Trench 19, east end. Sample section 19B. Looking north.



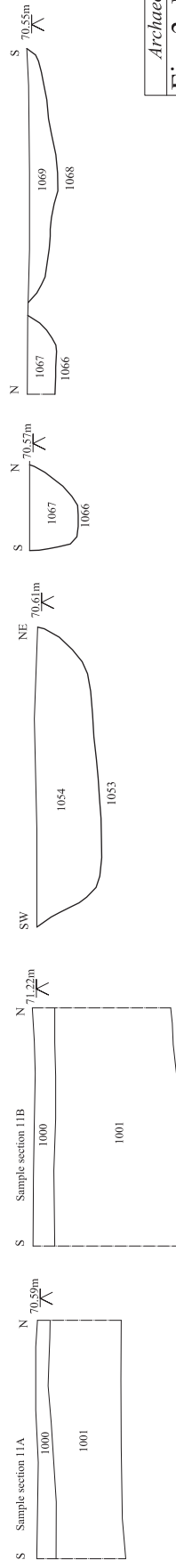
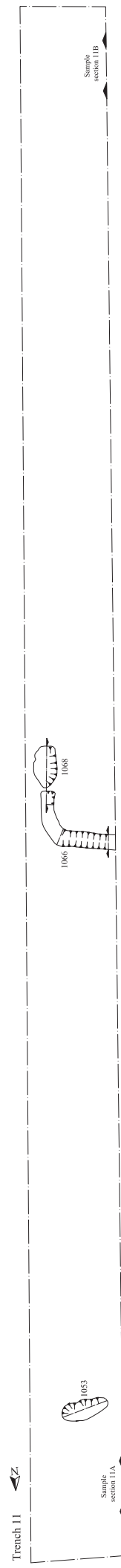
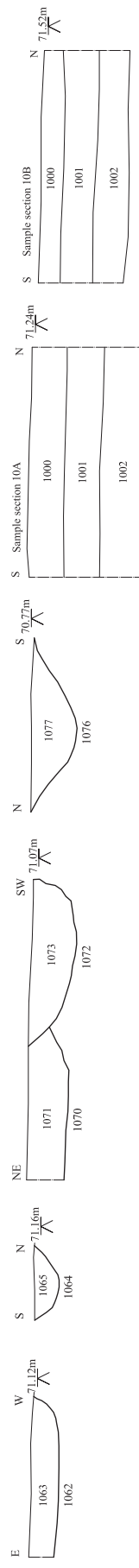
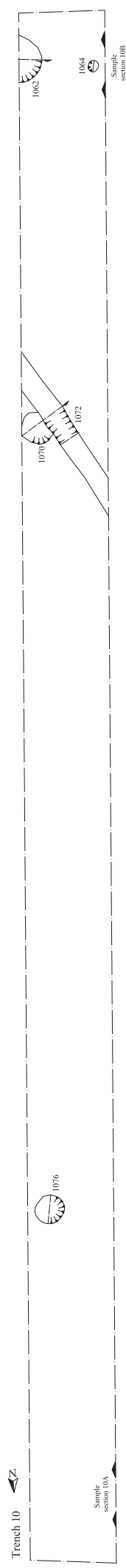
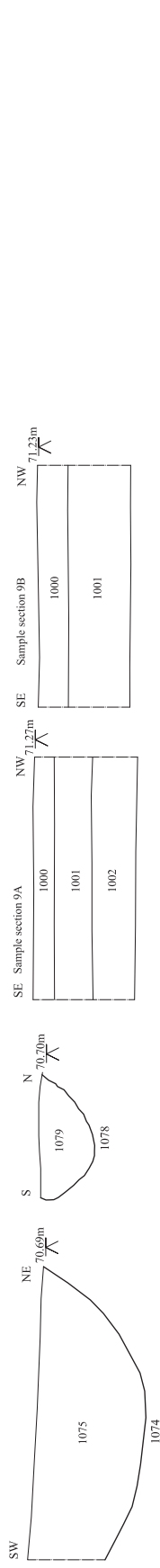
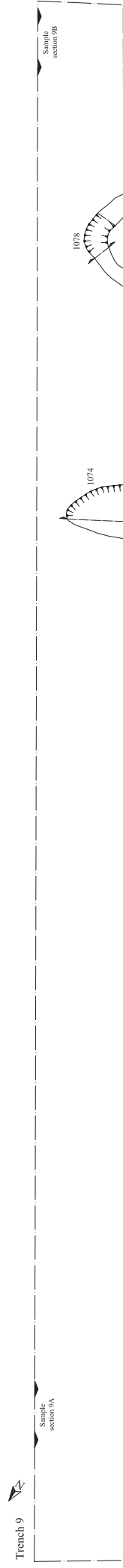
DP 92. Ditch F1047. Looking south.

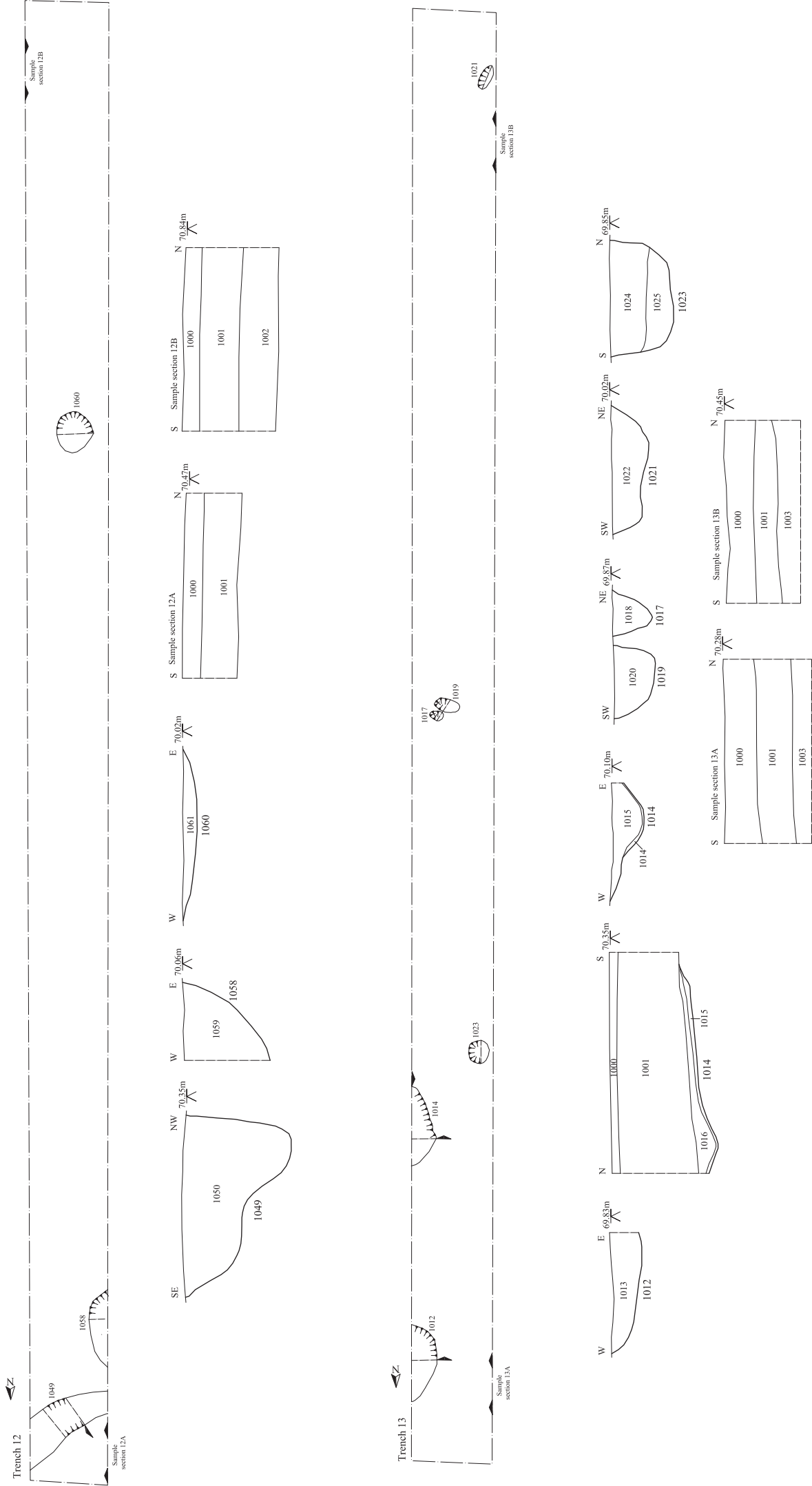


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Fig. 1 Site location plan
Scale 1:25,000 at A4



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Fig. 2 Detailed site location plan
 Scale 1:2500 at A3

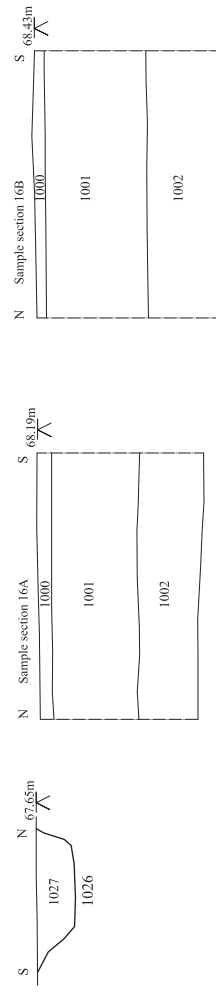
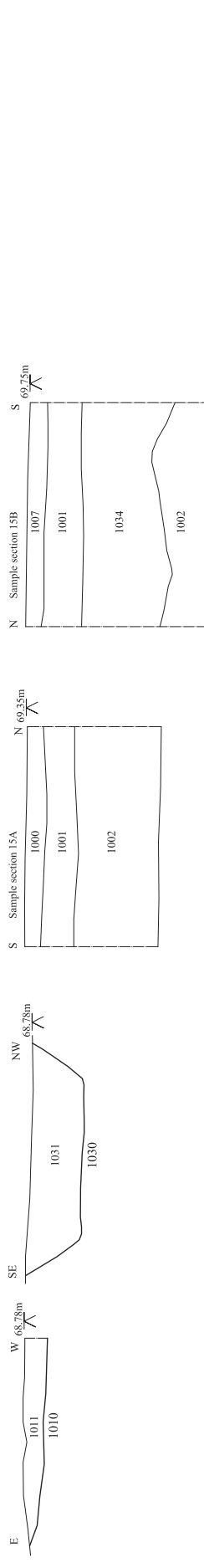
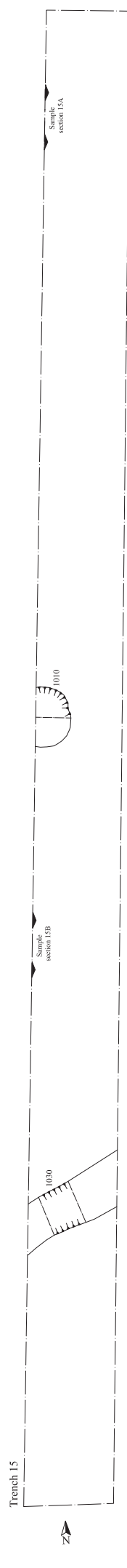
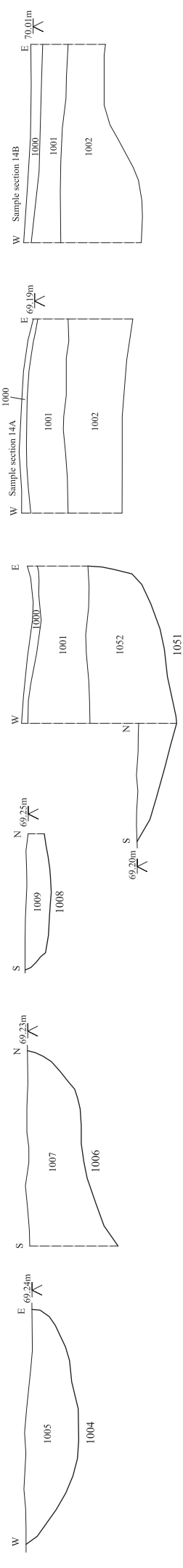
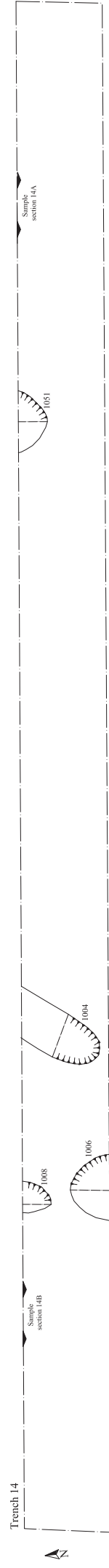


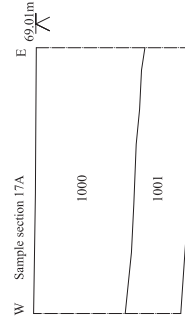
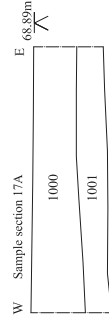
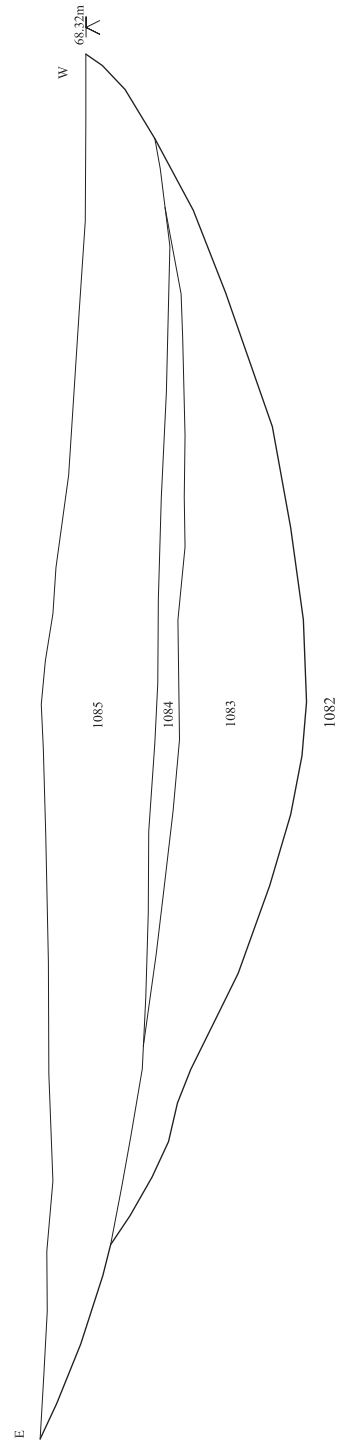
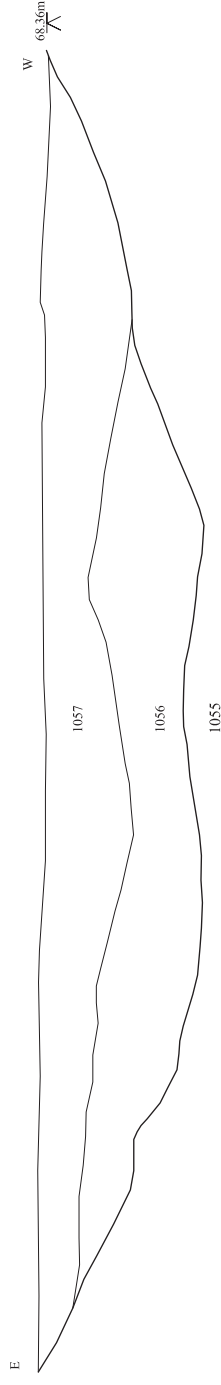
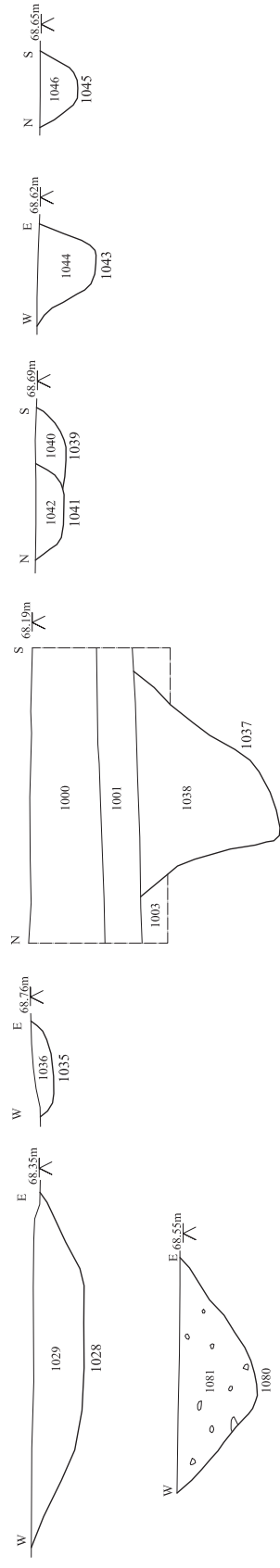
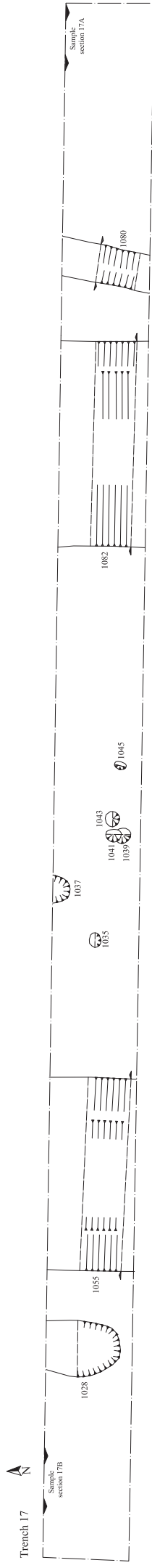


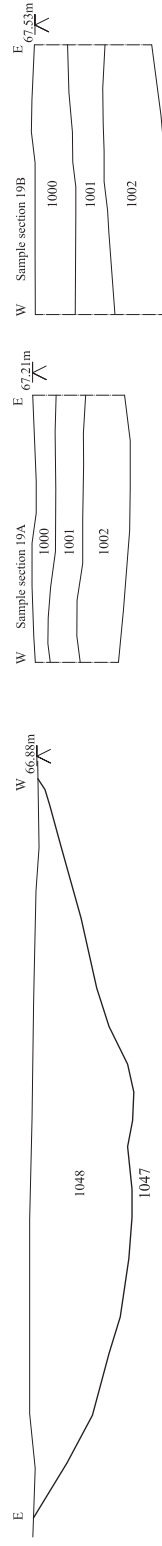
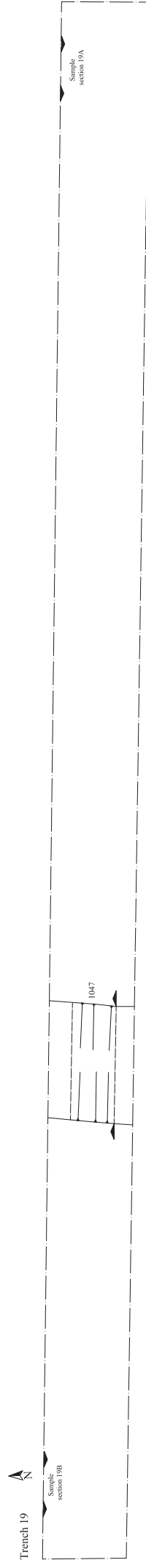
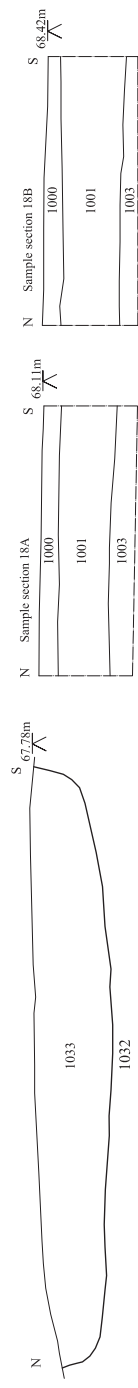
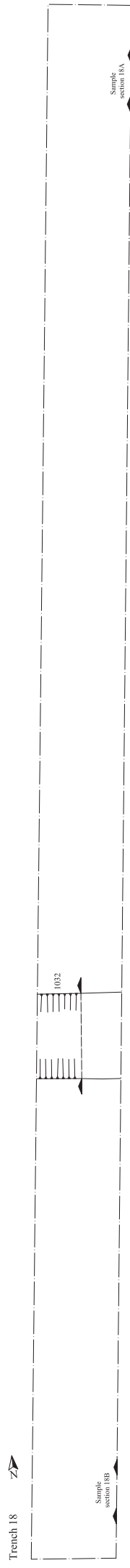
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Fig. 4 Plans & sections

Scale Plans 1:100, sections 1:20 at A3









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Fig. 8 Proposed development plan

Scale 1:4000 at A4