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Wilsford-Rauceby Reinforcement Main Scheme Archaeological Excavation, Evaluation and Watching Brief

NGR: SK 9906 4185 – TF 0112 4293
Site Code: WURM 06
Accession No.: 2006.180

Report for

Anglian Water Services Ltd

By

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Wilsford - Rauceby Reinforcement Main Scheme
Archaeological Excavation, Evaluation and Watching Brief

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Summary

An evaluation, watching brief and excavation were undertaken to mitigate the impact of a water mains reinforcement scheme on land between Wilsford Reservoir and the railway line east of Wilsford, identified by a desk-based assessment and geophysical survey of the pipeline route. Archaeological remains were concentrated solely the field containing the Wilsford Reservoir and the adjacent field to the east. Geophysical survey had indicated a concentration of archaeological remains in the field adjacent to the reservoir field, which was confirmed by evaluation trenching, when features associated with 2-3rd century Roman pottery were identified. Although minimal excavation was undertaken it was sufficient to re-route the pipeline along the grass verge to the south to minimise impact on the archaeological remains. A watching brief was maintained along substantial parts of the easement strip at either end of the pipeline during which a further concentration of archaeological remains was encountered within the reservoir field. This was subsequently excavated when remains dating from the late Neolithic to the late Iron Age/early Roman period were revealed. A pit alignment formed the earliest remains encountered. Several other pits in the general area may be of Bronze Age date. East of the pit alignment a system of boundary ditches had been established by the later Iron Age, although no associated evidence of occupation was present within the pipeline easement. A late Iron Age/early Roman rectangular, stone built structure had been constructed close to the earlier boundary ditches It is not know if it was domestic or agricultural in function. It was superseded by a second, similar, structure with a rammed cobble floor which may represent a rebuild of at least part of the earlier structure rather than a completely new building. A number of pits of unknown function were found in the vicinity and may relate to the building. They were probably backfilled after the collapse or demolition of the later structure. In contrast to the adjacent Later Roman pottery dating mainly from the 2nd-3rd century AD was only recovered during evaluation trenching. Whilst the nature of the activity in this area is uncertain, the presence of later material within this area perhaps suggests that the main focus of activity had shifted eastwards by the 2nd century AD.

Introduction

Lindsey Archaeological Services was commissioned by Anglian Water in July 2006 to undertake an archaeological evaluation between Wilsford and Rauceby, Lincolnshire (Fig. 1) and was subsequently commissioned in October 2006 to undertake an excavation and watching brief as part of the same scheme. The work was carried out in accordance with the project design (July 2006) and general requirements set out in *Lincolnshire Archaeological Handbook* published by the Archaeology Section, Lincolnshire County Council (1998). The excavation commenced on 24th October 2006 and was completed on 10th November, the watching brief commenced 16th October 2006 and was completed on 6th November. The evaluation was undertaken under the supervision of Doug Young, the

excavation under the direction of Gavin Glover and the watching was carried out by Mike Garrett.

Site Location and Description

The 2.5km route of the 450mm diameter pipe extends from the Wilsford Reservoir compound on Heath Lane, Wilsford Heath, eastwards to the A153 Sleaford road. The route was within farmland, alongside road hedges and across fields and involved the stripping of an easement up to 10m wide along the route of the pipeline.

Planning Background

The archaeological excavation, evaluation and watching brief was requested by the Lincolnshire County Council Senior Built Environment Officer following a previous desk-based assessment (Rowlandson 2006) and geophysical survey (Bunn and Masters 2006).

Archaeological Background

The east end of the pipeline route passes in the vicinity of previously reported Mesolithic and Bronze Age remains. A Mesolithic microlith site (NMR no. 349044) and a small Bronze Age accessory vessel (NMR no. 349060) were found to the southeast of the pipeline route in the vicinity of four Late Bronze Age buckets urns and a partly polished axe head and a bronze amulet (NMR no.349011). Numerous enclosures and field systems of possible prehistoric date are visible as cropmarks in the Wilsford area along with possible pit alignments.

At the western end of the route Wilsford Reservoir is sited about 0.7km east of the Roman Ermine Street which served the settlement at Ancaster and a villa at Sapperton. A scatter of Roman pottery (NMR no. 325999) was reported to the south of Slate House Farm, which has been suggested as the site of a Roman villa, along with Roman votive figures (NMR no. 325958) from the same approximate area. Remains believed to be those of a complex of Romano British farm buildings were excavated as part of work undertaken in association with the construction of a Petrofina pipeline to the north of the site (Jarvis, 1991). Numerous possible enclosures, fields and trackways of possible Roman date are visible as cropmarks in the vicinity of the pipeline and suggest a developed agricultural landscape of fields, enclosures and probably small settlements in the Ancaster hinterland.

Geophysical survey in the same field as the evaluation trenches detailed in this report has identified ditched enclosures and a possible trackway of probable Roman which may form part of a settlement.

Aims and Objectives

The purpose of the evaluation, excavation and watching brief was to

- investigate and preserve by record any archaeological features which would have been affected by contractors' excavation of the pipe trench
- enable an informed decision to be made regarding the future treatment of any archaeological remains and consider any further appropriate mitigatory measures either in advance of and/or during contractors' groundworks

The Evaluation

Method

Four trenches measuring 10m x 2m were located over features identified by the geophysical survey (Fig. 2). The trenches were machine excavated to the first recognisable archaeological horizon under archaeological supervision.

Each trench was hand-cleaned to reveal features in plan. Initially, selected cross-sections through the features were excavated, however, in light of the extent of features excavation ceased in its initial stages on the recommendation of the county archaeological service. It was believed that the archaeological remains in this field would be fully excavated ahead of construction, however re-routing of the pipeline removed this necessity.

Results

Trench 1 (Fig 3, Pl.1)

Natural limestone, **103**, overlain by firm yellow clay, **102**, formed the natural geological deposits revealed in Trench 1.

A N-S orientated ditch, **107**, was encountered extending across the centre of the trench. It measured 1.10m wide but was not excavated and contained a fill, **106**, comprising mid brown silty clay which exceeded 0.10m in thickness. To the west of ditch **107**, a second ditch, **105**, extended across the trench on an E-W orientation. It measured 0.55m wide and contained a fill, **104**, comprising mid brown silty clay similar to fill **106**. The ditch was not fully excavated but exceeded 0.10m in depth. The likely intersection between ditches **105** and **107** lay beyond the limit of the trench to the southeast and therefore the stratigraphic relationship between the two features remains uncertain. However, given the similarity of the ditch fills it is suggested that the ditches may have been contemporary. Both of the ditches appear as linear anomalies on the geophysical survey, the greyscale plot of which suggests that they form parts of the same system of ditches, possibly representing field or plot boundaries.

A partially exposed, sub-rectangular pit, **109** cut through ditch **105** towards the southwestern end of the trench. It was orientated E-W and measured 1.95m x 0.81m, its southeastern corner lying beyond the limits of the trench. The pit contained a fill, **108** comprising mid brown silty clay which was not excavated. Without excavation any interpretation of the pit must remain tentative, however, it bares a marked similarity in size and shape to a grave cut and this possibility cannot be discounted.

The features and deposits were sealed by a 0.15m thick subsoil, **101**, comprising yellowish brown silty clay, probably a buried ploughsoil, which had, in turn, been sealed by 0.25m thick modern ploughsoil, **100**. A single sherd of pottery dating from the mid 2nd – 3rd century AD was recovered from the subsoil.

Trench 2 (Fig 3, Pl. 2)

The earliest deposit encountered in Trench 2 was a layer, **201**, comprising mid brown silty clay and limestone fragments. The layer extended across the entire trench and continued beyond its limits. 32 sherds of pottery were recovered from its surface, which date from at least the 2nd century AD. The layer appeared to be a compact spread of material, possibly a surface, although its function remains uncertain.

A brownish yellow clay band, **202**, 0.90m wide, was encountered in the central area of the trench on an approximately NW-SE orientation. It is probable that **202** is the fill of a NW-SE orientated ditch which cut through layer **201**. However, in the absence of any excavation, it was not possible to prove that deposit **202** did not represent an underlying layer visible in a small area not covered by layer **201**. The archaeological deposits within the trench were sealed by a 0.40m thick layer of modern topsoil, **200**, which produced a small group of pottery dating to the 4th century AD.

Trench 3 (Fig 4, Pl. 3)

The natural geology in this trench comprised a firm yellow clay, **302**. Towards the north-eastern limit of the trench was an E-W orientated ditch, **307** cut into the natural clay. It was 0.77m wide and exceeded 0.24m in depth but was not fully excavated. Its fill, **306**, comprised a mid brown silty clay.

A second ditch, **305**, was encountered a short distance to the southwest. It extended across the trench on a NW-SE orientation, suggesting that it may have intersected with ditch **307** to the east of the trench, although this was not visible on the geophysical survey greyscale plot. The ditch measured 1.15m wide and was not fully excavated but exceeded 0.22m in depth. A fill, **304**, comprising mid brown silty clay was contained within it.

Ditch **305** had been truncated at the north-western limit of the trench by a pit, **309**, which partially extended into the trench. The pit measured 0.75m x 0.30m and was not fully excavated but exceeded 0.18m in depth. It extended beyond the limit of the trench to the northwest and contained a fill, **308**, comprising greyish brown silty clay.

A layer, **303**, comprising limestone fragments extended across the south-western end of the trench for a distance of 3.30m. The limestone fragments measured an average of *c.* 0.07m x 0.04m in surface area, with very few greatly exceeding this average. The fragments may have been deliberately selected for size and deposited to form a compact surface, possible for a yard or trackway.

Layer **303** and pit **309** were partly sealed by a 0.25m thick subsoil, **301**, which extended across the trench and contained a small group of Roman pottery of at least 2nd century AD date. The subsoil obscured the north-eastern limit of the surface and also the south-western limit of pit **309** and was itself overlain by a 0.25m-0.30m thick layer of modern ploughsoil, **300**, which produced 2 sherds of Roman pottery.

Trench 4 (Fig. 4, Pl. 4)

The natural geology encountered in Trench 4 comprised a layer of clay with limestone fragments and solid limestone **406**. A NE-SW orientated ditch, **402** towards the north-western limit of the trench measured 1.95m wide and c.0.85m deep with steep sides and a concave base. It contained a single fill, **403**, comprising mid brown silty clay.

Towards the south-eastern end of the trench a second, parallel ditch, **404**, was encountered. It was 1.75m wide and contained a mid brown silty clay fill, **405**, which was not excavated. Both of the ditches are clearly visible on the geophysical survey greyscale plot where they extend across the surveyed area on the same orientation for a distance of approximately 24m, and probably extend further beyond the limit of the survey. A small amount of pottery dating to the late Iron Age/early Roman period was recovered from the fills of both of the ditches. The ditches most likely represent road-side ditches flanking a road or track that would have extended through the trench on a NE-SW orientation. The distance between the ditches suggests that the road would have measured no more than 5m in width.

A 0.15m thick subsoil layer, **401**, extended across the entire trench and sealed the ditches. It was in turn sealed by a 0.25m thick layer of modern ploughsoil, **400** from which 3 sherds of late Iron Age/early Roman pottery were recovered.

The Watching Brief

Method

Stripping of the pipeline easement along its was monitored along a stretch to the northeast of the evaluation and excavation areas which had been identified by the desk based assessment as having high potential for prehistoric remains (Rowlandson 2006,). The purpose of the monitoring was to record any archaeological features or deposits encountered. A full photographic record was made of the works on site.

Results

No archaeological features were observed during the watching brief.

The Excavation

Method

A team of experienced archaeologists carried archaeological excavation. Mechanical removal of the topsoil was undertaken using a flat edged ditching bucket to the top of the first recognisable archaeological horizon. Areas where concentrations of archaeological remains were encountered were hand-cleaned to reveal features in plan and carefully selected cross-sections through the features were hand excavated to enable sufficient information about form, development date and stratigraphic relationships to be recorded. Site plans were drawn at a scale of 1:20 and sections at

1:10. All plans and sections were located to the OS grid. A full photographic record was kept of the site. All work was undertaken in line with IFA and LCC guidelines.

Results

The natural geological deposits, **1000**, comprised areas of fractured limestone with localised patches of mid orange brown silt along with larger areas of yellowish brown sandy silt. The height of natural deposits varied across the excavation from a maximum of 89.90m OD in the centre of the excavation area to approximately 88.60m OD at the eastern end of the area.

The water pipeline easement was crossed by a gas pipeline, which effectively split the area available for investigation in this field into two. Neolithic and Bronze Age features (Phase 1) were recorded southwest of the gas pipe and Later Iron Age and Roman features lay to the northeast (Phases 2-4)

Phase 1. Late Neolithic – Bronze Age (Figs. 5, 6, 7, 8. Pl. 6, 7, 8)

Seven pits, **1012**, and **1015 – 1025** (odd numbers only) were encountered in the central section of the excavation area. The pits were broadly similar in form, each being sub-circular in plan with moderately steep to near vertical sides and largely flat bases. They varied in approximate diameter between 0.79m – 1.10m and in depth between 0.12m – 0.42m. Each contained a greyish brown clayey silt with occasional charcoal flecks (**1013** and **1014 – 1024** (even numbers only)).

The pits formed a distinct group, **1028**, interpreted as a pit alignment which extended across the excavation on an approximately NW-SE orientation. They were spaced between 0.65m – 0.90m apart and a further pit is likely to have originally existed at the southeastern end of the alignment but had been truncated by a post-medieval furrow.

A small assemblage of worked flint was recovered from the pit fills of which two pieces, a flake from fill **1020** of pit **1021** and a core fragment from fill **1022** of pit **1023** are of probable late Neolithic/Bronze Age origin. The remainder of the worked flint from the pit fills was undateable.

To the southwest of the pit alignment four further pits, **1001**, **1004**, **1007**, and **1009** were encountered within area encompassing approximately 25m of the easement strip. The westernmost pit, **1001**, measured 3m x 0.50m x 0.36m deep. It contained a gritty clay primary fill **1003**, sealed by a secondary fill **1002**, comprising reddish brown sandy silty from which 3 fragments of slightly abraded, late Bronze Age pottery were recovered. A small assemblage of unstratified pottery (context **1086**) of a similar date was also recovered from the site during machine stripping of topsoil.

Pits **1004** and **1007** were similar in form to pit **1001**, although their fills did not produce any dateable evidence. They have been assigned to this phase of activity on the basis of their similarity and proximity to pit **1001**.

Pit **1009** was notably different in form from the other three pits. It was sub-circular in plan with steep sides and a flat base and measured 0.90m diameter x 0.26m deep. The pit contained two silty fills, a

primary fill **1011** and a secondary fill, **1010**. The secondary fill produced five fragments of worked flint, two of which have been dated as late Neolithic/Bronze Age, along with two sherds of prehistoric pottery which could not be closely dated.

Pits **1001**, **1004**, **1007** and **1009** did not form a discernable group. The artefacts recovered from the pits suggests that they represent more than one phase of activity, possibly the pit alignment **1028** along with pit **1009** forming an earlier Late Neolithic/Bronze Age phase and the remaining pits forming a subsequent later Bronze Age phase of activity.

Phase 2.1. Late Iron Age/early Roman field and enclosure systems (Fig 9, 10, 15. Pl. 9)

An E-W orientated, linear ditch **1069** was encountered at the eastern end of the excavation area. It extended beyond the limit of the excavation to the east and was truncated to the west by a modern, high pressure gas pipeline. The ditch did not continue beyond the disturbance caused by the pipeline and it must be assumed that it either terminated within this disturbed area, or, perhaps more likely, turned to run on an approximately N-S orientation within the disturbed area. It measured 1.40m wide x 0.57m deep and had moderately steep sides and a flat base. It contained two primary fills, **1068** and **1077**, comprising greenish brown silty clay and a secondary fill **1080**, comprising brownish yellow clay and white chalk. A single sherd of late Iron Age pottery was recovered from fill **1077**.

Ditch **1069** most likely represents a substantial boundary or enclosure ditch, belonging to a wider system of ditches and associated features. It is probably a continuation of the system of ditches identified during the geophysical survey of the field to the east of the excavation area, perhaps established in the vicinity of the site by the late Iron Age (Fig. 2).

Phase 2.2. Boundary alterations (Fig 9, 11, 15. Pl. 10, 11)

The southwest angle of an enclosure ditch, **1063**, was recorded near the eastern boundary of the modern field. It extended 2.50m into the eastern edge of the easement running E-W before turning north and continuing for 7m to the northern edge of the excavated area, and beyond. It had moderate to steep sides and a flat base and measured 1.40m wide x 0.70m deep. The ditch contained a primary fill, **1062** and a secondary fill **1076**, both comprising silt clays. A single sherd of early prehistoric pottery was recovered from the primary fill, however given the stratigraphic relationship of ditch **1063** to the earlier ditch **1069** which contained Iron Age material, the early prehistoric pottery must be residual.

The ditch had been cut by pit, **1057**, which was partially exposed in the excavated section of the ditch. The exposed area of the feature was approximately semi-circular in plan. It measured 0.88m wide x 0.40m deep and had steep sides and a concave base. It contained a single dark grey silty clay fill, **1056**. The function of the pit is unclear.

Pit **1057** was in turn truncated by a curvilinear ditch, **1035**, with moderately steep sides and a concave base which measured 0.92m wide x 0.22m deep and largely respected the limits of ditch **1063**. **1035**

contained two fills, a primary fill, **1026**, comprising greyish brown and yellowish brown sandy clay with moderate charcoal flecks and a secondary fill, **1058**, comprising mid brown sandy clay. Carbonised cereal grain identified as bead/spelt wheat along with other unidentifiable grains were recovered from a sample taken of fill **1026**. It is likely that ditch **1035** is a recut of ditch **1063**.

Ditch **1063** cut the northern edge of the Phase 2.1 boundary ditch **1069** and represents a reorganisation or realignment of the boundary rather than maintenance of it. The ditch was notably deeper at its southern end, where it was 0.73m deep than at the north end of the excavations where it measured 0.45m, indicating a greater degree of horizontal truncation of this end of the site. This may also explain why ditch **1035** was only present at the south end of the earlier ditch and it is possible that it originally recut the whole length of the boundary. The change in depth between ditch **1063** and ditch **1035** may reflect a change in usage, perhaps from livestock control, where the need for deeper ditches would be greater to a boundary definition, such as one reflecting ownership, where less depth to the boundary ditches would be required.

Gully **1071**, was encountered to the southwest of ditch **1063**. It had moderately steep sides and a flat base and measured 3m x 0.60m wide x 0.10m deep and had been cut through at its southeastern end by a series of later pits (**1029**, **1032** and **1034**, see Phase 3.2). It had also been subjected to heavy horizontal truncation from modern ploughing. The ditch contained a single fill, **1070**, comprising dark brown silty clay. Its function is uncertain, but it may have acted as a drainage ditch discharging into the boundary ditch **1063**, but too little survived to state this with confidence .

A similar shallow ditch, **1075**, was encountered to the north of ditch **1071**. It was orientated E-W and measured 5.18m x 0.58m x 0.14m deep. It contained a single clayey silt fill, **1074**, but did not produce any dateable finds. Its function is unclear, but it may represent a drainage ditch, similar to ditch **1071**, discharging into boundary ditch **1063.**

Phase 3. Late Iron Age/ early Roman building and associated pits

Structure 1 (Fig.9, 12, Pl. 12, 13)

A foundation trench, **1067**, with a right-angled return at its southern end, was encountered immediately adjacent to the gas pipeline easement, on the west side of the excavation area. It measured 6.60m NW-SE x 2.35m NE-SW with an average width of 0.40m and was 0.15m deep. It had irregular sides and a concave base and had been heavily truncated by a second foundation trench **1061** on its east side (see Phase 3.2 below). A substantial number of limestone blocks, **1089**, formed the primary fill of foundation trench **1067**. The blocks were roughly hewn and measured an average of 0.25m x 0.25m x 0.10m. No coursing or bonding material was evident and it was not possible to determine whether the blocks were *in situ* or had been dumped after severe robbing of masonry in the trench. The limestone blocks formed a rubble fill which was sealed in places by a secondary fill, **1066**. The fill comprised mid brown clayey silt, with frequent limestone fragments and moderate charcoal flecks. A single sherd of abraded late Iron Age pottery was recovered from this deposit.

Cut **1067** is undoubtedly associated with the construction of a building with stone foundations. The remains suggest that it must have measured at least 6.60m x 2.35m although its full size remains uncertain as no remains were encountered to suggest the position of any northwestern or northeastern walls.

Whilst there is no stratigraphic evidence to exclude the possibility that the building and the Phase 2.2 boundary ditches were contemporary such an association seems unlikely. The fills of the earlier ditches were relatively sterile, with both inclusions and finds being rare when compared to the volume of material excavated. If they were contemporary, one would perhaps expect a greater amount of artefactual evidence deriving from activity within the building to be reflected within the finds assemblage of the ditch fills.

Phase 3.2 Building 2 (Fig. 9, 13. Pl. 14, 15)

A second construction cut **1061** was on the same alignment as **1067** which cut through its eastern edge. It probably represents a rebuild of the earlier structure, which may have been demolished or collapsed, rather than an entirely new building. The construction cut formed an approximate L-shape with the intersection of each length forming a cross. It measured 5.90m x 4.90m and was 0.40m wide x 0.40m deep. A slightly deeper slot measuring 0.20m x 0.12m x 0.07m deep was revealed in the southwestern end of the NE-SW length of the cut.

A limestone block foundation **1052** was contained within the construction cut. It comprised a mix of roughly hewn and squared limestone blocks with average dimensions of 0.28m x 0.25m x 0.15m. There was no evident coursing and no bonding material. The foundation suggests that a rectangular building had replaced the earlier, similar structure and had a minimum ground plan of 5.90m x 3.90m and an interior of at least 4.70m x 2.50m.

A layer, **1081**, comprising rounded cobbles up to 0.10m in diameter, extended across an area measuring 2.84m x 2.40m and was contained within the area partly bounded by the building foundation. The layer was highly compact and the cobbles had apparently been rammed into the underlying natural to form a metalled surface. It is suggested that the surface is likely to have formed an interior floor surface within the building.

Associated pits (Fig 9, 13, Pl. 16, 17)

A number of discrete pits were encountered in the excavation area which could not be confidently assigned to any single phase, although a general amount of inclusions, particularly charcoal and burnt daub flecks, within the fills of the pits suggests that they derive from a period of increased intensity of activity at the site. They have therefore been tentatively assigned to Phase 3 and assumed to be associated with activity in, or around, the building.

A sub-oval pit **1065**, was encountered a short distance to the south of Building 2. It measured 0.90m x 0.60m x 0.14m deep with steep sides and a concave base. It contained a single, sandy silt fill, **1064**.

To the east of Building 2, pits **1032**, **1034** and **1029** formed a small group, with pit **1029** cutting pits **1032** and **1034**. Each pit was sub-oval or sub-round with steep sides and a flat base and measured between 1.50m and 0.52m in diameter and up to 0.42m deep. Pit **1032**, contained a mid brown silty clay fill, **1031**, with frequent charcoal flecks and occasional flecks of bone and pottery or daub which were too small to be recovered. A similar fill, **1033**, comprising yellowish brown silty clay with frequent charcoal flecks was contained within pit **1032**. The latest of the pits in the group, **1029**, contained two fills, a primary fill, **1030**, comprising light brown silty clay with frequent charcoal flecks and unrecoverable pottery or daub flecks and a secondary fill, **1027**. This comprised dark greyish brown silty clay with very frequent charcoal flecks from which a small assemblage of late Iron Age/early Roman pottery was recovered, along with carbonised grains of bread/spelt wheat.

A further pit, **1048**, was encountered to the northwest of the group of pits. It was circular in plan with steep sides and a concave base and measured 1.09m diameter x 0.33m deep. It contained two fills, a silty clay primary fill, **1049**, with frequent limestone fragments, from which a small assemblage of late Iron Age pottery was recovered. A dark brown silty clay formed the secondary fill, **1050**.

An irregular, elongated pit, **1039** was encountered to the northwest of pit **1048**. The pit was orientated E-W and measured 4.14m x 1.21m x 0.20m deep. It had moderately steep sides and a concave base. A smaller, circular pit, **1041**, was revealed in the base of the elongated pit, at its eastern end which had steep sides and a flat base and measured 0.61m diameter x 0.39m deep. It contained a single, silty clay fill, **1042**, from which a small assemblage of late Iron Age/early Roman pottery was recovered along with 2 worked flints which were probably residual. Fill **1042** was sealed by the fill, **1040**, of elongated pit **1039**. It comprised dark brown silty clay and produced a small assemblage of late Iron Age pottery along with further, residual worked flints.

A substantial pit, **1047**, was encountered to the north of pit **1039**. It was irregular in plan, with concave sides and a flat base and measured 3.20m x 1.50m x 0.40m deep. A primary fill, **1051**, comprising redeposited natural deposits was encountered which extended across the base of the pit and probably represents initial weathering of the feature whilst it was still open and potentially still in use.

A further pit, **1085**, was encountered to the northwest. It was irregular in plan with variable but generally steep sides and an irregular base. It measured 1.20m x 1m x 0.24m deep. A single silty clay fill, **1084**, was contained within the pit. An elongated pit or short linear feature, **1083**, truncated pit **1085**. It was orientated approximately NE-SW and had moderate to steep sides and an irregular base. The feature measured 3.55m x 0.75m x 0.25m deep and contained a single silty clay fill, **1082**. Charred rhizomes and club-rush seeds recovered from a sample of the deposit may be a further indication of peat being used at the site as a fuel source or turves being used during construction.

A partially exposed feature, **1053**, probably a further pit, was encountered to the northeast of pit **1083**. It extended beyond the limit of the excavation to the north. Its exposed area was sub-rectangular in shape and measured 0.91m x 0.51m x 0.68m deep. The pit contained two clay-rich fills, **1054** and **1055**.

Phase 4. Abandonment of Building 2 (Fig 9, 14. Pl. 9)

Two similar layers, **1043** and **1044**, comprising dark brownish grey clayey silt with frequent limestone fragments, large cobbles and moderate amounts of charcoal and ash, sealed the foundations and floor surface of Building 2. The layers, which extended over a combined area measuring 6.75m x 3.40m probably represent the same deposit, an interpretation supported by sherd joins between pottery fragments recovered from each deposit. A further layer, **1036**, comprising dark brownish grey clayey silt, frequent charcoal flecks and moderate limestone rubble, sealed layers **1043** and **1044**. The deposit extended over an area measuring 6.24m x 0.50m. Pottery recovered from all three of the layers has been dated to the late Iron Age/early Roman period with some residual Bronze Age material recovered from layer **1036**. The layers **1036**, **1043** and **1044** are interpreted as debris resulting from the abandonment and demolition or collapse of Structure 2.

A sub-oval pit, **1059**, was encountered cutting through layer **1044**. The pit had gradual sides and a concave base and measured 1m x 0.70m x 0.15m deep. A single fill, **1060**, comprising black silty clay with frequent charcoal flecks was contained within the pit, from which 10 sherds of late Iron Age/early Roman pottery were recovered.

A further fill, **1046**, appears to have been deposited in pit **1047** to the north of Building 2 during this phase of activity, sealing the Phase 3.2 primary fill **1051**. It comprised dark greenish brown clayey silt with frequent large, roughly hewn limestone blocks and charcoal flecks. The limestone blocks did not appear to be *in situ* and were more likely to have been dumped within the pit. Limestone blocks did not generally appear in great quantities within the fills of the features at the site, with the exceptions of this deposit and the foundation trenches for Buildings 1 and 2. It is possible that the high concentration of limestone blocks dumped in pit **1047** may be derived from the demolition of the nearby Building 2. A small quantity of late Iron Age pottery was recovered from the fill. An upper fill, **1045**, sealed fill **1046**. It comprised dark brown silty clay with frequent charcoal flecks, from which from which 45 sherds of late Iron Age/Roman pottery was recovered. Sherds from **1045** joined sherds recovered from layers **1043** and **1044** suggest that all three deposits may be contemporary. A seed of fat hen, (*Chenopodium album*), a weed commonly associated with cultivated or disturbed land, was identified in a sample taken from fill **1045**. This may indicated cereal cultivation or processing in the vicinity, although the evidence is scarce. Charred rhizomes and wetland seeds such as club-rush were also recovered from the deposit and may suggest that peat was used as a fuel at the site, or perhaps heathy turves were used for construction purposes.

Pit **1047** was partially truncated by a curvilinear gully **1037**, which extended beyond the pit to the north. The gully had a rounded terminus at either end and had gradual sides and a concave base. It measured 2.10m x 0.36m x 0.17m deep. A single fill, **1038**, comprising brownish grey clayey silt was contained within the gully and produced a single sherd of late Iron Age/early Roman pottery.

Phase 5. Subsoil, date uncertain

A layer of subsoil, **1079**, comprising mid brown silty clay up to 0.44m thick was recorded in section at

the eastern end of the excavation area. The subsoil had been removed during site stripping and originally extended across much of the excavation area, sealing the features originating during the previous phases of activity. Four sherds of residual Iron Age pottery were recovered from the subsoil but the date of its origin is uncertain The layer is interpreted as a buried ploughsoil.

Phase 6. Modern Ploughsoil

The latest deposit encountered at the site was a modern ploughsoil, **1078**. The ploughsoil extended across the entire excavation area up to 0.30m thick.

Discussion

The archaeologically significant remains encountered during the evaluation and excavation at Wilsford span a chronological period dating from the late Neolithic/Bronze Age to at least the 2nd century AD. Numerous archaeological sites and findspots are known in the vicinity of the excavation and evaluation areas and it is likely that the remains encountered provide a snapshot of the archaeological remains in the wider area.

The Late Neolithic/Bronze Age pit alignment which extended across the western part of the excavation area represented the earliest significant remains encountered at the site. Pit alignments are often enigmatic features within the landscape and their form is much debated but remains unclear. Some pit alignments contained wooden posts, although there is no definite evidence of such a function being performed here. Others appear to have formed boundary markers, perhaps with the spoil from the pits being mounded in the spaces between the pits to form a continuous barrier. It is possible that the pit alignment here may have functioned in such a manner but truncation of the site by many years of ploughing means there is little definitive evidence.

The purpose of the boundaries formed by pit alignments is also much debated, particularly as they frequently appear to stop in what otherwise appear to be empty spaces. It has been suggested that the boundaries have a symbolic or ritual purpose rather than, or perhaps in addition to, a practical one. Further pit alignments identified from aerial photographs are known in the Wilsford area, with the nearest (NMR 1049809) located *c.* 2.9km to the north-east of the pipeline excavations, a second (NMR 1048142) *c.*3km to the northwest and a third (NMR 1049816) *c.* 3.1km to the east. A number of further cropmarks of probable early prehistoric date have also been identified in the vicinity (Rowlandson, 2006). A relatively short stretch of the pit alignment encountered during the excavation was exposed, due to the angle at which it crossed the pipeline easement but it is one of the few excavated examples to contain associated dating evidence.

To the east of the pit alignment, the late Iron Age/early Roman enclosure or field boundaries had been subject to significant alteration beyond that expected when ditches are recut during maintenance. This is presumably the result of renegotiation of the boundaries themselves. The ditches appear to be placed within a wider network of land boundaries and enclosures which are visible on the geophysical

survey undertaken in the evaluated field to the east of the excavated area. The probable roadside ditches encountered within the evaluation trench closest to the excavation area could possibly be contemporary with the boundary ditches within the excavation and the road which they flanked may have provided the stimulus for activity in the area. The extent to which the other ditches revealed during the geophysical survey are contemporary with the boundary ditches in the excavation area, is not clear due to the limited level of investigations carried out during the evaluation. The pottery associated with the upper fills is certainly of later Roman date than the material found in the excavations.

The building encountered within the excavation area is indicative of the continued changes to the landscape during the period and may indicate settlement of the site. It was evidently of sufficient importance to warrant rebuilding when it either collapsed or was demolished, although it remains a possibility that it was agricultural in function rather than domestic. Its rectangular ground plan is a shape more commonly, although not exclusively, associated with Roman or Romano-British sites rather than Iron Age sites. The wall foundations were of stone, but whether this represents the construction material for the above ground walls remains uncertain as a timber or earthen superstructure may equally have been set on the stone foundations. Very little tile was recovered from the site and the presence of club rush seeds in associated demolition/destruction deposits is probably an indicator of turves being used as a roofing material.

Pottery recovered from the abandonment phase of the building was mainly in Iron Age tradition fabrics, which continued to be manufactured into the early Roman period and despite its typically Roman shape it is possible that the building is a native construction copying a typically Roman design.

The building lay close to the route of the probable road identified by the geophysical survey and evaluation and was probably serviced by it, but did not appear to front onto it. Pottery recovered from deposits sealing the floor surface suggest that the building fell out of use and collapsed or was destroyed by the early Roman period, although whether the road continued into this period and beyond was not established.

Finds from the evaluation trenches east of the main excavations suggest that the focus of activity may have shifted eastwards, to the other side of the road, which may still have been in use at this time. Roman pottery, dated from the 2nd century to the 4th century AD, was solely confined to the evaluation trenches on this side of the road. Unfortunately, few conclusions can be drawn regarding the nature of the later Roman activity due to the limit scale of excavation within the evaluation trenches.

Conclusion

The archaeological remains encountered in the evaluation and excavation areas have established that the remains of prehistoric, late Iron Age and Roman occupation and field systems survive in the area of the easement between 200m and 500m east of the Wilsford reservoir. The geophysical survey

results have shown that these remains extend beyond the easement limits of the pipeline route in this area, and although little evidence for domestic occupation was recorded on the route itself it cannot have been far away. No other archaeological remains were revealed during the watching brief undertaken on the pipeline route

Gavin Glover
Lindsey Archaeological Services
March 2008

Acknowledgements

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APPENDIX 1

Wilsford-Rauceby Main Reinforcement Scheme (WURM 06) Context Index

			EVALUATION		
Context No.	**Type**	**Phase**	**Description**	**Interpretation**	
100	Layer		Dark brown clayey silt, 0.25m thick	Ploughsoil	
101	Layer		Yellowish brown silty clay, 0.15m thick	Subsoil	
102	Layer		Firm yellow clay	Natural clay sealing **103**	
103	Layer		Light yellowish brown imestone	Natural Limestone	
104	Fill		Mid brown silty clay, not fully excavated, in excess of 0.10m thick	Fill of ditch **105**	
105	Cut		Linear, unexcavated, 0.54m wide, in excess of 0.10m deep, E-W orientated	Boundary ditch	
106	Fill		Mid browen silty clay, in excess of 0.10m thick	Fill of ditch **107**	
107	Cut		Linear, unexcavated, 1.10m wide, extedns across the trench, N-S orientated	Boundary ditch	
108	Fill		Mid brown silty clay, unexcavated	Fill of pit **109**	
109	Cut		Sub-rectangular, unexcavated, 1.95m x 0.81m	Rectangular pit, possible grave	
200	Layer		Mid greyish brown silty clay, 0.40m thck	Ploughsoil	
201	Layer		Mid brown clayand limestone flecks, unexcavated	Possible spread	
202	Layer		Mid brownish yellow clay	Possible ditch fill or partially visible layer beneath surface **201**	
300	Layer		Dark brown clayey silt, 0.30m thick	Ploughsoil	
301	Layer		Yellowish bropwn silty clay, 0.25m thick	Subsoil	
302	Natural		Compact yellow clay	Natural clay	
303	Surface		Compact limestone fragments, unexcavated	Limestone surface / trackway	
304	Fill		Mid brown silty clay, unexcavated	Fill of ditch **305**	
305	Cut		Linear. Not fully excavated, 1.15m wide x inexcess of 0.22m deep	Boundary ditch	
306	Fill		Mid brown silty clay, unexcavated	Fill of ditch **307**	
307	Cut		Linear, not fully excavated, 0.77m wide x in excess of 0.24m deep, E-W orientated	Ditch Boundary ditch	
308	Fill		Greyish brown silty clay, unexcavated	Fill of pit **309**	
309	Cut		Sub-rectangualr in plan, not fully excavated, 0.77m x 0.31m x in excess of 0.18m deep	Pit	
400	Layer		Dark brown silty clay, 0.25m thick	Ploughsoil	
401	Layer		Mid brown silty clay, 0.15m thick	Subsoil	
402	Cut		Linear, steep sides, concave base, 1.96m wide x 0.85m deep, NE-SW orientated	Boundary ditch	
403	Fill		Mid brown silty clay, 0.85m thick	Fill of ditch **402**	
404	Cut		Linear, unexcavated, 1.72m wide, NE-SW orientated	Boundary ditch	
405	Fill		Mid brown silty clay, unexcavated	Fill of ditch **404**	
406	Natural		Compact yellow clay	Natural clay	
			EXCAVATION		
Context No.	**Type**	**Phase**	**Description**	**Interpretation**	
1000	Natural		Yellowish brown sandy silt and areas of fractured limestone fragments	Natural	
1001	Cut	1	Elongated oval in pln, steep sides, concave base. 3m x 0.5m x 0.36m deep. SW-NE orientated	Elongated pit	

Wilsford-Rauceby Main Reinforcement Scheme (WURM 06) Context Index

Context No.	Type	Phase	Description	Interpretation	
1002	Fill	1	Dark reddish brown sandy silt. Moderate charcoal flecks. 0.36m thick	Fill of pit **1001**	
1003	Fill	1	Greyish brown gritty clay. 0.05m thick	Primary fill of pit **1001**	
1004	Cut	1	Irregular in plan, only partially visible, 1.70m x 0.50m x 0.29m deep	Irregular pit	
1005	Fill	1	Dark reddish brown sandy silt, moderate charcoal flecks, 0.22m thick	Fill of pit **1004**	
1006	Fill	1	Greyish brown gritty clay, 0.10m thick	Primary fill of pit **1004**	
1007	Cut	1	Sub-oval in plan, gradual sides, concave base, 0.90m x 0.45m x 0.15m deep. SW-NE orientated	Pit	
1008	Fill	1	Dark brown sandy silt, moderate charcoal flecks, 0.15m thick	Fill of pit **1007**	
1009	Cut	1	Sub-circular, steep sides, flat base, 0.90m diameter x 0.26m deep	Pit	
1010	Fill	1	Dark reddish brown sandy silt, moderate charcoal flecks, 0.22m thick	Fill of pit **1009**	
1011	Fill	1	Greyish brown gritty silt, moderate amounts of small limestone fragments, 0.10m thick	Primary fill of pit **1009**	
1012	Cut	1	Sub-circular, near vertical sides, flat base, 0.98m x 0.92m x 0.29m deep	Pit, part of pit alignment **1028**	
1013	Fill	1	Mid greyish brown clayey silt, frequent angular flint fragments, occasional charcoal flecks	Fill of pit **1012**	
1014	Fill	1	Greyish brown clayey silt, frequent angular flint fragments, occasional charcoal flecks, 0.17m thick	Fill of pit **1015**	
1015	Cut	1	Sub-circular, moderately steep sides, flat base, 1.06m x 1.10m x 0.17m deep	Pit, part of pit alignment 1028	
1016	Fill	1	Mid greyish brown clayey silt, occasional angular flint fragments, occasional charcoal flecks, 0.12m thick	Fill of pit **1017**	
1017	Cut	1	Sub-circular, steep sides, flat base, 0.91m x 0.85m x 0.12m deep	Pit, part of pit alignment 1028	
1018	Fill	1	Mid greyish brown clayey silt, occasional angular flint fragments, occasional charcoal flecks, 0.42m thick	Fill of pit **1019**	
1019	Cut	1	Circular, moderately steep concave sides, flat base, 0.79m diameter x 0.42m deep	Pit, part of pit alignment 1028	
1020	Fill	1	Greyish brown clayey silt, occasional angular flint fragments, occasional charcoal flecks, 0.29m thcik	Fill of pit **1021**	
1021	Cut	1	Sub-circular, near vertical sides, flat base, 0.90m x 0.94m x 0.29m deep	Pit, part of pit alignment 1028	
1022	Fill	1	Greyish brown clayey silt, occasional angular flint fragments, occasional charcoal flecks, 0.39m thick	Fill of pit **1023**	
1023	Cut	1	Sub-circular, steep sides, flat base with a slight sub-rectangualr depression, 0.95m x 0.85m x 0.39m deep	Pit, part of pit alignment 1028	
1024	Fill	1	Greyish brown clayey silt, occasional angular flint fragments, occasional charcoal flecks, 0.36m thick	Fill of pit **1025**	
1025	Cut	1	Sub-circular, vertical sides, flat base, 0.95m x 1.08m x 0.36m deep	Pit, part of pit alignment 1028	
1026	Fill	2.2	Compact, greyish brown and yellowish brown sandy clay, moderate charcoal flecks, 0.28m thick	Primary fill of ditch **1035**	

Wilsford-Rauceby Main Reinforcement Scheme (WURM 06) Context Index

Context No.	Type	Phase	Description	Interpretation	
1027	Fill	3.2	Dark greyish brown silty clay, very frequent charcoal flecks, occasional chlk nodules, occasional flint fragments, 0.22m thick	Upper fill of pit **1029**	
1028	Group	1	Pits **1012**, **1015**, **1017**, **1019**, **1021**, **1023** and **1025**, forming an approximately NW-SE alignment, evenly spaced *c*. 0.60m - 0.90m apart.	Pit alignment, possibly prehistoric	
1029	Cut	3.2	Sub-oval, steep sided, flat base, 1.30m x 1m x 0.36m deep, NE-SW orientated	Possible refuse pit	
1030	Fill	3.2	Plastic, light brown silty clay, frequent charcoal flecks, unrecoverable pot/daub flecks, occasional flint fragmnts. 0.13m thick	Primary fill of pit **1030**	
1031	Fill	3.2	Mid brown silty clay, frequent charcoal flecks, occasional unrecoverable bone flecks and pot, occasaional flint fragments and clay inclusions, 0.42m thick	Fill of pit **1032**	
1032	Cut	3.2	Sub-oval, steep slightly irregular sides, flat base, 1m x 0.96m x 0.42m deep	Pit, uncertain function. Irregularity in the sides probably due to weathering	
1033	Fill	3.2	Yellowish brown silty clay, frequent charcoal flecks, 0.11m thick	Fill of pit **1034**	
1034	Cut	3.2	Sub-circular, steep sides, flat base, 0.52m x 0.44m x 0.11m deep	Shallow pit	
1035	Cut	2.2	Curvilinear, moderately steep sides, concave base, 4.90m x 0.92m wide x 0.22m deep, E-W orientatade turning onto a N-S orientation	Curvilinear ditch, possibly a partial recut of ditch **1063**	
1036	Layer	4	Dark brfownish grey clayey silt, frequnet charcoal flecks, moderate limestone rubble fragments, occasional angular flint fragments. 6.24m x 5m x 0.07m thick	Possible occupation layer or spread of material related to collapse/demolishion of adjacent structures	
1037	Cut	4	Curvilinear, rounded terminus at either end, gradual sides, concave base. 2.10m x 0.36m wide x 0.17m deep, NE-SW orientated	Curvilinear gully, uncertain function	
1038	Fill	4	Dark brown clay silt, occasional charcoal flecks, occasional gravel, 0.36m thick	Fill of gully **1037**	
1039	Cut	3.2	Irregular in plan but largely linear, rounded termus at either end, gradual to moderately steep sides, concave base, 4.14m x 1.21m x 0.20m deep, NW-SE orientated	Irregular length of ditch or gully, uncertain function	
1040	Fill	3.2	Dark brown silty clay, moderate limestone fragments, 0.20m thick	Fill of ditch **1039**	
1041	Cut	3.2	Circular, steep sides, flat base, 0.61m diameter x 0.39m deep	Pit in base of ditch **1039**	
1042	Fill	3.2	Dark brown silty clay, moderate limestone fragments, 0.39m thick	Fill of pit **1041**	
1043	Layer	4	Dark brownish grey clayey silt, frequent limestone fragments, large rounded cobbles, moderate charcoal and ash, 2.10m x 5m x 0.09m thick	Possible demolishion/collapse layer related to adjacent structures	
1044	Layer	4	Dark brownish grey clayey silt and limestone fragments (up tp 0.42m x 0.32m x 0.10m), occasional smooth pebbles, charcoal and ash, 2.35m x 3.35m x 0.28m thick	Possible demolishion/collapse layer related to adjacent structures	

Wilsford-Rauceby Main Reinforcement Scheme (WURM 06) Context Index

Context No.	Type	Phase	Description	Interpretation	
1045	Fill	4	Dark brown silty clay, frequent charcoal flecks, moderate limestone fragments, occasional flint fragments, 0.20m thick	Fill of pit **1047**	
1046	Fill	4	Dark greenish brown clayey silt, frequent limestone fragments, moderate charcoal flecks, occasional flint fragments, 0.20m thick	Fill of pit **1047**	
1047	Cut	4	Sub-oval, concave sides, flat base, 3.20m x 1.50m x 0.40m deep	Substantial pit, uncertain function	
1048	Cut	3.2	Circular, steep sides, concave base, 1.09m diameter x 0.33m deep	Pit	
1049	Fill	3.2	Light orange brown silty clay, moderate limestone fragments, 0.13m deep	Primary fill of pit **1048**	
1050	Fill	3.2	Dark brow silty clay, moderate limestone fragments, 0.20m thick	Secondary fill of pit **1048**	
1051	Fill	3.2	Light greenish brown clayey silt, moderate gravel, occasional charcoal flecks, 0.05m thick	Primary fill of pit **1047**	
1052	Masonry	3.2	Limestone blocks (ave size 280mm x 250mm x 150mm), some squared, intermitently covering an area 6.15m x 0.80m x 0.15m high.	Remnants of possible stone wall remainder probably robbed in antiquity. Within putative construction cut **1061**	
1053	Cut	3.2	Sub-rectangular, steep sides, concave base, 0.91m x 0.51m x 0.68m deep, E-W orientated, continued beyond limit of excavation	Partially exposed probable pit, uncertain function	
1054	Fill	3.2	Mottled mid yellow and grey clay, moderate limestone fragments, 0.16m thick	Primary fill of pit **1053**	
1055	Fill	3.2	Dark brown silty clay, moderate limestone fragments, 0.23m thick	Secondary fill of pit **1053**	
1056	Fill	2.2	Dark grey silty clay, occasional limestone anf charcoal fragments, 0.40m thick	Fill of pit **1057**	
1057	Cut	2.2	Sub semi-circular (as seen, only partially exposed), steep sides, concave base, 0.80m wide x 0.40m deep	Possible pit in base of ditch **1035**	
1058	Fill	2.2	Mid brown and grey sandy clay, occasional flint fragments and chalk flecks, 0.50m thick	Secondary fill of ditch **1035**	
1059	Cut	4	Sub-oval, gradual sides, concave base, 1m x 0.70m x 0.15m deep	Pit, uncertain function - robber pit?	
1060	Fill	4	Black silty clay, frequent charcoal flecks, 0.15m thick	Fill of pit **1059**	
1061	Cut	3.2	Cross-shaped in plan, squared corners, steep sides, slightly irregular base, 5.90m x 4.90m, 0.40m wide x 0.40m deep with a 0.20m x 0.12m x 0.07m deep slot at western end of the E-W element of the cross	Constrcution cut for a sub-rectangular building	
1062	Fill	2.2	Greenish brown silty clay, frequent flint nodules, moderate chalk and charcoal flecks, up to 0.70m thick	Fill of ditch **1063**	
1063	Cut	2.2	Curviliner, 9.40m x 3m x 1.40m wide x 0.70m deep, W-W orientated turning onto a northerly orientation	Boundary ditch, probable field boundary	
1064	Fill	3.2	Mottled dark brown/mid orange sandy silt, frequent charcoal flecks, 0.14m thick	Fill of pit **1065**	

Wilsford-Rauceby Main Reinforcement Scheme (WURM 06) Context Index

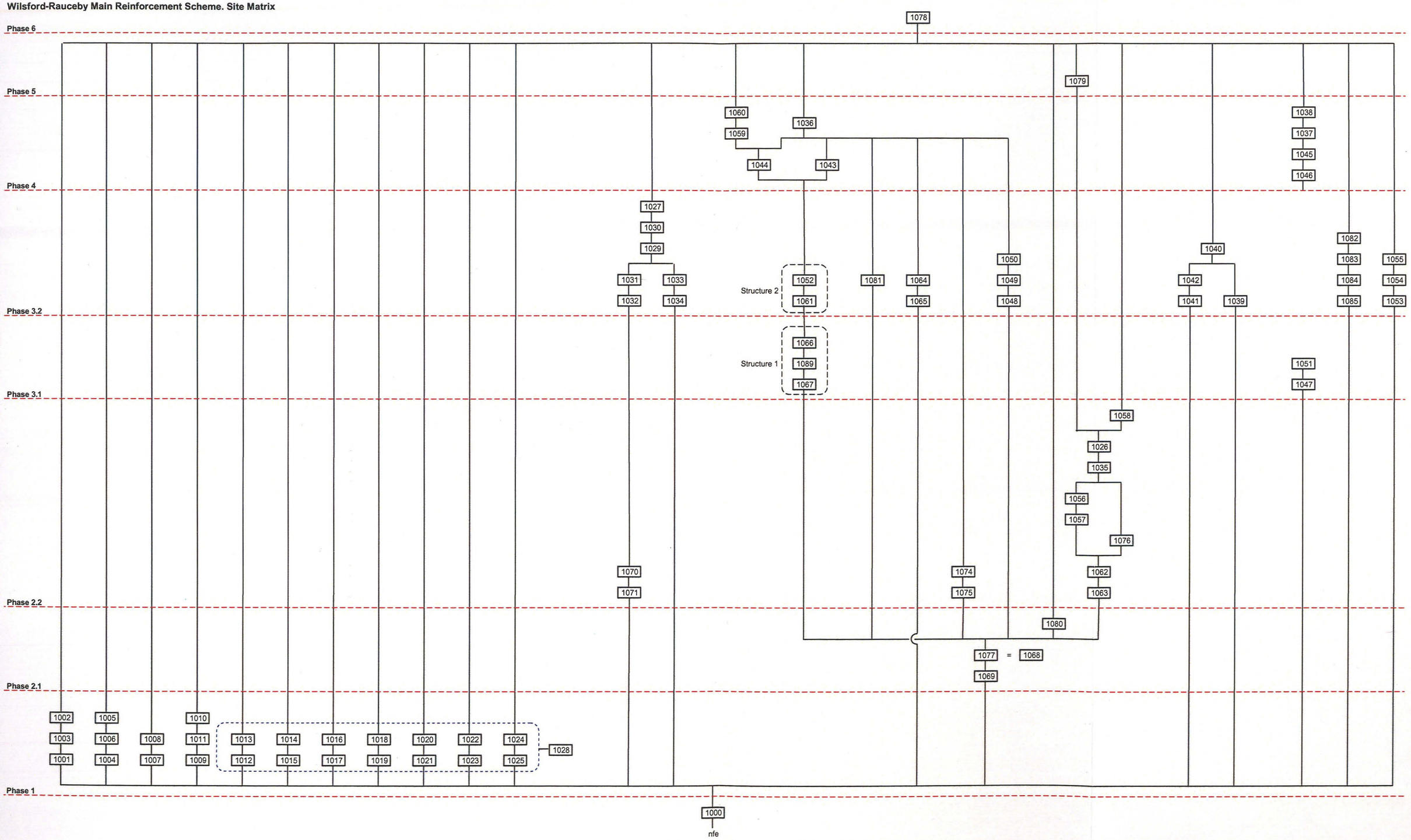
Context No.	Type	Phase	Description	Interpretation	
1065	Cut	3.2	Sub-rectangular, steep sides, concave base, 0.90m x 0.60m x 0.14m deep	Small pit	
1066	Fill	3.1	Mid brown, clayey silt, frequnet limestone fragmnets and blocks, moderate charcoal, occasional gravel, 0.18m thick	Seemingly the fill of **1067**, although most likely represents the fill of a later robber cut	
1067	Cut	3.1	Linear L-shape, irregular sidews, concave base, 6.60m x 2.35m x 0.40m wide (ave) x 0.15m deep	Foundation/constrcution cut for wall **1089**, irregularities in its shape may be the result of later robbing	
1068	Fill	2.1	Mid greenish brown silty clay, occasional charcoal and chalk flecks, 0.35m thick	Fill of ditch **1069**	
1069	Cut	2.1	Linear straight, moderately steep sides, flat base, 12.20m x 1.40m x 0.57m deep, WNW-ESE orientated	Boundary ditch, probable field boundary	
1070	Fill	2.2	Mid to dark brown silty clay, frequent charcol flecks, frequent small limestone and chalk flecks, 0.10m thick	Fill of gully **1071**	
1071	Cut	2.2	Slightly curvilinear, rounded terminus at western limit probably due to truncation for a furrow, moderately steep sides flat base, 3.0m x 0.60m x 0.10m deep, NE-SW orientated	Shallow gully, uncertain function although possibly related to adjacent structures	
1072	Void	Void	Void	Void	
1073	Void	Void	Void	Void	
1074	Fill	2.2	Greyish brown clayey silt, occasional charcoal flecks, occasional flint fragments and small pebbles, 0.14m thick	Fill of gully **1075**	
1075	Cut	2.2	Linear, gradual sides, concave base, 5.18m x 0.58m x 0.14m deep, E-W orientated, truncated at eastrn end by a furrow	Shallow gully	
1076	Fill	2.2	Mid brown silty clay with grey and yellowish grey mottles, moderate chalk flecks and flint nodules, 0.38m thick	Upper fill of ditch **1063**	
1077	Fill	2.1	Mid greenish brown clay, frequent chalk flecks and flint fragments, occasional charcoal flecks, 0.40m thick	Fill of ditch **1069**, same as fill **1068**	
1078	Layer	6	Mid grey silty clay, 0.30m thcik extends across the site.	Topsoil	
1079	Layer	5	Mid brown sandy silty clay, 0.44m thick	Subsoil	
1080	Fill	2.1	Brownish yellow clay and white chalk, moderate flint nodules, 0.15m thick	Redeposited bouder clay fill of ditch **1069**	
1081	Layer	3.2	Rammed rounded cobbles upto 0.10m diameter within a dark brown silty clay matrix. 2.84m x 2.40m x 0.10m thick	Metalled surface, possibly the remnants of a yard	
1082	Fill	3.2	Dark blueish grey silty clay and greenish grey clay, frequent charcoal flecks, moderate flint fragments, occasional large (over 0.10m diameter) cobbles and limestone blocks, 0.35m thick	Fill of pit **1083**	
1083	Cut	3.2	Linear, rounded terminus at eastern end, squared terminus at western end, moderately steep sides, uneven but mostly flat base, 3.55m x 0.75m x 0.25m deep, E-W orientated	Elongated pit/short gully	
1084	Fill	3.2	Brownish grey silty clay, frequent chalk flecks and flint nodules, occasional charcoal flecks, 0.34m thick	Fill of pit **1085**	

Wilsford-Rauceby Main Reinforcement Scheme (WURM 06) Context Index

Context No.	Type	Phase	Description	Interpretation	
1085	Cut	3.2	Irregular shape in plan, steep to moderately steep sides, uneven base, 1.2m x 1m x 0.24m deep	Pit, uncertain function	
1086	unstratified		Context number for unstratified finds	Context number for unstratified finds	
1087	void	void	void	void	
1088	void	void	void	void	
1089	Masonry	3.1	Limestone blocks (ave size 250mm x 250mm x 100mm), unworked, no coursing or bonding material, 1.80m x 0.30m x 0.25m high	Remnants of possible stone wall remainder probably robbed in antiquity. Within putative construction cut **1067**	

APPENDIX 2

Wilsford-Rauceby Main Reinforcement Scheme. Site Matrix



APPENDIX 3

Wilsford – Rauceby Mains Reinforcement Scheme, Lincolnshire
WURM 06

Lithic Materials: Assessment

Report by Jim Rylatt – March 2007

1.0 Introduction

This report concerns a collection of lithic material recovered to the south and south-west of Wilsford during archaeological monitoring of a water mains reinforcement scheme. A total of 47 pieces of struck flint were retrieved. Additionally, 24 unmodified fragments of flint were recovered, indicating that there is a natural source of flint pebbles/gravel in this locality. The items with diagnostic traits were indicative of activity during the late Neolithic to the Bronze Age.

2.0 Method of study

All of the artefacts that were submitted were physically examined in order to create an archive catalogue. The attributes of each piece were noted to determine its position in the reduction sequence, any observable characteristics of the reduction technology and an assessment of its functional potential. The catalogue also records the presence of patination, cortex, and whether any piece has been burnt. Additionally, metrical data was recorded for complete flakes, and each piece was weighed. Some artefacts were also examined with a x3 hand-lens to determine whether there was any evidence of localised modification that could be indicative of use.

3.0 Worked flint

3.1 Raw materials

All of the struck lithic artefacts were produced from flint. Surviving cortical surfaces were thin and abraded indicating that the raw materials were derived from secondary deposits. The latter consist of water-transported pebbles and cobbles that form river terrace gravels or glaciofluvial sheet deposits.

The artefacts utilised 23 pieces of the grey opaque flint, which are characteristic of the Lincolnshire Wolds chalk formations, and another 15 pieces of brownish-grey or greyish-brown semi-translucent flint. The presence of further Wolds-type flint among the unmodified pieces indicates that this raw material is present in local drift deposits, the most likely source being glaciofluvial sheet deposits that have been transported south-westward away from the Lincolnshire Wolds.

3.2 Condition

Almost the entire collection had wholly or partially recorticated surfaces. This post-depositional modification reflects the soil chemistry on the limestone escarpment.

The assemblage contained four pieces of burnt flint (8.5%), with another piece that may have been thermally modified (2.1%). The burning had altered the structure of the flint, creating a multitude of small, angular, insipient and/or detaching small pot-lid flakes. The burnt pieces

exhibited traits demonstrating that they had been burnt after knapping. The fact that flint was being burnt indicates that one or more prehistoric hearths were created in the immediate environs of the route followed by the water main.

3.3 Composition of Assemblage

The relatively small size of this assemblage limits any determination of the character of prehistoric activity. Some insights into the chronology and possible form of this activity are provided by selected elements of the collection.

The assemblage did not incorporate any items with morphological traits indicative of bladelet production, which characterises late Mesolithic and early Neolithic industries.

Eight pieces of worked flint had morphological traits typical of later Neolithic to Bronze Age industries. A core and a core fragment were both utilised for the production of hard hammer flakes with pronounced bulbs. The core fragment had several insipient bulbs of percussion resulting from failed attempts to detach flakes – the core had been struck away from the platform edge, which would have produced flakes with a thick butt if this attempt to detach pieces had succeeded. The presence of the core fragments indicates that core reduction was undertaken at or very near to the locations from which they recovered, but the small size of the assemblage implies that this is unlikely to have been a significant activity.

The component of the assemblage with later Neolithic to Bronze Age traits also includes a retouched flake (S.F. 52) and a utilised flake (S.F. 66).

4.0 Discussion

This collection of worked flint represents a human presence in this area during the late Neolithic and/or Bronze Age. The small quantity of lithic artefacts suggests there was no sustained activity or occupation in the immediate vicinity of the pipeline corridor and it therefore seems likely that visits were sporadic and brief during this period. In fact it is possible that later prehistoric activity was even more infrequent than the assemblage seems to suggest. More than half of the collection consisted of irregular waste (28 chunks and chips – 59.6%). Some of this material was undoubtedly the unintentional by-product of core reduction, but it is possible that other pieces may have been created by natural processes, such as frost shattering[1]; any such material will have artificially inflated the size of the assemblage.

[1] Any obviously natural thermal flakes were removed from the collection, but some of the remaining pieces do not have distinct indicators for the manner of their creation.

WURM 06: worked and modified lithic materials

Context	Find No.	Reduct. Seq	Type	Date	Weight	Comp	Cortex	Recort.	Burnt	Retouch	Platf	Bulb	Term	P-dep damage	Comments
200	66	S	utilised flake	L.Neo/BA	14.3	36x32x15	50 t.a			u/w	cort	pron	feath		thick hard hammer flake; dorsal end preserves bulb suggesting piece truncated by secondary flaking?; 1 lat edge cortical, other has small chips detached along ventral & dorsal margins, scars are slightly worn with slight diffuse polish; brownish-grey trans flint
200	67	T	chip		1.3	no		partly						no	irreg frag with flake surfaces, poss v. irreg flake, but no evidence of structured working - poss natural?; brownish-grey trans flint
301	68	P	flake		3.3	no	90 t.r.a	partly			flat	pron		no	prox frag of flake or b-l flake, hard hammer removal with 1 or 2 small trimming flakes detached from platf edge, with surviving flake surface; slight post-dep chipping; brown-grey trans flint
1008	9	T	chip		1.1	no		yes	yes						small frag of poss natural thermal flake with well developed cortex, latter with localised pinkish discolouration - large pot-lid detached from one end; grey flint
1010	22	S	chip		0.4	no	80 t.a	partly	poss						small frag of thermal piece, has insipient cracks - poss burnt poss frost damage - has resulted in truncation; greyish-brown trans flint
1010	23	T	flake		1.2	17x16x6		yes			flat	diffuse	feath	no	flake with scars of removals from same platf; flint
1010	24	S	flake		0.5	18x14x4	30 t.a	yes			flat	sm.pr	feath	no	small flake with dorsal scars of 2 earlier removals from same platf - 1 is prob trimming flake; grey opaque Wolds flint
1010	25	T	flake	L.Neo/BA	0.6	16x19x3	10 t.r.a	yes			cort	sm.pr	feath	no	squat irreg flake - prob hard hammer; grey opaque Wolds flint
1010	44	S	flake	L.Neo/BA	4.7	32x32x7	50 t.r.a	yes			cort	pron	feath	yes	hard hammer flake, with dorsal scars indicating removal of 2 similar flakes from same platf; post-dep damage to 1 lat edge; grey trans flint
1013	26	T	chip		0.2	no		yes							small flake-like frag or flake frag; flint
1013	27	S	chip		0.8	no	30 t.a	yes							small irreg frag with surviving flake surfaces - poss natural; flint
1013	29	T	chip		0.6	no		partly							small irreg frag with surviving flake surfaces; grey opaque flint
1013	30	T	chip		0.7	no		partly							small irreg frag with surviving flake surfaces - poss frag of truncated flake; mottled grey opaque Wolds flint
1013	31	T	chip		0.8	no		partly							small irreg frag with surviving flake surfaces; mottled grey opaque Wolds flint
1018	75	S	flake		3.3	24x33x9	30 t.a	yes			comp	diffuse	feath		irreg flake - poss natural thermal flake; grey opaque Wolds flint
1020	37	S	flake		0.3	no	30 t.a	partly			flat	pron		no	prox frag of small irreg hard hammer flake; brownish-grey trans flint
1020	38	S	flake		0.7	15x11x5	20 t.a	partly			cort	sm.pr	feath	no	small flake, with scars of other small removals from same platf; grey opaque Wolds flint
1020	43	S	chip		0.4	no	40 t.a	yes							small irreg frag with surviving flake surfaces - poss natural; flint
1020	44	T	flake	L.Neo/BA	0.8	no		partly					hinge	no	medial & distal frag of small irreg flake, platf poss detached during flaking; dorsal scars indicate 2 flakes removed from same 9rotating) platform, poss discoidal core?; greyish-brown trans flint
1020	45	T	chip		0.2	no		partly						no	small frag with surviving flake surfaces - poss medial frag of flake or b-l flake; mottled grey opaque Wolds flint
1022	15	S	core fragment	L.Neo/BA	50.7	44x60x33	30 t.r.a	partly						no	section (poss quarter) of river pebble, poss type A2 core, with flat platf created by removal of 2 large flakes; 2 elongated hard hammer flakes

WURM 06: worked and modified lithic materials

Context	Find No.	Reduct. Seq	Type	Date	Weight	Comp	Cortex	Recort.	Burnt	Retouch	Platf	Bulb	Term	P-dep damage	Comments
															detached from platf edge leaving pron negative bulb - adjacent section of platf has up to 7 insipient bulbs of percussion representing failed attempts to detach further flakes, failure probably resulting in premature discard of piece; brownish-grey semi-trans flint
1022	16	T	chunk		6.1	no		partly						no	irreg flake-like frag, with no butt & v irreg dorsal surface - poss natural; mottled grey opaque Wolds flint
1026	46	S	chunk		8.3	no	30 t.a.	partly						no	elongated irreg frag, with surviving flake surfaces, latter v. irreg on 2 sides, more regular on third - poss natural; brownish-grey trans flint
1026	47	T	chip		0.9	no		partly						no	small frag with surviving flake surfaces - poss distal frag of flake; mottled grey opaque Wolds flint
1026	48	T	chip		0.5	no		partly						no	small frag with surviving flake surfaces - poss distal frag of flake; grey opaque Wolds flint
1027	49	S	chunk		6.2	no	20 t.a	yes	yes					no	frag with flake surfaces; piece burnt and calcined after flaking, with granular structure resulting in localised truncation; flint
1027	50	S	chunk		28.9	no	30 t.a	yes	yes					no	large irreg frag with flake surfaces; piece burnt & calcined after flaking, with granular structure resulting in localised truncation; flint
1038	20	T	chip		0.3	no		yes						no	small irreg frag with flake surfaces - poss natural; grey opaque Wolds flint
1040	51	T	chip		0.8	no		partly						no	small irreg frag with surviving flake surfaces; mottled grey opaque Wolds flint
1040	52	S	retouched flake	L.Neo/BA	1.7	20x19x6	30 t.a	partly		yes	cort	pron		no	relatively small hard hammer flake; 1 lat edge cortical; inverse retouch to other lat edge & dist end (semi-abrupt & acute chips) creating convex margin - slight wear & diffuse polish along dorsal margin); greyish-brown trans flint
1040	53	T	chunk		2.8	no		partly							irreg frag with surviving flake surfaces - poss natural; pale grey opaque Wolds flint
1040	54	P	flake		1.4	17x20x5	90 t.r.a	partly			flat	sm.pr	feath	no	small irreg cortical flake; grey opaque Wolds flint
1040	57	T	chunk		14.2	no		partly						no	irreg frag, with flake surfaces - some insipient fractures; grey opaque Wolds flint
1040	58	S	chip		0.8	no	20 t.a	yes							flake-like frag, appears to be 'flaked flake' - poss natural; grey opaque Wolds flint
1042	61	T	flake	L.Neo/BA	0.6	16x15x4	<10 t.a	partly			comp	pron	feath	no	small irreg flake, prob detached from discoidal core (trimming edge of bifacial tool also poss); brownish-grey trans flint
1042	62	P	chip		0.6	no	80 t.r.a	partly						no	flake-like frag detached from surface of recorticated pebble - poss natural; pale grey opaque Wolds flint
1043	10	S	utilised flake		4.1	25x25x8	70 t.r.a	yes		poss, u/w	flat	sm.pr	feath	yes	squat thick flake, largely cortical, with 1 previous removal from same platf & 1 from perpendicular platf; v. small chips detached from 1 lat edge & most of dist end either as deliberate retouch or unintentional during use - poss slight wear & rounding of scars along lat edge suggesting this edge used as scraper-like tool, while modification of dist end was backing; flint
1044	71	T	flake		1.4	no		partly						yes	medial fragment of flake, possibly b-l piece - one end snapped, other chipped, as are both lateral margins; pale to mid grey opaque Wolds

WURM 06: worked and modified lithic materials

Context	Find No.	Reduct. Seq	Type	Date	Weight	Comp	Cortex	Recort.	Burnt	Retouch	Platf	Bulb	Term	P-dep damage	Comments
															flint
1046	64	T	flake		32.0	46x48x18		partly			flat	pron	feath	no	large irreg flake - dorsal surface is v. irreg with removals from 2+ platfs leaving large, thick ridge - domed ventral surface; grey opaque Wolds flint
1054	69	T	chip		3.8	no		yes						no	irreg frag with surviving flake surfaces, some chipping to margins - poss natural; grey opaque Wolds flint
1062	65	T	chip		0.7	no	10 t.a	partly						no	small frag, poss medial/distal frag of flake; brownish-grey trans flint
1062	72	S	chunk		8.5	no	30 t.a	partly							irreg frag, with flake surfaces; grey opaque Wolds flint
1062	73	T	chip		1.2	no		partly							small frag with flake surfaces, poss distal frag of flake; mid-grey trans flint
1072	17	S	chunk		13.2	no	30 t.r.a	partly	yes					no	frag with flake surfaces; piece burnt after flaking, with darkening of cortex, pot-lids detached & granular structure; grey opaque Wolds flint
1086	7	P	flake		3.1	22x25x7	90 t.a			poss	flat	diffuse	feath		poss notched flake? - relatively small cortical flake; after piece detached from core, a small flake was removed at junction of platf & 1 lat edge, poss deliberate single blow notch, with subsequent chipping/abrasion along its margin - however, latter not obviously worn so poss results from post-dep damage; greyish-brown semi-trans flint
1086	11	S	chunk		5.4	no	20 t.a	partly						yes	irreg frag with flake surfaces, poss v. irreg flake, but no evidence of structured working - differential levels of patination suggest significant chipping & damage, poss natural?; brownish-grey semi-trans flint
1086	12	T	core	L.Neo/BA	38.1	16x52x44		partly						no	thick flake (poss natural thermal piece?), which has been utilised as core, with smaller flakes taken off around c. 2/3 of its perimeter - flakes have pronounced negative bulbs (hard hammer) - essentially type a core, attempt to use it as discoidal core (to remove acute/invasive flakes from main platform was largely unsuccessful); mottled grey opaque Wolds flint

WURM 06: worked and modified lithic materials

Summary of worked flint assemblage

No. of finds	Reduct. Sequence	Type	Date	Weight	Comp	Cortex (%)	Recorticated	Burnt	Retouch	Platform	Bulb	Termination	Post-depositional damage
47	P **4**	retouched flake **1**	L.Neo/BA **8**	**270.5**g	yes **15**	0 **19**	yes **15**	yes **4**	yes **1**	flat **8**	diff **3**	feath **12**	yes **4**
	S **19**	utilised flake **2**			no **32**	10 **3**	partly **30**	poss **1**	poss **2**	cort **5**	pron **7**	hinge **1**	no **28**
	T **24**	flake **14**				20 **4**			u/w **1**	comp **2**	sm.pr **5**		
		core **1**				30 **10**							
		core fragment **1**				40 **1**							
		chunk/chip **28**				50 **2**							
						70 **1**							
						80 **2**							
						90 **3**							

APPENDIX 4

WILSFORD TO RAUCEBY PIPELINE
WURM06
REPORT ON PREHISTORIC POTTERY

By Carol Allen

1 Quantifications and Catalogue

1.1 A total of 54 sherds of pottery were found on this site weighing 232g. The pottery sherds represent approximately 13 separate vessels of prehistoric date. Some sherds cannot be identified to a type with any certainty and no complete profiles were apparent. All the sherds are detailed in the attached catalogue (Table 1).

1.2 Seven vessels are represented by these sherds which have form or decoration and can be identified to a specific type. Of these 4 pots are suitable for illustration and are allocated a drawing number in the catalogue.

2 Methodology

2.1 The pottery has been recorded and described according to the guidelines of the PCRG (1997). In addition, this report conforms to the standards and guidance of the IFA (2001). All the sherds were counted, weighed and recorded and are detailed on the catalogue attached. The wall thickness, fabric type and the abrasion level of the sherds is also given and the part of the pot remaining, rim, body or base is recorded.

2.2 All the sherds were examined by use of a x2 binocular microscope in order to allow the fabric types to be summarised.

3 Fabrics

3.1 Three different fabric types were recognised by examination of all the sherds by eye and with a x2 binocular microscope. The division of the fabric types was made based upon the apparent tempering materials visible by eye and the appearance, colour and firing of the sherds. This assumes that the potters were aiming to produce pots with a distinctive appearance and tempering.

3.2 Fabric 1, coded SHSM/QUSF, contains elongated voids and some shelly material (SH) in a sparse quantity (S=3-9%) and medium size (M=0.25-1.00mm). The elongated voids indicate the former presence of leached out shelly material. Fabric 1 also has a sparse amount of fine (F=<0.25mm) quartz (QU). Fabric 2, SHMC/QUSF, also contains voids and shell in a moderate amount (M=10-19%) and coarse size (C= 1.00-3.00mm) and fine quartz. Fabric 3, SHCC/QUSF, contains a common amount (C20-30%) of coarse sized voids and shell and sparse rounded quartz.

3.3 The site lies on Jurassic Great Oolite Limestone (BGS 1979; Swinnerton and Kent 1976) and it is therefore very likely that the tempering materials for the vessels were found locally. Thin section analysis of each of the fabric types would be required in order to confirm the identification of the shell and its likely location.

4 Types of Pottery

4.1 *General*

4.1.1 Remains of seven pots of late Bronze Age date have been identified from these sherds, and the remaining six are of prehistoric date, as shown in the catalogue.

However, the sherds of these six pots are without form or decoration and therefore discussion will concentrate on the sherds which are securely identified.

4.1.2 The sherds identified as prehistoric which could not be dated were found in a discrete pit (context 1010, pit [1009], pot 3), an occupation layer (1036, pot 5, possibly Bronze Age) and a ditch, context (1062, pot 6) the fill of ditch [1063]. Sherds from three undated prehistoric pots were unstratified (1086, pots 8, 10 and 12).

4.2 *Late Bronze Age*

4.2.1 All the sherds identified as late Bronze Age (LBA) are of the Post-Deverel Rimbury (PDR) type of plainwares seen in this period (Gibson 2002, figs 54 & 55; Knight 2002, 124-6). This type of pottery was first noted by Barrett (1980) and a number of sites with this pottery are now recognised throughout Britain and eastern England, including a number of sites in Lincolnshire. The vessels in this assemblage lack complete profiles and therefore it is not possible to assign sherds to an exact form, but all the pottery identified is of a very similar type.

4.2.2 In pit [1001] two LBA pots were recognised. One vessel (Fig.1.1, 1002, pot 2) has a distinctive round shoulder with fingertip decoration above the shoulder, and the other is an undecorated body sherd (pot 1). Both round shoulders and fingertip decoration are common on this type of pottery but the fingertip decoration above the shoulder is more unusual. Similar round shouldered sherds are also seen in context (1031) (pit [1032], pot 4). The rest of the material identified as LBA Post-Deverel Rimbury plainwares was unstratified (1086) and sherds of another round shouldered pot were apparent (pot 11).

4.2.3 Rims typical of this type of pottery were also apparent. In context (1086, unstratified) pot 7 (Fig.1.2) has a rounded and everted rim, slightly expanded externally, with an incised horizontal line below the rim. This pot may also have a shoulder. The sherds have the black finish characteristic of this type of pottery. Also unstratified (1086, pot 9) is a bevelled rim which may be part of an open bowl (Fig. 1.3), another form seen in this type of pottery. A rim of a small black cup with a wall thickness of 5mm was also found unstratified (Fig.1.4, 1086, pot 13).

4.2.4 *Comparative material* – In recent excavations at Washingborough, east of Lincoln, similar forms and rims were seen (Allen 2006), and also at Hibaldstow, near Brigg in Humberside (Allen and Knight 2001). This type of LBA PDR pottery is also known in southern Britain for example at Green Park, (also known as Reading Business Park, Brossler *et al* 2004).

4.2.5 *Dating* – There are a few dates for this type of pottery in this region. At Washingborough, Lincs, this type of pottery has been dated to between 1050 and 800 cal BC (Allen forthcoming). At Flag Fen, Cambs, a similar globular vessel was found beneath a timber dated by dendrochronology to *c*900BC (Knight 2002, 126). At Hibaldstow LBA PDR plainwares were dated to around the 8th century cal BC (Allen and Knight 2001).

5 Context

5.1 All the sherds found on this site were either slightly or moderately abraded, suggesting that they may have been redeposited or moved around the site. Some LBA

sherds were found in a discrete pit [1001] on the west of the site, and some were found in pit [1032] in the east of the excavation. A number of the LBA sherds were unstratified (1086). Other sherds, dated to the prehistoric period, were found in a discrete pit [1009] to the west of the pit alignment, the remains of one pot were found in ditch [1063] and in layer [1036]. Remains of three undated prehistoric vessels were unstratified (1086). There was no prehistoric pottery found in the pit alignment.

5.2 The condition and location of the sherds found suggests that there was a LBA location nearby, possibly an occupation area, and that this pottery was deposited within these contexts, perhaps during agricultural activity.

5.3 This is an interesting assemblage of pottery as the vessels of PDR type indicate the more diverse range of vessels seen in the LBA plainwares. In the late Bronze Age innovations of rim styles, varying wall thickness and sizes, from larger jars to smaller cups, were apparent. A variety of forms, jars, bowls and cups, were made for the domestic repertoire. This reflects the needs of LBA society for more display and the social role of pottery in serving food and drink.

6 References

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WURM06													
Context	Description	Pot no	Sherds	Weight	Wall	Fabric	Abrasion	Pot Type	Drawing No	Pot Part	Description		
			no	g	mm		level						
1002	fill pit 1001	1	1	1	6	1	S	LBA?	0	B	undecorated, brown finish		
1002	fill pit 1001	2	1	18	7	1	S	LBA	1	B	rd shoulder with fingertip dec above sh		
1010	fill pit 1009	3	1	4	10	2	M	Preh	0	B	undec orange		
1031	fill pit 1032	4	12	25	7	2	S/M	LBA	0	B,Ba	round shoulder undec black/brown		
1036	layer	5	8	82	12	3	M	BA?	0	B	orange/black thick sherds		
1062	fill ditch 1063	6	1	5	8	2	S	Preh	0	B	orange ext undecorated		
1086	unstratified	7	4	9	9	3	S/M	LBA	2	R,B,Ba	round everted rim poss shoulder		
1086	unstratified	8	3	34	15	2	M	Preh	0	Ba	undec		
1086	unstratified	9	4	14	7	2	S/M	LBA	3	R	bevelled rim, possible bowl		
1086	unstratified	10	6	11	8	3	M	Preh	0	B			
1086	unstratified	11	2	13	8	2	S	LBA	0	B	round shoulder orange		
1086	unstratified	12	10	15	7	3	M	Preh	0	B,Ba	undec brown/black		
1086	unstratified	13	1	1	5	2	S	LBA	4	R	black small cup		
Total			*54*	*232*						Pot type			
										Preh	Prehistoric		
Summary						Abrasion				BA	Bronze Age		
		1002	2	19		Code	Abrasion Level			LBA	Late Bronze Age		
		1010	1	4		U	unabraded						
		1031	12	25			none			Fabric	Tempered with		
		1036	8	82		S	slightly abraded -			1	sparse shell and fine quartz		
		1062	1	5			(5-25% of surface affected)			2	moderate shell and fine quartz		
		1086	30	97		M	moderately abraded			3	common coarse shell and fine quartz		
Total			*54*	*232*			(25-50% of surface affected)						
						A	abraded			Pot Part			
							(50-75%)			R	Rim		
						V	very abraded			B	Body		
							(>75%)			Ba	Base		

WILSFORD TO RAUCEBY
CATALOGUE OF ILLUSTRATED PREHISTORIC POTTERY

By Carol Allen

Figure 1

1 LBA PDR body sherd with black finish, round shoulder and fingertip decoration above shoulder, slightly abraded, fabric SHSM/QUSF, context (1002) fill of pit [1001]

2 LBA PDR plainware rim sherd, round everted rim slightly expanded externally with horizontal incised line below rim, black finish, slightly to moderately abraded sherds, fabric SHCC/QUSF, context (1086) unstratified

3 LBA PDR plainware rim sherd bevelled internally, probably an open jar or bowl, orange/grey finish, sherds slightly to moderately abraded, fabric SHMC/QUSF, context (1086) unstratified

4 LBA PDR plainware rim sherd with black finish from small cup with thin wall, slightly abraded, context (1086) unstratified

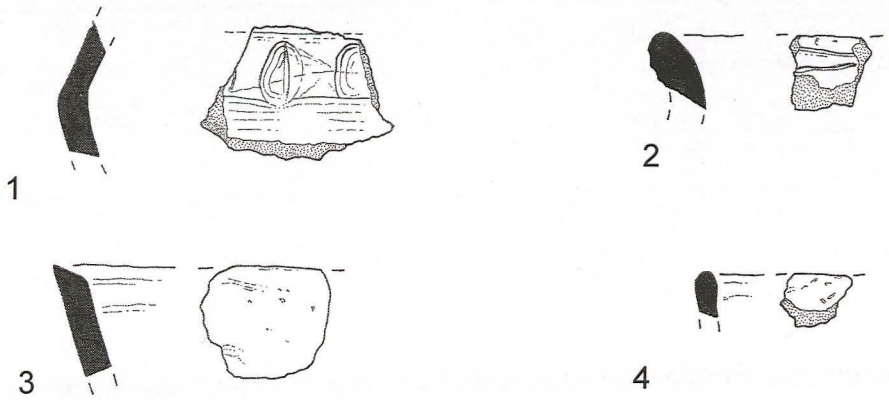


Fig. 1 The prehistoric pottery 1 (1002) 2-4 (1086) >Scale ½ actual size.
Drawn by Charlotte Bentley

APPENDIX 5

An Archive report on the Iron Age and Roman pottery from the Wilsford Rauceby Reinforcement Main Scheme, Lincolnshire (WURM06) for Lindsey Archaeological Services (SKR 9906 4185 – TK 0112 4293)

B J Precious Late Iron Age and Roman Pottery Consultant

01/02/08

The pottery has been recorded to the basic archive level according to the guidelines laid down by the Study Group for Roman Pottery (Darling 2004) using the computer codes and pottery recording system of the City of Lincoln Archaeology Unit, with sherd count and weight in grams as the measures. The site archive has been collated using Microsoft Excel (wurm06.xls).

Introduction (See Table1, below)

This site produced 433 sherds weighing 6000 grams of Prehistoric, and late Iron Age to Roman pottery. Sixty sherds weighing 661 grams came from the evaluation, and 373 sherds weighing 5339 from the main excavation. Prehistoric, and probable sherds of this date, account for 36 sherds of the total, weighing 159 grams, and 23 sherds weighing 120 grams, respectively (see report by Carol Allen). The bulk of the remainder of the assemblage (373 sherds weighing 5721 grams) dates from the Late Iron to the early Roman period, together with a small amount of mid- to late Roman pottery that came exclusively from the evaluation area. This report concentrates on the assemblage of this date, although contexts with Prehistoric pottery are noted in the tables, below.

Condition (see Table 1, below)

Evaluation

There is little abrasion noted on the pottery from the evaluation, although the sherd/weight ratio is generally low with only three contexts (**201**, **403** and **405**) with a mean of more than 10 grams per sherd. This indicates redistribution of the material. Context **403** has a mean of 23.7 grams but this is due to the presence of two fragments of a coarse tempered ware weighing 68 grams.

Staining is noted of pottery from **201**, and vessels from **400** and **401** are burnt, probably as a result of cooking. There are no sherd joins from this area.

Main Excavation

A relatively high proportion of the Late Iron Age pottery is either abraded or very abraded. The average sherd weight is on the low scale, although two contexts stand out: **1044**, the largest group from the site (an area of occupation demolition or collapse), with a mean of 20.9, and **1046** with a mean of 42.9. However, the latter mainly consists of large storage vessels with thick, heavy sherds that tend to skew the statistics.

An equally high percentage of the Late Iron Age vessels are burnt as a result of cooking use, together with a number that are burnt on the interior – a feature often noted on Late Iron Age vessels but rarely on Roman cooking wares. There is a noticeable amount of Vesicular ware with leached inclusions, probably shell, and more definite Iron Age, shell-tempered wares with the shell leached from the surfaces. One vessel, a finely made cordoned bowl, with joins between contexts **1043** and **1044**, both areas of occupation demolition or collapse, appears to have been smashed *in situ* (Illustration1).

Several sherd joins and/or sherd families occur between contexts **1043**, **1044** and **1045**; **1049** and **1052**; and **1079** and **1082**.

Table 1: The date range of the Roman pottery from WURM06 by sherd count and weight

context	sherds	grams	date range	sh/wt	join	illust	area
100	1	6	M2-3C	6			EVAL
200	9	80	4C	8.8			EVAL
201	32	387	2C+	11.4			EVAL
300	2	10	RO	5			EVAL
301	8	68	2C+	8.5			EVAL
400	3	17	LIA	5.7			EVAL
403	3	71	LIA-EROM	23.7			EVAL
405	2	22	LIA-EROM	11			EVAL
1002	1	3	PREHIST?	3			Fill P1001
1010	7	64	PREHIST- MLIA	9.1			Fill P1009
1026	16	56	LIA-EROM	3.5			1st fill 1029
1027	12	110	LIA-EROM	9.2			Upfil P1029
1031	12	26	PREHIST	2.2			Fill P1032
1036	13	141	EROM	10.8			Occ spread/collapse
1038	3	6	LIA-EROM	2			Fill G1037
1039	1	184	MLIA	184		4	Irreg D or gully
1040	15	97	LIA	6.5			Fill D1039
1042	13	167	EROM	12.8		2;6	Fill P1041
1043	59	774	EROM	13.1	1044;1045	1;9;10	Occ dem/collapse
1044	90	1889	EROM	20.9	1043	1;3;7	Occ dem/collapse
1045	46	328	EROM	7.1	1043	11	Fill P1047
1046	20	859	LIA	42.9			Fill P1047
1049	7	48	LIA	6.9	1052	5	Fill P1048
1052	1	10	IA	10	1049		C1061?
1060	10	57	LIA-EROM	5.7			Fill P1059
1062	1	5	PREHIST	5			Fill D1063
1066	3	12	LIA	4			Fill 1067
1077	1	1	LIA	1			Fill D1069=1068
1079	4	40	IA	10	1082		Subsoil
1082	6	348	LIA-EROM	58	1079	8	Fill P1083
1086	32	114	PREHIST-LIA	3.6			Unstrat
	433	6000	TOTAL	13.9			

Dating (see Tables 1, 2 and 3, below)

Evaluation

Pottery dating from the Late Iron Age to the early Roman period came exclusively from Trench 4 (**400**, **403**, and **405**), mainly consisting of hand made Late Iron Age wares, largely undiagnostic closed vessels but including a native tradition cooking pot (CPN). A fine pale, grey ware sherd (GFIN) with a zone of rouletted decoration may tentatively be from a butt-beaker, but sherd is too small to be certain. This is the only group from the evaluation area that is contemporary with the assemblage from the main excavation.

A single sherd of Nene Valley grey ware broadly dates context **100** from the mid-2nd to the 3rd century. The latest pottery from the site occurred in Trench 2 (**200**), a lid-seated jar in a very coarse local grey ware (LCOA) – a fabric noted at the Swanpool kilns in Lincoln – dated

to the 4th century. Other sherds of this date include abraded sherds of Nene Valley colour-coated ware and a wide-mouthed bowl in a grey ware. The pottery from **201** is less determinate and includes grey wares of at least 2nd century date together with a coarse-tempered (COAR) bowl with a stubby rim and no neck (BNN) that is broadly of native tradition style, but clearly wheel made.

The groups from Trench 3 (**300** and **301**) come from ploughsoil and subsoil deposits and consist mainly of undiagnostic body sherds, mainly grey wares and their derivatives, dating to at least the 2nd century.

Main Excavation

The bulk of the of the assemblage from the main excavation consists of hand made vessels in a range of Late Iron Age fabrics including shell and sand-tempered wares (IASH and IASA) as well as oolitic (IALOOL), gritty (IAGR) and grog-tempered was (IAGROG). The forms are clearly gallo-belgic and native in tradition, for example illustrations 1,2, 5-8. However, some of these forms continue to be manufactured as hand made examples well into the 1st century AD. Thus a broad Late Iron Age to early Roman date is suggested for these groups, but it should be noted that contexts assigned this date do not contain any definite Romano-British wares, and it is likely that these groups could sit either side of the Roman Conquest period.

Several contexts (**1036, 1042-5**) all produced sherds of a wheel made, oxidised fabric with a containing fairly fine sand-temper, and coated with a white slip. In most cases the slip is virtually abraded away. As only very slight streaks of white slip remains, it is not possible to be certain whether all the sherds in this fine oxidised fabric were originally white-slipped. Therefore the code given to this ware is based on the principal features – an oxidised fabric with fairly fine inclusions of quartz (OXFF). Any remnants of white-slip are noted in the comments field of the database.

The fragments are abraded and mainly survive as body sherds, however there are three examples of moulded footring bases (Illustrations 9-11). Red and white-slipped fabrics are rare in the 1st century as white wares were preferred for flagons and mortaria. Although an industry producing Hofheim flagons in a red fabric with a white slip in the Kent district Hoo thrived during the early Roman period (Davies et al, 1994 p 38-40). A parallel closer to this area is a reconstruction of a two-handled Hofheim flagon from the Old Sleaford site (Elsdon, 1997 fig 64 no 168). The base is virtually identical those illustrated here, but most flagons have moulded footring bases. The Old Sleaford vessel is in a red fabric with a white slip and is dated to the Tiberian-Claudian period. Unfortunately there are no diagnostic rim sherds from WURM06, but the close parallels in fabric, base-type and region together with a virtual absence of other Roman-British wares gives further evidence for a Peri-Conquest settlement.

Statement of Potential (See Tables 2 and 3, below)

This discussion concentrates on the Late Iron Age to early Roman material as the only evidence for later Roman occupation is slight and has been discussed in the sections above.

The assemblage provides good dating evidence for a settlement establishing itself from the Late Iron Age into the Peri-Conquest period. There is a range of regional Late Iron Age fabrics and forms that adds to the growing body of material of this date.

Although there are several examples of finer Late Iron Age vessels with the carinations and cordons typical of this period (Illustration 1, for example), there are no imported wares or

Romano-British finewares within this assemblage. This indicates a settlement of moderate, but not low, status. The presence of flagons, albeit very abraded moulded, foot rings, together with a single sherd of grey ware, is the only evidence from the site for any degree of Romanisation.

Table 2: The Roman fabrics from WURM06 by sherd count and weight

Fabric	Code	sherds	%	grams	%
Coarse-tempered ware	COAR	6	1.39%	119	1.98%
Fired clay?	FCLAY?	4	0.92%	20	0.33%
Fine grey ware	GFIN	5	1.15%	21	0.35%
Grey reduced ware	GREY	33	7.62%	377	6.28%
Grog-tempered ware	GROG	1	0.23%	13	0.22%
Grey with brown surfaces	GYBN	4	0.92%	40	0.67%
Iron Age fine ware	IAFIN	47	10.85%	638	10.63%
Iron Age gritty ware	IAGR	12	2.77%	139	2.32%
Iron Age grog-tempered ware	IAGROG	3	0.69%	26	0.43%
Iron Age grog-tempered ware?	IAGROG?	3	0.69%	7	0.12%
Iron Age oolitic-tempered ware	IALOOL	26	6.00%	515	8.58%
Iron Age oolitic-tempered ware?	IALOOL?	5	1.15%	62	1.03%
Iron Age sandy ware	IASA	30	6.93%	386	6.43%
Iron Age sandy ware?	IASA?	2	0.46%	6	0.10%
Iron Age shell-tempered ware	IASH	49	11.32%	1120	18.67%
Iron Age fine shell-tempered ware	IASHF	5	1.15%	72	1.20%
Iron Age South-Lincs shell-temper	IASLSH	39	9.01%	1350	22.50%
Iron Age South-Lincs fine shell-temper	IASLSHF	1	0.23%	11	0.18%
Local coarse ware	LCOA	1	0.23%	18	0.30%
Nene Valley colour-coated ware	NVCC	2	0.46%	20	0.33%
Nene Valle grey ware	NVGW	3	0.69%	13	0.22%
Oxidised ware	OX	2	0.46%	7	0.12%
Fine oxidised ware	OXFF	26	6.00%	356	5.93%
Prehistoric pottery	PREHIST	36	8.31%	159	2.65%
Prehistoric pottery?	PREHIST?	23	4.32%	120	2.00%
South Lincolnshire fine shell-temper	SLSHF	1	0.23%	3	0.05%
Vesicular ware	VESIC	64	14.78%	382	6.37%
	TOTAL	433	100.00%	6000	100.00%

The Late Iron Age tradition fabrics and forms

These fabrics are generic groups rather than examples of specific sources. The most common of these are shell-tempered wares (49 sherds; 1120 grams) with moderate amounts of medium-sized shell fragments (IASH). They range in surface colour from red-brown to black, and are mainly hand made. There is a small sub-group with noticeably fine shell (IASHF). Forms in this fabric include bead and everted rim bowls (BBR), native tradition bowls (BNAT – illustration 5), and gallo-belgic cordoned vessels (JBCOR), larger jars or bowls (JBL) and storage jars (JS).

A similar fabric group, but with obvious inclusions of punctate brachiapods forms a slightly smaller group (IASLSH- 39 sherd; 1350 grams) together with a finer variant (IALSHSF). These inclusions are more common in shell-tempered wares found in the south of the county and more so in the south midlands area. Bead and everted rim bowls (illustrations 6 -7) and storage jars (illustration 8) are included in the repertoire.

There is a slightly larger, but related, group of vesicular wares (64 sherds; 382 grams), where the inclusions, probably shell, have leached out either in use or in the ground leaving noticeable, angular voids. Vessels in this group are entirely handmade and the fabric is often fragmentary. Most of the sherds are undiagnostic, but thick sherds indicate that large jars or bowls and storage jars were manufactured.

Table 3: The Roman forms from WURM06 by sherd count and weight

Form	code	sherds	%	grams	%
Undiagnostic		116	26.79%	395	6.58%
Open form	OPEN	6	1.39%	401	6.68%
Bead rim bowl	BBR	6	1.39%	66	1.10%
Cordoned bowl	BCOR	44	10.16%	675	11.25%
Everted rim bowl	BEV	6	1.39%	62	1.03%
Large bowl	BL	1	0.23%	184	3.07%
Native tradition bowl	BNAT	1	0.23%	19	0.32%
Bowl with no neck	BNN	2	0.46%	39	0.65%
Wide mouth bowl	BWM	1	0.23%	15	0.25%
Closed forms	CLSD	133	30.72%	946	15.77%
Flagon	F	1	0.23%	67	1.12%
Flagon?	F?	7	1.62%	160	2.67%
Beaker	BK	2	0.46%	6	0.10%
Jar or beaker	JBK	5	1.15%	18	0.30%
Curve rim jar or beaker	JBKCUR	1	0.23%	3	0.05%
Cooking pot	CPN	2	0.46%	68	1.13%
Jar	J	10	2.31%	51	0.85%
Jar or bowl	JB	22	5.08%	483	8.05%
Carinated jar or bowl	JBCAR	4	0.92%	39	0.65%
Cordoned jar or bowl	JBCOR	2	0.46%	17	0.28%
Curve-rim jar or bowl	JBCUR	1	0.23%	13	0.22%
Large jar or bowl	JBL	24	5.54%	406	6.77%
Bead rim jar	JBR	1	0.23%	67	1.12%
Curve rim jar	JCUR	3	0.69%	6	0.10%
Lid-seated jar	JLS	1	0.23%	18	0.30%
Storage jar	JS	28	6.47%	1334	22.23%
Castor box	BX	1	0.23%	17	0.28%
Mortar (Industrial?)	Z	2	0.46%	425	7.08%
	TOTAL	433	100.00%	6000	100.00%

The second largest group of Late Iron Age pottery, finely made, silt-tempered ware (IAFIN – 47 sherds; 638 grams) is mainly represented by a single vessel, a carinated bowl with a cordon at the neck and girth (illustration1), from two contexts **1043** and **1044**. This vessel is closely paralleled at Old Sleaford (ibid. fig62 no 138) and is fairly high fired, with fine thin walls and entirely wheel made in a fine sandy fabric.

A related group is Iron Age sand-tempered ware (IASA) and is composed of 32 sherds weighing 392 grams. Vessels in this fabric include gallo-belgic types such as carinated and cordoned bowls and are mainly hand made or wheel finished. One vessel has been illustrated from this group (illustration 4), a large bowl with a fairly flat-topped rim, with a high shoulder, more reminiscent of mid to late Iron Age types.

The remaining ware-types are composed of small groups. These include Iron Age gritty wares (IAGR) in a hand made fabric with large inclusions of quartz and occasional grog or

clay pellets similar to Trent Valley wares (12 sherds; 139 grams). Forms in this ware include curved and bead-rimmed jars (illustration 2) and storage jars (JS).

Grog-tempered wares are rare, and again hand made with varying amounts of grog-temper. This is a very small group, 6 sherds weighing 33 grams and consists of largely undiagnostic body sherds; the only identifiable form being a large jar or bowl (JBL) based on the thickness of the sherds.

The last of these ware-types is a distinctive fabric with oolitic clay, probably local products given proximity of Ancaster oolitic stone. The vessels are all handmade and the identifiable forms include large jars or bowls. However, this group also produced the most interesting vessel from the site. It is a substantial bowl (Z) of very large dimensions, at least 70 cm in diameter (illustration 3), probably made using the coil method. The rim is thick, and provides a good handhold, with a concave, fairly shallow body wall, very reminiscent of Roman mortaria. Obvious wear patterns on the interior add weight to the use of this vessel as a mortar. It is clearly not a Roman vessel, although perhaps modelled on the form, and is a unique find.

Further Work

The Late Iron Age fabrics and forms from this assemblage are a well-dated addition to the body of material of this date that is being developed in the County.

The pottery is in stable condition and should be retained for further work.

List of Illustrations (see Appendix 2 – wurm06dwg.xls)

References

Darling, M. J., 2004, 'Guidelines for the Archiving of Roman Pottery', *Journal of Roman Pottery Studies* **11**: 67-74

Davies, B., Richardson, B. & Tomber, R., 1994 *A dated corpus of early Roman pottery from the City of London*, Archaeol of Roman London 5, CBA Res Rep 98

Elsdon, S.M., 1997 *Old Sleaford Revealed, A Lincolnshire settlement in Iron Age, Roman, Saxon and Medieval times: excavations 1882-1995*, Oxbow Monog 78. Nottingham Studies in Archaeology 2.

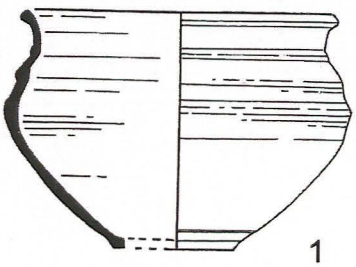
CONTEXT	FABRIC	FORM	DEC	NOV	ALTER	DWGNO	DESCRIPTION	JOIN	SHS	WEIGHT	AREA
100	NVGW	JBK			ABR		BS SLIP EXT THINNISH WALL		1	6	EVAL
100	ZDATE						M2-3C				EVAL
100	ZZZ						PLOUGH SOIL				EVAL
200	GREY	BWM					RIM		1	15	EVAL
200	GREY	CLSD					BS PROB J		1	11	EVAL
200	GYBN	CLSD	WM				BS; SANDY SURF		1	6	EVAL
200	LCOA	JLS					RIM; PEBBLES		1	18	EVAL
200	NVCC	BK			ABR		BS; WHTFAB		1	3	EVAL
200	NVCC	BX	ROUZ		ABR		RIM WHTFAB; SLIP NR LOST		1	17	EVAL
200	NVGW	CLSD					BS PROB J		1	4	EVAL
200	NVGW	JBKCUR					RIM		1	3	EVAL
200	SLSHF	CLSD	HM?		ABR		BS RDBN PUNC; POSS EARLIER		1	3	EVAL
200	ZDATE						4C				EVAL
200	ZZZ						TRENCH 2				EVAL
201	COAR	BNN	WM		1 ABR		RIMS J STUBBY CF BNAT EARLY?; OCC LGE Q		2	39	EVAL
201	GFIN	J					BS SANDWICH FINE		1	7	EVAL
201	GFIN	JBK					BS THIN		1	2	EVAL
201	GREY	CLSD			1 STAININT		BSS		2	41	EVAL
201	GREY	CLSD			1		FTMS BS OCC CHALK		3	70	EVAL
201	GREY	CLSD		2?	STAININT		BSS J?; SOME STAIN INT		17	201	EVAL
201	GREY	CLSD			ABR		BSS		2	9	EVAL
201	GREY	J	RIB?		1		BSS; VERTICAL RIDGING		4	18	EVAL
201	ZDATE						2C+				EVAL
201	ZZZ						TRENCH 2				EVAL
300	GREY	J			1		BSS FRESH BREAKS THINNER WALLS; OCC LGE Q		2	10	EVAL
300	ZDATE						RO				EVAL
300	ZZZ						PROB 2C+ PLOUGHSOIL				EVAL
301	COAR	CLSD	HM?		1		BSS EARLY? MOD LGE PEBBLES		2	12	EVAL
301	GFIN	J			1		BSS FRESH BREAKS; MIN SPALL INT		2	9	EVAL
301	GROG	JBCUR					RIM FRAG OCC SHELL FINE SILTY		1	13	EVAL
301	GYBN	CLSD					BSS		2	12	EVAL
301	GYBN	JBL					BSS OCC CLAY PARTICLES		1	22	EVAL
301	ZDATE						2C+				EVAL
301	ZZZ						SOME EARLY?; SUBSOIL				EVAL
400	IAGROG	CLSD	HM				BS		1	3	EVAL
400	IASA?	CLSD	HM?		BURNT		BS SANDY		1	3	EVAL
400	IASLSHF	CLSD	HM		BURNT		BS; PUNC		1	11	EVAL
400	ZDATE						LIA				EVAL
400	ZZZ						PLOUGHSOIL				EVAL
403	COAR	CPN	HM		1 SOOT EXT		RIM BS LIA -EROM		2	68	EVAL
403	GFIN?	BK	ROUZ		ABR		BS; FINE PALE GREY; BKBB?; BKEV		1	3	EVAL
403	ZDATE						LIA-EROM				EVAL
403	ZZZ						MIX? SOME LIA -EROM; DATE NVGW; FILL DITCH 402				EVAL
405	IAGR	CLSD	HM		1 BURNT		BSS FRESH BREAKS;SANDY W GRIT GROG		2	22	EVAL
405	ZDATE						LIA-EROM				EVAL
405	ZZZ						FILL DITCH 404				EVAL
1002	PREHIST?				BURNT		FRAG BURNT INT		1	3	Fill P1001

1002	ZDATE					PREHIST?			Fill P1001
1002	ZZZ					TO CAROL ALLEN			Fill P1001
1010	PREHIST		HM		BURNT	FRAG	1	4	Fill P1009
1010	PREHIST		HM SCRD	1		BSS FRAG; MLIA	4	27	Fill P1009
1010	PREHIST		HM	1		BS FRAG; MLIA	1	14	Fill P1009
1010	PREHIST		HM STAB		BURNT	BS STAB SHLDR CARINATION; EIA?	1	19	Fill P1009
1010	ZDATE					PREHIST- MLIA			Fill P1009
1010	ZZZ					5 LITHICS; TO CAROL ALLEN			Fill P1009
1026	IAGR				VABR;BURNT	FRAG	1	2	1st fill D1035
1026	IALOOL			1?	VABR	FRAGS RDBN EXT BLK INT	9	12	1st fill D1035
1026	IASA	CLSD	WM	1		BSS RDBN SURFS DKGY CORE	6	42	1st fill D1035
1026	ZDATE					LIA-EROM			1st fill D1035
1026	ZZZ					MANY FRAGS; 3 LITHICS			1st fill D1035
1027	GREY	CLSD	WM?			BS; RO	1	2	Upfil P1029
1027	IASA	BCOR	WM	1	BURNT	RIMS BSS FTM CORDONED ROUNDED SHLDR; RDBN-BN	8	88	Upfil P1029
1027	IASA	CLSD	WM?	1	VABR	BSS J FLAKED INT;SHLDR CARIN <9>; LIA	2	9	Upfil P1029
1027	IASH	CLSD			LEACH;VABR	BS	1	11	Upfil P1029
1027	ZDATE					LIA-EROM			Upfil P1029
1027	ZZZ					BCOR ;BLK CORE; OCC CLAY PELLETSFINELY MADE THIN WALLED			Upfil P1029
1027	ZZZ					BCOR: CF D1			Upfil P1029
1027	ZZZ					NO DEF ROMAN PROB LIA			Upfil P1029
1031	PREHIST		HM	1		FRAGS; SHEL	4	14	Fill P1032
1031	PREHIST		HM	1?		FRAGS	8	12	Fill P1032
1031	ZDATE					PREHIST			Fill P1032
1031	ZZZ					TO C ALLEN			Fill P1032
1036	IASA	JB	HM			BS; BN SURFS DKGRY CORE; THIN WALL; LIA	1	3	Occ spread/collapse
1036	IASA	JBCAR	HM			BS; RDBN SURFS DKGRY CORE; THIN WALL; LIA	1	3	Occ spread/collapse
1036	IASH	JS	HM		VABR	BS	1	11	Occ spread/collapse
1036	IASH	JS	HM		VABR	BS INT LOST	1	39	Occ spread/collapse
1036	OXFF		WM?		VABR	RIM? RO? EXTR	1	3	Occ spread/collapse
1036	PREHIST?	JBL	HM	2	LEACH	BSS	3	61	Occ spread/collapse
1036	PREHIST?		HM		VABR	FRAGS LEACH	5	21	Occ spread/collapse
1036	ZDATE					EROM			Occ spread/collapse
1036	ZZZ					MIX; PREHIST? TO C ALLEN			Occ spread/collapse
1038	IAGR	JCUR	B; WM	1		RIM NECK FRAGS; BLK; BEAD LIP BURNISHED EXT	3	6	Fill G 1037
1038	ZDATE					LIA-EROM			Fill G 1037
1039	IASA	BL	HM		INT LOST	2 RIM SHLDR V LGE VESS 34D; NO PARALLEL	1	184	Irreg D or gully
1039	ZDATE					MLIA			Irreg D or gully
1039	ZZZ					BLK NEEDS FABRIC DESCRIPTION			Irreg D or gully
1040	IAGR	CLSD	HM		ABR	FRAGS BLK	2	9	Fill D 1039
1040	IAGR	CLSD	HM		ABR	BS SHLDR	1	4	Fill D 1039
1040	IAGR	JS	HM	1	VABR;BURNT	BS FLAKE J; LEACHED	2	29	Fill D 1039
1040	IALOOL	CLSD	HM	1	ABR	BSS	3	35	Fill D 1039
1040	IALOOL		HM		VABR	FRAG	1	2	Fill D 1039
1040	IALOOL		HM	1	VABR	FRAGS	6	18	Fill D 1039
1040	ZDATE					LIA			Fill D 1039
1040	ZZZ					VABR MANY FRAGS; 6 LITHICS			Fill D 1039
1042	IAGR	JBR	B; HM			3 RIM SHLDR; 14D; BURNISH EXT	1	67	Fill P1041

1042	IASH	BBR			ABR		RIM FRAG LGE VESS		1	11	Fill P1041
1042	IASH				BURNT;LEACH		BS		1	7	Fill P1041
1042	IASLSH	BBR	HM/WF	1	SOOT EXT	4	RIMS SHLDR BS; PUNC; HEAVY SOOT UNDER RIM; 16D		5	55	Fill P1041
1042	IASLSH				ABR BURNT		BSS		2	13	Fill P1041
1042	OX	JBK	HM/WF?		VABR		BASE BS SMALL VESS : SOAPY		2	7	Fill P1041
1042	OXFF	CLSD					BS RO INT?; EXTR		1	7	Fill P1041
1042	ZDATE						LIA-EROM				Fill P1041
1042	ZZZ						OXF INT? ELSE DEF ROM; 2 LITHICS				Fill P1041
1043	IAFIN	BCOR	WM	1	SMASH	7	RIMS BASE BSS PROF;17 DIAM FS	1444	16	343	Occ dem/collapse
1043	IAFIN	CLSD	HM	1	ABR		BSS RDBN THIN WALL		3	3	Occ dem/collapse
1043	IASH	CLSD	HM		ABR;LEACH		BSS DKBN		1	23	Occ dem/collapse
1043	IASH	CLSD	HM		ABR;LEACH		BSS		3	30	Occ dem/collapse
1043	IASH	CLSD	HM	1?	LEACH		FTRING BASE POSS OMPHALO; BSS FRAGS; BLK		6	10	Occ dem/collapse
1043	OXFF	CLSD	WM	1?			BSS SOME Q MICA?; INT? AS IN 1042; EXTRSAME	1045	8	57	Occ dem/collapse
1043	OXFF	F	WM			11	FTM WHT SLIP UNDER BASE; 13.5D		1	67	Fill P1047
1043	OXFF	F?	WM	1	REUSE	8	BASES; WHT SLIP UNDER BASE; REUSE LID?		4	104	Occ dem/collapse
1043	VESIC	JB	HM	1	ABR		RIM FRAGS UPRIGHT THICK FLAT TOP RDBN		3	9	Occ dem/collapse
1043	VESIC	JBL	HM		LEACH		BS PROB SHEL; DKBN EXT BURNT BLK INT		1	59	Occ dem/collapse
1043	VESIC	JBL	HM	1?	LEACH		BSS; RDBN; SOOT; PROB SHEL		5	48	Occ dem/collapse
1043	VESIC		HM		VABR;LEACH		BSS; PROB SHEL		8	21	Occ dem/collapse
1043	ZDATE						EROM				Occ dem/collapse
1043	ZZZ						MOST LIA; OXID V UNUSUAL WM RO INT?; SEE 1036				Occ dem/collapse
1044	FCLAY?				VABR		FRAGS		2	10	Occ dem/collapse
1044	IAFIN	BCOR	WM	1	SMASH	7	RIMS BASE BSS PROF;17 DIAM FS	1043	20	244	Occ dem/collapse
1044	IAFIN	CLSD	HM?	1			BSS; BN		4	10	Occ dem/collapse
1044	IALOOL	CLSD	HM	1	BURNT		BSS RDBN		4	20	Occ dem/collapse
1044	IALOOL	Z	HM	1?	LEACH	9	RIM WALL BS; VLGE BOWL OR MORTAR;70+ DIAM		2	425	Occ dem/collapse
1044	IASA	CLSD	HM				BS SHLDR; DKBN		1	14	Occ dem/collapse
1044	IASA				VABR		BS RDBN		1	1	Occ dem/collapse
1044	IASH	JB	HM	1	LEACH		BSS FRAGS BASAL; INT LOST FRIABLE RDBN BLK INT		10	402	Occ dem/collapse
1044	IASH	JBL	HM	1	SOME ABR		BSS FRAGS		6	128	Occ dem/collapse
1044	IASH	OPEN	HM	1	LEACH		BSS FRAGS BLK SMOOTH INT POSS V LGE BOWL		6	401	Occ dem/collapse
1044	IASH		HM		VABR		BSS FRAGS		8	36	Occ dem/collapse
1044	IASHF	JB	WF				FTM; RDBN		1	35	Occ dem/collapse
1044	IASHF	JBCOR	HM		BURNT;LEACH		BS		1	12	Occ dem/collapse
1044	IASLSH	BEV	BHL;HM		LEACH;SC	10	RIMS BS SHLDR BLK; BURNISHED H LINES AT EDGE;22D		6	62	Occ dem/collapse
1044	IASLSH	CLSD	HM				BS RDBN THIN WALL		1	6	Occ dem/collapse
1044	OXFF	JBK	WM				BS V THIN EXTR; RO		1	3	Occ dem/collapse
1044	VESIC	CLSD	HM		BURNT;LEACH		BSS FRAGS PROB SHEL BLK		11	63	Occ dem/collapse
1044	VESIC	JB	HM		LEACH		RIM FRAG; DKBN		1	3	Occ dem/collapse
1044	VESIC		HM		ABR;LEACH		BSS		4	14	Occ dem/collapse
1044	ZDATE						EROM				Occ dem/collapse
1044	ZZZ						1 SH OXFF EROM?; REST LIA				Occ dem/collapse
1045	FCLAY?				BURNT		FRAG		1	8	Fill P1047
1045	IALOOL	JBL			ABR		BS BNEXT BLK INT LOST		1	3	Fill P1047
1045	IASA?	CLSD	WM?				BS SANDY; POSS CARINATED <11>		1	3	Fill P1047
1045	IASLSH	JS	HM	1	BURNT		BS FLAKE J; PUNC; RDBN		2	34	Fill P1047
1045	OXFF	CLSD	WM	1			BSS; W TURNING INT; EXTR; SAME	1043	7	59	Fill P1047

1045	OXFF	F?	WM		1	VABR	12	BASES FRAG BS J FLAKE		3	56 Fill P1047
1045	VESIC	CLSD	HM		1	BURNTINT		BSS FRAGS		14	47 Fill P1047
1045	VESIC	CLSD	HM		1			BASES BSS BLK		13	69 Fill P1047
1045	VESIC	CLSD	HM			VABR		BSS; SHEL?		2	5 Fill P1047
1045	VESIC	JS	HM		1	VABR;BURNT		BS FLAKE J IALOOL? ROUND HOLES; DKBN		2	44 Fill P1047
1045	ZDATE							EROM			Fill P1047
1045	ZZZ							UNUSUAL RO OXID WARES; REST LIA			Fill P1047
1046	IASA	JB	HM					BS RDBN THIN WALL OCC GROG		1	4 Fill P1047
1046	IASHF		HM			ABR		BS		1	1 Fill P1047
1046	IASLSH	JS	HM	1?				RIM BSS FRAGS;RDBN; PUNC; BEAD AS DWG 6		5	202 Fill P1047
1046	IASLSH	JS	HM		1			BSS; DKBN; PUNC; COARSE + FINE SHEL		4	427 Fill P1047
1046	IASLSH	JS	HM	1?		VABR		RIM BSS FLAKES; HOOK RIM; RDBN		6	222 Fill P1047
1046	IASLSH		HM					FLAKES PROB FROM JSS		3	3 Fill P1047
1046	ZDATE							LIA			Fill P1047
1046	ZZZ							JSS COARSE AND FINE SHELL MIX; NO DEF RPOT			Fill P1047
1049	IAFIN		B; HM?			ABR		FLAKE INT LOST		1	2 1st fill P1048
1049	IAGROG	JBL				ABR;BURNT		FRAG; THICK; AS IN	1052	1	13 1st fill P1048
1049	IAGROG?		HM?			VABR		FRAGS; FINE SILTY SOME GROG/CLAY		3	7 1st fill P1048
1049	IASA	J	WF			ABR		RIM THIN FAIRLY UPRIGHT POSS WM		1	7 1st fill P1048
1049	IASHF	BNAT	HM			SOOTEXT	5	RIM NECK; 26 DIAM		1	19 1st fill P1048
1049	ZDATE							LIA			1st fill P1048
1049	ZZZ										1st fill P1048
1052	IAGROG	JBL				ABR;BURNT		FRAG; THICK POSS RIM AS IN	1049	1	10 C 1061?
1052	ZDATE							IA			C 1061?
1052	ZZZ							FRAG ONLY; REMAINS WALL			C 1061?
1060	FCLAY?					VABR		FRAG SOME CHALK; RDBN		1	2 Fill P1059
1060	IAFIN	JBCAR	WM	1?		SOOTEXT		BSS; FINE SILTY FAB SLIGHT SOAPY FEEL; WELL MADE CARI		3	36 Fill P1059
1060	IASA					VABR		FLAKE RDBN DARK CORE <13>		1	2 Fill P1059
1060	IASA		HM?			ABR		BS		1	2 Fill P1059
1060	IASH				1	VABR		FRAGS BLK		2	5 Fill P1059
1060	IASH		HM?			ABR		FRAG RDBN EXT DKGRY INT		1	5 Fill P1059
1060	IASHF	JBCOR	WM					BS; NECK CORDON		1	5 Fill P1059
1060	ZDATE							LIA-EROM			Fill P1059
1060	ZZZ							PROB JUST LIA			Fill P1059
1062	PREHIST		HM			BURNTINT		BS		1	5 Fill D1063
1062	ZDATE							PREHIST			Fill D1063
1062	ZZZ							3 LITHICS; TO CAROL ALLEN			Fill D1063
1066	IASA	JB	HM		1	ABR		RIM FRAGS; NEAT FAIRLY UPRIGHT RIM ; RDBN DK GRY CORI		3	12 Fill 1067
1066	ZDATE							LIA			Fill 1067
1066	ZZZ							POSS FILL LATER ROBBER CUT			Fill 1067
1077	IASH							FRAG		1	1 Fill D1069 = 1068
1077	ZDATE							LIA			Fill D1069 = 1068
1077	ZZZ							FRAG ONLY			Fill D1069 = 1068
1079	IALOOL?	JBL	HM		1	BURNT INT		JBL; PALE BN EXT BLK INT AND CORE; LEACHED; A:	1082	4	40 Subsoil
1079	ZDATE							IA			Subsoil
1079	ZZZ							LOOL DECAYED			Subsoil
1082	IALOOL?	JBL	HM			BURNTINT		JBL; PALE BN EXT BLK INT AND CORE; LEACHED; A:	1079	1	22 Fill P1083
1082	IASLSH	JS	WF			BURNT?	6	RIMS NECK ROUNDED FRAGS; 60D		5	326 Fill P1083

1082	ZDATE					LIA-EROM			Fill P1083
1082	ZZZ					NO RPOT PROB LIA			Fill P1083
1086	IASA	JB	HM		1 ABR	RIM BS J; LIA; SOME CLAY PELLETS; NECK CORDON	2	15	Unstrat
1086	PREHIST		HM		1 ABR	BSS THCK FRAGS; TO C ALLEN	2	20	Unstrat
1086	PREHIST		HM		1	FRAGS BLK CORE; TO C ALLEN	2	14	Unstrat
1086	PREHIST		HM	1?	VABR	FRAGS ; TO C ALLEN	10	16	Unstrat
1086	PREHIST		HM	2?	ABR BURNT	FRAGS; TO C ALLEN	2	14	Unstrat
1086	PREHIST?		HM		1 VABR	RIM FRAG; FRAGS; TO C ALLEN	2	3	Unstrat
1086	PREHIST?		HM	1?	VABR	FRAGS; TO C ALLEN	4	14	Unstrat
1086	PREHIST?		HM		1 BURNT	RIM FRAG BS; TO C ALLEN	2	7	Unstrat
1086	PREHIST??		HM		1	BS FRAGS; TO C ALLEN ; IASHF NO PUNC	6	11	Unstrat
1086	ZDATE					PREHIST-LIA			Unstrat
1086	ZZZ					IASA; SLIGHTLY FLARING TALL RIM			Unstrat
1086	ZZZ					3 LITHICS;PREHIST TO C ALLEN			Unstrat



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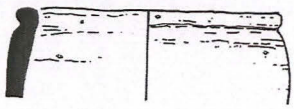

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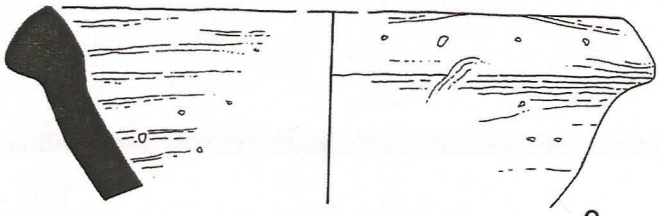

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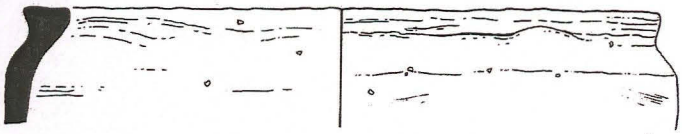

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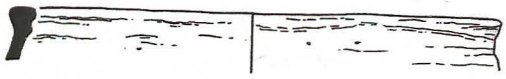

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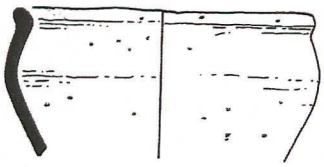

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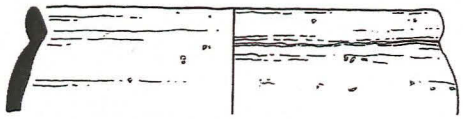

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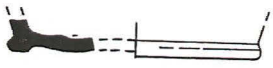

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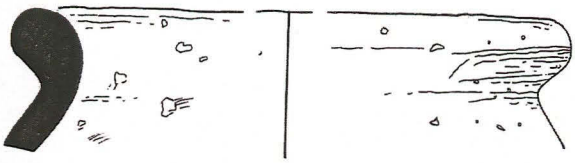

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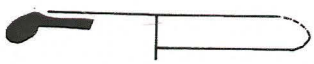

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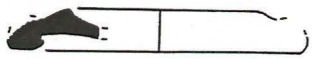


11

Fig. 1 The pottery, 1 (1043), 2 (1044) , 3 (1042), 4 (1039), 4 (1039), 5 (1049), 6 (1042), 7 (1044), 8 (1082), 9 and 10 (1043), 11 (1045). Scale 1/4 actual size . Note no.3 is reduced diameter see text for actual diameter (Drawn by Charlotte Bentley)

APPENDIX 6

WURM06

1. Introduction

1.1 Archaeological Services WYAS (ASWYAS) was commissioned by Lindsey Archaeological Services to undertake the analysis of twelve soil samples from archaeological investigations associated with the Wilsford to Rauceby Reinforcement Main Scheme. The resulting twelve flots and three bags of sorted retent material were assessed for carbonised plant remains and charcoal.

2. Methodology

2.1 Sub-samples of eight litres in volume were subjected to a system of flotation in an Ankara-style flotation tank (French 1971). The floating remains (the flot) were collected in a 300μm sieve and the heavy fraction (the retent) was collected in a 1mm mesh. The flot, once dry, was scanned using a low-powered binocular microscope at magnifications of x 4 to 45 and the results are presented below (Table 1). The retent was scanned by eye for both ecofacts and artefacts by ASWYAS prior to disposal. This included a scan with a magnet to recover any hammerscale present. The flots typically contained very little charred material, typically <2.5ml to 5ml of carbonised fragments, and three samples containing nothing. Modern root fragments were present throughout, but again in small amounts from <2.5ml to 10ml.

2.2 Charcoal fragments were also scarce, but identifiable pieces were scanned and mostly found to be oak, although other types were also present. Short-lived types of charcoal were examined in detail utilising a Vickers M10 metallurgical microscope. Plant nomenclature utilised in the text follows Stace (1997) for all vascular plants apart from cereals, which follow Zohary and Hopf (2000).

3. Discussion

3.1 The samples produced only a small quantity of carbonised plant remains, although this covered a range of material including cereal grain, weed seeds, rhizomes and charcoal fragments.

3.2 Carbonised cereal grain was recovered from samples 7 (1026), 9 (1027) and 10 (1031). The majority was well preserved with all the identifiable specimens being *Triticum aestivum* sl. (bread/spelt wheat), while the remainder of the cereal grain was indeterminate. Overall the number of grains recorded was very low throughout and could be considered trace amounts. The *Chenopodium album* (fat hen) seed present in sample 11 (1045) is a possible weed of cultivated or disturbed land which may be connected to cereal processing activities at the site, but again the evidence is very scarce.

3.3 Identifiable charcoal was present in samples 1 (1010) and 13 (1060), mostly of *Quercus* (oak) type, with a small amount of *Corylus* (hazel) also present in sample 1 (1010). In addition, a single fragment of *Prunus spinosa* (blackthorn) was recovered from sample 11 (1045). This combination of charcoal types indicates mixed deciduous woodland, most likely very open and scrubby in nature, presumably used for fuel and other purposes. As with the cereal grain,

charcoal recovery at the site was low-level. Other sources of fuel were suggested by samples 11 (1045) and 14 (1082) which contained charred rhizomes and weeds of wetland and heathy environments. The combination of rhizome fragments and wetland seed types such as *Scirpus* sp. (club-rush) indicates the potential cutting of peat or heathy turves for fuel or construction purposes.

3.4 Other environmental remains from the site consisted of a small number of non-marine mollusc shells from sample 16 (1077) which should be forwarded to an appropriate specialist for identification.

4. Conclusions

4.1 This assessment has produced a small number of carbonised cereal grains, exclusively identified as bread/spelt wheat types, and an interesting variety of weed seeds in trace amounts. The recovery of charcoal fragments, including oak, hazel and blackthorn types, and evidence for the cutting of peat, indicated a range of possible fuel types.

4.2 Future environmental work undertaken at the site offers potential for further recovery of carbonised plant remains and charcoal, although possibly only in small amounts. Preservation was very good overall and some of the cereal grain and short-lived charcoal recovered from the assessment would be suitable for radiocarbon dating. No further work is required on these samples, but processing of further samples from the site could prove interesting.

Table 1. Results from the flots and retents

	Sample	1	5	6	7	9	10	11	12	13	14	15	16
	Context	1010	1014	1022	1026	1027	1031	1045	1046	1060	1082	1062	1077
	Total CV	5ml	0	0	2.5ml	2.5ml	<2.5ml	2.5ml	<2.5ml	5ml	<2.5ml	0	<2.5ml
	Modern	2.5ml	5ml	10ml	5ml	5ml	10ml	0	<2.5ml	2.5ml	<2.5ml	<2.5ml	<2.5ml
Carbonised Cereal Grain	**Common Name**												
Triticum aestivum sl.	bread/spelt wheat				1	3							
Indeterminate cereal grain (+embryo)						4	1						
Carbonised Weeds													
Chenopodium album	fat hen							1					
Prunella vulgaris	self-heal							1					
Scirpus sp.	club-rushes										1		
Indeterminate weed					1						1		
Charcoal													
Quercus	oak	3 (0.34g)											
Corylus	hazel	1 (0.23g)											
Prunus spinosa	blackthorn							1 (0.23g)					
Indeterminate										1 (0.18g)			
Other Carbonised Remains													
Buds								1					
Rhizomes								3					

Bibliography

French, D. H., 1971. 'An Experiment in Water Sieving', *Anatolian Studies 21* 59-64

Stace, C., 1997. *New Flora of the British Isles*

Zohary, D. and Hopf, M., 2000. *Domestication of Plants in the Old World*

Acknowledgements

Client

Lindsey Archaeological Services

Project management

Jane Richardson PhD

Report

Diane Alldritt PhD

Sample processing

Mike Burns PhD

Zoe Horn

APPENDIX 7

Pottery Archive for the Wilsford to Rauceby Reinforcement Mains Scheme (WURM06)

Jane Young

context	cname	full name	form type	sherds	vessels	weight	part	description	date
0400	BOU	Bourne D ware	jug	1	1	9	BS	white slip cu mottled glaze	15th to mid 16th
1200	SWSG	Staffordshire White Saltglazed stoneware	plate	1	1	11	rim to base	beaded rim edge	early/mid to late 18th
1200	LERTH	Late earthenwares	?	1	1	5	base		17th to 18th
1200	BL	Black-glazed wares	large bowl	1	1	108	rim		18th to 19th
1200	BL	Black-glazed wares	jar/chamberpot	1	1	21	base		18th
1200	BL	Black-glazed wares	small bowl	1	1	38	rim	unusual inturned rim;int glaze	18th

APPENDIX 8

Ceramic Building Material Archive for the Wilsford to Rauceby Reinforcement Mains Scheme (WURM06)

Jane Young

context	cname	full name	fabric	frags	weight	description	date
0200	RTIL	Roman tile	hard oxid fabric with some light firing streaks	1	30	fabric incl moderate-common fine-medium subround-round quartz sparse coarser sparse light clay pellets occ ca & moderate fe;probably a Tegula	Roman
0201	FIRED CLAY	fired clay	oxid fabric with abundant fine subround-round quar	1	5	fabric includes moderate fe & sparse ca;very abraded;probably a pottery sherd	-
1027	FIRED CLAY	fired clay	fine silty red fabric occ fe	1	4	no structure	-
1031	FIRED CLAY	fired clay	abundant quartz	1	4	little clay matrix;near vitrified;? Fuel ash	-
1031	FIRED CLAY	fired clay	common fine-medium quartz mod fe sparse ca	1	5	no structure	-
1040	FIRED CLAY	fired clay	abundant fine bakground quartz mod fe	1	5	some light clay streaks;soot on surface;? One flat surface	-
1042	RTIL	Roman tile	fine oxid fabric with lenses of light clay	1	7	very abraded;fabric includes moderate fine-medium subround-round quartz sparse larger incl greensand	Roman
1062	STILE	Stone tile	limestone	1	685	flat roofer;partially smoothed surface	-
1086	DAUB	Daub	abundant fine-med subround-round quartz	1	32	stick impression of 14mm diameter;some of surface partly vitrified;fabric includes moderate fe occ ca & occ flint;possibly for oven/hearth rather than building	-
1086	FIRED CLAY	fired clay	common very poorly sorted quartz	5	48	2 joining;most are reduced with oxid surfaces;fabric includes occ aggregated coarse sst occ flint mod fe & carbonised veg	-

APPENDIX 9

OASIS DATA COLLECTION FORM: England

OASIS ID: lindseya1-41334

Project details

Project name	Wilsford-Rauceby Reinforcement Main Scheme, Lincs
Short description of the project	An evaluation, watching brief and excavation were undertaken on land between Wilsford Reservoir and the railway line east of Wilsford. Geophysical survey identified a concentration of archaeological remains in the field adjacent to the reservoir field, which was confirmed by evaluation trenching, when features associated with 2-3rd century Roman pottery were identified. The water pipeline was re-routed along the grass verge to the south, to avoid the remains. A further concentration of archaeological remains was encountered in the reservoir field to the west during topsoil stripping and excavation revealed remains of late Neolithic to the late Iron Age/early Roman period, including a pit alignment and several other pits of possible Bronze Age date. East of the pit alignment was a system of later Iron Age boundary ditches, although no associated evidence of occupation was present within the pipeline easement. A late Iron Age/early Roman rectangular, stone built structure had been constructed close to the earlier boundary ditches. It is not known if it was domestic or agricultural in function. It was superseded by a second, similar, structure with a rammed cobble floor. A number of pits of unknown function were found in the vicinity and may relate to the building. In contrast only Later Roman pottery dating mainly from the 2nd-3rd century AD was recovered during evaluation trenching, suggesting that the main focus of activity had shifted eastwards by the 2nd century AD.
Project dates	Start: 01-07-2006 End: 06-11-2006
Previous/future work	Yes / No
Any associated project reference codes	WURM 06 - Sitecode
Any associated project reference codes	2006.180 - Museum accession ID
Type of project	Recording project
Current Land use	Cultivated Land 4 - Character Undetermined
Monument type	PIT ALIGNMENT Neolithic
Monument type	DITCHES Middle Iron Age
Monument type	BUILDINGS Late Iron Age
Monument type	DITCHES Roman
Significant Finds	POTTERY Late Bronze Age
Significant Finds	POTTERY Late Iron Age
Significant Finds	FLINT Neolithic
Significant Finds	POTTERY Roman

Investigation type	'Field observation','Open-area excavation','Watching Brief'
Prompt	Water Act 1989 and subsequent code of practice

Project location

Country	England
Site location	LINCOLNSHIRE NORTH KESTEVEN WILSFORD Wilsford-Rauceby Reinforcement Main Scheme
Study area	1250.00 Square metres
Site coordinates	SK 9906 4185 52.9645337669 -0.524945352668 52 57 52 N 000 31 29 W Point
Site coordinates	TF **0112 4293 52** .9738548787 -0.493944916497 52 58 25 N 000 29 38 W Point
Height OD	Min: 76.65m Max: 88.70m

Project creators

Name of Organisation	LINDSEY ARCHAEOLOGICAL SERVICES
Project brief originator	Contractor (design and execute)
Project design originator	Naomi Field
Project director/manager	M. MCDAID
Project supervisor	Gavin Glover
Type of sponsor/funding body	Water Authority/Company
Name of sponsor/funding body	Anglian Water Services Ltd

Project archives

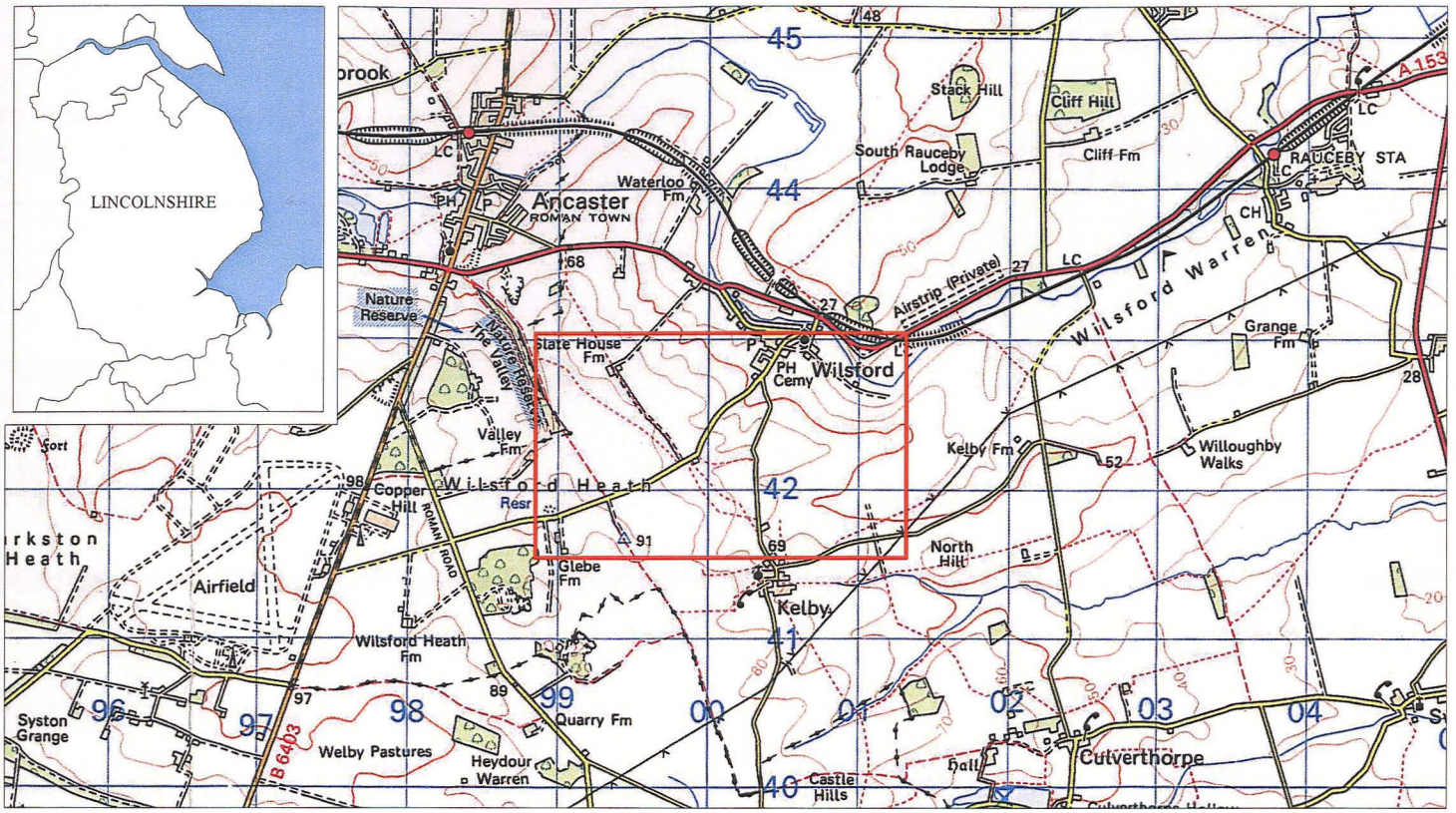
Physical Archive recipient	LCNCC
Physical Archive ID	2006.180
Physical Contents	'Ceramics','Environmental','Worked stone/lithics'
Digital Archive recipient	Lindsey Archaeological Services
Digital Archive ID	WURM 06
Digital Contents	'Ceramics','Environmental','Worked stone/lithics'
Digital Media available	'Images raster / digital photography','Spreadsheets','Survey','Text'
Paper Archive recipient	LCNCC
Paper Archive ID	2006.180
Paper Contents	'Ceramics','Environmental','Worked stone/lithics'

Paper Media available	'Context sheet','Correspondence','Drawing','Matrices','Notebook - Excavation',' Research',' General Notes','Photograph','Plan','Report','Section','Survey '

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Wilsford- Rauceby Reinforcement Main Scheme Archaeological Excavation, Evaluation and Watching Brief
Author(s)/Editor (s)	Glover, G.
Other bibliographic details	LAS Report 1047
Date	2008
Issuer or publisher	Lindsey Archaeological Services
Place of issue or publication	Lincoln
Description	A4 comb bound 14pp + 8 appendices + 15 figs + 18 plates
Entered by	Naomi Field (naomi@linarch.co.uk)
Entered on	25 April 2008

THE FIGURES



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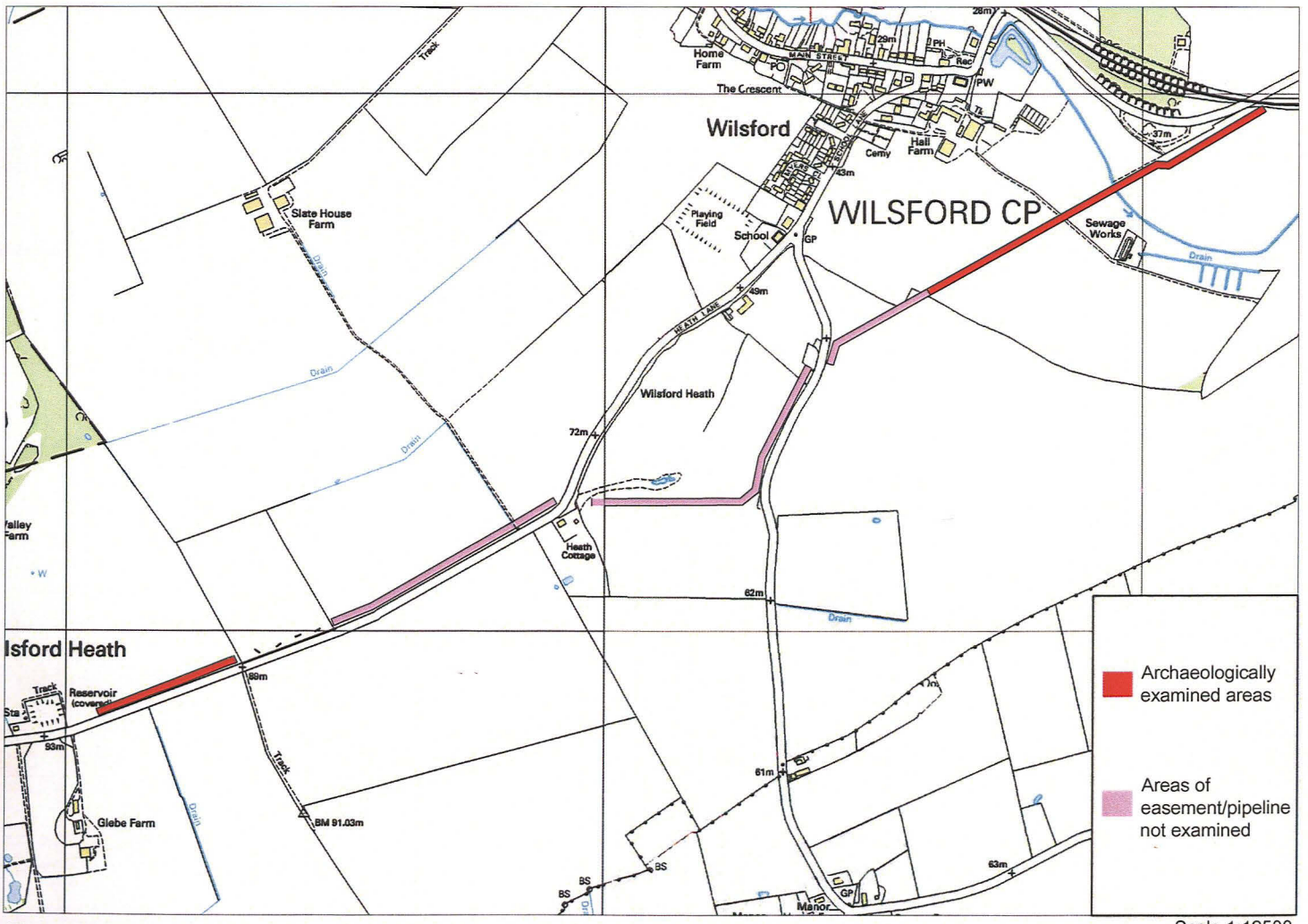

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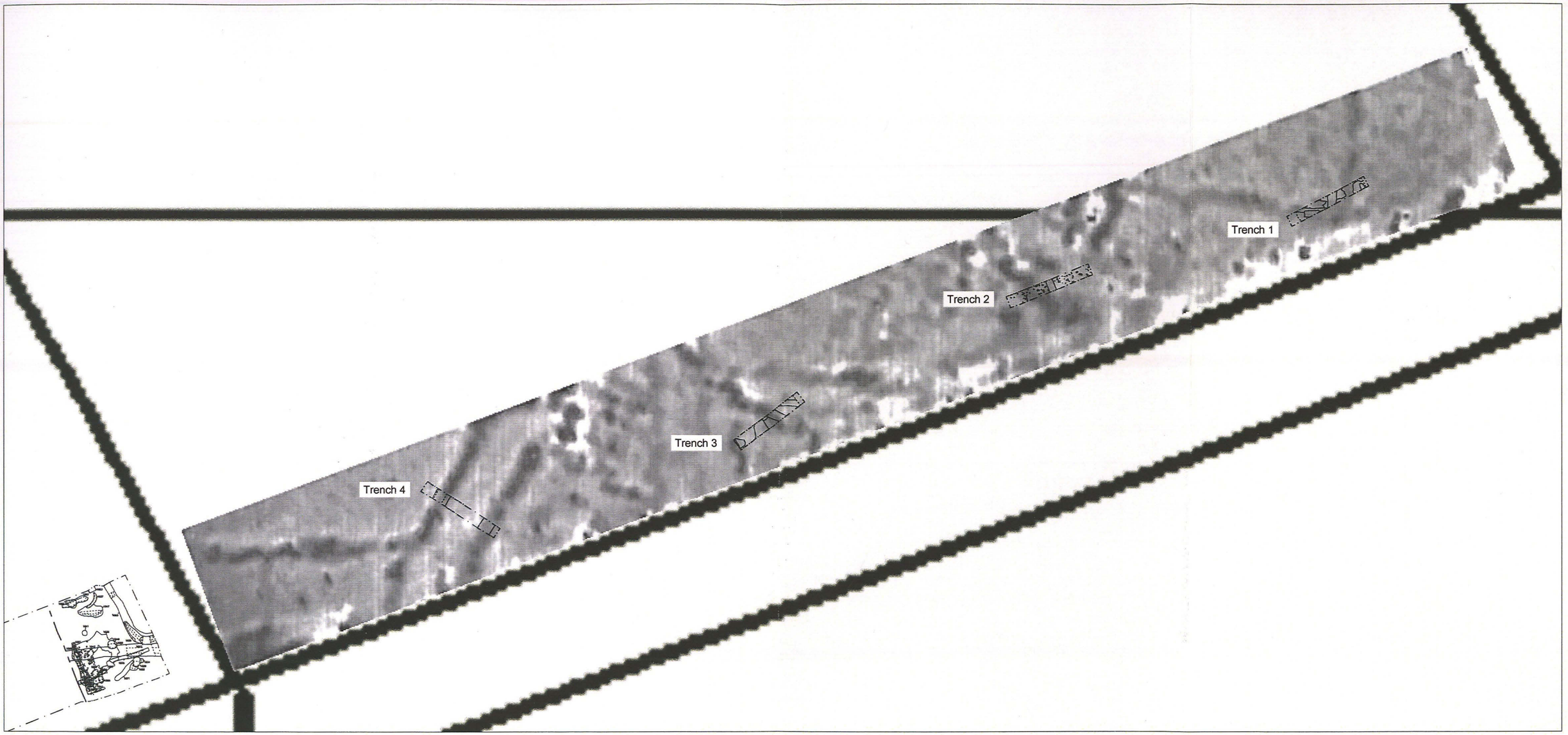
Fig.1 Location of archaeological works along pipeline easement. Inset above based on the 1:10,000 Ordnance Survey map, reproduced at a reduced scale. Crown copyright, reproduced with the permission of the Controller of HMSO. LAS Licence no. AL 100002165.

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME: Wilsford-Rauceby Mains Reinforcement Scheme	SITE CODE: WURM 06	DRAWN BY: GG	N
	PROJECT TYPE: Excavation, Evaluation, Watching Brief	ACC. NO: 2006.180 SCALE: Various.	DATE: 21/01/2008	



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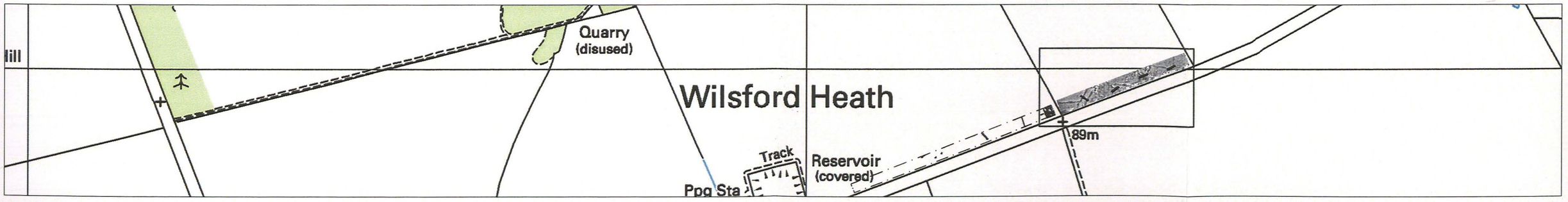
metres



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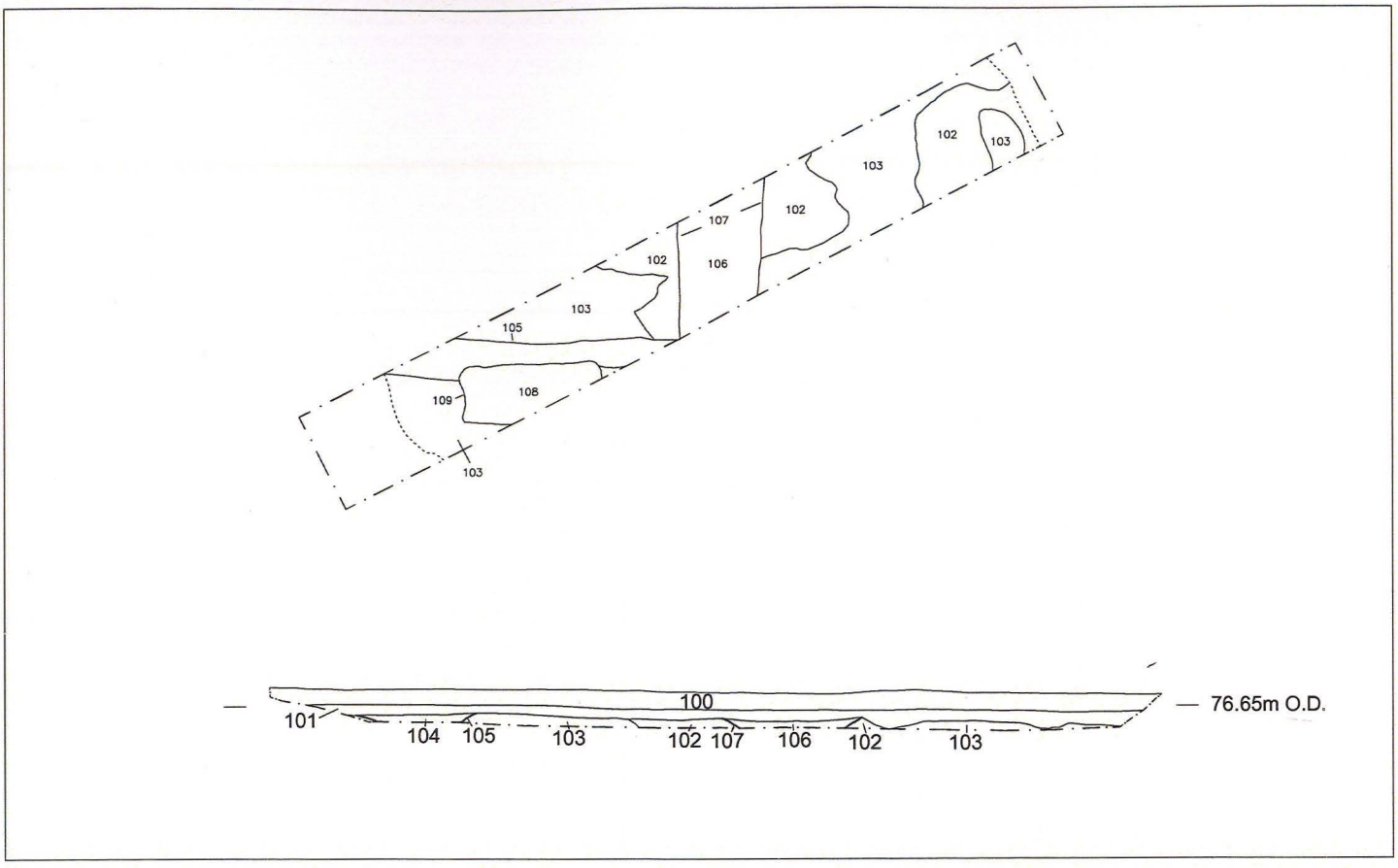
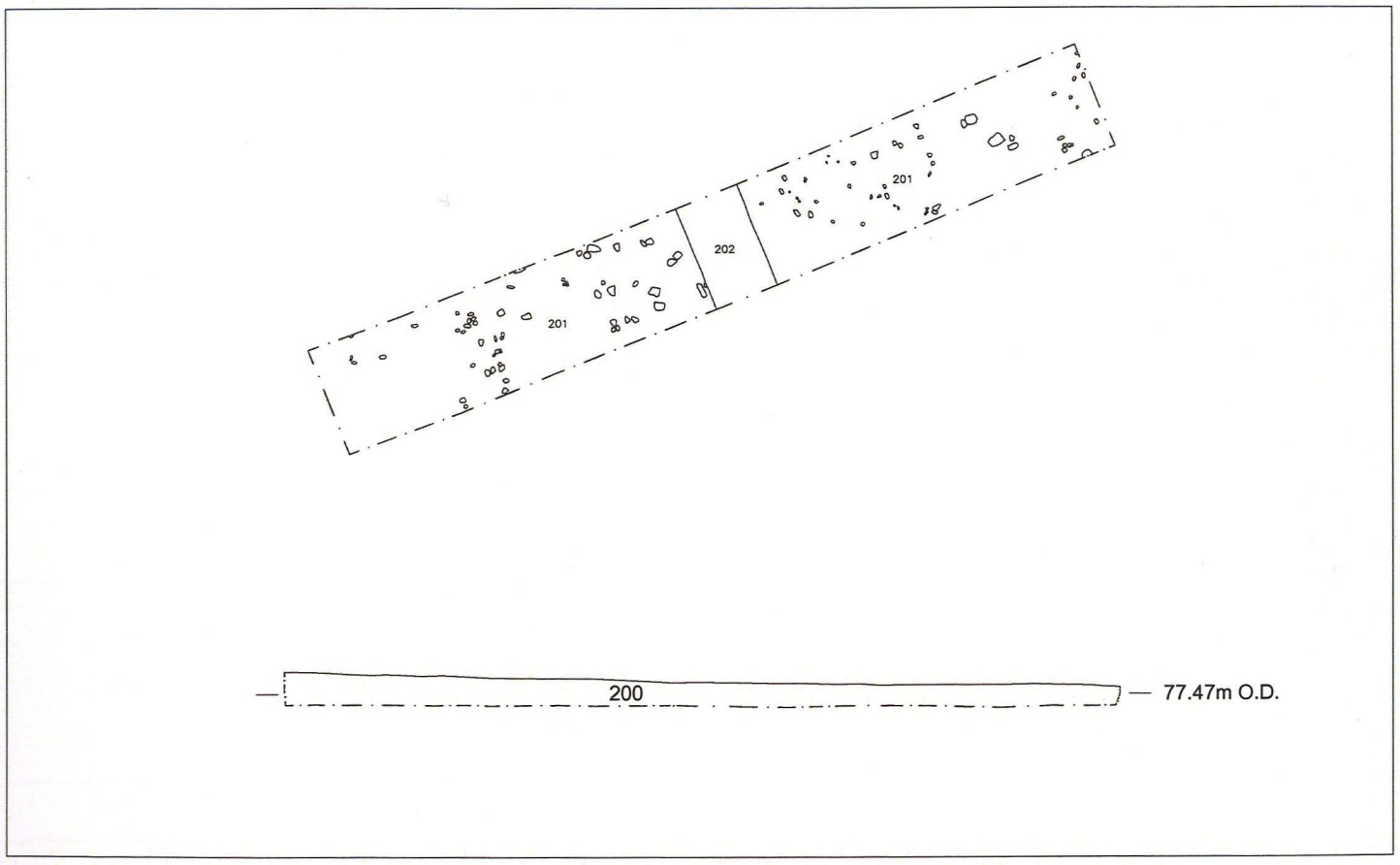
metres

Fig.2. Location of evaluation trenches and main excavation area, showing geophysical survey results

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME: Wilsford-Rauceby Mains Reinforcement Scheme	SITE CODE: WURM 06	DRAWN BY: GG	N
	PROJECT TYPE: Excavation, Evaluation, Watching Brief	ACC. NO: 2006.108 SCALE: 1:500/1:5000	DATE: 17/01/2008	





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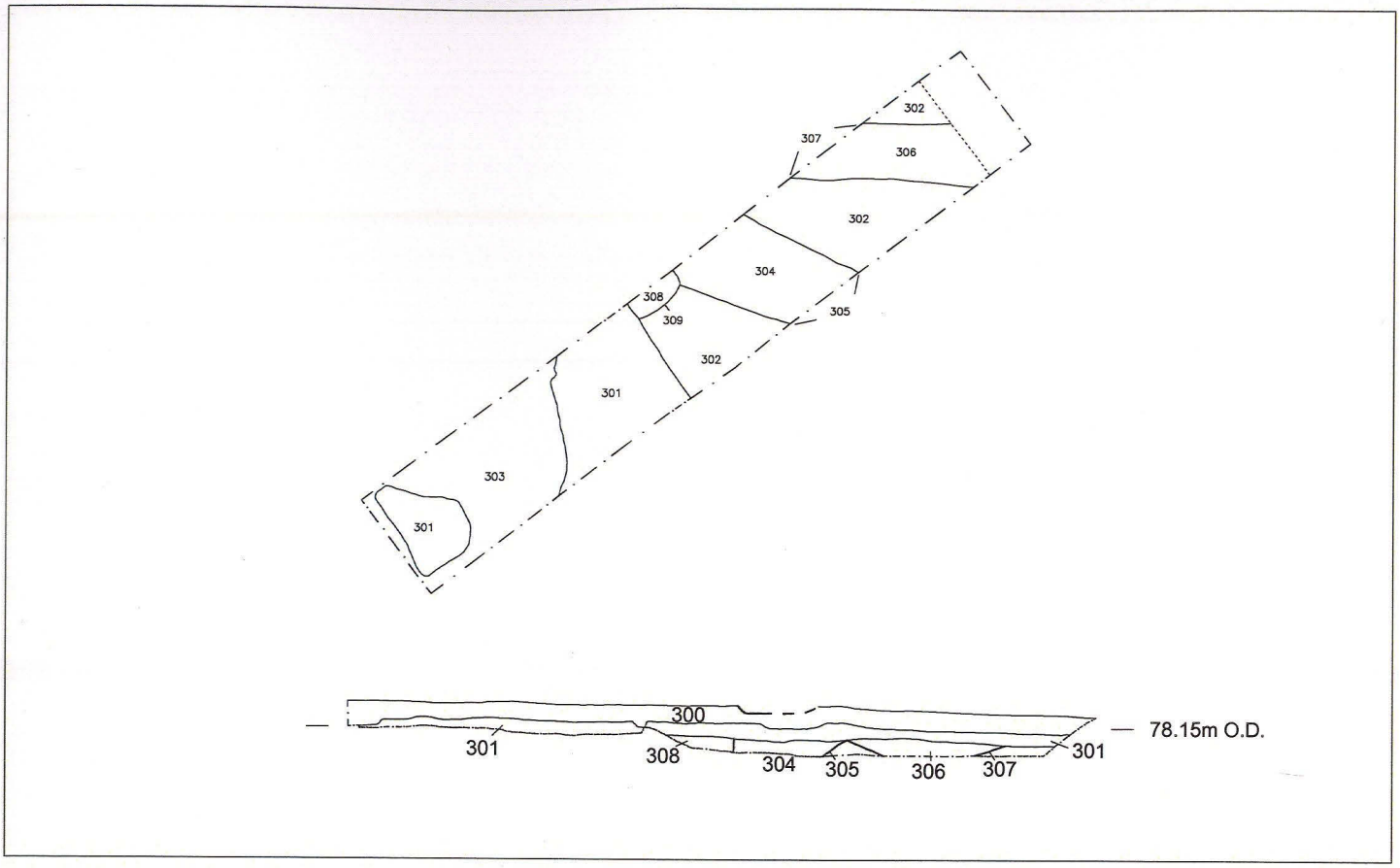
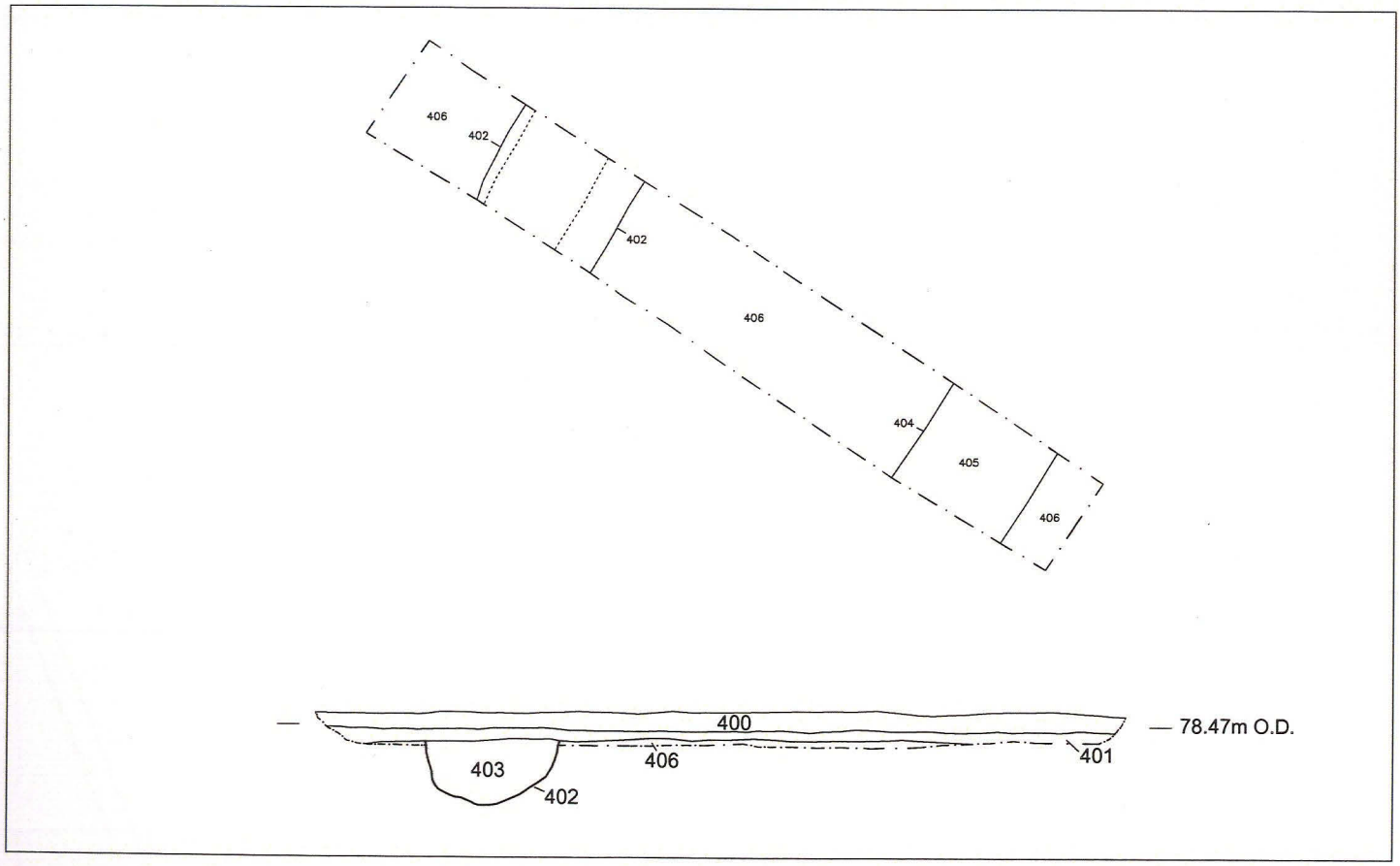
metres

Fig 3. Plans and long sections of Trenches 1 and 2

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME: Wilsford-Rauceby Reinforcement Main Scheme	SITE CODE:WURM 07	DRAWN BY: GJG	N
	PROJECT TYPE: Excavation and Watching Brief	ACC. NO: 2006.180 SCALE: 1: 100	DATE: 26/11/07	





0 10

metres

Fig 4. Plans and long sections of Trenches 3 and 4

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME: Wilsford-Rauceby Reinforcement Main Scheme	SITE CODE:WURM 06	DRAWN BY: GJG	N
	PROJECT TYPE: Excavation and Watching Brief	ACC. NO: 2006.180 SCALE: 1: 100	DATE: 26/11/07	

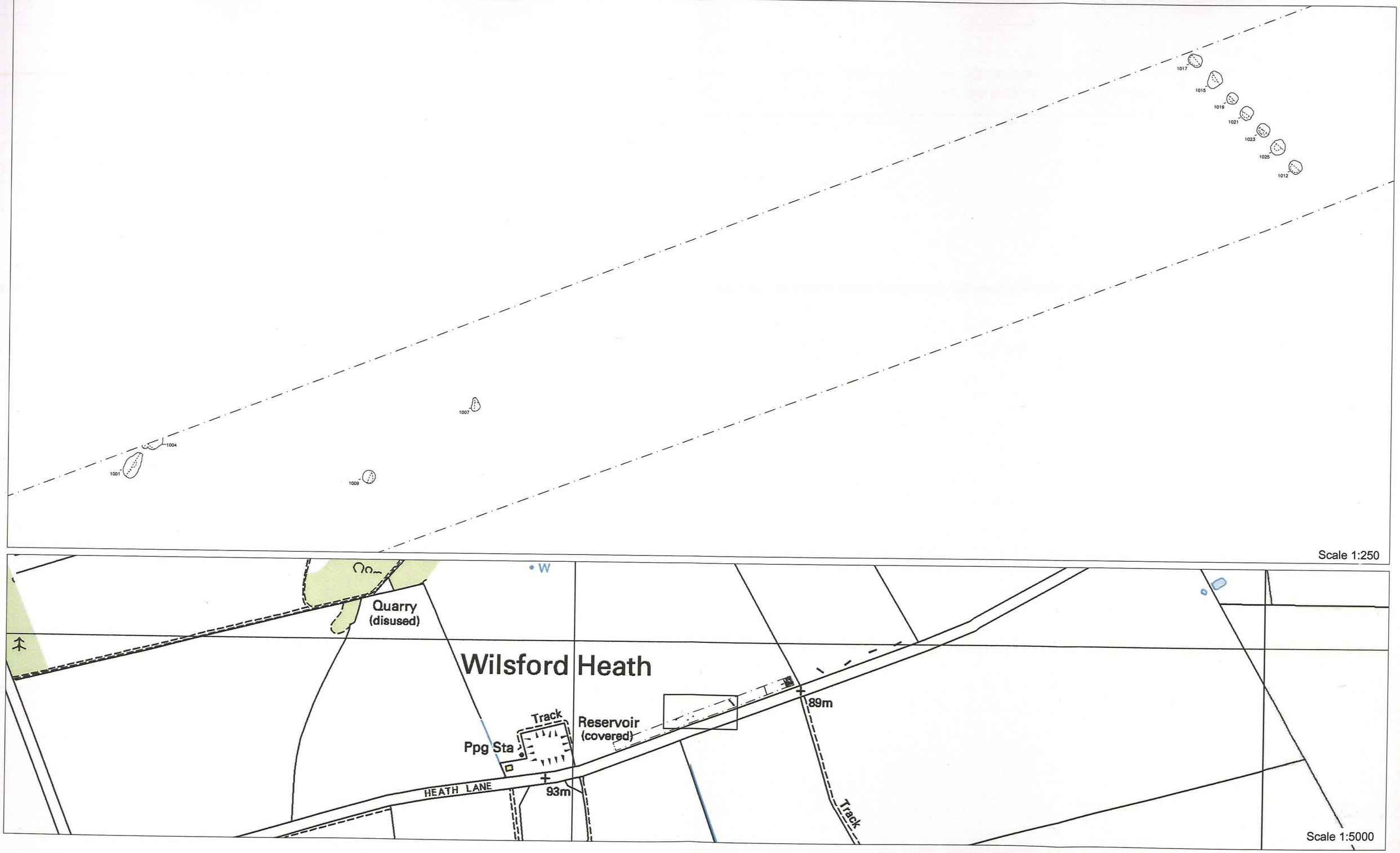


Fig. 5. Location of Phase 1 pits

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME:Wilsford-Rauceby Mains Reinforcement Scheme	SITE CODE: WURM 06 ACC. NO: 2006.180 SCALE: 1: 100	DRAWN BY: GG	N
	PROJECT TYPE: Exacavtion, Evaluation, Watching Brief		DATE: 17/01/2008	

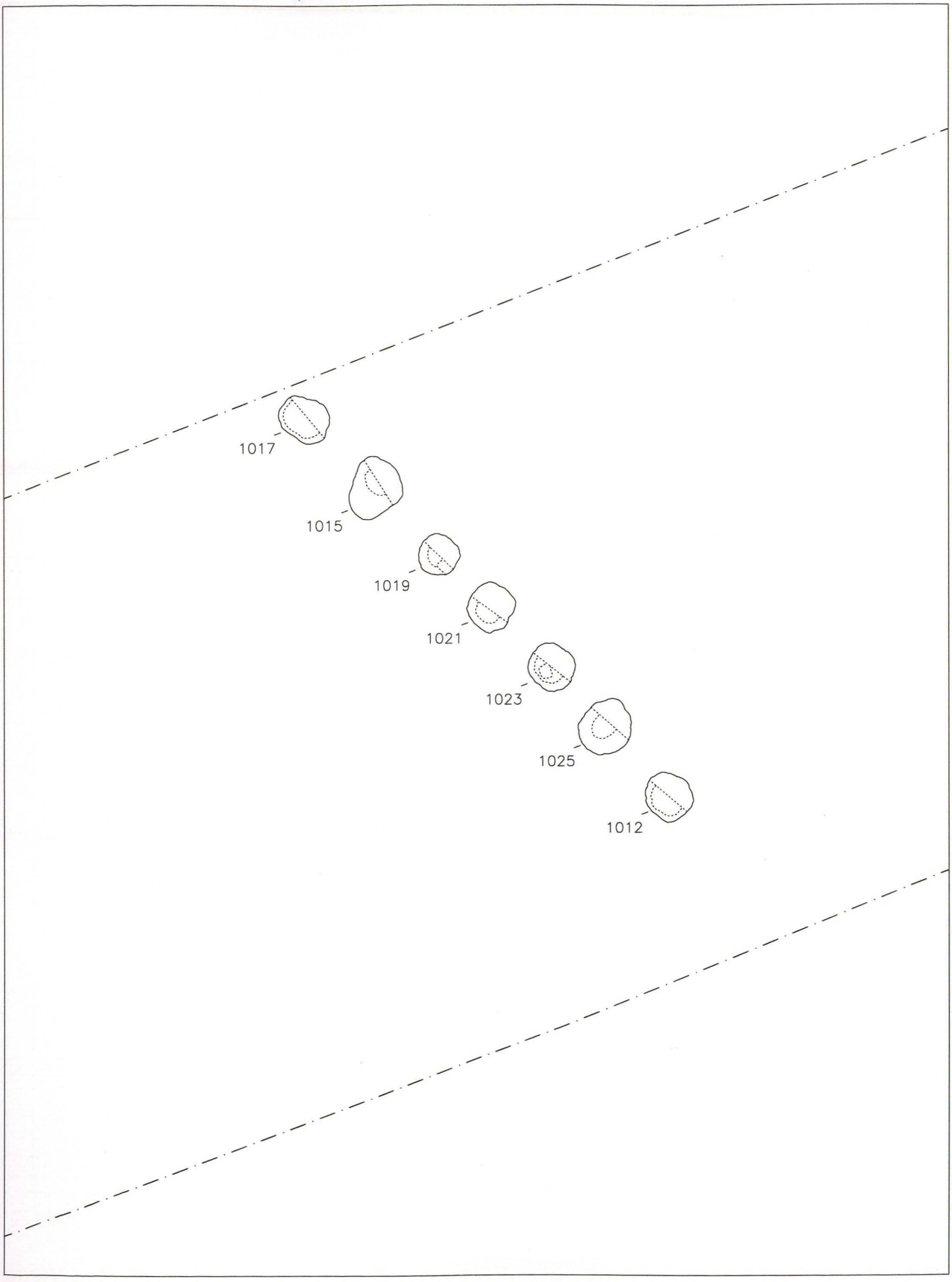


Fig.6 Plan of Phase 1 pit alignment, 1028

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME: Wilsford-Rauceby Reinforcement Main Scheme	SITE CODE:WURM 06	DRAWN BY: GJG
	PROJECT TYPE: Excavation and Watching Brief	ACC. NO: 2006.180 SCALE: 1: 100	DATE: 26/11/07

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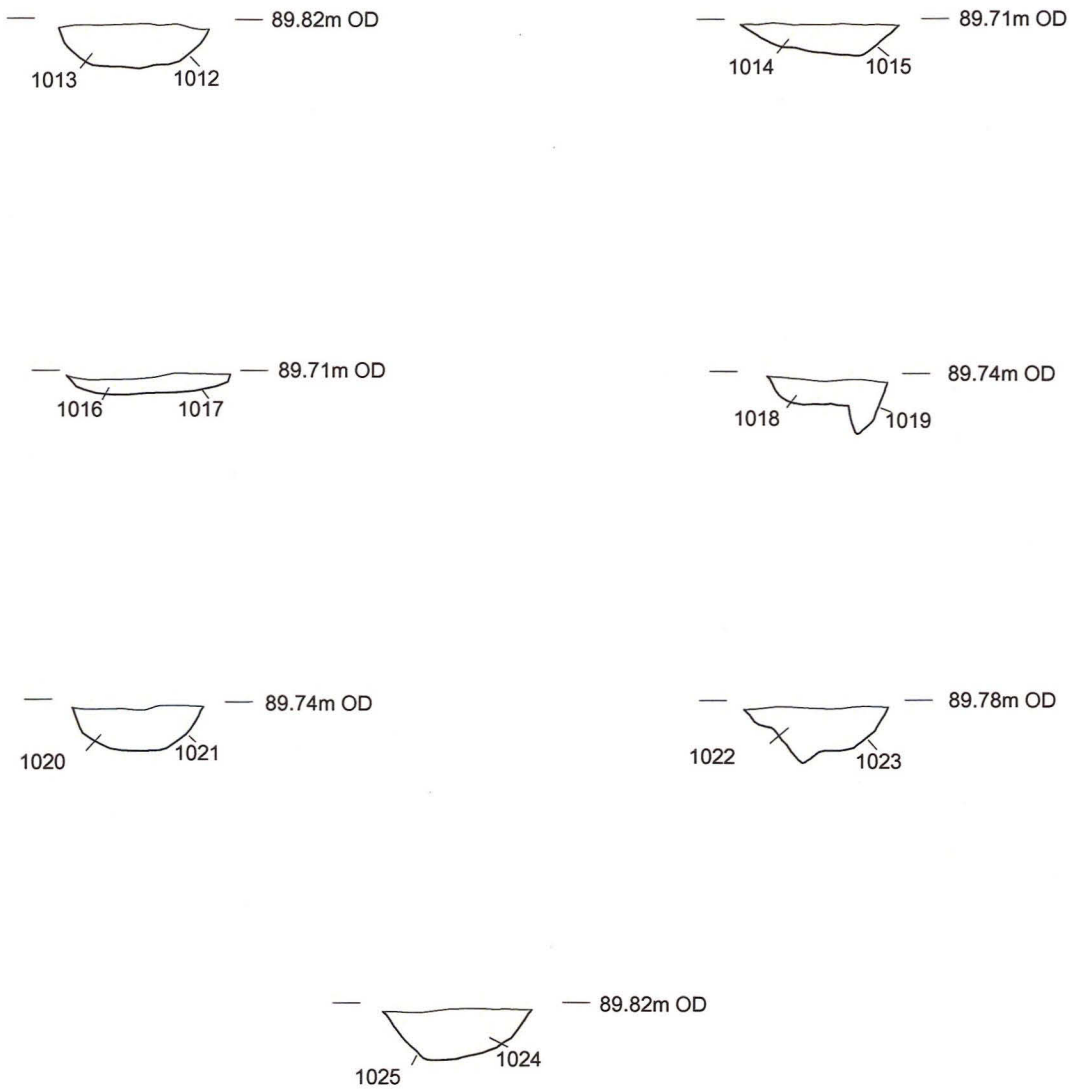


0 5

metres

Fig.7 Sections through pits of pit alignment 1028. All west facing.

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME: Wilsford-Rauceby Mains Reinforcement Scheme	SITE CODE: WURM 06 ACC. NO: 2006.180 SCALE: 1: 50	DRAWN BY: GG
	PROJECT TYPE: Excavation, Evaluation, Watching Brief		DATE: 03/04/2008

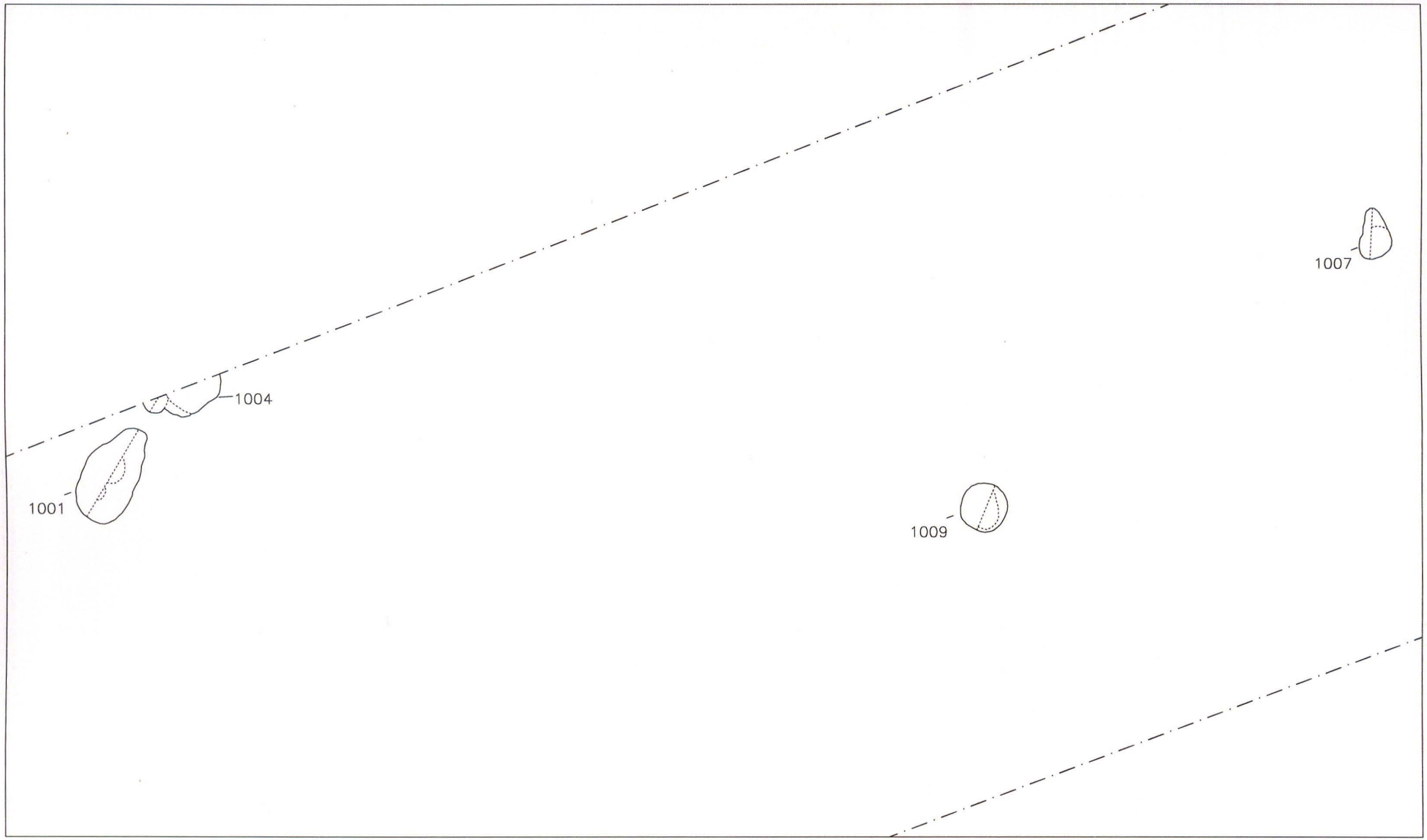


Fig.8 Plan of Phase 1 additional prehistoric pits

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME: Wilsford-Rauceby Reinforcement Main Scheme	SITE CODE:WURM 06	DRAWN BY: GJG	N
	PROJECT TYPE: Excavation and Watching Brief	ACC. NO: 2006.180 SCALE: 1: 100	DATE: 26/11/07	

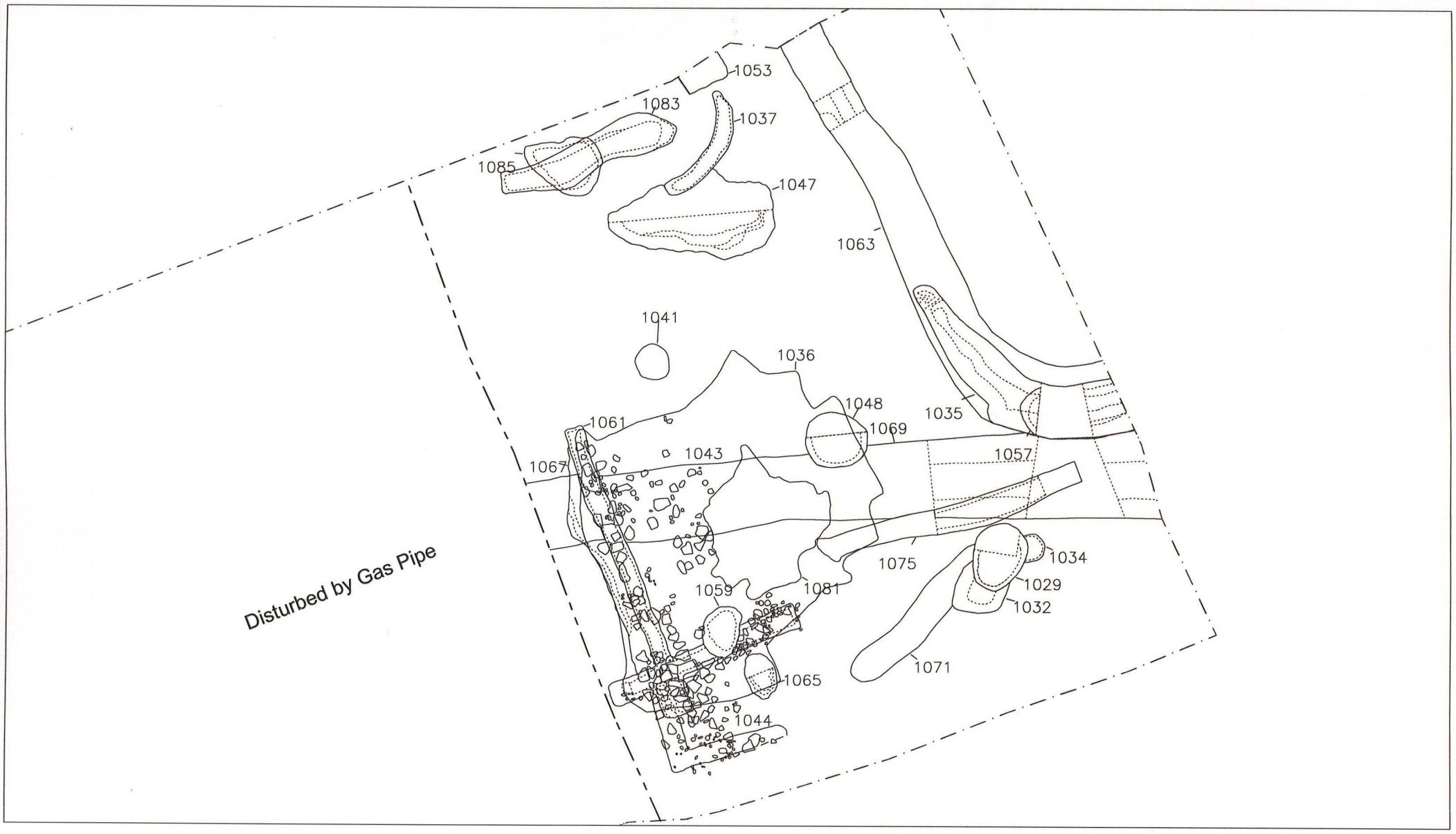
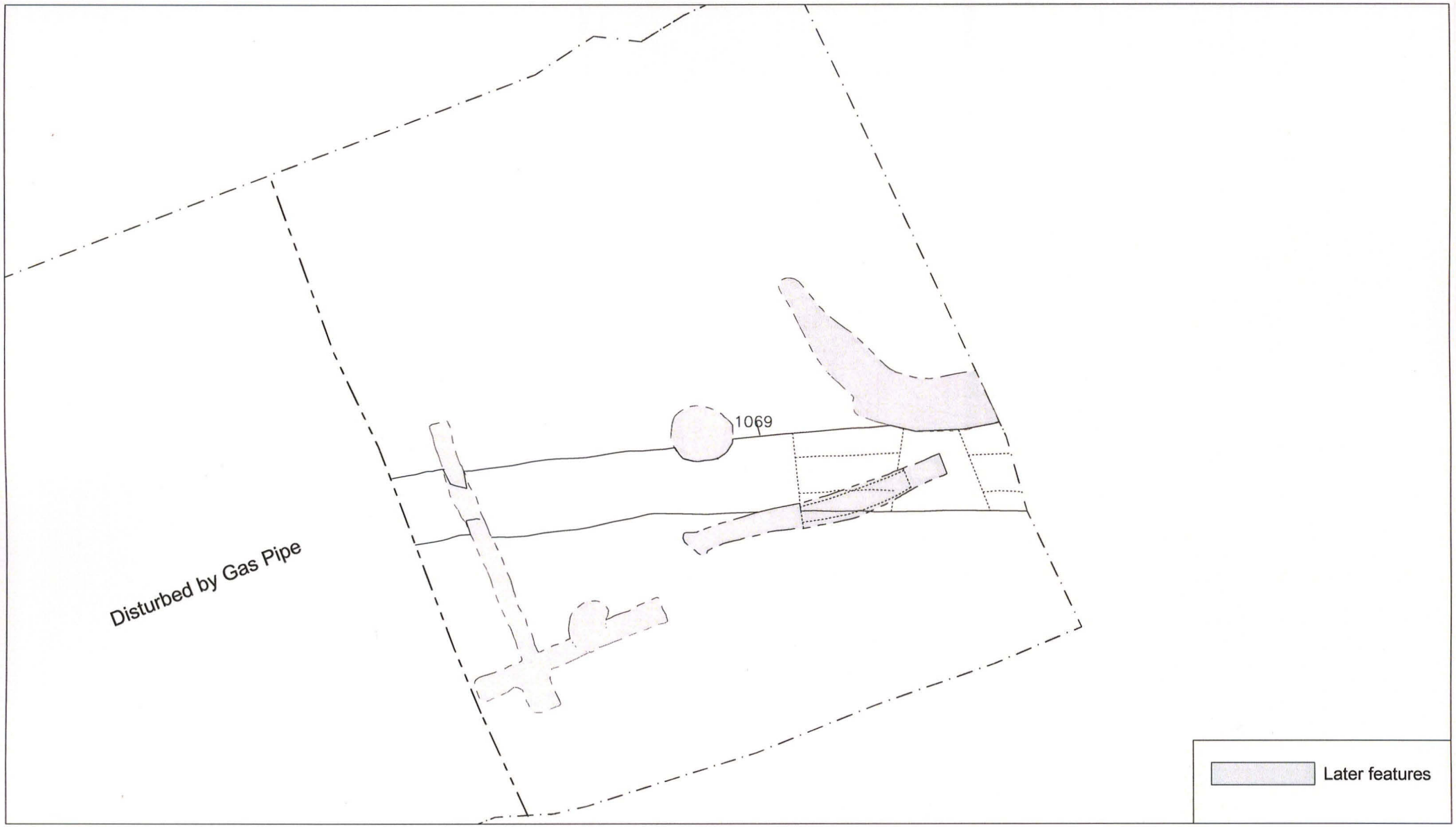


Fig.9 Plan of main excavation area, Phases 2-4

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME:Wilsford-Rauceby Mains Reinforcement Scheme	SITE CODE: WURM 06	DRAWN BY: GG	N
	PROJECT TYPE: Excavation, Evaluation, Watching Brief	ACC. NO: 2006.180 SCALE: 1: 100	DATE: 16/11/2007	



0 10

metres

Fig.10 Phase 2.1 Late Iron Age/early Roman boundary ditch

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME:Wilsford-Rauceby Mains Reinforcement Scheme	SITE CODE: WURM 06	DRAWN BY: GG	N
	PROJECT TYPE: Exacavtion, Evaluation, Watching Brief	ACC. NO: 2006.180 SCALE: 1: 100	DATE: 17/01/2008	

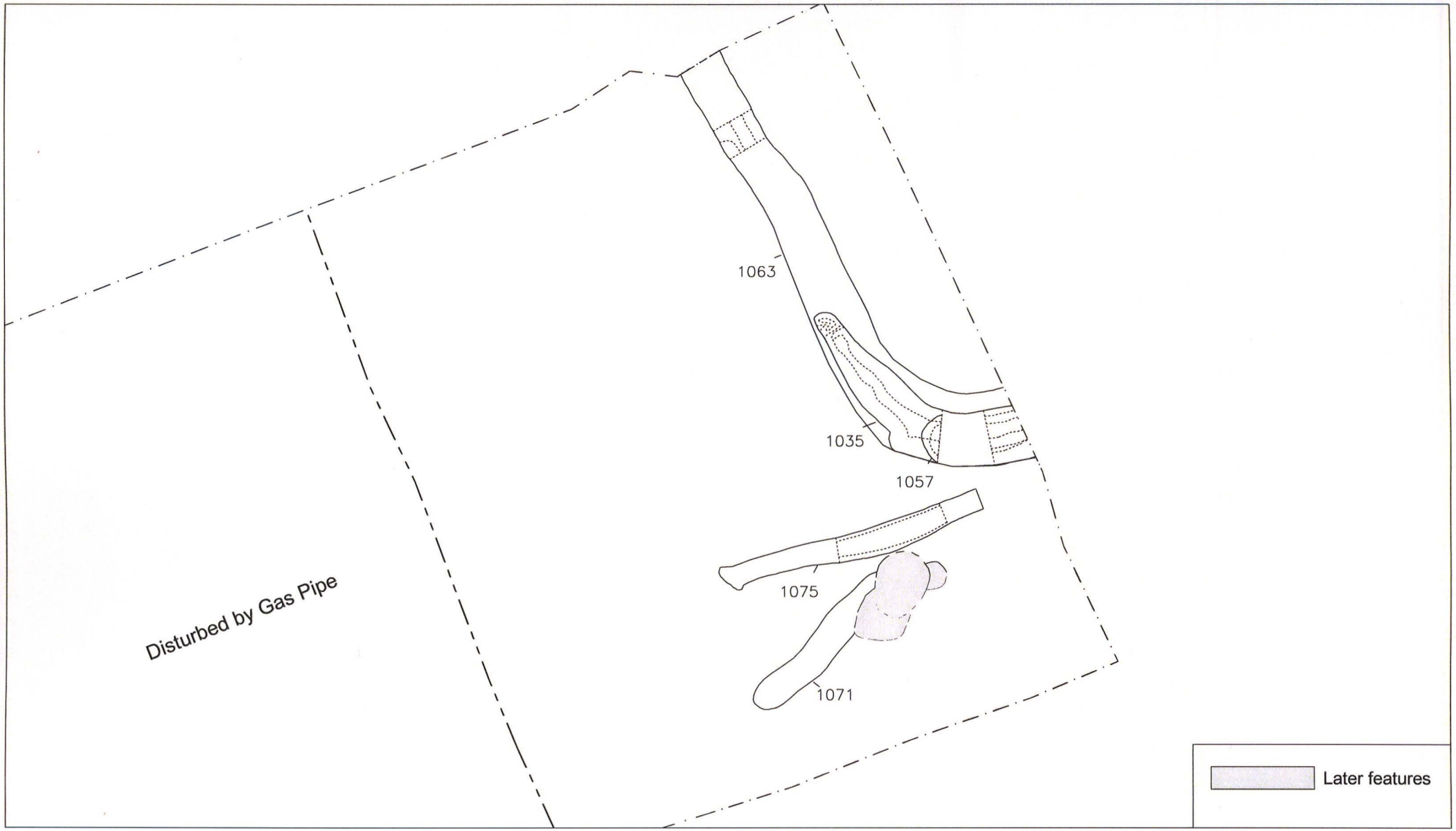


Fig.11 Phase 2.2 plan

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME:Wilsford-Rauceby Mains Reinforcement Scheme	SITE CODE: WURM 06	DRAWN BY: GG	N
	PROJECT TYPE: Excavation, Evaluation, Watching Brief	ACC. NO: 0000.000 SCALE: 1: 100	DATE: 17/01/2008	

Fig. 12. Phase 3.1 plan

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME: Wilsford-Rauceby Mains Reinforcement Scheme	SITE CODE: WURM 06 ACC. NO: 2006.180 SCALE: 1: 100	DRAWN BY: GG	N
	PROJECT TYPE: Excavation, Evaluation, Watching Brief		DATE: 17/01/2008	

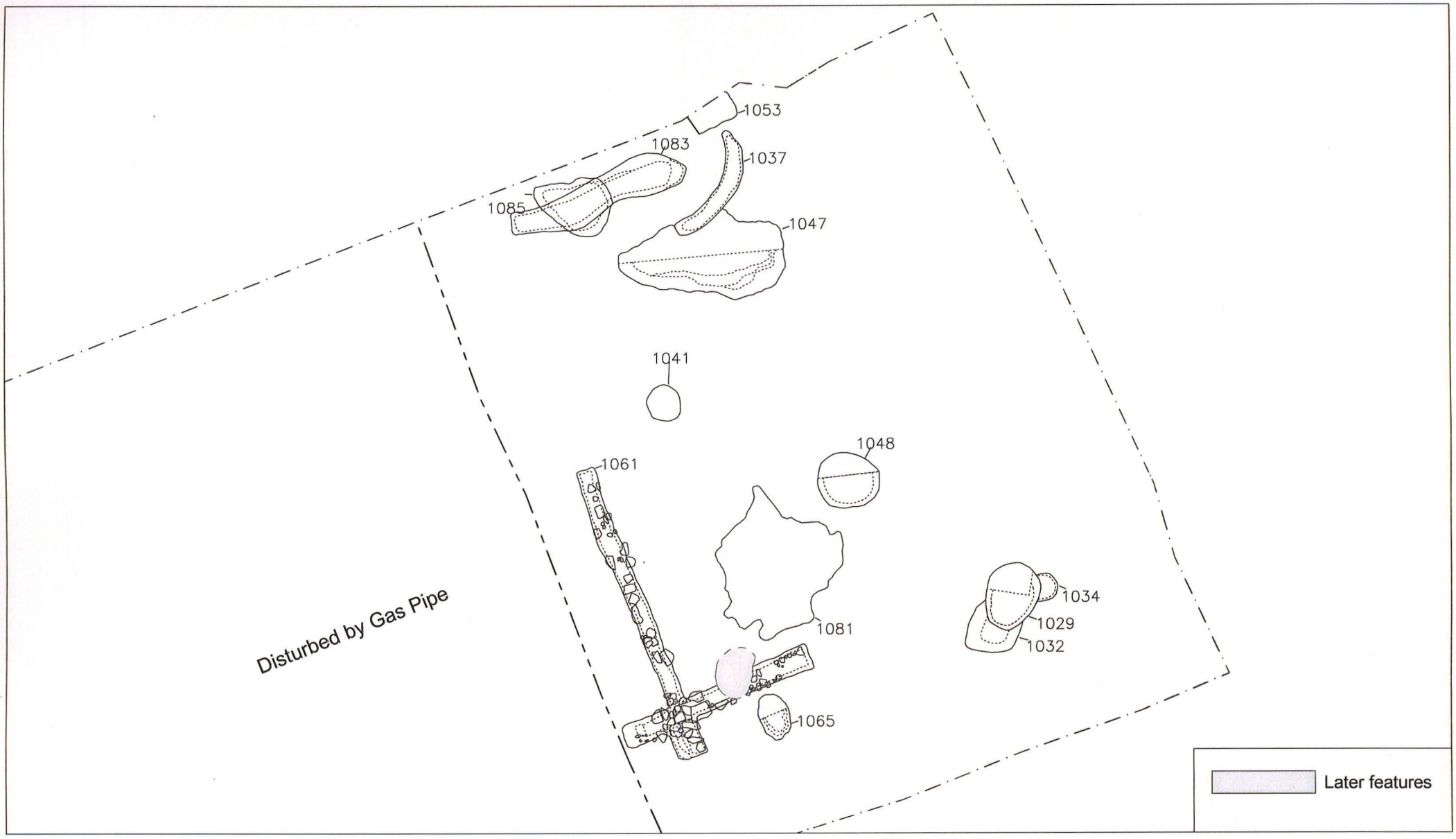


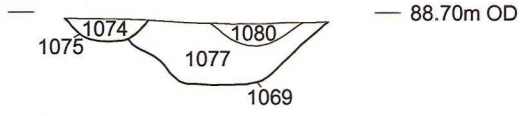
Fig 13. Plan of Phase 3.2

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME: Wilsford-Rauceby Mains Reinforcement Scheme	SITE CODE: WURM 06	DRAWN BY: GG	N
	PROJECT TYPE: Excavation, Evaluation, Watching Brief	ACC. NO: 2006.180 SCALE: 1: 100	DATE: 17/01/2008	

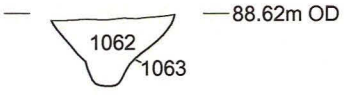
Fig.14 Phase 4 plan

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME:Wilsford-Rauceby Mains Reinforcement Scheme	SITE CODE: WURM 06	DRAWN BY: GG	N
	PROJECT TYPE: Exacavtion, Evaluation, Watching Brief	ACC. NO: 2006.180 SCALE: 1: 100	DATE: 17/01/2008	

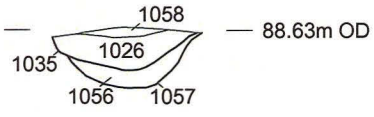
East facing section through ditches 1069 and 1075



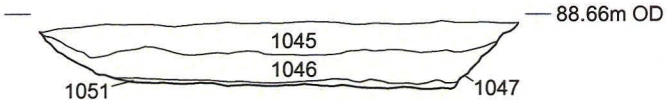
Northwest facing section through ditch 1063



Northwest facing section through ditch 1035 and pit 1057



South facing section through pit 1047



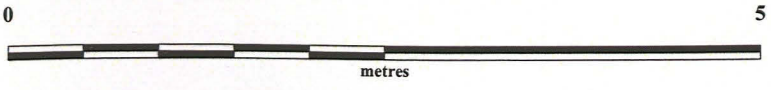


Fig.15 Sections through assorted features.

LINDSEY ARCHAEOLOGICAL SERVICES	PROJECT NAME: Wilsford-Rauceby Mains Reinforcement Scheme	SITE CODE: WURM 06	DRAWN BY: GG	
	PROJECT TYPE: Excavation, Evaluation, Watching Brief	ACC. NO: 2006.180 SCALE: 1: 50	DATE: 03/04/2008	

THE PLATES

Pl. 1. Evaluation Trench 1, looking southwest. 1m scale.

Pl. 2. Evaluation Trench 2, looking southwest. 1m scale

Pl 3. Evaluation Trench 3, looking northeast. 1m scale.

Pl.4. Evaluation Trench 4, looking northwest. 1m scale

Pl. 5. Machine stripping of easement in excavation area, looking east.

Pl.6. Pit alignment **1028** looking south. 2 x 1m scales + 1m scale

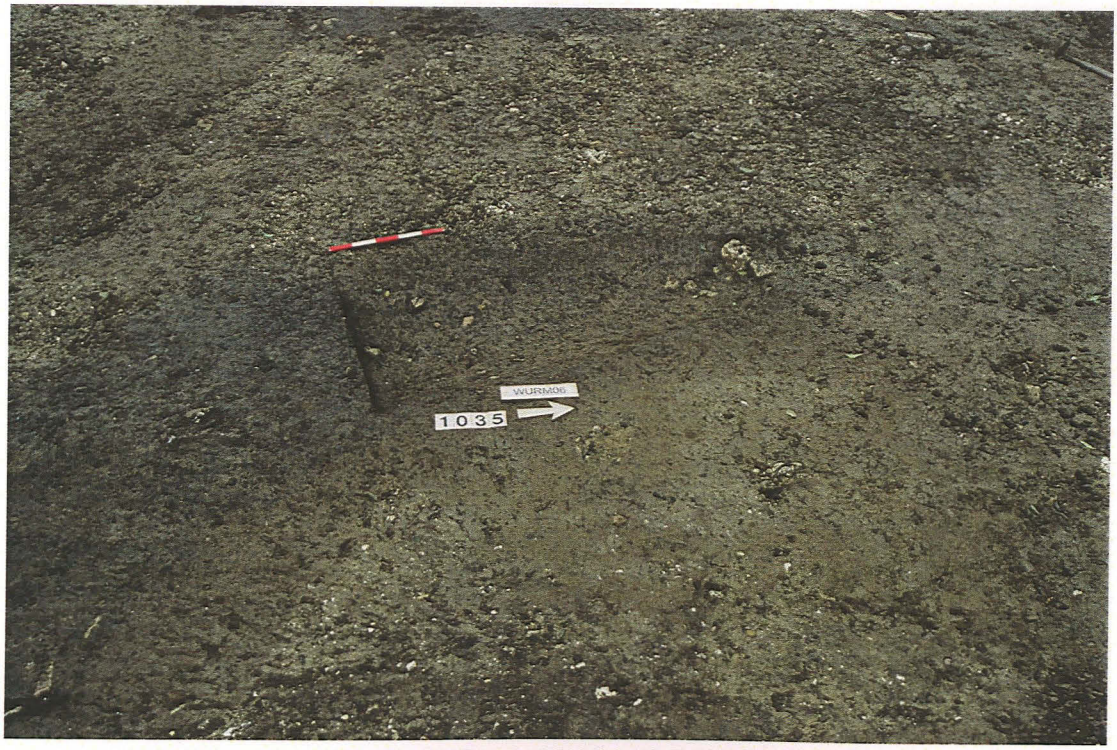
Pl. 7. Pit **1001**, looking northwest. 1m scale + 0.5m scale

Pl. 8. Pit **1007** looking northwest. 0.5m scale

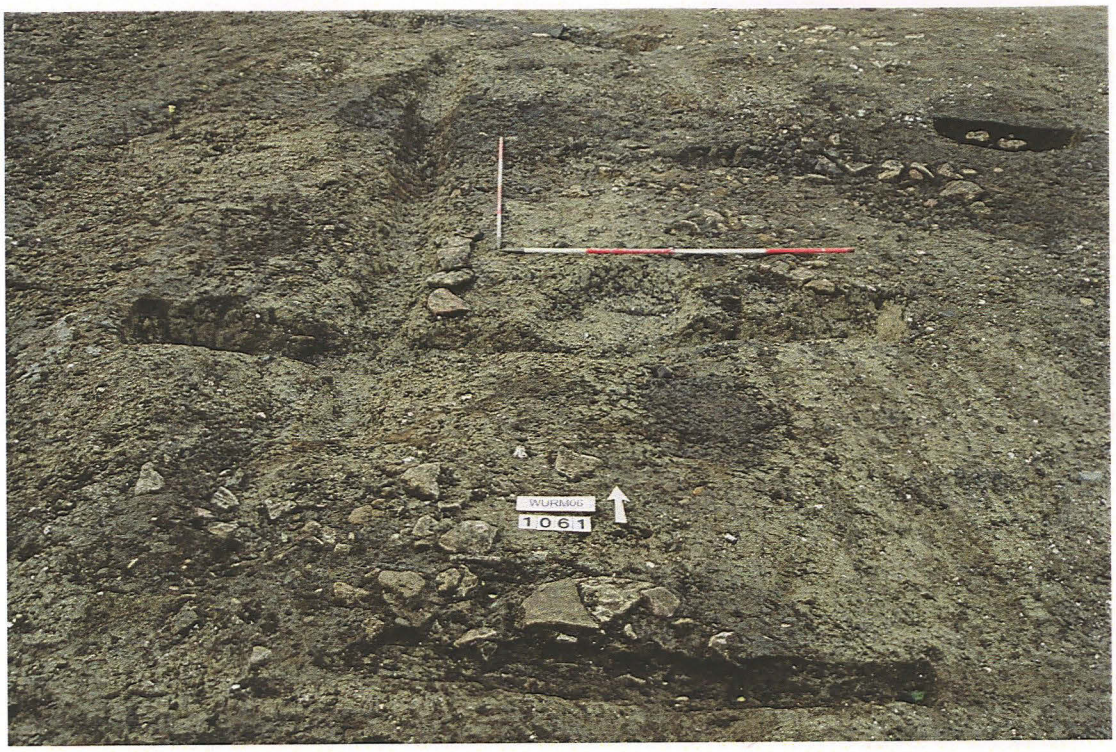
Pl. 9. Main excavation area, Phases 2 - 4, pre-excavation, looking south. 2 x 2m scales

Pl. 10. Ditch **1069**, looking east. 1m scale

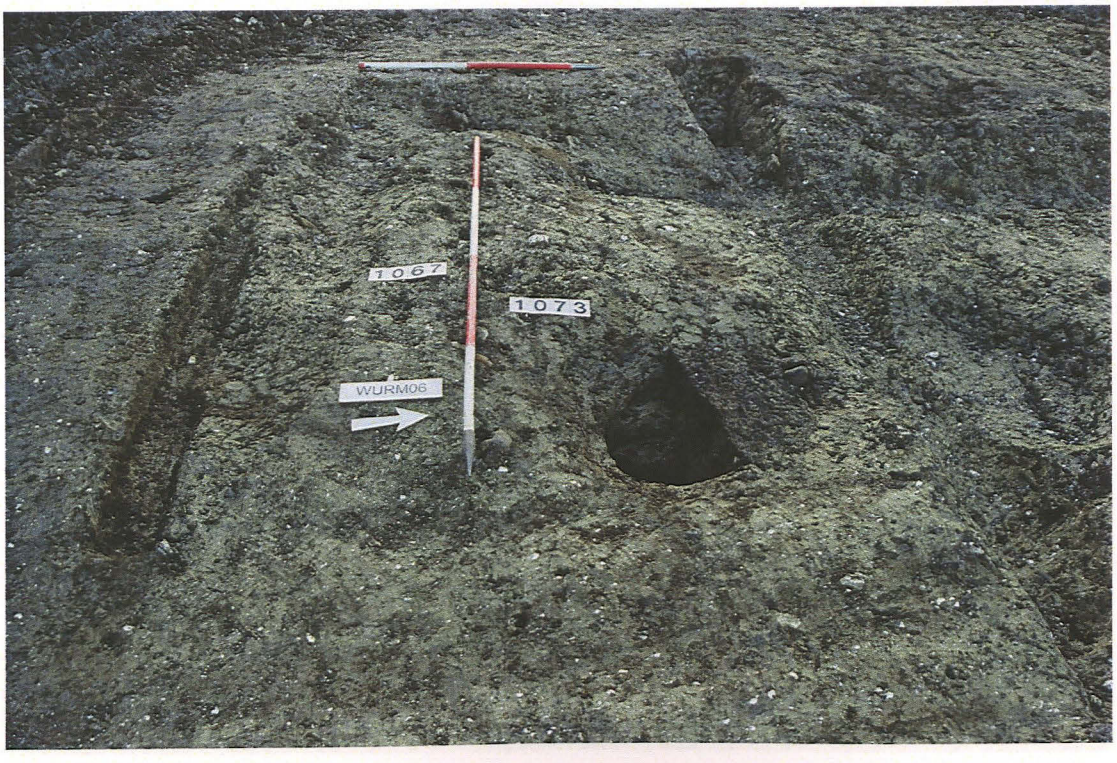
Pl. 11. Ditch **1063** looking east. 1m scale



Pl. 12. Ditch **1035** looking west. 1m scale

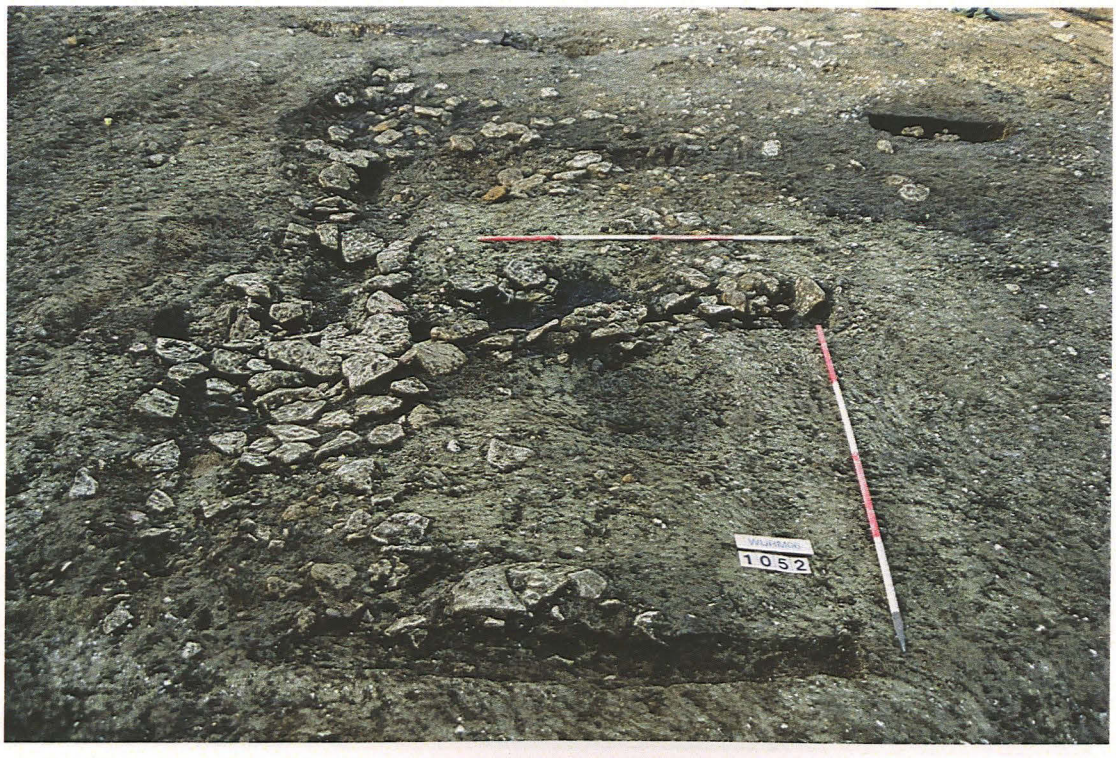


Pl. 13 Building 2 post-excavation, showing Structure 1 pre-excavation, looking north. 2 x 2m scales



Pl. 14. Building 1 post-excavation, looking west. 2m scale + 1m scale

Pl. 15. General view, Building 2, looking south



Pl. 16. Building 2 looking north. 2 x 2m scales

Pl. 17 Pit **1047** looking north. 2 x 2m scales

Pl. 18. Pits **1029**, **1032** and **1034**, looking north-west. 0.5m scale