ArcHeritage

LAND OFF DUNSWELL ROAD, COTTINGHAM, EAST YORKSHIRE

ASSESSMENT REPORT

Report Number 2011/7 March 2011

ArcHeritage

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ArcHeritage, Campo House, 54 Campo Lane, Sheffield S1 2EG

Phone: +44 (0)114 2728884 Fax: +44 (0)114 3279793

www.archeritage.co.uk

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Non-technical Summary

Between 24th January and 3rd February 2011 ArcHeritage were commissioned by Prospect Archaeology to undertake the excavation of 3 archaeological evaluation trenches on a plot of land off Dunswell Road, Cottingham, East Riding of Yorkshire. Trench 1 was located at the northern end of the site and was cut down over peat and gravel filled palaeochannels. Trench two was located centrally within the site and it had, with the exception of modern land drains and a concrete Kerb base, cut straight down onto the top of natural clays. Trench three was located at the southern end of the site and a sequence of cut features were revealed at its north-western end. These were all thought to have been related to recent agricultural / horticultural practice. The excavations also showed that ground levels across the site had been reduced in preparation, or along with, the construction of the caravan factory that latterly occupied the site.

Key Project Information

Project Name	Land off Dunswell Road, Cottingham, East Yorkshire
ArcHeritage Project No.	5474
Report status	Draft for comment
Type of Project	Evaluation
Client	Redrow Homes Yorkshire
Planning Application No.	DC/10/03018
NGR	TA50504 43393
Museum Accession No.	
OASIS Identifier	archerit1-98954
Author	Bryan Antoni
Illustrations	Bryan Antoni
Editor	David Aspden
Report Number and Date	2011/7 [28/03/2011]

1 INTRODUCTION

Between 24th January and 3rd February 2011 ArcHeritage were commissioned by Prospect Archaeology to undertake an archaeological evaluation within the bounds of a former caravan factory on a plot of land off Dunswell Road, Cottingham, East Riding of Yorkshire (centred on NGR TA50504 43393, Fig. 1). The work was carried out on behalf of Redrow Homes Yorkshire in compliance with an application for planning permission to construct 108 residential dwellings on the site (planning ref. DC/10/03018). The site is located within an area of extensive archaeological activity hence conditions were set on the planning application by the Partnership Manager (Humber Archaeological Partnership) to fulfil the Joint Structure Plan, Local Plan and policies within PPS5. The evaluation comprised the archaeological excavation of three 60 x 2m trenches (Figure 2) placed in order to assess for the presence, condition and survival of any archaeological remains located within the area of the proposed development.

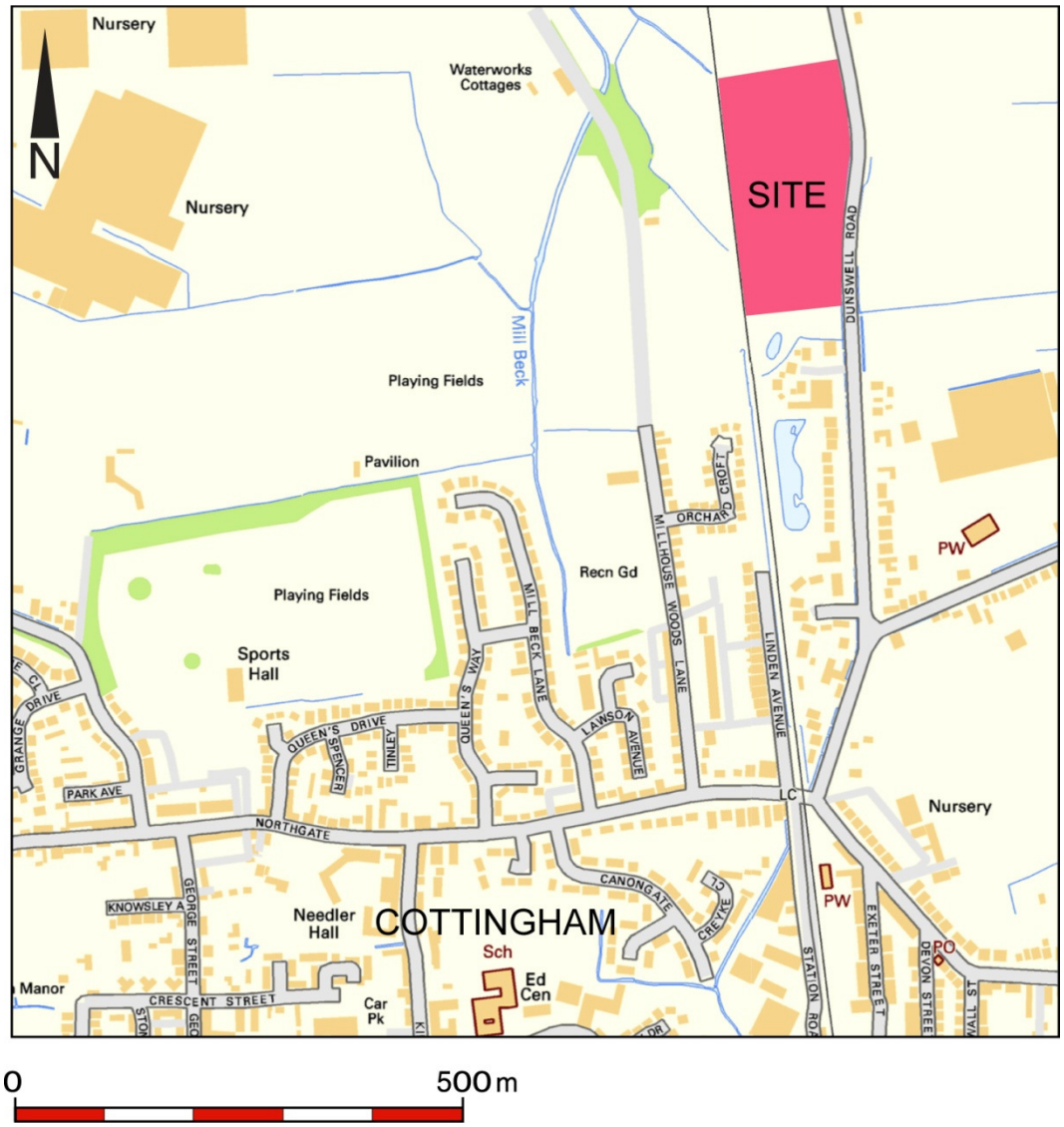


Figure 1 Location of Site

2 METHODOLOGY

All the ground-works were undertaken by the use of a wheeled, 360° hydraulic excavator fitted with a toothless ditching bucket. The last 5m of the base in the south-western end of Trenches 2 and 3 was excavated to a final depth of 1m to test for the presence of buried Holocene deposits. The excavations were undertaken with regard to a Written Scheme of Investigation (WSI) for the works, supplied by Prospect Archaeology (Appendix 3).

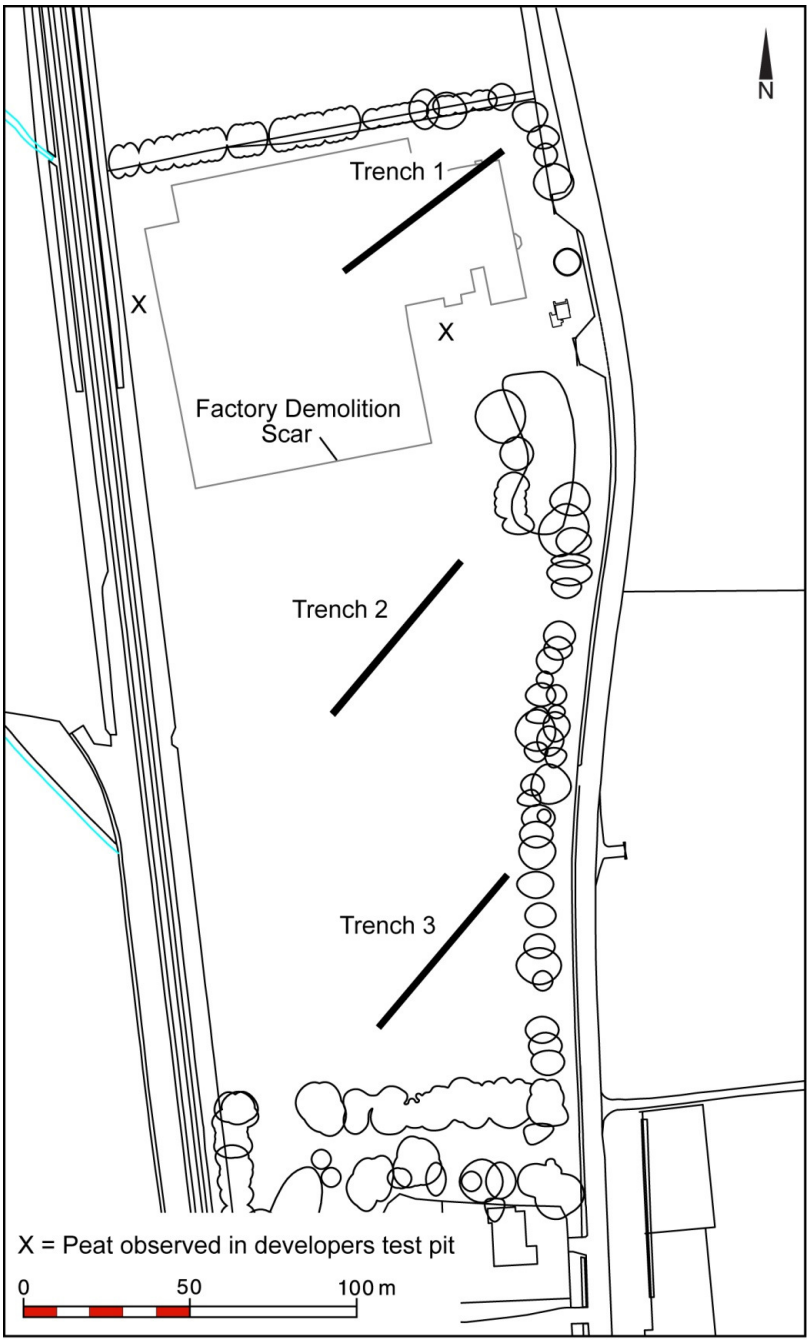


Figure 2 Location of Trenches

Archaeological deposits and features were recorded as drawn plans at a scale of 1:20 and 1:50, sections at a scale of 1:20 or 1:50 and described using pro-forma context recording

sheets, following the procedures laid down in the Trust's fieldwork manual (YAT 2009). A series of digital and monochrome photographs was taken throughout. The artefacts and site records are currently stored by York Archaeological Trust under Project 5474.

3 LOCATION, GEOLOGY & TOPOGRAPHY

The site is located on the outskirts of Cottingham, some 1.1Km north-north-east of the town centre, where it occupies an area of c. 4ha. The western edge of the site is bounded by the Hull to Scarborough railway line and the eastern edge by Dunswell Road. The northern edge of the site is delineated by a small-holding, whereas a small housing estate ('The Swallows') on the northern fringe of Cottingham lay immediately to the south of it. The factory, with the exception of a guard-house inside the site entrance, had been demolished to ground level before the excavations were undertaken. All that remained was a mix of reinforced concrete, tarmac and compacted hardcore surfaces and standings. The site is located some 7.5Km north of the River Humber, at c. 6.0m aOD, on the western edge of an area of low lying land known as Holderness. The surrounding land is generally flat and varies little in elevation. The solid geology of the area comprises Cretacious chalk with flint overlain by alluvial silt clays containing layers of sand, peat and gravel (Geol. Surv. 1957).

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The history of the development area has been previously covered in the WSI for the site (Appendix 3, below). This section will, therefore, comprise an abridged version of the information laid out in there.

The site lies within a wetland landscape occupied from the Mesolithic period onwards and Mesolithic and Neolithic flint scatters are known locally. Two Neolithic axe heads were also recovered during gravel extraction to the east, whereas a suspected Bronze Age cemetery lies to the north-east. Iron Age settlement is known to exist some 1.5Km to the north-west and during the Roman period a landscape of dispersed settlements and field systems was evinced by cropmarks to the north. Some of these were excavated when encountered by the construction of the BP TSEP and Transco West Hull Relief pipeline (2001) and proved to be 2nd - 3rd century AD in date. Iron Age and Roman coins have been recovered from the area by metal detectorists (Dave Evans, pers. comm.). The site was thought to have been located adjacent to the Archbishop's deer park in the medieval period. The parklands may have been associated with the settlement of Pileford which, although mentioned in the Domesday survey, remains to be located with a degree of certainty.

5 RESULTS

5.1 Trench 1

Trench 1 (Figure 2) was north-east / south-west aligned, 60m long, 2m wide and was located within the footprint of the former factory. For much of its length it was machine excavated to a maximum depth of c. 1.06m bGL (metres below Ground Level), or down to 4.29m aOD (metres above Ordnance Datum). For the last 5m at the south-western end of the trench the depth of the base was increased by 0.5m, to 3.77m aOD, to investigate a silted channel (Figure 3).

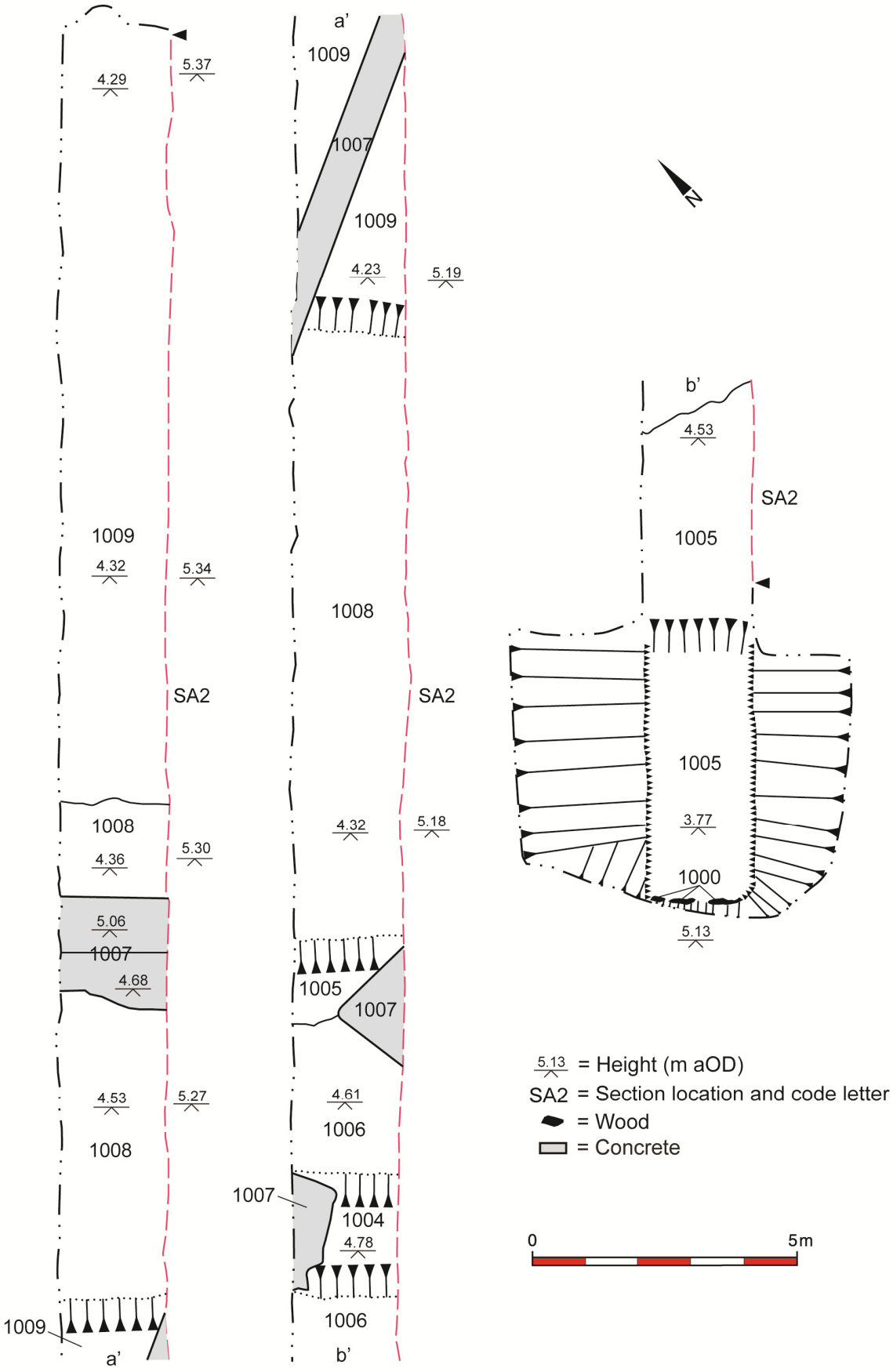


Figure 3 Plan of Trench 1

It was not possible to hand excavate any of the deposits within this trench as it rapidly filled with ground water. The following descriptions are therefore based on a rapid assessment of the deposits exposed before the trench was swamped (Plate 1).

Plate 1 Trench 1, record shot looking North-east

The earliest deposits observed were Contexts 1006 and 1008 (Figures 3 and 4). Deposit 1006 was observed at c. 4.61m aOD, was 0.25m thick and continued beneath the trench base. It was located towards the south-western end of the trench and comprised a loose, fine to medium flint and chalk gravel and occasional small pebbles in a matrix of an orange mottled mid brown clay silt. The majority of the rest of the trench base was covered by Deposit 1008, a loose, pale greyish white coarse chalk and flint gravel, in a pale bluish grey sand silt matrix. Deposits 1006 and 1008 were sealed, respectively, by deposits 1005 and 1009. Both of these comprised a friable, crumbly fibrous dark brown peat with occasional decayed plant roots, small pebbles and flint fragments.

Peat deposit 1005 (Figure 3 and 4) was located at the south-western end of the trench where it was observed at c. 5.14m aOD (see cover plate). The top of it fell gradually for the next 9.5m towards the south-west, to 4.26m aOD, before running beyond the end of the trench. An attempt was made to understand the morphology and date of the feature by machine excavating a 5m long, 2m wide, 1.36m deep slot in the base of the trench, hard against its south-western end (Figure 3 and 4). The slot rapidly filled with water allowing very brief observations to be made and it was evident that the formation of the peat was interrupted on at least three occasions by the deposition of blue-grey silt and flint rich chalk and gravel lenses, up to 0.20m thick. This would imply an alternating (seasonal?) depositional environment of higher and lower flow fluctuations throughout its formation.

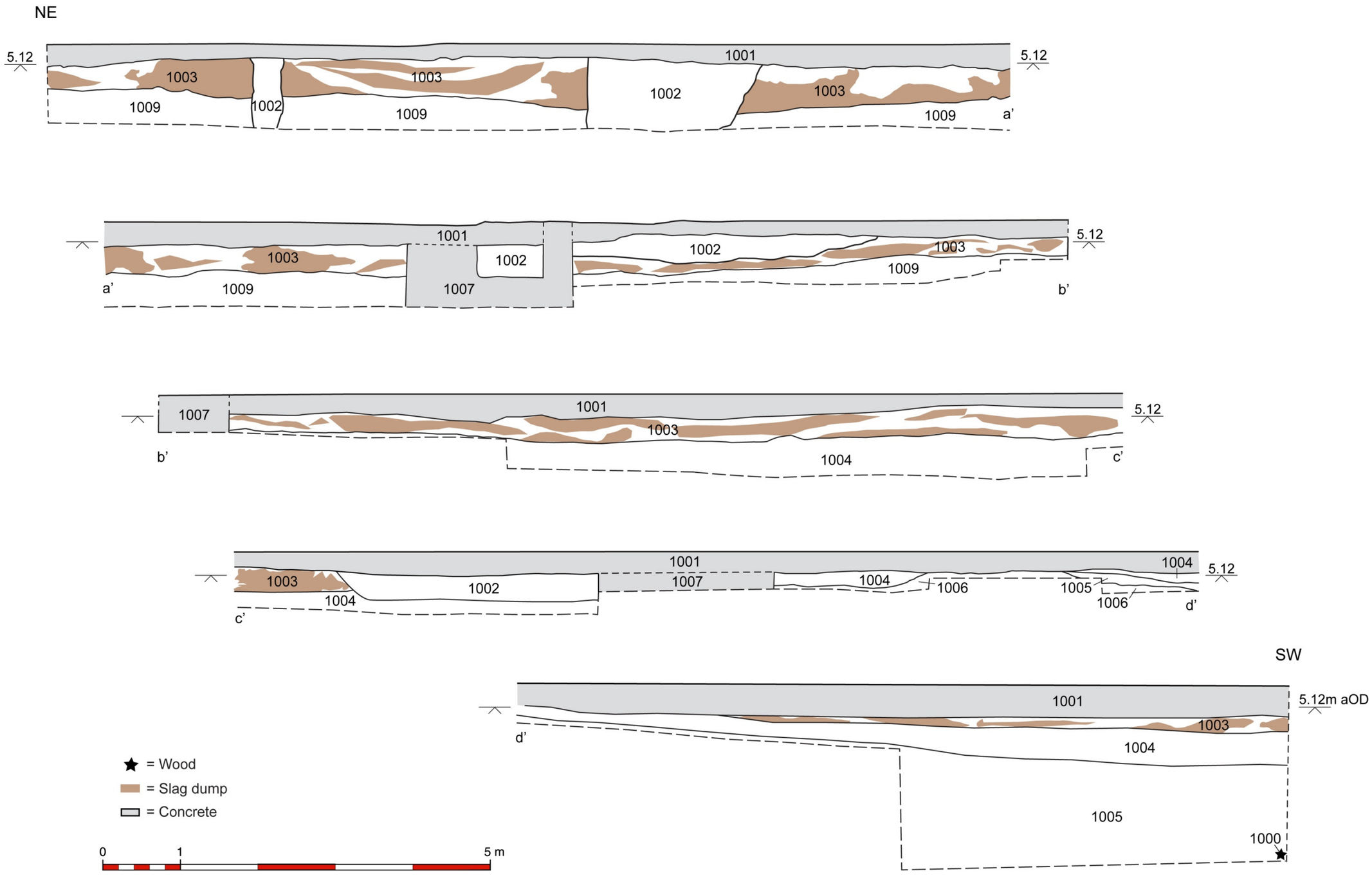


Figure 4 Trench 1, North-west Facing Section SA2

The silt / gravel lenses fell away and tailed off towards the south, suggesting that the centre of the channel lay in that direction and that the channel was, therefore, aligned east – west. The top of a linear deposit of wood fragments (1000) was noted hard against the base of the south-west edge of the trench at c. 3.77m aOD. One of the fragments was retained (Sample 03, below) and identified as a torn off fragment of willow (Salix alba) unsuitable for either carbon 14 or dendro dating.

Deposit 1009 (Figures 3 and 4) was located at the north-eastern end of the trench and it could be traced for 30.5m towards the south-west. It continued beyond the base and north-eastern trench edge. The top of it was formed at c. 4.82m aOD and was further reduced by 0.53m, to 4.29m aOD. A north-west / south-east aligned edge (Figure 3) was noted some 14.50m from the north-eastern end of the trench, suggesting that the edge of a north-west / south-east aligned water channel may have been exposed. This feature could not be properly investigated as the trench had rapidly filled with water. Any interpretation is, therefore, largely speculative and is based on the findings arising from the rapid excavation of Deposit 1005.

Stratified peat and gravel bands were also observed within test pits dug to trace the line of a culvert which crosses the site (Figure 2, **X**). Although the trenches were only open for a very short duration it was possible to ascertain that the peat deposits were still present 40m south and 64m west of Trench 1.

The top of peat 1005 was sealed beneath an extensive layer of a soft, plastic, humic dark grey brown clay silt with occasional patches of fibrous, dark brown, decayed silt peat, small flint and animal bone fragments (1004; Figure 3 and 4), up to 0.45m thick. The top of it was observed at 5.16m aOD and its humic nature and peat inclusions suggested that 1004 was the top of Deposit 1005 altered through re-working, oxidation or addition of dumped materials. Small fragments of Late 19th – Early 20th Century pottery was also recovered. Deposit 1004 and peat 1009 were sealed beneath a levelling and / or land reclamation deposit comprised Fe. Slag in a dark grey, gritty clay silt sand matrix with moderate small – medium glassy slag fragments and occasional small to large patches of medium grained black casting? sand (1003; Figure 4, Plate 2), up to 0.75m thick.

Plate 2 Trench 1, south-east facing section showing rust brown slag and black sand deposit (1003). Concrete 1001 above, Deposit 1004 below. 1m scale

The top of it was observed at c. 5.27m aOD and it almost continued across all of the trench. The top of 1003 was truncated by several service trenches containing electricity cables or water pipes and drainage for the factory that previously occupied the site. All the service trenches were recorded under context 1002. The services appeared to have been put in alongside or slightly later than the concrete foundations and pile caps (1007) for the factory build. These were themselves abutted and sealed by the up to 0.4m thick reinforced concrete factory floor (1001) when it was cast. This formed the ground surface, between 5.13 and 5.37m aOD, when the excavations were undertaken

5.2 Trench 2

Trench 2 (Figure 2) was located in the centre of the proposed development. The ground sloped up gently from 5.65m aOD in the east to 6.85m aOD in the west. It was north-east / south-west aligned, 60m long, 2m wide and was machine excavated to a maximum depth of 0.59m bGL, except for the final 5m at south-western end of the trench where the depth was increased by 0.56m, reaching 5.63m aOD (Plate 3). The depositional sequence in Trench 2 varied little therefore the elevation of the southern trench edge was recorded as a series of 1m wide sections placed at 10m intervals (Figure 5).

Plate 3 Trench 2, general shot looking north-east. Increased depth dig in foreground

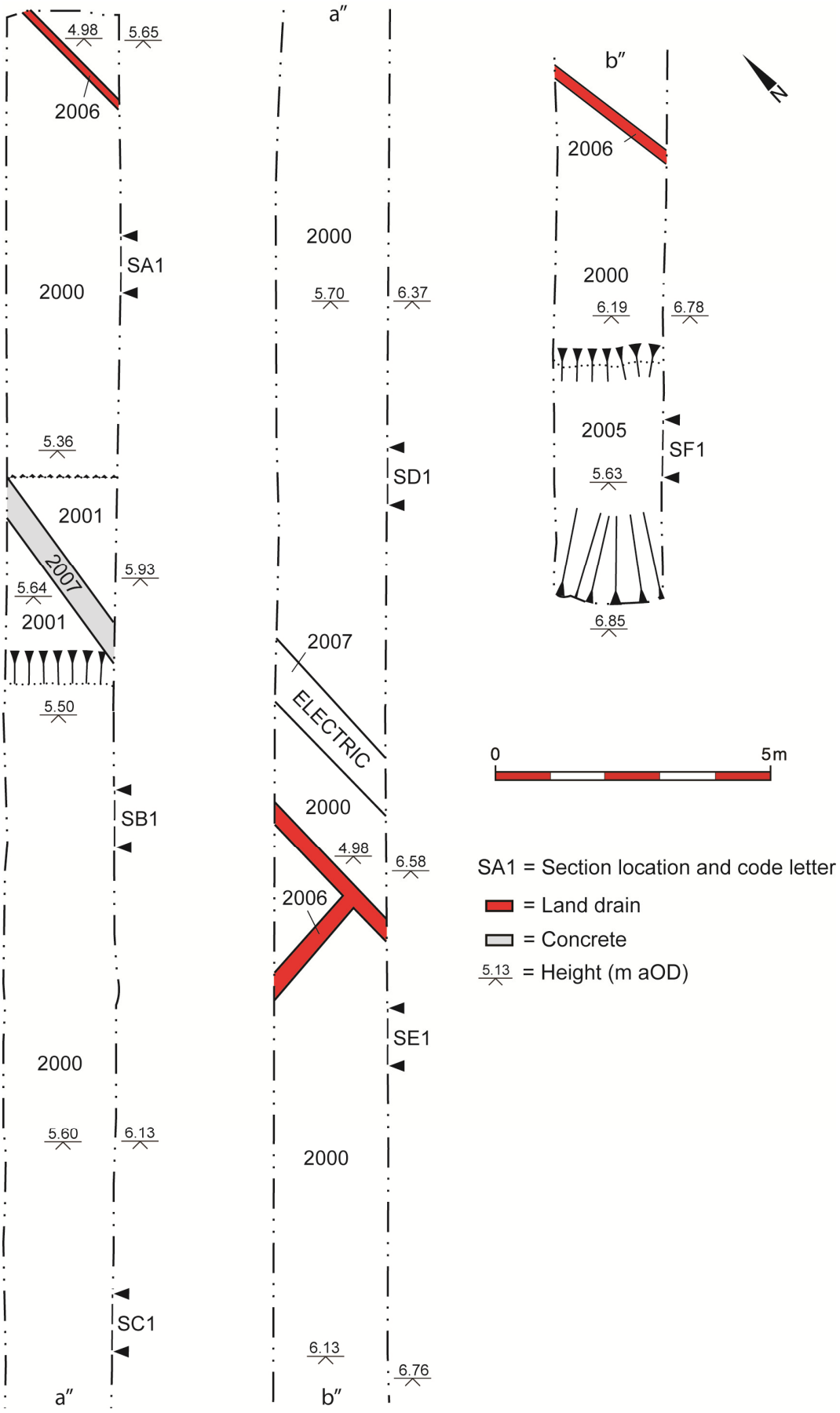


Figure 5 Plan of Trench 2

The earliest deposit encountered was located at the southwest end of the trench and comprised a tenacious, stiff reddish brown medium grained sand silt clay with occasional small – medium pebbles and small angular erratics (2005; Figure 5 and Figure 6, Section SF1).

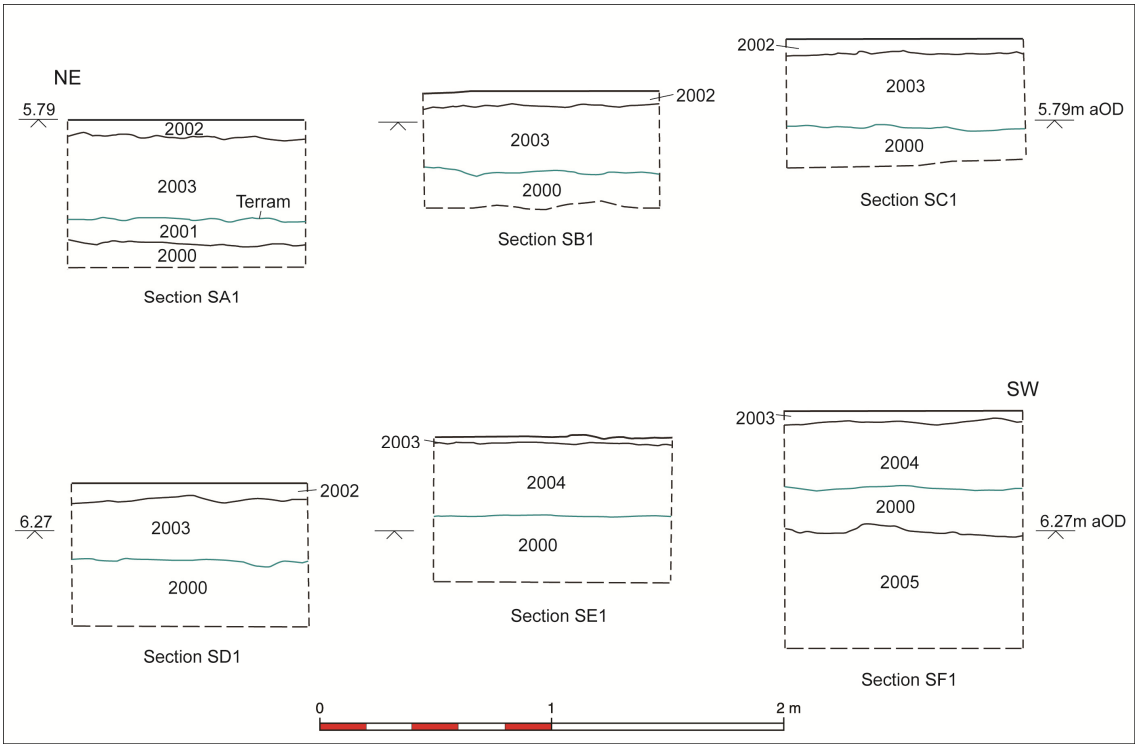


Figure 6 Trench 2; North-west facing s SA1 – SF1

The top of 2005 was sealed beneath a mixed natural deposit comprised a stiff olive green tinged, brown and pale grey mottled, dark orange brown silt sand clay with frequent pale grey clay silt spotting, moderate manganese flecks and occasional small to medium pebbles(2000), up to 0.30m thick. Directly above it was a 0.11m thick deposit of a relict agricultural / horticultural soil comprised a friable, dark grey brown sand silt with occasional small chalk pebbles, charcoal flecks and animal bone fragments (2001; Figure 5 and Figure 6, Section SA1, Plate 4). The top of soil 2001 and natural 2000 were both truncated by the imposition of ceramic land drains which were grouped together and recorded under context number 2006 (Figure 5). The tops of the drains were sealed beneath a single 'Terram' membrane which was observed at 5.33m aOD at the north-west end of the trench, 6.47m aOD at its south-west end. The variation in height probably reflects the level of truncation reached during landscaping for (presumably) the formation of the car parking areas and hard standings associated with the former factory. To achieve this, the area was first levelled and consolidated with limestone hardcore (2003) or crushed brick and concrete rubble (2004). These were set down on top of the membrane and were up to 0.46m thick. A concrete kerb base and electric ducting (2007; Figure 5) appeared to have been installed at the same time. Limestone hardcore 2003 and Rubble 2004 were used as the bedding for, respectively, either a tarmac (2002) or compacted limestone hard core surface (2003). Combined, these formed a gently sloping ground surface at the time the excavations were undertaken, rising from 5.65m aOD in the east and up to 6.85m aOD in the west.

Plate 4 Trench 2, north-west facing representative Section SA1. Relict soil (2001) below limestone hardcore. 0.4m scale

5.3 Trench 3

Trench 3 (Figure 2) was located towards the southern boundary of the of the proposed development. The ground sloped up almost imperceptibly, from 5.51m aOD in the east to 5.58m aOD in the west. As with Trench 2, the deposits varied little thus the elevation of the southern trench edge was recorded as a series of 1m wide sections at 10m intervals, except at the north-eastern end of the trench where a sequence of intercutting features was observed (Figure 8, Plate 5). Trench 3 was north-east / south-west aligned, 60m long, 2m wide and was machine excavated to 0.57m bGL except for the last 5m at south-western end of the trench where the depth was increased by 0.59m, to c. 4.48m aOD (Figure 7).

Plate 5 Trench 2, Intercutting features at north-east end of trench. Looks north. 1m scale

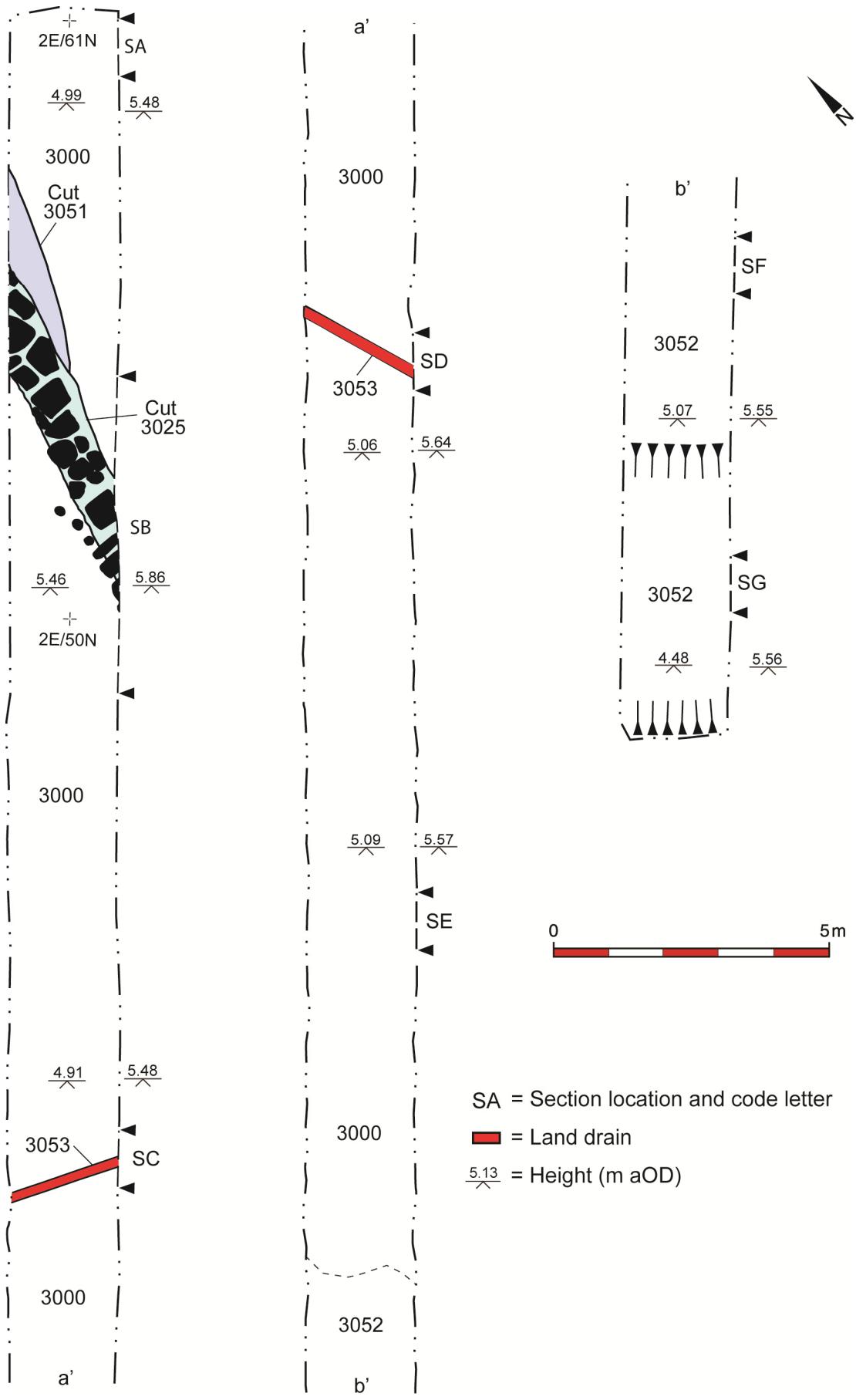
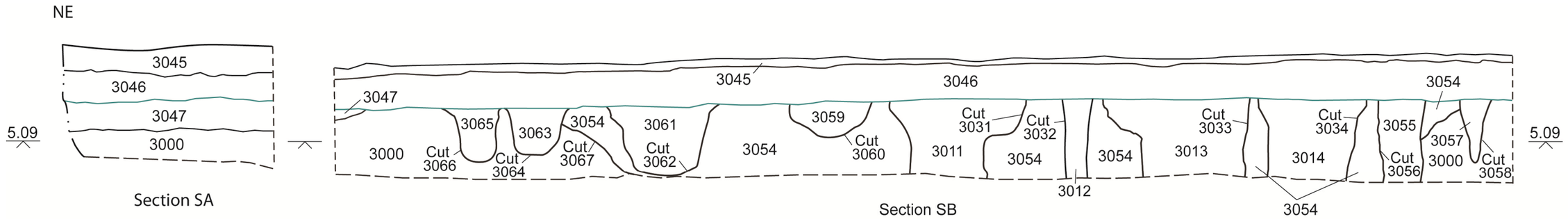


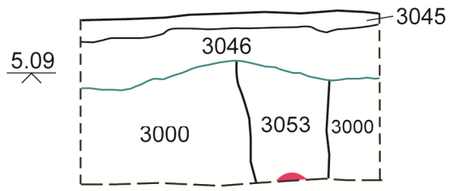
Figure 7 Plan of Trench 3

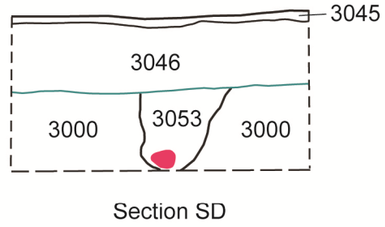
The earliest deposit in this trench was observed at c. 0.38m bGL, or 5.15m aOD and was located at the south-west end of the trench. It comprised a natural, stiff reddish brown sand silt clay with occasional small – medium pebbles and small angular erratics (3052; Figure 7 and Figure 8 - Sections SF and SG) which, at over 0.58m thick, continued beyond the base of the trench. Directly above it was a further natural deposit comprised a mixed stiff brown and pale grey mottled, dark orange brown silt sand clay with moderate manganese flecks and occasional small to medium pebbles (3000; Figure 7 and Figure 8, Sections SA – SG), up to 0.42m thick.

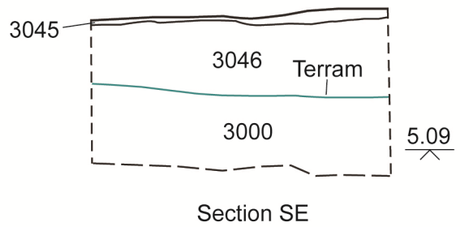
Plate 6 Trench 3, general shot looking north-east. Increase depth dig in foreground

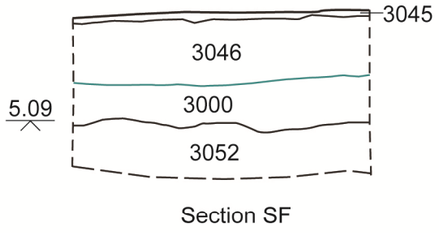
At the north-east end of the trench, Deposit 3000 was truncated by Ditch cut 3051 (Figures 7, 9 and 10). The top of it had been reduced to 4.96m aOD by the machine and it could not be traced in the trench edge due to truncation by later features. The western edge of it lay outside of the trench, whereas the eastern edge and southern extents were removed by later activity. What remained was north-north-east / south-south-west aligned, linear in plan, over 0.65m wide, 0.40m deep and had a wide 'U' shaped profile. The southern end it may have turned gently towards the west but, as it ran beneath a later intrusion this could not be verified. Its backfill (3048), a friable, coarse grained mid brown grey sandy clay with moderate Fe? Spotting, charcoal flecks and small pebbles, gave little indication to its use.

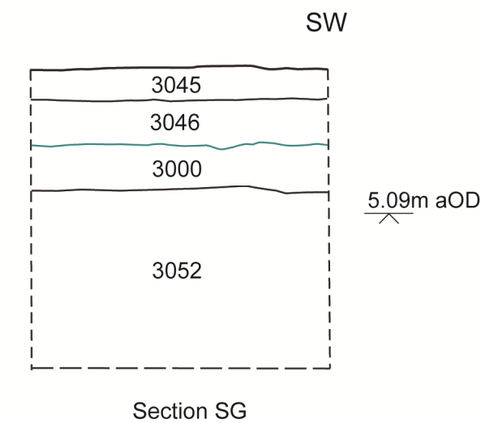












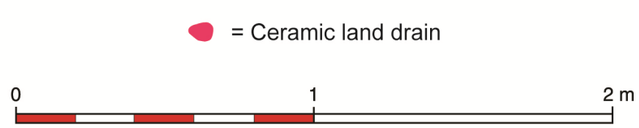


Figure 8 Trench 3; North-west facing Sections SA - SG

The top of Fill 3050 was truncated by north / south aligned Ditch cut 3049 (Figure 9) which continued beyond the north-west and south-east trench edges. Within the trench it was 4.70m long, up to 1m wide, 0.36m deep and had a wide 'U' shaped profile (Figure 10, Plate 7). The top of this feature had been reduced to the same level as Ditch 3051 yet it could be traced within the south-eastern trench edge (Cut 3067; Figure 8, Section SB), suggesting it had originally been c. 0.80m deep and had a steeper profile (as the Trench 3 had cut through it at an oblique angle, the excessive 4.40m width evinced in the section was erroneous.) The backfill of Cut 3049, a friable, coarse grained mid brown grey sandy clay with moderate Fe? Spotting, charcoal flecks and small pebbles (3048), was sealed beneath Deposit 3054. This was recorded as the fill of Cut 3067 (Figure 8, Section SB) and comprised a crumbly, mid reddish brown silt sand clay with occasional manganese flecks, small pebbles and small chalk fragments.

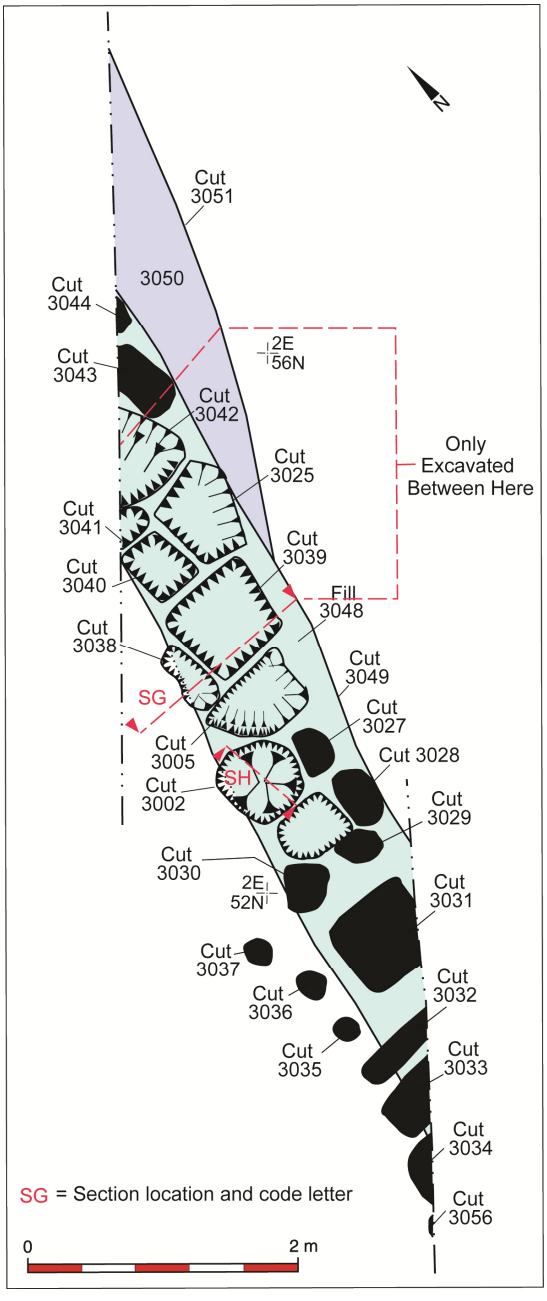


Figure 9 Trench 3; Composite plan

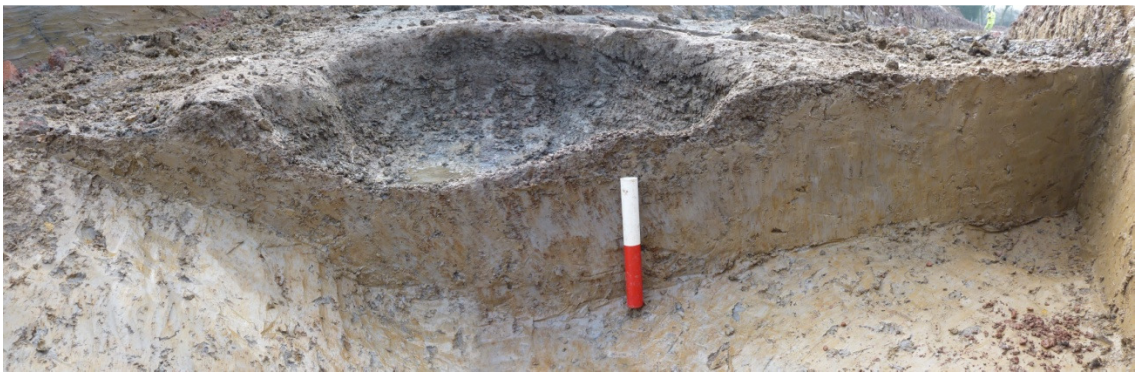


Plate 7 Trench 3, North facing elevation of Section SG. 0.20m scale

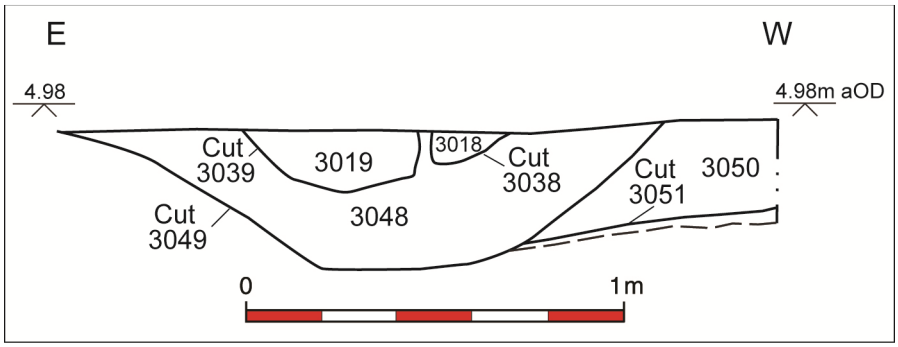


Figure 10 Trench 3; North facing Section SG

The top of deposit 3054 was truncated by a series of 28 closely set pits (Cuts 3002, 3005, 3025, 3027-38, 3040-44, 3056 (Figure 9), 3058, 3060, 3062, 3064 and 3066 (Figure 8, Section SB, Plate 8) which followed the line of Ditch 3049 (Plate 5). They were either an ovoid or rectilinear shape in plan, varied between 0.18m Ø - 0.74m wide and 0.24 – 0.67m deep. The majority proved to have vertical or very steep sides and flat uneven bases. It was chosen to draw the profile of Cut 3002 as a representative of the whole (Figure 11). They were all backfilled with a firm, slightly humic, mid brown grey sand clay with occasional small pebbles, stones and charcoal flecks (Contexts 3001, 3005, 3003, 3007-18, 3020-24 3055, 3057, 3059, 3061, 3063 and 3065, respective). A total of nine of them were hand excavated (Figure 9) and animal bone was recovered from Fills 3001 and 3003.

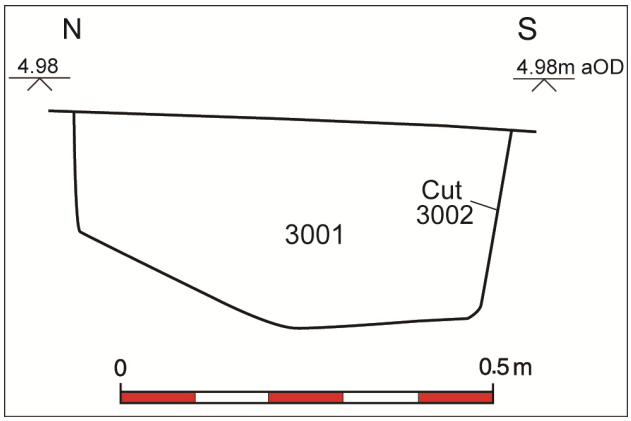


Figure 11 Trench 3; West facing Section SH

Plate 8 Trench 3; Detail of north-west facing Section SB showing Cuts 3031 (left), 3032 (centre right) and 3033 (right). 0.40m scale

The top of Natural 3000 was also sealed beneath an up to 0.14m thick deposit of a plastic, black mottled, mid greenish grey sand silt clay, with occasional small pebbles (3047; Figure 8, Sections SA and SB). This was located at the north-eastern end of the trench and was thought to represent a relict agricultural soil. A set of ceramic land drains, all recorded under Context 3053 (Figures 7 and 8, Sections SC – SD) had also been cut through the top of 3000. The fills of the aligned pits, land drains and the top of Deposit 3047 were all sealed beneath a single layer of 'Terram' membrane, laid down immediately before the area was levelled and consolidated with an up to 0.26m thick deposit of crushed red brick and concrete (3046; Figure 8, Sections SA – SG) beneath a compacted limestone hardcore surface (3045) up to 0.14m thick. The top of the hardcore sloped up gently from 5.51m aOD in the east to 5.58m aOD in the west and also formed the ground level at the time the excavations were undertaken.

5.4 Discussion

The archaeological assessment of the site showed that deposits of archaeological interest were present within Trenches 1 and 3. Interpretation of these features was rendered difficult due to the confines of the trench, water-logging (Trench1) and adopting a policy of partial excavation to understand the relationship between features. The trenches will be discussed in numerical order.

5.4.1 Trench 1

The earliest deposits observed in Trench 1 were all thought to be related to a system of meandering palaeochannels. Gravels 1006 and 1008 were the earliest of the sequence and

were presumed to have been deposited within an earlier channel system which was then cut down on at least two occasions. This was inferred by the presence of Peat deposits 1009 and 1005. Peat 1009 was located at the north-eastern end of the trench and it was, although not excavated, thought to have been the fill of a north-west / south-east aligned channel. The machine excavation of a slot through peat 1005 proved the presence of a second, over 1.5m deep, east / west aligned channel at the south-western end of the trench (Figure 3 and 4). Both of these were thought to represent the last of a sequence of meandering channels within a localised alluvial flood plain. Wood fragments (1000) were observed at c. 1.60m bGL (3.77m aOD) in the base of the machine excavated slot. One of these, a fragment of Willow, was recovered and its state of preservation inferred that the peat fills of the channels have the potential to provide other similarly preserved palaeoenvironmental material which would provide information concerning the site setting, local habitat and regional environment throughout their formation. The channels, even after becoming silted, must have still been evident as a soft, wet hollow in the landscape as attempts were made to infill and consolidate them. The top of Deposit 1005 was sealed by a layer of decayed, oxidised peat (1004) which was then followed by an extensive deposit of slag (1003). Fragments of pottery recovered from Deposit 1004 suggested that these remedial works had started in the Late 19th - Early 20th Century and were initiated by dumping night soil into the top of, presumably, a wet boggy area created in a slump hollow formed in the top of the channels. The following dumps of slag suggested that the area was levelled for purposes other than reclamation for agricultural or horticultural reasons, but what this was is uncertain as the area had undergone truncation when it was levelled for the construction of the former factory. All that remained of the factory was its concrete foundations and floors, the latter being cast directly on top of slag deposit 1003.

In this trench significant palaeoenvironmental deposits were encountered at a depth of 0.30m bGL (5.12m aOD). In Trench 2 (below) these types of deposit were notable by their absence, suggesting that the southern limit of the channel(s) lay somewhere between the peat deposits observed in a test pit 40m to the south of Trench 1 and the northern edge of Trench 2. The potential exists for earlier human activity and /or settlement within this area, focused on the margins of the channels.

5.4.2 Trench 2

With the exception several land-drains (2006) and a small deposit of relict agricultural / horticultural soil (2001) at the north-east end of the trench, archaeologically significant deposits and features were absent. The backfills of the land-drains and top of Deposit 2001 had been truncated when the ground levels were reduced prior to the construction of the former factory's service areas and car-parks.

In this trench, the top of natural was reduced to a maximum depth of 0.42m bGL, reaching 5.33m aOD at the north-eastern end of the trench and 6.47m aOD at its south-western end.

5.43 Trench 3

In Trench 3, the top of the natural clay (3000) was truncated by north-north-east / south-south-west aligned boundary and / or drainage ditch 3051. This was located at the north-east end of the trench where it was either replaced or reinstated by a linear feature (Cut 3049) of a similar size and depth, albeit on a slightly different north / south alignment. Its upper fill

(3054) was punctured by a total of 28 closely set pits (Figure 9) which were thought to have been a method of arable cultivation, a type of 'Lazy bed', related to the former use of the area as a market garden. The animal bone recovered from the fills (3001 and 3003) of two of them (Cuts 3002 and 3025) and the richness of the aroma of all suggested that copious manure had been added before planting out had taken place. Although there was no dating evidence from either the ditches or the lazy beds, they appeared to have been a late addition to the landscape as they all shared the same alignment as Dunswell Road to the north. A pair of land drains (3053) and relict top soil (3047) located in the north-east end of the trench are also thought to have been survivors of the market gardens. The top fills of the land drains and the rest of topsoil 3047 was removed from elsewhere by the reduction of the ground level to c5.39m aOD during landscaping the area as part of the former factory development. In this area of the site the ground reduction was followed by the installation of a 'Terram' membrane before the area was brought up to surface level, to c. 5.58m aOD, with compacted brick and concrete rubble.

LIST OF SOURCES

Geol. Surv. (1957) British Geological Survey, ten mile map, sheet 2

ACKNOWLEDGEMENTS

The Pottery .....Ailsa Mainman

Wood Report ..... Steve Allen

APPENDIX 1 – Index to Archive

Item	Number of items
Context sheets	86
Context register	3
Photographic register	0
Levels register	6
Drawing register	0
Original drawings	12
B/W photographs (films/contact sheets)	42 (2 films)
Colour slides (films)	0
Digital photographs	76
Written Scheme of Investigation	1
Report	1

Table 1 Index to archive

APPENDIX 2 – Context List

Trench	Context no.	Description
1	1000	Wood fragments
	1001	Concrete floor
	1002	Modern disturbance and services
	1003	Slag, some glassy, in a dark grey gritty clay silt sand matrix, with occasional small to large patches medium grained black casting? sand
	1004	Soft, plastic, humic dark grey brown clay silt with occasional patches fibrous dark brown decayed silt peat, small flint fragments and animal bone
	1005	Friable, crumbly fibrous dark brown peat with occasional decayed plant roots, small pebbles and flint fragments
	1006	Fine to medium flint and chalk gravel in a plastic, orange mottled mid brown clay silt matrix with occasional pebbles
	1007	Block No. allocated for concrete sub-surface factory pile caps and ground beams
	1008	Loose, coarse pale grey white chalk and flint gravel in a pale blue grey gritty sand silt matrix
	1009	Friable, crumbly fibrous dark brown peat with occasional decayed plant roots, small pebbles and flint fragments
2	2000	Stiff, brown mottled (Fe?), olive green tinged , dark orange brown pale grey spotted silt sand clay with frequent pale grey clay silt spotting, moderate

		manganese flecks and occasional small to medium pebbles
	2001	Friable dark grey brown sand silt with occasional small chalk pebbles, charcoal flecks and animal bone fragments
	2002	Tarmac surface
	2003	Limestone hardcore
	2004	Coarse crushed brick and concrete hardcore
	2005	Tenacious, stiff reddish brown medium grained sand silt clay with occasional small – medium pebbles and small angular erratics
	2006	Block No. allocated for all ceramic land drains
	2007	Concrete beam (kerb base)
3	3000	Mixed, stiff, brown and pale grey mottled, dark orange brown silt sand clay with moderate manganese flecks and occasional small to medium pebbles
	3001	Firm, slightly humic, mid brown grey sand clay with occasional small pebbles, stones and charcoal flecks
	3002	Pit / other cut, contains 3001
	3003 - 3004	Firm, slightly humic, mid brown grey sand clay with occasional small pebbles, stones and charcoal flecks
	3005	Pit / other cut, contains 3004
	3006 - 3024	Firm, slightly humic, mid brown grey sand clay with occasional small pebbles, stones and charcoal flecks
	3025	Pit / other cut, contains 3003
	3026	Pit / other cut, contains 3006
	3027	Pit / other cut, contains 3007
	3028	Pit / other cut, contains 3008
	3029	Pit / other cut, contains 3009
	3030	Pit / other cut, contains 3010
	3031	Pit / other cut, contains 3011
	3032	Pit / other cut, contains 3012
	3033	Pit / other cut, contains 3013
	3034	Pit / other cut, contains 3014
	3035	Pit / other cut, contains 3015
	3036	Pit / other cut, contains 3016
	3037	Pit / other cut, contains 3017
	3038	Pit / other cut, contains 3018
	3039	Pit / other cut, contains 3019
	3040	Pit / other cut, contains 3020
	3041	Pit / other cut, contains 3021
	3042	Pit / other cut, contains 3022
	3043	Pit / other cut, contains 3023
	3044	Pit / other cut, contains 3024
	3045	Limestone hardcore
	3046	Moderately coarse crushed brick and concrete hardcore
	3047	Plastic, black mottled mid greenish grey sand silt clay with occasional small pebbles
	3048	Friable, coarse grained mid brown grey sandy clay with moderate Fe? Spotting, charcoal flecks and small pebbles
	3049	Ditch? Cut, contains 3048
	3050	Firm mid grey brown slightly sandy clay with occasional small pebbles

	3051	Ditch? Cut, contains 3050
	3052	Tenacious, stiff blue grey clay marbled reddish brown medium grained sand silt clay with occasional small – medium pebbles and small angular erratics
	3053	Block No. allocated for all ceramic land drains
	3054	Crumbly, plastic when worked, mid reddish brown silt sand clay with occasional manganese flecks, small pebbles and small chalk fragments
	3055	Firm, slightly humic, mid brown grey sand clay with occasional small pebbles, stones and charcoal flecks
	3056	Pit / other cut, contains 3055
	3057	Firm, slightly humic, mid brown grey sand clay with occasional small pebbles, stones and charcoal flecks
	3058	Pit / other cut, contains 3057
	3059	Firm, slightly humic, mid brown grey sand clay with occasional small pebbles, stones and charcoal flecks
	3060	Pit / other cut, contains 3059
	3061	Firm, slightly humic, mid brown grey sand clay with occasional small pebbles, stones and charcoal flecks
	3062	Pit / other cut, contains 3061
	3063	Firm, slightly humic, mid brown grey sand clay with occasional small pebbles, stones and charcoal flecks
	3064	Pit / other cut, contains 3061
	3065	Firm, slightly humic, mid brown grey sand clay with occasional small pebbles, stones and charcoal flecks
	3066	Pit / other cut, contains 3065

Table 2 Context list

APPENDIX 3 – Pottery by Context

Trench	Context no.	Description	Date
1	1004	1 sherd red earthenware, white-dipped, 1 sherd of abraded earthenware, possibly Low Countries red ware 5 sherds of bone china with transfer printed design 4 sherds of white earthenwares, plain or with transfer-printing. Vessels include earthenwares, pancheon, plates, and bowls.	Late 19th – Early 20th Century

Table 3 Pottery by context

APPENDIX 4 – Wood Report

Section of halved roundwood, traces of bark present. Spiralling grain, appears to have been naturally cleft. No working marks. Both ends broken away and missing. 338mm L, 152mm W, 97mm Th. Salix spp.

Salix (willows, sub species not differentiated) is not a species that can be dated by dendrochronology. Although the wood species could under normal circumstances be

submitted for ^{14}C dating, this particular piece seems to be contaminated with petrochemicals, detectable by smell while being washed and as a thin film on the run off from the washtable.

APPENDIX 5 – Written Scheme of Investigation/Project Brief

Dunswell Road, Cottingham

WSI - Evaluation

Redrow Homes Yorkshire

prospect archaeology

Executive Summary

Redrow Homes Yorkshire has made a planning application for the construction of 108 residential dwellings on Dunswell Road, Cottingham East Yorkshire (Planning ref DC/10/03018). The site is located to the west of Dunswell Road in an area of archaeological interest.

A desk based assessment was prepared by ARCUS in 2006. The Manager of Humber Archaeology Partnership has been consulted as advisor to East Riding of Yorkshire Council (ERYC). These have identified the potential for remains of all periods but with the prehistoric and Roman periods being most prevalent. To the north of the site, cropmarks were excavated and dated to the 2nd – 3rd centuries AD. Mesolithic, Neolithic and Bronze Age finds have been made around the site, as well as an Iron Age settlement site with large quantities of pottery recorded to the west at Creyke Beck.

This document identifies trench locations and a methodology for their excavation. The work will be monitored by Humber Archaeology Partnership on behalf of ERYC and will determine whether further work is required in advance of or during development.

1. Introduction

1.1 Redrow Homes Yorkshire has applied for planning permission for the construction 108 residential dwellings on a site on Dunswell Road, Cottingham (planning reference DC/10/03018). The site is centred on 505040, 433930 and measures c.4ha. It lies in an area of extensive archaeological activity and as such an evaluation excavation is required to determine the potential for the development to impact on any as yet unidentified heritage assets.

1.2 The Partnership Manager of the Humber Archaeology Partnership (HAP) commented on the application and referred to the desk-based assessment prepared by ARCUS in 2005 for a previous planning application in May 2006 and resubmitted for this application. The archaeological background of the site is outlined below. The Partnership Manager of (HAP) concluded that an evaluation excavation be required in accordance with the Joint Structure Plan, the Local Plan and policies contained in PPS5.

1.3 The site is currently unoccupied and was most recently in use by Swift Holdings Ltd for their caravan manufacturing business. It contained large factory buildings and hard-standing which have since been removed. Geotechnical assessment indicates that made ground exists to a depth of 2.4m in the north below the former building but reduces in depth southwards until the make-up for the hard-standing directly overlies subsoil at the southern end of the site (ARCUS 2005).

2.0 Archaeological and Historical Background

2.1 The area of the proposed development lies in a wetland landscape continuously occupied from the Mesolithic period onwards. Mesolithic and Neolithic flint scatters are known locally and two Neolithic axeheads were found during gravel quarrying within the Swift's site to the east. A suspected Bronze Age barrow cemetery has been identified to the northeast. Extensive Iron Age settlement is known from excavation near the electricity sub-station to the north-west.

2.2 During the Roman period a landscape of dispersed settlements and field systems existed, as evidenced by cropmarks to the north. Excavation of these cropmarks undertaken during the construction of the BP TSEP and Transco West Hull Relief Gas pipelines established a date of 2nd and 3rd century AD for the features where excavated. It is entirely possible that elsewhere such features could be earlier or later. Iron Age and Roman coins have been found by metal detectorists in the area.

2.3 The site lay adjacent to the Archbishop's deer park in the medieval period in an area possibly relating to the Domesday settlement of Pileford. The location of this settlement has never been proven but it may relate to the fields known as Pilwoods to the north of the site on the western side of Dunswell Road (ARCUS 2005)

3.0 Aims and Objectives

3.1 To identify and evaluate the extent, character and significance of archaeological remains within the application area.

3.2 To assess the impact of the proposed development on the archaeological remains.

3.3 To allow preparation of a suitable mitigation strategy that considers the options for preservation in situ, or for the investigation, recording and recovery of archaeological remains and the publication of the findings.

4.0 Methodology

4.1 Fieldwork will follow the guidance of the Institute for Archaeologists Standards and Guidance for Archaeological Field Evaluation (revised 2008).

4.2 Three trenches have been identified, each measuring 60m x 2m. They are located to investigate the entire area of the proposed development.

4.3 Mechanical excavation equipment will be employed under direct archaeological supervision until the uppermost significant archaeological horizon or natural undisturbed ground has been reached. It is expected that demolition material will underlie the current ground surfaces and these will be removed by machine until in-situ remains are identified. All archaeological features and deposits revealed will be sample excavated by hand in an archaeologically controlled and stratigraphic manner, and recorded in order to achieve the aims of the evaluation exercise. Homogenous or dump deposits may be removed by mechanical excavator once their character has been established by sample excavation.

4.4 A sufficient sample will be investigated to understand the stratigraphic sequence down to naturally occurring deposits. The sampling policy is as follows:

• A 100% sample should be taken of all stake-holes.

• A 50% sample should be excavated of all post-holes and pits, and this should include a complete section of each feature to recover its full profile.

• A minimum 10% sample should be excavated through all linear features crossing the trench. If features are believed to terminate within the trench the terminals should also be investigated.

• If features are observed to have a stratigraphic relationship then this relationship should be targeted by sample excavation.

4.5 A full written, drawn and photographic record will be made of all archaeological features and deposits revealed during the course of excavation. Plans should be completed at a scale of 1:50 or 1:20 (as appropriate), whilst section drawings should be at a scale of 1:20 or 1:10 (as appropriate). A minimum of monochrome 35mm format for photography is required. Digital colour photographs can be taken to supplement this record and for reproduction in the report.

4.6 Should human remains be encountered, they will be left in situ, protected from public sight. HAP and client's representative will be contacted to discuss their further treatment.

4.7 Palaeoenvironmental sampling will be undertaken where the potential for biological remains exists. A strategy for the recovery and sampling of environmental remains from the site should be agreed with an environmental advisor in advance of the project commencing (see English Heritage/Centre for Archaeology Guidelines 2002, Environmental Archaeology: A guide to the theory and practice of methods from sampling and recovery to post-excavation). Opportunity will be afforded for an environmental specialist to visit the site during the evaluation and to discuss the implemented strategy.

4.8 Provision will also be made for sampling material suitable for radiocarbon, archaeomagnetic and/or dendrochronological dating, as appropriate.

4.9 The finds recovery and conservation strategy will be discussed with HAP in advance of the project commencing, and a policy for finds recording will be agreed and submitted before commencement of site works (see Society of Museum Archaeologists 1993, Selection, Retention and Dispersal of Archaeological Collections, Guidelines for use in England, Northern Ireland, Scotland and Wales). Any recording, marking and storage materials should be of archive quality, and recording systems must be compatible with the recipient museum.

4.10 All finds (artefacts and ecofacts) visible during excavation will be collected and processed, unless variations in this principle are agreed. Finds must be appropriately packaged and stored under optimum conditions, as detailed in the RESCUE/UKIC publication First Aid for Finds. In accordance with the procedures outlined in MAP2, all iron objects, a selection of non-ferrous artefacts (including all coins), and a sample of any industrial debris relating to metallurgy should be Xradiographed before assessment.

4.11 The following categories of artefacts may be predicted: pottery, flint, ferrous and non-ferrous metalwork, animal bone (worked and unworked), worked stone, clay pipes, ceramic building materials and glass.

4.12 The archaeological contractor will demonstrate that they or their sub-contractors possess the necessary levels of professional experience and technical expertise, to undertake rural

excavations, and to be familiar with artefacts of the region from the prehistoric to post-medieval periods.

4.13 A programme of monitoring visits will also be agreed with the council's archaeological advisors and Prospect Archaeology Ltd.

4.14 Reinstatement will comprise backfilling of the excavated area with the arisings. No reinstatement of surfaces will be undertaken unless specifically requested by the client.

4.15 Should the evaluation prove less productive than anticipated, and the contractor wish to curtail fieldwork before the scheduled close of the on-site works, HAP and client's representative must be contacted in advance, so that an opportunity to view the site prior to backfilling can be taken up.

4.16 Should the contractor or commissioning body wish to vary the monitoring strategy, if, for example, a part or the whole of the site is not amenable to monitoring as outlined above it is expected that a proposal for amended/additional work will be drafted by the archaeological contractor and discussed urgently with the council's archaeological advisor to resolve the matter.

5.0 Report preparation, contents and distribution

5.1 Upon completion of fieldwork a report will be prepared discussing the findings and assessing the importance and potential for further investigation prior to or during development.

5.2 The evaluation report will be prepared to include the following:

• A non-technical summary of the results of the work, introduction and aims and objectives.

• An introduction which should include

− the site code/project number

− planning reference number

− dates when the fieldwork took place

− grid reference

• An account of the methods and results of the evaluation, describing both structural data and associated finds and/or environmental data recovered.

• Interpretation, including phasing of the site sequence and spot-dating of ceramics. (Descriptive material should be clearly separated from interpretative statements). This shall be supported by the use of photographs and drawings, to include an overall plan of the site accurately identifying the location of trenches; individual trench plans as excavated indicating the location of archaeological features, with at least one section detailing the stratigraphic sequence of deposits within each trench.

• A specialist assessment of the artefacts recovered. Allowance should be made for preliminary conservation and stabilization of all objects and an assessment of long-term conservation and storage needs. Assessment of artefacts must include inspection of X-radiographs of all iron objects, a selection of nonferrous artefacts (including coins), and a sample of any industrial debris relating to metallurgy. A rapid scan of all excavated material

should be undertaken by conservators and finds researchers in collaboration. Material considered vulnerable will be selected for stabilisation after specialist recording. Where intervention is necessary, consideration must be given to possible investigative procedures (e.g. glass composition studies, residues in or on pottery, and mineral-preserved organic material). Once assessed, all material will be packed and stored in optimum conditions, as described in First Aid for Finds.

• A specialist assessment of the environmental samples taken (if appropriate), with a view to their potential for subsequent study. Processing of all samples collected for biological assessment, or sub-samples of them, must be completed. Bulk and site-riddled samples from dry deposits should have been processed during the excavation, where possible. The preservation state, density and significance of material retrieved must be assessed, following methods presented in Environmental Archaeology: a Guide to the theory and practice of methods from sampling and recovery to post-excavation. Unprocessed sub-samples must be stored in conditions specified by the appropriate specialists. Assessments for any technological residues should be undertaken. Samples for dating must be submitted to laboratories promptly, so as to ensure that results are available to aid development of specifications for subsequent mitigation strategies.

• The results from investigations in Archaeological Sciences will be included in the Site Archive and presented in the Evaluation Report. Reports will include sufficient detail to permit assessment of potential for analysis. They will include tabulation of data in relation to site phasing and contexts, and nontechnical summaries. The objective presentation of data will be clearly separated from interpretation. Recommendations for further investigations (both on samples already collected, and at future excavations) will be clearly separated from the results and interpretation, and will be incorporated into the Specifications/Project Design for any future intervention or mitigation strategy.

• An assessment of the archaeological significance of the deposits identified, in relation to other sites in the region.

• A conclusion with recommendations for further work, if required.

• Details of archive location and destination (with accession number, where known), together with a catalogue of what is contained in that archive.

• Appendices and figures, as appropriate, including a copy of the specification and/or project design.

• References and bibliography of all sources used.

5.3 Six (6) copies of the report will be prepared for redistribution to the commissioning body, design team, Local Authority and HAP within an agreed timetable (4 weeks) and subject to any contractual requirements on confidentiality (see below). A digital copy of the report will be supplied in PDF format.

6.0 Copyright, confidentiality and publicity

6.1 Unless the individual/organisation commissioning the project wishes to state otherwise, the copyright of any written, graphic or photographic records and reports rests with the originating body (the archaeological organisation undertaking the fieldwork and analysis).

Agreements on copyright should be agreed with the commissioning body at the outset of the project.

6.2 The circumstances under which the report or records can be used by other parties will be identified at the commencement of the project, as should the proposals for distribution of the report (see above). All archaeologists undertaking work must respect the commissioning body's requirements over confidentiality, but the archaeologist must endeavour to emphasise their professional obligation to make the results of archaeological work available to the wider archaeological community within a reasonable time.

6.3 The archaeologist undertaking the evaluation has a duty of confidence to the client commissioning the work. All aspects of publicity must be agreed at the outset of the project between the commissioning body and the archaeological organisation or individual undertaking the project.

6.4 Ultimately the archive and copyright is expected to be granted to the Hull and East Riding Museum.

7.0 Archive preparation & deposition

7.1 The Hull & East Riding Museum will be contacted in advance of fieldwork commencing and an accession number acquired. Archive preparation requirements will be discussed and the site archive will be prepared in line with this specification and deposited with the Hull and East Riding Museum upon the completion of archaeological works.

8.0 Publication and dissemination

8.1 Where no further work is envisaged, allowance will be made for the preparation and publication in a local journal of a brief note on the results of the evaluation and a summary of location and material held within the site archive. In the event of further work being required, publication will be undertaken following completion of that further work.

9.0 Monitoring, health and safety, staffing & insurance

9.1 The work will be monitored by HAP who should be consulted before the commencement of site works. Prospect Archaeology Ltd will monitor on behalf of the commissioning body.

9.2 Health and safety will take priority over archaeological matters. All archaeologists undertaking fieldwork must comply with all Health and Safety Legislation; this includes the preparation of a Risk Assessment.

9.3 Necessary precautions should be taken with regard to underground services and overhead lines.

9.4 The archaeologist or archaeological organisation undertaking fieldwork will ensure that they, or any proposed sub-contractors, are appropriately qualified to undertake such projects.

9.5 The archaeologist or archaeological organisation undertaking the monitoring will ensure that they are adequately insured, to cover all eventualities, including risks to third parties.