

**ARCHAEOLOGICAL EVALUATION REPORT:  
TRIAL TRENCHING AND GEOARCHAEOLOGICAL TEST PITTING ON LAND AT POPLAR FARM, OLD  
FEN DYKE, SUTTON ST JAMES, LINCOLNSHIRE**

Planning Reference: H20-0933-24  
NGR: TF 3793 1769  
AAL Site Code: SSOF 25  
Museum Accession Number: LCNCC:2025.75  
OASIS Reference Number: allenarc1-538239



Report prepared for Elizabeth Allen Land Agents Ltd  
on behalf of  
Poplar Farm Flowers Ltd

By  
Allen Archaeology Ltd  
Report Number AAL 2025271

November 2025



Allenarchaeology



## Contents

Executive Summary .....	1
1.0 Introduction.....	2
2.0 Site Location and Description.....	2
3.0 Planning Background.....	2
4.0 Archaeological and Historical Background.....	3
5.0 Aims and Objectives .....	3
6.0 Methodology .....	4
Trial Trenching.....	4
Geoarchaeological Test Pitting.....	4
7.0 Results .....	5
Trench 1 (Figure 2, Figure 4).....	5
Trench 3 (Figure 2, Figure 5).....	6
8.0 Discussion and Conclusions.....	7
9.0 Effectiveness of Methodology.....	7
10.0 Acknowledgements .....	7
11.0 References.....	7

### List of Plates

Plate 1: Southwest-facing section of ditch [103] (recut of [105]), 0.5m and 2m scales, looking northeast .....	6
Plate 2: Northeast-facing section of ditch [303], 1m scales, looking south .....	6

### List of Appendices

Appendix 1: Animal bone .....	9
Appendix 2: Geoarchaeological Assessment.....	10
Appendix 3: Context Summary List .....	32
Appendix 4: Figures .....	35
Appendix 5: OASIS Summary.....	40

### List of Tables

Table 1: Animal remains recovered.....	9
--	---

## List of Figures

Figure 1: Site location outlined in red .....	35
Figure 2: Plan of trench locations superimposed on geophysical survey (AAL 2005b).....	36
Figure 3: Plan of trench locations superimposed on LiDAR showing silted up networks of roddons .....	37
Figure 4: Plan and section of Trench 1 .....	38
Figure 5: Plan and section of Trench 3 .....	39

## Document Control

<b>Element:</b>	<b>Name:</b>	<b>Date:</b>
Report prepared by:	Jake Minton BA (Hons) PGCert Maria Stockdale MA MSc	03/11/2025
Illustrations prepared by:	Maria Stockdale MA MSc	07/11/2025
Report edited by:	Robert Evershed BSc (Hons)	10/11/2025
Report reviewed by:	Joshua T. Hogue BSc (Hons) MSc DPhil	12/11/2025
Version no.:	1.0	12/11/2025

## Executive Summary

- Elizabeth Allen Land Agents Ltd on behalf of Poplar Farm Flowers Ltd commissioned Allen Archaeology Limited to undertake an archaeological evaluation by trial trenching and geoarchaeological test pitting on land at Poplar Farm, Old Fen Dyke, Sutton St. James, Lincolnshire, to inform a planning application for the construction of a new glass house to grow flowers for the existing horticultural facility.
- The site exists within an area of somewhat limited archaeological activity, with several Romano-British settlements identified within a 2km radius of the site, in addition to the nearby settlement of Sutton St. James, thought to have been established in the mid-13<sup>th</sup> century.
- A geophysical survey was undertaken in 2025 by Allen Archaeology Limited which did not identify any specific features of archaeological interest. It did, however, suggest the existence of several palaeochannels as well as magnetic noise probably associated with buried modern material.
- The current phase of work entailed the excavation of 5no trial trenches, each measuring approximately 30m x 1.8m. Geoarchaeological test pits were excavated at one end of each of these trenches, apart from in Trench 3 where it was dug slightly away from the end of the trench. Each was dug to a depth of around 3 metres and uncovered roddon deposits extending beyond the depth of the excavation. These sediments are of limited archaeological and palaeoenvironmental potential.
- Two undated northeast-to-southwest aligned ditches segments were identified during this phase of work, one in Trench 3 which likely continued into Trench 1, where it was potentially recut. The evaluation has shown that the proposed development may have limited impact upon the archaeological resource within the site boundary.

## 1.0 Introduction

- 1.1 Elizabeth Allen Land Agents Ltd on behalf of Poplar Farm Flowers Limited commissioned Allen Archaeology Limited (AAL) to undertake an archaeological evaluation by trial trenching and geoarchaeological test pitting on land at Poplar Farm, Old Fen Dyke, Sutton St. James, Lincolnshire, to inform a planning application for the construction of a new glass house to grow flowers for the existing horticultural facility.
- 1.2 The fieldwork, recording and reporting was carried out in a manner consistent with current national guidelines, as set out in the Chartered Institute for Archaeologists 'Standard for archaeological field evaluation' (CIfA 2023a), 'Universal guidance for archaeological field evaluation' (CIfA 2023b), and the Historic England document 'Management of Research Projects in the Historic Environment' (Historic England 2015a) as well as local guidance in the 'Lincolnshire Archaeological Handbook' (LCC 2024). The work was also carried out in accordance with a Written Scheme of Investigation (WSI) drafted by this company (AAL 2025a).
- 1.3 The documentation and records generated by the investigation will be assembled in accordance with the national guidelines in 'Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation' (AAF 2011), and the local guidelines in 'Lincolnshire Archaeological Handbook' (LCC 2024). The archive will be deposited with Lincoln Museum under the accession number LCNCC:2025.81 in June 2026.

## 2.0 Site Location and Description

- 2.1 The proposed development site is at Poplar Farm, Old Fen Dyke, Sutton St James, in the administrative district of South Holland, Lincolnshire. Sutton St James is situated c.15.3km east-southeast of Spalding and c.10.9km northwest of Wisbech. The site is located 1.1km to the west-southwest of Sutton St James to immediately to the northeast of Old Fen Dyke and southeast of Scalesgate Road and measures approximately 1.8 hectares. The site is centred at National Grid Reference (NGR) TF 3793 1769 and is c.3m above Ordnance Datum.
- 2.2 The bedrock geology comprises West Walton Formation- mudstone and siltstone, with superficial geology of Tidal Flat deposits of clay and silt recorded (<https://www.bgs.ac.uk/mapviewers/geoindex-onshore/>).

## 3.0 Planning Background

- 3.1 A planning application has been submitted for the 'construction of a new glass house to grow flowers for existing horticultural facility' (H20-0933-24). The Historic Environment Officer advising Lincolnshire County Council has recommended a programme of geophysical survey, which was undertaken in June 2025 (AAL 2025a), followed by geoarchaeological assessment and trial trenching to provide information to allow the planning authority to make a reasoned decision as to whether any further intrusive investigations will be required to mitigate the effects of the proposed development upon the archaeological resource, either prior to or following determination of the application.
- 3.2 A WSI (AAL 2025b) was submitted for provision of a programme of trial trenching and geoarchaeological assessment to the curatorial archaeologist and was approved. It outlined a programme of archaeological work, in response to request for archaeological evaluation

from the Historic Environment Officer advising Lincolnshire County Council. This report covers the results of this works.

- 3.3 The approach adopted is consistent with the recommendations of the National Planning Policy Framework (NPPF), with the chapter of relevance being '*Chapter 12: Conserving and enhancing the historic environment*' (Ministry of Housing, Communities & Local Government 2025).

#### **4.0 Archaeological and Historical Background**

- 4.1 There are a few potentially identified Romano-British settlements within 2km of the site. Approximately 1km to the east-southeast is Bird's Drove (MLI22316), 1.3km to the east-southeast is Taylor's Drove (MLI22318), 1.4km to the west-northwest is Fleet Drain (MLI22253), and 1.4km to the northeast is Horsemoor Drove (MLI22317). 2km to the west-southwest is the Romano-British settlement and saltworking site of Coy Bridge (MLI20446).
- 4.2 The settlement of Sutton St James is not mentioned in the Domesday Book of 1086, and is believed to have been established from around the mid-13th century, first as a chapelry to Long Sutton, and then a parish in its own right from the 19th century.
- 4.3 The Grade II\* listed parish church of St James (MLI22314) is located at the east end of the village, approximately 1.8km east-northeast of the site. 1km to the east-northeast is the Scheduled Monument St Ives Cross (MLI20021), which is believed to signify the location of a market which was granted to William Lungspee by King Henry III in 1252. Approximately 350m to the southwest of the site is a second stone cross (MLI22313), a likely boundary cross dating from the 14th century.
- 4.4 The site is located immediately to the northwest of Poplar Farm which is a partially extant 19th century farmstead (MLI124022). There has been a partial loss (less than 50%) of traditional buildings.
- 4.5 The geophysical survey (AAL 2025) identified no specific features of archaeological interest, with a palaeochannel(s) and a buried modern service revealed, along with large amounts of magnetic noise associated with modern equipment and likely buried modern material. Whilst roddon crests representing palaeochannels are known to contain areas of archaeological remains in the wider Fen landscape, the survey results suggested a limited archaeological potential for the proposed development area.

#### **5.0 Aims and Objectives**

- 5.1 The purpose of the trial trench evaluation was to specifically target the area of the palaeochannels identified in the geophysical survey, in order to gather sufficient information for the archaeological curator to be able to formulate a policy for the management of the archaeological resources present on the site.
- 5.2 Evidence was gathered to establish the presence/absence, nature, date, depth, quality of survival and importance of any archaeological deposits to enable an assessment of the potential and significance of the archaeological remains, and to assess the impact of the development upon the archaeology.

## 6.0 Methodology

### *Trial Trenching*

- 6.1 This phase of works entailed the excavation of five trenches (Figure 2), each approximately 30m x 1.8m, within the footprint of the proposed development and targeting the positive anomalies identified by the geophysical survey (AAL 2025).
- 6.2 The trial trenches were accurately located using a survey grade GPS receiving RTK corrections. The trenches were excavated using a mechanical excavator fitted with a toothless bucket which removed the topsoil, subsoil and underlying non-archaeological deposits in spits no greater than 100mm in thickness, until either the archaeological horizon or natural geology was reached. Once excavated, the trenches and resulting spoil was scanned using a metal detector to aid in the recovery of finds.
- 6.3 The works were carried out between Monday 8<sup>th</sup> of September and Tuesday 9<sup>th</sup> of September 2025 and were supervised by the author.
- 6.4 A full written record of the layers encountered in each trench was made on standard AAL context recording sheets. A complete summary of these is included in Appendix 3. Representative sections were drawn for each trench at a scale of 1:20, with Ordnance Datum heights displayed on each drawing. Full colour photography formed an integral part of the recording strategy, and all archive photographs incorporated scales, a directional arrow and an identification board where appropriate.

### *Geoarchaeological Test Pitting*

- 6.5 Geoarchaeological test pits were excavated at one end of each trench to a depth of around 3 metres (see Parker, Appendix 2). The test pit for Trench 3 was dug immediately outside of the end of the trench due to a slight miscommunication on site.
- 6.6 The deposits were recorded by a geoarchaeologist using the Troels-Smith (1955) system of sediment classification. The scheme breaks down a sediment sample into four main components and allows the inclusion of extra components that are also present, but that are not dominant. Key physical properties of the sediment layers are darkness (Da), stratification (St), elasticity (El), dryness of the sediment (Sicc) and the sharpness of the upper sediment boundary (UB). A summary of the sedimentary and physical properties classified by Troels-Smith (1955) and a stratigraphic breakdown of the deposits were recorded on proforma log sheets.
- 6.7 The logs were supplemented by digital photography carried out using a DSLR with a minimum sensor size of 10 megapixels. All photography adhered to Historic England guidance for Digital Image Capture and File Storage (HE 2015b). Graduated metric scales of appropriate lengths were used, ensuring the use of vertical scales used against deep sections in combination with horizontal scales. Digital photographs intended for archive purposes comply with AAF and ADS guidance (i.e. high quality non-proprietary raw files (DNG) or TIFF images).
- 6.8 A deposit model was constructed using the results of the test pitting, where possible, which used existing British Geological Survey records and any other previous GI works undertaken at the site where present. The modelling followed procedures set out within the Historic

England Guidance for Deposit Modelling and Archaeology (HE 2020). The data will be entered into Rockworks in order to generate illustrations which may include 3-D solid models, fence diagrams and cross-sections. In addition, surfaces may be created to aid visualisation using ArcGis incorporating available lidar data as digital terrain models with multi-directional hillshading and/or local relief modelling used to aid interpretation. The data will be archived in an excel spreadsheet

## 7.0 Results

- 7.1 Five trenches (Figure 2) were excavated across the site, largely targeting two northeast–southwest orientated linear anomalies and amorphous anomalies southwest of these. LiDAR data show that the wider landscape is covered in sinuous systems of silted up roddons (Figure 3).
- 7.2 The disturbed topsoil measured up to 0.70m thick and sealed two ditches and a series roddon deposits of silty clay, silty sands and clay. These were excavated to a maximum depth of 1.2m but supplemented by geotechnical pits excavated at the end of each trench yielding a series of roddon deposits encountered at a depth of c.0.5 - 0.7m below the ground surface and extended beyond the depth of 3m below the ground surface (see Parker, Appendix 2). Trenches 1 and 3 were the only two trenching that contained archaeological features (ditches), both accounted for below.

### ***Trench 1 (Figure 2 and Figure 4)***

- 7.3 Trench 1 targeted the northwest geophysical linear anomaly.
- 7.4 Ditch [103](recut of [105]) was encountered below the topsoil, 107 (Plate 1). It followed a northeast–southwest orientation and, both in its original form and as recut, had steep, concave sides and a concave base. The earliest ditch [105], survived up to c.0.45m deep, and contained a naturally silted fill, 106, consisting of compact mid bluish grey silty clay. The ditch was devoid of datable finds containing only four fragmented animal bones from cattle (see Appendix 1). Ditch [103] was devoid of finds, measured approximately 0.48m deep, and contained three naturally accumulated clayey silt fills: 109, 104 and 108 (in chronological order).
- 7.5 Ditch 105 cut through the upper layer of roddon, 101, which extended beyond the limit of excavation and below the excavated depth.



*Plate 1: Southwest-facing section of ditch [103] (recut of [105]), 0.5m and 2m scales, looking northeast*

### ***Trench 3 (Figure 2 and Figure 5)***

- 7.6 Trench 3 positioned c.35m southwest of Trench 1 targeted the same geophysical anomaly.
- 7.7 The first encountered archaeological feature was found below the topsoil, 300/305. Ditch [303] measured c.2.20m wide and 0.76m deep. It extended beyond the limit of excavation to the northeast and southwest and appeared to align with the ditch encountered in Trench 1. It had steep, concave sides and a concave base and was filled by a single fill, 304, of compact mid bluish grey silty clay, which was devoid of finds.



*Plate 2: Northeast-facing section of ditch [303], 1m scales, looking south*

- 7.8 Ditch [303] cut through the upper layer of a roddon, 301.

## **8.0 Discussion and Conclusions**

- 8.1 The archaeological evaluation by trial trenching targeted a number of geophysical anomalies identified as roddons, discovered during a preceding investigation (AAL 2025a).
- 8.2 The first archaeological horizon was encountered between 0.50–0.60m below the existing ground surface. Below this level were the upper silted layers of two phases of roddons crossing the site (see Appendix 2). These roddons are part of a wider network of silted up channels which once dominated the area with their presence. Their sinuous meanderings extend to the Wash c.15km northeast of the site. Several levels of channel networks are seen on LiDAR and these relate to numerous unrelated events covering the periods from prehistoric to post-medieval marine and freshwater movements in the landscape (Figure 2).
- 8.3 The archaeology was restricted to two undated ditches, potentially representing the same entity, and both cut into the roddons and consequently of later date. Some evidence of maintenance was encountered in the northeast ditch in Trench 1. The interpretations are speculative as the evaluation trenches restricted a wider view of the area and that the ditches were undated. It is thus possible these ditches are unrelated and representing more than one phase of activity, despite falling on similar alignments within Trenches 1 and 3.
- 8.4 The lack of features within the other three trenches and the almost complete lack of finds, suggests that these ditches were likely situated some distance away from any settlement but could be part of a wider field system.
- 8.5 No evidence was found for deposits of greater intrinsic archaeological or palaeoenvironmental potential, namely the Lower Peat, and if they do exist at the site, they would be beyond the maximum depth of the excavation and thus of limited risk by the proposed development (see Appendix 2).

## **9.0 Effectiveness of Methodology**

- 9.1 The chosen method was appropriate for the size and scope of the site uncovered limited archaeological presence represented by two-three ditches within an area dominated by roddon deposits.

## **10.0 Acknowledgements**

- 10.1 AAL would like to thank Elizabeth Allen Land Agents Ltd on behalf of Poplar Farm Flowers Ltd for the commission.

## **11.0 References**

AAF, 2011, Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation, Archaeological Archives Forum

AAL 2025a, *Archaeological evaluation report: Geophysical survey by magnetometry on land at Poplar Farm, Old Fendyke, Sutton St James, Lincolnshire*. Report no AAL2025090. Unpublished project document. Allen Archaeology

- AAL 2025b, *Specification for a programme of archaeological evaluation by trial trenching: Poplar Farm, Old Fendyke, Sutton St James, Lincolnshire*. Unpublished project document. Allen Archaeology
- Cameron K., 1998, *A Dictionary of Lincolnshire Place-names*, English Place-Name Society, University of Nottingham, Nottingham
- CIfA, 2023a, *Standard for archaeological field evaluation*, Chartered Institute for Archaeologists, Reading
- CIfA, 2023b, *Universal guidance for archaeological field evaluation*, Chartered Institute for Archaeologists, Reading
- Historic England, 2011 *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*. Swindon: Historic England
- Historic England, 2015a, *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide*. Historic England
- Historic England, 2015b, *Digital Image Capture and File Storage: A guide to best practice*, Swindon: Historic England
- Historic England, 2015c, *Geoarchaeology: Using earth sciences to understand the archaeological record*, Swindon: Historic England
- Historic England, 2020, *Deposit Modelling and Archaeology: Guidance for mapping buried deposits*, Swindon: Historic England
- LCC, 2024, *Lincolnshire Archaeology Handbook*. Lincolnshire County Council
- Ministry of Housing, Communities and Local Government, 2025, *National Planning Policy Framework*. London: Ministry of Housing, Communities and Local Government
- Morgan P., and Thorn C., (eds.), 1986, *Domesday Book: vol.31: Lincolnshire*, Phillimore & Co. Ltd, Chichester
- Schoch, W., Heller, I., Schweingruber, F.H. and Kienast, F. 2004, *Wood Anatomy of Central European Species*, Online version: [www.woodanatomy.ch](http://www.woodanatomy.ch)
- Schweingruber, F.H. 1990, *Macroscopic Wood Anatomy* (3rd ed), Birmensdorf: Swiss Federal Institute for Forest, Snow and Landscape Research.
- Troels-Smith, J. 1955, *Karakterisering af løse jordarter (characterisation of unconsolidated sediments)*, *Denmarks Geologiske Undersøgelse, Series IV/3*, 10, 73

## Appendix 1: Animal bone

By: Bryn Leadbetter

Three small fragments of animal bone and one tooth were submitted for assessment following their recovery during the excavation of a naturally occurring silting-up deposit within a ditch (Table 1).

### Result

Context	Feature	Type	Bone Specimens	Teeth Specimens	Total
106	105	ditch	3	1	4
Total:	-	-	3	1	4

*Table 1: Animal remains recovered*

Although not said with certainty, sufficient morphological indication was present to suggest the specimens likely belong to a single cattle mandible. Fragmentation aside, the remains were in a structurally sound condition and with no evidence of modification such as burning or butchery.

### Discussion of Potential

Given the paucity of remains and the state of fragmentation there is no potential with this material for further knowledge to be gained by any additional study that would aid interpretations relating to the site, its features or animal husbandry practices. Thus, no such further work is recommended.



## Poplar Farm, Sutton St James: Geoarchaeological Assessment

By Luke Parker

YA Assessment Report 2025/233 October 2025

The logo for York Archaeology features a stylized red 'YA' monogram. The 'Y' is formed by two overlapping shapes, and the 'A' is a solid red shape. To the right of the monogram, the word 'York' is written in a grey sans-serif font, and 'Archaeology' is written in a larger, bold black sans-serif font.

# York Archaeology



York Archaeological Trust undertakes a wide range of urban and rural archaeological consultancies, surveys, evaluations, assessments and excavations for commercial, academic and charitable clients. We manage projects, provide professional advice and fieldwork to ensure a high quality, cost effective archaeological and heritage service. Our staff have a considerable depth and variety of professional experience and an international reputation for research, development and maximising the public, educational and commercial benefits of archaeology. Based in York, Sheffield, Nottingham and Glasgow the Trust's services are available throughout Britain and beyond.

**York Archaeological Trust, Cuthbert Morrell House, 47 Aldwark, York YO1 7BX**

Phone: +44 (0)1904 663000 Fax: +44 (0)1904 663024

Email: [archaeology@yorkat.co.uk](mailto:archaeology@yorkat.co.uk)

Website: <http://www.yorkarchaeology.co.uk>

© 2021 York Archaeological Trust for Excavation and Research Limited

Registered Office: 47 Aldwark, York YO1 7BX

A Company Limited by Guarantee. Registered in England No. 1430801

A registered Charity in England & Wales (No. 509060) and Scotland (No. SCO42846)

## CONTENTS

<b>1. INTRODUCTION .....</b>	<b>3</b>
1.1 Site Background.....	3
1.2 Geology and Topography .....	3
1.3 Planning Background.....	3
<b>2. GEOARCHAEOLOGICAL BACKGROUND.....</b>	<b>4</b>
2.1 Pleistocene .....	4
2.2 Holocene .....	5
2.3 Archaeological Context.....	5
<b>3. PROJECT AIMS AND OBJECTIVES .....</b>	<b>7</b>
<b>4. GEOARCHAEOLOGICAL METHODOLOGY .....</b>	<b>8</b>
4.1 Fieldwork Methodology .....	8
4.2 Fieldwork Limitations .....	9
<b>5. RESULTS .....</b>	<b>9</b>
5.1 Lithology.....	9
5.2 Deposit Modelling .....	10
<b>6. DISCUSSION AND CONCLUSIONS.....</b>	<b>10</b>
<b>7. REFERENCES.....</b>	<b>14</b>
<b>8. APPENDIX 1. TROELS-SMITH.....</b>	<b>17</b>
<b>9. APPENDIX 2 – BOREHOLE AND TEST PIT LOGS.....</b>	<b>18</b>

## FIGURES

Figure 01: Site location.

Figure 02: Intervention locations.

Figure 03: LiDAR Elevation

## PLATES

Plate 01. Shot of TP01

Plate 02. Shot of TP02

Plate 03. Shot of TP03

Plate 04. Shot of TP04

Plate 05. Shot of TP05

## KEY PROJECT INFORMATION

Project Name	Poplar Farm, Sutton St James: Geoarchaeological Assessment
YA Project Code	10508
Report status	D1.1
Type of Project	Geoarchaeological Assessment
Client	Allen Archaeology
Planning Reference	H20-0933-24
OASIS ID	N/A
NGR	TF 37930 17690
Authors	Luke Parker
Illustrations	Luke Parker
Editor	T Keyworth
Report Number	YA/2025/232
Version and Filename	10508_Sutton_St_James_GA_D1.1

### Copyright Declaration:

York Archaeology give permission for the material presented within this report to be used by the archives/repository with which it is deposited, in perpetuity, although York Archaeological Trust retains the right to be identified as the author of all project documentation and reports, as specified in the Copyright, Designs and Patents Act 1988 (chapter IV, section 79). The permission will allow the repository to reproduce material, including for use by third parties, with the copyright owner suitably acknowledged.

### Disclaimer:

This document has been prepared for the commissioning body and titled project (or named part thereof) and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of the author being obtained. York Archaeological Trust accepts no responsibility or liability for the consequences of this document being used for a purpose other than that for which it was commissioned.

**Abstract**

*York Archaeology (YA) were commissioned by Allen Archaeology to undertake geoarchaeological test pitting at Poplar Farm, Sutton St James (TF 37930 17690, Figure 1) on the 8th September 2025. A total of five test pits were excavated at the ends of five archaeological evaluation trenches. This investigation precedes the proposed development at the farm in the form of a new glass house for growing flowers.*

*The five test pits demonstrated broadly similar stratigraphies; with a mid-grey silty sand overlain by a mid-orange silty sand or sandy clay (TP04 and TP05). In test pits TP02 and TP04 this was overlain by a thin deposit of grey/white silty medium sand, followed by a dark orange clay.*

*These sediments are viewed as relating to two phases of roddon deposition. Although the sediments may represent the Barroway Drove beds the sediment is relatively coarse for this formation; being sand and silt rather than clay-dominated. They are therefore viewed here as more likely being the result of roddon deposition. Lidar illustrates that the site is located at the intersection point of an indeterminate number of roddons. The site situated on a north-south oriented, two-metre-high promontory which may be a relict roddon system that is intersected by another, east-west oriented, roddon system. Although over three metres of roddon sedimentation is not unheard of within the wider region, it is still relatively considerable.*

*The roddon sediments themselves have limited intrinsic archaeological and palaeoenvironmental potential. Although sediments of greater intrinsic archaeological and palaeoenvironmental potential, namely the Lower Peat, may exist at the site, they would be beyond the maximum excavated depth and therefore are at limited risk by the proposed development.*

## 1. INTRODUCTION

### 1.1 Site background

1.1.1 York Archaeology were commissioned by Allen Archaeology to undertake geoaerchaeological test pitting at Poplar Farm, Sutton St James (TF 37930 17690, Figure 1) on the 8<sup>th</sup> September 2025. A total of five test pits were excavated at the ends of five archaeological evaluation trenches.

1.1.2 This geoaerchaeological assessment follows the archaeological specification (Allen Archaeology, 2025) written for both the archaeological trenching and geoaerchaeological test pits.

### 1.2 Geology and Topography

1.2.1 The area of the geoaerchaeological survey was centred on NGR TF 37930 17690 (Figure 01) within the grass field located in the north-western quadrant of the Poplar Farm complex. The survey area was bordered to the north by Scalesgate Road, to the west by Old Fen Dike, and to the south and east by buildings associated with Poplar Farm.

1.2.2 The underlying geology of the site as mapped by the British Geological Survey (BGS) is that of West Walton Formation - Mudstone and siltstone. Sedimentary bedrock formed between 163.5 and 157.3 million years ago during the Jurassic period.

1.2.3 The superficial deposits as mapped by the BGS for the site are Tidal Flat Deposits - Clay, silt and sand which are Holocene in age. There are no BGS boreholes within 1km of the site.

### 1.3 Planning Background

1.3.1 This investigation is part of the redevelopment of the site (Application no. H20-0933-24), which encompasses the construction of a new glass house to grow flowers; similar to what is already present on the site to the northeast and southeast.

1.3.2 Developments of this nature, and their impact upon the historic environment, are addressed by the revised 2024 'National Planning Policy Framework' (NPPF) published by the Ministry of Housing, Communities and Local Government (MHCLG), and the NPPF Planning Practice Guide 'Conserving and Enhancing the Historic Environment' (DLHC 2024).

1.3.3 Section 16 of NPPF, paragraph 205 states:

*Local planning authorities should maintain or have access to a historic environment record. This should contain up-to-date evidence about the historic environment in their area and be used to:*

*a) assess the significance of heritage assets and the contribution they make to their environment; and*

*b) predict the likelihood that currently unidentified heritage assets, particularly Sites of historic and archaeological interest, will be discovered in the future.*

1.3.4 In addition, paragraph 207, states that:

*In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record*

*should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a Site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.*

1.3.5 Furthermore, paragraphs 212 and 208 of the NPPF state:

*When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.*

*Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.*

## **2. GEOARCHAEOLOGICAL BACKGROUND**

2.1.1 The oldest superficial deposits within the region consist of river terrace deposits (March Gravels) formed by networks of high energy rivers which characterised the wider area during ice-free periods of the Pleistocene (2.58 million BP to 11,700 BP). Subsequent late Pleistocene/early Holocene (11,700 BP to the present day) sea level rise, glacioisostatic rebound and river action led to incision through and downcutting of these terraces, forming drier gravel islands within a wetland landscape which have been a major focus for settlement during the Holocene.

2.1.2 The site lies within the geological setting of the Fenland; a complex sedimentary depositional system which developed following the last glacial maximum as sea levels rose in response to the decay of the British and Irish Ice sheet (Hughes et al., 2016).

2.1.3 Sea level rise during the early Mesolithic resulted in seasonal flooding and peat growth in the deepest parts of the Fenland basin (Godwin, 1974). Continued sea level rise during the early Neolithic led to the inundation of former river systems and widespread deposition of silts and clays, mapped as Tidal Flat Deposits by the British Geological Survey (BGS) (Wheeler and Waller, 1995). Flooding beyond tidal flat areas induced waterlogging and vegetation growth, which formed thick peat deposits as water levels lowered (Godwin, 1974).

2.1.4 In the late Bronze Age to early Iron Age periods, sea levels rose once again sealing the peat deposits with silts and clays. From the late Bronze Age through to the Roman period (which is characterised by significant flooding), many river channels silted up and became inactive (Smith et al., 2012).

2.1.5 Reclamation of the land in the post-medieval period led to the erosion and wastage of fenland peat, causing a reduction in topography. As a result, silt roddons (sand and silt mounds created when former river channels silted up) began to protrude from the lower lying peatlands and become more prominent in the landscape.

### **2.2 Archaeological context**

2.2.1 The following historic background for the site is taken and summarised from the archaeological specification (Allen Archaeology ,2025).

2.2.2 There are a few potentially identified Romano-British settlements within 2km of the

site. Approximately 1km to the east-southeast is Bird's Drove (MLI22316), 1.3km to the east-southeast is Taylor's Drove (MLI22318), 1.4km to the west-northwest is Fleet Drain (MLI22253), and 1.4km to the northeast is Horsemoor Drove (MLI22317). 2km to the west-southwest is the Romano-British settlement and saltworking site of Coy Bridge (MLI20446).

- 2.2.3 The settlement of Sutton St James is not mentioned in the Domesday Book of 1086, and is believed to have been established from around the mid-13th century, first as a chapelry to Long Sutton, and then a parish in its own right from the 19th century.
- 2.2.4 The Grade II\* listed parish church of St James (MLI22314) is located at the east end of the village, approximately 1.8km east-northeast of the site. 1km to the east-northeast is the Scheduled Monument St Ives Cross (MLI20021), which is believed to signify the location of a market which was granted to William Lungspee by King Henry III in 1252. Approximately 350m to the southwest of the site is a second stone cross (MLI22313), a likely boundary cross dating from the 14th century.
- 2.2.5 The site is located immediately to the northwest of Poplar Farm which is a partially extant 19<sup>th</sup> century farmstead (MLI124022). There has been a partial loss (less than 50%) of traditional buildings.
- 2.2.6 The geophysical survey (AAL 2025) identified no specific features of archaeological interest, with a palaeochannel(s) and a buried modern service revealed, along with large amounts of magnetic noise associated with modern equipment and likely buried modern material.

### 3. AIMS AND OBJECTIVES

3.1.1 The project aims and objectives were defined in the WSI (YA 2025). All recording will result in *'the preparation of a report and ordered archive'*, in line with the guidelines of the ClfA Chartered Institute for Archaeologists (ClfA 2020)

3.1.2 The project aims were as follows:

- To provide an assessment of the formation processes responsible for the deposit sequences and their development through time, specifically the buried land surface/soil;
- To determine the location, nature, extent, date, condition, state of preservation, significance and complexity of geoarchaeological and palaeoenvironmental sequences;
- To aid further evaluation and understanding of the archaeological potential within the site.

3.1.3 The project objectives were as follows

- To undertake test pitting at the site;
- To record the lithology of the deposits at the site;
- To recover samples as appropriate for further palaeoenvironmental assessment as deemed appropriate;

- To produce a report detailing the results of the work and make recommendations

#### **4. GEOARCHAEOLOGICAL METHODOLOGY**

##### **4.1 Fieldwork Methodology**

- 4.1.1 In total, five test pits were located at the ends of evaluation trenches by the monitoring geoarchaeologist using a GNSS, and undertaken by a tracked machine using a toothless bucket. These test pits were excavated up to 3.00m below ground level or up to trench side collapse. The 3.00m maximum depth was maintained due to the wet sand-dominated superficial geology limiting the stability of test pit sides.
- 4.1.2 The lithology of the test pits was recorded using the sediment classification system of Troels-Smith (1955). The scheme breaks down a sediment sample into four main components and allows the inclusion of extra components that are also present, but that are not dominant. Key physical properties of the sediment layers are darkness (Da), stratification (St), elasticity (El), dryness of the sediment (Sicc) and the sharpness of the upper sediment boundary (UB). A summary of the sedimentary and physical properties classified by Troels-Smith (1955) is provided in Appendix 1.
- 4.1.3 The descriptive logs (Appendix 2) were supplemented by digital photography carried out using a DSLR with a minimum sensor size of 10 megapixels. All photography adhered to Historic England guidance for *Digital Image Capture and File Storage* (HE 2015b). Graduated metric scales of appropriate lengths were used, ensuring the use of vertical scales used against deep sections in combination with horizontal scales. Digital photographs intended for archive purposes will comply with AAF and ADS guidance (i.e. high quality non-proprietary raw files (DNG) or TIFF images).

## **5. RESULTS**

### **5.1 Lithology**

- 5.1.1 The deposits recorded within the test pits were all broadly similar. The lowermost deposit recorded in all pits (apart from TP02) was a mid-grey silty sand which extended upwards to around 2.40-3.00m BGL (-0.60- 0.00m OD). This mid-grey silty sand had a very graduated upper boundary with the overlying mid-orange silty sand or sandy clay (for TP04 and TP05). The mid-orange silty sand/sandy clay had an upper boundary of 0.50-1.30m BGL (0.95-1.80m OD).
- 5.1.2 Overlying the mid-orange silty sand/sandy clay within TP02 and TP04 was a thin (0.10-0.20m thick) deposit of grey/white silty medium sand which was then overlain by a dark orange clay.
- 5.1.3 The uppermost deposit within all test pits was around 0.50-0.70m BGL of dark brown sandy clay topsoil.

## **6. DISCUSSION AND CONCLUSIONS**

### **6.1 Overview of lithological sequence**

- 6.1.1 The five test pits demonstrated broadly similar stratigraphies; with a mid-grey silty sand overlain by a mid-orange silty sand or sandy clay (TP04 and TP05). In test pits TP02 and TP04 this was overlain by a thin deposit of grey/white silty medium sand, followed by a dark orange clay.
- 6.1.2 The lowermost deposits of mid-grey silty sand and mid-orange silty sand/sandy clay are viewed as being broadly the same stratigraphic unit; with the mid-orange phase of the unit representing an oxidised form of the same deposit. Confidently interpreting the formation process for this unit is difficult; with this either representing Barroway Drove beds or roddon deposition. However, the sediment is relatively coarse for Barroway Drove beds, being sand and silt rather than clay-dominated, and is therefore viewed here as more likely being the result of roddon deposition.
- 6.1.3 The subsequent grey/white silty medium sand and dark orange clay deposits within TP02 and TP04 are likewise viewed as the result of roddon deposition. This deposition occurred during a subsequent phase of roddon activity following that which deposited the mid-grey and mid-orange silty sands (Section 6.1.2).

### **6.2 Deposit survival and existing impacts**

- 6.2.1 The site itself has experienced relatively limited anthropogenic truncation; with the uppermost 0.50-0.70m being ploughed topsoil and no evidence for deeper human impacts.
- 6.2.2 The recorded sequence consists entirely of roddon deposits, down to a depth of over 3.00m below the present-day surface (-0.60m OD). The formation of these roddons may have resulted in the truncation of earlier sediments, namely the Barroway Drove beds and Lower Peat. If these sediments are still present at the site then they are at relatively considerable depth.

### **6.3 Discussion of deposits**

- 6.3.1 The sediments recorded at the site consist of roddon formations which were deposited by at least two discrete features. A Lidar elevation model was developed (Figure 03) which illustrates the modern topographical expression of the extensive roddon system which characterises the landscape. The site is located at the

intersection point of an indeterminate number of roddons; with the site situated on a north-south oriented two-metre-high promontory which may be a relict roddon system that is intersected by another, east-west oriented, roddon system. Although over three metres of roddon sedimentation is not unheard of within the wider region, it is still relatively considerable.

- 6.3.2 These roddons represent former watercourses of the Fens which became progressively exposed during the last century as overlying peat has been stripped away by desiccation and modern agricultural practices (Smith *et al.*, 2010). The roddon sediments themselves have limited intrinsic archaeological and palaeoenvironmental potential. The fills of these former channels are inorganic in composition and with limited evidence for permanent water saturation. The primary archaeological association with roddons is either in the form of cut archaeological features, where past occupation has taken advantage of the higher elevation created by these features. Given the relative increase in elevation which the site is situated on (Figure 03), at the intersection of a number of roddon systems, this could represent a potentially attractive location for past occupiers of the landscape.
- 6.3.3 More considerable archaeological association with roddons can be found at the Must Farm site near Whittlesey, Cambridgeshire. This site revealed waterlogged Bronze Age settlement in a state of unique preservation, containing finds of national significance. However, importantly, this site was recorded within a later freshwater late-stage channel, rather than the roddon itself. This later freshwater channel had cut an earlier roddon, which itself had truncated Barroway Drove, Lower Peat, and Pleistocene gravels (Smith *et al.* 2012). A similar, overlying freshwater channel (and associated waterlogging) has not been recorded at this site.
- 6.3.4 Although sediments of greater intrinsic archaeological and palaeoenvironmental potential, namely the Lower Peat, may exist at the site, they would be beyond the maximum excavated depth and therefore are at limited risk by the proposed development.

#### **6.4 Consideration of research aims**

- 6.4.1 This investigation has addressed the project aims and objectives (Sections 3.1.1-3.1.2) in providing an insight into the formation processes responsible for the depositional sequences present at the site, their distribution, and an indication as to the significance of said sequences.
- 6.4.2 The recorded superficial geology consists of two separate instances of roddon deposition, which have collectively formed at least 3.00m of inorganic sand-dominated sediments. These are of limited intrinsic archaeological and palaeoenvironmental potential.

#### **6.5 Potential impacts**

- 6.5.1 The proposed development encompasses the construction of a new glass house to grow flowers, similar to what is present surrounding the site to the northeast and south east. The below ground impact from this development is unclear, as the documents relating to this development on the South Holland District planning portal do not detail sub-surface impacts (if they any). However, what impacts may occur e.g. building foundations, utility infrastructure etc. are unlikely to impact beyond the roddon sediments which have been recorded at over 3.00m thick and are of limited archaeological and palaeoenvironmental potential (Section 6.3.2).

#### **6.6 Conclusions**

- 6.6.1 Five geoarchaeological test pits were excavated at the ends of trenches at the site of a prospective glass house development. The five test pits demonstrated broadly similar

stratigraphies; with a mid-grey silty sand overlain by a mid-orange silty sand or sandy clay (TP04 and TP05). In test pits TP02 and TP04 this was overlain by a thin deposit of grey/white silty medium sand, followed by a dark orange clay.

- 6.6.2 These sediments are viewed as relating to two phases of roddon deposition. Although the sediments may represent the Barroway Drove beds the sediment is relatively coarse for this formation; being sand and silt rather than clay-dominated. They are therefore viewed here as more likely being the result of roddon deposition. LiDAR illustrates that the site is located at the intersection point of an indeterminate number of roddons. The site situated on a north-south oriented, two-metre-high promontory which may be a relict roddon system that is intersected by another, east-west oriented, roddon system. Although over three metres of roddon sedimentation is not unheard of within the wider region, it is still relatively considerable.
- 6.6.3 The roddon sediments themselves have limited intrinsic archaeological and palaeoenvironmental potential. Although sediments of greater intrinsic archaeological and palaeoenvironmental potential, namely the Lower Peat, may exist at the site, they would be beyond the maximum excavated depth and therefore are at limited risk by the proposed development.

## REFERENCES

Allen Archaeology 2025. Specification for a programme of archaeological evaluation by trial trenching: Poplar Farm, Old Fendyke, Sutton St James, Lincolnshire.

British Geological Survey (BGS). 2025. *Geology of Britain Viewer*. [Online] <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> [Accessed 09/08/2024].

Brown, D. H 2007. *Archaeological archives*. Reading: Institute of Field Archaeologists. [Online] <https://archaeologydataservice.ac.uk/library/browse/details.xhtml?recordId=3001775> [Accessed 15/02/2024].

Chartered Institute for Archaeologists 2022 *Code of Conduct*. Reading: Chartered Institute for Archaeologists.

Chartered Institute for Archaeologists (CIfA) 2022 *Toolkit for Selecting Archaeological Archives* Reading: Chartered Institute for Archaeologists.

Chartered Institute for Archaeologists (CIfA) 2023b *Universal guidance for archaeological field evaluation*. Reading: Chartered Institute for Archaeologists.

Department of Levelling Up, Housing and Communities 2024 *National Planning Policy Framework (NPPF)*. London: Department of Levelling Up, Housing and Communities.

FAME. 2006. *Health & Safety in Field Archaeology Manual* FAME.

Historic England. 2006, *Management of Recording Projects in the Historic Environment (MoRPHE)*. Swindon. Historic England.

Historic England (HE), 2011 *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*. Swindon: Historic England.

Historic England. 2015a. *Geoarchaeology: Using earth sciences to understand the archaeological record*. Swindon. Historic England.

Historic England. 2015b. *Digital Image Capture and File Storage: A guide to best practice*. Swindon. Historic England.

- Historic England. 2015c. Waterlogged Wood. Guidelines on the recording, sampling, conservation and curation of waterlogged wood. Swindon. Historic England.
- Historic England. 2016. Preserving archaeological remains: Decision-taking for sites under development. Swindon. Historic England.
- Historic England. 2017. *Understanding the Archaeology of Landscapes*. Swindon. Historic England.
- Historic England. 2020. Deposit Modelling and Archaeology: Guidance for mapping buried deposits. Swindon. Historic England.
- Historic England. 2022. Radiocarbon Dating and Chronological Modelling: guidelines and best practice. Swindon. Historic England.
- Neal, V and Watkinson, D (eds) 1998 *First Aid for Finds: Practical Guide for Archaeologists*. 3<sup>rd</sup> Revised edn. United Kingdom Institute for Conservation of Historic & Artistic Works, Archaeology Section.
- Schoch, W., Heller, I., Schweingruber, F.H. and Kienast, F. 2004. *Wood Anatomy of Central European Species*. Online version: [www.woodanatomy.ch](http://www.woodanatomy.ch).
- Schweingruber, F.H. 1990. *Macroscopic Wood Anatomy* (3<sup>rd</sup> ed). Birmensdorf: Swiss Federal Institute for Forest, Snow and Landscape Research.
- Smith, D., Zalasiewicz, J., Williams, M., Wilkinson, I., Redding, M., Begg, C. 2010. Holocene drainage systems of the English Fenland: Roddons and their environmental significance. *Proc. of the Geol. Soc.* 121, 256-269
- Smith, D., Zalasiewicz, J., Williams, M., Wilkinson, I., Scarborough, J., Knight, M., Sayer, C., Redding, M., Moreton, S. 2012. The anatomy of a Fenland roddon: Sedimentation and environmental change in a lowland Holocene tidal creek environment. *Proc. of the Geol. Soc.* 59(2), 145-159
- Troels-Smith, J. 1955. Karakterisering af lose jordarter (characterisation of unconsolidated sediments). *DenmarksGeologiskeUndersogelse*, Series IV/3, 10, 73.

## 1. APPENDIX 1. TROELS-SMITH

Darkness		Degree of Stratification		Degree of Elasticity		Degree of Dryness	
nig.4	black	strf.4	well stratified	elas.4	very elastic	sicc.4	very dry
nig.3		strf.3		elas.3		sicc.3	
nig.2		strf.2		elas.2		sicc.2	
nig.1		strf.1		elas.1		sicc.1	
nig.0	white	strf.0	no stratification	elas.0	no elasticity	sicc.0	water

Sharpness of Upper Boundary	
lim.4	< 0.5mm
lim.3	< 1.0 &> 0.5mm
lim.2	< 2.0 &> 1.0mm
lim.1	< 10.0 &> 2.0mm
lim.0	> 10.0mm

	Sh	Substantia humosa	Humous substance, homogeneous microscopic structure
I Turfa	Tb	T. bryophytica	Mosses +/- humous substance
	Tl	T. lignosa	Stumps, roots, intertwined rootlets, of ligneous plants
	Th	T. herbacea	Roots, intertwined rootlets, rhizomes of herbaceous plants
II Detritus	DI	D. lignosus	Fragments of ligneous plants >2mm
	Dh	D. herbosus	Fragments of herbaceous plants >2mm
	Dg	D. granosus	Fragments of ligneous and herbaceous plants <2mm >0.1mm
III Limus	Lf	L. ferrugineus	Rust, non-hardened. Particles <0.1mm
IV Argilla	As	A. steatodes	Particles of clay
	Ag	A. granosa	Particles of silt
V Grana	Ga	G. arenosa	Mineral particles 0.6 to 0.2mm
	Gs	G. saburralia	Mineral particles 2.0 to 0.6mm
	Gg(min)	G. glareosa minora	Mineral particles 6.0 to 2.0mm
	Gg(maj)	G. glareosa majora	Mineral particles 20.0 to 6.0mm
	Ptm	Particulaetestaemolloscorum	Fragments of calcareous shells

### Physical and sedimentary properties of deposits according to Troels-Smith (1955)

## 2. APPENDIX 2 – TEST PIT LOGS

Borehole Number	Depth (m) upper	Depth (m) lower	Depth (m OD) upper	Da	St	El	Sicc	UB	Troels-Smith Texture	Description
TP01	0	0.72	2.22	3	2	0	4		As2, Ga2	Dark brown sandy clay topsoil
TP01	0.72	2.44	1.5	3	4	0	4	4	Ga3, Ag1	Mid orange silty sand
TP01	2.44	2.68	-0.22	3	4	0	3	3	Ag2, Ga2	Mid grey silty sand
TP02	0	0.66	2.19	3	2	0	4		As2, Ga2	Dark brown sandy clay topsoil
TP02	0.66	1.1	1.53	3	4	0	5	4	As4	Dark orange clay
TP02	1.1	1.22	1.09	2	2	0	4	3	Ag2, Gs2	Grey/white silty medium sand
TP02	1.22	2.64	0.97	3	4	0	4	4	Ga3, Ag1	Mid orange silty sand
TP03	0	0.62	2.55	3	2	0	4		As2, Ga2	Dark brown sandy clay topsoil
TP03	0.62	2.62	1.93	3	4	0	4	4	Ga3, Ag1	Mid orange silty sand
TP03	2.64	2.84	-0.09	3	4	0	3	3	Ag2, Ga2	Mid grey silty sand
TP04	0	0.6	2.27	3	2	0	4		As2, Ga2	Dark brown sandy clay topsoil
TP04	0.6	1.1	1.67	3	4	0	5	4	As4	Dark orange clay
TP04	1.1	1.32	1.17	2	2	0	4	3	Ag2, Gs2	Grey/white silty medium sand
TP04	1.32	2.8	0.95	3	4	0	4	4	As3, Ga1	Mid orange sandy clay
TP04	2.8	3.2	-0.53	3	4	0	3	3	Ag2, Ga2	Mid grey silty sand
TP05	0	0.52	2.38	3	2	0	4		As2, Ga2	Dark brown sandy clay topsoil
TP05	0.52	3.06	1.86	3	4	0	4	4	As3, Ga1	Mid orange sandy clay
TP05	3.06	3.18	-0.68	3	4	0	3	3	Ag2, Ga2	Mid grey silty sand

# FIGURES

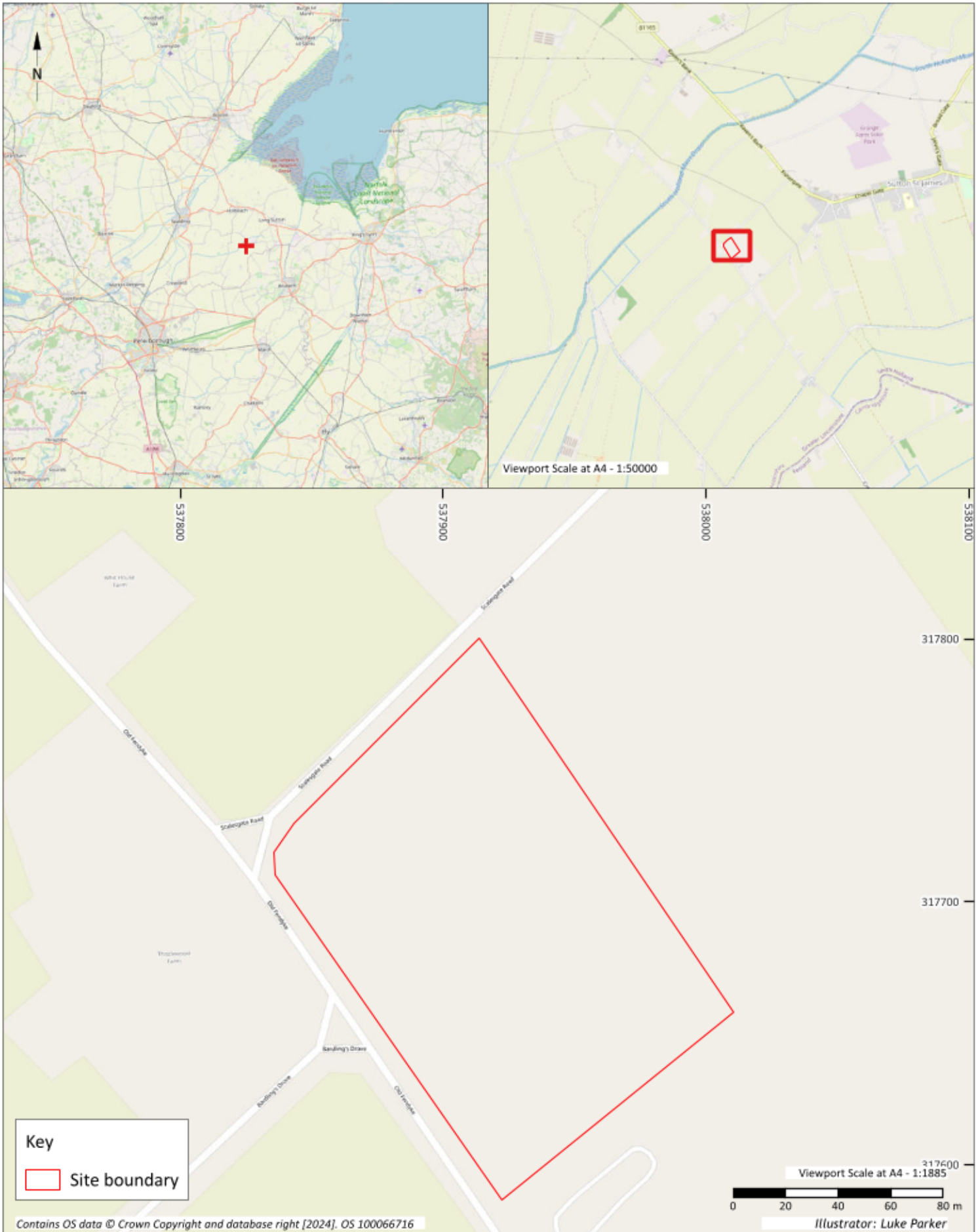


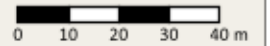
Figure 01 - Location Map  
 10508 - Sutton St James GA



**Key**

- ▭ Site boundary
- ▭ Evaluation trenches
- Georarchaeological test pits

Viewport Scale at A4 - 1:1500

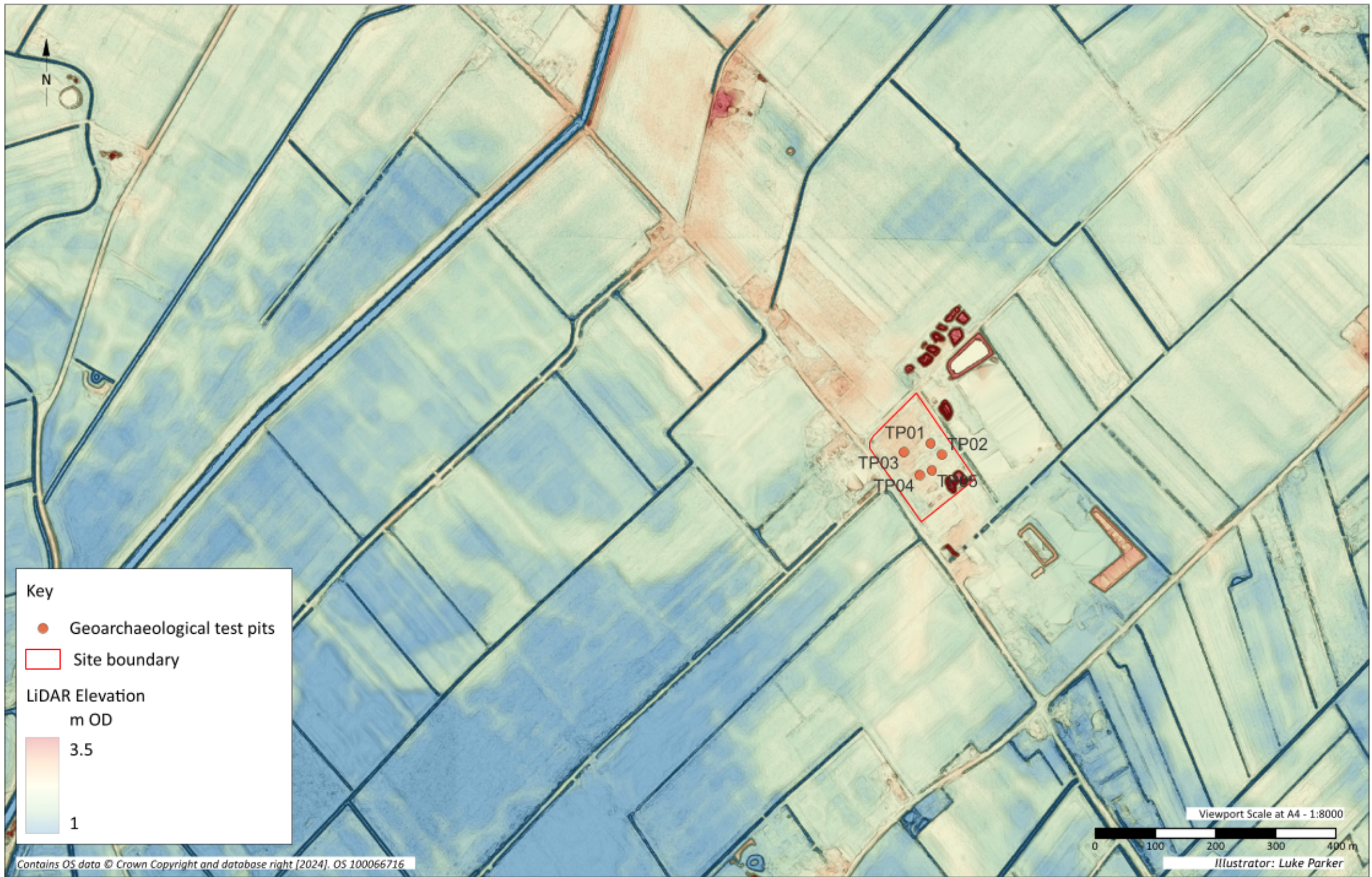


Illustrator: Luke Parker

Contains OS data © Crown Copyright and database right [2024], OS 100066716



**Figure 02 - Intervention Locations**  
10508 - Sutton St James GA



Contains OS data © Crown Copyright and database right [2024], OS 100066716



Figure 03 - Regional LiDAR  
10508 - Sutton St James GA

## Plates



Plate 01. Shot of TP01



Plate 02. Shot of TP02



Plate 03. Shot of TP03



Plate 04. Shot of TP04



Plate 05. Shot of TP05

### Appendix 3: Context Summary List

Trench	Context	Type	Fill of.	Part of.	Feature	Description	Length (m)	Width (m)	Thickness/ Depth (m)	Interpretation
1	100	Layer			100	Friable, dark brown, silty clay; very occasional small, sub-rounded stones			0.15	Topsoil
1	101	Layer			101	Soft, light orange yellow, silty sand			0.22+	Roddon
1	102	Layer			102	Compact, mid orange brown, clay			1+	Roddon
1	103	Cut			103	Northeast-southwest orientated linear ditch; steep, concave sides, concave base		2.70	0.48	Recut of ditch [105]
1	104	Fill	103		103	Firm, mid brownish grey, clayey silt			0.45	Natural silting within ditch
1	105	Cut			105	Northeast-southwest orientated linear ditch; steep, concave sides, concave base		1.65	0.45	Cut of ditch
1	106	Fill	105		105	Compact, mid blue grey, silty clay			0.34	Natural silting within ditch
1	107	Layer			107	Firm, mid orange brown, silty clay			0.40	Topsoil
1	108	Fill	103		103	Firm, mid greyish brown, clayey silt			0.06	Natural silting within ditch
1	109	Fill	103		103	Firm, light yellowish brown, clayey silt			0.28	Natural silting within ditch
2	200	Layer			200	Friable, dark brown, silty clay; very occasional small, sub-rounded stones			0.30	Topsoil
2	201	Layer			201	Firm, mid orange brown, silty clay			0.34	Roddon
2	202	Layer			202	Compact, mid orange brown, clay			0.70	Roddon

Trench	Context	Type	Fill of.	Part of.	Feature	Description	Length (m)	Width (m)	Thickness/ Depth (m)	Interpretation
2	203	Layer			203	Soft, light blue grey, silty sand			0.26+	Marine clay
3	300	Layer			300	Friable, dark brown, silty clay; very occasional small, sub- rounded stones			0.30	Topsoil
3	301	Layer			301	Soft, light orange yellow, silty sand			0.80	Roddon
3	302	Layer			302	Compact, mid orange brown, clay			0.40	Roddon
3	303	Cut			303	Northeast-southwest orientated linear; steep concave sides, concave base		2.20	0.76	Cut of ditch
3	304	Fill			303	Compact, mid blue grey, silty clay			0.76	Natural silting within ditch
3	305	Layer			305	Firm, mid orange brown, silty clay			0.38	Roddon
4	400	Layer			400	Friable, dark brown, silty clay; very occasional small, sub- rounded stones			0.30	Topsoil
4	401	Layer			401	Firm, mid orange brown, silty clay			0.35	Roddon
4	402	Layer			402	Soft, light orange yellow, silty sand			0.30	Roddon
4	403	Layer			403	Compact, mid orange brown, clay			0.70	Roddon
4	404	Layer			404	Compact, mid grey, clay			0.85	Roddon
4	405	Layer			405	Soft, light blue grey, silty sand			0.20	Marine clay
4	406	Layer			406	Compact, mid grey, clay			1.2+	Marine clay

Trench	Context	Type	Fill of.	Part of.	Feature	Description	Length (m)	Width (m)	Thickness/ Depth (m)	Interpretation
5	500	Layer			500	Friable, dark brown, silty clay; very occasional small, sub- rounded stones			0.34	Topsoil
5	501	Layer			501	Soft, light orange yellow, silty sand			0.26	Roddon
5	502	Layer			502	Compact, mid orange brown, clay			0.3+	Roddon

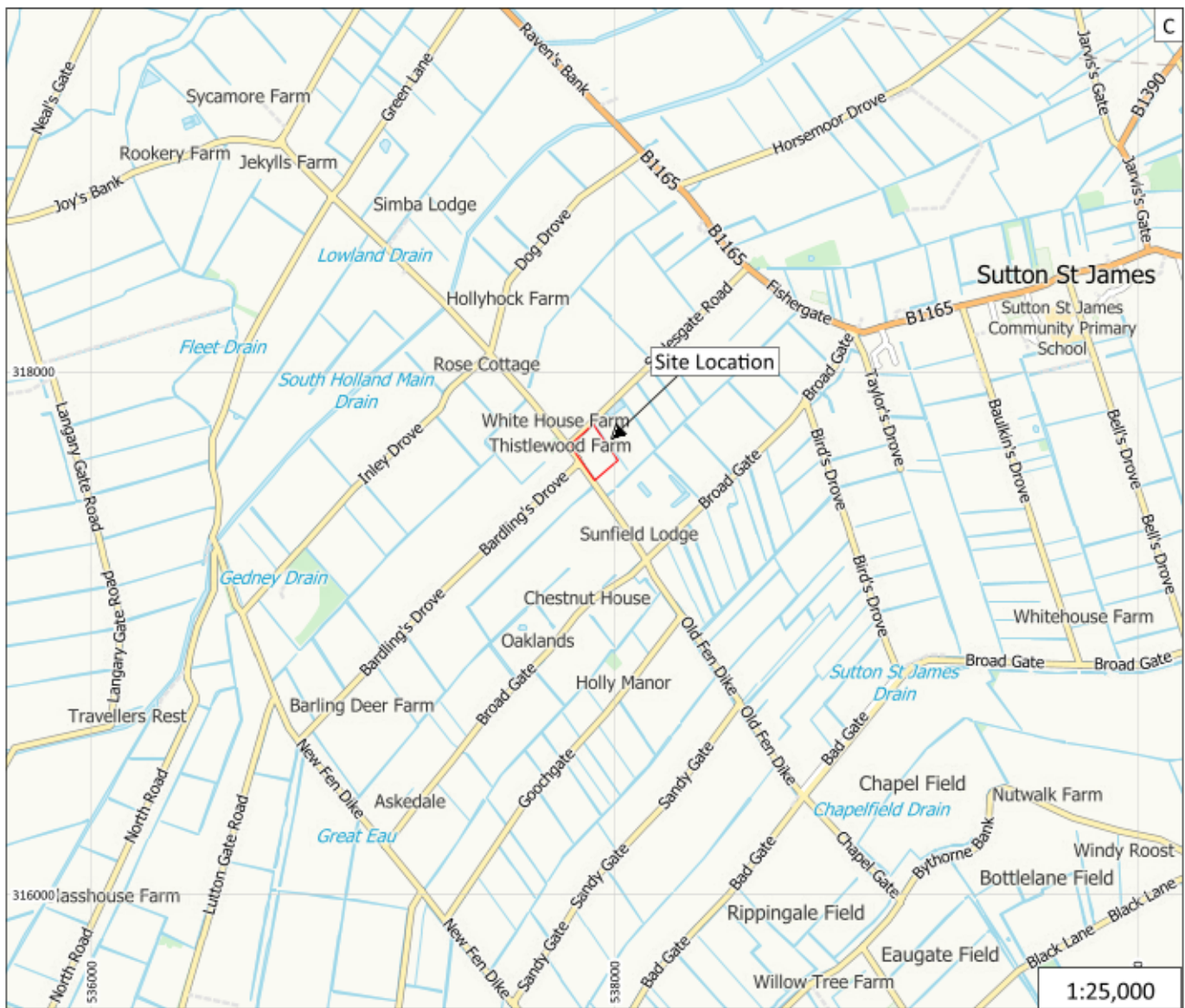
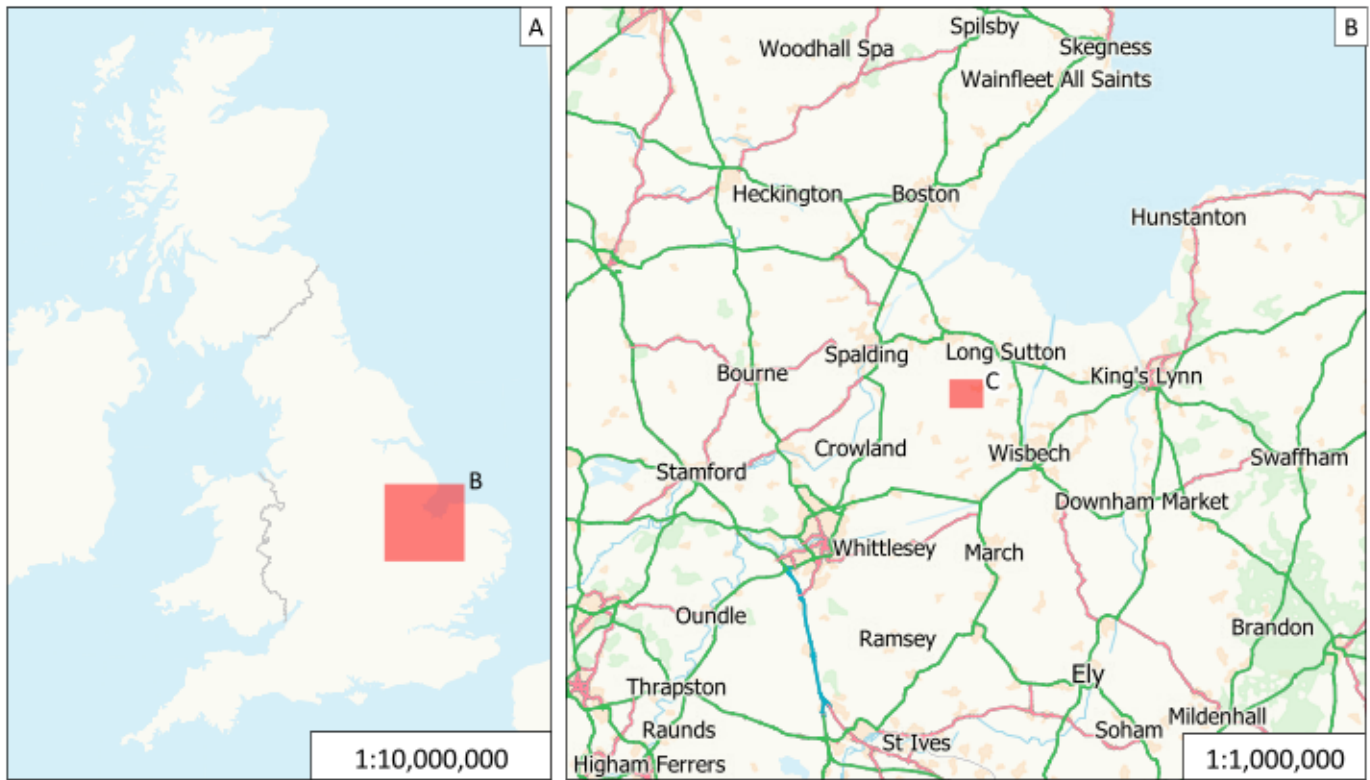


Figure 1: Site location outlined in red



Poplar Farm, Sutton St James  
Site Code: SSOF 25

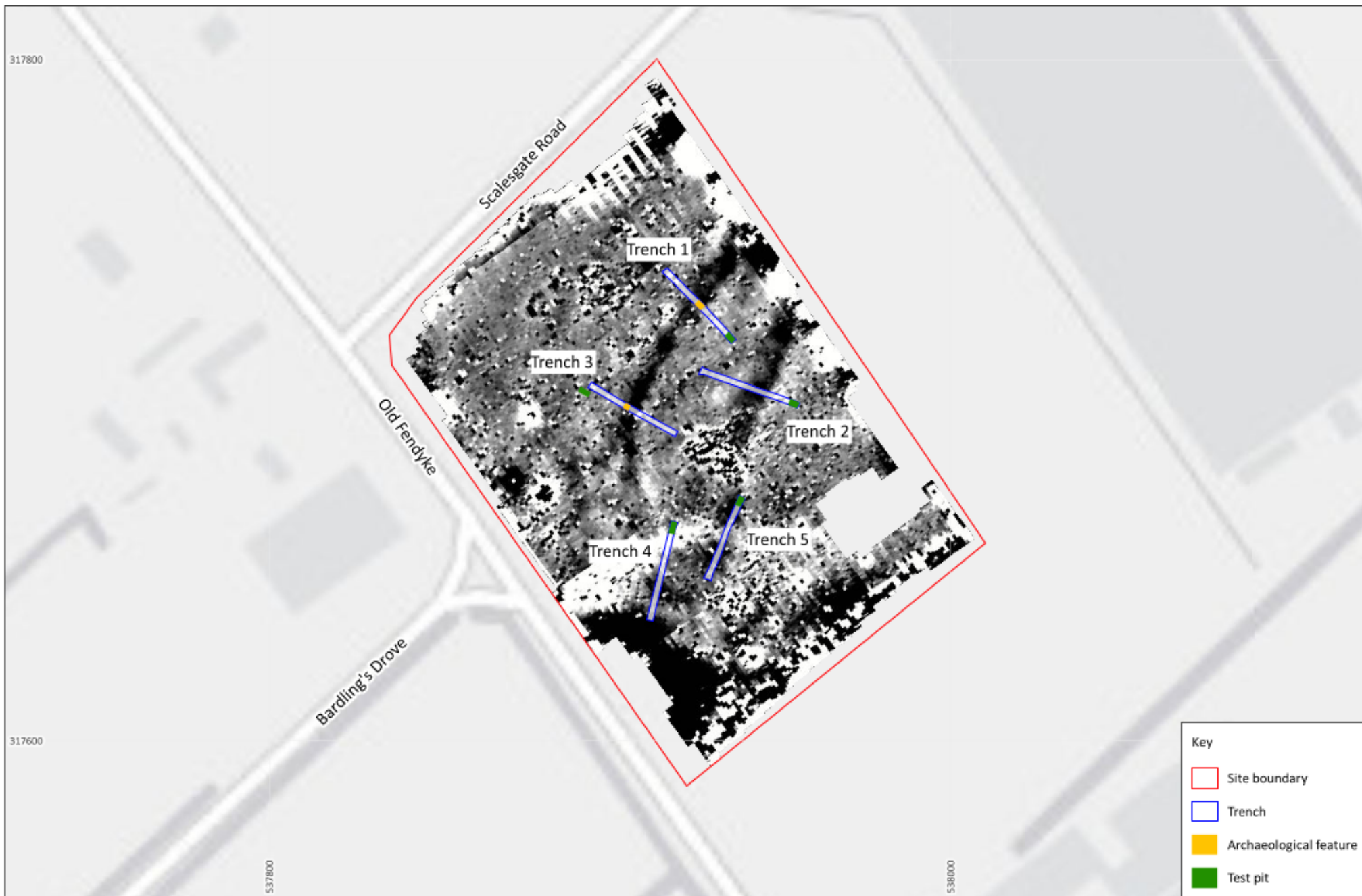
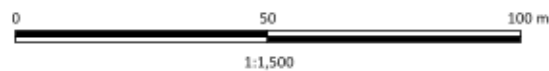


Figure 2: Plan of trench locations superimposed on geophysical survey (AAL 2025a)



Poplar Farm, Sutton St James  
Site Code: SSOFF 25



Figure 3: Plan of trench locations superimposed on LiDAR showing silted up networks of roddons



Poplar Farm, Sutton St James  
Site Code: SSOFF 25

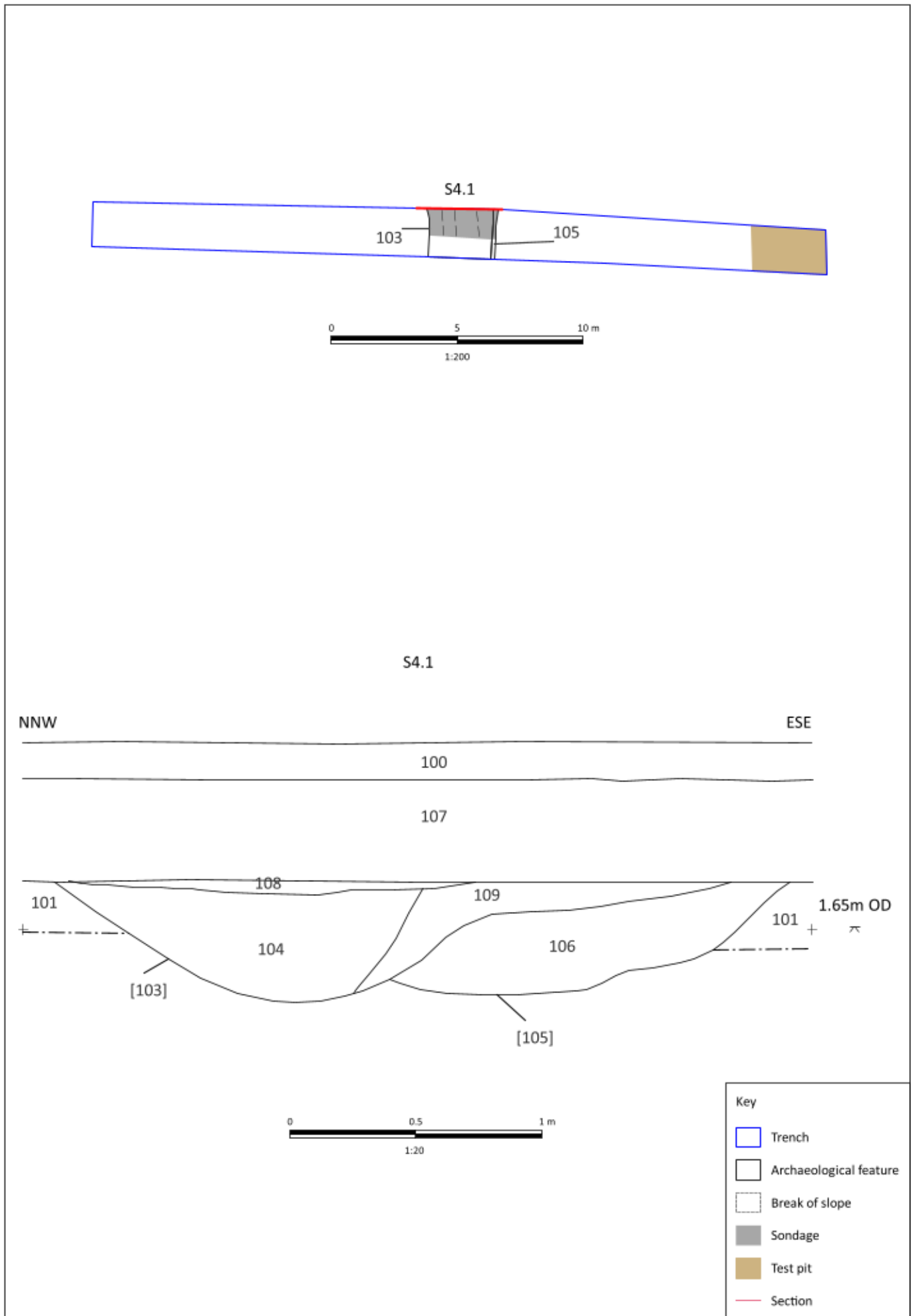
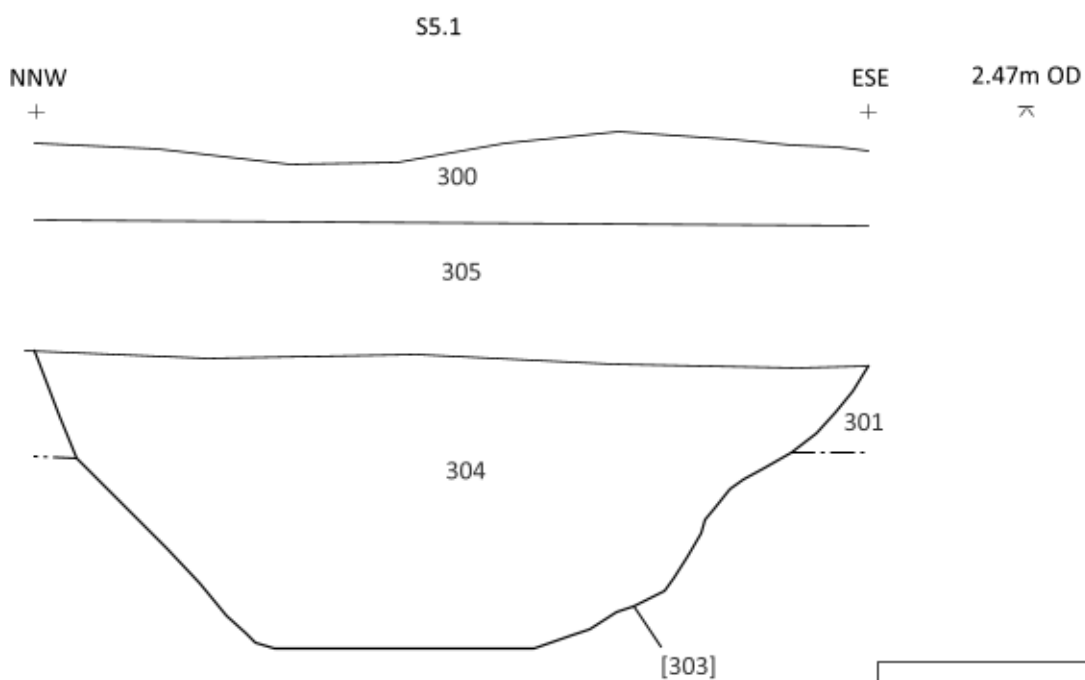
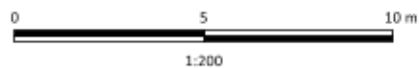
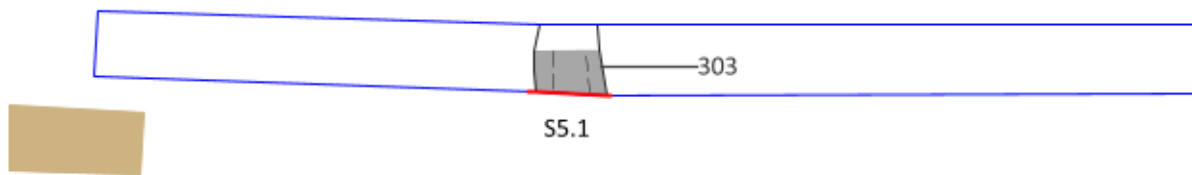


Figure 4: Plan and section of Trench 1



Poplar Farm, Sutton St  
James  
Site Code: SSOF 25



Key	
	Trench
	Archaeological feature
	Break of slope
	Sondage
	Test pit
	Section



Figure 5: Plan and section of Trench 3



Poplar Farm,  
Sutton St James  
Site Code: SSOF 25

## Appendix 5: OASIS Summary

<b>OASIS ID (UID)</b>	allenarc1-538239
<b>Project Name</b>	ARCHAEOLOGICAL EVALUATION AND GEOARCHAEOLOGICAL REPORT: TRIAL TRENCHING ON LAND AT POPLAR FARM, OLD FEN DYKE, SUTTON ST JAMES, LINCOLNSHIRE
<b>Sitename</b>	LAND AT POPLAR FARM, OLD FEN DYKE, SUTTON ST JAMES, LINCOLNSHIRE
<b>Sitecode</b>	SSOF 25
<b>Project Identifier(s)</b>	
<b>Activity type</b>	Evaluation
<b>Planning Id</b>	H20-0933-24
<b>Reason For Investigation</b>	Planning: Between application and determination
<b>Organisation Responsible for work</b>	Allen Archaeology Limited
<b>Project Dates</b>	08-Sep-2025 - 09-Sep-2025
<b>Location</b>	<b>LAND AT POPLAR FARM, OLD FEN DYKE, SUTTON ST JAMES, LINCOLNSHIRE</b> NGR: TF 37930 17690 LL: 52.73925130170242, 0.041600274118556 12 Fig: 537930,317690
<b>Administrative Areas</b>	Country: England County/Local Authority: Lincolnshire Local Authority District: South Holland Parish: Sutton St James
<b>Project Methodology</b>	Elizabeth Allen Land Agents Ltd on behalf of Poplar Farm Flowers Ltd commissioned Allen Archaeology Limited to undertake an archaeological evaluation by trial trenching on land at Poplar Farm, Old Fen Dyke, Sutton St. James, Lincolnshire to inform a planning application for the construction of a new glass house to grow flowers for the existing horticultural facility.
<b>Project Results</b>	The archaeological evaluation by trial trenching targeted a number of geophysical anomalies identified as roddons, discovered during a preceding investigation (AAL 2025b). The first archaeological horizon was encountered between 0.50-0.60m below the existing ground surface. Below this level were the upper silted layers of two phases of roddons crossing the site (see Parker Appendix 2). These roddons

	<p>are part of a wider network(s) of silted up channels which once dominated the area with their presence. Their sinuous meanderings extend to the Wash c.15km northeast of the site. Several levels of channel networks are seen on LiDAR and these relate to numerous unrelated events covering the periods from prehistoric to post-medieval marine and freshwater movements in the landscape. The archaeology was restricted to two undated ditches, potentially representing the same entity. Some evidence of maintenance was encountered in the northeast ditch in Trench 1. The interpretations are speculative as the evaluation trenches restricted a wider view of the area and that the ditches were undated. It is thus possible these ditches are unrelated and representing more than one phase of activity, despite falling on the same alignment within Trench 1 and between Trenches 1 and 3. The lack of features within the other three trenches and the almost complete lack of finds, suggests that these ditches were likely situated some distance away from any settlement but could be part of a wider field system.</p>
<b>Keywords</b>	Ditch - UNCERTAIN - FISH Thesaurus of Monument Types
<b>Funder</b>	Private or public corporation Poplar Farm Flowers Ltd
<b>HER</b>	Lincolnshire HER - unRev - STANDARD
<b>Person Responsible for work</b>	Robert Evershed
<b>HER Identifiers</b>	
<b>Archives</b>	

Report generated on: 10-11-2025:1028



Allen Archaeology Limited  
[www.allenarchaeology.co.uk](http://www.allenarchaeology.co.uk)

Company Registered in England and Wales No: 6935529

**Lincoln**  
**Whisby Lodge**  
**Hillcroft Business Park**  
**Whisby Road**  
**Lincoln**  
**Lincolnshire**  
**LN6 3QL**

**T: +44 (0) 1522 685356**  
**E: [info@allenarchaeology.co.uk](mailto:info@allenarchaeology.co.uk)**

**West**  
Arion Business Centre  
Harriet House  
118 High Street  
Birmingham  
B23 6BG  
T: +44 (0) 800 610 2545  
E: [birmingham@allenarchaeology.co.uk](mailto:birmingham@allenarchaeology.co.uk)

**South**  
International House  
Southampton International Business  
Park  
George Curl Way  
Southampton  
SO18 2RZ

T: +44 (0) 800 610 2555  
E: [southampton@allenarchaeology.co.uk](mailto:southampton@allenarchaeology.co.uk)

**East**  
Wellington House  
East Road  
Cambridge  
Cambridgeshire  
CB1 1BH  
T: +44 (0) 800 610 2550  
E: [cambridge@allenarchaeology.co.uk](mailto:cambridge@allenarchaeology.co.uk)

**Northwest**  
Office 4  
Barbury House,  
8 Hardy Close,  
Nelson Court Business Centre,  
Preston,  
PR2 2XP

T: +44 (0) 1772 963039  
M: +44 (0) 7710 099052  
E: [northwest@allenarchaeology.co.uk](mailto:northwest@allenarchaeology.co.uk)