

RSPB BOWERS MARSH WETLAND NATURE RESERVE

BASILDON

ESSEX

ARCHAEOLOGICAL TRIAL TRENCHING AND MONITORING



Essex County Council

FIELD ARCHAEOLOGY UNIT

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**RSPB BOWERS MARSH WETLAND NATURE RESERVE
BASILDON, ESSEX**

ARCHAEOLOGICAL TRIAL TRENCHING AND MONITORING

Client: Haskoning UK Ltd, acting for the RSPB

Planning application no.: 09/01179/FULL

Grid ref.: TL 575672 185873

Dates of fieldwork: 14/7/10 to 16/7/10

Site code: BABM 09

ECC FAU Project no.: 2211

Oasis ref.: essexcou1-96398

SUMMARY

The construction of a new nature reserve at Bowers Marsh was preceded by the archaeological trial trenching of a series of possible post-medieval embankments identified by lidar survey, an existing rectangular banked enclosure, and a former farmstead. The objective of the trenching was to investigate the post-medieval conversion of the marsh to farmland and to determine the presence of any archaeological remains and the likely impact of construction works upon them.

The trenching found no evidence for the embankments identified by the lidar survey. The age and function of the banked enclosure were unable to be established as it produced no finds or additional archaeological features, while the trenching of North Staines Farm exposed no archaeological remains apart from a modern linear cut feature, possibly for a drain, ditch or grubbed-out wall foundation. It is suggested that the site of the farm was severely disturbed and truncated when the farm was demolished in the 1970s. Consequently, the impact of the proposed works on the archaeological record is deemed to be negligible.

1.0 INTRODUCTION

The construction of a new nature reserve at Bowers Marsh near Basildon was preceded by the archaeological trial trenching of a number of possible post-medieval embankments and a former farmstead. The work was carried out by Essex County Council Field Archaeology Unit (ECC FAU) and was commissioned by Haskoning UK Ltd, acting for the Royal Society for the Protection of Birds. It was recommended and monitored by the Essex County Council Historic Environment Management team (ECC HEM) and was undertaken in accordance with an archaeological brief and a Written Scheme of Investigation (ECC HEM 2010; ECC FAU 2010).

Copies of this report have been sent to Haskoning UK Ltd, ECC HEM and the Essex County Council Historic Environment Record. A digital version of this report can be found on the Oasis on-line database (www.oasis.ac.uk). The site archive will be held at Southend Museum.

2.0 BACKGROUND INFORMATION

2.1 Location, topography and geology

Bowers Marsh consists of 270ha of low lying agricultural land which will become part of network of new reserves in south Essex that are being created by the RSPB (Fig. 1). It will comprise a variety of wetland habitats including newly created inter-tidal, reed bed and coastal wet grasslands with a network of public access facilities. The outline habitat creation scheme proposes the construction of twenty hectares of inter-tidal habitat in the eastern part of the site, adjacent to Easthaven Creek, including ten hectares of salt marsh and a ten hectare tidal-exchange saline lagoon. In addition, approximately twenty acres of reed bed will be created that will act as a reservoir to supply water to two large coastal wet grassland units, along with two large ponds, a network of new ditches and scrapes and a visitor car park with approximately seventy to one hundred spaces.

The geology of Bowers Marsh consists of Tidal Flat deposits of “consolidated soft silty clay with layers of sand, gravel and peat” above London Clay (BGS Lexicon of Rock Units, www.bgs.ac.uk/Lexicon/lexicon.cfm?pub=TFD). A geotechnical survey of the near-surface geology recorded sub-tidal deposits of dark bluish grey clay (c. 1.4m+) below inter/supra tidal deposits of compact brown clay (c. 0.2m to 1.4m) and agricultural soil (c. 0 to 0.2m), representing a gradual transition from a marine to a terrestrial environment (Green and Young 2009).

2.2 Historical and archaeological background

The current phase of archaeological work was preceded by walkover surveys (Medlycott and Gascoyne 2006), a desk-based assessment (Heppell 2009), geotechnical survey (Green and Young 2009) and archaeological trial trenching and test pitting (Germany 2009). The trial-trenching and test pitting confirmed the results of the earlier geotechnical survey and found no archaeological remains in the specific locations targeted.

The desk-based assessment records that Bowers Marsh was embanked and converted from salt marsh to farmland from the 16th/17th century onwards, probably on a piecemeal basis. It also records that the conversion of the salt marsh was carried out concurrently with the building of farms (North Staines, South Staines, Great Mussels and Rookery Farm). Maps and walkover surveys reveal that many marsh creeks and some reed beds still survive within the present-day field pattern. The farms are no longer in use and were mostly demolished in the 1970s.

Sites possibly related to the transformation of the salt marsh were identified by the desk-based assessment and the walkover surveys. They include (Fig. 1):

- Possible early embankments, detected by lidar survey in fields in the south-eastern part of the marsh (sites FAU 32 and 33)
- A rectangular banked enclosure in the south-eastern part of the marsh (site FAU 11).
- North Staines Farm, situated on a ridge of higher ground overlooking a creek in the south-eastern part of the marsh (site FAU 10)

Documentary evidence suggests North Staines Farm was founded before 1627. The first four editions of the Ordnance Survey (spanning the period 1872 to 1953) record the farm as an L-shaped farm house inside a ditched enclosure, with a block of cattle sheds and yards to the north (Fig. 4). At the time of the trenching, the site of the farm consisted of uneven ground covered by scrub, alongside a large spoil heap of hard core and concrete.

3.0 AIMS AND OBJECTIVES

The aim of the archaeological work was to obtain more information about the post-medieval transformation of the area from salt marsh to farmland, to determine the importance and date of the relict seawalls, and to assess any impact associated with the construction of an embankment with associated drain across the site of the farmstead.

The project-specific objectives were:

- To ascertain the form and date of the possible early embankments (sites FAU 32 and 33)
- To establish the foundation and developmental history of North Staines Farm (site FAU 10)
- To establish the form, date and function of the rectangular banked enclosure (site FAU 11)
- To establish the form and the date of construction of the seawall (site FAU 22)

4.0 METHOD

Sites FAU 11, 32 and 33 were investigated by a single trench each, supplemented by the taking of numerous levels, while Site FAU 10 was investigated by two trenches, one of them L-shaped. Trench FAU 10A examined the site of the cattle shed, and trench FAU10B the site of the farmhouse. All of the trenches were stripped of topsoil by a mechanical excavator equipped with a broad toothless bucket. The trenches were positioned by using a directional GPS with on-board map-based software, with an error margin of less than 0.2m.

The archaeological work was carried out in accordance with the Institute of Field Archaeologists' *Standard and Guidance for Archaeological Field Evaluation* and the Association of Local Government Officers' *Standards for Field Archaeology in the East of England* (IFA 2008; Gurney 2003). The ECC FAU is a registered archaeological organisation with the Institute of Field Archaeologists. The ECC FAU uses its own recording system to record all archaeological deposits and features. Further details of the excavation method can be found in the Written Scheme of Investigation (ECC FAU 2010).

5.0 FIELDWORK RESULTS

Site FAU 10 (North Staines Farm)

Trench FAU 10B, across the site of the farmhouse, revealed a large, steep-sided cut (77) (Fig 5). The cut contained modern artefacts, including pieces of plastic, and was more than 0.45m deep (Figs 4 and 5; Plate 1). Trench FAU 10A, across the site of the cattle shed, revealed no archaeological remains, apart from infrequent modern bricks in the topsoil.

Sites FAU 11, 32 and 33

Trenching and the taking of levels at sites FAU 32 and 33 revealed topsoil above tidal deposits, but no archaeological remains or evidence for embankments (Figs 2 and 3; Plates 3 and 4).

The trenching and taking of levels across banked enclosure site FAU 11 revealed a bank, measuring c. 7m wide and 3m high (Fig. 6; Plate 2). The bank was constructed from topsoil and was broad and slightly convex. The archaeological work found no finds or evidence for a bank-side ditch.

6.0 CONCLUSIONS

The trenches across sites FAU 32 and 33 have produced no archaeological remains or evidence to support or confirm the existence of the embankments identified by the results of the lidar survey. It is possible that the 'embankments' are plough headlands, formed from a build up of topsoil towards the field margins where the plough is raised and turned, or have been entirely destroyed by ploughing.

The age and function of banked enclosure site FAU 11 remain uncertain as the trench across it has produced no finds or additional archaeological features.

The quantity of archaeological remains revealed by the trenching of North Staines Farm is surprisingly small and possibly indicates that the site of it was remodelled and severely truncated when the farm buildings were demolished in the 1970s. Cut feature 77 is conjectured to be one side of a ditch, drain or grubbed-out wall foundation.

Given the very low level of remains encountered the impact upon the archaeological record with regard to the sites investigated is deemed to be negligible.

ACKNOWLEDGEMENTS

The archaeological trenching was commissioned by Haskoning UK Ltd acting on behalf of the RSPB. Jackie Lavender of Haskoning UK Ltd, and Dave Hedges and Marc Outten of the RSPB are thanked by ECC FAU for their co-operation and assistance.

The archaeological fieldwork was carried out by Mark Germany and Andy Lewsey and was managed by Adrian Scruby. The work was monitored by Richard Havis of ECC HEM. Figures 1 to 6 were drawn by Andy Lewsey.

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APPENDIX 1: TRENCH DATA

Trench	Length	Width	Depth	Co-ordinates
FAU10A	30m	1.8m	0.55m	SW X = 575234 Y = 185812 N X = 575250 Y = 185829 SE X = 575260 Y = 185822
FAU10B	18.5m	1.8m	0.6m	NW X = 575218 Y = 185794 SE X = 575231 Y = 185780
FAU11	12m	1.8m	0.5m	NW X = 575672 Y = 185873 SE X = 575686 Y = 185862
FAU32	20m	1.8m	0.63m	W X = 575753 Y = 185704 E X = 575773 Y = 185704
FAU33	20.4m	1.8m	0.53m	N X = 575993 Y = 185422 S X = 575990 Y = 185402

APPENDIX 2: CONTEXT DATA

No.	Trench	Category	Description	Date
77	FAU10B	Cut-feature	Linear. Steeply sloping south-west side. Base and north-east side not exposed. 18.5m+ long, 1.1m+ wide, 0.45m+ deep. Filled by 78	Modern
78	FAU10B	Fill	Dark greyish brown plastic/sticky silt clay with infrequent small stones. Contains pieces of wood, plastic, tile, brick and iron guttering. Single fill of ditch 77	Modern

APPENDIX 3: CONTENTS OF SITE ARCHIVE

Contained with this folder:

1. Client report
1. Project Design
1. Written Scheme of Investigation
5. Trench sheets
2. Context sheets
5. Level sheets
1. Photo register
16. Digital photos
1. Computer disk

Held separate from this folder:

1. Large sheet of trench plans

APPENDIX 4: ESSEX HISTORIC ENVIRONMENT RECORD

Site name/Address: Bowers Marsh Wetland Nature Reserve, Basildon	
Parish: Bowers Gifford	District: Basildon
NGR: TL 575672 185873	Site Code: BABM09
Type of Work: Archaeological trial trenching	Site Director/Group: Mark Germany, Essex County Council Field Archaeology Unit
Date of Work: 14/7/10 to 16/7/10	Size of Area Investigated: 5 trenches, totalling 182m ²
Location of Finds/Curating Museum: Southend Museum	Client: Royal Haskoning Ltd., acting for the RSPB
Further Seasons Anticipated?: Yes	Related HER Nos.:
Final Report: Essex Archaeology and History (summary)	
Periods represented: Post-medieval Modern	
SUMMARY OF FIELDWORK RESULTS:	
<p>The construction of a new nature reserve at Bowers Marsh was preceded by archaeological trial trenching of a series of possible post-medieval embankments identified by lidar survey, an existing rectangular banked enclosure, and a former farmstead. The objective of the trenching was to investigate the post-medieval conversion of the marsh to farmland and to determine the presence of any archaeological remains and the likely impact of the construction work upon them.</p> <p>The trenching found no evidence for the embankments identified by the lidar survey. The age and function of the banked enclosure were unable to be established as it produced no finds or additional archaeological features. The trenching of North Staines Farm exposed no archaeological remains apart from a modern linear cut, possibly for a drain, ditch or grubbed-out wall foundation. It is suggested that the site of the farm was severely disturbed and truncated when the farm was demolished in the 1970s. Consequently, the impact of the proposed works on the archaeological record is deemed to be negligible.</p>	
Previous Summaries/Reports:-	
<p>Germany, M. 2009 <i>RSPB Bowers Marsh Wetland Nature Reserve, Basildon, Essex. Archaeological trenching and test pitting.</i> ECC FAU report 2130</p> <p>Heppell, E. 2009 <i>RSPB Bowers Marsh Wetland Nature Reserve. Desk-based Assessment.</i> FAU report 2114</p> <p>Medlycott, M. and Gascoyne, A. 2006 <i>A contemplation of things wide and infinite. A report to the RSPB on archaeological desk-top and walkover surveys of proposed new RSPB reserves in south Essex.</i> ECC limited circulation report</p> <p>Young, D.S. 2009 <i>Trial pits at Bowers Marsh, Pitsea, Essex: Preliminary Geoarchaeological Report.</i> Quaternary Scientific (QUEST) unpublished preliminary report, project number 064/09</p>	
Author of Summary: Mark Germany	Date of Summary: March 2011

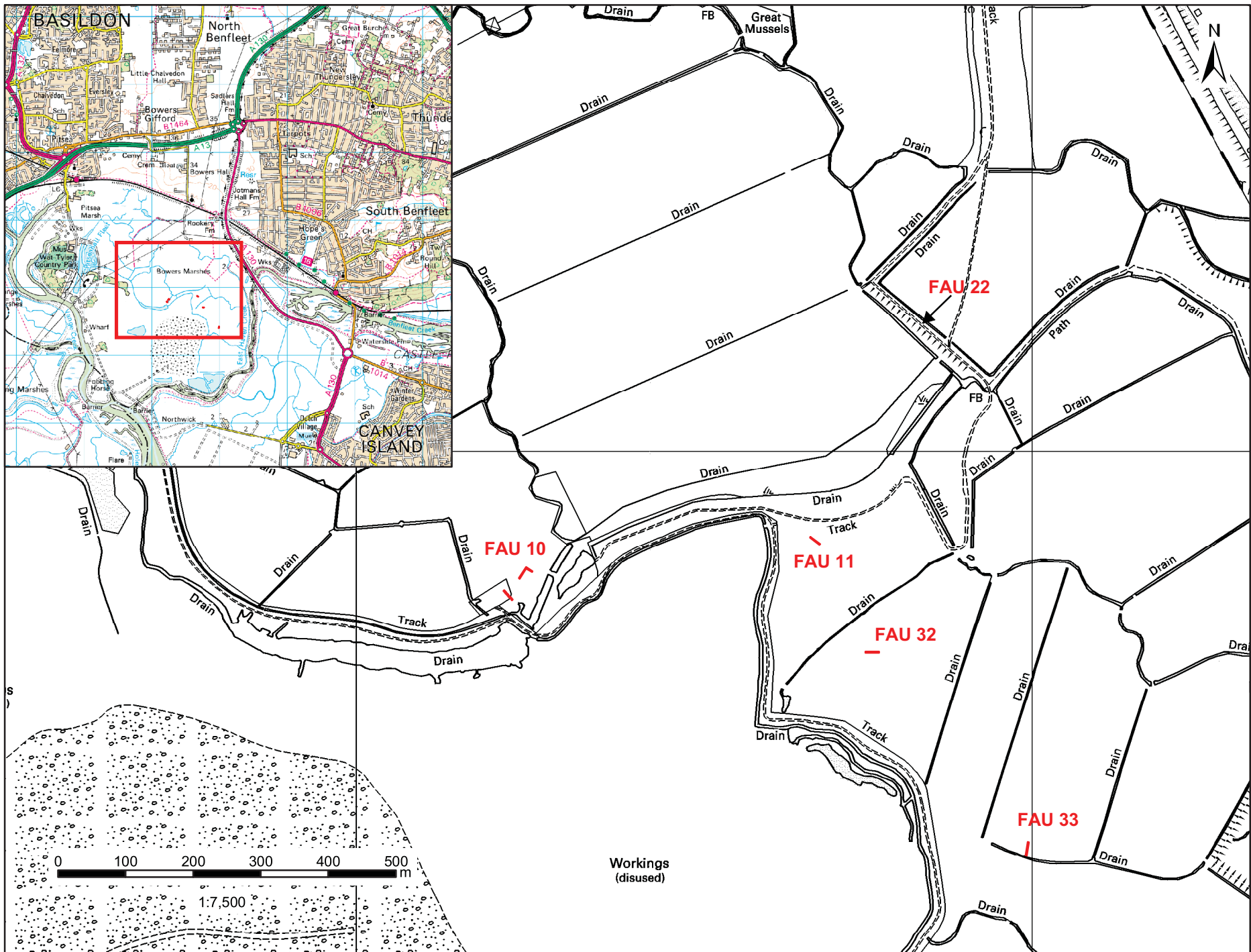


Fig.1. Location of sites

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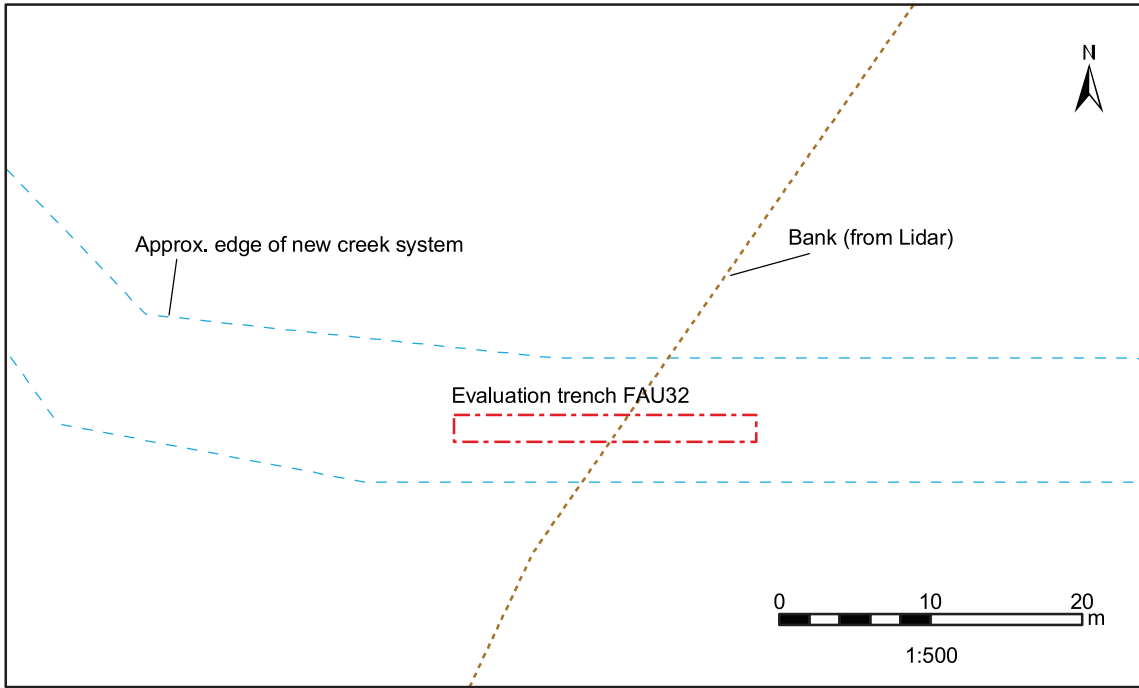


Fig.2. Evaluation trench location for site FAU32

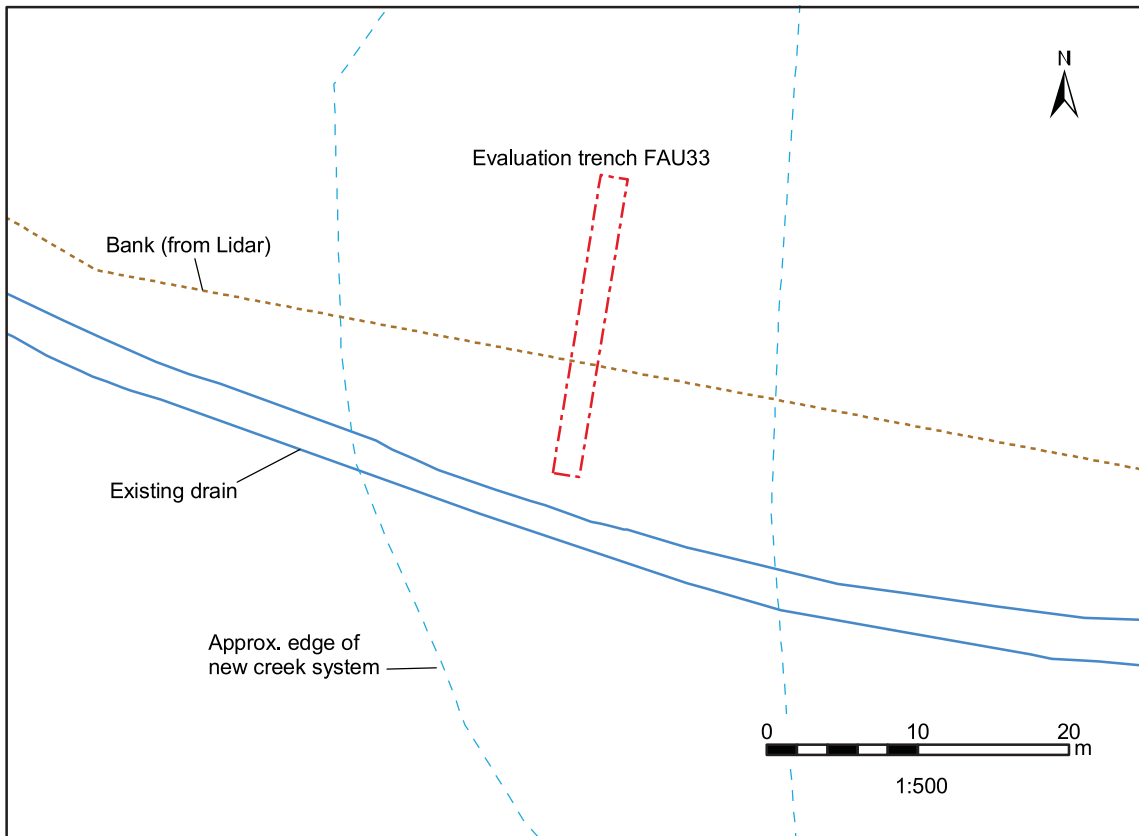
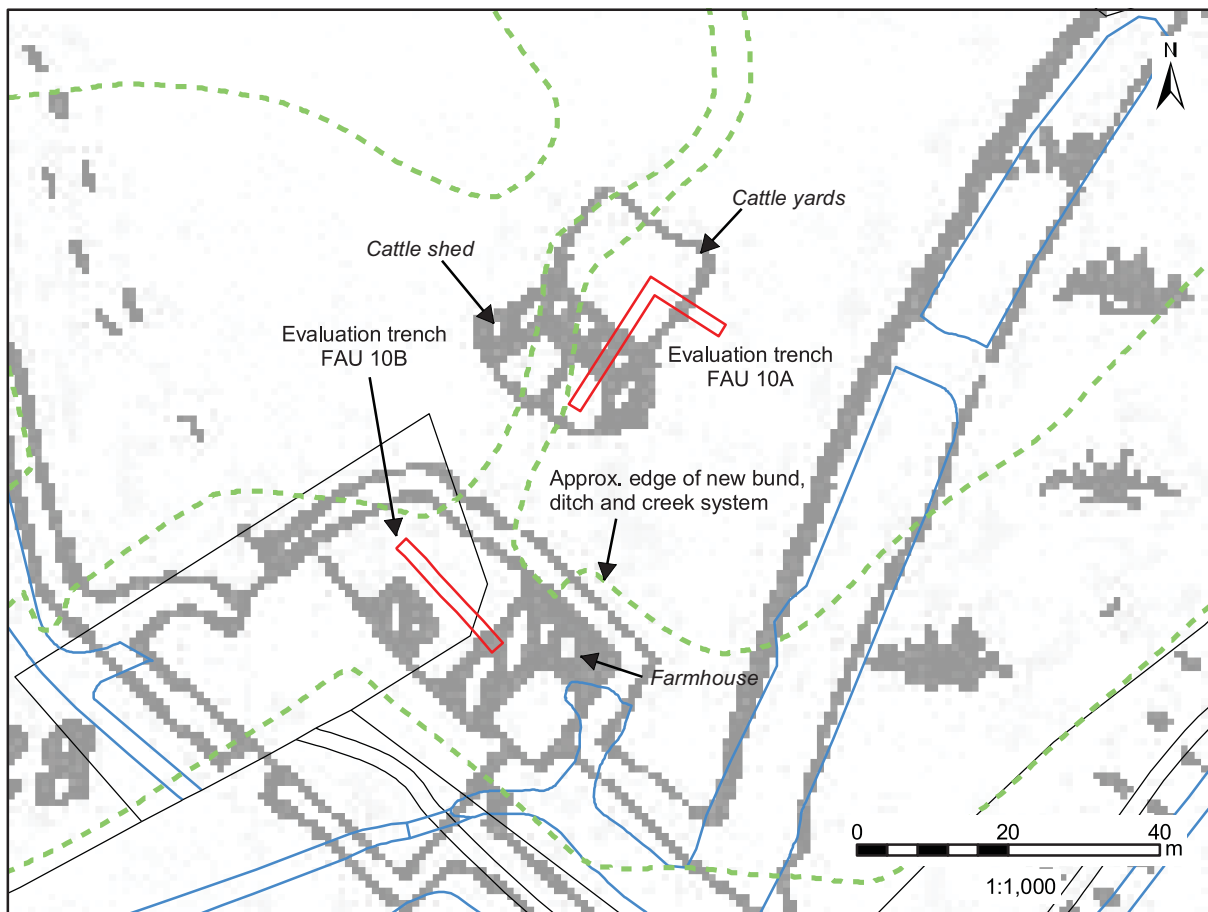


Fig.3. Evaluation trench location for site FAU33



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Fig.4. Evaluation trench location for site FAU10, with background third edition Ordnance Survey (1915-1924)

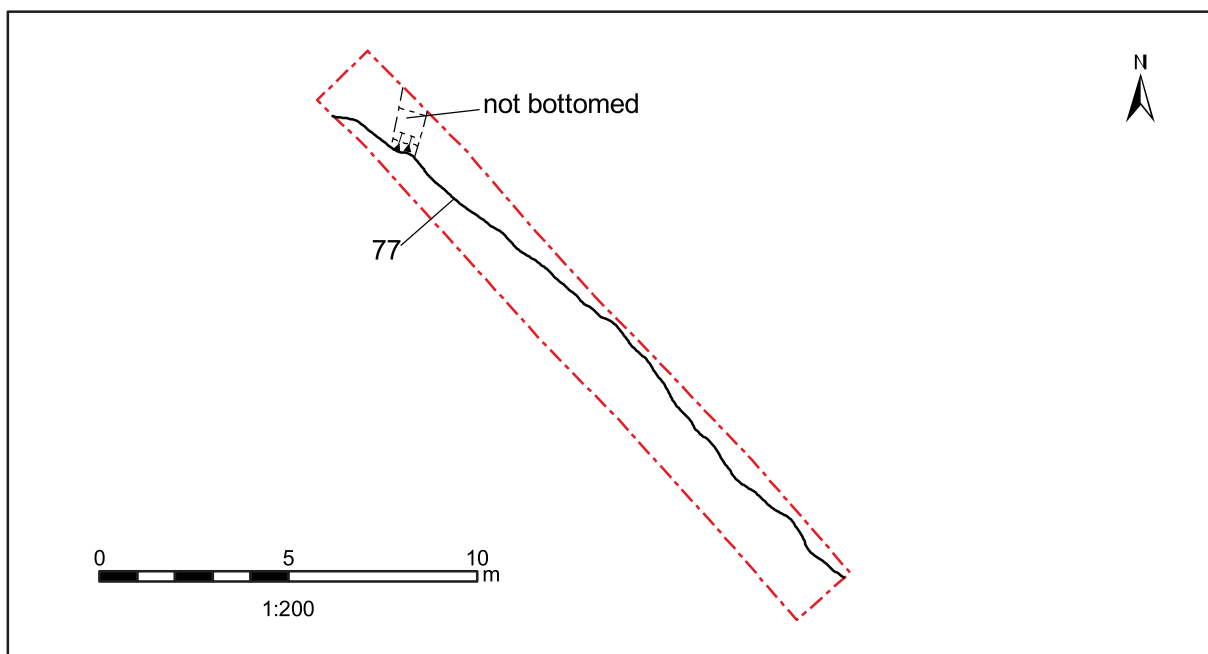


Fig.5. Evaluation trench FAU 10B

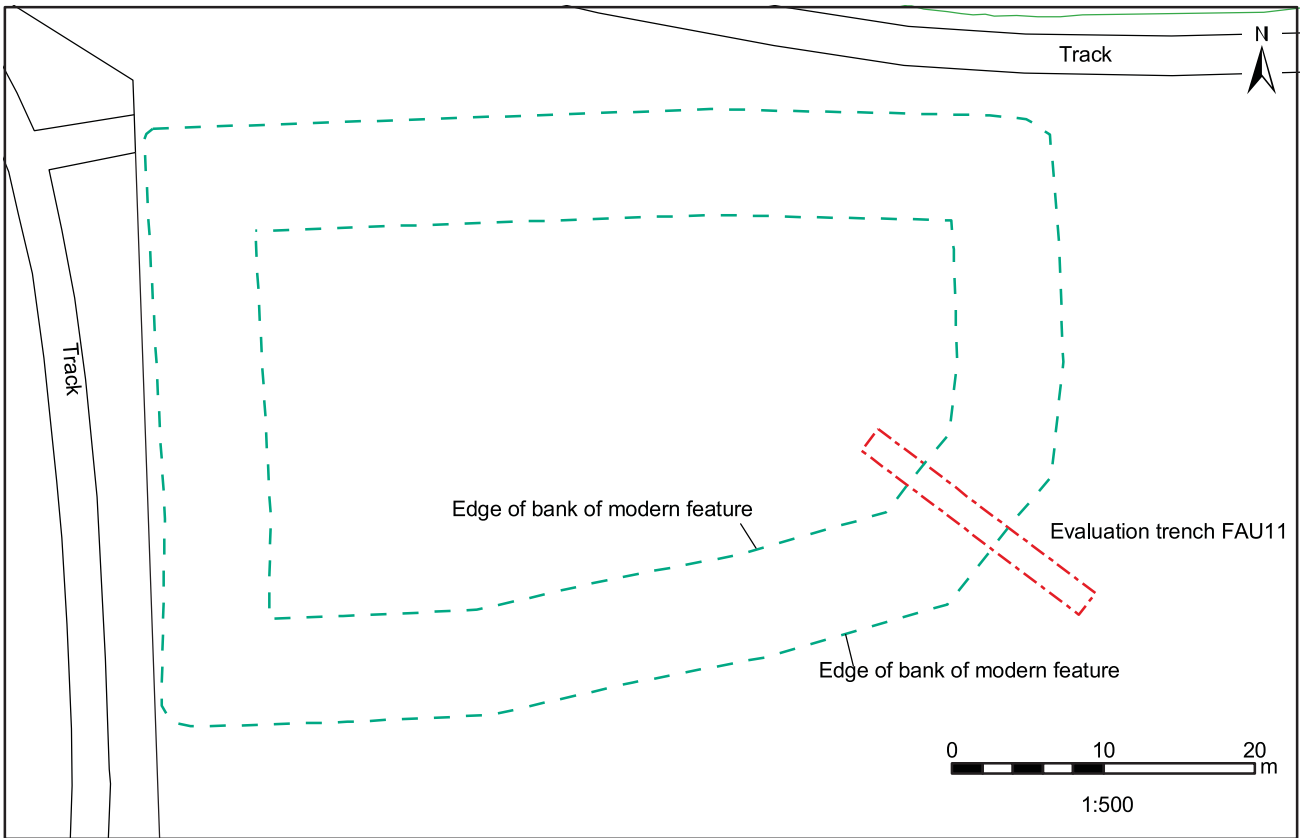


Fig.6. Evaluation trench location for site FAU11



Plate 1. Trench FAU 10B, North Staines Farm, looking south



Plate 2. Trench FAU 11, looking north-west



Plate 3. Trench FAU 32, looking west



Plate 4. Trench FAU 33, looking south