

JOHN MOORE HERITAGE SERVICES

AN ARCHAEOLOGICAL EVALUATION

AT

**LITTLEMORE PARK,
LITTLEMORE, OXFORD**

SX 5370 0230

On behalf of

RO Group Developments Ltd.

January 2008

REPORT FOR RO Group Developments Ltd.
c/o
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Summary

John Moore Heritage Services concluded an archaeological evaluation of the proposed development site, from 7th –8th January 2008. Four trenches, totalling approximately 80 metres in length, were excavated to reveal the underlying natural geology.

Amongst several modern features, one ditch dating to the Roman period and one undated posthole were located in Trench 1. A further gully feature investigated, also within Trench 1, contained one residual sherd of Roman pottery but was found to cut a modern field drain on closer inspection. A further undated but apparently later gully was also located within Trench 2 on a similar alignment to the Roman ditch in Trench 1.

1 INTRODUCTION

1.1 Site Location (Figure 1)

The site is situated on an irregular parcel of land at Littlemore Park, Littlemore, Oxford. The study site comprises an area of open grassland situated off Armstrong Road and immediately east of buildings forming the Research Institute (National Grid Reference SP 5370 0230)

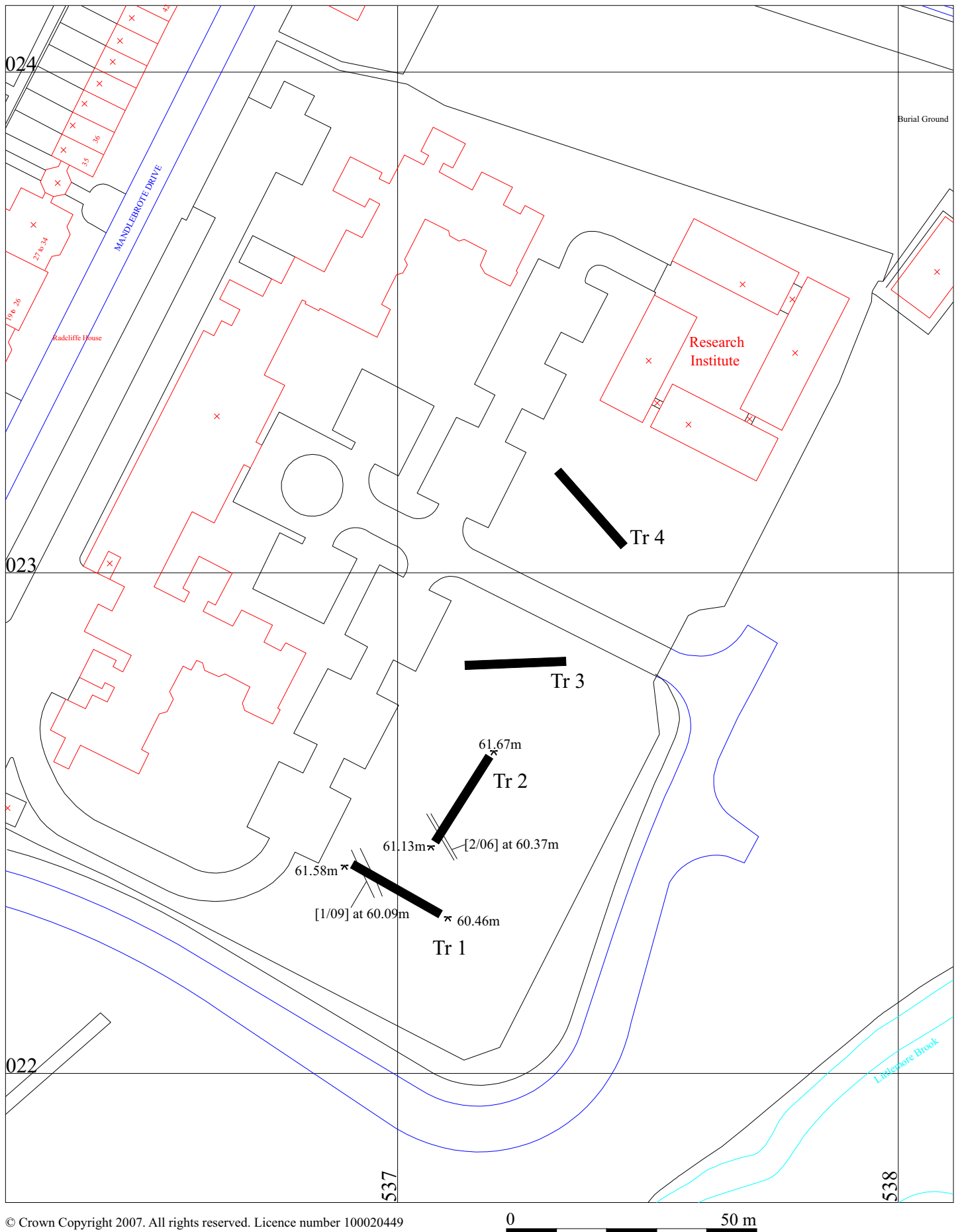
The site comprises an area of approximately 0.9 hectares that occupies a gentle southeast slope that descends to Littlemore Brook, a tributary stream of the River Thames. The study site lies immediately to the north of the alluvial floodplain of the Littlemore Brook. Discrete alterations to the internal topography of the site have been noted but broadly the southern area of the study site lies at c.60.5m above Ordnance Datum (AOD) rising to c.63m AOD to the south.

According to Maps (BGS 237) the underlying solid geology is identified as Sandstone of the Beckley Sand Member. Geotechnical assessment carried out previously documented superficial deposits of alluvium overlying solid geology across the southern extent of the site c.0.70m to 1.10m below the existing ground level.

1.2 Planning Background

Planning permission has been granted for the construction of two new two storey buildings with associated car parking, access roads and landscaping. Due to the possibility of archaeological deposits being damaged or destroyed as a result of the development and in order to ascertain any further possible mitigation strategies which might be needed, a field evaluation has been requested. This was designed to establish the presence/absence and condition of any archaeological deposits thought to present within the site and is in line with PPG 16 and Local Plan Policies.

A desk based assessment (CgMs 2007a) identified the site to have a low to moderate potential for archaeological remains dating to the Prehistoric and Iron Age/Roman periods and for palaeoenvironmental remains.



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Figure 1. Site and trench location

1.3 Archaeological Background

An archaeological desk based assessment of the site was completed in by CgMs in November 2007 as part of the specification of work. The main points identified on the potential of the site can be summarised as follows:

No records from the prehistoric period were noted for the site although activity is known from the wider area surrounding the site. Previous work carried out immediately adjacent and extending into the southern area of the site recorded the possible remains of a palaeochannel or silted hollow, thought to have been potentially open during this period.

An Iron Age settlement and a beaver dam have been recorded c.300m to the south east of the site. Residual Iron Age pottery and coins have also been recovered further to the east of the site. Significant evidence of Roman occupation is known within the area surrounding the site predominantly relating to pottery production, evidence for which has been recorded throughout the Littlemore and Blackbird Ley's area and is thought likely to have centred upon the Alchester to Dorchester-on-Thames Roman road. Numerous pottery kiln sites have been recorded within a 500m radius of the site and considerable evidence of residual Roman pottery, tile and coins have also been recorded as chance finds through archaeological investigations.

Excavations conducted c.300m to the south east have recorded the remains of an Anglo Saxon settlement including c.10 sunken featured buildings with associated pits although an evaluation conducted immediately adjacent to the site failed to reveal any features of this period.

A small medieval settlement or farmstead was revealed c.300m to the south east at the Oxford Science Park predominantly represented by the recovery of significant quantities of pottery and other finds but with most of any surviving below ground deposits being removed by later Post Medieval quarrying.

Both the cartographic and archaeological evidence suggest that the site was utilised as agricultural land up until the development of Littlemore Hospital until the mid nineteenth century. After which successive periods of development occurred on the site as part of extension works to the hospital.

2 AIMS OF THE INVESTIGATION

The aims of the investigation as laid out in the Written Scheme of Investigation were as follows:

- To determine as far as reasonably practicable, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains.
- To establish the ecofactual and environmental potential of archaeological deposits and features encountered.

In particular

- To establish the presence/absence, extent and significance of any prehistoric activity.
- To clarify the presence and character of the palaeochannel/silted hollow previously identified by evaluation conducted in 2001.
- To establish the presence/absence, extent and significance of any Iron Age/Roman activity.
- To establish the presence/absence, extent and significance of any palaeoenvironmental evidence.

3 STRATEGY

3.1 Research Design

In response to Oxford City Council's request a scheme of investigation was designed by CgMs and agreed with Oxford City Council and the applicant. The work was carried out by JMHS and was to involve the excavation of trial trenches across the site (Fig. 1).

Site procedures for the investigation and recording of potential archaeological deposits and features were defined in the *Written Scheme of Investigation*. The work was carried out in accordance with the standards specified by the Institute of Field Archaeologists (1999) and the procedures laid down in MAP2 (English Heritage 1991).

3.2 Methodology

The trenching sample required was achieved through the excavation of four 20.0m long trenches, numbered 1 to 4.

All trenches were 1.6 m wide and were excavated by a JCB type wheeled excavator fitted with a toothless ditching bucket. The resultant surfaces were cleaned by hand prior to limited hand excavation of any identified archaeological deposits.

Standard John Moore Heritage Services techniques were employed throughout, involving the completion of a written record for each deposit encountered, with scale plans and sections drawings compiled where appropriate. A photographic record was produced. The trenches were backfilled after recording.

Mr Brian Durham of Oxford City Council monitored the work.

4 RESULTS

All deposits and features were assigned individual context numbers. Context numbers in [] indicate features i.e. pit cuts; while numbers in () show feature fills or deposits of material.

4.1 Excavation Results (Figures 2&3)

The lowest deposit in the area was the natural pale orange-yellow clayey sand or sand. (1/04), (2/05), (3/05) and (4/05). The overlying stratigraphy however varied in each trench although a dark grey/brown sandy loam topsoil was noted in each trench. This was recorded as deposit (01), so for example in Trench 3 this would be (3/01).

Trench 1 (Figure 2)

A possible sub-circular posthole [1/15] was noted cutting into the natural (1/04) towards the extreme western end of the trench which continued under the section. This was noted to be at least 0.25m wide and 0.15m deep with moderately steeping curving sides onto a relatively flat base. It contained a mid brown sandy clay fill (1/16) with occasional charcoal flecking but no finds.

Next to this was a linear ditch aligned roughly NW-SE [1/09]. It was measured to be 1.8m wide, 0.67m deep and thought initially to contain five fills. The earliest (1/10), a dark grey/black almost peat like sandy clay contained sherds of Roman pottery. Above this was a pale grey sandy silt (1/11) containing further sherds of Roman pottery. This was covered by (1/12), a dark grey/black fill identical to (1/10) and containing a single sherd of Roman pottery. Above this was a mid grey clayey sand (1/13). This was overlain by a dark orange/brown sandy clay (1/14) containing a sherd of medieval pottery. In section, this deposit was observed to continue beyond the edges of the cut feature and is thought likely to be the remains of a buried subsoil which has sealed the sunken fills of the ditch.

Just to the east of ditch [1/09] was linear gully [1/07] aligned approximately N/S. This was 0.35m wide and 0.40m deep with very steep sides and a flat base. Its fill consisted of a mottled pale grey, mid brown, clayey sand with patches of orange-yellow natural (1/08). This fill contained a single sherd of Roman Pottery. However, this is thought to be residual as further inspection and cleaning revealed that this gully cuts through a modern field drain not previously seen due to difficult digging conditions.

All these features were sealed by layer (1/03), a buried soil horizon consisting of dark brown sandy clay c.0.10-0.15m thick. This was sealed by (1/02), a dark grey sandy clay made ground layer 0.65m thick containing ceramic building material, tarmac and modern pottery. These were noted but not retained. Finally, these horizons were overlain by (1/01) a dark grey/brown sandy loam topsoil.

At the eastern end of the trench a test pit was dug through the natural (01/04) to check for evidence of the remains of a possible palaeochannel. It was noted that this horizon was 0.70m thick and contained a considerable amount of root penetration. Below this a pale grey slightly clayey sand natural (01/05) was observed measuring c.0.40-0.50m thick, again containing root penetration. Below this and continuing to the total depth of the test pit was a layer of sandstone 0.15m thick in a sparse pale grey clayey sand

matrix. From this test pit it could be seen that root penetration could be seen to a total depth of c.2.00m from the current ground level.

Trench 2 (Figure 2)

Typically the stratigraphy revealed consisted of a natural pale yellow-orange slightly clayey sand (2/05) mottled grey in places overlain by an orange/brown sandy clay layer (2/04) 0.10-0.15m thick containing occasional charcoal flecking.

A linear ditch [2/06] aligned approximately NW-SE was observed towards the southern end of the trench cutting layer (02/04). This was 0.68m wide and was found to be 0.30m deep with near vertical sides and an irregular base. The section revealed the feature to contain two fills. The primary fill (02/07) consisted of a pale yellow clayey sand with occasional patches of dark grey clay and charcoal flecking 0.05m thick. Above this was a mid brown/grey sandy clay (02/08) 0.25m thick containing small CBM fragments.

Sealing this was a layer of dark grey-brown sandy clay (2/03) flecked with charcoal that varied from 0.1m to 0.15m in thickness. Cut into this layer was a brick drain. Above this was a 0.6m thick layer of dark grey sandy clay (2/02) containing stone and concrete rubble as well as brick fragments. The uppermost layer was a topsoil of grey-brown sandy loam (2/01) up to 0.2m thick.

Trench 3 (Figure 3)

Lying directly above the natural (3/05) was an orange-brown sand clay layer (3/04) up to 0.2m thick sparsely flecked with charcoal. Above this was a 0.2m thick layer of dark orange-brown sandy-clay (3/03) with denser charcoal flecking. These layers would appear to represent a buried soil sequence.

Cut [3/06] into these deposits was a 6.5m wide by 0.4m deep trench to accommodate the construction of a road. Three relatively modern services were cut into the natural below the level of the road construction. The road consisted of a lower make-up layer of stone rubble and brick fragments in a pale orange-yellow sand matrix (3/08) that was 0.25m thick. This was capped with a 0.15m thick layer of tarmac (3/07). These deposits did not fill the cut completely and left a 0.2m wide margin at the edges on both sides that was filled with a dark brown clay sand (3/09) that contained tarmac and brick fragments. This was 0.4m thick.

An undated historic map presented by CgMs (2007b) in the specification for the project shows this road.

Overlying these deposits was a 0.4m thick layer of dark brown sandy-clay with charcoal flecks and brick fragments (3/02). Cut into this layer were two modern pits filled with concrete rubble, both were unexcavated. Over (3/02) was a topsoil of grey-brown sandy loam (3/01) up to 0.2m thick.

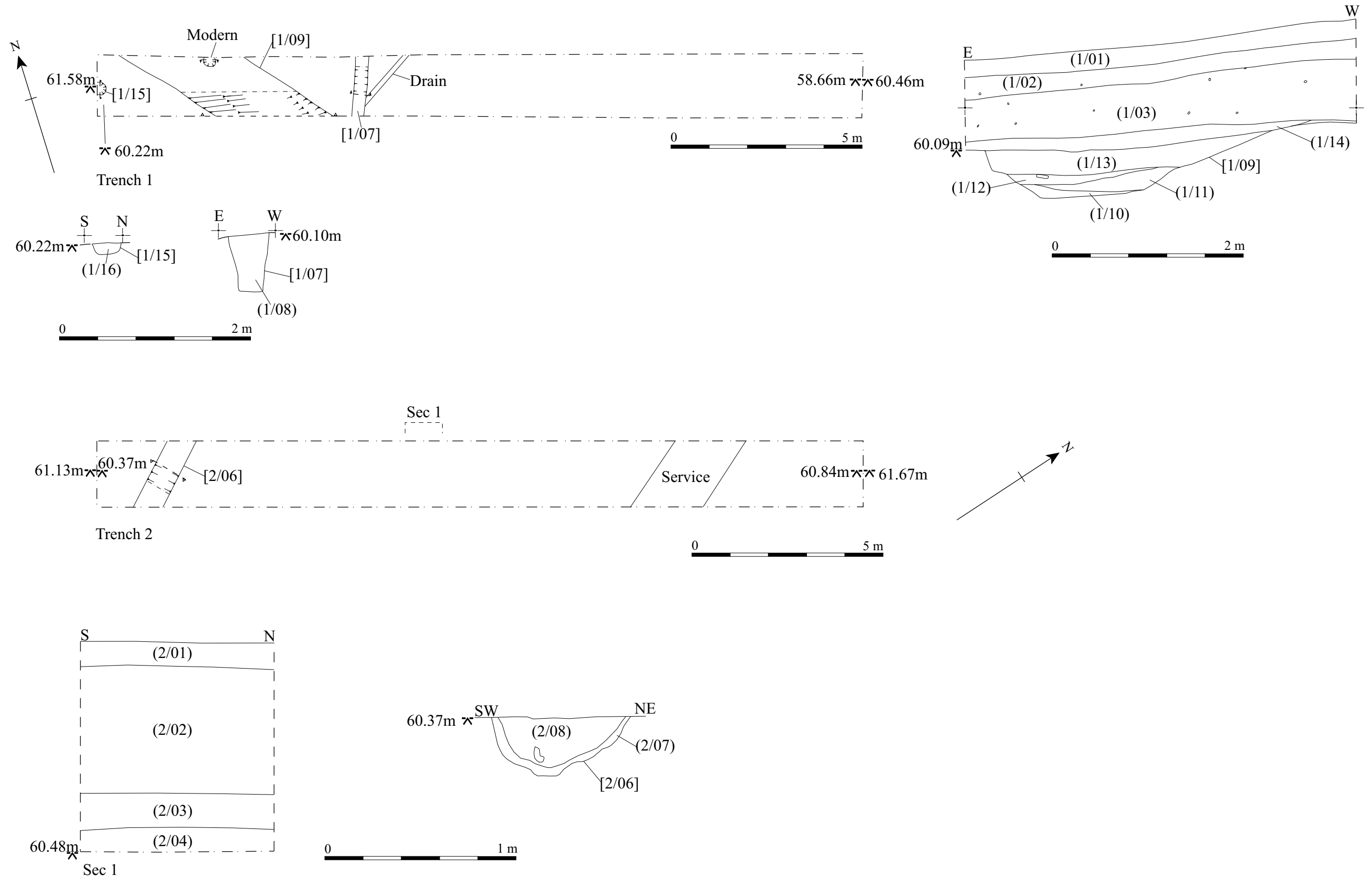


Figure 2. Plans and sections trench 1 and 2

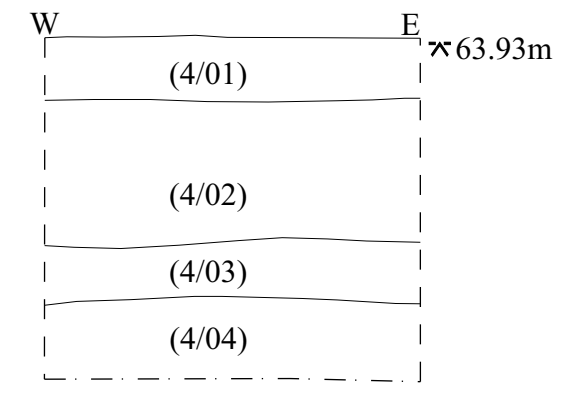
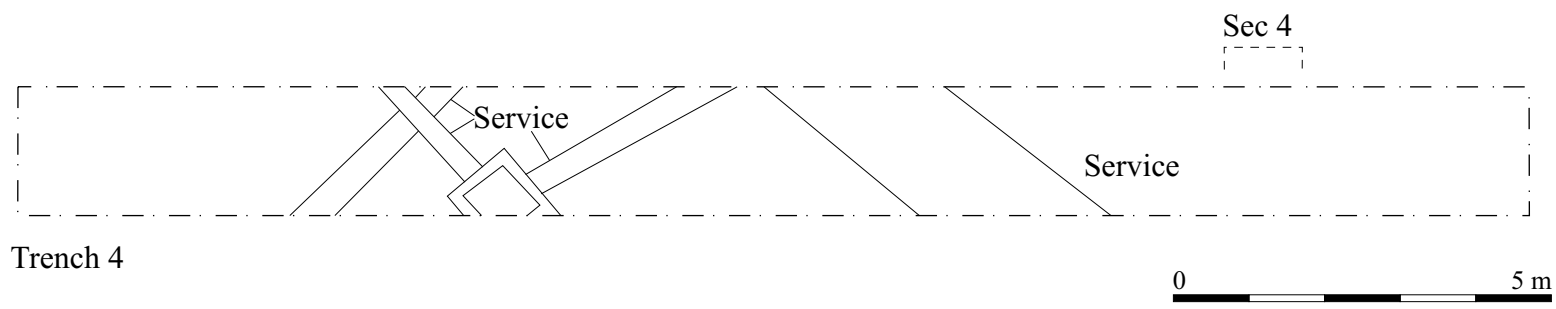
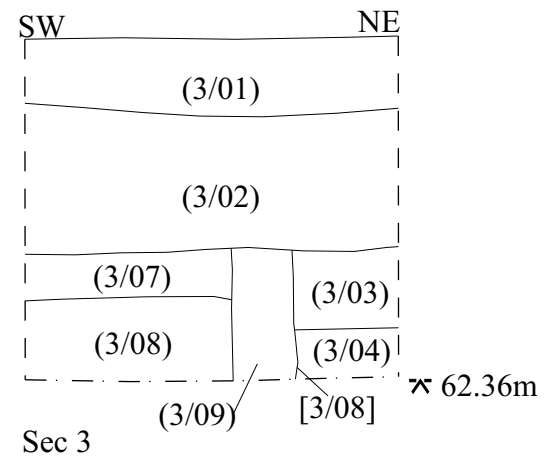
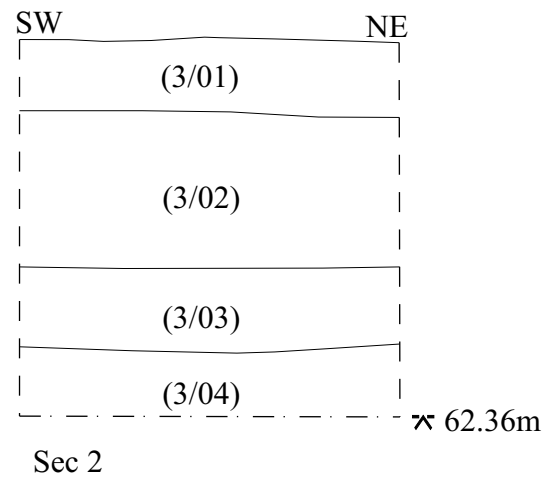
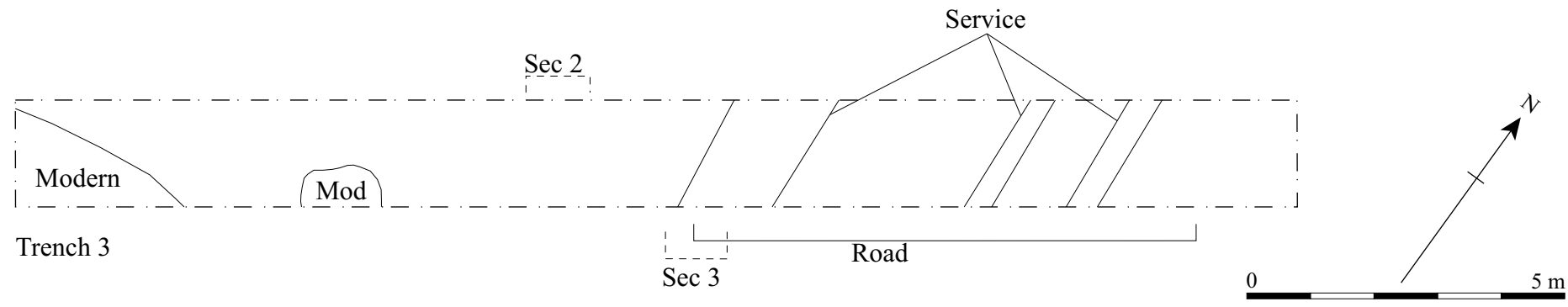


Figure 3. Plans and sections trench 3 and 4

Trench 4 (Figure 3)

Lying directly above the natural (4/05) was an orange-brown sand clay layer (4/04) up to 0.2m thick sparsely flecked with charcoal. Above this was a 0.2m thick layer of dark orange-brown sandy-clay (4/03) with denser charcoal flecking and the odd fleck of coal and CBM. These layers would appear to represent a buried soil sequence, similar to those recorded in Trench 3.

Overlying these deposits was a 0.4m thick layer of dark grey-brown sandy loam with charcoal flecks, rubble and brick fragments (4/02). At the western end of the trench was a layer of degraded tarmac and gravel up to 0.15m thick that extended into the trench 4.5m (4/06). The uppermost layer was a topsoil of grey-brown sandy loam (4/01) up to 0.15m thick.

Numerous modern services were seen within this trench, some cut through layer (4/03) the rest through (4/02).

4.2 Reliability of Techniques and Results

The reliability of results is considered to be good. The excavation of the trenches took place during periods of relatively dry weather, apart from one or two very heavy rain showers.

5 FINDS

5.1 Pottery

5.1.1 Roman and medieval Pottery *(by Paul Booth)*

Thirty sherds of pottery (287 g) were recovered from Trench 1. A single medieval sherd (9 g) of a coarse oxidised sand-tempered sherd with black surfaces came from context 1/14. The remaining material is all Roman, in locally-produced reduced coarse ware fabrics and was recorded using Oxford Archaeology ware codes. It includes a single sherd (4 g) in fine reduced ware R10 from context 1/8 and a single sherd (36 g) in a slightly sandy reduced ware (R30) from context 1/12. The rest of the pottery (27 sherds, 238 g), from contexts 1/10 and 1/11, are all from a single vessel, a wide mouthed jar of Young (1977) type R38, in a fairly fine black-surfaced fabric (R50). This is a very loosely defined and long lived type, but on the basis of both fabric and the details of the form and finish of the vessel a 2nd century date is most likely. A fragmentary black deposit on the neck suggests that the vessel was used before deposition.

The Roman pottery is consistent with origin in local kilns that form part of the Oxford pottery industry, but the evidence of use on the R38 jar suggests that the at least some of the material derives from a domestic context and is not direct production waste. This activity was probably focussed on, but need not have been confined to, the 2nd century AD. The single medieval sherd is perhaps of 12th-14th century date.

5.1.2 Post-medieval Pottery *(by David Gilbert)*

The post-medieval pottery was recorded on site utilizing the coding system and chronology of the Oxfordshire County type-series (Mellor 1984; 1994), as follows:

WHEW: Mass-produced white earthenwares, mid 19th - 20th century.

Sherds of this pottery type were noted from the following contexts: (1/01), (1/02), (2/01), (2/02), (3/01), (3/02) and (4/02).

None of this material was retained.

5.2 Environmental Remains

Due to the nature of the deposits encountered no environmental samples were taken

6 DISCUSSION

All trenches showed a sequence of buried soil horizons. Deposits (2/03), (3/03) and (4/03) appear to be soils associated with an old land surface and are probably contemporary. These had associated subsoils represented by (2/04), (3/04) and (4/04). The layer (1/03) within Trench 1 may also represent a contemporary deposit. These buried land surfaces are likely to be similar to those identified by evaluation on Yamagouchi site adjacent (CgMs 2007a).

Unfortunately no direct dating evidence was found within any of these deposits, however, the fact that construction for a relatively modern road was cut in to (3/03) and CBM fragments were seen with in (4/03) would indicate that they are of no great antiquity. All deposits above them contain 19th century or later pottery.

Land immediately to the south and west showed signs of terracing (JMHS 2006) and horticultural use in the 19th century (JMHS 2007). This practice was not evident in this area. If the buried soils had been used for horticultural purposes they did not display the re-dug beds evident to the west. Historic mapping shows green-houses in this southern area, which are not evident in the area of the site.

Roman pottery was found close by during two previous evaluations (JMHS 2006 & 2007), although neither of these produced any associated structural remains or cut features.

The ditch [1/06] produced several sherds of Roman pottery from the primary fill. These were large unabraded pieces from a single vessel, and must be considered contemporary with the use of the ditch.

This ditch [1/06] showed signs of intermittent use or water flow. Its primary fill indicates a slightly peaty deposit then follows a sequence of silt and darker more humic build up as if the ditch is drying out and a soil forming before water flow continued at a later date. This happened at least three times. No evidence for re-cutting was seen.

Although both ditch [1/06] and gully [2/06] are on a similar alignment it is unlikely that they are contemporary as the gully [2/06] appears to be cut from a higher stratigraphic level than the ditch. The gully also showed no signs of humic soil build-up as seen within the ditch.

A palaeochannel or silted hollow was previously identified by evaluation to the south of the site in 1995 (CgMs 2007a).

Geotechnical results suggested that a palaeochannel may also be present in the vicinity of Trench 1 (STATS 2007). No evidence for this was seen during the evaluation. Tree root penetration was noted to a depth of over 2m, which may explain the wood fragments recorded during the bore-hole survey.

7 CONCLUSIONS

There was no evidence for any prehistoric activity in this area. Roman activity is noted to the south of the site. A ditch and possibly associated, but undated, posthole from this period were located at 60.09m AOD.

The gully and the Roman ditch are parallel; however the gully cuts through the buried subsoil layer that seals the ditch indicating a later date. Their parallel nature may suggest that they potentially fulfilled a similar purpose at different periods and were placed according to the topography of the area.

No evidence for a palaeochannel was seen, although any evidence for such could potentially lie further to the west (CgMs 2007a) of Trench 1. Wood fragments recorded by the geotechnical report may also possibly relate to the remains of the deep penetrating tree roots recorded by the evaluation.

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APPENDIX – ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Description	Depth (m)	Width (m)	Length (m)	Finds	Date
Trench 1			1	1.6	20		
1/01	Layer	Topsoil	0.15 - 0.2	Tr.	Tr.	Pottery	Modern
1/02	Layer	Dark grey sandy clay	0.65	Tr.	Tr.	Pottery, glass, CBM	Modern
1/03	Layer	Dark brown sandy clay	0.1 - 0.15	Tr.	Tr.	-	
1/04	Natural	Pale orange - yellow clayey sand	0.7	Tr.	Tr.	-	Natural
1/05	Natural	Pale grey sand	0.4 - 0.5	Tr.	Tr.	-	Natural
1/06	Natural	Grey sand and stone	0.15+	Tr.	Tr.	-	Natural
1/07	Cut	Linear cut	0.4	0.35	1.7+		Modern
1/08	Fill	Mottled grey-brown sandy clay	0.4	0.35	1.7+	Pottery	Modern
1/09	Cut	Linear cut	0.65	1.8	2+		Roman
1/10	Fill	Dark grey-black sandy clay	0.05	1.8	2+	Pottery	Roman
1/11	Fill	Pale grey silty sand	0.2	1.8	2+	Pottery	
1/12	Fill	Dark grey-black sandy clay	0.07	1.8	2+	Pottery	
1/13	Fill	Grey clay sand	0.2	1.8	2+		
1/14	Fill	Dark orange-brown sandy clay	0.15	1.8	2+		
1/15	Cut	Posthole	0.15	0.35	0.25		
1/16	Fill	Brown sandy clay	0.15	0.35	0.25	-	
Trench 2			1	1.6	20		
2/01	Layer	Topsoil	0.15 - 0.2	Tr.	Tr.	Pottery	Modern
2/02	Layer	Dark grey sandy clay	0.6	Tr.	Tr.	Pottery	Modern
2/03	Layer	Dark grey-brown sandy clay	0.1 - 0.15	Tr.	Tr.	-	
2/04	Layer	Orange-brown sandy clay	0.1 - 0.15	Tr.	Tr.	-	

Context	Type	Description	Depth (m)	Width (m)	Length (m)	Findings	Date
2/05	Natural	Pale orange - yellow clayey sand	-	Tr.	Tr.	-	Natural
2/06	Cut	Linear cut	0.3	0.68	1.7+	-	
2/07	Fill	Orange yellow clay-sand	0.05	0.68	1.7+	-	
2/08	Fill	Brown sandy clay	0.25	0.68	1.7+	-	
Trench 3			0.65	1.6	20		
3/01	Layer	Topsoil	0.2	Tr.	Tr.	Pottery	Modern
3/02	Layer	Dark brown sandy clay	0.4	Tr.	Tr.	Pottery, glass, CBM	Modern
3/03	Layer	Dark orange brown sandy clay	0.2	Tr.	Tr.	-	
3/04	Layer	Orange brown sandy clay	0.2	Tr.	Tr.	-	
3/05	Natural	Pale orange - yellow clayey sand	-	Tr.	Tr.	-	Natural
3/06	Cut	Linear cut	0.4	6.5	1.7+		Modern
3/07	Fill	Tarmac	0.15				Modern
3/08	Fill	Sand and rubble	0.25			CBM, metal, glass	Modern
3/09	Fill	Dark brown sandy clay	0.4	Tr.	Tr.	CBM	Modern
Trench 4			0.65	1.6	20		
4/01	Layer	Topsoil	0.15	Tr.	Tr.	-	Modern
4/02	Layer	Dark grey-brown sandy clay	0.4	Tr.	Tr.	Pottery, glass, CBM	Modern
4/03	Layer	Dark brown-grey sandy clay	0.15	Tr.	Tr.	CBM	Modern
4/04	Layer	Dark orange brown sandy clay	0.2	Tr.	Tr.		
4/05	Natural	Pale orange - yellow clayey sand	-	Tr.	Tr.	-	Natural
4/06	Layer	Gravel and Tarmac	0.15	4.5	Tr.		Modern