OLD HALL AND GENERALS FARM BOREHAM ESSEX

ARCHAEOLOGICAL EVALUATION BY TRIAL TRENCHING





May 2006

OLD HALL AND GENERALS FARM BOREHAM, ESSEX

ARCHAEOLOGICAL EVALUATION BY TRIAL TRENCHING

Prepared By: Andrew Robertson	Signature:
Position: Project Officer	Date:
Approved By: Mark Atkinson	Signature:
Position: Unit Manager	Date:

Document Ref.	1568rep.doc
Report Issue Date	May 2006
Circulation	DK Symes Associates
	Sewells Reservoir Construction Ltd
	ECC Historic Environment Management
	Essex Historic Environment Record

As part of our desire to provide a quality service, we would welcome any comments you may have on the content or the presentation of this report.

Please contact the Archaeological Fieldwork Manager, at the

Field Archaeology Unit,

Fairfield Court, Fairfield Road, Braintree, Essex CM7 3YQ Tel: 01376 331470

Fax: 01376 331428

CONTENTS

SUMMARY	Page No 1
1. INTRODUCTION	2
2. BACKGROUND 2.1 Planning 2.2 Location and topography 2.3 Geology 2.4 History and archaeology	3
3. AIMS AND OBJECTIVES	5
4. METHOD	5
5. RESULTS	6
6. FINDS and ENVIRONMENTAL MATERIAL 6.1 Pottery 6.2 Brick and tile 6.3 Baked Clay 6.4 Worked Flints 6.5 Iron Work 6.6 Copper Alloy 6.7 Cremated Bone	15
7. DISCUSSION	20
8. ASSESMENT OF RESULTS	24
Acknowledgements	25
BIBLIOGRAPHY	26
APPENDICES	
Appendix 1: Trench data Appendix 2: Context list Appendix 3: Finds data Appendix 4: Archive index Appendix 5: EHER summary	34 36 37 39 40
FIGURES Figure 1 Location Plan Figure 2 Trenches 6, 7, 12 and 13 Figure 3 Trench 12 Figure 4 Trench 13 Figure 5 Trench 50 Figure 6 Trench 52	28 29 30 31 32 33
TABLES Table 1 – Distribution of worked flints	18

OLD HALL AND GENERALS FARM BOREHAM, ESSEX

ARCHAEOLOGICAL EVALUATION BY TRIAL TRENCHING

SUMMARY

Client: Sewells Reservoir Construction Ltd

FAU Project No.: 1568

NGR: TL 765087 (centred)

Site Code: BOOH 06

Date of Fieldwork: 28/02/06 to 21/03/06 OASIS reference: essexcou1-15009

An archaeological evaluation, covering c.15 hectares, was carried out on the site of a proposed agricultural reservoir and associated ecological compensation area on land at Old Hall and Generals Farm, Boreham, near Chelmsford. Seventy-four trial trenches were opened, covering 5900 sq m (c.4% of the site) to provide a uniform coverage across the proposed development area. A number of trenches specifically targeted known cropmark features that comprised apparent ring-ditches and linear boundary ditches/trackways. The existence of these were substantiated by the trial trenching.

The identified remains revealed a wide date range, from Late Neolithic/Early Bronze age through Roman, Saxon onto medieval and post-medieval. However, their was no particular concentration of features from any period. The remains were also largely confined to two distinct areas of the site, the first on the higher ground in the northeast of the site and the second on the floodplain in the southwest.

The Late Neolithic/Early Bronze Age remains consisted of a small pit and ditch in the northeastern area and two possible ring ditches in the southwestern, although the dating for the ring ditches is tenuous. The Roman remains, an Early Roman urned cremation burial, a north-south ditch and two layers, were confined to the northeastern area above the floodplain. These may represent the edge of wider-ranging Roman activity that extends northward. The Saxon remains were more ephemeral, consisting of a poorly-dated pit and layer which lie along the edge of the higher ground in the northeast. The medieval and post-medieval remains consist of field ditches. The single medieval ditch seemingly ran along the upper break of slope, dividing the floodplain from the higher ground. The majority of the post-medieval ditches appeared as cropmarks and a number of them had ceramic drains in their bases.

Although the density of archaeological features is relatively low, the date range of features is potentially important with regards to understanding land-use through time. It is judged that the proposed development will adversely affect any archaeological remains in the area.

1. INTRODUCTION

This report contains the results of an archaeological evaluation undertaken prior to the submission of a planning application for the construction of an agricultural reservoir and associated ecological compensation area. The evaluation consisted of trial trenching across the proposed development area and was designed to determine the presence, nature, date and survival of any archaeological remains.

Essex County Council Field Archaeology Unit (ECC FAU) carried out the evaluation on behalf of Sewells Reservoir Construction. The project was carried out in accordance with a brief prepared by ECC Historic Environment Management (ECC HEM), who also monitored the work. The site archive will be deposited at Chelmsford Museum. A copy of this report will be deposited with the Essex Historic Environment Record (EHER) and a summary will appear in the county journal Essex Archaeology and History (EAH). An OASIS record for this project has been started and will be completed after HEM approval.

The standards and guidance issued by the Institute of Field Archaeologists (1999) and ALGAO Standards for Field Archaeology in the East of England (Gurney 2003) were followed throughout all stages of this project.

The report is structured to describe the background to the project, followed by a description of the features and finds from each trench. Summaries of the individual material assemblages are presented separately. An overall discussion of the significance and potential of the remains followed by an assessment of the results are located at the end of the report. Appendices include trench, context and finds data, in addition to the details of the archive contents and the EHER summary. All illustrations are placed together towards the back of the report.

2. BACKGROUND

2.1. Planning

At the request of DK Symes Associates, acting as agent to Sewells Reservoir Construction, ECC HEM produced a pre-determination brief of works (Connell 2005) for archaeological trenching on the site of a proposed agricultural reservoir and associated soil storage, flood compensation and ecological areas (Planning apps. ESS/39/03/CHL, ESS/0032/04/CHL). ECC FAU was subsequently appointed by Sewells Reservoir Construction to undertake the archaeological evaluation in accordance with the brief and the Written Scheme of Investigation (ECC FAU 2006).

2.2 Location and Topography (Fig. 1)

The proposed development area lies immediately to the east of Church Road and north of the Chelmer and Blackwater Navigation, and extends across an area of approximately 15 ha. The main reservoir area extends northwards to an existing, smaller, reservoir and surfaced track. The ecological compensation area lies within an adjoining field immediately to the north-east.

The site is currently arable farmland on the gentle lower slope and floodplain of the north side of the Chelmer valley. At its northern end the ground is 20m above OD and this falls to 14m at the southern end of the site. The investigation area spanned two separate fields, the northern field comprised a gently sloping terrace with a sharp slope falling towards the floodplain. The southern field was comparatively flat as it lay entirely on the floodplain of the river Chelmer.

2.3 Geology

The topsoil across the whole of the site was approximately 0.4m deep and was a dark brown sandy loam. It was very loose and crumbly, even when wet. The natural upper geological deposits varied across the site, but broadly fell into three distinct groups. The three types of observed geological deposits are comparable to those shown on the British Geological Survey maps for the area (British Geological Survey 2006). At the western side of the southern field was a pale yellow brown silty clay with patches of gravel present, this corresponds to river terrace deposits. The northern field and the eastern central part of the southern field comprised of orangy sand and gravel, equating to glacial sand and gravel. In the extreme eastern part of the southern field was grey silty clay, which is likely to be alluvium. The only other sub-surface deposit encountered was a pale yellow clay that extended approximately 30m northwards from the edge of the Chelmer and Blackwater navigation. This deposit was probably associated with the consolidation of the River Chelmer's banks as part of the construction of the Navigation in 1793 - 79. The underlying geology of the area is London Clay (British Geological Survey 2006).

2.4 History and Archaeology

A number of cropmarks, indicative of the presence of below-ground archaeological remains, have been identified from aerial photographs within the proposed development area and in the surrounding vicinity (Fig.1). The archaeological and historical significance of this site has previously been investigated by means of a desk-based assessment (Heppell 2004).

In summary, the area of investigation includes cropmarks of two likely prehistoric ring-ditches (remains of burial mounds) and fragmentary remains of two further possible examples, a trackway of unknown date and other linear ditch-like features (EHER 5760). Some of the linear ditches correlate with field boundaries, marked on the 1st edition OS mapping, that have subsequently been in-filled. A late 18th century coal wharf is known to have once existed in the south-west corner of the proposed development area. In general, the present landscape around the site has the same layout as the on the 1st edition OS map. The Chelmer and Blackwater Navigation was the focal point of this landscape in the late 19th century as, since its completion in 1797, it was the main transport link between Chelmsford and the coast, at Maldon.

In archaeological terms, the Chelmer valley has been occupied and exploited since at least the Neolithic period. Although little in the way of Neolithic occupation sites are known, a causwayed enclosure and cursus monument have been identified at Springfield some 3km to the west of the site (Buckley and Hedges 2001). These, along with other scattered, generally incoherent, remains indicate a significant presence during the Neolithic period. The Bronze Age remains in the chemer valley reflect increasing domestic occupation and agriculture, with enclosure sites such as Broomfield (Atkinson 1995) and Springfield Lyons (Buckley and Hedges In prep) containing structures, and numerous field systems located along the river valley. The late Iron Age and Roman periods are increasingly dominated by towns such as Chelmsford and Heybridge with much of the surrounding landscape seemingly cultivated. The Saxon period in this part of Essex is seemingly defined by small-scale settlements and cemeteries such as at Springfield Lyons (Tyler and Major 2005). The river valley was increasingly settled but retained an agricultural nature during the medieval and post-medieval periods.

No previous archaeological work has taken place within the limits of the site or in the immediate vicinity.

3 AIMS AND OBJECTIVES

The evaluation work was undertaken to locate, identify and record any surviving remains within the proposed development area. In particular, the evaluation sought to clarify the location, nature and date of the cropmarks previously identified on the site.

4 METHOD

The brief required a 4% sample of the proposed development area to be evaluated, and that the area of known cropmarks be specifically targeted. To this effect 74 trenches, each measuring 40 x 2m, were excavated across the area. One further trench (Trench 18), positioned to investigate a ring-ditch cropmark, could not be excavated due to the presence of a substantial earth bund at this location. Trenches 1 - 17 were located in the northern field, the ecological compensation area, while trenches 19 - 74 were situated on the floodplain in the main reservoir area.

A mechanical excavator equipped with a flat-bladed bucket was used to open all trenches under archaeological supervision. The machine-excavated surface of the trenches was sufficiently cleaned to ensure that any features present were visible. All archaeological features and deposits, other than obviously modern features, were manually excavated.

Standard ECC FAU methodologies were employed with regard to excavation and recording. All features exposed within the trenches were recorded using the FAU context recording system. Linear features were sampled by at least one excavated segment and discrete features were 50% excavated. However, continuations of major linear features such as boundary ditches, revealed in multiple evaluation trenches, were not necessarily all excavated – particularly where it could be demonstrated that these remains correlate with modern OS mapped features (i.e. 1st edition OS onwards). All artefacts from the excavated features were collected to aid dating and characterisation. Surveying and planning was tied to the Ordnance Survey National Grid using GPS. A photographic record consisting of colour slide, black and white print and digital images was maintained throughout the course of the investigation.

5 RESULTS

Seventy-four trenches, each measuring 40m x 2m, were excavated across the proposed development area (Fig.1). Trenches 2, 4, 5, 8-11, 16, 17, 21, 23, 24, 25, 29, 31-36, 38–49, 53, 55, 56, 58-63 and 65-74 contained no archaeological remains and are not further described here, unless particularly pertinent. Those trenches which contained significant archaeological remains are described below.

Further information on each trench is presented in Appendix 1 and individual features/deposits, including dimensions, are listed in Appendix 2. Detailed finds information is listed in Appendix 3. All pertinent trench plans (Figs 1 - 5) are situated at the rear of the report.

The area of investigation spans two separate fields, with the northern field lying on a slope the southern field on the floodplain. Two distinct areas of significant archaeological activity were identified. One area was centred around trenches 50 and 52 in the southwestern corner of the site with the second located in the northeastern corner. In the main, the features present on the site consist of ditches, a small number of pits and layers and a single urned cremation, as well as the remains of two possible Bronze Age barrows. Apart from in trenches 12 and 13, the density of the archaeological remains is not particularly high with only one or two features present in each trench and very little intercutting stratigraphy. The dates of the features range from Neolithic to Roman, Saxon and medieval, although there is a general paucity of artefacts with several of the features only tentatively dated. No single period has a large number of features dated to it; indeed, a large proportion of the features were undated. The fills of the features were predominantly soft silty clays and ranged in colour from light grey to mid brown. None of the fills exhibited evidence of deliberate dumping, suggesting that they had been deposited by natural means.

In general, the survival of the archaeological features was reasonably good with few being significantly damaged by ploughing. The plough disturbance was largely limited to light scoring over the exposed surface in the trenches. The one area of significant deep modern disturbance was towards the northern end of trench 12, where it seems that sugar-beet had been dug into the ground.

The topsoil was a loose sandy loam which ranged in depth from c.0.3m in the northern most trenches, on the slope, to 0.45m on the flood plain. The underlying geology of the site was broadly of three distinct types: pale yellow brown silty clay with gravel patches along the western side; orangey red silty gravel running from the most northern trenches down the centre and grey silty clay, which may be alluvium, along the eastern edge. The high amount of gravel and sand in the

natural geology means that the soil is free draining and is relatively acidic, which accounts for the lack of organic remains, with exception of burnt bone, recovered from the site.

5.1 Trench 1 (Fig.1)

Trench 1 was the northern-most trench of the evaluation and lay on the 20m contour line. It was orientated northwest–southeast. The undisturbed natural geology was encountered at a depth of 0.5m.

Although this trench was located to intersect with a linear cropmark, this was not identified in the trench. The only feature was cremation pit 29, which contained early Roman cremation vessel 32. The vessel was a shallow jar decorated with a groove and wavy-line combing but was very badly fractured in antiquity. Surrounding the cremation vessel was fill 30/89 which contained a quantity of small fragments of human bone. This was fully-sampled (bulk soil sample 1) and processed. Some of the burnt bone fragments from sample 1 had iron fragments adhering to them, probably fused together during the burning process. The main cremation burial, inside the vessel, comprised of larger pieces of human bone, again with fragments of iron adhering to some of them. This difference in deposition suggests that the larger bone fragments had been selected for inclusion in the burial vessel with the remaining ash piled up around it.

5.2 Trench 3 (Fig.1)

Located in the north west corner of the northern field, trench 3 ran east—west. It was machine-excavated onto undisturbed natural gravel at a depth of 0.5m. A single pit (27) was identified in the trench. It measured approximately 0.84m in diameter and was 0.32m deep. The fill of the pit contained 21 pieces of worked flint, including two blades and two scrapers, as well as twelve sherds of Neolithic pottery. It seems likely that all the material from this deposit is *in-situ*.

5.3 Trench 6 (Figs. 1 and 2)

Orientated north–south, this trench was located along the northeastern edge of the evaluation area. It was excavated to a depth of 0.5m onto the undisturbed natural gravel and contained ditch 59 and deposit 40. Deposit 40 was very heavily plough damaged and it proved impossible to define its nature. Two small copper alloy objects were recovered from the deposit, SF 1 and 2. However, neither of these objects were datable or identifiable.

At the southern end of the trench, ditch 59 ran northeast—southwest. It was 1.8m wide and 0.79m deep. It contained four fills with the lower two fills 62 and 63 containing all the collected finds. The

pottery recovered from secondary fill 62 was all Neolithic in date. Ditch 59 was further identified in trench 7, as ditch 25.

5.4 Trench **7** (Figs.1 and 2)

Lying immediately to the east of trench 6, trench 7 ran east—west and was excavated to a depth of 0.43m onto the undisturbed natural gravel. Two ditches were identified in this trench. A modern (unnumbered) ditch running north—south was not excavated, as brick and paint tins were noted on its surface. This ditch corresponded with a cropmark plotted as running through the eastern end of the trench. The second ditch 25 ran northeast—southwest and was probably the same ditch as was excavated in trench 6, ditch 59, although it does not appear in trench 10 further to the southwest. The fill of ditch 25 contained two sherds of Roman samian ware.

5.5 Trench 12 (Figs.1, 2 and 3)

Situated at the eastern edge of the site, this trench was orientated north—south. It was machine-excavated to a depth of 0.5m and the northern end of the trench was heavily disturbed by modern intrusion. All the features and deposits were located either in the centre or towards the southern end of the trench. Three cut features were identified; pit 41, pit 51 and ditch 57, along with four layers 36/38, 37, 39 and 56/73. Of all the trenches on the site, this one exhibited the most complex stratigraphy.

The latest feature was a modern ditch which ran east—west across the trench, this was unexcavated but modern china and brick was noted in the exposed fill. 13th century pit 51, which lay towards the centre of the trench and extended beyond the western baulk, was probably contemporary with gravel layer 37, and possibly with silty layer 36/38. Both of these layers lay towards the southern end of the trench with 36/38 being stratigraphically earlier than 37. Underlying both pit 51 and layer 36/38 was Saxon layer 56/73 which itself overlay Saxon pit 41 and Roman or Saxon ditch 57. 1.8m-wide ditch 57 ran northwest—southeast across the trench and was 0.85m deep; it contained two fills 72 and 58. Ditch 57 may be the same ditch as was identified in trenches 13 (ditch 19/33/44), 14 and 15 (ditch 23). The earliest deposit identified was possible prehistoric layer 39, which lay at the extreme southern end of the trench.

All of the archaeological remains, with the exception of the modern ditch, lay in what seems to be a hollow bounded to the north by ditch 57. It is unclear if this was a natural or man-made hollow as the extents of it were not established within the trench. Neither was the undisturbed natural reached, with layer 39 extending below 1.2m. An extant pond to the immediate south of the trench raises the possibility that the hollow was originally part of the pond that has subsequently silted-up.

5.6 Trench 13 (Figs.1, 2 and 4)

Trench 13 was the most westerly of all the trenches and was orientated east-west. It was excavated to a depth of 0.5m. Three cut features gully 21, ditch 19/44/33 and ditch 45 were identified in the trench, as were deposit 50 and layers 43, 48 and 49. Situated towards the western end of the trench the latest deposit was charcoal-rich layer 43, which overlay north—south gully 21. Gully 21 was only partially seen in section but was approximately 0.35m deep. Its fill contained 12th to 14th century pottery. Gully 21 cut east—west ditch 19/44/33 which ran along three quarters of the length of the trench. Ditch 19/44/33 was approximately 0.2m deep and the pottery recovered from its fill indicates a date of c.1200. These two features cross perpendicularly but are probably unrelated. It is possible that ditch 19/33/44 is a further part of a ditch that runs along the top of the break of slope to the floodplain and therefore equates to ditch 57 (trench 12) and ditch 23 (trenches 14 and 15).

The eastern end of the trench was covered by apparent alluvial deposit 48. Spread over the top of this was a thin charcoal-rich deposit 50, which contained Roman pottery. Deposit 50 seems likely to have been fire residue which was dumped. Sealed by layer 48 was Early Roman ditch 45. Ditch 45 ran north – south and was approximately 0.7m deep. It was cut into a second alluvial layer 49. The successive alluvial layers overlying the natural gravel, and separated by ditch 45, may suggest that the area around the eastern end of the trench was repeatedly flooded during the Roman period. The flooding may be related to overflowing of the putative pond/depression seen to the west in trench 12.

5.7 Trench **14** (Fig.1)

Trench 14 was orientated east-west and lay at the south eastern corner of the northern field. It was machine-excavated to a depth of 0.5m and a single ditch, 23, was identified running along the length of the trench. The ditch was also identified in trench 15 where it was planned only. Ditch 23 was 0.75m deep and 1.4m wide. Its fill contained two small fragments of 10th to 13th century pottery, but it is likely that these were residual as they were highly abraded.

It seems likely, given the location and alignment of this ditch, running east—west along the top of the break of slope for the flood plain, that it represents a field boundary and is possibly the same as ditch 19/44/33 in Trench 13.

5.8 Trench **15** (Fig.1)

Situated to the immediate east of trench 14, this trench ran north—south down the slope to the flood plain. It was excavated to a depth of 0.5m and contained a single feature. A continuation of ditch 23, which was excavated in trench 14, ran east-west through this trench. It was not excavated but planned only. No finds were collected from the surface of this feature. It is presumed that its eastward continuation lay just to the north of trench 16, which was found to be devoid of archaeological remains.

5.9 Trench **19** (Fig.1)

Located along the northern edge of the reservoir area, this trench was orientated east-west. It was machine excavated to a depth of 0.6m onto the undisturbed natural and a single northeast-southwest ditch was revealed. This ditch was not excavated as it was further investigated in trenches 20 (ditch 7) and 26 (ditch 3). No finds were collected from the surface of this feature.

5.10 Trench **20** (Fig.1)

Trench 20 was aligned north—south and located to the immediate east of trench 19. It was excavated to a depth of 0.45m and contained a single northeast—southwest ditch, 7, at the northern end of the trench. The ditch was 0.7m deep and had a clinker-filled channel along its base. It is probable that this ditch is the same as ditch 3 in trench 26 and the unexcavated ditch in trench 19, and that it represents a modern drainage ditch running parallel to the extant farm trackway. No finds were collected from the fill of this feature.

5.11 Trench 22 (Fig.1)

Trench 22 lay at the northeast corner of the reservoir area. It ran north-south and was excavated to a depth of 0.64m onto the undisturbed natural geology. A single ditch ran northwest-southeast across the northern end of the trench. It corresponds with a field boundary on the 1st edition OS map and was therefore probably post-medieval in origin. No finds were collected from the surface of this feature and it was recorded on plan only.

5.12 Trench **26** (Fig.1)

Located to the immediate west of trench 19, trench 26 ran north—south. It was machine-excavated to a depth of 0.4m and contained a single ditch 3. This ditch was aligned northeast—southwest and corresponds to ditch 7 in trench 20 and an unexcavated ditch in trench 19. Ditch 3 was 0.8m deep and contained a land drain at the base. Although no finds were collected from the fill of this feature, it is likely that it is of modern origin and represents a drainage ditch along the edge of the extant farm track.

5.13 Trench 27 (Fig.1)

Trench 27 was situated towards the northwest corner of the site and was orientated east—west. It was excavated to a depth of 0.4m onto the undisturbed natural geology. A single north—south aligned ditch 1 was investigated in this trench. At the base of the ditch was a gravel-filled channel. No finds were retrieved from the fill of this feature and it seems likely that it was a modern drainage ditch. The feature was not identified in any other trench.

5.14 Trench **28** (Fig.1)

Located to the east of trench 27, trench 28 was orientated north—south and was positioned over some linear cropmarks. It was excavated to a depth of 0.5m onto the undisturbed natural geology and the cropmarks were identified as two modern ditches, 5 and 9. The northern-most of the two ditches, 9, ran approximately east—west across the trench and was c.0.46m deep and 2.7m wide. A single find was recovered from the fill of this feature, a modern iron horse shoe, which was discarded after recording. The second ditch, 5, ran approximately northwest—southeast and was 1.45m wide and excavated to a depth of 0.27m. The ditch was not fully-excavated as a land drain was encountered within it. No finds were collected from it.

Both of the ditches investigated in this trench were likely post-medieval in origin and probably represent drainage or infilled boundary ditches.

5.15 Trench **29** (Fig 1)

Lying to the east of trench 28, trench 29 was orientated east-west and was positioned over a semicircular cropmark. It was excavated to a depth of 0.4m. A further north-south extension to trench was also excavated. Remains corresponding to the cropmark were not identified in either the original trench or the extension. No finds were collected from the surface of the trench.

5.16 Trench **30** (Fig.1)

Situated to the southwest of trench 22, trench 30 was orientated north—south. The trench was machine-excavated to a depth of 0.4m and although it was positioned over two separate cropmarks only the southern was identified as a tangible feature. A single modern ditch was identified running east—west, which was planned but not excavated as it correlates with a former boundary marked on the OS 1st edition map. This ditch was further identified in trench 37. No finds were collected from the ditch surface.

5.17 Trench **33** (Fig 1)

Located towards the southeastern corner of the proposed agricultural reservoir, trench 33 was orientated east-west. It was excavated to a depth of 0.6m onto the undisturbed natural geology. Although positioned to intercept with a linear cropmark no features were identified. No finds were collected from the surface of this trench.

5.18 Trench **37** (Fig.1)

This trench lay towards the northeastern corner of the reservoir site. It was orientated northwest—southeast to intercept known cropmarks. Although the trench was excavated down onto undisturbed natural geology at a depth of 0.3m, only one of the cropmarks, a modern boundary ditch, was encountered. It was not excavated as it corresponded to a boundary ditch marked on the 1st edition OS map. It was also identified in trench 30. No finds were collected from the surface of the ditch. The northern continuation of a track like pair of linear cropmarks was not found to manifest itself as tangible features in this trench.

5.19 Trench **48** (Fig 1)

Situated along the western edge of the site, trench 48 was orientated east-west. It was excavated onto the undisturbed natural geology at a depth of 0.45m. Although this trench was positioned to lie over two parallel linear cropmarks, neither was identified as was the case in trench 37. No finds were collected from the surface of this trench.

5.20 Trench **50** (Figs.1 and 5)

Located towards the western edge of the site, trench 50 was excavated to a depth of 0.4m. It was positioned northwest–southeast to investigate a circular cropmark. Ring gully, 64/66/68, was located slightly to the south of the plotted cropmark. Although only a small part of the ring gully was within the trench, it seems to be approximately 7m in diameter. Three slots were excavated through the gully, but only a single piece of Saxon pottery was recovered along with worked and burnt flints. The surviving depth of the ring gully was approximately 0.17m. The single Saxon sherd does not securely date this feature and it may be intrusive with the ring gully being prehistoric in origin. However, the possibility remains that this feature is indeed a Saxon ring gully. Two Saxon ring gullies have been identified at Springfield Lyons (Tyler and Major 2005), to the west of the present site. Both of these were associated with inhumation or cremations burials, though no remains of a grave were identified here.

Three other features were investigated in this trench, pit 70 which cut the ring gully and undated ditch 85/87 and a modern ditch containing a ceramic drain. Pit 70 extended beyond the western

baulk and only a small part of it was seen in the trench. This feature, although later than the ring gully, is undated despite a number of flint flakes and cores being recovered from its fill. Ditch 85/87 may be natural in origin but it ran east-west across the trench. No finds were recovered from its fill.

5.21 Trench **51** (Fig.1)

Running approximately east—west towards the southwestern corner of the reservoir site, trench 51 was excavated to a depth of 0.45m. It was situated over two parallel linear cropmarks, which were both investigated. Ditch 16 was the easternmost of the ditches and was approximately 3m wide and 0.5m deep. The second ditch 54 was approximately half the size of ditch 16, with a width of 1.4m and a depth of 0.29m. Both were also identified in trenches 57 and 64 to the south. These ditches seem to be field boundaries and not the edges of a trackway as was first supposed from the cropmarks. Although neither ditch is dated, the dimensions and character of them differ so much that it seems unlikely that they are contemporary with one another.

5.22 Trench **52** (Figs.1 and 6)

Situated to the east of trench 51, trench 52 ran north—south. It was excavated to a depth of 0.5m onto the undisturbed geological deposits. Three features were identified in this trench; east—west running ditches 12 and 14, a ring gully 74/79 and layer 83. The ring gully corresponds with a circular cropmark feature. To further establish the dimensions of the ring gully an east—west extension to the trench was excavated.

The ring gully was approximately 12m in diameter and had two segments excavated across it. The gully itself was approximately 1.6m wide and 0.16m deep. The ring gully was sealed by gravel layer 83, perhaps the remains of the spread mound that originally occupied the enclosed area. Three fragments of possible Late Neolithic or Early Bronze Age pottery were recovered from the fill of the ring ditch. No internal features were visible, despite intensive hand—cleaning. However, the gravel and sand soil was so dry and dusty that ephemeral or small features may not have been apparent. The centre of the ring ditch did, however, appear to be darker than the surrounding natural which, along with the putative dating, possibly indicates that the feature was the base of a ploughed-out prehistoric barrow (burial mound).

Ditch 12 may have been natural silt banding in the gravel as the sides were not well-defined and the fill was particularly sterile. No finds were recovered from the fill, so the feature remains undated. Ditch 14 was a modern east-west drainage ditch with a gravel-filled trough cut into its

base. It corresponds with a post-medieval field boundary identified as both a cropmark and a ditch on the 1st edition OS map. It was further identified in trenches 50 and 54.

5.23 Trench **54** (Fig.1)

Located approximately in the centre of the site, this trench ran north—south. It was excavated to a depth of 0.52m onto the natural gravel geology. A single modern ditch was identified running east-west through this trench. It was also identified in trenches 50 and 52 and as a cropmark and corresponds to a field boundary on the 1st edition OS map. The ditch was not excavated and no finds were collected.

5.24 Trench **56** (Fig. 1)

Situated to the south-west of trench 50, trench 56 was positioned over a curvilinear cropmark. The trench was orientated northwest-southeast and was excavated to a depth of 0.51m. However, no features were identified within the trench and no finds were collected from its surface.

5.25 Trench **57** (Fig.1)

Located towards the southwest corner of the site, this trench was aligned east—west. It was excavated to a depth of 0.5m. Two ditches were identified running approximately north—south across the trench. These were not excavated as they correlate with more extensive cropmarks that were further investigated in trench 51. They were also noted in trench 64. No finds were collected from the surface of either of these features.

5.26 Trench 64 (Fig.1)

Lying immediately to the south of trench 57, trench 64 also ran east—west. It was excavated to a depth of 0.55m and the two north-south cropmark ditches recorded in trench 57, and investigated in trench 51, were further identified. The actual position of the ditches lay to the east of the plotted cropmarks to which they correspond. They were planned only and no finds were collected from the surface of either of them.

6. FINDS and ENVIRONMENTAL MATERIAL by Joyce Compton

A variety of finds were recovered from a total of thirty-five contexts, across ten of the excavated trenches. Most of the finds were collected from Trenches 1 to 14, though Trenches 50 and 52 produced quantities of flints and small amounts of pottery. All of the material has been recorded by count and weight, in grams, by context. Full details can be found in Appendix 3. The finds are described by category below.

6.1 Pottery

A total of 310 sherds of pottery, weighing 2047g, was recovered from twenty-seven contexts. All periods are represented, from the prehistoric period to relatively recent times. The pottery has been divided and recorded by period, and identified by the relevant specialist, as follows:

Prehistoric pottery by Nick Lavender

The evaluation produced 24 sherds (186g) of prehistoric pottery. The material has been recorded using a system developed for prehistoric pottery in Essex (Brown 1988; details in archive). Four fabrics (C, D, E and M) were identified, the details and proportions of which can be found in the archive.

Most of the assemblage is heavily abraded; a condition which has been exacerbated during processing to the extent that it is now impossible to tell if any sherds were fresh when excavated. The pottery is also fragmentary with an average sherd weight of 8g. Sherds in three contexts are residual, from Roman cremation burial 29 (Trench 1), gully 33 and ditch 45 (both Trench 13).

Whilst one heavily abraded sherd from fill 34 of gully 33 may be from the neck of a Late Bronze Age or Early Iron Age jar, the rest of the assemblage is of later Neolithic date. Identifiable Grooved ware, all in grog-tempered fabric M, comprises 70.8% of the assemblage by sherd count (88.7% by weight). Pit 27 (fill 28) in Trench 3 produced thirteen Neolithic sherds (122g), including one large sherd bearing six deep horizontal grooves. This sherd, and three others from the same context, comes from a large, thick-walled vessel. The remaining material is from a thinner-walled pot. Four sherds from fill 62 of ditch 59 (Trench 6) come from an undecorated tub-shaped vessel with a flat, slightly thickened rim (diameter *c.* 200mm). The small quantity of flint-tempered pottery from fills 39, 47 and 80 (Trenches 12, 13 and 52) may also be of this date.

The presence of Grooved Ware, albeit in small quantities, suggests a focus of Late Neolithic activity on the higher ground overlooking the River Chelmer. Given the nature and number of Neolithic and Bronze Age monuments further west in the valley, this should not be surprising.

Grooved Ware has been recovered in the upper fills of Springfield Cursus (Brown 2001) and in isolated pits at both of the Springfield Lyons (Brown, in prep) and Great Baddow (Brown and Lavender 1994) Late Bronze Age enclosures. Finds of Beaker pottery at the cursus and a Beaker burial near the White Hart public house in Springfield also attest to Late Neolithic and Early Bronze Age activity in the area.

Late Iron Age and Roman pottery

Twelve contexts produced Late Iron Age and Roman pottery, amounting to 187 sherds weighing 674g, most of which derived from the jar in a truncated cremation burial (29; Trench 1). Most of the assemblage is abraded and the samian has also been affected by adverse burial conditions, so that hardly any slip survives. The storage jar body sherd in fill 46 of ditch 45 (Trench 13) is encrusted. The pottery has been identified using the Essex County Council FAU fabric series. The assemblage comprises base and body sherds and thus vessels could only be recorded by broad class.

Four contexts contained pottery (168 sherds, 384g) deriving from the cremation urn in burial 29. This comprises the lower half of a thin-walled jar in black-surfaced ware, now in many pieces, some of them tiny. The vessel appears to have been decorated with combed wavy lines, perhaps beneath a groove, and may be a G23.4 jar (Going 1987, fig.10). The fabric indicates an early Roman vessel, probably no later than early 2nd century.

The pottery from the remaining eight contexts (19 sherds, weight 290g) mainly comprises body sherds in coarse fabrics which are not closely datable within the Roman period. The body sherds in two contexts (the fills of gullies 21 and 33, both Trench 13) are residual. Storage jars were the sole recorded vessel class among the coarse pottery. Two joining footring sherds (84g) from a large f37 bowl, probably 2nd century, came from the fill of gully 25 (Trench 7). Two further, small, samian sherds from the fill of ditch 57 (Trench 12) have no remaining surfaces.

Saxon pottery (identified by Sue Tyler)

Twenty sherds of Saxon pottery, weighing 226g, came from four features; three in Trench 12 and the fourth in Trench 50. All sherds are in a sandy fabric with traces of *schlickung* decoration externally. The sherds are in good condition with an average sherd weight of 11.5g. Several vessels are represented and many of the sherds are sooted. The pottery is characteristic of a domestic assemblage, rather than that used for cremation urns. The single body sherd from ring-ditch fill 65 in Trench 50 is in a similar sandy fabric, but identification as Saxon is tentative for such a small sherd.

Medieval and later pottery by Helen Walker

A total of eighty sherds, weighing just over 1kg, was excavated from nine contexts, mainly in trenches 12 and 13. The relatively small quantities of pottery, and the fact that pottery from earlier periods occurs in the same context, indicates that the pottery may be intrusive. No fine wares are present, the pottery comprising early medieval ware, medieval coarse ware (including at least one example of Mill Green coarse ware), and a single sherd of shell-and-sand-tempered ware. Cooking pots are the most common vessel form and there are examples with beaded, B2, B4 and H2-type rims, spanning the 12th to mid 13th centuries. However, the presence of Mill Green coarse ware, which was not introduced until the mid 13th century, could indicate later 13th to 14th century activity. A thickened everted bowl rim is also present. The wares are typical of central Essex, although the lack of fine wares suggests the pottery is from service areas rather from a living area. Further excavation may reveal evidence as to the nature of the medieval settlement. A few sherds of post-medieval pottery were also found, perhaps resulting from the muck-spreading of midden material.

6.2 Brick and tile

Fragments of brick and tile, mostly of Roman date, were recovered from seven contexts. The Roman component comprises a total of 3678g, recorded in features in Trenches 12 and 13. Almost all of the assemblage came from the fill of ditch 57 and overlying layer 56 in Trench 12. Three large pieces of brick were recorded, along with several flat fragments which probably derived from *tegula* roofing tiles. One brick piece is overfired, with a large surface blister, and one tile fragment has a partial dog footprint. There are eight indeterminate small fragments, two of which have poorly mixed clay fabric with buff streaks. The remaining Roman tile fragment, from the fill of gully 21 in Trench 13, is a very small piece. A flat sherd, maximum thickness 20mm, weight 64g, found in fill 34 of gully 33, has a brown sandy fabric, and may be medieval. The context also contained almost 500g of medieval pottery, lending weight to the tentative dating for the tile. The post-medieval brick and tile comprises small pieces from three contexts, some of which are too abraded for firm dating. A sherd, perhaps from a chimney pot of relatively recent date, was found unstratified.

6.3 Baked clay

Baked clay, weighing a total of 358g, was recovered from eight contexts. Most of the assemblage comprises small featureless fragments, except for pieces SFs 3 and 4 from two fills of gully 59 in Trench 6. SF3 from fill 62 consists of eleven fragments, weighing 152g. Most of the pieces are small, with the exception of two joining fragments which have one flat surface. Two other, non-joining, small pieces appear to have corners or curved surfaces. SF4 from fill 63 consists of a

single piece, weighing 112g. This piece has a curved outer surface, providing a diameter of 28mm, with one contiguous flat surface. None of the pieces seems to belong to the same object, implying that at least three separate artefacts are present, but unfortunately the form and function of any of them cannot now be discerned. The gully also contained Neolithic pottery, and the objects are probably of the same date.

6.4 Worked flints by Hazel Martingell

A total of 115 worked flints were studied (Table 1). There were also four natural pieces and eight burnt pieces of flint. Trenches 1-17, on the higher ground, produced thirty-nine flints, twenty-one of these, including two scrapers, came from a small pit, 27, in Trench 3. Seventy-six flints were recovered from the lower valley area, fifty of these from Trench 50, in the vicinity of the ring ditch.

The earliest retouched artefact is an incomplete, small, late Mesolithic (5000-3500BC) geometric microlith found in pit 70 (Trench 50). All of the remaining retouched artefacts came from the higher ground, and included three scrapers, a piercer, a notched flake and a retouched flake. The three scrapers are probably late Neolithic (2500-1500BC) and the remaining three retouched pieces would also fit with this dating.

There are two areas of special interest; firstly, small pit 27 in Trench 3, with evidence for a late Neolithic presence in the form of pottery and worked flints. Secondly, pit 70 in Trench 50, which contained a relatively large amount of knapping debris, unfortunately not closely datable, comprising six cores, three waste blocks and fifty-five flakes.

Context	Cores	Flakes	Blades	Micro	Piercers	Scrapers	Waste	Notched	Retouch'd	Hammer
				liths			blocks			stone
Tr. 1-17	1	7	5		1	1		1	1	1
27		17	2			2				
70	6	55	9	1			3			
75		2								
Totals	7	81	16	1	1	3	3	1	1	1

Table.1: Quantification of worked flint by type

6.5 Ironwork

Iron nails and fragments, some with cremated bone adhering, were retrieved from the bulk soil sample taken from cremation burial 29. These probably derive from the structure in which, or on which, the body was cremated. Part of a horseshoe was the sole find recovered from Trench 28. It is not possible to provide a firm date, but this is probably a fairly recent item.

6.6 Copper Alloy

Two large, but incomplete, items of copper alloy were recovered from deposit 40 in Trench 6, both of which are in poor condition with no remaining surfaces. Although substantial, neither object is intrinsically datable and, unfortunately, no associated dating evidence was recovered.

6.7 Cremated human bone

Fragments of cremated human bone, total weight 322g, were collected from within the cremation vessel and from surrounding fills of Roman burial 29. The vessel contents, and the collected soil samples, were processed by wet-sieving over a 500 micron mesh. The residues were dried and separated into 4mm and 2mm fractions. All material larger than 4mm (the coarse fraction) was sorted by eye and cremated bone fragments, artefacts and macro-fossils were extracted manually. The material smaller than 4mm (fine fraction) was bagged unsorted. The bone is off-white in colour, which indicates a relatively high combustion temperature. The fragments from fill 30 are noticeably more abraded than those from within the vessel. There are large and recognisable pieces, in particular long bone shaft fragments from the fill of the urn, one of which measures more than 70mm. Very small fragments are present in the unsorted fine fractions. Charcoal, weighing a total of 103g, was noted in the burial, especially in the fill of the urn. No artefacts were recorded, except for iron nails, fragments of which were adhering to the cremated bone.

Statement of Potential

Although the overall finds assemblage is small, the range and variety of the recorded artefacts is remarkable. The Neolithic pottery, in particular, is of local and regional importance, although further work at this stage is not required. The worked flints are also significant, especially those found in association with the Neolithic pottery. Of interest is the Saxon pottery, and it should be noted that finds of both Neolithic and Saxon date have been found previously in this part of the Chelmer Valley. Apart from that in the cremation burial, most of the Roman pottery is abraded and all may be residual. All of the finds should be retained, except for the horseshoe fragment and the more recent ceramics.

7. DISCUSSION

Although there is a relatively low density of archaeological remains across the whole of the site, the range of dates for the features present is wide. Features dating from the Neolithic through Roman to Saxon, Medieval and Post-medieval have all been identified. The majority of the plotted cropmarks were identified in the trenches although, with the exceptions of the two ring-ditches and some undated ditches, they were all found to relate to in-filled post-medieval field boundaries. The significant archaeological features and deposits lie in two distinct areas of the site. The first is centred around the two cropmark ring ditches in the south east corner of the proposed reservoir site and the second is across the northeastern side of the ecological compensation area.

None of the features from any period seem to be directly associated with occupation but with the exception of presumptive medieval field boundaries they do seem to be either burials or associated with mortuary monuments. The collective results of the evaluation are further discussed, by broad chronological period, below.

Late Neolithic/ Early Bronze Age

The evidence from this period, although sparse, is consistent with other sites in the area. The remains in the northern area consisted of three features, only one of which can be considered securely dated, pit 27 in trench 3. The pottery and flints recovered from the fill of this feature are comparable to artefacts recovered from pits at Broomfield (Atkinson 1995), Elms Farm (Atkinson and Preston 2001) and Springfield Lyons. While none of the features indicates occupation on the site they do hint at the possibility of Late Neolithic/Early Bronze Age settlement further to the north on the higher ground.

In the southern area, ring ditch 75/79 (trench 52) has been tentatively dated as Late Neolithic/ Early Bronze age on the basis of three small sherds of pottery. Although the dating of the feature is by no means secure, the possibility of this feature being the remains of a funerary monument should be seriously considered. The dimensions of the ditch do not suggest that it was a hut circle and the discoloration in the centre of the feature may indicate that a mound once occupied its interior. However, no internal features were identified.

The second ring ditch 64/66/68 identified was much smaller in dimensions than 75/79. The dating for this feature is based upon a single sherd of Saxon pottery, which may be intrusive. It seems more likely that this feature is prehistoric and is more or less contemporary with 75/79. While no internal features were identified in the present ring ditch only a small section of it lay within the trench. The possibility does, however, exist that this is the remains of a Saxon burial monument.

Parallels for Saxon ring ditches have been identified at Springfield Lyons, some 3km west of the site (Tyler and Major 2005).

The two curvilinear cropmarks in trenches 29 and 30, originally thought to have been partial ring ditches, were not identified as below ground features. The circular cropmark, that was originally intended to be investigated by trench 18, was the most promising with a central pit clearly seen on the cropmarks. However, the presence of a modern earth bund over the location of this cropmark precluded its excavation as part of this site evaluation.

There is observed to be concentration of ring ditches of this date on the river gravels along the Chelmer valley (Holgate 1996) and the social/ritual significance of this general vicinity, throughout the prehistoric period, is clearly demonstrated by the Springfield Lyons site. While such funerary monuments are commonly located in elevated and conspicuous positions, their presence on flood plains is not unknown elsewhere in Essex, for instance at the Essex University, Colchester (Ennis 2004) and Fen Farm, Elmstead Market (Barker 2003).

Roman

The Roman period remains are confined to the north eastern corner of the ecological compensation area. Early Roman cremation burial 31 was situated at the highest point of the site, in Trench 1. The burial lay on a gently sloping plateau which was situated between two steep slopes which either fall away towards the floodplain of the Chelmer or continue to rise northward. Although there is no evidence to suggest that further burials lie in the immediate vicinity, the positioning on the plateau may be significant.

The other Roman remains lie at the western end of Trench 13, which lies along the break of slope of the flood plain edge. Roman ditch 45 lies stratigraphically between two alluvial layers, suggesting that during the Roman period this area was subject to flooding. As this is likely to be too high for river flood silts to collect, this raises the question of the origin of the alluvial layers. Although the evidence is not fully clear, they may originate from overflowing of the pond/hollow tentatively identified in trench 12.

As no Roman remains or artefacts were recovered from the floodplain itself it seems likely that any activity was confined to the higher ground to the north of the site. Further to this the cremation burial may lie at the very edge of any areas of activity for this period, as marginal land was often utilised for burials.

Saxon

The northern ecological compensation area contained Saxon, or possible Saxon, remains. All of the Saxon remains were identified in trench 12 and were seemingly associated with the pond/hollow. None of the remains are securely dated and ditch 57 may well be medieval in origin as it seems to be part of a longer ditch running along the upper break of slope to the flood plain. Both pit 41 and layer 56/73 contained only a small amount of dating evidence. The only possibly Saxon feature to lie away from trench 12 was the ring gully in trench 50. This supposition is however, based upon 1 sherd of pottery which is likely intrusive. Apart from indicating a Saxon presence in the area and possibly suggesting concentration on the higher ground to the north very little can be deduced about the Saxon presence in this part of the landscape.

Medieval

All of the medieval features lie in the ecological compensation area, with the majority located at the extreme eastern edge in trenches 12 and 13. Only one medieval feature was identified outside these two trenches, ditch 23 in trenches 14 and 15, and this is only tentatively dated as 10th to 13th century on the basis of two small sherds of pottery. Ditch 23 runs east—west along the top of the southern break of slope that leads down to the floodplain and it may have acted as a boundary to the floodplain. Ditch 19/33/44, in trench 13, also runs along the break of slope for the floodplain and may be part of the same boundary as ditch 23. The finds from ditch 19/33/44 indicate a date of c.1200 A.D and are generally coarse domestic wares. One other possible section of this boundary was investigated as ditch 57, in trench 12. Although it matches the line of the other two ditches, the dating from it is Saxon, possibly indicating differential deposition along the ditch. These features may constitute a single boundary to the floodplain.

The other medieval features present on the site were a pit and a series of layers in Trench 12. The pottery recovered from the deposits and fills is coarse domestic ware. As mentioned above, all the features seem to lie in a hollow or dip but the exact nature of this was not established within the trench. The artefactual evidence, along with the possible boundary ditch, suggests that any occupation during this period was located further up the hill to the north, on the higher ground.

Post-medieval

The post-medieval remains were largely identified confined to the proposed agricultural reservoir area and the vast majority of them appeared as cropmarks. All of the post-medieval ditches, with the exception of ditch 9 in trench 28, were marked on the 1st edition OS map as field boundaries. Although only a small proportion of the ditches were investigated, most of them were found to contain either ceramic drains or gravel-filled channels at their bases. In addition to this, the lines of

the two posited trackways, seen as cropmarks in the southwest corner of the site, are marked as boundaries in the fields adjacent to the investigation area. Suggesting that they were both field boundaries rather than trackways.

All of the post-medieval ditches have been backfilled since the late 19th century, indeed some very recently judging from the modern debris in them. The infilling of the ditches created larger open fields that are still extant today. The larger fields are more suited to mechanical ploughing which has a tendency to level out small 'irregularities' in the landscape, such as banks and hollows and to disturb the upper archaeological levels.

8. ASSESSMENT OF RESULTS

The evaluation has demonstrated that Late Neolithic/Early Bronze Age, Roman, Saxon and medieval remains are present within the proposed development area. Post-medieval remains were also identified but need not be considered further as they relate to documented field systems. Although a relatively low density of archaeological features were uncovered, there was a discernable difference in the character in the remains between the floodplain, to the south, and the higher ground, to the north.

The archaeological remains on the floodplain, in the area of the proposed reservoir, are tentatively identified as Late Neolithic/Early Bronze Age mortuary monuments. These correlate with a wider pattern of distribution of ring ditches, some associated with burials, along the river valleys in Essex. The remaining features of this date, although only consisting of a single pit and ditch, were located on the higher ground above the floodplain. While not conclusive, these remains, along with the finds recovered from their fills, suggest that any occupation during the Late Neolithic/ Early Bronze Age was situated on the higher ground to the north. This apparent division offers the potential for examining the use of different types of land and how human interaction with the landscape was structured by natural features/topography (Brown and Glazebrook (eds) 2000, 9 - 13).

The remaining archaeological features all lie on the higher ground, above the 15m contour line. This suggests that any significant occupation, or land exploitation, was generally confined to the higher ground along the Chelmer valley. It is certainly the case that large stretches of the river do exhibit a pronounced flood plain which may prove important in seeking to understand land use along the valley. The potential for further investigation of this, on this site, is however reduced as the northern ecological compensation area does not extend much further north than the identified remains.

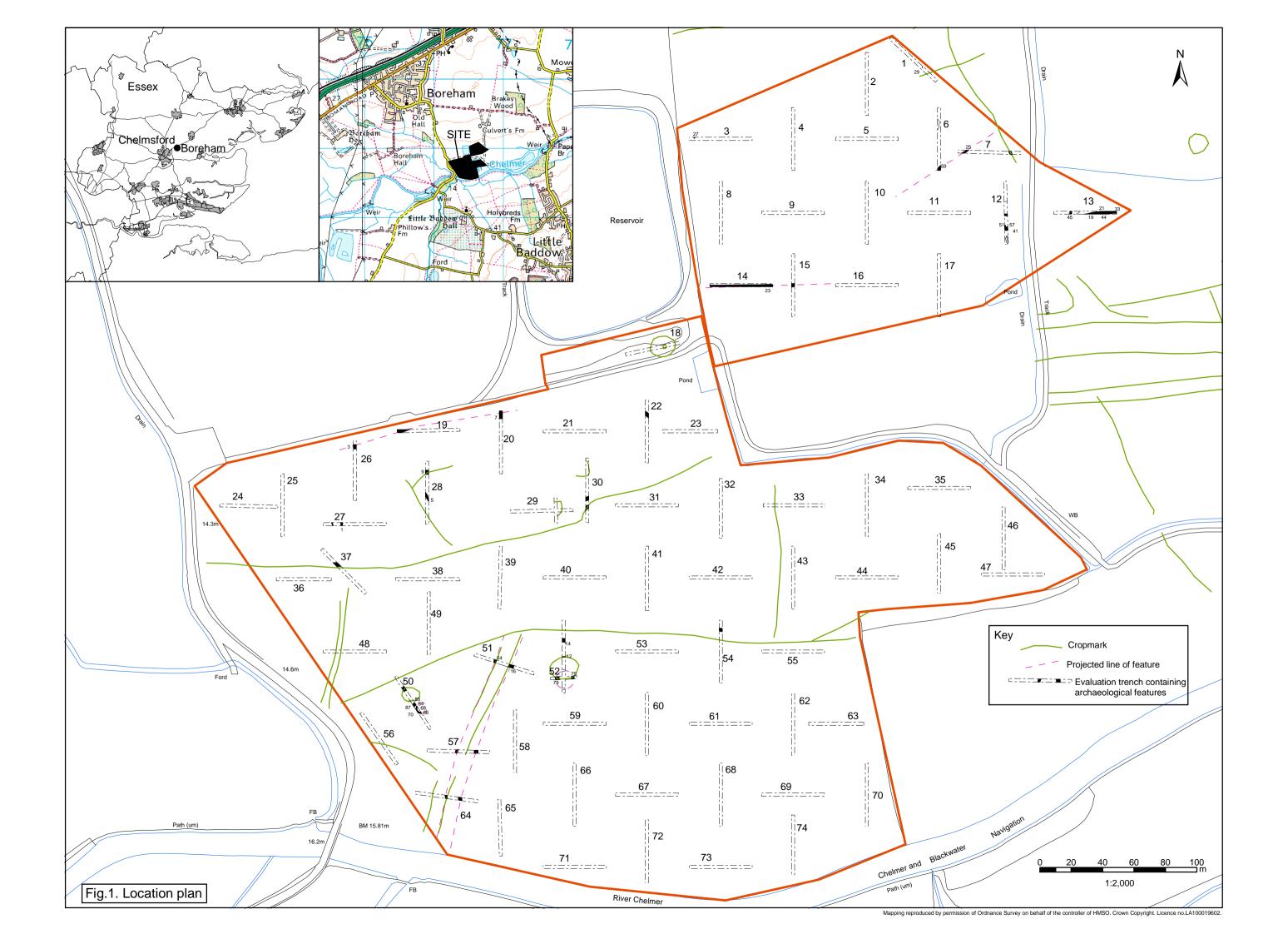
In general the development will have an adverse impact on the archaeological remains within the proposed area. The relative shallowness at which the remains survive means that intrusive groundworks deeper than 0.3m, and indeed the movement of heavy plant across the site, will disturb any remains present. In addition, any groundwork deeper than 0.6m will completely remove the vast majority of the archaeological remains. It is therefore very likely that development of this site will necessitate further archaeological investigation prior to works commencing to facilitate the preservation by record of the archaeological resource.

ACKNOWLEDGEMENTS

This project was commissioned by DK Symes Associates on behalf of Sewells Reservoir Construction. Thanks are due to the landowners, Mr McMillan (Old Hall) and Mr Bolton (Generals Farm) for their co-operation and assistance throughout the fieldwork. The project was conducted by Essex County Council Field Archaeology Unit. The fieldwork was carried out by the author and Mark Germany, with the assistance of C. Down, J. Hewitt, A. Turner and D. Smith. All finds were processed by Phil McMichael and analysed by Joyce Compton and Helen Walker. Sue Tyler is thanked for her comments on the Saxon pottery. Digitising of plans and preparation of the figures was undertaken by Andy Lewsey. The project was managed by Mark Atkinson of ECC FAU. Pat Connell of the ECC Historic Environment Management team monitored the fieldwork on behalf of the Local Planning Authority.

BIBLIOGRAPHY		
Atkinson, M.	1995	A Late Bronze Age Enclosure at Broomfield, Chelmsford. Essex Archaeol. Hist. 26 1-24
Atkinson, M. and Preston, S.	2001	Prehistoric settlement and burials at Elms Farm, Heybridge. Essex Archaeol. Hist. 32 42-74
Barker, B.	2003	Fen Farm, Elmstead Market, Essex. ECC FAU Client Report 862
British Geological Survey	2006	Geoindex www.bgs.ac.uk/geoindex/index.htm accessed accessed
Brown, N.	1988	'A Late Bronze Age enclosure at Lofts Farm, Essex' <i>Proc. Prehist. Soc.</i> 54 , 249-302
Brown, N.	2001	'Prehistoric pottery' in Buckley, D. G., Hedges, J. D. and Brown, N. 'Excavations at a Neolithic Cursus, Springfield, Essex, 1979-85' <i>Proc. Prehist. Soc.</i> 67 , 123-34
Brown, N.	In prep.	'Neolithic and Early Bronze Age pottery.' In Buckley, D.G. and Hedges, J.D. <i>Excavations at Springfield Lyons, Essex: 1. Prehistoric.</i> E. Anglian Archaeol.
Brown, N. and Lavender, N. J.	1994	'Later Bronze Age sites at Great Baddow and settlement in the Chelmer Valley 1500-500 BC' Essex Archaeol. Hist. 25, 3-13
Brown, N. and Glazebrook, J. (eds.)	2000	Research and Archaeology: a Framework for the Eastern Counties 2. Research agenda and strategy, E. Anglian Archaeol. Occ. Pap.8
Buckley, D.G. and Hedges, J.D.	2001	Excavations at a Neolithic Cursus, Springfield, Essex, 1979-85' <i>Proc. Prehist. Soc.</i> 67 , 123-34
Buckley, D.G. and Hedges, J.D.	In Prep	Excavations at Springfield Lyons, Essex: 1. Prehistoric. <i>E. Anglian Archaeol.</i>
Connell, P.	2005	Archaeological Evaluation, Old Hall and Generals Farm, Boreham, Chelmsford. ECC HEM brief, Oct 2005
Ennis, T.	2004	Land Adjacent to Elmstead Road and Boundary Road, University of Essex, Colchester, Essex. ECC FAU Client Report 1328
ECC FAU	2006	Written Scheme of Investigation: Archaeological Evaluation, Old Hall and Generals Farm, Boreham, Chelmsford, Essex
Going, C.J.	1987	The Mansio and Other Sites in the South-eastern Sector of Caesaromagus: the Roman pottery, Chelmsford Archaeol. Trust Rep. 3.2, Counc. Brit. Archaeol. Res. Rep. 62
Gurney, D.	2003	Standards for Field Archaeology in the East of England. E. Anglian Archaeol. Occ. Pap.14

Heppell, E.	2004	Old Hall Reservoir, Boreham, Essex: archaeological desk- based assessment. ECC FAU rep. 1374			
Holgate, R.	1996	'Essex c.4000 – 1500 BC' in ed. Bedwin, O. <i>The Archaeology</i> of Essex, Proceedings of the Writtle Conference. ECC Planning			
Institute of Field Archaeologists	1999	Standards and Guidance for Archaeological Evaluations (revised)			
Tyler, S. and Major, H.	2006	The Early Anglo-Saxon Cemetery and Later Saxon settlement at Springfield Lyons, Essex. E. Anglian Archaeol. 111			



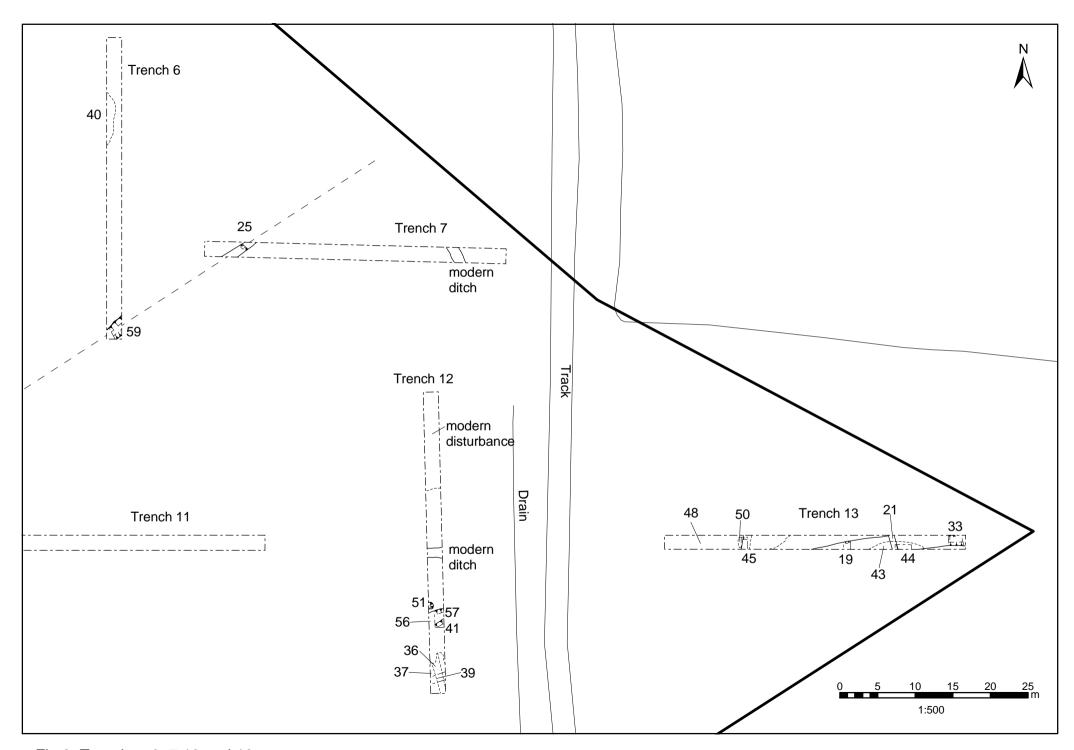


Fig.2. Trenches 6, 7,12 and 13

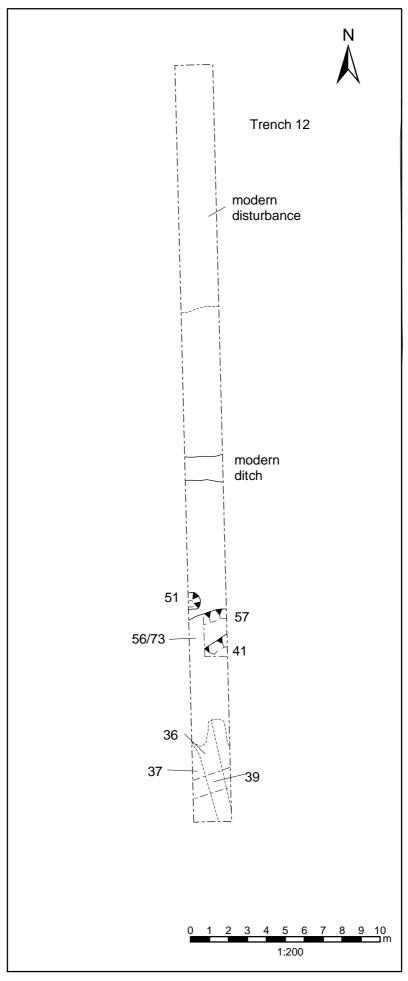


Fig.3. Trench 12

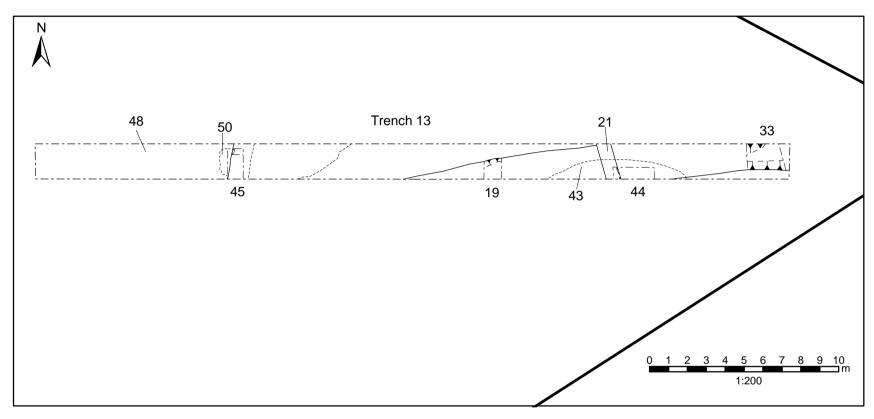


Fig.4. Trench 13

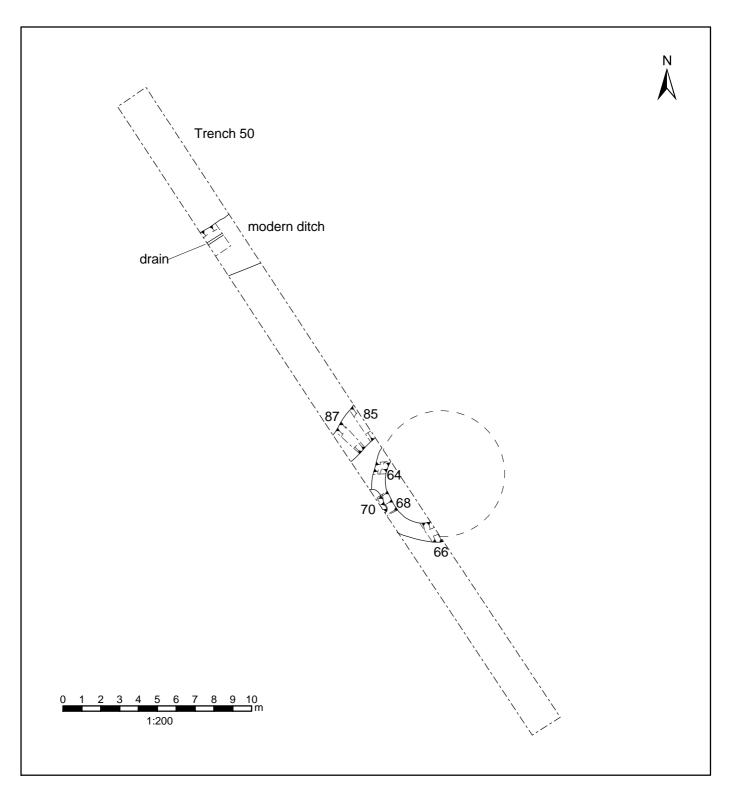


Fig.5. Trench 50

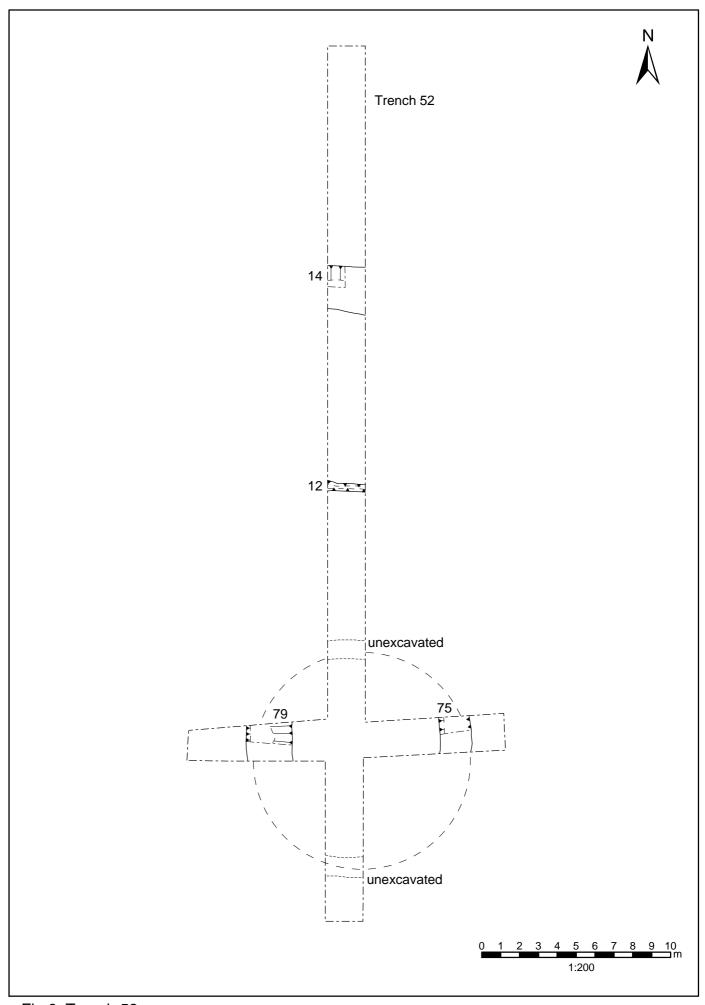


Fig.6. Trench 52

APPENDIX 1: TRENCH SUMMARY

All dimensions are given in metres

rench	Length	Width	Depth	Orientation	Grid Ref	Features
1	40	1.8	0.5	NW - SE	TL 7664 0909 / TL 7667 0907	Yes
2	40	1.8	0.4	North - South	TL 7662 0909 / TL 7662 0904	
3	40	1.8	0.5	East - West	TL 7651 0903 / TL 7655 0903	Yes
4	40	1.8	0.36	North – South TL 7658 0905 / TL 7658 0901		
5	40	1.8	0.34	East – West	TL 7660 0903 / TL 7664 0903	
6	40	1.8	0.31	North – South	TL 7667 0905 / TL 7667 0901	Yes
7	40	1.8	0.43	East – West	TL 7668 0902 / TL 7672 0902	Yes
8	40	1.8	0.34	North – South	TL 7653 0900 / TL 7653 0896	
9	40	1.8	0.46	East – West	TL 7656 0898 / TL 7660 0898	
10	40	1.8	0.38	North – South	TL 7662 0900 / TL 7662 0896	
11	40	1.8	0.4	East – West	TL 7665 0898 / TL 7669 0898	
12	40	1.8	0.5	North – South	TL 7672 0900 / TL 7672 0896	Yes
13	40	1.8	0.5	East – West	TL 7674 0898 / TL 7678 0898	Yes
14	40	1.8	0.5	East – West	TL 7652 0894 / TL 7656 0894	Yes
15	40	1.8	0.5	North – South	TL 7658 0896 / TL 7658 0892	Yes
16	40	1.8	0.47	East – West	TL 7660 0894 / TL 7664 0894	
17	40	1.8	0.45	North – South	TL 7667 0896 / TL 7667 0892	
18					Not Dug	
19	40	1.8	0.6	East – West	TL 7632 0884 / TL 7636 0884	Yes
20	40	1.8	0.45	North - South	TL 7639 0886 / TL 7639 0882	Yes
21	40	1.8	0.5	East – West	TL 7642 0884 / TL 7646 0884	
22	40	1.8	0.32	North – South	TL 7648 0886 / TL 7648 0882	Yes
23	40	1.8	0.51	East – West	TL 7649 0884 / TL 7653 0884	
24	40	1.8	0.4	East – West	TL 7621 0880 / TL 7625 0880	
25	40	1.8	0.4	North – South	TL 7625 0882 / TL 7625 0878	
26	40	2	0.4	North – South	TL 7630 0884 / TL 7630 0880	Yes
27	40	1.8	0.4	East – West	TL 7628 0879 / TL 7632 0879	Yes
28	40	1.8	0.5	North – South	TL 7634 0883 / TL 7634 0879	Yes
29	40	1.8	0.4	East – West	TL 7640 0880 / TL 7644 0880	1.00
30	40	1.8	0.4	North – South	TL 7645 0883 / TL 7645 0879	Yes
31	40	1.8	0.34	East – West	TL 7646 0880 / TL 7650 0880	1.00
32	40	1.8	0.38	North – South	TL 7653 0882 / TL 7653 0878	
33	40	1.8	0.6	East – West	TL 7656 0880 / TL 7660 0880	
34	40	2	0.62	North – South	TL 7662 0882 / TL 7662 0878	
35	40	2	0.51	East – West	TL 7665 0881 / TL 7669 0881	
36	40	1.8	0.37	East – West	TL 7624 0875 / TL 7628 0875	
37	40	1.8	0.3	NW – SE	TL 7628 0877 / TL 7631 0874	Yes
38	40	1.8	0.4	East – West	TL 7632 0875 / TL 7636 0875	1.00
39	40	1.8	0.28	North – South	TL 7639 0877 / TL 7639 0873	
40	40	1.8	0.26	East – West	TL 7642 0875 / TL 7646 0875	
41	40	1.8	0.4	North – South	TL 7648 0877 / TL 7648 0873	
42	40	2	0.62	East – West	TL 7651 0875 / TL 7655 0875	+
43	40	2	0.51	North – South	TL 7658 0877 / TL 7658 0873	
44	40	2	0.51	East – West	TL 7660 0875 / TL 7664 0875	+
45	40	2	0.43	North – South	TL 7667 0878 / TL 7667 0874	+
46	40	2	0.47	North – South	TL 7672 0880 / TL 7672 0876	
47	40	2	0.45	East – West	TL 7672 0000 / TL 7672 0070	+
48	40	1.8	0.45	East – West	TL 7628 0871 / TL 7632 0871	+
49	40	1.8	0.43	North – South	TL 7634 0874 / TL 7634 0870	
50	40	1.8	0.4	NNW - SSE	TL 7632 0869 / TL 7635 0866	Yes
51	40	1.8	0.45	NW – SE	TL 7637 0870 / TL 7641 0869	Yes
52	40 + 15	2	0.45	N – S + E - W	TL 7643 0873 / TL 7643 0869	Yes
53	40 + 15	1.8	0.5	East – West	TL 7646 0871 / TL 7650 0871	169
						Voo
54	40	2	0.52	North – South	TL 7653 0873 / TL 7653 0869	Yes
55	40	2	0.53	East – West	TL 7656 0871 / TL 7660 0871	
56	40	1.8	0.51	NNW – SSE	TL 7630 0867 / TL 7633 0863	V
57	40	1.8	0.5	East – West	TL 7634 0864 / TL 7638 0864	Yes
58	40 40	1.8 1.8	0.4	North – South	TL 7640 0867 / TL 7640 0863	
59		1 2	0.52	East – West	TL 7642 0866 / TL 7646 0866	Ī

61	40	2	0.54	East – West	TL 7651 0866 / TL 7655 0866	
62	40	2	0.58	North – South	TL 7658 0868 / TL 7658 0864	
63	40	2	0.51	East – West	TL 7659 0866 / TL 7663 0866	
64	40	1.8	0.55	East – West	TL 7634 0861 / TL 7637 0859	Yes
65	40	1.8	0.41	North – South	TL 7639 0861 / TL 7639 0857	
66	40	1.8	0.4	North – South	TL 7644 0863 / TL 7644 0859	
67	40	1.8	0.5	East – West	TL 7646 0861 / TL 7650 0861	
68	40	2	0.55	North – South	TL 7653 0863 / TL 7653 0859	
69	40	2	0.52	East – West	TL 7656 0861 / TL 7660 0861	
70	40	2	0.51	North – South	TL 7662 0863 / TL 7662 0859	
71	40	1.8	0.5	East – West	TL 7642 0857 / TL 7646 0857	
72	40	1.8	0.39	North – South	TL 7648 0860 / TL 7648 0856	
73	40	2	0.55	East – West	TL 7651 0857 / TL 7655 0857	
74	40	2	0.53	North - South	TL 7658 0860 / TL 7658 0856	

APPENDIX 2: FEATURE LIST

All dimensions are given in metres.

Context No.	Feature type	Filled By	Equals	length	breadth	depth	Trench No.	Period
1	Ditch	2		0.8	1.27	0.4	27	
3	Ditch	4	7	2	2.8	0.8	26	
5	Ditch	6		50	1.45	0.27	28	
7	Ditch	8	3	50	0.8	0.7	20	
9	Ditch	9,10		1.8	2.7	0.46	28	Modern
12	Ditch	13		1.8	0.35	0.3	52	
14	Ditch	15		0.8	1.1	0.55	52	
16	Ditch	17,18		2	3	0.51	51	
19	Gully	20	33, 44	0.9	0.9	0.19	13	Medieval
21	Gully	22		0.6	0.33	0.35	13	Medieval
23	Ditch	24		0.8	1.4	0.75	14	Medieval
25	Gully	26	59		1.3	0.15	7	Roman
27	Pit	28		0.84	0.84	0.32	3	Neolithic
29	Cremation pit	30, 32, 89		0.56	0.56	0.14	1	Early Roman
32	Cremation vessel	31					1	Early Roman
33	Gully	34	19, 44	1.5	1.5	0.3	13	Medieval
36	Layer		38	1	0.7	0.32	12	Medieval
37	Layer			1	0.55	0.22	12	Medieval
38	Layer		36				12	Medieval
39	Layer			1	1.8	0.33	12	Neolithic/EBA
40	Deposit			1.05	0.63	0.12	6	
41	Pit	42		1.7	1.2	0.37	12	Saxon
43	Layer			0.6	0.33	0.19	13	
44	Gully	53	19, 33	2.2	0.6	0.3	13	
45	Ditch	46,47	,	1.6	0.8	0.7	13	Early Roman
48	Layer			1.9	0.8	0.25	13	
49	Layer			1.9	0.3	0.35	13	
50	Layer			1.3	0.65	0.04	13	Roman
51	Pit	52		0.45	0.75	0.33	12	Medieval
54	Ditch			2	1.4	0.29	51	
56	Layer		73	2.9	1.8	0.1	12	Saxon
57	Ditch	58, 72		1.15	1.8	0.85	12	Saxon
59	Ditch	60,61,62,63	25	2.3	1.8	0.79	6	Neolithic
64	Ring Ditch	65	66,68	0.6	0.8	0.18	50	Saxon
66	Ring Ditch	67	64,68	0.5	1	0.16	50	
68	Ring Ditch	69	64,66	1.1	0.75	0.16	50	
70	Pit	71,72	•	0.8	0.2	0.25	50	Post - Saxon
73	Layer		56	1.8	0.7	0.1	12	
74	Ring Ditch	75	79	2	1.3	0.18	52	
76	Layer			2	1	0.3	52	
79	Ring Ditch	80	74	1.8	1.2	0.15	52	Neolithic/EBA
82	Layer					0.09	52	
83	Layer					0.25	52	
84	Layer					0.3	52	
85	Ditch	86	87	1.6	0.3	0.2	50	
87	Ditch	88	85	1.2	0.5	0.16	50	

APPENDIX 3: FINDS DATA

Finds data

Context	Feature	Count	Weight	Description	Date
10	9	1	34	Iron horseshoe fragment	?Modern
20	19	2 12	2 48	Brick fragments Pottery; rim and body sherds	Post med. Medieval
22	21	1 4 1 14	4 32 4 120	Flint flake Baked clay fragments Tile fragment Pottery; body and handle sherds, one cordoned, two glazed Pottery; body sherds, sandy grey ware	- Roman Med/post med.
24	23	3	4	Baked clay fragments	-
2.	20	2	2	Pottery; crumbs	Medieval
26	25	2	84	Pottery; joining footring sherds, samian f37	Roman
28	27	22 3 13	100 6 122	Flints Burnt flints Pottery; rim and body sherds, one grooved	- - Neolithic
30	29	14 1 1 - - 5 1	12 2 22 102 94 2	Iron nails and fragments from sample 1, some with cremated bone adhering Flint flake Burnt flint from sample 1 Cremated human bone from sample 1, some with iron adhering Charcoal from sample 1 Pottery; crumbs from sample 1, from vessel 31 Pottery; flint-tempered crumb from sample 1	- - - - Roman Prehistoric
31	32	- - 40	216 1 18	Cremated human bone, some with iron adhering Charcoal Pottery; body sherds and crumbs from vessel 32	- - Roman
32	29	113	362	Pottery; jar base and lower wall sherds, black- surfaced ware, some body sherds with groove, some with wavy-line combing	Early Roman
34	33	1 1 1 24 1	6 4 64 432 2 6	Flint flake Burnt flint Tile fragment Pottery; rim and body sherds Pottery; body sherd, sandy grey ware Pottery; body sherd	- ?Medieval Medieval Roman Prehistoric
36	35	11	134	Pottery; body sherds	Medieval
37	Layer	2	14	Pottery; body sherds	Medieval
38	Layer	6	52	Pottery; base and body sherds	Medieval
39	35	1	6	Pottery; body sherd	Prehistoric
40	Deposit	2	20	Copper alloy objects, SF1 and SF2	Undated
42	41	1 2	4 60	Tile fragment, possibly Roman Pottery; body sherds	Undated Saxon
46	45	2	34	Pottery; body sherds, one from grog-tempered storage jar, one very small	Early Roman

47	45	7	96	Pottery; storage jar rim sherd and body sherds,	Roman
				various	
		1	1	Pottery; flint-tempered body sherd	Prehistoric
50	Layer	-	14	Charcoal	-
		1	14	Struck flint	-
		2	2	Pottery; body sherds	Roman
52	51	2	44	Pottery; joining rim sherds	Medieval
56	Layer	2	34	Baked clay fragments	-
		5	855	Brick and tile fragments (a small curved piece is	Roman
				probably post-medieval)	
		4	32	Pottery; rim and body sherds	Saxon
58	57	3	16	Baked clay fragments	-
I		9	2815	Brick and tile fragments, one with paw print	Roman
		13	128	Pottery; rim and body sherds	Saxon
62	59	11	152	Baked clay fragments, inc probable object SF3	-
		4	48	Pottery; rim and body sherds, grog-tempered	Neolithic
63	59	1	112	Baked clay, probable object SF4	-
65	64	8	38	Flints, worked and unworked	_
00	04	6	64	Burnt flints	_
		1	6	Pottery; body sherd	?Saxon
67	66	1	58	Burnt sandstone (Discarded)	-
		4	38	Flint flakes	-
71	70	50	280	Flint flakes and cores, some patinated	_
72	57	2	8	Pottery; joining body sherds, samian	Roman
75	74	2	12	Flint flakes	-
		1	4	Baked clay	-
77	Topsoil	1	58	Pottery; base/lower wall sherd, grog-tempered	Late Iron Age
	. 550011	•		storage jar	
78	Topsoil	1	30	Flint lump	-
80	79	3	4	Pottery; body sherds, flint-tempered	Prehistoric
					FIGUISION
81	Finds	13	134	Flint lumps and flakes	-
	(Tr.1-17)	1	4	Baked clay] -
		2	16	Roof tile fragments	Post med.
		1	76	Rim sherd, pipe or chimney pot or similar	Modern
		6	114	Pottery; rim and body sherds	Med/post med.
86	85	15	94	Flint lumps and flakes	-
89	29	-	4	Cremated human bone from sample 2	-
		-	8	Charcoal from sample 2	-
		10	2	Pottery; crumbs from sample 2, from vessel 32	Roman

APPENDIX 4: ARCHIVE INDEX

SITE CODE: BOOH 06

Index to the Archive

File containing:

1. Introduction

- 1.1 Brief for Evaluation
- 1.2 Specification for Evaluation

2. Research Archive

- 2.1 Evaluation Report
- 2.2 Finds Reports

3. Site Archive

- 3.1 3 x Context Record Register
- 3.2 Original Context Records 1 to 87
- 3.3 74 x Trench sheets
- 3.4 2 x Plans Register
- 3.5 3 x Sections Register
- 3.6 4 x Sample Registers
- 3.7 3 x Levels Register
- 3.8 4 x Photographic Register
- 3.9 Site Photographic Record (15 x Colour Slide; 15 x B + W Print; 22 Digital images)
- 3.10 2 x Registered finds sheets

Not in Files:

Site Drawings – 2 A1-size Permatrace section sheets

1 A5-size Permatrace section sheets

4 A1-size Permatrace plan sheets

1 A5-size Permatrace plan sheets

1 box of finds

APPENDIX 5: EHER SUMMARY SHEET

Site Name/Address: Old Hall and Generals Farm, Boreham, Essex						
Parish: Boreham	District: Chelmsford					
NGR: TL 765087 (centred)	Site Code: BOOH 06					
Type of Work: Evaluation by Trial Trenching	Site Director/Group: A. Robertson					
	ECC Field Archaeology Unit					
Date of Work:	Size of Area Investigated:					
28/02/06 to 21/03/06	Development area c.150000 ² m					
	Trenching: 74 trenches = 5900 ² m (4%)					
Location of Finds/Curating Museum:	Funding Source:					
Chelmsford Museum	Sewells Reservoir Construction					
Further Work Anticipated?	Related EHER Nos:					
Yes	5760					
Final Report: FAH Summary	•					

Final Report: EAH Summary

Periods Represented: Prehistoric Roman Saxon Medieval Post-medieval

SUMMARY OF FIELDWORK RESULTS:

An archaeological evaluation, covering c.15 hectares, was carried out on the site of a proposed agricultural reservoir and associated ecological compensation area on land at Old Hall and Generals Farm, Boreham, near Chelmsford. Seventy-four trial trenches were opened, covering 5900 sq m (c.4% of the site) to provide a uniform coverage across the proposed development area. A number of trenches specifically targeted known cropmark features that comprised apparent ring-ditches and linear boundary ditches/trackways. The existence of these were substantiated by the trial trenching.

The identified remains revealed a wide date range, from Late Neolithic/Early Bronze age through Roman, Saxon onto medieval and post-medieval. However, their was no particular concentration of features from any period. The remains were also largely confined to two distinct areas of the site, the first on the higher ground in the northeast of the site and the second on the floodplain in the southwest.

Late Neolithic/Early Bronze Age

The Late Neolithic/Early Bronze Age remains consisted of a small pit and ditch in the northeastern area and two possible ring ditches in the southwestern, although the dating for the ring ditches is tenuous.

Roman

The Roman remains, an Early Roman urned cremation burial, a north-south ditch and two layers, were confined to the northeastern area above the floodplain. These may represent the edge of wider-ranging Roman activity that extends northward.

Saxon

The Saxon remains were more ephemeral, consisting of a poorly-dated pit and layer which lie along the edge of the higher ground in the northeast.

Medieval and Post-medieval

The medieval and post-medieval remains consist of field ditches. The single medieval ditch seemingly ran along the upper break of slope, dividing the floodplain from the higher ground. The majority of the post-medieval ditches appeared as cropmarks and a number of them had ceramic drains in their bases.

Previous Summaries/Reports: n/a					
Author of Summary:	Date of Summary:				
A. Robertson (ECC FAU)	May 2006				