

Heckington Fen Solar Park EN010123

Outline Written Scheme of Investigation – Evaluation Applicant: Ecotricity (Heck Fen Solar) Limited

Document Reference: 7.13 Pursuant to: APFP Regulation 5(2)(q) Deadline 2: 7th November 2023 Document Revision: 2

November 2023



OUTLINE WRITTEN SCHEME OF INVESTIGATION - EVALUATION

Document Properties					
Regulation Reference	Regulation 5(2)(q)				
Planning Inspectorate	EN010123				
Scheme Reference					
Application Document	7.13				
Reference					
Title	Outline Written Scheme of Investigation - Evaluation				
Prepared By	Heckington Fen Energy Park P	roject Team			
	(Wessex Archaeology)				
	Version History				
Version	Date	Version Status			
Rev 1	February 2023	Application Version			
Rev 2	November 2023	Deadline 2			

1



Heckington Fen Cable Route, Lincolnshire

Outline Written Scheme of Investigation – Cable Route Corridor (Trial Trenching)

Planning Ref.: EN010123 Accession Number: LCNCC:2022.104 DCO Document Ref.: 7.13 WA Document Ref.: 267011.01 October 2023

wessexarchaeology



© Wessex Archaeology Ltd 2023, all rights reserved

Unit R6 Sheaf Bank Business Park Prospect Road Sheffield S2 3EN

www.wessexarch.co.uk

Wessex Archaeology Ltd is a company limited by guarantee registered in England, company number 1712772. It is also a Charity registered in England and Wales number 287786, and in Scotland, Scottish Charity number SC042630. Our registered office is at Portway House, Old Sarum Park, Salisbury, Wiltshire, SP4 6EB

Disclaimer

The material contained in this report was designed as an integral part of a report to an individual client and was prepared solely for the benefit of that client. The material contained in this report does not necessarily stand on its own and is not intended to nor should it be relied upon by any third party. To the fullest extent permitted by law Wessex Archaeology will not be liable by reason of breach of contract negligence or otherwise for any loss or damage (whether direct indirect or consequential) occasioned to any person acting or omitting to act or refraining from acting in reliance upon the material contained in this report arising from or connected with any error or omission in the material contained in the report. Loss or damage as referred to above shall be deemed to include, but is not limited to, any loss of profits or anticipated profits damage to reputation or goodwill loss of business or anticipated business damages costs expenses incurred or payable to any third party (in all cases whether direct indirect or consequential) or any other direct indirect or consequential loss or damage

Document Information

Document title	Heckington Fen Cable Route
Document subtitle	Outline Written Scheme of Investigation – Cable Route Corridor (Trial Trenching)
WA Document reference	267011.01
DCO Document reference	7.13
Commissioned by	Pegasus Group (Cirencester)
Address	33 Sheep Street Cirencester GL7 1RQ
On behalf of	Ecotricity (Heck Fen) Solar Ltd
Address	Lion House, Rowcroft, Stroud, GL5 3BY
Site location	Brown's Drove, Swineshead Bridge, Swineshead (north of route) to Bicker Drove, Villa Farm (south of route), Boston
County	Lincolnshire
County National grid reference	
2	Lincolnshire 521474 343910 (TF 21474 43910) to 519648 339324 (TF 19648
National grid reference	Lincolnshire 521474 343910 (TF 21474 43910) to 519648 339324 (TF 19648 39324) Lincolnshire County Council, North Kesteven District Council and
National grid reference Planning authority	Lincolnshire 521474 343910 (TF 21474 43910) to 519648 339324 (TF 19648 39324) Lincolnshire County Council, North Kesteven District Council and Boston Borough Council
National grid reference Planning authority Planning reference	Lincolnshire 521474 343910 (TF 21474 43910) to 519648 339324 (TF 19648 39324) Lincolnshire County Council, North Kesteven District Council and Boston Borough Council ENO10123
National grid reference Planning authority Planning reference Museum name	Lincolnshire 521474 343910 (TF 21474 43910) to 519648 339324 (TF 19648 39324) Lincolnshire County Council, North Kesteven District Council and Boston Borough Council ENO10123 The Collection Museum, Art and Archaeology, Lincolnshire
National grid reference Planning authority Planning reference Museum name Museum accession code	Lincolnshire 521474 343910 (TF 21474 43910) to 519648 339324 (TF 19648 39324) Lincolnshire County Council, North Kesteven District Council and Boston Borough Council ENO10123 The Collection Museum, Art and Archaeology, Lincolnshire LCNCC:2022.104
National grid reference Planning authority Planning reference Museum name Museum accession code WA project code	Lincolnshire 521474 343910 (TF 21474 43910) to 519648 339324 (TF 19648 39324) Lincolnshire County Council, North Kesteven District Council and Boston Borough Council ENO10123 The Collection Museum, Art and Archaeology, Lincolnshire LCNCC:2022.104 267011

Quality Assurance

Internal Issue	Date		Author	Approved by
1	12/12/2022		CJS/VH	
2	16/12/2022		CJS/VH	
3	10/10/2023	Trench changes	CJS	
4	24/10/2023	Figure and trench changes	CJS	
5	27/10/2023	Formatting updates	CJS	



Contents

1	INTR	ODUCTION	.1
		Project and planning background	
		Scope of document	
		Location, topography and geology	
		Introduction	
		Previous investigations related to the proposed development	
	1.6	Archaeological and historical context	. 3
2	AIMS	AND OBJECTIVES	.4
		General aims	
		General objectives	
	2.3	Site-specific objectives	. 5
3	FIELD	DWORK METHODS	. 5
	3.1	Introduction	. 5
	3.2	Setting out of the trenches	. 5
		Service location and other constraints	
		Excavation methods	
		Recording	
		Survey	
		Monitoring	
		Reinstatement	
		Finds	
		Environmental sampling	
4		-EXCAVATION METHODS AND REPORTING	
		Stratigraphic evidence	
		Finds evidence	
		Environmental evidence.	
		Reporting	
5		HIVE STORAGE AND CURATION	
		Museum.	
		Transfer of title	
		Preparation of archive	
		Selection strategy	
		Security copy	
6	OUTF	REACH AND SOCIAL MEDIA	12
7	COP	/RIGHT	12
	7.1	Archive and report copyright	12
		Third party data copyright	
8	WES	SEX ARCHAEOLOGY PROCEDURES	12
0		External quality standards	
		Personnel	
	-	Internal quality standards	
		Health and safety	
		Insurance	
REE		CES	15
APPI	ENDIC		
		ndix 1 Finds and environmental specialists	
	Appel	ndix 2 Trial Trench Rationale	١Ŏ



List of Figures

Figure 1	Site location and trench layout
Figure 2	Proposed trenches and geophysics data overlaid with mapping
Figure 3	Proposed trenches and geophysics data overlaid with mapping
Figure 4	Proposed trenches and geophysics data overlaid with mapping
Figure 5	Proposed trenches and geophysics data overlaid with mapping
Figure 6	Proposed trenches and geophysics data overlaid with mapping
Figure 7	Proposed trenches and geophysics data overlaid with mapping
Figure 8	Proposed trenches and geophysics data overlaid with mapping
Figure 9	Proposed trenches and geophysics data overlaid with mapping
Figure 10	Proposed trenches and geophysics data overlaid with mapping



Outline Written Scheme of Investigation – Cable Route Corridor (Trial Trenching)

1 INTRODUCTION

1.1 Project and planning background

- 1.1.1 Wessex Archaeology has been commissioned by Pegasus Group ('the consultant') on behalf of Ecotricity (Heck Fen Solar) Ltd ('the client'), to produce a written scheme of investigation (WSI) for a proposed archaeological evaluation of a 120 ha area extending south from Holland Dike on the north side of the A17 at East Heckington (PE20 3PZ) to the National Grid Bicker Fen substation (PE20 3BQ), hereafter 'the site'. The site ranges from NGR 520932 343931 (north) to 519648 339324 (south) (Fig. 1).
- 1.1.2 The site is proposed for a cable route connecting a proposed solar park and energy storage facility at Six Hundreds Farm, Heckington Fen ('the Energy Park') to the National Grid Bicker Fen substation. These elements form part of the Proposed Development Plan for the Environmental Impact Assessment (Pegasus 2022a) and the Development Consent Order Application for the Heckington Fen Solar Park.
- 1.1.3 As stated in the EIA (*ibid*):

The Development falls within the definition of a 'nationally significant infrastructure project' (NSIP) under Section 14(1)(a) and 15(2) of the Planning Act 2008 (the "Act") as the construction of a generating station with a capacity of more than 50MW, with a capacity in the region of 500MW.

- 1.1.4 The evaluation will comprise the excavation, investigation and recording of 233 trial trenches (each measuring 50 m by 2 m), equating to a 2% sample of the proposed development area.
- 1.1.5 This evaluation is part of a staged approach in determining the archaeological potential of the site, and follows other non-intrusive archaeological work, including a geophysical survey (Headland Archaeology 2022). The results of the survey, along with a heritage desk-based assessment inclusive of geological information and aerial photographic and LiDAR imagery (Pegasus Group 2022b), has guided the location of the trenches.
- 1.1.6 Although we believe that the archaeological potential of the site is sufficiently targeted by the above 233 trenches, in addition, there is a provisional contingency for up to an additional 240 trenches. Additional trenching will only be deployed if the level and the complexity of archaeology could not be resolved by the initial number of trenches. This will be done with a prior dialogue and an agreement with the consultant, the client and the archaeological advisors to the local planning authorities; the use of the contingency (i.e., the actual trenching on site) within a specific area will need to be executed as soon as determined needed as to avoid any delays in the programme.



- 1.1.7 The evaluation seeks to locate and identify the presence of any significant archaeology within the area proposed for the development, and to inform a programme of a potential next stage of archaeological works archaeological mitigation.
- 1.1.8 A detailed trench by trench rationale for the location of the trenches is presented in **Appendix 2.**
- 1.1.9 The trenches have been positioned to include:
 - anomalies interpreted as probable/potential archaeological features;
 - anomalies interpreted as possible features of non-archaeological origin;
 - a sample of areas with roddon coverage which may or may not be masking buried archaeological features;
 - a sample of areas with ridge and furrow coverage, which may or may not be masking buried archaeological features; and
 - a sample of 'blank' areas.

1.2 Scope of document

- 1.2.1 This WSI sets out the aims of the evaluation, and the methods and standards that will be employed. In format and content, it conforms to current best practice, as well as to the guidance in *Management of Research Projects in the Historic Environment* (MoRPHE, Historic England 2015a) and the Chartered Institute for Archaeologists' (CIfA) *Standard and Guidance for Archaeological Field Evaluation* (CIfA 2014a).
- 1.2.2 This document will be submitted to the client and Denise Drury, Senior Historic Environment Officer at Heritage Lincolnshire (hereafter 'HL') and Matthew Adams and Jan Allen, Historic Environment Officers at Lincolnshire County Council (hereafter 'LCC') for approval, prior to the start of the evaluation. In addition, the document will be submitted to Historic England.

1.3 Location, topography and geology

- 1.3.1 The proposed evaluation area is located within arable land west of the A17 and east of South Forty Foot Drain; between NGR 521474 343910 (north) and 519648 339324 (south) (Fig. 1).
- 1.3.2 Existing ground levels are between 1 m and 5 m above Ordnance Datum (AOD).
- 1.3.3 The bedrock geology is West Walton Formation Mudstone and Siltstone in the north of the site and Oxford Clay Formation Mudstone in the south (British Geological Survey 2022). The bedrock is overlaid by superficial tidal deposits of clay and silt.

1.4 Introduction

1.5 Previous investigations related to the proposed development

Heritage desk-based assessment (2022)

1.5.1 The historical and archaeological background was assessed in a prior desk-based assessment (Pegasus Group 2022). HER data, PAS data, historic maps, and Historic England's collection of historic aerial photographs were sourced for a 2km radius of the boundaries of the Site. The HER's collection of historic aerial photographs was consulted for the Site only. NHLE data was reviewed for a 5km radius of the Site.



1.5.2 A summary of the assessment is presented below, with relevant Monument ID numbers from the Lincolnshire Historic Environment Record (HER).

Geophysical survey (2022)

1.5.3 A geophysical survey has been carried out across the cable route. The survey concluded that the area is dominated by geological/natural anomalies associated with the former saltmarsh landscape; it is crossed by several sinuous anomalies indicative of former channels meandering across the landscape. Possible archaeological features were recorded in the northern part of the route, to the south-west of Royalty Farm, where a number of interconnecting ditch-type anomalies form a possible enclosure complex which respects the former watercourses. Cropmarks are also visible in this field on certain historic aerial photographs reviewed as part of the desk-based assessment (Pegasus Group 2022b). A number of anomalies also represent former field boundaries.

1.6 Archaeological and historical context

Prehistoric and Romano-British

- 1.6.1 In the Early Holocene, the land proposed for the site would have comprised low-lying saltmarsh crossed by tidal river channels. Marine transgression would have filled the channels with sediment, creating dry ridges of silt, or roddons. A number of these roddons were settled and used during the prehistoric and Romano-British periods.
- 1.6.2 Neolithic and Bronze Age tools and Romano-British pottery have been discovered to the east of the site, near Swineshead (HER MLI12570, MLI12574, MLI12569, MLI12590), West Low Grounds (HER MLI2573) and Holthills Farm (HER MLI22410). Finds suggest a possible saltern present at Holthills, while a Romano-British saltern has been identified at Helpringham Fen, south-west of the Bicker Fen substation.
- 1.6.3 Cropmarks of probable Iron Age and Romano-British settlement have been recorded around 750 m east of the cable route's central section at East Low Grounds (HER MLI90812), as well as at Bicker Fen (HER MLI2525, MLI90808 and MLI90811) at the south end of the route and near Donnington (HER MLI90719), 1 km south of the route.
- 1.6.4 In 2022 archaeological mitigation works for Viking Link identified undated ditches, gullies and pits, as well as a roundhouse, to the north and west of the site (Wessex Archaeology, forthcoming). It is possible that these features were remains of prehistoric and/or Romano-British settlement and agricultural activity.

Early medieval and medieval

- 1.6.5 Garwick, approximately 3.5 km west of the northern section of the site, is believed to be the location of a high-status Middle Anglo-Saxon trading centre of possible Early Anglo-Saxon or even Roman origins (HER MLI116391). A total of 269 mid-6th to mid- 8th-century coins alongside brooches, hooked tags, tweezers, and strap ends where found during metal detecting and is one of Lincolnshire's largest recorded assemblages of finds from this period.
- 1.6.6 Swineshead is mentioned in the c.AD 890 Anglo-Saxon Chronicle in relation to a charter dating from AD 675. There has been some evidence of early medieval activity recorded within the town and Heckington, Steyning (Swineshead) and Bicker were all recorded in the 1086 Domesday survey (Open Domesday 2022).



Post-medieval and modern

- 1.6.7 The Lincolnshire Fens were subject to large-scale drainage engineering schemes from the 17th century onwards. The construction of the South Forty Foot Drain, to the west of the site, was undertaken from 1635 to 1638.
- 1.6.8 The settlement of East Heckington, along the A17, was in existence by the 18th century (HER MLI87648). Buildings recorded here by the HER include the 19th-century or earlier farmsteads of Poplars Farm (MLI121995), Elm Grange (MLI121956), Home Farm (MLI121955), Rectory Farm (MLI121954), and Rakes Farm (MLI121953); two 19th-century places of worship (MLI87649, MLI97290); an early 20th-century or earlier smithy (MLI88102); and the early 20th-century house and designed landscape of Park House (MLI87654).
- 1.6.9 Historic maps show the land along which the cable route extends as drained by the late 18th century. The 1850 Tithe Map for Great Hale shows the north-western section of the cable route, between the A17 and Labour in Vain Drain, and illustrated a greater number of fields to the east of Hall Farm than exist today. The First Edition OS map showed the land proposed for the cable route comprising sub-rectangular fields. Small buildings and farmhouses are also present, dotted around the landscape.

2 AIMS AND OBJECTIVES

2.1 General aims

- 2.1.1 The general aims (or purpose) of the evaluation, in compliance with the CIfA *Standard and Guidance for Archaeological Field Evaluation* (CIfA 2014a), are to:
 - provide information about the archaeological potential of the site; and
 - inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.

2.2 General objectives

- 2.2.1 In order to achieve the above aims, the general objectives of the evaluation are to:
 - determine the presence or absence of archaeological features, deposits, structures, artefacts or ecofacts within the specified area;
 - establish, within the constraints of the evaluation, the extent, character, date, condition and quality of any surviving archaeological remains;
 - place any identified archaeological remains within a wider historical and archaeological context in order to assess their significance;
 - if required inform the design of an appropriate archaeological mitigation strategy, such as a requirement for further archaeological investigation in the form of setpiece excavation or strip, map and record, and/or archaeological monitoring during ground works at construction;
 - make available information about the archaeological resource within the site by reporting on the results of the evaluation; and
 - to produce a site archive for deposition with The Collection Museum and to provide information for accession to the museum.



2.3 Site-specific objectives

- 2.3.1 Following consideration of the archaeological potential of the site and the regional research framework Knight, Vyner & Allen, 2012: East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands (now held online) <u>https://archaeologydataservice.ac.uk/researchframeworks/eastmidlands/wiki/Main</u>), the site-specific objectives of the evaluation are to:
 - test the results of the geophysical survey;
 - test the 'blank areas' for any previously undetected archaeological remains;
 - determine the presence or absence of early prehistoric remains covered by alluvial deposits or by peat;
 - determine the depth of the alluvial sequence and examine the archaeological and palaeoenvironmental potential of alluvial deposits;
 - examine evidence for remains of medieval/post-medieval agricultural remains and assess if this has impacted on any earlier remains;
 - examine the evidence of water management and land drainage change int postmedieval and modern (1750+) period;
 - examine the artefactual and ecofactual potential of archaeological deposits, some of which may be waterlogged; and
 - assess the potential for the recovery of artefacts to assist in the development of type series within their local, regional and national context.

3 FIELDWORK METHODS

3.1 Introduction

- 3.1.1 Health and safety will override archaeological considerations in all works since, as stated in CIfA guidance, Health and Safety regulations and requirements cannot be ignored no matter how imperative the need to record archaeological information; hence Health and Safety will take priority over archaeological matters (CIfA 2014a, 11)
- 3.1.2 All works will be undertaken in accordance with the detailed methods set out within this WSI. Any significant variations to these methods will be agreed in writing with the Senior Historic Officer at HL and Historic Environment officer at LCC and the client prior to being implemented.
- 3.1.3 The evaluation was originally intended to comprise the excavation, investigation and recording of 240 trial trenches (each measuring 50 m by 2 m), equating to a 2% sample of the proposed development area. However, only 233 trenches are now proposed.
- 3.1.4 Trench 8 will not be excavated due to the presence of an agricultural building. Trenches 235–240 will be omitted due to prior disturbance and access constraints from existing cabling, and prior disturbance from the Triton Knoll laydown and cable area, which will be used for a laydown area for this project (trenches 238–240).

3.2 Setting out of the trenches

3.2.1 All trenches will be set out using a Global Navigation Satellite System (GNSS) in the approximate positions shown in Figures 2–10. Minor adjustments to the layout may be required to take account of constraints such as vegetation or located services, and to allow



for machine manoeuvring. The trench locations will be tied into the Ordnance Survey (OS) National Grid and Ordnance Datum (OD) (Newlyn), as defined by OSTN15 and OSGM15.

3.3 Service location and other constraints

- 3.3.1 The client will provide information regarding the presence of any below/above-ground services, and any ecological, environmental or other constraints.
- 3.3.2 Before excavation begins, the evaluation area will be walked over and visually inspected to identify, where possible, the location of any below/above-ground services. All trial trench locations will be scanned before and during excavation with a Cable Avoidance Tool (CAT) to verify the absence of any live underground services.

3.4 Excavation methods

- 3.4.1 The trenches will be excavated using a 360° tracked excavator equipped with a toothless bucket. Machine excavation will be under the constant supervision and instruction of the monitoring archaeologist. Machine excavation will proceed in level spits of approximately 50–200 mm until either the archaeological horizon or the natural geology is exposed.
- 3.4.2 Particular attention will be paid to achieving a clean and well-defined horizon with the machine. The surface achieved through machine excavation will be inspected for archaeological remains.
- 3.4.3 The arisings from the archaeological works will be store adjacent to the trenches, directly onto the ground with no artificial protection, within a safe distance and separated according to the material (topsoil separated from subsoil). It is not anticipated that entire trenches will require hand cleaning.
- 3.4.4 A sample of the archaeological features and deposits identified will be hand-excavated, sufficient to address the aims of the evaluation.
 - all relationships between features and deposits will be excavated and recorded;
 - all discrete features will be half sectioned. Those thought to form part of recognisable structures, contain deposits of particular value or significant artefact or environmental assemblages will be fully excavated;
 - all excavated ditch sections will be one metre wide, unless conditions dictate otherwise;
- 3.4.5 Spoil derived from machine stripping and hand-excavation will be visually scanned for the purposes of finds retrieval, and where appropriate will also be metal-detected by trained archaeologists. Artefacts and other finds will be collected and bagged by context.
- 3.4.6 If an exceptional number and/or complexity of archaeological deposits are identified, sample excavation will aim to be minimally intrusive, but sufficient to resolve the principal aims of the evaluation, to a level agreed with the Senior Historic Officer at HL and Historic Environment officer at LCC and the client.
- 3.4.7 If human remains are uncovered, the specific methods outlined below (section 3.9.2) will be followed.
- 3.4.8 If trenches where natural deposits are not encountered due to depth, or where the interpretation of natural deposits is in doubt, sondage excavations down to natural deposits, will be machine-excavated at each end of the trench and the full sequence of deposits thus



revealed and recorded by photographing the section only. At no circumstances will the sondage be entered by an archaeologist. The sondage will be backfilled immediately upon taking a photograph.

- 3.4.9 Naturally derived soil horizons will also be investigated, especially where these are organically-preserved and laid down within archaeological periods. Particular emphasis will be placed upon the recording and sampling of peat, palaeochannels and alluvial formations, so as to gain an understanding of the natural environment before, during and after any human occupation of adjacent or inter-stratified landscapes.
- 3.4.10 Where complex archaeological stratification is encountered, deposits will be left *in situ* and alternative measures taken to assess their depth.
- 3.4.11 Where modern features are seen to truncate the archaeological stratification, these may be removed, where practicable, in a manner that does not damage the surrounding deposits to enable the depth of stratification to be assessed.

3.5 Recording

- 3.5.1 All exposed archaeological deposits and features will be recorded using Wessex Archaeology's pro forma recording system.
- 3.5.2 A complete record of excavated archaeological features and deposits will be made. This will include plans and sections, drawn to appropriate scales (generally 1:20 or 1:50 for plans, 1:10 for sections) and tied to the OS National Grid.
- 3.5.3 A full photographic record will be made using digital cameras equipped with an image sensor of not less than 16 megapixels. This will record both the detail and the general context of the principal features and the site. Digital images will be subject to managed quality control and curation processes, which will embed appropriate metadata within the image and ensure long term accessibility of the image set. Photographs will also be taken of all areas, including access routes, to provide a record of conditions prior to and on completion of the evaluation.

3.6 Survey

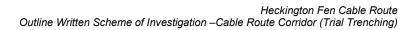
3.6.1 The real time kinematic (RTK) survey of all trenches and features will be carried out using a Leica GNSS connected to Leica's SmartNet service. All survey data will be recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSTN15 and OSGM15, with a three-dimensional accuracy of at least 50 mm.

3.7 Monitoring

3.7.1 The client will inform Senior Historic Officer at HL and Historic Environment officer at LCC of the start of the evaluation and its progress. Reasonable access will be arranged to make site visits to inspect and monitor the progress of the evaluation. Any variations to the WSI, if required to better address the project aims, will be agreed in advance with the client and the Senior Historic Officer at HL and Historic Environment officer at LCC.

3.8 Reinstatement

3.8.1 Trenches completed to the satisfaction of the client and the Senior Historic Officer at HL and Historic Environment officer at LCC will be backfilled using excavated materials in the order in which they were excavated and left level on completion. No other reinstatement or surface treatment will be undertaken.



3.9 Finds

General

3.9.1 All archaeological finds will be retained, although those of clearly very recent origin with negligible potential to provide information relevant to the project aims and objectives may be recorded on site and not retained. Where appropriate, soil samples may be taken and sieved to aid in finds recovery. Any finds requiring conservation or specific storage conditions will be dealt with immediately in line with *First Aid for Finds* (Watkinson and Neal 1998).

Human remains

- 3.9.2 In the event of discovery of any human remains (articulated or disarticulated, cremated or unburnt), all excavation of the deposit(s) will cease pending Wessex Archaeology obtaining a Ministry of Justice licence (this includes cases where remains are to be left *in situ*).
- 3.9.3 Initially the remains will be left *in situ*, covered and protected, pending discussions between the client, Wessex Archaeology's osteoarchaeologist and the Senior Historic Officer at HL and Historic Environment officer at LCC regarding the need for excavation/removal or sampling. Where this is deemed appropriate, the human remains will be fully recorded, excavated and removed from site in compliance with the Ministry of Justice licence.
- 3.9.4 Excavation and post-excavation processing of human remains will be in accordance with Wessex Archaeology protocols and in-line with current guidance documents (e.g., McKinley 2013) and the standards set out in CIfA Technical Paper 13 (McKinley and Roberts 2013). Appropriate specialist guidance/site visits will be undertaken if required.
- 3.9.5 The final deposition of human remains subsequent to the appropriate level of osteological analysis and other specialist sampling/examinations will follow the requirements set out in the Ministry of Justice licence.

Treasure

3.9.6 Wessex Archaeology will immediately notify the client and the Senior Historic Officer at HL and Historic Environment officer at LCC on discovery of any material covered, or potentially covered, by the *Treasure Act 1996*. All information required by the Treasure Act (i.e., finder, location, material, date, associated items etc.) will be reported to the Coroner within 14 days.

3.10 Environmental sampling

- 3.10.1 All sampling will be undertaken following Wessex Archaeology's in-house guidance, which adheres to the principles outlined in Historic England's guidance (English Heritage 2011 and Historic England 2015b).
- 3.10.2 Bulk environmental soil samples, for the recovery of plant macrofossils, wood charcoal, small animal bones and other small artefacts, will be taken as appropriate from well-sealed and dateable contexts. In general, features directly associated with particular activities (e.g., pits, latrines, cesspits, hearths, ovens, kilns, and corn driers) should be prioritised for sampling over features, such as ditches or postholes, which are likely to contain reworked and residual material.
- 3.10.3 If waterlogged or mineralised deposits are encountered, an environmental sampling strategy will be devised and agreed with the Senior Historic Officer at HL and Historic Environment officer at LCC as appropriate. Specialist guidance will be provided by a



member of Wessex Archaeology's geoarchaeological and environmental team, with site visits undertaken if required.

- 3.10.4 Any samples will be of an appropriate size typically 40 litres for the recovery of environmental evidence from dry contexts, and 10 litres from waterlogged deposits.
- 3.10.5 Following specialist advice, other sampling methods such as monolith, Kubiena or contiguous small bulk (column) samples may be employed to enable investigation of deposits with regard to microfossils (e.g., pollen, diatoms) and macrofossils (e.g., molluscs, insects), soil micromorphological or soil chemical analyses.

4 POST-EXCAVATION METHODS AND REPORTING

4.1 Stratigraphic evidence

- 4.1.1 All written and drawn records from the evaluation will be collated, checked for consistency and stratigraphic relationships. Key data will be transcribed into a database, which can be updated during any future analyses. The preliminary phasing of archaeological features and deposits will be undertaken using stratigraphic relationships and the spot dating from finds, particularly pottery.
- 4.1.2 A written description will be made of all archaeologically significant features and deposits that were exposed and excavated, ordered either by trench or by period as appropriate. Detail of all contexts will be provided in trench tables in the appendix of the report.

4.2 Finds evidence

- 4.2.1 All retained finds will, as a minimum, be washed, weighed, counted and identified. They will then be recorded to a level appropriate to the aims and objectives of the evaluation. Recording and reporting will conform to the Type 2 (Appraisal) level according to CIfA's *Toolkit for Specialist Reporting*, to include appropriate quantification, characterisation and assessment of significance and potential. The report will include a table of finds by feature/context or trench.
- 4.2.2 Metalwork from stratified contexts will be X-rayed and, along with other fragile and delicate materials, stored in a stable environment. The X-raying of objects and other conservation needs will be undertaken by Wessex Archaeology in-house conservation staff, or by another approved conservation centre.
- 4.2.3 Finds will be suitably bagged and boxed in accordance with the guidance given by the relevant museum and generally in accordance with the standards of the ClfA (2014b).

4.3 Environmental evidence

- 4.3.1 Bulk environmental soil samples will be processed by standard flotation methods. The residues will be fractionated into 5.6/4 mm and 1/0.5 mm and dried if necessary. The coarse residue fraction (>5.6/4 mm), and the fine fraction when appropriate, will be sorted and discarded, with any finds recovered given to the appropriate specialist. The flot will be retained on a 0.25 mm mesh and scanned to assess the range of environmental remains present and their preservation. Unsorted fine residues will be retained until after any analyses and discarded following final reporting (in accordance with the Selection policy, below).
- 4.3.2 In the case of samples from cremation-related deposits the flots will be retained on a 0.25 mm mesh, with residues fractionated into 4 mm, 2 mm and 1 mm. In the case of



samples from inhumation burial deposits, the sample will be wet sieved through 9.5 mm and 1 mm mesh sizes. The coarse fractions (9.5 mm) will be sorted with any finds recovered given to the appropriate specialist together with the finer residues.

- 4.3.3 Any waterlogged samples will be processed by standard waterlogged flotation methods.
- 4.3.4 Recording and reporting will conform to the Type 2 (Appraisal) level according to ClfA's *Toolkit for Specialist Reporting*, to include appropriate quantification, characterisation and assessment of significance and potential.

4.4 Reporting

General

- 4.4.1 Following completion of the fieldwork and the evaluation of the stratigraphic, artefactual and ecofactual evidence, a draft report will be submitted for approval to the client and the Senior Historic Officer at HL and Historic Environment officer at LCC for comment. Once approved, a final version will be submitted.
- 4.4.2 The report will include the following elements:
 - Non-technical summary;
 - Project background;
 - Archaeological and historical context;
 - Aims and objectives;
 - Methods;
 - Results stratigraphic, finds and environmental;
 - Conclusions in relation to the project aims and objectives, and discussion in relation to the wider local, regional or other archaeological contexts and research frameworks etc;
 - Archive preparation and deposition arrangements;
 - Appendices, including trench summary tables;
 - Illustrations; and
 - References.
- 4.4.3 A copy of the final report will be deposited with the HER, along with surveyed spatial digital data (.dxf or shapefile format) relating to evaluation.

Publication

4.4.4 If no further mitigation works are undertaken, a short report on the results of the evaluation will be prepared for publication in a suitable journal, if considered appropriate and agreed with the client and the Senior Historic Officer at HL and Historic Environment officer at LCC.

OASIS

4.4.5 An OASIS (online access to the index of archaeological investigation) record (http://oasis.ac.uk) will be created, with key fields completed, and a .pdf version of the final report submitted. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service (ADS) ArchSearch catalogue.



5 ARCHIVE STORAGE AND CURATION

5.1 Museum

5.1.1 It is recommended that the project archive resulting from the evaluation be deposited with The Collection. Provision has been made for the cost of long-term storage in the post-fieldwork costs. The museum has received notification of the project prior to fieldwork commencing, and an accession number has been obtained (LCNCC:2022.104).

5.2 Transfer of title

5.2.1 On completion of the evaluation (or extended fieldwork programme), every effort will be made to persuade the legal owner of any finds recovered (i.e., the landowner), with the exception of human remains and any objects covered by the *Treasure Act 1996*, to transfer their ownership to the museum in a written agreement.

5.3 **Preparation of archive**

Physical archive

5.3.1 The complete physical archive, which may include paper records, graphics, artefacts, and ecofacts, will be prepared following the standard conditions for the acceptance of excavated archaeological material by The Collection, and in general following nationally recommended guidelines (Brown 2011; CIfA 2014c; SMA 1995). The archive will usually be deposited within one year of the completion of the project, with the agreement of the client.

Digital archive

5.3.2 The digital archive generated by the project will be deposited with a Trusted Digital Repository, in this instance the Archaeology Data Service (ADS), to ensure its long-term curation. Digital data will be prepared following ADS guidelines (ADS 2013 and online guidance) and accompanied by metadata.

5.4 Selection strategy

- 5.4.1 It is widely accepted that not all the records and materials (artefacts and ecofacts) collected or created during the course of an archaeological project require preservation in perpetuity. These records and materials will be subject to selection in order to establish what will be retained for long-term curation, with the aim of ensuring that all elements selected to be retained are appropriate to establish the significance of the project and support future research, outreach, engagement, display and learning activities, i.e., the retained archive should fulfil the requirements of future researchers and the receiving Museum.
- 5.4.2 The selection strategy, which details the project-specific selection process, is underpinned by national guidelines on selection and retention (Brown 2011, section 4) and generic selection policies (SMA 1993; Wessex Archaeology's internal selection policy) and follows ClfA's *Toolkit for Selecting Archaeological Archives*. It should be agreed by all stakeholders (Wessex Archaeology's internal specialists, external specialists, local authority, museum) and fully documented in the project archive.
- 5.4.3 In this instance, given that the level of finds recovery is expected to be relatively low, decisions on selection will be deferred until after the fieldwork stage, and no detailed strategy is presented here. Any material not selected for retention may be used for teaching or reference collections by the museum, or by Wessex Archaeology.



5.5 Security copy

5.5.1 In line with current best practice (e.g., Brown 2011), on completion of the project a security copy of the written records will be prepared in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

6 OUTREACH AND SOCIAL MEDIA

6.1.1 In line with its charitable aims, Wessex Archaeology will, where possible and in consultation with the client, seek opportunities to disseminate the results of the evaluation and engage with the local community through social media, press releases, open days and volunteer involvement, while taking into account issues such as health and safety, confidentiality and vandalism.

7 COPYRIGHT

7.1 Archive and report copyright

- 7.1.1 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act 1988* with all rights reserved. The client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations 2003*.
- 7.1.2 Information relating to the project will be deposited with the Historic Environment Record (HER), where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research, or development control within the planning process.

7.2 Third party data copyright

7.2.1 This document, the evaluation report and the project archive may contain material that is non-Wessex Archaeology copyright (e.g., Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of the *Copyright, Designs and Patents Act 1988* with regard to multiple copying and electronic dissemination of such material.

8 WESSEX ARCHAEOLOGY PROCEDURES

8.1 External quality standards

8.1.1 Wessex Archaeology is registered as an archaeological organisation with the Chartered Institute for Archaeologists (CIfA) and fully endorses its *Code of conduct* (CIfA 2014d) and *Regulations for professional conduct* (CIfA 2014e). All staff directly employed or subcontracted by Wessex Archaeology will be of a standard approved by Wessex Archaeology, and archaeological staff will be employed in line with the CIfA codes of practice and will normally be members of the CIfA.



8.2 Personnel

- 8.2.1 The fieldwork will be directed and supervised by an experienced archaeologist from Wessex Archaeology's core staff. The overall responsibility for the conduct and management of the project will be held by one of Wessex Archaeology's project managers, who will visit the fieldwork as appropriate to monitor progress and to ensure that the scope of works is adhered to. Where required, monitoring visits may also be undertaken by Wessex Archaeology's Health and Safety manager. The appointed project manager will be involved in all phases of the investigation through to its completion.
- 8.2.2 The analysis of any finds and environmental data will be undertaken by Wessex Archaeology core staff or external specialists, using Wessex Archaeology's standard methods, under the supervision of the departmental managers and the overall direction of the project manager. A complete list of specialists is provided in Appendix 1.
- 8.2.3 The following key staff are proposed:
 - Project Manager John Winfer
 - Fieldwork Director Hannah Dabill
- 8.2.4 Wessex Archaeology reserves the right, where necessary due to unforeseen circumstances, to replace nominated personnel with alternative members of staff of comparable expertise and experience.

8.3 Internal quality standards

- 8.3.1 Wessex Archaeology is an ISO 9001 accredited organisation (certificate number FS 606559), confirming the operation of a Quality Management System which complies with the requirements of ISO 9001:2015 covering professional archaeological and heritage advice and services. The award of the ISO 9001 certificate, independently audited by the British Standards Institution (BSI), demonstrates Wessex Archaeology's commitment to providing quality heritage services to our clients.
- 8.3.2 Wessex Archaeology assigns responsibility to individual managers for the successful completion of all aspects of a project including reporting. This includes monitoring progress and quality; controlling the budget from inception to completion; and all aspects of health and safety for the project. At all stages, the project manager will carefully assess and monitor performance of staff and adherence to objectives, timetables and budgets, while the manager's own performance is monitored by the team leader or regional director. The technical managers in the Graphics, Research, GeoServices and IT sections provide additional assistance and advice.
- 8.3.3 All staff are responsible for following Wessex Archaeology's quality standards but the overall adherence to and setting of these standards is the responsibility of the senior management team who, in consultation with the team leaders/regional directors, also ensure projects are adequately programmed and resourced within Wessex Archaeology's portfolio of project commitments.

8.4 Health and safety

8.4.1 All works will be undertaken in accordance with the *Health and Safety at Work Act 1974*; the *Management of Health and Safety at Work Regulations 1999* and all other applicable health and safety legislation.

- 8.4.2 Wessex Archaeology is an ISO 45001 accredited organisation (certificate number OHS 744383), confirming the operation of an Occupational Health and Safety Management System that complies with the requirements of ISO 45001:2018. The award of the ISO 45001 certificate, independently audited by the British Standards Institution (BSI), demonstrates Wessex Archaeology's commitment to delivering effective risk management across all its activities.
- 8.4.3 Wessex Archaeology will, for all projects, produce one or more task and site-specific risk assessments and method statements (RAMS), which will ensure our staff can work safely on the site. A copy of the RAMS and our Health and Safety Policy can be provided to the client. All staff on our sites will be made fully familiar with the RAMS before work commences.
- 8.4.4 We aim to work collaboratively on health and safety with clients and, where separately appointed, with principal contractors. We expect clients to provide in good time all the necessary risk information about a site that may affect the archaeological work, such as locations of utilities or any known ground contamination. We will comply with the project specific Personal Protective Equipment (PPE) requirements, and any other specific additional requirements of the Principal Contractor.
- 8.4.5 All fieldwork staff are certified through the Construction Skills Certification Scheme (CSCS) and have undergone UKATA Asbestos Awareness Training. Staff who carry out specific tasks are suitably trained and competent to do so through training accredited by the Construction Industry Training Board (CITB), Institution of Occupational Safety & Health (IOSH) and the National Plant Operators Recognitions Scheme (NPORS).

8.5 Insurance

8.5.1 Wessex Archaeology holds Employers Liability (£15,000,000), Public Liability (£15,000,000) and Professional Indemnity (£10,000,000) policies.



REFERENCES

- ADS 2013. Caring for Digital Data in Archaeology: a guide to good practice. Archaeology Data Service & Digital Antiquity Guides to Good Practice.
- British Geological Survey 2022. *BGS Geology Viewer* https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/ (accessed December 2022).
- Brown, D. H. 2011. Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation (revised edition). Archaeological Archives Forum.
- Chartered Institute for Archaeologists [CIfA] 2014a. *Standard and Guidance for Archaeological Field Evaluation* (revised edition October 2020). Reading: CIfA.
- CIfA 2014b. Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (revised edition October 2020). Reading: CIfA.
- ClfA 2014c. Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (revised edition October 2020). Reading: ClfA.
- ClfA 2014d. Code of Conduct. Reading: ClfA.
- CIfA 2014e. Regulations for Professional Conduct. Reading: CIfA.
- CIfA 2022a. *Toolkit for Specialist Reporting* https://www.archaeologists.net/reporting-toolkit (accessed December 2022).
- CIfA 2022b. *Toolkit for Selecting Archaeological Archives* https://www.archaeologists.net/selection-toolkit (accessed December 2022).
- English Heritage 2011. Environmental Archaeology. A Guide to the Theory, Practice of Methods, from Sampling and Recovery to Post-excavation (2nd edition). Portsmouth: English Heritage.
- East Midlands Historic Environment Research Framework <u>Research Agenda East Midlands</u> <u>Historic Environment Research Framework (researchframeworks.org)</u> (accessed December 2022)
- Headland Archaeology. 2022. *Heckington Fen Solar Park, Cable Corridors, Lincolnshire Geophysical Survey Report.* Unpublished client report.
- Historic England 2015a. *Management of Research Projects in the Historic Environment: the MoRPHE project managers' guide*. Swindon: Historic England.
- Historic England 2015b. *Geoarchaeology. Using Earth Sciences to Understand the Archaeological Record*. Swindon: Historic England.
- McKinley, J. I. 2013. 'Cremation: excavation, analysis and interpretation of material from cremation-related contexts', in Tarlow, S. and Nilsson Stutz, L. (eds), *The Oxford Handbook of the Archaeology of Death and Burial*, 147 71. Oxford: Oxford University Press.
- McKinley, J. I. and Roberts, C. 1993. *Excavation and Post-excavation Treatment of Cremated and Inhumed Human Remains*. Reading: CIfA Technical Paper 13.

Pegasus Group, 2022a. Environmental Impact Assessment Scoping Report.

Pegasus Group, 2022b. Heritage Desk-Based Assessment: Heckington Fen Solar Park.

- SMA 1993. *Selection, Retention and Dispersal of Archaeological Collections*. London: Society of Museum Archaeologists.
- SMA 1995. *Towards an Accessible Archaeological Archive*. London: Society of Museum Archaeologists.
- Watkinson, D. and Neal, V. 1998. *First Aid for Finds: practical guide for archaeologists*. United Kingdom Institute for Conservation of Historic & Artistic Works.

APPENDICES

Name	Qualifications	Specialism
Sander Aerts	BA, MSc	Archaeoentomological remains, animal bone, marine shell and archaeobotanical remains (carbonised)
Phil Andrews	BSc; FSA; MCIfA	Slag and metal working debris
Ceridwen Boston	BSocSc; MA; MSc; DPhil	Osteoarchaeology; funerary archaeology
Elina Brook	BA; MA; PCIfA	Later prehistoric and Romano-British pottery, and small finds
Alex Brown	BA; MSc; PhD	Geoarchaeology, palynology
Kirsten Egging Dinwiddy	BA; MA; MCIfA	Human remains (inhumations)
Erica Gittins	BA; MA; PhD	Prehistoric flint
Phil Harding	PhD	Prehistoric flint, particularly Palaeolithic flint
Lorrain Higbee	BSc; MSc; MCIfA	Animal bone
Matt Leivers	BA; PhD; ACIfA	Prehistoric pottery and flint
Inés López-Dóriga	BA; MA; PhD	Archaeobotanical remains
Erica Macey-Bracken	BA; ACIfA	Post-medieval finds, ceramic building material and worked wood
Katie Marsden	BSc	Pottery from prehistoric to post-medieval/modern. Metalwork of all periods, including coins. Small and bulk finds including fired clay, ceramic building material, worked bone
Jacqueline McKinley	BTech; FSA	Human remains (inhumations and cremations)
Lorraine Mepham	BA; MCIfA	Pottery and other ceramic finds of all dates, concentrating on later prehistoric and post-Roman; ceramic building material; clay tobacco pipe; glass of Saxon or later date; small finds
Nicki Mulhall		Geoarchaeology and archaeobotanical remains
Richard Payne	BSC; MSc; MPhil	Geoarchaeology
Emma Robertson	BA; MSc	Human remains (inhumations)
Megan Scantlebury	BA, MSc	Archaeobotanical remains
Rachael Seager Smith	BA; MCIfA	Pottery with particular emphasis on Roman ceramics; and metalwork, fired clay, ceramic building material, stone, worked bone, shale, glass, and wall plaster
Andrew Shaw	BA; MA; PhD	Palaeolithic lithic artefacts and Pleistocene geoarchaeology
Amy Thorp	BA; MA	Pottery with emphasis on Roman ceramics, small finds
Ed Treasure	BSc; MRes; PhD	Archaeobotanical remains, including plant remains and charcoal/wood

Appendix 1 Finds and environmental specialists



Appendix 2 Trial Trench Rationale

Shaded entries are trenches completed as of October 2023

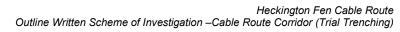
Trench		Field	Figure	
No.	Reason for Trial Trench Location	No.	No.	Dimensions
1	Targeting geophysical anomaly (geology/linear trend + ferrous spike)	F1	2	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F1	2	
2	agriculture/drainage/linear trend)			50 m x 2 m
3	Targeting geophysical anomaly (agriculture/drainage/linear trend)	F1	2	50 m x 2 m
4	Targeting geophysical anomaly (former field boundary/linear trend)	F1	2	50 m x 2 m
5	Targeting geophysical anomaly (geology/linear trend + former field boundary/linear trend)	F1	2	50 m x 2 m
6	Targeting 'blank' area	F1	2	50 m x 2 m
7	Targeting geophysical anomaly (geology/discrete feature)	F1	2	50 m x 2 m
9	Targeting area without geophysics	F1	2	50 m x 2 m
10	Targeting geophysical anomaly (geology/linear trend)	F1	2	50 m x 2 m
11	Targeting geophysical anomaly (geology/linear trend)	F1	2	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend,	F1	2	
12	geology/discrete feature + agriculture/drainage/linear trend)			50 m x 2 m
13	Targeting 'blank' area	F1	2	50 m x 2 m
14	Targeting geophysical anomaly (geology/discrete feature)	F1	2	50 m x 2 m
15	Targeting geophysical anomaly (geology/linear trend)	F1	2	50 m x 2 m
16	Targeting ferrous disturbance	F1	2	50 m x 2 m
17	Targeting area without geophysics	F2	2	50 m x 2 m
18	Targeting area without geophysics	F2	2	50 m x 2 m
19	Targeting area without geophysics	F2	2	50 m x 2 m
20	Targeting area without geophysics	F2	2	50 m x 2 m
21	Targeting area without geophysics	F2	2	50 m x 2 m
22	Targeting area without geophysics	F2	2	50 m x 2 m
23	Targeting area without geophysics	F2	2	50 m x 2 m
24	Targeting area without geophysics	F2	2	50 m x 2 m
25	Targeting area without geophysics	F2	2	50 m x 2 m
26	Targeting area without geophysics	F2	2	50 m x 2 m
27	Targeting area without geophysics	F2	2	50 m x 2 m
28	Targeting area without geophysics	F2	2	50 m x 2 m
29	Targeting area without geophysics	F2	2	50 m x 2 m
30	Targeting area without geophysics	F2	2	50 m x 2 m
31	Targeting area without geophysics	F2	2	50 m x 2 m
32	Targeting area without geophysics	F2	2	50 m x 2 m
33	Targeting area without geophysics	F2	2	50 m x 2 m
34	Targeting area without geophysics	F3	2	50 m x 2 m
35	Targeting geophysical anomaly (geology/discrete feature)	F3	2	50 m x 2 m
36	Targeting geophysical anomaly (geology/linear trend, roddon tributary + agriculture/drainage/linear trend)	F3	2	50 m x 2 m
37	Targeting 'blank' area	F3	2	50 m x 2 m



Trench		Field	Figure	
No.	Reason for Trial Trench Location	No.	No.	Dimensions
	Targeting geophysical anomaly (geology/discrete feature +	F3	2	
38	agriculture/drainage/linear trend)			50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F3	2	
39	geology/discrete feature)			50 m x 2 m
	Targeting geophysical anomaly (geology/discrete feature +	F3	2	
40	agriculture/drainage/linear trend)			50 m x 2 m
41	Targeting geophysical anomaly (geology/linear trend + roddon	F3	2	50 m v 2 m
41	tributary)	Γ4	3	50 m x 2 m
42	Targeting geophysical anomaly (geology/linear trend +	F4	3	50 m x 2 m
42	geology/discrete feature)	F4	3	50 m x 2 m
	Targeting 'blank' area	F4	3	50 m x 2 m
44	Targeting ferrous spike Targeting geophysical anomaly (roddon tributary +	F4	3	50 m x 2 m
45	agriculture/drainage/linear trend)	Г4	5	50 m x 2 m
46	Targeting geophysical anomaly (geology/linear trend)	F4	3	50 m x 2 m
40	Targeting geophysical anomaly (geology) inteal trendy	F4	3	50 m x 2 m
47	agriculture/drainage/linear trend + ferrous spike)	1.4	5	50 m x 2 m
48	Targeting geophysical anomaly (roddon tributary)	F4	3	50 m x 2 m
	Targeting geophysical anomaly (roddon tributary +	F4	3	50 m x 2 m
49	agriculture/drainage/linear trend)		-	50 m x 2 m
50	Targeting geophysical anomaly (geology/linear trend)	F4	3	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F4	3	
51	geology/discrete feature)			50 m x 2 m
52	Targeting geophysical anomaly (agriculture/drainage/linear trend)	F4	3	50 m x 2 m
53	Targeting geophysical anomaly (agriculture/drainage/linear trend)	F4	3	50 m x 2 m
54	Targeting 'blank' area	F4	3	50 m x 2 m
55	Targeting 'blank' area	F4	3	50 m x 2 m
56	Targeting geophysical anomaly (agriculture/drainage/linear trend)	F4	3	50 m x 2 m
57	Targeting geophysical anomaly (agriculture/drainage/linear trend)	F4	3	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend,	F4	3	
58	<pre>geology/discrete feature + agriculture/drainage/linear trend)</pre>			50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F4	3	
59	geology/discrete feature)			50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F4	3	
60	geology/discrete feature)			50 m x 2 m
61	Targeting geophysical anomaly (agriculture/drainage/linear trend)	F5	3	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F5	3	
62	agriculture/drainage/linear trend)			50 m x 2 m
~~~	Targeting geophysical anomaly (geology/linear trend +	F5	3	F0
63	geology/discrete feature)		2	50 m x 2 m
64	Targeting 'blank' area	F5	3	50 m x 2 m
65	Targeting geophysical anomaly (geology/linear trend)	F5	3	50 m x 2 m
66	Targeting geophysical anomaly (geology/linear trend +	F5	3	50 m x 2 m
66	geology/discrete feature)			50 m x 2 m



Trench		Field	Figure	
No.	Reason for Trial Trench Location	No.	No.	Dimensions
	Targeting geophysical anomaly (agriculture/drainage/linear trend +	F5	3	
67	ferrous spike)			50 m x 2 m
68	Targeting geophysical anomaly (geology/linear trend)	F5	3	50 m x 2 m
69	Targeting geophysical anomaly (geology/linear trend)	F5	3	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F5	3	
70	agriculture/drainage/linear trend)	_		50 m x 2 m
71	Targeting 'blank' area	F5	3	50 m x 2 m
72	Targeting geophysical anomaly (geology/linear trend)	F6	4	50 m x 2 m
73	Targeting geophysical anomaly (geology/linear trend + former field boundary)	F6	4	50 m x 2 m
		F6	4	50 m x 2 m
74	Targeting geophysical anomaly (geology/linear trend)	F6	4	-
75	Targeting 'blank' area	F6	4	50 m x 2 m
76	Targeting geophysical anomaly (geology/linear trend)	F6	4	50 m x 2 m
77	Targeting geophysical anomaly (geology/linear trend)			50 m x 2 m
78	Targeting geophysical anomaly (geology/linear trend)	F6 F6	4	50 m x 2 m
79	Targeting geophysical anomaly (geology/linear trend + agriculture/drainage/linear trend)	FO	4	50 m x 2 m
80	Targeting geophysical anomaly (geology/linear trend + ferrous spike)	F6	4	50 m x 2 m
80		F6	4	50 m x 2 m
	Targeting ferrous spike	F6	4	
82	Targeting 'blank' area Targeting geophysical anomaly (agriculture/drainage/linear trend +	F6	4	50 m x 2 m
83	ferrous spike)	FU	4	50 m x 2 m
84	Targeting ferrous spike	F6	4	50 m x 2 m
85	Targeting 'blank' area	F6	4	50 m x 2 m
86	Targeting blank area	F6	4	50 m x 2 m
87	Targeting geophysical anomaly (geology/linear trend)	F6	4	50 m x 2 m
88	Targeting geophysical anomaly (geology/linear trend + ferrous spike)	F6	4	50 m x 2 m
89	Targeting geophysical anomaly (geology/linear trend)	F6	4	50 m x 2 m
90	Targeting geophysical anomaly (geology/linear trend)	F6	4	50 m x 2 m
91	Targeting geophysical anomaly (geology/linear trend)	F6	4	50 m x 2 m
92	Targeting geophysical anomaly (geology/linear trend)	F6	4	50 m x 2 m
JΖ	Targeting geophysical anomaly (geology/linear trend)	F6	4	JU 111 X Z 111
93	tributary)		'	50 m x 2 m
94	Targeting geophysical anomaly (geology/linear trend)	F6	4	50 m x 2 m
95	Targeting geophysical anomaly (geology/linear trend + ferrous spike)	F6	4	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend, roddon	F6	4	
96	tributary + ferrous spike)			50 m x 2 m
	Targeting geophysical anomaly (agriculture/drainage/linear trend +	F7	5	
97	ferrous spike)		_	50 m x 2 m
00	Targeting geophysical anomaly (geology/linear trend + roddon	F7	5	50 m 2 i
98	tributary)	57	-	50 m x 2 m
00	Targeting geophysical anomaly (agriculture/drainage/linear trend +	F7	5	50 m y 2 m
99	ferrous spike) Targeting geophysical anomaly (roddon tributary +	F7	5	50 m x 2 m
100	agriculture/drainage/linear trend)		5	50 m x 2 m



Trench		Field	Figure	
No.	Reason for Trial Trench Location	No.	No.	Dimensions
101	Targeting geophysical anomaly (agriculture/drainage/linear trend)	F7	5	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F7	5	
102	agriculture/drainage/linear trend)			50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F7	5	
103	agriculture/drainage/linear trend)			50 m x 2 m
104	Targeting 'blank' area	F7	5	50 m x 2 m
105	Targeting geophysical anomaly (geology/linear trend + agriculture/drainage/linear trend)	F7	5	50 m x 2 m
106	Targeting geophysical anomaly (agriculture/drainage/linear trend)	F7	5	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F7	5	
107	agriculture/drainage/linear trend)			50 m x 2 m
108	Targeting 'blank' area	F7	5	50 m x 2 m
109	Targeting geophysical anomaly (geology/linear trend)	F7	5	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F7	5	
110	agriculture/drainage/linear trend)			50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F7	5	
111	agriculture/drainage/linear trend)		-	50 m x 2 m
112	Targeting geophysical anomaly (agriculture/drainage/linear trend)	F7	5	50 m x 2 m
110	Targeting geophysical anomaly (geology/linear trend,	F7	5	50
113	geology/discrete feature + agriculture/drainage/linear trend)	F7	5	50 m x 2 m
114	Targeting 'blank' area			50 m x 2 m
115	Targeting 'blank' area	F7	5	50 m x 2 m
116	Targeting geophysical anomaly (roddon tributary + agriculture/drainage/linear trend)	F7	5	50 m x 2 m
	Targeting geophysical anomaly (roddon tributary +	F7	5	
117	agriculture/drainage/linear trend)			50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F7	5	
118	agriculture/drainage/linear trend)			50 m x 2 m
	Targeting geophysical anomaly (roddon tributary +	F7	5	50 0
119	agriculture/drainage/linear trend)	67		50 m x 2 m
120	Targeting geophysical anomaly (geology/linear trend, roddon tributary + agriculture/drainage/linear trend)	F7	5	50 m x 2 m
120	Targeting geophysical anomaly (geology/linear trend, roddon	F8	5	50 111 × 2 111
121	tributary + linear feature possibly archaeology)	го	5	50 m x 2 m
121	Targeting geophysical anomaly (geology/linear trend + linear feature	F8	5	50 11 × 2 11
122	possibly archaeology)			50 m x 2 m
123	Targeting geophysical anomaly (linear feature possibly archaeology)	F8	5	50 m x 2 m
	Targeting geophysical anomaly (linear feature possibly archaeology +	F8	5	
124	roddon tributary)			50 m x 2 m
	Targeting geophysical anomaly (linear feature possibly archaeology +	F8	5	
125	roddon tributary)			50 m x 2 m
	Targeting geophysical anomaly (agriculture/drainage/linear trend +	F8	5	
126	former field boundary)			50 m x 2 m
	Targeting geophysical anomaly (linear feature possibly archaeology +	F8	5	
127	roddon tributary)			50 m x 2 m

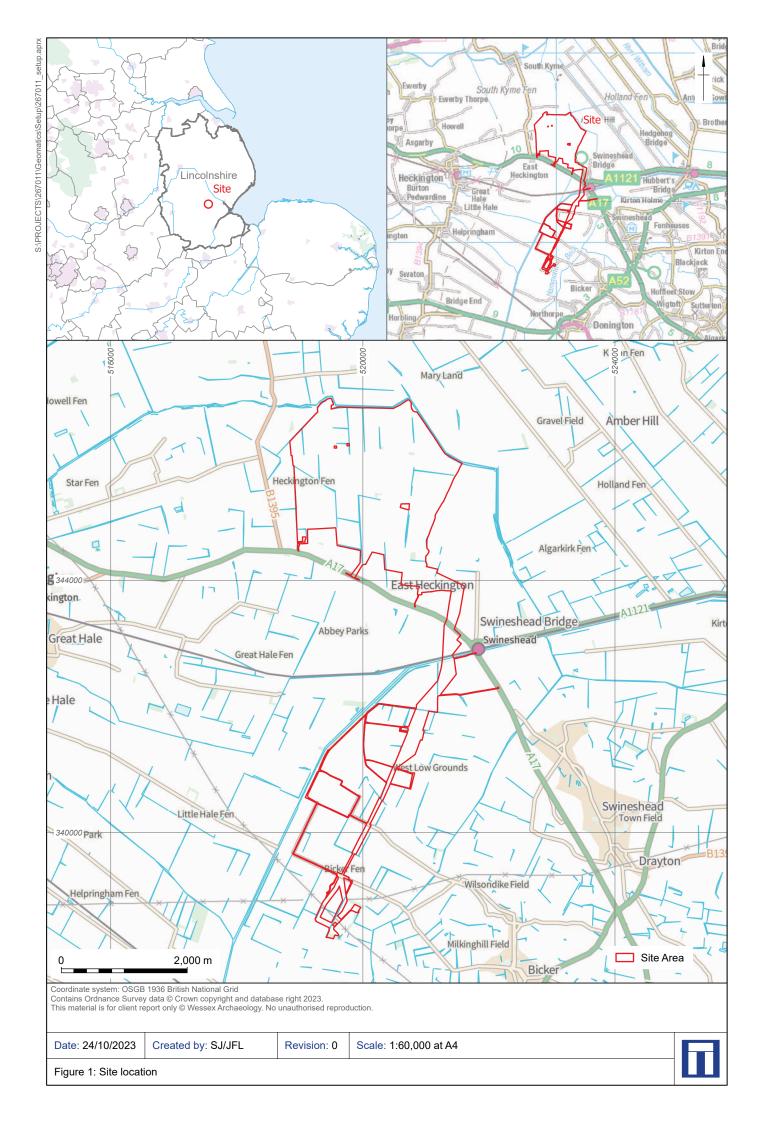
Trench		Field	Figure	
No.	Reason for Trial Trench Location	No.	No.	Dimensions
	Targeting geophysical anomaly (linear feature possibly archaeology,	F8	5	
128	former field boundary + ferrous spike)		_	50 m x 2 m
120	Targeting geophysical anomaly (roddon tributary + former field	F8	5	50
129	boundary) Targeting geophysical anomaly (geology/linear trend,	F8	5	50 m x 2 m
	agriculture/drainage/linear trend + linear feature possibly	ГО	5	
130	archaeology)			50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F8	5	
131	agriculture/drainage/linear trend)			50 m x 2 m
132	Targeting geophysical anomaly (geology/linear trend + ferrous spike)	F8	5	50 m x 2 m
133	Targeting 'blank' area	F8	5	50 m x 2 m
134	Targeting geophysical anomaly (geology/linear trend + ferrous spike)	F8	5	50 m x 2 m
135	Targeting geophysical anomaly (geology/linear trend)	F8	5	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend + roddon	F8	5	
136	tributary)			50 m x 2 m
137	Targeting geophysical anomaly (geology/linear trend)	F8	5	50 m x 2 m
138	Targeting geophysical anomaly (geology/linear trend)	F8	5	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F8	5	
139	agriculture/drainage/linear trend)			50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend,	F8	5	
140	agriculture/drainage/linear trend + ferrous spike)			50 m x 2 m
141	Targeting 'blank' area	F9	6	50 m x 2 m
142	Targeting geophysical anomaly (geology/linear trend)	F9	6	50 m x 2 m
143	Targeting geophysical anomaly (geology/linear trend)	F9	6	50 m x 2 m
144	Targeting geophysical anomaly (geology/linear trend)	F9	6	50 m x 2 m
145	Targeting geophysical anomaly (geology/linear trend)	F9	6	50 m x 2 m
146	Targeting geophysical anomaly (geology/linear trend + roddon tributary)	F9	6	50 m x 2 m
147	Targeting geophysical anomaly (geology/linear trend)	F9	6	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend + roddon	F9	6	
148	tributary)			50 m x 2 m
149	Targeting geophysical anomaly (geology/linear trend)	F9	6	50 m x 2 m
150	Targeting geophysical anomaly (geology/linear trend + ferrous disturbance)	F9	6	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F9	6	
151	agriculture/drainage/linear trend)			50 m x 2 m
152	Targeting geophysical anomaly (geology/linear trend + roddon tributary)	F9	6	50 m x 2 m
152	Targeting geophysical anomaly (geology/linear trend)	F9	6	50 m x 2 m
154	Targeting geophysical anomaly (geology/lineal trend)	F10	6	50 m x 2 m
104	Targeting geophysical anomaly (geology/discrete reactives)	F10	6	50 11 × 2 11
155	tributary)			50 m x 2 m
155	Targeting geophysical anomaly (geology/linear trend + ferrous spike)	F10	6	50 m x 2 m
100	Targeting geophysical anomaly (geology/liscrete features + ferrous	F10	6	50 m A 2 m
157	spike)		-	50 m x 2 m

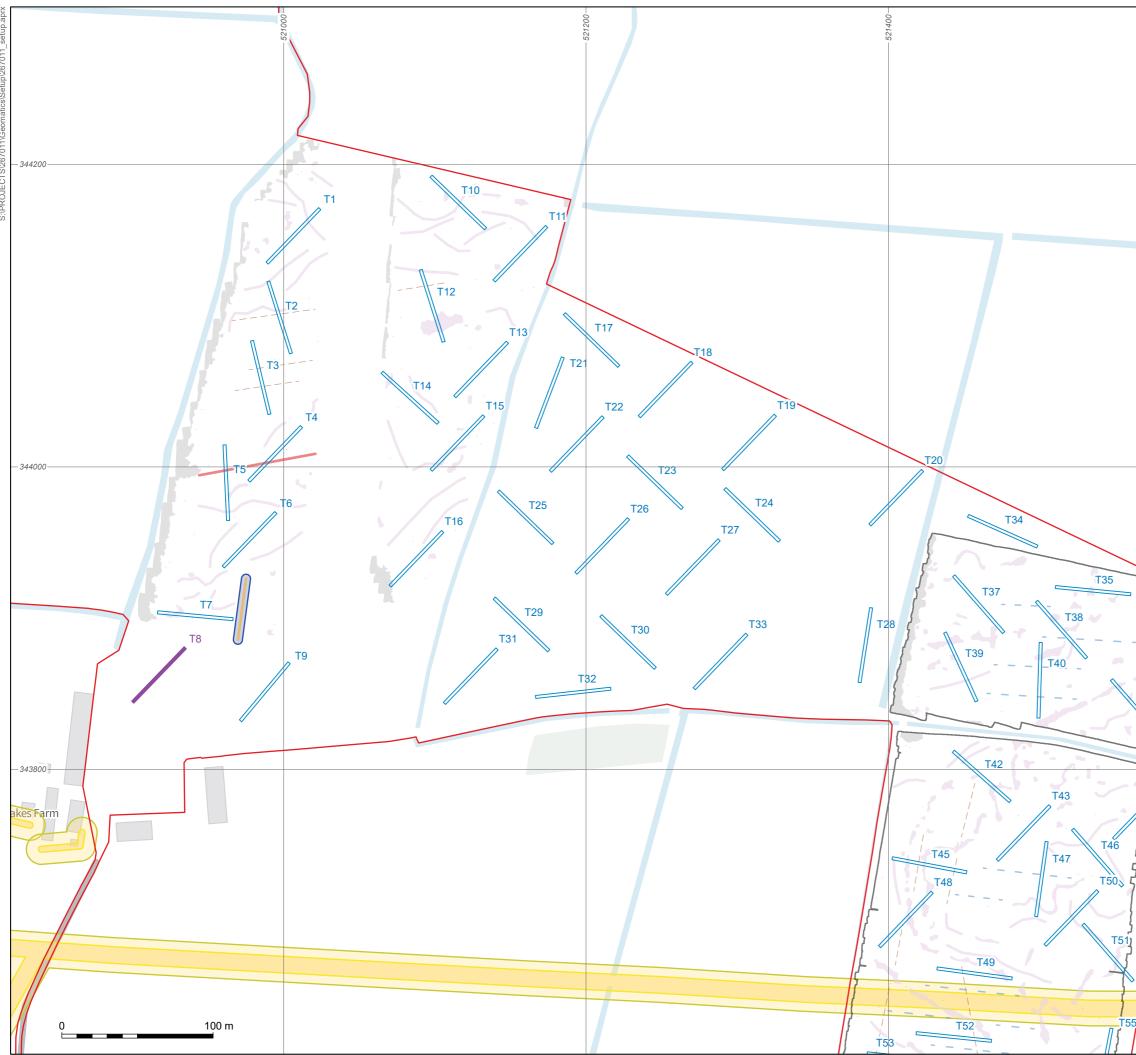
Trench		Field	Figure	
No.	Reason for Trial Trench Location	No.	No.	Dimensions
158	Targeting geophysical anomaly (geology/discrete features)	F10	6	50 m x 2 m
159	Targeting geophysical anomaly (geology/discrete features)	F10	6	50 m x 2 m
160	Targeting geophysical anomaly (geology/discrete features)	F10	6	50 m x 2 m
161	Targeting 'blank' area	F10	6	50 m x 2 m
162	Targeting geophysical anomaly (geology/discrete features)	F10	6	50 m x 2 m
163	Targeting geophysical anomaly (geology/discrete features)	F10	6	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F10	6	
164	geology/discrete features)			50 m x 2 m
165	Targeting 'blank' area	F10	6	50 m x 2 m
166	Targeting geophysical anomaly (geology/linear trend)	F10	6	50 m x 2 m
167	Targeting geophysical anomaly (geology/linear trend)	F10	6	50 m x 2 m
168	Targeting geophysical anomaly (agriculture/drainage/linear trend)	F10	6	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F10	6	
169	agriculture/drainage/linear trend)			50 m x 2 m
170	Targeting geophysical anomaly (geology/linear trend)	F10	6	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F10	6	
171	geology/discrete features)			50 m x 2 m
172	Targeting geophysical anomaly (geology/discrete features)	F10	6	50 m x 2 m
173	Targeting 'blank' area	F10	6	50 m x 2 m
174	Targeting 'blank' area	F11	7	50 m x 2 m
175	Targeting geophysical anomaly (geology/linear trend)	F11	7	50 m x 2 m
176	Targeting geophysical anomaly (geology/linear trend)	F11	7	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F11	7	
177	geology/discrete features)		-	50 m x 2 m
178	Targeting geophysical anomaly (geology/linear trend)	F11	7	50 m x 2 m
179	Targeting geophysical anomaly (geology/linear trend)	F11	7	50 m x 2 m
100	Targeting geophysical anomaly (geology/linear trend +	F11	7	F0 m v 2 m
180	agriculture/drainage/linear trend)	E11	7	50 m x 2 m
181	Targeting geophysical anomaly (geology/linear trend + agriculture/drainage/linear trend)	F11	7	50 m x 2 m
181	Targeting geophysical anomaly (geology/linear trend)	F11	7	50 m x 2 m
102	Targeting geophysical anomaly (geology/linear trend)	F11	7	50 11 × 2 11
183	geology/discrete features)		<b>'</b>	50 m x 2 m
184	Targeting area without geophysics	F12	7	50 m x 2 m
185	Targeting area without geophysics	F12	7	50 m x 2 m
186	Targeting area without geophysics	F12	7	50 m x 2 m
187	Targeting area without geophysics	F12	7	50 m x 2 m
188	Targeting geophysical anomaly (geology/discrete features)	F13	7	50 m x 2 m
189	Targeting 'blank' area	F13	7	50 m x 2 m
100	Targeting geophysical anomaly (geology/linear trend)	F13	7	50 m x 2 m
190	Targeting geophysical anomaly (geology/mical ticita)	F13	7	50 m x 2 m
191	Targeting blank' area	F14	8	50 m x 2 m
192	Targeting blank area	F14	8	50 m x 2 m
193	Targeting blank area Targeting geophysical anomaly (geology/linear trend)	F14	8	50 m x 2 m
194	raigeting geophysical anomaly (geology/intedi tienu)	1 74	U	JU 11 X Z 11

Trench		Field	Figure	
No.	Reason for Trial Trench Location	No.	No.	Dimensions
195	Targeting geophysical anomaly (geology/linear trend)	F14	8	50 m x 2 m
196	Targeting 'blank' area	F14	8	50 m x 2 m
197	Targeting 'blank' area	F15	8	50 m x 2 m
198	Targeting 'blank' area	F15	8	50 m x 2 m
	Targeting geophysical anomaly (geology/discrete features + formed	F15	8	
199	field boundary/linear trend)	_		50 m x 2 m
200	Targeting 'blank' area	F15	8	50 m x 2 m
201	Targeting 'blank' area	F15	8	50 m x 2 m
	Targeting geophysical anomaly (geology/linear trend +	F15	8	
202	geology/discrete features)	545	0	50 m x 2 m
203	Targeting geophysical anomaly (geology/discrete features)	F15	8	50 m x 2 m
204	Targeting geophysical anomaly (geology/discrete features + ferrous	F16	9	50 m v 2 m
204	spike)	F16	9	50 m x 2 m
205	Targeting geophysical anomaly (geology/discrete features)	F16	9	50 m x 2 m
206	Targeting 'blank' area Targeting geophysical anomaly (geology/discrete features + ferrous	F16	9	50 m x 2 m
207	disturbance)	110	5	50 m x 2 m
208	Targeting ferrous disturbance	F16	9	50 m x 2 m
209	Targeting 'blank' area	F17	9	50 m x 2 m
210	Targeting area without geophysics	F18	9	50 m x 2 m
211	Targeting area without geophysics	F18	9	50 m x 2 m
212	Targeting area without geophysics	F18	9	50 m x 2 m
213	Targeting area without geophysics	F18	9	50 m x 2 m
214	Targeting area without geophysics	F18	9	50 m x 2 m
215	Targeting area without geophysics	F18	9	50 m x 2 m
216	Targeting area without geophysics	F18	9	50 m x 2 m
217	Targeting area without geophysics	F18	9	50 m x 2 m
218	Targeting area without geophysics	F18	9	50 m x 2 m
219	Targeting area without geophysics	F18	9	50 m x 2 m
220	Targeting area without geophysics	F18	9	50 m x 2 m
221	Targeting area without geophysics	F18	9	50 m x 2 m
222	Targeting area without geophysics	F18	9	50 m x 2 m
223	Targeting area without geophysics	F20	10	50 m x 2 m
224	Targeting area without geophysics	F20	10	50 m x 2 m
225	Targeting area without geophysics	F20	10	50 m x 2 m
226	Targeting area without geophysics	F20	10	50 m x 2 m
227	Targeting area without geophysics	F20	10	50 m x 2 m
228	Targeting area without geophysics	F20	10	50 m x 2 m
229	Targeting area without geophysics	F20	10	50 m x 2 m
230	Targeting area without geophysics	F20	10	50 m x 2 m
231	Targeting geophysical anomaly (agriculture/drainage/linear trend)	F20	10	50 m x 2 m
232	Targeting area without geophysics	F21	10	50 m x 2 m
233	Targeting area without geophysics	F21	10	50 m x 2 m

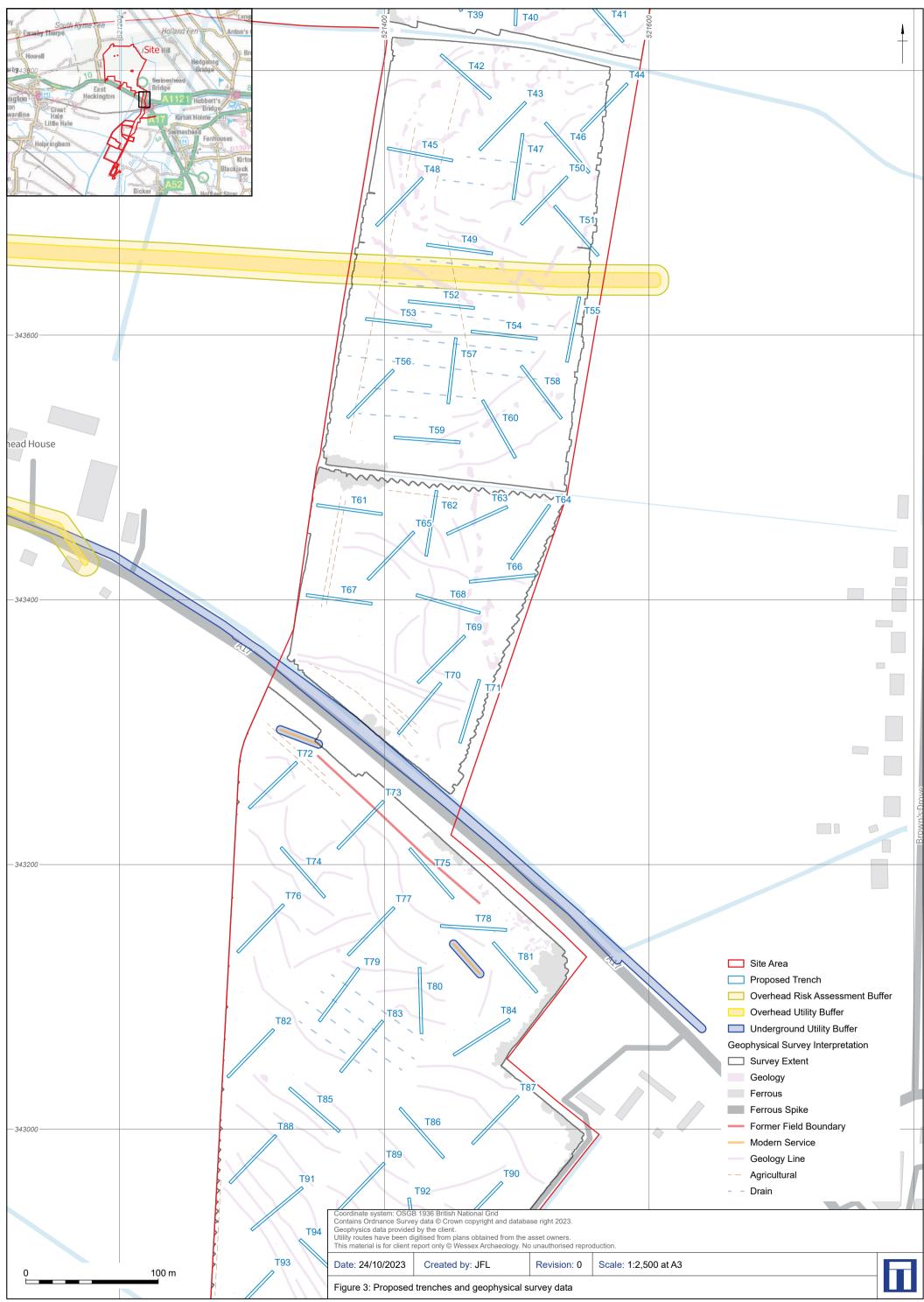


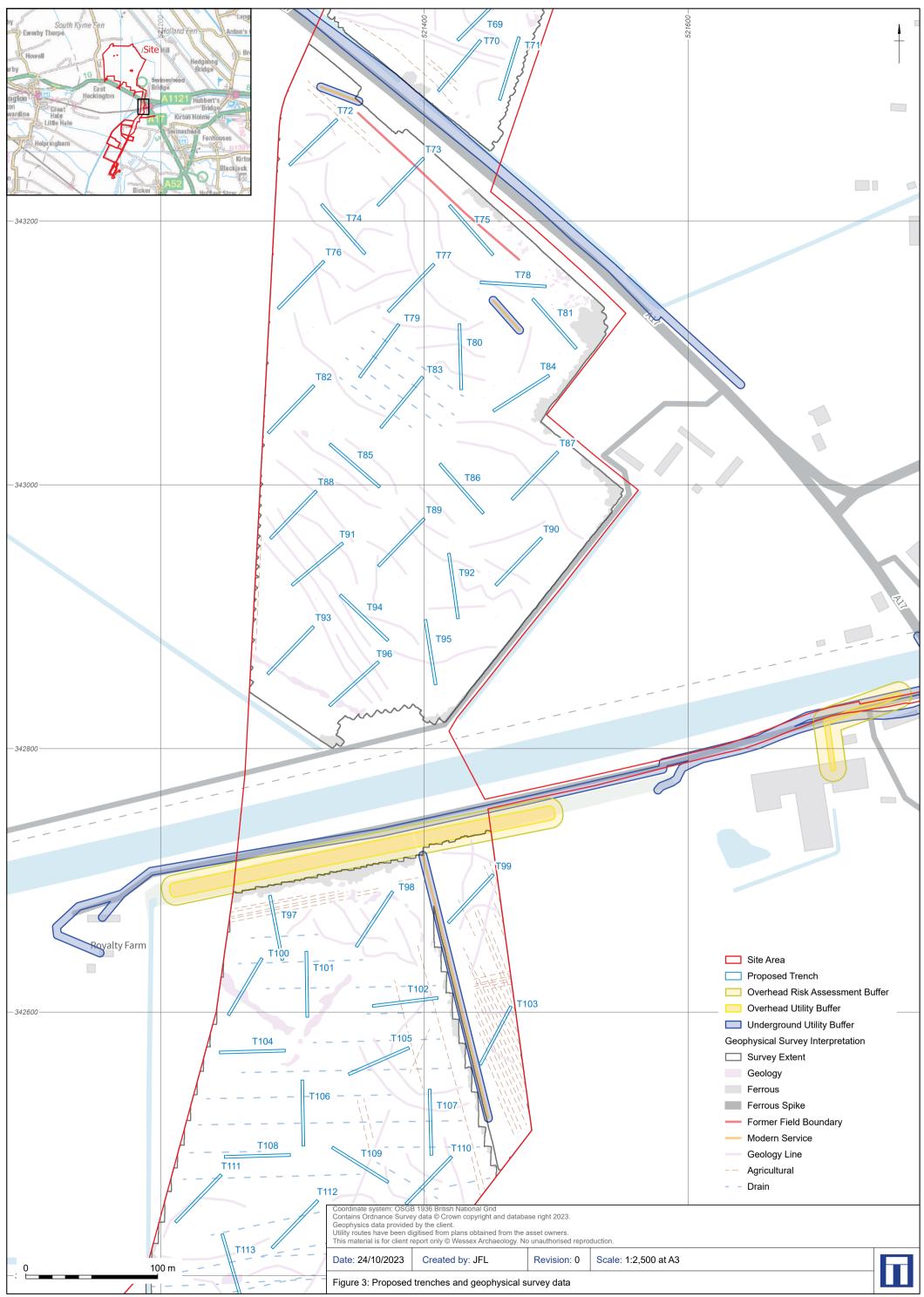
Trench		Field	Figure	
No.	Reason for Trial Trench Location	No.	No.	Dimensions
234	Targeting area without geophysics	F21	10	50 m x 2 m



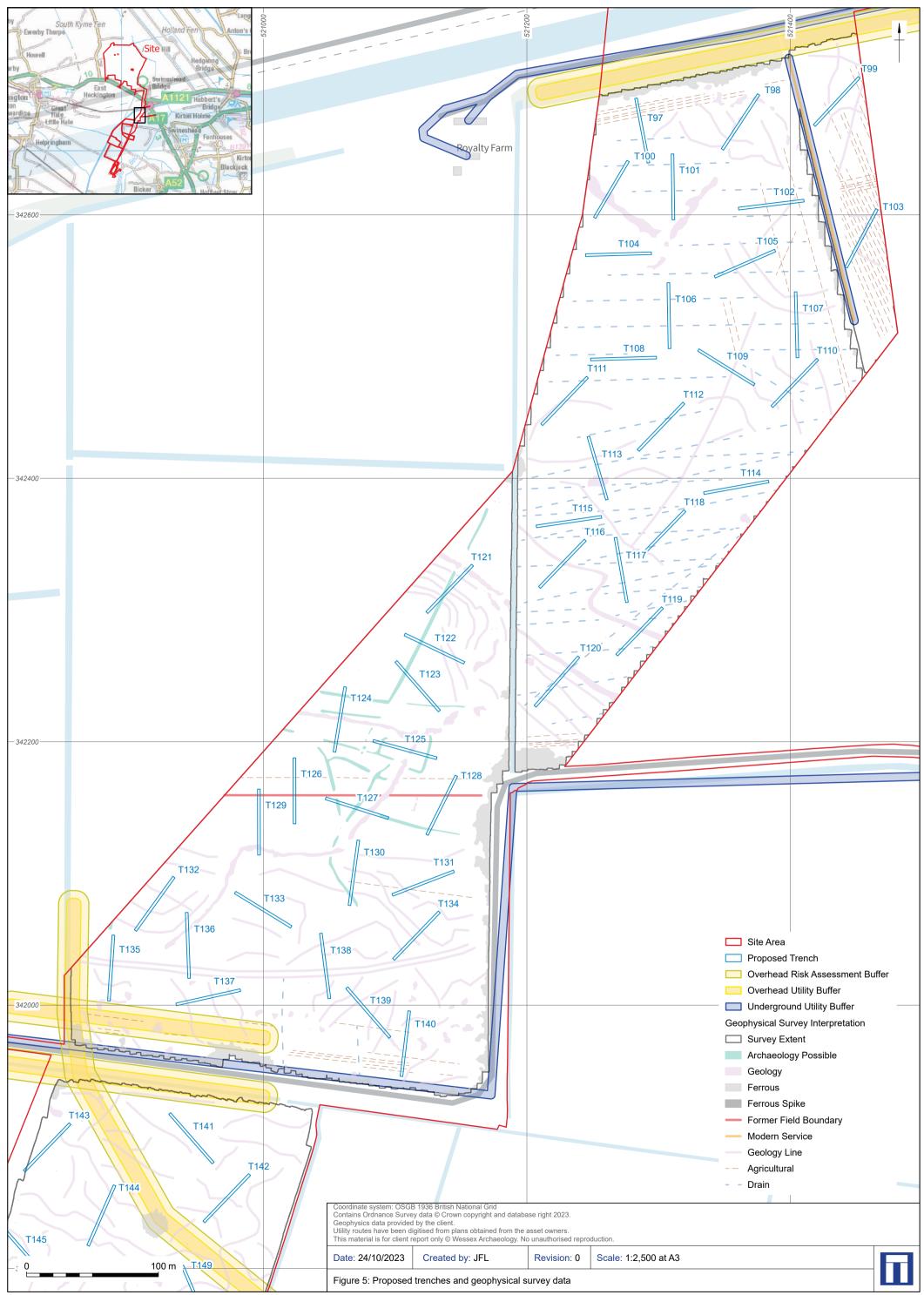


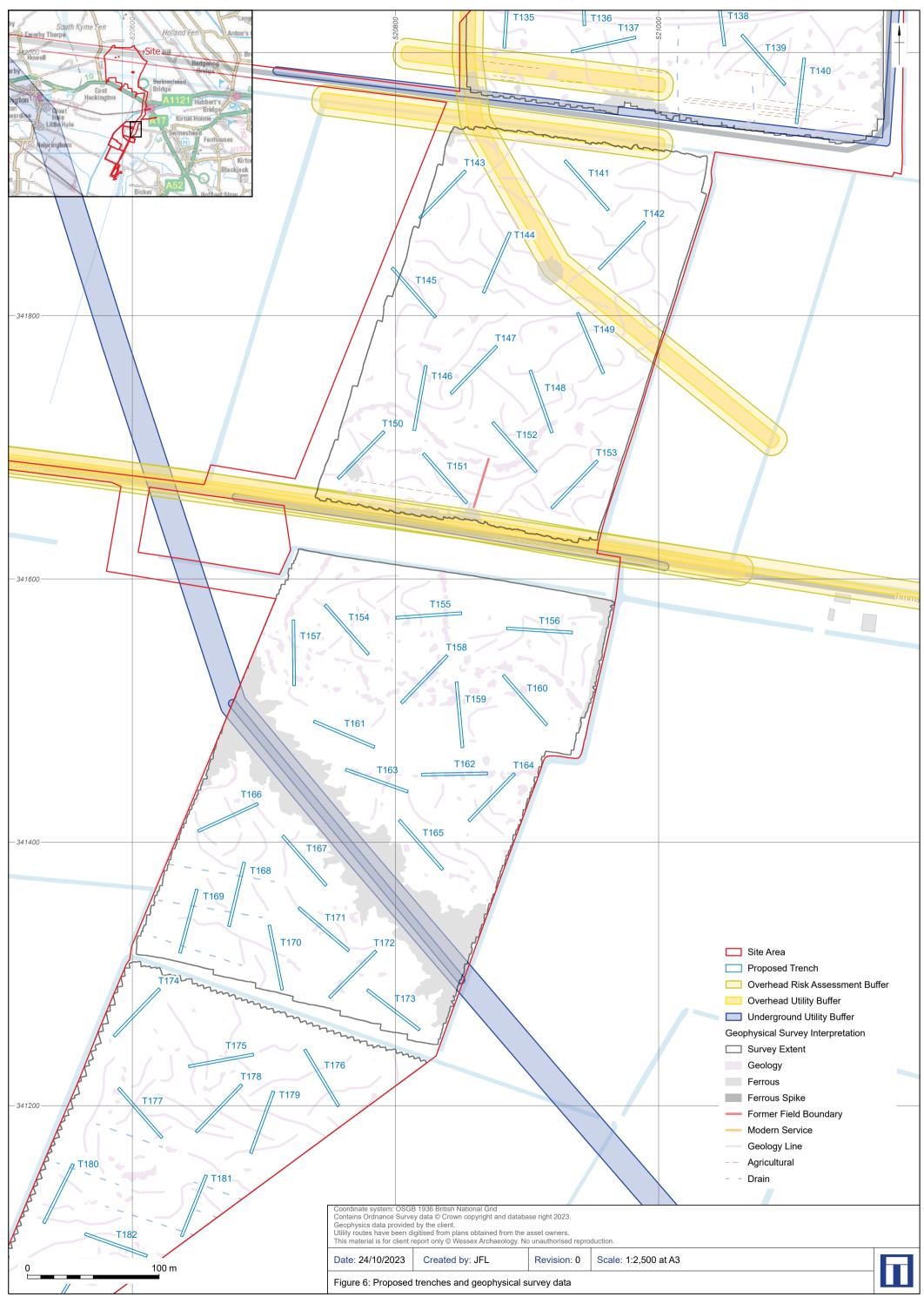
		eckington		Swineshead Bridge	
T36	Geop	Overhead Undergro	d Trench d Trench d Risk A d Utility bund Util urvey In xtent Spike Field Bou Service Line	ssessment Bu Buffer ity Buffer terpretation	ffer
	right 2023. Geophysics dat Utility routes ha owners.	nce Survey a provided b ve been digi for client rep d reproductio	data © Cro by the clien tised from port only © on.	own copyright and d	n the asset
	Scale: 1:2,5	00 at A3		Revision: 0	
5	Figure 2: Pro	posed trer	nches an	d geophysical s	urvey
	1				

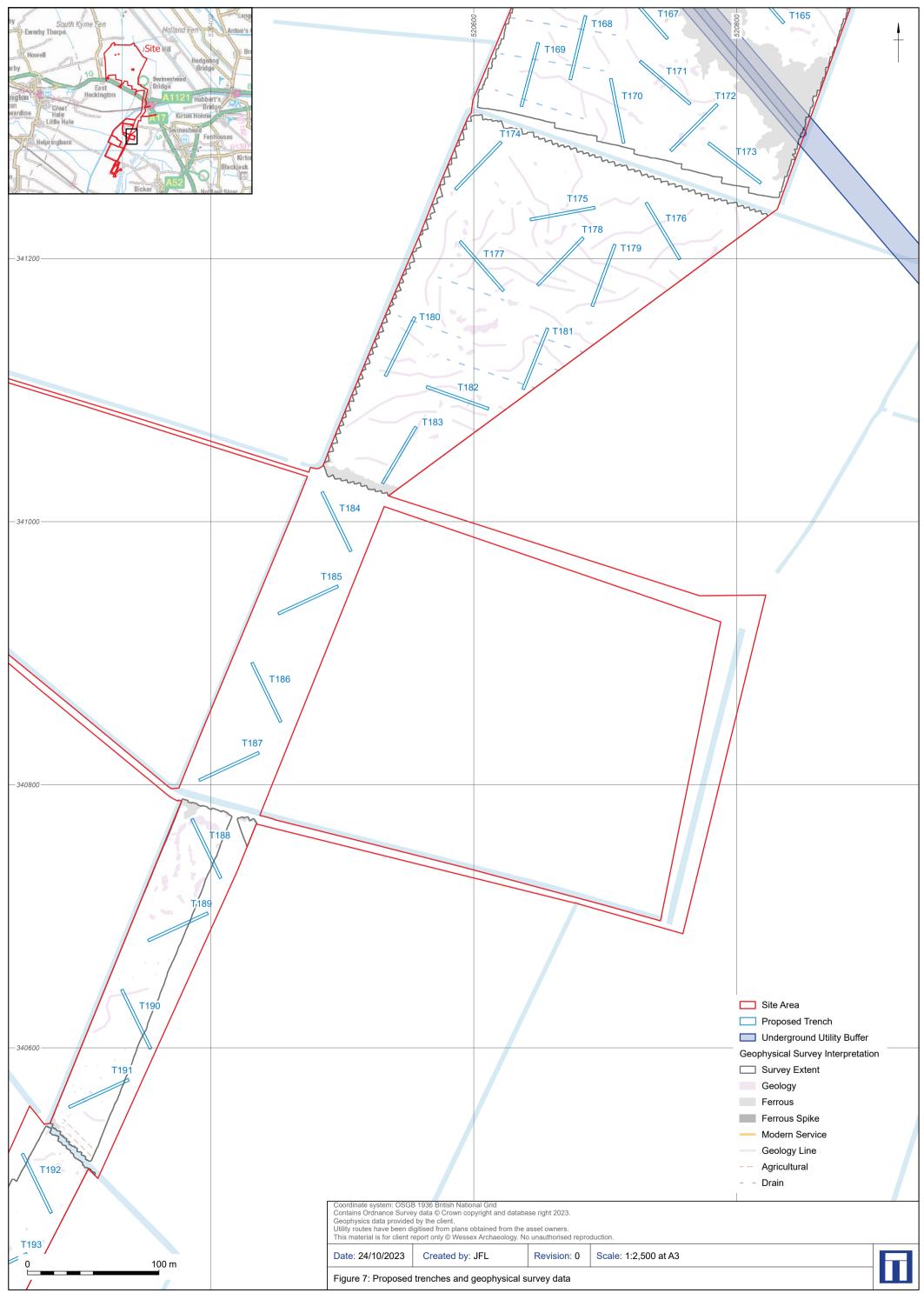


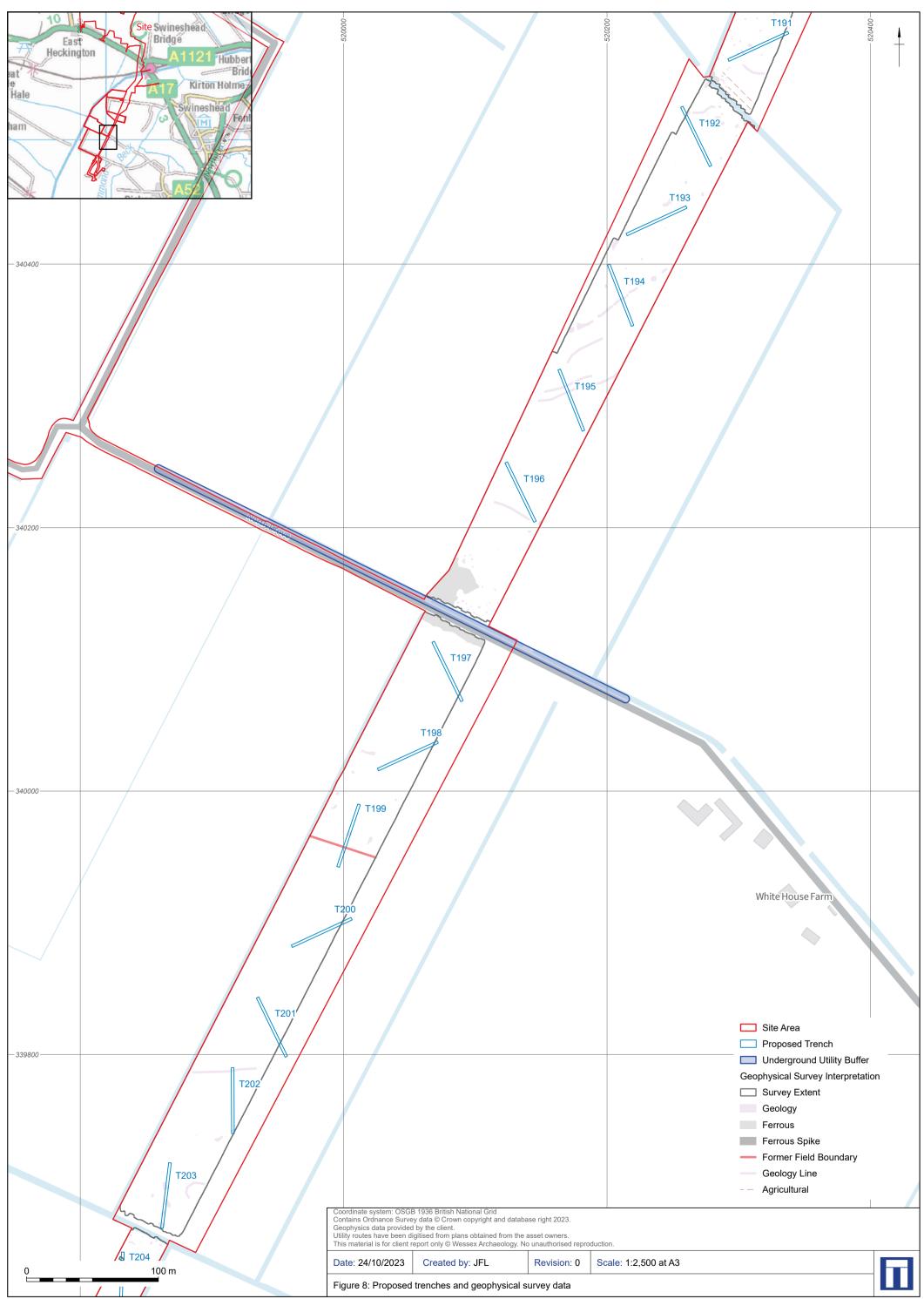


S:\PROJECTS\267011\Geomatics\Setup\267011_setup.aprx

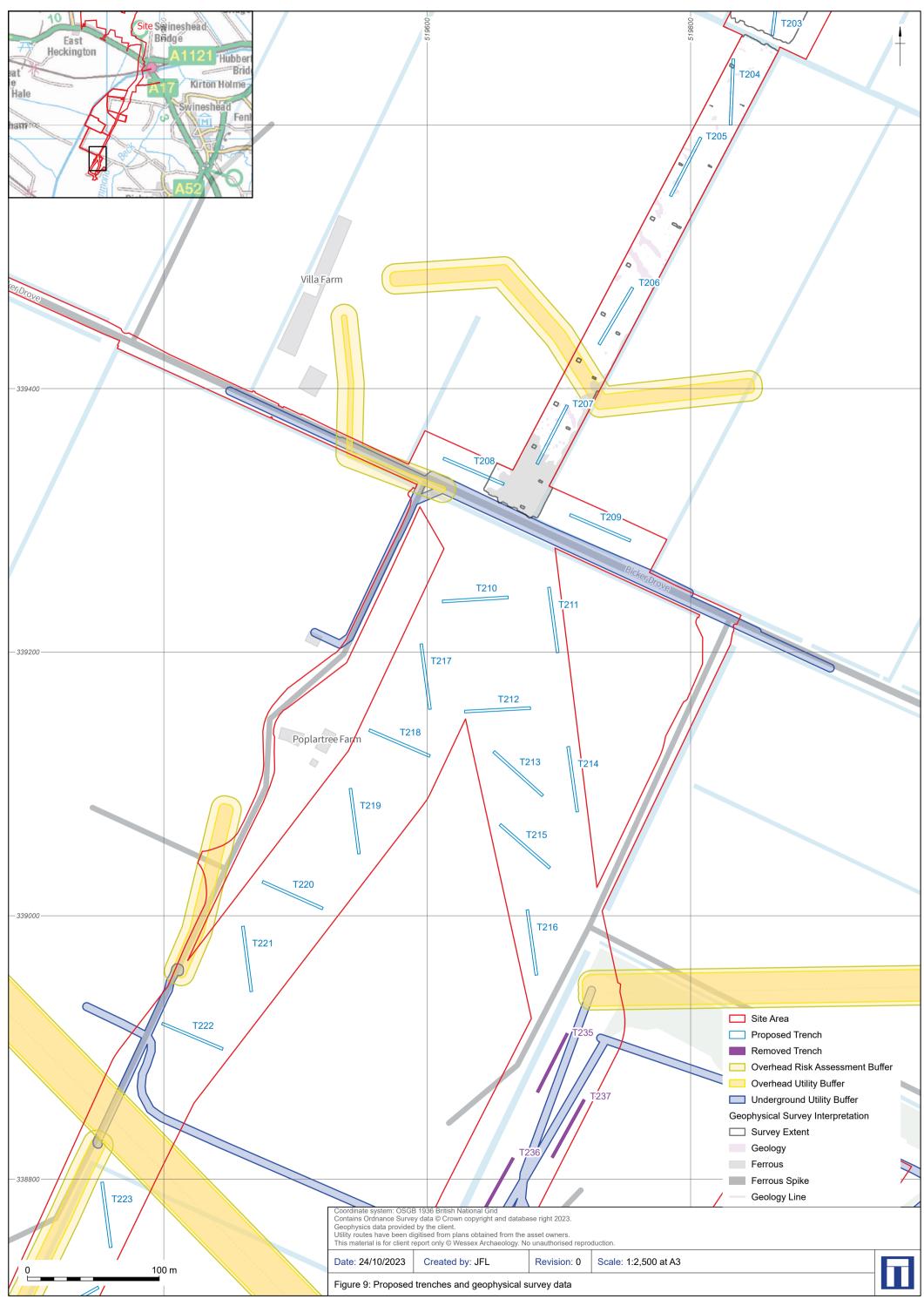


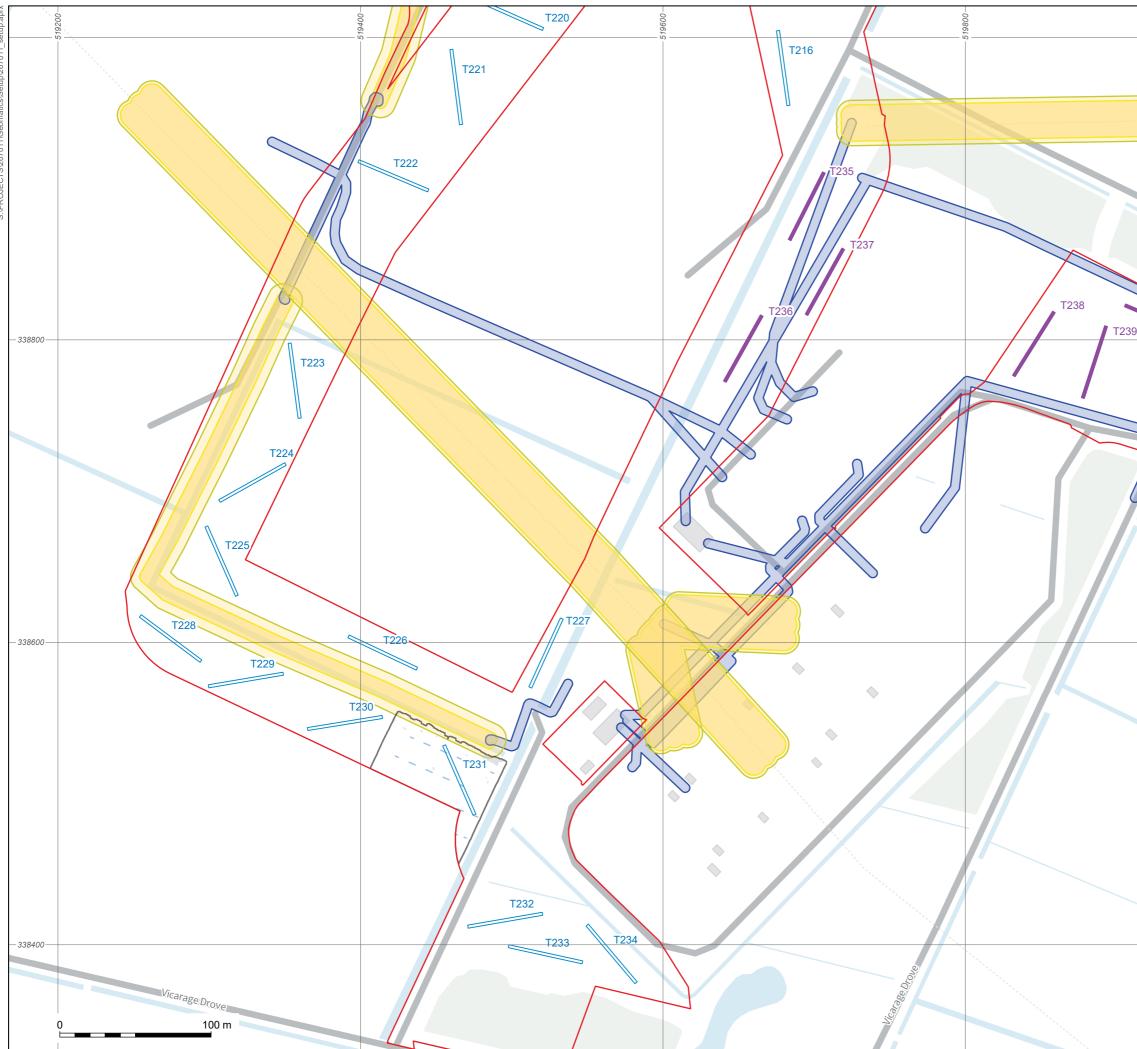






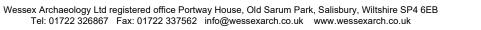
S:\PROJECTS\267011\Geomatics\Setup\267011_setup.aprx





	East Heckington		A17	121 Hi Kirton Ha
9	<ul> <li>Site Area</li> <li>Proposed</li> <li>Removed</li> <li>Overhead</li> <li>Overhead</li> <li>Undergro</li> <li>Geophysical S</li> <li>Survey E</li> <li>Geology</li> <li>Ferrous</li> <li>Ferrous S</li> <li>Drain</li> </ul>	d Trench d Trench d Risk As d Utility E bund Utili Survey In Extent	ssessment Bu Buffer ity Buffer	ffer
	Coordinate system: OSGB Contains Ordnance Survey right 2023. Geophysics data provided t Utility routes have been digi owners. This material is for client rep No unauthorised reproductii Date: 24/10/2023 Scale: 1:2,500 at A3 Figure 10: Proposed to	data © Cro by the client itised from p port only © 1 on. Create	wn copyright and d olans obtained from Wessex Archaeolo ed by: ?? Revision: 0	n the asset gy.
		STICTICS di	a goophysical:	Sarvey







Wessex Archaeology Ltd is a company limited by guarantee registered in England, No. 1712772 and is a Registered Charity in England and Wales, No. 287786; and in Scottand, Scottish Charity No. SC042630. Registered Office: Portway House, Old Sarum Park, Salisbury, Wilts SP4 6EB.

