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LINDSEY ARCHAEOLOGICAL SERVICES

Horton's Garage, Fen Road, Washingborough

NGR: ~~02489~~ 70731

Site Code: HGW 04

Accession Number: 2004.245

Planning Application: N/71/1343/02

Archaeological Evaluation

Report for

LKR Design

By

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LAS Report No: 795

January 2005

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Horton's Garage, Fen Rd, Washingborough Archaeological Evaluation

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Summary

Evaluation at Horton's Garage has established the presence and alignment of the Car Dyke along with its profile, suggesting this particular segment of the Car Dyke could have been used as a canal. The presence of a berm or tow path on the south side of the dyke supports this interpretation. Roman artefacts have been recovered and well preserved environmental remains have been sampled for future analysis to allow greater understanding of the Car Dyke. With appropriate foundation design, development of the site need not disturb the Car Dyke given the amount of modern overburden

Introduction

Lindsey Archaeological Services was commissioned by LKR Design in November 2004 to undertake an archaeological evaluation at the above site (Fig. 1). The work was carried out in accordance with the brief provided by the Heritage Officer, North Kesteven District Council dated December 5th 2002 and the general requirements set out in *Lincolnshire Archaeological Handbook* published by the Archaeology Section, Lincolnshire County Council (1998). Work commenced 15/11/04 and was completed 19/11/04.

Site Location and Description

Washingborough village sits on the southern bank of the River Witham c.5km east of Lincoln. The proposed development site is c.85m x 50m in extent and located on the northern side of Fen Road north east of the medieval core of the village (Fig. 1). The front of the site is currently occupied by Horton's Garage and Skoda dealership showrooms, which includes fuel tanks below the forecourt.

Planning Background

It is proposed to apply for full planning permission to demolish the existing buildings on the site for residential development with associated access and services.

Archaeological Background

The Car Dyke is a watercourse connecting the River Witham, near Lincoln, to the River Nene at Peterborough, a length in the region of some 76 miles. An excavation at Helpringham established that the width of the channel was about 17m with flanking banks each about 13m wide. The Car Dyke was investigated at Washingborough in 1971, west of the current site, but all notes were in sketch form so no accurate recording of this segment of the Car Dyke has been made.

The proposed development area is located over the channel and associated banks of the Car Dyke. Within Washingborough the Car Dyke is generally well preserved and a stretch immediately to the west of, and adjacent to the proposed development site, is protected as a scheduled ancient monument (LI 275). A further stretch of the monument 150m to the east of the site is also scheduled. The scheduling of this section of the Car Dyke was undertaken after the garage had been built, so does not include the proposed development site but this does not mean that the remains below ground are of any less archaeological interest or importance.

Aims and Objectives

The purpose of the evaluation was to

- establish the presence or absence, quality and extent of archaeological remains and their location within the development area
- gather sufficient information to enable an assessment of the potential and significance of any archaeological remains to be made and the impact which development will have upon them
- enable an informed decision to be made regarding the future treatment of any archaeological remains and consider any appropriate mitigatory measures either in advance of and/or during development
- More precisely the evaluation examined the presence and preservation of archaeological deposits associated with the Car Dyke.

Scope of the investigation

The evaluation comprised a single trench along the north-south axis of the development plot (Fig. 2, Pl. 1), across the presumed line of the Car Dyke. Constraints posed by existing site conditions (eg buildings, live services) limited the length of the trench to c.48m. The width of the trench, up to c.4m wide, was sufficient for the full depth of the Car Dyke to be determined.

Method

The evaluation trench was excavated using a JCB, with a toothless dyking bucket, across the full width of the Car Dyke. Due to concrete covering services the trench was divided into two segments (Pls. 3 and 7). All machine excavation was monitored by an experienced archaeologist. The trench was hand-cleaned to reveal archaeological deposits in section. Archaeological recording was carried out by a team of 2 experienced archaeologists, including a Site Director. A full written (single context) and photographic record was made of the site, including site plans at a scale of 1:50, along with 1:20 sections.

A temporary bench mark, 3.93m OD was established from a bench mark 4.75m OD located on the corner of Horton's Garage.

Evaluation Trench Results (Figs. 3 and 4, Pls. 2 - 8)

Post Medieval and Modern Activity

The concrete and tarmac surface, **1**, 0.10m deep, was removed to expose a 1m thick modern levelling deposit, **2** and **5**, comprising limestone blocks, some worked and painted, which had been salvaged from the demolition of Boutham Hall (or Manor as it was also known), destroyed in 1959. Below was 0.12m deep grey silt, **7/20/30**, devoid of inclusions, which ran the length of the trench. It was probably a former topsoil, though it is unclear whether this deposit formed through ploughing. As **7/20/30** extended over the Car Dyke it changed noticeably, having a peat content, **9**, suggesting that peat formation continued beyond the Roman period.

Early Post Roman - Medieval Activity

A hard limestone surface, **31** and **58**, had been laid in an attempt to consolidate the ground below which was an alluvial deposit, **29** and **32**, brown grey silt clay becoming progressively blue towards its base, which signified a phase of flooding. Upper accumulations in the Car Dyke, humic dark grey brown peaty silt with limestone chippings, **33**, grey silt, **34**, and dark grey brown peaty silt, **12**, were above buried topsoil, **39**, which partially filled the Car Dyke on the south side and probably continued to the north as humic grey brown peaty silt, **35**.

Roman Activity

The Car Dyke (Pls. 5 and 6)

The Car Dyke, **11**, was on an east/west alignment. It had a width of approximately 10.50m and a depth of 3m. Its northern and southern primary edge fills, **14** and **23/43**, light brown sand containing gravel, 0.16m deep, and blue grey sand, **45**, were below humic grey black silt **24/44** and **47**, which may represent vegetation growing along the bank edge. The fill in the base was brown grey peaty silt, **37/52**, and **38**, grey sand with brown grey peaty silt lenses, 0.70m deep. Similar material **6**, **46** and **62**, brown silt sand with gravel inclusions, are on the north edge of the Car Dyke, in filling postholes **63**, **64** and **65**, 0.75m wide, 0.25m deep. The south bank had a similarly sized and profiled feature, **51**, filled by grey brown humic silt, **50**, which contained a piece of Roman tegula roof tile.

Car Dyke re-cut **13**, of similar dimensions to **11**, contained one main 0.45m deep undulating fill, **25/36/53**, which produced a Roman shoe, outer and middle sole with studs, and two pieces of Roman imbrex tile which had cloth markings visible. Sealed by **25/36/53**, on the south side of the Car Dyke, was grey sand with peaty silt lenses, **40**, 0.10m thick. Deposit **40** appeared to continue on the level ground south of the Car Dyke as topsoil **42**, 0.20m deep, which became less humic on higher ground, **21/22**, until it became red brown silt, **28**. A gravel lens, **61**, was also noted on the northern edge of the Car Dyke.

The North Bank (Pls. 2 and 3)

The primary bank material, c.8m in width, was a re-deposited light grey green silt sand with limestone gravel inclusions, **8**, which was 0.20m thick at its southern extent, where it changed to a brown colour,

but was generally 0.07m, tapering at its northern most point. It sealed 0.18m deep peaty silt **60**, which was only seen at the southern end of the bank, in the east facing trench section.

The South Bank (Pl. 8)

The south bank, also c.8m wide, with a surviving height of 0.20m, comprised upper dark grey brown sand silt, **55** and grey brown sand, **27/57**, above yellow sand, **26/56**, and peat and grey sand mix, **59**, which was the same material as **19** on the west facing trench section. Below was grey silt sand, **19**. This, in turn, sealed **54**, grey and brown silt sand, which was above **58**, very light grey sand. Later topsoil deposit, **21** (to the south) and **22** (to the north) would have covered the bank.

Pre-Roman Deposits

A dark grey brown soapy silty peat, **3** (north of the Car dyke), **18** and **42** (to the south of the Car dyke), 0.30m thick, sealed 0.22m deep, dark brown peat layer, **4** (north of the Car dyke), **15**, **17** and **41** (to the south of the Car dyke), which contained wood. The peat petered out at the southern end of the trench, **3**, and recorded as **18**, **42**, **4**, **15**, **17** and **41** at 3.31m OD.

Below the peat was the interface between the peat and natural sand, **16** and **48**, up to 0.16m in places, with varying peat and sand content, and a pocket of grey sand at the north-eastern corner of the trench, **49**. These deposits comprised what is believed to be the continuation Mesolithic land surface originally identified during the excavation at 81 Washingborough Road, though no artefacts were recovered to date the deposits. The natural sand, **10** and **16**, was grey in colour at low lying points becoming light brown on higher ground.

Discussion

Evaluation at Horton's Garage, Washingborough, has afforded a rare opportunity to examine the Car Dyke in some detail, providing the best profile of the monument in its setting to date. In addition to the ditch itself, banks on both sides were found full set of environmental samples was taken.

A Mesolithic ground surface was found at 81, Main Street, Washingborough, It is possible that **16/48** represents the remains of this Mesolithic surface because it is stratigraphically in the correct location, but no artefacts were recovered from these deposits below the peat.

The peat deposits were sampled during the 81 Main Road, Washingborough excavation and dated to 1260-905 (cal) BC. A sample of the upper peat deposit was taken on this site at its highest point on the southern slope where it terminates, in the hope of dating when the early peat process stopped.

The evaluation established that the earliest deposits associated with the Car Dyke (**11**, c.10.50m wide, c.3m deep) were gravels and sands, whilst the base was interweaved layers of sand and peat. These deposits and the profile of this segment of the Car Dyke were similar to that of the Car Dyke at Baston

which had a broad flat base and sides less than 45°, suggesting it could have been a navigable waterway for barges.

The early dyke deposits appear to be sealed by buried topsoil, **21/22/28/40/42**, which went down the edge of the Car Dyke, this soil eventually filled possible postholes, **51, 63, 64** and **65**, which may represent a barrier or mooring posts along the Car Dyke. The buried soil on the south side of the dyke was layer **24/44**.

The north bank, deposit **8**, which had been heavily truncated by later activity, had a width of c.8m which, in comparison with that at Helpringham, suggests it may not have been particularly substantial. Layer **8** could be the result of later cleaning of the dyke as it seals the posthole fills/buried soil and is similar in composition to basal fill **38**. However, if the Car Dyke's location was partially dictated by existing ditches or channels, it could be that the earliest northern dyke deposits represent a pre-Car Dyke phase and layer **8** is the upcast from the widening of this ditch or channel, becoming the Car Dyke. It appears part of the northern bank, gravel lens, **61**, slipped back into the Car Dyke.

The south bank has identical material in its make-up, **19**, but it is not possible to say with certainty whether it is contemporary or earlier than the north bank. It may be that it is earlier as layer **19** was sealed by varying coloured sands, **55 26/56** and **27/57**, which are probably from the base of the Car Dyke, and covering an intermittent peat layer, **54**, which may be the re-deposited peat from the initial digging of the Car Dyke.

What was most noticeable about the south bank was that it was constructed c.5m to the south of the Car Dyke, giving ample room for a berm or tow path where horses could be utilised. No berm was identified between the bank and channel at Helpringham, suggesting the berm was intermittent. The banks distance away from the Car dyke also meant that soil washed down from the bank after a heavy storm would not silt up the dyke.

A buried topsoil, **35/39**, of post-Roman date, was noted, but lack of finds prevent closer dating of this deposit at the time of writing. This layer completely covers the Car Dyke indicating that the dyke ceased to have any function as a waterway or drain.

Flooding, **29**, appears to have occurred prior to the 13-14th century. The southern bank has flood deposits to the north and south suggesting it no longer functioned as a barrier between the Car Dyke and land to the south. As a result a hard surface, **31**, was laid over the Car Dyke and land to the south, in an attempt to consolidate the soft ground. Although no dating was recovered from **31** it seems likely it is the same surface as that recorded at 81 Main Road, Wahingborough and, as such, is 13-14th century in date.

Deposit **7** appears to mark the beginning of post-medieval activity.

Although the environmental samples are currently awaiting assessment, Initial examination has established a high quality of material is present. The waterlogged conditions have resulted in excellent preservation of organic remains and other finds, such as plaster (*pers com*). As the environmental remains are so rich in data further analysis of the environmental samples will be undertaken in aid of understanding the Car dyke and its function.

Conclusion

Evaluation at Horton's Garage has established the alignment of the Car Dyke and its profile, which, in turn suggests its possible usage as a canal. Roman artefacts have been recovered to date this particular segment of the Car Dyke and well preserved environmental data, to be analysed at a later stage of work, has been sampled to allow greater understanding of the Car dyke and the prehistoric and Roman landscape. With appropriate foundation design development of the site need not disturb the Car Dyke given the amount of overburden sealing it.

Mick McDaid

Lindsey Archaeological Services

February 2005

Acknowledgements

LAS would like to thank LKR Design for their help. The environmental samples were looked at by James Rackhama and the leather identification was by Jenny Mann. Thanks are due to the hard working site team who assisted the author, namely: Mike Garrett, Helen MacIntyre and Mick McDaid. This report was edited and collated by Naomi Field.

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Contents of the Site Archive

Context sheet: 65

Plans: 1

Sections: 2

Correspondence

Photographs: LAS film nos. 04/138/24-36, 04/160/2-14, 04/162/1-36, 04/163/1-24, 04/164/1-24,

Finds: 1 flint, 1 leather shoe and 3 pieces of tile

Specialist reports

Appendix 1

**Horton's Garage,
Washingborough (HGW 04)
Context Summary**

Context	Trench	Type	Description	Length	Width
1	1	Layer	Concrete/Tarmac	50m+	4m+
2	1	Layer	Modern levelling	c.11m	4m+
3	1	Layer	Peat	1.60m+	48m+
4	1	Layer	Peat	1.60m+	42m+
5	1	Layer	Modern levelling	c.39m	4m+
6	1	Fill	Fill of a 63	unknown	0.80m
7	1	Layer	Former topsoil	50m+	4m+
8	1	Layer	North bank material	1.60m+	12m+
9	1	Layer	Former topsoil	Same	as
10	1	Layer	Natural	50m+	4m+
11	1	Cut	Car dyke	1.60m+	c.10.50m
12	1	Layer	Accumulation	unknown	3.80m
13	1	Cut	Car dyke re-cut	1.60m+	c.10.50m
14	1	Fill	Fill of 13	1.60m+	0.70m
15	1	Layer	Peat interface	unknown	1.50m
16	1	Layer	Peat interface	1.60m+	49m+
17	1	Layer	Peat	Same	as
18	1	Layer	Peat	Same	as
19	1	Layer	South bank material	1.60m+	c.5m
20	1	Layer	Former topsoil	Same	as
21	1	Layer	Former topsoil	1.60m+	13m+
22	1	Layer	Former topsoil	1.60m+	c.4m
23	1	Fill	Fill of 11	Same	as
24	1	Fill	Fill of 11	Same	as
25	1	Fill	Fill of 13	Same	as
26	1	Layer	South bank material	Same	as
27	1	Layer	South bank material	Same	as
28	1	Layer	Former topsoil	Same	as
29	1	Layer	Flood deposit	1.60m+	12m+
30	1	Layer	Former topsoil	Same	as
31	1	Layer	Surface	1.60m+	c.23m
32	1	Layer	Flood deposit	1.60m+	c.10m
33	1	Layer	Accumulation	1.60m+	c.10.50m
34	1	Layer	Accumulation	1.60m+	c.13m
35	1	Layer	Accumulation	Same	as
36	1	Fill	Fill of 13	c.10.50m	1.60m+
37	1	Fill	Fill of 11	unknown	4m+
38	1	Fill	Fill of 11	1.60m+	c.5m
39	1	Layer	Former topsoil	1.60m+	c.6m
40	1	Layer	Former topsoil	unknown	0.85m
41	1	Layer	Peat interface	1.60m+	2.30m
42	1	Layer	Peat	1.60m+	c.4m
43	1	Fill	Fill of 11	1.60m+	1m
44	1	Fill	Fill of 11	1.60m+	1.60m
45	1	Fill	Fill of 11	1.60m+	1.15m
46	1	Fill	Fill of 65	unknown	0.68m
47	1	Fill	Fill of 11	1.60m+	2.50m
48	1	Layer	Peat interface	Same	as
49	1	Layer	Grey sand	unknown	1m+

Horton's Garage,
Washingborough (HGW 04)
Context Summary

Context	Trench	Type	Description	Length	Width
50	1	Fill	Fill of 50	unknown	0.75m
51	1	Cut	Posthole?	unknown	0.75m
52	1	Fill	Fill of 11	Same	as
53	1	Fill	Fill of 13	Same	as
54	1	Layer	South bank material	1.60m+	c.6.50m
55	1	Layer	South bank material	unknown	0.30m
56	1	Layer	South bank material	1.60m+	c.2m
57	1	Layer	South bank material	1.60m+	c.5.50m
58	1	Layer	South bank material	unknown	c.2m
59	1	Layer	South bank material	Same	as
60	1	Layer	North bank material	unknown	1m
61	1	Fill	Fill of 13	unknown	0.70m
62	1	Fill	Fill of 64	unknown	0.76m
63	1	Cut	Posthole?	unknown	0.80m
64	1	Cut	Posthole?	unknown	0.76m
65	1	Cut	Posthole?	unknown	0.68m

Appendix 2

Tile Archive HGW04

Jane Young

context	cname	full name	frags	weight	description	date
36	IMB	imbrex	1	337	bedded on pebbles sand & clay pellets;edge	Roman
36	IMB	imbrex	1	1523	blown in kiln;bedded on pebbles sand & clay pellets;poss formed on cloth;mishapen;clear wiping marks along length and across end	Roman
50	TEG	Tegula	1	799	overfired with large blown bubbles;shaped ? Or broken in kiln;bedded roughly on sand & clay pellets	Roman

Appendix 3

Roman leather shoe

Fragments of a leather shoe found in ditch fill (044) comprise the virtually complete sole and insole of a nailed bottom unit, and scraps of upper. The sole (flesh side outwards), shaped for the right foot, is torn across the seat at the extremity of the heel but is otherwise intact, while the insole (grain side inwards) is complete. Overall, this measures *c.* 265mm long with a width at the tread of *c.* 80mm. A small curved strip *c.* 13 mm wide (max) is probably a reinforcement, while several very much thinner scraps of leather are almost certainly from the upper. One of these is part of the lasting margin while another has what appears to be a very insubstantial loop, but which could be an accidental effect of the leather having torn around a triangular cut-out.

The upper was originally secured between the sole and insole by iron hobnails; some of these are visible, while the X-ray shows the remains of twelve *in situ* and the shank of another. The sole has broadly spaced peripheral nailing; a group of four hobnails forms a lozenge pattern across the tread, with a further three along the centre seat. – a common pattern on Roman shoes. This is almost certainly an outdoor shoe with a upper of closed rather than sandal-type construction, although more certain identification would require specialist examination.

The Figures

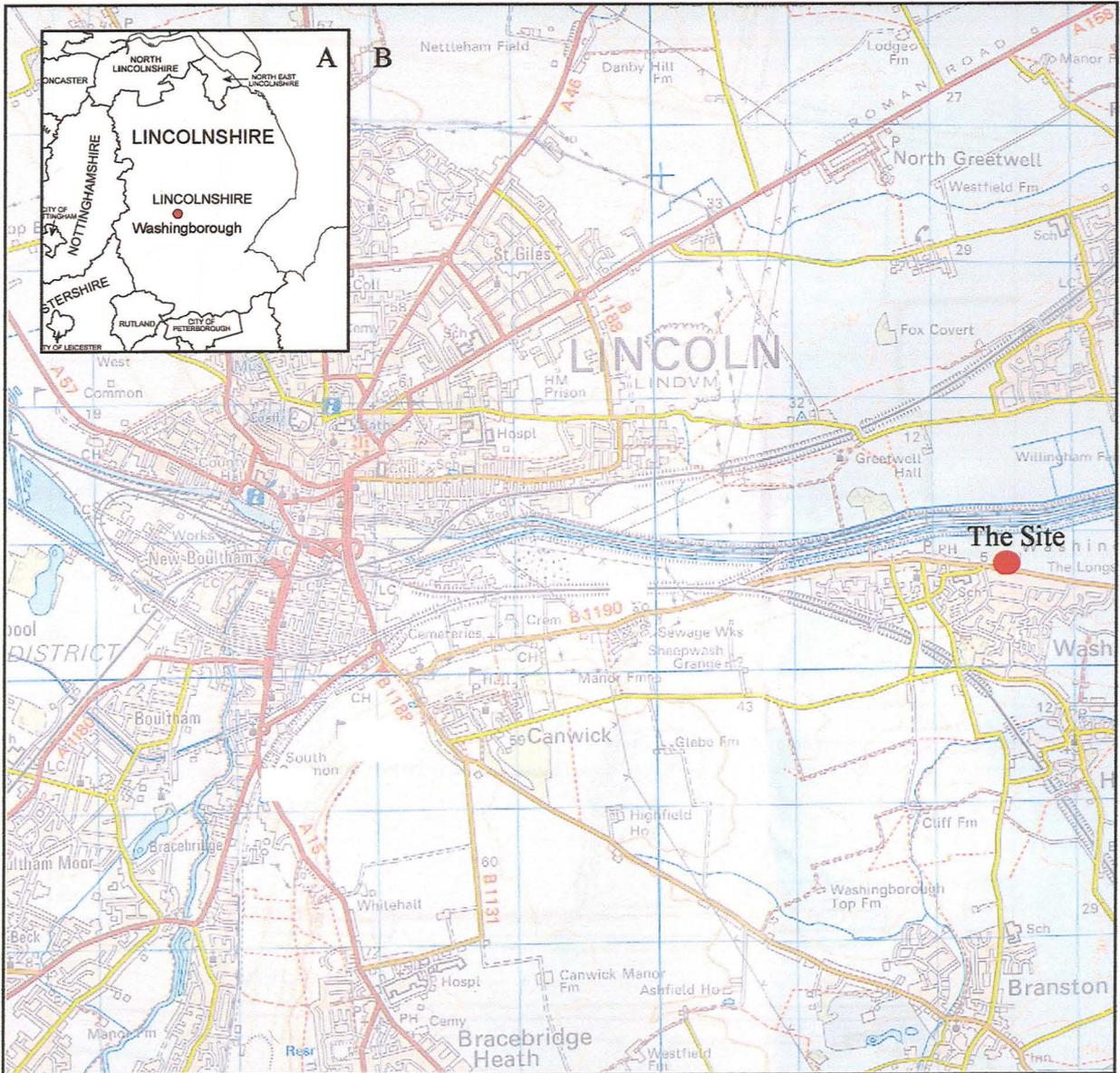
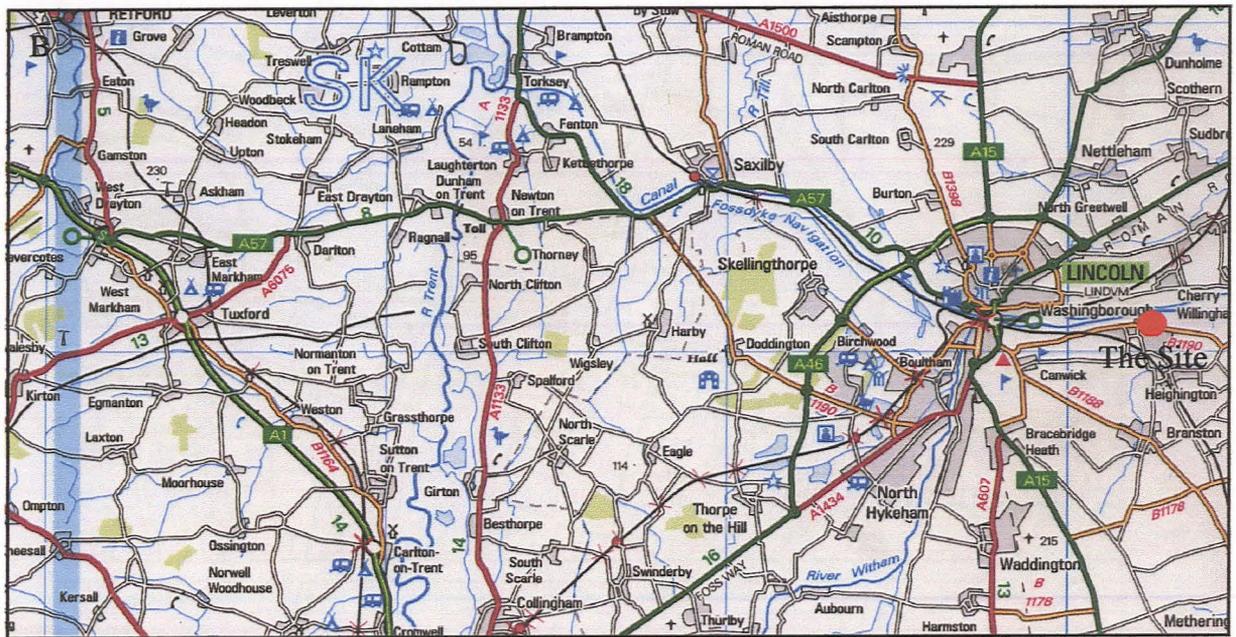


Fig.1 Location of Horton's Garage, Fen Road, Washingborough (inset C based on the Ordnance Survey 1:50,000 Landranger map Sheet 121. Crown Copyright, reproduced with the permission of the Controller of HMSO. LAS Licence no. AL 100002165).

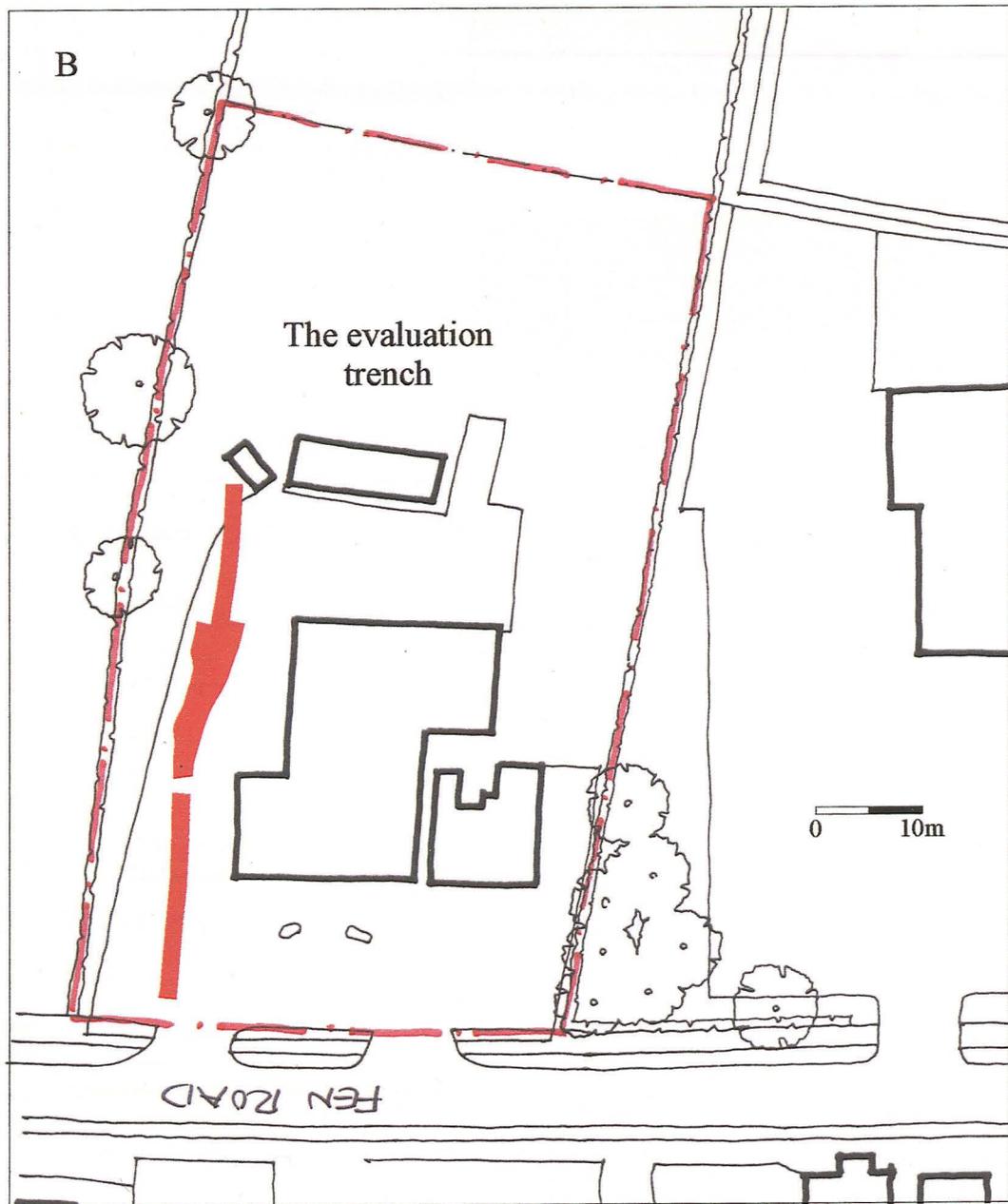
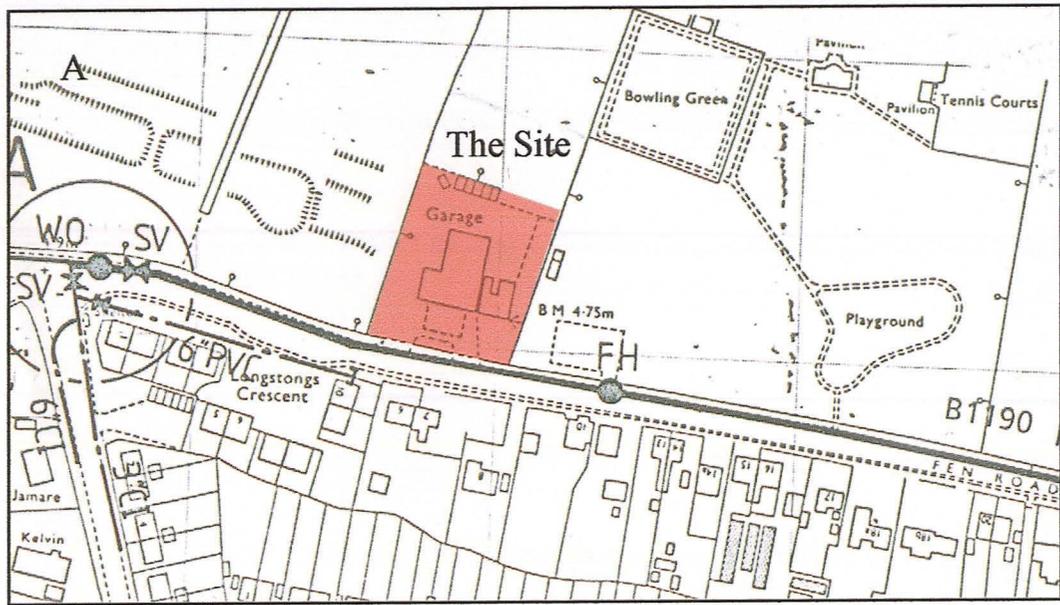
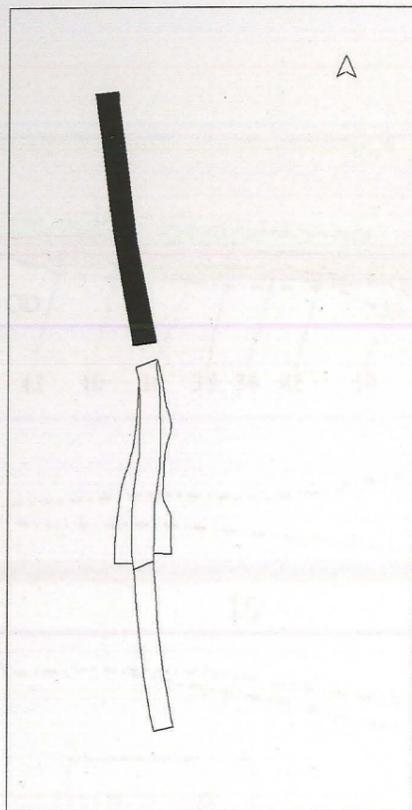


Fig 2 A) Plan locating the site along Fen Road.

B) Plan locating the evaluation trench.



Key

- Overburden
- Hard surface
- Post Car Dyke accumulation
- Buried soil
- Bank
- Fill of Car Dyke re-cut/buried soil
- Fill of Car Dyke
- Peat
- Mesolithic horizon
- Limit of excavation

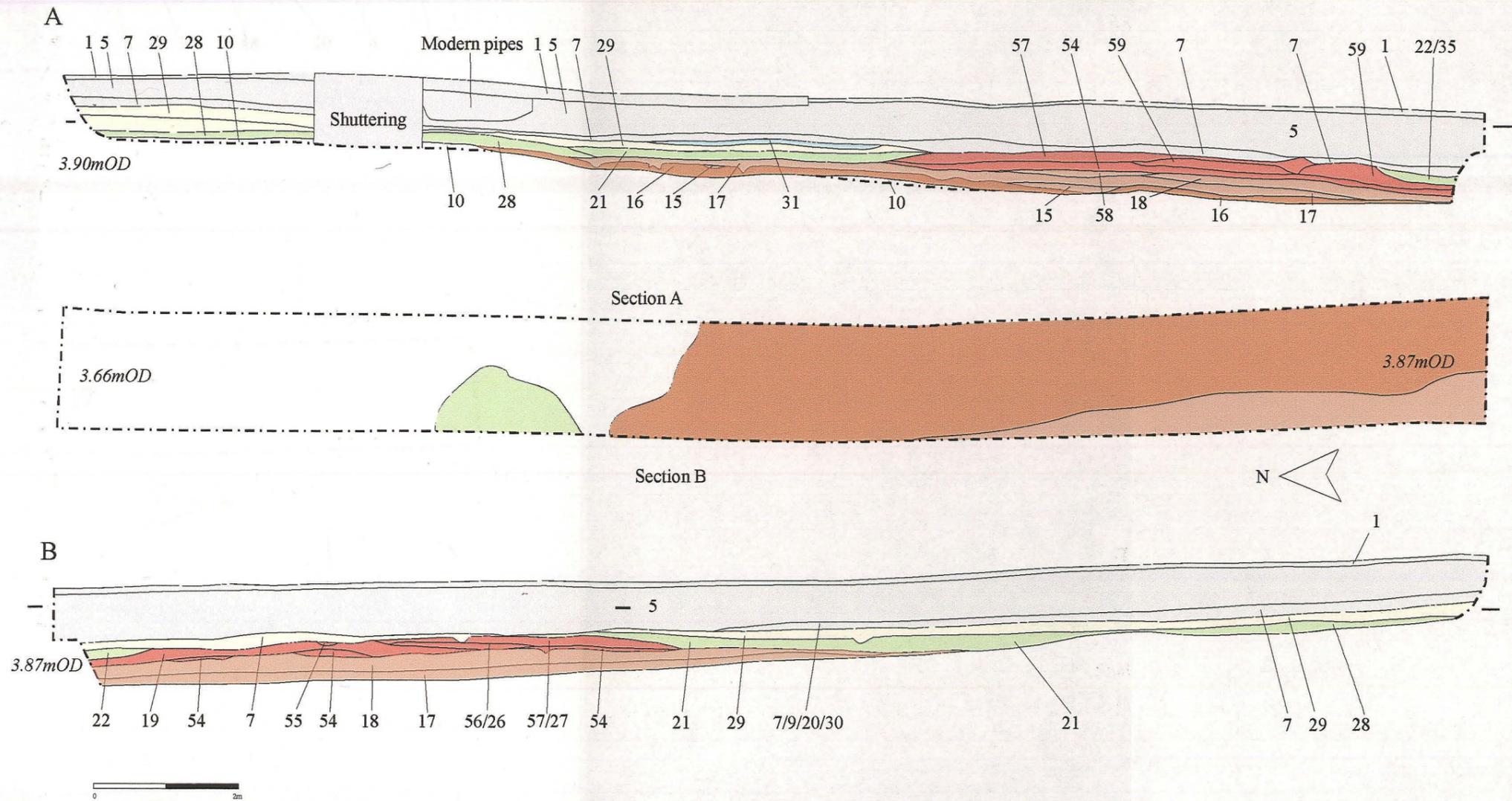


Fig. 3 Sections and plan of the south end of the evaluation trench.

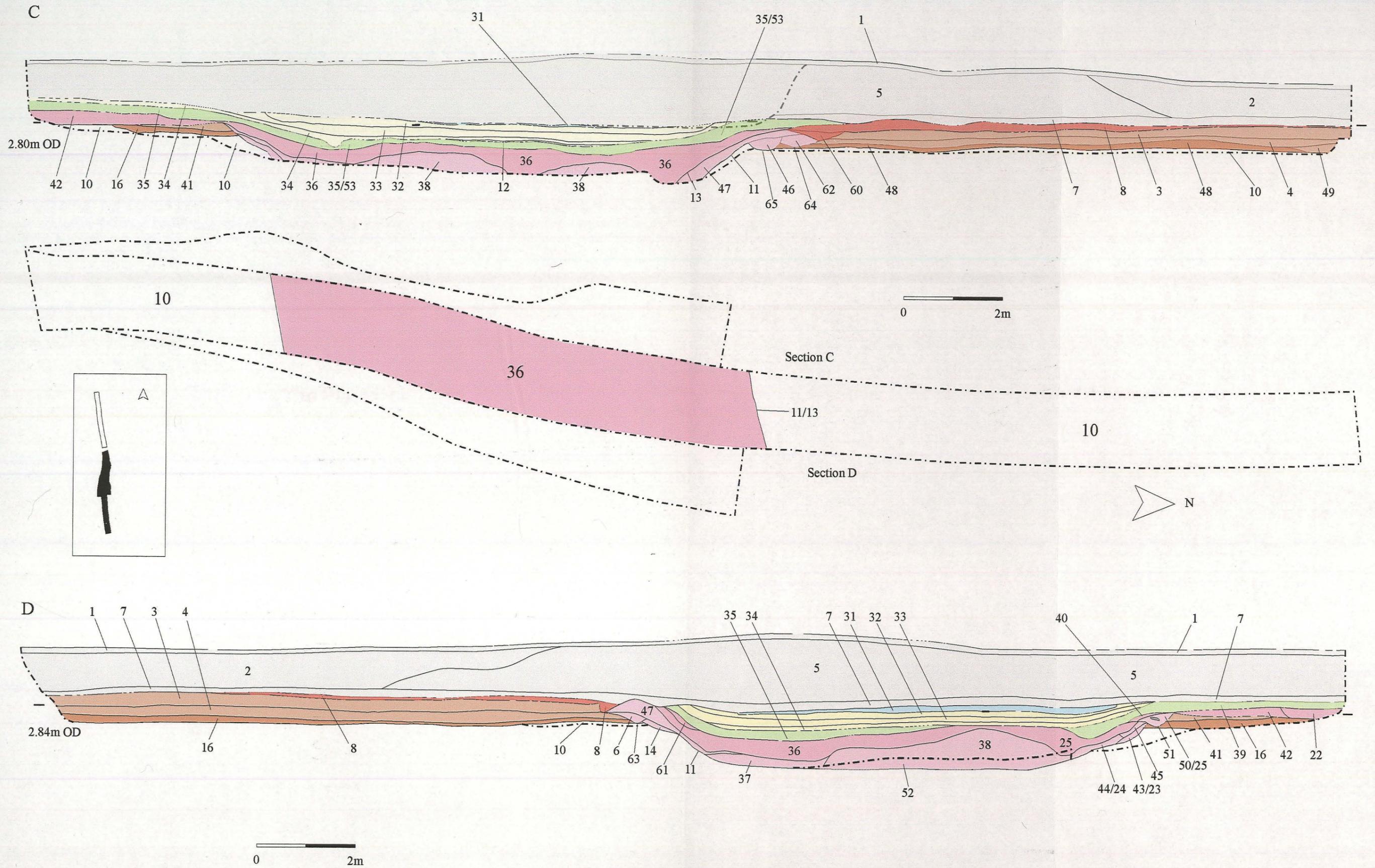


Fig. 4 Sections and plan of the north end of the evaluation trench.

The Plates



PI. 1 The location of the trench within the site, looking north-west.



PI. 2 North end of the evaluation trench looking north.



Pl. 3 General view of the north end of the trench with bank showing in section. Looking south.
Scales 1m and 0.50m.



Pl. 4 Sequence of deposits in the center of the north end of the trench. Scale 0.50m.



Pl. 5 Composite shot of the west facing section of the Car Dyke, showing possible ground surface to the north. Horizontal scales 0.50m, vertical scales 2m.



Pl. 6 Southern continuation of the west facing section showing berm. Horizontal scale 0.50m, vertical scale 2m.



Pl. 7 South end of the evaluation trench looking north-east. Scales 0.50m



Pl. 8 General view of the south end of the trench with south bank showing in section. Looking south-west. Horizontal scale 0.50m, vertical scale 1m.