HERITAGE NETWORK

A10 Wadesmill Bypass: Phase 2
Haul Road

HN361

Archaeological Evaluation Report

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THE HERITAGE NETWORK LTD

Registered with the Institute of Field Archaeologists as an Archaeological Organisation
Archaeological Director: David Hillelson, BA MIFA

A10 WADESMILL BYPASS: PHASE 2
Haul Road

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Archaeological Evaluation Report

Prepared on behalf of the Fitzpatrick Contractors Ltd and Lafarge Aggregates

by

Chris Turner, BSC

Report No.161

September 2002

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Contents

The cover illustration is an extract from Dury and Andrews' Map of Hart-fordshire, 1766

Acknowledgements

The fieldwork for this project was undertaken by Paul Palmer, Karin Semmelmann, David Kaye and Geoff Saunders under the supervision of Chris Turner.

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Summary

Site name and address:	A10 Wadesmill Bypass, Herts		
County:	Hertfordshire	**District:**	East Herts
Village/town:	Thundridge-Colliers End	**Parishes:**	Thundridge, Standon
Planning reference:	n/a	**NGR:**	53542/21600-53806/22265
Client name and address:	Fitzpatrick Contractors Ltd, Hertford Road Hoddesdon EN11 9BX		
Nature of application:	Roadbuilding	**Present land use:**	Agriculture
Size of study area:	c.70,000m²	**Size of area investigated:**	c.70,000m²
Site Code:	HN361	**Other reference:**	n/a
Organisation:	Heritage Network	**Site Director:**	David Hillelson
Type of work:	Monitoring	**Finds location/Museum:**	Hertford Museum
Start of work	April 2002	**Finish of work**	June 2002
Related SMR Nos.:	n/a	**Periods represented:**	Prehistoric-post/med
Previous summaries /reports:	Phase 1 Evalution Report (HN report No.148)		

SYNOPSIS

As the second phase of archaeological works in association with the construction of the A10 Wadesmill Bypass, the Heritage Network undertook a watching brief on the groundworks for a haul road along the length of the road corridor.

The line of the haul road was machined under close archaeological supervision through 42 of the 53 defined plots crossing the by-ass route. A total of 40 archaeological features were encountered in 18 of the plots, ranging from former field boundaries of post-medieval origin, to Late Bronze/ Early Iron Age pits.

This phase of work has further clarified the potential for encountering archaeological features within the full width of the road corridor. Four areas of archaeological significance were identified:

In Plot 6, a series of early LBA/EIA pits and a post hole were investigated. Fragments of several crucibles were recovered indicating that metal working was taken place in the vicinity.

In Plot 18, a single Iron Age ditch was encountered. However, the density of pottery and other domestic material recovered from this feature suggests that a settlement site may lie in very close proximity.

In Plot 29, three pits and three linears were encountered. At least one of the features dates to the late Iron Age. This data, considered in association with the information recovered from the evaluation trenches in the southern half of this plot, suggests a high probability that a settlement site may survive in this plot which spans the Late Bronze Age to the 2nd / 3rd century AD.

In Plot 34, a Bronze Age ring ditch and associated pits and a posthole were encountered. These features were recorded and preserved in situ.

In Plot 12, where advance evaluation suggested that there might be several phases of surviving archaeological activity spanning the late Bronze Age to the medieval period, only one post-medieval ditch was encountered along the line of the haul road. This suggests that the concentration of significant archaeology is confined to the western half of the road corridor.

This phase of works has clarified the extent of the archaeological resource along the length of the road corridor, and has indicated the need for further investigation in Plots 12, 18 and 29.

Introduction

This report has been prepared on behalf of *Fitzpatrick Contractors Ltd* and *Lafarge Aggregates* as part of the archaeological monitoring and recording of the construction of the A10 Wadesmill By-pass, Hertfordshire. This programme of archaeological fieldwork forms the agreed Phase 2 archaeological works carried out as part of the construction programme and follows the provisions set out in the Heritage Network's *Archaeological Mitigation Statement,* dated November 2001, approved by the Highways Agency as part of the tender submission for the construction project. The detailed methodology for the monitoring of the construction of the haul road was contained in a separate *Project Design* (*A10 Wadesmill Bypass. Phase 2: Haul Road*) submitted to the Highways Agency (HA) and to the County Archaeology Office (CAO), and approved by the CAO as the agreed curatorial authority for the project.

The route of the bypass (see Figure 1) runs approximately north-northeast from the junction of the present A10 with the A1170, north of Ware (TL 2542 1600), to the east of the villages of Thundridge, Wadesmill, High Cross and Colliers End, and rejoins the present route at its junction with the A120 southwest of Standon (TL 3806 2265).

The haul road runs along the eastern side of the road corridor from the southern end of the bypass to a point just south of Cold Christmas Lane where it crosses to the western edge (see Figure 2). It crosses back to the eastern edge on the north side of Cold Christmas Lane. At Old Church Lane, it crosses back to the western side to cross the temporary bridge over the River Rib. From the river the haul road continues along the western edge until a point just north of Gore Lane where it recrosses to the eastern edge. It continues along the eastern edge to end in the works compound, located at the junction with the present A10 and the A120.

Fieldwork carried out on behalf of the Highways Agency by the Essex Field Archaeological Unit, in advance of the start of the construction contract, identified six potential archaeological sites along the route of the bypass of which three, designated sites 1, 2 and 6, were evaluated by them (Roy, 2002).

Site 3, and three further areas of identified potential, were evaluated by the Heritage Network as Phase 1 of the archaeological works undertaken as part of the construction contract. The evaluation of Site 3 (Plot 29) identified a concentration of multi-period activity which was considered to deserve further investigation (Turner, 2002).

The aim of the present phase of archaeological works has been to consider the location, extent, date, character, condition, significance and quality of any surviving archaeological remains which are liable to be threatened by the construction programme along the length of the road corridor.

This report sets out the results of the Phase 2 evaluation, and identifies those archaeological features and deposits which might require further investigation, and could cause disruption to the main construction programme.

Previous Archaeological Work

A programme of archaeological investigation was undertaken at the request of the Highways Agency, by the Essex County Council Field Archaeology Unit (FAU), in advance of the start of the construction contract. Reports made available by the Highways Agency include, to date:

a desk-based assessment (Vaughan, 2001a) which incorporates data derived from the County Sites and Monuments Record, and historical, documentary and cartographic data derived from a number of sources;

a fieldwalking survey (Vaughan, 2001b), carried out over approximately half of the route, which collected and mapped artefact evidence in 20m squares and analysed the results statistically to define possible archaeological sites;

a geophysical survey (Wardill, 2001) focused on a number of areas highlighted by the fieldwalking, in order to characterise the nature of the identified archaeology by non-intrusive means;

recommendations for further archaeological evaluation (Vaughan, 2001c) which identified six potential sites.

Further evaluation work was subsequently carried by the FAU, on three of the six sites, defined as *Sites 1, 2* and *6* in the advance reports (Roy, 2002). No evaluation work was undertaken in *Site 3* (Plots 28-29), *Site 4* (Plots 32-34) or *Site 5* (Plots 42-43).

Site 1 (Plots 10-12) was located on Moles Farm to the south of Cold Christmas Lane. In total 28 trenches were excavated which revealed possible prehistoric and medieval activity in the north-west corner of the site (Plot 12).

Site 2 (Plots 16-18) was located on the Youngsbury Estate to the north of the River Rib. In total 8 trenches were excavated which revealed no archaeological features or deposits.

Site 6 (Plots 44-46) was located on Dowsetts Farm/Standon Friars to the north of Dowsetts Lane. In total 21 trenches were excavated which revealed no archaeological features or deposits.

As Phase 1 of the archaeological works carried out as part of the construction contract, Site 3, identified by the FAU, and three additional sites identified in the Heritage Network's *Archaeological Mitigation Statement* (Hillelson & Turner, 2001) were evaluated by trial trenching.

Plot 15 was located immediately to the south of the River Rib. Three trenches were excavated, and an auger survey was carried out, which identified an earlier alignment of the river but no archaeological features or deposits.

Plots 28-29 (Site 3) was located between North Drive and Sutes Wood. Twenty-four evaluation trenches were excavated, which identified a number of linear

features containing domestic pottery and animal bone spanning the late Bronze Age to the Roman periods.

Plots 35-37 was located between Gore Lane and a track linking Colliers End with Plashes, just to the north of Site 4. Eleven evaluation trenches were excavated which revealed no archaeological features or deposits.

Plot 51 was located close to the original line of Ermine Street, just to the north of Site 6. Seven evaluation trenches were excavated which revealed no significant archaeological features or deposits.

Fieldwork

STRATEGY

The groundworks for the haul road have provided an opportunity for the linear evaluation of a sample of the whole road corridor, and the identification of archaeological features and deposits which might require further investigation and could cause disruption to the main construction programme.

The construction of the haul road has provided an approximate 10m wide strip along the 7km length of the route, representing an approximate 20% sample of the whole corridor. The clearance groundworks were undertaken in two stages: the first involving the stripping of the topsoil / ploughsoil, the second involving the rotovating of the exposed sub-surface to a depth of 300mm.

METHODOLOGY

The first stage stripping works were carried out under full-time archaeological supervision. All identified archaeological features were investigated and recorded in accordance with the method statements contained in the Heritage Network's approved Project Design. The timetable for the fieldwork followed the groundworks schedule, beginning with an initial strip in plot 29 on the 17th April 2002, and continuing to the end of May.

All machining for the haul road was undertaken using a 360^{o} tracked excavator fitted with a toothless ditching bucket and all spoil was inspected for archaeological artefacts.

Each plot through which the haul road passed was recorded on an appropriate pro-forma record card. All archaeological features were investigated to ascertain their nature, significance and date and a written, drawn and photographic record produced.

Features were located with reference to surveyed chainage markers, which measure distance north in metres along the road corridor.

All work was carried out in accordance with the requirements of the construction contract, and followed the provisions set out in the Heritage Network's approved *Archaeological Mitigation Statement*.

GEOTECHNICAL DATA

The underlying geology of the road corridor consists of glacial tills. In the valley of the River Rib, alluvium overlies lower chalk, and the base of the valley slopes also has colluvial deposits. To the north of Gore Lane, at Plashes farm and below Colliers End, sand and gravel cover tertiary clay (Vaughan 2001). The natural chalk rises to the surface in places, on the slopes at the northern end of the bypass.

RESULTS

Archaeological features were identified in 18 field plots (43%) out of a total of 42 through which the haul road passed. A broad spectrum of evidence was encountered along the route, ranging from field systems to Late Bronze/Early Iron Age settlement features.

Of the 40 features recorded, over 25% were former field boundaries which could be traced in the cartographic record. Linears which could not be directly related to known boundaries constituted 23% of the features. Pits constituted 20% of the features, and burnt patches 10%. Two post holes, four tree boles, a post medieval quarry and a possible post-medieval track were also identified. In all, four discrete areas of significant archaeological activity were identified.

The collected data is tabulated below, by plot, followed by a detailed consideration of the four identified areas of archaeological significance. Plots containing identified archaeological features have been illustrated in Section 7.

Plot	Context No	Archaeological feature(s)	Location of features (m)	Potential for further features
1.00	-	None - no haul road in this plot	-	-
2.00	-	None - no haul road in this plot	-	-
3.00	-	None - no haul road in this plot	-	-
4.00	-	None - no haul road in this plot	-	-
5.00	-	None - no haul road in this plot	-	-
6.00	6001, 6003, 6005, 6007, 6009, 6011, 6019	1 posthole; 1 Late Bronze Age pit group	1360.00	High
7.00	7001-7003	3 Med/Post-Med linears (poss. remnants of ridge and furrow)	1580, 1590, 1610	Moderate
8a	8001.00	1 undated linear	1680.00	Low
8b	-	None	-	-
9.00	-	None	-	-
10.00	-	None - Disturbed by modern gas main	-	Low
11.00	-	None	-	-
12.00	12001, 12002	2 Post-Med linears	2210.00	High
13.00	-	None	-	-
14.00	-	None	-	-
15.00	-	None	-	-
16.00	16001, 16002	1 old field boundary, Post-Med/ mod tree bole/ pit	2700, 2790	Low
17.00	-	None	-	-
18.00	18001.00	Iron Age ditch	3100.00	High
19.00	-	None	-	-
20.00	-	None - no haul road in this plot	-	-
21.00	-	None - no haul road in this plot	-	-
22.00	22001, 22002	2 Post-Med field boundaries	3205, 3270	Low
23.00	23004, 23006, 23007	Post-Med linear, 2 tree boles	3400-3270	Low
24.00	24001.00	Post-Medieval quarry	3500.00	Moderate
25.00	-	None	-	-
26.00	-	None	-	-
27.00	27001.00	poss. Post-Medieval track?	3800.00	Moderate
28.00	28003.00	Undated 1 burnt pit	4040.00	Moderate

29.00	29003, 29006, 29009, 29011, 29012, 29015	3 Iron Age pits and 2 linears, 1 Post-Med field boundary.	4210-4383	High
30.00	-	None	-	-
31.00	31001.00	Post-Med former field boundary	4910.00	Low
32.00	32001.00	Post-Med former boundary	5200.00	Low
33.00	33001.00	Post-Med former boundary	5350.00	Low
34.00	34003, 34006, 34007, 34008	Bronze Age ditch, 2 pits , 1 posthole	5420.00	High
35.00	-	None	-	-
36.00	-	None	-	-
37.00	-	None	-	-
38.00	-	None	-	-
39.00	-	None	-	-
40.00	-	None	-	-
41.00	-	None	-	-
42.00	42001, 42002	2 Post-Med field boundaries	6517, 6619	Low
43.00	43001-43003	3 undated burnt flint patches	6840.00	Low
44.00	-	None	-	-
45.00	-	None	-	-
46.00	-	None	-	-
47.00	-	None		-
48.00	-	None - no haul road in this plot		-
49.00	-	None		-
50.00	-	None - no haul road in this plot		-
51.00	-	Site Compound None - no haul road in this plot	-	-
52.00	-	None - no haul road in this plot	-	-
53.00	-	None - no haul road in this plot	-	-

Plot 6

Background

Plot 6 is located to the south of Thundridge and west of Mole's Farm, centred on NGR TL 3561 1622, close to the junction between the present A10 and the A1170 (see Figure 3). At present the land is open farmland, which lies on the plateau above Thundridge at c.77m AOD.

Late Bronze Age/Early Iron Age activity was revealed at NGR TL 363 166, approximately 700m NE of Plot 6, during pipeline works on the ridge at Moles Farm in 1968. The subsequent excavation investigated features truncated by the pipeline, including five pits and ditches, containing extensive pottery and bone (SMR 2098). The area is now a designated Area of Archaeological Significance (AAS 141).

Roman activity, in the form of linked puddling or clay-working pits, was also found at Moles Farm during the construction of the Ware Bypass in the 1970s, centred at NGR TL 3555 1630, approximately 120m NW of Plot 6. Cropmark and placename evidence have defined a rectangular enclosure adjacent to these pits (SMR 4714).

Recorded features

A series of intercutting pits and a post hole were identified at chainage point 1360m. The pits were located on the eastern limit of the haul road corridor, so only a proportion of these features was available for investigation. The group had been disturbed by a deep plough mark [6003].

The principal pit cut [6009] was ovoid and measured approximately 2.00m in length, over 1.00m in width and 1.42m in depth. Context [6005] was a shallow cut, measuring approximately 0.20m in depth and located to the west of [6009]. Context [6007] was a further shallow cut located to the south of [6009]. These cuts appear to form a ledge on the outside of the main pit, and may represent earlier features reused as part of a larger feature.

Three fills were identified, and bulk samples were taken from all three to provide additional evidence regarding the function of this feature.

The upper fill (6010) sealed the entire feature and comprised a very dark greyish brown (2.5Y 3/2) compact silty clay with frequent charcoal inclusions, with an average depth of 0.33m. It was disturbed by a modern deep-plough rut, cut [6003], which ran across the feature on a north - south alignment. Finds recovered from this fill include 7 sherds of Late Bronze Age/Early Iron Age flint-gritted pottery, a possible microlith of Mesolithic date, and fired clay fragments

The secondary fill (6016), consisted of redeposited dark yellowish brown (10 YR 4/6) sandy clay (possibly redeposited natural), 0.46m in depth. A single sherd of possible Early/Middle Iron Age pot was recovered.

The primary fill, (6013), consisted of dark yellowish brown (10YR 3/4) firm sandy clay with frequent charcoal inclusions, approximately 0.18m in depth. Finds recovered include 105 sherds of pottery (43 of which represent the possible crucible, the remainder being flint-gritted sherds of Late Bronze Age/Early Iron Age date), 21 fragments of fired clay, 6 struck flints, and 6 pieces of stone.

A stratigraphically later pit, cut [6001], truncated cut [6005] on the western side. Two fills were identified.

The upper fill (6002) was a dark yellowish brown (10 YR 3/4) sandy clay, which contained two sherds of Late Bronze Age/Early Iron Age flint-gritted pottery & 7 fragments of fired clay.

The primary fill (6017) was a very dark grey (2.5 YR 3/3) sandy clay, which contained a single relatively large sherd of Late Bronze Age/Early Iron Age pottery.

A posthole, cut [6011], located approximately 4 metres south of the pit group, was also investigated. Although no dating evidence was recovered from this feature, and it is not stratigraphically or physically related to the pit group, the nature of its fills suggests that it may be contemporary.

Discussion

The artefact assemblage from Plot 6 has been dated to the Late Bronze Age/Early Iron Age on the basis of the recovered pottery. This date is likely to be consistent with the struck flints collected, though evidence of possible earlier activity was also recovered, in the form of a microlith which is likely to be Mesolithic in date.

Despite the presence of fragments of at least three metal-working crucibles within the primary fill of pit [6009], and an initial interpretation of the feature as the remains of a furnace, the lack of any evidence for burning or heat action suggests that the pit fulfilled some subsidiary purpose, with metal working being undertaken in the vicinity, but outside the limits of the limits of the present investigation.

Evidence of metal working from the Late Bronze Age/Early Iron age coupled with occupation features within the surrounding area, serves to increase the archaeological status of Moles Farm and outlines the potential for further finds during the course of construction groundworks in this area.

Plot 18

Background

Plot 18 is located on the brow of the northern slope of the River Rib valley, to the north of Youngsbury Drive, centred on NGR TL 3530 1760 (see Figure 8). At present the land is open farmland, the northern end of which lies on a plateau at 70.66m AOD, dropping to c.57m at the southern end.

Fieldwalking has identified prehistoric flints and Roman pottery at the base of, and on the northern slope of the River Rib valley. Geophysical survey has also indicated anomalies towards the brow of the hill.

Youngsbury ice house, built in the mid 18th century, lies 200m North east of the plot.

Recorded Features

A single ditch [18003] was investigated in this plot at chainage point 3100m. This 'U' shaped feature was orientated broadly N-S and measured over 11.30m long, 0.90 wide and 0.55m deep. Two fills were identified within the ditch.

The primary fill (18002) was an olive brown (2.5 Y 4/4) silty clay. This fill appears to be the result of slumped natural deposits within the base of the ditch. This material was located predominantly on the western side. No finds were recovered from this context.

The principal secondary fill (18001) was a dark greyish brown (2.5 Y 3/2) silty clay. This contained 217 sherds of pottery together with animal bone, flint, daub, and iron fragments.

Discussion

The artefact and ecofact assemblage recovered from context (18001) has been dated to the Late pre-Roman Iron Age on the basis of the pottery fabrics and forms.

The large quantity of pottery recovered from the ditch fill, accompanied by butchered animal bone fragments, suggests that this is a domestic assemblage derived from occpation in close proximity to the ditch.

The quantity of redeposited struck flints and flint-tempered pottery also recovered suggests the presence of earlier activity in the vicinity.

Plot 29

Background

Plot 29 is located south east of Sutes Farm and north of North Drive, centred on NGR TL 3691 1880 (see Figure 13). At present the land is open farmland, which lies on the plateau, above the Barwick Tributary, at c.91m AOD.

Sutes Farm is the site of a 14th century manor house, which lies c.400m northwest of Plot 29. Approximately 450m northeast of the plot lies the site of a ploughed out medieval moat. The undated cropmark of a complete and partially rectilinear enclosure lie c.400m to the southeast.

Fieldwalking has identified a general spread of prehistoric flints, and Roman pottery and tile across a broad area from the Youngsbury Estate to Sutes Farm, with a concentration of material in the southern half of Plot 29. In addition, geophysical survey has identified some undated curvilinear anomalies in this plot.

Recorded Features

Six features were identified between chainage 4210m and 4383m in the southern half of this plot.

Three pits were investigated [29003], [29006] and [29009]. All three were subcircular in shape and each contained two fills.

Pit [29003] was located at chainage point 4372m. This feature measured 1m in diameter and 0.50m in depth. The sides were concave and the base flat. The primary dark grey silty fill (29002) contained charcoal flecks. Fired clay was recovered from this fill and a bulk sample was taken. The secondary fill (29001), a yellow brown silty clay, covered the southern half of this feature.

Pit [29006] was located at chainage point 4210m. This feature measured 0.60m in diameter and 0.19m in depth and was concave in profile. The primary fill was a grey silty clay (29005), which was overlaid by a darker grey silty clay fill (29004). No finds were recovered from this feature.

Pit [29009] was located at chainage point 4383m. This ovoid feature measured

0.90m in length, 0.60m in width and 0.23m in depth. The primary fill (29008) was a grey silty clay, which was overlaid by a darker grey silty clay fill (29007). No finds were recovered from this feature.

The post-medieval field boundary [29012], previously identified in trench 10 during the evaluation of this plot, was observed crossing the haul road at chainage point 4318m. To the south of this ditch was another ditch [29015], which was aligned broadly E-W. This feature crossed the haul road at chainage point 4310m. It had a 'U' shaped profile and measured 1.90m in width and 1.10m in depth. The primary fill (29014), was a grey brown silty clay which contained pottery fragments suggesting a Late pre-Roman Iron Age date. This was overlain by a mid brown silty clay (29013). This ditch does not appear to be aligned with the features encountered in the evaluation trenches to the east.

Another linear [29011] was identified running N-S along the haul road, between chainage points 4258 and 4266m. This feature measured 9.50m in length, 0.70m in width and 0.28m in depth. It had a 'U' shaped profile and contained a single dark grey silty clay fill (29010). Animal bone fragments and pottery were recovered from this context, suggesting that this feature dates to the Late pre-Roman Iron Age.

Discussion

The artefact and ecofact assemblage from the three pits and two of the linears in Plot 29 has been assigned to the Late pre-Roman Iron Age on the basis of the pottery fabrics present.

The material recovered suggests limited domestic occupation in the vicinity of the site, with the disposal of pottery, animal bone and ceramic building material. The new information indicates that the evidence encountered during the evaluation of this plot extends across the width the road corridor. The discovery of a single sherd of flint-tempered pottery and a struck flint suggest the existence of earlier activity on or in the vicinity of the site.

Plot 34

Background

Plot 34 is located immediately north of Gore Lane, centred on NGR TL 3720 1985 (see Figure 18). At present the land is open farmland, which lies in the valley of the Barwick Tributary, at c.82m AOD.

Fieldwalking has identified prehistoric flints and Roman pottery across the valley of the Barwick Tributary.

A late 18th century lime kiln is located 450m to the northwest of this plot. In addition, an undated possible linear trackway lies c.400m to the southeast.

Recorded Features

Initially a single curving ditch [34003] was observed within the haul road in this plot. When the width of the haul road was increased, the ditch was identified as part of a ring ditch with two pits and a posthole [34006] associated with it. The full diameter of the ring ditch was investigated as part of the works associated with the Gore Lane temporary diversion road which was built to the south of the haul road.

The ring ditch [34003] had a 'U' shaped profile and measured 21m in diameter, 1m in width and a maximum 0.18m in depth. The southern half of the ditch was highly eroded and survived to less than 0.05m in depth. The primary fill was a light olive brown (2.5Y 5/4) sandy clay (34002), which was overlain by a dark greyish brown (2.5Y 3/2) sandy silt (34001). Bulk samples were taken from both fills.

A single post hole [34006] was excavated, 6m to the north of the ring ditch. The primary fill (34005) was a dark yellowish brown (10YR 4/4) sandy silt, which was overlain by a dark grey (5Y2.5/2) clayey silt fill (34004). Pottery recovered from this fill suggests that it is contemporary with the ring ditch.

Two pits [34007] and [34008] were observed adjacent to, and continuing under the northern baulk of the haul road. Both produced animal bone fragments. Although no direct

dating evidence was recovered from these features, the nature of their dark grey silty fills was similar to those of the ring ditch and the post hole, suggesting that they may be contemporary.

Discussion

These features have been protected and preserved in situ beneath the haul road, as it is intended that this plot should be built up and no stripping of topsoil will take place.

The shallow depth of the ring ditch indicates extensive attrition of this feature, and it is likely that any features within the ring have been ploughed away. The artefact assemblage recovered from the fills of the ring ditch have been dated to the Late Bronze Age/Early Iron Age on the basis of the pottery types. The relatively unworn state of the material recovered from the upper fills may indicate deliberate backfilling of the ditch.

The presence of these features indicates that further archaeological features of a similar date are likely to survive within this plot, and that there is potential for similar sites along the course of the Barwick Tributary.

Finds Assessment

OVERVIEW

Concordance of finds

	Pottery		CBM		Fired clay		Daub		Animal bone		Burnt bone		Iron objects		Stone		Flint	
Context	**Wt.**	**No.**	**Wt.**	**No.**	**Wt.**	**No.**	**Wt.**	**No.**	**Wt.**	**No.**	**Wt.**	**No.**	**Wt.**	**No.**	**Wt.**	**No.**	**Wt.**	**No.**
								PLOT 6										
6002.00	5.00	2.00			70.00	7.00											130.00	12.00
6006.00	5.00	1.00															10.00	1.00
6010.00	100.00	7.00			355.00	5.00											245.00	10.00
6013.00	985.00	105.00			135.00	21.00									880.00	6.00	140.00	6.00
6016.00	5.00	1.00																
6017.00	225.00	1.00																
								PLOT 12										
u/s			35.00	2.00														
								PLOT 18										
18001.00	1923.00	217.00	30.00	1.00			10.00	3.00	170.00	56.00	3.00	1.00	10.00	2.00			75.00	18.00
								PLOT 23										
23003.00	20.00	3.00																
Linears (Plots 23/5)			45.00	2.00														
								PLOT 28										
28001.00	3.00	1.00															170.00	26.00
								PLOT 29										
29002.00					15.00	3.00											45.00	1.00
29010.00	70.00	10.00	20.00	2.00					15.00	4.00								
Ditch	15.00	1.00																
								PLOT 34										
34001.00	140.00	7.00					10.00	5.00										
34002.00	3.00	4.00					10.00	4.00									25.00	1.00
34004.00	25.00	8.00																
34007.00									1.00	1.00								
34008.00									3.00	1.00								
TOTALS	3524.00	368.00	130.00	7.00	590.00	46.00	30.00	12.00	189.00	62.00	3.00	1.00	10.00	2.00	880.00	6.00	840.00	75.00

ASSESSMENT BY PLOT

PLOT 6

Pottery

A total of 117 sherds, weighing 1325g were recovered from the fills of a pit complex. This represents 32% of the total assemblage by count and 37.5% by weight. A single sherd from context (6016) may be Early/Middle Iron Age in date (c.400bc-100bc), the remainder dating to the Late Bronze Age/Early Iron Age.

The bulk of the pottery was collected from context (6013), the primary fill of the pit/furnace complex. This fill contained 77 sherds, some of which appear to represent the remains of at least three crucibles. The remainder of the recovered fragments comprised of crushed flint-tempered sherds.

The most complete crucible was a shallow oval vessel, measuring approximately 117mm in length, 110mm in width and 22mm in depth, with a spout at one end and a fired clay handle at the other. The body of the vessel comprises a light fine soft grey fabric, with fine sand temper. The vessel wall measures c.28mm in thickness at the base and c.13mm at the rim. The exterior is burnt orange and black. Some sherds have vitrified on the interior, suggesting contact with intense heat. Fragments of copper alloy on the breaks indicate that the vessel may have fractured during use. The handle measures over 90mm in length with a diameter of c.35mm at its widest and 10mm at its tip. It has a patchy orange and light yellowish brown exterior with a black interior. A circular hole in the centre, c.7mm in diameter, suggests that it was attached by means of a rod running through the handle and pushed into the vessel wall; nothing appears to remain of the rod.

The date of the pottery recovered from the fills of the pit complex suggest that this feature was in use during the Late Bronze Age/Early Iron Age.

Fired Clay

Thirty-three fragments of fired clay, weighing 560g, were recovered from contexts (6002), (6010) and (6013). It is likely that this material was used in the lining of a furnace/ oven. The largest group, comprising 21 fragments (63%) was collected from (6013), the primary fill of the main feature.

STONE

Six lumps of stone, weighing 880g, were recovered from context (6013). The assemblage comprises four pieces of sandstone, two of which are burnt and two others which join, a broken lump of possible marble and a broken lump of possible granite. The latter are not local and therefore must have been imported from some distance.

The sandstone and the possible marble show signs of wear, and may possibly have been associated with the activities around the pit/furnace complex.

STRUCK FLINT

Twenty-nine possible struck flints, weighing 525g, were collected from fills (6002), (6006), (6010) and (6013).

The majority of the assemblage appears to comprise waste flakes from knapping. Implements identified include a possible microlith of *Mesolithic* date from (6010), two possible working cores, also from (6010), and a possible scraper from (6002).

PLOT 12

Two pieces of post-medieval peg tile, weighing 35g, were collected from this site. The material is unstratified, having been recovered from the plough soil, and probably represents the use of broken tile to manure the field.

PLOT 18

Pottery

A total of 217 sherds, weighing 1923g, was recovered from context (18001), the main fill of ditch [18003]. This represents 59% of the total assemblage by count and 54.5% by weight. The bulk of the pottery assemblage from this plot comprised grog-tempered sherds of LPRIA date. These accounted for 175 sherds (80% by sherd count). Other fabrics represented include 15 sherds of residual crushed flint-tempered pottery, dating to the Late Bronze Age/early Iron Age (7% by sherd count); a single intrusive sherd of early Roman sandy ware; 2 sherds of Late pre-Roman Iron Age (LPRIA) shell-tempered ware and 23 sherds of LPRIA handmade black organic-tempered ware (10.5% by sherd count).

The presence of the prehistoric sherds indicates activity of Late Bronze Age/Early Iron Age date in the vicinity of the site. The presence of the single Roman sherd is not sufficient to indicate Romano-British activity in the vicinity.

At least 10 vessels were represented in the assemblage (excluding the prehistoric and Romano-British wares). Jars were the only form identified and these appear to represent the remains of common Hertfordshire forms, including part of the rim circuit of one rilled jar and bodysherds of others of type C7-1 (Thompson, 1982, p.273).

This assemblage indicates the disposal of broken pottery from domestic occupation. Its presence in the ditch fill suggests either that the ditch had gone out of use by the time this pottery was deposited, and the material was used as deliberate backfill, or that there was a household situated in close proximity, which used the ditch to dispose of its rubbish, clearing it periodically. The uniform date and the relatively unabraded condition of the bulk of the material suggests that it was deposited as one event.

Ceramic Building Material

One fragment of tile, weighing 30g, was recovered from context (18001). It is 15mm in thickness and is burnt and smoke-discoloured on all surviving surfaces, suggesting either that it was sited close to a fire, or that it formed part of a building that burnt down.

The bulk of the pottery from this context dates to the Late pre-Roman Iron Age and it is possible that this fragment may be contemporary, suggesting the presence of a structure in the vicinity. Alternatively, this could be intrusive Romano-British material as one sherd of early Roman pottery was collected from this context.

Daub

Three fragments of burnt daub, weighing 10g, were recovered from context (18001). Their presence, together with the tile fragment, suggests a structure in the vicinity of the site, which may have been destroyed by fire.

Animal Bone

Fifty-six fragments of animal bone, weighing 170g, were collected from context (18001). The assemblage included teeth, mandible and long bone fragments of larger mammals, such as sheep and cows. Some of the bone showed evidence of butchery.

One fragment of burnt bone, weighing 3g, was also recovered. This appears to be part of a long bone. Some of the exterior surface had become calcined and turned white, suggesting that it was subject to heat approaching 600^{o}C.

Struck Flint

Eighteen pieces of possible struck flint, weighing 75g, were collected from context (18001). The majority were blue grey in colour and showed signs of patination. The irregular shape and variations in thickness of the pieces suggest that they are largely waste flakes. No definite implements were identified on a preliminary examination.

Iron Object

Two pieces of iron, weighing 10g, were recovered from context (18001). They appear to be part of the same object, the remains of a small iron blade or stylus. The object measures 90mm in length, 7mm in width and 3mm in depth. It has a triangular point at one end, and the other end is broken. Corrosion currently obscures any other detail.

Plot 23-25

Pottery

Three sherds of pottery, weighing 20g, were recovered from context (23003). The material comprised 2 sherds of modern flowerpot and a single abraded scrap of post-medieval pottery.

Ceramic Building Material

Two fragments of post-medieval peg tile, weighing 45g, were recovered from the linears in plots 23-25. The pieces were worn, suggesting they were imported for use in manuring the fields, probably in the 19th century.

Plot 28

Pottery

A single abraded sherd of Romano-British grey ware, weighing 3g, probably from Much Hadham, was recovered from context (28001). No other pottery was recovered from this fill, suggesting that this sherd is residual in the feature.

Flint

Twenty-six fire cracked flints, weighing 170g, were recovered from context (28001). No evidence of knapping was observed on any flint. They may represent the remains of hearth material.

No date can be assigned to this material.

Plot 29

Pottery

A total of 11 sherds, weighing 85g, was recovered from contexts (29010) and (29014). The majority of the assemblage (10 sherds) comprises LPRIA grog- and sand-tempered sherds from 2 vessels. One residual prehistoric flint-tempered sherd was recovered from (29010).

Ceramic Building Material

Two fragments of possible tile, weighing 20g, were recovered from context (29010). Both pieces came from the same artefact. They comprise an oxidised red clay matrix, heavily tempered with fine sand and moderate amounts of crushed flint and chalk.

The presence of this material may indicate a substantial structure in the vicinity of the site. The pottery recovered from the context is of LPRIA date, suggesting that the CBM may be contemporary. Alternatively it may represent intrusive material of Roman date.

Fired Clay

Thirteen unidentifiable fragments of fired clay, weighing 30g, were collected from contexts (29002) and (29010). This material could represent either the remains of degraded daub, or part of a hearth. In either case it could indicate the presence of a structure in the vicinity.

No date can be assigned to this material.

Animal Bone

Four fragments of animal bone, weighing 15g, were collected from context (29010).

One fragment is part of a jawbone, and another is part of a vertebrae. The pieces are too small for species identification, other than to state that they represent the remains of at least one large mammal.

No date can be assigned to this material.

Flint

A single piece of possible worked flint, weighing 45g, was collected from context (29002). There is possible evidence of retouching along two sides, which may indicate use as a scraper.

No date has been assigned to this object.

PLOT 34

Pottery

A total of 19 sherds of Late Bronze Age/Early Iron Age flint-tempered pottery, weighing 168g, was recovered from the fills of ring ditch [34003]. This represents 5%, by sherd count, of the total pottery assemblage and was collected from two sections excavated across the ditch.

Five vessels were represented, 2 from context (34001), the upper fill of the ditch, 1 from (34002), the lower fill, and 2 from (34004). Only bodysherds were present, those from (34001) being relatively unworn, the remainder being very abraded. The assemblage may represent later backfilling of an earlier Bronze Age ring ditch.

Daub

Nine fragments of daub, weighing 20g, were collected from fill (34001) and (34002). These are very small and badly worn, but may suggest a structure in the vicinity of the ring ditch.

No date can be assigned to this material.

Animal Bone

Two fragments of animal bone, weighing 4g, were recovered from the surfaces of two unexcavated features, contexts [34007] and [34008]. The bone from [34007] is part of a rib from a chicken or small mammal. That from [34008] is a fragment of rib from a larger mammal, of unidentifiable species.

No date can be assigned to this material.

Flint

One piece of burnt flint, weighing 25g, was collected from context (34002). No

evidence of knapping could be seen on the flint, which may form part of a hearth.

No date can be assigned to this material.

Recommendations for Further Study

Pottery

The Late Bronze Age/Early Iron Age material should be submitted to a prehistoric ceramics specialist for full fabric and form identification. The possible crucible should also be examined by a metal-working specialist.

Ceramic Building Material

No further work is proposed for this material.

DAUB

Given the small size and fragmentary nature of the assemblage, no further work is proposed for this material.

FIRED CLAY

Given the small size and fragmentary nature of the assemblage, no further work is proposed for this material.

Animal Bone

Given the small size and fragmentary nature of the assemblage, no further work is proposed for this material.

Iron

The iron object recovered from context (18001) in Plot 18 should initially be submitted for x-raying to determine its form and whether any iron survives within the corrosion. Further conservation work may then be required.

STRUCK FLINT

The assemblage should be submitted to a specialist for full identification and dating.

STONE

This assemblage should be submitted to a specialist for detailed geological analysis and possible identification of form and function.

Bulk Samples

Nine bulk samples were taken from four features: pits [6001] and [6003] in plot 6; pit [29003] in plot 29; and ring ditch [34001] in plot 34. These samples may contain material

that can be used for dating, such as charcoal. In addition the samples may provide evidence for the function of these features, including information concerning the processing of cereals, and industrial activities such as metal working. Environmental evidence for contemporary flora and fauna may also be present.

On this basis, the samples should be wet sieved and the dry residues submitted to a specialist for further examination.

Discussion and conclusions

The Phase 2 evaluation along the line of the Wadesmill Bypass haul road has provided an opportunity for the linear evaluation of a sample of the whole bypass route, in order to identify archaeological features and deposits which might require further investigation, and further clarify the risk of disruption to the main construction programme.

Forty archaeological features were recorded over eighteen field plots along the 7km route. The evidence encompasses settlement activity spanning the late Bronze Age to the late Iron Age, and farming activity spanning the late medieval period to the present. The chronological spread suggests that Ermine Street, to the west of the bypass route, largely provided the focus for settlement activity during the intervening period.

The evaluation work isolated four areas of archaeological significance, three of which fall within sites already defined in the course of the advance archaeological investigations commissioned by the Highways Agency. The fourth site, Plot 6, had not previously been identified.

Plot 6 was given a Low rating for archaeological potential in the Heritage Network's *Archaeological Mitigation Statement* (Hillelson & Turner, 2001), and was considered to be Low risk in terms of the archaeological impact on construction on the basis of the results of fieldwalking undertaken as part of the advance works commissioned by the Highways Agency. The present project has investigated the outlying remains of a possible metalworking area which dates to the Late Bronze Age/Early Iron Age, and lies c.500m south of a known settlement site of the same period (HSMR 2098).

Plot 18 forms part of Site 2 which was subject to evaluation as part of the advance works commissioned by the Highways Agency. The archaeological potential of this plot was given a High rating in the Heritage Network's *Archaeological Mitigation Statement* (Hillelson & Turner, 2001), but it was considered to be of no risk in terms of the archaeological impact on construction because it was due to have been cleared in advance of the start of the construction programme. The advance evaluation failed to find the archaeological features identified in the earlier geophysical survey, but the present project has investigated a boundary ditch containing an assemblage of domestic pottery and animal bone dating to the Late Pre-Roman Iron Age, which is likely to be one of these features.

Plot 29 forms part of Site 3 which was not evaluated as part of the advance works commissioned by the Highways Agency. The archaeological potential of this plot was given a High rating in the Heritage Network's *Archaeological Mitigation Statement* (Hillelson & Turner, 2001), and it was considered to be High risk in terms of the archaeological impact on construction. The Heritage Network's Phase 1 Evaluation demonstrated the presence of a possible settlement site spanning the Late Bronze Age/Early Iron Age to the Roman period. The present project has investigated a

further group of three pits and two ditches dating to the Late Pre-Roman Iron

Age, which are likely to form part of the previously identified multi-period settlement site.

Plot 34 forms part of Site 4 which was not evaluated as part of the advance works commissioned by the Highways Agency. The archaeological potential of this plot was given a Moderate rating in the Heritage Network's *Archaeological Mitigation Statement* (Hillelson & Turner, 2001), and but was considered to be Low risk in terms of the archaeological impact on construction because the road corridor is intended to be built up in this location and any potential archaeology would be preserved in situ. The present project has investigated a ring ditch which is likely to be the remains of a ploughed out burial mound, and three possibly related features, dating to the Late Bronze Age/Early Iron Age, most of which will remain preserved in situ.

Revised Archaeological Potential **and Risk Assessment**

The results of the present stage of work have demonstrated or confirmed a High archaeological potential within Plots 6, 18, 29 and 34. The likely impact on the construction programme for these plots is considered to be Low for Plot 34, where the remains will remain protected beneath an embankment, and Moderate for Plot 6 where the identified features lie at the margin of the road corridor and are likely to extend away from it. The archaeological potential in Plot 18 (Site 2) and Plot 29 (Site 3) remains High, with a High potential impact on the contruction programme.

The archaeological potential for Plots 7, 24, 27 and 28 is considered to be Moderate, with a Low potential impact on the contruction programme.

The archaeological potential for Plots 8a, 10, 16, 22, 23, 31, 32, 33, 42 and 43 is considered to be Low, with a Low potential impact on the contruction programme.

Conclusion

The present project has identified a series of features along the line of the haul road:

Within Plots 18 and 29, these features are considered to form a part of a larger discrete site which will require further investigation. Method Statements will be prepared for mitigating the impact of the construction programme on the archaeology identified in these areas.

Within Plots 6 and 34, these features have been fully investigated, and no further mitigation, beyond the monitoring of the next phase of groundworks, is proposed in these areas.

The remaining isolated features have been adequately investigated in order to demonstrate their date, form and function, and no further mitigation, beyond the monitoring of the next phase of groundworks, is proposed in these areas.

Confidence Rating

The weather conditions were varied over the duration of the Phase 2 Evaluation, but are considered to have been generally acceptable for the successful identification of any archaeological features or deposits present. There were no circumstances where the overall confidence rating for the results obtained in each of the evaluation areas would be considered to be less than High.

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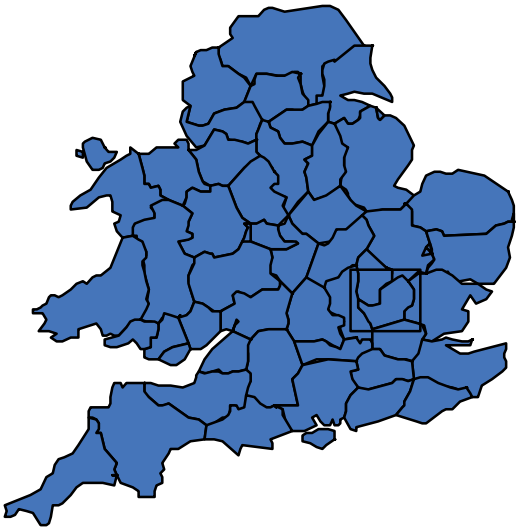
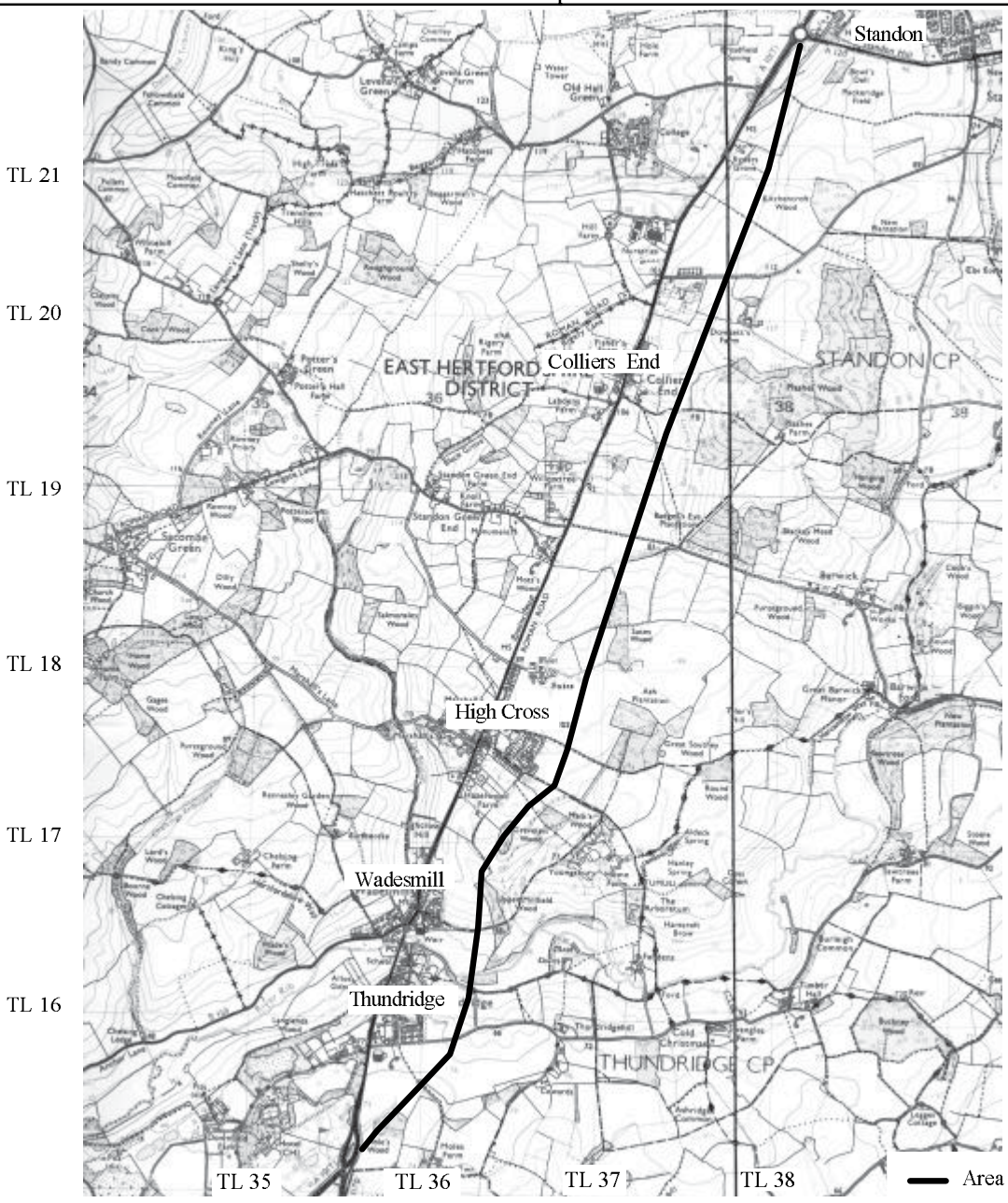
Illustrations

THE HERITAGE NETWORK LTD | A10 Wadesmill By-pass - Haul Road | HN361

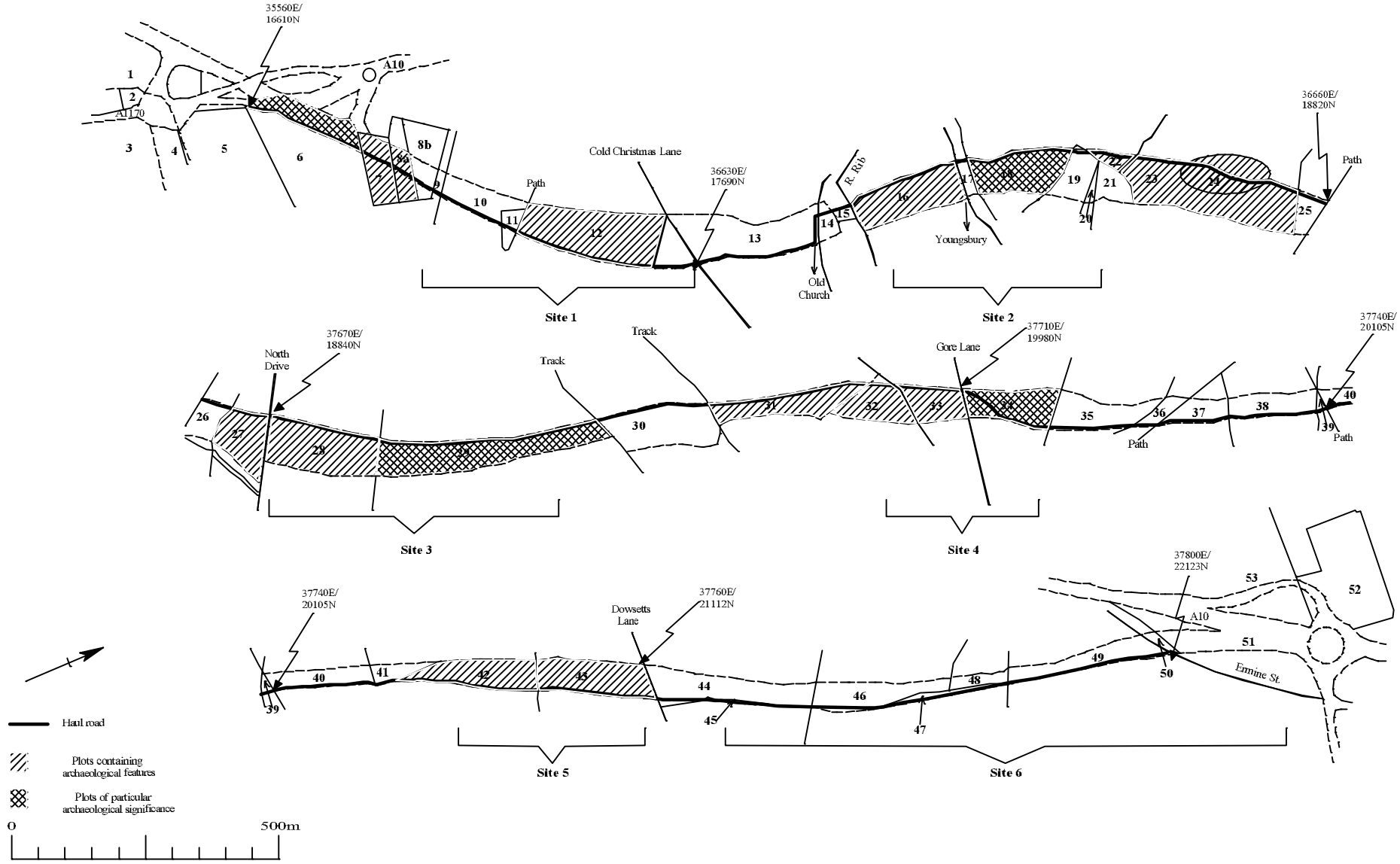




Site Location

Scale 1:40 000

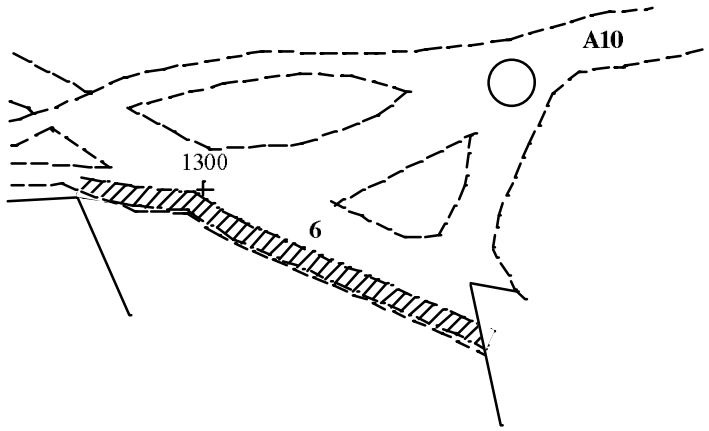
Figure 1



Areas of archaeological significance

Scale 1:7500

Figure 2



Haul Road

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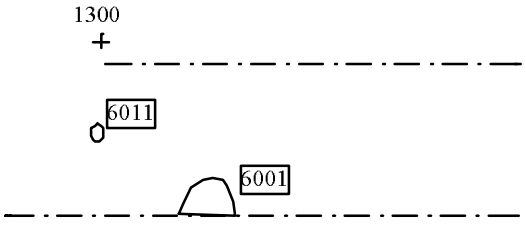
Scale 1:4000



0 10m

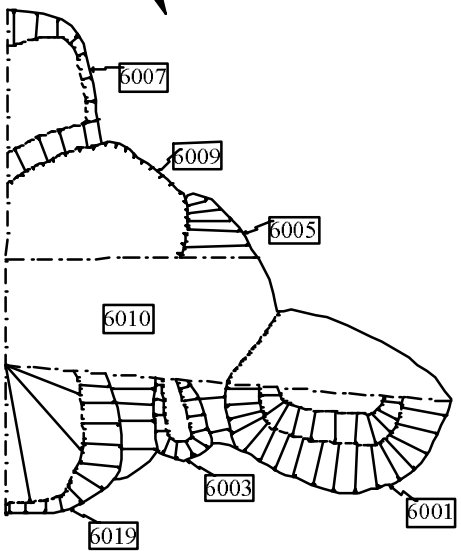
Scale 1:400

Plot 6

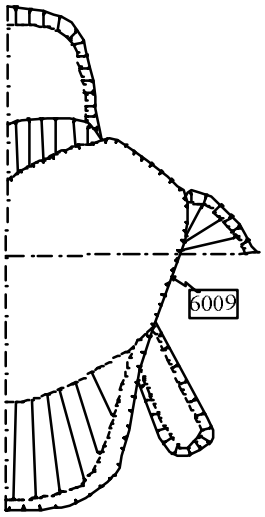
Scale as shown

Figure 3

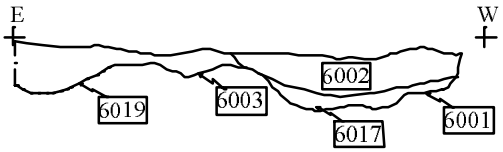
Intermediate plan of pit series



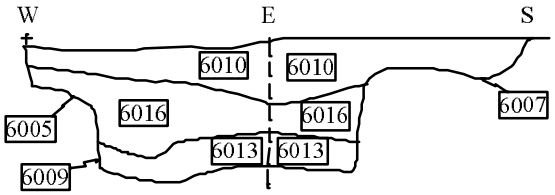
Final plan of pit series



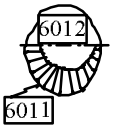
North facing section of [6001], [6003], [60019]



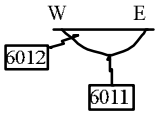
Section of [6005], [6007], [6009]



Plan of posthole [6011]



South facing section of posthole [6011]



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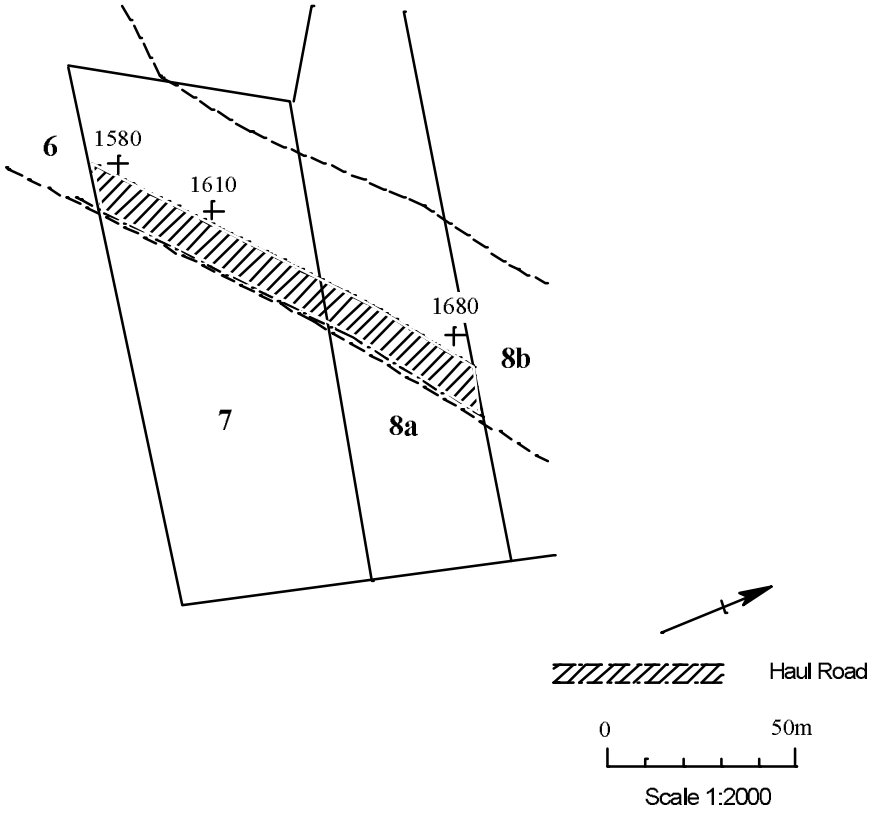
Scale 1:40

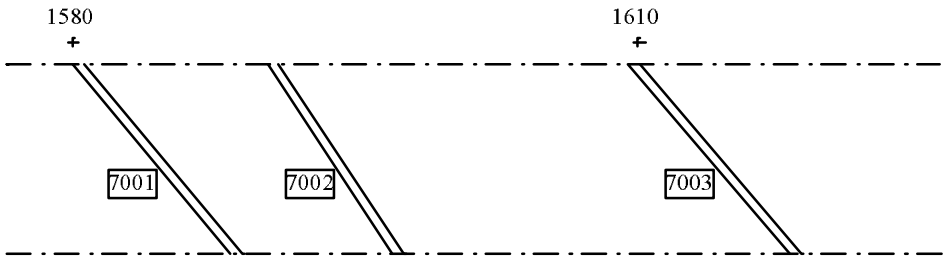
Plot 6-Archaeological features

Scale 1:40

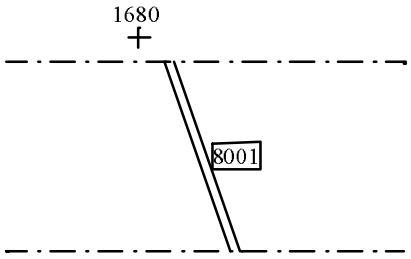
Figure 4

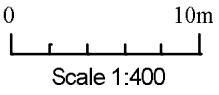


Plot 7



Plot 8a

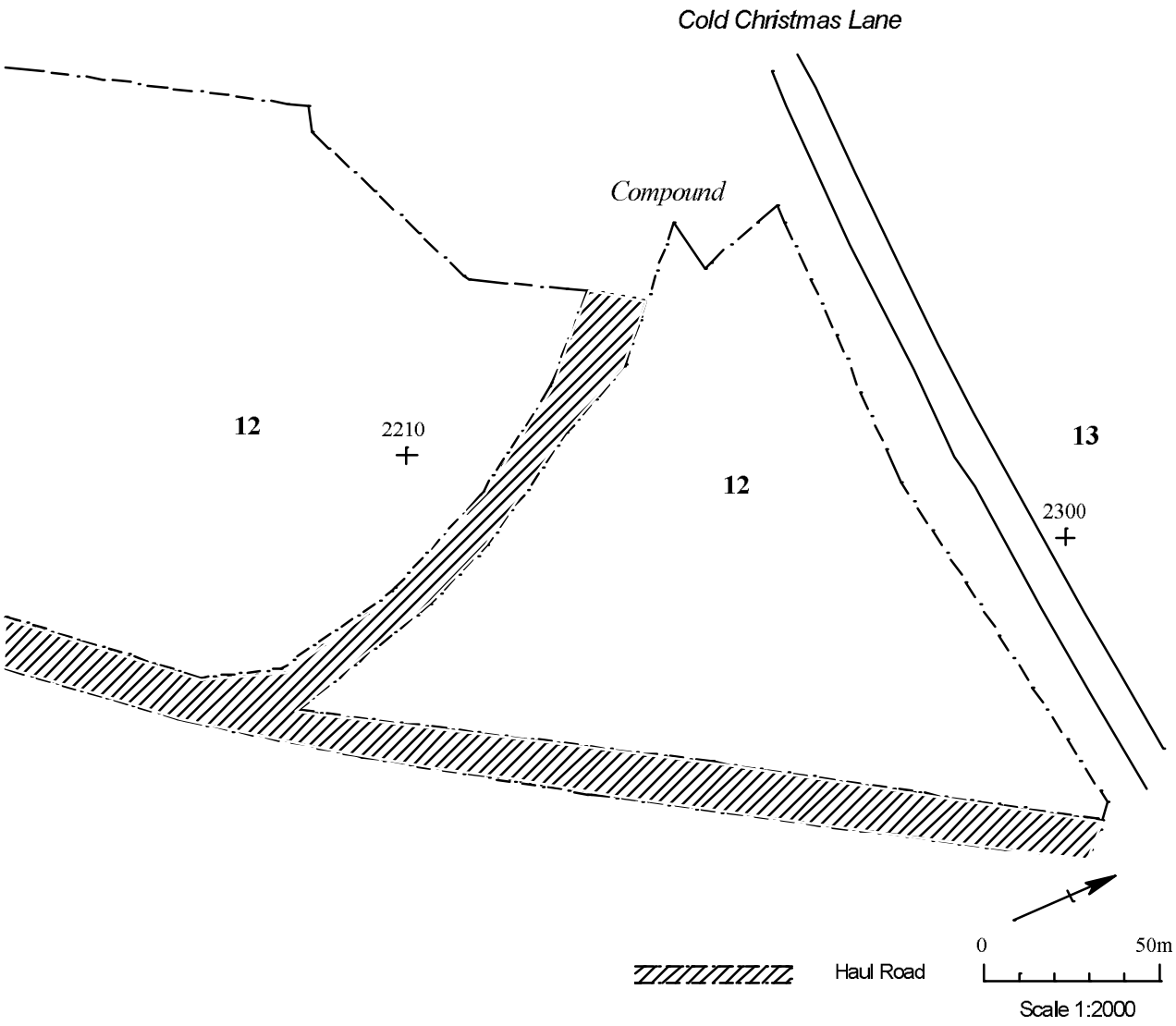


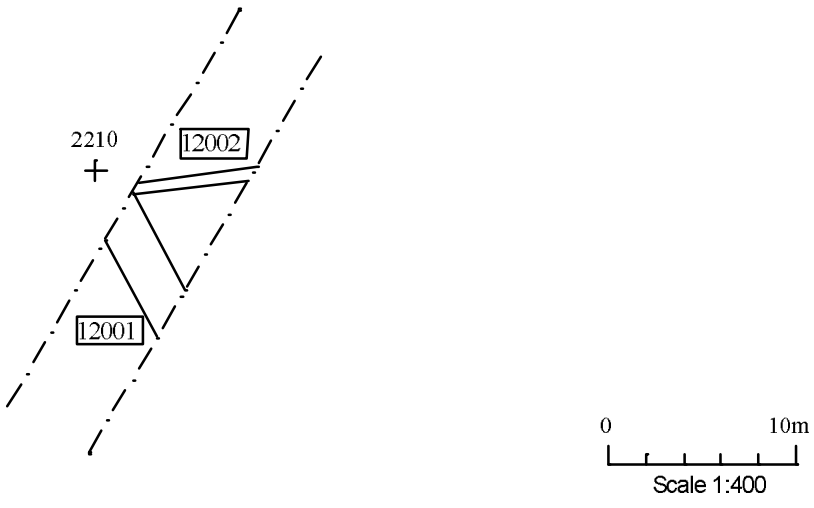


Plots 7 & 8

Scale as shown

Figure 5

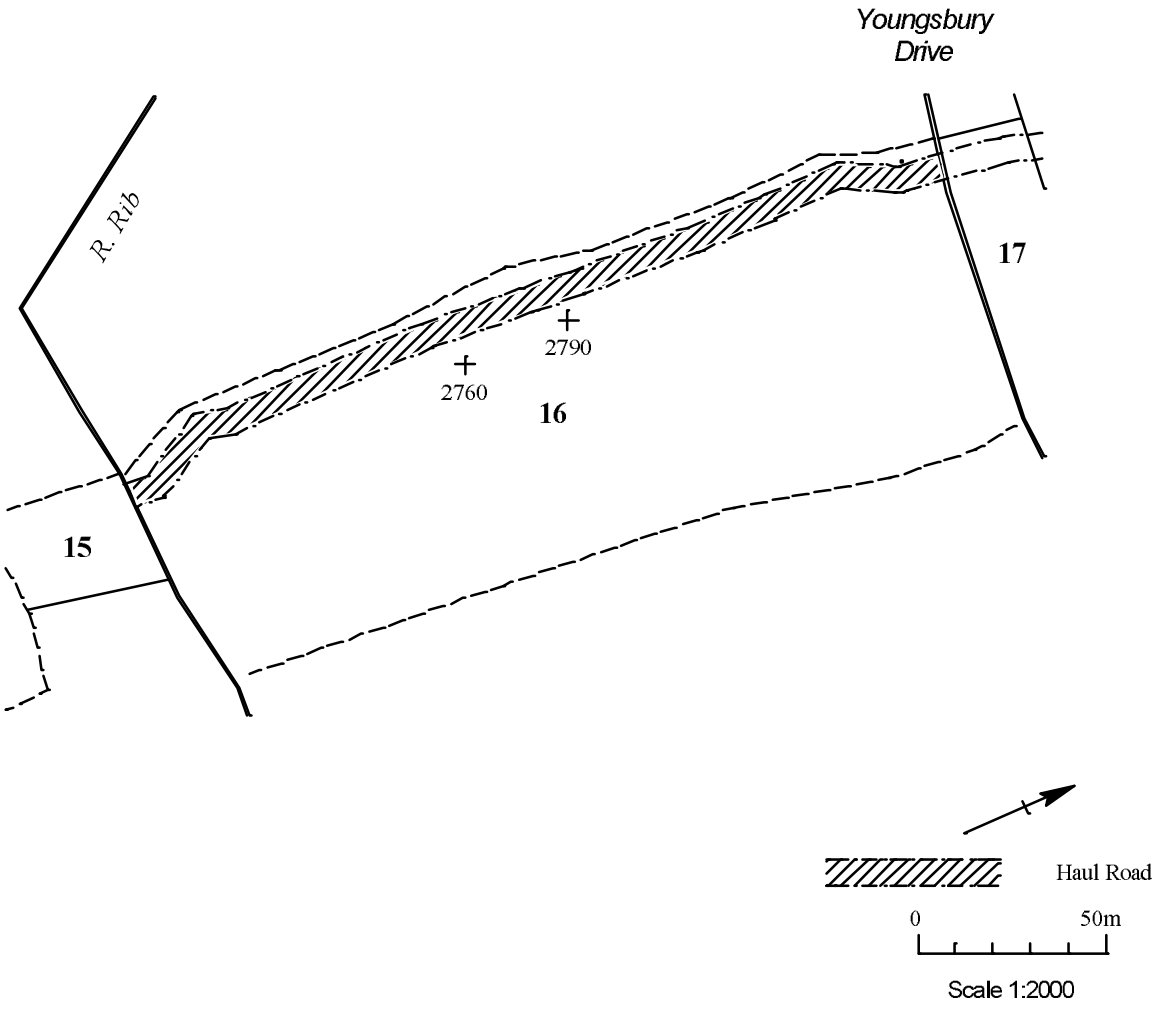


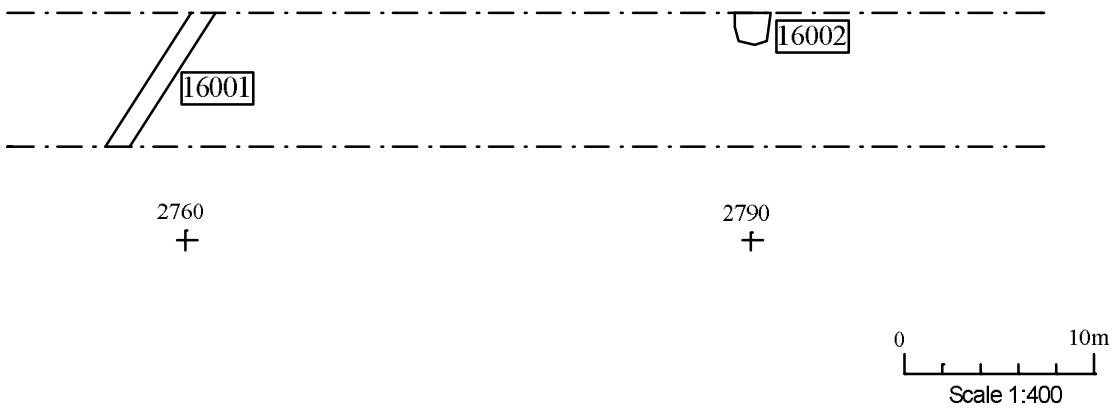


Plot 12

Scale as shown

Figure 6

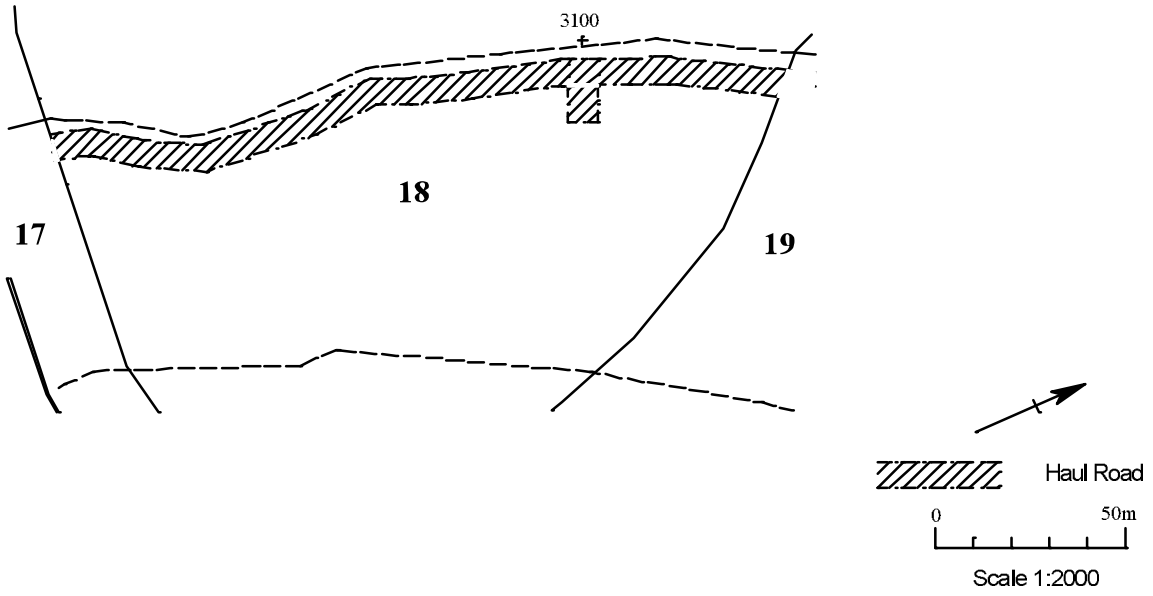


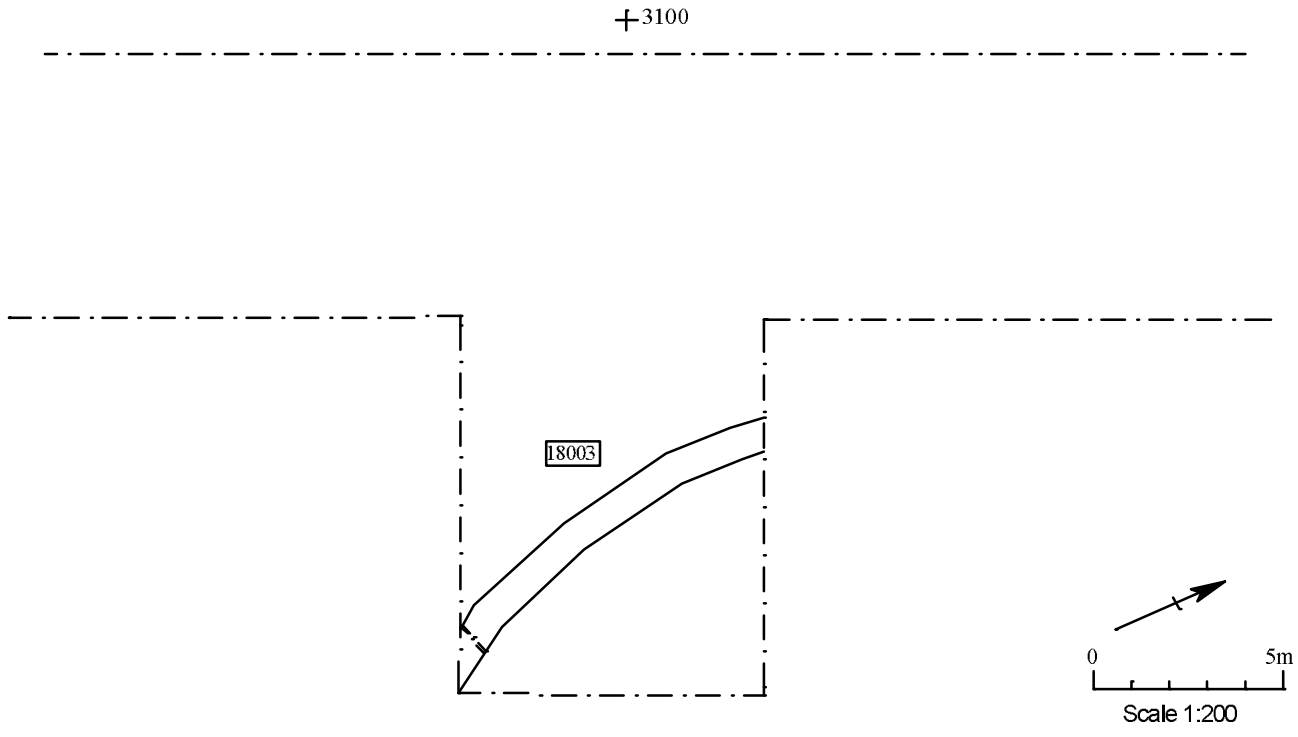


Plot 16

Scale as shown

Figure 7

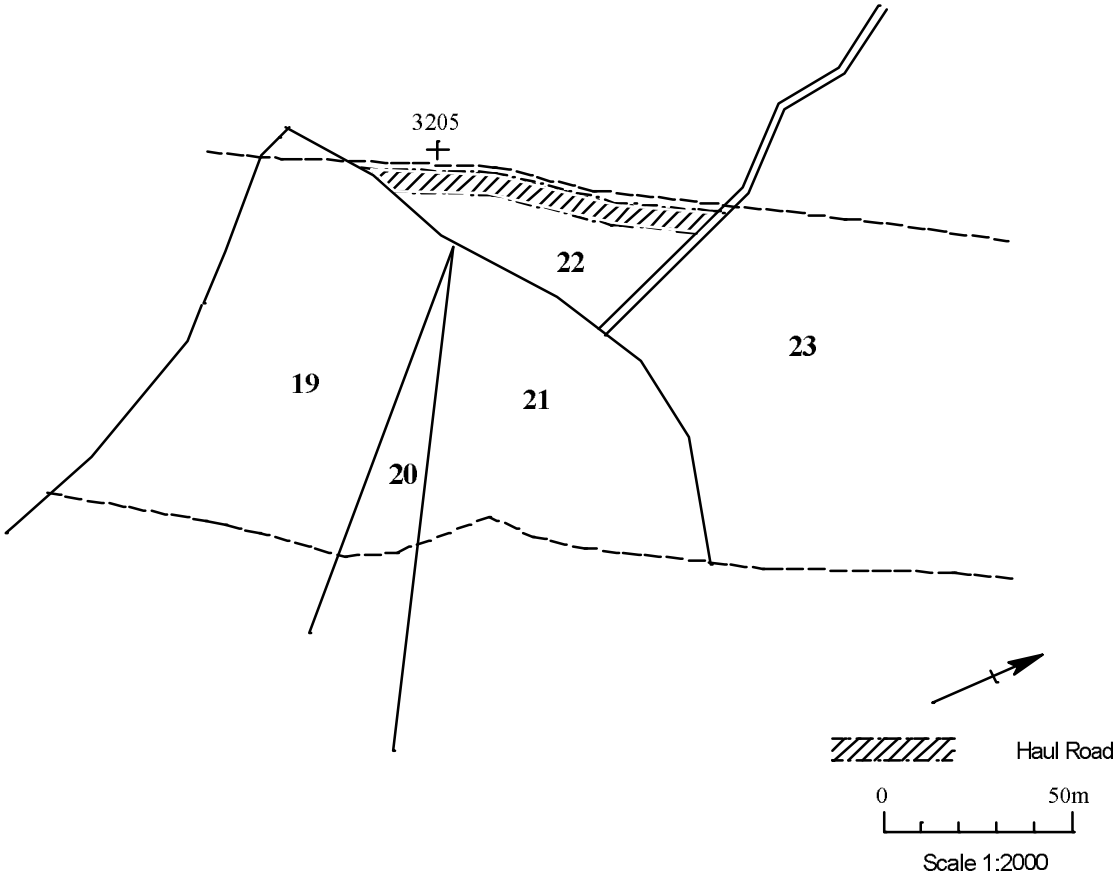


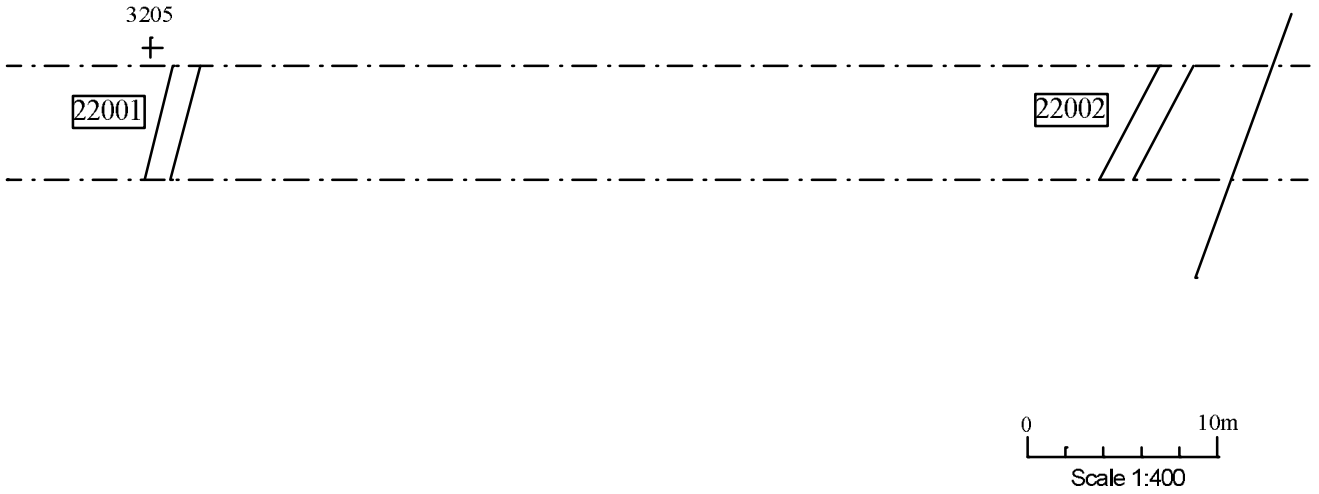


Plot 18

Scale as shown

Figure 8

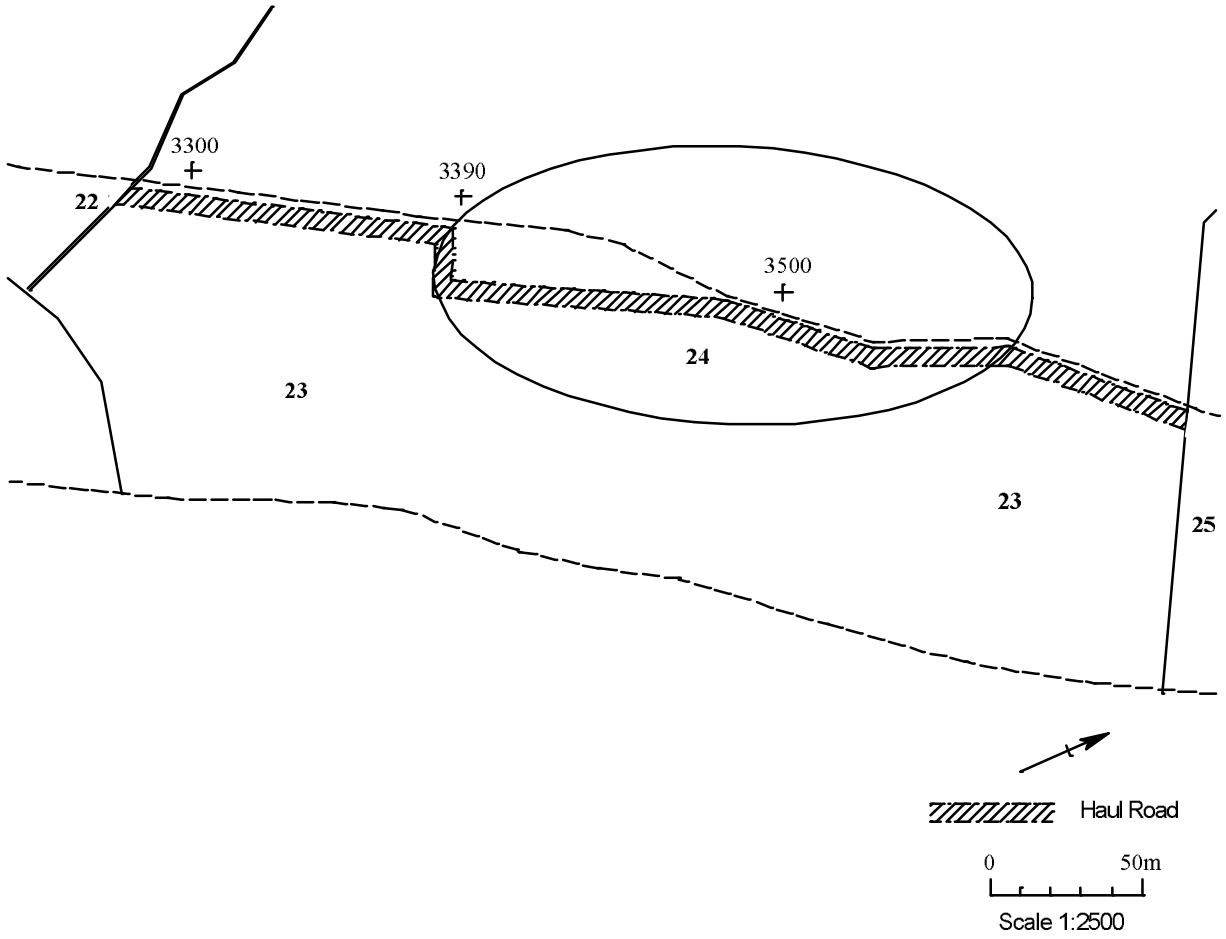




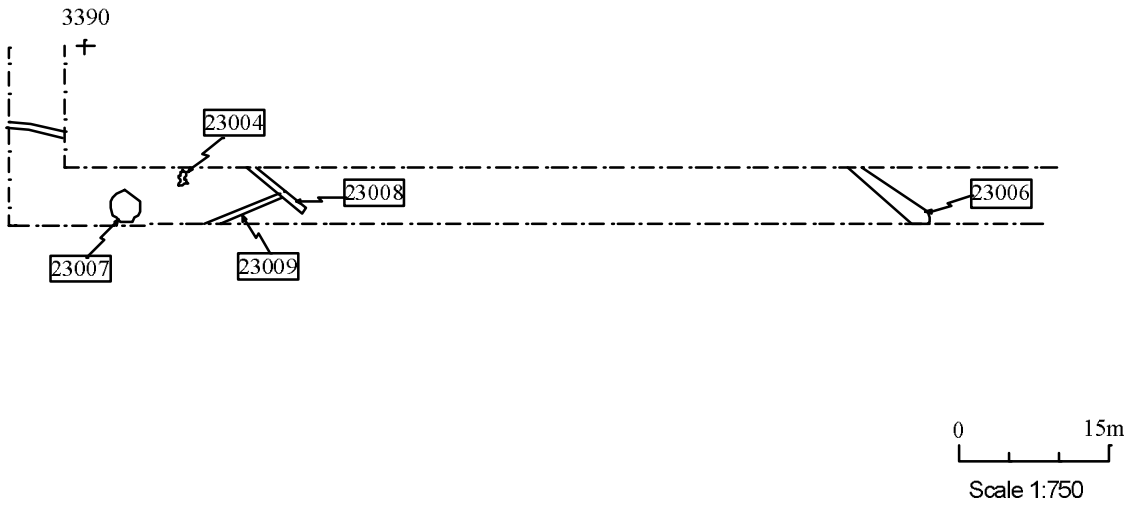
Plot 22

Scale as shown

Figure 9



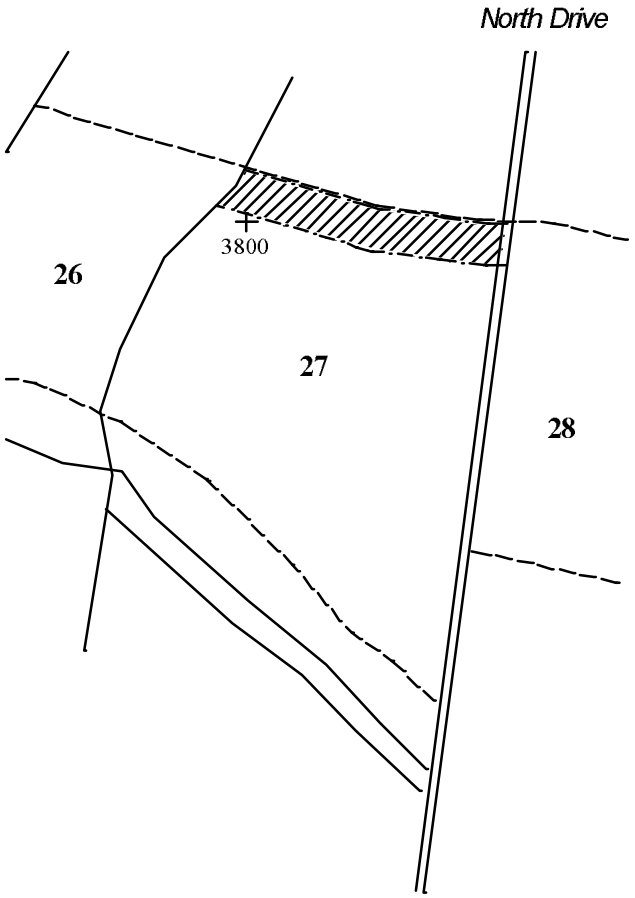
Features south of the quarry

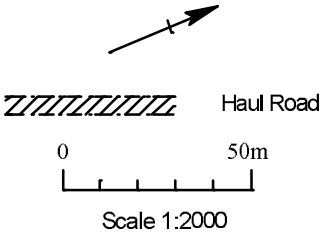


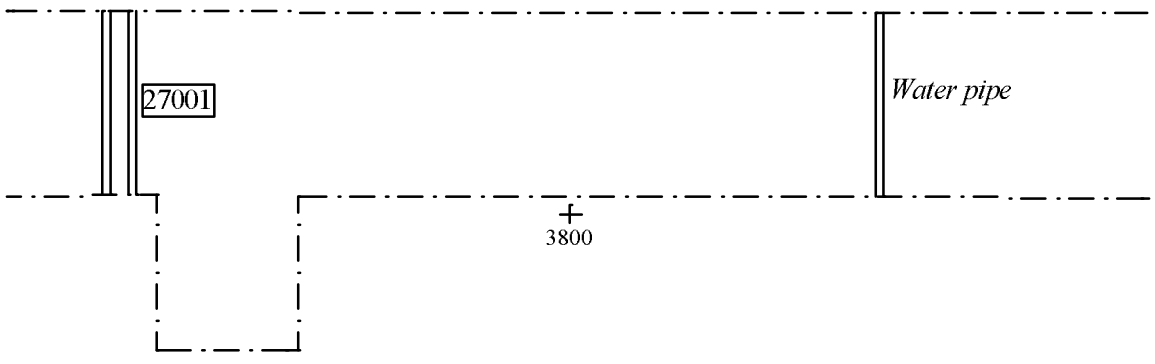
Plots 23 & 24

Scale as shown

Figure 10



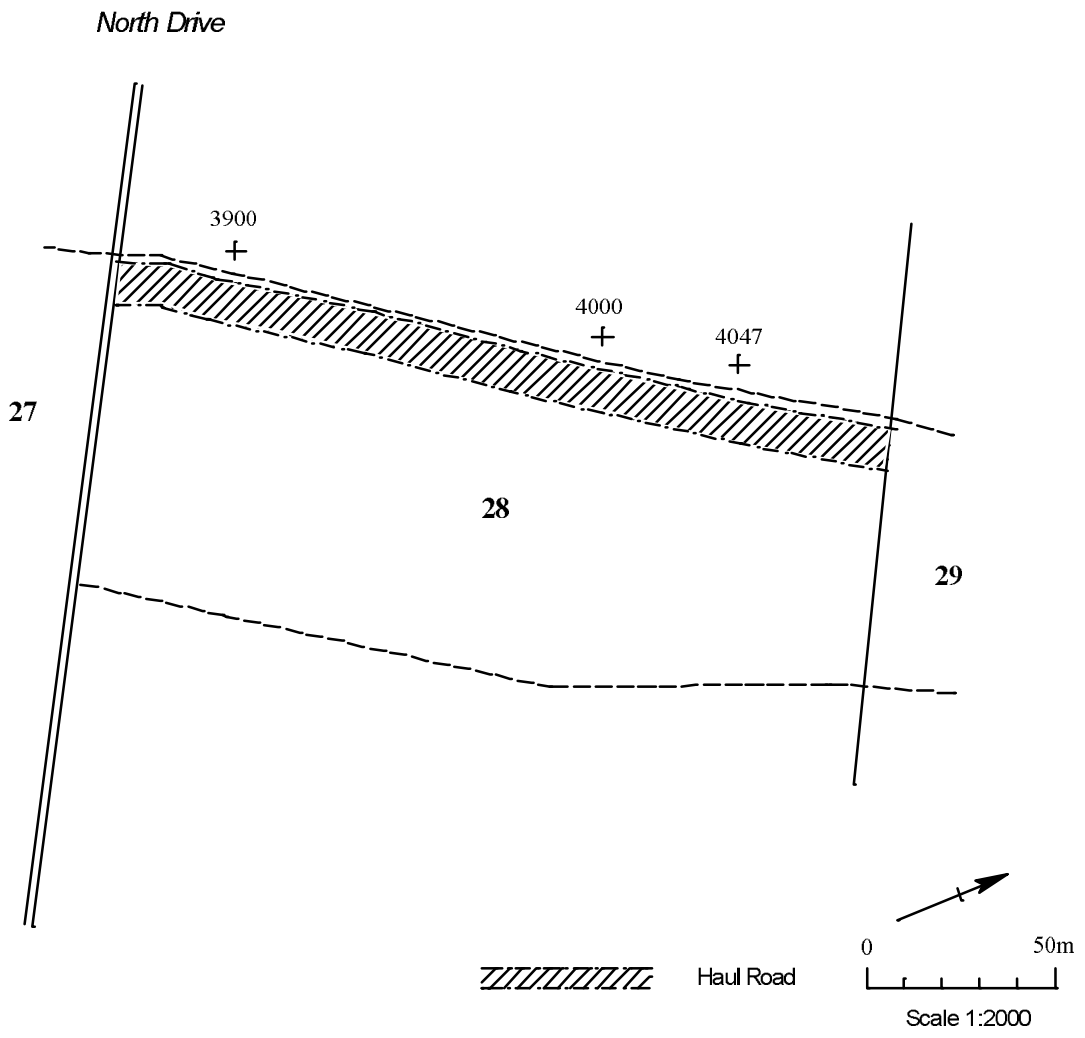


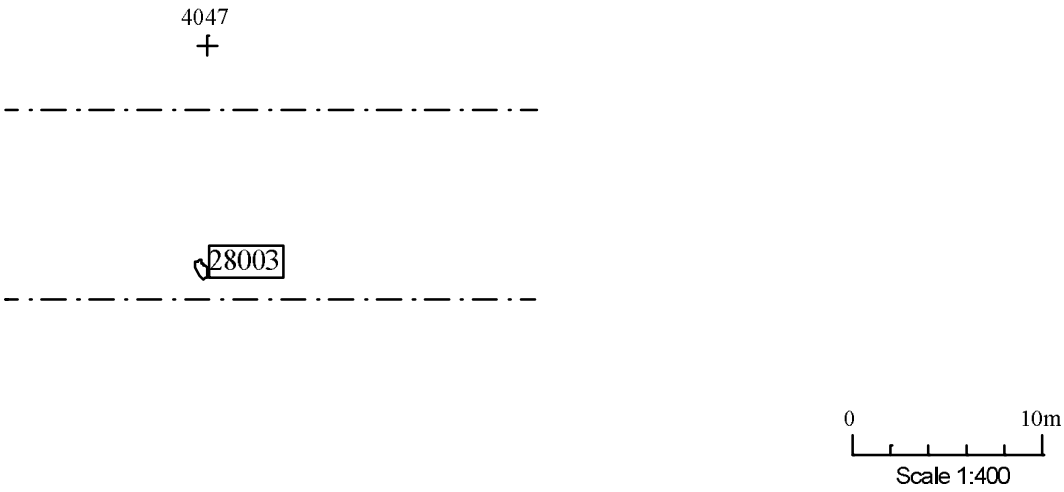


Plot 27

Scale as shown

Figure 11

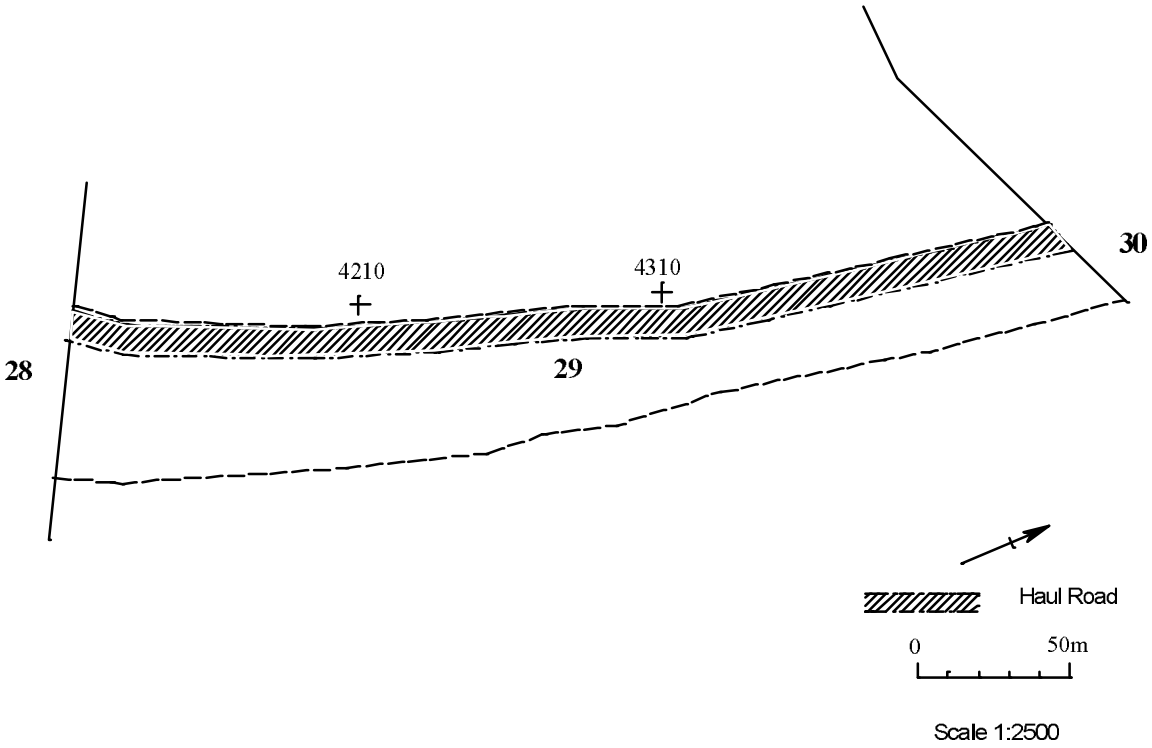




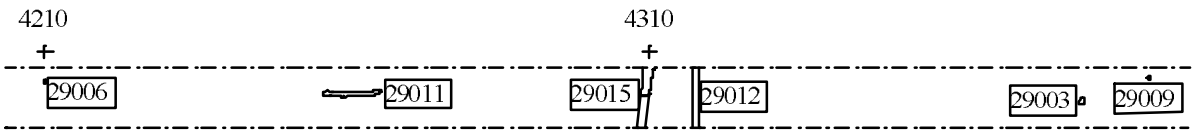
Plot 28

Scale as shown

Figure 12



Scale 1:2500



0 25m

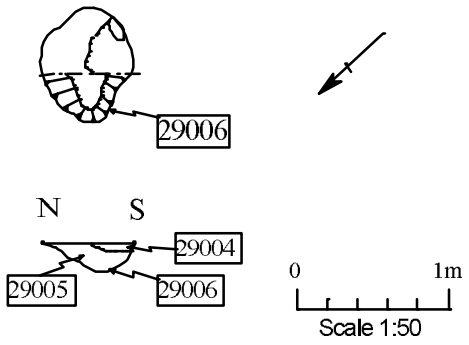
Scale 1:1250

Plot 29

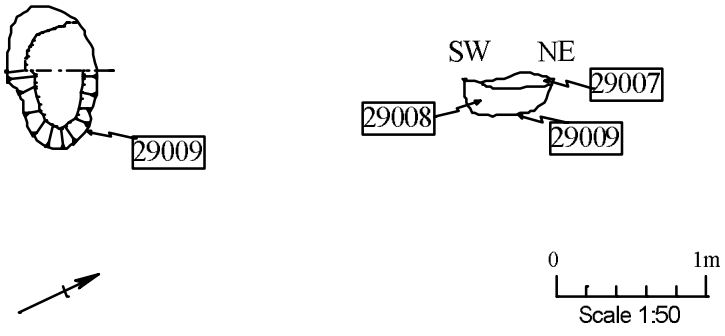
Scale as shown

Figure 13

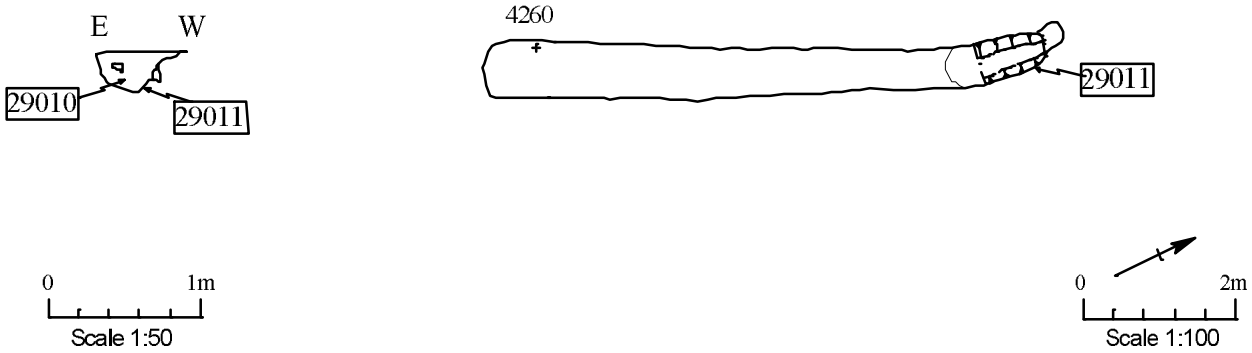
Plan & East facing section of pit [29006]



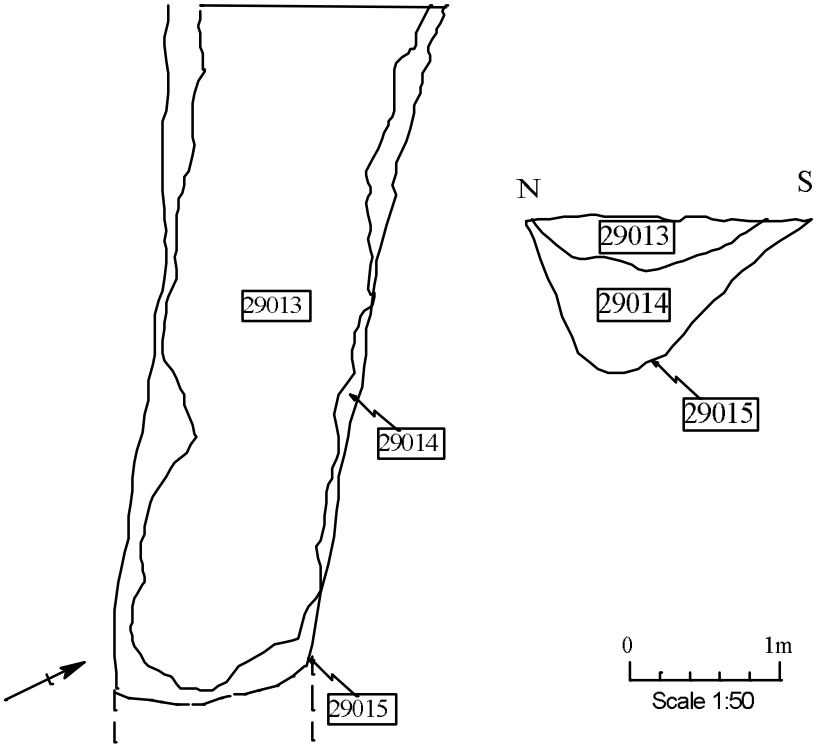
Plan & South-east facing section of pit [29009]



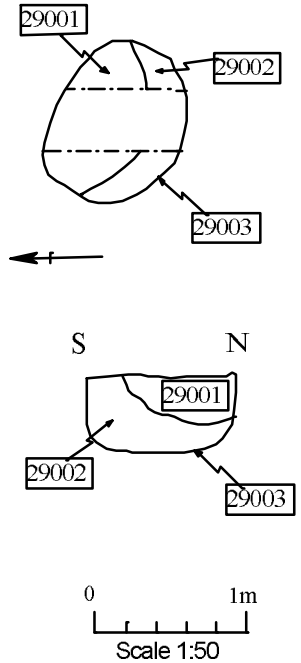
North facing section & plan of linear [29011]



Plan & East facing section of linear [29015]



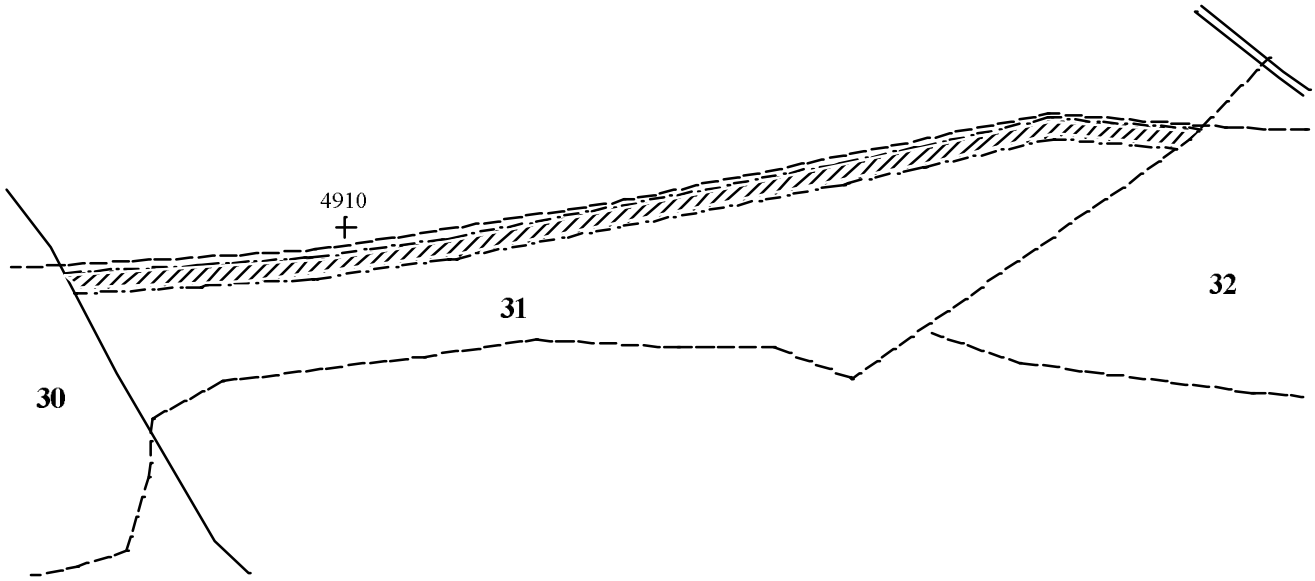
Plan & East facing section of linear [29003]

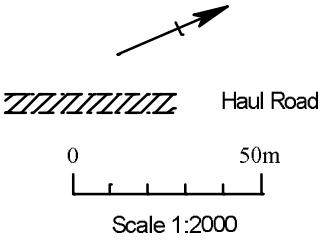


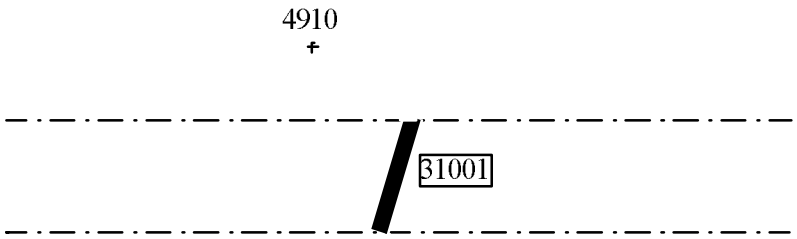
Plot 29-Archaeological features

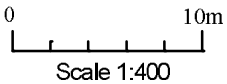
Scale as shown

Figure 14





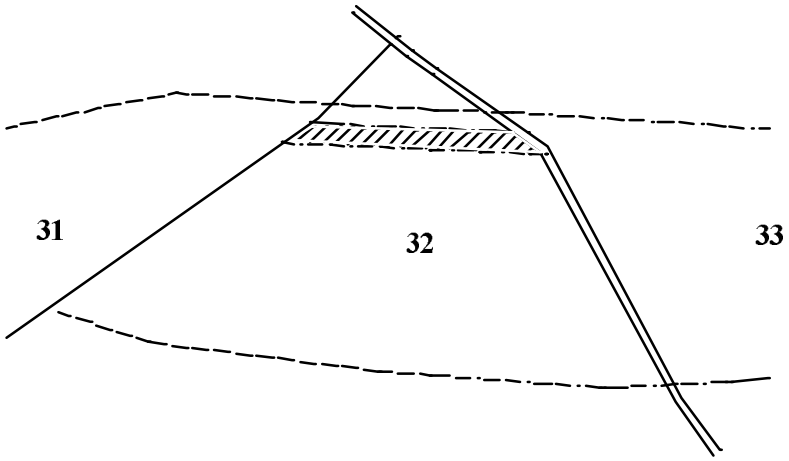


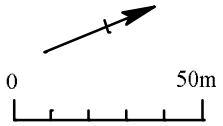


Plot 31

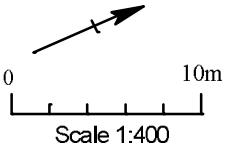
Scale as shown

Figure 15





Scale 1:2000

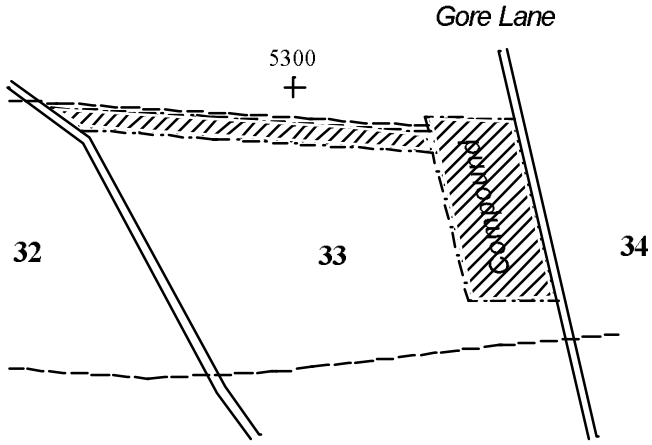


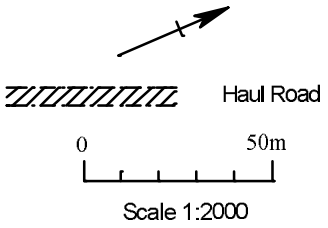
Scale 1:400

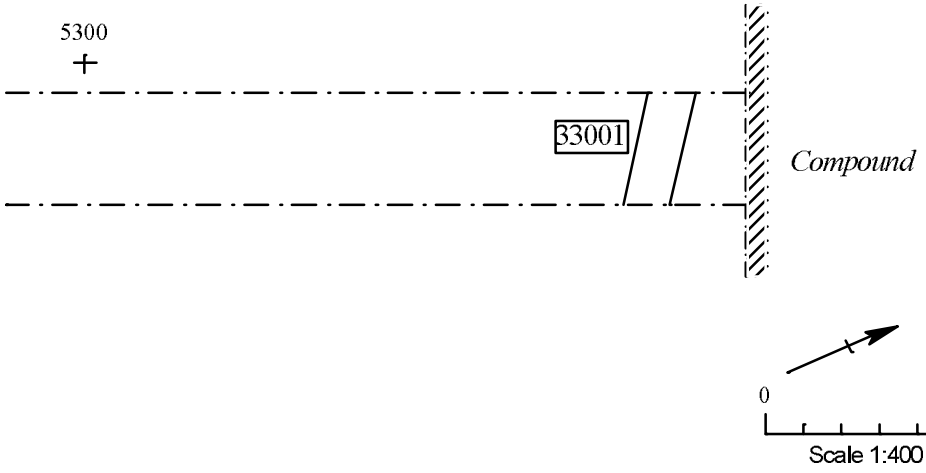
Plot 32

Scale as shown

Figure 16



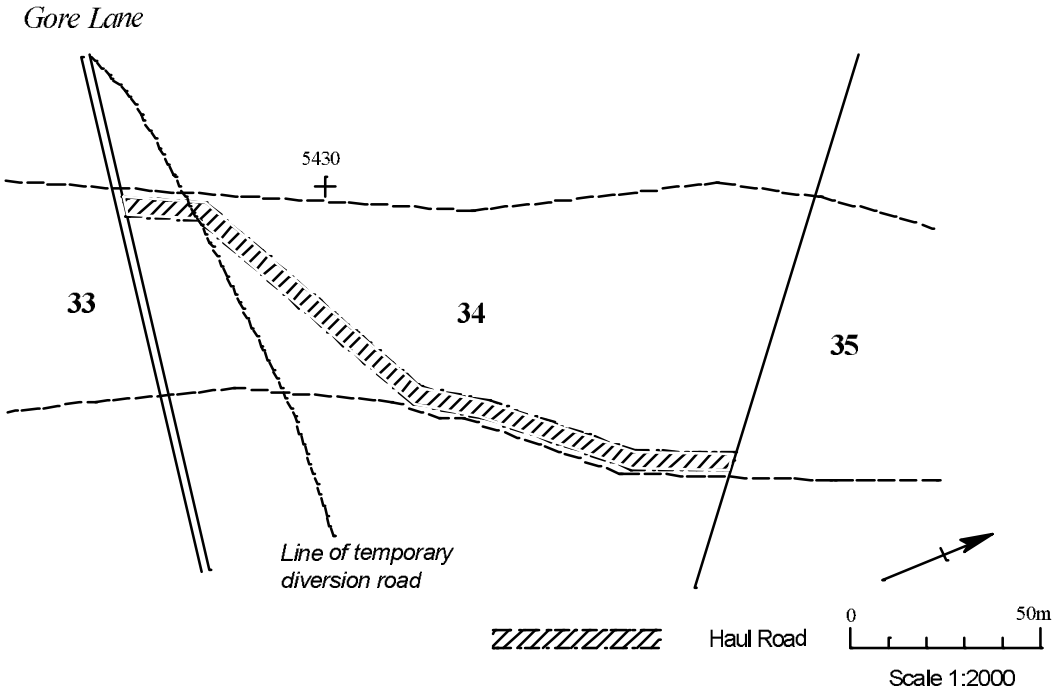


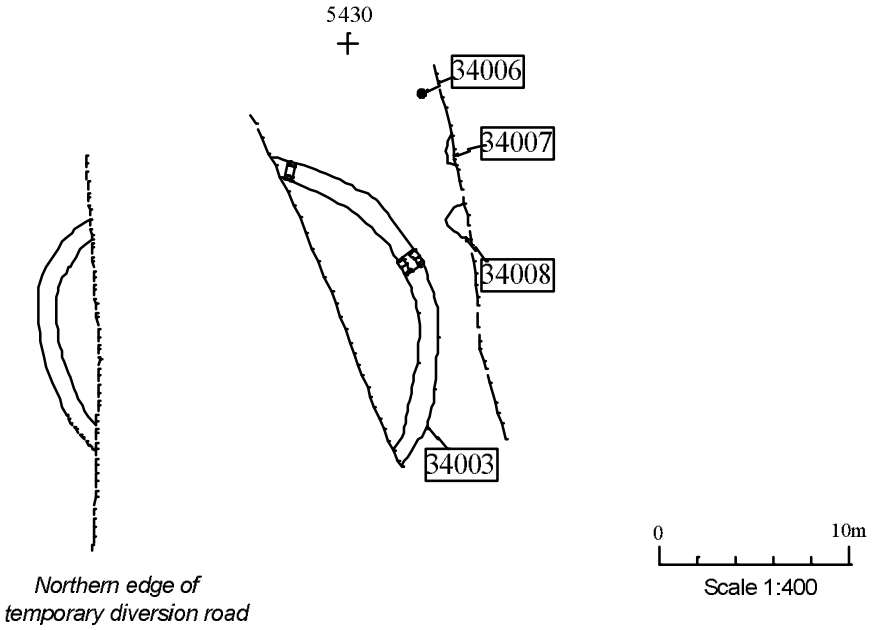


Plot 33

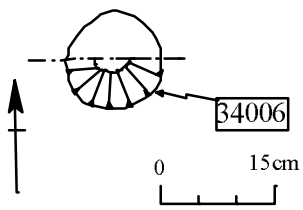
Scale as shown

Figure 17

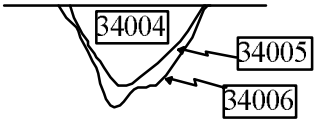




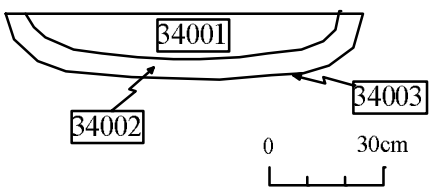
Plan of posthole [34006]
1:40



Section of linear [34003]
1:20



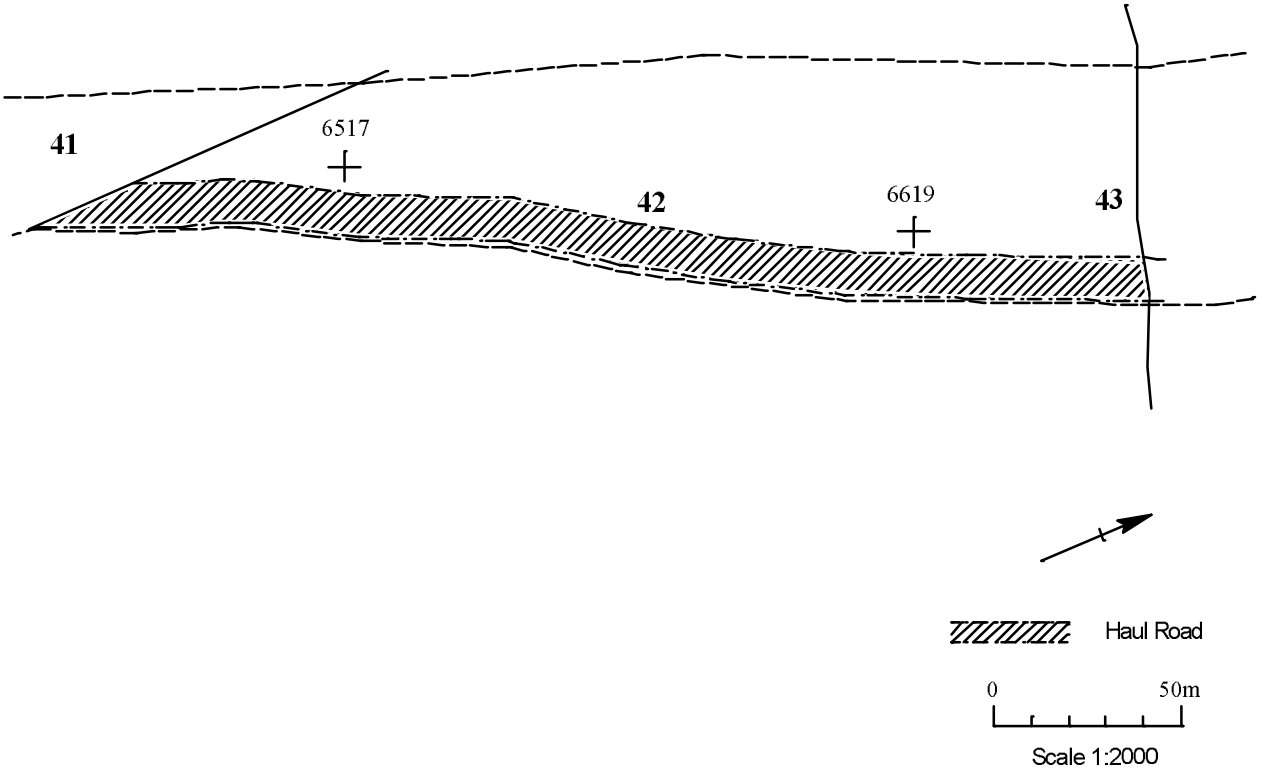
North-east facing section of linear [34003]
1:20

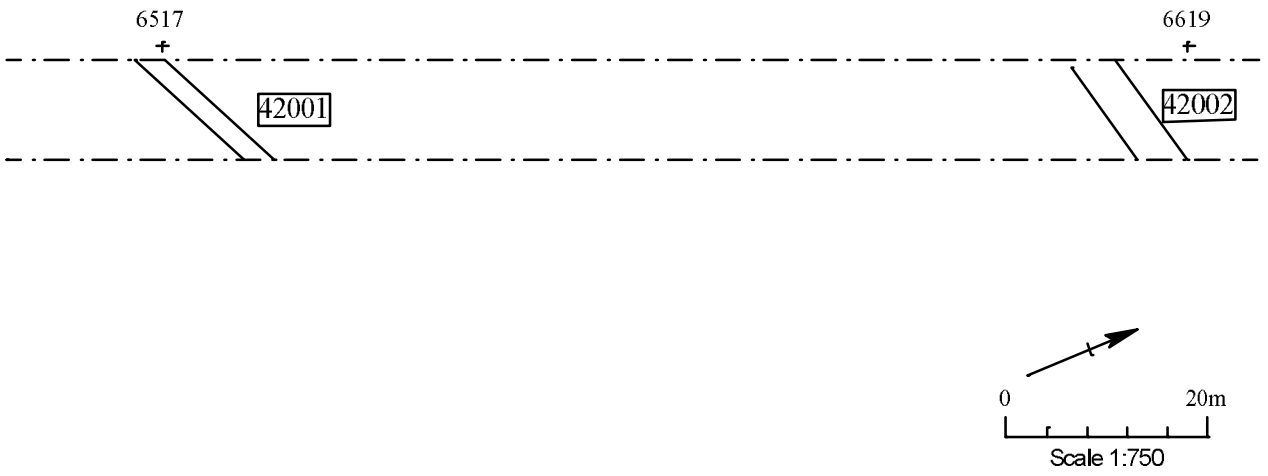


Plot 34

Scale as shown

Figure 18

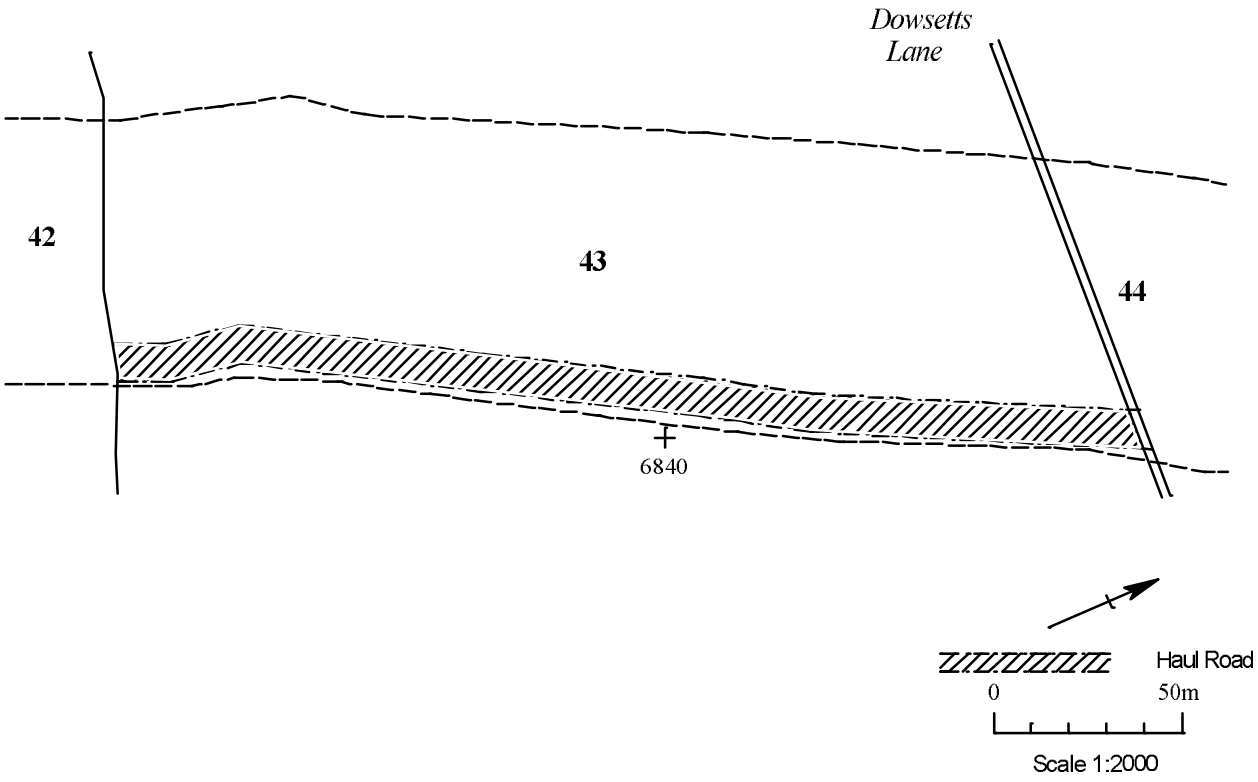


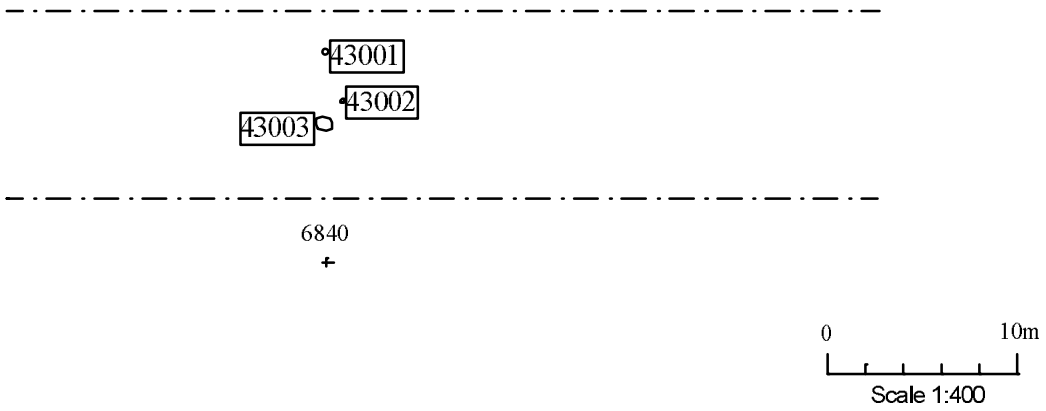


Plot 42

Scale as shown

Figure 19





Plot 43

Scale as shown

Figure 20