

97/18



LINDSEY ARCHAEOLOGICAL SERVICES

**Land off Watery Lane, Mareham le Fen
Archaeological Evaluation**

NGR: TF 2772 6114

Site Code: MFW 97

LCNCC Accession No. 258.97

Archaeological Evaluation

for

Owl Homes

Report No. 270

December 1997

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Contents	
Summary	1
Introduction	1
The Site	1
Archaeological Background	2
Evaluation Results	2
Discussion	9
Conclusion	10
Acknowledgements	10
Contents of Site Archive	10

Appendix 1 Context Summary

Appendix 2 Pottery Report

by Jane Young

Appendix 3 Environmental Report

by James Rackham

Appendix 4 Animal Bone Report

by Richard Moore

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Figures

Fig. 1 Location of proposed development, Watery Lane Mareham le Fen (based on O.S. 1:25,000 sheet TF 26. Crown Copyright 1953. Reproduced with the permission of the controller of HMSO. LAS Licence No. AL 50424A).

Fig. 2 Location of Trenches, based upon a plan provided by Owl Homes.

Fig. 3 a) Trench 1, plan b) Trench 2, plan

Fig. 4 Trench 3, plan and section

Fig. 5 Trench 4, plan and section

Fig. 6 Trench 5, plan and section

Fig. 7 Trench 6, plan and section

Fig. 8 Trench 7, plan and section

Fig. 9 Trench 8, plan

Fig. 10 Trench 9, plan

Fig. 11 Trench 10, plan and section

Fig. 12 Sections of features from Trenches 1-3

Fig. 13 Sections of features from Trenches 4-6

Fig. 14 Sections of features from Trenches 8-10

Plates

Pl. 1 Trench 1, general view looking NE

Pl. 2 Feature 105 looking NW

Pl. 3 Feature 107 looking E

Pl. 4 Trench 2, general view looking WSW

Pl. 5 Trench 3, general view looking NW

- Pl. 6 Features 319 and 315 looking NE
- Pl. 7 Feature 311 looking WSW
- Pl. 8 Trench 4, general view looking SE
- Pl. 9 Feature 405 looking E
- Pl. 10 Features 418 looking WSW
- Pl. 11 Feature 414 looking SE
- Pl. 12 Trench 5, general view looking NE
- Pl. 13 Feature 508 looking WSW
- Pl. 14 Trench 6, general view looking NNE
- Pl. 15 Feature 603 looking SE
- Pl. 16 Feature 706 looking S
- Pl. 17 Feature 718 looking S
- Pl. 18 Trench 8, general view looking ENE
- Pl. 19 Feature 804 looking SE
- Pl. 20 Feature 814 looking ENE
- Pl. 21 Trench 9, general view looking N
- Pl. 22 Trench 10, general view looking ENE
- Pl. 23 Feature 1012 looking NW
- Pl. 24 Feature 1006 looking E

Land off Watery Lane, Mareham le Fen Archaeological Evaluation

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Planning Application S/114/01186/95

Summary

An evaluation of 10 trenches in the centre of Mareham le Fen revealed a number of pits, probably for domestic refuse containing pottery of 12th to 15th century date. Also present were linear features, probably representing field boundaries. The pits are likely to relate to medieval buildings, the remains of which probably exist below the current housing on the street frontages and thus lie beyond the proposed development. The only street frontage that lies within the area of development is off Watery Lane. This was investigated during the evaluation but failed to produce evidence of significant archaeological remains.

Introduction

Lindsey Archaeological Services was commissioned to undertake an archaeological evaluation at land off Watery Lane, Mareham le Fen, Lincolnshire on behalf of Owl Homes. The evaluation was carried out in accordance with the brief set by the Archaeology Section of Lincolnshire County Council dated January 1996 and amended in a letter dated 22 February 1996. The aims of the evaluation were to:

- establish the presence or absence of archaeological remains and their location within the development area.
- determine the quality and extent of any remains.
- provide enough information to enable options for further archaeological work prior to or during development to be determined.

The Site

The proposed development comprises 21 residential plots on 1.2ha of land off Watery Lane to the south-west of the parish church. The land adjacent to Watery Lane is used as a farm yard with upstanding buildings and a concrete yard (this was an area unavailable for evaluation). The rest was, at the time of evaluation, under rough grass except for the area of Trench 5 which was located in an old orchard.

Apart from the area fronting onto Watery Lane most of the site is behind existing housing which lies between the proposed development and the street frontages.

Archaeological Background

Mareham le Fen lies on the edge of the Lincolnshire silt fens. Archaeological research in the region has shown that the Lincolnshire fen edge was an important focus for settlement in the prehistoric and Roman periods. There is no evidence for these periods noted in the immediate vicinity except for a Bronze Age axe (found at TF 2830 6140).

Mareham le Fen was recorded in the Domesday Survey of 1086 as being sokeland of Horncastle. A possible manor site located to the NE of the proposed development although its precise location has yet to be determined.

A market and a fair are also recorded in the parish during the medieval period which indicates that the village was a local centre. It seems likely from the topography of the village that the main focus of the settlement was to the east of the proposed development closer to the church and the manor house, which also may have been the location of the market and fair.

Archaeological investigation from the west of the village has revealed a 13th century roof tile kiln. The position of the proposed development area, close to the Parish church and the village green, indicates the potential of archaeological remains relating to the early development of the village.

Mareham has the highest survival of mud and stud cottages in Lincolnshire, perhaps an indication of the relatively minor impact of post-medieval development in the core of the village.

Evaluation Results

Trench 1 (Pl. 1 and Fig. 3a)

This trench was located adjacent to Watery Lane between a barn to the south and a residential dwelling to the north. It was orientated NE-SW and its dimensions were 13m by 1.6m (the trench was shortened from the original specification due to the need for continued access to part of the farmyard).

The trench was excavated through approximately 0.18m of a dark brownish grey silty sand topsoil onto 0.12m of disturbed material containing occasional brick fragments and other modern building debris (**102**). This in turn overlay 0.12m of mid greyish brown sandy silt (**103**). The features in this trench were sealed by the above deposits and cut into a mid brownish orange sand containing rounded stones (**104**).

Two features were uncovered in this trench. The first (**105**), (Pl. 21 and Fig.12a) was located 0.40m from the SW baulk, was partially obscured by the NW baulk. In profile it was 0.78m wide and 0.26m deep with convex sides and a rounded base. There was a notable break of slope at the approximate mid point of the SE slope. Its single fill (**106**) was a dark brownish grey sandy silt containing and flint

fragments and rounded stones. This deposit contained six sherds of pottery dated to the 16th century (Appendix 2).

The second feature in this trench (**107**) (see Pl. 3 and Fig.12b) protruded 1.5m from the NE baulk. It was 0.76m wide with a steep NW side and a shallow SE side. Its single fill (**108**), a light brown grey sandy silt, contained a single flint blade.

Trench 2 (Pl. 4 and Fig. 3)

Located north of the farm buildings, this trench was 15m by 1.9m orientated NE-SW. It had 0.25m of a dark grey black sand silt (**200**) overlying a mid grey silt containing occasional flints and pebbles (**201**). This deposit overlay the archaeological features which were cut into natural, orange sand with patches of gravel (**212**).

There were five features located in the trench, concentrated in the SW part. A small pit (**210**) (Fig.12c), located approximately 0.14m from the SW baulk was oval in plan but was partially obscured by the SE baulk. The profile showed a shallow slightly concave cut 0.30m deep and at least 0.65m long. Its single fill (**211**) was a mid grey brown silt with occasional flints.

A second pit (**208**) (Fig. 12b) was located approximately 3m from the SW baulk again partially obscured by the SE baulk. It had a shallow rounded profile and its single fill (**209**) was a mixture of mid brown clay-silt-sand and orange sand with flints.

A third pit (**202**), located 3.5m from the NW baulk, was 0.24m wide and 0.15m deep. It contained a mid grey brown silt with occasional small flints (**203**).

Two small depressions (**204**) and (**206**) (Fig.12e) approximately 1m to the NE of (**202**). Both of these features contained flecks of charcoal, but were probably natural.

None of the features in the trench contained any finds. The only dating from this trench was a single sherd of pottery from the topsoil, which was so abraded it was impossible to closely date but was either 13th or 19th/20th century. These shallow features may represent significantly truncated archaeological features or natural depressions, probably caused by tree activity.

Trench 3 (Pl. 5, Fig.4)

Features in Trench 3 were overlain by approximately 0.60m of overburden which consisted of a black humic topsoil (**300**) which overlay a deposit of crushed chalk and lenses of orange brown sand (**301**) infilling modern depressions. This in turn overlay a dark grey sandy silt (**302**) which sealed the features in this trench.

An irregular shaped feature at the NW end of the trench was a treebole (313) and a second feature at the SE end appeared to be a natural depression filled with the overlying deposit (317) (Fig.12i).

A large pit (311) (Pl. 7 and Fig.12j) was partially obscured by the NE section. It was 2.8m wide at its widest visible point. The pit had steeply sloping sides and contained four silty sand fills (312) which contained a single sherd of tile dated to 13th-16th century; (322); and (323) which contained 3 sherds of pottery dated 13th to 15th century.

Some undercutting occurs in the SW part of the (311) and it appears to follow a deposit of natural white sand within the natural. It seems likely that the pit was originally used to quarry this sand and was later used as a convenient rubbish dump.

Posthole (309) (Fig.12h) was located to the SW of (311). It was an oval feature 0.5m wide and 0.5m deep with relatively straight sides and a rounded base. The slightly less steep eastern side was possibly created during the removal of the post. It contained a mid brown clay-silt-sand (310).

An elongated oval feature (305), probably a posthole, was uncovered against the SW section. It had a relatively steep sided flat bottomed profile 0.40m by 0.20m deep. The elongated nature of the feature may have been caused by the removal of the post. Its fill was a mid grey brown silt sand with occasional flints (306).

Pit (315) (Pl. 6 and Fig.12g) was similar in plan to (309) but much shallower and with no evidence of steep sides that would hold a post. The fill (316) was a dark grey silt sand with occasional flints.

A small shallow pit (319) (Pl. 6) was located against the SW baulk. It was approximately 0.70m wide and 0.20m deep and contained a mid brown silt sand with occasional flints (320).

Trench 4 (Pl. 8 and Fig. 5)

This trench was located SE of the farm complex in an area of rough grass and trees and was orientated NW-SE. It was 15m by 1.8m and excavated to a depth of between 0.80m and 1.1m.

The trench had approximately 0.40m of dark grey-black silty sand topsoil (401) overlying a mid yellowish brown silty sand (402) up to 0.30m deep which in turn overlay a dark greyish brown silty clay 0.40m deep.

Features (426), (428) and (430) dug through from the topsoil indicating a modern origin and (422) was dug from just below the topsoil again suggesting a relatively recent origin. The significant archaeological features sealed from below (403) and dug into the grey-orange sand and gravel natural.

A concentration of features in the NW of this trench have been obscured in section by modern disturbance but the layout of features can be clearly seen on the plan.

A pit (405) (Pl. 9, Fig. 13c), partially obscured by the SW section, was very shallow with gently sloping sides and a flat base. This feature contained three fills: the uppermost was a mid brownish orange sandy silt with occasional gravel (406) which overlay a mid grey brown silt sand (407) containing a single sherd of 13th to 15th century pottery. This in turn overlay a dark brown grey sandy silt (408).

Pit (405) cut a linear feature (409) which ran NE-SW across the NW part of the trench. It contained a light brownish grey sandy silt (410) which in turn overlay a thin deposit of mid orange grey sandy silt (411) which contained a single piece of 5th to 8th century pottery. From the section it appears that the modern feature (430) was cut into (409), truncating its upper levels.

A narrow gully (418) ran parallel to (409), 0.55m to the SE (Pl. 10). This was cut by the modern pit (422) at the NE baulk. The gully was shallow and rounded and filled with a mid brown-grey silty-sand.

A post hole (420) was truncated by (418), and contained a mid brownish grey fill (421). This feature and (418) were both cut on the SE side by the modern pit (433).

Two post holes were located SE of the above features (414) (Pl. 11 and Fig. 13b) adjacent to the NE baulk was oval in shape and 0.3m wide by 0.3m deep with straight steep sides and a flat base. It contained a mid brown-grey silty sand (415).

(416) was located immediately to the west (Fig.13a), 0.30m wide by 0.28m deep. It has steep sides and a flat base and contained a mid greyish brown sandy silt.

A small shallow pit (412) was located approximately 0.60m NW of 409. It was 0.6m long by 0.5m wide and 0.5m deep, had shallow concave sides and contained a mid brownish grey sandy silt.

Trench 5 (Pl. 12 and Fig. 6)

This was located east of the farm yard. The trench was orientated ENE-WSW and 15m by 2m. It was excavated to a depth between 0.75m and 1m.

This trench proved to be heavily disturbed by modern activity associated with the nearby timber yard. Deposit (513) in the WSW part of the trench consists of modern debris which included plastic and modern bricks. This deposit extended to a depth of at least 0.40m below the excavated surface.

An irregular feature (511) was located against the SSE section, partially obscured by the baulk (Fig.13f). It was approximately 1.2m wide and 1.2m long with concave sides and a flat base. Its single fill was a mid orange-grey silty-sand (512).

A shallow linear feature (506) was located running NNE-SSW across the trench. This feature was 1.10m wide and 0.20m deep. Its fill was a mid brownish grey silty sand (507). Cut through (507) was a probable post hole (508) (Pl. 13 and Fig.13d) 0.40m by 0.50m by 0.40m deep. It had a single fill, (509) a dark brown sandy clay.

A large feature (503) was cut into the ENE part of the trench from just below the topsoil, it was at least 4.2m wide (extending beyond the ENE section). This contained a mid to dark grey clayey sand (504) which contained a mid to dark grey clayey silt and (505) a lens of orange sand and gravel. As this feature was cut from just below the topsoil it was interpreted as being modern.

Trench 6 (Pl. 14 and Fig.6)

Trench 6 was excavated in the eastern part of field 3. It was orientated NNW by SSE and 15m long by 1.8m wide. The depth of excavation was between 0.70m to 0.80m.

There was between 0.20m and 0.50m of topsoil (600) overlying a mid greyish brown sandy loam (601) which incorporated lenses of orange gravelly sand. This sealed the archaeological features which were cut into the orange gravelly sand natural.

Two ditches were uncovered running NW-SE through the trench. (605) was 0.30m wide by 0.16m deep and filled with a mid brown silty sand (606). To the south west this feature was truncated by (603) a large ditch on the same alignment (Pl. 16 and Fig.13g). It was 0.75m wide by 0.16m deep and contained a mid greyish brown silty sand (604) which contained seven sherds of early to mid 13th century pottery.

A possible post hole (611) was located in the NNW part of the trench (Fig.13h). It was 0.27m in diameter and 0.15m deep but with irregular sides which may

have been caused by the removal of the post. The feature contained a mid brownish grey silt sand (612).

Trench 7 (Fig.8)

Trench 7 was orientated E-W in the northern part of field 3. This trench was 15m by 1.8m and excavated to a depth between 0.60m at the eastern end to 1m at the eastern end.

0.20m of topsoil (701) overlay modern demolition and accumulation deposits (702) which in turn overlay an orange gravely sand natural (716) into which the features were cut.

A large pit (706) (see Pl.16) in the eastern part of the trench was excavated to a depth of 0.45m below the base of the trench. Excavation was stopped because the water table was reached. The earliest exposed deposit was (720), a dark grey brown silty sand with frequent angular fragments of flint and rounded stones. Above this deposit was a yellow brown silty sand (721). The uppermost fill was a mid grey brown clayey silty sand (707) which contained a single sherd of 13th-14th century pottery.

Dug into (707) was a small pit (704) which contained burnt material (715) overlain by an a white ashy deposit (714).

A steep sided flat-bottomed pit (718) was excavated in the central northern part of the trench. It was 1.20m wide by 0.50m deep and contained a dark brown slightly silty sand (717) with two sherds of 13th-14th century pottery. This layer sealed a deposit of interleaving yellow silty sand and dark organic lenses (719) contained two sherds of 13th-14th century pottery.

Trench 8 (Pl. 16 and Fig.9)

Trench 8 was located on the west side of the eastern field and was orientated NE-SW. It measured 15m by 2m. An extension perpendicular to the original trench was excavated southwards for 15m to see whether a feature (911) in Trench 9 was a boundary ditch crossing the field (see below).

Two linear features were located running NE-SW across the trench. (802) was a shallow gully with a rounded profile. Its fill was a dark grey sandy silt (803) which contained a single sherd of 13th-14th century pottery. 0.20m to the NE, a large ditch (804) 1m wide and 0.28m deep ran parallel to (802) (Pl.19 and Fig.14a). Its primary fill comprised a mid grey sandy silt (808) overlain by (809) a mid dark grey silt-sand containing occasional flint fragments. Above 809 was a mid grey brown silt-sand (807) which in turn was overlain by a dark grey sand silt (805) which contained a single sherd of 13th-15th century pottery.

In the trench extension was a possible gully 0.47m wide and 0.10m deep (812) filled with a mid dark grey sandy silt (813) (Fig.14b). To the SSE of (812) were two small pits which ran beneath the side of the trench (Fig.14b). The earlier pit (817) was at least 0.13m wide by 0.08m deep and was cut through on its east by (814) which was 0.24m wide and 0.12m deep (Pl. 20).

Trench 9 (Pl. 21 and Fig.10)

This trench was positioned against the eastern boundary of the site. It was orientated NE-SW and measured 15m by 1.8m. It was excavated to an average depth of 0.7m.

The topsoil was a dark brown silty sand between 0.3 and 0.5m deep (901), which overlay a light brown silty sand deposit (902). This deposit sealed the archaeological features which were cut into orange gravelly natural.

(903) was a large feature which extended 2.30m into the south end of the trench. It could only be partially excavated because it was waterlogged. An auger sample was taken from a dark organic layer at a depth of almost 2m from the surface. This may have been a pond but there were no aquatic species present in the sample taken for environmental analysis (see Appendix 3).

An oval feature (905) 0.60m wide and 0.15m deep, was located against the eastern section and contained a dark grey silty sand (906). (907), a shallow oval feature, was located immediately SW of (905) and contained a dark grey brown silty sand. (912) was a shallow natural depression which had become filled in from the overlying layer. These three features were very shallow with no artefacts recovered and were interpreted as natural.

Trench 10 (Pl. 21 and Fig.14d)

This trench was located at the SE end of the site and was positioned behind the extant frontage of the main street buildings. It was orientated NE-SW and its dimensions were 15m by 1.8m.

A large pit (1004) was uncovered in the centre of the trench partially obscured by the NE baulk. It was approximately 3m long and 1.2m at its widest point and irregularly shaped with slightly convex sides and a flat base. Its primary fill (1017) a mid brownish grey-yellow silty sand contained one sherd of 12th century pottery. This was overlain by (1018) a dark greyish black silty sand with angular gravel fragments containing 15 sherds of late 11th to 12th century pottery. Environmental evidence from this context indicated a great deal of burning including burnt mortar (see Appendix 3). Above this layer was a mid brown-grey silty sand (1016) containing four sherds of 12th century pottery, which was in turn overlain by a dark greyish black silty sand which contained 10 sherds of mid to late 10th century pottery (1015).

A second pit (1019), c.1.20m wide and 0.16m deep, with a mid greyish brown silty sand fill (1020) was located SE of (1004). An oval posthole(1012), 0.40m wide and 0.30m deep, immediately south of (1004). Its single fill was a grey brown silty sand.

0.15m
Three small pits were located south of (1012) (Fig.14e). (1008) measured 0.45m by 1.5m deep and its single fill was a dark grey sandy silt. 1006 was 0.55m by 0.26m wide containing a dark brown grey silty clay (1007) (see Pl. 22 and Fig.14f). Pit (1010) was 0.30m in diameter and 0.10m deep and filled with a mid brown grey silty sand.

Discussion

The proposed housing development is situated mainly away from the street frontages behind existing houses. The only area where the development reaches the street frontage lies adjacent to Watery Lane and the evaluation trench 1 produced little of archaeological significance.

The initial focus was probably to the east of the current development around the church and the manor house. The date of the pottery from the evaluation trenches indicates that this part of the village developed in the early medieval period. The presence of a medieval market, suggests that the village was a local trading centre serving the surrounding minor settlements.

The pottery retrieved from the site ranged from the early-mid Saxon period to present. The single sherd of Saxon pottery is interesting as there are still few instances of early Saxon pottery from extant villages in the East Midlands. The evidence suggests that rather than genuine continuity the presence of the early Saxon pottery in later villages represents the coincidental location of settlement in two very different settlement patterns i.e. the dispersed settlement of the early to mid Saxon period and the nucleated system of the late Saxon and medieval periods.

Although the ceramic assemblage is of some importance, most of the material was found in domestic refuse pits and there were no associated buildings. The late Saxon or early medieval pottery evidence from the pits probably represents disposal of rubbish behind medieval buildings on the street frontages, and both the environmental and animal bone reports have suggested the deposits were domestic in character.

Early medieval pottery was also recovered from probable ditches/gullies in Trenches 6 and 8. There is little associated structural evidence and it is possible that they relate to medieval land division; the proximity of these ditches to the settlement on the street frontages accounts for the presence of pottery in the features.

Some of the larger features, currently waterlogged, appear to have been only intermittently waterlogged in the past. This has led to the loss of organic material, leaving only the most robust species surviving.

Conclusion

The site has evidence of late Saxon/early medieval occupation represented by domestic refuse pits assumed to have belonged to houses beneath existing buildings along the street frontages. The environmental evidence has limited potential due to intermittent waterlogging in the past. The ceramic evidence is important but is unlikely to occur in significant stratified sequences within the development area.

Acknowledgements

LAS would like to thank Owl homes for their co-operation. LAS would also like to thank the staff at the archaeology section, Lincolnshire County Council for their co-operation.

The excavation was carried out by the Author with the assistance of Liz Davis, Sue Farr and Michael McDaid. The report was collated and produced by Jane Frost.

Contents of Site Archive

Record archive

- 1 Environmental sample sheet
- 10 Context registers
- 183 Context sheets
- 2 Drawing registers
- 12 sheets of Drawing film containing:
 - 13 Plans
 - 40 Sections

Photographic archive consisting of film nos, 97/77, 97/78, 97/79 and 97/80

Material Archive

- 4 Bulk environmental sample residues
- 1 spot sample residue
- 1 box of animal bones
- 1 box of pottery and tile fragments

- 1 file containing correspondences

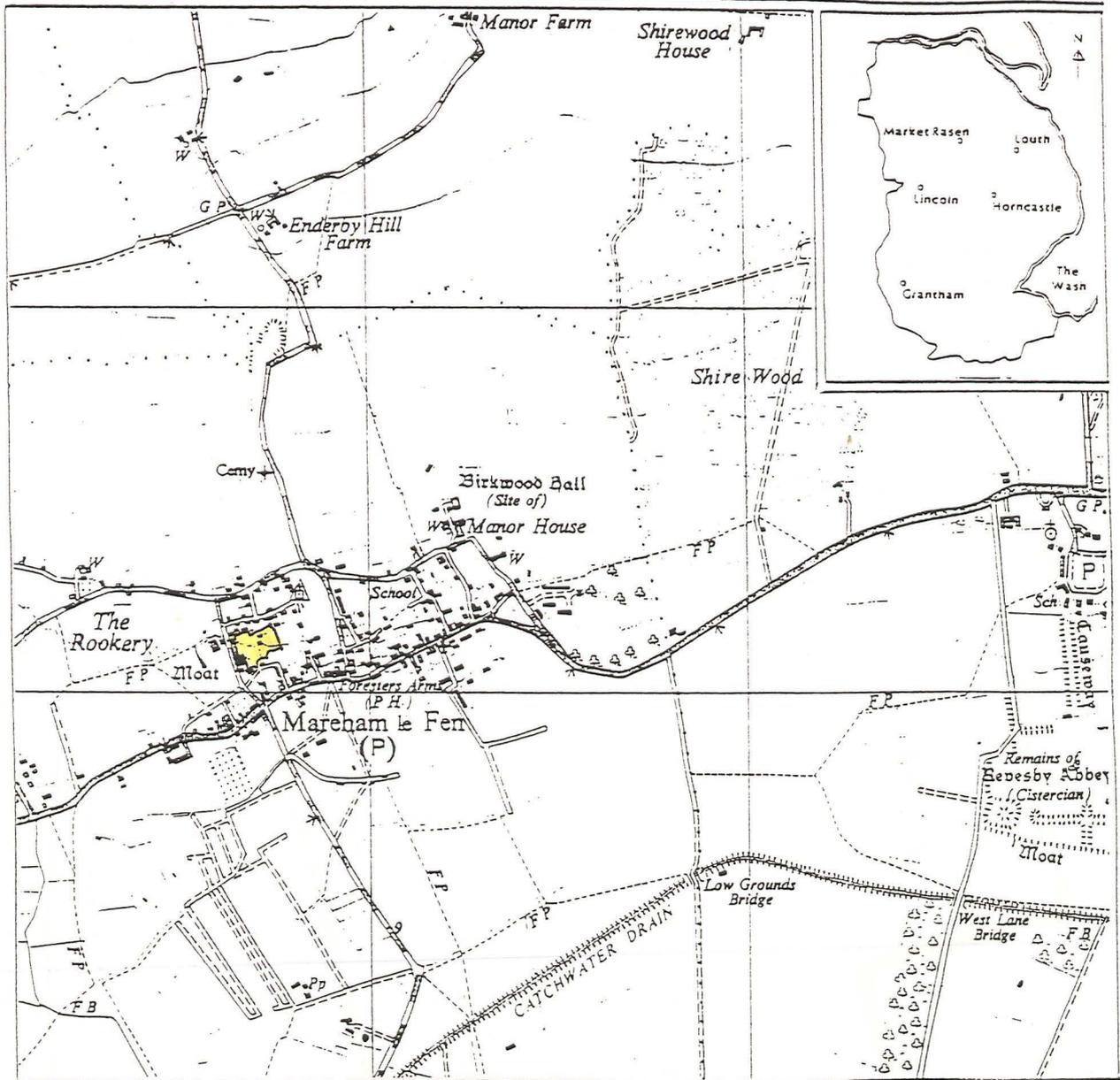
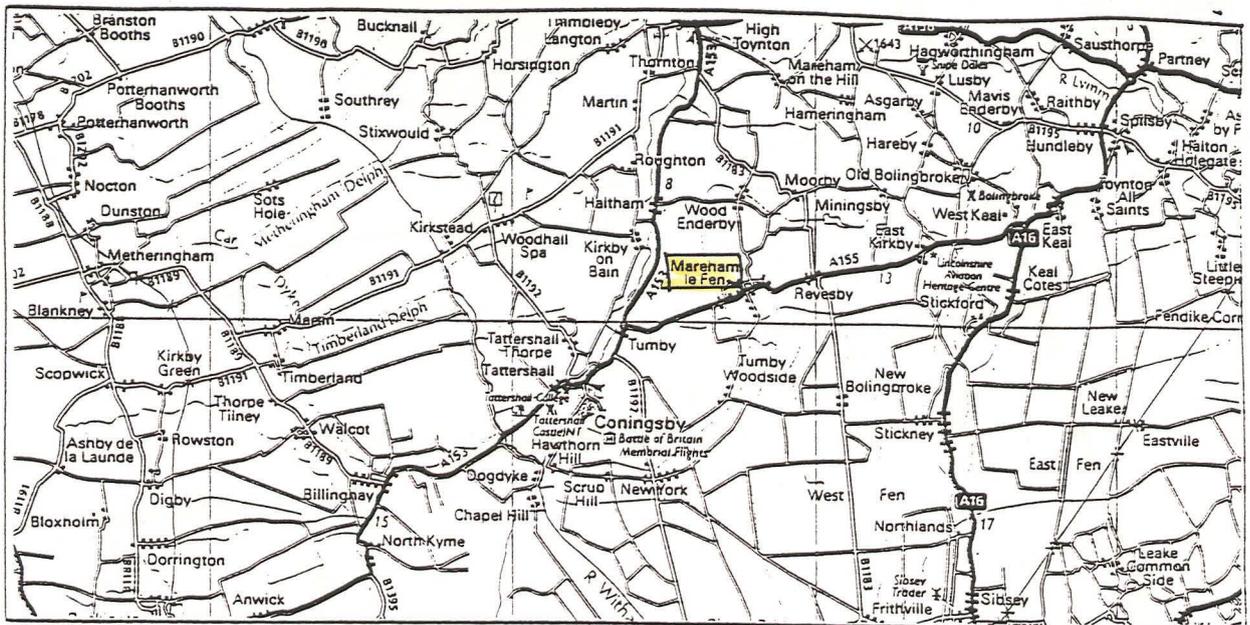


Figure 1, Location of Proposed development, Watery Lane Mareham le Fen (based on O.S. 1:25,000 sheet TF 26. Crown Copyright 1953. Reproduced with the permission of the controller of HMSO. LAS Licence No. AL 50424A).

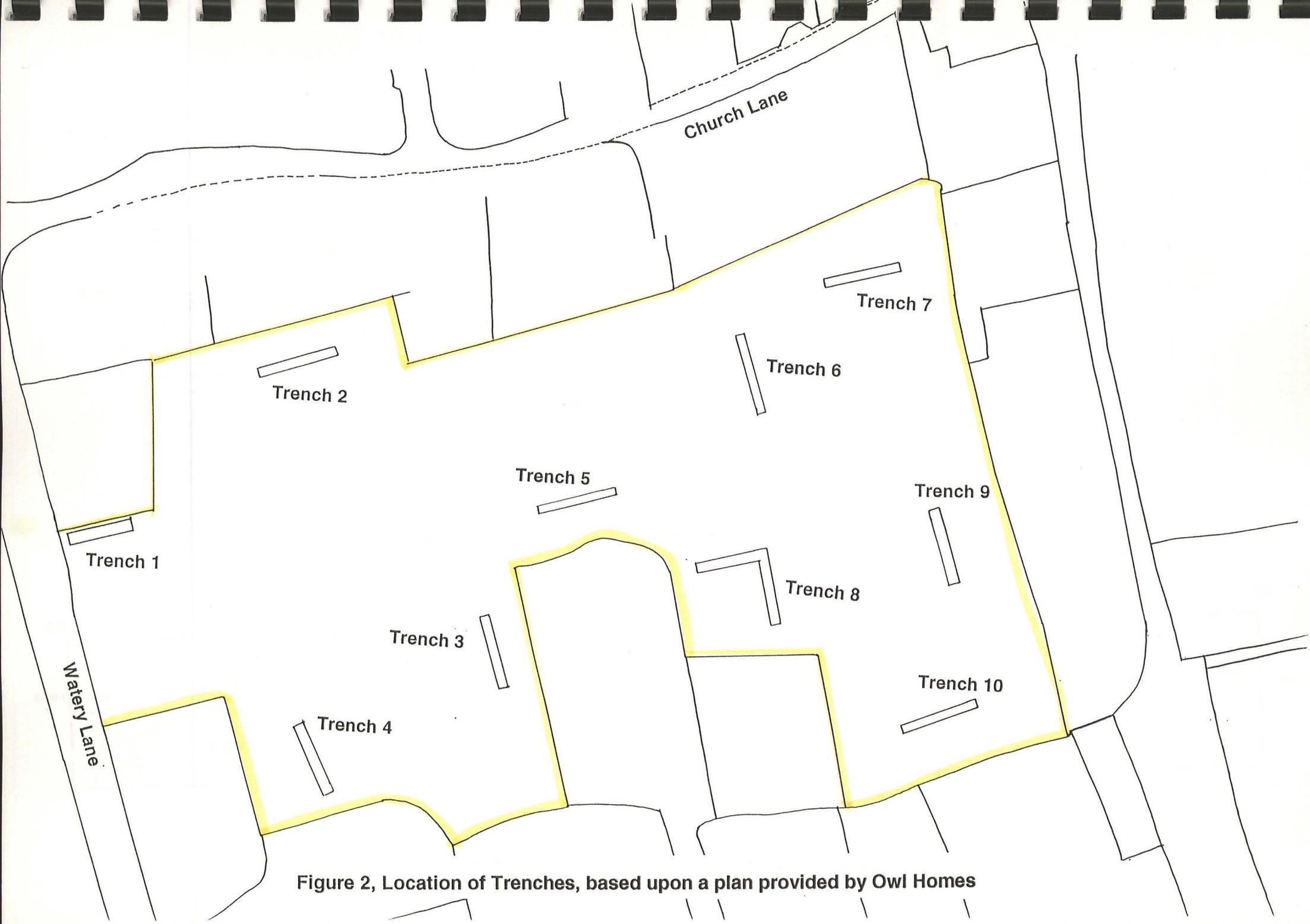


Figure 2, Location of Trenches, based upon a plan provided by Owl Homes

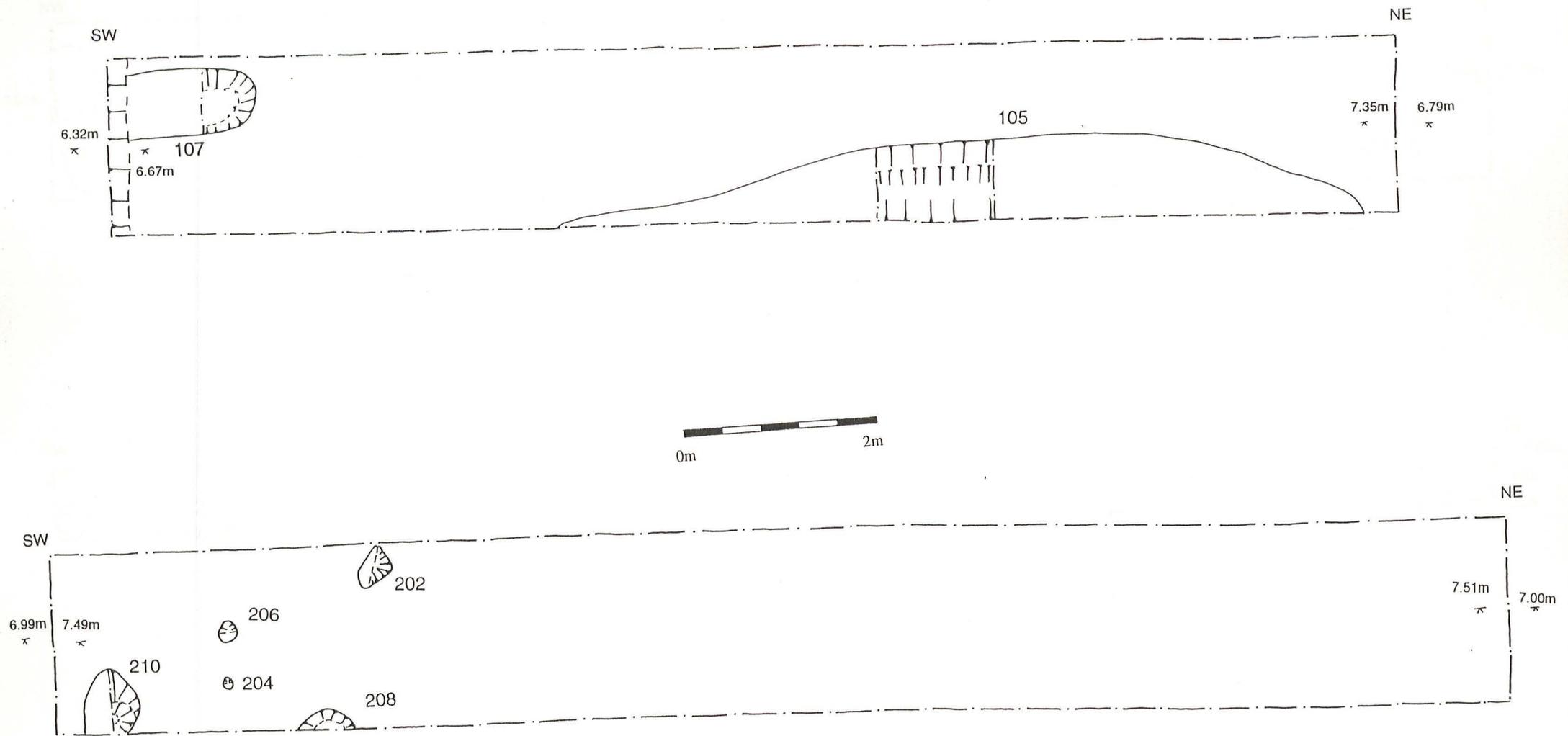


Figure 3, a) Trench 1, plan b) Trench 2, plan

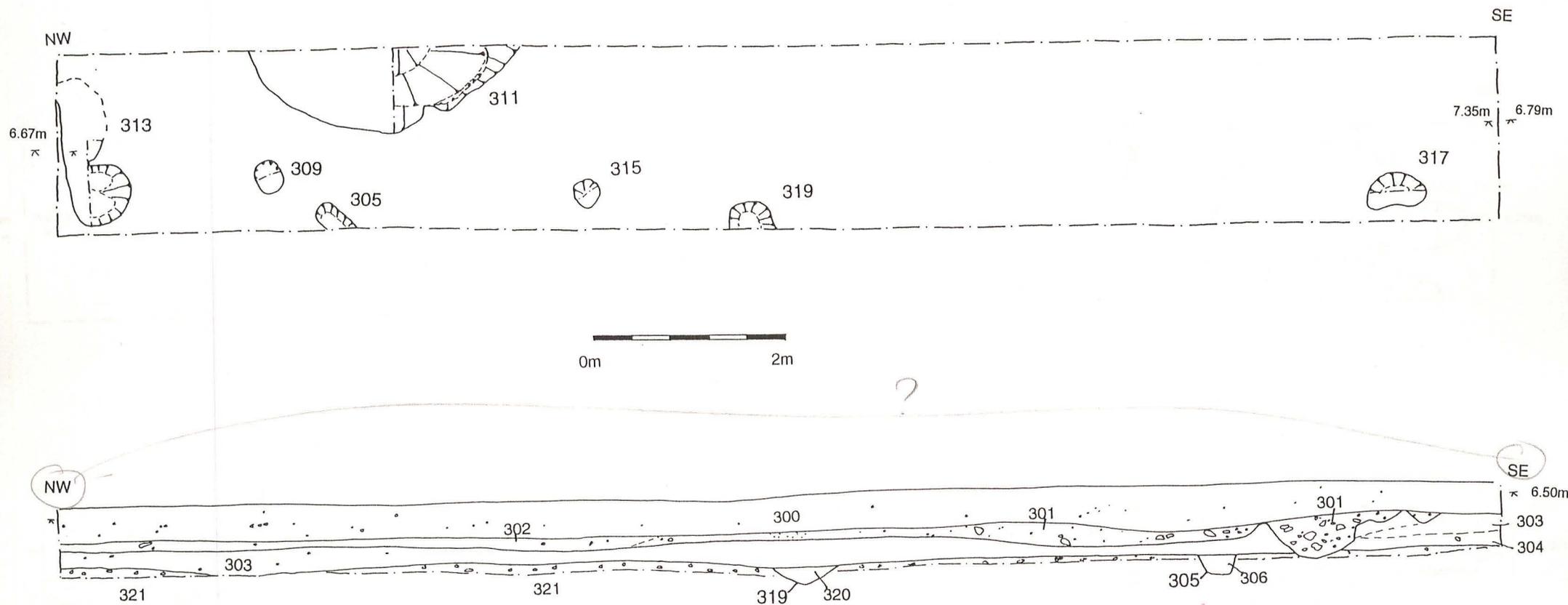


Figure 4: Trench 3, plan and section

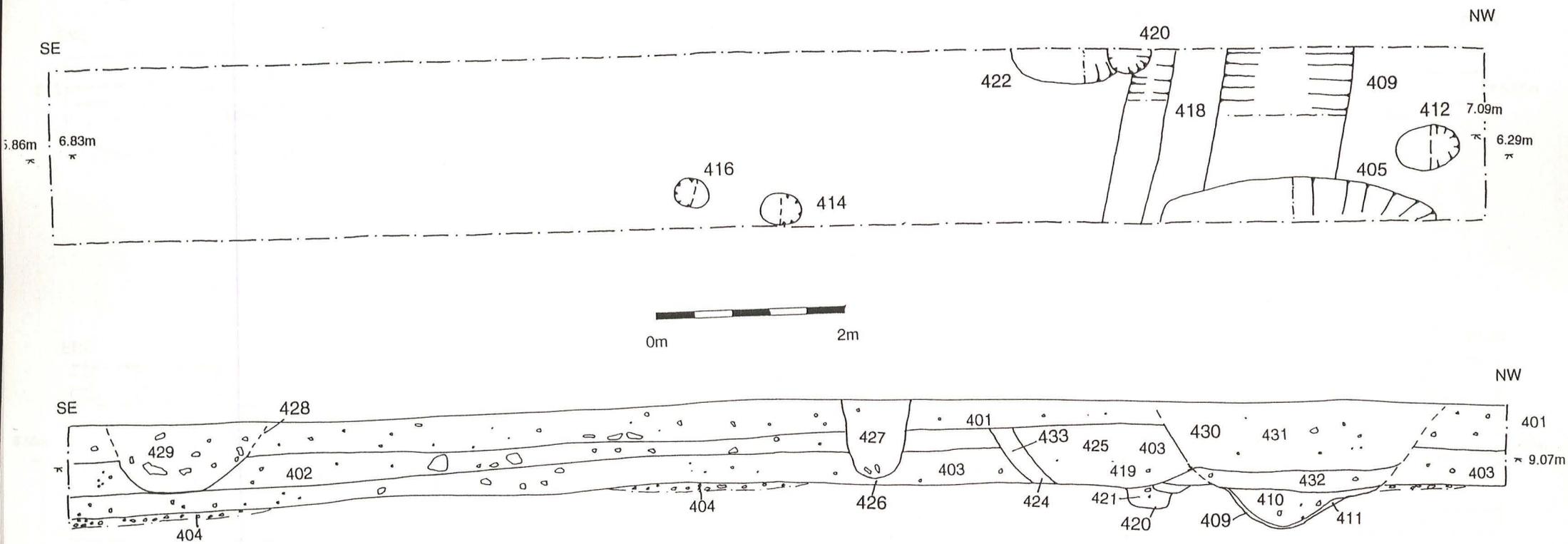


Figure 5: Trench 4, plan and section

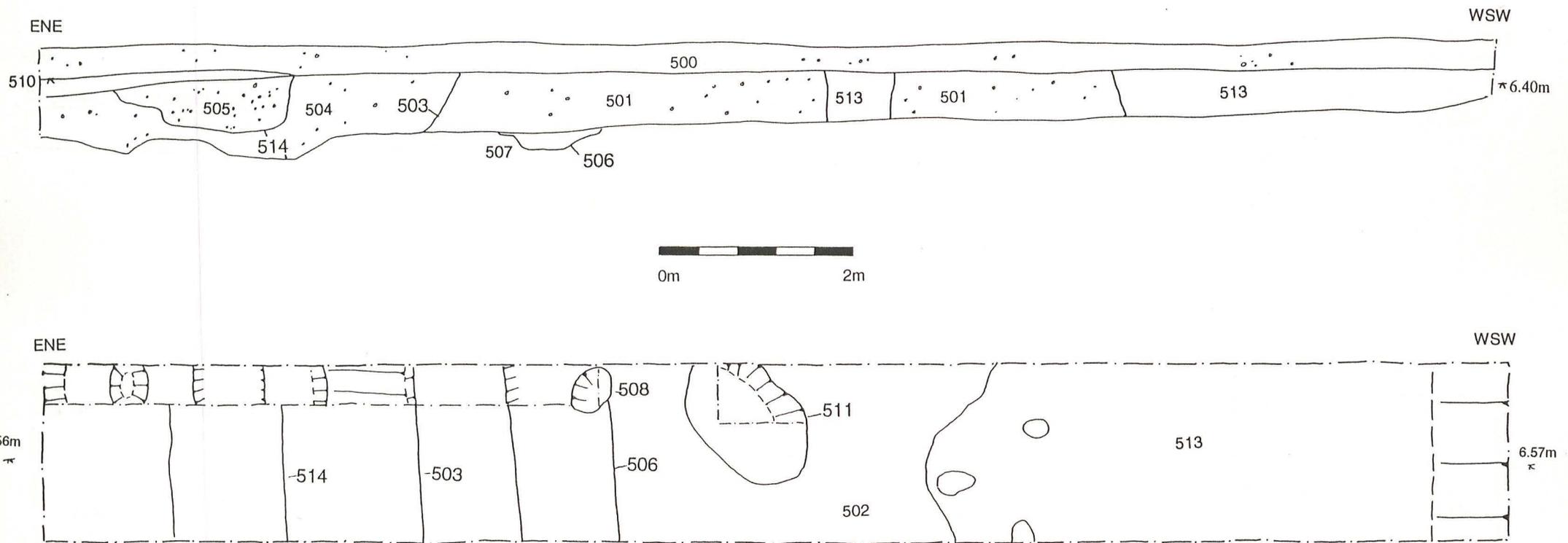


Figure 6: Trench 5, plan and section

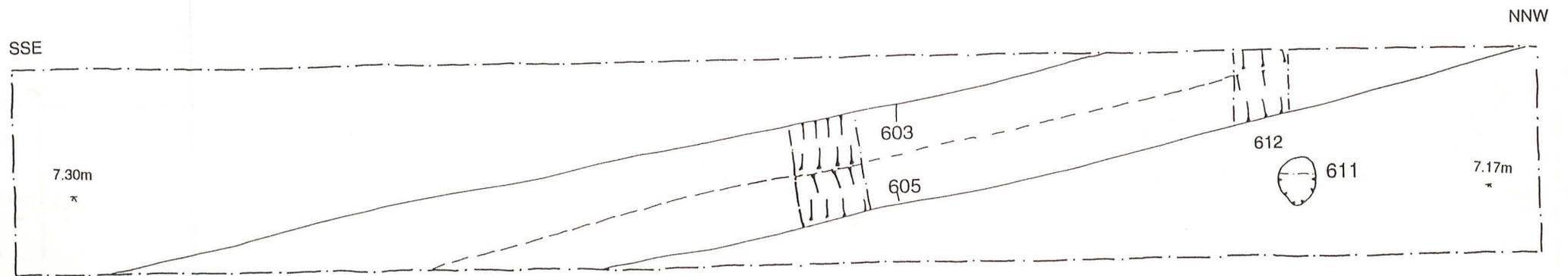
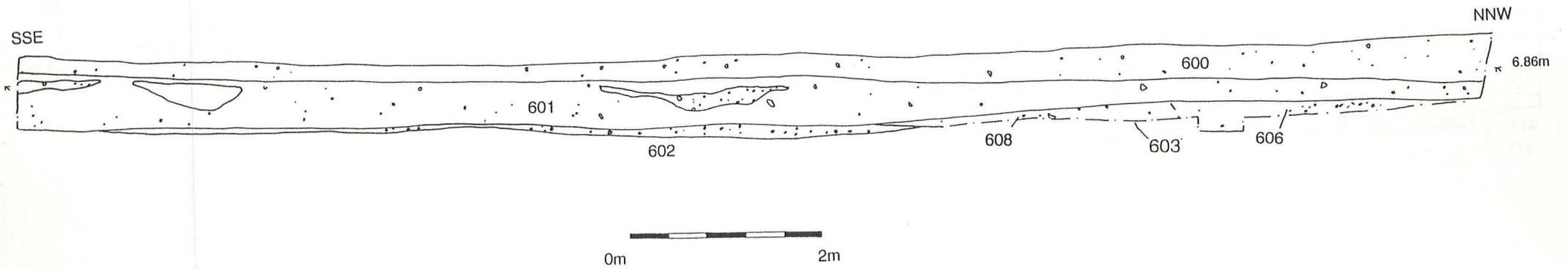


Figure 7: Trench 6, plan and section

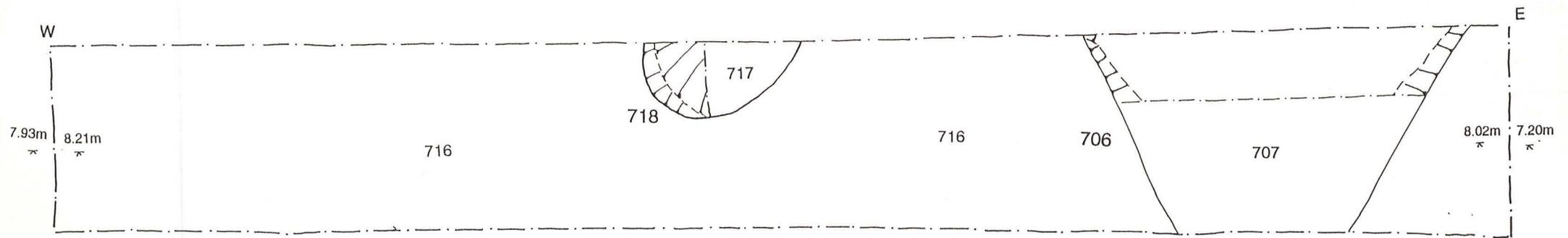
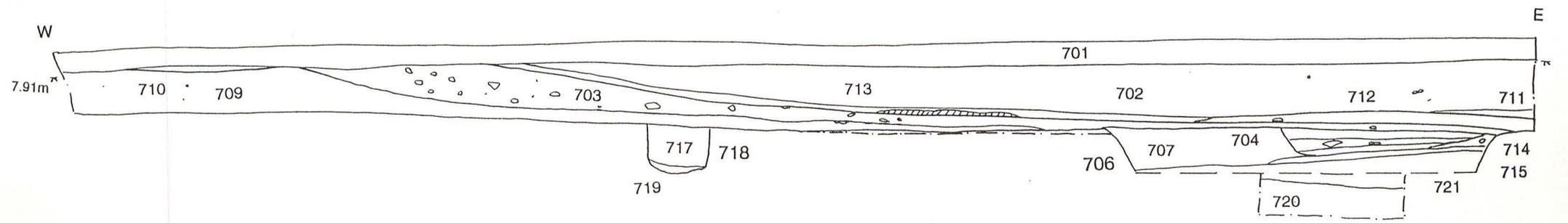


Figure 8: Trench 7, plan and section

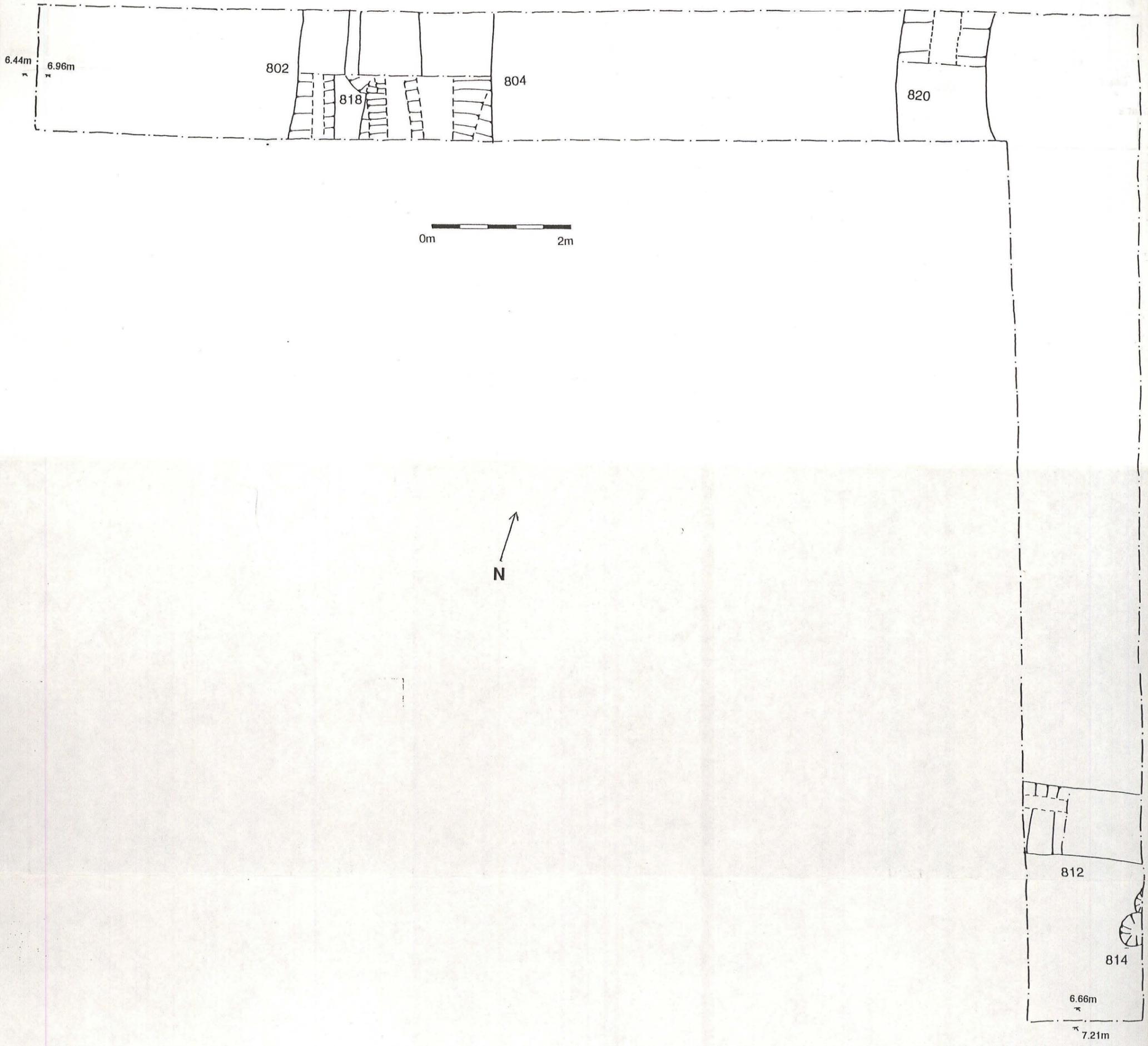


Figure 9: Trench 8, plan

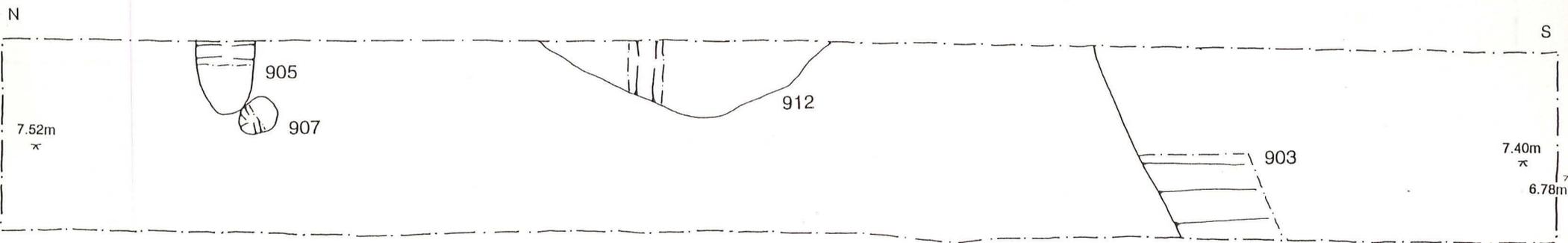


Figure 10: Trench 9, plan

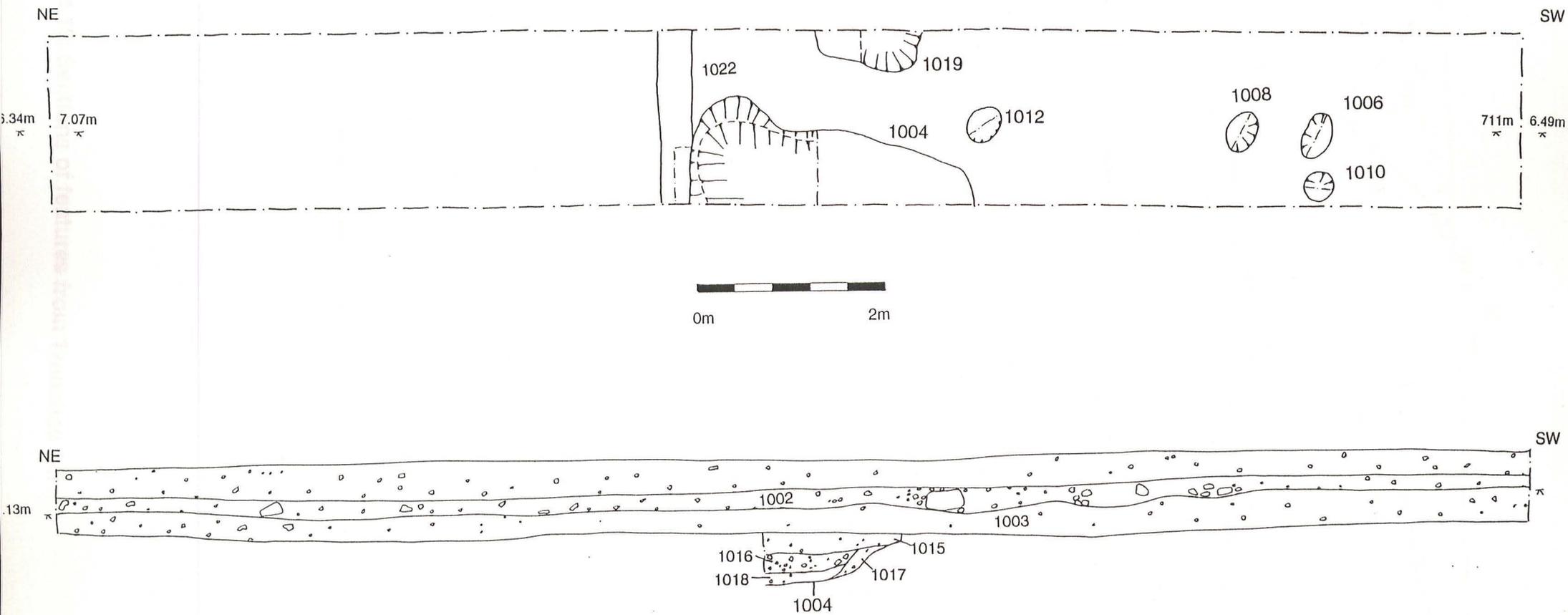


Figure 11: Trench 10, plan and section

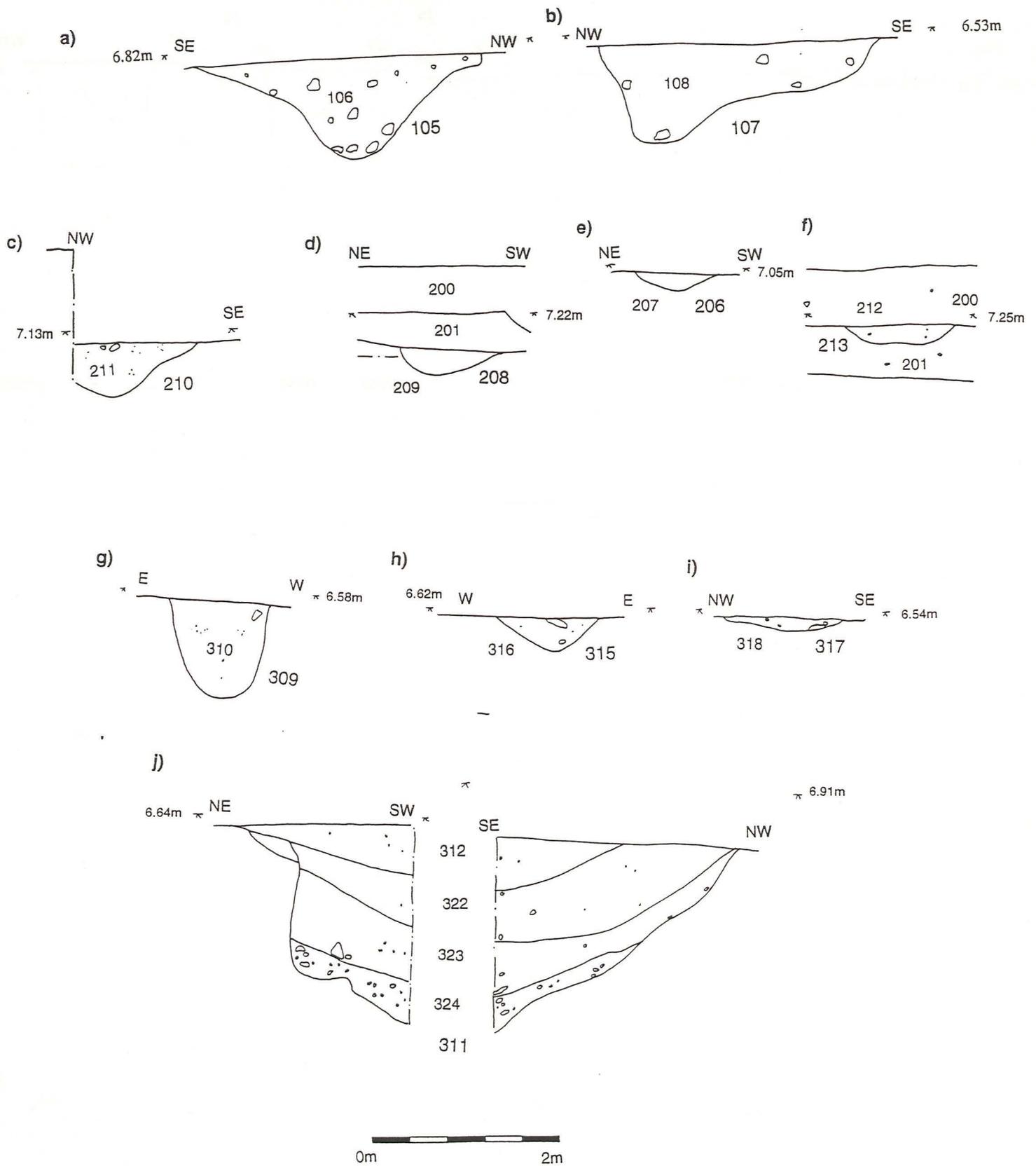


Figure 12: Sections of features from Trenches 1-3

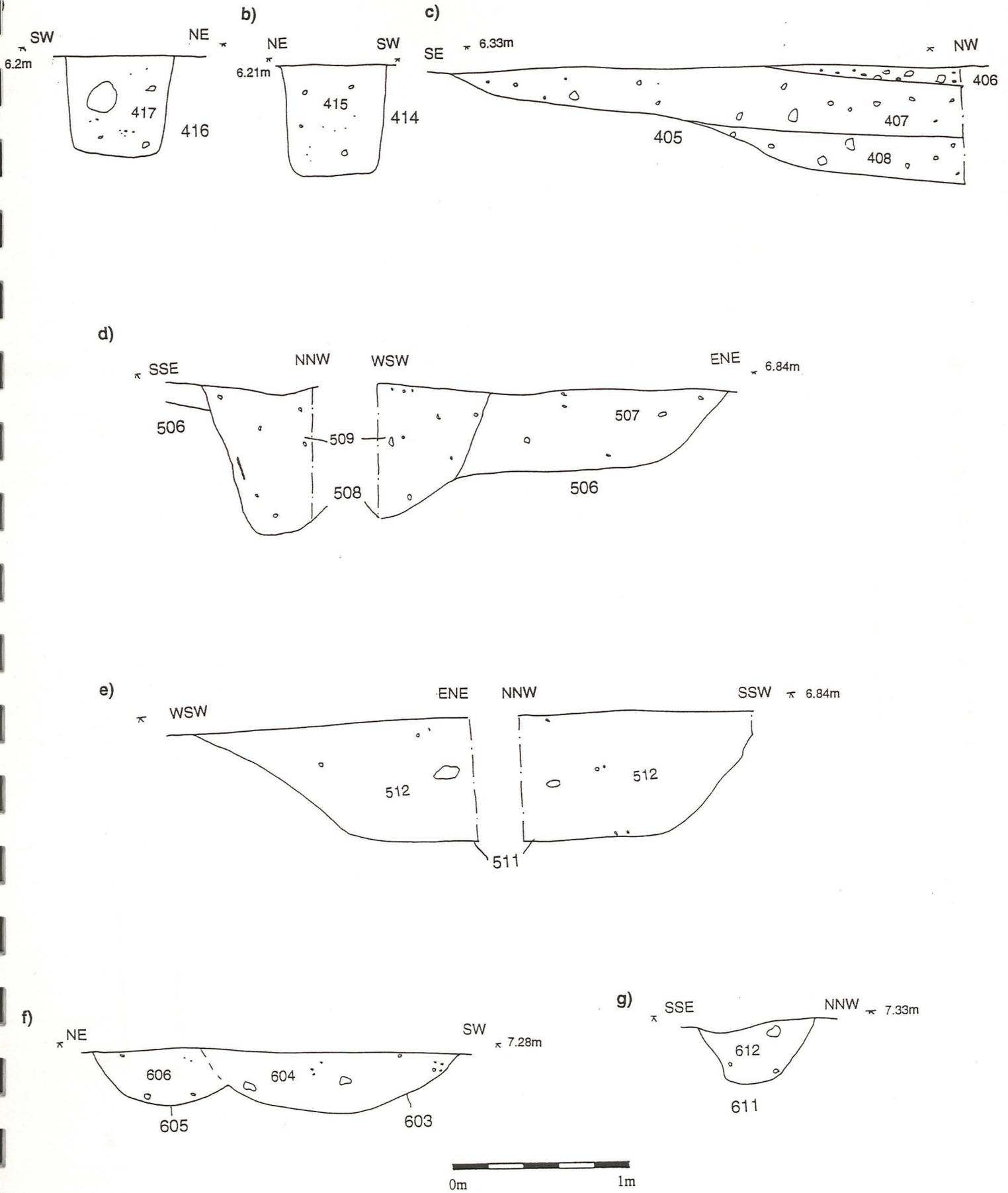


Figure 13: Sections of features from Trenches 4-6

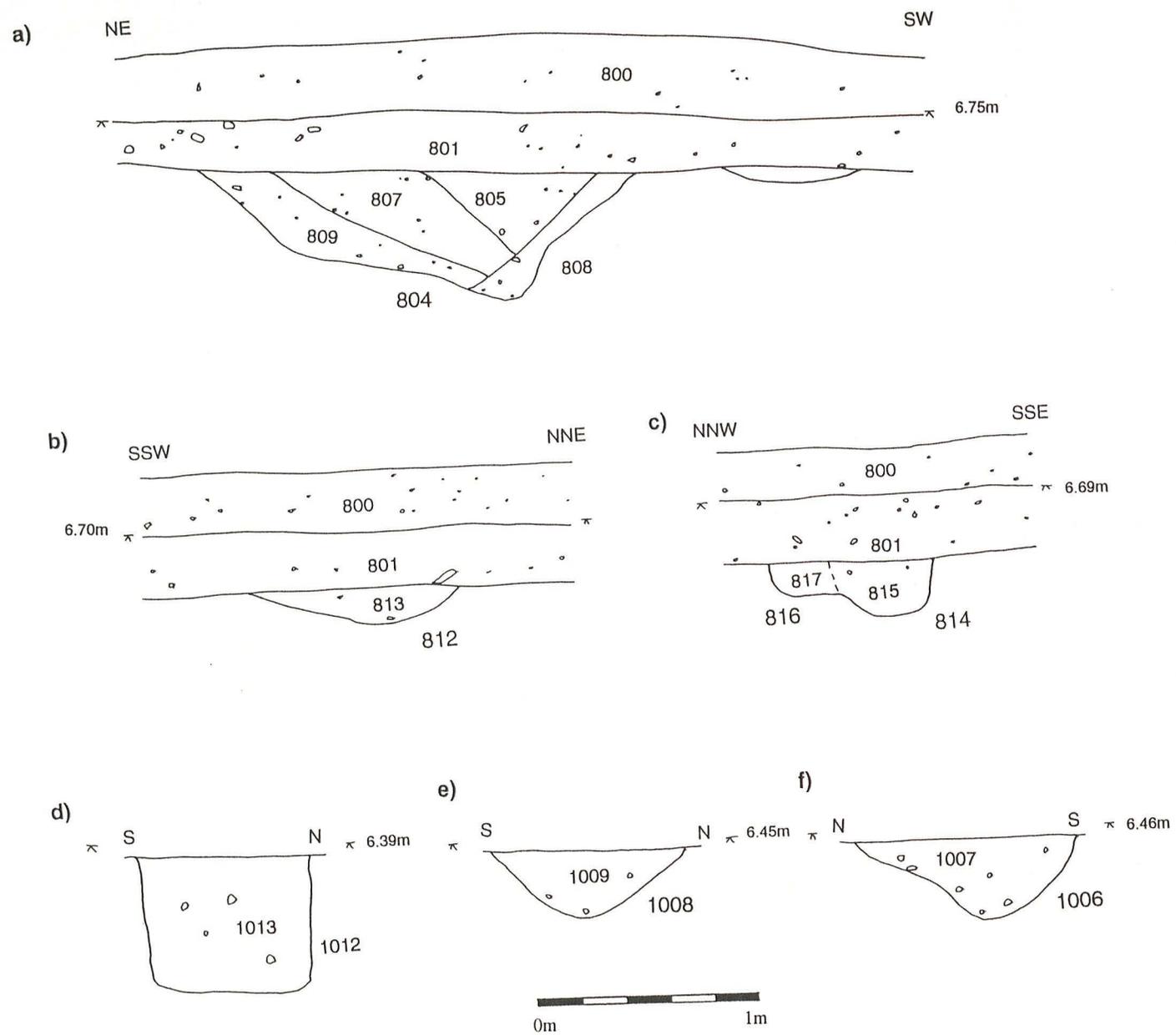


Figure 14: Sections of features from Trenches 8-10

Appendix 1

Context Summary

Context No	Trench No	Type	Description	Pottery/probable date
101	1	topsoil	dark brownish grey silty sand	
102	1	layer	mid greyish brown silty sand	
103	1	layer	mid greyish brown sandy silt	
104	1	natural	mid brownish orange sand with rounded stones	
105	1	cut	linear	
106	1	fill of 105	dark brownish grey sandy silt with flint fragments	6 sherds 16th
107	1	cut	linear	
108	1	fill of 107	light brownish grey sandy silt	
200	2	topsoil	dark grey black sand silt	1 sherd 13th or 19th/20th
201	2	layer	mid grey silt sand with occasional flints and pebbles	
202	2	cut	pit?	
203	2	fill of 202	mid grey brown silt sand with occasional small flints	
204	2	cut	pit?	
205	2	fill of 204	dark brown compact sand silt contains occasional chalk flecks	
206	2	cut	posthole	
207	2	fill of 206	mid brown clay silt sand with flecks of charcoal	
208	2	cut	pit	
209	2	fill of 208	mixture of mid brown clay silt sand and orange sand with flints	
210	2	cut	pit	
211	2	fill of 210	mid grey brown silt sand containing occasional flints	
212	2	natural	orange sand with patches of gravel	
213	2	cut	linear	
214	2	fill of 213	mix of compact sand and silts with occasional flints	
300	3	topsoil	black humic sandy silt containing occasional flints	1 sherd- 13th-16th
301	3	fill of 308	compact white chalk containing occasional pebbles	
302	3	layer	dark grey brown sand silt with chalk lense and occasional flint	
303	3	topsoil	dark grey brown sandy silt	
304	3	layer	mid brown silt sand	
305	3	cut	posthole	
306	3	fill of 305	mid grey brown silt sand	
307	3	fill of 308	dark grey sand silt	
308	3	cut	heavily disturbed features	
309	3	cut	posthole	
310	3	fill of 309	mid brown clay silt sand	
311	3	cut	pit	
312	3	fill of 311	mid grey silt sand with occasional flints	1 Fragment tile 13th-16th
313	3	treebowl		

314	3	fill of 313	mid brown silty sand mixed with orange sand	
315	3	cut	posthole	
316	3	fill of 315	dark grey silt sand with occasional flints	
317	3	depression	natural	
318	3	fill of 317	dark grey silt clay with occasional flints	
319	3	cut	posthole	
320	3	fill of 319	light mid brown silt sand with occasional flints	
321	3	layer	natural	
322	3	fill of 311	mid dark grey sand silt with occasional flints	
323	3	fill of 311	mid brown grey silt sand	3 sherd 13th-15th
324	3	fill of 311	grey black sand silt	
325	3	natural	medium white gravel sand	
401	4	topsoil	dark grey black silty sand	
402	4	layer	mid yellowish brown silty sand	
403	4	layer	dark greyish brown silty sand	
404	4	natural	mid greyish orange sand with occational gravel	
405	4	cut	pit	
406	4	fill of 406	mid brownish orange sandy silt with occational gravel	
407	4	fill of 405	mid greyish brown silty sand	3 sherds 13th-15th
408	4	fill of 405	dark brownish grey sandy silt	
409	4	cut	linear	
410	4	fill of 409	light brownish grey sandy silt	
411	4	fill of 409	mid orange grey sandy silt	1 sherd 5th-8th
412	4	cut	pit	
413	4	fill of 412	mid brownish grey sandy silt	
414	4	cut	posthole	
415	4	fill of 414	mid brownish grey silty sand	
416	4	cut	posthole	
417	4	fill of 416	mid greyish brown sandy silt	
418	4	cut	gully	
419	4	fill of 418	mid brownish grey silty sand	
420	4	cut	posthole	
421	4	fill of 420	mid brownish grey with orange mottling	
422	4	cut	pit	
423	4	fill of 422	mid grey brown with orange mottles	
424	4	fill of 422	mid orange brown sandy silt with occational gravel	
425	4	fill of 422	dark greyish black silty sand with occational gravel	
426	4	cut	modern pipe trench	

427	4	fill of 426	dark greyish black silty sand	
428	4	cut	pit	
429	4	fill of 428	dark greyish brown sandy silt with occasional chalk fragments	
430	4	cut	pit	
431	4	fill of 430	dark greyish brown sandy silt with gravel and chalk fragments	
432	4	fill of 430	dark brownish grey sandy silt	
433	4	cut	modern pit	
501	5	layer	dark brownish grey silty sand	
502	5	natural	orange sand with gravel	
503	5	cut	linear	
504	5	fill of 503	mid to dark grey clayey sand	2 sherds 13th-14th
505	5	fill of 503	orange sand and gravel	
506	5	cut	linear	
507	5	fill of 506	mid brownish grey silty sand	
508	5	cut	post hole	
509	5	fill of 508	dark brown sandy clay	
510	5	fill of 503	grey white sand containing mortar	
511	5	cut	pit	
512	5	fill of 511	mid orange grey silty sand	
513	5	deposit	mottled orange and black sandy loam	
514	5	cut	modern pit	
600	6	topsoil	dark brownish grey sandy loam	unstratified-
601	6	layer	mid greyish brown sandy loam	unstratified
602	6	natural	orange gravelly sand	
603	6	cut	gully	
604	6	fill of 603	mid greyish brown silty sand	7 sherds early to mid 13th
605	6	cut	gully	
606	6	fill of 605	mid brown silty sand	
607	6	cut	gully	
608	6	fill	dark brownish grey silty sand	
609	6	cut	linear	
610	6	fill of 609	mid to dark brownish grey	1 sherd 13-15th
611	6	cut	posthole?	
612	6	fill	mid brownish grey silty sand	
701	7	topsoil	mid brown slightly silty sand clay	
702	7	layer	grey brown silty sand	
703	7	deposit	light yellow brown mortar	
704	7	cut	pit	2 sherds 17th-18th

705	7	fill of 704	interleaving grey ash and charcoal material	
706	7	cut	pit	
707	7	fill of 706	mid grey brown clayey silty sand	1 sherd 13th-14th
708	7	deposit	light yellow brown mortar deposit	
709	7	deposit	mid grey brown silty clay sand with occasional flint fragments	
710	7	deposit	yellow brown silty clay	
711	7	deposit	green brown slightly silty	
712	7	layer	dark brown silty clay	
713	7	deposit	grey brown silty sand	
714	7	fill of 704	grey white ashy deposit	
715	7	fill of 704	dark brown burnt organic deposit	
716	7	natural	orangey yellow sand	
717	7	fill of 718	a dark brown slightly silty sand	1 sherd 13th-14th
718	7	cut	pit	
719	7	fill of 718	bands of yellow silty sand interlaced with dark organic lenses	1 sherd 13th-14th
720	7	fill of 706	dark orange slightly silty sand	
721	7	fill of 706	yellow brown slightly silty sand	
800	8	topsoil	very dark brown sandy clay silt	2 sherds unstratified
801	8	layer	mid dark brown grey sand clay silt with occasional flint	1 sherd unstratified
802	8	cut	linear	
803	8	fill of 802	dark grey sandy silt	1 sherd 13th-15th
804	8	cut	linear	
805	8	fill of 804	dark grey sand silt	1 sherd 12th-14th
806	8	natural	orange silt sand	
807	8	fill of 804	mid grey brown silt sand	
808	8	fill of 804	mid grey sandy silt	
809	8	fill of 804	mid dark grey silt sand containing occasional flints	
810	8	tree bowl		
811	8	fill of 810	light grey silty sand	
812	8	cut	ditch	
813	8	fill of 812	mid dark grey sandy silt	
814	8	cut	posthole	
815	8	fill of 814	fill of 814	
816	8	cut	posthole	
817	8	fill of 816	mid brown grey silt sand	
818	8	cut	gully	
819	8	fill of 818	light mid grey silt sand	
901	9	topsoil	dark brown silty sand containing occasional small flints	

902	9	layer	light brown silty sand	
903	9	cut	pit	
904	9	fill of 903	slightly clayey silt	
905	9	cut	pit	
906	9	fill of 905	dark organic slightly clayey silt with occational flint	
907	9	depression		
908	9	tree bowl		
909	9	fill of 908	natural	
910	9		same as 902	
1001	10	topsoil	grey brown silty sand containing gravel and occasional gravel	
1002	10	layer	grey brown with orange mottling	
1003	10	layer	dark grey brown silty sand with occasional gravel	
1004	10	cut	pit	
1005	10	natural	mid brown orange sand with occational flints	
1006	10	cut	posthole	
1007	10	fill of 1006	brown grey silty sand	
1008	10	cut	posthole	
1009	10	fill of 1008	posthole	
1010	10	cut	?	
1011	10	fill of 1010	mid brown grey silty sand	
1012	10	cut	posthole	
1013	10	fill of 1012	grey brown silty sand	
1014	10		NOT USED	
1015	10	fill of 1004	dark greyish black silty sand	10 sherds mid to late 12th
1016	10	fill of 1004	mid brown grey silty sand	4 sherds mid to late 12th
1017	10	fill of 1004	mid brownish grey silty sand	1 sherd 12th
1018	10	fill of 1004	dark greyish black silty sand with angular gravel fragments	15 sherds late 11th-12th
1019	10	cut	pit	
1020	10	fill of 1019	mid greyish brown silty sand	
1021	10	cut	linear	
1022	10	fill of 1021	dark greyish black sandy silt with occasional gravel	

Appendix 2

Pottery Report

MFW 97 Pottery notes

A small, but ceramically very important group of pottery. Medieval material somewhat similar to that produced at Toynton All Saints is present, however, the jugs have traits that do not occur on any known Toynton products, namely the presence of copper in the glaze and the use of iron-painted strips as a decorative element. Two of the jugs have underfired glazes and although this could be a characteristic of this production, it may also indicate a very local kiln source. A range of previously uncharacterized shell and quartz tempered fabrics (WEMS) occurs on the site. The fabrics are similar to that of a possible late Saxon production in the Horncastle area, however, although the vessels on this site are competently wheelthrown with thin walls, flat bases and templated everted rims on the jars; typical of late Saxon production, the material is stratified with what is clearly 12th century pottery from Nottingham and Stamford. This marks a complete difference to the coarse ware pottery tradition elsewhere in Lincolnshire during the 12th century, where handmade shell or quartz tempered vessels are the main traditions. It is important that future material from this area is assessed properly and a typology created, in order to avoid confusion in dating these wheelthrown wares to the 10th century where they are not associated with other material.

POST-ROMAN POTTERY ARCHIVE: MFW97 HORIZON DATING

Context	Earliest horizon	Latest horizon	Probable horizon	Dating
106	PMH3 OR PMH6	PMH4 OR EMH	PMH3	16th ? INTRUSIVE BL SHERD
200	MH4 OR EMH	MH5 OR EMH	-	13th or 19/20th ? INTRUSIVE LPM SHERD
300	MH4	PMH1	-	13-16th
312	MH4	PMH1	-	13-16th TILE ONLY
323	MH4	MH10	-	13-15th
407	MH4	MH10	-	13-15th
411	ASH1	ASH2	-	5-8th
504	MH4	MH7	-	13-14th
600	MH4	MH7	-	13-14th
601	MH4	MH8	-	13-14th
604	MH3	MH4	MH4	early to early/mid 13th
610	MH4	MH10	-	13-15th
704	PMH4	PMH8	-	17-18th
707	MH4	MH6	-	13-14th
717	MH4	MH8	-	13-14th
719	MH4	MH7	-	13-14th
800	MH4	MH10	-	13-15th
801	MH4	MH8	-	13-14th
803	MH4	MH10	-	13-15th
805	MH3	MH7	-	12-14th
1015	MH1	MH4	MH2-MH3	mid to late 12th
1016	MH1	MH4	MH2-MH3	mid to late 12th
1017	MH1	MH4	-	12th
1018	ASH14	MH4	ASH14-MH3	late 11-12th

POST-ROMAN POTTERY ARCHIVE: MFW97 WARE TYPES BY CONTEXT

Context	Ware	Sherds	Draw	Form	Comments
106	BL	1	-	BOWL	RIM;17-19TH
106	LHUM	1	-	?	BS
106	TB	1	-	BOWL	BASE;16-18TH
106	TB	1	-	BOWL	BS;15-17TH
106	TB	1	-	JAR/JUG	BS;14-16TH
106	TB	6	-	JUG	RIM;14-16TH
200	LPM	1	-	?	PLAIN WHITE
200	LSW2	1	-	JUG	? ID
200	MEDLOC	1	-	JAR/PIPKIN	SOOT;UNGLZE
300	MEDLOC	1	-	BOWL?	INT GLZE
323	POTT	3	-	?	BASE
407	POTT	1	-	?	OR SLST
411	ESAXLOC	1	-	?	FABRIC INCLUDES FINE ROUNDED QUARTZ + OCC CHAFF;? ID
504	MEDLOC	1	-	JUG	CU GLZE;? LSW2
504	MEDLOC	1	-	JUG	GLZE
600	TOY	1	-	?	OR TB
600	WEMS	1	-	?	FABRIC B?
601	TOY	1	-	JUG	BASE;SOOT;? ID
604	LSW1	1	-	JUG	LHJ
604	LSW1/2	1	-	JUG	STRAP HANDLE
604	MEDLOC	1	-	JAR/PIP	BASE;SOOT
604	MEDLOC	1	-	JAR/PIP	BS;SOOT
604	MEDLOC	1	-	JAR/PIP	RIM;SOOT
604	SLST	1	-	?	BS
604	SLST	1	-	COOK	BS
610	POTT	1	-	COOK	OR SLST
704	TB	1	-	BOWL	BOLINGBROKE;RIM
704	TB	1	-	HOLLOW	INT GLZE
707	MEDLOC	1	-	JUG	HARD FIRED;REDUCED GREEN GLZE; FE APPLIED STRIPS; ? MARHAM PRODUCTION
717	MEDLOC	1	-	?	INT & EXT GLZE
717	MEDLOC	1	-	JUG	?SV 719;CU SPECKLED GLZE
719	MEDLOC	1	Y	JUG;OVOID/PEAR	? MARHAM PRODUCT;ROD HANDLE; WHITE SKIN;LITTLE GLZE; FE PAINTED STRIPS;? UNDERFIRED
719	MEDLOC	1	Y	JUG;SQUAT?	? MARHAM PRODUCT;ROD HANDLE; 2 UPPER THU JOINS;ORANGE FABRIC; UNDERFIRED CU SPECKLED GLZE; GROOVED BODY
800	MEDLOC	1	-	?	NO GLZE
800	MEDLOC	1	-	BOWL	RIM;INT GLZE
801	MEDLOC	1	-	JUG?	?? TOY
803	MEDLOC	1	-	JUG	FINE QUATRZ FABRIC + OCC SST
805	SLST	1	-	?	BS
1015	EMLOC	1	-	JUG/PITCHER	BS
1015	WEMS	1	-	?	FABRIC A;BS;SCRAP
1015	WEMS	1	-	?	FABRIC B;BS;SCRAP

1015	WEMS	1	-	?	FABRIC B;BS;SCRAP
1015	WEMS	1	-	?	FABRIC E;BS;SOOT;TS TAKEN
1015	WEMS	1	-	JAR	FABRIC B;BS
1015	WEMS	1	-	JAR	FABRIC B;BS;TS TAKEN
1015	WEMS	1	Y	JAR	FABRIC B;RIM;SOOT
1015	WEMS	2	-	BOWL?	FABRIC B;BS
1016	NSP	1	-	JUG/PITCHER	FINER FABRIC
1016	WEMS	1	-	?	FABRIC A;BS
1016	WEMS	1	-	JAR?	FABRIC D;SOOT;TS TAKEN
1016	WEMS	1	Y	JAR	FABRIC E;EVERA RIM
1017	WEMS	1	-	JAR?	FABRIC A;SOOT;TS TAKEN
1018	NSP	1	-	JUG/PITCHER	BS
1018	ST	1	-	JAR/PITCHER	GLZE;L11/12TH
1018	WEMS	1	-	?	FABRIC A;? GRASS WIPING
1018	WEMS	1	-	?	FABRIC B;THICK BS
1018	WEMS	1	-	?	FABRIC C;TS TAKEN
1018	WEMS	1	-	JAR	FABRIC A
1018	WEMS	1	Y	BOWL	FABRIC B;RIM;SOOT
1018	WEMS	2	-	?	FABRIC B;FLAT BASE
1018	WEMS	2	-	?	FABRIC B;FLAT BASE
1018	WEMS	2	-	JAR?	FABRIC A;SOOT PATT INT;FLAT BASE
1018	WEMS	2	Y	BOWL	FABRIC C;RIM;LONG THU DEC ON RIM TOP

BULK MATERIALS ARCHIVE LIST: MFW97

Bulk Materials

Context	Type	Count	Comments
1015	FIRE	1	10GM
1018	FIRE	1	150GM FRAGMENTED

TILE ARCHIVE: MFW97 TILE TYPES BY CONTEXT

Context	Form	Frag	Weight	Subform	Comments
106	PNR	1	75	-	MED
106	PNR	1	50	-	VITR MED
312	PNR	1	5	-	MED
601	NIB	1	140	7D	WHITE SLIP ON NIB FACE MED
601	NIB	1	85	7D	WHITE SLIP ON NIB FACE MED
601	PNR	1	35	-	MED
800	PNR	1	185	-	MED

Appendix 3
Environmental Report

Mareham-Le-Fen - MFW 97

Environmental Archaeology Assessment

A collection of six samples were recovered from the evaluation at Mareham-le-Fen for assessment (Table 1). Five of these can be dated to the medieval period and the sixth, 911, was taken from a possible pond from which no dating evidence was recovered.

Table 1. List of soil samples collected.

context	feature	description	date	volume in l.
324	311	lower fill of pit	13/15th C	20
719	718	lower fill of pit	13/14th C	7
720	706	middle fill of large pit	13/14th C	8
809	804	lower fill of pit	12/14th C	8
911		?pond fill	?	0.2
1018	1004	lowest fill of pit	12th C	7.5

Methods

The whole of the available sample was processed except for the samples from contexts 720 and 1018. A smaller sample of these was processed because they initially appeared to be 'waterlogged'. 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), except for the small sample from context 911, 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. The sample from context 911 was washed in a bowl within a 250 micron sieve and kept wet. A total of 50.7 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 hammerscale 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.

Results

Preservation

All the samples contained some preserved organic debris, plant or insect, which was clearly contemporary with the deposition of the sediments. Nevertheless this was largely composed of unidentifiable fragments of decomposed wood and robust seeds such as elder, goosefoots, blackberry, knotgrass family and meadow rue. In addition a number of identifiable thorax and

was recovered, a the phalanx of a mole and a few amphibian bones. Food remains recovered from the residue included a few fragments of mussel shell, a piece of bird eggshell, a bird phalanx and a few fish bones and indeterminate mammal bone fragments. A few charred cereal grains, including wheat, were recovered from the flot with some fragments of charred 'straw'.

Context 809

The sample from this context was the poorest with the least indication of nearby settlement activity. Archaeological finds included a single flake of hammerstone, which could have moved down through the soil, and less than 1 gramme of animal bone. Very little charcoal (see Table 3) was recovered and only two charred cereal grains. The remainder of the finds were limited to a few snail shells and preserved seeds of elder and goosefoots.

Context 911

This was a small sample taken from an undated fill thought to be a pond. It had the best waterlogged preservation of all the samples and the small sample produced well preserved seeds of *Polygonum*, *Rumex* and other species and a relatively high frequency of beetle fragments. No positive aquatic species were recorded during the assessment but a more detailed analysis by botanical and entomological specialists would be needed to substantiate this.

Context 1018

There is considerable evidence for burning in this context. The sample produced the largest amount of charcoal, included fired earth and mortar and much of the bone and eggshell was burnt. Waterlogged survival was minimal with seeds, mainly of meadow rue species, present. Aquatic conditions are suggested by the operculum of a freshwater snail and shells of ostracods, an aquatic crustacean, but these may have been introduced with other material.

Archaeological finds include 4 sherds of pottery, a corroded iron object with mineralised wood imprints, two leather fragments, two fragments from a possible fired clay vessel and 28 grammes of animal bone.

The charcoal remains include large quantities of small twigs, some with small buds, as well as larger charred wood. Charred seed remains include fragments of hazelnut, pea, bean, other legumes(?), possible *Brassica* sp, and grains of wheat, barley and oats. Some chaff fragments were also present in this sample, suggesting either the use of crop waste on the fire or possibly local crop processing. Many of the animal bone fragments were burnt and identified bones include amphibian, fish and cattle fragments. Two fragments of edible mussel and some burnt eggshell were also present.

Discussion

Contexts 324, 719 and 1018 clearly include much material deriving from fires, probably domestic although the quantity of burnt 'mortar' in 719 may suggest some other origin. The fuel ash slag present is not vitrified indicating that fire temperatures were relatively low, typical of domestic rather than commercial fires (Cowgill pers comm.). All these samples include a range of archaeological debris and food remains, with considerable quantities of charcoal. 1018 is a little different in that the charcoal includes abundant twigs and chaff is present. This may reflect fire-lighting material or even the residue from an oven where such material is used to generate heat very quickly. The few flakes of hammerstone in context 324,

while clearly indicating that iron smithing of some type was taking place somewhere near the site, was in much too low a concentration to reflect activity in the immediate vicinity.

Context 720, although a smaller sample size and containing much charcoal does not include burnt bone or other finds. It has a significantly higher proportion of preserved plant and insect remains which indicate that the pit was probably waterlogged when the material was dumped in it.

The presence of water flea ephippia in 324 and 720 (and aquatic snails in 324) suggests either the introduction of material from an aquatic habitat or that these features remained open with standing water for sufficient time for these animals to colonise.

Context 809 includes very little material deriving from occupation and does not appear to have received any 'rubbish'. Likewise the very small sample from 911 appears to be a natural accumulation with no evidence of input from settlement activity. The preserved seed remains from all the samples, despite being biased by the loss of less robust species, are indicative of a wasteground and scrub type of habitat, but this is unlikely to be the whole story and the lost and unidentified components of the seed assemblage could reflect other habitats.

This series of medieval contexts illustrate that the food crops included pea, bean, wheat, barley and oats. Mussels and cockles were available from the coast and possibly also marine fish. Hazel nuts and birds eggs, probably chicken, were also eaten. The deeper features must have been waterlogged at the time of formation and the surrounding area certainly included a flora composed of elder, goosefoots, knotgrasses, meadow rues, blackberry and docks, although many other plant species probably have not survived burial.

Potential for further work

Although there is some waterlogged preservation in the samples this is not exceptional and considerable loss of material must have occurred. These samples therefore do not reflect a true picture of the plant and insect remains which were originally deposited. The insect remains may be more useful for local environmental reconstruction than the plant remains in these samples. These post-depositional losses considerably reduce the potential of the samples and unless much deeper features occur on site, perhaps the pond- 911, which have not been subjected to periodic dessication during occasional dry summers the waterlogged preservation should not be used as a justification for further work or sampling.

The remaining samples well illustrate a level of activity on site with much of the material probably deriving from domestic dumping, with perhaps some suggestion that crop processing was taking place nearby, or at least the waste products were available. This evidence suggests that structures are likely to have been nearby and may occur on the site. Should further work be required then sampling would be expected to help in the interpretation of the nature of the occupation and activities that were taking place.

Acknowledgments

The samples were processed by Alison Foster and sorted by Jane Cowgill. Jane Cowgill kindly commented upon the fuel ash slag.

Williams, D. 1973 Flotation at Siraf, *Antiquity*, 47, 198-202

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Table 2: Archaeological finds from soil samples

context	feature	volume processed	fired clay in g. *	coal	fuel ash slag in g.	pottery in g.	hammer scale	bone in g.	comments
324	311	20	18	<1	2	2	few flakes	5	
719		7	43	<1	1	1		8	much burnt mortar
720	706	4				4		2	possible degraded fragments of leather
809	804	8					1 flake	<1	
1018	1004	4	9			10		28	iron frag with wood imprint; 2 leather fragments; 2 fragments possible fired clay vessel

*fired/baked clay and mortar

Table 3: Environmental finds from soil samples

context	flot vol. in ml.	char-coal	wood	marine shell	snails	seeds water-logged	seeds charred	charred grain	charred chaff	insects etc	mammal & bird bone	burnt bone	fish bone	bird egg-shell	comments
324	70	5	2		2/2	3/3	2/2	3		2/2	2	y	1		wheat, barley & oats; <i>Daphnia</i> ephippia; house mouse incisor; amphibian bone
719	80	5		cockle, mussel	1/1	2/2	3/3	3			2	y	1	2	wheat, barley & oats; cattle tooth; burnt bird and fish vertebrae and bird eggshell; all bone and shell burnt.
720	45	3	2	mussel	1/1	4/3	2/2	2		2/2	1		1	1	wheat; <i>Daphnia</i> ephippia; mole; amphibian and fish vertebra;
809	1	1			1/1	1/1		1			1	y			only two poorly preserved cereal grains
911	20		3			2/2				2/3					all waterlogged material, although wood degraded
1018	190	5+		mussel	1/1	2/2	2/2	3	2		2	y	1	2	wheat, barley & oats; charred hazel, bean, pea & ? <i>Brassica</i> ; burnt eggshell; many small twigs, some with buds in charcoal; ostracods.

Appendix 4

Animal Bone Report

Watery Lane, Mareham le Fen (MFW97): Animal Bone

The animal bone recovered from this site constituted an assemblage of 72 bones or bone fragments from 16 contexts. Much of the material is fragmentary, with long-bone ends tending to be eroded, damaged or lost. However, the surfaces of the surviving bone are mostly fairly well preserved.

The common food species are represented; cattle, sheep, chicken and pig. In addition, there is a shaft fragment of a large goose-sized bird in context (106) and fragments of two small mammal bones, from an approximately rat-sized animal, in context (1018).

Cattle bones are present in contexts (106), (504), (604) and (808), with unidentified fragments of cattle-size in six other contexts. At least three different individuals are represented. The right radius and metatarsus from context (504) are probably from the same animal, which would have been very small by comparison with most modern cattle. The right humerus from context (604) came from a similar-sized individual.

Sheep bones were recovered from contexts (312), (504), (601) and (1015) with unidentified sheep-sized fragments also present in four other contexts. At least three animals are represented. Two jaw bones, from contexts (504) and (601) are both from mature animals, with full permanent dentition. The state of wear of their teeth would indicate that they were at least 3 years old, and probably older. The paired femurs and tibiae from context (707) have unfused epiphyses, but they are comparatively large. That they were found together suggests that they came from a lamb which had died and been disposed of by burial. Rib bones from context (300) with unfused articular ends could also be from a young lamb.

The high proportion of chicken bones is accounted for by two contexts, (800) and (801). Together, these contained the remains of at least three, and probably no more, individuals. The two birds represented in context (801) would have been comparable to average-sized modern hens, while that from (800) was slightly smaller. Birds from archaeological contexts are often smaller than this, perhaps the size of a modern bantam.

Contexts (106) and (805) both yielded pig bones.

Small fragments of burnt bones were present in contexts (1015), (1017) and (1018). These were all completely calcined on the surface with internal carbonization, indicating prolonged high-temperature exposure. They are mostly too small to be identified, but include material from sheep and probably from cattle.

Evidence of butchery is fairly sparse. The cattle scapula from context (504) shows cut marks, where the blade of the bone has been severed. Some of the material is typical of the fragments produced when long-bones are cracked to extract marrow, although similar pieces can be produced by accidental damage. A shaft fragment from context (300), possibly a pig radius, has been sawn. This is perhaps more typical of modern butchery practice.

Overall, the amount of bone collected is surprisingly small considering the number of trenches excavated. The recovered bone is fairly well preserved, but it could be that soil conditions in the past were less conducive to preservation, and much material has been lost. A change in ground drainage, for instance, could have radically affected the soil chemistry.

Otherwise, this is an unexceptional assemblage of bones. It consists mostly of the residues expected from disposal of domestic food waste, together with the remains of some unusable young animals.

Context	Animal	Bone	Side	Completeness	Comments
106	Bos	Femur	R	Frag of Head	
106	Bos	Mandible	R	Small frag.	Back part of mandible
106	Sus	Scapula	L	Blade frags.	
106	C.S.	Carpal	?	Complete	
106	C.S.	T. Vert		Neural spine	
106	C.S.	Vert ?		Small frag.	
106	C.S.	Innom. ?		Small frag.	
106	Bird	Tibiotarsal ?		Shaft frag.	Large - goose sized
200	Sus ?	Radius ?		Shaft frag.	Sawn
300	S.S.	Rib		Frag including articulation	Unfused
300	S.S.	Rib		Frag. including articulation	Unfused
300	S.S.	Rib		Frag.	Same animal as above 2
300	S.S.	Rib		Frag.	Possibly same as above
312	Ovis	Tibia ?	L	Shaft frag.	
312	C.S.	Long bone		Shaft frag	Butchered, cracked for marrow ?
504	Bos	Radius	R	Distal end	
504	Bos	Metatarsal	R	Distal end missing	Same animal as above
504	Bos	Scapula	R	Olecranon frag.	Butchery marks ?
504	Ovis	Mandible	R	Back part missing	pm 3,4 m 1,2 fairly heavy wear
504	C.S.	Cranium		Frag.	
504	C.S.	Long bone		3 Shaft frag.	Proably all from same bone
601	Ovis	Mandible	L	Complete	pm 3,4 m1,2,3 Mod to heavy wear
604	Bos	Humerus	R	Prox. end damaged	Fairly small
604	C.S.	Long bone ?		Shaft frag.	Badly eroded
604	S.S.	Tibia ?		Small frag.	
707	Ovis	Femur	L		Unfused
707	Ovis	Tibia	L		Unfused
707	Ovis	Femur	R		Unfused
707	Ovis	Tibia	R		Unfused, same animal as 3 above
707	?	Rib		Frag.	Possibly same as above
707	?	Rib		Frag	Possibly same animal as above
800	Gallus	Tibiotarsal	L	Distal end	
800	Gallus	Femur	R	Prox end	
800	Gallus	Furcula ?		Frag.	
800	Gallus	Sternum		Frag.	
800	C.S.	T. Vert.		Neural spine	
800	C.S.	C. Vert.		Centrum frag.	

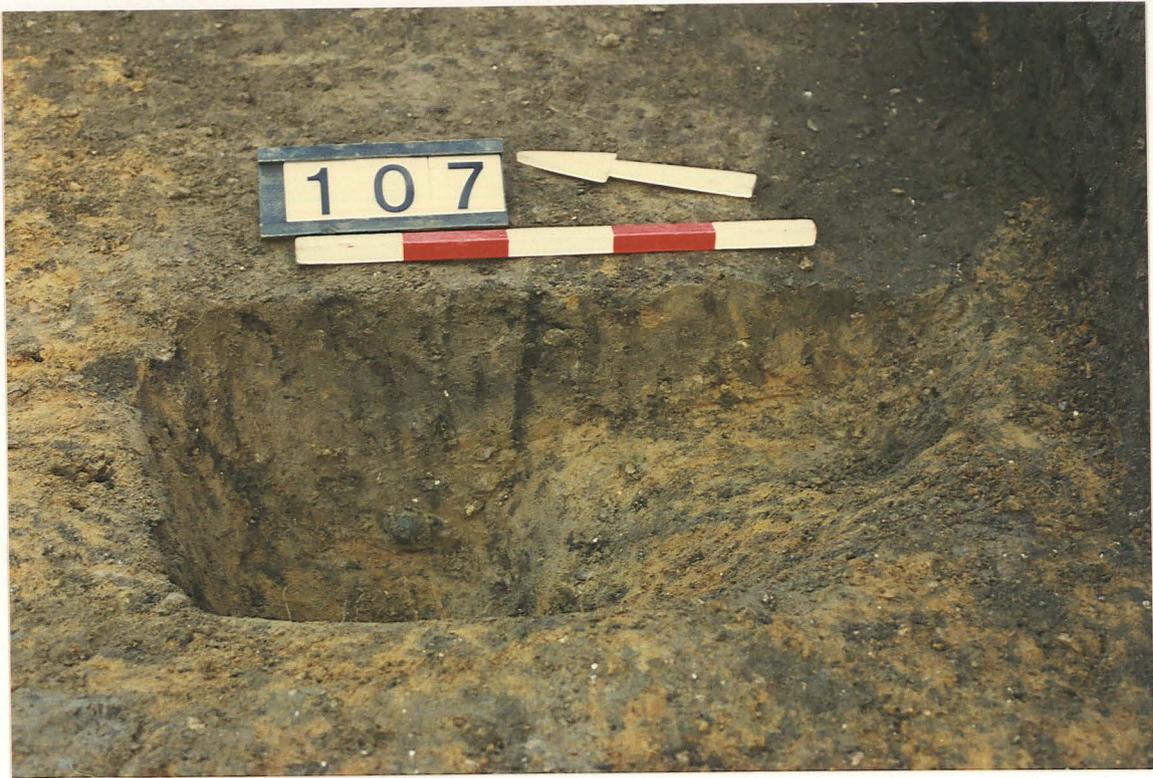
801	Gallus	Femur	L	Complete	
801	Gallus	Femur	L	Distal end	
801	Gallus	Tibiotarsal	R	Prox end frag.	
801	Gallus	Ulna	R	Complete	
801	Gallus	Ulna	L	Distal end	
801	Gallus	Humerus	L	Complete	
801	Gallus	Sternum ?		Small frag.	
805	Sus	Innom.	R	Articular region	
808	Bos	Axis		Centrum frag.	Post. epipysis present but unfused
808	?	Vert. ?		Small frag.	
1015	Ovis	Axis		Frag. of crest	Burnt, calcined
1015	Ovis	Vert.		Centrum	Burnt, calcined
1015	S.S.	Rib		Small frag.	Burnt, calcined
1015	S.S.	Rib		Small frag.	Burnt, calcined
1015	S.S.	Rib		Frag.	Not completely mineralized, spongy
1015	S.S.	Rib		Frag.	
1015	S.S.	Long bone ?		Shaft frag.	
1016	C.S.	Rib		Frag.	
1016	C.S.	Rib		Frag.	
1016	C.S.	Rib		Frag.	
1016	C.S.	Scapula		Blade frag.	
1016	S.S.	Rib		Frag.	
1016	S.S.	Rib		Frag.	
1017	C.S.	Rib		Frag.	Burnt, calcined
1018	S.S.	Vert.		Small frag.	Burnt, calcined
1018	S.S.	Rib		Small frag.	Burnt, calcined
1018	?	?		Small frag.	Burnt, calcined
1018	?	?		Small frag.	Burnt, calcined
1018	?	?		Small frag.	Burnt, calcined
1018	?	?		Small frag.	Burnt, calcined
1018	?	?		Small frag.	Burnt, calcined
1018	S.S.	Scapula		Blade frag.	
1018	C.S.	Rib		Frag.	
1018	S.M.	Long bone ?		Shaft	Approximately rat-sized
1018	S.M.	Long bone ?		Shaft frag.	Same animal as above ?



Pl. 1 Trench 1, general view looking NE



Pl. 2 Feature 105 looking NW



Pl. 3 Feature 107 looking E

Pl. 4 Trench 2, general view looking WSW





Pl. 5 Trench 3, general view looking NW

Pl. 6 Features 319 and 315 looking NE





Pl. 7 Feature 311 looking WSW

Pl. 8 Trench 4, general view looking SE

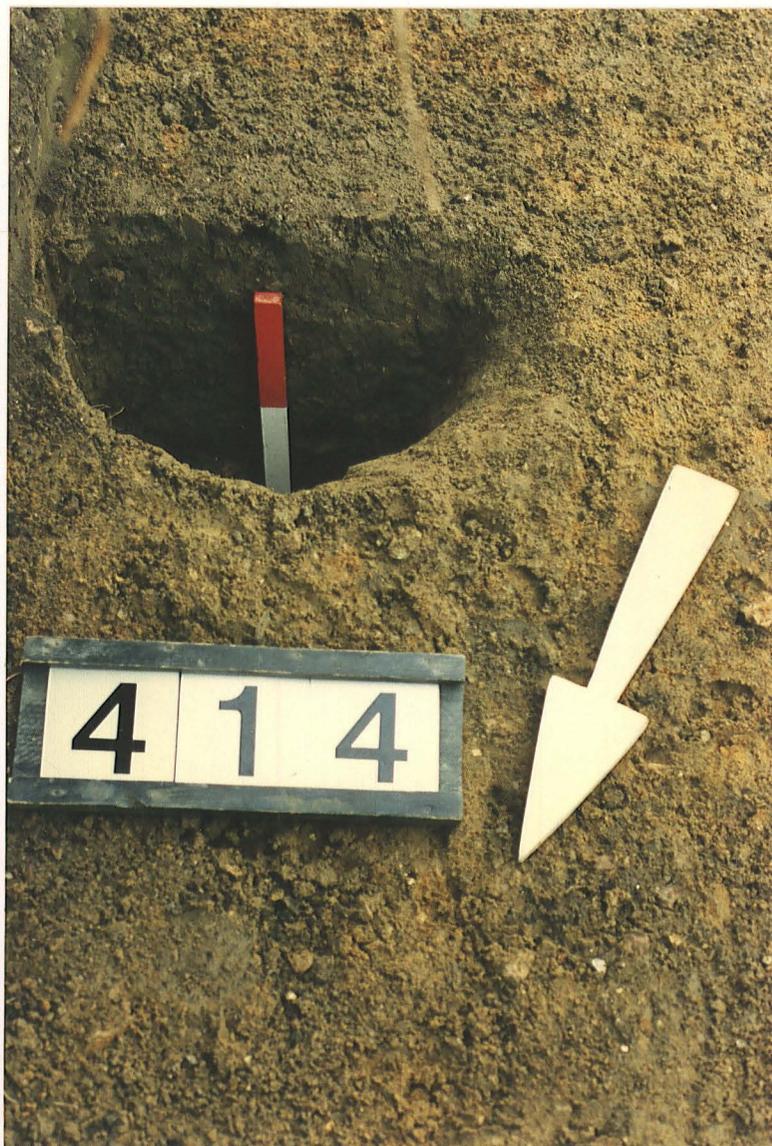




Pl. 9 Feature 405 looking E

Pl. 10 Features 418 looking WSW





Pl. 11 Feature 414 looking SE



Pl. 12 Trench 5, general view looking NE



Pl. 13 Feature 508 looking WSW

Pl. 14 Trench 6, general view looking NNE





Pl. 15 Feature 603 looking SE



Pl. 16 Feature 706 looking S



Pl. 17 Feature 718 looking S

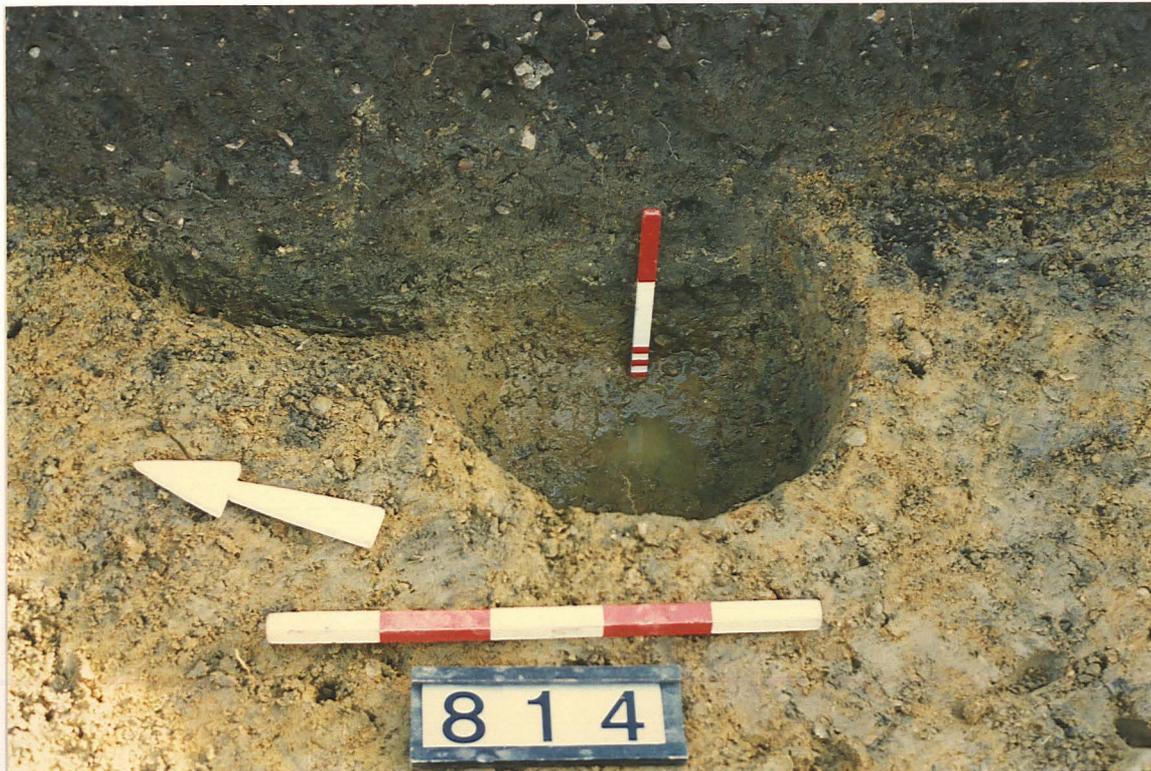
Pl. 18 Trench 8, general view looking ENE





Pl. 19 Feature 804 looking SE

Pl. 20 Feature 814 looking ENE

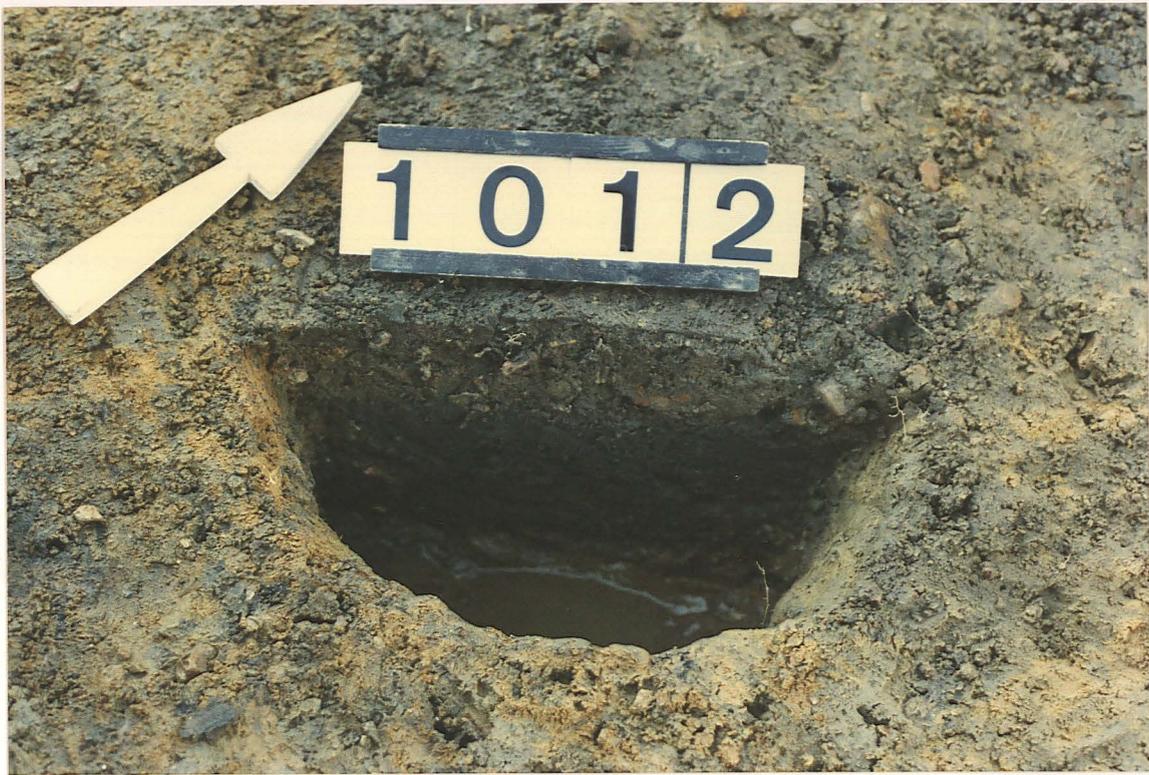




Pl. 21 Trench 9, general view looking N



Pl. 22 Trench 10, general view looking ENE



Pl. 23 Feature 1012 looking NW

Pl. 24 Feature 1006 looking E

