Dairy Site, Angel Link, Halesworth, Suffolk

Archaeological Evaluation Report

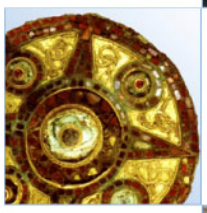
Planning Application Number: Pre-Planning

National Grid Reference Number: TM 3874 7729

AOC Project no: 30017

Site Code: HWT029

Date: August 2008



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Archaeological Evaluation Report

On Behalf of:	**Pinnacle Consulting Engineers** Studio 4 37 Broadwater Road Welwyn Garden City AL7 3AX
National Grid Reference (NGR):	**TM 3874 7729**
AOC Project No:	**30017**
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Date of Excavation:	**9th to 25th January 2008**
Date of Report:	**August 2008**

This document has been prepared in accordance with AOC standard operating procedures.

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Non-Technical Summary

An archaeological evaluation was undertaken by AOC Archaeology Group between 9th and 25th January 2008 at the Dairy Site, Angel Link, Halesworth, Suffolk, on behalf of Pinnacle Consulting Engineers Ltd. The evaluation comprised of the excavation of 13 trenches.

The evaluation revealed possible evidence of prehistoric activity, in the form of stuck flint, a Middle Saxon burial and post-medieval pits and a building.

Natural Lowestoft sands and gravels were identified between 12.79m and 7.88m OD. Cut into this were around 20 archaeological features including small ditches, pits, animal burials and a human inhumation burial.

In the western part of the site evidence of marshland was discovered, with alluvial clays covering the natural sands. No archaeological features were observed in this part of the site.

There was a low level of prehistoric activity, represented by a number of worked flints discovered across the site, with a slight concentration in the northern section.

In the southern area of the site a wall relating to a possible 16th to 17th century building was discovered. No other features directly relating to this were encountered.

1 Site Location

1.1 The site is centred on National Grid Reference (NGR) TM 3874 7729, and is within land bounded by The Paddock to the north, Saxon Way to the east, a commercial building to the south and commercial buildings to the west (Fig's 1 and 2).

1.2 The site is irregular in shape and covers an area of approximately 14,000m².

2 Geology and Topography

2.1 The British Geological Survey report for the site (Delta-Simons, 2007) indicates that the site is situated upon the sands and gravels of the Pleistoscene Lowestoft Formation.

3 Planning Background

3.1 The local planning authority is Suffolk County Council. Archaeological advice to the council is provided by Keith Wade, Archaeological Service Manager.

3.2 In advance of submitting a planning application, an archaeological evaluation has been carried out to inform on the potential for archaeological remains to exist upon the site and any further archaeological work that may be required as a condition on any planning permission.

3.3 This document reports on the results of an archaeological evaluation undertaken to identify any archaeological remains that might be threatened by any future development of the site.

4 Archaeological and Historical Background

4.1 The following information is drawn from the Written Scheme of Investigation (AOC 2008).

Prehistoric (before c.AD 43)

4.2 A Mesolithic tranchet axe found at Cheddison Street and worked Mesolithic flints found at the Old Angel Bowling Green represent the earliest remains recovered within the area. A search of the National Monuments Record for the area included further finds of a Palaeolithic hand axe at Babington Drive, a Neolithic polished flint axe at Owak Way and a Bronze Age Palstave.

4.3 Worked Neolithic flints and Beaker pottery as well as Iron Age pottery sherds were also recovered from the excavations at the Old Angel Bowling Green. A Bronze Age leaf-shaped arrowhead and Iron Age Socketed Axe have also been recovered: at Bedingfield Crescent and Old Angel Bowling Green.

4.4 A search of the National Monuments Record for the area included further finds of a Palaeolithic hand axe at Babington Drive, a Neolithic polished flint axe at Owak Way and a Bronze Age Palstave.

4.5 Finds from the area clearly demonstrate prehistoric human activity within the vicinity of the site, and the site's location within an area of alluvial deposits increase the likelihood of prehistoric finds being recovered.

4.6 The region is uniquely important for studies aiming to build a British Pleistocene framework due to its location on the edge of the ice sheets where "the Lowestoft Till from the Anglian Glaciation can be directly correlated to the formation of the Thames terrace sequence" (Austin, 2000, 5).

Roman (c.AD 43 - 450)

4.7 The south and east coasts around Halesworth were fortified by a chain of forts built in the 3rd century AD. The area was steadily covered by a network of roads, camps, settlements and villas.

4.8 One Roman road from Caistor to Dunwich, known as Stone Road (now the A144) was built by the end of the 1st century AD, and Halesworth may be built directly upon the course of this road.

4.9 A scatter of building material, including roof and floor tile, and domestic pottery has been recovered to the west of site.

4.10 A group of finds have been recovered from a single ditch underlying extensive hill wash at Church Farm. Further excavations were undertaken in 1999 and a field system defined by ditches was identified. Also, a coffined burial of probable Roman date has been excavated. Monitoring in adjacent areas uncovered a large, probable boundary ditch containing Roman finds.

Anglo-Saxon (c.451 - 1065)

4.11 By the mid 6th century the area known as Suffolk County was already demarcated by the River Stour to the south and the River Waveney to the north.

4.12 From 550 AD East Anglia was ruled by the *Wuffinga* family, of whom Raedwald was the most powerful. Overlord of all southern Britain from 610 – 624 AD, it is thought that it is he who was commemorated by the well-known ship burial at Sutton Hoo.

4.13 The town of Halesworth was probably founded during the Middle Saxon period (650 – 850 AD) and was named '*Halesuworde*'. The location of the settlement is believed to be to the east of the church and evidence suggests settlement, a bridging point and activities such as the beaching of boats.

4.14 Archaeological work carried out at the Old Angel Bowling Green retrieved a single sherd of Ipswich Ware and sherds of Thetford Ware.

4.15 Within the church there are three pieces of Saxon carved stone. Although incomplete, these are all part of one design. These were found buried in the south aisle and have been dated by the British Museum to the 9th century. .

Medieval (c.1066 - 1485)

4.16 At the time of the Norman Conquest Halesworth comprised a rural estate held by Aelfric but by 1086 the land was in the possession of Norman landowners. At this time the population amounted to approximately 130 people and the manor comprised 120 acres of arable land and 4 acres of meadow. The Domesday Book makes mention of a church and a priest called Ulf.

4.17 By 1100 the town had moved northwest from its original position to occupy the higher land it sits on today. The church of St Mary, which stands approximately 200m northwest of the site was built before the 14th century.

4.18 Halesworth probably developed into a small market town by the 13th century, when a charter granting the right to hold a market and fair was granted in 1223. It was during this time that Halesworth expanded, the River Blyth was narrowed, the floodplain reduced and a road at The Thoroughfare was built over the old causeway. The Thoroughfare is just 200m northwest of the site.

4.19 Evidence suggests that lead-working, spinning thread, weaving and brewing were being carried out on tenements to the east of the church. Further evidence of industry exists at the Angel site immediately to the south, where lead fishing weights were cast in sand moulds in a pit. A pottery kiln was also found at the Angel site at the back of a cottage.

4.20 Archaeological excavations undertaken at the Angel site in 1993 identified several phases of activity including pits, layers and kilns associated with pottery manufacture.

4.21 Other archaeological remains found in the area include postholes, an oyster midden and pottery found during the excavation of a trench running from The Thoroughfare to Angel Lane, and two trial trenches excavated on the Angel Bowling Green produced medieval pottery and a worn coin of Edward III. These all suggest that the site is not far from the medieval centre of Halesworth.

Post-Medieval (c.1485 - modern)

4.22 By the 17th century Halesworth was the fastest growing town in East Anglia, its economy being based on leather, food and clothing. Merchants from the town traded with London, Calais, Holland and Germany.

4.23 In 1759 work was begun on the River Blyth to make it navigable between Southwold Harbour and Halesworth, resulting in the industrialisation of the quay area and the area between the New Reach and the river.

4.24 From the 18th to the 19th century, the dominant industry in Halesworth was the growing of barley to serve the brewing industry. The Angel and the White Hart had roles in the industry and a brewing and malting enterprise was run at the Angel during the 18th century. In 1841 the Corn Hall was built behind the Angel Inn. As well as being a place of business it served, at various points, as a county court.

4.25 The west part of the White Hart hotel car park was used as a Bleach Ground. It is presumed that this refers to the traditional practice of laying cloth in the open air to bleach rather than the 19th century practise using bleaching powders. The latter process would have utilised buildings, such as a bleach house, dye house, water filters and an enormous amount of water.

4.26 In 1803 an Iron Foundry was established on the Central Car Park for the manufacture of ploughs, threshing machines, turnip cutters and chaff machines. The Foundry also built the earlier town bridge in 1820. By the 20th century the foundry had fallen into disuse and few of its parts remained standing.

5 Aims and Objectives

5.1 Aims of the Evaluation were defined as being:

- To establish the presence/absence of archaeological remains within the site.
- To determine the extent, condition, nature, character, quality and date of any archaeological remains encountered.
- To record and sample excavate any archaeological remains encountered.
- To assess the ecofactual and environmental potential of any archaeological features and deposits.

- To determine the extent of previous truncations of the archaeological deposits.
- To enable the Archaeological Service Manager to make an informed decision on the status of any future planning application, and any possible conditions for further work required if an application is approved.
- To make available to interested parties the results of the investigation in order to inform the mitigation strategy as part of the planning process.

5.2 Specific objectives of the Evaluation were to:

- Determine the presence of any remains of prehistoric date.
- Determine the presence of any remains of Saxon date on the site.
- Assess the potential of the site to inform on the medieval development and chronology of Halesworth. Particularly, to determine the presence of any activity relating to pottery manufacture.
- Assess the degree and extent of truncation of earlier deposits by the phases of late post-medieval and modern buildings on the site.

5.3 The final aim is to make public the results of the investigation, subject to any confidentiality restrictions.

6 Methodology

6.1 The evaluation consisted of 11 n^{o} 30m x 2m trenches and 2 n^{o} 15m x 2m trenches (5% of the site) with selected hand excavation of archaeological features where present (Figure 3). Due to the depth of sand and alluvial deposits in some trenches the sides had to be stepped to provide safe access.

6.2 Trench 10 was moved 2m north to avoid a drain and Trench 10 was only excavated to 25m as a wall was discovered at the southern end (fig 2).

6.3 All overburden was removed down to the top of the first recognizable archaeological horizon or the natural deposit where no archaeological horizons were present, using a 13 tonne tracked excavator fitted with a 1.8m wide toothless ditching bucket.

6.5 All machining was carried out under direct control of an experienced archaeologist.

6.6 Excavated material was examined in order to retrieve artefacts to assist in the analysis of the spatial distribution of artefacts.

6.7 On completion of machine excavation, all archaeological features that required examination were excavated and recorded. All faces of trenches that required examination or recording were cleaned using appropriate hand tools.

6.8 All excavation was undertaken with a view to avoiding damage to any archaeological features or deposits which appeared to be demonstrably worthy of preservation *in situ*.

6.9 After excavation and recording, the trenches were backfilled with excavated material.

6.10 Three Temporary Bench Marks were set up on the site due to the presence of a number of buildings blocking the line of sight. These were transferred from a Bench Mark on the South Western corner Saint Mary's Church.

6.11 The evaluation work was undertaken in 13 days by Ian Hogg, Project Supervisor, under the overall project management of Andy Leonard; Project Manager.

7 Results

7.1 Trench 1 (Figure 4)

Height	Context Number	Description
10.64 to 9.75m OD	(1/001)	Loosely compacted dark greyish brown sandy clay, occasional CBM, topsoil.
9.75m to 9.27m OD	(1/002)	Loosely compacted mid orange- brown silty sand, occasional flint inclusions, subsoil.
9.27m to 9.21m OD-	(1/006)	Loosely compacted mid orange yellow sand.

7.1.1 Natural Lowestoft sands (1/006) were observed from 9.21m OD. Pit [1/005] cut into the sands and was 1.60m long and 0.70m wide (to the limit of excavation). The pit was subcircular, steep sided and of unknown function. It contained two fills. The primary fill (1/004) was 0.40m deep, dark greyish brown clayey silt and produced no finds. The upper fill (1/003), was a mid grey, friable silty sand which was 0.20m deep and produced two small pieces of lava quernstone. Both are from the same quern and are probably of Niedermendig lava or nepheline-tephrite from the Eifel Hills of Germany (see Appendix F).

7.1.2 Overlying the pit was orange-brown naturally formed subsoil (1/002) 0.60m thick, sealed by dark greyish brown topsoil (1/001) 1.00m thick.

7.2 Trench 2 (Figure 5)

Height	Context Number	Description
10.71m to 10.10m OD	(2/003)	Loosely compacted, dark grey brown sandy silt, topsoil.
10.10m to 9.69m OD	(2/004)	Loosely compacted, dark brownish grey, sandy silt, subsoil.
9.69m to 9.61m OD-	(2/009)	Loosely compacted mid orange yellow sand.

7.2.1 Natural Lowestoft sands (2/009) were observed at 9.69m OD. Cut into this was a posthole [2/008] 0.30m long and 0.25m wide; it contained a single fill (2/007). The posthole [2/008] contained no find and was quite deep (0.50m), probably to compensate for the softness of the underlying soils.

7.2.2 This posthole was truncated by a subcircular pit [2/002] 3.50m long, 1.40m wide and 0.60m deep. This had steep sides and a flat base. The lowest fill (2/006) was up to 0.50m deep and was soft, dark brownish orange sand; it contained oyster shell and animal bones (deer, horse, ox, pig and sheep-sized bones) including a worked red deer antler <s.f. 1>. This pit contained the only evidence of wild 'game' mammals on site, in the form of red and fallow deer bones, and the only evidence of worked bone. In addition, some of the ox bones displayed evidence of butchery. Above this was a thin layer of grey silty ash (2/001) containing frequent charcoal inclusions just 0.03m thick and animal bones from a herring, unidentified bird bone and sheep-sized bones. Some of these bones were calcined (burnt). The upper fill (2/005) was a 0.40m thick soft dark brownish orange sand, which contained a pot sherd, roof tile and three struck flints including a worked out multi-platform flake core and a long, curving, narrow bladelet core trimming flake. The pot sherd was of Ipswich-/Thetford–type ware which dates to AD900-1100. The roof tile is thought to be part of a ridge or hip tile, probably of post-medieval date.

7.2.3 Sealing this was subsoil (2/004) into which a 20th century pit was cut, it was left unexcavated. Above this was the topsoil (2/003).

7.3 Trench 3 (Figure 6)

Height	Context Number	Description
8.88m to 8.49m OD	(3/001)	Loosely compacted dark brownish grey clayey silt, topsoil.
8.49m to 7.92m OD	(3/002)	Loosely compacted dark brownish grey silty sand, subsoil.
8.22m to 7.66m OD	(3/007)	Loosely compacted, dark brownish grey silty sand.
7.66m to 7.64m OD	(3/010)	Loosely compacted pale whitish grey sand.

7.3.1 Natural Lowestoft sand (3/010) was present at 7.66m OD. Cutting this was a subcircular pit [3/009] with gently-sloping sides that was 2.20m long, 1.00m wide and 0.30m deep. This contained a single fill (3/008); mid brownish grey silty sand in nature.

7.3.2 Overlying the natural sand at the northern end of the trench was a layer of dark brownish grey silty sand (3/007), 0.40m deep. A single axe trimming flake was recovered from this layer. The presence of this flint may indicate a prehistoric landscape or may be a result of redeposited soils. This was cut by a small, curvilinear ditch [3/006] which terminated within the trench. The ditch was 3.50m long and 0.30m wide. The fill (3/005) was a dark brownish grey clayey silt up to 0.12m deep.

7.3.3 The ditch fill was cut by a second ditch [3/004], 1.00m wide, 0.40m deep and aligned east to west. This ditch was filled with heavy grey clay (3/003) which contained a struck flint in the form of the distal end of a blade. This fill was very similar to alluvial layers in Trenches 6 and 7 and it is probable that all of these deposits were formed at the same time.

7.3.4 The archaeological sequence was then sealed by the subsoil (3/002) 0.60m deep and the topsoil (3/001) 0.40m deep.

7.4 Trench 4

Height	Context Number	Description
12.30m to 11.35m OD	(4/001)	Loosely compacted dark brown sandy silt, occasional

		CBM, topsoil.
11.35m to 11.06m OD	(4/002)	Loosely compacted mid orange brown silty sand, occasional flint inclusions, subsoil.
11.06m to 11.02m OD-	(4/003)	Loosely compacted mid orange yellow sand.

7.4.1 Natural Lowestoft sands (4/003) were observed at a depth of 11.06m OD. Overlying this was naturally formed subsoil (4/002) 0.25m deep.

7.4.2 Cut through the subsoil (4/002) and natural sands (4/003) were three modern pits containing 20th century material. Due to their modernity they were not excavated. Sealing these pits was topsoil (4/001) measuring 0.95m deep.

7.5 Trench 5 (Figure 7)

Height	Context Number	Description
10.53m to 9.89m OD	(5/001)	Loosely compacted dark greyish brown, clayey sand, topsoil.
9.89m to 9.35m OD	(5/002)	Loosely compacted mid orange brown silty sand, occasional flint inclusions, subsoil.
9.35m to 9.30m OD-	(5/008)	Loosely compacted mid orange yellow sand.

7.5.1 Natural sand (5/008) occurred at 9.35m OD. Cut into this was a small subcircular pit [5/004] 0.70m long, 0.50m wide and 0.20m deep. This fill (5/003) was very red in colour indicating possible burning, but no other evidence of this was present.

7.5.2 At the western end of the trench a Middle Saxon inhumation burial was cut into the natural deposits. The burial was only partially exposed when the trench was initially dug; therefore it was extended southwards to reveal the whole grave. The cut [5/007] was c.1.80m long and 0.60m wide and 0.20m deep and was backfilled with redeposited natural sand. The skeleton (5/006) was supine, aligned north-south, with the head at the south end. The skeleton, which was 55% complete, was of moderate preservation and the individual is thought to have been 'middle aged' at death and probably male. The skeleton displayed dental pathologies and two other pathological conditions which require further analysis (see Appendix E). The grave fill contained sheep-sized long bones; probably not a result of primary deposition and a single sherd of unsourced sand-tempered ware dated to AD50-400. The skeleton has subsequently been radiocarbon dated to 1210 ± 40BP (c. 740 AD, Appendix J).

7.5.3 Sealing the pit and inhumation burial was subsoil (5/002), 0.45m thick. Above this was topsoil (5/001), 0.55m thick.

7.6 Trench 6

Height	Context Number	Description
9.43m to 9.19m OD	(6/001)	Loosely compacted dark greyish brown clayey silt. Occasional flint inclusions, topsoil.
9.19m to 8.34m OD	(6/002)	Loosely compacted mid greyish brown clayey silt, subsoil.
8.34m to 7.97m OD	(6/003)	Firmly compacted mid orange grey sandy clay,

		occasional charcoal inclusions, alluvial deposits from marshland.
7.97m to 7.93m OD-	(6/004)	Firmly compacted mid grey sand.

7.6.1 Natural sand (6/004) was observed at a depth of 7.97m OD. Above this was a layer of heavy grey sandy clay alluvium (6/003) 0.50m thick, that had been laid down under marshy conditions that were previously present in this area of site. This layer did not contain or overlie any archaeological features and was notably sterile.

7.6.2 Overlying this was subsoil (6/002) 0.80m thick and topsoil (6/001) 0.30m thick.

7.7 Trench 7

Height	Context Number	Description
10.91m to 10.35m OD	(7/001)	Loosely compacted dark greyish brown clayey silt, topsoil.
10.35m to 9.45m OD	(7/004)	Loosely compacted mid greyish brown clayey silt, subsoil.
9.45m to 9.37m OD-	(7/005)	Firmly compacted mid orange grey sandy clay, occasional charcoal inclusions, alluvial deposits from marshland.

7.7.1 Natural Lowestoft sand was not reached in this trench as no archaeological features were present cutting the mid orange grey alluvial clay (7/005). Overlying this deposit was mid greyish brown naturally occurring subsoil (7/004).

7.7.2 Cutting through the subsoil was a modern feature of unknown size or shape [7/003]; this was 1.00m deep and filled with pale yellow sand (7/002). This feature was cut by a modern unexcavated pit and then sealed by topsoil (7/001) 1.0m thick.

7.8 Trench 8

Height	Context Number	Description
10.03m to 9.57m OD	(8/001)	Loosely compacted, mid brownish grey sandy silt, topsoil.
9.57m to 8.72m OD	(8/002)	Very loosely compacted, dark brownish orange silty sand subsoil.
8.72m to 8.67m OD	(8/003)	Loosely compacted mid orange yellow sand.

7.8.1 Natural sand (8/003) was observed at a depth of 8.72m OD. Overlying this was 0.85m thick subsoil (8/002). This was sealed by topsoil (8/001).

7.8.2 No archaeological features were observed in this trench.

7.9 Trench 9

Height	Context Number	Description

11.81m to 11.19m OD	(9/001)	Loosely compacted orange brown sandy silt topsoil.
11.19m to 10.48m OD	(9/002)	Loosely compacted mid brownish orange silty sand, subsoil.
10.48m to 10.39m OD	(9/003)	Loosely compacted mid yellowish orange gravelly sand.

7.9.1 Natural Lowestoft sands and gravels (9/003) were observed at 10.48m OD, sealing this was 0.70m thick subsoil (9/002). Overlying this was topsoil (9/001) which was 0.60m thick.

7.9.2 No archaeological features were observed in this trench.

7.10 Trench 10 (Figure 8)

Height	Context Number	Description
11.94m to 11.66m OD	(10/001)	Loosely compacted mid greyish brown silty sand, occasional building material, modern topsoil.
11.66m to 11.02m OD	(10/002)	Loosely compacted mid orange sand, modern subsoil.
11.02m to 10.68m OD	(10/003)	Loosely compacted mid greyish brown, sandy silt, buried topsoil.
10.68m to 10.49m OD	(10/004)	Loosely compacted brownish orange sand, buried subsoil.
10.49m to 10.46m OD	(10/009)	Loosely compacted mid yellowish orange gravelly sand.

7.10.1 Natural sand (11/009) was reached at 10.49m OD. Two small ditches [10/006 and 10/008] were cut into the sand. Ditch [10/006] was 0.50m wide, 0.10m deep, with a v-shaped profile and ran southwest to northeast. It contained a single loosely compacted, mid greyish brown sandy silt fill (10/005). The other [10/008] was similar in shape but 1.20m wide and 0.20m deep and was aligned southeast to northwest. It again contained a single fill (10/007) very similar to (10/005).

7.10.2 Overlying these ditches was the original subsoil (10/004), a brownish orange sand 0.15m thick. Sealing this was a buried topsoil (10/003) 0.45m thick and mid greyish brown sandy silt. Sitting over this was a modern subsoil formed of redeposited natural (10/002) 0.65m thick, and modern topsoil (10/001) 0.30m thick. This is probably formed by levelling of the ground.

7.11 Trench 11 (Figure 9)

Height	Context Number	Description
12.46m to 12.17m OD	(11/001)	Loosely compacted, dark brown sandy silt, topsoil.
12.17m to 11.72m OD	(11/002)	Loosely compacted, orange sand, subsoil.
11.72m to 11.57m OD	(11/018)	Loosely compacted mid yellowish orange sand.

7.11.1 The natural Lowestoft sands and gravels (11/018) were reached at 11.72m OD. Cut into this at the northern end of the trench was a small ditch [11/003], 0.85m wide and 0.36m deep. This ditch was similar to most others found on this site being relatively small and v-shaped and was aligned east-west. It may have been a small boundary ditch or a drainage ditch. The fill (11/004) was a loosely compacted mid brown silty sand which contained foetal/neonate ox bones.

7.11.2 Three cuts contained animal bone; two appear to be specifically for burial. The largest cut [11/008] was 0.90m long, 0.45m wide and 0.30m deep, and contained the skeleton of a sheep (11/007). The fill (11/014) was dark greyish brown sandy silt, and quite loose.

7.11.3 The second cut [11/017] was 0.50m long, 0.40m wide and 0.35 m deep. It contained the semi-articulated skeleton of an adult dog (11/016). The fill (11/015) of [11/017], was very similar in nature to (11/014); being a dark greyish brown sandy silt. The fill also contained infant pig and dog bones.

7.11.4 Next to these burials, the third pit was small [11/005]; 0.29m long, 0.28m wide and 0.07m deep. The fill (11/006) was a loosely compacted, mid brown sandy silt. It is thought these three features may be related.

7.11.5 A fourth pit [11/013] was present in the trench. It was fairly large at 1.80m long, 1.40m wide and 0.56m deep. The fill (11/012) was loosely compacted dark orange brown sandy silt and contained butchered pig and ox bones, three clay pipe stems dated to 1610-1710 and three brick fragments dated to the 18th or 19th century (Appendix C and G). This feature may be associated with the wall (11/009) only a few metres away.

7.11.6 Sealing these features was 0.48m thick subsoil (11/002), followed by 0.36m thick topsoil (11/001). Cut through the topsoil and subsoil at the southern end of the trench was a foundation trench [11/011] 1.10m long, 0.60m wide and 0.50m deep. This contained a wall (11/009) aligned east-west which appears to represent the corner of a building. Three brick samples were taken from this wall; two probably date to the 16th to 17th centuries and one from the 18th or 19th century. This does not necessarily preclude a 16th century date for the wall, since the brick may have been part of a later repair. It is not clear how far this building extends due to modern truncation and the presence of modern topsoil in the southern part of site. Filling the foundation trench [11/011] was loose dark brown clayey silt (11/010).

7.12 Trench 12 (Figure 10)

Height	Context Number	Description
13.69m to 13.57m OD	(12/001)	Loosely compacted, dark brownish black sandy silt, modern overburden.
13.54m to 13.44m OD	(12/002)	Loosely compacted, pale greyish yellow, layer of modern redeposited natural.
13.44m to 13.11m OD	(12/003)	Loosely compacted, dark brown, sandy silt, old topsoil.
13.11m to 12.79m OD	(12/004)	Loosely compacted, mid brown silty sand, old subsoil.
13.57m to 13.53m OD	(12/005)	Loosely compacted, pale orange brown silty sand, modern layer.
12.79m to 12.69m OD	(12/008)	Loosely compacted mid yellowish orange sand.

7.12.1 Natural sand (12/008) was reached at 12.79m OD. Cutting this was a single, east-west aligned ditch [12/007] which terminated within the trench. This was 2.80m long, 0.40m wide and 0.11m deep. It was orientated southeast to northwest and extended for 3m from the trench edge before terminating. The ditch fill (12/006) was loosely compacted, mid brown, silty sand.

7.12.2 Sealing this ditch was the original subsoil (12/004) which was 0.35m thick and a 0.45m thick buried topsoil (12/003). These were sealed relatively recently by a layer of redeposited natural orange sand

0.11m thick, (12/002), a layer of builders sand 0.03m thick (12/005) and modern topsoil (12/001) 0.11m thick.

7.13 Trench 13 (Figure 11)

Height	Context Number	Description
13.63m to 13.22m OD	(13/011)	Loosely compacted, mid greyish brown, silty sand man made levelling layer.
13.22m to 12.64m OD	(13/012)	Firmly compacted orange sandy clay, subsoil.
12.64m to 12.60m OD	(13/013)	Loosely compacted orange yellow clayish sand.
13.36m to 13.23m OD	(13/014)	Firmly compacted yellow silty clay.

7.13.1 The natural Lowestoft sands were observed at 12.64m OD (13/013). At the west end of the trench yellow clay (13/014) was present at a depth of 13.36m. This is probably an outcrop of high clay natural. Into this was cut a probable ditch terminal [13/002] which was linear, steep sided, orientated north-south and 1.0m long 0.9m wide and 0.23m deep. The fill (13/001) was a loosely compacted greyish orange sand. It may be an enclosure ditch evidenced by a small subcircular posthole [13/004] located just to the south. The posthole was 0.45m long, 0.40m wide and 0.10m deep. It contained a similar fill (13/003) to the ditch and may have held a gate post.

7.13.2 A small subcircular, steep sided pit [13/008] was also cut into the clay; it was 1.20m long, 0.75m wide and 0.11m deep. This pit had a single fill (13/007); which was a loosely compacted, mottled brownish grey sandy silt.

7.13.3 A north-south ditch [13/006] also cut into the clay. It was linear with irregular sides due to disturbance by tree roots, it measured 1.25m wide and 0.45m deep. The ditch fill (13/005) was loosely compacted greyish orange silty clay. This ditch was cut by a modern circular posthole [13/010], 0.55m in diameter and 0.24m deep. This was filled with (13/009), dark brownish black very loose clayish silt.

7.13.4 Sealing all of these features was the subsoil (13/012) which was 0.30m deep and the modern topsoil (13/011) which was 0.40m deep.

8 FINDS

8.1 Pottery

8.1.2 Only two sherds of pottery were found during the evaluation. One was from (2/005), the fill of the pit in Trench 2. The pottery is medieval in date; it is not known if this is intrusive or residual as the pit also contained three struck flints and a probable post-medieval roof tile.

8.1.3 The other sherd of pottery was from the fill (5/005) of the inhumation in Trench 5 and is an unsourced sand-tempered ware dated to AD 50-100. It must be noted that this pottery may be residual.

8.2 Building Material

8.2.1 Three contexts contained building material; two of which were from Trench 11. This included brick samples from wall (11/009) and three brick fragments from pit (11/012). A fragment of roofing tile probably, post-medieval, was recovered from pit (2/005).

8.3 Animal Bone

8.3.1 Animal bone was found in a number of contexts within Trenches 2, 5 and 11. These included a sheep (11/007) and dog (11/016) burial. The animal burials were only 1m apart and are likely to be fairly modern.

8.3.2 A number of species were represented in the hand-collected assemblage including cow, sheep, pig, dog, horse and deer. The wet-sieved assemblage from the samples included herring and unidentified bird bone. The carcase-part representation of the major domestic animals showed a bias towards areas of good meat-bearing quality. The bulk of the assemblage is thought to represent disposal of butchery and post-consumption waste.

8.4 Molluscs

8.4.1 The only shell recovered from the site was common/flat oyster shell from pit [2/002]. This represents post-consumption waste.

8.5 Human Bone

8.5.1 The skeleton in Trench 5 (5/006) was supine and aligned north-south, with the head at the south end. The skeleton, which was 55% complete, was of moderate preservation and the individual is thought to have been 'middle aged' at death and probably male. The skeleton displayed dental pathologies and two other pathological conditions which require further analysis. Radiocarbon analysis dated the inhumation to approximately 740 AD.

8.6 Flint

8.6.1 Five pieces of knapping waste were identified from three contexts (2/005, 3/003, 3/007). This may be a result of prehistoric activity at the site or may be the result of imported/redeposited soils. The specialist tentatively suggests a Neolithic date for the material.

8.7 Other Finds

8.7.1 Two fragments of lava quern were found in context (1/003). They are probably of Roman or Late Saxon/early medieval date. Three 18th century clay tobacco pipe was recovered from context (11/012).

8.8 Botanical evidence

8.8.1 Environmental samples were taken but no botanical evidence was identified.

9 Conclusions and Recommendations

9.1 Evidence of both the natural and man-made environment was present. The natural slope of the site descends to the northeast, from 12.60mOD in Trenches 12 and 13, to 7.65mOD in Trench 3. The natural environment is represented by an area formerly occupied by marshland on the eastern edge of the site (Trenches 6 and 7). One ditch was filled with silty clay and may be evidence of a flooding event associated with the marsh.

9.2 The archaeological features are of low density and the most frequent features are narrow ditches, which are likely to be the remnants of boundaries, probably field boundaries, although one or more may represent settlement boundaries in that flint flakes are present, in the ditch from Trench 3 and the large pit from Trench 2. Given the presence of worked flints of probable Neolithic date, it seems reasonable to suggest that scale activity took place on or near the site in the Neolithic period.

9.3 The nature of the large pit in Trench 2 is unclear. The pottery within is dated as medieval, the building material is probably post-medieval but the presence of flint in the feature indicates a prehistoric date. Either the pottery and building material are intrusive or the flint is residual. The deposit of ash is unusual, and may be evidence of hearth-clearance or even industrial residue.

9.4 Only a single sherd of Roman pottery was retrieved from the site. This came from the fill of the inhumation burial in Trench 5, the radiocarbon date for the inhumation placing it in the mid 8th century AD, towards the end of the Middle Saxon period. This date would place the inhumation at the founding of Halesworth and it was possibly related an earlier church.

9.5 Only a single sherd of medieval pottery was discovered on site, in (2/005) and this seems likely to be intrusive considering the worked flint that was found in the same feature.

9.6 Although Halesworth was only a minor medieval settlement it is nonetheless surprising that there is such a scarcity of finds from this period especially given the proximity of St Mary's Church. The reason for this could be because part of the site would have been marshy and so little activity took place close to this boggy area.

9.7 Across the site post-medieval activity was observed. At the southern end of Trench 11 the wall (11/009) is of a 16th to 17th century date. More of this building may be visible slightly to the south where a number of similar bricks are exposed. There is another building of a similar period to the west.

9.8 Most of the post-medieval pits on site appear to be 19th or 20th century.

9.9 The character of the natural sand is very soft and easily moved. This would account for potential intrusive finds.

9.10 The evaluation met its aims; evidence of low level prehistoric activity was discovered. Saxon activity was detected including the discovery of an inhumation burial. Very little medieval activity was present. Significant post-medieval activity was detected including the foundation of a building and various other features.

9.11 The majority of the features were identified in excess of 1.00m below ground level. Depending on the depth and type of foundation of any future development it may be that the majority of the archaeological features will remain undisturbed, enabling a situation for preservation *in-situ*, rather

than by record. Only the overburden in the west corner was significantly shallower, being approximately 0.30 – 0.40m thick.

9.12 Publication of this phase of work will be through the ADS OASIS form (Appendix H).

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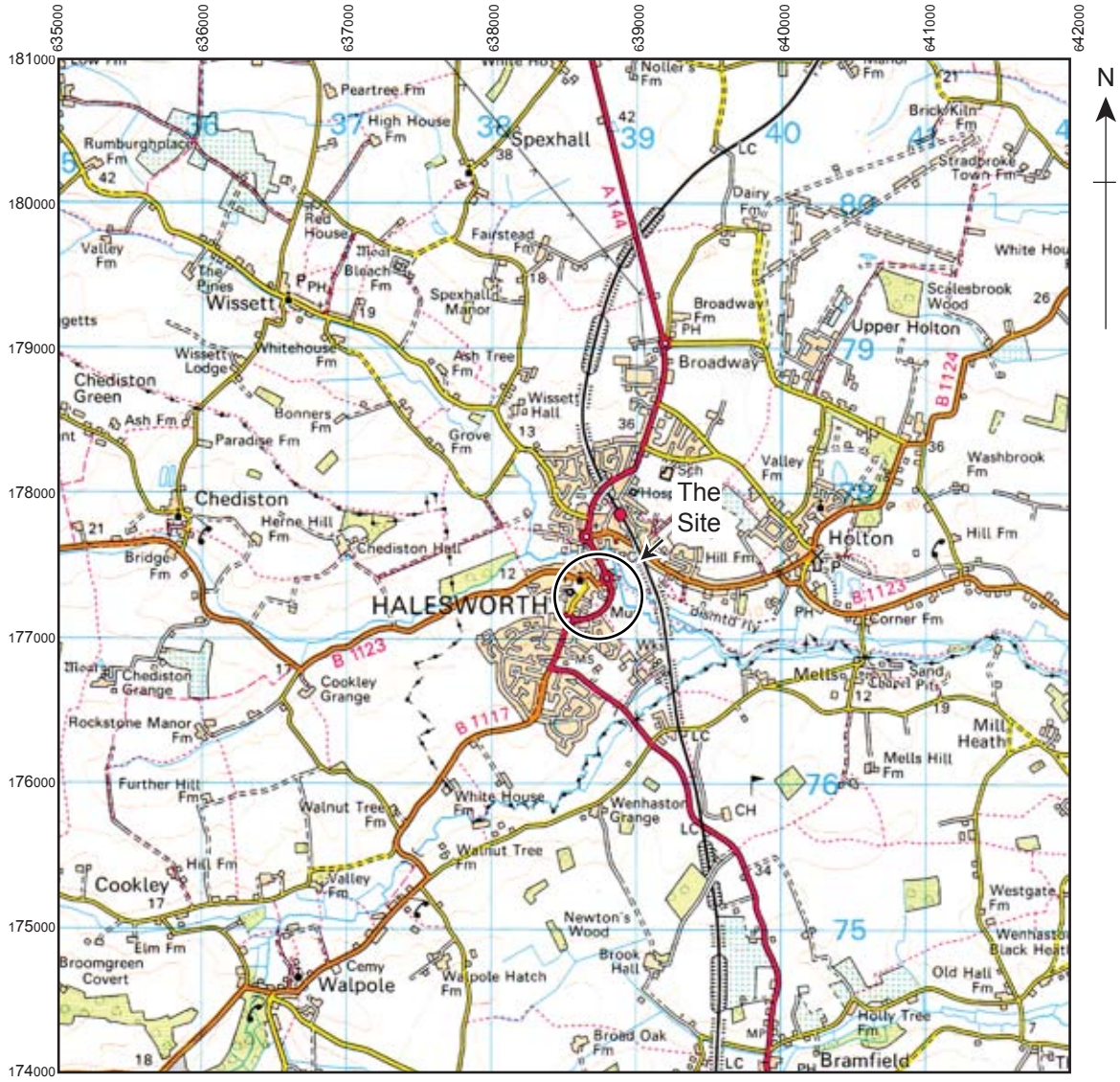

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500m 0 2 km

1:50 000

Figure 1: Site Location

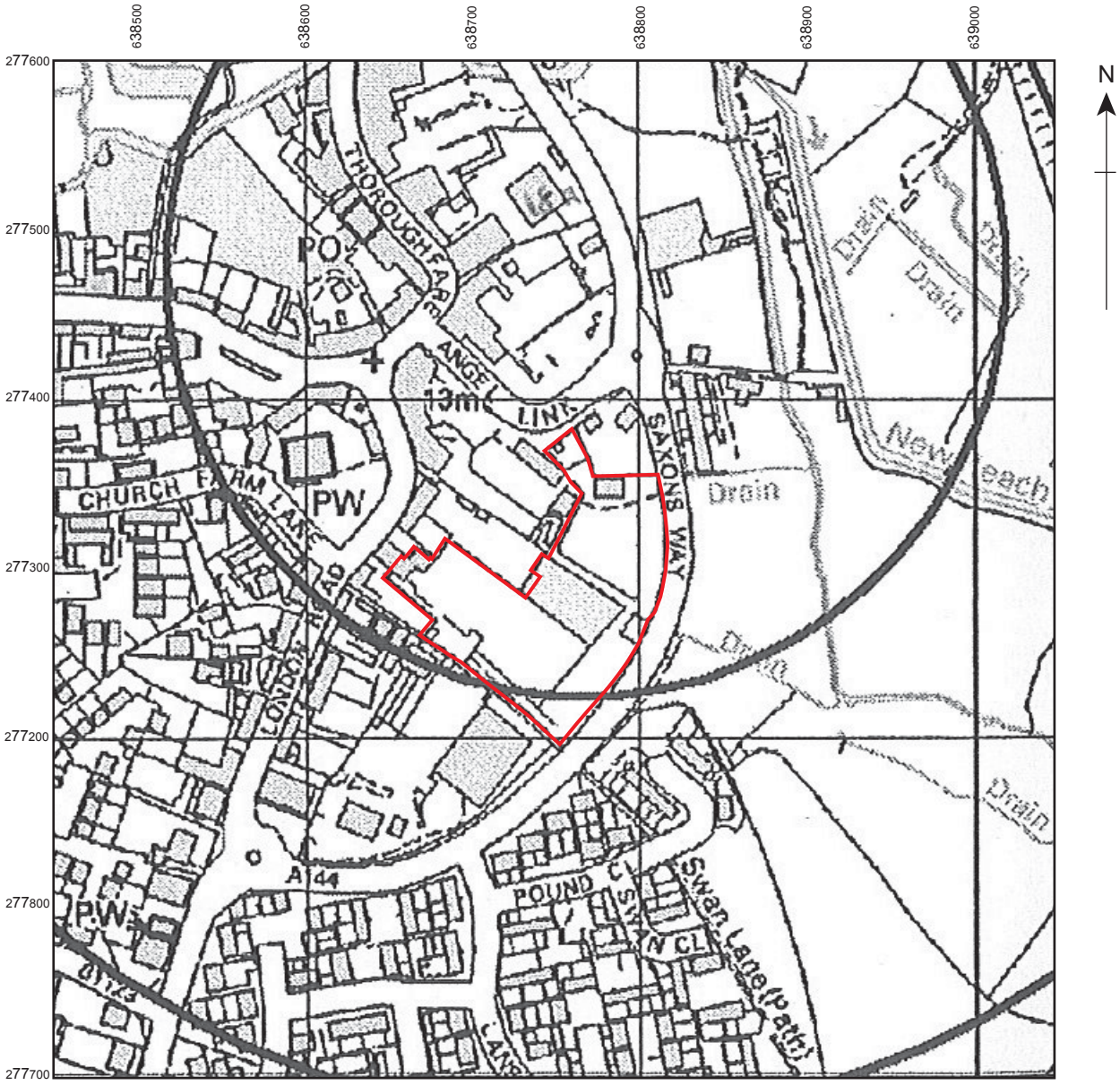

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Figure 2: Detailed Site Location

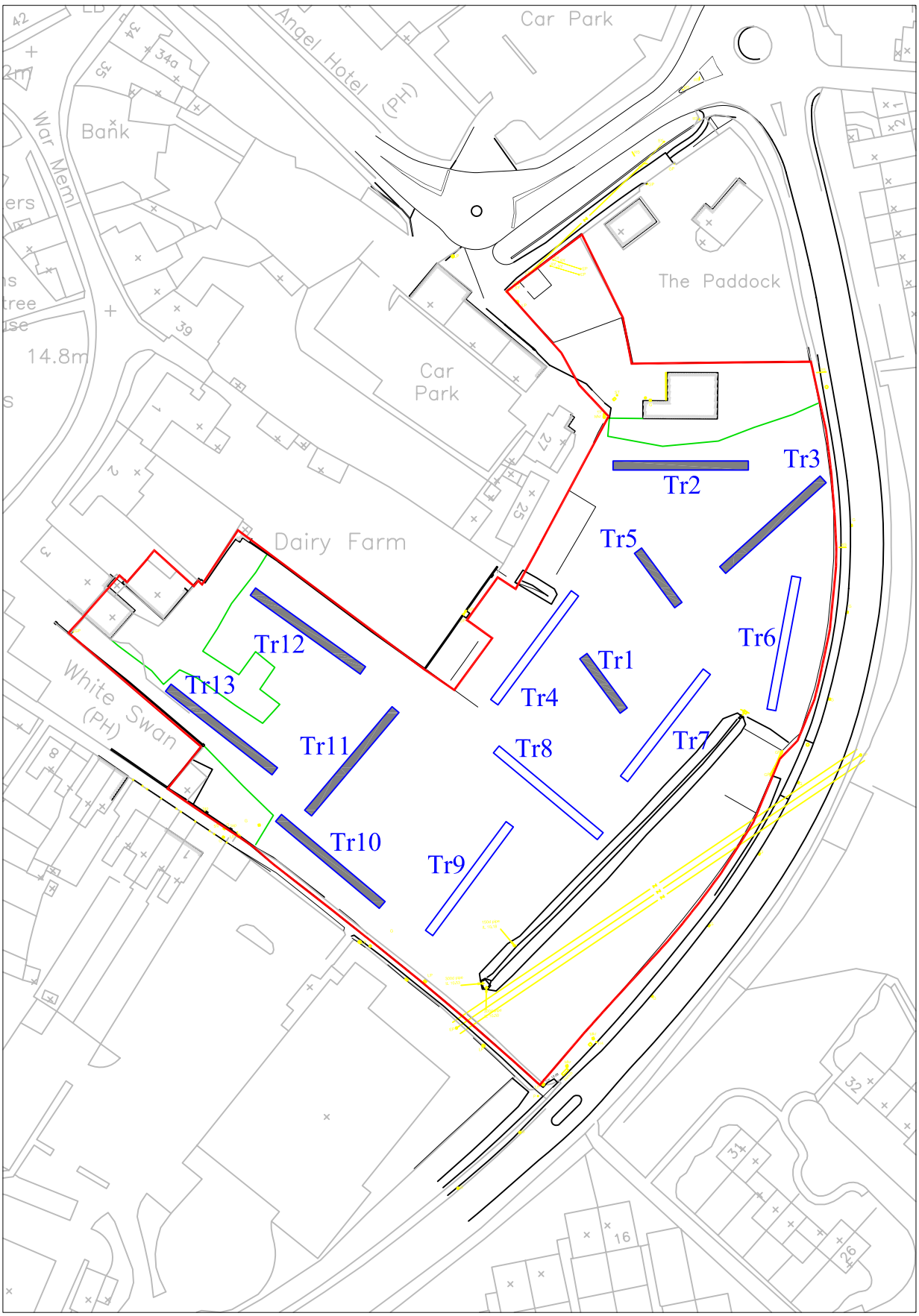

Figure 3: Evaluation Trench Location Plan

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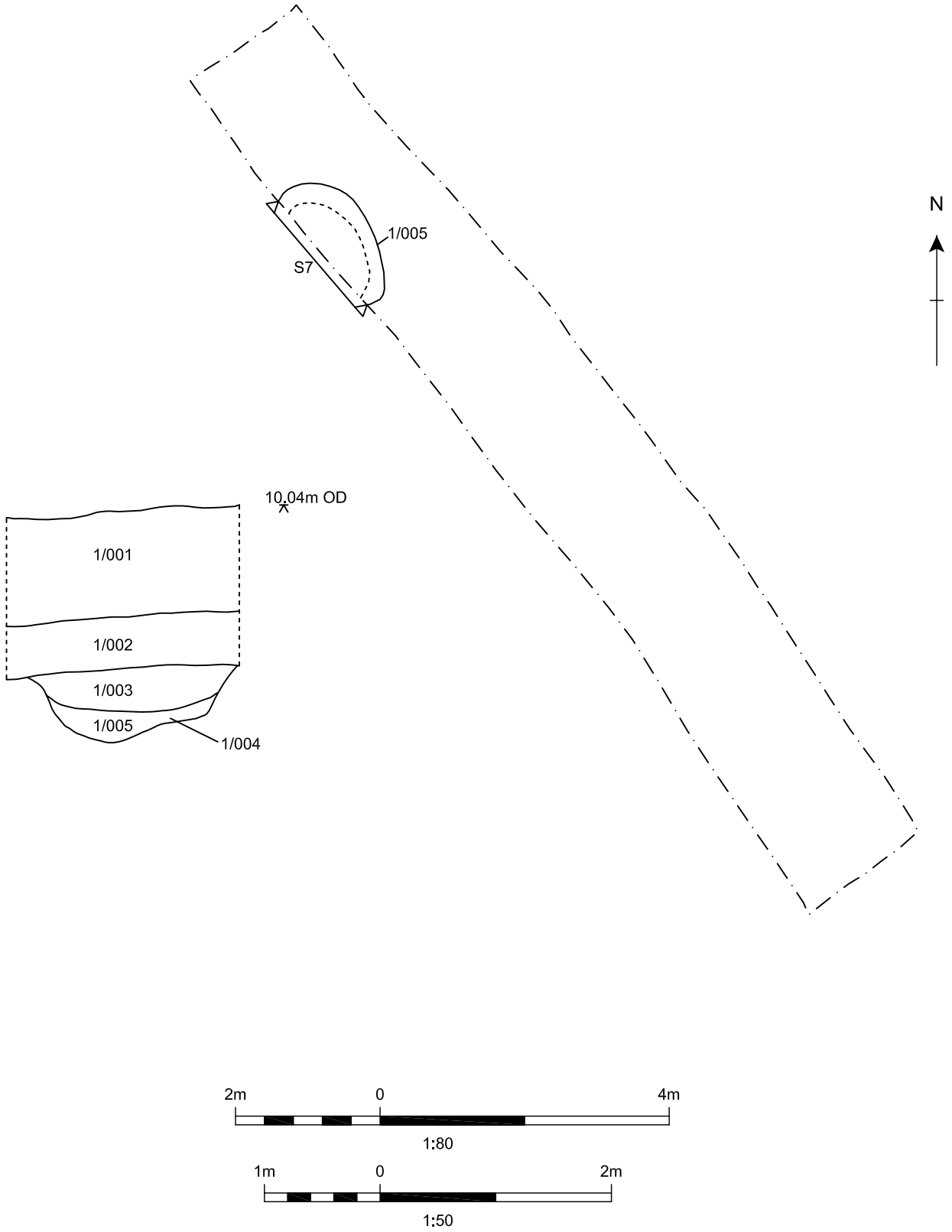

Figure 4: Trench 1: Plan (1:80) & Section (1:50)

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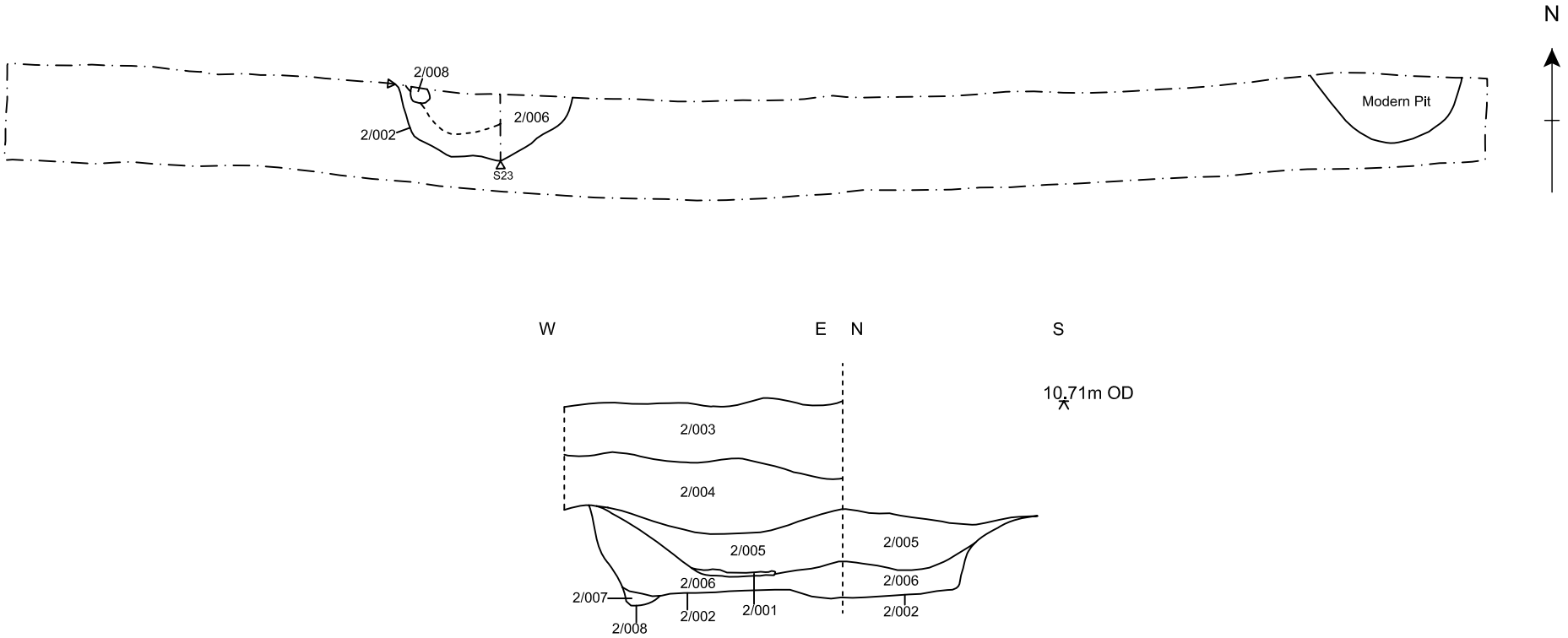

Figure 5: Trench 2: Plan (1:125) & Section (1:50)

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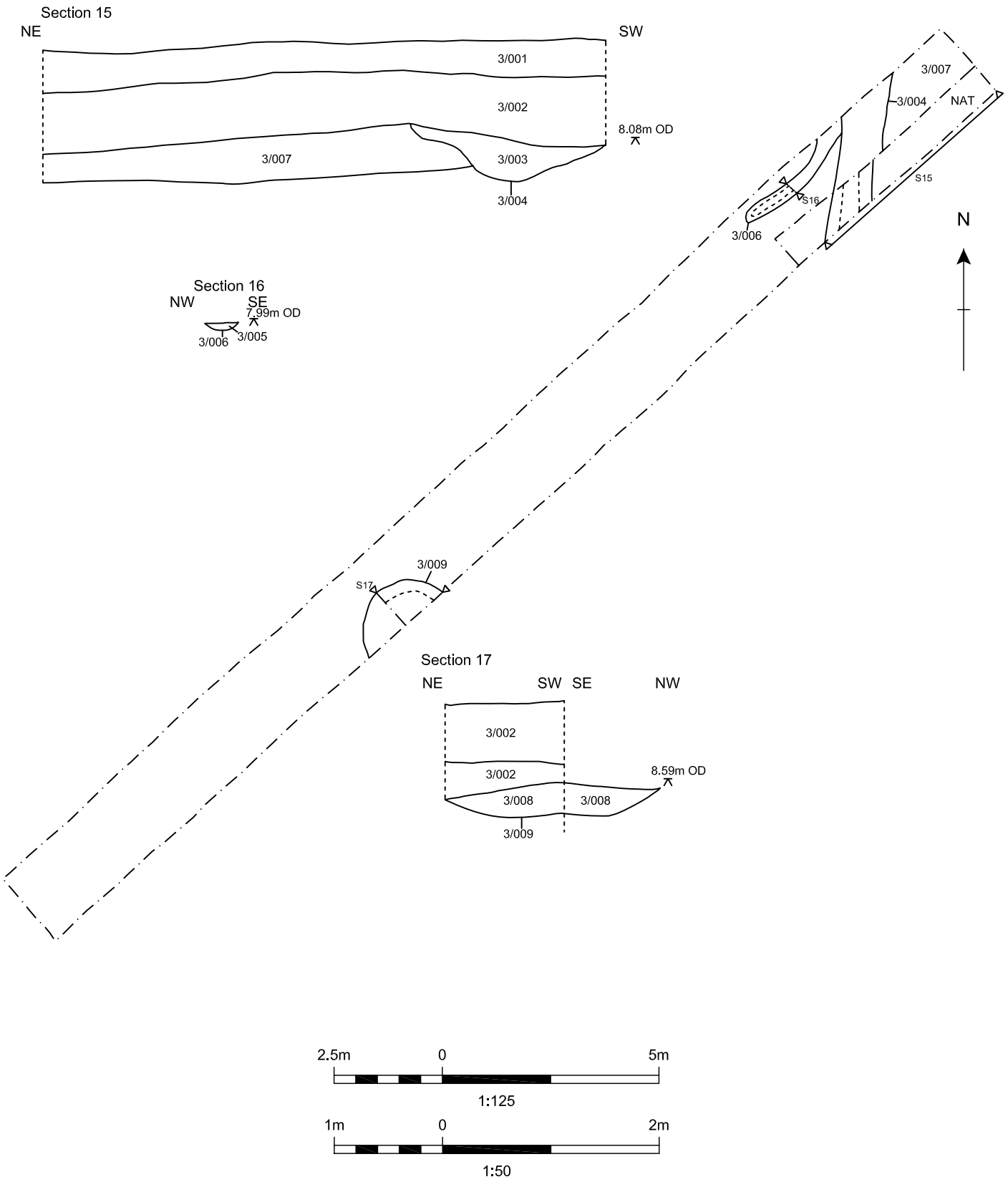

Figure 6: Trench 3: Plan (1:125) & Sections (1:50)

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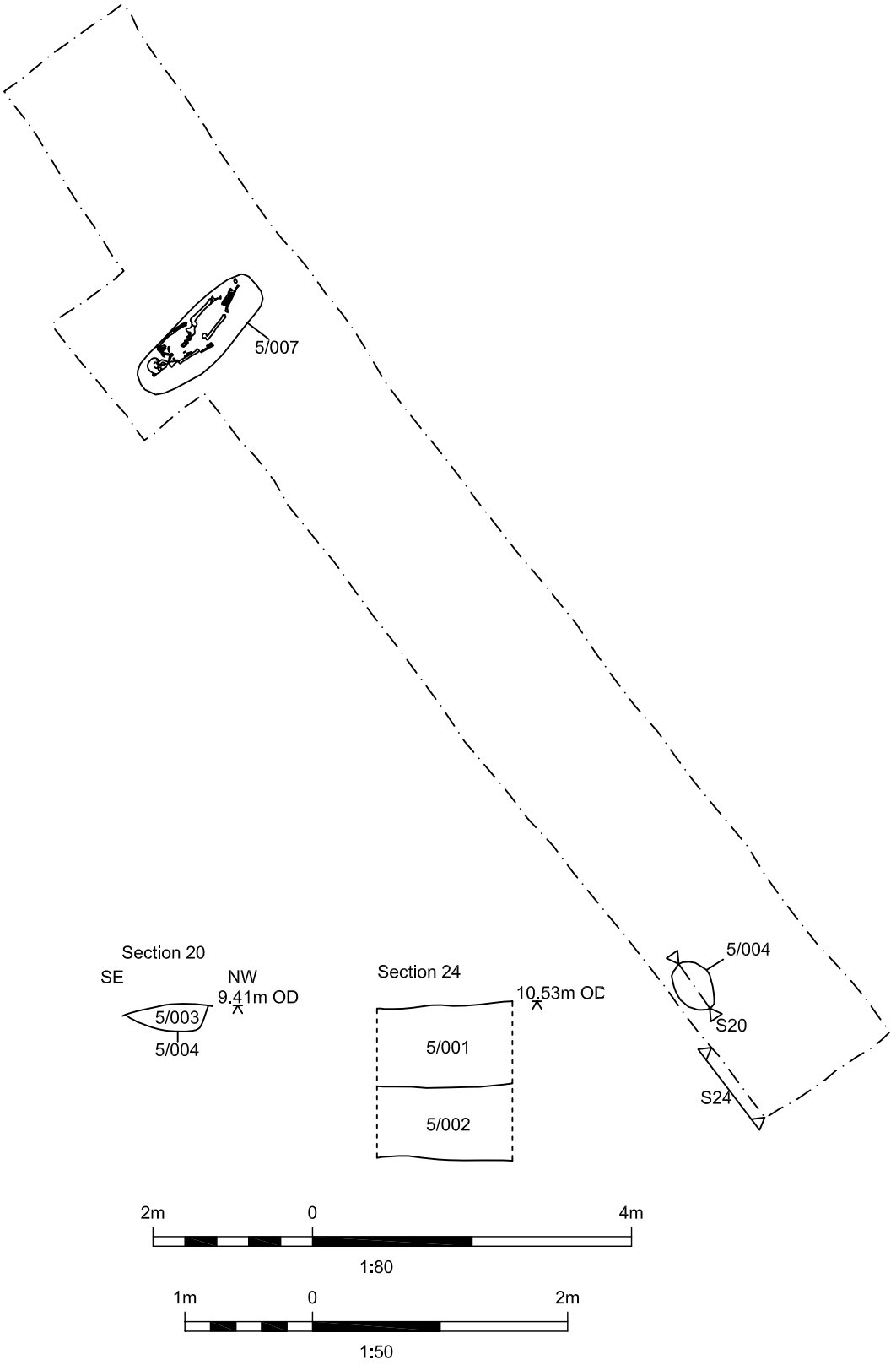

Figure 7: Trench 5: Plan (1:80) & Sections (1:50)

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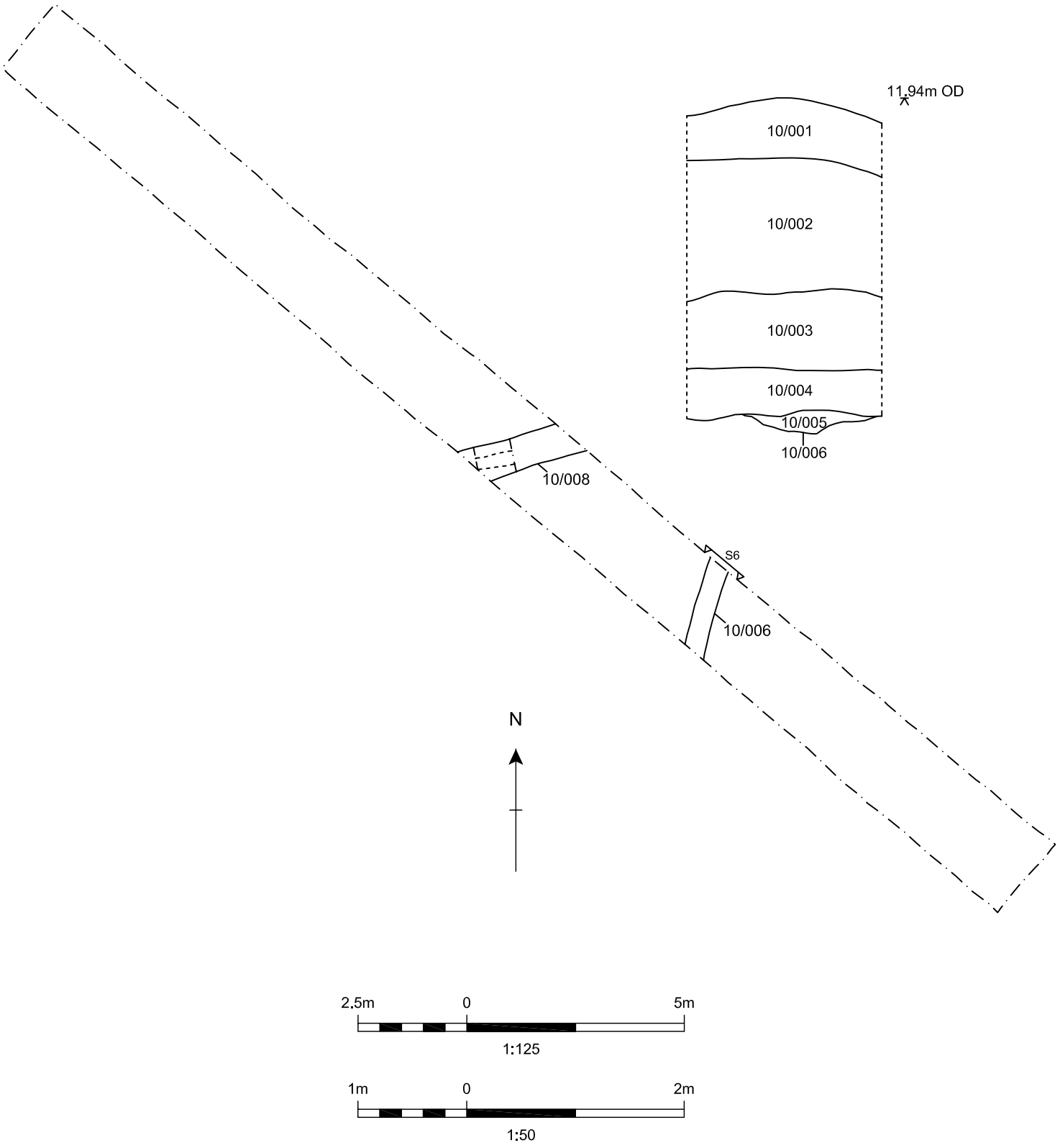

Figure 8: Trench 10: Plan (1:125) & Sections (1:50)

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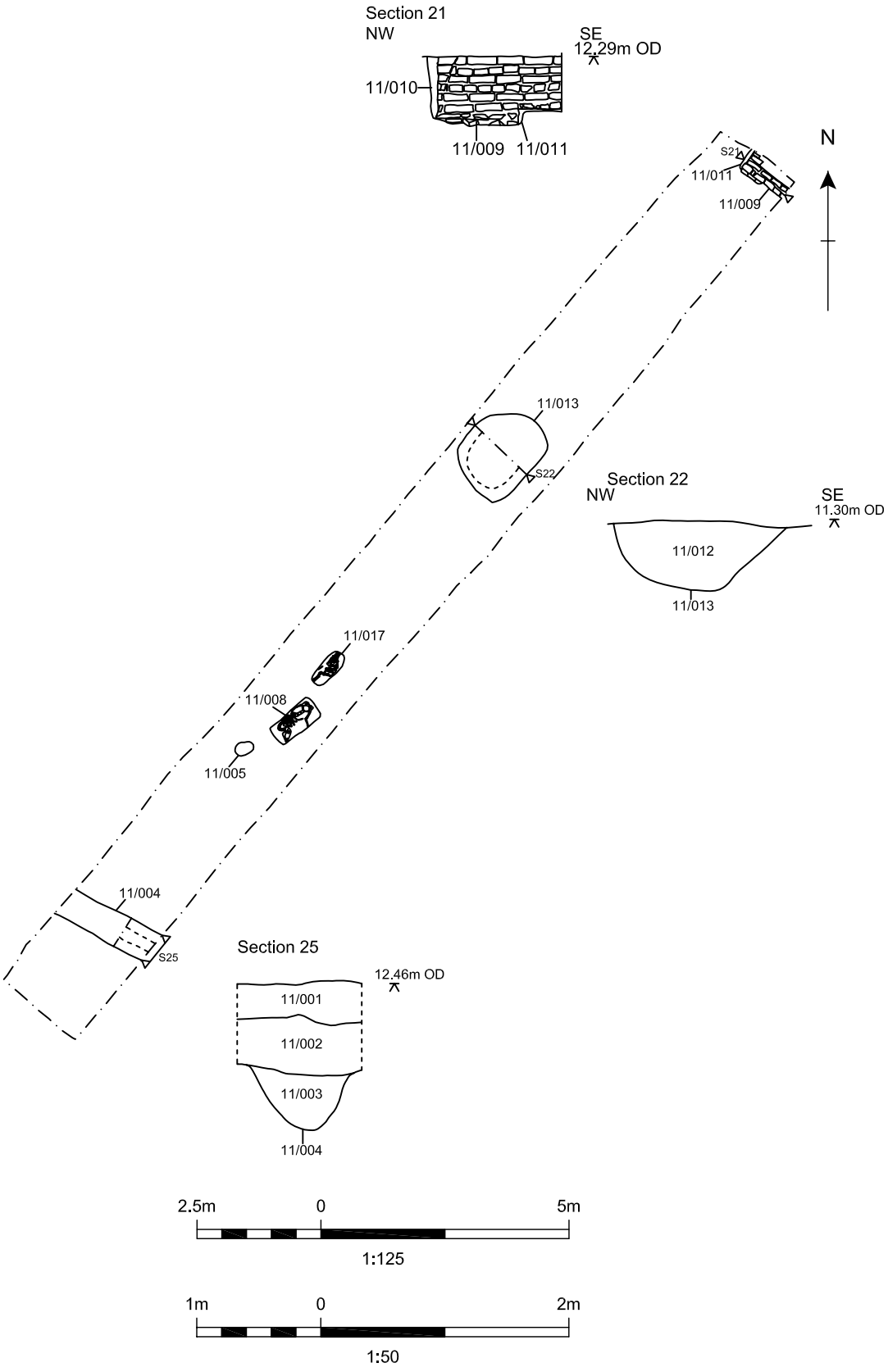

Figure 9: Trench 11: Plan (1:125) & Sections (1:50)

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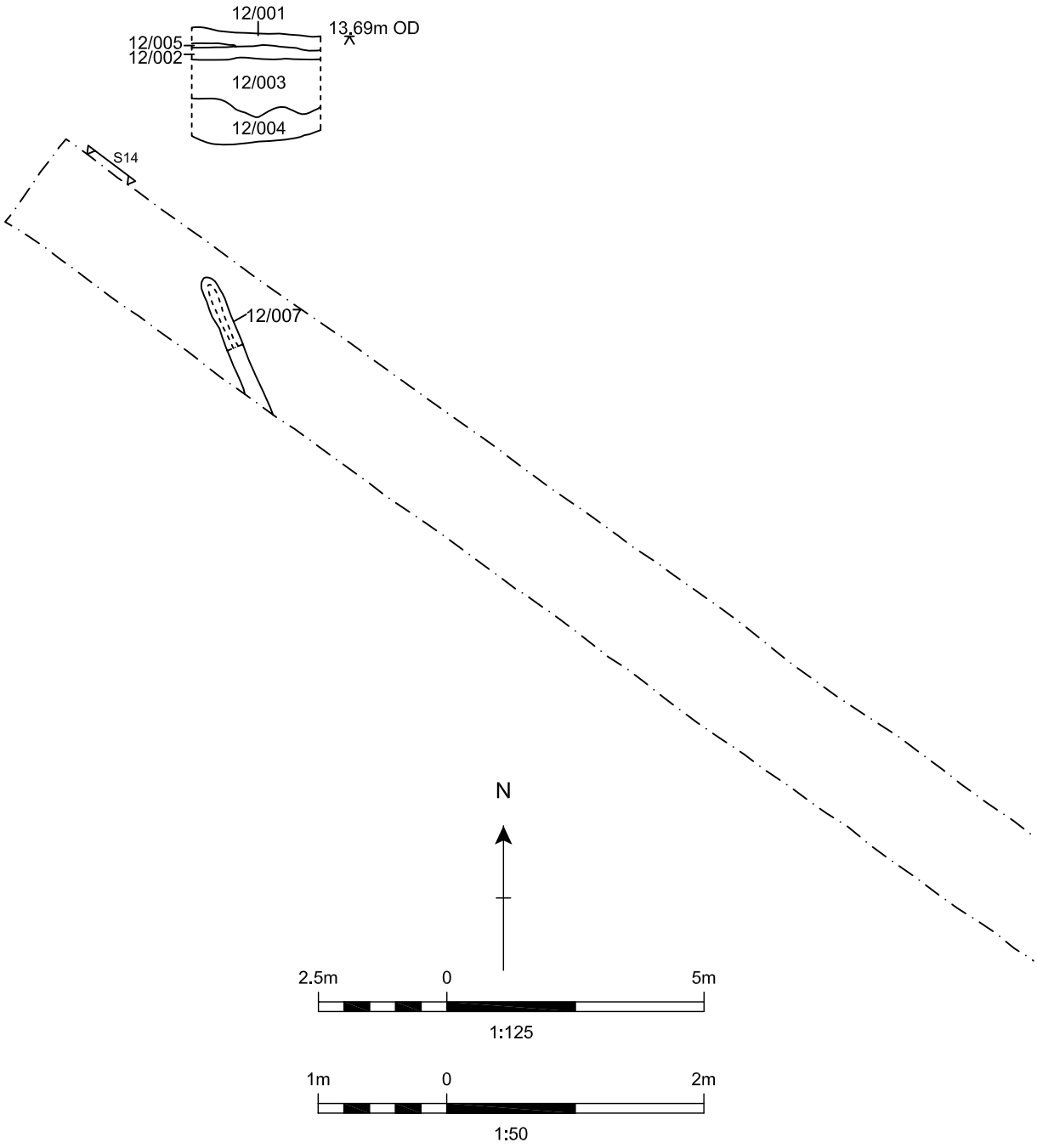

Figure 10: Trench 12: Plan (1:125) & Section (1:50)

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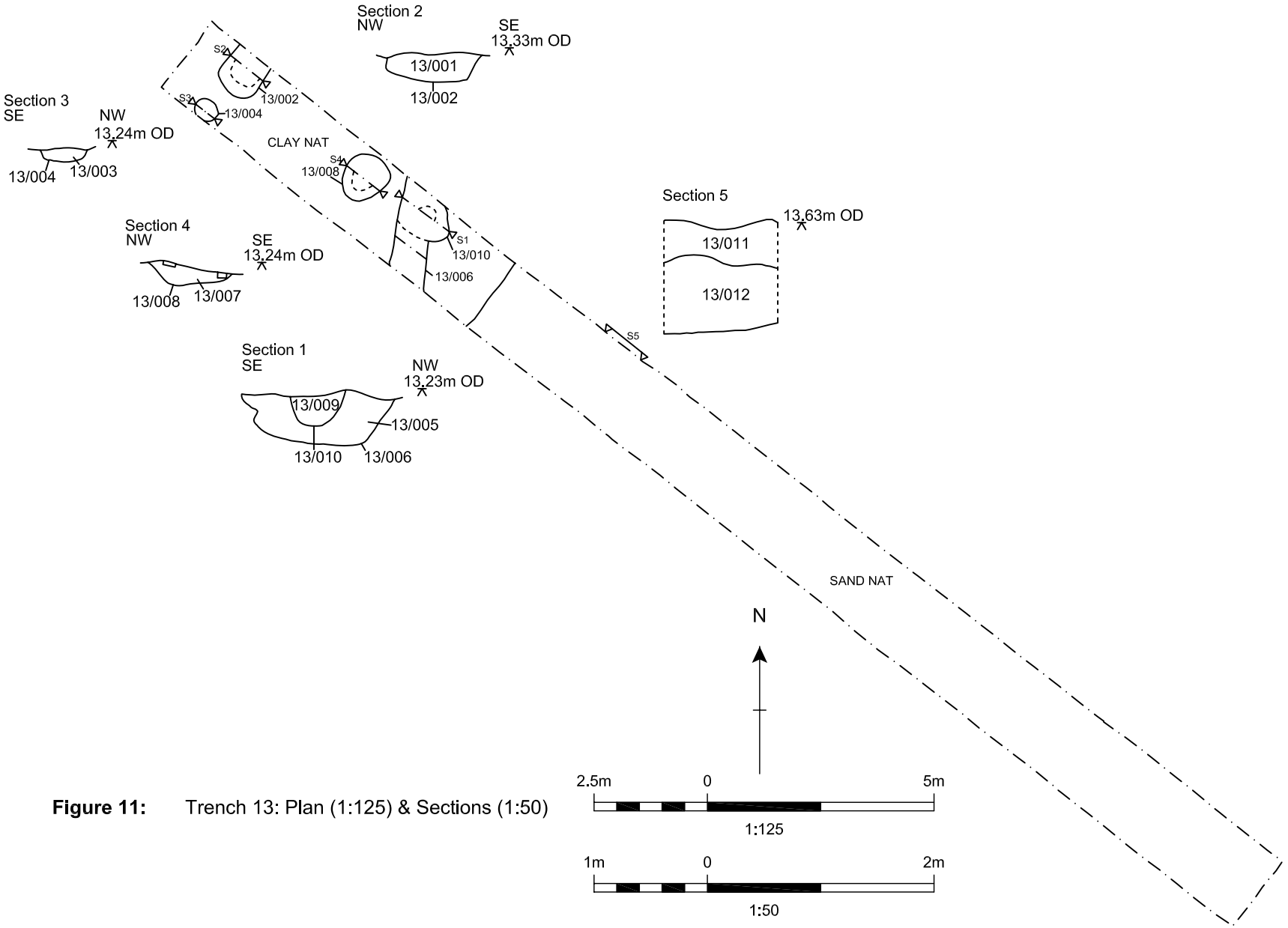

Figure 11: Trench 13: Plan (1:125) & Sections (1:50)

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Appendices

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Appendix A– Context Register

Context.	Description	Length/m	Width/m	Depth/m
1/001	Topsoil	15.00	1.80	1.00
1/002	Subsoil	15.00	1.80	0.60
1/003	Pit Fill	1.60	0.70	0.40
1/004	Pit Fill	1.20	0.60	0.20
1/005	Pit Cut	1.60	0.70	0.60
1/006	Natural Sand	15.00	1.80	-
2/001	Pit Fill	0.60	0.50	0.03
2/002	Pit Cut	3.50	1.40	0.60
2/003	Topsoil	30.00	1.80	0.60
2/004	Subsoil	30.00	1.80	0.60
2/005	Pit Fill	3.50	1.40	0.40
2/006	Pit Fill	3.50	1.40	0.50
2/007	Posthole Fill	0.30	0.25	0.50
2/008	Posthole Cut	0.30	0.25	0.50
2/009	Natural Sand	30.00	1.80	-
3/001	Topsoil	30.00	1.80	0.40
3/002	Subsoil	30.00	1.80	0.60
3/003	Ditch Fill	1.80	1.0	0.40
3/004	Ditch Cut	1.80	1.0	0.40
3/005	Ditch Fill	3.50	0.3	0.12
3/006	Ditch Cut	3.50	0.3	0.12
3/007	Layer	3.80	1.80	0.40
3/008	Pit Fill	2.20	1.00	0.30
3/009	Pit Cut	2.20	1.00	0.30
3/010	Natural Sand	30.00	1.80	-
4/001	Topsoil	30.00	1.80	0.95
4/002	Subsoil	30.00	1.80	0.25
4/003	Natural Sand	30.00	1.80	-
5/001	Topsoil	15.00	1.80	0.55
5/002	Subsoil	15.00	1.80	0.45
5/003	Pit Fill	0.70	0.50	0.20
5/004	Pit Cut	0.70	0.50	0.20
5/005	Grave Fill	1.80	0.60	0.20
5/006	Skeleton			
5/007	Grave Cut	1.80	0.60	0.20

5/008	Natural Sand	15.00	1.80	-
6/001	Topsoil	30.00	1.80	0.30
6/002	Subsoil	30.00	1.80	0.80
6/003	Alluvial Clay	30.00	1.80	0.50
6/004	Natural Sand	30.00	1.80	-
7/001	Topsoil	30.00	1.80	1.0
7/002	Sandy Fill	2.20	1.80	1.0
7/003	Large Feature	2.20	1.80	1.0
7/004	Subsoil	30.00	1.80	0.90
7/005	Alluvial Clay	30.00	1.80	0.10
8/001	Topsoil	30.00	1.80	0.50
8/002	Subsoil	30.00	1.80	0.98
8/003	Natural Sand	30.00	1.80	-
9/001	Topsoil	30.00	1.80	0.60
9/002	Subsoil	30.00	1.80	0.70
9/003	Natural Sand	30.00	1.80	-
10/001	Modern Topsoil	30.00	1.80	0.30
10/002	Modern Subsoil	30.00	1.80	0.65
10/003	Old Topsoil	30.00	1.80	0.45
10/004	Subsoil	30.00	1.80	0.15
10/005	Ditch Fill	1.80	0.50	0.10
10/006	Ditch Cut	1.80	0.50	0.10
10/007	Ditch Fill	1.80	1.20	0.20
10/008	Ditch Cut	1.80	1.20	0.20
10/009	Natural Sand	30.00	1.80	-
11/001	Topsoil	30.00	1.80	0.36
11/002	Subsoil	30.00	1.80	0.48
11/003	Ditch Cut	1.80	0.85	0.44
11/004	Ditch Fill	1.80	0.85	0.44
11/005	Pit Cut	0.29	0.28	0.07
11/006	Pit Fill	0.29	0.28	0.07
11/007	Animal Skeleton			
11/008	Animal Grave Cut	0.90	0.45	0.30
11/009	Wall	1.10	0.55	0.45
11/010	Foundation Trench Fill	1.20	0.60	0.08
11/011	Foundation trench Cut	1.10	0.60	0.50
11/012	Pit Fill	1.80	1.40	0.56

11/013	Pit Cut	1.80	1.40	0.56
11/014	Animal Grave Fill	0.90	0.45	0.30
11/015	Animal Grave Fill	0.50	0.40	0.35
11/016	Animal Skeleton			
11/017	Animal Grave Cut	0.50	0.40	0.35
11/018	Natural Sand	30.00	1.80	-
12/001	Modern Topsoil	30.00	1.80	0.11
12/002	Modern Subsoil	30.00	1.80	0.11
12/003	Old Topsoil	30.00	1.80	0.45
12/004	Subsoil	30.00	1.80	0.35
12/005	Modern Layer	1.80	0.35	0.03
12/006	Ditch Fill	2.80	0.40	0.11
12/007	Ditch Cut	2.80	0.40	0.11
12/008	Natural Sand	30.00	1.80	-
13/001	Ditch Fill	1.00	0.90	0.23
13/002	Ditch Cut	1.00	0.90	0.23
13/003	Posthole Fill	0.45	0.40	0.10
13/004	Posthole Cut	0.45	0.40	0.10
13/005	Ditch Fill	1.80	1.25	0.45
13/006	Ditch Cut	1.80	1.25	0.45
13/007	Pit Fill	1.20	0.75	0.11
13/008	Pit Cut	1.20	0.75	0.11
13/009	Posthole Fill	0.56	0.55	0.24
13/010	Posthole Cut	0.56	0.55	0.24
13/011	Modern Topsoil	30.00	1.80	0.40
13/012	Subsoil	30.00	1.80	0.30
13/013	Natural Sand	21.50	1.80	-
13/014	Natural Clay	8.50	1.80	-

Appendix B – Pottery Assessment

Amy Thorp, Museum of London Archaeology Service

Quantification

Summary/Introduction

Medieval pottery	5g	1 sherd
Roman pottery	5g	1 sherd

Just two sherds from separate contexts were found at the site at Halesworth. They indicate the presence of both Roman and Medieval activity (in the case of the latter the sherd may be intrusive in the context).

Methodology

The pottery was examined macroscopically using a binocular microscope (x20). It was recorded on proforma sheets and an Excel spreadsheet (rpot01.xls). Standard MoLAS pottery codes have been used for recording purposes, the dates of which can be found on the Excel spreadsheet. The numerical data comprises sherd count, estimated vessel count (ENV), and weight.

Discussion

Context 2/005 contained a single sherd of Ipswich-/Thetford-type ware (THET) which can be dated to AD 900–1100. This context could be identified as of Medieval date. However, as noted in the evaluation report on the site there was a good quantity of Prehistoric struck flint in the same context. Therefore, it is likely that this single Medieval sherd of pottery is intrusive.

Context 5/005 contained a single sherd of unsourced sand-tempered ware (SAND) dated to AD 50–400. This sherd was found associated with a grave cut, and can confirm a Roman date is likely. A more specific Roman date is not possible unless the sherd was from a dated local grey ware industry.

Analysis of Potential

Due to its size, the pottery assemblage from Halesworth has very limited potential for the refinement of the dating once the spot-date information has been fully integrated with the stratigraphic sequence.

Significance of data

This assemblage has limited local significance showing the presence of possible Roman burial activity in Halesworth

Revised Research Aims

The pottery does not suggest any revised research aims.

Method Statements

For publication, material from this assessment may be incorporated within the principal text. No further specialist input is required.

Table 1. The Pottery

Context	Context TPQ	Context TAQ	Comments on date range	Type	Size	Fabric	?	Form	?	Decoration	Shds	Env	State	Comments	Wt	Fabric date
2/005	900	1100	Possibly intrusive?	M	S	THET					1	1		Identification of fabric provided by Lyn Blackmore	5	900-1100
5/005	50	400		R	S	SAND					1	1		Fabric from local industry?	5	50-400

Appendix C - Building Material Assessment

Terence Paul Smith, Museum of London Archaeology Service

Quantification

A total of 8,950gm of building material, from three contexts, was examined; it comprises three bricks (context 11/009), three brick fragments (context 11/012), and one roof tile fragment (context 2/005).

Summary/Introduction

The building materials have been given site-specific fabric numbers (B = brick, T = roofing tile): see below.

Methodology

The building materials were examined microscopically (x10) to establish fabric types. Surviving dimensions and any other relevant features have been recorded. All data have been entered into an Excel database.

Fabric types

(i) Bricks
B1 Red, fairly sandy with few other inclusions
B2 Red, little sand, numerous calcium carbonate specks, some black iron oxides
B3 Red, fine matrix with scatter of tiny calcium carbonate specks
B4 Buff, fairly fine matrix with some black iron oxides and occasional red streaks

(ii) Roofing tile
T1 Red, moderately sandy with some black iron oxides

Context 11/009: The three bricks from this possibly 16th-century wall are in fabrics B1, B2, and B3; they measure respectively 240 x 112 x 55–60mm, 240 x 114 x 58mm, and 237 x 115 x 56mm. The first two are in red fabrics and are almost certainly handmade products. They are perhaps of 16th-century date, consonant with the supposed date of the wall, although a date in the following century certainly cannot be ruled out. The third brick is also in a red fabric; it has fairly sharp arrises and may be a machine-made product. It is probably of 18th- or, even more probably, of 19th-century date, despite its thinness – equivalent to just under 2¼ inches: possibly its *intended* use was as a paviour. This does not necessarily preclude a 16th-century date for the wall, since the bricks may have been used for later repair work.

Context 11/012: Two of the three brick fragments from this (unspecified) context are in fabric B1, a red fabric. One preserves its thickness of 58mm; no other dimensions are preserved. The fragments have fairly sharp arrises but are probably handmade products. They perhaps date from the 18th century, although this can be said with no great confidence. The third fragment is in fabric B4, a buff fabric. It preserves only its thickness of 51mm. It has sharp arrises and is possibly a machine-made product. It is impossible to date with any confidence, but *may* be of the 19th century, despite its thinness – equivalent to only 2 inches. It may have been manufactured as a paviour, a garden edging-brick, or for some other specialist application.

Context 2/005: The fragment of roofing tile from this posthole fill is in fabric T1, a red fabric. Only its thickness of 19mm is preserved. Its upper face shows a slight concave curvature, suggesting that it is part of a ridge or hip tile. (It cannot be from a pantile – a common form of roofing in Suffolk from *c.*1600 – since it has a sanded lower face, and pantiles were smoothed on *both* faces.

Suffolk has a long established brick and tile industry, and it is likely that all the materials were made fairly locally.

Analysis of Potential

The building material has little potential. The most that can be said is that two of the bricks are not inconsistent with a 16th-century date for the brick wall 11/009 – but they certainly cannot *prove* such a date.

Significance of data

The building material is commonplace – especially in East Anglia – and has no significance.

Revised Research Aims

The building material does not suggest any revised research aims.

Method Statements

For publication, material from this assessment may be incorporated within the principal text. No further specialist input is required.

Table 2. The Building Material

SITE	CONTEXT	FABRIC	FORM	WEIGHT (gm)	AMOUNT	COMMENTS
HWT019	2/005	T1	ROOF TILE	50	1	Slight curvature: ridge or hip tile? Prob. Post-med.
HWT019	11/009	B1	BRICK	2500	1	240 x 112 x 55-60mm; handmade; C16?
HWT019	11/009	B2	BRICK	2800	1	240 x 114 x 58mm; handmade?; C16?
HWT019	11/009	B3	BRICK	3000	1	237 x 115 x 56mm; fairly sharp arrises; perhaps machine-made; C18/C19?
HWT019	11/012	B1	BRICK	400	2	Fragments, one - ? x ? x 58mm - with fairly sharp arrises, but prob. Handmade; C18?
HWT019	11/012	B4	BRICK	200	1	? x ? x 51mm; fairly sharp arrises, possibly machine-made; C19?

Appendix D - Mollusc Shell and Animal Bone Assessment

Alan Pipe, Museum of London Archaeology Service

Quantification

Summary/Introduction

This report quantifies, describes and interprets the assemblages of animal bone and mollusc shell recovered by hand-collection and wet-sieving from HWT029. It then assesses these groups in terms of their potential value for further study, and specifies the time resources required for such work.

Table 3. Archaeozoological archive/general summary

Animal bone (hand-collected)	4.575 kg, approximately 364 fragments, in one large archive quality 'skeleton' box and one archive quality 'shoebox'.
Animal bone (wet-sieved)	0.011 kg, approximately 29 fragments in one archive quality 'shoebox' (with above)
Mollusc shell (hand-collected)	<0.500 kg, eight shells, in **one** archive quality 'shoebox' (with the animal bone)

Table 4 gives a summary of the hand-collected animal bone context groups and wet-sieved sample groups in terms of weight (kg), estimated fragment count, fragmentation, preservation, faunal composition, and the recovery of evidence for ageing and stature.

Table 5 gives a detailed summary of the hand-collected animal bone context groups and wet-sieved sample groups in terms of faunal composition, carcase-part, modification and the recovery of sub-adult age groups.

Table 6 gives a summary of the mollusc shell in terms of weight (kg), estimated shell count, fragmentation, preservation and species-composition.

A total of 4.586 kg, approximately 393 fragments, of animal bone were recovered from the whole hand-collected and wet-sieved assemblage. The hand-collected group totalled 4.575 kg, approximately 364 fragments; the wet-sieved group totalled 0.011 kg, approximately 29 fragments, of well-preserved animal bone. Fragment size lay in the range <25->75mm but was generally greater than 75mm.

The hand-collected assemblage derived largely from ox *Bos taurus*, sheep *Ovis aries*, pig *Sus scrofa* and dog *Canis familiaris* with single finds of horse *Equus caballus* adult upper limb [2/006], red deer *Cervus elaphus* antler [2/006] and fallow deer *Dama dama* metapodial (foot) [2/006]. The wet-sieved assemblage from samples [2/001] {1}, [5/005] {2} and [5/005] {4} was sparse and included only herring family Clupeidae vertebra, unidentified bird phalange (toe) and fragments of 'sheep-sized' longbone.

Wild 'game' mammals were represented by only two bones; a red deer antler and a fallow deer foot, both from [2/006]. No human bones were recovered. Carcase-part representation of the major domestic mammals showed a bias towards upper and lower limb; areas of good meat-bearing quality, with much smaller components of the areas of lesser meat quality; head, feet and toes. There was no recovery of horncore. This suggests that the bulk of the assemblage mainly represents disposal of butchery and post-consumption waste, from prime carcase areas, with relatively minor components of waste from consumption of carcase areas of poorer meat quality with waste from primary carcase processing.

Foetal or neonate ox bones were recovered from [11/003]; infant pig and dog bones were recovered from [11/016]. The remainder of the assemblage derived from adult or juvenile animals.

The hand-collected and wet-sieved assemblage included a substantial group of evidence for study of age at death, with eight mandibular tooth rows and 151 epiphyses; metrical evidence comprised 31 measurable bones including 25 complete longbones.

Clear evidence of butchery was seen on ox head, upper limb and lower limb; and pig upper limb. Calcined bones from [2/001] {1} provided the only evidence for burning. A shaped red deer *Cervus elaphus* antler tine from [2/006] (small find 1) comprised the only recovery of worked bone from the whole assemblage; there was no other evidence for bone, horn or antler working. There was no evidence for gnawing, pathological change or any other modification.

Fill [2/006] of pit [2/002] produced eight valves, <0.5 kg, of common/flat oyster *Ostrea edulis* only. There were no terrestrial or freshwater species.
The preservation state was medium and there was no identifiable encrusting flora or fauna. This bivalve occurs in suitable habitats around all British coasts and is of major economic importance as food species, occurring very regularly as post-consumption waste from archaeological sites particularly throughout the lowland British Isles.

Methodology

Hand-collected and wet-sieved animal bone, mainly from pit and skeleton groups with smaller quantities from back fill, ditch and layer deposits, were recorded directly onto Excel spreadsheets. Each context and sample group was described in terms of weight (kg), estimated fragment count, species, carcase-part, fragmentation, preservation, modification, and the recovery of epiphyses, mandibular tooth rows, measurable bones, complete long bones, and sub-adult age groups. The assemblage was not recorded as individual fragments or identified to skeletal element. All identifications referred to the MoLAS reference collection. Fragments not identifiable to species or genus level were generally allocated to an approximate category, particularly herring family, unidentified bird, 'ox-sized' and 'sheep-sized' mammal, as appropriate. Each context and sample assemblage was then grouped with the available dating and feature description.

Mollusc shells from pit fill [2/006] were described onto an Excel table (Table 4) in terms of preservation, species-composition and shell count. Each shell was inspected for identifiable encrusting flora and fauna. The context group was then tabulated with available dating and feature description.

Analysis of Potential

The animal bone assemblage has only very limited potential for further study, in terms of the local meat diet, with particular reference to selection of carcase-part and age-class of the major mammalian domesticates, and the implications for consumption of beef, mutton and pork. There is some potential for study of stature and build of sheep and dog.

The absence of amphibians, passerine birds and small mammals effectively precludes interpretation of local environmental conditions and there is no potential for this.
The small size and moderate preservation of the common/flat oyster shell assemblage precludes any potential for further study in terms of either size-distribution, or possible interpretation of the source fisheries.

Significance of data

Post-assessment study of the major mammalian domesticates will produce data of limited significance in terms of the local meat diet, and patterns of waste disposal. Such study will allow some comment on *intra-site* comparison of post-consumption and primary processing waste, particularly with respect to carcase-part selection and age-at-death, which may allow comment on the dietary preferences and economic status of the consumers. The sample is too small to allow *inter*-site comparison with local contemporary assemblages.

Analysis of the sheep skeleton from [11/007] and the dog skeleton from [11/016] will allow comment on age at death, and calculation of estimated stature.

The mollusc assemblage will produce no significant data beyond an indication of local consumption and disposal of common/flat oyster *Ostrea edulis*.

Revised Research Aims

RRA01 What is the composition of the local meat diet in terms of age-group and carcass part selection with particular reference to consumption of beef, mutton and pork?
RRA02 What are the estimated statures of sheep and dog?
RRA03 What evidence is there for local antler working?

Method Statements

The animal bone assemblage should be quantified and described, as individual bones, directly onto the MoLAS Access external site animal bone database, in terms of all standard parameters recorded at post-assessment level by the MoLAS faunal analyst. The data set will be interpreted as a discrete assemblage with reference to available stratigraphic data; and then grouped to allow interpretation of *intra-site* variation in terms of selection and disposal of species, carcase-part and age-group.
No further work should be done on the mollusc assemblage and there are no resource requirements.
Resource requirements are-

Task 1: Recording of stratified animal bones onto database	1.50 pdays
Task 2: Analysis of data/preparation of report	1.50 pdays
Task 3: Edit/archive	0.25 pday
TOTAL	**3.25 pdays**

Table 4 Summary of the hand-collected animal bone context groups and wet-sieved sample groups in terms of weight (kg), estimated fragment count, fragmentation, preservation, faunal composition, and the recovery of evidence for ageing and stature.

FEATURE	PARENT	CONTEXT	SAMPLE	SF NO.	WT (kg)	FRAG (mm)	PRES	NOS	LMAM	SMAM	FISH	BIRD	AMPH	MAND	MEAS	EPI	COMPLETE
ash layer	2/002	2/001	1		0.005	<25	medium	25	23	0	1	1	0	0	0	1	0
pit fill	2/002	2/006	0		1.45	>75	good	75	75	0	0	0	0	4	1	5	0
pit fill	2/002	2/006	0	1	0.075	>75	good	1	1	0	0	0	0	0	0	0	0
back fill	5/007	5/005	2		0.001	<25	medium	2	2	0	0	0	0	0	0	0	0
back fill	5/007	5/005	4		0.005	<25	medium	2	2	0	0	0	0	0	0	0	0
ditch	11/003	11/003	0		0.1	>75	good	80	80	0	0	0	0	0	0	40	0
skeleton	11/008	11/007	0		2	>75	good	125	125	0	0	0	0	2	20	75	15
		11/012	0		0.05	>75	medium	1	1	0	0	0	0	0	0	0	0
pit		11/013	0		0.05	>75	good	2	2	0	0	0	0	0	0	0	0
skeleton	11/017	11/016	0		0.85	>75	good	80	80	0	0	0	0	2	10	30	10
TOTAL					**4.586**			**393**	**391**	**0**	**1**	**1**	**0**	**8**	**31**	**151**	**25**

Table 5. Summary of the hand-collected animal bone context groups and wet-sieved sample groups in terms of faunal composition, carcase-part, modification and the recovery of sub-adult age groups.

INTERP	PARENT	CONTEXT	SAMPLE	SF NO.	TAXON	PART	AGE	MODIFICATION
ash layer	2/002	2/001	1		bird, unidentified	toe	adult	calcined
ash layer	2/002	2/001	1		herring family	vertebra		
ash layer	2/002	2/001	1		sheep-sized	longbone		calcined
ash layer	2/002	2/001	1		sheep-sized	longbone		
pit fill	2/002	2/006	0		deer, fallow	foot		
pit fill	2/002	2/006	0		horse	upper limb	adult	
pit fill	2/002	2/006	0		ox	foot	juvenile	
pit fill	2/002	2/006	0		ox	head		butchered
pit fill	2/002	2/006	0		ox	lower limb	juvenile	
pit fill	2/002	2/006	0		ox	lower limb		butchered
pit fill	2/002	2/006	0		ox	upper limb		butchered
pit fill	2/002	2/006	0		ox-sized	rib		

pit fill	2/002	2/006	0		pig	head	young adult	
pit fill	2/002	2/006	0		pig	head	adult	
pit fill	2/002	2/006	0		pig	lower limb	juvenile	
pit fill	2/002	2/006	0		pig	upper limb		
pit fill	2/002	2/006	0		sheep/goat	head	adult	
pit fill	2/002	2/006	0		sheep-sized	rib		
pit fill	2/002	2/006	0	1	deer, red	antler	adult	worked
back fill	5/007	5/005	2		sheep-sized	longbone		
back fill	5/007	5/005	4		sheep-sized	longbone		
ditch	11/003	11/003	0		ox	lower limb	foetal/neonate	
ditch	11/003	11/003	0		ox	rib	foetal/neonate	
ditch	11/003	11/003	0		ox	upper limb	foetal/neonate	
ditch	11/003	11/003	0		ox	vertebra	foetal/neonate	
skeleton	11/008	11/007	0		sheep	foot	adult	
skeleton	11/008	11/007	0		sheep	head	adult	
skeleton	11/008	11/007	0		sheep	lower limb	adult	
skeleton	11/008	11/007	0		sheep	rib	adult	
skeleton	11/008	11/007	0		sheep	toe	adult	
skeleton	11/008	11/007	0		sheep	upper limb	adult	
skeleton	11/008	11/007	0		sheep	vertebra	adult	
		11/012	0		ox	upper limb		butchered
pit		11/013	0		ox-sized	longbone		
pit		11/013	0		pig	upper limb		butchered
skeleton	11/017	11/016	0		dog	foot	adult	
skeleton	11/017	11/016	0		dog	head	adult	
skeleton	11/017	11/016	0		dog	head	infant	
skeleton	11/017	11/016	0		dog	lower limb	adult	
skeleton	11/017	11/016	0		dog	rib		
skeleton	11/017	11/016	0		dog	toe	adult	

skeleton	11/017	11/016	0		dog	upper limb	adult	
skeleton	11/017	11/016	0		dog	vertebra	adult	
skeleton	11/017	11/016	0		pig	upper limb	infant	

Table 6. Summary of the mollusc shell in terms of weight (kg), estimated shell count, fragmentation, preservation and species-composition.

FEATURE	PARENT	CONTEXT	TERRESTRIAL SNAIL	FRESHWATER MOLLUSC	MARINE MOLLUSC	NOS.	PRESERVATION
pit fill	2/002	2/006	nil	nil	common/flat oyster	8	medium
TOTAL			**nil**	**nil**	**common/flat oyster**	**8**	**medium**

Appendix E - Human Bone Assessment

Rachel Ives, AOC Archaeology Group

1.0 Summary

1.0.1 An archaeological evaluation was undertaken by AOC Archaeology Group between the 9th and 25th January 2008 at the Dairy site, Angel Link, Halesworth, Suffolk (National Grid Reference TM 3874 7729) on behalf of Pinnacle Consulting Engineers Ltd. The evaluation works comprised the excavation of 13 trenches. A number of features were identified including several small ditches and pits and two modern animal burials. An adult inhumation supine burial aligned south-north was also found on the site. A single piece of pottery found with the burial initially indicated that the burial was of Roman date. However, subsequent radiocarbon-dating has dated the burial to the Saxon period (mid 8th century). The site is located within land bounded by The Paddock to the north, Saxon Way to the east, a commercial building to the south and commercial buildings to the west (AOC 2008a).

1.0.2 The evaluation of the human remains was undertaken following guidance issued by English Heritage (1991, 2002) and standard methods of osteological identification of bones present and the determination of age and sex following IFA with the British Association of Biological Anthropology and Osteoarchaeology (BABAO) (Brickley & McKinley 2004). The remains represented one middle adult probable male individual. The bones were quite weathered and had suffered significant post-mortem damage, most likely due to processes within the burial environment and excavation damage. There were several notable pathological changes on the skeleton indicating poor dental health, dental anomalies (enamel pearls), as well as a lytic lesion on the scapula and bone fusion of two elements in the hand. It is recommended in this report that further scientific osteological analysis should be undertaken on the human remains to document the remains present and further investigate the pathological diagnosis of the evident changes.

2.0 Introduction

2.0.1 This report presents the post-excavation assessment of human remains recovered from an evaluation at the Dairy site, Angel Link, Halesworth, Suffolk (National Grid Reference TM 3874 7729), on behalf of Pinnacle Consulting Engineers Ltd. The evaluation was undertaken at Angel Link, Halesworth by AOC Archaeology Group between 9th to 25th January 2008 (AOC 2008a). The site is located on land bounded by The Paddock to the north, Saxon Way to the east, a commercial building to the south and commercial buildings to the west (AOC 2007; AOC 2008a). The evaluation was carried out in advance of development and submission of a planning application in order to inform on the potential for archaeological remains to exist on the site. A total of 13 trenches were excavated at the Angel Link site, which revealed 20 archaeological features, including small ditches, pits, animal burials of a sheep/goat and a dog and a human inhumation burial. The human burial was excavated from a

shallow, sub-rectangular grave cut and was aligned south-north with the head at the south end of the grave. The burial was found supine with the arms and legs extended. There was no archaeological evidence of a coffin surrounding the burial (no wood or metal finds such as coffin nails). A single sherd of residual pottery was found in the grave for the inhumation burial, which has been assigned a provisional Roman date (Roman Grey Ware).

2.1 Archaeological Background

2.1.1 Investigation of known archaeological evidence in the region of the site, as identified in the Written Scheme of Investigation (AOC 2008b), has demonstrated clear evidence of prehistoric activity, including a Mesolithic tranchet axe, a Palaeolithic hand axe, a Neolithic polished hand axe, a Bronze Age Palstave axe and an Iron Age socketed axe.

2.1.2 Halesworth falls within the domain of *Iceni* tribe, a Celtic-British tribe that maintained territory in modern Norfolk and north-west Suffolk between the 1st century BC and the 1st century AD (Hanson 1999, 149; AOC 2007). Roman activity has been documented through the south and east coasts surrounding Halesworth, through a chain of forts built in the 3rd century AD (AOC 2008a). Increasing development of the region during the Roman period occurred through a network of roads, camps, settlements and villas (AOC 2007). Archaeological evidence of Roman building material, pottery and field systems has also been documented in the region (AOC 2007). A Roman inhumation burial was previously excavated from Church Farm located 1.5km from the Angel Link site (AOC 2007, 12, 15; AOC 2008a).

2.1.3 Saxon evidence around Halesworth is well documented and has been reviewed in AOC 2007 and AOC 2008b. The area now known as Suffolk County was demarcated by the 6th century by the River Stour to the south and the River Waveney to the north (see further AOC 2007; AOC 2008b). The site of Angel Link falls within the Saxon settlement of Halesworth (*Halesuworde)*, which is located to the east of St. Mary's church (AOC 2007, 16). The Saxon settlement was most likely founded during the Middle Saxon period between AD 650 and 850. St. Mary's church is thought to have some medieval construction but earlier building origins are not clear and earlier Saxon origins are plausible. No Saxon burials have been reported to date from Halesworth.

2.1.4 Halesworth was a rural estate held by Aefric at the time of the Norman Conquest, together with two smaller manors held by freeman under the patronage of Ralph the Constanble and Edric of Laxfield as has been reported on by Fordham (2007; AOC 2007). It is likely that Halesworth had developed into a small market town by the 13th century, and a charter was granted issuing the right to hold a market and fair in AD 1223 (Fordham 2007; AOC 2007).

2.1.5 Significant town expansion occurred during the 17th century, with the settlement's economy based on leather processing, food and clothing production, and trading with

London and Calais is known to have occurred together with sites in Holland and Germany (Fordham 2007; AOC 2007). The brewing industry markedly developed in Halesworth during the 18th to the 19th century, necessitating significant barley harvesting in the region. Bleaching and dyeing industries further developed in the settlement, together with an iron foundry (see further AOC 2007).

2.1.6 The potential contribution that the human remains excavated from Angel Link can make to the understanding of the history of this region of Halesworth will be considered in the Discussion (Section 5.0 below).

3.0 Methods

3.0.1 The assessment of the inhumation burials followed guidance established by English Heritage (1991, 2002), as well as recent guidance recommended by BABAO/IFA (Brickley & McKinley 2004). The recording protocol of the assessment requires an examination of the remains to quantify the minimum number of individuals (MNI) present, and to determine an inventory of the human bones as well as the completeness and degree of preservation of the skeletal remains. An estimate of the osteological age-at-death and sex was also undertaken. The specific methods used for the assessment of the human bones are outlined further below.

3.1 Inventory

3.1.1 An inventory of the human bones present was compiled using a rapid recording system. The bones of the skull, dentition, torso, pelvis, legs, feet, arms, hands were recorded as present or absent and shown in Appendix A Table 1.

3.2 Preservation and Completeness

3.2.1 The preservation of the human bone was evaluated according to the Museum of London recording schema, which classifies the degree of surface preservation using the following criteria:

> **1** = Bone surface is in **good** condition with no erosion, fine surface detail such as coarse woven bone deposition would be clearly visible (if present) to the naked eye.
>
> **2** = Bone surface is in **moderate** condition with some post-mortem erosion on long bone shafts but the margins of articular surfaces are eroded and some prominences are eroded.
>
> **3** = Bone surface is in **poor** condition with extensive post-mortem erosion resulting in pitted and eroded cortical surfaces and long bones with articular surfaces missing or severely eroded.

3.2.2 The percentage completeness of each skeleton was calculated on the basis that that the skull equates to 20% of the skeleton, the upper limbs 20%, the torso 40%, and the lower limbs 20%.

3.3 Sex Determination

3.3.1 Sexually dimorphic regions of the pelvis and cranium develop with the onset of puberty. The development of these features can be variable and some areas such as the cranium may not remain static over the course of an individual's lifetime. Older females, for example, can develop robust and rugged traits more frequently associated with male characteristics (Meindl *et al* 1985; Walker 1995; Brickley 2004). Prior to puberty, it is not possible to accurately determine the sex of a juvenile skeleton without undertaking destructive biomolecular analyses.

3.3.2 Various regions of the pelvis and skull were recorded in order to provide an estimation of the sex of each adult skeleton assessed. The female pelvis is typically more gracile than a male pelvis, and is also broader as modified for childbirth. The assessment of specific regions of the adult skull and pelvis for the determination of sex followed the methods of Buikstra & Ubelaker (1994, 20) and Brickley & McKinley (2004). Individuals were classified as male, probable male, indeterminate, female, probable female, or where not possible to classify, individuals were considered as undeterminate.

3.4 Age Determination

3.4.1 Methods of adult age-at-death determination are based on degenerative changes that occur at various joint surfaces including the pubic symphysis and auricular surface of the pelves, as well as at the sternal rib end and have been reviewed by Buikstra & Ubelaker (1994, 21-32) and Bass (1995). Methods for the determination of age-at-death from juvenile remains include assessment of the degree of tooth formation and eruption sequence, together with estimations of growth derived from long bone diaphyseal lengths and additional bone size estimates (eg. width and length of the pars basilaris and ilium) and estimates of epiphyseal fusion rates (see Buikstra & Ubelaker 1994, 40; Scheuer & Black 2000).

3.4.2 Due to time constraints of an assessment a biological estimate of age-at-death in years could not be given. Instead, individuals were classified as foetal, neonatal, juvenile, young adult, middle adult, old adult, or if not possible to refine to any of these categories, the individuals was classified as adult.

3.6 Pathology

3.6.1 Observation of any evidence for pathological changes across the skeleton and dentition was undertaken for this assessment, following standard osteological references including Brothwell (1981), Barnes (1994), Rogers & Waldron (1995), Hillson (1996), Aufderheide & Rodríguez-Martín (1998), Ortner (2003) and Roberts & Manchester (2005), as well as guidance issued in Roberts & Connell (2004). Depending on the observations of pathology present on the remains from Angel Link, the need for X-rays and photography will be considered in the results of this report.

4.0 Results and Discussion

4.0.1 The results and discussion of the osteological assessment of the human remains from Angel Link, Halesworth are outlined here. The burial was aligned south-north with the head at the south end of the grave. The burial was found supine with the arms and legs extended. The human bone was of a moderate preservation (Grade 2) with clear evidence of linear striations and abrasions in the external bone surface, together with pitting and surface cortical bone flaking. Several of the long bones had suffered from longitudinal splitting and fissuring of the shaft. These changes most likely represent post-mortem damage caused by the burial environment and excavation damage.

4.0.2 The skeletal remains comprised a MNI of one individual. The osteological evaluation determined that the remains were of a middle adult probable male. Significant tooth wear was evident throughout the dentition and across all molars, and included involvement of the buccal (cheek) side of several of the mandibular teeth. The wear pattern was not considered indicative of normal age-related change and was instead considered probably influenced by components of the diet or potentially pathological alterations. Tooth wear as a method of individual age estimation was therefore not used for the assessment of this individual.

4.0.3 The human skeleton from Angel Link was estimated to be 55% complete. The remains of the cranium were quite well preserved and more complete when compared to the post-cranial skeleton. The skeletal elements of the torso (vertebrae, ribs, pelvis) in particular, were poorly preserved. This level of preservation and completeness has implications for the potential scientific analysis that could be undertaken particularly on the post-cranial skeleton. Post-cranial metrical analysis will be limited and it will not be possible to determine an estimate of individual stature. In contrast, a range of standard osteological measurements could be gauged from the cranial remains during osteological analysis. Similarly, the majority of the cranial non-metric traits could be recorded during a full analysis, although the scope of recording post-cranial non-metric (non-pathological) traits would remain more limited.

4.0.4 The human remains presented a range of pathological alterations across the dentition and post-cranial skeleton. Dental pathology included three periapical abscesses affecting both the maxilla and mandible. A number of teeth throughout the mandibular dentition were affected by dental calculus (mineralised plaque) (Hillson, 1996, 255). An additional tooth was also evident in an unusual position as un-erupted within the mandible alveolar bone well below the dental arcade and beneath the first right molar. It is not yet clear whether this tooth represents a premolar which is currently missing from the dentition (eg mal-eruption), or represents a malformed and mal-erupted supernumerary molar. If this tooth is not the missing premolar, then further evidence of dental pathology is evident with the ante-mortem tooth loss potentially linked to conditions such as caries. Additional non-pathological dental anomalies were also evident throughout the dentition including multiple enamel pearls (Hillson, 1996, 98).

4.0.5 The extent of pathological changes across the joint surfaces was limited during the assessment by post-mortem damage to the majority of post-cranial joints. Evidence for various other pathological conditions across the post-cranium was however discernable on the remains from Angel Link, Halesworth. The first included a lesion within the glenoid fossa of the left scapula, manifest as a lytic oval defect in the joint surface. It is not immediately clear what condition may have caused this lesion, and further consideration of a range of circulatory conditions (eg. osteochondritis dissecans) that can affect this joint should be undertaken. The second pathological change identified during the assessment includes bony ankylosis or fusion across the proximal surface of the second metacarpal and the left trapezoid of the wrist. The fusion was manifest with both bone formation together with locations of lytic bone removal. The aetiology of this pathological change also requires further investigation and may represent a seronegative spondyloarthropathy (Rogers & Waldron 1995). Further evidence of a probable joint pathology was evident through slight marginal lipping (osteophyte bone formation) between the sacrum and fifth lumbar vertebra. Quite prominent enthesophytes, or bone formation located along muscle attachment sites, were noted bilaterally affecting the left and right proximal humerus, which suggest quite marked use of the muscles in the upper arm.

5.0 Recommendations

5.0.1 The results of this assessment have clarified that remains of an adult, probable male were recovered from the Angel Link evaluation. The skeleton is sufficiently complete to enable a full scientific osteological analysis. Whilst the extent of bone surface weathering and post-cranial fragmentation is quite marked and likely to limit the full range of metrical and non-metric traits identifiable, several notable cases of pathological alteration were evident in the post-cranial skeleton.

5.0.2 There is a lack of comparative burials known from the local area of Halesworth. Halesworth does have Saxon and Medieval foundations, which appears to contrast with the apparent scarcity of archaeological finds from these periods. The church of St. Mary in Halesworth is located approximately 150 metres from the burial found at Angel Link, which may indicate that the burial is not associated with interments made in association with the church.

5.0.3 The assessment has demonstrated the potential for a full analysis of the remains to contribute to a better understanding of challenges to health based in this individual. The burial also necessitates the development of the research questions originally posed for this project, in order to expand the understanding of the context of this burial in relation to the settlement of Halesworth.

5.0.4 The remains from Angel Link are of local and regional significance. It is recommended that the human remains from Angel Link, Halesworth undergo full osteological investigation and reporting. The osteological analysis will follow standard guidance as issued by English Heritage (1991, 2002) and the IFA/BABAO (Brickley & McKinley 2004).The osteological analysis should include a full inventory of the cranial and post-cranial remains. Such reporting should consider further the extra tooth located in the mandible body and aim to determine whether this is a missing premolar

or a supernumerary molar. The pathological changes merit a full scientific investigation and further research to attempt to better determine the pathological diagnoses in this individual. The changes on the skeleton require photographic documentation but do not require X-ray analysis. As the remains represent only one individual, it will not be possible to consider the pathological changes in a population perspective of health. Instead, the remains should be reported at the individual level.

5.1 Conservation requirements and retention policy

5.1.1 The bones in this collection have no special conservation requirements. Once analysed and dated the adult skeleton from Angel Link, Halesworth, Suffolk, should be archived in consultation with Colchester & Ipswich Museum Service as a research resource.

5.2 Tasks required for Archiving

TASK	DESCRIPTION	
1	Osteological recording (*n*=1) @ c.2.5 days	0.5 days
2	Inputting of data and integrity checking	0.25 days
3	Analysis of data	0.25 day
4	Research	0.5 day
5	Report writing and editing	2 days
6	Photography	0.5 days
	TOTAL	**4 days**
7	AMS Radiocarbon Dating	TBA

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Table 7. Catalogue of Skeletons from Angel Link, Saxons Way, Halesworth, Suffolk (HWT029)

Skeleton no.	Pr	%	Sk	D	T	P	L	F	A	H	Age	Sex	Pathology/Notes	Photo	X-ray
5/006	2	55	1	1	1	1	1	1	1	1	MA	M?	Dental calculus, periapical abscesses, mal-eruption of maxillary teeth, enamel pearls. Joint disease - erosive and fusion hand and lytic lesion scapula.	Yes	No

Abbreviations: Pr = preservation grade (1 = good, 2 = moderate, 3 = poor), % = percentage completeness, Sk = skull (1 = present, 0 = absent, D = dentition, T = torso, P = pelvis, L = legs, F = feet, A = arms, H = hands, MA = Middle Adult, M? = Probable Male.

Appendix F – Flint Assessment

Tony Grey, Museum of London Archaeology Service

Quantification

Summary/Introduction

Twenty pieces of flint were submitted for identification from four contexts. Fifteen were isolated as non-struck field flint with fourteen of these sourced in Context (2/001). Five pieces are knapping waste (debitage). These pieces are itemised in the table below and in the accompanying excel file.) There is no burnt flint.

There is a worked out multi-platform flake core from Context (2/005), the upper fill of pit [2/002] containing flint, bone and a pot sherd, and a long, curving, narrow bladelet core trimming flake from the same context. There is the transversely snapped distal end of a blade in ochre-grey flint from Context (3/003), the fill of ditch [3/004], and a very hard-struck possible axe trimming flake with prominent ripples and grey-brown cortex in reddish-grey flint from Context (3/007), a layer of dark silty sand overlying the natural sand. The flint item <1> from context (2/001) is probably field flint rather than burnt flint.

Table 8. The Flint

Context	Flakes	Blades	Cores	Retouched	Total	Comments
2/001						14 field flint to discard
2/005	2		1		3	One core, one core trimming flake, one flake, one field flint
3/003		1			1	Distal end of blade
3/007	1				1	Axe trimming flake
Total	3	1	1		5	

Methodology

The flint material was assessed according to current MoLAS methodology and recorded in an accompanying excel file.

Analysis of Potential

There is potential to compare this small assemblage with other published prehistoric flint from nearby parts of Suffolk.

Significance of data

This small assemblage demonstrates the presence of flint-knapping activity at, or in the vicinity of, the Angel Link site. The geology of alluvial deposits suggests that the material may be redeposited. Other prehistoric worked flint is attested at several nearby sites including worked Mesolithic and Neolithic flints at Old Angel Bowling Green, a Mesolithic axe at Cheddison Street, a Neolithic polished axe at Owak Way and a Bronze Age arrowhead at Bedingfield Crescent. The raw material is of variable quality from flint nodules probably local to the area. It is not flint of the highest quality. The presence of white patina on some pieces, particularly the field flint from Context (2/001), indicates sourcing or exposure to a chalk-based environment. The material may be of Neolithic origin.

Revised Research Aims

To check published prehistoric flint reports from areas around Halesworth, Suffolk for comparison.

Method Statements

To check published reports of prehistoric flint from Suffolk: 0.5 person day

Bibliography

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Appendix G – Quernstone Assessment

Lyn Blackmore, Museum of London Archaeology Service

Quantification

Two small fragments (6g; one now in two pieces) recovered from [1/003] were identified as quernstone in the draft evaluation report, but as slag on the finds bag; the first identification is correct. Quernstone is also noted in the draft evaluation report, as being present in [2/005], but none was in the finds box.

Description

Two small fragments of lava quernstone were found in the upper fill of pit [1/005] in Trench 1. Both are from the same quern and probably of Niedermendig lava, or nepheline-tephrite, from the Eifel hills (Cologne Vorgebirge) of Germany (Parkhouse 1976; Kars 1980; Blackmore and Williams 1988, 132–3; Williams 1989, 129–30; Goffin 2003).

Analysis of Potential

Querns were imported to England from the Rhineland from the Roman period onwards. In London a large Roman assemblage was recovered from the Poultry site. Numerous querns have been found on Middle Saxon sites in Lundenwic (Blackmore and Williams 1988, 132–3; Williams 1989, 129–30; Goffin 2003), presumably exported via Dorestad in the Netherlands (Parkhouse 1976; Kars 1980). Importation continued into the early medieval period (Pritchard 1991), with a large dump from the City of London (Freshwater 1996). The same sequence applies to York and probably to East Anglia. The most that can be of the present small fragments is that, given the present lack of Middle Saxon pottery from the site, they are probably of Roman or Late Saxon/early medieval date.

Significance of data

Being undated, the quernstone fragments are of local significance only.

Revised Research Aims

No new research aims can be suggested.

Method Statements

For publication of the present finds no further specialist input is required and the above can be incorporated within any publication text. This may, however, change if further work is carried out on the site and a more substantial assemblage is recovered.

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Appendix H – Clay Pipe Assessment

Tony Grey, Museum of London Archaeology Service

Quantification

Summary/Introduction

A total of three clay pipe fragments were submitted for assessment. These consisted of three stems (see Table 9 below). The pipes were recovered from one context. Generally, clay pipe stems are undiagnostic and only broadly datable to the entire period of clay pipe usage so rendering them not identifiable by form based on the typology of Oswald and Atkinson's London pipe forms (Oswald 1975; Atkinson and Oswald 1969).

Part of a heel is extant on one of the stems so they could be broadly datable to either the 17th century or earlier 18th century.

Table 9: Clay tobacco pipe quantification

Total no. of fragments	3
No. of bowl fragments	0
No. of stem fragments	3
No. of mouthpieces	0
Accessioned pipes	0
Marked pipes	0
Decorated pipes	0
Imported pipes	0
Complete pipes	0
Wasters	0
Kiln material fragments	0

Table 10: Clay tobacco pipe dates by context (B – bowl; M – mouthpiece; S – stem)

Context	TPQ	TAQ	B	S	M	Total
11/012	c 1610	c 1710		3		3
Total				3		3

Methodology

The clay tobacco pipe assemblage was recorded in accordance with current MoLAS practice but not entered onto an Excel file on this occasion. The English pipe bowls, when available, are classified and dated according to the Chronology of London Bowl Types (Atkinson and Oswald 1969), with the dating of some of the 18th-century pipes refined where appropriate by reference to the Simplified General Typology (Oswald 1975, 37-41). The prefixes AO and OS are used to indicate which typology has been applied. Quantification and recording follow guidelines set out by Higgins and Davey (1994; Davey 1997).

Analysis of Potential

This tiny assemblage has no potential for further research.

Significance of data

The clay pipe stems from Context (11/102) indicated post-medieval activity with pipe usage during the 17th or 18th centuries.

Revised Research Aims

None

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Appendix I - OASIS Form

OASIS ID: aocarcha1-37208

Project details

Project name	Angel Link, Halesworth
Short description of the project	An archaeological evaluation comprised of 11 trenches Natural Lowestoft sands and gravels were identified between 12.79m and 7.88m OD. Cut into this were a number of archaeological features including small ditches, pits, animal burials and a human inhumation. In the Western part of the site evidence of marshland was discovered, alluvial clays covered the natural sands. There was a low level of prehistoric activity, a number of worked flints were discovered. The burial may be of Roman date judging from the sherd of pottery found in the grave. No other certain Roman activity was detected. There was surprisingly little medieval activity considering the closeness of St Mary's church. On the Southern area of the site a wall relating to a possible building was discovered. This may date to the 16th century.
Project dates	Start: 09-01-2008 End: 25-01-2008
Previous/future work	No / Not known
Any associated project reference codes	HWT029 - Sitecode
Any associated project reference codes	30017 - Contracting Unit No.
Type of project	Field evaluation
Site status	Conservation Area
Current Land use	Woodland 7 - Scrub
Monument type	DITCHES Uncertain
Monument type	PITS Uncertain

Monument type	WALL Post Medieval
Monument type	BURIAL Roman
Monument type	ANIMAL BURIALS Post Medieval
Monument type	POSTHOLE Uncertain
Significant Finds	WORKED FLINT Uncertain
Significant Finds	ANIMAL BONE Uncertain
Significant Finds	POTTERY Medieval
Significant Finds	POTTERY Roman
Significant Finds	BUILDING MATERIAL Post Medieval
Significant Finds	LAVA QUERN Uncertain
Significant Finds	ANTLER Uncertain
Methods & techniques	'Sample Trenches'
Development type	Urban commercial (e.g. offices, shops, banks, etc.)
Prompt	Direction from Local Planning Authority - PPG16
Position in the planning process	Pre-application

Project location

Country	England
Site location	SUFFOLK WAVENEY HALESWORTH Dairy Site, Angel Link, Halesworth
Study area	14000.00 Square metres

Site coordinates	TM 3874 7729 52.3410591872 1.505214765510 52 20 27 N 001 30 18 E Point
Height OD	Min: 7.88m Max: 13.63m

Project creators

Name of Organisation	AOC Archaeology
Project brief originator	Local Planning Authority (with/without advice from County/District Archaeologist)
Project design originator	AOC Archaeology
Project director/manager	Andy Leonard
Project supervisor	Ian Hogg
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Pinnacle Engineering

Project archives

Physical Archive recipient	Suffolk County Council Archaeological Service
Physical Archive ID	HWT029
Physical Contents	'Animal Bones','Ceramics','Environmental','Human Bones','Worked bone','Worked stone/lithics'

Entered by	Ian Hogg (ian.hogg@aoc.co.uk)
Entered on	1 February 2008

Appendix J - Radiocarbon Dating Certificate.

Scottish Universities Environmental Research Centre
Director: Professor A B MacKenzie Director of Research: Professor R M Ellam
Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

19 December 2008

Laboratory Code	SUERC-21630 (GU-17884)
Submitter	Rachel Ives AOC Archaeology Group Unit 7, St. Margarets Business Centre Moor Mead Road Twickenham TW1 1SJ
Site Reference	Angel Link, Halesworth
Sample Reference	HWT029 5/006
Material	Bone : Human
$\delta^{13}C$ relative to VPDB	-19.8 ‰
Radiocarbon Age BP	1205 ± 40

N.B.

1. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.
2. The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal3).
3. Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or Telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- R. Anderson Date :- 19-12-08

Checked and signed off by :- P. Naysmith Date :- 19-12-08

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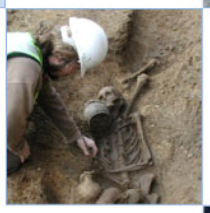



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