

Archaeological Services & Consultancy Ltd

**ARCHAEOLOGICAL EVALUATION:
LAND TO THE R/O 17 MAIN STREET
LITTLEPORT
CAMBRIDGESHIRE**

**NGR: TL 5675 8676
EVENT NUMBER: ECB 2699**

on behalf of Mr K Blundell



Nigel Wilson HND AIFA

November 2007

ASC: 978/LMS/2

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Site Data

<i>ASC site code:</i>	LMS	<i>Project no:</i>	978
<i>SMR Event No:</i>	ECB 2699	<i>OASIS Ref.:</i>	archaeol2-34424
<i>County:</i>	Cambridgeshire		
<i>Village/Town:</i>	Littleport		
<i>Civil Parish:</i>	Littleport		
<i>NGR (to 8 figs):</i>	TL 5675 8676		
<i>Extent of site:</i>	c.10m x 30m		
<i>Present land use:</i>	Open ground		
<i>Planning proposal:</i>	Erection of two semi-detached bungalows		
<i>Local Planning Authority:</i>	East Cambridgeshire District Council		
<i>Planning application ref/date:</i>	05/01122/FUL		
<i>Client:</i>	Mr K Blundell 33 The Mount Aspley Guise Milton Keynes MK17 8DZ		
<i>Contact name:</i>	Mr K J Blundell		

Internal Quality Check

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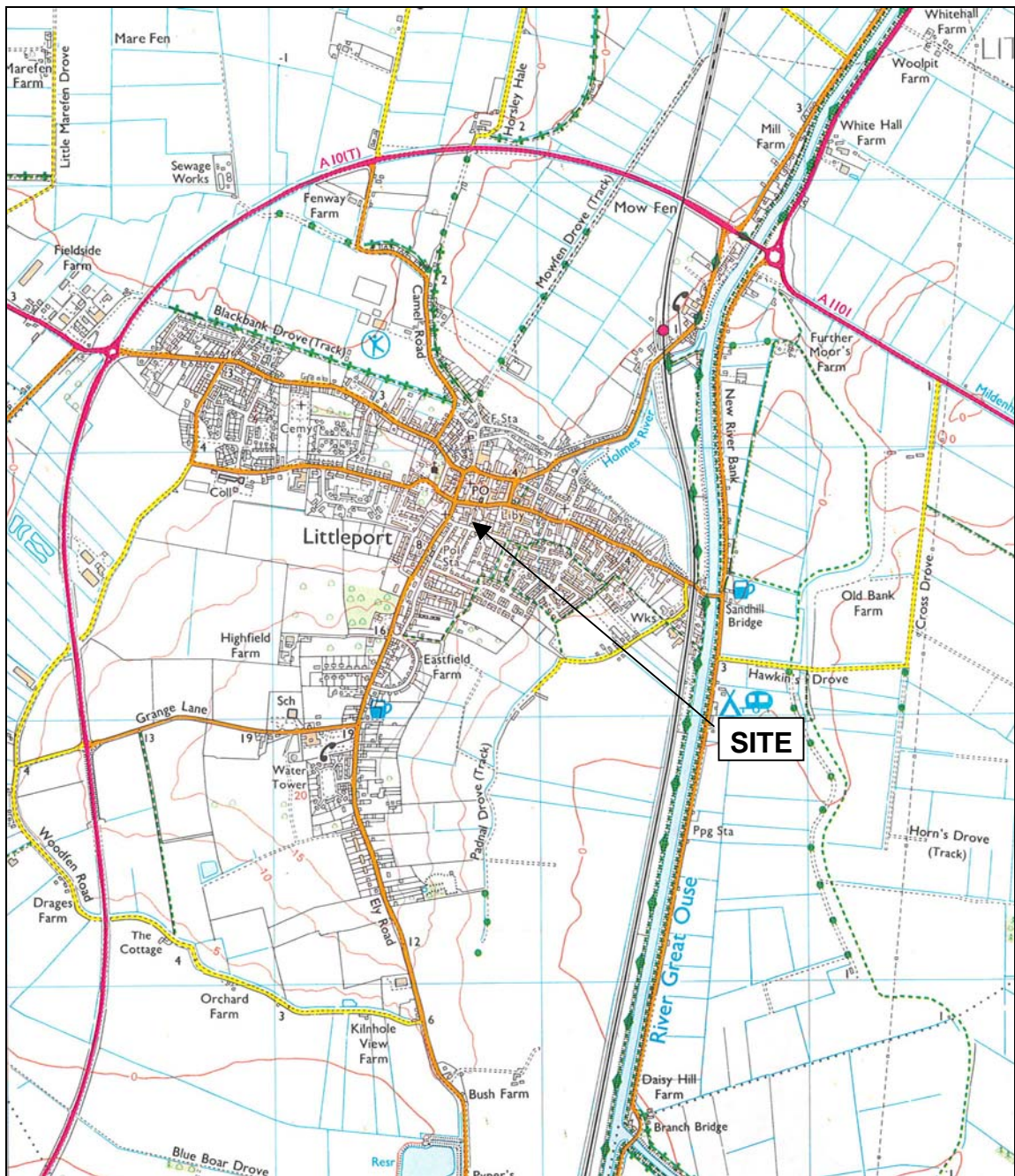


Figure 1: General location (scale 1:25,000)

Summary

During October 2007, ASC Ltd undertook an evaluation at 17 Main Street, Littleport, Cambridgeshire. The work was required in advance of a residential development. Within the single north-south trench a large ditch was revealed, running the full length of the trench. This ditch was possibly an old property boundary. Two sherds of post medieval pottery including a redware sherd dating from the late 18th century were recovered from the main fill of the ditch. This fill had a considerable accumulation of semi decayed vegetable matter in it. The date of the pottery would indicate that the ditch was most likely filled during the late 18th or early 19th centuries. However for the accumulation of semi decayed vegetable matter to have formed, maintenance of the ditch is likely to have stopped some time earlier. Sealing the ditch, two phases of 19th century rammed chalk surfaces and a wall constructed of Gault brick were revealed.

1 Introduction

1.1 In October 2007 *Archaeological Services and Consultancy Ltd* (ASC) carried out an evaluation at 17 Main Street, Littleport, Cambridgeshire (NGR TL 5675 8676: Fig. 1). The project was commissioned by *Mr K J Blundell*, and was carried out according to a generic brief prepared on behalf of the local planning authority (LPA), *East Cambridgeshire District Council*, by their archaeological advisor (AA), *Cambridgeshire Archaeology Planning & Countryside Advice* (CAPCA, and a project design prepared by ASC (McLeish 2007). The relevant planning application reference is 05/01122/FUL.

1.2 *Planning Background*

This evaluation was required under the terms of *Planning Policy Guidance Note 16* (PPG16), in response to proposals for the construction of a pair of semi-detached bungalows.

1.3 *Location*

The town of Littleport lies approximately five miles north of Ely in the administrative district of East Cambridgeshire,. The site is located at NGR TL 5675 8676 to the rear of 17 Main Street, close to the centre of the town. The south of the site fronts onto Hempfield Road (Fig. 1) which was known as Back Lane until c.1900.

1.4 *Services, Buildings, Access, Etc*

The site consists of an irregular rectangle of land measuring c.300 square metres. Access to the site is from the northern side of Hempfield Road. The proposed site is currently open ground partly used for car parking. The site is bounded by residential and commercial properties to the north, west and east (Fig. 2).

1.5 *Geology & Topography*

The soils of the area comprise the *Ashley Association* consisting of fine loamy over clayey soils with slowly permeable subsoils and slight seasonal waterlogging. Some calcareous and non calcareous slowly permeable clayey soils (Soil Survey 1983, 572q). The underlying geology comprises *Kimmeridge Clay* (Gallois 1980).

Littleport is located on a low fenland island, and the site is on relatively flat ground at an elevation of *c.*8.5m AOD.

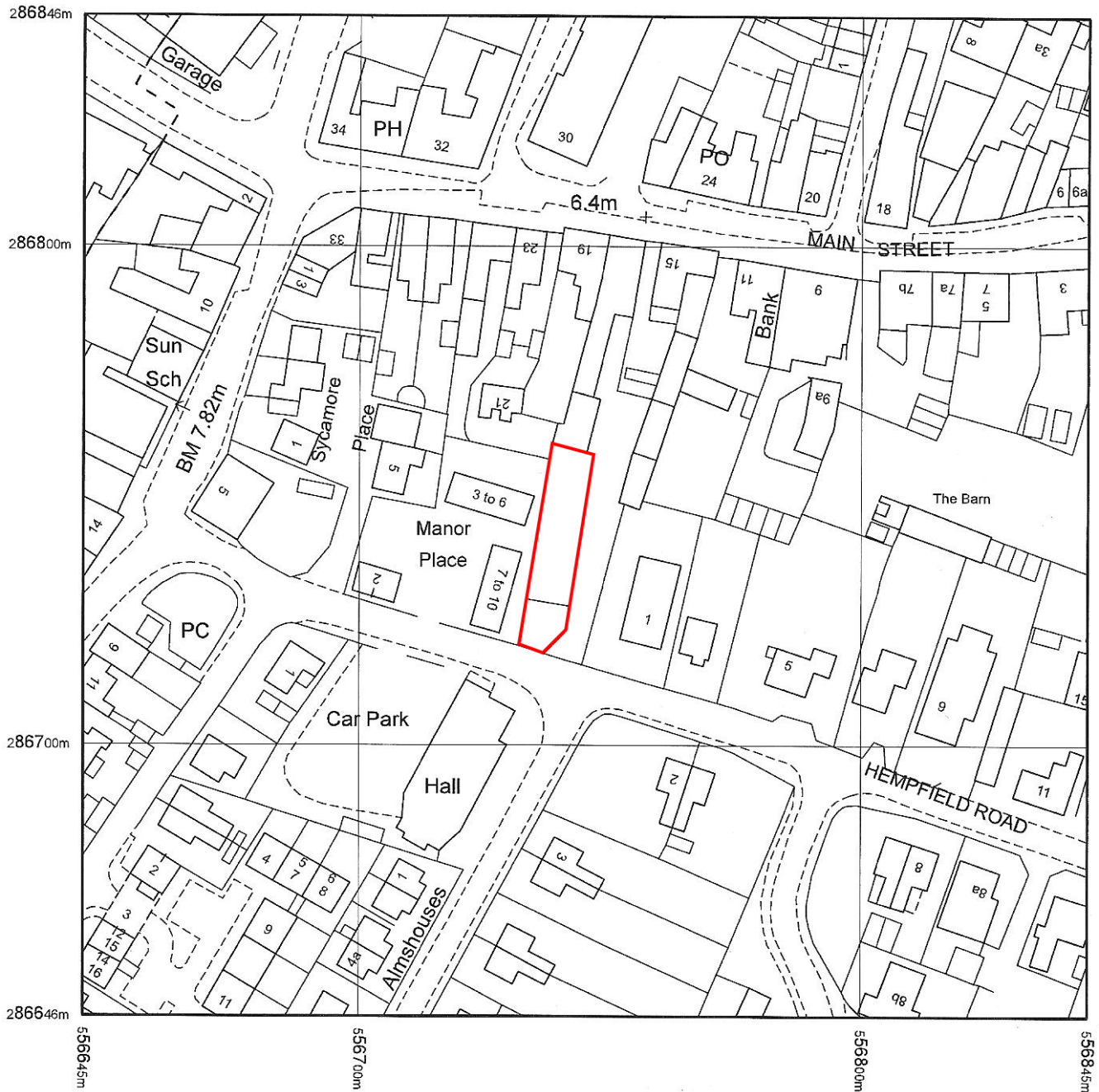


Figure 2: Site plan (scale 1:1250)

2 Aims & Methods

2.1 Aims

As described in the brief (Section 3), the aims of the evaluation were:

- To determine the location, extent, date, character, condition, significance and quality of any remaining archaeological remains potentially threatened by the proposed development.

2.2 Standards

The work conformed to the project design, to the relevant sections of the Institute of Archaeologists' *Code of Conduct* (IFA 2000) and *Standard & Guidance Notes* (IFA 2001), to the Association of Local Government Archaeological Officers East of England Region *Standards for Field Archaeology in the East of England* (ALGAO 2003), and to the relevant sections of ASC's own *Operations Manual*.

2.3 Methods

The work was carried out according to the brief (Section 2), which required:

- A programme of linear trial trenching to adequately sample the threatened available areas. A minimum of 5% sample of the areas to be affected by the development to be subject to trial trenching (Fig. 2).
- All features to be investigated and recorded unless otherwise agreed with CAPCA.
- Investigation slots through all linear features to be least 1m in width
- Discrete features to be half-sectioned or excavated in quadrants.

2.4 Constraints

Due to the depth of deposits encountered the trench was stepped on its eastern side and the deepest deposits were mechanically excavated for safety reasons.

Being in an urban context examination of aerial photographs and geophysical prospecting were not deemed appropriate for this site.

3 Archaeological & Historical Background

- 3.1 The Fenland Town of Littleport Cambridgeshire is situated approximately five miles north of Ely alongside the River Great Ouse. It is mentioned in the Domesday Survey of 1086 as being held by the Abbot of Ely.

A relatively large amount of archaeological work has been carried out within the town of Littleport, with remains dating from the prehistoric period through to post medieval times.

ECB: Historic Environment Record Event Reference.

HER: Historic Environment Record.

3.2 *Prehistoric:*

Trial trenching and fieldwalking c.800m to the south west of the site at Highfield Farm revealed evidence for prehistoric activity in the form of two Neolithic ditches and Peterborough Ware pottery. A concentration of early Neolithic flint artefacts associated with tool production together with Beaker pottery and an isolated, undated human cremation was also recovered from this site (ECB141). Due to lack of settlement evidence on this higher ground, it is suggested that it served a more ceremonial function. An evaluation at Wisbech Road, c.900m to the north west of the site revealed features consisting of pits, postholes a ditch and a gully relating to a late Bronze Age/early Iron Age date (ECB2469). Evidence of water encroachment was also evident at this location. A curved flint Neolithic sickle was discovered near Little Ouse Village displaying a high degree of craftsmanship (HER07233). Bronze Age flint has also been recovered c.800m west of the proposed site suggestive of a lithic working site.

3.3 *Roman:*

Roman occupation evidence has been uncovered in the vicinity of the site. Approximately 700m to the west of 17 Main Street, an evaluation at Parson's Lane revealed a series of ditches, which probably served as field or property boundaries. Some residual Roman sherds and scattered flints were also recovered from the site (ECB519). At Camel Road, c.500m to the north west of the development site, an evaluation uncovered ditches and gullies containing Roman pottery, along with a post-hole and daub, which suggested building activity (ECB139). The subsequent excavation at Camel Road suggested that these remains relate to a Roman settlement of some importance with the various phases of occupation spanning 250 years of the Romano-British period. Additionally, evidence of Roman activity was recovered c.200m north east of the site consisting of two parallel ditches containing residual Roman finds (ECB1800). Cropmarks and a large volume of Roman pottery were recorded during construction works to the west of Camel Road (HER08425): this may relate to the aforementioned site at Camel Road. The Roman activity in this area may be linked to a Roman canal (HER CB15678), with possible evidence of a loading or dock area. Romano-British salt-working debris including briquetage were revealed at The Hythe, c.350m northeast of the site although no archaeological features of Roman date were recorded (ECB521). Similar saltern debris and Roman occupation is also noted c.600m north west of the site. A Roman bronze coin of Gallienus was recovered c.400m north west of the site (HER07222).

3.4 *Medieval:*

Closer to the site, repaving work on Main Street itself revealed a well, parts of which were thought to date to the late medieval period (ECB1354). Further Medieval activity is represented by intercutting pits spanning four centuries, c.200m north east of the proposed site, thought to be used for the disposal of domestic waste (ECB1800). Saint George's and Saint John's Church located to the north west of the site is a Grade II listed building dating to the 14th century with subsequent repair and rebuilding works spanning into the modern day (HER CB14890). Excavations carried out at Highfield Farm (HER CB15683), revealed medieval cultivation systems consisting of field boundaries and ridge and furrow. These cultivation systems probably continued into the post-medieval period. Similar cultivation traces are also recorded c.1.2km to the west (HER MCB16496). Some unstratified finds from the garden of 22 High Street indicate activity within the area spanning the Early Neolithic thumbnail scraper to the Medieval Thetford ware pottery fragments (HER MCB16792).

3.5 *Post Medieval*

Evaluation trenching in Victoria Street, c.200m north east of the proposed site revealed 18th century makeup debris associated with the development of the street frontage and a Post-Medieval pit, which contained a large volume of animal bone, indicative of butchery waste (ECB1800). Post medieval windmills have been recorded to the northeastern edge of Littleport at the juncture of the River Great Ouse and the Holmes River (HER07234 & 07236). Littleport had a substantial population as long ago as the 17th century, but most of its growth was during the 19th century. There are few buildings older than the late 18th century and the general appearance is of a typical white-brick fen village (Hall 1996).

3.6 *Modern:*

Littleport contains a number of World War II structures located along its eastern and southern extremities. Approximately 1.3km to the north east of the development site is a World War II spigot mortar emplacement base (HER CB15090). To the southeast lay another World War II structure, which is now destroyed (HER MCB16413). Two WWII pillbox gun emplacements are located c.750m east and c.550m north east of the site. These structures occupied positions on the western edge of the river Ouse. On the south western edge of Littleport is the site of a destroyed WWII water tower (HER MCB16481). The nearby 19th century shirt factory is evidence of manufacturing within the area (HER MCB16603).

3.7 *Listed Buildings:*

Nos. 5 and 29 High Street are both 19th century Grade II listed buildings built of Gault brick. Number 5 is a villa dated *c.* 1830 while number 29 is a house dated *c.* 1800 (HER 49478 & 49479).

15 Main Street is a Grade II listed house *c.* 1800 of Gault brick with a late 17th century Grade II listed barn to the rear of the premises (HER 49481 & 49480).

4 Results

General (Figs 4, 5 & 6)

- 4.1 The single 14m trench was orientated north to south (Fig 3). Initially the trench was 1.6m wide but due to the depth of deposits encountered the eastern side was stepped by a further 1.6m. At no point in the trench did the natural soil profile survive. However where natural was exposed towards the base of the trench it comprised yellow clay.
- 4.2 The principal feature, which run the full length of the trench was a large north south orientated ditch or drain [16], cut into the natural clay. It is possible that Ditch [16] was a re-cut of an earlier ditch represented by Fill (14) on the southwest side. This fill comprised grey silt with some organic content. It was not possible to obtain a full hand cut profile across Ditch [16], however observation of a machine-cut sondage (Fig 6) was able to determine that the base of the ditch was 3.2m below the current ground level at 5.5mOD. Three fills were recorded in the ditch. The earliest and main fill (Context 15) in the base of the ditch comprised brown to black waterlogged silty clay, containing an abundant quantity of partially decayed vegetable matter. Redware, pottery hand excavated from close to the base of this layer has been dated to the later part of the 18th century by Lucy Whitingham (Appendix 2) and was probably produced at Ely a pottery production centre since at least the 16th or 17th centuries when Cistercian-type ware and Blackware was being produced. This pottery evidence would indicate that the ditch most likely went out of use in the late 18th or early 19th centuries. Sealing Fill 15 there were two further fills, a light brownish grey silt (13), and a final filling of mid brownish grey silt (11). From the available evidence it is unclear if these layers were deposited naturally or brought in to deliberately fill the ditch channel. However what is clear is that a level surface would have been left after the ditch was filled.
- 4.3 An environmental sample was taken from Context (15) in the base of Ditch 16. This sample has been examined by Angela Monkton of University of Leicester Archaeological Services and her findings are reproduced in Appendix 3.
- 4.4 At some time, probably fairly soon after the ditch was filled, a rammed chalk surface (Context 10) was laid. This surface extended c. 3.00m southwards from the northern end of the trench partially cutting into the upper fill of Ditch [16]. No evidence to date this surface was recovered during the evaluation but it seems likely that it was laid soon after the ditch was filled, in the late 18th or early 19th century. A second feature cut into the upper fill of the ditch was a north south orientated drain [18] made from handmade horseshoe shaped tiles laid on flat ceramic sole plates. This drain is also likely to date from the early years of the 19th century, and almost certainly before 1845 when Thomas Scragg invented a machine for extruding drainage tiles, which brought the price of drain tiles down by 70% (Robinson 1986). Sealing the drain there was a further rammed chalk surface (06) sitting on a broken Gault brick hardcore layer (07).
- 4.5 Wall (05) (Plate 5) comprised 3 courses of mortar bonded Gault bricks. The 1890 and 1903 Ordnance Survey 1:10560 maps (Figs 7 & 8) show buildings abutting the western boundary of the site. It is likely that Wall [05] is part of one of these buildings.

4.6 The only other deposits recorded were disturbed 19/ 20th century levelling layers.

4.6 Detailed information regarding the trial trench and its contents appears in Appendix 1.

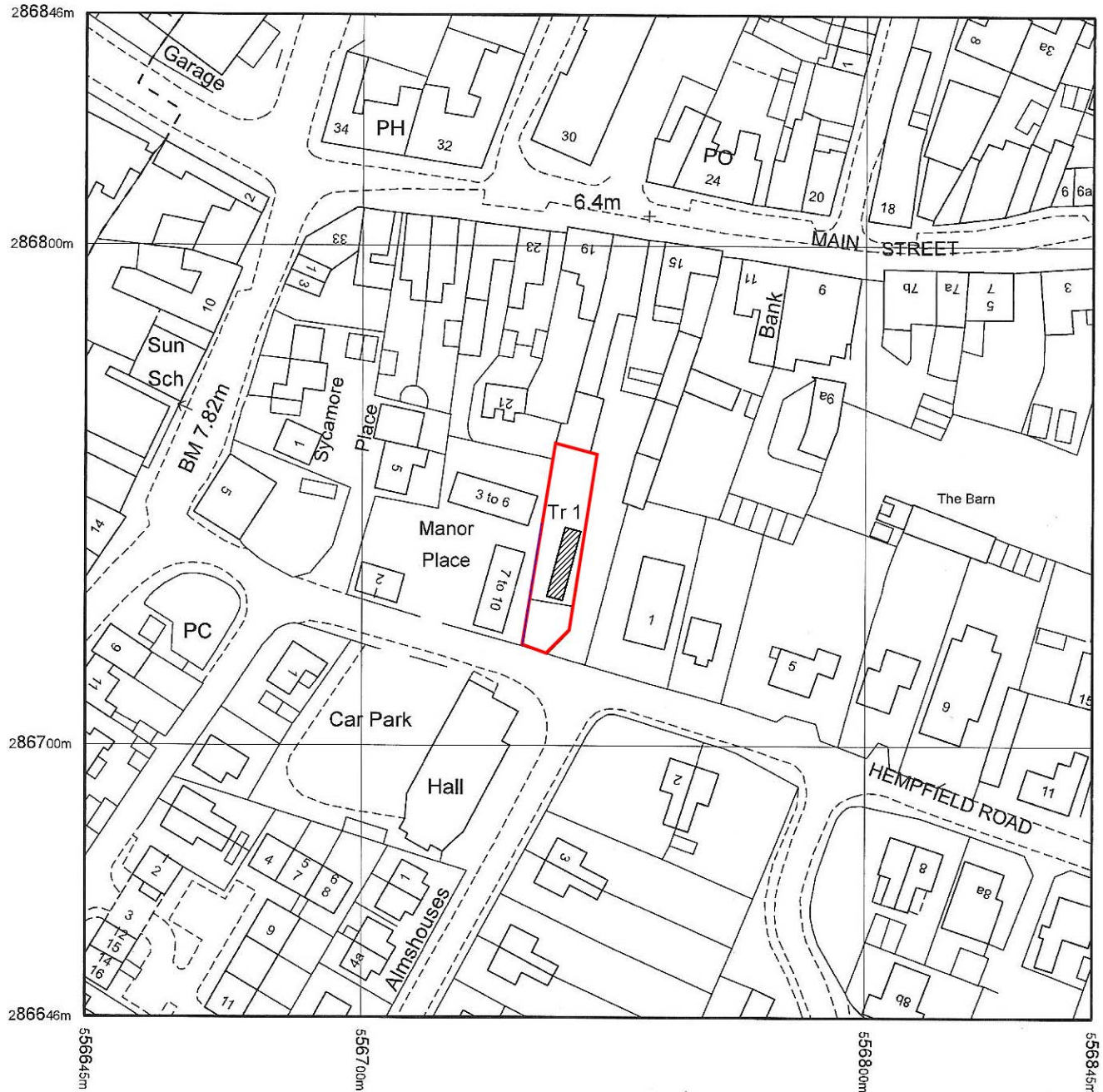


Figure 3: Trench location plan (scale 1:1250)

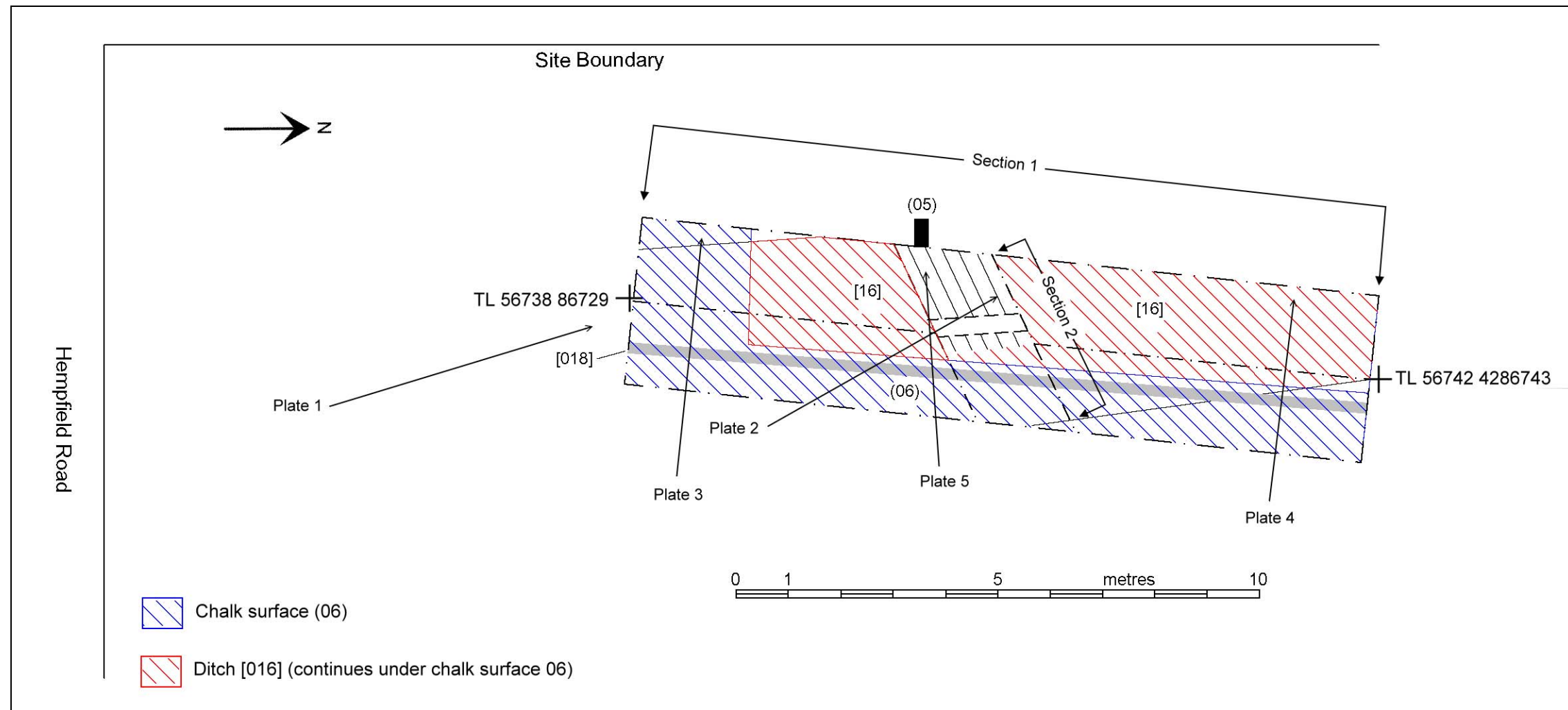


Figure 4: Trench plan (scale 1:100)

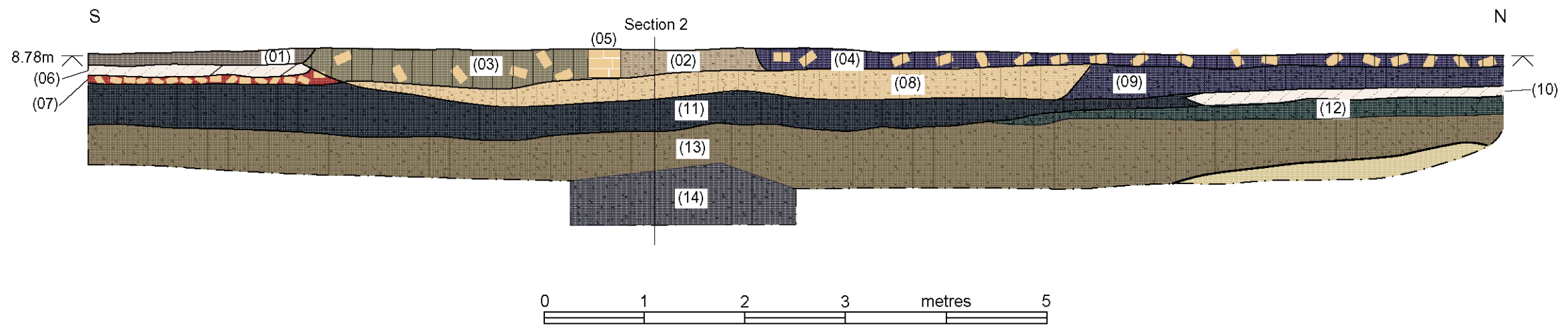


Figure 5: Section 1, east facing section of the trench (scale 1:50)

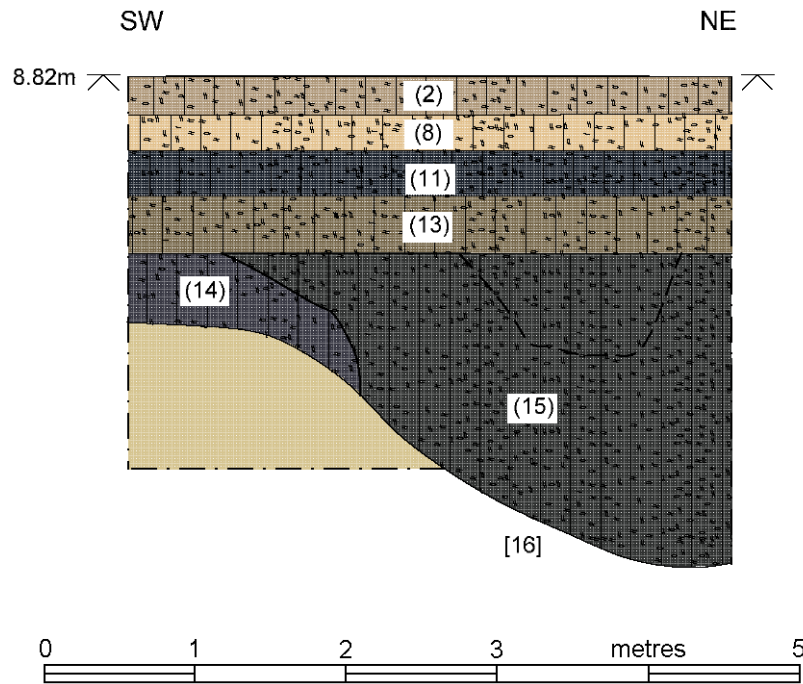


Figure 6: Section 2, southeast facing section of Ditch [16] (scale 1:50)



Figure 7: Extract from the 1890 Ordnance Survey 1:10560 map (not to scale)

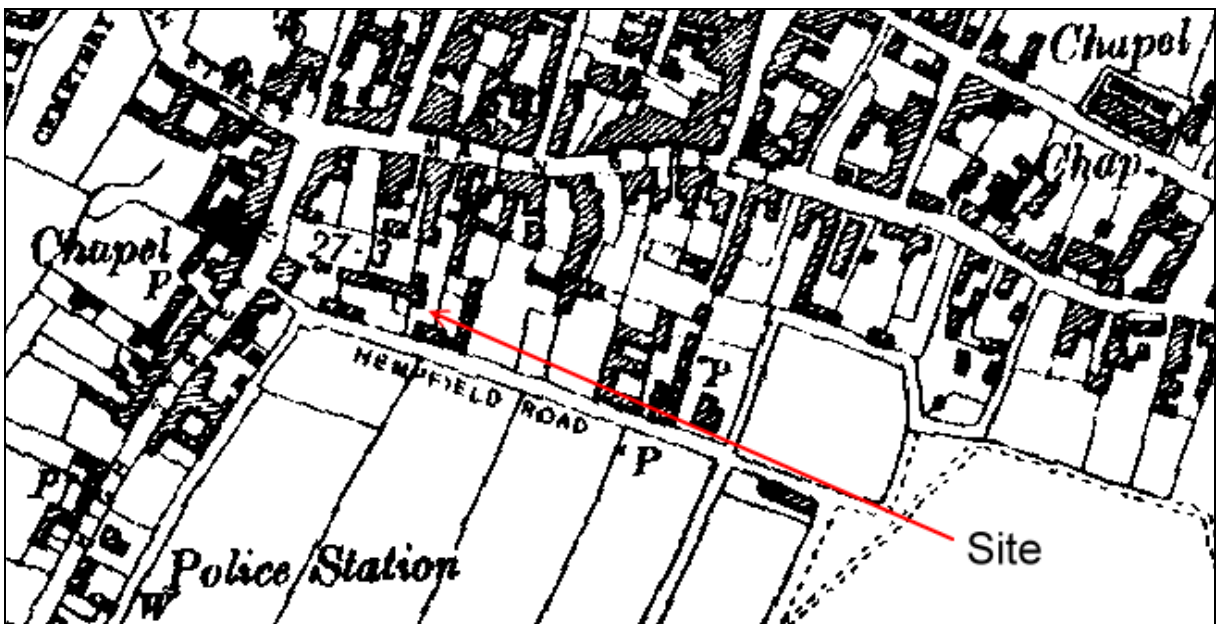


Figure 8: Extract from the 1903 Ordnance Survey 1:10560 map (not to scale)



Plate 1: General view of the east facing section showing Surface 06

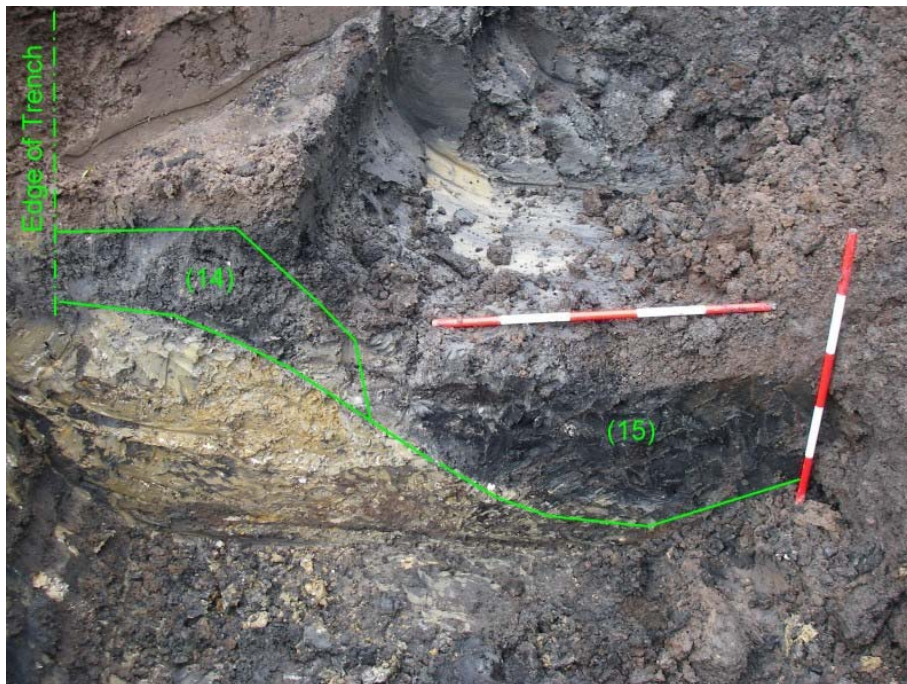


Plate 2: Fill containing semi decayed vegetable matter in the base of Ditch 16



Plate 3: Rammed chalk surface 06

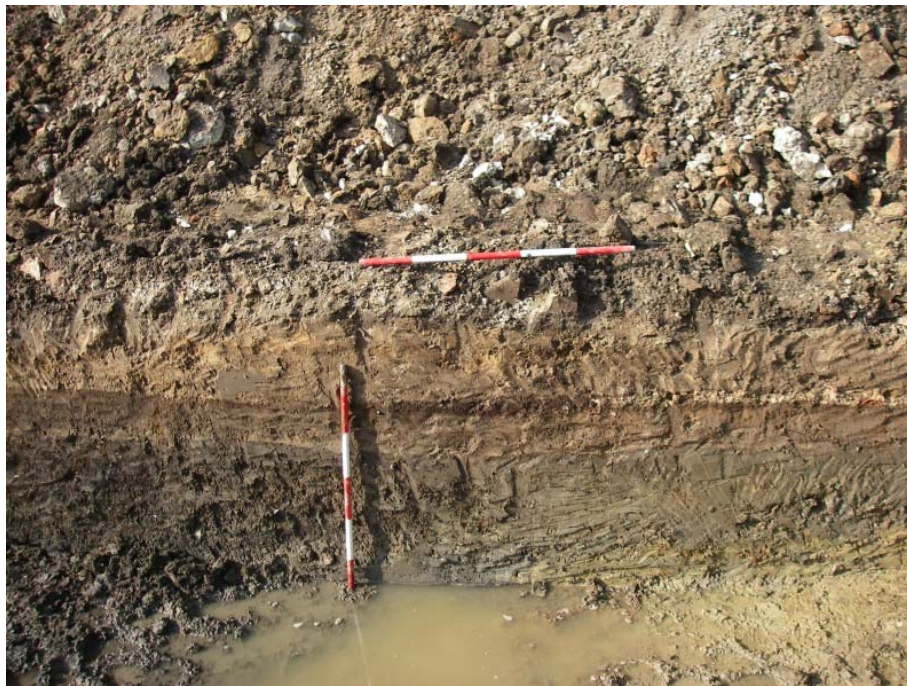


Plate 4: Rammed chalk surface 10 (to right of scale)



Plate 5: Truncated Wall 05

5. Conclusions

- 5.1 The earliest feature identified during the evaluation was a large ditch or drain which would almost certainly have been a long established property boundary. Though no medieval finds were recovered during the evaluation it is possible that this boundary dates back to the medieval period. However the presence of late 18th century pottery in the fill would indicate that the ditch was still open at this time. To allow for the depth of semi decayed vegetation recorded in the base of the ditch to form, it cannot have been regularly maintained for many years. Some of the seeds recorded in the environmental analysis of the samples confirm that the ditch was either stagnant or very slow moving with damp or marshy banks. Finding only three grains of cereal indicates that the ditch was probably in an undeveloped area of the town but within the vicinity of domestic dwellings presumably those on Main Street to the north of the site. Pre 19th century maps of Littleport examined during the project were not of sufficient detail to depict the ditch and its date of origin and development could not be established. By the early 19th century as Littleport began to expand and the pressure on land increased it would seem likely that the ditch was finally filled in and the land levelled ready for development.
- 5.2 The earliest development of the site evidenced in the evaluation trench seems to have been two rammed chalk surfaces. No definite function can be determined for either of these surfaces, but it is possible that they are the remains of yards associated with now demolished structures. From their relative positions in the stratigraphic sequence and different methods of construction with Surface [10] the earlier surface sitting directly on the ditch levelling material and Surface (06) sitting on a layer of broken Gault brick makeup it is likely that they represent two phases of development. The recorded extent of Surface (06) may represent the outline of a 19th century building which lay to the west of the area examined during the evaluation. The only other significant feature recorded was brick wall [05]. It is almost certain that this wall forms part of the structure shown on the 1893 and 1903 Ordnance Survey maps. As the footing trench for this wall was cut through earlier demolition rubble (03) which sealed chalk surface (06) the wall is likely to represent a third phase of 19th century development on the site. The size and construction of the wall suggests that it was the footing for a substantial, building.
- 5.3 Through the evaluation on this derelict plot of land to the rear of 17 Main Street it has been possible to determine that the site has been repeatedly developed during the 19th century. After the gradual filling of the abandoned, semi-water filled ditch during the 18th century, at least three phases of development took place during the 19th century. With this amount of modern development on the site, accompanied by the large ditch cut it is highly unlikely that any significant areas of undisturbed pre 19th century archaeology other than the ditch itself will survive on the site.
- 5.4 *Confidence rating*

Though only a single trench was excavated, the available mapping evidence and the known history of Littleport support the evidence obtained during the evaluation, hence a high confidence rating can be applied to the results of the evaluation.

6. Acknowledgements

ASC is grateful to Mr K Blundell for commissioning the evaluation. We would also like to acknowledge the role of the staff at Cambridgeshire Archaeology Planning & Countryside Advice Office especially Andy Thomas who approved the project design and monitored the fieldwork. The project design was prepared by Janice McLeish and the project was managed by David Fell BA MA MIFA. The fieldwork was undertaken by Nigel Wilson and Lizzie Gill. The pottery was examined by Lucy *Whittingham* and the environmental report was prepared by Angela Monkton.

We would finally like to thank the people of Littleport for their interest in the project and apologise for any inconvenience caused during the evaluation.

7. Archive

7.1 The project archive will comprise:

1. Brief
2. Project Design
3. Initial Report
4. Site records
5. Finds records
6. Finds
7. Sample records
8. Site record drawings
9. List of photographs
10. B/W prints & negatives
11. Original specialist reports and supporting information
12. CDROM with copies of all digital files.

7.2 The archive will be deposited with the Cambridgeshire County Store under Event Number ECB 2699

8. References

Standards & Specifications

- ALGAO 2003 *Standards for Field Archaeology in the East of England*. East Anglian Archaeology Occasional Paper **14**.
- EH 1991 *The Management of Archaeological Projects, 2nd edition*. English Heritage (London).
- Gdaniec K 2007 Planning Brief: *Land rear of 17 Main Street, Littleport, Ely, Cambridgeshire*. Cambridgeshire County Council.
- IFA 2000a Institute of Field Archaeologists' *Code of Conduct*.
- IFA 2001 Institute of Field Archaeologists' *Standard & Guidance documents (Desk-Based Assessments, Watching Briefs, Evaluations, Excavations, Investigation and Recording of Standing Buildings, Finds)*.
- McLeish J. 2007 *Land to the rear of 17 Main Street, Littleport, Cambridgeshire. Project Design for Archaeological Evaluation*. ASC Ltd (ref. 978/LMS/01)

Secondary Sources

- Gallois R.W. 1980 *Institute of Geological Sciences, Sheet 173 1:50,000 series, Ely*. (Southampton)
- Robinson M 1996 *The Extent of Farm Underdrainage in England and Wales, prior to 1939*. The Agricultural History Review 34,1986 Part 1 (British Agricultural History Society)
- Soil Survey 1983 *1:250,000 Soil Map of England and Wales, and accompanying legend (Harpenden)*.
- Williams A & Martin G H 2003: *Domesday Survey: A Complete Translation*. Penguin Books.

Maps Consulted

Cambridge Record Office

- 1836, *Enclosure Map 515*\P\Box 3
- c.1798 *Plan showing situation of Ms Airs's house* P109\22\1
- 1797 *Survey of 2 farms* 283\P
- Estate of Mr J Seaber* 283\P
- !911 *Sale plan of House and business premises in Main Street*. 297\SP122


University Library

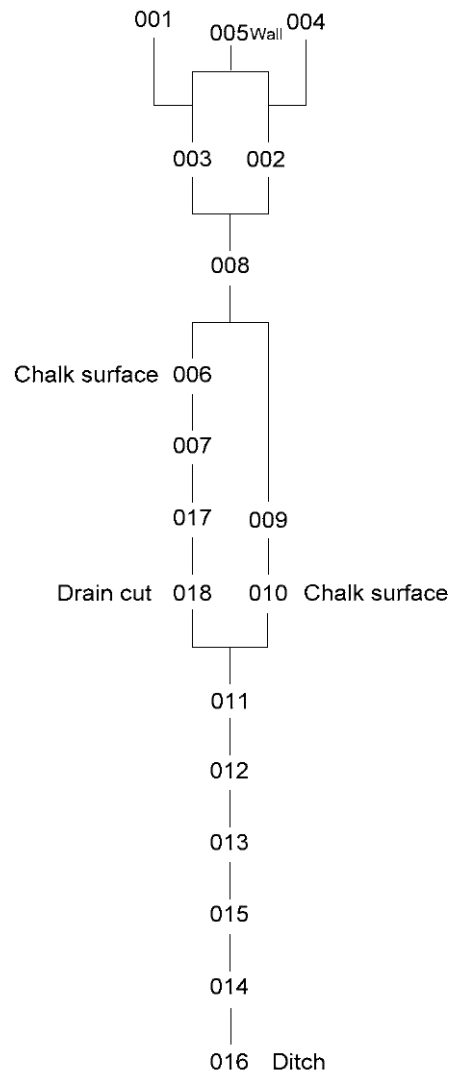
- 1795 *by J. Turpin* (Incomplete plan of Littleport) MS plan 149
- 18.. *by J. Turpin* (Incomplete plan of Littleport) MS plan 148
- 1836 *Enclosure Map A.53.832A*
- 1839 *Tithe Map* bb.19.q.1
- 1865 *Sales plan maps* PSQ.18.188
- 1895 *Sales plan maps* PSQ.18.437

Old Ordnance Survey Maps

- 1890 1:10560
- 1903 1:10560

Appendix 1: Trench Summary Table & Context List

Trench1						
	Max Dimensions (m)					
	Length	14.3	Width	1.6+1.6	Depth	c.1.2
	Levels					
	Trench base south			7.53m OD		
	Trench top south			8.78m OD		
	Trench base north			7.45m OD		
	Trench top north			8.68m OD		
	NGR Co-ordinates					
	S	TL 56738 86729		N	TL 56742 86743	
	Orientation			South - North		
Reason for Trench			Testing the potential of the site			
Context	Type	Description and Interpretation	Max Width (mm)	Max Thckn (mm)	Depth BGL (mm)	
01	Layer	Tarmac		250	0-250	
02	Layer	Layer containing a few bricks very late in the sequence.		250	0-250	
03	Layer	Dark layer cut by wall [05]		360	0-360	
04	Layer	Black loam very mixed frequent bricks, demolition material.		180	0-180	
05	Wall	Gault brick wall, east west 3 courses surviving		290	0-290	
06	Surface	Rammed chalk surface. Not on the west side of the trench apart from at the very southern end.		120	120-240	
07	Layer	Makeup layer of Gault brick for surface (06).		90	240-330	
08	Layer	Makeup layer of mid greyish brown silty material		250	250-500	
09	Layer	Makeup layer of mid brownish silty material		290	120-410	
10	Surface	Chalk surface		110	390-500	
11	Ditch fill	Dark brown peaty silt		300	500-800	
12	Ditch fill	Mid greyish brown clay		200	440-640	
13	Ditch fill	Dark greyish blue clay ditch fill		410	800-1210	
14	Ditch fill	Black vegetation rich fill of ditch		720	1210-1930	
15	Ditch fill	Grey silty fill on side of ditch		1990	1210-3200	
16	Cut	Large ditch/ drain		2710	490-3200	
17	Drain	Ceramic horseshoe drain and sole plate		270	330-600	
18	Cut	Slot for horseshoe shaped drain		270	330-600	



Stratigraphic matrix of the contexts exposed in the trench

Appendix 2: Finds Concordance and notes on the pottery

Context	Pottery		Bone		Flint (no)	Shell (g)	Stone (no)	Other Finds	
	(no)	(g)	(no)	(g)				Type	(no)
13			2	35				Slate & C.B.M.	1(each)
15	2	97							

Two sherds of post-medieval pottery (106g) are coarse earthenware vessels with a lead glaze. These are likely to be the products of a local redware industry operating during the 18th and early 19th centuries. The smaller sherd with a glazed corrugated external surface is from a hollow vessel form such as a jar. The larger sherd with internal glaze is from a deep bowl. There is a known production centre of 16th and 17th-century Cistercian-type ware and Blackware at Ely (McCarthy and Brooks 1988, 424). The production of redware is likely to have continued within the same vicinity into the 18th and 19th centuries.

McCarthy, M and Brooks, C M 1988, *Medieval Pottery in Britain AD900-1600*. Leicester

Lucy Whittingham
(Nov 2007)

Appendix 3: Environmental report

Angela Monckton (April 30th 2008) ULAS Report No. 2008-000

Introduction

The site at 17, Main Street, Littleport was the subject of an archaeological evaluation by ASC Ltd supervised by Nigel Wilson and a sample from a ditch or drain was taken to be investigated for the preservation of organic remains which may provide evidence of the past environment or activity on the site in the past. The layer sampled was the earliest encountered below a recut of the ditch which dated to 18th -19th century by pottery.

Methods

Samples from context (15) of ditch 16 were from a layer containing post-medieval pottery and were examined after processing.

Samples of around 30 litres of sediment were processed by wet-sieving as bulk samples in a 0.5mm mesh with flotation into a 0.3mm mesh sieve by ASC Ltd and the residues were air-dried and submitted for examination. The flotation fraction was examined with a x10-30 stereo microscope for plant and other remains. The plant remains were identified by comparison with modern reference material and listed below. The plant names follow Stace (1991) and were mostly uncharred seeds. Snails were also present and identified with reference to Macan and Douglas Cooper (1969), and Kerney and Cameron (1979).

Results

The sample from an organic layer in a ditch or drain and was likely to have been permanently waterlogged because anaerobic deposits are dark grey to black in colour and rich in organic remains as found here. The deposit contain organic material consisting of reed stem fragments and seeds were very numerous in the first sample. The sample had been processed and dried so possibly more delicate material had been lost but the seeds were sufficiently numerous to indicate the local conditions. A few charred cereal grains were present in the second sample together with reed stems. Snails were also present in both samples and noted below.

A range of water-plants, waterside, and land plants were found (table 1). The remains indicated that there was permanent water in the ditch from the presence of duckweed and water-milfoil. Duckweed can only set seed in permanent water and water-milfoil lives in slow flowing water. Celery-leaved buttercup lives in marshy or shallow water and probably grew at the ditch side, these seeds were very numerous and are thought to indicate animal run-off as found in pasture land. Seeds of waterside plants show the vegetation of the ditch sides to have included club-rush, bur-marigold and mare's-tails amongst other plants in areas of marsh ground. Plants of the surrounding vegetation included a wide range of damp pasture plants such as thistles, meadow rue, grasses and others. Stinging nettles also indicate nitrogen rich soil from animal run-off, henbane and hemlock also grow in these conditions, both are poisonous plants and henbane is rare today. The plant silverweed grows on waysides perhaps indicating a pathway or trampling in the area. Other disturbed ground plants and garden-type weeds included goosefoots, docks and persicaria.

The snails include the water-snail *Armiger crista* and some *Lymnaea* sp. possibly the dwarf pond snail both indicating standing water. Other snails included *Anisus leucostoma* which is a snail of wet areas prone to drying perhaps from the ditch sides, and possible *Lymnaea truncatula* often found on pastures. These add to the evidence for the environment indicated by the plant remains.

The only evidence of crop plants was from three charred grains and a charred straw fragment in the second sample. Free-threshing wheat was represented as typical of the medieval and post medieval periods, together with barley. These are probably from domestic waste at some distance from the site.

Discussion

The remains here are mainly of natural wetland vegetation such as has existed since the prehistoric period, the exception is the presence of a few charred cereal remains thought to be medieval or post-medieval, although both cereals were present earlier. The local conditions indicated are of a ditch containing permanent water, or drainage from permanent water, the ditch sides were marshy and prone to drying and surrounded by a damp area probably pasture. Such vegetation has been found in many natural palaeochannels as well as waterlogged ditches. Disturbed ground was present nearby and use of cereals indicated, probably from domestic waste in the locality, although at some distance from the sampling site.

Waterlogged deposits can contain preserved pollen and insect remains as well as plant macrofossils as found here. Pollen can provide evidence about the regional and surrounding vegetation, as well as the vegetation on the site. Plant macrofossils are likely to represent the vegetation on the site and so can show the water conditions by the type of water plants present, as well as the other nearby vegetation. Evidence of cultivated plants may be found which may be of interest in the study of the site. Insect remains have good potential to show the local land use from, for example, the presence of insects which may indicate pasture or woodland; they also have the potential to reveal the water conditions from water beetles and caddisflies which may be characteristic of still or flowing water. Molluscs are also good environmental indicators as well as providing evidence of water conditions although a large number of shells is needed for full analysis, insufficient were recovered here. Good survival of plant remains was found here which indicates other remains such as pollen and insect remains will also survive in such deposits so if further investigation of the site occurs it is recommended that deposits are sampled for a range of remains. This should be carried out if phases of occupation in the area have not been investigated already or if the site is of archaeological significance. Dating evidence is always required. Post-medieval deposits can be of interest because they may contain evidence of the introduction of plants into the country, and information for landscape reconstruction, although for these later deposits it is desirable that they should have some documentary evidence and good dating evidence.

Recommendations

If significant waterlogged deposits are encountered during future investigations they should be sampled in consultation with relevant specialists. Samples for plant macrofossils should be processed by a specialist using very fine meshes and examined whilst wet to avoid loss of delicate material. The same deposits should also be examined for pollen.

Conclusions

A dried waterlogged sample was examined which indicated that the deposits had the potential to preserve environmental information. A wetland environment was described from the presence of seeds and snails.

Acknowledgements

This work was carried out at University of Leicester Archaeological Services, University Road, Leicester LE1 7RH.

Bibliography

Macan, T. T., and R. Douglas Cooper (1969) A key to the British Fresh and Brackish-water Gastropods. Freshwater Biological Association No 13, 3rd Edition 1969.

Kerney M. P. and R. A. D. Cameron (1979) A Field Guide to the Land Snails of Britain and North-west Europe, Collins: London 1979.

Stace, C. 1991 New Flora of the British Isles. Cambridge University Press.

Table 1: Plant remains from Littleport, Cambs.

Sample number	1.1	1.3	
Context	15	15	
AQUATIC			
<i>Ranunculus</i> subgen <i>Batrachium</i>	+	-	Water-crowfoot
<i>Myriophyllum</i> sp	++		Water-milfoil
<i>Lemna</i> sp	+	-	Duckweed
MARSH OR WATERSIDE			
<i>Ranunculus sceleratus</i> L.	+++	-	Celery-leaved buttercup
<i>Oenanthe aquatica</i> (L.) Poiret	+	-	Water-dropwort
<i>Hydrocotyl</i> sp.	+	-	Pennywort
<i>Bidens</i> sp.	+	-	Bur-marigold
<i>Schoenoplectus lacustris</i> (L.) Palla	+	-	Common Club-rush
<i>Eleocharis</i> sp	+	-	Spike-rush
<i>Hippuris vulgaris</i>	+	-	Mare's-tail
TREES AND SHRUBS			
<i>Sambucus nigra</i> L.	+	-	Elder
<i>Alnus</i> sp.	+	-	Alder
CROP PLANTS			
<i>Triticum</i> sp. Free-threshing grains	-	2	Wheat (charred grains)
<i>Hordeum vulgare</i> l.	-	1	Barley (charred grain)
UNCLASSIFIED			
<i>Urtica dioica</i> L	+	-	Stinging nettle
<i>Urtica urens</i>	+	-	Small leaved nettle
<i>Chenopodium album</i> L.	+	-	Fat-hen
<i>Chenopodium</i> sp.	+	-	Goosefoots
<i>Thalictrum flavum</i> L.	++	-	Meadow-rue
<i>Persicaria</i> sp	+	-	Persicaria
<i>Rumex</i> sp.	+	-	Docks
<i>Potentilla anserina</i> L.	+	-	Silverweed
<i>Vicia</i> sp	+	-	Vetch
<i>Malva</i> sp.	+	-	Mallow
<i>Lysimachia/Anagallis</i>	+	-	Pimpernel type
<i>Aethusa cynapium</i> L.	+	-	Fool's-parsley
<i>Conium maculatum</i> L.	+	-	Hemlock
<i>Hyoscyamus niger</i> L.	+	-	Henbane
<i>Sonchus</i> spp	+	-	Sow-thistle
<i>Mentha</i> sp.	+	-	Mint
<i>Picris</i> sp	+	-	Oxtongues
<i>Cirsium</i> cf <i>palustris</i>	+	-	Thistles
Asteraceae	+	-	Daisy family
<i>Carex</i> sp.	+	-	Sedge
Poaceae	+	-	Grasses
Indet seeds	+	+	Indet seeds
Stem fragments (Monocot)	+	++	Stem

Snails	++	+	
Sample size (litres)	30	30?	

Key: remains are seeds in the broad sense, and are uncharred unless stated.
+ = few, ++ = moderate amount, +++ = hundreds.

Appendix 4: List of Photographs

SITE NAME: Land to r/o 17 Main Street, Littleport			SITE NO/CODE: 978/LMS
Shot	B&W	Digital	Subject
1		√	Working shot (ditch)
2		√	Working shot (ditch)
3		√	Working shot (ditch)
4	√	√	Ditch section
5	√	√	Ditch section
6	√	√	Ditch section
7	√	√	Ditch section
8		√	Working shot (ditch)
9		√	Working shot (ditch)
10	√	√	Section (E facing)
11	√	√	General shot of trench
12	√	√	General shot of trench
13	√	√	Section (E facing)
14	√	√	Section (E facing)
15	√	√	Section (E facing)
16	√	√	Section (E facing)
17	√	√	Section (E facing)
18	√	√	General shot of trench
19	√	√	General shot of trench
20	√	√	Section (E facing)
21		√	General shot of site
22	√	√	Section (E facing)

Appendix 5: ASC OASIS Form

PROJECT DETAILS			
Project Name:	Land to r/o 17 Main Street, Littleport		
Short Description:	<p><i>During October 2007, ASC Ltd undertook an evaluation at 17 Main Street, Littleport, Cambridgeshire. The work was required in advance of a residential development. Within the single north-south trench a large ditch was revealed, running the full length of the trench. This ditch was possibly an old property boundary. Two sherds of post medieval pottery including a redware sherd dating from the late 18th century were recovered from the main fill of the ditch which had a considerable accumulation of semi decayed vegetable matter in it. The date of the pottery would indicate that the ditch was most likely filled during the late 18th or early 19th centuries. However for the accumulation of semi decayed vegetable matter to have formed, maintenance of the ditch is likely to have stopped some time earlier. Sealing the ditch, two phases of 19th century rammed chalk surfaces and a wall constructed of Gault brick were revealed.</i></p>		
Project Type: (indicate all that apply)	Trial Trenching		
Site status: (eg. none, SAM, Listed)	none	Previous work: (eg. SMR refs)	none
Current land use:	Brownfield	Future work: (yes / no / unknown)	no
Monument type:	Ditch, Structure, Surface	Monument period:	Post medieval
Significant finds: (artefact type & period)	Pottery		
PROJECT LOCATION			
County:	Cambridgeshire	OS reference: (8 figs min)	TL 56740 86736
Site address: (with postcode if known)	Land to r/o 17 Main Street, Littleport CB6		
Study area: (sq. m. or ha)	345 sq m	Height OD: (metres)	8.7
PROJECT CREATORS			
Organisation:	Archaeological Services & Consultancy Ltd		
Project brief originator:	Cambridgeshire County Council	Project design originator:	ASC Ltd
Project Manager:	David Fell BA MA MIFA	Director/Supervisor:	Nigel Wilson HND AIFA
Sponsor / funding body:	Mr K Blundell		
PROJECT DATE			
Start date:	10/10/2007	End date:	11/10/2007
PROJECT ARCHIVES			
	Location (Accession no.)	Content (eg. pottery, animal bone, files/sheets)	
Physical:	Cambridgeshire Archaeological Store	Pottery	
Paper:	Cambridgeshire Archaeological Store	Trench record sheets, Context sheets, Plans/Sections	

Digital:	Cambridgeshire Archaeological Store	CD containing digital report, images and drawings	
BIBLIOGRAPHY (Journal/monograph, published or forthcoming, or unpublished client report)			
Title:	Archaeological Evaluation: Land to the Rear of 17 Main Street, Littleport, Cambridgeshire,		
Serial title & volume:	ASC unpublished client report Ref: 978/LMS/2		
Author(s):	Nigel Wilson		
Page nos	1-25	Date:	7 th November 2007