

98/16



LINDSEY ARCHAEOLOGICAL SERVICES

Great Gonerby Fortes Cafe Pumping Station and Rising Main

[Great Gonerby PS to Marston STW]

Archaeological Monitoring

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Site Code: GMB 97
LCNCC Museum Accn. No. 242.97

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Frontispiece: Archaeologists investigating Romano-British feature at the south end of the pipeline easement (looking north).

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Summary

Topsoil stripping close to the Old Great North Road revealed part of a previously unknown third century AD Romano-British ditch or pit at the edge of the pipeline easement, apparently at the eastern edge of an occupation site. Over 350 sherds of pottery were recovered from the short section of backfilled ditch examined. Although the finds collected were consistent with domestic activity, fired clay fragments from a hearth may have been in contact with some form of salt processing. Few sites of this date have been examined in the area.

No other archaeological features were identified during excavations for the new pipeline although it passed adjacent to an archaeological site known from cropmarks.

Introduction

Lindsey Archaeological Services (LAS) was commissioned by Anglian Water Services Ltd in October 1997 to conduct a watching brief during trenching for a rising main positioned alongside an existing pipe between the Old Great North Road, Great Gonerby, and Marston Sewage Treatment Works (Figs. 1 and 2). Archaeological monitoring had been requested by the Archaeology Section of the Lincolnshire County Council, expressed in a letter dated 8th May 1997 and Requirements for Archaeological Work, dated 22nd May 1997.

The purpose of the Watching Brief was to identify and record any archaeological deposits disturbed during groundworks along the route.

The first inspection visit by the author was made on 17th November 1997. Further visits were made until 4th February 1998 when monitoring was concluded; a total of 20 visits were made. The intensity of visits was greatest where the route crossed farmland south of Cliff Lane, and in that area all of the stripped easement was closely inspected. Occasional visits were made during trenching along Cliff Lane and the track extension, but most of the trench face was visible. Regular visits were made during trenching along Sand Lane apart from a short stretch at the western end and along Barkston Road which was trenched and backfilled without monitoring. A monitored section of trench at the Sand Lane/Barkston Road junction showed that the trench along Barkston Road followed the line of an existing service trench and it is unlikely that information was lost. The stripped easement at the eastern end of the route was closely inspected.

The Route (Fig. 2)

The 4.5km long pipeline was laid through the parishes of Great Gonerby, Marston and Barkston. About 1km of the route followed the edges of arable fields, within an easement of 15m in width, of which 9-12m was stripped of topsoil. The pipe trench was then excavated by 360° excavator with toothed bucket at the centre of the stripped easement. The remainder of the route, along a farm track and the highways of Cliff Lane, Barkston Road and Sand Lane was laid in a 0.45m wide trench cut by a trenching machine. In this area the trench was inaccessible.

Archaeological Background

The County Sites and Monuments Record indicates that numerous archaeological sites have been recognised from air photographs in the area. Several possible prehistoric sites are recorded beside Sand Lane and Barkston Road and may extend beneath the present road. These cropmark sites include rectangular enclosures, trackways and other ditches (NMR APs).

Medieval ridge and furrow earthworks north of the Great North Road are relics of an expansion of arable cultivation (during a temporary phase of population expansion or climatic improvement) into land which has not been ploughed regularly since. Earlier archaeological features could survive below the earthworks.

Ridge and Furrow

The County Archaeological Officer had requested that surviving ridge and furrow affected by the pipeline was surveyed and recorded before damage occurred. The route was inspected and found to cross no surviving cultivation earthworks.

Well preserved ridges and furrows remain in pasture fields immediately east of the pipeline at Gonerby Moor, predating the present field pattern (Pl. 1). In the field closest to the Old Great North Road the west-east aligned ridges respect a headland (marking the limit of a former cultivation block) to the east of the modern hedge, but traces of west-east furrows were evident after topsoil stripping of the pipeline easement. This implies that cultivated fields extended further west onto Gonerby Moor and were not restricted to the slopes at the foot of Gonerby Hill.

The Watching Brief (Fig. 2)

For recording purposes, each distinct section of the monitored route (individual fields, tracks, lanes and roads) was allocated a number 1-8. Each findspot or observation within these stretches was then assigned a letter. Within the small area at **1C** cleaned for archaeological excavation, a context recording system of numbers 50-65 was used, with the assigned Site Code GMB 98.

Old Great North Road (ch. 43) to Cliff Lane farm track (Ch. 1100) (Fig. 3)

This part of the pipeline was laid in an easement stripped of topsoil at the eastern edge of two large fields. The present straight field boundary and hedge was interpreted as being of post-medieval date, probably associated

with formal enclosure of the parish. West-east aligned ridge and furrow undulations survive in pasture to the east of the field boundary, and vestigial traces of topsoil-filled furrows were observed on the same alignment crossing the stripped easement. In the absence of obvious headlands either side of the field boundaries, these are likely to be part of the same medieval or post-medieval arable fields. Small ponds are present within the pasture fields, and the ground alongside this boundary was especially wet towards the northern end.

Topsoil removal began at the southern end of the route beside an access road to an industrial unit. Sherds of Romano-British pottery were almost immediately revealed within the ploughsoil and on the subsoil horizon (findspots **1A** and **1B**), but no archaeological features were exposed until 50m north of the road where dark soil with pottery sherds and lumps of iron-panned concretion appeared to fill a west-east aligned feature crossing the easement (findspot **1C**). Initially this was interpreted as a backfilled Romano-British ditch, but after limited excavation it was found to be beside a medieval plough furrow which had redeposited material from an earlier north-south aligned ditch or pit along the western edge of the stripped easement. No other features were identified within the stripped easement although a less dense pottery scatter was found 80m to the north (findspot **1D**). A single 18th century pottery sherd was found in the next field north (findspot **2A**).

By arrangement with Anglian Water, the County Archaeology Section, and the contractors, Galliford, LAS undertook a three-day investigation of the Romano-British feature in advance of disturbance by the imminent trenching to the east.

The Excavation

A 1.5m wide section was hand excavated across the apparently west-east aligned feature, sufficiently to the west side of the stripped easement to allow contractors vehicles to reach the rest of the easement (Pl. 2). During excavation it became obvious that at least two distinct features were present, and that the iron-panned concretion concentration (initially thought to mark the central fill of a ditch) was probably naturally occurring. A gravel-filled modern land drain crossing the easement obliquely at the edge of both features added to the confusion. In practice, it was fortuitous that the Romano-British feature was identified; the pottery found during topsoil stripping was all redeposited within a medieval or later plough furrow.

a) Post-medieval plough furrow 54 (Figs. 4 and 6)

The furrow **54** was 3m wide and up to 0.35m deep. It had cut through the backfill of the Romano-British pit or ditch **60** at its northern edge and then passed to the north of the iron-panned concretion (Pls. 2-4). Its fill was a yellow/brown silt clay, incorporating charcoal flecks from the earlier feature. Excavators noted that it appeared to veer slightly northwards at the western side of the cleaned area; ridge and furrow frequently exhibits a reversed-S plan produced by the plough team adjusting its approach to the headland in order to make a manageable turn. The light brown soil filling the furrow was clearly evident in the pipe-trench face close to the hedge (Pl. 5).

Two fragments of pottery, one a 17th century Blackware drinking vessel and the other a 14th-16th century Humberware jug, were recovered from the main fill of the furrow (App. 1). These suggest that manuring of this field was occurring in the late 16th-17th centuries and that the plough furrows may be of that date. Two 18th century sherds were found unstratified along the stripped easement in this and the next field but there is no evidence as to when the arable fields temporarily became pasture and thus permitted the preservation of the furrow remains.

b) Romano-British Feature 60 (Figs. 4 and 5)

The SE corner of a feature with steeply sloping side was found within the arbitrarily positioned section (Pl. 6). The slope appeared to flatten within the excavated segment, as if the base of the feature had been reached, but no certain information about its form or extent was retrieved within the easement area available. Possible functions for the excavated feature include a rubbish pit, a pit dug for clay, a ditch terminal or the SE corner of an enclosure ditch. The concentration of pottery sherds (325) recovered from its fills indicated that a habitation site was in the close vicinity, and the options of enclosure ditch corner, terminal or rubbish pit seemed most appropriate.

Fired clay fragments recovered from the fills and redeposited fragments from above the feature include pieces with a smooth flat surface. This has been interpreted as indicative of the material deriving from a clay hearth possibly used for a process involving salt; iron smithing is possible but unlikely. Other pieces of fired clay may represent destruction of ovens or a building (App. 2).

Animal bones collected from the fills consist mostly of cattle, but one bone from an adult sheep is present. Two bones have butchery marks, and signs of gnawing by dogs have been detected (App. 3). Other indicators of contemporary processes close to the Romano-British feature include infrequent grains of wheat and barley, and charred straw or grass stems sieved from soil samples taken from the fills.

The source of the rubbish dumped in this ditch is thought to have been to the west of the easement; although slight indications of features were revealed during the trenching for the new pipe 40m south of this feature, the absence of further occupation debris shows that the site was not within or east of the easement.

The pottery mostly dates to the early/mid-3rd century AD and analysis suggests it comes from a nearby settlement occupied during the 2nd-3rd centuries. A few possibly later sherds were recovered from upper fills of the feature. The pottery consisted mainly of greywares, with sand and shell-grit tempering. Much of this may derive from unknown fairly local kilns. Beakers from the Nene Valley kiln centres are also represented (App. 4). Specialist identification by Maggi Darling has identified a single sherd from a South Spanish amphora (a tall cream-coloured large storage jar) which would have arrived containing olive oil, but no samian (high quality red finewares from Gaul) was recovered. Further evidence of trading links is given by the

fragments of two mortaria (circular bowls with a surface dressing of coarse material designed to crush grains and spices when used with a pestle). These vessels are thought to have been made in, or close to, Colchester.

No sign of this Romano-British feature or any associated features was visible at ground level in the adjacent field (Pl. 7). The existing pipe, which diverges from the course of the new one, will have previously cut through this archaeological site, but no discoveries were reported on that occasion.

c) The Iron-panned Concretion 64 (Fig. 6)

Topsoil stripping revealed a scatter of Romano-British sherds in the vicinity of a distinct darker area aligned west-east; investigation initially concentrated on this spread of iron-panned lumps which seemed to be the fill of a ditch.

Excavation of the section through the concreted lumps at the SE edge of the Romano-British feature showed that they lay on an almost flat clay loam surface which was also heavily iron-panned but not to the extent of forming conglomerate (Pl. 8). The conglomerate deposit seemed to have been cut through for the pit or ditch, but it is possible that it had been deliberately avoided when that feature was dug (Pl. 6). There was no evidence to suggest that the lumps had been collected and laid to produce a firm surface.

The later medieval plough furrow lies at the northern edge of the conglomerate, probably as a result of the plough being deflected by the large concreted lumps into softer adjacent soil. The northern side of the deposit has probably been straightened by medieval plough disturbance.

Features in the Pipe Trench

Excavation of the new pipe trench past the archaeological excavation site was closely monitored in order to identify and record any further features which had not been apparent on the stripped surface. In this vicinity the trench was excavated to a depth of 2.5-3m, and the trench sides were battered for safety purposes. This resulted in unsuitable conditions for observing or recording soil changes, although traces of possible features were noted at the southern limit of the watched trench, 60m north of the Old Great North Road (Pl. 9); a scatter of Romano-British sherds had been found on the stripped easement surface at this point (findspots **1A** and **1B**).

Cliff Lane farm track (Ch. 1100) to Barkston Road

This section of the pipe trench was excavated with a toothed bucket in the eastern verge of an un-named farm track and the western verge of Cliff Lane (Pl. 10). The track had been consolidated with brick rubble and other imported hardcore but there was no evidence of any post-medieval or earlier metalling. Natural sand deposits were present the entire length, with no evidence of archaeological features. No artefacts were found.

Barkston Road to Sand Lane junction

This section was trenched and backfilled without archaeological monitoring, except at the northern end where the trench was found to follow the line of an earlier glazed ceramic drain, presumably piping the ditch in the roadside verge. The contractors reported running sand deposits along the trench in this road, presumably appearing at a depth of about 0.8m as seen at the Sand Lane junction.

The field to the SW of the junction exhibits a slight natural rise of about 2m, and this higher ground coincides with the recorded rectangular enclosure cropmark and trackway (Pl. 11).

Sand Lane

The trench was cut along the southern edge of Sand Lane using a trenching machine. As the road name suggested, this section of the route encountered sandy deposits immediately below the road foundation; in these conditions the angled cutting teeth left a slightly grooved and smeared finish to the trench sides, and redistributed material along the cut faces. Identification and interpretation of features along this road was unsatisfactory: distinct colour variations were noted but in the absence of archaeological material it was impossible to tell whether archaeological or natural features were being observed. In such fine material, considerable disturbance could be produced easily by animal or water action. Observations have been noted and described in case they add detail to any future fieldwork on the nearby cropmark complex; **7E** was not assigned.

7A. At the western end of Sand Lane a trench excavated to connect two lengths of pipe revealed that the 0.12m thick tarmac road surface overlaid 0.18m of imported clay and stone which was bedding for the road. As the trench was at the road edge it was unclear whether the bedding represented original construction of the lane or was subsequent widening or repair. The bedding layer was over a 0.16m thick layer of grey sand, probably remains of a post-medieval topsoil.

The bedding layer sealed a layer of orange sand, thought to have been introduced to level the ground. Beneath the orange layer was a black sand deposit which merged unevenly with the underlying yellow sand (Pls. 12 and 13). The black layer may be a buried ground surface where organic material has decomposed, or the fill of a post-medieval roadside ditch. No dating material was exposed.

An upright small piece of wood was revealed at the trench base but proved on investigation to be a tree root (Pl. 14). Some of the possible features observed in the trench along Sand Lane may be the backfilled hole left by a wind-thrown tree.

7B. 180m east of the junction with Barkston Road a smelly black sand deposit up to 0.15m thick below the road bedding was ironpanned and may have originally been peat filling a channel cut into the undisturbed yellow sand. The width of this feature was not established.

7C. A similar sequence, not necessarily part of the same feature, was observed between 30m and 38m further to the east. After a 15m length with no dark sand, another disturbance up to 1.2m deep was seen, about 5m wide.

7D. 260m east of the junction, a thin band of dense black sand was present below the post-medieval road bedding, above grey and brown sand (Pl. 15). This may have been a turf layer buried when the road was built.

7F. 450m east of Barkston Road the road edge had been consolidated with pitched limestone rubble (Pl. 16). Short stretches of this were seen only on the southern face of the trench.

7G. A field entrance 500m from the junction coincided with the various sand layers dipping to about 1m below the surface, suggesting that the entrance had been formed over a backfilled depression.

7H. 800m east of the junction the tarmac surface had been bedded onto a fine dusty grey silt which sealed a mixed layer of gravel and limestone pieces, almost certainly consolidation of a depression. A horseshoe-shaped clay land drain had been laid under the former ground surface approximately parallel with the road, probably within a partly backfilled roadside ditch (Pl. 17). Two possible ditches or narrow channels 0.8-1.05m deep were seen to the east of this grey silt but they were too indistinct to record in detail.

7I. A cultivated field south of Sand Lane, bordered by the railway, illustrated the high sand content of the dark grey topsoil (Pl. 18). Sand Lane has been constructed across similar ground.

Marston STW to Sand Lane

An easement was stripped of topsoil at the edge of two fields north of Sand Lane (Pl. 19). The exposed subsoil was yellow clay, with sandier patches at intervals. Coal and other debris associated with the adjacent embanked railway was present, but no archaeological material was seen.

Conclusion

Prehistoric or Romano-British occupation features probably extend across Sand Lane, Cliff Lane and Barkston Road from the recorded cropmark sites but no sign of these could be found looking obliquely at the trench faces. However, where the trench was laid within a stripped easement close to the Old Great North Road, a previously unknown Romano-British ditch or pit was identified from pottery scatters and soil differences that could not have been seen, or understood, within a pipe trench.

The third century Romano-British site immediately north of the Old Great North Road is barely known from this project, but the monitoring and excavation has well-defined its eastern edge and opportunities may arise in the future to examine land to the west. At present, no trace of this site has been seen on air photographs. Added to the known late prehistoric or Roman

cropmark sites in the area, it seems that archaeological occupation in the Gonerby Moor and Barkston Road area was relatively high, and sited on both clay and sand soils.

Acknowledgements

LAS was grateful to Anglian Water Services Ltd, especially Dave Garland, Nina Weatherall and Barry Blacklock (Project Manager) for their co-operation and interest. Considerable help was received from their contractors Galliford Midlands, including Dave Moreland (Estimating Manager, Civil Engineering), Barry Scott and the pipeline teams.

The archaeological excavation was undertaken by Rob Armour-Chelu, Mick McDaid and Geoff Tann for LAS. Illustrations were prepared by Mick McDaid; the report was produced and collated by Jane Frost.

Geoff Tann
Lindsey Archaeological Services
18th June 1998

Archive Summary

Context sheets 50-65

Field section drawings

Field site plans

Field location plans

Inked plans and sections

Annotated developer plans

Photographs: colour prints:

LAS film nos. 97/83/8-31, 33-37

97/84/3-16

97/95/5, 6

98/5/1-10, 14-16, 28, 29, 34-36

98/11/26, 33-36

Archaeological finds:

Roman pottery

Post-Roman pottery

Animal bone

Fired clay

Roman tile

Specialists' reports:

Roman pottery

Illustrations of Roman pottery forms

Post-Roman pottery

Animal bone

Fired clay

Correspondence

Appendix 1

Post-Roman Pottery Archive List by Jane Young

Findspot	Description	Date
1C	MISC, 1, ?, fine fabric, only one surface	?
2A	BS, 1, jar, small	18th C
Context		
50	HUM, 1, jug,	14th-16th C
53	BL, 1, drinking vessel	17th C
56	HUMB, 1, jug,	14th-16th C

Glossary of Fabric Codes

BS	Brown stoneware: late 17th century - modern
BL	Blackware: mid 16th - modern
HUM	Humber ware: mid 14th/late 16th centuries
HUMB	Humber Basin glazed fabrics: early 12th - late 15th centuries
MISC	undated wares

**GREAT GONERBY TO MARSTON RISING MAIN FIRED CLAY
ASSESSMENT (GMB97 LCCM: 242.97)**

By Jane Cowgill©

A small assemblage of fired clay was recovered from a Romano-British pit or ditch at the edge of the stripped pipeline easement. No other features were recorded.

The Recording Methodology.

A total of 471g (62 pieces) of fired clay was submitted for recording which includes the material recovered from the environmental samples. Some of the pieces from the samples were very small and have resulted in a slightly misleadingly high count for some contexts (most notably 51). The fired clay was identified by visual examination, sometimes with the aid of a x10 binocular microscope. It was recorded on *pro forma* recording sheets but a database was not created due to the small size of the assemblage.

The Catalogue.

Ctext	No	Weight (g)	Comments
50	14	112	Oxidised and reduced; untempered micacious clay with few organic + sand and ironstone inclusions
50	2	6	Odd purplish colour due to the iron within the clay being altered by some process; low fired
50	5	146	Most oxidised; all pieces have a flat smooth surface – probably a hearth; micacious clay with much ironstone staining and occasional sand inclusions
51	28	106	Oxidised; lots of smooth flat surfaces – probably a hearth; micacious clay with much ironstone staining and occasional sand inclusions
52	6	73	Oxidised; smooth flat surfaces – probably a hearth; micacious clay with much ironstone staining and occasional sand inclusions
52	4	8	Oxidised; micacious clay with some possible organic temper; sand and very occasional ironstone inclusions
55	2	3	Oxidised; micacious clay with no temper
55	1	7	Odd mauve/purplish colour due to the iron within the clay being altered by some process; low fired clay with charcoal and ?organic inclusions;

Discussion.

The clays are all probably local and from the same source although there are some noticeable differences, particularly in the amount of ironstone and iron staining in the pieces with a flat surface (contexts 50, 51 and 52). The other differences are minor and even the possibly tempered piece may just reflect differences within the clay deposits. The fired clays can be subdivided in to three types: those with surfaces, the mauve/purple pieces and the remainder; the latter dominating by quantity if the bias produced by the pieces from the samples is removed.

The fired clay with a smooth flat surface was made from an iron-rich clay of identical composition but survives in varying thicknesses. It is very likely that they came from the same feature and that this was a hearth. The three oddly coloured pieces, due to the iron within the clays being affected by some process, are also all low fired. One piece also has charcoal added as a temper which usually only occurs if the clays are going to be submitted to a sudden and rapid change of temperature (for example in a smithing hearth). A number of chemicals will affect the iron in clays including processes that involve salt, which are numerable. With so little evidence no conclusions can be drawn here. The remaining group is of an indeterminate nature having no form or special characteristics. Many have been highly fired in both oxidising and/or reducing environments and could represent the structural remains of a building or a smaller entity such as an oven.

Conclusions.

This assemblage has a surprising variety of fired clays considering that it is such a small group. The evidence suggests the destruction or dismembering of a well-fired hearth and the presence nearby of some industrial process, however large or small scale, that may have involved salt (iron smelting also affects the clays but the lack of slags argues against this interpretation). The remainder of the assemblage is similar to the types of fired clays to be expected from any Romano-British site.

Great Gonerby to Marston Rising Main - GMB97

Environmental Archaeology Assessment

Two soil samples and a small collection of animal bones were collected from a Romano-British pit or enclosure ditch on the course of the Great Gonerby to Marston Rising Main within Gonerby parish. These were submitted for environmental study and assessment.

Methods

The soil samples were processed in the following manner. Sample volume and weight was measured prior to processing. The samples were washed in a 'Siraf' tank (Williams 1973) using a flotation sieve with a 0.5mm mesh and an internal wet-sieve of 1mm mesh for the residue. Both residue and float were dried, and the residue subsequently re-floated to ensure the efficient recovery of charred material. The dry volume of the combined 1st and 2nd flots was measured, and the volume and weight of the residue recorded. A total of 38 litres of soil was processed in this way.

The residue was sorted by eye, and environmental and archaeological finds picked out, noted on the assessment sheet and bagged independently. A magnet was run through each residue in order to recover magnetised material such as hammerstone and prill. The residue was then discarded. The float of each sample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, carbonised seeds, bones etc) was noted and their abundance and species diversity recorded on the assessment sheet. The float was then bagged. The float and finds from the sorted residue constitute the material archive of the samples.

The animal bone was recorded following the procedures used by the Environmental Archaeology Consultancy whose details are attached (see Appendix).

Results

A summary of the finds extracted from the soil samples is given in Table 1 and the individual contexts discussed below.

Table 1:

sample	cont.	vol mls	pottery wt/no	fired clay g.	bone wt g.	flot vl. mls	char- c'l*	charred grain*	charred chaff*	charred seeds#	snails#
1	52	28	38/16	7	3	5	2	1		2/2	1/1
2	51	10	3/1	109	20	5	2	1	1	2/2	

* categories for frequency of items: 1=1-10; 2=11-100; 3=101-250

initial figure frequency coded as above; second figure categories for diversity of species: 1=1-3; 2=4-10; 3=11-25

Context 52, sample 1

The sample was not particularly rich. The residue was composed of concreted sediment, iron stained gravel, ironstone and occasional burnt sandstone and gravel. Finds extracted from the dried residue included 16 sherds of pottery, a few pieces of fired earth and a few fragments of unidentifiable bone, approximately 50% of which was burnt.

The flot was small, included a few very small fragments of charcoal, a few charred cereal grains, other charred seeds and a snail. A couple of uncharred *Chenopodium* sp. seeds are

almost certainly modern contaminants. The cereals are poorly preserved but include grains of barley. The animal bone hand collected from this context comprised only four bones, all of cattle, two of which were dog gnawed.

Context 51, sample 2

The residue of this sample was similar to context 52. Finds included one sherd of pottery, several pieces of fired earth and a few bone fragments including a sheep metatarsus and fragments of burnt long bone shaft.

The flot was a little larger, relatively, than sample 1. It included a few tiny fragments of charcoal, several charred straw or grass stems, a few cereal grains, a single piece of cereal chaff, and several charred weed seeds, including probable legumes. The cereals include grains of wheat and barley, but most are poorly preserved. One fragmented cattle mandible of an immature animal was hand picked from this context during excavation.

The animal bones recovered by hand are listed in the attached appendix. Apart from those already mentioned above the only identified fragment was a single tooth from an adult sheep that was recovered from context 59.

Conclusions

Little can be said concerning these samples. There is no evidence of industrial activity and the food remains are consistent with domestic debris. There is a possibility that the charred stem fragments and chaff derive from cereal processing waste, perhaps originating locally, but the density of remains in the soil, for instance less than 1 grain per litre of sediment, suggests that this material reflects the general background of waste distributed around the site.

Acknowledgments

I should like to thank Alison Foster for processing the samples.

Bibliography

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THE ENVIRONMENTAL ARCHAEOLOGY CONSULTANCY

Key to codes used in the cataloguing of animal bones

SPECIES	BONE	SIDE	FUSION
BOS cattle	SKL skull	W - whole	Records the fused/unfused condition of the epiphyses
CSZ cattle size	TEMP temporal	L - left side	P - proximal; D - distal; E - acetabulum;
SUS pig	FRNT frontal	R - right side	N - unfused; F - fused; C - cranial; A - posterior
OVCA sheep or goat	PET petrous	F - fragment	
OVI sheep	PAR parietal	TOOTH WEAR - Codes are those used in Grant, A. 1982 The use of tooth	
SSZ sheep size	OCIP occipital	wear as a guide to the age of domestic animals, in B.Wilson,	
EQU horse	ZYG zygomatic	C.Grigson and S.Payne (eds) <i>Ageing and sexing animal bones from</i>	
CER red deer	MAN mandible	<i>Archaeological sites, 91-108.</i>	
CAN dog	MAX maxilla	Teeth are labelled as follows in the tooth wear column:	
MAN human	ATL atlas	h ldpm4/dupm4	f ldpm2/dupm2
UNI unknown	AXI axis	H lpm4/upm4	g ldpm3/dupm3
CHIK chicken	CEV cervical vertebra	I lm1/um1	
GOOS goose, dom	TRV thoracic vertebra	J lm2/um2	
LEP hare	LMV lumbar vertebra	K lm3/um3	
UNB indet bird	SAC sacrum		
MALL duck, dom.	CDV caudal vertebra	ZONES - zones record the part of the bone present.	
GULL gull sp.	SCP scapula	The key to each zone on each bone is on page 2	
FISH fish	HUM humerus		
UNIB bird indet	RAD radius	MEASUREMENTS - Any measurements are those listed in A.Von den Driesch (1976)	
UNIF fish indet	MTC metacarpus	<i>A Guide to the Measurement of Animal Bones from Archaeological</i>	
GSSZ goose size	MCI-4 metacarpus 1-4	<i>Sites, Peabody Museum Bulletin 1, Peabody Museum, Harvard, USA</i>	
BEAV beaver	INN innominate		
CROK crow or rook	ILM ilium	BUTCHERY - KN-knife cut; CH-chopped; B-burnt	
BUZZ buzzard	PUB pubis	GNAWING - DG-dog gnawed; RD-rodent gnawed	
CKSZ chicken size	ISH ischium		
FRTO frog or toad	FEM femur		
	TIB tibia		
	AST astragalus		
	CAL calcaneum		
	MTT metatarsus		
	MT1-4 metatarsus 1-4		
	PH1 1st phalanx		
	PH2 2nd phalanx		
	PH3 3rd phalanx		
	LM1-LM3 Lower molar 1 - molar 3		
	UM1-UM3 upper molar 1 - molar 3		
	LPM1-LPM4 lower premolar 1-4		
	UPM1-UPM4 upper premolar 1-4		
	DLPM1-4 deciduous lower premolar 1-4		
	DUPM1-4 deciduous upper premolar 1-4		
	MNT mandibular tooth		
	MXT maxillary tooth		
	LBF long bone		
	UNI unidentified		
	STH sternum		
	INC incisor		
	TTH indet. tooth		
	CMP carpo-metacarpus		

ZONES - codes used to define zones on each bone

SKULL	<ol style="list-style-type: none"> 1. paraoccipital process 2. occipal condyle 3. intercornual protuberance 4. external acoustic meatus 5. frontal sinus 6. ectorbitale 7. entorbitale 8. temporal articular facet 9. facial tuber 0. infraorbital foramen 	METACARPUS -	<ol style="list-style-type: none"> 1. medial facet of proximal artciulation, MC3 2. lateral facet of proximal articulation, MC4 3. medial distal condyle, MC3 4. lateral distal condyle, MC4 5. anterior distal groove and foramen 6. medial or lateral distal condyle
		FIRST PHALANX	<ol style="list-style-type: none"> 1. proximal epiphysis 2. distal articular facet
MANDIBLE	<ol style="list-style-type: none"> 1. Symphyseal surface 2. diastema 3. lateral diastemal foramen 4. coronoid process 5. condylar process 6. angle 7. anterior dorsal ascending ramus posterior M3 8. mandibular foramen 	INNOMINATE	<ol style="list-style-type: none"> 1. tuber coxae 2. tuber sacrale + scar 3. body of illium with dorso-medial foramen 4. iliopubic eminence 5. acetabular fossa 6. symphyseal branch of pubis 7. body of ischium 8. ischial tuberosity 9. depression for medial tendon of rectus femoris
VERTEBRA	<ol style="list-style-type: none"> 1. spine 2. anterior epiphysis 3. posterior epiphysis 4. centrum 5. neural arch 	FEMUR	<ol style="list-style-type: none"> 1. head 2. trochanter major 3. trochanter minor 4. supracondyloid fossa 5. distal medial condyle 6. lateral distal condyle 7. distal trochlea 8. trochanter tertius
SCAPULA	<ol style="list-style-type: none"> 1. supraglenoid tubercle 2. glenoid cavity 3. origin of the distal spine 4. tuber of spine 5. posterior of neck with foramen 6. cranial angle of blade 7. caudal angle of blade 	TIBIA	<ol style="list-style-type: none"> 1. proximal medial condyle 2. proximal lateral condyle 3. intercondylar eminence 4. proximal posterior nutrient foramen 5. medial malleolus 6. lateral aspect of distal articulation 7. distal pre-epiphyseal portion of the diaphysis
HUMERUS	<ol style="list-style-type: none"> 1. head 2. greater tubercle 3. lesser tubercle 4. intertuberal groove 5. deltoid tuberosity 6. dorsal angle of olecranon fossa 7. capitulum 8. trochlea 	CALCANEUM	<ol style="list-style-type: none"> 1. calcaneal tuber 2. sustentaculum tali 3. processus anterior
RADIUS	<ol style="list-style-type: none"> 1. medial half of proximal epiphysis 2. lateral half of proximal epiphysis 3. posterior proximal ulna scar and foramen 4. medial half of distal epiphysis 5. lateral half of distal epiphysis 6. distal shaft immediately above distal epiphysis 	METATARSUS	<ol style="list-style-type: none"> 1. medial facet of proximal artciulation, MT3. 2. lateral facet of proximal articulation, MT4 3. medial distal condyle, MT3 4. lateral distal condyle, MT4 5. anterior distal groove and foramen 6. medial or lateral distal condyle
ULNA	<ol style="list-style-type: none"> 1. olecranon tuberosity 2. trochlear notch- semilunaris 3. lateral coronoid process 4. distal epiphysis 		

Archive Catalogue of animal bone from Great Gonerby to Marston Rising Main, GMB97

site	context	species	bone	no.	side	fusion	zone	butch'y	gnaw'g	toothwear	measure- ment	comment	pres- erv'n
GMB97	50	SSZ	LBF	1	F			B				SHAFT FRAGMENT- 2PIECES-CALCINED	4
GMB97	51	BOS	MAN	1	L		23			h14I12J7		ANT HALF HORIZONTAL RAMUS- FRAGMENTED	3
GMB97	52	BOS	MAN	1	L							VENTRAL FRAG OF MANDIBLE IN CONTEXT 51	3
GMB97	52	BOS	MAN	1	L		7					ANT FRAG ASCENDING RAMUS	3
GMB97	52	BOS	MTC	1	L		12	CH	DG		Bp-67	PROX END AND SHAFT-FRAGMENTED- DISTAL END CHEWED OFF-PROX SHAFT WITH CHOP MARKS	3
GMB97	52	BOS	RAD	1	L		3		DG			PROX HALF SHAFT-END CHEWED-SMALL- JUV	3
GMB97	59	OVCA	UM3	1	R					K12			4

REPORT ON THE POTTERY FROM THE GREAT GONERBY TO MARSTON RISING MAIN, GMB97.

for LINDSEY ARCHAEOLOGICAL SERVICES

by MARGARET J. DARLING, M.Phil., F.S.A., M.I.F.A.

30 March 1998

QUANTITY AND CONDITION

The pottery totalled 350 sherds, weighing 5.619kg. The condition varied from poor, fragmented and abraded (from contexts 1A-1D), to fairly fresh, with quantities of joining sherds from contexts 50 and 52. There are no problems anticipated for long term normal storage. The pottery has been archived according to the guidelines of *The Study Group for Roman Pottery*, the archive including sherd count and weight. A copy of the archive database is below, and will be curated for future study.

The quantities by context are detailed on table 1, with the context date, and comments. Fairly extensive sherd links occurred between contexts 50, 52 and 55.

Table 1 Quantities, date, comments and links by context

	Sherds	Weight	Date	Comments	
1A	7	41	M3 OR LATER	SMALL ABRADED SHS	
1B	7	21	RO	SMALL ABRADED SHS	
1C	8	70	RO	SMALL ABRADED SHS	
1D	1	22	2C OR LATER	ABRADED	
50	144	1825	EM3	SEVERAL VESS W MULTIPLE JOINS	LINKS 52;55
51	13	155	3C PROB	F.FRESH SHS	
52	151	3165	EM3?	VESSELS W JOINING SHS	LINKS 50;55
53	1	37	E3 OR LATER		
55	12	267	L2-3?	F.FRESH	LINKS 50;52
56	2	7	RO/POSTRO		
57	1	1	RO?		
59	3	8	RO		
Total	350	5619			

OVERVIEW OF FABRICS AND FORMS

The grey vessels are all in sandy fabrics, although two lid-seated jars, nos 5 and 6, appear to differ in texture, and probably come from a different source. The main sandy fabric has a sparkly appearance due to sub-angular quartz on the surface; there are some flint inclusions and the fabric tends to be lighter grey. Nearly all the coarse sherds are from jars, including the two unusual lid-seated types (nos. 5 and 6) alongside cavetto-rim cooking pot types (no. 3). Two wide-mouthed bowls occurred, one from (50) having a substantially complete profile (no. 8). This bowl appears to be an early example of the type and pre-dates the main occurrence starting in the mid-later 3rd century. Other open forms are rare, including a grooved-rim bowl or dish and a chamfered base (not illustrated).

None of the forms is especially distinctive for source, but the wide-mouthed bowl (no. 8) and lid-seated jars are more likely to belong to a mid-to-north Lincolnshire tradition rather than to the Nene Valley style.

The fabrics represented are shown in Table 2.

Table 2 Fabric quantities

Fabric	Code	Sherds	%	Weight	%
Mortaria	MORT	4	1.15	100	1.78
Dressel 20 amphora	DR20	1	0.29	196	3.49
Cream	CR	3	0.86	9	0.16
Oxidized	OX	6	1.72	25	0.44
Oxidized fine	OXF	2	0.58	45	0.80
Oxidized light	OXL	3	0.86	26	0.46
Nene Valley colour-coated	NVCC	11	3.14	38	0.68
Nene Valley grey-ware	NVGW	18	5.15	139	2.47
Grey	GREY	218	62.29	2429	43.23
Grey sandy	GRSA	41	11.71	1846	32.85
Vesicular	VESIC	39	11.14	714	12.71
Post-Roman	PRO	4	1.14	52	0.93
Total		350	100	5619	100

The sandy grey GRSA has been separated and represents a single large jar of unusual type, sherds of which occurred principally in 52 but also in 50 and 55 (no. 2). This example can be paralleled in a group from Monument 97 in the Nene Valley (forthcoming in *East Anglian Archaeology*, figs. 40-41; information kindly supplied by Lindsey Rollo), dating to the mid 2nd century, but similar forms continue probably into the 3rd century. This is a particularly fine example, with thin walls, and may be earlier in the date range. Sherds of the same fabric were found in Field 1 at location B.

The grey vessels are strikingly similar to the range found in the rampart at the Park, Lincoln (P70) in large rubbish layers containing much late 2nd to 3rd century pottery, although deposited in the 4th century.

The large jar (no. 9) is unusual and derives from native forms in the later Iron Age in the area. Use of such forms continues well into the Roman period, and are still common in the mid to later 2nd century.

The vesicular jars (nos. 10 and 11) are notably hard fired and the vesicular appearance arises from the loss of inclusions, the nature of which are not clear. The likelihood is shell but other calcareous inclusions are possible. These do not closely match the shell-gritted jars seen in the Nene Valley, although the forms are similar, and would fit 2nd century dating.

The few oxidised sherds included a possible flagon base, and a fine fabric folded beaker base of the type normally made in Nene Valley Colour Coat (unillustrated). This has a grey fabric but traces of surviving surface suggest that it was originally oxidised. The few other sherds are otherwise unremarkable, and given the abrasion on some, certainty on date is impossible.

Pottery from outside the immediate area includes a single sherd from a Dressel 20 amphora from South Spanish, which would have contained olive oil. The mortaria sherds may represent two vessels, one being no more than a chip, but the other sherds are from a collared form. This type is common in Colchester, but also occurs at the Warwickshire Mancetter-Hartshill potteries; the fine fabric of these sherds are more likely to be from Colchester and area. The Nene Valley potteries contributes a few sherds of beakers, primarily from a probable plain-rimmed rouletted baggy type, of early to mid 3rd century date. There is also a rim fragment from a bowl or dish, also of 3rd century date, but possibly later. A single wide-mouthed jar accounts for nearly all the sherds of Nene Valley grey-ware. There are no samian sherds.

The contexts 50, 52 and 55 appear to be strongly linked by joining sherds, and 50 and 52 in particular contain a number of vessels with multiple joining sherds, suggesting a fairly primary deposition of rubbish.

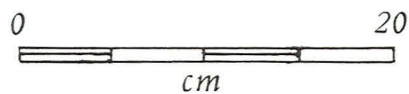
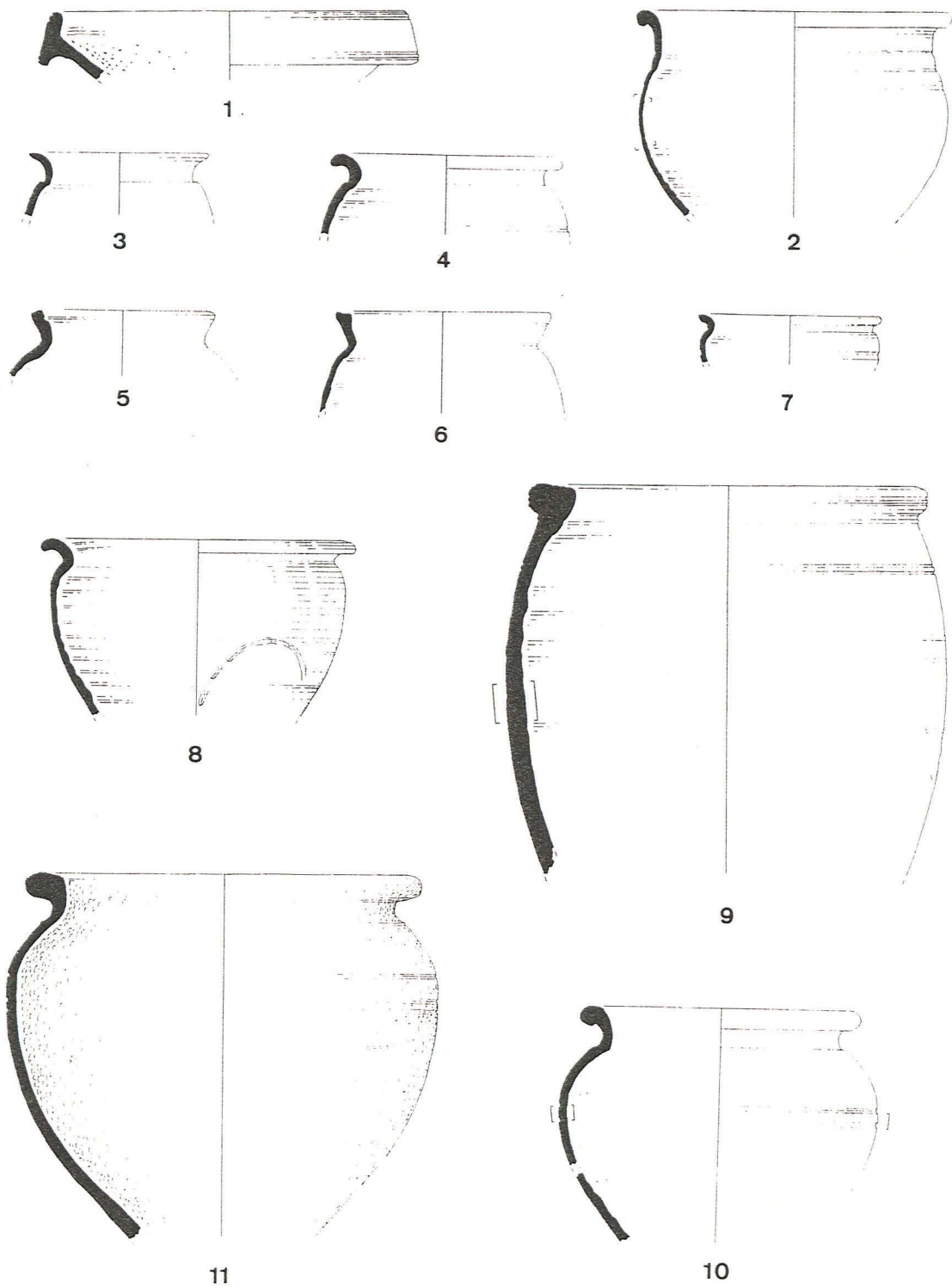
DATE

The earliest possible date would lie in the latter part of the 2nd century, but most of the pottery fits a 3rd century date. There are no sherds necessarily much later than the mid 3rd century.

ILLUSTRATED POTTERY CATALOGUE

Most of the pottery came from contexts 50 and 52, with sherd links with 51, and 55. The catalogue sequence is fabric, details, context

- 1 MOCO collared mortarium from the Colchester area, datable to c AD160-200. [50]
- 2 NVGW wide-mouthed jar. [50; 52]
- 3 GREY cavetto rimmed jar. [52]
- 4 GREY curved rim jar. [52]
- 5 GREY jar with distinctive lid seating, known in the the Lincoln city type series as J107. [51]
- 6 GREY jar with unusual lid seating. [55]
- 7 GREY small necked bowl. [50]
- 8 GREY wide-mouthed bowl. [50]
- 9 GRSA large jar of a form derived from native Iron Age types. [52; 50;55; 1B]
- 10 VESIC jar with rounded rim. [50;52]
- 11 VESIC large jar. [52]



Great Gonerby. Roman pottery. $\frac{1}{4}$ full size (D. Hopkinson)

Cxt	Fabric	Form	Dec	Ves	D?	DNo	Comments	Links	Shs	Wt
1A	GRSA	-	-	-	-	-	BS	-	1	4
1A	GREY	JBK	-	-	-	-	SM.PLAIN BASE;STRING	-	1	8
1A	GREY	-	-	-	-	-	MISC BSS	-	3	22
1A	VESIC?	-	-	-	-	-	BS	-	1	3
1A	NVCC	BFL?	-	-	-	-	FLANGE FR ONLY;ABR	-	1	4
1A	ZDATE	-	-	-	-	-	M3 OR LATER	-	-	-
1A	ZZZ	-	-	-	-	-	SMALL ABRADED SHS	-	-	-
1B	GRSA	-	-	-	-	-	BSS ABR	-	2	7
1B	GREY	-	-	-	-	-	BSS ABR	-	2	5
1B	VESIC?	-	-	-	-	-	BSS ABR	-	3	9
1B	ZDATE	-	-	-	-	-	RO	-	-	-
1B	ZZZ	-	-	-	-	-	SMALL ABRADED SHS	-	-	-
1C	GREY	-	-	-	-	-	BSS ABRADED	-	4	17
1C	GREY	-	-	-	-	-	BASE FRAG;DKGRY;ABR	-	1	9
1C	OXL	-	-	-	-	-	BS;ABR;F.SANDY LTBN	-	1	3
1C	PRO	-	-	-	-	-	GLAZED BS & FRAG	-	2	41
1C	ZDATE	-	-	-	-	-	RO	-	-	-
1C	ZZZ	-	-	-	-	-	SMALL ABRADED SHS	-	-	-
1D	OXL	F?	-	-	-	-	FTRG FRAG;LT CR-BN	-	1	22
1D	ZDATE	-	-	-	-	-	2C OR LATER	-	-	-
1D	ZZZ	-	-	-	-	-	ABRADED	-	-	-
							BASE/WALL AS NVCC			
53	OXF	BKFO	-	-	-	-	TYPE;?BURNT;GRYFAB;TRACES LTRB SURF	-	1	37
53	ZDATE	-	-	-	-	-	E3 OR LATER	-	-	-
51	GREY	J107	-	1	D	1	RIM/SHLDR LTGRY	-	2	29
51	GREY	J?	-	1	-	-	BSS;?SAME IN 50	50?	6	89
51	GREY	J?	-	3	-	-	BSS	-	5	37
51	ZDATE	-	-	-	-	-	3C PROB	-	-	-
51	ZZZ	-	-	-	-	-	F.FRESH SHS	-	-	-
55	GRSA	JL	-	-	-	-	BSS AS JB IN 50/52	50;52	2	173
55	NVGW	JWM?	-	-	-	-	BS POSS X VESS 50/52	50;52	1	4
55	GREY	JLS	-	1	D	2	RIM/SHLDR;UNUS.TYPE	-	4	39
55	GREY	J?	-	3	-	-	BSS	-	5	51
55	ZDATE	-	-	-	-	-	L2-3?	-	-	-
55	ZZZ	-	-	-	-	-	F.FRESH	-	-	-
52	GRSA	JL	-	1	D	3	RIMS/BSS;SOOTED	50;55	29	1456
52	VESIC	JL	-	1	D	4	RIMS/BSS;BURNT	-	11	428
52	VESIC	JRR	-	1	D	5	RIMS/BSS;JOINS	50	10	108
52	NVCC	BKPR?	ROUZ	-	-	-	BS CR FAB;PROB SAME IN	50	1	4
52	GREY	JCUR	-	-	D	6	RIM/SHLDR;STRONGISH CURVE	-	1	65
52	GREY	JCAV	-	1	D	7	RIM/SHLDR;CP TYPE	-	2	28
52	GREY	JEV	-	-	D?	-	RIM/PT SHLDR	-	1	12
52	VESIC	J	-	1	D?	-	RIMS;VPOOR CONDITION;LTGRY;NR U/CUT RIM	-	3	91
52	NVGW	JWM	-	1	D	8	RIMS/BSS JOINS	50;55	14	73
52	GREY	JCUR	-	1	-	-	RIMS FR;GRY-BN SURFS	-	3	20
52	GREY	JCUR	-	1	-	-	RIMS FR;LTGRY	-	2	9
52	NVGW?	BDTR	-	-	-	-	RIM/PT WALL;ABR	-	1	9
52	MORT?	M?	-	-	-	-	SOFT CR FINE ABR FR;?PT SPOUT	-	1	3
52	CR	JBK?	-	-	-	-	BS SHLDR GROOVED;SANDY CR	-	1	4
52	GREY	JL	-	-	-	-	BODY/PT BASE THICK LTGRY	-	1	210
52	GREY	J	-	-	-	-	PLAIN BASE	-	1	88
52	GREY	JB	-	-	-	-	BS GRYBN EXT;DKGRY INT	-	1	105
52	GREY	J	-	-	-	-	BASE STRING	-	1	14
52	OXL	-	-	-	-	-	ABR CHIP;LTRB	-	1	1
52	GREY	B	-	-	-	-	CHAMFERED BASE FRAG	-	1	34
52	GREY	J	-	1	-	-	BSS;SOFT BN INT;PROB JCUR	-	27	144
52	GREY	-	-	-	-	-	BSS	-	37	251
52	OX?	J?	-	-	-	-	BS;THIN WALL;GREY BURNT?	-	1	8
52	ZDATE	-	-	-	-	-	EM3?	-	-	-

52	ZZZ	-	-	-	-	-	-	VESSELS W JOINING SHS	-	-	-
50	DR20	A	-	-	-	-	-	BS F.SANDY	-	1	196
50	MORT	MCO	-	1	D	9	-	RIM/BS;SOFT CR;MIXED TG?	-	2	78
50	MORT	MCO	-	-	D	9?	-	RIM ONLY;GROOVED TOP RIM;SAME SOFT CR FAB	-	1	19
50	NVCC	BKPR?	ROUZ	1	-	-	-	BSS;SAME IN 52	52	4	13
50	NVCC	BKCOR	-	-	-	-	-	RIM FR;CR-PINK	-	1	1
50	NVCC	BK	-	-	-	-	-	TINY BS;MOST CC LOST	-	1	1
50	NVCC	BK	-	-	-	-	-	BS;CR-LTBN	-	1	3
50	NVCC	B?	-	-	-	-	-	BURNT FLAKE;CR	-	1	3
50	NVCC	BDTR	-	-	D?	-	-	BURNT RIM FRAG	-	1	9
50	NVGW	JWM	-	1	D	8	-	RIMS JOINS	52;55	2	53
50	GREY	BDGR	-	-	D?	-	-	RIM FR;PT WALL	-	1	11
50	GREY	JCAV	-	-	D?	-	-	RIM/SHLDR;CP TYPE	-	1	23
50	GREY	JCUR	-	-	-	-	-	RIM FRAG	-	1	6
50	VESIC	J	-	-	D	5	-	RIM FRAG;FOLD-OVER TYPE;JOINS	52	1	13
50	GREY	BNK	-	-	D	10	-	RIM/WALL;V.SMALL EG	-	1	9
50	GREY	JL	-	1	D?	-	-	RIMS;CURVED;LGE JNN?	-	2	83
50	GREY	BWM	BL	1	D	11	-	RIMS/WALL;BURNISH LINE DEC	-	29	331
50	GREY	J?	-	1	-	-	-	BSS;BN INT;AS JCUR IN 52	52?	22	180
50	GRSA	JL	-	1	-	-	-	BSS AS IN	50	7	206
50	VESIC	J	-	-	-	-	-	BSS AS IN	50	7	39
50	GREY	J?	-	1	-	-	-	BSS;SANDY;RB-GRY EXT	-	11	124
50	GREY	J?	-	1	-	-	-	BSS	-	7	52
50	GREY	BWM	-	-	-	-	-	NECK	-	1	25
50	VESIC	J?	-	-	-	-	-	LTGRY ABR BS;PROB SAME	52	1	17
50	GREY	J	-	-	-	-	-	PLAIN BASE;STRING	-	1	59
50	GREY	-	-	-	-	-	-	MISC BSS	-	29	238
50	OX	-	-	-	-	-	-	MISC BSS;F.SANDY RB;SOFT ABR	-	3	14
50	OXF?	-	-	-	-	-	-	BS;SOFT ABR LTRB	-	1	8
50	CR	CLSD	-	-	-	-	-	VBURNT BS	-	1	1
50	CR	-	-	-	-	-	-	ABR PINK-CR FRAG	-	1	4
50	PRO	-	-	-	-	-	-	BS W GLAZE TRACES	-	1	6
50	ZDATE	-	-	-	-	-	-	EM3	-	-	-
50	ZZZ	-	-	-	-	-	-	SEVERAL VESS W MULTIPLE JOINS	-	-	-
56	OX	-	-	-	-	-	-	ABR BS;F.FINE	-	1	2
56	ZDATE	-	-	-	-	-	-	RO/POSTRO	-	-	-
56	PRO	-	-	-	-	-	-	GLAZED BS	-	1	5
57	OX	-	-	-	-	-	-	ABR CHIP	-	1	1
57	ZDATE	-	-	-	-	-	-	RO?	-	-	-
59	GREY	J	-	-	-	-	-	RIM CHIP	-	1	2
59	VESIC	-	-	-	-	-	-	BS	-	1	4
59	VESIC?	-	-	-	-	-	-	ABR FRAG	-	1	2
59	ZDATE	-	-	-	-	-	-	RO	-	-	-

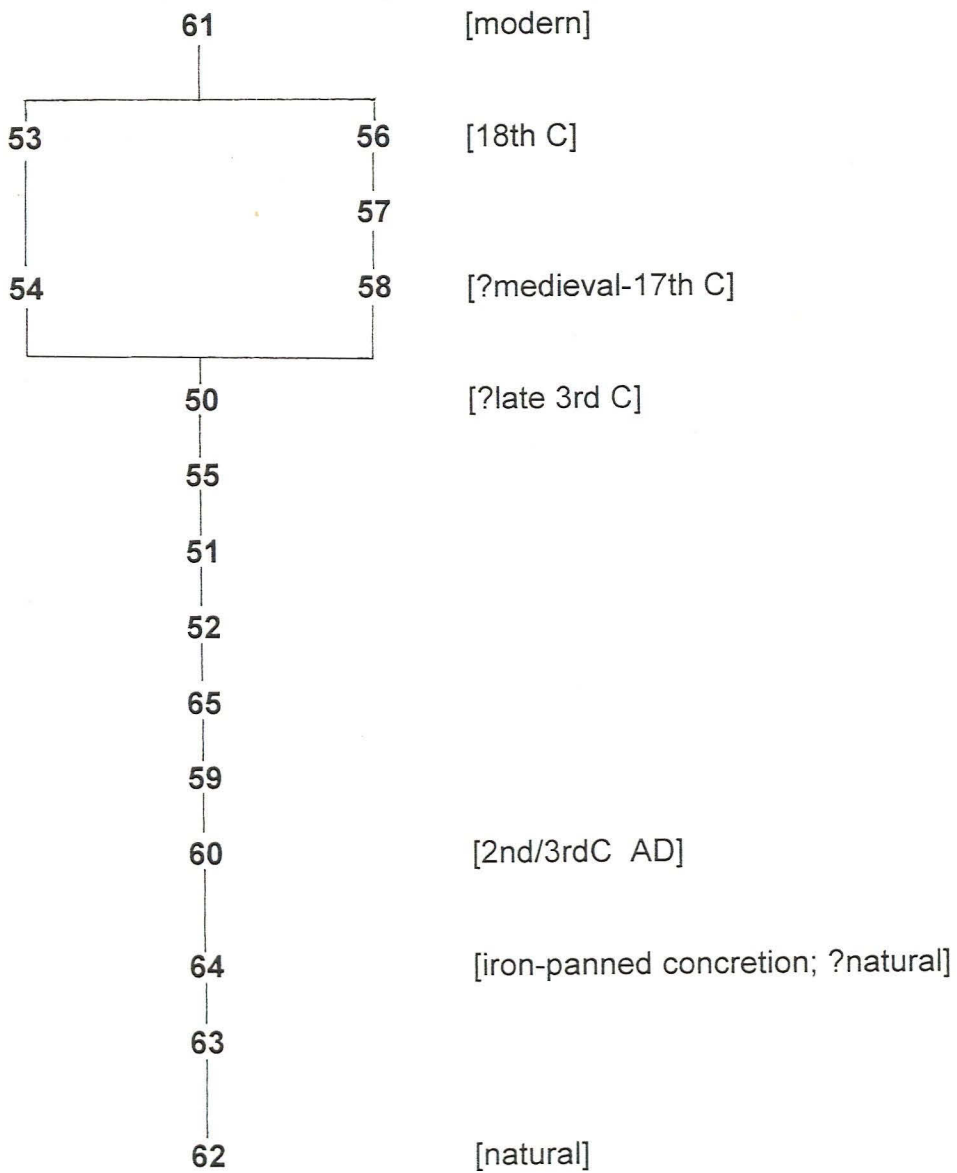
Appendix 5

Excavation Context List

Context No.	Type	Below	Above	Description	Date
50	fill	54, 58	55	brown silt/clay with fired clay flecks; ?buried topsoil horizon	Roman:mid-3rd C
51	fill	55	52	dark brown silt clay with fired clay, band of heated clay at base of fill. ?Deliberate filling	Roman: ?3rd C
52	fill	51	59	grey clay, main fill of 60. ?Natural silting	Roman: mid-3rd C
53 [=56]	fill	61	54	grey/yellow clay; ?redeposited natural fRoman slumping of sides	Post-med:17th C
54 [=58]	cut	53	50	east-west aligned wide linear feature; ?medieval furrow	Post-med:17th C
55	fill	50	51	brown/grey silty clay; probably a mixing of 50 and upper fill 51	Roman: mid-3rd C
56 [=53]	fill	61	57	grey/yellow clay; ?redeposited natural fRoman slumping of sides	Post-med: 14th-16th C
57	fill	56	58	light grey clay; primary silting of 58	Post-med:17th C
58 [=54]	cut	57	50	east-west aligned wide linear feature; ?medieval furrow	Post-med:17th C
59	fill	52	60	light grey clay primary fill of 60	Roman
60	cut	59	64	ditch terminal or part of large pit; used as rubbish pit	Roman
61	layer	53, 56	modern topsoil, 0.25m deep	modern
62	natural	63	yellow clay, with orange/brown sand and fine brash in grey sand matrix
63	cut	64	62	east-west linear feature, probably natural
64	fill	60	63	grey sand and flint brash, with ironstone conglomerate lumps

Appendix 6

Excavation Matrix



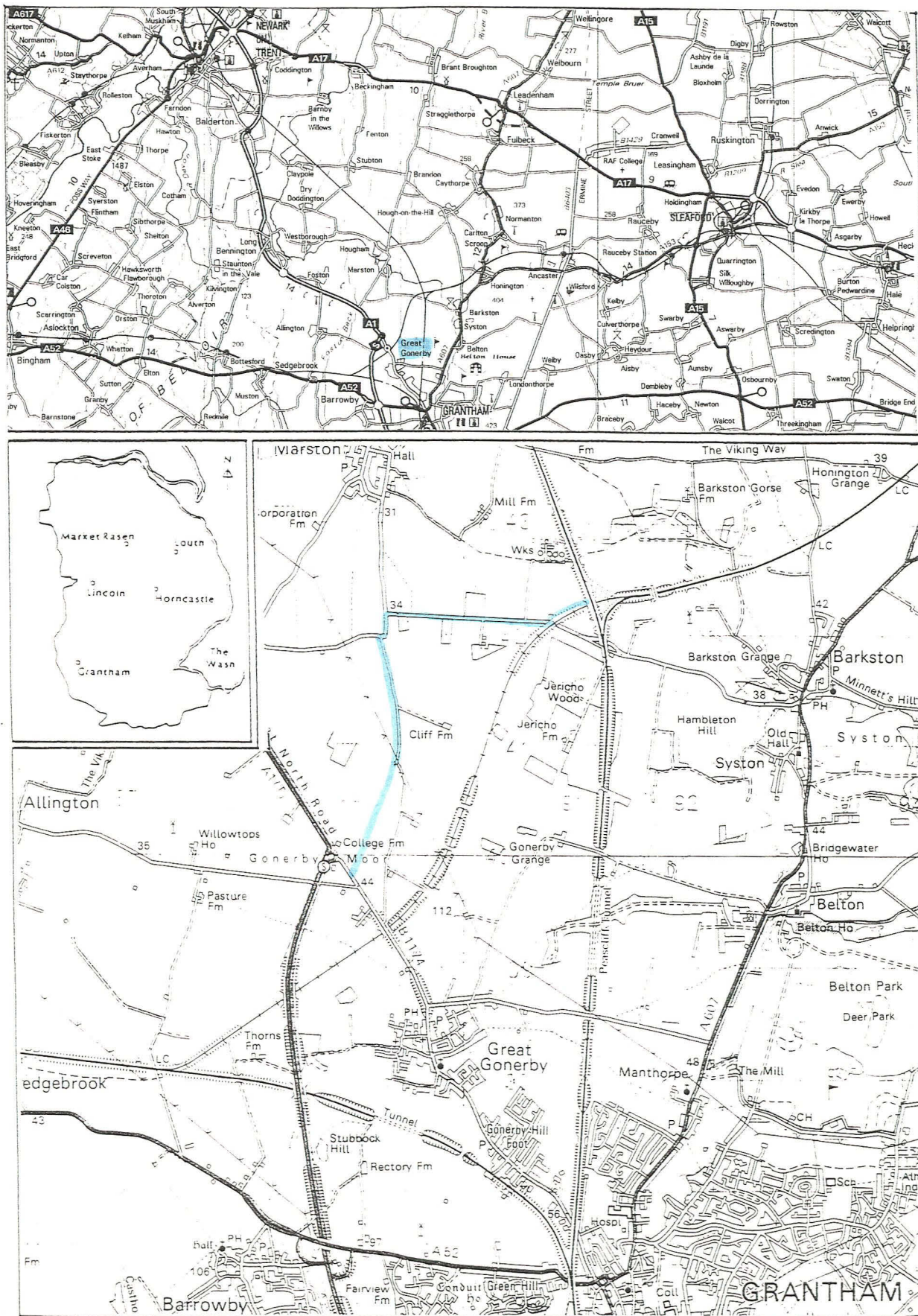


Fig. 1 Location of Gonerby Moor and Marston (based on the 1990 Ordnance Survey 1:50,000 Landranger map Sheet 130. © Crown Copyright; reproduced with the permission of the Controller of HMSO. LAS Licence no. AL 50424A).

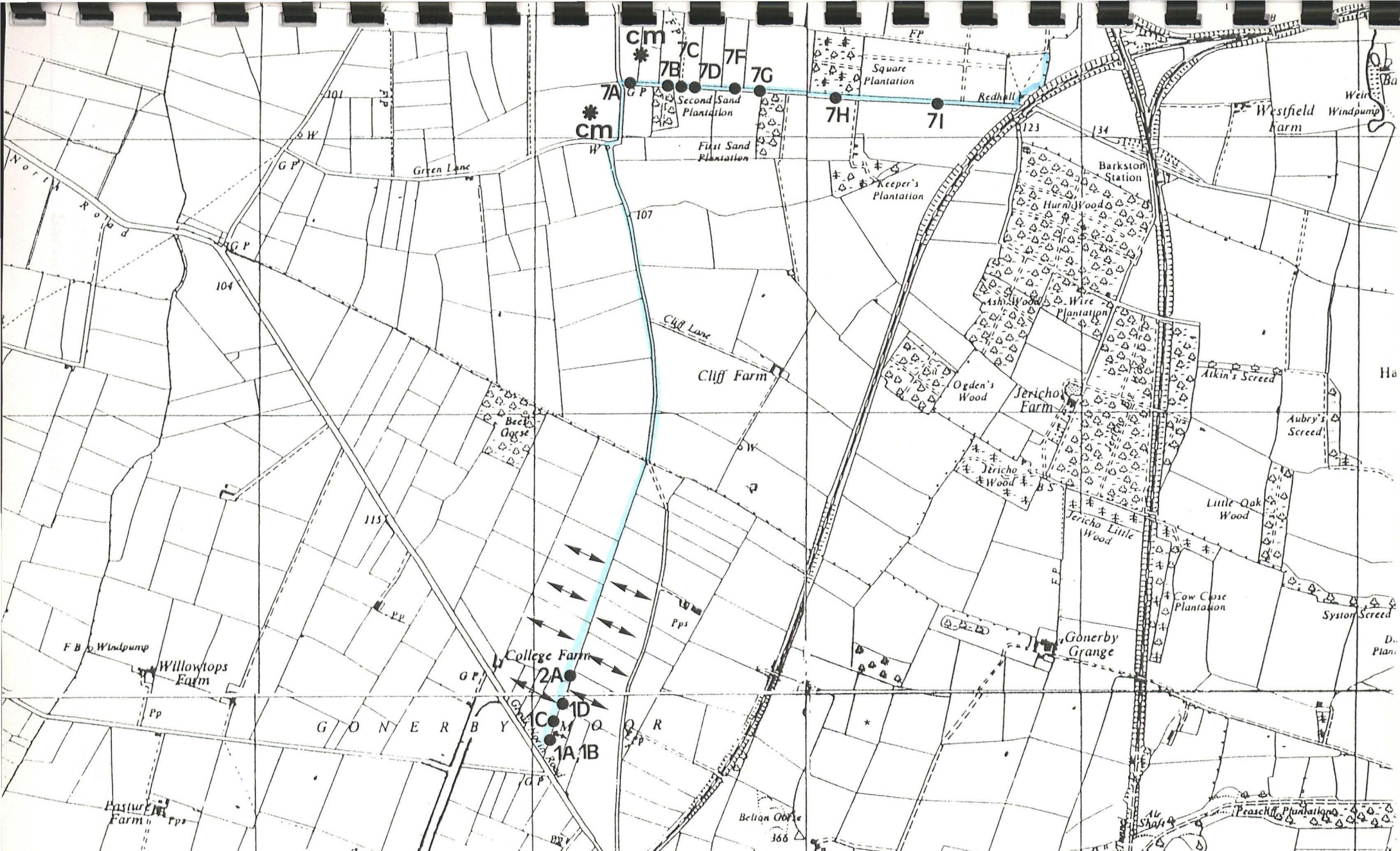


Fig. 2 The pipeline route, showing findspots, traces of ridge and furrow and cropmark sites. (Based on the 1957 Ordnance Survey 1:25,000 map Sheets SK 83, 84, 93 and 94. © Crown Copyright; reproduced at enlarged scale with the permission of the Controller of HMSO. LAS Licence no. AL 50424A).

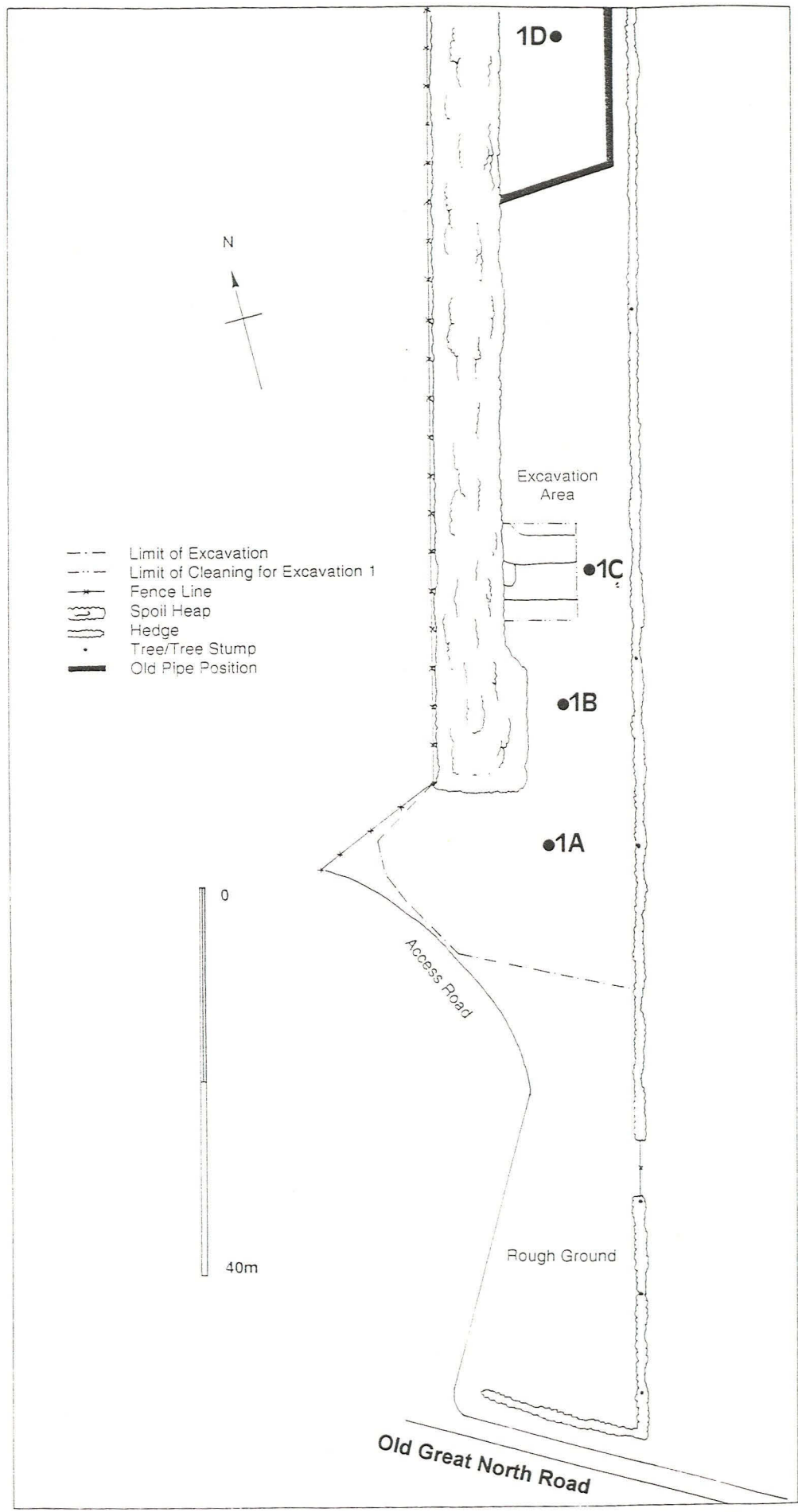


Fig. 3 Location of archaeological features and findspots in Field 1 north of the Old Great North Road (McDaid, after the Anglian Water Services dwg. no. 92/70028/101).

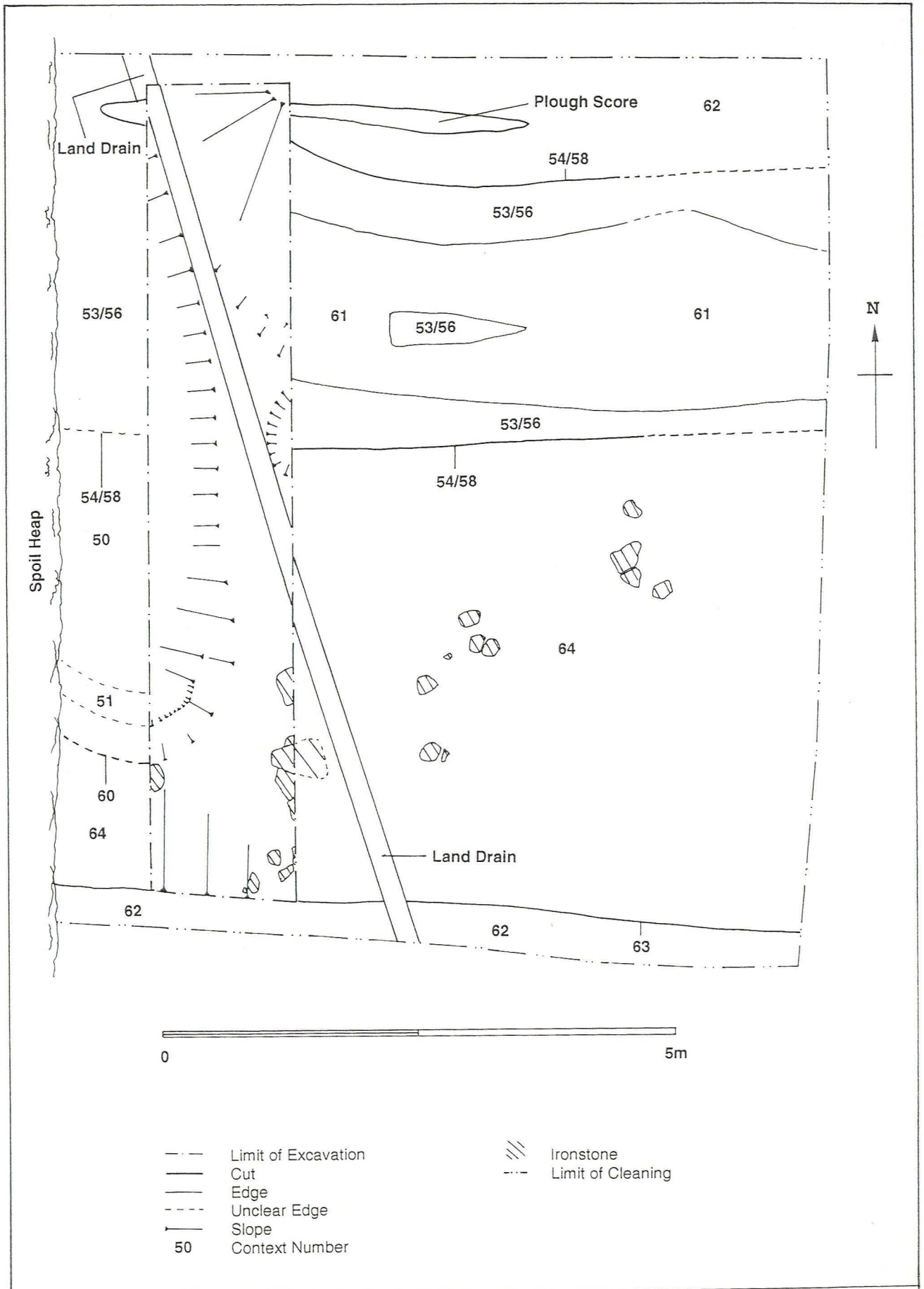


Fig. 4 Plan of plough furrow 54 and Romano-British feature 60 (McDaid).

Fig. 5 Section across the Romano-British feature 60 (McDaid and Tann).

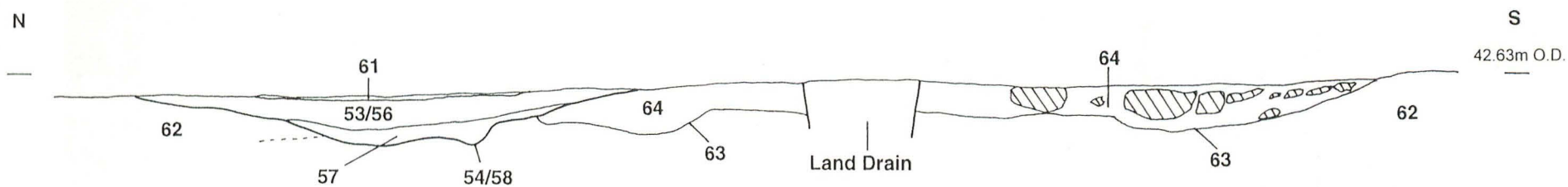
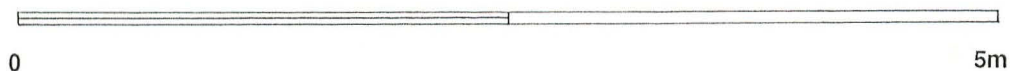
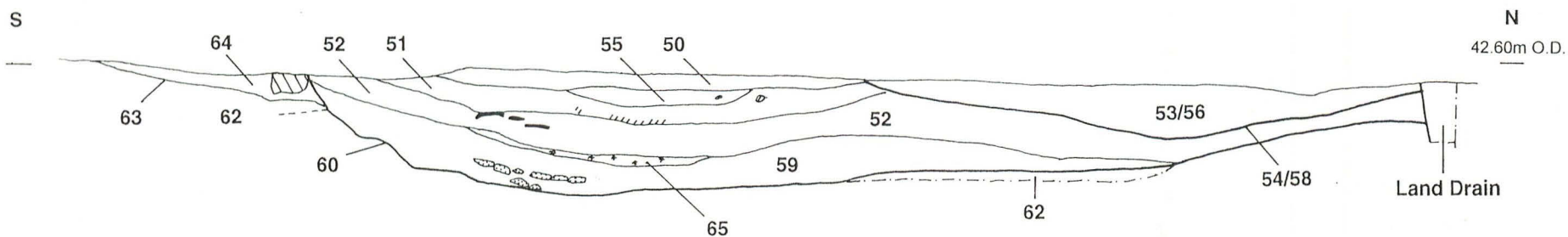


Fig. 6 Section across the iron-panned concretion 64 and plough furrow 54 (McDaid and Tann)



- | | | | |
|-------|---------------------|-----|-----------------------|
| --- | Limit of Excavation | /// | Ironstone |
| — | Cut | ••• | Sandstone |
| — | Edge | * | Charcoal Flecks |
| - - - | Unclear Edge | /// | Burnt Clay/Fired Clay |
| ▲ | Slope | — | Pottery |
| 50 | Context Number | | |



Pl. 1 Classic curving earthworks of medieval or post-medieval ridge and furrow, surviving in pasture field east of Field 1 (looking east). The furrows stop at a broad headland in the foreground but furrows cut by the new pipe trench proved that this is not a medieval field boundary hedgeline.

Pl. 2 Site of the archaeological excavation close to the southern end of the pipeline (looking NE).





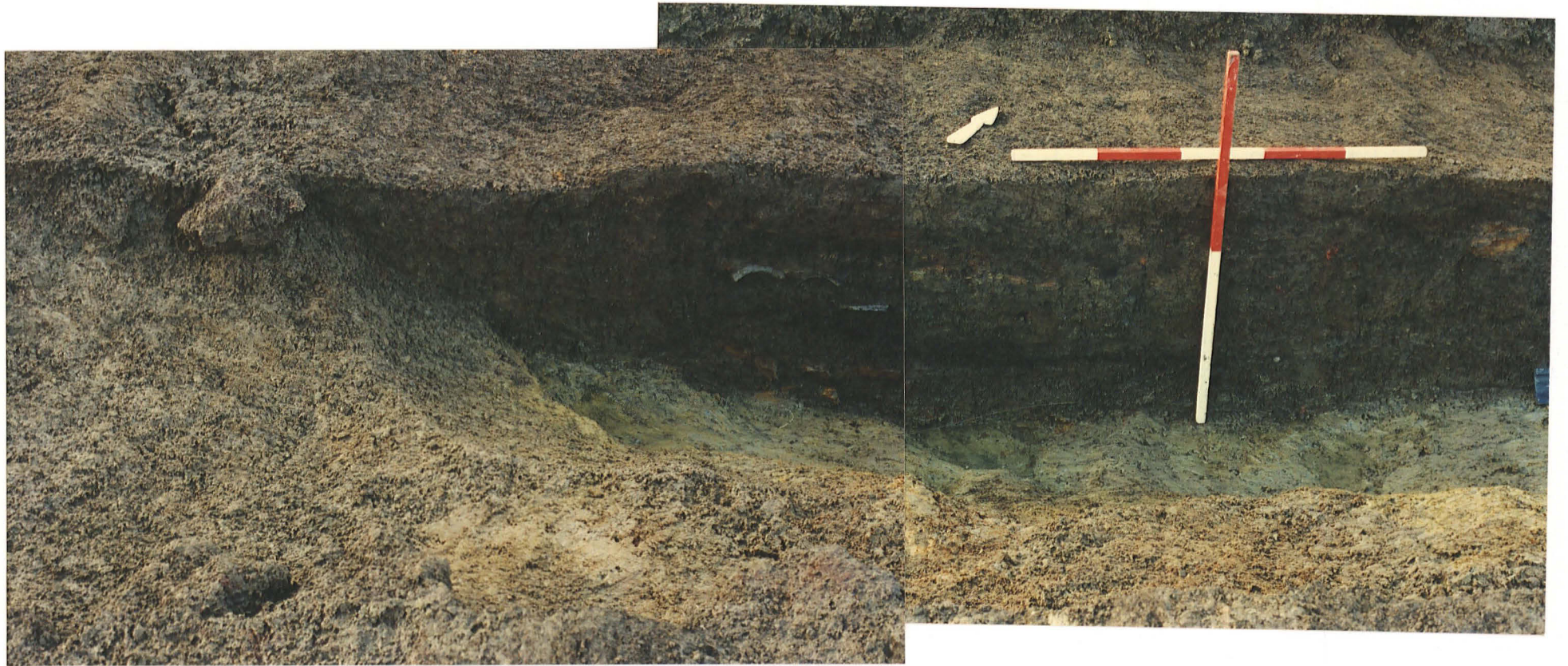
Pl. 3 Roman pottery sherds within the sectioned fill of ditch or pit 60 (looking north). Light brown clay loam (top right) marks a post medieval plough furrow, cut by a modern gravel-filled land drain.

Pl. 4 Detail of the post-medieval plough furrow 54 cutting into the much darker fill of the Roman ditch or pit 60 (looking NW).





Pl. 5 Brown fill of medieval/post-medieval plough furrow 54 visible in pipe trench face close to field hedge (looking east).



Pl. 6 SE end (or corner) of Romano-British feature 60, with pottery and fired clay visible in its fills (looking NW; scales 1m).



Pl. 7 Panoramic view of the arable field beside the easement, Field 1: the Romano-British site extends into this field but cannot be seen at ground level. Looking west from beside the archaeological excavation; the A1 roundabout is visible top left.



Pl. 8 Section across iron-panned concretion deposit 64 (looking east).

Pl. 9 Dark brown soil, perhaps fill of unidentified archaeological features, visible at top of pipe trench at southern end of pipeline (looking SW to access road).





Pl. 10 Green lane to south of Cliff Lane (looking north). The pipe trench was excavated through modern rubble at the eastern side of the track.

Pl. 11 Junction of Cliff Lane and Barkston Road (looking north). Note the higher ground in the rear field, coinciding with a known cropmark site of a prehistoric or Romano-British enclosure.





Pl. 12 Pipe trench section at Sand Lane/Barkston Road junction (7A), showing sand bedding for the road sealing black sand from a buried ground surface or ditch fill (scale divisions 0.2m).

Pl. 13 Detail of the black sand in pipe trench section (7A) at Sand Lane/Barkston Road junction (scale divisions 0.2m).





Pl. 14 Tree root at trench base 7A, Sand Lane/Barkston Road junction.

Pl. 15 Black sand layer 7D, possibly buried turf, below post-medieval road foundation.





PI. 16 Pitched limestone rubble used for road edge consolidation, 7F.

PI. 17 Red clay drain pipe below road, in former roadside ditch, 7H.





Pl. 18 Topsoil in field to south of Sand Lane (71), with hillscarp to east (looking SE).

Pl. 19 The pipeline easement north of Sand Lane, with railway to east (looking NE).

