

A46 Newark Bypass

Scheme Number: TR010065

**6.8 Environmental Statement
Archaeological Management Plan**

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Planning Act 2008

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scribed Forms and Procedure) Regulations 2009**

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Development Consent Order 202[#]**

**6.8 Environmental Statement
Archaeological Management Plan**

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Contents

1 Introduction	1
1.1 Purpose of this document.....	1
1.2 Phases of archaeological investigation	1
1.3 Status of this document.....	2
1.4 Roles and responsibilities.....	2
2 Archaeological background	5
2.1 Introduction	5
2.2 Archaeological and historic background.....	6
2.3 Archaeological potential	8
3 Research framework and agenda	13
3.1 Introduction	13
3.2 Relevant agenda	13
3.3 Overarching themes	14
3.4 Research questions by period.....	14
4 Phase 1: Preliminary surveys	21
4.1 Overview	21
4.2 Geophysical survey.....	21
4.3 Metal detector	23
4.4 Field walking survey	23
4.5 Desk-based geoarchaeological review.....	24
5 Phase 2: Archaeological evaluation	26
5.1 Overview	26
5.2 Archaeological Monitoring of Ground Investigation	26
5.3 Geoarchaeological coring.....	27
5.4 Trial trench evaluation	29
5.5 Test pitting.....	31
6 Phase 3 – Archaeological Mitigation Strategy	33
6.1 Overview	33
6.2 Archaeological Clerk of Works	33
6.3 Historic building recording	34
6.4 Vibration monitoring and condition survey.....	36

6.5 Archaeological evaluation	37
6.6 Archaeological excavation.....	38
6.7 Archaeological monitoring and recording	41
6.8 Geoarchaeological Investigation	44
6.9 Protective fencing.....	46
6.10 Unexpected Finds Procedure	47
6.11 Public engagement and outreach.....	47
7 Overarching guidance and methodologies.....	49
7.1 Overview	49
7.2 Programme	49
7.3 Health and safety	49
7.4 Written Schemes of Investigation	50
7.5 Recording.....	51
7.6 Finds strategy.....	53
7.7 Treasure	55
7.8 Human remains.....	55
7.9 Environmental sampling	57
7.10 Reporting.....	59
7.11 Archive	63
Communication and Monitorings.....	66
7.12 Public outreach.....	68
8 References.....	70
9 Abbreviations	74
A. Appendix: Figures	76
B. Appendix: Geophysical Survey WSI	77
C. Appendix: Metal Detecting WSI	78
D. Appendix: Field Walking WSI	79
E. Appendix: Archaeological Watching Brief of GI Works WSI.....	80
F. Appendix: Geoarchaeological Coring WSI	81
G. Appendix: Trial Trench Evaluation WSI.....	82
H. Appendix: Trial Trenching Survey Report.....	83

1 Introduction

1.1 Purpose of this document

1.1.1 This Archaeological Management Plan (AMP) relates to an application made by National Highways (the Applicant to the Secretary of State for Transport via the Planning Inspectorate (the Inspectorate) under the Planning Act 2008 (the 2008 Act) for a Development Consent Order (DCO). If made the DCO would grant consent for the A46 Newark Bypass (the Scheme). A detailed description of the Scheme can be found in Chapter 2 (The Scheme) of the Environmental Statement (ES) (**APP-050**).

1.1.2 The purpose of this AMP is to:

- Support the assessment set out in Chapter 6 (Cultural Heritage) of the ES (**APP-050**).
- Summarise the known archaeological and historical baseline within the study areas and outline the archaeological potential for further unknown archaeological remains within the Order Limits.
- Set out the research priorities that have been identified using the East Midlands Historic Environment Research Framework (EMHERF).
- Outline the scope, aims and objectives and methodology for the Phase 1 preliminary surveys and subsequent Phase 2 archaeological evaluation, including the production of Written Schemes of Investigation (WSI) and technical reports required for each element of fieldwork.
- Outline the Phase 3 archaeological mitigation strategy for the Scheme which, in accordance with Requirement 9 of the draft DCO (**REP4-003**), would detail the scope of the archaeological and built heritage investigations which must be undertaken during the pre-commencement and construction stages of the Scheme. These works will be developed and implemented through task specific WSIs to be produced by the Archaeological Contractor, in accordance with this AMP.
- Detail the approach to Stakeholder engagement and consultation, project management, fieldwork methodology, post-excavation analysis and publication stages for archaeological investigations to be carried out during the pre-commencement and construction periods of the Scheme.

1.2 Phases of archaeological investigation

1.2.1 This section provides a summary of the phases of archaeological investigation, which are required to inform and support the Scheme. These phases are as follows:

- **Phase 1** of the AMP provides details on the preliminary archaeological surveys undertaken to inform the ES (**APP-050**) baseline, which included

geophysical survey, metal detector and field walking survey and geoarchaeological desk-based assessment (DBA).

- **Phase 2** of the AMP details the archaeological evaluation undertaken to further characterise the archaeological resource identified during Phase 1 surveys and to inform the scope of the Phase 3 archaeological mitigation strategy. This includes geoarchaeological coring completed in June 2023 and test pitting and trial trench evaluation which commenced in September 2023 and completed in June 2024.
- **Phase 3** of the AMP (as secured by Requirement 9 of the draft DCO **(REP4-003)**), was determined following the completion of Phase 2 archaeological evaluation Phase 3 of the AMP sets out the archaeological mitigation strategy which is required to be adhered to during the pre-commencement and construction stages of the Scheme. This comprises: historic building survey, monitoring and recording; archaeological strip, map and sample excavation; archaeological open area excavation; geoarchaeological investigation and archaeological monitoring. Additionally, the Phase 3 AMP outlines the requirement for an Unexpected Finds Procedure and the use of an Archaeological Clerk of Works.

1.2.2 Further detailed information on each of the phases of archaeological investigation are contained within Chapters 4, 5 and 6 of this AMP.

1.3 Status of this document

- 1.3.1 Archaeological investigation is an iterative process relying on the results of one phase of work to inform the following phase. As such the results of the Phase 1 surveys have informed the scope of the Phase 2 evaluation and in turn the results of the Phase 2 investigations have informed the Phase 3 archaeological mitigation strategy.
- 1.3.2 This iteration of the AMP details the Phase 1 and Phase 2 archaeological investigations completed and details the final scope for the Phase 3 archaeological mitigation strategy.
- 1.3.3 This iteration has been prepared in consultation with relevant Stakeholders, including: the Nottinghamshire County Council (NCC) Senior Practitioner Archaeology; Newark & Sherwood District Council (NSDC) Historic Environment Officer; and Historic England Development Advice Team Leader and Science Advisor for the Midlands Region.

1.4 Roles and responsibilities

- 1.4.1 Table 1-1 below details the roles and responsibilities required for the works outlined within this AMP.
- 1.4.2 Clear communication between all relevant parties would form a critical part of the delivery of the archaeological fieldwork.

Table 1-1: Roles and responsibilities

Role	Responsibilities
Client National Highways, or their representative (hereafter referred to as the Client's representative)	- The Client will be responsible for providing details of National Highways Framework approved Archaeological Contractors to the Principal Contractor. - The Client will be responsible for assuring the work undertaken by the Principal Contractor and Design Consultant.
Principal Contractor Construction contractor for the Scheme	- The Principal Contractor will be responsible for the procurement of a National Highways approved Archaeological Contractor. - The Principal Contractor will be responsible for the construction of the Scheme and implementation of all relevant health and safety policies and regulations. - The Principal Contractor will provide plant and welfare facilities required by the Archaeological Contractor during the undertaking of the archaeological works outlined in the AMP.
Design Consultant The CIfA Registered Organisation procured as part of the National Highways Framework to manage the Archaeological Contractor ¹ .	- The Design Consultant will be responsible for the production of this AMP in consultation with the Stakeholders (see definition of the Stakeholders below). - The Design Consultant will be responsible for the management of the Archaeological Contractor during the archaeological works outlined in this AMP. - The Design Consultant will be responsible for the assurance of technical reports produced by the Archaeological Contractor. - The Design Consultant will act as the main point of contact for the Stakeholders, Principal Contractor and Archaeological Contractor for all heritage matters associated with the Scheme. The Stakeholders will be kept informed of the progress of the fieldwork via the Design Consultant to ensure that it is carried out to the required standard and specification as set out in this AMP and the task specific WSIs.
Archaeological Contractor The CIfA Registered Organisation procured as part of the National Highways Framework to undertake archaeological fieldwork.	The Archaeological Contractors will be responsible for the delivery of the program of archaeological works outlined within this AMP. This responsibility will include undertaking fieldwork as well as the preparation of task specific WSI, Risk Assessment and Method Statement (RAMS), post-excavation reporting as well as any associated publication.

¹ Mott MacDonald acted as Design Consultant for the Phase 1 and 2 archaeological investigations. The Design Consultant for Phase 3 is to be confirmed.

Role	Responsibilities
	- The Archaeological Contractor will be a Registered Organisation (RO) of the Chartered Institute for Archaeologists (CIfA). The fieldwork manager will have Member of the Chartered Institute for Archaeologists (MCIfA) status or equivalent knowledge and experience. - The Archaeological Contractor will adhere to the specification outlined in this AMP and will be responsible for programming and staffing. - The Archaeological Contractor will be responsible for the delivery of toolbox talks to relevant site operatives during pre-commencement and construction activities.
Stakeholders NCCCC Senior Practitioner Archaeology, NSDC Historic Environment Officer and Historic England Development Advice Team Leader and Science Advisor for the Midlands Region. As well as any relevant representatives of the Environment Agency and any other relevant statutory bodies	- The Stakeholders will be responsible for approving task specific WSI's prior to the commencement of any archaeological works outlined within this AMP. - The Stakeholders will be responsible for monitoring the archaeological fieldwork outlined in this AMP. This will include attendance at both site and virtual meetings in order to review the fieldwork as it progresses. This will inform any related decisions. - The Stakeholders will be responsible for approving the technical reports produced for the archaeological works outlined in this AMP.
Archaeological Clerk of Works CIfA Member level accredited archaeologist, procured as part of the National Highways Framework	- An Archaeological Clerk of Works (ACoW) will be appointed to oversee all of the onsite archaeological works detailed within this Strategy. - The ACoW will monitor the Principal and Archaeological Contractors compliance with their contractual obligation to ensure that the Scheme complies with all relevant archaeological and historic environment legislation and consents, including the DCO and those measures set out within the Environmental Management Plan (EMP). The ACoW will also ensure that all onsite works are carried out in accordance with approved WSI's.

2 Archaeological background

2.1 Introduction

2.1.1 The archaeological and historical background for the Order Limits of the Scheme and associated 500 metre and 1 kilometre study areas are presented within Appendix 6.1 (Cultural Heritage Desk Based Assessment) (DBA) of the ES Appendices **(AS-099)**.

2.1.2 The evidence baseline presented within the DBA has been developed based on the following Phase 1 assessments which were completed for the preparation of the DCO application and are included as technical appendices to Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices **(AS-099)**:

- DBA Appendix D - Fieldwalking survey²
- DBA Appendix E - Metal detecting survey³
- DBA Appendix F - Geophysical survey⁴
- DBA Appendix G - Geophysical survey addendum⁵
- DBA Appendix H - Geoarchaeological and archaeological monitoring⁶
- DBA Appendix I - Geoarchaeological desk-based assessment⁷
- DBA Appendix J - Geotechnical watching brief⁸
- DBA Appendix K - Geoarchaeological coring⁹

2.1.3 The information provided below presents a summary of the baseline detailed within Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices **(AS-099)**, including the relevant assessments produced during the archaeological fieldwork undertaken to inform the baseline for the Scheme.

2.1.4 Related figures showing the location of heritage assets can be seen within Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices **(AS-099)**.

² AMS (2023) Fieldwalking Survey Report of Lands along the A46 Newark Northern Bypass. February 2023.

³ AMS (2023) Metal Detecting Survey Report of Lands along the A46 Newark Bypass. February 2023.

⁴ AMS (2022) Geophysical Survey Report of Lands along the A46 Newark Northern Bypass. February 2023.

⁵ AMS (2023) Addendum to Geophysical Survey Report of Lands along the A46 Newark Bypass. March 2023.

⁶ York Archaeology (2022) A46 Newark North Bypass Nottinghamshire, Archaeological and geoarchaeological monitoring of ground investigations.

⁷ AMS (2023) Regional Delivery Partnership A46 Newark Bypass. Geoarchaeological Desk Based Assessment.

⁸ AMS (2023) A46 Newark Bypass, GI Watching Brief Report. May 2023.

⁹ AMS (2023) A46 Newark Bypass, Geoarchaeological Coring Report. July 2023.

2.2 Archaeological and historic background

- 2.2.1 This chapter presents a summary of the archaeological and historic background for the Scheme, as presented within Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices **(AS-099)**.
- 2.2.2 All heritage assets discussed below have been assigned a unique identification number prefixed by MM (Mott MacDonald). This is for ease of identification and cross reference.
- 2.2.3 A full gazetteer of all heritage assets with drawings showing their locations are presented within Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices **(AS-099)**.

Palaeolithic and Mesolithic (500,000 – 4,000 BC)

- 2.2.4 The raised sand and gravel terraces of the River Trent, deposited during the Ice Age, provide free-draining soils, easy access to water and a vital communication route. These terraces have provided an attractive location for human habitation since the Palaeolithic.
- 2.2.5 Located within the 500 metre study area, partially within the southern extent of the Order Limits is the Late Upper Palaeolithic (13,000 to 9,500 years ago) open-air site of Farndon Fields (MM503). Analysis of artefacts recovered from here suggests a number of discrete areas of Late Upper Palaeolithic (LUP) occupation and industrial activity, such as flint knapping, around possible hearths.
- 2.2.6 Mesolithic activity is scarce within the Scheme, although surface lithic scatters have been recorded at Farndon Fields (MM502).

Neolithic and Early to Middle Bronze Age (4,000 to 1500 BC)

- 2.2.7 There is evidence of communities still following a nomadic lifestyle across the Trent Valley, with seasonal occupation evidenced at Farndon Fields (MM502). However, there is also evidence of more permanent occupation at Langford (MM505) with structures identified. Communities were also burying their dead in highly visible monuments, as demonstrated at Winthorpe Road, Newark (MM504) where a possible long barrow was identified.
- 2.2.8 Burial monuments dating to the Bronze Age, have been tentatively identified through geophysical survey associated with the Scheme at Langford Hall (MM026) and Newark Showground (MM938).

Later Bronze Age and Iron Age (1,150 BC to AD 43)

- 2.2.9 The late Bronze Age and Iron Age periods are characterised by a major shift in landscape organisation across the 500 metre study area. From

around 450 BC, there is evidence that this study area was densely occupied, with enclosures, field systems and roundhouses across the area. Extensive enclosure complexes have been mapped across the Order Limits. Several are recorded at Averham and Kelham (for example MM659; MM515) and Winthorpe (MM541). The complexes at Winthorpe comprise of small enclosures¹⁰, which were likely to have defined different areas of activity.

Romano-British period (AD 43 – 410)

2.2.10 Much of Britain came under Roman control after AD 43 and the Roman influence is well recorded within the archaeological record for the Scheme 500 metre study area. The River Trent was an important, strategic communication route and marked the western frontier of Roman rule during the mid-1st century AD. The Fosse Way (MM507) ran through the Scheme 500 metre study area and a number of forts and settlements, such as Ad Pontem and Crococalana (MM002), were established during this period. The tradition of rural settlement in the Iron Age continues into the Roman period. Within the Order Limits, enclosure complexes, such as those discussed above are likely to have been occupied into the Roman period.

Early medieval (Anglo-Saxon, AD 410 – 1066)

2.2.11 Following the withdrawal of Roman rule in AD 410, social, economic and political organisation broke down. The region fragmented into small kingdoms and large-scale immigration from the middle of the 5th century changed the political organisation of the region.

2.2.12 Evidence for occupation during this period within the Scheme 500 metre study area is fairly fragmentary and rare. Occupation during this period is evidenced by a large cremation cemetery in Newark, dating to the 6th-7th centuries (MM522). Newark was established as a burh (a fortified settlement) in the 10th century and archaeological investigation has demonstrated evidence for activity during this period.

2.2.13 The Domesday Survey of 1086 often recorded settlements that were established during the early medieval period. Both Kelham and Averham are recorded, as well as Winthorpe. There is also evidence for early medieval settlement within the grounds of Kelham Hall (MM525).

2.2.14 Trial trench evaluation undertaken to inform the Scheme has also revealed significant Anglo Saxon settlement evidence east of Winthorpe (Areas 20 and 21). This settlement activity appears to be a continuation of earlier late Iron Age and Roman settlement identified during Phase 1 geophysical survey and Phase 2 trial trench evaluation (see Sections 4.2 and 5.4 of this AMP).

¹⁰ AMS 2022 Geophysical Survey Report of Lands along the A46 Newark Northern Bypass.

High medieval (1066 to 1485)

- 2.2.15 Newark took advantage of the strategic location next to important communication routes and became a densely and permanently occupied centre of trade and industry during the medieval period, specifically for wool and cloth. It was fortified with a Castle (MM001) and town walls.
- 2.2.16 Evidence for rural settlement is documented across the scheme 500meter study area. Within the Order Limits there is little evidence for medieval land organisation and archaeological evidence for occupation at this time is limited. However, both Averham and Kelham were occupied at this time and formed foci for dispersed farmsteads and hamlets during this period.

Post medieval (1485 – 1750)

- 2.2.17 During the post-medieval period, Newark became Nottinghamshire's second town. Its strategic position along the River Trent and the Fosse Way meant that Newark played a pivotal role during the Civil War (1642-1646). Newark is surrounded by the below ground and earthwork remains of offensive and defensive fieldworks which were raised during the Civil War, some of which extend into the Order Limits.
- 2.2.18 This period is also marked by gradual change in the agrarian economy. This is mainly reflected in the reorganisation of the landscape, with the piecemeal enclosure of formerly open fields, visible around rural settlements such as Averham and Kelham.

Modern (1750 – present)

- 2.2.19 Industry continued to develop in Newark. Cartographic evidence illustrates increased development of warehouses and wharfs. Newark became a centre for the brewing industry, reflected through the fragmentary remains of former breweries such as Castle Brewery (MM109) and Northgate Brewhouse (MM303).
- 2.2.20 During the 20th century, the Scheme 500 metre study area underwent extensive change, as agricultural practices were modernised and the landscape opened up to large scale industry, such as sand and gravel extraction. One of the most prominent industries in Newark during this time was Kelham Home Grown Sugar refinery (MM842), now known as British Sugar, which opened in 1921.

2.3 Archaeological potential

- 2.3.1 This section highlights the scenario of highest potential for the survival of unknown archaeological remains. The following summary provides an indication of the archaeological potential within the Order Limits. This has been considered during the assessment within the ES. Further detail is provided within Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices **(AS-099)**.

- 2.3.2 Related figures showing the location of heritage assets can be seen within Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices (**AS-099**). Figures showing the area numbers as referred to below can be seen within Appendix F: Trial Trenching Evaluation WSI contained within this AMP.

Palaeoenvironmental

- 2.3.3 Geoarchaeological investigations undertaken to inform the Scheme assessment (see Appendix H, I and K of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices (**AS-099**)) identified superficial deposits belonging to the Holme Pierrepont Sand and Gravel Member within the Order Limits, specifically the area south of the Trent crossing, immediately north-east of Farndon. Combined with the nearby discovery of Late Upper Palaeolithic tools at Farndon (MM503) this small area has high potential to contain Palaeolithic and Mesolithic archaeological remains and palaeoenvironmental deposits.
- 2.3.4 The lower alluvial deposits of Pleistocene date recorded within the Order Limits have low potential for palaeoenvironmental material and archaeological remains to survive. The upper alluvial deposits have medium potential for organic remains to survive.
- 2.3.5 Palaeochannels are recorded across the Order Limits, which have high potential to preserve palaeoenvironmental remains.
- 2.3.6 Geoarchaeological investigations undertaken to inform the Scheme assessment (see Appendix H, I and K of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices (**AS-099**)) have demonstrated that organic sediments survive in and around the mapped palaeochannel deposits within Areas 2, 8, 9, 14 and 18 of the Order Limits (Appendix F Trial Trenching Evaluation WSI of this AMP). These deposits have high potential to preserve multi-period waterlogged palaeoenvironmental organic matter and archaeological remains, which have the potential to help explain changes in the surrounding environment over time, including woodland clearance and the intensification of agriculture.

Palaeolithic and Mesolithic

- 2.3.7 The results of multiple phases of archaeological investigation at Farndon Fields have recorded hundreds of struck flints dating to the Palaeolithic (MM503), Mesolithic and Neolithic periods (MM502). The evidence suggests there is high potential for further unknown early prehistoric remains to be encountered, particularly within Area 40 of the Order Limits (Appendix F Trial Trenching Evaluation WSI of this AMP), which lies at the northern extent of Farndon Fields.

Neolithic, Bronze Age and Iron Age

- 2.3.8 There is a high concentration of evidence associated with possible late prehistoric settlement, agricultural activity and funerary monuments within Areas 20, 21, 24, 30 and 48 of the Order Limits (Appendix F Trial Trenching Evaluation WSI of this AMP). These include the possible funerary activity with round barrows at Langford (MM937) and enclosures, field systems and settlements have also been identified at Kelham, Averham, Newark and Winthorpe.
- 2.3.9 This evidence suggests that there was a substantial human presence within the Scheme study area during the later prehistoric period. It is therefore considered that there is high potential for further archaeological remains associated with the late prehistoric period within Order Limits.

Roman

- 2.3.10 There is strong evidence for occupation during the Roman period, given the close proximity of the area to the Fosse Way (MM507) and known settlements at Newark (MM512) and Crococalana at Brough (MM002). The wider, rural, landscape was also populated during this period and it is likely that some of the possible Iron Age enclosures identified in Areas 20, 21, 24 and 48 of the Order Limits (Appendix F Trial Trenching Evaluation WSI of this AMP) at Kelham, Averham, Newark and Winthorpe continued to be utilised and occupied into the Roman period. It is therefore considered that there is high potential for further archaeological remains associated with the Roman period within the Order Limits.

Early medieval

- 2.3.11 The early medieval period saw the formation of many of the settlements that survive today within the Scheme 500 metre study area, including Newark, Kelham, Averham and Winthorpe.
- 2.3.12 There is evidence for Newark becoming a focal point for production and commerce as part of its role as a burh during this period. Industrial activity within early medieval Newark is recorded at Kirkgate, in the form of pottery manufacturing. The Domesday Survey of 1086 records Kelham, Averham and Winthorpe, indicating that these settlements had been established during or possibly prior to the early medieval period. Trial trench evaluation undertaken to inform the Scheme (Section 5.4 of this AMP) has also revealed significant Anglo Saxon settlement evidence east of Winthorpe, which appears to be a continuation of earlier Iron Age and Roman settlement activity. It is therefore considered that there is high potential for further archaeological remains associated with early medieval period settlement activity within the Order Limits.

High medieval

- 2.3.13 The early medieval settlements at Newark, Averham, Kelham and Winthorpe expanded during the high medieval period. Within the 500 metre study area at Newark, a number of buildings from this period survive and excavations within the town have revealed extensive archaeological remains associated with urban settlement alongside trade and industrial activity.
- 2.3.14 Outside of Newark high medieval activity associated with rural settlement and agricultural activity is recorded on the HER. At Kelham activity defined by pits, ditches and quarry pits (MM530) is recorded, and at Langford an extensive complex of irregular earthworks including hollows, banks and ridge and furrow (MM529) is also recorded. The high concentration of high medieval features and archaeological remains across the Scheme 500 metre study area suggests substantial human activity during this period. Therefore there is high potential for further medieval remains to be encountered within the Order Limits of the Scheme

Post medieval

- 2.3.15 There is extensive evidence for post medieval agricultural, settlement and industrial activity within the Scheme 500 metre study area. Surrounding Newark a large number of below ground and earthwork remains of offensive and defensive English Civil War fieldworks, which collectively form the Newark Civil War landscape (MM964) have been extensively surveyed and recorded. These remains comprise a number of scheduled monuments, such as the Civil War redoubt 550m south-east of Valley Farm (MM007) which lies 5m north of the Order Limits. There are also a large number of non-designated assets associated with Civil War Activity such as the First (MM660) and Second (MM624) Lines of Circumvallation at Newark, which lie within the Order Limits. The high concentration of designated and non-designated heritage assets associated with the post medieval period suggests that there is high potential for further post medieval remains associated with Civil War activity to be encountered within the Order Limits.

Modern

- 2.3.16 Within the Scheme 500 metre study area there is substantial evidence for archaeological remains associated with modern agricultural, settlement, transport and industrial activity. A number of late 18th and early to mid-19th century halls with associated designed parklands survive such as Kelham Hall (MM018), Langford Hall (MM026) and Winthorpe Hall (MM027). One of the most prominent industries in Newark during this period was Kelham Home Grown Sugar refinery (MM842), now known as British Sugar, which opened in 1921. During the Second World War RAF

Winthorpe (MM848) opened, which is now the location of Newark Air Museum. Second World War FW3/22 pillboxes are recorded within the study area, both of which are located at Kelham (MM835; MM836). The high concentration of designated and non-designated heritage assets associated with the modern period, suggests that there is high potential for further archaeological remains from this period to be encountered within the Order Limits.

3 Research framework and agenda

3.1 Introduction

- 3.1.1 Consideration of research agendas and themes is key to understanding the potential value of archaeological remains. The broad principles of a number of existing research agenda will be applicable to the works set out in this AMP.
- 3.1.2 The research agenda is key to identifying the focus for the Phase 3 archaeological mitigation strategy, helping to identify sites that require further investigation. The purpose is to identify sites that can help answer the research questions set by the relevant frameworks.
- 3.1.3 The phased approach to the archaeological fieldwork has taken the research questions into account, utilising information from desk-based studies and previous phases. This has resulted in Scheme wide research questions, as well as those specific to each site. The research questions will be reviewed and updated throughout the Scheme and the strategy should be flexible. Research questions will be reviewed, and added to, during the following stages:
- Preparation of task specific WSIs
 - During fieldwork
 - During preparation of post-excavation assessment reports (where applicable)
- 3.1.4 This Chapter provides an overarching strategy, based primarily on the regional and thematic research agenda. Each site will have specific questions and the WSI will have updated research section and questions. Those presented here are not fixed and the preparation of WSI should be responsive to the Scheme.

3.2 Relevant agenda

- 3.2.1 The relevant research agenda for this AMP are:
- East Midlands Historic Environment Research Framework (EMHERF)¹¹
 - Research and Conservation Framework for the British Palaeolithic¹²

¹¹ East Midlands Heritage (2012) East Midlands Historic Environment Research Framework [online] available at: <https://researchframeworks.org/emherf/> (last accessed December 2023).

¹² The Prehistoric Society & English Heritage (2008) Research and Conservation Framework for the British Palaeolithic [online] available at: <https://historiceurope.org.uk/images-books/publications/research-and-conservation-framework-for-british-palaeolithic/palaeolithic-framework/> (last accessed December 2023).

- Understanding the British Iron Age: an agenda for action¹³
- Medieval Settlement Research Framework¹⁴

3.3 Overarching themes

3.3.1 Reviewing the baseline of the Order Limits has allowed a series of overarching themes (OT) to be defined, based on the known archaeological resource detailed within Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices **(AS-099)**.

3.3.2 These themes are found within the EMHERF and are designed to overlap the traditional archaeological and historical periods. However, they are also useful to define the overarching themes for individual periods as well. Following a review of the baseline and the archaeological potential, the following overarching themes which are relevant for the Scheme are defined below:

- OT1: Pleistocene and Holocene environmental change
- OT2: Hunter-gatherer subsistence strategies and mobility patterns
- OT3: Development of agriculturally-based settlement patterns
- OT4: The development of fields and field systems
- OT5: The role of rivers as movement corridors, sources of power and socio-political boundaries
- OT6: Development of prehistoric monument complexes
- OT7: Development of funerary monuments and changing burial and memorial practices
- OT8: Battlefield and skirmish sites
- OT9: Development of territorial and administrative (for example, parish) boundaries.

3.4 Research questions by period

3.4.1 The Scheme may impact on archaeological remains relating to the Late Upper Palaeolithic, Bronze Age, Iron Age, Roman, early medieval, medieval and post-medieval periods (see Chapter 2 of this AMP). Within the overarching themes identified above, a series of period specific research questions from the EMHERF are outlined, which contribute to the overarching theme. A series of strategic objectives (SO) which can help answer these research questions are also outlined below.

¹³ Champion, T.C., Haselgrove, C., Armit, I., Creighton, J. and Gwilt, A. (2001) Understanding the British Iron Age: an agenda for action. [online] available at: [\(PDF\) Understanding the British Iron Age: an agenda for action. A Report for the Iron Age Research Seminar and the Council of the Prehistoric Society \(researchgate.net\)](#) (last accessed December 2023).

¹⁴ Medieval Settlement Research Framework (2024), The Rippon-Morton Review of Medieval Settlement Research, 2007–2016 [online] available at: [Medieval Settlement Research Framework - Medieval Settlement Research Framework \(researchframeworks.org\)](#) (last accessed June 2024).

3.4.2 Many of the research questions and strategic objectives relate to landscape-based approaches to the archaeological resource. This recognises the research potential of the scale of the Scheme. Individual and groups of sites may also be able to contribute to more specific research questions, particularly regarding artefact, chronologies and application of scientific techniques. It is envisioned that these can be added and addressed as part of future phases of fieldwork and mitigation.

Palaeolithic

3.4.3 There is evidence for an LUP open-air site, with evidence of in situ activity located partially within the southern extent of the Order Limits at Farndon Fields. Evidence for Palaeolithic activity may also be found within the Order Limits, sealed below coversands and on areas of Holme Pierrepont sands and gravels at Winthorpe and Kelham. The coversands also have potential to preserve organic lenses and palaeoenvironmental material.

3.4.4 The Palaeolithic archaeological resource has the potential to contribute to OT1, OT2 and OT5.

3.4.5 The key Palaeolithic research questions (PRQ) are:

- PRQ1: How were Early Upper and Late Upper Palaeolithic sites distributed across the landscape, and what contrasts may be observed with earlier and later (Mesolithic) periods?
- PRQ2: How may studies of fauna, pollen and other organic material from palaeochannels, caves, terrace sediments and other deposits refine our understanding of the evolving environment, and how may this have varied spatially?
- PRQ3: How best may we extend and enhance regional fieldwalking or test-pitting programmes as means of prospecting for open-air sites?
- PRQ4: How can we maximise the research yield of Pleistocene sites investigated during developer-funded work?

3.4.6 The principal research objective for the Palaeolithic across England relates to the identification of in situ remains from the period, along with developing a reliable chronology. Artefactual finds are relatively rare and the development of geoarchaeological deposit models and environmental sampling can enhance the existing baseline.

3.4.7 The EMHERF encourages further investigation of Upper Palaeolithic open-air sites within the region (Strategic Objective (SO) 1D). Identification of further sites within the Order Limits can help elucidate their character and spatial distribution (PRQ1). Analysis of any associated artefacts can also help identify patterns of movement of LUP communities (SO 1F). Farndon Fields is recognised as a key site within the EMHERF and analysis already carried out on artefacts from this site

have indicated that some lithic material was sourced from over 200km away.

- 3.4.8 Geoarchaeological deposit models from the Scheme can also help determine if there is any evidence of the changing Pleistocene environment (SO 1G).

Early Bronze Age

- 3.4.9 There is potential evidence for round barrows within the Order Limits.

- 3.4.10 The Bronze Age archaeological resource has the potential to contribute to OT6 and OT7.

- 3.4.11 The key Bronze Age research questions (BARQ) are:

- BARQ1: Can we define more precisely the chronology of the major monument classes (causewayed enclosures, barrows and cairns etc), and how might this have varied spatially?
- BARQ2: Why may monument complexes have developed, why were some short-lived and others of longer duration, and why do these incorporate such a wide variety of monument types?
- BARQ3: How significant were river-crossing or confluence zones as foci for monument complexes?
- BARQ4: How far can studies of burials, grave goods, house and barrow/cairn structures contribute to studies of status variations within and between communities?

- 3.4.12 The EMHERF encourages the identification of monument complexes (SO 3F), particularly as they are poorly known by comparison to other areas like Wessex. This is especially true of lowland areas where funerary monuments are normally only identified through remote sensing or, as in the case of the Order Limits, geophysical survey. The close proximity of the River Trent may have had a bearing on the location of round barrows (BARQ3).

Late Bronze Age and Iron Age

- 3.4.13 A number of enclosures, field systems and settlements have been identified across the Scheme 500 metre study area. This evidence suggests that there was a substantial human presence within the Order Limits during this period.

- 3.4.14 The Late Bronze Age and Iron Age archaeological resource has the potential to contribute to OT3 and OT4.

- 3.4.15 There is an opportunity to add a significant body of knowledge to the existing baseline, through work on the Scheme. The key late Bronze Age/Iron Age research questions (IARQ) are:

- IARQ1: What can we deduce about the morphology, spatial extent and functions of settlements, and in particular the processes underlying the development in some areas of enclosed occupation or activity foci?
- IARQ2: Why were settlements increasingly enclosed during this period and to what extent may the progress of enclosure have varied regionally?
- IARQ3: How are the nucleated settlements related to one another and to other settlements of the period? In particular, is there evidence for a developing settlement hierarchy?
- IARQ4: Can we shed further light upon the development of field and boundary systems?
- IARQ5: What were the economic, social or political roles of the pit alignments and linear ditch systems that characterised many areas of the East Midlands?
- IARQ6: What may we deduce from studies of linear boundaries with respect to changes in the agrarian landscape?
- IARQ7: What may further analysis of burials and of settlement architecture and morphology contribute to studies of social and political organisation?

3.4.16 There is an opportunity to help answer a number of research questions through fieldwork carried out as part of the Scheme. Investigation of these settlements and field systems, could help add a significant body of knowledge regarding settlement patterns, functions (IARQ1), hierarchies (SO 4E; IARQ3) and social and political organization (IARQ7) at this time.

Roman

3.4.17 The extensive enclosure and field systems recorded within the Order Limits are likely to have been occupied into the Roman period. The Order Limits lies close to the major communication routes such as the River Trent and the Fosse Way and there is an opportunity to investigate the wider rural settlement patterns during this period.

3.4.18 The Roman archaeological resource has the potential to contribute to OT3, OT4 and OT5.

3.4.19 The key Roman period research questions (RRQ) are:

- RRQ1: How did the conquest impact upon rural settlements and landscapes?
- RRQ2: How did field and boundary systems relate to earlier systems of land allotment, and how did these boundary networks develop over time?
- RRQ3: Can we chart more closely the processes of agricultural intensification and expansion and development of field systems?
- RRQ4: To what extent may communication routes have been influenced by late Iron Age settlement patterns and routes of movement?

3.4.20 The scale of the Scheme means that a landscape based approach can be taken to investigate the landscape context of rural settlements (SO

5H). The archaeological resource within the Order Limits has the potential to add to an existing body of work carried out across the wider Trent Valley (SO 5I).

Early medieval

3.4.21 Evidence for early medieval occupation across the Scheme 500 metre study area is fairly fragmentary and rare. However, Newark was occupied during this period and tentative evidence for activity at this time has been identified at Kelham Hall (MM018).

3.4.22 There is an opportunity to explore the role of existing communication routes during this period and any surviving archaeological evidence.

3.4.23 The early medieval archaeological resource has the potential to contribute to OT3 and OT9. The key early medieval research questions (EMRQ) are:

- EMRQ1: Can we identify social/political boundaries (for example, surviving linear earthworks and natural barriers) and/or estate centres?
- EMRQ2: To what extent may rivers such as the Trent or Witham have served as major political and social boundaries during the Anglo-Saxon period?
- EMRQ3: What impact may Germanic and Scandinavian immigration have had upon established rural settlement patterns, and how may place-name evidence contribute to studies of settlement evolution?
- EMRQ4: Is there evidence for a hiatus in cultivation in the mid-sixth century and for later arable expansion?

3.4.24 Although the current corpus of early medieval evidence for the Order Limits is small, there is an opportunity to investigate the role of the River Trent as a possible socio-political boundary at this time (SO 6F/6G). Investigation of earlier settlement sites may also help to determine whether these were occupied into this period, and what implications this has for reconstructing early medieval settlement patterns (SO 6A).

High medieval

3.4.25 Within the 500 metre study area, a number of settlements developed during this period, such as Kelham and Averham, whilst Newark became an important market town. The rural landscape was also extensively used agriculturally, with evidence for field boundaries and ridge and furrow.

3.4.26 The medieval archaeological resource has the opportunity to contribute to OT3, OT4 and OT9.

3.4.27 There is an opportunity to explore the archaeological resource relating to the medieval agricultural landscape. The key medieval research questions (MRQ) are:

- MRQ1: Can we clarify further the processes of settlement desertion and shrinkage, especially within zones of dispersed settlement?
- MRQ2: How did medieval manors and manorial estates develop from the Anglo-Saxon period?
- MRQ3: Can we shed further light upon the origins and development of the open-field system and its impact upon agricultural practices?

3.4.28 There is an opportunity to investigate the development of open field systems within the Order Limits (SO 7I; MRQ3). Land within the Order Limits has been subject to intensive agricultural activity, which has accelerated during the last century. Consequently, there is very little evidence of earthwork ridge and furrow although it has been detected as buried archaeological remains. The relationship with earlier systems of land allotment, such as those identified within the Scheme and tentatively dated to the Iron Age, can also be explored.

3.4.29 The archaeological resource within the Order Limits can also be explored alongside the documentary evidence, particularly relating to the development of medieval manors and the importance of agricultural activity for their continued economic success (MRQ2). Documentary evidence could also be examined for evidence relating to past settlement patterns and whether the villages at Kelham and Averham were larger in the past (MRQ1).

Post-medieval

3.4.30 Much of the land within the Order Limits remained agricultural in use during this period. However, during the Civil War, the area was utilised to lay down both offensive and defensive fieldworks during several sieges at Newark.

3.4.31 The post-medieval archaeological resource has the opportunity to contribute to OT3, OT4 and OT8.

3.4.32 There is an opportunity to determine the exact location of some of these Civil War fieldworks and confirm the accuracy of siegeworks mapping. The key Post-medieval research questions (PMRQ) are:

- PMRQ1: How can we improve our understanding of the early landscapes of enclosure and improvement and the interrelationship between arable, pasture, woodland, commons and waste?
- PMRQ2: How can we refine our knowledge of Civil War defences and siege works?

3.4.33 Documentary and mapping evidence shows that the agricultural landscape within the 500 meter study area was enclosed during this period. However, the intensification of this landscape during the 20th century means that evidence of this has been erased and is difficult to see past enclosure patterns. Archaeological investigation within the Order Limits offers an opportunity to identify these agricultural

improvements and help to date enclosure and refine the chronology for past landscape organization (SO 8E; PMRQ1).

3.4.34 The offensive and defensive fieldworks erected during the Civil War have been well mapped and recorded. However, whilst statutory protection is afforded to many of these with surviving above-ground remains, there is still some uncertainty around those surviving below ground. The course of the circumvallation lines and some fieldworks no longer survive above ground, and their exact location is not known. Archaeological investigation within the Order Limits offers an opportunity to explore whether any of these fieldworks survive archaeologically (SO 8J; PMRQ2).

Multi-period

3.4.35 The overarching themes were designed to take into account key research areas where the archaeological and historical periods overlapped. Archaeological investigation within the Order Limits, has the potential to enhance the existing knowledge base within these overarching themes.

3.4.36 Geoarchaeological work, combined with specific palaeoenvironmental sampling on individual sites, has the potential to document the changing environment throughout prehistory and through to the modern period (OT1).

3.4.37 Settlement patterns within the Order Limits should be examined holistically, to elucidate when enclosure complexes first developed and how these patterns changed. This could be examined archaeologically from the Iron Age through to the post-medieval period (OT3).

3.4.38 There is evidence for large scale landscape organisation dating to the Iron Age onwards within the Order Limits. There is an opportunity to investigate how field system patterns changed over time, right through to the post-medieval period (OT4).

3.4.39 The River Trent is a major feature close to the Order Limits and it has had a great influence on settlement patterns and landscape organisation. There is an opportunity to investigate how it was viewed as a landscape feature throughout different periods and also how it was utilised at various times (OT5).

3.4.40 No specific research questions are defined within the EMHEF for multi-period research themes. However, a number have been drawn up based on the known baseline for the Scheme (MRQ).

- MRQ1: Can the Pleistocene and Holocene environment be reconstructed for the Scheme area?
- MRQ2: How has landscape organisation, including settlement patterns and field patterns changed from prehistory?
- MRQ3: How has the role of the River Trent changed over time?

4 Phase 1: Preliminary surveys

4.1 Overview

4.1.1 This Chapter presents the Phase 1 preliminary surveys undertaken to inform the baseline contained within Chapter 6 (Cultural Heritage) of the ES (APP-050). The survey techniques were agreed in advance with NCC and NSDC Stakeholders and where relevant Historic England.

4.1.2 It was agreed with the Stakeholders that the fieldwork would:

- Inform the presence of and potential for archaeological remains within the Order Limits, to provide more in depth understanding of potential to impact this resource as a result of the Scheme.
- Identify any opportunities to further research goals in local, regional and national frameworks.
- Identify any opportunities for future public engagement to promote and enhance the benefits of the Scheme.
- Provide detailed and comprehensive knowledge to be included within the ES (**APP-050**) to inform Stakeholder decisions regarding further fieldwork.

4.1.3 Phase 1 included geophysical, metal detector and field walking surveys as well as a desk-based analysis of existing geoarchaeological data. Each technique is described below, alongside a summary of the results, which are detailed further within Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices. (**AS-099**).

4.1.4 Where the survey has informed the archaeological record, this has been incorporated into the baseline contained within Chapter 6 (Cultural Heritage) of the ES (**APP-050**).

4.1.5 All WSI's produced by the Archaeological Contractor for each survey type in Phase 1 were produced in consultation with and approved by the NCC and NSDC Stakeholders prior to commencement of the surveys. All Phase 1 WSIs prepared can be found within Appendices A-C of this AMP.

4.2 Geophysical survey

4.2.1 Geophysical survey is a non-intrusive method of gathering early-stage information on potential archaeology within an area and dependent on the results and their quality can provide information on the presence or absence of archaeology.

4.2.2 The geophysical survey undertaken to inform the Scheme comprised of high-resolution magnetic gradiometry (Magnetometry), undertaken in two phases by the Archaeological Contractor between September 2022 and March 2023. The surveys were undertaken within the Order Limits

specifically targeting the route of the Scheme (Areas 20 to 25 and 27 to 32) and the Floodplain Compensation Areas (Areas 48 to 51).

Aims and objectives

- 4.2.3 The aim of the geophysical survey was to identify any geophysical anomalies of possible archaeological origin to help characterise the nature, extent and potential significance of any known and unrecorded heritage assets.

Methodology

- 4.2.4 Magnetometry was proposed as it was the fastest, most cost-effective method of surveying large areas of ground while producing effective results which can identify a wide range of archaeological features.
- 4.2.5 Areas of recorded alluvial deposits on the flood plain were not surveyed as the composition of alluvium gives distorted magnetic readings which could hide archaeological features cut into it. Earlier archaeological features covered by alluvium would be disguised by the magnetic readings and may be below the survey depth of the magnetometers.
- 4.2.6 The geophysical survey was undertaken using a cart system across all identified fields using gradiometer sensors to record the magnetic resistance of the ground up to approximately 1 metre below the surface. These readings are then translated into a greyscale image and processed using specialist software.
- 4.2.7 The task specific WSI produced for the geophysical survey is contained within Appendix B of this AMP.

Results

- 4.2.8 The technical reports produced for the geophysical survey are contained within Appendices F and G of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices (**AS-099**). A summary of the geophysical surveys is also included within Chapter 6 (Cultural Heritage) of the ES (**APP-050**).
- 4.2.9 In summary the geophysical survey identified multiple sites of archaeological potential and enabled a greater understanding of the archaeology of the Order Limits. A possible Neolithic or Early Bronze Age ring ditch and two barrows were identified to the south of Langford Hall. Possible, Iron Age, Roman and early medieval settlement sites were also identified around Winthorpe and Kelham.
- 4.2.10 In consultation with the Stakeholders a programme of archaeological trial trenching and test pitting was recommended to be undertaken as part of the Phase 2 archaeological evaluation. The purpose of the trial trenching and test pitting was to further explore the archaeological potential identified within the geophysical survey reports contained within Appendices F and G of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices (**AS-099**). The scope of the trial trenching is outlined in Chapter 5 of this AMP, however, this has not changed the assessment in

the ES but has been used to inform the Phase 3 archaeological mitigation strategy (see Section 6).

4.3 Metal detector

4.3.1 Metal detector surveys were undertaken by the Archaeological Contractor between September 2022 and January 2023. The surveys were undertaken within the Order Limits specifically targeting known areas with potential for Civil War remains, specifically targeting (Areas 2 to 4, 6, and 7 to 18). These areas lie in proximity to designated and non-designated Civil War heritage assets as well as having potential for prehistoric archaeology.

Aims and objectives

4.3.2 The aim of the metal detector survey was to map artefacts which could help locate or negate the potential for archaeological remains. There was a particular focus on locating artefacts derived from the Civil War, as Newark was a key strategic location during the conflict.

Methodology

- 4.3.3 The survey required clear ground to effectively use the metal detectors. The fields surveyed were systematically walked and any artefacts collected and recorded, with the location recorded by GPS.
- 4.3.4 The task specific WSI produced for the metal detector survey is contained within Appendix C of this AMP.

Results

- 4.3.5 In summary the survey did not identify any areas of specific archaeological potential, although a number of finds relating to the Civil War era were recovered including unspent musket balls and a broken gunflint.
- 4.3.6 The full technical report produced for the metal detector survey is contained within Appendix E of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices (**AS-099**). A summary of the metal detector survey is also included within Chapter 6 (Cultural Heritage) of the ES (**APP-050**).

4.4 Field walking survey

4.4.1 Field walking survey was undertaken by the Archaeological Contractor in January 2023. The survey was undertaken within the Order Limits specifically targeting known areas with potential for lithic surface finds (Areas 2 to 4, 6 and 7). These areas lie in proximity to areas known to have potential for prehistoric archaeology.

Aims and objectives

- 4.4.2 The aim of the field walking survey was to map artefacts which could help locate or negate the potential for archaeological remains. Any concentrations of lithic or other artefacts may suggest the presence of either archaeological deposits containing artefacts or the presence of related archaeological features below the ground surface.

Methodology

- 4.4.3 This survey type requires ploughed and harrowed fields to be effective and is undertaken by the systematic walking of the field placing flags where artefacts are noted. The flags locations are then recorded by GPS with the artefact being recovered and recorded.
- 4.4.4 The task specific WSI produced for the field walking survey is contained within Appendix D of this AMP.

Results

- 4.4.5 In summary the survey did not identify any areas of specific archaeological potential, demonstrating only the deposition of post medieval pottery sherds as part of the agricultural practice of manuring.
- 4.4.6 The full technical report produced for the field walking survey is contained within Appendix D of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices (**AS-099**). A summary of the fieldwalking survey is also included within Chapter 6 (Cultural Heritage) of the ES (**APP-050**).

4.5 Desk-based geoarchaeological review

- 4.5.1 A geoarchaeological DBA was undertaken by the Archaeological Contractor in January 2023. The assessment covered the Order Limits in addition to a 1 kilometre buffer surrounding the Order Limits.

Aims and objectives

- 4.5.2 The aim of the geoarchaeological DBA was to understand the geological deposits within the Order Limits; identify areas of geoarchaeological potential which may be affected by the Scheme; and make recommendations for further site-based assessment to be carried out in Phase 2.

Methodology

- 4.5.3 The DBA comprised a review of geological data, which included British Geological Survey (BGS) mapping, the results of previous geoarchaeological investigations within the study area and Geotechnical Investigation (GI) results gathered during Options Selection stage.

Results

- 4.5.4 The geoarchaeological DBA report is contained within Appendix I of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices **AS-099**. A

summary of the DBA is also included within Chapter 6 (Cultural Heritage) of the ES (**APP-050**).

- 4.5.5 In summary the geoarchaeological DBA concluded that there was high potential for Late Upper Palaeolithic (LUP) material and associated deposits within the Holme Pierrepont Sand and Gravel member recorded within the Order Limits, particularly within Area 40, close to the previously recorded open-air site at Farndon. The DBA also established that there was high potential for organic sediments to survive in and around the mapped palaeochannels within the Order Limits. These deposits had high potential to preserve multi-period waterlogged palaeoenvironmental organic matter and archaeological remains.
- 4.5.6 In consultation with the Stakeholders a programme of further geoarchaeological assessment including coring and test pitting was recommended to be undertaken as part of the Phase 2 archaeological evaluation. The purpose of the coring and test pitting was to further explore the archaeological potential identified within the geoarchaeological DBA contained within Appendix I of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices (**AS-099**). The scope of the trial trenching and associated works is outlined in Chapter 5 of this AMP.

5 Phase 2: Archaeological evaluation

5.1 Overview

- 5.1.1 This Chapter presents the Phase 2 archaeological evaluation work undertaken to further characterise the archaeological resource within the Order Limits of the Scheme, and to inform the scope of the Phase 3 archaeological mitigation strategy.
- 5.1.2 The scope of the Phase 2 archaeological evaluation was informed by:
- The existing baseline and archaeological potential detailed within Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices **(AS-099)**.
 - The results of the Phase 1 preliminary archaeological surveys detailed in Chapter 4 of this AMP.
 - Key research questions identified from the EMHEF as detailed in Chapter 3 of this AMP..
- 5.1.3 The survey techniques outlined within this Chapter were agreed in advance with NCC and NSDC Stakeholders and where relevant Historic England.
- 5.1.4 All WSIs produced for the Phase 2 archaeological evaluation were produced in consultation with and approved by the NCC and NSDC Stakeholders. All Phase 2 WSIs can be found within Appendices D-F of this AMP.

5.2 Archaeological Monitoring of Ground Investigation

- 5.2.1 A series of GI trial pits were excavated within the Order Limits in May 2023 as part of the wider works for the Scheme. Where GI was proposed within archaeologically sensitive areas (Areas 20 and 49) these works were subject to archaeological monitoring, see Appendix H and JJ of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices **(AS-099)**.

Aims and objectives

- 5.2.2 The aim of the archaeological monitoring was to determine the presence or absence of archaeological deposits within archaeologically sensitive GI work areas; to determine (so far is reasonable possibly) the stratigraphic sequence and dating of features identified; and to identify the need for, scope and scale of further archaeological works which may be required as part of the Phase 3 archaeological mitigation strategy.

Methodology

- 5.2.3 The work involved archaeological monitoring of seven GI trial pits, each measuring between 3.0 metres and 4.0 metres in length, 0.5 metres in width and attaining depths of between 2.2 metres and 3 metres. A

competent archaeologist with relevant geoarchaeological knowledge was supplied by the Archaeological Contractor to monitor the excavation of the seven trial pits. The competent archaeologist was present for the opening of all seven trial pits and observed the full excavation of each location.

- 5.2.4 The archaeological monitoring was undertaken in accordance with the WSI, contained within Appendix E of this AMP.

Results

- 5.2.5 The full technical report for the archaeological monitoring is contained within Appendix J of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices (**AS-099**). A summary of the report is also included within Chapter 6 (Cultural Heritage) of the ES (**APP-050**).
- 5.2.6 In summary, while no archaeological features were observed in any of the monitored areas of GI, the work enabled observations to be made regarding the character of underlying deposits and the depth of recent overburden sealing potential archaeological layers and features.

5.3 Geoarchaeological coring

- 5.3.1 Geoarchaeological coring was carried out within the Order Limits of the Scheme by the Archaeological Contractor between September 2022 and March 2023. The investigation comprised a programme of 38 purposive geoarchaeological boreholes with a sampling interval of approximately 250 metres.
- 5.3.2 The purpose of the work was to understand and characterise Holocene and Pleistocene alluvial deposits and identify any trends of variation in deposits across the floodplain, including palaeochannels identified within Appendix H and J of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices (**AS-099**).

Aims and objectives

- 5.3.3 The principal aim of the geoarchaeological coring was to characterise, as far as reasonably possible, the deposit sequence within the floodplain section of the Scheme and the alluvial deposits near Kelham. This concentrated on nature, extent, date, and potential significance of any palaeoenvironmental or geoarchaeological materials within the Order Limits of the Scheme.
- 5.3.4 The objective of the coring was to provide data to inform the ES, and to identify the need for, scope and scale of further geoarchaeological investigations which may be required as part of the Phase 3 archaeological mitigation strategy.

Methodology

- 5.3.5 The geoarchaeological coring was implemented within areas of the Order Limits that crossed the flood plain of the River Trent (Areas 2, 3, 6, 7-12, 14-16, and 18), alongside a limited part of the Kelham and Averham flood compensation area (Areas 48 and 51). The geoarchaeological coring was carried out in accordance with the task specific WSI contained within Appendix F of this AMP.
- 5.3.6 Work at each coring location commenced with the excavation a narrow hand dug spade pit dug to a depth of 1.2m to ensure no buried services were present. The hand excavation was undertaken under archaeological supervision, with the spoil being checked for artefacts as well as being geoarchaeologically recorded.
- 5.3.7 Boreholes were then drilled with an appropriate scale rig, from the current ground surface to the top of the underlying bedrock geology or refusal. The type of rig used varied according to availability and suitability for the predicted sediment sequence. Sediment cores were recovered either in plastic liners (percussion and rotary rigs) or by continuous feed into sample trays. The number of cores and a record concerning the level of recovery that was observed was made on site by the attending geoarchaeologist.

Results

- 5.3.8 The full technical report produced for the geoarchaeological coring is contained within Appendix K of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices (**AS-099**). A summary of the geophysical surveys is also included within Chapter 6 (Cultural Heritage) of the ES (**APP-050**).
- 5.3.9 In summary six boreholes designed to target known palaeochannels produced organic sediments, however, nine other boreholes targeting palaeochannels failed to produce any organic material. In contrast seven organic deposits were recorded in borehole locations not indicated as being in palaeochannels.
- 5.3.10 Only one borehole located within the Kelham and Averham flood compensation area produced a humified peat deposit. The remaining boreholes at Kelham either produced no organic material or were shown to be in the Holme Pierrepont sands and gravels indicating that the palaeochannels were further west than originally thought and unlikely to be impacted by the Scheme.
- 5.3.11 In consultation with the Stakeholders it was agreed that samples recovered from the survey, in addition to viable samples taken during geoarchaeological monitoring along the route of the Scheme (see Appendix H of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices (**AS-099**), will be sent for radiocarbon dating and pollen testing. The objective of this analysis was to provide dating and environmental evidence to identify the need for further geoarchaeological investigations which may be required as part of the Phase 3

archaeological mitigation strategy. The results of this testing will be appended to the technical report produced for the Phase 2 trial trench and test pit evaluation (see Sections 5.4 and 5.5).

5.4 Trial trench evaluation

- 5.4.1 Archaeological trial trenching was carried out within the Order Limits of the Scheme by the Archaeological Contractor between August 2023 and June 2024. The investigation comprised a programme of 292 machine excavated trial trenches, with additional areas of fieldwalking and metal detecting.
- 5.4.2 The trial trench evaluation was undertaken in a phased approach relating to the required Environment Agency Flood Risk Activity Permits (FRAPs), landowner licenses and additional considerations including despoiling of land.
- 5.4.3 The first stage of trenching was focused on those areas outside of the floodplain and began in August 2023.
- 5.4.4 The second stage was focused on those areas within the floodplain which required a FRAP. This stage began almost immediately after the completion of the first stage and was completed in the early part of 2024.
- 5.4.5 A third stage was undertaken to complete trenching in areas that were inaccessible during the first two stages. This was undertaken later than the first two phases in June 2024.
- 5.4.6 A number of trenches could not be excavated as part of the Phase 2 evaluation owing to flooding or absence of landowner permission to work. These areas will be subject to evaluation during Phase 3 and are detailed within Chapter 6 of this AMP.

Aims and objectives

- 5.4.7 The aims of the trial trench evaluation were to define and gain a better understanding of the archaeology revealed by the Phase 1 preliminary surveys as well as testing those locations where no definitive archaeology was identified through preliminary survey (see Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices (AS-099).
- 5.4.8 The objective of the trial trenching was to better understand the impacts of the Scheme upon known and potential archaeological remains, and to identify the need for, scope and scale of further archaeological investigations which will be required as part of the Phase 3 archaeological mitigation strategy.

Methodology

- 5.4.9 In agreement with the NCC and NSDC Stakeholders the trial trench evaluation took place across the Order Limits and consisted of 3% trenching in those areas where geophysical survey had taken place and

5% trenching in those areas which had not undergone geophysical survey.

- 5.4.10 All archaeological trial trenching was carried out by the Archaeological Contractor in accordance with the WSI contained within Appendix G of this AMP, alongside the ClfA Standard and Guidance for Archaeological Field Evaluation¹⁵.
- 5.4.11 The number and layout of trenches was developed in consultation with and agreed by the NCC and NSDC Stakeholders. Additional trenches or significant deviation from the original trenching plan was agreed with the Client, Design Consultant and Stakeholders. Location plans and details of the trenches can be found within the task specific WSI, which forms Appendix G of this AMP.
- 5.4.12 Additional fieldwalking was undertaken in areas of Holme Pierpont sands and gravels, where there is high potential for LUP activity to be preserved. This was to ensure any prehistoric lithics were located prior to excavation and that any concentrations of artefacts were identified and recorded. It is noted that these locations were not generally suitable for fieldwalking, being un-ploughed, however, the known potential was great enough to warrant a search prior to excavation. Chapter 7 and Appendix G of this AMP details further requirements for field walking prior to excavation.
- 5.4.13 Further metal detecting was undertaken in the areas of high Civil War potential prior to excavation of the trenches. Following the topsoil strip, the spoil heaps and subsoil were also subject to metal detecting. Chapter 7 and Appendix F of this AMP details further requirements for metal detecting during hand excavation.

Results

- 5.4.14 The full technical report produced for the archaeological trial trenching is contained within Appendix H of this AMP.
- 5.4.15 In summary the trial trenching confirmed the results of the Phase 1 preliminary surveys and provided further evidence and dating for known areas of archaeology within the Order Limits of the Scheme. Significantly Anglo Saxon evidence was identified east of Winthorpe (Areas 20 and 21) along with confirmation of the previously identified Iron Age/Romano British settlement sites (Areas 24 and 25). The presence of Romano British settlement at Kelham (Area 48) was also confirmed along with other areas of archaeological interest across the scheme.
- 5.4.16 The trenching did not find evidence of the palaeochannels in the areas around the Island north of the River Trent and excavations in those areas were curtailed on advice from the Stakeholders. The same results were recorded by the trenching around Cattle Market roundabout. It is

¹⁵ ClfA 2020 Standard and Guidance for Archaeological Field Evaluation [online] Available at: [ClfAS&GFieldevaluation_3.pdf \(archaeologists.net\)](#) (last accessed December 2023).

anticipated that these features are at greater depths than trenching could reach and would only be impacted by the works at depth in area 6.

- 5.4.17 Following completion of the trial trenching consultation was undertaken with the NCC, NSDC and Historic England Stakeholders. The purpose of this consultation was to discuss the results of the trial trenching and to develop the scope of archaeological investigations and protection measures required during the pre-commencement and construction stages of the Scheme. The agreed requirements are outlined in the Phase 3 archaeological mitigation strategy in Chapter 6 of this AMP.

5.5 Test pitting

- 5.5.1 Alongside trial trenching geoarchaeological test pitting was carried out within the Order Limits of the Scheme by the Archaeological Contractor between August 2023 and June 2024. The investigation comprised a programme of 51 machine excavated test pits and 37 hand excavated trial pits.
- 5.5.2 The purpose of the work was to understand and characterise Holocene and Pleistocene alluvial deposits and identify any trends of variation in deposits across the floodplain, including palaeochannels identified within Appendix H and J of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices **(AS-099)**.

Aims and objectives

- 5.5.3 In agreement with the Stakeholders, geoarchaeological test pits were excavated to test and further understand the nature of palaeoenvironmental features identified within Appendix H and K of Appendix 6.1 (Cultural Heritage DBA) of the ES Appendices **(AS-099)**.
- 5.5.4 The aim of this work was to provide additional geoarchaeological information in order to create a comprehensive deposit model and inform the precise location and depths of the geoarchaeological features, as well as allowing the development of the Phase 3 archaeological mitigation strategy detailed in Chapter 6 of this AMP.

Methodology

- 5.5.5 The test pitting was carried out by the Archaeological Contractor in accordance with the WSI contained within Appendix G of this AMP.
- 5.5.6 The 51 machine excavated test pits, were machine excavated at the end of each of the trial trenches at locations determined by the onsite geoarchaeologist in (Areas 21, 22, 48, 49, 50 and 51) to provide further understanding of the nature and extent of the deposits identified and whether there were any further layers of geoarchaeological interest. Optically Stimulated Luminescence (OSL) dating was used as part of this aspect of geoarchaeological investigation.

5.5.7 The 37 hand dug test pits were excavated in areas of Holme Pierpont sands and gravels, where there is high potential for LUP activity to be preserved (Areas 2121, 22, 48 and 51). The hand dug test pits allowed a detailed search of the area for these prehistoric lithics as well as any Civil War artefacts that may be present. Following the topsoil strip, the spoil heaps were hand sieved in order to search for any lithics. Chapter 7 and Appendix G of this AMP details further requirements for lithic sampling during excavation.

Results

- 5.5.8 The full technical report produced for the geoarchaeological trial trenching and test pitting is contained within Appendix H of this AMP.
- 5.5.9 Within area 48, the presence of laminated sands and gravels resembling those identified at Farndon has been noted in some of the geoarchaeological test pits. Some of the similar deposits at Farndon have produced in situ Late Upper Palaeolithic stone tools. While no such artefacts were noted in the geoarchaeological test pits, OSL dates taken from these sands have given a deposition date of 10 490-8050 BC which would include the final phases of the Late Upper Palaeolithic.
- 5.5.10 In summary the machine excavated test pits helped to confirm the extent of deposits of potential archaeological interest but did not recover any associated Holocene artefacts
- 5.5.11 The hand dug test pits recovered no artefacts and in agreement with the Stakeholders, some areas were descope from excavating further hand dug test pits.

6 Phase 3 – Archaeological Mitigation Strategy

6.1 Overview

- 6.1.1 This Chapter presents the Archaeological Mitigation Strategy (hereafter referred to as the ‘Strategy’), which details the scope of archaeological investigations, protection measures and community engagement required ahead of and during the pre-commencement and construction stages of the Scheme.
- 6.1.2 In accordance with Requirement 9 of the draft DCO (**REP4-003**), this Strategy has been developed in consultation with the NCC, NSDC and Historic England Stakeholders, following completion of the Phase 1 preliminary surveys and Phase 2 archaeological evaluation, described in Chapters 4 and 5 of this AMP.
- 6.1.3 The archaeological investigations detailed within this Strategy will be undertaken in accordance with the general methodology and guidance outlined in Chapter 7 of this AMP and the task specific WSI’s, to be produced by the Archaeological Contractor and approved by the NCC Stakeholder. The WSI’s will detail the scope and methodology for archaeological recording and reporting of these investigations, deposition of the report with the relevant Historic Environment Record (HER) and deposition of the archive with a suitable public depository willing to receive it. All work will conform to this Strategy and the general methodology set out in Chapter 7 of this AMP.
- 6.1.4 All post excavation reporting and archiving will be undertaken by the Archaeological Contractor and will be overseen by the Design Consultant. The scope and detail of this work will be developed following completion of fieldwork and agreed with Stakeholders and the Client. Further detail is contained in Chapter 7 of this AMP.

6.2 Archaeological Clerk of Works

- 6.2.1 An Archaeological Clerk of Works (ACoW) will be appointed to oversee all of the onsite works detailed within this Strategy.
- 6.2.2 The ACoW will work closely with the Client to ensure any changes to construction or construction programme that may impact archaeology are properly reviewed and discussed with the relevant Stakeholders prior to implementation.
- 6.2.3 The ACoW will attend site visits and be the main point of communication between the Client, the Archaeological Contractor, the Design Consultant and relevant Stakeholders regarding all onsite works.
- 6.2.4 The overall responsibilities of the ACoW will be to monitor the Principal and Archaeological Contractors compliance with their contractual

obligation to ensure that the Scheme complies with all archaeological and historic environment legislation and consents, including the DCO and those measures set out within the First Iteration Environmental Management Plan (EMP) **(REP4-010)**.

6.2.5 The ACoW will:

- Facilitate access and vibration monitoring arrangements with Stakeholders;
- Give toolbox talks, where required, to inform all site personnel of the archaeological and historic environment constraints on site;
- Monitor fieldwork to ensure the Archaeological Contractor's compliance with this AMP and approved task specific WSI's and commitments set out in the EMP;
- Monitor the Principal Contractors compliance with their obligations and commitments to ensure that protection measures are in place and maintained appropriately throughout the pre-commencement and construction stages of the Scheme, in compliance with the EMP, AMP and approved WSIs; and
- Provide a condition survey feedback to Stakeholders during site meetings, including compliance/non-compliance issues and how these are being resolved.

6.3 Historic building recording

6.3.1 Historic building recording will be undertaken where the construction works will result in a direct physical impact, which has the potential to result in a change to the character and appearance of a heritage asset. The work will be undertaken at the earliest opportunity prior to any construction work in the area of the historic building.

6.3.2 The only heritage asset within the Order Limits of the Scheme identified as requiring historic building recording is the Grade II Causeway Arches 500m north-west of level crossing (MM228), which will be subject to partial demolition as a result of the Scheme.

6.3.3 The partial loss of the asset's historic fabric is required to be recorded in advance of demolition in accordance with Historic England guidance. 'Understanding Historic Buildings: A guide to good recording practice'¹⁶.

Aims and objectives

6.3.4 The recording of historic buildings will be undertaken to compile a lasting record of that resource, to analyse and interpret the results as appropriate. The main objectives of the survey will be:

¹⁶ Historic England, 2016. Understanding Historic Buildings: A Guide to Good Recording Practice. [Available online]: [Understanding Historic Buildings: A Guide to Good Recording Practice \(historicengland.org.uk\)](https://historicengland.org.uk). (last accessed December 2023).

- To investigate, analyse and describe the fabric of the building concerned before demolition, with the aim of elucidating its use and structural history.
- To make a detailed record of the existing building in its present condition, by means of photography and scale drawings, with the use of existing scale drawings.
- To make a detailed recording of any historic fabric exposed during demolition by means of photography.
- To make a photographic record of the buildings setting, to provide an archive of the relationship between the asset and its surroundings prior to construction and to record how changes to the setting affect the significance of the asset.
- To report the results in suitable form for inclusion within the Nottinghamshire HER and publish a summary and register the report through the Archaeology Data Service (ADS) OASIS form.

Methodology

- 6.3.5 The historic building recording will be undertaken in accordance with Historic England “Understanding Historic Buildings: A Guide to Good Recording Practice”¹⁷ and ClfA “Standard and guidance for the archaeological investigation and recording of standing buildings or structures”¹⁸.
- 6.3.6 In line with the guidance and in consultation with NCC and NSDC Stakeholders it has been determined that the Grade II Causeway Arches 500m north-west of level crossing (MM228) will be the subject of building recording commensurate with a Historic England Level 3 historic building survey.
- 6.3.7 The historic building survey will be completed prior to the commencement of any construction works (including any pre-commencement works) to the heritage asset and updated should new information be revealed during the course of the works.
- 6.3.8 The methodology for the historic building recording will be set out in a task specific WSI to be produced by the Archaeological Contractor and approved by the NCC Stakeholder before the survey is undertaken. The WSI will adhere to the scope detailed within Chapters 6 and 7 of this AMP.

¹⁷ 17 Historic England, 2016. Understanding Historic Buildings: A Guide to Good Recording Practice. [Available online]: [Understanding Historic Buildings: A Guide to Good Recording Practice \(historicengland.org.uk\)](https://www.historicengland.org.uk/understanding-historic-buildings-a-guide-to-good-recording-practice). (last accessed December 2023).

¹⁸ 18 ClfA, 2019. Standard and guidance for the archaeological investigation and recording of standing buildings or structures [online] https://www.archaeologists.net/sites/default/files/ClfA%26GBuildings_3.pdf (Last accessed May 2024).

6.4 Vibration monitoring and condition survey

- 6.4.1 Vibration monitoring and condition survey will be undertaken where the construction works have the potential to have a physical impact, which may result in a change to structural condition of a heritage asset.
- 6.4.2 Three heritage assets have been identified as requiring ‘three season’ vibration monitoring in order to protect their special interest and heritage value. One of these heritage assets will also require a condition survey in order to determine its condition prior to works commencing. The heritage assets which require vibration monitoring and condition survey are described below in Table 6-1.

Table 6-1: Heritage assets requiring vibration monitoring and condition survey.

Asset	Requirement	Reason
Grade II Causeway Arches 500m north-west of level crossing (MM228)	Vibration Monitoring	This asset is required to be partially demolished and rebuilt (west side). The remaining section of arches (east side) dating to the 18th century is vulnerable to destabilisation as a result of these works.
	Condition Survey	In addition to vibration monitoring, this asset requires a condition survey. This is in order to determine the assets structural and material condition prior to works commencing, as well as its foundation design.
Grade II Farndon Windmill (MM139)	Vibration Monitoring	This asset is in close proximity to a construction compound and the site of a new section of road bridge, requiring a crane and piling. The mill is missing its cap, leaving wall tops open to the elements, and with an unknown maintenance regime, it is to be assumed that the mill must be in poor to very bad condition.
Grade II* Concrete Footbridge across River Trent (MM038)	Vibration Monitoring	This asset is immediately adjacent to a temporary access route which will be used to reach a works compound required to construct a new section of road bridge. The quality or type of foundations to this bridge are unknown and the construction of the bridge is slender and of reinforced concrete now over 100 years old, which can be subject to considerable deterioration over time. The level of maintenance to and strength and condition of the bridge, is unknown.

Aims and objectives

- 6.4.3 The aim of the ‘three season’ vibration monitoring is to establish a baseline before construction works begin; to monitor the range of movement during construction and ensure any vibration does not exceed an agreed threshold (in which case, works should cease and mitigation put in place); and post-works monitoring to ensure that any settlement is in line with the baseline readings.

- 6.4.4 The aim of the condition survey for Grade II Causeway Arches 500m north-west of level crossing (MM228) is to determine the assets structural and material condition prior to works commencing, as well as its foundation design. This will ensure that any remedial works to the structural condition of the building can be carried out in accordance with the construction programme, and the information can be used to inform the rebuilding of the asset (west side) to ensure the use of appropriate materials and methodology.

Methodology

- 6.4.5 The monitoring and survey requirements described in Table 6-1 will be secured in the First Iteration Environmental Management Plan (EMP) **(REP4-010)**. Commitment CH2 of Table 3.2 Register of Environmental Actions and Commitments of the First Iteration EMP refer to structural monitoring for these heritage assets.
- 6.4.6 The Principal Contractor will be responsible for ensuring that a monitoring plan containing the detailed monitoring methodology will be produced prior to work commencing. This plan will be produced in consultation with the landowners and the NCC Stakeholder, prior to the start of the monitoring.

6.5 Archaeological evaluation

- 6.5.1 During the Phase 2 evaluation some areas of the Order Limits were not accessible owing to an absence of landowner permissions and/or flooding. As a result, those areas not accessible during Phase 2, will be subject to evaluation during the pre-commencement stage of the Scheme, if not before. This evaluation will include trial trenching and geoarchaeological test pitting.
- 6.5.2 The areas which will require archaeological evaluation during the pre-commencement stage of the Scheme, if not before, are detailed below in Table 6-2. The location of these areas is depicted within the Archaeological Trial Trenching and Test Pitting WSI contained within Appendix G of this AMP as well as Appendix A, Figures 1 and 3.

Table 6-2: Details of the evaluation requirements during pre-commencement stage of the Scheme.

Location	Requirement	Reason
Area 7	10 Trenches	To identify any Civil War remains, and palaeochannels identified in previous studies.
Area 52	One Trench and one hand test pit.	To identify any paleolithic remains associated with the scatters identified to the South of Farndon roundabout.

Aims and objectives

6.5.3 The aims and objectives of the trial trenching and test pitting are set out in Chapter 5, Sections 5.4 and 5.5 and Appendix G of this AMP.

Methodology

- 6.5.4 All archaeological trial trenching and test pitting within the locations outlined in Table 6-2 will be carried out by the Archaeological Contractor in accordance with the existing WSI, contained within Appendix G of this AMP, and ClfA Standards and Guidance for archaeological field evaluation¹⁹. The WSI has been approved by the NCC Stakeholder, as part of the Phase 2 archaeological investigation and as such a new site specific WSI will not be required.
- 6.5.5 Upon completion of the evaluation, consultation will be undertaken with the NCC Stakeholder. The purpose of this consultation will be to determine the need (if any), and scope of further archaeological investigations and protection measures required within the locations outlined in Table 6-2 during the pre-commencement and construction stages of the Scheme.
- 6.5.6 If further archaeological investigation is required within the locations outlined in Table 6-2, this Archaeological Mitigation Strategy must be updated to include the scope of any further investigation required. This update must be submitted in writing and approved by the NCC Stakeholder prior to any works being started within the locations outlined in Table 6-2.
- 6.5.7 In addition, task specific WSI's for any further archaeological investigations required within the locations outlined in Table 6-2 must be produced by the Archaeological Contractor and approved by the NCC Stakeholder, prior to any works being started in these locations.

6.6 Archaeological excavation

- 6.6.1 Where significant and complex archaeology was identified within the Order Limits of the Scheme during the Phase 2 evaluation, archaeological excavation will be required. This will take the form of Strip, Map and Sample or Detailed Open Area Excavation, which will be conducted during the pre-commencement stage of the Scheme.
- 6.6.2 In consultation with the NCC, NSDC and Historic England Stakeholders and the Client, the excavations will be focused on the areas described below in Table 6-3. The location of these areas are depicted below in Appendix A, Figures 5, 6 and 8.

¹⁹ ClfA. 2023. Universal guidance for archaeological field evaluation [online]
<https://www.archaeologists.net/sites/default/files/Universal%20guidance%20for%20archaeological%20field%20evaluation.pdf> (Last accessed May 2024).

Table 6-3: Areas requiring archaeological excavation during the pre-commencement stage of the Scheme.

Location	Requirement	Reason
Areas 20 & 21	Detailed Open Area Excavation	Phase 1 preliminary surveys and Phase 2 archaeological evaluation established that these areas contained significant archaeological remains associated with settlement activity dating from the Iron Age through to the Early Medieval period including a Saxon Grubenhause. The main concentration of archaeological remains are contained within Area 20 but extend into Area 21.
Areas 24 & 25	Strip, Map and Sample Excavation	Phase 1 preliminary surveys and Phase 2 archaeological evaluation established that these areas contained significant archaeological remains associated with settlement activity dating to the Iron Age and Roman periods. These archaeological remains appear to lessen in density towards the eastern extent of the area.
Area 48	Detailed Open Area Excavation	Phase 1 preliminary surveys and Phase 2 archaeological evaluation established that this area contained significant archaeological remains associated with settlement activity dating to the Iron Age and Roman periods. The archaeological remains appear to be concentrated in the Northern extent of the area but features continue to the southern edge of the area. OSL dating of a paleochannel revealed deposits relating to the palaeolithic which have the potential to contain artefacts of this period.

Aims and objectives

6.6.3 The principal aim of the excavations will be the preservation by record, of archaeological deposits, which will be lost as a result of the construction of the Scheme. The main objectives of the excavations will be to:

- To provide a comprehensive record of the archaeological features and analysis of the results.
- To determine the significance, extent, condition, nature, character, quality and date of any archaeological remains encountered.
- To record and fully excavate any significant archaeological remains encountered.
- To assess the eco-factual and environmental potential of any significant archaeological features and deposits.
- To report the results in suitable form for inclusion within the Nottinghamshire HER and publish a summary and register the report through the Archaeology Data Service (ADS) OASIS form.

Methodology

6.6.4 All excavations detailed within Table 6-3 will be undertaken in accordance with task specific WSIs to be produced by the Archaeological Contractor and approved by the NCC Stakeholder. This excavation will

also be undertaken in accordance with the ClfA Standards and Guidance for archaeological excavation²⁰ as well as any other relevant standards and guidance as identified in Chapter 7 of this document.

- 6.6.5 The need for excavation within the areas specified in Table 6-3 has been identified through the Phase 2 evaluation which confirmed the presence of significant archaeological remains within these areas. This approach has been agreed through consultation with the Stakeholders and the Client.
- 6.6.6 The areas specified in Table 6-3 will be machine stripped under archaeological control to the first archaeological horizon, or to the natural geology where no archaeological remains are encountered. All archaeological features will be recorded and sampled. Each sampled context will be excavated in sequence. The sampling strategy outlined below in Table 6-4, will be adopted where features are sampled to ascertain the nature, depth, date and state of preservation of archaeological features as well as the stratigraphical relationships of these deposits and features to one another. The methodology for excavation in area 48 will take into account the presence of paleolithic deposits (See Section 6.8).

Table 6-4: List of features and recommended sampling strategies.

Feature	Min. Sampling Requirements of exposed elements	Comment
Discrete (e.g., pit, posthole)	50%	If no dating material, then the remaining fill will be rapidly excavated after recording to recover dating material.
Ditch	Varies	Sampling strategy to be established once feature exposed. Terminals to be targeted. Overall approach flexible, depending on artefact/ecofact content.
Ring gully	50%	Include terminals. Once recorded, 100% excavation for finds retrieval and sampling.
Structures	Varies	Should be excavated in sufficient detail to establish construction sequence and repairs/extensions. Floor levels to be cleaned, excavated and sampled.
Hearth, furnace or kiln	100%	Should also be bulk sampled. Aim to determine function, repairs or replacement.
Human remains	Varies	If not to be left in-situ, then 100% excavation. Any removal of human remains will be carried out in accordance with Article 51 (removal of human remains) in the dDCO (REP4-003).

²⁰ ClfA. 2023. Universal guidance for archaeological excavation [online]
https://www.archaeologists.net/sites/default/files/ClfAS&GExcavation_1.pdf. (Last accessed May 2024).

Complex features	Varies	Sampling strategy to be established once feature exposed. Areas to be targeted where stratigraphic relationships can be established. Overall sampling approach flexible, depending on artefact/ecofact content.
Waterlogged features	Varies	Sampling strategy to be established once feature exposed. Will likely involve bulk environmental sampling (see Chapter 7 of this AMP).

- 6.6.7 In some cases, where complex archaeological features/ relationships of high significance are identified, the excavation areas will be extended in agreement with the Client and the NCC Stakeholder to include any archaeology continuing outside of the impacted areas but within the Order Limits of the Scheme. These extensions will be discussed and the balance between preservation in situ and the requirement to understand the feature/relationship will be carefully considered and agreed with all relevant parties.
- 6.6.8 Features/relationships which are agreed to require the extension of the excavation area, will only be excavated far enough to understand the feature. No features extending outside of the Order Limits will be excavated as this would extend beyond the area assessed as part of the DCO submission.
- 6.6.9 It is anticipated that an element of metal detecting will be undertaken as part of this work, both to protect against loss of artefacts through nighthawking **Error! Bookmark not defined.** and to ensure the full recovery of metal artefacts, particularly any from the Civil War era.
- 6.6.10 All excavations will be subject to regular monitoring visits by the Design Consultant and the NCC Stakeholder in order to ensure that the excavations are being carried out to the required standards and that it will achieve the stated objectives in line with the approved WSI. These visits will be coordinated by the ACoW.

6.7 Archaeological monitoring and recording

- 6.7.1 Archaeological monitoring and recording (AMR), covers archaeological investigations conducted during the construction stage of the Scheme. This will include the monitoring of ground works associated with the construction of road and associated infrastructure.
- 6.7.2 AMR will take place in areas of lower concentrations of archaeological remains and/or those areas which will be minimally impacted by the Scheme. However, these areas should be undertaken in reasonable time that should archaeology be discovered it can be excavated and recorded without impacting the construction program.

6.7.3 In consultation with the NCC, NSDC and Historic England Stakeholders and the Client, AMR will be focused on the areas described below in Table 6-5. The location of these areas are depicted below in Appendix A, Figures 4 to 7.

Table 6-5: Areas requiring AMR during the construction stage of the Scheme.

Location	Requirement	Reason
Area 18	AMR	This area is in close proximity to the Civil War Scheduled Monument Civil War redoubt 550m south east of Valley Farm and while there was no significant archaeological evidence was recorded during the Phase 1 preliminary surveys or Phase 2 evaluation. Stakeholders have advised that work in this area is monitored by a qualified archaeologist due to the proximity of the Scheduled monument. Included in Area 18 is the Cattle Market roundabout which could not be archaeologically tested but which may overlie the remains of features related to Causeway Arches 500 metres north west of level crossing. Furthermore the partial demolition of the Arches 500 metres north west of level crossing section of Smeaton's Arches will also be monitored the results used to enhance the building recording detailed within Section 6.4 of this AMP.
Areas 22 & 23	AMR	Limited archaeological evidence was uncovered in these areas by the Phase 1 preliminary surveys or Phase 2 evaluation. However, these areas are located between two areas of high concentrations of archaeological remains (Areas 21 and 24) dated to the Iron Age, Roman and Early medieval periods. and as such Stakeholders have advised it would be best practice to archaeologically monitor these areas.
Areas 26 & 27	AMR	These areas are east of an identified area of archaeology (Area 25) which contained Iron Age/Romano British archaeology. Furthermore, they have had potential Iron Age/Romano British archaeology identified through crop marks and geophysical survey. However, the trenching phase of works did not reveal substantial levels of archaeology in these locations.
Areas 30 & 31	AMR	This area revealed limited evidence of significant archaeology but the presence of some archaeological features were identified during the Phase 1 preliminary surveys, including potential medieval/enclosures and a potential Iron Age ring ditch outside of the construction area. As such this area should be carefully monitored to record the extent of any archaeology present and should be included as early as possible in the construction program to prevent delays to the construction program.
Area 32	AMR	There is limited potential for archaeology relating to the former Winthorpe RAF base within this area. Archaeological evaluation was not conducted in this area due to the proposed use of the site as a lay down area, it's narrow dimensions and limited archaeological potential. However due to the lack of archaeological investigation in

Location	Requirement	Reason
		this area, Stakeholders have advised that any ground works in this location should be archaeologically monitored.

Aims and objectives

6.7.4 AMR aims to allow the preservation by record, of archaeological deposits where the presence and nature could not be established in advance of works. The main objectives of the AMRCIR will be to:

- To provide a comprehensive record of the archaeological features and analysis of the results.
- To determine the significance, extent, condition, nature, character, quality and date of any archaeological remains encountered.
- To highlight any potential significant archaeological remains which may require further resources to investigate.
- To report the results in suitable form for inclusion within the Nottinghamshire HER and publish a summary and register the report through the Archaeology Data Service (ADS) OASIS form.

Methodology

6.7.5 All AMR detailed within Table 6-5 will be undertaken in accordance with the task specific WSIs to be produced by the Archaeological Contractor and approved by the NCC Stakeholder. The AMR will be undertaken in accordance with the ClfA Standards and Guidance for archaeological monitoring and recording²¹ as well as any other relevant standards and guidance as identified in Chapter 7 of this document.

6.7.6 The AMR will be reliant upon the Principal Contractors construction programme. The Archaeological Contractor will be notified at least two weeks prior to the commencement of construction works. Once the construction programme is known, this shall be confirmed to the NCC Stakeholder in writing by the Archaeological Contractor.

6.7.7 The ground works subject to AMR will be machine excavated by the Principal Contractor using a toothless ditching bucket. The excavations will be opened to the Principal Contractor's required depth however should archaeological remains be identified during excavations the Principal Contractor will be prepared to pause machining to allow the Archaeological Contractor to undertake hand excavation and recording.

6.7.8 Should significant remains be revealed at any point during AMR, machine excavation will stop, and the ACoW will contact the NCC Stakeholder, to arrange an on-site meeting to discuss mitigation requirements. Any further archaeological investigation required as a consequence of such stoppages will be agreed in writing with the Client,

²¹ ClfA. 2023. Universal guidance for archaeological monitoring and recording. [online] available at: <https://www.archaeologists.net/sites/default/files/Universal%20guidance%20for%20archaeological%20monitoring%20%26%20recording.pdf> (last accessed May 2024)

Principal Contractor, Archaeological Contractor and the NCC Stakeholder prior to the commencement of the additional works (such additional costs to include any extra time required on-site by the Archaeological Contractor, as well as additional reporting requirements or specialist time inputs).

- 6.7.9 If, in the professional judgement of the Archaeological Contractor and ACoW, the archaeological works show that archaeological deposits are absent, the ACoW should contact the Client and the NCC Stakeholder to discuss reducing or curtailing the requirements. The work may only be curtailed with the prior agreement of the NCC Stakeholder and written confirmation of this agreement.

6.8 Geoarchaeological Investigation

- 6.8.1 Where significant and/or complex geoarchaeological deposits/features have been identified within the Order Limits, further geoarchaeological investigation will be required during the pre-commencement stage of the Scheme.
- 6.8.2 Archaeological monitoring of the extraction of sands and gravels would be the most appropriate option for mitigation, with geoarchaeological recording of working sections being undertaken to further understand the formation processes of these deposits. The archaeological monitoring should be assessed in terms as it progresses to ensure that it is necessary for mitigation, a process that geoarchaeological recording would assist with.
- 6.8.3 Monolith samples and further environmental sampling may also be required including the use of Kubeina tins for those areas with potential for flint scatters. This will allow the identification of any related archaeological activity and full sampling of the palaeochannels as per the methodology set out in Chapter 7 of this AMP.
- 6.8.4 Hand test pitting will be carried out in Area 48 in the location of the Paleochannel which returned paleolithic OSL dates, in order to recover and record any artefacts of this date.
- 6.8.5 In consultation with the NCC, NSDC and Historic England Stakeholders and the Client, these investigations are described below in Table 6-6. The location of this area is depicted in Figure 2 contained in Appendix A of this AMP.

Table 6-6: Area requiring geoarchaeological investigation during the pre-commencement stage of the Scheme.

Location	Requirement	Reason
Area 6	Geoarchaeological investigation & recording	In consultation with the Principal Contractor and NCC, NSDC and Historic England Stakeholders, geoarchaeological investigation and recording

		will be undertaken across Area 6 where deeper excavations for a borrow pit are anticipated. This may include a programme of test pits to will identify any important deposits prior to their removal and determine if any further mitigation is required. The approach to this work will be determined by specific construction details with due consideration to health and safety concerns.
Area 48	Hand test pitting	OSL dating of a paleochannel revealed deposits relating to the palaeolithic which have the potential to contain artefacts of this period.

Aims and objectives

6.8.6 The principal aim of the geoarchaeological investigation is to allow the preservation by record, of geoarchaeological deposits where the presence and nature could not be established during Phase 2 evaluation. The main objectives of the geoarchaeological investigations will be to:

- To provide a comprehensive record of the geoarchaeological deposits within the area outlined in Table 6-6 above and analysis of the results.
- To determine the significance, extent, condition, nature, character, quality and date of any geoarchaeological deposits encountered.
- To highlight any potential significant deposits which may require further resources to investigate.
- To report the results in suitable form for inclusion within the Nottinghamshire HER and publish a summary and register the report through the Archaeology Data Service (ADS) OASIS form.

Methodology

6.8.7 All geoarchaeological investigations detailed within Table 6-6 will be undertaken in accordance with a task specific WSI's to be produced by the Archaeological Contractor in consultation with the NCC Stakeholder and Historic England Science Advisor, and approved by the NCC Stakeholder. The geoarchaeological investigations will be undertaken in accordance with the Historic England Standards and Guidance for Geoarchaeology²² as well as any other relevant standards and guidance as identified in Chapter 7 of this document.

6.8.8 In agreement with NCC, NSDC and Historic England Stakeholders investigations will likely take the form of ground reduction in archaeologically controlled zones and spits coordinated with water management to allow the Archaeological Contractor sufficient time and opportunity to record and assess the deposits / remains effectively during construction.

²²Historic England. 2015. Geoarchaeology Using Earth Sciences to Understand the Archaeological Record.

- 6.8.9 The areas of the geoarchaeological investigations will be determined by the geoarchaeologist employed by the Archaeological Contractor in agreement with the Client and the NCC Stakeholder.

6.9 Protective fencing

- 6.9.1 This section outlines those heritage assets within the Order Limits of the Scheme which require protective fencing during the pre-commencement and construction stages of the Scheme.
- 6.9.2 The location of the assets described in this section is depicted below in Appendix A, in Figures 1 and 4 to 7.

Noise Protection

- 6.9.3 To reduce noise impacts upon heritage assets during the pre-commencement and construction stages of the Scheme, temporary noise fencing will be erected in sensitive locations.
- 6.9.4 The requirement for noise protection for heritage assets will be secured by Commitment CH3 of Table 3.2 Register of Environmental Actions and Commitments of the First Iteration EMP (**REP4-010**).
- 6.9.5 In consultation with NCC and NSDC Stakeholders the following assets will require temporary noise fencing:
- Grade II listed Farndon Windmill (MM139)
 - Grade II listed Lowwood (MM053)
 - Grade II listed Langford Hall (MM026)
 - Winthorpe Conservation Area (MM432)
- 6.9.6 The assessment of effects and requirements for temporary noise fencing for the assets listed above is detailed within Appendix 6.3 (Assessment of Cultural Heritage Effects During Construction of the Scheme) of the ES Appendices (**AS-099**).

Physical Protection

- 6.9.7 To reduce the risk of physical impacts to heritage assets during the pre-commencement and construction stages of the Scheme, temporary protective barrier fencing and signage will be erected in sensitive locations.
- 6.9.8 The requirement for physical protection for heritage assets will be secured by Commitment CH4 of Table 3.2 Register of Environmental Actions and Commitments of the First Iteration EMP (**REP4-010**).
- 6.9.9 In consultation with NCC and NSDC Stakeholders the following assets will require temporary protective barrier fencing and signage throughout construction:

- Areas 20 & 21: Romano British and Early medieval settlement at Winthorpe (MM876);
- Areas 23 to 27: Romano British settlement south and east of Winthorpe;
- Areas 29 & 30: areas west and North of Brownhills Roundabout;
- Area 18: Smeaton's Causeway Arches (MM228); and
- Areas of preservation in situ south of Farndon roundabout (MM503)

6.9.10 The assessment of effects and requirements for temporary fencing for the assets listed above is detailed within Appendix 6.3 (Assessment of Cultural Heritage Effects During Construction of the Scheme) of the ES Appendices **(AS-099)**.

6.9.11 Further fencing may be required, in agreement with Stakeholders, in areas of identified archaeology which are not anticipated to be directly impacted by construction activities. This fencing must be in place throughout construction to avoid accidental damage to unrecorded archaeology.

6.9.12 Further fencing may be required following the results of the remaining evaluation in areas 7 and 52.

6.9.13 The ACoW will be responsible for regularly monitoring the protective fencing to ensure that sensitive archaeological sites are being protected throughout the pre-commencement and construction stages of the Scheme.

6.10 Unexpected Finds Procedure

6.10.1 An Unexpected Finds Procedure (UFP) will ensure any discoveries outside of previously identified areas will be suitably recorded. The UFP will be approved by the NCC Stakeholder.

6.10.2 This will detail a standard approach to any archaeological discoveries outside of predetermined archaeological works and will include contact details and escalation procedures for any discoveries

6.11 Public engagement and outreach

6.11.1 It is expected that the Archaeological Contractor undertaking the Phase 3 archaeological investigations will demonstrate a commitment to public engagement and outreach.

6.11.2 The Archaeological Contractor will be expected to provide detailed information to the Client and NCC Stakeholder concerning how they will meet the requirements for this programme of works and also demonstrate innovation in the implementation of these elements.

6.11.3 The aims and objective and methodology for the public engagement and outreach programme is detailed within Chapter 7, Section 7.12 of this AMP.

7 Overarching guidance and methodologies

7.1 Overview

- 7.1.1 This Chapter sets out the general methodology which should be followed for all archaeological investigations set out in Chapters 6 of this AMP. It also sets out the relevant policy and guidance which should be adhered to.

7.2 Programme

- 7.2.1 The programme for the archaeological investigations detailed in Chapter 6 of this AMP will be dependent upon the Principal Contractors construction programme.
- 7.2.2 An indicative programme for the archaeological investigations will be developed by the Archaeological Contractor in consultation with the Principal Contractor.
- 7.2.3 The Archaeological Contractor will share the indicative programme with the Client, Design Consultant and the NCC Stakeholder in a reasonable period prior to the start of works. The programme for each archaeological investigation will also be included within the relevant task specific WSI.

7.3 Health and safety

- 7.3.1 Health and safety considerations will be of paramount importance in conducting all fieldwork and safe working practices will override archaeological considerations at all times.
- 7.3.2 All work will be carried out in accordance with the Health and Safety at Work Act 1974 and the Management of Health and Safety Regulations 1992, and all other relevant Health and Safety legislation, regulations and codes of practice in force at the time for the fieldwork.
- 7.3.3 The Principal Contractor will retain overall responsibility for Health and Safety and be responsible for the site set up and will confirm appropriate levels of PPE to be worn on site and other risk avoidance procedures.
- 7.3.4 The health and safety requirements specific to the archaeological investigations detailed in Chapter 6 of this AMP are detailed below:
- All staff conform to the Principal Contractor's Health and Safety requirements including undertaking a site induction as well as a Safety Critical Medical if working within 5 metres of the live carriageway.
 - A Risk Assessment and Method Statement (RAMS) for the work will be prepared by the Archaeological Contractor prior to the commencement of fieldwork and submitted to the Principal Contractor and Design Consultant

for review and acceptance. Specific health and safety issues including PPE will be detailed within the site specific RAMS.

7.4 Written Schemes of Investigation

7.4.1 Following consultation with the relevant parties, task specific WSIs will be prepared for the archaeological investigations detailed in Chapter 6 of this AMP, which includes:

- Historic building recording.
- Archaeological evaluation (trial trench evaluation and test pitting).
- Archaeological excavation (detailed open area and strip, map and sample)
- Archaeological monitoring and recording.
- Geoarchaeological investigation (test pitting, monitoring and recording).

7.4.2 The task specific WSIs should be prepared by the Archaeological Contractor in consultation with the NCC Stakeholder and where relevant Historic England. All WSI's will be prepared using the ClfA Standards and Guidance Appendices²³ and will include as a minimum:

- Non-technical summary.
- Site location including map(s) and description (NGR, size, geology, land use, topography, physical constraints).
- Context of the project: planning background, planning policies, other environmental matters, relevant legislation, details of proposed development if relevant.
- Archaeological and historical background.
- Aims of fieldwork (clearly stated in both general and specific terms)
- Field methodology (techniques selected, with justification for selection detailed exposition of techniques, artefact collection policies, discard policies, environmental).
- Collection strategy and implementation, recording techniques, and any measures for the conservation/reburial of surviving deposits).
- Post-fieldwork methodologies (cleaning, conservation, cataloguing, packaging, dating techniques, archive preparation, analyses).
- Copyright.
- Archive deposition (including finds ownership, recipient museum/repository).
- Publication and dissemination proposals, at the analysis stage to include publication plan or synopsis.
- Timetable.
- Staffing.
- Health and safety policies and implementation, including risk assessment and insurances.

²³

- Monitoring procedures (internal, curatorial, contractual).

7.4.3 Draft copies of the WSIs should in the first instance be given to the Design Consult for review and amendment before submission of the final copies to the NCC and NDSC Stakeholders for approval.

7.5 Recording

7.5.1 All archaeological remains and historic buildings/structures will be recorded in accordance with the methodology set out in the relevant task specific WSI and in adherence to the appropriate ClfA and Historic England standard and guidance outlines below.

Archaeological investigations

7.5.2 In adherence to ClfA Universal Guidance for field archaeological field evaluation²⁴, archaeological excavation²⁵ and archaeological monitoring and recording²⁶, the recording methodology outlined below will be followed.

7.5.3 All excavated contexts should be fully recorded by detailed written context records.

7.5.4 Written and photographic records will be maintained at all sites, even where archaeological features have not been encountered, in order to document the scope of works, their location and presence/absence of archaeological remains.

7.5.5 A born-digital approach should be adopted in the first instance. Records should be created and maintained on a Common Data Environment (CDE) which has sufficient security and back up procedures. The Archaeological Contractor's approach to digital recording should be outlined in the WSI, and within a Data Management Plan (see Section 7.10 of this AMP).

7.5.6 The record of archaeological investigations will include, at minimum:

- The site/trench codes as defined by the Archaeological Contractor
- The location of the investigation areas
- The date(s) of the investigation
- Personnel involved in the investigation
- A description of the investigation

²⁴ ClfA. 2023. Universal guidance for archaeological field evaluation [online] <https://www.archaeologists.net/sites/default/files/Universal%20guidance%20for%20archaeological%20field%20evaluation.pdf> (Last accessed May 2024).

²⁵ ClfA. 2023. Universal guidance for archaeological excavation [online] <https://www.archaeologists.net/sites/default/files/ClfA%20Excavation%201.pdf> (Last accessed May 2024).

²⁶ ClfA. 2023. Universal guidance for archaeological monitoring and recording. [online] available at: <https://www.archaeologists.net/sites/default/files/Universal%20guidance%20for%20archaeological%20monitoring%20and%20recording.pdf> (last accessed May 2024).

- Scope of investigation and depths, if applicable
- A description where observation of archaeological features was obscured, including where and any reasoning
- Location and description of any archaeological remains
- Location and description of any modern deposits/remains
- Areas and depths where archaeological remains were left in situ

7.5.7 On site recording of archaeological features will consist of:

- Completion of pro-forma record sheets, including the unique site code
- Location and the extent of excavated areas should be surveyed using a differential GPS. Features should be surveyed using a Global Navigation Satellite System (GNSS) Global Positioning System (GPS).
- Plans and sections of all exposed archaeological features and horizons, including the boundary with the natural geology. These should be done to an appropriate scale. A scale of 1:100 or 1:200 will be utilised to initially map all trenches and the exposed archaeology. These should then be linked to individual trench plans, with features planned at 1:20. All sections should be drawn at 1:10. All features should be accurately tied into the Ordnance Survey National Grid and Ordnance Datum.
- Photography should be carried out in line with current industry best practice and any requirements from the NCC Stakeholder. A photographic record of the archaeological features, layers, structures etc, alongside an appropriate scale and accompanying register. Working shots should also be taken to establish the wider context and scale of the evaluation works. This should be with an SLR digital camera, with a minimum 16 megapixels quality, and capture RAW and JPEG data.
- A record of the datum levels of archaeological deposits
- A record of any special/small finds
- Environmental sample register
- Indices of context records, drawings samples and photographs to be maintained and checked.

Historic building recording

7.5.8 The historic building recording for the Grade II Causeway Arches 500m north-west of level crossing (MM228) will be undertaken in adherence with Historic England “Understanding Historic Buildings: A Guide to Good Recording Practice”²⁷ and ClfA “Standard and guidance for the archaeological investigation and recording of standing buildings or structures”²⁸.

²⁷ 27

²⁸

7.5.9 The historic building survey will be commensurate with a Historic England Level 2 descriptive record as detailed within the guidance above. The record will include:

- A photographic record using suitable equipment and photo plan showing the locations and direction of photographs.
- A drawn record comprising plans (to scale or fully dimensioned) as existing and measured elevations, where these are necessary to develop an understanding of the building's design, development or function. Plans should show the form and location of any structural features of historic significance, such as blocked doorways, windows and fireplaces, masonry joints, ceiling beams and other changes in floor and ceiling levels, and any evidence for fixtures of significance.
- A written account including the precise location of the building as an address and in the form of a grid reference, a note of any statutory designations, the date when the record was made, the name of the recorder, the location of any archive material and a summary statement describing the building and its purpose. The written description should also include an account of the building's history using relevant sources, an account of the building's form and phases of development and discussion of the building's historical development. Its setting should also be discussed with reference to how it has developed into its current form and how it contributes to its significance.

7.6 Finds strategy

Overview

7.6.1 Artefacts will be collected, stored and processed in accordance with standard methodologies and national guidelines, as well as local authority and receiving museum requirements. This includes:

- ClfA Standard and Guidance for the collection and documentation, conservation and research of archaeological materials²⁹
- English Heritage 2006³⁰
- Historic England 2010³¹
- Historic England 2018³²
- Historic England 2019³³
- ICON's professional standards and ethics 2014³⁴

²⁹ ClfA 2020. Standard and guidance for the collection, documentation, conservation and research of archaeological materials. [online] available at: ClfAS&GFinds_2.pdf (archaeologists.net) (last accessed December 2023).

³⁰ Historic England 2006. Guidelines on the X-radiography of archaeological metalwork.

³¹ Historic England 2010 Waterlogged Wood Guidelines on the recording, sampling, conservation and curation of waterlogged wood.

³² Historic England 2018a Waterlogged Organic Artefacts Guidelines on their Recovery, Analysis and Conservation.

³³ Historic England 2019. Animal Bones and Archaeology - Recovery to archive.

³⁴ ICON 2014. professional standards and ethics.

- Society of Museum Archaeology 2020³⁵

Fieldwork methodology

- 7.6.2 All finds shall be recorded by context with special, or small, finds being recorded three dimensionally and given a sequence of unique numbers. All finds should be collected and retained, however certain classes of material may be discarded after recording and a representative sample retained. However, this needs to be agreed with the receiving museum and the NCC Stakeholder in advance.
- 7.6.3 Exposed finds will be lifted at the end of the working day. Where removal cannot be undertaken on the same day as exposure, suitable security measures will be taken to protect artefacts from theft or damage.
- 7.6.4 Provision for on-site conservation and finds treatment will be undertaken, where appropriate.
- 7.6.5 The Archaeological Contractor is responsible for the protection of finds and artefacts both on site and during transportation to a post-excavation facility.
- 7.6.6 All finds recording on site will include as a minimum:
- The site/trench codes as defined by the Archaeological Contractor
 - The location of the evaluation works area
 - Context number in which the artefact(s) were found
 - Designated find number, if appropriate
 - Material type
 - Brief description of the artefact
- 7.6.7 All finds will be labelled and bagged or boxed, where possible, with attached identification tags in plastic bags and entered into an on-site finds register and numbered accordingly. Any finds that are too large to be bagged will be labelled in an appropriate and visible manner with a finds tag.
- 7.6.8 All lithic artefacts found within a definable scatter, with a maximum linear dimension (MLD) of 10mm will require 3D plotting prior to recovery and then individually bagged and recorded as registered finds. Non-tool fragments of less than the MLD should be bagged according to an appropriate spatial recording system consistent with the context they are found within.

Post-excavation methodology

- 7.6.9 Artefacts will be cleaned and conserved, where necessary, to allow for identification and to accommodate further investigation.
- 7.6.10 Post-excavation storage will be secure and appropriate to the material and significance of the object. Analysis will be in line with national best

³⁵ Society of Museum Archaeology 2020. Standards and Guidance in the Care of Archaeological Collections.

practice guidelines for artefact conservation and may include x-radiography and consolidation as part of the process.

7.7 Treasure

- 7.7.1 Any finds covered by the provisions of the Treasure Act³⁶ (1996, amended 2023) and Treasure (Designation) Order³⁷ (2002, amended 2023) will be moved to a safe place. Where removal cannot be undertaken on the same day as discovery, suitable security measures will be taken to protect the artefacts from theft or damage. This should be coordinated with the Client.
- 7.7.2 Any treasure finds must be reported to the coroner's office. They will also be reported to the local Finds Liaison Officer from the Portable Antiquities Scheme.

7.8 Human remains

Overview

- 7.8.1 No known burial sites are recorded within the Order Limits, however the Phase 3 archaeological investigations detailed in Chapter 6 of this AMP may result in the discovery of unexpected human remains.
- 7.8.2 It is illegal to remove human remains without a license from the Secretary of State, in accordance with Section 25 of the 1857 Burial Act. The following methodology will apply where human remains are encountered. All human remains will be treated in accordance with national and local policies and guidance, specifically:
- McKinley and Roberts, 1993. Excavation and post excavation treatment of cremated and inhumed human remains.³⁸
 - APABE, 2017. Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England.³⁹
 - Historic England, 2018. The Role of the Human Osteologist in an Archaeological Fieldwork Project.⁴⁰
 - Mitchell and Brickley, 2017. Updated Guidelines to the Standards for Recording Human Remains⁴¹

³⁶ Department for Culture, Media and Sport 2023. Treasure Act: Code of Practice.

³⁷ Department for Culture, Media and Sport 2023. Treasure (Designation) Order.

³⁸ McKinley and Roberts, 1993. Excavation and post excavation treatment of cremated and inhumed human remains.

³⁹ APABE, 2017. Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England.

⁴⁰ Historic England, 2018. The Role of the Human Osteologist in an Archaeological Fieldwork Project.

⁴¹ Mitchell and Brickley, 2017. Updated Guidelines to the Standards for Recording Human Remains.

Fieldwork Methodology

- 7.8.3 Where human remains are encountered, all excavation of the deposit(s) will cease and the Archaeological Contractor will inform the Design Consultant. Initially, the remains will be left in situ, covered and protected, pending discussions between the Archaeological Contractor, Design Consultant, the NCC Stakeholder and Client regarding the need for excavation/removal.
- 7.8.4 If the human remains are to be retained in situ, then they must be recorded as is and accurately located using a GPS so they can be located and treated appropriately during the mitigation phase.
- 7.8.5 If removal of human remains is deemed necessary, then the removal of human remains should be undertaken in accordance with Article 51 of the draft DCO **(REP4-003)**.
- 7.8.6 Human remains will be treated with dignity and respect at all times. It may be necessary to screen off human remains from public view. All articulated and disarticulated human remains, including structured burials and charnel, will be exposed to define their extent and then excavated and lifted in a logical and appropriate manner with the suitable tools. Each excavated individual will be bagged separately and permanently labelled as to content and cross referenced with the archaeological records of the excavation (APABE 2017). Different skeletal areas and bones from the left and right sides will be bagged separately (APABE 2017, Annex S3, 38) and all bags labelled.
- 7.8.7 Any exposed associated artefacts, including grave goods, will be recorded and removed at the end of the working day to limit the risk of theft and disturbance. If not possible, then security will be required and should be coordinated with the Client.
- 7.8.8 Samples may be taken from the fill around the head and around the torso and feet for the recovery of small bones/teeth and for the possibility of further scientific investigation (APABE 2017, Annex S3, 38). The sampling strategy should be designed by a suitably qualified and experienced Osteoarchaeologist.
- 7.8.9 Unstratified, disarticulated human remains will be rapidly screened when discovered. An Osteoarchaeologist should determine what the appropriate course of further investigation should be, in consultation with the Design Consultant.
- 7.8.10 All human remains should be bagged and boxed with an assigned identification number or code.
- 7.8.11 All applicable pro forma record forms, including context sheets and skeleton recording sheets, should be completed. Written descriptions should include details about the human remains and their surrounding context, including any information regarding truncation and completeness of the skeletal remains. The location of all skeletons should be accurately

located on plans and mapped using measured photogrammetry and tied into the OS NGR.

- 7.8.12 Any photographs taken should be done in a sensitive manner. Only authorised photographs should be taken and a suitable scale should be visible in all photographs. These should conform to the minimum standards set out in Section 7.5 of this AMP.

Post-excavation methodology

- 7.8.13 Human remains should be reburied unless exceptional circumstances call for their retainment for future study and it is agreed with all relevant parties including but not limited to the NCC Stakeholder. If subject to further study, analysis must be carried out by a trained osteologist. The remains must be treated in accordance with established guidelines (see Section 7.5 of this AMP). Preliminary assessment will be undertaken to evaluate the potential of the assemblage to yield further information.
- 7.8.14 If the skeletal assemblage is worthy of further study, then appropriate archiving and long-term storage procedures should be undertaken according to established guidelines (see Section 7.12 of this AMP).
- 7.8.15 As with pre-excavation processes, due consideration of the ethical treatment of any human remains should be taken into consideration during the post-excavation phase.
- 7.8.16 Human remains should be reinterred at an appropriate location within two years. This should be the case for human remains which will not be subject to further analysis. However, this time limit may be altered after consultation with the Ministry of Justice.

7.9 Environmental sampling

Overview

- 7.9.1 All environmental sampling will be conducted in accordance with national, regional and local policies and guidance. All aspects of the collection, selection, processing, assessment and reporting on the environmental sampling shall be undertaken in accordance with the principles set out in Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation⁴² and with reference to the Association for Environmental Archaeology's Working Paper No. 2, Environmental Archaeology and Archaeological Evaluation⁴³.

⁴² English Heritage, 2011. Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition).

⁴³ Association for Environmental Archaeology, 2018. Working Paper No. 2, Environmental Archaeology and Archaeological Evaluation.

Fieldwork Methodology

- 7.9.2 Where archaeological remains are uncovered, individual contexts will be assessed for the suitability of environmental sampling. Bulk samples will be taken from appropriate contexts to assess archaeological features and the natural deposit sequence in which archaeological remains are discovered. Provision will be made for column and other samples to be taken, where appropriate.
- 7.9.3 The sampling strategy should be agreed upon in advance with the NCC Stakeholder and, where relevant, the Historic England Science Advisor. As a minimum, bulk samples will be taken for most archaeological contexts. Provision will also be made for column or other necessary sampling.
- 7.9.4 Bulk samples will be taken using 10L plastic, lidded tubs (with handles) or securely fastened strong polythene bags (double bagged). All sample tubs/bags will be appropriately and clearly labelled with site codes, context details and sample information using permanent ink.
- 7.9.5 Bulk samples of dry context will be taken in the range of 40L-60L as appropriate. Samples of wet (i.e. waterlogged) deposits should total 20L. Where the context is of a lower volume, 100% of the context will be sampled.
- 7.9.6 Monolith and Kubiena box samples should be taken where necessary to allow for specialist analysis of deposits. The location and depth should be accurately recorded, and all samples should be taken with a 50mm overlap where more than one monolith is required. Column samples should also be taken down the length of a section where appropriate. These samples should be neatly packed and secured with plastic and rubber bands. All samples will be appropriately and clearly labelled with site codes, context details and sample information using permanent ink.
- 7.9.7 In waterlogged conditions, it is possible that timbers will survive below ground. Where there is potential for timbers to be dated, they should be sampled following guidelines in Waterlogged Wood: Guidelines to the Recording, Sampling, Conservation and Curation of Waterlogged Wood. Should such remains be encountered, a specialist conservationist should be deployed to site to oversee the recovery, recording, and conservation of the remains.
- 7.9.8 The Archaeological Contractor is responsible for the safekeeping of samples on-site and during transportation to the post-excavation processing facility.

Post-excavation methodology

- 7.9.9 The techniques employed for post-excavation analysis will be determined by a suitable experienced and qualified palaeoenvironmental specialist.
- 7.9.10 Processing and assessment of samples should be undertaken in line with an agreed environmental sampling strategy (as outlined in the Archaeological Contractor's WSI) and relevant guidance. Samples

should be processed and assessed under the supervision of a palaeoenvironmental specialist.

- 7.9.11 Where appropriate, suitable samples for scientific dating will also be recovered, including from geoarchaeological cores. Dating techniques shall only be applied where required to meet the aims and objectives of the investigation and in consultation with the Design Consultant and, if relevant, the Historic England Science Advisor. The Archaeological Contractor shall make provision for submitting a justified proposal and number of samples for radiocarbon dating.
- 7.9.12 If suitable deposits exist, samples will be submitted for specialist assessment (pollen, diatom/ foraminifera) to identify the potential for past environmental reconstruction.
- 7.9.13 All processing, recording, cleaning, storage and conservation of samples shall be in accordance with the ClfA Standard and guidance for the collection, documentation, conservation and research of archaeological materials.

7.10 Reporting

Overview

- 7.10.1 All reporting will be conducted in accordance with national, regional and local policies and guidance. Reports will be issued following the agreed channels Archaeological Contractor – Design Consultant – Principal Contractor – Stakeholders and Client.
- 7.10.2 The Archaeological Contractor will report to the Client and Design Consultant periodically, depending on the length of the fieldwork programme. For longer term programmes, this is anticipated to be monthly progress reports and calls. The content of the reports will cover a summary of fieldwork carried out over the previous month and plans and/or progress on post-excavation assessment and reporting. This may be shared with the Stakeholders, depending on their requirements on progress monitoring. This should be outlined prior to the commencement of fieldwork.

Interim reporting requirements for archaeological fieldwork

- 7.10.3 Upon completion of fieldwork work, the Archaeological Contractor will prepare an interim report within four weeks of completion.
- 7.10.4 The report will adhere to national standards and will include the following, as a minimum:
- A non-technical summary
 - Contents list
 - List of tables, figures etc
 - Introduction
 - Summary of background

- Description and illustration of site location
- Geological and topographical background
- Archaeological and historical background, including previous, relevant archaeological interventions
- Aims and objectives
- Methodology
- Results
- Recommendations for further analysis and details of ongoing analysis where required
- Statements regarding the archive
- Bibliography
- Acknowledgements
- Trench, context, find, drawing, photographic, environmental sample registers, as applicable
- General and detailed plans showing the location of the investigation areas accurately positioned on an OS base with grid co-ordinates
- Photographic archive

Post investigation assessment

7.10.5 On completion of fieldwork, a methodology for processing, sampling and analysis of, where appropriate, artefacts, ecofacts, environmental samples and human remains recovered during the evaluation will be determined. This should be proportionate to the character and complexity of the data recorded and recovered. This will enable an informed decision to be made with regards to further archaeological mitigation, as well as the post-excavation processes for the data recovered for further analysis.

7.10.6 A draft interim post-excavation assessment report will be prepared and submitted for review by the Design Consultant. Following any necessary revisions, the Archaeological Contractor will submit a final version of the report to the Design Consultant for approval and dissemination to the NCC Stakeholder and the Client.

7.10.7 The reporting will include, as a minimum:

- A non-technical summary
- Introductory statements
- Aims and objectives
- Methodology
- Results and conclusions
- A table summarising the deposits, features, classes and number of artefacts encountered and spot dates of small/significant finds
- A synthesis of findings and research aims achieved to date
- Proposed further stages of archaeological analysis and reporting where required
- A synthesis of specific research aims that could be answered through the implementation of an updated design

- In the case of the evaluation; recommendations for any appropriate and proportionate fieldwork to achieve the identified objectives
- Recommendations for any areas preserved in situ, including any recommended protection or signage.
- Detailed mapping of the excavation areas and any areas of preservation in situ
- Proposals for deposition of the complete archive

Final post-excavation report

7.10.8 Upon completion of post excavation work, the Archaeological Contractor will prepare the final report within 12 weeks of completion. This will be dependent on the scope and nature, the results and any external specialist reports required, which are associated with the fieldwork. Should extensive and significant archaeological remains be encountered during fieldwork, then this timetable may be extended subject to agreement with the Design Consultant.

7.10.9 The Archaeological Contractor and the Design Consultant should agree on the reporting timescales once the fieldwork has been completed.

7.10.10 The report will adhere to national standards and will include the following, as a minimum:

- A non-technical summary
- Contents list
- List of tables, figures etc
- Introduction
- Summary of background
- Description and illustration of site location
- Geological and topographical background
- Archaeological and historical background, including previous, relevant archaeological interventions
- Aims and objectives
- Methodology
- Results
- Statement of significance regarding the archaeological resource and potential
- Assessment of results in terms of the Site-specific aims and wider context
- Conclusions and recommendations for appropriate further archaeological investigation and mitigation with reference to the specific aims and research agenda as set out in Chapter 4 of this AMP
- Recommendations if required regarding further reports including academic publications, monographs and/or other accessible reporting materials.
- Statements regarding the archive
- Bibliography
- Acknowledgements
- Site matrix, if applicable

- Trench, context, find, drawing, photographic, environmental sample registers, as applicable
- General and detailed plans showing the location of the investigation areas accurately positioned on an OS base with grid co-ordinates
- Photographic archive
- A copy of the OASIS form

Reporting requirements for Geoarchaeological assessment

7.10.11 The geoarchaeological assessment also has its own specific additional minimum requirements which are listed below.

7.10.12 A preliminary interpretation of the soil and sediment characteristics of the cores will be made, including a summary of the stratigraphy that will characterise the deposit sequence and identify soil/sediment formation processes. The description of each deposit will include sediment type, inclusions, colour, bedding and nature of contacts to overlying and underlying units. The report will also include appropriate lithological diagrams.

7.10.13 An interim summary assessment report will be produced shortly after completion of the fieldwork in order to inform the design of any subsequent archaeological mitigation.

7.10.14 A final geoarchaeological assessment report shall be prepared and will include a complete lithological description, following standard sedimentary conventions and the Troels-Smith system and incorporating the results of specialist assessment and dating.

7.10.15 The final geoarchaeological assessment report will illustrate the sub-surface topography and shall characterise the sediments present on the site and indicate the potential of the core sample taken for environmental reconstruction. If appropriate, it will include a fully justified and costed proposal for analysis and publication.

7.10.16 The geoarchaeological assessment will be placed within the context of any previous investigations and assessment work undertaken in the vicinity of each site to aid the interpretation of the deposit sequence.

7.10.17 Details of final reporting should be agreed between the Archaeological Contractor, the Client, the NCC Stakeholder and Design Consultant. This should include whether the areas are combined into a single report or divided by appropriate area. The requirement for any publication and further dissemination of the information should also be agreed at this point.

7.10.18 The final report(s) should include details of all the above reporting and adhere to the minimum requirements outlined in each component as well as all relevant standards and guidance.

Report submission

7.10.19 Copies of draft reports will be sent to the Design Consultant for their review and onward transmission to the Client and the NCC Stakeholder for comment. Final copies will also be deposited with the Nottinghamshire HER.

7.10.20 An OASIS form will be completed and appended to the report. A digital copy of the report will be deposited with the ADS

7.11 Archive

Overview

7.11.1 A full archive strategy will be created prior to the commencement of the Phase 3 fieldwork, this should follow the below information and guidance but will detail the precise institutes and methodologies that will be used.

7.11.2 Data recorded and recovered during the course of fieldwork should be, where appropriate, copied, backed up and held securely in line with current good practice, until it can be deposited in the agreed, relevant recipient depository and repository⁴⁴. The recipient organisations (museums and digital data archives) should be identified by the Design Consultant, in consultation with the NCC Stakeholder. Details of the recipient organisations will be agreed before fieldwork commences and accession numbers obtained.

7.11.3 A Deed of Transfer will be secured between the landowner and the recipient organisations prior to the commencement of fieldwork as part of the pre commencement consultation. Details are given in 7.12.15.

Methodology

7.11.4 The methodology for archiving the physical (includes the documentary archive) and digital archives is included within this section.

7.11.5 All archiving will comply with national, regional and local standards and guidance including:

- Archaeological Archives Forum (AAF), Archaeological Archives: A Guide to best practice in creation, compilation, transfer and curation (2011)⁴⁵
- ClfA, Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (Updated 2020)⁴⁶

⁴⁴ Repository generally refers to where digital data will be stored. A depository refers to where physical material will be stored.

⁴⁵ Archaeological Archives Forum (AAF), 2011. Archaeological Archives: A Guide to best practice in creation, compilation, transfer and curation.

⁴⁶ ClfA, 2020. Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives.

- Europae Archaeologia Consilium (EAC), A Standard and Guide to Best Practice for Archaeological Archiving in Europe (2015)⁴⁷
- Historic England, Management of Research Projects in the Historic Environment (MoRPHE) (2015)⁴⁸
- Archaeological Data Service (ADS) guidance on archiving digital material⁴⁹
- ClfA and DigVentures, Dig Digital guidance should be considered with relation to digital archiving **Error! Bookmark not defined.**
- The ClfA toolkit for selecting archaeological archives (2019) should also be considered during archiving⁵⁰

Pre-fieldwork requirements

- 7.11.6 The Design Consultant in coordination with the Archaeological Contractor will determine the appropriate local museum to receive the archive.
- 7.11.7 The landowner will be contacted regarding the preparation, ownership and deposition of the archive and finds.
- 7.11.8 The local museum will also be contacted to ascertain whether deposition can be attained. In the case where finds are retained, landowner consent will be required to allow transfer of the finds.
- 7.11.9 The Archaeological Contractor under the Clients instruction, will undertake to have A Deed of Transfer drawn up by the local museum for signing by the landowner.
- 7.11.10A Scheme Data Management Plan (DMP) will be produced to collate all digital data from all phases of the fieldwork and ensure that it is collated into an archive that can be submitted for future use. The Archaeological Contractor will contact Archaeological Data Service (ADS) to discuss eventual data deposition, as well as estimated costs.

Post-fieldwork requirements

- 7.11.11 Immediately upon completion of the finalised report and any data or other documentation produced during the post-excavation process shall be integrated into the site archive. The Archaeological Contractor shall store the archive in suitable conditions in a secure location until instructions are received from the Design Consultant for its deposition.
- 7.11.12 Upon completion of each phase, the museum will be contacted with detail of the complete archive and finds inventory and any further information will be provided to the museum, on request
- 7.11.13 The Archaeological Contractor will have storage facilities in place to temporarily hold the archive for a period of one year following completion

⁴⁷ Europae Archaeologia Consilium (EAC), 2015. A Standard and Guide to Best Practice for Archaeological Archiving in Europe.

⁴⁸ Historic England, 2015. Management of Research Projects in the Historic Environment (MoRPHE).

⁴⁹ Archaeological Data Service (ADS) guidance on archiving digital material.

⁵⁰

of fieldwork. This should be an appropriate period of time for archive preparation and deposition.

Physical archive

- 7.11.14 The physical archive includes all records and materials recovered during an archaeological project and identified for long-term preservation, including artefacts, ecofacts and other environmental remains, waste products and scientific samples. The documentary archive includes written and visual documentation generated during any archaeological works, including context records, plans and photographs.
- 7.11.15 The archive should be consolidated after completion of each phase of archaeological work, with records and finds collated and ordered as a permanent record which is accessible, stable and secure.
- 7.11.16 The physical archive should be appropriately labelled, including the site code and be consistent within the confines of the works. A contents list will also be included within the archive.
- 7.11.17 The documentary archive will also be securely copied as PDF/A files and deposited digitally, alongside born digital material (see Section 15.5), with the ADS.
- 7.11.18 Prior to the deposition of the material archive, all finds will be kept secure and clean, wherever possible. They will be recorded and catalogued and stored in suitable archive boxes or in conditions suitable to their material composition and size as per national guidelines.
- 7.11.19 All finds will be labelled, with reference to the accession number, and accompanied with catalogues and copies of specialist reports.
- 7.11.20 The retention, selection and dispersal of finds will be carried out after discussion with the receiving museum and relevant specialists prior to museum deposition.
- 7.11.21 The site archive will be deposited with the relevant museum within one year of the completion of all fieldwork (if no further work is required). It will then become publicly accessible.

Digital archive

- 7.11.22 The DMP will include the submission of all mapping of excavation areas to the HER as well as any specific areas of preservation in situ. This will ensure that specific areas of archaeological and geoarchaeological investigation and preservation in situ are recorded and available to inform the future management of the landscape and specifically any operational works for the road to avoid additional impacts to preserved archaeology and unnecessary rework. This will be detailed in the Third Iteration EMP and handover register residual hazards.
- 7.11.23 Digital mapping and recording of geoarchaeological artefacts deposits should be included within the submission, this may include deposit

models, GIS/CAD mapping, and scientific dating results as well as scans of logs and other written records produced during fieldwork.

- 7.11.24 Any paper and written records created during fieldwork should be scanned and a digital copy created. ADS guidance on file types should be followed although PDF format is the current preferred type.
- 7.11.25 The Archaeological Contractor should maintain a working archive within a Common Data Environment (CDE). ADS standards and guidance will be followed regarding folder structures, appropriate file formats and file naming. In addition, ClfA's Dig Digital will also be referred to.
- 7.11.26 The Archaeological Contractor will complete OASIS records for each individual phase of archaeological works which result in a report, as soon as possible after the completion of the works. All applicable sections of the record should be completed.
- 7.11.27 A digital copy of the final report will be deposited with the ADS.
- 7.11.28 The creation, management and deposition of digital files should adhere to the DMP set out in the fieldwork WSI, as well as ADS standards and guidance.
- 7.11.29 Not all digital data should be kept in perpetuity. Digital data should be subject to appraisal and selection, following ClfA's Selection Toolkit and Dig Digital guidance. This should be included within the Archaeological Contractor's WSI.
- 7.11.30 The archived data will be in appropriate file formats, in accordance with ADS requirements, as well as any national and regional guidance. Agreed file formats should be recorded within the DMP.
- 7.11.31 Archives should be accessible as possible and the key principles within ADS Accessibility Guidance for Depositors⁵¹ should be followed.
- 7.11.32 The Archaeological Contractor and ADS should have a formal data agreement in place, with regards to the processing and securing personal information during archiving of digital data, in accordance with GDPR.

Communication and Monitorings

Progress reporting

- 7.11.33 It is expected that for all surveys a minimum of weekly updates will be provided by the Archaeological Contractor to the Design Consultant. This should be issued via email each week throughout the fieldwork. It should include:

⁵¹ ADS 2021, Accessibility Guidelines for Depositors. Available at: <https://archaeologydataservice.ac.uk/advice/accessibilityGuidelines.xhtml> (last accessed December 2023).

- Details of where archaeological fieldwork has taken place during the previous week
- Any archaeological features located
- Any significant finds and discoveries
- The progress against the agreed programme
- In addition, the Archaeological Contractor is also expected to provide brief, ad hoc updates, at the request of the Design Consultant and/or Client. It is anticipated that regular progress meetings will be held on site with the NCC Stakeholder during the course of fieldwork. These meetings shall be arranged by the Design Consultant and a programme of monitoring visits/meetings will be agreed upon prior to the commencement of fieldwork.

General communication

- 7.11.34 The Archaeological Contractor shall liaise directly with the ACOW in all instances concerning fieldwork and the Design Consultant for post-excavation phases, unless specifically requested otherwise. All consultation and site liaison with the Client and the NCC Stakeholder will be the responsibility of the ACOW and Design Consultant unless otherwise stated. Any enquiries on the archaeological works from interested parties (including the media) should be referred to the Design Consultant who will inform the relevant parties.
- 7.11.35 All work will be undertaken in accordance with this AMP and the WSI prepared by the Archaeological Contractor in advance of the works and approved by the Design Consultant, the Client and the NCC Stakeholder. Any departures from this brief to the agreed WSI will be made explicit and agreed with all parties first.
- 7.11.36 The archaeological investigations will be monitored at regular intervals by the Design Consultant, the Client and the Stakeholders. The Design Consultant will agree suitable monitoring dates with the ACOW and Archaeological Contractor and notify the Stakeholders in advance of the start of work on the site. Monitoring frequency will be agreed with the Stakeholders.
- 7.11.37 If, in the professional judgement of the ACOW and Archaeological Contractor, the archaeological investigations reveal below-ground conditions which indicate that potentially archaeological deposits are absent, the ACOW should contact the Design Consultant and the NCC Stakeholder to discuss reducing or curtailing the requirements. The work may only be curtailed with the prior agreement of the NCC Stakeholder.
- 7.11.38 The Design Consultant must obtain written confirmation of this agreement from the Stakeholders prior to curtailing the requirement of the archaeological investigations.

7.12 Public outreach

7.12.1 The Phase 3 archaeological investigations outlined in Chapter 6 of this AMP, have the potential to reveal significant archaeological remains relating to the prehistoric, Roman and early medieval activity within the Order Limits of the Scheme.

7.12.2 These investigations offer an opportunity for an outreach and interpretation programme, which could involve activities such as on-site events involving public tours of the archaeological excavation, through to online lectures regarding the work and permanent interpretation materials incorporated into public realm.

Aims and objectives

7.12.3 The public outreach programme through a combination of digital and face-to-face engagement, will aim to:

- Effectively engage a wide range of people, particularly those often underserved by culture and heritage
- Foster interest in the archaeological processes and discoveries from the A46 Newark Bypass investigations
- Support local people to make stronger connections to a place, themselves and to each other.
- Empower people to use the historic environment as a stimulus for learning and well-being.

Methodology

7.12.4 The public outreach programme will be developed by the Archaeological Contractor in collaboration with the Client, Principal Contractor and Design Consultant.

7.12.5 The programme will be developed in consultation with Stakeholders including NCC, NSDC and Historic England. Other relevant stakeholders may be identified during the development of the programme such as local museum curators/educators and local historical and archaeological societies/groups.

7.12.6 To achieve the public outreach programme aims, the Archaeological Contractor will need to produce a Method Statement which sets out:

- Audience mapping detailing who the targeted audiences are for the public outreach programme.
- Activity plan outlining the proposed outreach activities and when these will happen.
- Evaluation methodology which will be used to assess the success of the outreach programme against the aims and support the intended benefits and legacy of the Scheme as a whole.

7.12.7 The Archaeological Contractor will also be responsible for the creation of a strategy and programme for public engagement, to be agreed in

consultation with National Highways and include outreach and engagement with the local community and local/regional museums.

8 References

AMS (2023) Fieldwalking Survey Report of Lands along the A46 Newark Northern Bypass. February 2023.

² AMS (2023) Metal Detecting Survey Report of Lands along the A46 Newark Bypass. February 2023.

³ AMS (2022) Geophysical Survey Report of Lands along the A46 Newark Northern Bypass. February 2023.

⁴ AMS (2023) Addendum to Geophysical Survey Report of Lands along the A46 Newark Bypass. March 2023.

⁵ York Archaeology (2022) A46 Newark North Bypass Nottinghamshire, Archaeological and geoarchaeological monitoring of ground investigations.

⁶ AMS (2023) Regional Delivery Partnership A46 Newark Bypass. Geoarchaeological Desk Based Assessment.

⁷ AMS (2023) A46 Newark Bypass, GI Watching Brief Report. May 2023.

⁸ AMS (2023) A46 Newark Bypass, Geoarchaeological Coring Report. July 2023.

⁹ AMS 2022 Geophysical Survey Report of Lands along the A46 Newark Northern Bypass.

⁰ East Midlands Heritage (2012) East Midlands Historic Environment Research Framework [online] available at: <https://researchframeworks.org/emherf/>. (Last accessed December 2023).

¹¹ The Prehistoric Society & English Heritage (2008) Research and Conservation Framework for the British Palaeolithic [online] available at: <https://historicengland.org.uk/images-books/publications/research-and-conservation-framework-for-british-palaeolithic/palaeolithic-framework/>. (Last accessed December 2023).

² Champion, T.C., Haselgrove, C., Armit, I., Creighton, J. and Gwilt, A. (2001) Understanding the British Iron Age: an agenda for action. [online] available at: [\(PDF\) Understanding the British Iron Age: an agenda for action. A Report for the Iron Age Research Seminar and the Council of the Prehistoric Society \(researchgate.net\)](#) (Last accessed December 2023).

¹³ ClfA 2020 Standard and Guidance for Archaeological Field Evaluation [online] Available at: [ClfAS&GFieldevaluation 3.pdf \(archaeologists.net\)](#) (Last accessed December 2023).

⁴ Historic England, 2016. Understanding Historic Buildings: A Guide to Good Recording Practice. [Available online]: [Understanding Historic Buildings: A Guide to Good Recording Practice \(historicengland.org.uk\)](#) (Last accessed December 2023).

⁵ ClfA. 2020. Standard and guidance for archaeological excavation [online] https://www.archaeologists.net/sites/default/files/ClfAS&GExcavation_1.pdf (Last accessed December 2023).

⁶ ClfA. 2020. Standard and guidance for an archaeological watching brief. [online] available at: [ClfAS&GWatchingbrief 2.pdf \(archaeologists.net\)](#) (last accessed December 2023)

¹⁷ Historic England. 2015. Geoarchaeology Using Earth Sciences to Understand the Archaeological Record.

¹⁸ ClfA 2020. Standard and guidance for the collection, documentation, conservation and research of archaeological materials. [online] available at: [ClfAS&G Finds 2.pdf \(archaeologists.net\)](#) (last accessed December 2023).

¹⁹ Historic England 2006. Guidelines on the X-radiography of archaeological metalwork.

²⁰ Historic England 2010 Waterlogged Wood Guidelines on the recording, sampling, conservation and curation of waterlogged wood.

²¹ Historic England 2018a Waterlogged Organic Artefacts Guidelines on their Recovery, Analysis and Conservation.

²² Historic England 2019. Animal Bones and Archaeology - Recovery to archive.

²³ ICON 2014. professional standards and ethics.

²⁴ Society of Museum Archaeology 2020. Standards and Guidance in the Care of Archaeological Collections.

²⁵ Department for Culture, Media and Sport 2023. Treasure Act: Code of Practice.

²⁶ Department for Culture, Media and Sport 2023. Treasure (Designation) Order.

²⁷ McKinley and Roberts, 1993. Excavation and post excavation treatment of cremated and inhumed human remains.

²⁸ APABE, 2017. Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England.

²⁹ Historic England, 2018. The Role of the Human Osteologist in an Archaeological Fieldwork Project.

³⁰ Mitchell and Brickley, 2017. Updated Guidelines to the Standards for Recording Human Remains.

³¹ English Heritage, 2011. Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition).

³² Association for Environmental Archaeology, 2018. Working Paper No. 2, Environmental Archaeology and Archaeological Evaluation.

³³ ClfA Toolkit for selecting archaeological archives [online] available at: <https://www.archaeologists.net/selection-toolkit> (last accessed December 2023).

³⁴ Repository generally refers to where digital data will be stored. A depository refers to where physical material will be stored.

³⁵ Archaeological Archives Forum (AAF), 2011. Archaeological Archives: A Guide to best practice in creation, compilation, transfer and curation.

³⁶ ClfA, 2020. Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives.

³⁷ Europae Archaeologia Consilium (EAC), 2015. A Standard and Guide to Best Practice for Archaeological Archiving in Europe.

³⁸ Historic England, 2015. Management of Research Projects in the Historic Environment (MoRPHE).

³⁹ Archaeological Data Service (ADS) guidance on archiving digital material.

⁴⁰ ClfA Toolkit for selecting archaeological archives
<https://www.archaeologists.net/selection-toolkit> (Last accessed December 2023).

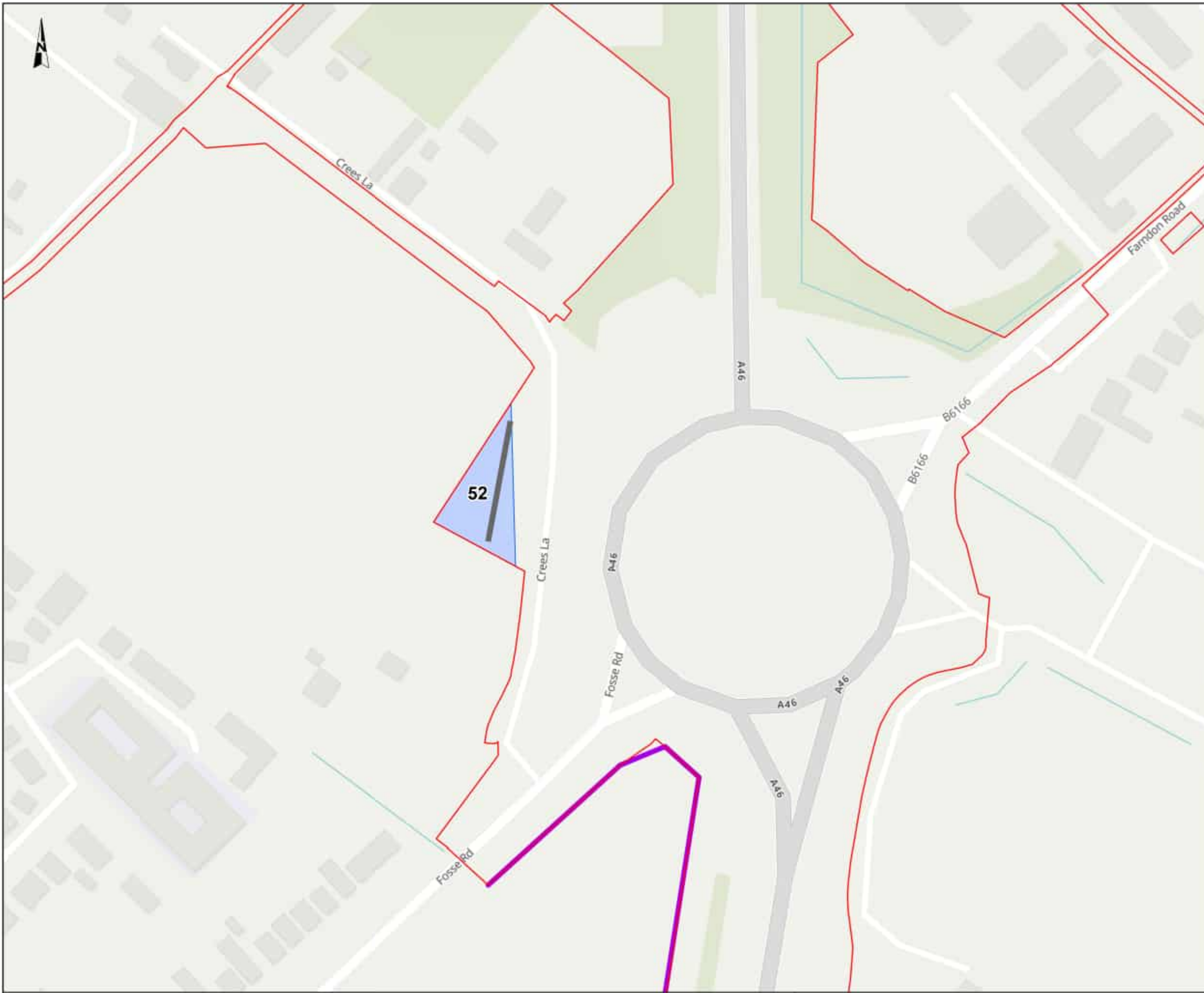
⁴¹ ADS 2021, Accessibility Guidelines for Depositors. Available at: [New Guidelines for ADS Depositors – Archaeology Data Service](#) (Last accessed December 2023).

9 Abbreviations

Abbreviation	Definition
AAF	Archaeological Archives Forum
ADS	Archaeological Date Service
AMP	Archaeological Management Plan
AMR	Archaeological Monitoring and Recording
AMS	Archaeological Management Solutions
APABE	Advisory Panel on the Archaeology of Burials in England
BARQ	Bronze Age Research Question
CifA	Chartered Institute for Archaeologists
DBA	Desk Based Assessment
DCO	Development Consent Order
EAC	Europae Archaeologia Consilium
EMHERF	East Midlands Historic Environment Research Framework
EMQR	Early Medieval Research Question
ES	Environmental Statement
GI	Ground Investigation
GPS	Global Positioning System
GNSS	Global Navigation Satellite System
HER	Historic Environment Record
IARQ	Iron Age Research Question
ICON	Institute for Conservation
MM	Mott MacDonald
MoJ	Ministry of Justice
MoRPHE	Management of Research Projects in the Historic Environment
MRQ	Medieval Research Question
NCC	Nottinghamshire County Council
NSDC	Newark and Sherwood District Council
OASIS	-
OT	Overarching Theme
PMRQ	Post Medieval Research Question
PRQ	Palaeolithic Research Question

RAMS	Risk Assessment and Method Statement
RO	Registered Organisation
RRQ	Roman Research Question
SO	Strategic Objective
WSI	Written Scheme of Investigation

A. Appendix: Figures

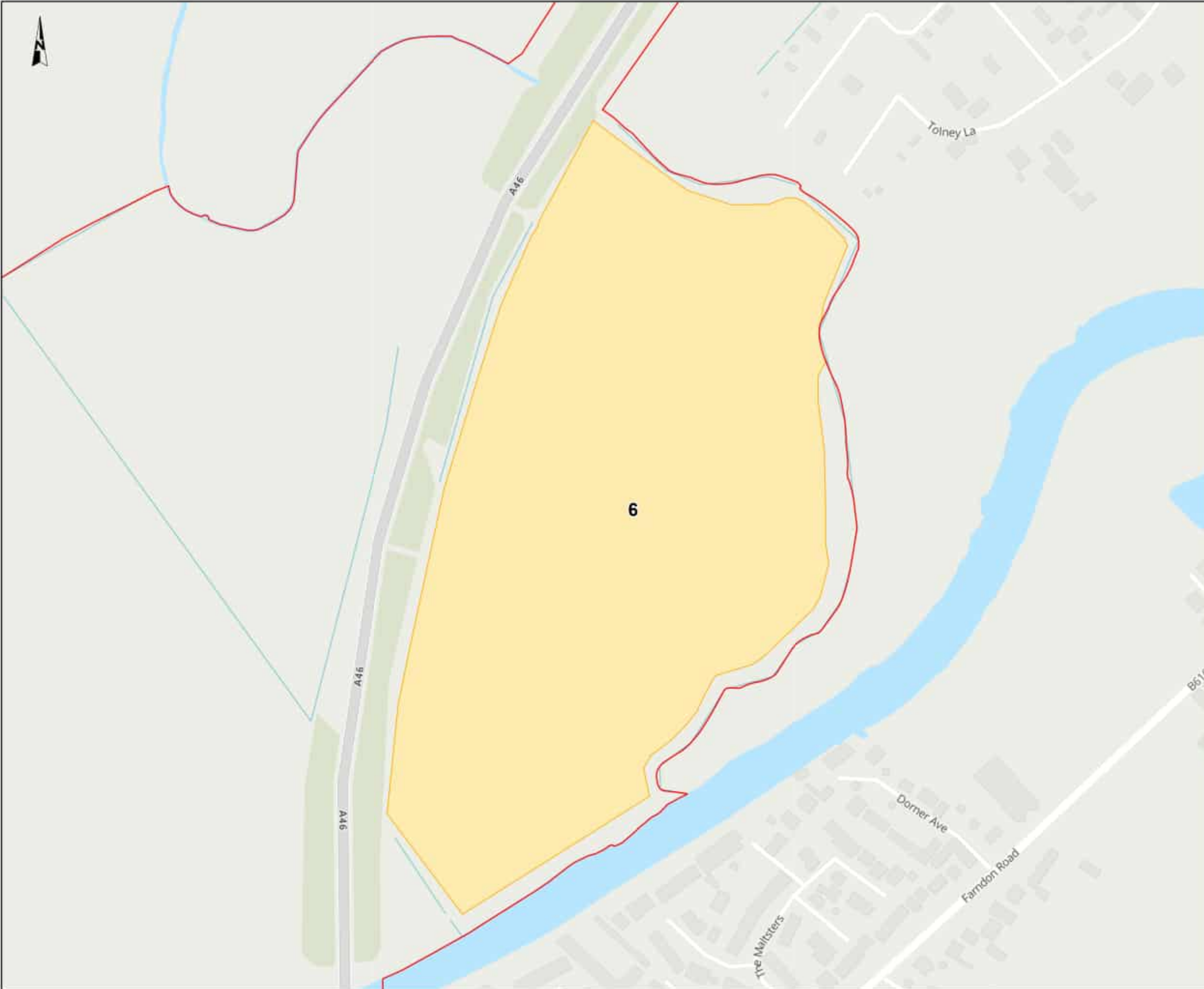


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KEY TO SYMBOLS
Order Limits
Protective fencing
Trench
Excavation area
Geoarchaeological - (further works may be required following completion)
Monitoring
Open Excavation
Trenching - (further works may be required following completion)

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A46 NEWARK BYPASS					
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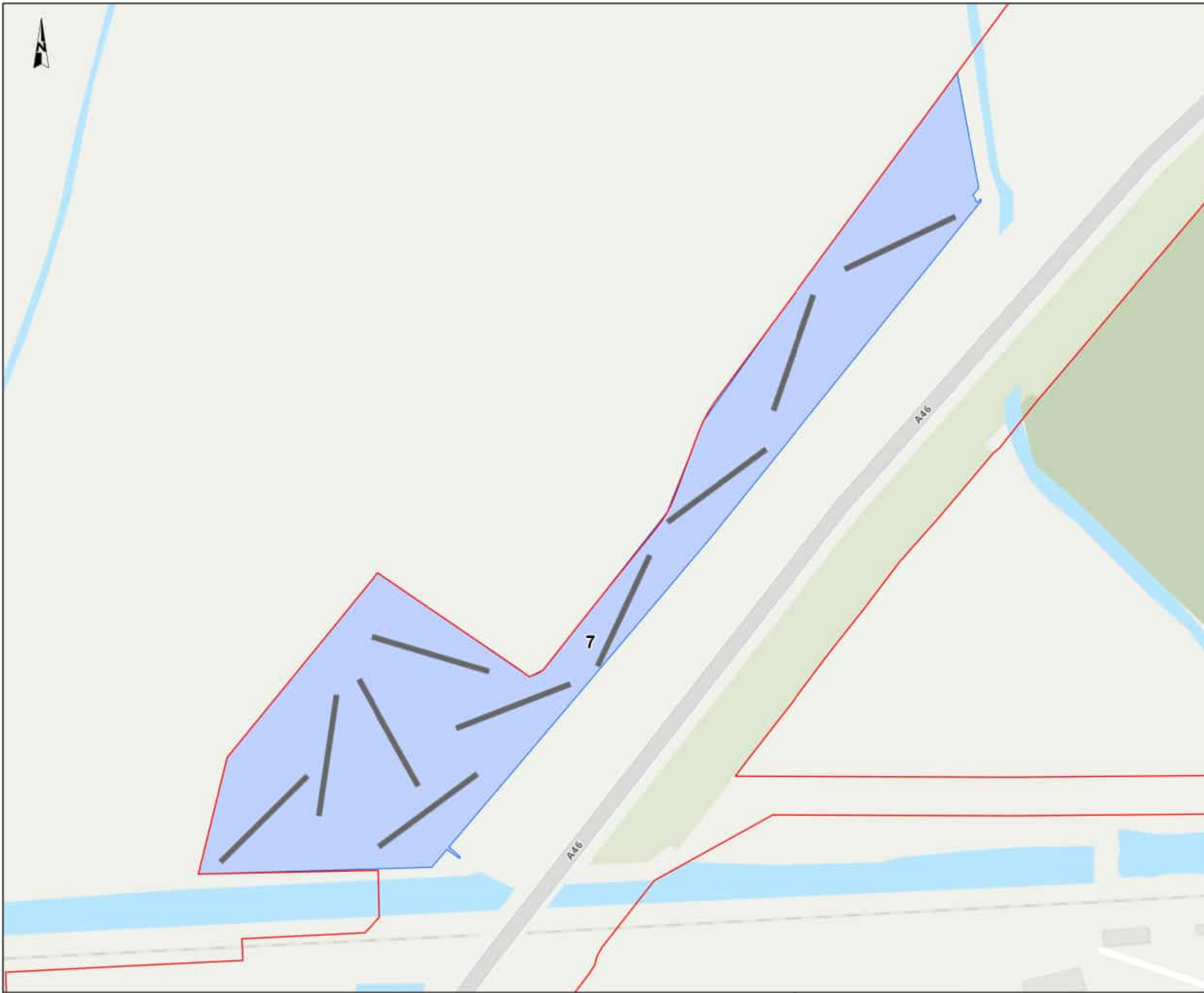
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- Protective fencing
- Trench

Excavation area

- Geoarchaeological - (further works may be required following completion)
- Monitoring
- Open Excavation
- Trenching - (further works may be required following completion)

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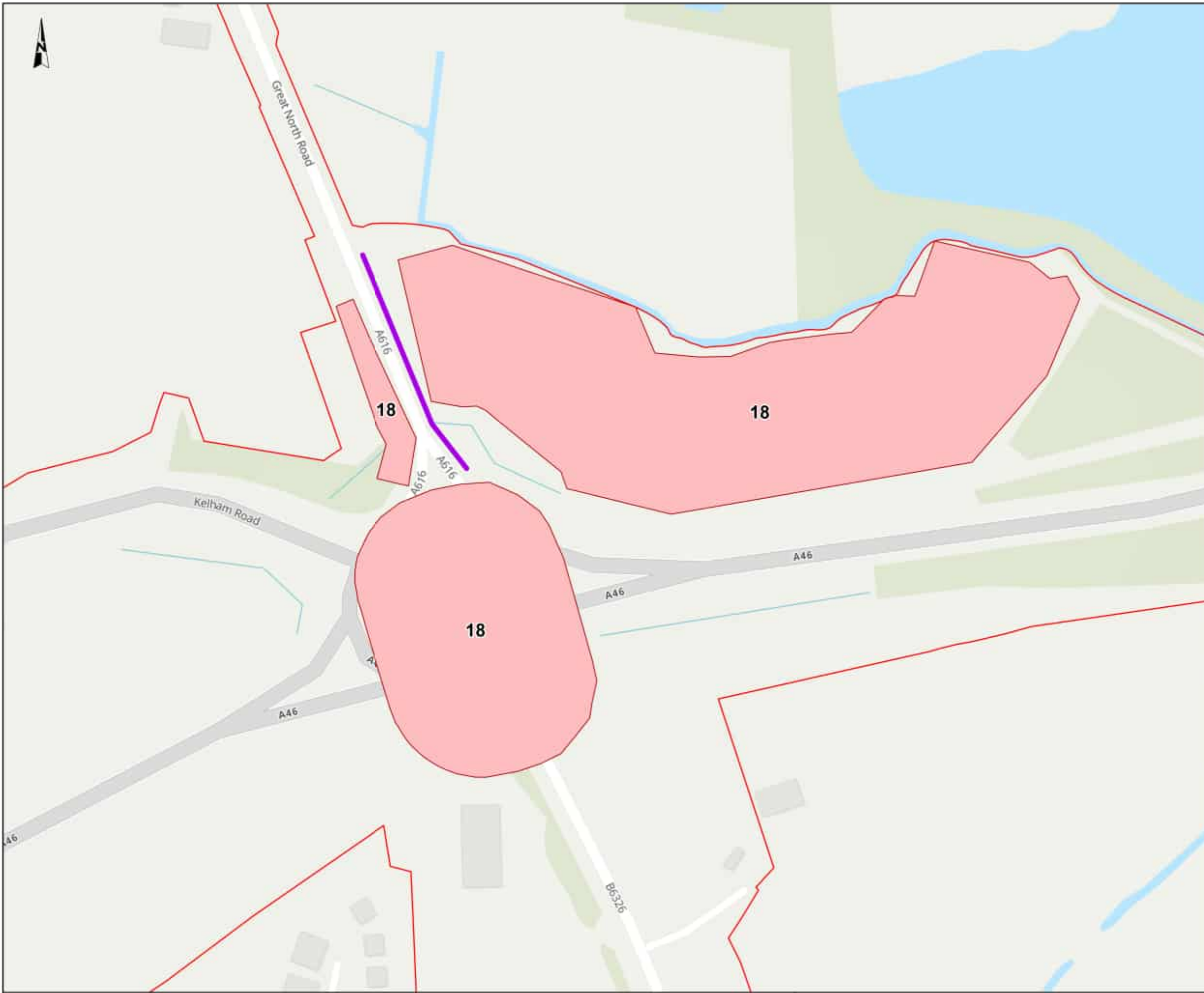
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Order Limits
Protective fencing
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Excavation area
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Trenching - (further works may be required following completion)

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KEY TO SYMBOLS

Order Limits

Protective fencing

Trench

Excavation area

Geoarchaeological - (further works may be required following completion)

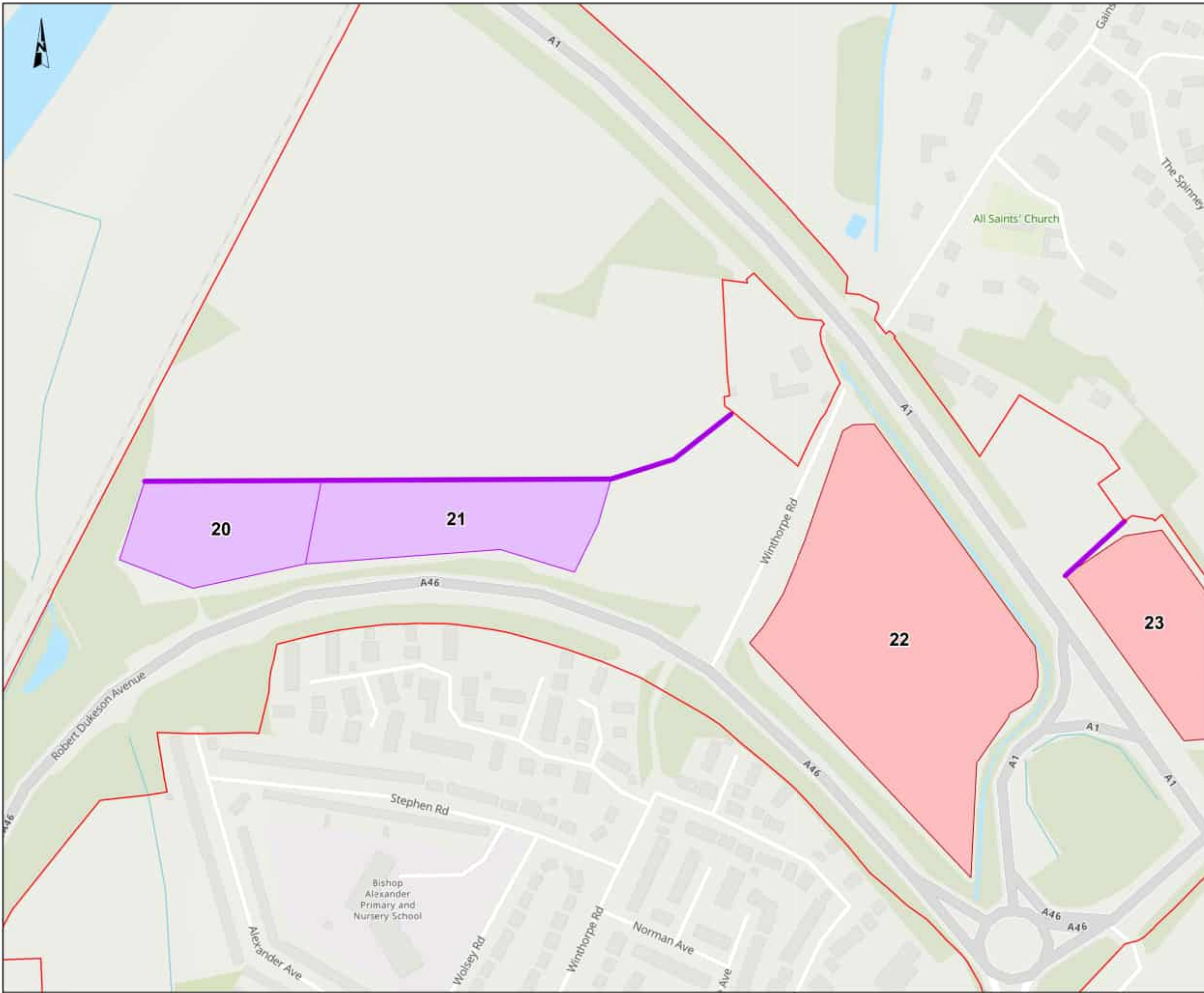
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Open Excavation

Trenching - (further works may be required following completion)

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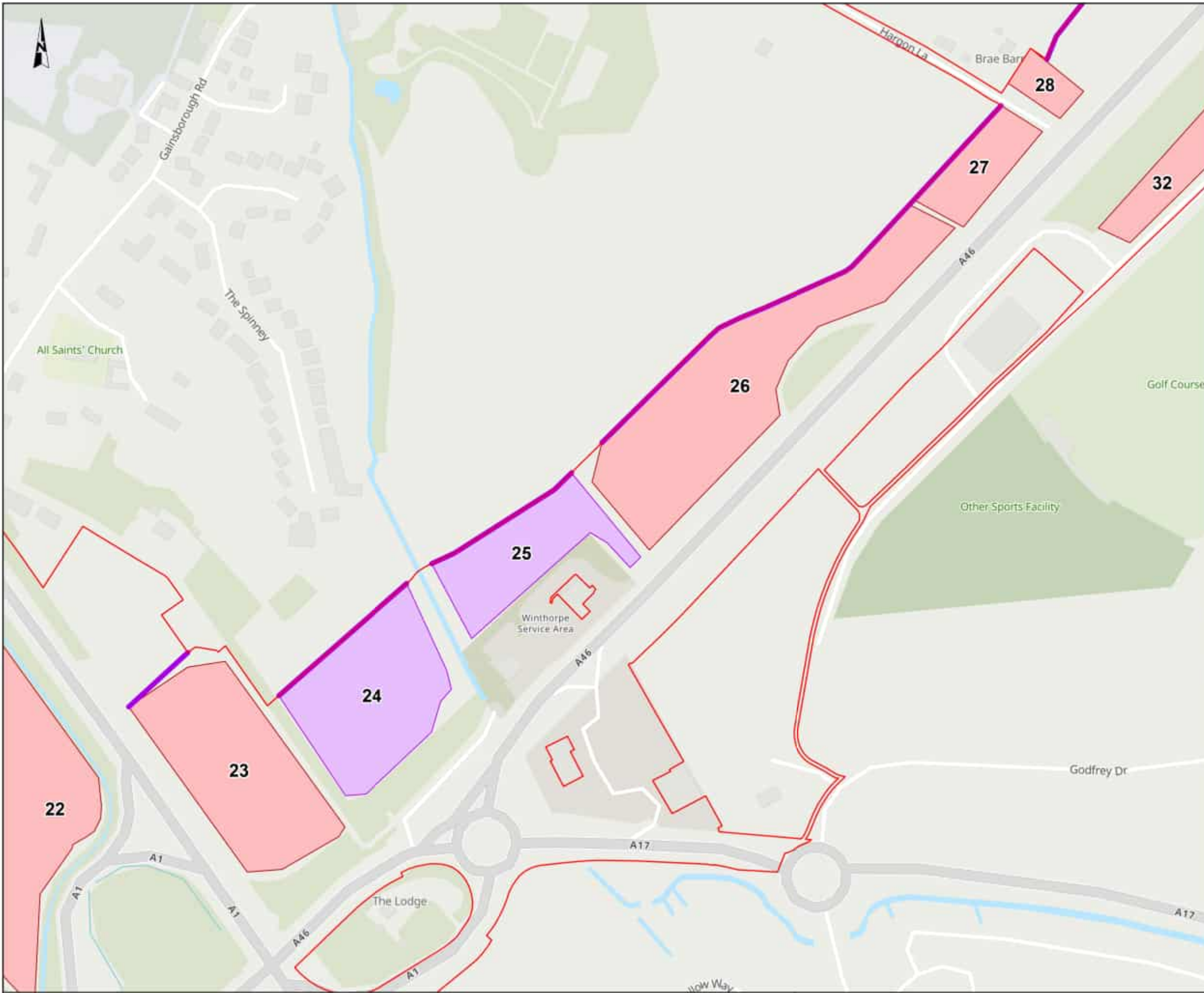
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- Monitoring
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- Trenching - (further works may be required following completion)

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- Trench

Excavation area

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- Open Excavation
- Trenching - (further works may be required following completion)

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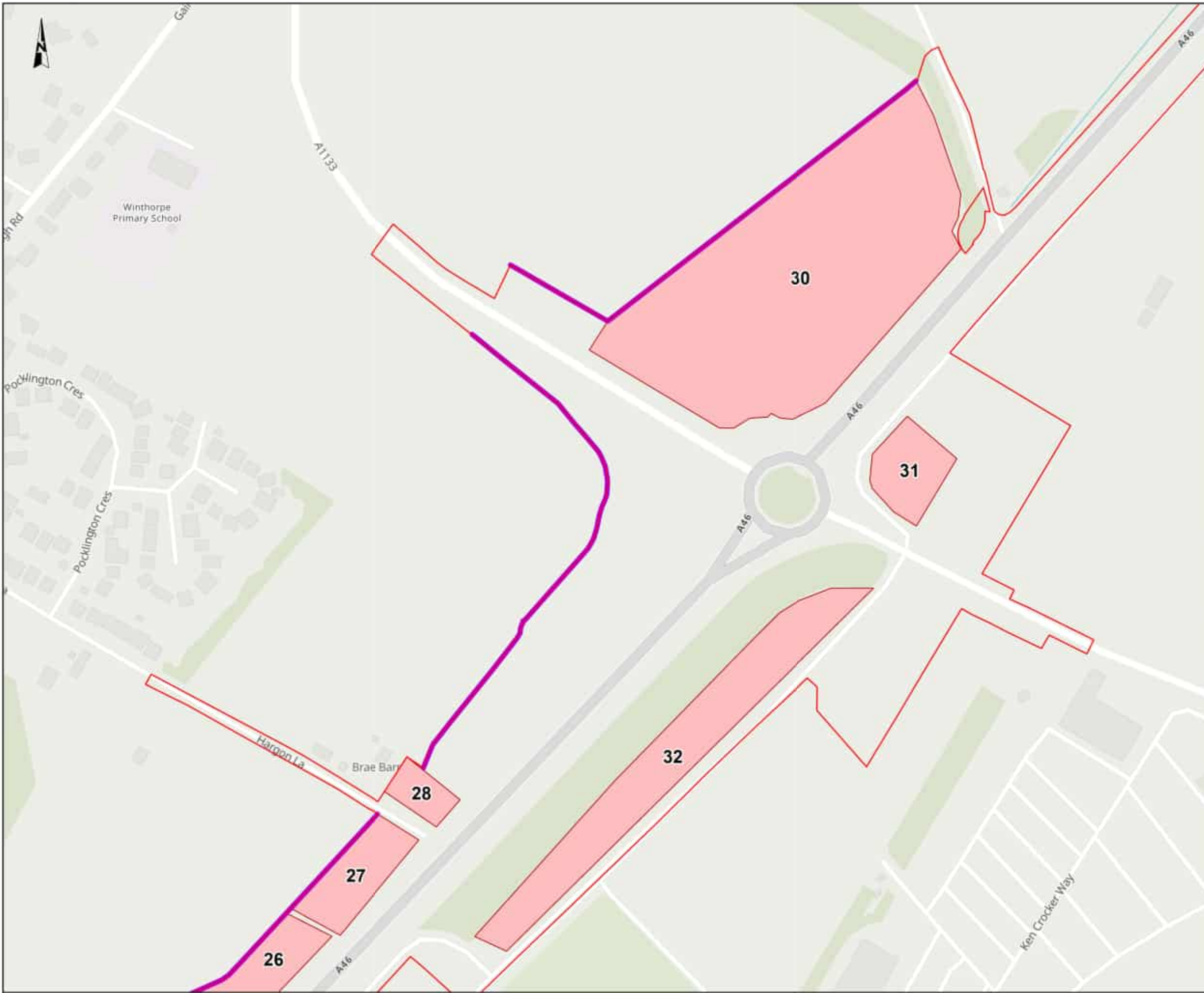
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Figure 6
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Page 6 of 8

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- Trench

Excavation area

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- Monitoring
- Open Excavation
- Trenching - (further works may be required following completion)

PO1	15/08/24	FIRST ISSUE	JB	NV	CH
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B. Appendix: Geophysical Survey WSI

A46 Newark Northern Bypass, Nottinghamshire: Written Scheme of Investigation for an Archaeological Geophysical Survey



Prepared for Skanska Construction UK Ltd on behalf of National Highways Regional Delivery Partnership Framework

By Dr Ger Dowling and Dr Steve Lancaster

24 May 2022

TITLE PAGE

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Project Name:	A46 Newark Northern Bypass, Nottinghamshire
Report Status/Revision:	Draft v.1.4
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Disclaimer

The results, conclusions and recommendations contained within this document are based on information available at the time of its preparation. Whilst every effort has been made to ensure that all relevant data have been collated, the authors and AMS accept no responsibility for omissions and/or inconsistencies that may result from information becoming available subsequent to the document's completion.

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Table of Contents

1 Introduction	4
1.1 Project Background	4

1.2 Purpose and Scope of this Assessment	5
1.3 Site Location.....	5
1.4 Archaeological Background.....	6
2 Project Objectives and Aims	6
2.1 Project Objectives	6
2.2 Project Aims.....	7
3 Project Team	7
4 Survey Methodology and Instrumentation.....	7
4.1 Methods	7
4.2 Instrumentation	7
5 Data Management, Processing and Interpretation	7
6 Programme	8
7 Safety, Health & Welfare at Work	8
8 Reporting	8
9 Archive Storage and Curation.....	9
10 Copyright.....	9
11 AMS Check, Review, Approve – Verify Procedure.....	9
References	9
Figures	11

List of Tables

Table 1: Survey Areas	5

List of Figures

Figure 1: Location of the Survey Areas (Areas 20 – 31)	12

Abbreviations

Term	Description
ADS	Archaeological Data Service
AMS	Archaeological Management Solutions
BGS	British Geological Survey
CIfA	Chartered Institute for Archaeologists
CRA-V	Check Review Approve - Verify
DCO	Development Consent Order
EAR	Environmental Assessment Report
EIA	Environment Impact Assessment
GIS	Geographical Information System
GPS	Global Positioning System
GR	Grid Reference
HE	Highways England
HER	Historic Environment Record
HLC	Historic Landscape Characterisation
NH	National Highways
OSGB	Ordnance Survey Great Britain
PCF	Project Control Framework
PCF Stage 2	National Highways Project Control Framework Option Selection stage
PPE	Personal Protective Equipment
RAMS	Risk Assessment Method Statement
UKSO	UK Soil Observatory
WSI	Written Scheme of Investigation

Coordinate System

All grid coordinates in this report are georeferenced to OSGB 1936 National Grid coordinate reference system unless otherwise stated.

1 Introduction

1.1 Project Background

- 1.1.1 This Written Scheme of Investigation (WSI) has been prepared by Archaeological Management Solutions Ltd (AMS) on behalf of Skanska Construction UK ('the Client') Ltd on behalf of National Highways Regional Delivery Partnership Framework in advance of a

geophysical survey on lands forming part of the A46 Newark Northern Bypass, Nottinghamshire. Mott MacDonald are acting as archaeological consultants on the project.

- 1.1.2 The A46 Newark Northern Bypass scheme is approximately 6km in length, passing the western and northern extents of Newark-on-Trent, Nottinghamshire, between Farndon and Winthorpe roundabouts. The aim of the scheme is to increase capacity and reduce traffic congestion on the A46 in the vicinity of Newark, improve connectivity from Lincolnshire to the national motorway network, and improve route standard consistency for the A46.
- 1.1.3 The scheme is the subject of a PCF Stage 2 Environmental Assessment Report (EAR) undertaken by Atkins in 2021 (Highways England 2021), which found archaeologically sensitive areas across the route.
- 1.1.4 The geophysical survey, involving high resolution magnetic gradiometry, will be implemented over twelve discrete areas along the northern section of the scheme and will cover a combined area of approximately 41.64ha.
- 1.1.5 The work will be carried out in accordance with the agreed methodology detailed in this WSI. Any variations to this working practice will be agreed in advance with the Client.
- 1.1.6 The results of the survey will help inform the Environmental Impact Assessment to be submitted as part of the Development Consent Order (DCO) application for the proposed development. The results will also aid future archaeological trial trenching along the scheme.
- 1.1.7 The geophysical survey will be conducted alongside a programme of metal detecting and field walking surveys, for which a separate WSI has been prepared.

1.2 Purpose and Scope of this Assessment

- 1.2.1 This WSI sets out the aims of the geophysical survey, and the methods and standards that will be employed. It conforms to current best practice, as well as to the guidance outlined in the Chartered Institute for Archaeologists' (CIfA) standards and guidance for archaeological geophysical survey (CIfA 2014a) and European Archaeologiae Consilium recommendations (Schmidt *et al.* 2016).

1.3 Site Location

- 1.3.1 The geophysical survey will be implemented over twelve neighbouring fields of tillage and pasture (designated as 'Areas 20–31') that extend to the west and north of the Brownhills Roundabout, along the existing A1 and A46, and cover a combined area of approximately 41.64ha. (Table 1; Figure 1).

Table 1: Survey Areas

Area	Size (ha.)
20	7.97
21	7.47
22	4.47
23	2.48
24	1.98
25	1.83
26	4.9
27	1.91

Area	Size (ha.)
28	1.63
29	3.31
30	2.1
31	1.55

- 1.3.2 The underlying bedrock of the locality comprises Mercia Mudstone Group, an early Triassic lithostratigraphic group which is widespread in the English Midlands. Bedrock of this type is of fluvial, lacustrine and marine origin (BGS 2022). Within the area of the geophysical survey the superficial deposits consist of Holme Pierrepont sands and gravels (southwest of the A1), a small area with no mapped superficial deposits (immediately northeast of the A1) and Balderton sands and gravels to the Winthorpe Junction. Both of the sand and gravel geological formations are of fluvial origin, and date to the early to mid Quaternary.
- 1.3.3 The soils are classed as loamy and clayey floodplain soils in Areas 20 and 21; naturally wet, sandy and loams soils in Areas 22 to 24; and free draining, sandy soils in Areas 25 to 31 (UKSO 2022).

1.4 Archaeological Background

- 1.4.1 The EAR (Highways England 2021) noted evidence for settlement along the A46 extending back into prehistory. The Fosse Way Roman Road runs through the scheme area on a northeast–southwest alignment, linking Exeter to Lincoln, with additional Roman remains recorded elsewhere in the vicinity of the scheme. Later activity during the medieval period is indicated by the remains of Newark Castle, a twelfth-century scheduled monument (1003474) and a Grade I listed building (1196278), located in the centre of Newark by the River Trent. This area is also notable for the three separate sieges it was subjected to from 1643 to 1646, during the English Civil War. Indeed, eight of the twelve scheduled monuments, within the 1km area of the scheme, are defensive structures relating to the Civil War. Post-medieval buildings and structures are also present, illustrating the development of Newark during the seventeenth to twentieth centuries. The construction of the Grade II listed building Great North Road causeway arches was carried out from the 1760s and completed in 1770.
- 1.4.2 The earliest Ordnance Survey map of the area of the proposed scheme depicts land use at 1883. The majority of land northwest of the River Trent is regular field systems, typical of enclosure era land divisions. Comparison with current satellite imagery indicates relatively little amalgamation of fields has occurred since.

2 Project Objectives and Aims

2.1 Project Objectives

- 2.1.1 The principal objectives of the geophysical investigation are to:
- provide information on the location and extent of any potential geophysical anomalies,
 - assess the location and extent of known archaeological remains, and

- assess the presence or absence of archaeological features in areas where there are currently no records of archaeological remains.

2.2 Project Aims

2.2.1 The geophysical investigation aims to:

- identify any geophysical anomalies of possible archaeological origin within the specified survey areas,
- accurately locate these anomalies and present the findings in map form,
- describe the anomalies and discuss their potential provenance in a written report,
- incorporate all of the above in a report to the Client and in a Site/Digital Archive.

3 Project Team

The geophysical survey will be conducted for AMS by Dr Ger Dowling, with one survey assistant.

4 Survey Methodology and Instrumentation

4.1 Methods

4.1.1 The geophysical survey will employ high resolution magnetic gradiometry. This technique measures changes in the magnetic properties of the soil and is widely used in modern investigations due to its ability to detect a broad range of subsurface archaeological remains, including ditches and pits, and industrial features associated with metalworking and pottery production.

4.2 Instrumentation

- 4.2.1 The magnetic survey will be conducted using a five-channel magnetometer system combined with cm-precision GPS (georeferenced to OSGB 1936 National Grid). Mounted on a non-magnetic cart that can be either hand-pushed or pulled by a quad bike, the system records magnetometer and GPS data simultaneously into a single data file. The data capture strategy will involve logging readings at 0.05m intervals along transects spaced 0.5m apart, with a maximum traverse width of 2.5m.
- 4.2.2 The magnetometer system will be linked to a Trimble R12 GNSS receiver with TSC3 controller, outputting in NMEA mode to ensure a high positional accuracy of each data point.
- 4.2.3 The sampling strategy produces a high-resolution dataset, giving clarity to any archaeological features detected. The highly accurate positioning of the survey data provides strong confidence when integrating the geophysical results with other datasets such as aerial imagery in GIS, and also ensures repeatability should further investigation of anomalies be required (e.g. test excavation).
- 4.2.4 A daily record of the survey will take the form of survey area photographs and field description notes.

5 Data Management, Processing and Interpretation

- 5.1 Survey data will be logged continuously to a laptop computer and archived daily to an external hard drive.
- 5.2 The collated magnetic data will be processed in the following way:

- Real-time positioning of magnetometer data based on GPS measurements
 - Processing (Zero Mean Transect) of collated magnetometer data
 - Gridding (nearest neighbour interpolation)
 - Interpolation of data to improve visual clarity
 - Export of georeferenced greyscale images at optimum visual range
- 5.3 The processed data will be imported into QGIS for final image production. Final geophysical datasets will be formatted as raster data models to enable subsequent geospatial analysis. All geophysical raster datasets will be digitally archived to best practice (e.g.; Schmidt and Ernenwein 2011; Archaeological Data Service 2021).

6 Programme

- 6.1. The geophysical survey for the A46 Newark Project is anticipated to take two weeks to complete, commencing 30 May 2022.

7 Safety, Health & Welfare at Work

- 7.1 All survey works will be carried out in accordance with current health and safety legislation. A project-specific Risk Assessment Method Statement (RAMS) will be in place at the commencement of on-site services. All staff will wear appropriate PPE.

8 Reporting

- 8.1 A draft report on the geophysical survey will be completed within four weeks of completion of the fieldwork. This report will be submitted to Mott MacDonald and Skanska UK Construction Ltd for review.
- 8.2 The report will include the following information:
- A non-technical summary (300 words maximum)
 - Background and aims of survey
 - Description of survey areas
 - Methods and instrumentation
 - Conditions of survey
 - Results in tabular and mapped format
 - Discussion and conclusions
 - References
 - Illustrations (processed greyscale images and interpretative plans)
 - Archive Location
 - Appendices (technical detail and supporting information)
- 8.3 Significant anomalies shall be described in tabular format under the following headings:
- Survey Area
 - National Grid reference
 - Form/nature of anomaly

- Possible source(s) of anomaly
- Interpretative discussion

8.4 Upon completion and approval of the final report, copies of the report will be issued to the Client, as well as the relevant Historic Environment Record, local authority Planning Officer and/or Conservation Officer. An OASIS online record will be created, and a PDF version of the final report submitted. Subject to contractual obligations on confidentiality, copies of the report will be provided to relevant local and national records and published through the Archaeology Data Service.

9 Archive Storage and Curation

The project archive will be prepared in accordance with *A Guide to Good Practice: Geophysical Data in Archaeology* (Schmidt and Ernenwein 2011) and *ADS Guidelines for Depositors* (ADS 2021). The data formats for the raw data archive will be selected on this basis. The archive will be deposited within 6–12 months of project completion.

10 Copyright

The copyright of the report and archive will be retained by Archaeological Management Solutions Ltd under the *Copyright, Designs and Patents Act 1988*, with all rights reserved. The Client will be licensed to use each report for the purposes that it was produced in relation to the project as described in the specification. The archive repository, 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*.

Information relating to the project will be deposited with the Historic Environment Record where it can be freely copied with reference to Archaeological Management Solutions Ltd for the purposes of archaeological research or development control within the planning process.

Where the project documentation or archive contains material that is non-AMS Consulting copyright, or the intellectual property of third parties, which AMS Consultancy are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable users remain bound by the conditions of the *Copyright, Designs and Patents Act 1988* regarding copying and electronic dissemination of such material.

11 AMS Check, Review, Approve – Verify Procedure

9.1 AMS employ a Check, Review, Approve – Verify (CRA-V) procedure for all our reporting deliverables/outputs. This involves the originator (creator of the deliverable) sending the output to be checked once it has been completed. The checker undertakes a line-by-line check of the deliverable to ensure that it meets with requirements. The originator will then address the checker's comments. Once this task has been completed, the deliverable is resent to the checker for a second review before it is sent to a third person for approval. The approver will do an independent check to ensure that the deliverable meets the task brief. Any comments will be addressed prior to verification by the client.

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Figures

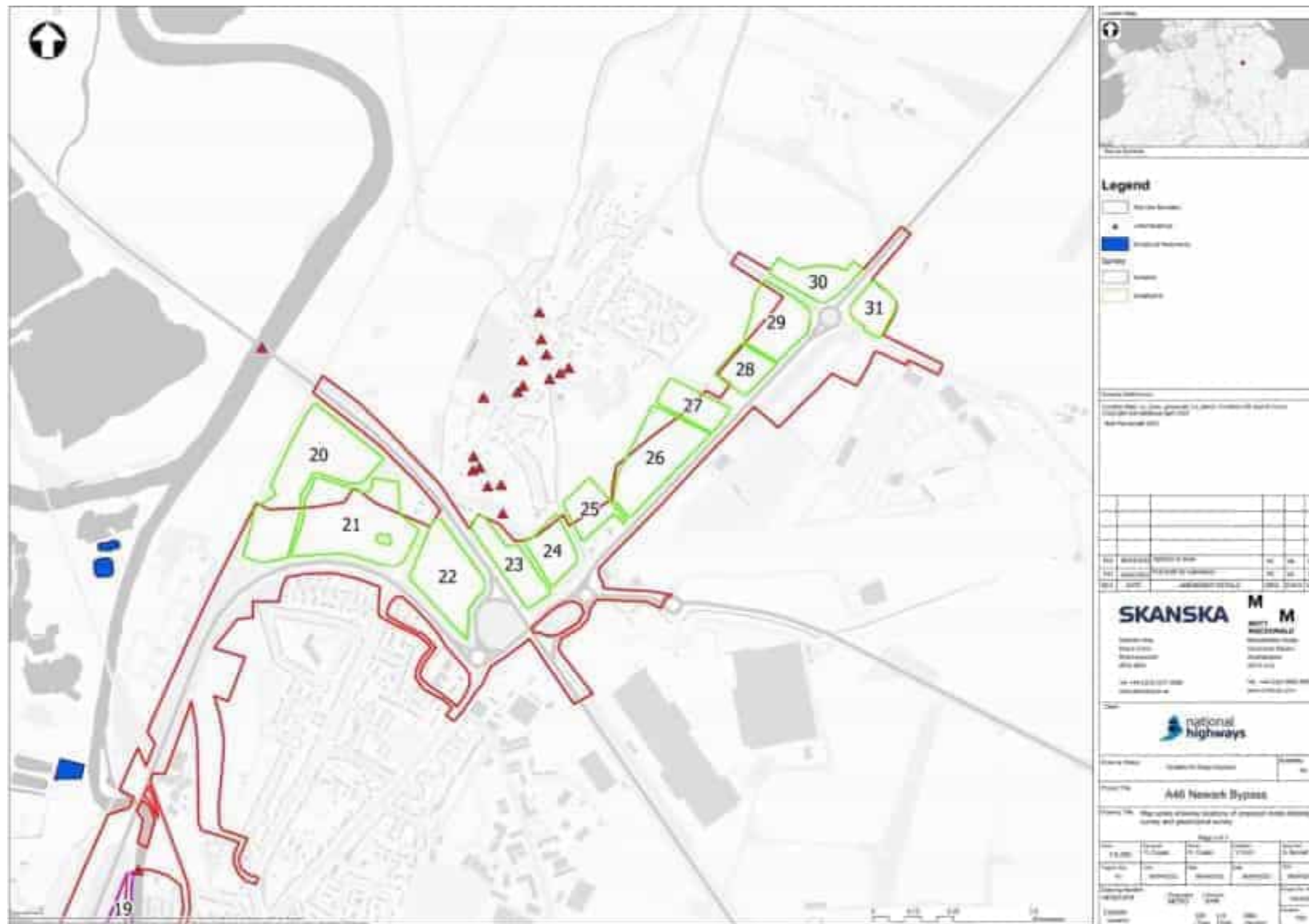


Figure 1: Location of the Survey Areas (Areas 20 – 31)

C. Appendix: Metal Detecting WSI

A46 Newark Northern Bypass, Nottinghamshire: Written Scheme of Investigation for Archaeological Metal Detecting



Prepared for Skanska Construction UK Ltd on behalf of National Highways Regional Delivery
Partnership Framework

By Dr James Bonsall

2 September 2022

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Table of Contents

Introduction	5
Project Background.....	5
Purpose and Scope of this Assessment	5
Site Location	6
Archaeological Background	8
General Archaeological Background	8
Palaeolithic	8
Mesolithic	8
Neolithic and Early Bronze Age.....	8
Later Bronze Age and Iron Age	8
Romano-British Period	8
Early Medieval	9
Medieval.....	9
Post-medieval Period	9
Modern (AD 1750–present).....	10
Scheduled Monuments adjacent to the Survey Areas	10
Project Aims and Objectives.....	11
Key Personnel and Project Team.....	12
Survey Methodology and Instrumentation.....	13
Methods.....	13
Instrumentation.....	14
Finds Management	15
Archive Deposition.....	16
Programme	17
Land Access.....	18
Monitoring	19
Safety, Health & Welfare at Work.....	20
Analysis and Reporting.....	21
Copyright	22
References	23
Figures	25

List of Tables

Table 1: Survey Areas.....	6

Table 2: Project Team	12

List of Figures

Figure 1: Site Location.....	26
Figure 2: Locations of proposed metal detecting and geophysical survey areas	27
Figure 3: Locations of proposed metal detecting and geophysical survey areas	28

Abbreviations

Abbreviation	Definition
AMS	Archaeological Management Solutions
ClfA	Chartered Institute for Archaeologists
CP	Civil Parish
EAR	Environmental Assessment Report
OSGB36	Ordnance Survey Great Britain 1936 coordinate system
RTK DPGS	Real Time Kinematic Differential Global Positioning System
SM	Scheduled Monument
PCF	Project Stage Commencement
UKIC	United Kingdom Institute for Conservation
WSI	Written Scheme of Investigation

Coordinate System

All grid coordinates in this document use the OSGB36 coordinate reference system unless otherwise stated.

Introduction

Project Background

This Written Scheme of Investigation (WSI) has been prepared by Archaeological Management Solutions (AMS) on behalf of Skanska Construction UK Ltd (Skanska) on behalf of National Highways Regional Delivery Partnership Framework in advance of a metal detection survey on lands forming part of the A46 Newark Northern Bypass, Nottinghamshire (Figure 1–Figure 3).

The A46 Newark Northern Bypass scheme is approximately 6km in length, passing the western and northern extents of Newark-on-Trent, Nottinghamshire, between Farndon and Winthorpe roundabouts. The aim of the scheme is to increase capacity and reduce traffic congestion on the A46 in the vicinity of Newark, improve connectivity from Lincolnshire to the national motorway network, and improve route standard consistency for the A46.

The scheme has been subject to a PCF Stage 2 Environmental Assessment Report (EAR) undertaken by Atkins in 2021 (Highways England 2021), which found archaeologically sensitive areas across the route.

Purpose and Scope of this Assessment

This WSI sets out the aims of the metal detection survey, and the methods and standards that will be employed. The survey shall conform to current best practice and shall be planned, managed, and undertaken in accordance with the requirements of this Specification and based on the guidance provided by:

- Standards and Guidance for archaeological field evaluation (ClfA 2014a);
- Standards and Guidance for the collection, documentation, conservation, and research of archaeological materials (ClfA 2014b);
- Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (ClfA 2014c);
- Code of conduct: professional ethics in archaeology (ClfA 2014d); and
- ClfA Policy: Use of Volunteers and Students (ClfA 2021).

The metal detection survey will be implemented over 16 discrete areas along the northern section of the scheme and will cover a combined area of approximately 69.67ha.

The work will be carried out in accordance with the agreed methodology detailed in this WSI. Any variations to this working practice will be agreed in advance with the client. The specification details how the archaeological metal detecting survey, and subsequent reporting and archiving, shall be undertaken.

The results of the survey will help inform the Environmental Impact Assessment (EIA) to be submitted as part of the Development Consent Order (DCO) application for the proposed development. The results will also aid future archaeological trial trenching along the scheme.

The metal detection survey will be conducted alongside a programme of geophysical and field walking surveys, for which separate WSIs have been prepared (Dowling & Lancaster 2022; McKenna 2022).

The metal detecting will be undertaken by a team of archaeological metal detectorists working under the direct supervision of the Field Director.

Site Location

The metal detection survey will be implemented over 16 neighbouring fields (designated as 'Areas 2–4' and 'Areas 6–18' as numbered in the project specifications). These are located to the west and north of the River Trent in Averham CP and Newark CP, along the existing A46 and A617, and cover a combined area of approximately 69.6ha. (Table 1; Figure 1–Figure 3).

Table 1: Survey Areas

Area	Size (ha.)
2	14.46
3	6.87
4	25.44
6	11.88
7	2.34
8	1.46
9	0.57
10	0.25
11	0.81
12	0.87
13	0.40
14	0.76
15	0.54
16	0.67
17	0.47
18	1.79

The underlying bedrock of the locality comprises Mercia Mudstone Group, an early Triassic lithostratigraphic group which is widespread in the English Midlands. Bedrock of this type is of fluvial, lacustrine, and marine origin (British Geological Survey 2022). Within the area of the metal detection survey the bedrock consists of Gunthorpe Member mudstones (parts of Areas 2 and 3, Area 4 and Areas 7–18) and Edwalton Member mudstones (parts of Areas 2 and 3 and Area 6). The superficial

deposits over all of the areas are alluvium—clay, silt, sand, and gravel—formed from the River Trent, dating to the Quaternary period.

Archaeological Background

The following is an adapted summary of the archaeological background given in the EAR (Historic England 2021). Sites directly adjacent the areas of survey are listed near the end of this section and shown on Figure 2 and Figure 3. Please refer to the EAR (Historic England 2021) for location figures depicting sites mentioned in the wider area of the scheme.

General Archaeological Background

Palaeolithic

An Upper Palaeolithic site was identified through field walking in 1991 at Farndon Fields (M3571) near the southern end of the scheme (Harding et al. 2014). This is a very rare site type, and the survey team will be made aware of its presence and the potential for related remains.

Mesolithic

There are no known Mesolithic sites within the area of the scheme; however, excavations to the Staythorpe Power station—c.2.5km to the west alongside the River Trent—have revealed Mesolithic remains (Cooper 2006).

Neolithic and Early Bronze Age

Neolithic and Bronze Age flints (L11808) and burnt stone have been recovered from Farndon Fields and a Neolithic mortuary enclosure (M3612) was identified through aerial photography and subsequent excavation near the northern end of the scheme. A Neolithic and Early Bronze Age occupation site (L12214 and M18427) was identified under the Roman Fosse Way near Langford (L12214 and M18427).

Later Bronze Age and Iron Age

Remains of this age are considered rare in Nottinghamshire and are mainly known from isolated finds of bronze objects, such as palstaves from the River Trent (L8514 & L3039). Late Bronze Age and Iron Age pottery was recovered from excavations at Farndon Fields (L11810), and further Iron Age sherds were recovered at Crankley Point sewage works (L11013).

Romano-British Period

The Fosse Way Roman Road is presumed to have run along the same alignment as the current A46. It ran from Exeter to Lincoln, marked the limits of early Roman settlement and connected settlements and production centres. Concentrations of Roman material have been recorded at Farndon Fields and Newark Northgate, and trial trenching near Langford revealed the remains of the original Roman Road (L3737).

Early Medieval

Archaeological finds are rare; however, placename evidence attests to Anglo-Saxon settlements throughout the area of the scheme. A high-status female burial (M18359) was found south of the scheme at a cropmark on Winthorpe Road (Newmark-on-Trent) and another inhumation was found in a possible Neolithic barrow (M3612). Excavations of enclosures alongside the Roman road to the south (Newark-on-Trent to Widmerpool) suggest continued use into the Anglo-Saxon period.

Medieval

Newark-on-Trent emerged as a market town in the medieval period. The castle (1003474) in its centre was built in the early twelfth century by the Bishop of Lincoln and sits on the site of an earlier motte-and-bailey. There is also a medieval hospital and cemetery (St Leonard's: M3691), a moated site (near Dairy Farm: 1016051), a medieval settlement (Osmondthorpe at Northgate: M18367), a medieval road (M3093), a medieval bridge (M3214), a medieval building (at Northgate allotments: M3690) and many finds have been identified within the town during minor development works.

Post-medieval Period

There are many standing buildings, agricultural and industrial remains from the post-medieval period within the area of the scheme. However, the most significant remains are those relating to the English Civil War. Newark-on-Trent was subjected to three separate sieges from 1643 to 1646 during the Civil War and a series of defences and forts were built around the town. The following Civil War defences are within the area of the scheme:

- 1016020: Civil War town defences within the Friary Garden (Scheduled Monument);
- 1016046: Civil War redoubt 550m southeast of Valley Farm (Scheduled Monument);
- 1016048: Civil War redoubt 680m northwest of Dairy Farm (Scheduled Monument);
- 1016049: Civil War redoubt on Crankley Point (Scheduled Monument);
- 1016050: Civil War redoubt on Crankley Point (Scheduled Monument);
- 1016150: Queen's Sconce (Scheduled Monument);
- 1016152: Civil War redoubt 580m ENE of sugar refinery (Scheduled Monument);
- 1017402: Civil War Sconce 650m northwest of Devon Bridge (Scheduled Monument);
- 1008258: Hawton Moated site, fishpond, Civil War redoubt, and ridge and furrow (Scheduled Monument);
- L3733: Line of Village Defences at Winthorpe;
- L8532: Line of Rampart at Winthorpe;
- M3027: Fortified village at Farndon;
- M3114: Second Line of Circumvallation;

- M8401/L10511/L8470/L8442: Earthworks and line of First Circumvallation; and
- L3664: Civil War earthworks at Newark-on-Trent.

Following the Civil War, the castle was destroyed, and Newark-on-Trent returned to its role as a merchant town.

Newark-on-Trent was particularly known for its beer. Warwicks and Richardsons began brewing in 1766 and the Northgate Brewery (M3717) was built in 1871. The Brewery Office (1277425), Maltings (1196413) and almshouses (M3262) still stand, and the locations of others are known. Many improvements were made to the river and wharfs and warehouses were constructed. Newark Town Wharf (M3274) and Cow Lane Wharf (M3291) likely served the breweries. There are nine Grade II listed warehouses within the area of the scheme.

Post-medieval buildings and structures illustrating the development of Newark during the seventeenth to twentieth centuries are present. The construction of the Great North Road causeway arches (a Grade II listed building) was carried out from the 1760s and completed in 1770.

Modern (AD 1750–present)

Industrial uses continued and more breweries and warehouses were built post-1750. For example, the Kelham Home Grown Sugar refinery along Great North Road (now operating as British Sugar) was built in 1920.

The earliest Ordnance Survey map of the area of the proposed scheme depicts land use in 1883. Most of the land northwest of the River Trent is regular field systems, typical of enclosure-era land divisions. Comparison with current satellite imagery indicates little amalgamation of fields has occurred since.

Scheduled Monuments adjacent to the Survey Areas

Areas 1–7 are located north of the southern branch of the River Trent 4km northeast of the Battle of Stoke Registered Battlefield limits, southwest of Newark-on-Trent. Scheduled Monument (SM) 1017402—a Civil War Sconce—is located c.220m southeast of Area 7 and c.300m northeast of Area 6 (Figure 2).

Areas 8–18 are located 0.5–1km from Newark Castle. Area 8 is located to the immediately south of SM 1016048, Civil War redoubt. Area 18 is located to immediately south of SM 1016046, another Civil War redoubt.

Project Aims and Objectives

The principal objective of the metal detection survey is to map non-ferrous metal 'hits' that may help locate or negate any potential for underlying archaeological features. The metal detection investigation aims include:

- To identify and collect non-ferrous artefacts within the specified survey areas;
- Accurately locate those artefacts and present the findings in map form;
- Assess the artefacts found and describe them in a written report;
- Incorporate all of the above in a report to the Client;
- Create a digital site archive;
- Disseminate the results of the archaeological metal detecting survey through the deposition of a detailed report at the National Monuments Record of England; and
- Disseminate the results through one or more of the following means: via the A46 Newsletter, National Highways website, social media or through a press release. This work will be undertaken by the consultant and shall be based on the report prepared by the sub-consultant.

The metal detection survey will, as requested in the specification (Mott McDonald 2022), target the areas of known archaeological features such as Fosse Way, and nearby Civil War battlegrounds and Scheduled Monuments, and produce results by identifying and mapping find spots and clusters of find spots. This will, along with the geophysical and field walking surveys, indicate the potential presence of underlying archaeology. Confirming the exact location of potential underlying archaeology will contribute towards de-risking the project and may assist to determine further archaeological works during the next stage of the programme.

Key Personnel and Project Team

The metal detection survey will be conducted for AMS by a metal detecting expert (Bryn Gethin) with a team of at least five skilled detectorists, one survey assistant and an on-site Field Director (see Table 2 below).

Additional specialist staff from AOC Group may be required to assist with:

- Registered finds and metalwork
- Coins
- Conservation

Table 2: Project Team

Name	Role	Contact Details
Labhaoise McKenna	Project Manager	[REDACTED]
Tony Bartlett	AMS Field Director Health and Safety Officer	[REDACTED]
Bryn Gethin	Metal Detecting Lead	
Caroline Rann	Metal Detectorist Team Manager	
Raul Zafra	AMS Surveyor	

Survey Methodology and Instrumentation

Methods

The metal detection survey will occur on transects spaced 10m apart, reducing to 5m in areas of high density finds and areas adjacent to the two Scheduled Monuments. Detectorists will survey down the centre of the transects, scanning along both sides, providing full coverage along each transect. Each detectorist will be assigned a transect which will be systematically detected.

When a hit is registered, it will be investigated by pinpointing its location to within 5cm. Targets will only be retrieved where they lie in the topsoil layer in order to protect the integrity of any underlying archaeological features. Non-ferrous metal targets will be investigated using a small spade or trowel. Discriminating metal detectors are capable of identifying different metal types based on their metallic properties, usually by identifying a number that corresponds to a particular metal(s). In some cases, this can be clearly stated, such as 'ferrous' or 'lead', in other cases the responses may indicate several different types of response. This survey will discriminate against ferrous metals, allowing for the mapping of non-ferrous metals likely to be associated with the Civil War. Retrieved finds will be flagged, bagged and numbered.

It should be noted that it is not the intention to fully metal-detect the entire survey area. The methodology employed constitutes a sample of the material/metal type that likely survives in the Survey Areas and these areas should not be regarded as "cleared" of archaeological material.

Each detectorist will be provided with standard ziplock finds bags and a number of pin flags. Each significant find recovered will be bagged and the finder will write their initials on the bag. Each bag will then be pin flagged to the ground. Once each detectorist has finished their first transect then the finds can begin to be located using a Real Time Kinematic Differential Global Positioning System (RTK DGPS) and at this point the overseeing archaeologist will give each finds bag an individual number which will match a location point on the survey. Each bag will be collected at this point.

No finds or pin flags will ever be left overnight between survey days and the number of any transects left at the end of each day will be left to the minimum necessary for the accurate laying out and continuation of the work on the following day. No finds will be transported from the site by anyone except for staff members of AMS.

Metal detecting farmed fields inevitably yields assemblages containing buttons, coins, buckles and various fragments of modern detritus. It is not proposed to discard any objects unless they are clearly modern, such as post 1950s currency, shotgun cartridge ends, drinks cans, and bottle tops. These will be initially assessed on site and then kept in large scrap bags for each field covered by the survey to

be discarded at a later date after a final check to make certain they contain no significant objects. This method has previously been used during the battlefield survey at Bosworth and on all other organised surveys carried out by the team. All other objects will be bagged and numbered but may be discarded at a later date after discussions with the Mott MacDonald Archaeologist and the Newark and Sherwood District Archaeologist.

In the event of human remains, including cremations, being revealed these would be initially left *in situ* and an appropriate exclusion zone demarcated. Any significant or extensive remains will be subject to a separate WSI. If significant quantities of unexpected finds are recovered during the fieldwork (definition of 'unexpected' to be agreed with Mott MacDonald Archaeologist and the Newark and Sherwood District Archaeologist), it may be necessary to renegotiate additional analysis and reporting costs.

Instrumentation

Transects will be laid out using 2m cross-sight ranging poles and 50m/100m tapes to create base-lines which will be used to set up the 10m and occasional 5m transects. This method has been used on numerous metal detecting surveys, such as work on Bosworth battlefield for Leicestershire County Council, at Battle Abbey for English Heritage, and numerous surveys by the Battlefields Trust (such as Edgehill and Stow-on-the-Wold). The ends of the transects will be surveyed in using the RTK DGPS.

The metal detection survey will be conducted using high performance discriminating metal detectors such as Minelab X-Terra 305 or similar, set to non-ferrous mode. The frequent use of the land for farming purposes, together with its proximity to Newark, means that the potential for high levels of modern metal scattered throughout the survey area is high. In order to combat this, the survey will use the metal detectors discrimination capability to filter out ferrous material, seeking instead to target other metal responses, specifically lead, which would be indicative of conflict remains. Practitioners will also be vigilant for ferrous and non-ferrous contaminants indicative of green waste, which may or may not be spread across the survey areas as a fertilizer/soil conditioner (Gerrard et al. 2015). Such contaminants may prevent a metal detection assessment. If encountered at an early stage (indicated by a high frequency of metal hits across a given survey area), detectorists will decide if the survey is viable in that area.

Finds Management

Artefacts recovered from the survey will be retained, excluding objects of twentieth or twenty-first century in date, which will be recorded but not retained. The finds will be recorded, cleaned, conserved, marked, bagged and boxed in accordance with recording systems, practices and standards outlined in Preparation of Archaeological Archives: Selection, Retention and Dispersal of Archaeological Collections (SoMA 1993) and ClfA's Standard and guidance for the collection, documentation, conservation and research of archaeological materials (ClfA 2014b/2020) and their publication Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (ClfA 2014c), First Aid for Finds (Watkinson & Neal 1998), and the United Kingdom Institute for Conservation guideline documents (UKIC 1983 and 1990) as appropriate and any requirements of the local authority or final museum or archive. Finds will be stored in suitable facilities at AMS offices prior to final deposition to archives.

Finds covered by the Treasure Act (2003) and Treasure Order (2002), including but not limited to gold and silver, will be lifted and stored in a safe place. All information required under the Treasure Act (including finder, location, material, date, associated items etc.) will be reported to the relevant authorities including the coroner's office and the local finds liaison officer from the Portable Antiquities Scheme within fourteen days. Such finds will also be notified to Skanska. Where removal of the treasure cannot be carried out in safe and controlled manner on the same working day, suitable security measures will be taken to protect it from theft and/or damage.

Archive Deposition

All finds, photographs, drawings and paper archive records will be compiled into a comprehensive and fully cross-referenced archive in accordance with recognised best practice and the requirements of the local authority and/or museum (Walker 1990; ClfA 2014c, Brown 2011).

The site archive will be prepared in accordance with Historic England and ClfA guidelines and with any specific requirements of Newark and Sherwood District Council Museum Service. AMS will liaise with the local authority archaeology service and local archive and museum service to ensure the services are aware of the work and to obtain an accession code for the project from the archive and museum service.

AMS will liaise with Skanska in order to persuade landowners to transfer ownership of finds to the receiving repository prior to the fieldwork being initiated.

All recovered artefacts and other material will be cleaned, bagged and boxed in accordance with AMS procedures and the requirements of appropriate repository institutions, as detailed above under Finds Management.

All finds storage materials or packaging will be clearly marked with the assigned site code or accession number.

A non-retention policy for certain artefacts of low archaeological or academic significance or groups of unstratified finds will be followed. However, any non-retention policy will accord with the aims and objectives of the project, the requirements of the archaeological brief and the finds deposition requirements of the relevant repository.

Programme

The metal detecting survey for the A46 Newark Project is anticipated to take three to four weeks to complete, commencing 12 September 2022.

Land Access

AMS will liaise with Skanska regarding land access in order to achieve the programme. This may involve having to plan for specific arrangements by the landowner/tenant and ecological constraints for access. Prior notification of field access will be provided to the Skanska project ecologist in advance of fieldwork. AMS will liaise with the project ecologist and Skanska regarding works in these areas.

AMS will produce condition surveys before entry and after completion of the metal detecting surveys, including photographs. AMS will make an initial check to make sure that there are no ground conditions that would prevent a successful survey. The project team will always follow agreed access points and routes.

Monitoring

The responsibility for monitoring the progress of the project, to ensure adherence to the WSI and the maintenance of professional standards, lies with the local authority archaeological service. So that arrangements for monitoring can be made, the local authority archaeological service, Mott McDonald and Skanska will be notified of AMS's proposed programme to undertake the work and be given one week's notification, in writing, of the start date of the works.

The metal detecting survey will be available for monitoring visits by the local authority archaeology service, Skanska and Mott McDonald, who will have unrestricted access to the survey areas, survey records or any other information.

Verbal progress reports will be provided to Skanska and Mott McDonald upon request. Weekly written progress reports (via email each Monday) will be provided during the survey and will be sent on to the local authority archaeology service.

Safety, Health & Welfare at Work

All survey works will be carried out in accordance with current Health and Safety legislation. A project specific Risk Assessment Method Statement (RAMS) will be in place at the commencement of on-site services. All staff will wear appropriate Personal Protective Equipment (PPE).

Analysis and Reporting

A report on the metal detection survey will be completed within six weeks of completion of the fieldwork. This report will be submitted to Mott MacDonald and Skanska for review.

The report will include the following information:

- A non-technical summary (300 words maximum);
- Background and aims of survey;
- Description of survey areas;
- Methods and instrumentation;
- Conditions of survey;
- Results in tabular and mapped format (including XYZ location of each metal find, its identification and spot date if discernible);
- Discussion and conclusions;
- Further work to be carried out on assemblage prior to deposition;
- Illustrations (numbered findspots, thematic maps of metal types, photographs of a selection of finds);
- References; and
- Appendices (technical detail and supporting information).

The report will be subject to AMS's internal quality control procedures, which include technical review and copyediting.

Upon completion and approval of the final report, copies of the report will be issued to the client, as well as relevant Historic Environment Record, local authority Planning Officer and/or Conservation Officer. An OASIS online record will be created, and a PDF version of the final report submitted. Subject to contractual obligations on confidentiality, copies of the report will be provided to relevant local and national records and published through the Archaeology Data Service.

Copyright

The copyright of the report and archive will be retained by AMS under the *Copyright, Designs and Patents Act 1988*, with all rights reserved. The client will be licensed to use each report for the purposes for which it was produced in relation to the project as described in the specification. The archive repository, 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*.

Information relating to the project will be deposited with the Historic Environment Record where it can be freely copied with reference to AMS for the purposes of archaeological research or development control within the planning process.

Where the project documentation or archive contains material that is non-AMS copyright, or the intellectual property of third parties, which AMS are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable. Users remain bound by the conditions of the Copyright, Designs and Patents Act 1988 regarding copying and electronic dissemination of such material.

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Figures

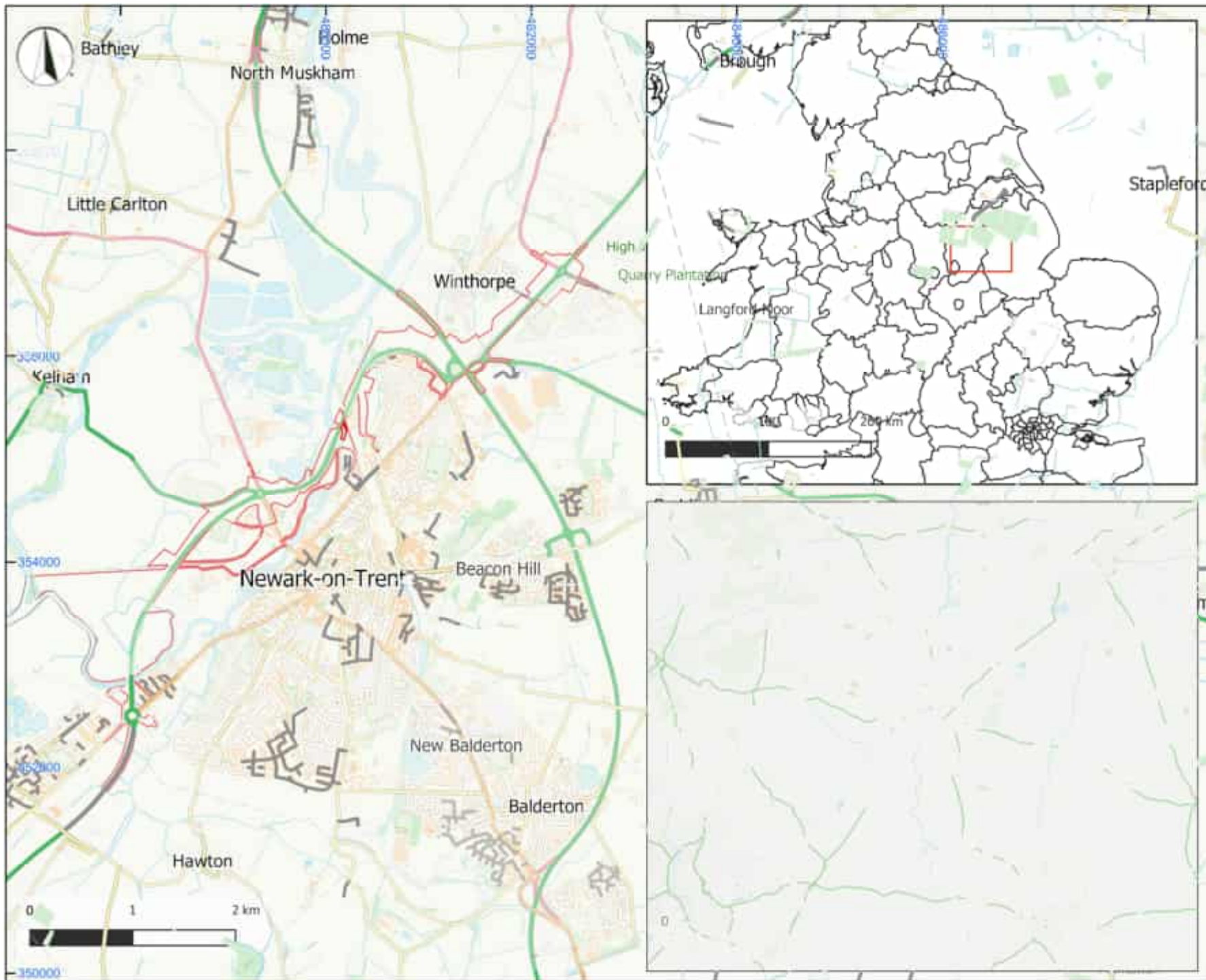


FIGURE 1

Title: Site Location

Project: A46 Newark Bypass

Client: Skanska

Job No: J3063-A

Scale: 1:50,000@A4

Date: 12/08/2022

Drawn by: LOC

Revision: 1.0

Key

Site Boundary

Notes: OS Zoomstack ©
Ordnance Survey



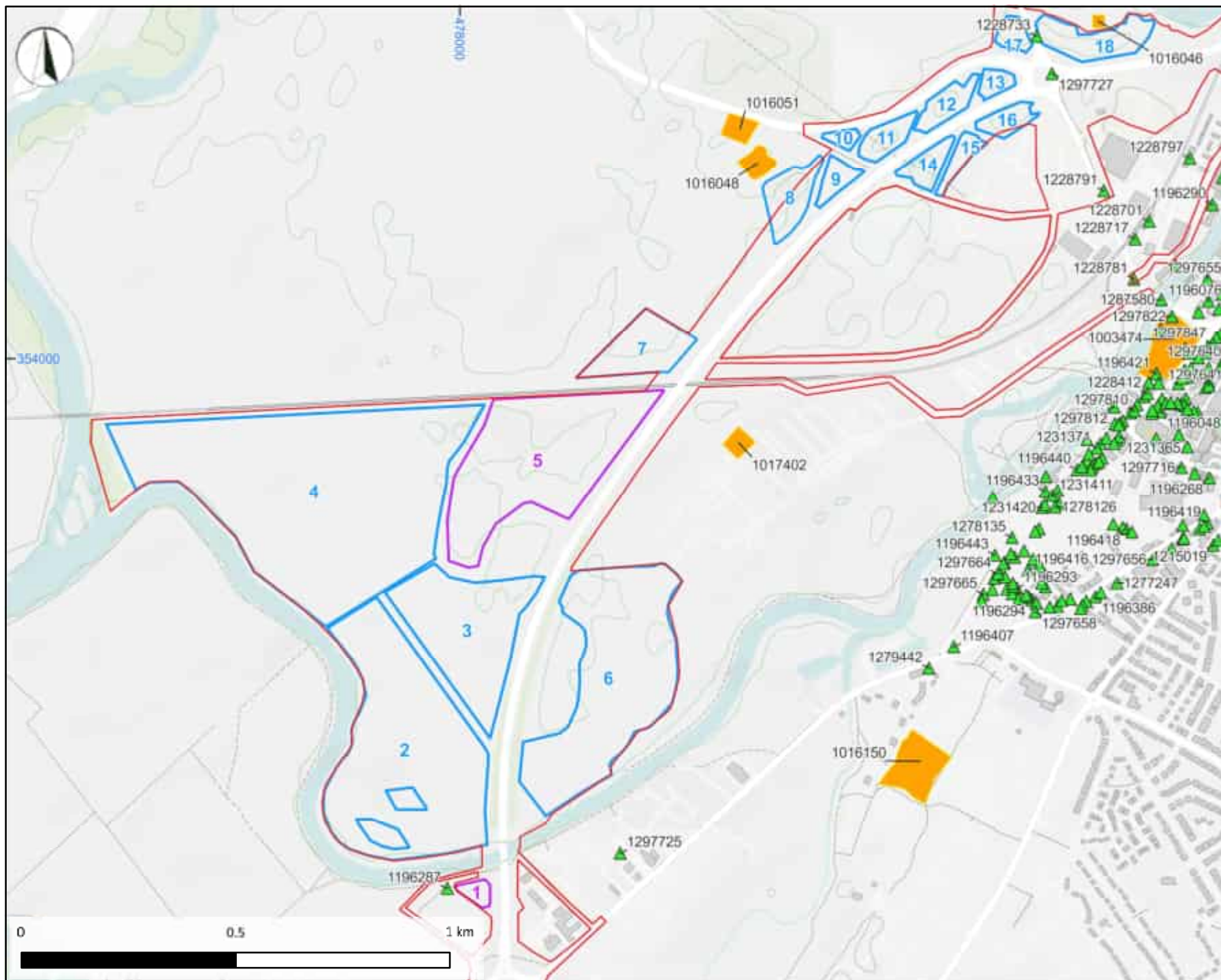


FIGURE 2

Title: Locations of proposed metal detecting and geophysical survey areas

Project: A46 Newark Bypass

Client: Skanska

Job No: J3063-A

Scale: 1:12,000 @A4

Date: 12/08/2022

Drawn by: LOC

Revision: 1.0

Key

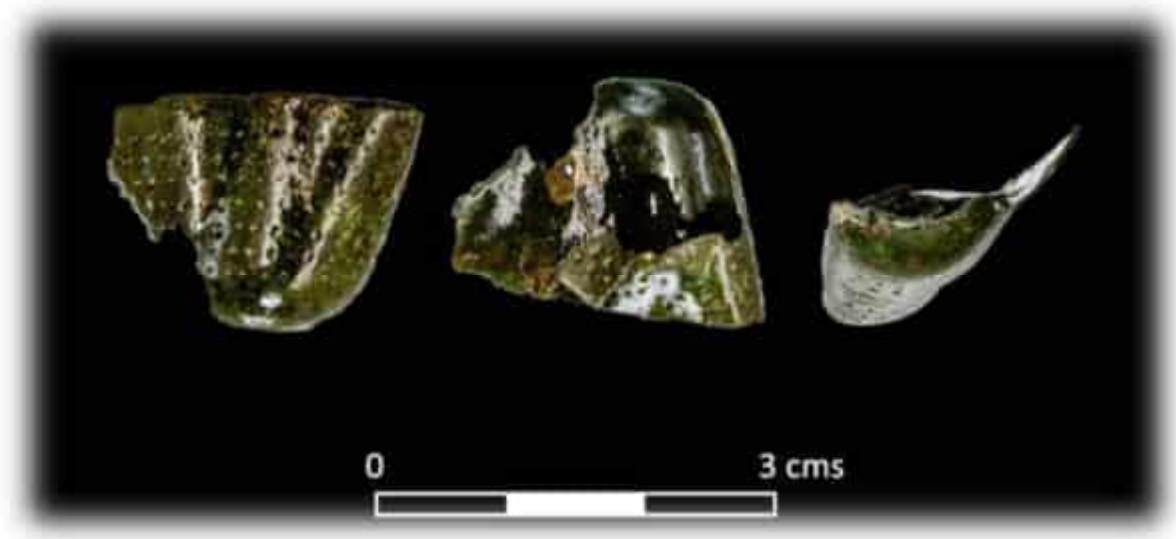
- ▬ Site Boundary
- Scheduled Monuments
- ▲ Listed Buildings
- ▬ Excluded
- ▬ Metal Detecting and Field Walking

Notes: OS Zoomstack © Ordnance Survey



D. Appendix: Field Walking WSI

A46 Newark Northern Bypass, Nottinghamshire - Written Scheme of Investigation for Archaeological Field Walking Survey



Prepared for Skanska Construction UK Ltd on behalf of National Highways Regional Delivery Partnership Framework

By Labhaoise McKenna

08 August 2022

TITLE PAGE

AMS Job No.: J3063-A

Project Name: Regional Delivery Partnership A46 Newark Bypass

Civil Parish Name(s): Averhsam CP, Newark CP

Grid Reference (OSGB36): 478807 / 354376

Report Status/Revision: 1.4

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Report Author: Labhaoise McKenna

Technical Reviewer: Dr Conor Brady

Report Editor: Dr Ros Ó Maoldúin

Approved By: Dr Steve Lancaster

File Name: A46 Newark Northern Bypass, Nottinghamshire - Written Scheme of Investigation for Archaeological Field Walking v.1.4

Cover Photo: A medieval copper-alloy thimble

Archaeological Management Solutions
Fahy's Road, Kilrush, Co. Clare. V15 C780

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Disclaimer

The results, conclusions and recommendations contained within this report are based on information available at the time of its preparation. Whilst every effort has been made to ensure that all relevant data have been collated, the author and AMS accept no responsibility for omissions and/or inconsistencies that may result from information becoming available subsequent to the report's completion.

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Table of Contents

1	Introduction.....	5
1.1	Project Background	5
1.2	Purpose and Scope of this Assessment.....	5
1.3	Site Location.....	6
2	Archaeological Background	8
2.1	General Archaeological Background.....	8
2.2	Scheduled Ancient Monuments adjacent to the Areas of Fieldwalking	10
3	Project Aims and Objectives	11
6	Finds Management.....	13
11	Copyright.....	15
12	References.....	17

List of Figures

Figure 1	Site Location
Figure 2	Location of proposed metal detecting and geophysical survey areas
Figure 3	Location of proposed metal detecting and geophysical survey areas

Abbreviations and Definitions

Abbreviation	Definition
AMS	Archaeological Management Solutions
BGS	British Geological Survey
CIfA	Chartered Institute for Archaeologists
DCO	Development Consent Order
EAR	Environmental Assessment Report
EIA	Environmental Impact Assessment
H & S	Health and Safety
OSGB36	Ordnance Survey Great Britain 1936 coordinate system
PPE	Personal Protective Equipment
RAMS	Risk Assessment Method Statement
RTK DPGS	Real Time Kinematic Differential Global Positioning System
SAM	Scheduled Ancient Monument
WSI	Written Scheme of Investigation

Coordinate System

All grid coordinates in this report use the OSGB36 coordinate reference system unless otherwise stated.

1 Introduction

1.1 Project Background

This Written Scheme of Investigation (WSI) has been prepared by Archaeological Management Solutions Ltd (AMS) on behalf of Skanska Construction UK Ltd on behalf of National Highways Regional Delivery Partnership Framework in advance of a fieldwalking survey on lands forming part of the A46 Newark Northern Bypass, Nottinghamshire (Figure 1).

The A46 Newark Northern Bypass scheme is approximately 6km in length, passing the western and northern extents of Newark-on-Trent, Nottinghamshire, between Farndon and Winthorpe roundabouts. The aim of the scheme is to increase capacity and reduce traffic congestion on the A46 in the vicinity of Newark, improve connectivity from Lincolnshire to the national motorway network, and improve route standard consistency for the A46.

The scheme has been subject to a PCF Stage 2 Environmental Assessment Report (EAR) undertaken by Atkins in 2021 (Highways England 2021), which found archaeologically sensitive areas across the route.

1.2 Purpose and Scope of this Assessment

This WSI sets out the aims of the field walking survey, and the methods and standards that will be employed. It conforms to current best practice, as well as to the guidance outlined in the Chartered Institute for Archaeologists' (CIfA) Standard and guidance for archaeological field evaluation (CIfA 2014) and Historic England's Our Portable Past (2018). The survey was designed to assist in defining the character and extent of any archaeological remains within the study area in conjunction with geophysical (Dowling & Lancaster 2022) and metal detecting survey (Bonsall 2022).

It is intended that the fieldwalking survey, will be implemented over 16 discrete areas, along the northern section of the scheme and will cover a combined area of approximately 69.67ha. The fieldwalking team will conduct a walk with 10% coverage. Following the specification (Mott Macdonald 2022), the survey is non-intrusive and is limited to the scanning and recording of finds in the field. There will be no surface collection.

The work will be carried out in accordance with the agreed methodology detailed in this WSI. Any variations to this working practice will be agreed in advance with the client.

The results of the survey will help inform the Environmental Impact Assessment (EIA), to be submitted as part of the Development Consent Order (DCO) application for the proposed development. The results will also aid future archaeological trial trenching along the scheme.

The field walking survey will be conducted ahead of metal detection surveys, for which a separate WSI has been prepared. There will be an economy of scale benefit to undertake the field walking survey and the metal detecting survey in short succession reducing the costs and time involved.

1.3 Site Location

The field walking survey will be implemented over 16 fields (designated as 'Areas 2—4' and 'Areas 6—18' as numbered in the project specifications). These are located the west and north of the River Trent in Aversham CP and Newark CP, along the existing A46 and A617, and cover a combined area of approximately 69.67ha. (Table 1; Figure 2—3).

Table 1: Survey Areas

Area	Size (ha.)
2	14.46
3	6.87
4	25.44
6	11.88
7	2.34
8	1.46
9	0.57
10	0.25
11	0.81
12	0.87
13	0.40
14	0.76
15	0.54
16	0.67
17	0.47
18	1.79

The underlying bedrock of the locality comprises Mercia Mudstone Group, an early Triassic lithostratigraphic group that is widespread in the English Midlands. The bedrock of this type is of fluvial, lacustrine, and marine origin (BGS 2022). Within the area of the field walking survey the bedrock consists of Gunthorpe Member mudstones (parts of Areas 2 and 3, Area 4, and Areas 7—18) and Edwalton Member mudstones (parts of Areas 2 and 3 and Area 6). The superficial deposits over all areas are alluvium - clay, silt, sand, and gravel – formed from the River Trent, dating to the Quaternary period.

2 Archaeological Background

The following is an adapted summary of the archaeological background given in the EAR (Historic England 2021). Sites directly adjacent the areas of survey are listed near the end of this section and shown on Figures 2–3. Please refer to the EAR (Historic England 2021) for location figures depicting sites mentioned in the wider area of the scheme.

2.1 General Archaeological Background

Palaeolithic

An Upper Palaeolithic site was identified through field walking in 1991 at Farndon Fields (M3571) near the southern end of the scheme (Harding, Ellis and Grant 2014). This is a very rare site type, but the field walking team will be made aware of its presence and the potential for related remains.

Mesolithic

There are no known Mesolithic sites within the area of the scheme; however, excavations to the Staythorpe Power station – c.2.5km to the west alongside the River Trent – have revealed Mesolithic remains (Cooper 2006).

Neolithic and Early Bronze Age

Neolithic and Bronze Age flints (L11808) and burnt stone have been recovered from Farndon Fields and a Neolithic mortuary enclosure (M3612) was identified through aerial photography and subsequent excavation near the north end of the scheme. A Neolithic and Early Bronze Age occupation site (L12214 and M18427) was identified under the Roman Fosse Way near Langford (L12214 and M18427).

Later Bronze Age and Iron Age

Remains of this age are considered rare in Nottinghamshire and are mainly known from isolated finds of bronze objects, such as palstaves from the River Trent (L8514 & L3039). Late Bronze Age and Iron Age pottery was recovered from excavations at Farndon Fields (L11810), and further Iron Age sherds were recovered at Crankley Point sewage works (L11013).

Romano-British period

The Fosse Way Roman Road is presumed to have run along the same alignment as the current A46. It ran from Exeter to Lincoln, marked the limits of early Roman settlement and connected settlements and production centres. Concentrations of Roman material have been recorded at Farndon Fields and Newark Northgate, and trial trenching near Langford revealed the remains of the original Roman Road (L3737).

Early Medieval

Archaeological finds are rare; however, place-name evidence attests to Anglo-Saxon settlements throughout the area of the scheme. A high-status female burial (M18359) was found south of the scheme at a cropmark on Winthorpe Road (Newmark-on-Trent) and another inhumation was found in a possible Neolithic barrow (M3612). Excavations of enclosures alongside the Roman road to the south (Newark-on Trent to Widmerpool) suggest continued use into the Anglo-Saxon period.

Medieval

Newark-on-Trent emerged as a marked town in the medieval period. The castle (1003474) in its centre was built in the early 12th century by the Bishop of Lincoln and sits on the site of an earlier motte-and-bailey. There is also a medieval hospital and cemetery (St Leonard's: M3691, a moated site (near Dairy Farm: 1016051), a medieval settlement (Osmundthorpe at Northgate: M18367), a medieval road (M3093), a medieval bridge (M3214), a medieval building (at Northgate allotments: M3690) and many finds have been identified within the town during minor development works.

Post-medieval period

There are many standing buildings, agricultural and industrial remains from the post-medieval period within the area of the scheme. However, the most significant remains are those relating to the civil war.

Newark-on-Trent was subjected to three separate sieges from 1643 to 1646, during the English Civil War and a series of defences and forts were built around the town.

The following civil war defences are within the area of the scheme:

- 1016020: Civil War town defences within the Friary Garden (Scheduled Monument);
- 1016046: Civil War redoubt 550m south-east of Valley Farm (Scheduled Monument);
- 1016048: Civil War redoubt 680m north-west of Dairy Farm (Scheduled Monument);
- 1016049: Civil War redoubt on Crankley Point (Scheduled Monument);
- 1016050: Civil War redoubt on Crankley Point (Scheduled Monument);
- 1016150: Queen's Sconce (Scheduled Monument);
- 1016152: Civil War redoubt 580m ENE of sugar refinery (Scheduled Monument);
- 1017402: Civil War Sconce 650m north-west of Devon Bridge (Scheduled Monument);
- 1008258: Hawton Moated site, fishpond, Civil War redoubt, and ridge and furrow (Scheduled Monument);

- L3733: Line of Village Defences at Winthorpe;
- L8532: Line of Rampart at Winthorpe;
- M3027: Fortified village at Farndon;
- M3114: Second Line of Circumvallation;
- M8401/L10511/L8470/L8442: Earthworks and line of First Circumvallation;
- L3664: Civil War earthworks at Newark-on-Trent.

Following the Civil War, the castle was destroyed, and Newark-on-Trent returned to its role as a merchant town. Newark-on-Trent was particularly known for its beer. Warwicks and Richardsons began brewing in 1766 and the Northgate Brewery (M3717) was built in 1871). The Brewery Office (1277425), Maltings (1196413) and almshouses (M3262) still stand and the locations of others are known. Many improvements were made to the river and wharfs and warehouses were constructed. Newark Town Warf (M3274) and Cow Lane Warf (M3291) likely served the breweries. There are nine Grade II listed warehouses within the area of the scheme.

Post-medieval buildings and structures are present, illustrating the development of Newark during the 17th to 20th centuries. The construction of the Grade II listed building Great North Road causeway arches was carried out from 1760s and completed in 1770.

Modern (AD 1750–present)

Industrial uses continued and more breweries and warehouses were built. The Kelham Home Grown Sugar refinery, along Great North Road, (now operating as British Sugar) was built in 1920. The earliest Ordnance Survey map of the area of the proposed scheme depicts land use in 1883. Most of the land northwest of the River Trent is regular field systems, typical of enclosure-era land divisions. Comparison with current satellite imagery indicates little amalgamation of fields has occurred since.

2.2 Scheduled Ancient Monuments adjacent to the Areas of Fieldwalking

Areas 1—7 are located north of the southern branch of the River Trent. It is 4km northeast of the Battle of Stoke Registered Battlefield limits, southwest of Newark-on-Trent. SAM 1017402 – a Civil War Sconce - is located c.220m southeast of Area 7 and c.300m northeast of Area 6 (Figure 2).

Areas 8—18 are located 0.5—1km from Newark Castle. Area 8 is located to the immediately south of SAM 1016048, Civil War redoubt. Area 18 is located to immediately south of SAM 1016046, a Civil War redoubt.

3 Project Aims and Objectives

3.1 Project Aim

The principal aim of the field walking survey is to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, and significance of any surface artifact clusters within the development area. This field walking survey will, as requested in the specification (Mott McDonald 2022), target the areas of known archaeological features such as Fosse Way, and nearby Civil War battlegrounds and scheduled monuments, and produce results by identifying find spots and clusters of find spots. This will, along with the Geophysical and metal-detecting surveys, indicate the potential presence of underlying archaeology. Confirming the exact location of underlying archaeology will contribute towards de-risking the project and may assist to determine further archaeological works during the next stage of the programme.

3.2 Project Objectives

The field walking investigation objectives include:

- to identify and quantify surface archaeological artefacts within the specified survey areas;
- accurately locate those artefacts and present the findings in map form;
- describe the artefacts in a written report;
- incorporate all of the above in a report to the Client; and
- create a digital site archive.

4 Project Team

The field walking survey will be conducted by AMS. It will be led by AMS Senior Archaeologist Tony Bartlett with one surveyor, one artefact specialist, and with five skilled archaeological technicians one of which will be the H&S specialist.

5 Field Walking Methodology

5.1 Methods

Fieldwalking that involves collection is considered intrusive (ClfA 2014, 12; Historic England 2018, 29) and is destructive as it removes part of the archaeological resource. As such, this non-intrusive survey will be restricted to the surface scanning and in field recording of artefacts.

The optimum condition for field walking is following ploughing and/or harrowing and some weathering. It is intended that the field walking survey will be conducted across 16 fields as listed in the project specifications (designated therein as 'Areas 2—4' and 'Areas 6—18'); however, only

those in a condition suitable for field walking will be walked. All categories of artefactual material will be recorded.

The sample unit will be the individual field. Each field will be numbered individually and sub-divided into 20m transects. The 20m transects will be designed in GIS (Geographic Information System), where they will be aligned on an orientation most appropriate to field dimensions. Using a survey-grade Leica GS07 GPS with Real-Time Kinematic (RTK) connectivity, the transects will then be laid out while also deploying intervisible field walking line guides with poles along the midpoint of each transect.

An archaeologist will walk each transect line checking 1m to either side - i.e. a 2m-wide corridor - thereby ensuring 10% coverage. The field walking archaeologist will mark all artefacts with a flag but will not collect objects.

A second archaeologist and a surveyor will follow over transects, recording the location and a brief description of the finds. Only those appraised as archaeologically significant will be included in the survey results. An artefact specialist will be on site daily to provide advice to the field walking team. The description and unique identifier of each find will be inputted into a database in the field.

5.2 Survey

The location of all finds will be surveyed using the Leica GS07 which can be mapped in GIS within the British National Grid (OSGB36) coordinate system. Undertaking finds analysis in GIS will help identify any potential hotspots of artefact densities and highlight these areas for further investigation. Should dense areas of finds be encountered the team may employ a 5m stint approach, where artefacts are recorded by type within a stint with the midpoint recorded by GPS.

6 Finds Management

As this is a non-intrusive survey no artefacts will be collected.

7 Programme

The field walking survey for the A46 Newark Project is anticipated to take 3 weeks to complete, but this is dependent on ploughed and harrowed ground. The anticipated start date is 5th September 2022.

8 Safety, Health & Welfare at Work

All survey works will be carried out in accordance with current H&S legislation. A project specific Risk Assessment Method Statement (RAMS) – will be in place at the commencement of on-site services. All staff will be inducted and briefed prior to commencing on-site work, have appropriate safety training, wear appropriate PPE and use sunscreen when necessary.

9 Reporting

A draft report on the field walking survey will be completed within four weeks of completion of the fieldwork. This report will be submitted to Mott MacDonald and Skanska UK Construction Ltd for review.

The report will include the following information:

- A non-technical summary (300 words maximum);
- Background and aims of survey;
- Description of survey areas;
- Methods and instrumentation;
- Conditions of survey;
- Results in tabular and mapped format;
- Discussion and conclusions;
- References;
- Illustrations (numbered findspots, thematic maps of find types);
- References;
- Archive Location; and
- Appendices (technical detail and supporting information).

Upon completion and approval of the final report, copies of the report will be issued to the client, as well as relevant Historic Environment Record, local authority Planning Officer and/or Conservation Officer. An OASIS online record will be created, and a PDF version submitted. Subject to contractual obligations on confidentiality, copies of the report will be provided to relevant local and national records and published through the Archaeology Data Service.

10 Archive Storage and Curation

The project archive will be prepared in accordance with Archaeology Data Service's *Guides to Good Practice*¹ (online) and *ADS Guidelines for Depositors* (ADS 2021). It is envisaged that the archive will be deposited within 6–12 months of project completion.

¹ Available online [REDACTED] Accessed on 1 August 2022.

11 Copyright

The copyright of the report and archive will be retained by AMS under the *Copyright, Designs and Patents Act 1988*, with all rights reserved. The client will be licensed to use each report for the purposes that it was produced in relation to the project as described in the specification. The archive repository, however, will be granted an exclusive license 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*.

Information relating to the project will be deposited with the Historic Environment Record where it can be freely copied with reference to AMS for the purposes of archaeological research or development control within the planning process.

Where the project documentation or archive contains material that is non-AMS copyright, or the intellectual property of third parties, which AMS are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable. Users remain bound by the conditions of the Copyright, Designs and Patents Act 1988 regarding copying and electronic dissemination of such material.

12 AMS Check, Review, Approve – Verify Procedure

AMS employ a Check, Review, Approve – Verify (CRA-V) procedure for all our reporting deliverables/outputs. This involves the originator (creator of the deliverable) sending the output to be checked once it has been completed. The checker undertakes a line-by-line check of the deliverable to ensure that it meets with requirements. The originator will then address the checker's comments. Once this task has been completed, the deliverable is resent to the checker for a second review before it is sent to a third person for approval. The approver will do an independent check to ensure that the deliverable meets the task brief. Any comments will be addressed prior to verification by the client.

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E. Appendix: Archaeological Watching Brief of GI Works WSI

A46 Newark Bypass, Nottinghamshire: Written Scheme of Investigation for Archaeological Watching Brief of Ground Investigation Works



Prepared for Skanska Construction UK Ltd on behalf of National Highways Regional Delivery
Partnership Framework

By Tony Bartlett

05 May 2023

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Disclaimer

The results, conclusions and recommendations contained within this report are based on information available at the time of its preparation. Whilst every effort has been made to ensure that all relevant data have been collated, the author and AMS accept no responsibility for omissions and/or inconsistencies that may result from information becoming available subsequent to the report's completion. All AMS deliverables are subject to quality assurance.

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Table of Contents

Introduction	6
Project Background	6
Previous Archaeological Works	6
Purpose and Scope of this Written Scheme of Investigation	6
Site Location	7
Archaeological Background	9
General Archaeological Background	9
Palaeolithic	9
Mesolithic	9
Neolithic and Early Bronze Age	9
Later Bronze Age and Iron Age	9
Romano-British Period	10
Early Medieval	10
Medieval	10
Post-medieval Period	10
Modern (AD 1750–present)	11
Results of the Metal Detecting Survey	11
Results of the Field Walking Survey	11
Results of the Geophysical Survey	12
Specification for an Archaeological Watching Brief	13
Scope of Work	13
Method for Archaeological Watching Brief	13
Investigation and Recording of Archaeological Remains	13
Contingency Arrangements	15
Site Archive	15
Post-Excavation Assessment and Reporting	17
Key Personnel and Project Team	19
Programme	19

Safety, Health & Welfare at Work.....	19
Reporting	20
Archive Storage and Curation.....	21
Copyright	22
References	23
Figures	25

List of Tables

Table 1: GI Trial Pits.....	8
Table 2: Project Team.....	19

List of Figures

Figure 1: Site Location.....	25
Figure 2: Locations of Trial Pits at Kelham.....	26
Figure 3: Locations of Trial Pits between A46 and the A1.....	27

Abbreviations

Abbreviation	Definition
AMS	Archaeological Management Solutions
ClfA	Chartered Institute for Archaeologists
CP	Civil Parish
EAR	Environmental Assessment Report
GI	Ground Investigation
HER	Historic Environment Record
OASIS	Online Access to Index of Archaeological Investigations
OSGB36	Ordnance Survey Great Britain 1936 coordinate system
PEA	Post-Excavation Assessment
SM	Scheduled Monument
PCF	Project Control Framework
TP	Trial Pit
WSI	Written Scheme of Investigation

Coordinate System

All grid coordinates in this document use the OSGB36 coordinate reference system unless otherwise stated.

Introduction

Project Background

This Written Scheme of Investigation (WSI) has been prepared by Archaeological Management Solutions (AMS, the Archaeological Contractor) on behalf of Skanska Construction UK Ltd (Skanska) on behalf of National Highways Regional Delivery Partnership Framework in advance of an archaeological watching brief of the ground investigation (GI) works on lands forming part of the A46 Newark Bypass, Nottinghamshire (Figure 1–Figure 3).

The A46 Newark Bypass scheme is approximately 6km in length, passing the western and northern extents of Newark-on-Trent, Nottinghamshire, between Farndon and Winthorpe roundabouts. The aim of the scheme is to increase capacity and reduce traffic congestion on the A46 in the vicinity of Newark, improve connectivity from Lincolnshire to the national motorway network, and improve route standard consistency for the A46.

The scheme has been subject to a PCF Stage 2 Environmental Assessment Report (EAR) undertaken by Atkins in 2021 (Highways England 2021), which found archaeologically sensitive areas across the route.

Previous Archaeological Works

AMS have already carried out archaeological works for a Metal Detection Survey, a Walkover Survey and a Geophysical Survey on behalf of Skanska on lands forming part of the A46 Newark Bypass in September 2022, January and February 2023. A programme of geoarchaeological coring is ongoing. Further works relating to each of these surveys will be carried out in 2023.

Purpose and Scope of this Written Scheme of Investigation

The purpose of this WSI is to provide a detailed specification for the archaeological watching brief, and the methods and standards that will be employed. It conforms to current best practice, as well as to the guidance outlined in the Chartered Institute for Archaeologists' (CIfA) *Standard and Guidance for an Archaeological Watching Brief* (CIfA 2020a). The CIfA guidance defines the purpose of an archaeological watching brief as follows:

"[...] to allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works [...];

...to provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard" (CIfA 2020a).

The aims of the archaeological watching brief are:

- to identify the presence or absence of any buried archaeological remains;
- to identify, investigate and record any archaeological remains discovered during GI works to the extent possible by the methods put forward in this WSI;
- to determine (so far as is possible) the stratigraphic sequence and dating of features identified;
- to establish the preservation of any buried archaeological remains and provide a chronology of the archaeological phasing;
- to identify the need for, nature, scope and scale of further recording works that may be required; and,
- to disseminate the results through deposition of an ordered archive at the local museum, the deposition of a report at the local Historic Environment Record (HER), and completion of the Online Access to Index of Archaeological Investigations (OASIS) Project website.

The archaeological watching brief shall conform to current best practice and shall be planned, managed, and undertaken in accordance with the requirements of this Specification and based on the guidance provided by:

- *Standard and Guidance for an Archaeological Watching Brief* (CIfA 2020a);
- *Standard and Guidance for the Collection, Documentation, Conservation, and Research of Archaeological Materials* (CIfA 2014b);
- *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (CIfA 2014c);
- *Code of Conduct: Professional Ethics in Archaeology* (CIfA 2014d); and
- *CIfA Policy: Use of Volunteers and Students* (CIfA 2021).

The work will be carried out in accordance with the agreed methodology detailed in this WSI. Any variations to this working practice will be agreed in advance with the Client. The specification details how the archaeological watching brief, and subsequent reporting and archiving, shall be undertaken.

The results of the archaeological watching brief will help inform the EIA to be submitted as part of the Development Consent Order application for the proposed development. The results will also aid future archaeological trial trenching along the scheme.

Site Location

The archaeological watching brief will be implemented over two distinct areas (Figure 1) along the proposed A46 Newark Bypass - in Kelham Lands (Figure 2) located to the north of the River Trent in Averham CP and; the area between the A46 and the A1 (Figure 3) to the south-east of the River Trent in Newark CP (Table 1; Figure 2 and Figure 3).

Table 1: GI Trial Pits

Trial Pit (TP)	Survey Area (Figures 2 & 3)
S3TP35	50
S3TP36	49
S3TP37	48
S3TP38	48
S3TP39	36
S3TP40	35
S3TP41	51
S3TP42	20
S3TP43	20
S3TP44	21

The underlying bedrock comprises Mercia Mudstone Group. All these formations are early Triassic in age. Bedrock of this type is of fluvial, lacustrine, and marine origin (British Geological Survey 2022).

The superficial deposits in the area of Trial Pits S3TP35 to S3TP41 are the Holme Pierrepont Sand and Gravel Member. The superficial deposits at S3TP42 to S3TP44 are on alluvium. Both formations date to the Quaternary.

Archaeological Background

The following is an adapted summary of the archaeological background given in the EAR (Highways England 2021) and succeeding surveys. The surveys undertaken consisted of geophysical survey over the northern section of the Scheme, and fieldwalking and metal detecting surveys in the southern section of the Scheme where it had been assessed that geophysical survey was unlikely to produce useful results. Please refer to the EAR (Highways England 2021) for location figures depicting sites mentioned in the wider area of the scheme.

General Archaeological Background

Palaeolithic

An Upper Palaeolithic site was identified through field walking in 1991 at Farndon Fields (M3571) near the southern end of the scheme (Harding *et al.* 2014). This is a very rare site type, and the survey team will be made aware of its presence and the potential for related remains.

Mesolithic

There are no known Mesolithic sites within the area of the scheme; however, excavations to the Staythorpe Power station—c.2.5km to the west alongside the River Trent—have revealed Mesolithic remains (Cooper 2006).

Neolithic and Early Bronze Age

Neolithic and Bronze Age flints (L11808) and burnt stone have been recovered from Farndon Fields and a Neolithic mortuary enclosure (M3612) was identified through aerial photography and subsequent excavation near the northern end of the scheme. A Neolithic and Early Bronze Age occupation site (L12214 and M18427) was identified under the Roman Fosse Way near Langford (L12214 and M18427). Bronze Age remains, including a possible burnt mound, have recently been uncovered in the vicinity of Kelham.

Later Bronze Age and Iron Age

Remains of this period are considered rare in Nottinghamshire and are mainly known from isolated finds of bronze objects, such as palstaves from the River Trent (L8514 & L3039): while these are not close to the area of the proposed coring, finds of this type may be expected within the flood plain area, given the known practice of depositing metalwork in bodies of water and wetlands during this period. Settlement evidence, such as the Late Bronze Age and Iron Age pottery recovered from excavations at Farndon Fields (L11810) and further Iron Age sherds recovered at Crankley Point sewage works (L11013), are more indicative of human activity off the floodplain. Finds of Bronze Age and Iron Age date have recently been uncovered in the area of Kelham.

Romano-British Period

The Fosse Way Roman Road is presumed to have run along the same alignment as the current A46. It ran from Exeter to Lincoln, marked the limits of early Roman settlement and connected settlements and production centres. Concentrations of Roman material have been recorded at Farndon Fields and Newark Northgate, and trial trenching near Langford revealed the remains of the original Roman Road (L3737). A small amount of Roman material has been recovered from the flood plain area during the metal detecting survey.

Early Medieval

Archaeological finds are rare; however, placename evidence attests to Anglo-Saxon settlements throughout the area of the scheme. A high-status female burial (M18359) was found south of the scheme at a cropmark on Winthorpe Road (Newmark-on-Trent) and another inhumation was found in a possible Neolithic barrow (M3612). Excavations of enclosures alongside the Roman road to the south (Newark-on-Trent to Widmerpool) suggest continued use into the Anglo-Saxon period.

Medieval

Newark-on-Trent emerged as a market town in the medieval period. The castle (1003474) in its centre was built in the early twelfth century by the Bishop of Lincoln and sits on the site of an earlier motte-and-bailey. There is also a medieval hospital and cemetery (St Leonard's: M3691), a moated site (near Dairy Farm: 1016051), a medieval settlement (Osmondthorpe at Northgate: M18367), a medieval road (M3093), a medieval bridge (M3214), a medieval building (at Northgate allotments: M3690) and many finds have been identified within the town during minor development works.

Post-medieval Period

There are many standing buildings, agricultural and industrial remains from the post-medieval period within the area of the scheme. However, the most significant remains are those relating to the English Civil War. Newark-on-Trent was subjected to three separate sieges from 1643 to 1646 during the Civil War and a series of defences and forts were built around the town. Following the Civil War, the castle was destroyed, and Newark-on-Trent returned to its role as a merchant town.

Newark-on-Trent was particularly known for its beer. Warwicks and Richardsons began brewing in 1766 and the Northgate Brewery (M3717) was built in 1871. The Brewery Office (1277425), Maltings (1196413) and almshouses (M3262) still stand, and the locations of others are known. Many improvements were made to the river and wharfs and warehouses were constructed. Newark Town Wharf (M3274) and Cow Lane Wharf (M3291) likely served the breweries. There are nine Grade II listed warehouses within the area of the scheme.

Post-medieval buildings and structures illustrating the development of Newark during the seventeenth to twentieth centuries are present. The construction of the Great North Road causeway arches (a Grade II listed building) was carried out from the 1760s and completed in 1770.

Modern (AD 1750–present)

Industrial uses continued and more breweries and warehouses were built post-1750. For example, the Kelham Home Grown Sugar refinery along Great North Road (now operating as British Sugar) was built in 1920.

The earliest Ordnance Survey map of the area of the proposed scheme depicts land use in 1883. Most of the land northwest of the River Trent is regular field systems, typical of enclosure-era land divisions. Comparison with current satellite imagery indicates little amalgamation of fields has occurred since.

Results of the Metal Detecting Survey

The metal detecting survey was undertaken in two phases. The first phase in September 2022 comprised the survey of fourteen fields, three under arable and eleven under pasture. The second phase was carried out in January 2023 and comprised two fields under arable.

A total of 115 significant metal finds were retrieved from the survey.

The earliest item identified within the area to be subject to geoarchaeological coring consists of the end of a possible Roman period solid copper alloy bracelet or bangle (Area 7).

Some objects, such as a large bulbous copper alloy vessel rim fragment (Area 2), other copper alloy vessel fragments (Area 2 and 3), a lead weight (Area 7), lead waste (Area 9, 14, 18) and a folded lead disc (Area 6) could be of medieval date.

Most objects recovered are well-preserved post-medieval items. Some such as seven musket-calibre balls (Area 7, 9, 10, 18) and a single pistol ball (Area 12) are likely to have been associated with the English Civil War and the sieges of Newark between 1642 and 1646. Several personal items, such as belt buckles (Area 7), may also originate from this period. The remainder of the material was eighteenth to twentieth century in date. All the coins recovered, 29 in total, were eighteenth to twentieth century in date.

Results of the Field Walking Survey

The fieldwalking survey was carried out in January 2023, immediately after the completion of the Phase 2 metal detecting survey (Gethin and Appleby 2023). Of the areas subject to geoarchaeological coring, it was only possible to survey Area 6.

The survey recovered a small quantity of medieval pottery, thirteenth to fourteenth century in date, a few fragments of clay tobacco pipe and a large amount of late eighteenth to the early twentieth-century pottery. Many of the artefacts are likely to have been spread over the fields along with manure from nearby farms or Newark itself.

The finds assemblage did not indicate the presence of any early underlying archaeological sites, nor did it include any significant concentration of finds with the potential to date to the English Civil War period.

Results of the Geophysical Survey

The geophysical survey comprised high-resolution magnetic gradiometry undertaken in two phases. During the first phase, undertaken in early September 2022, ten areas (20–24 & 29–32) encompassing c.36 ha surveyed (Dowling 2022). A second phase was undertaken in late February 2023 concentrating on the northern end of the Scheme (Areas 25–27, 29, 30, 33 & 34) and on potential flood compensation areas (Areas 48, 49 & 51). During the first phase, features of archaeological and potential archaeological interest were identified in at least seven areas. These include evidence for potential settlement and relict field systems in Areas 20, 21, 22 and 30, as well as a range of potential features and structures of possible archaeological interest in Areas 22, 28 and 29. Potential pits, ditches, drains and other tentative features were also mapped by the survey in some of the other areas investigated. During the second phase a series of small, conjoined enclosures (Area 48) were found in the Kelham area, which may correspond to an HER record. An additional rectilinear enclosure was mapped 75m⁵ west of this. To the south (Areas 51) also contained potential evidence of archaeological features. Many possible ditches/drains (Areas 25–27, 29, 30, 48, 49 & 51) and pit-type features (Areas 28, 48 & 51) were also detected, though natural, ferrous or agricultural origins for at least some of these features cannot be ruled out.

Specification for an Archaeological Watching Brief

Scope of Work

The works covered in this WSI relate to the archaeological monitoring of ten Trial Pits (TP) in advance of the A46 Newark Bypass (Figure 2 and Figure 3). AMS will undertake archaeological inspection works of this programme of trial pits. This archaeological watching brief will incorporate the following elements:

- The archaeological watching brief will take place during the machine excavation of ten Trial Pits (S3TP35 - S3TP44) (See Table 1).
- Monitoring the GI excavations and recording any archaeological observations as necessary.

Method for Archaeological Watching Brief

Stripping of topsoil and other overburden shall be undertaken by the GI Contractor operating under the continuous observation of a member of the Archaeological Contractor's archaeological staff.

Stripping of topsoil and other overburden shall remain subject to the oversight of the Archaeological Contractor and no GI operations may commence until they have issued in writing a 'clearance to proceed' to the GI Contractor in any specific area, defined by reference to plans. The Archaeological Contractor may issue such clearance in any of the following circumstances:

- they are satisfied that no remains of archaeological interest are present in the specified trial pit;
- they are satisfied that all remains of archaeological interest in the specified trial pit have been identified, investigated and recorded in accordance with the requirements of the WSI; or
- they are satisfied that, although there remains a possibility that unidentified archaeological remains are present in the specified trial pit, no further ground disturbance will take place that would result in the exposure or disturbance of those remains; and
- where written clearances to proceed are issued these will be kept on file and copies provided to the Client.

Investigation and Recording of Archaeological Remains

Where archaeological remains are identified which in the judgment of the Archaeological Contractor are of low density or complexity, and where they can reasonably do so without compromising the ongoing watching brief, the Archaeological Contractor shall investigate and record the remains according to the methodology in this section. Where this is not feasible because the remains are too complex or extensive to be investigated with the available resources or without compromising the ongoing watching brief, then the contingency arrangements set out below shall be implemented.

Unless otherwise agreed with the Skanska/Mott MacDonald, the Archaeological Contractor shall undertake archaeological excavation by hand of any archaeological remains identified in accordance with the following strategy:

- discrete negative features (less than 1m diameter): at least 50% by area in addition to all stratigraphic relationships;
- discrete negative features (more than 1m diameter): at least 50% by area in addition to all stratigraphic relationships;
- discrete negative features containing good assemblages: 100%;
- linear negative features: at least 50% by area within the GI trial pit;
- 100% of all cremations; and
- all wall lines and other similar features shall be recorded by plan and section. A section through wall and foundation trenches shall be excavated and recorded where feasible.

Hand-cleaning of features or selected areas shall be undertaken to clarify the extent of, or relationship between, features/deposits, as far as possible within the trial pit. Relationships between intersecting features shall be determined by hand-excavation. All hand-excavation shall be carried out in a stratigraphic manner.

All excavated contexts shall be fully recorded by a descriptive written context record for each stratigraphic unit, together with full photographic records and drawn plans and sections at appropriate scales.

All excavated features and deposits shall be recorded photographically using high resolution digital photography. Additional illustrative photographs shall be taken as appropriate. A high-resolution digital camera with a minimum resolution of ten megapixels shall be used for the production of colour images. Digital images shall be supplied in uncompressed TIFF format for long-term storage and accessibility.

All finds shall be recorded by context as a minimum, and significant finds shall be recorded individually. Soil or other samples for potential palaeoenvironmental analysis or scientific dating shall be collected from suitable contexts, including any waterlogged deposits, deposits visibly rich in charred or other organic materials or other deposits as appropriate, in accordance with best practice.

If any human remains are encountered, the Consultant, Client, the coroner and the local police shall be notified. Excavation and removal of the remains shall only occur after obtaining an appropriate licence from the Ministry of Justice. The Archaeological Contractor shall notify the Client within 24 hours of such a discovery. Any conditions in the Ministry of Justice Licence affecting the future deposition and curation of human remains shall be discussed with the Client and the recipient repository at the earliest opportunity.

All finds of potential archaeological value shall be retained and removed from the site; cleaned, catalogued and appropriately packaged. All recording, cleaning, storage and conservation of finds shall be in accordance with ClfA's *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials* (ClfA 2014b).

Should the need arise for environmental samples to be undertaken, then all aspects of the collection, selection, processing, assessment and reporting on those environmental samples shall be undertaken in accordance with the principles set out in *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage 2011).

Subject to this strategy and the agreement of the Client, samples to be collected from suitable deposits shall include:

- If possible, a sample from suitable deposits which will be as large as GI works permit up to a limit of 40–60l, though it is envisaged in a watching brief that the volume will be less. This sample will be used for wet-sieving;
- Where deposits of particular potential interest are identified, and on the advice of the relevant specialist, additional special samples shall be collected. These could include additional monoliths, or other small samples for other special analyses. Where waterlogged deposits are identified, more intensive sampling shall be undertaken subject to the agreement of the Client and on the advice of the relevant specialist.

Contingency Arrangements

Where archaeological remains are identified which, for whatever reason, cannot be properly investigated and recorded with the resources available on site without compromising the ongoing watching brief, then the Archaeological Contractor shall mark out the relevant trial pit in an appropriate manner and notify the Consultant. Further work shall not be permitted within the trial pit except if given clearance to do so by the Archaeological Contractor. All works within the marked-out area shall be suspended until completion of the archaeological investigation in that area.

Notification of discoveries as set out above shall be made within one working day of the discovery, and shall include a brief outline of what has been discovered. This notification will be issued to the Client who will inform the Curator.

After such notification, the Archaeological Contractor will initiate a call with the Client to determine the need for, nature and scope of any further archaeological investigation and recording works.

Site Archive

Adequate resources shall be provided during fieldwork to ensure that all records are checked and internally consistent. Archive consolidation shall be undertaken immediately following the conclusion of fieldwork. The site record shall be checked, cross-referenced and indexed as necessary. All retained

finds shall be cleaned, conserved, marked and packaged as necessary to maintain the archive prior to transfer. All retained finds shall be assessed and recorded using pro-forma recording sheets, by suitably qualified and experienced staff. Initial artefact dating shall be integrated with the site matrix. The archiving and post-excavation work shall be undertaken in accordance with the requirements of ClfA's *Standard and Guidance for an Archaeological Watching Brief* (ClfA 2020a). The integrity of the primary field records shall be preserved and the Archaeological Contractor shall create security copies in digital format of all primary field records.

Post-Excavation Assessment and Reporting

A Post-Excavation Assessment (PEA) will be produced. Where no additional phases of investigations are required it is possible that the PEA may be adequate to disseminate the results of the investigations. This shall be agreed with the Curator, Consultant and Client.

The PEA shall clearly acknowledge the role of the Consultant and Client and show the logo of the Client on the front cover. The report shall be prepared in line with *CIfA Standard and Guidance for an Archaeological Watching Brief* (CIfA 2020a) and shall include as appropriate:

- a non-technical summary;
- site code and project number;
- planning reference number;
- dates when the investigations took place;
- a description of the background to and circumstances of the work;
- a brief description of the previously known archaeology of each site;
- a description of the methodology used;
- an objective description of the results;
- a specialist assessment of each category of data;
- details of archive location and destination (with accession number, where known), together with a catalogue of what is contained in that archive;
- an assessment of the archaeological significance of the deposits identified, in relation to other sites in the region;
- a conclusion with recommendations for further post-excavation work, if required;
- a statement of the storage and curation requirements for each category of data;
- general and detailed plans at appropriate scales, showing the location of each site accurately positioned on an up-to-date Ordnance Survey base;
- plans of each site at appropriate scales, with keys and north points;
- detailed plans and sections of individual features where necessary;
- all scales used on any drawings should be standard scales such as would appear on a normal scale ruler;
- a complete matrix for each site;
- a copy of the specification and/or project design, and
- references and bibliography of all sources used.

Each category of data and material recovered by the investigations (site records/stratigraphic data, each category of artefact or other find, each category of palaeoenvironmental/economic evidence, any other data) shall be examined and assessed by a suitably qualified and experienced archaeologist

or specialist. During the assessment specialists shall make recommendations regarding the discard and retention of material.

The assessment of all samples shall be undertaken in accordance with the guidance provided by English Heritage (2011). After instruction from the Consultant, the Archaeological Contractor shall start processing and assessing samples as soon as the investigation works starts to both inform the onsite sampling strategy and also to reduce the number of samples to be processed after the investigations. Any samples remaining after the investigations shall be prioritised (such as those from key deposits) for processing and assessment.

If necessary and possible to achieve the aims and objectives of the PEA, dating evidence shall be obtained by the application of radiocarbon, dendrochronological or other scientific dating techniques.

One copy of a complete draft assessment report, or additional appendix, shall be submitted in the first instance for review/checking by the Consultant. In finalising the report, the Archaeological Contractor shall take into account any comments and remedy any faults identified by the Consultant or Curator. The finalised assessment report shall be submitted to the Consultant within five working days of receipt of the comments on the draft report.

Immediately upon completion of the finalised assessment report, the report and any data or other documentation produced during the post-excavation process shall be integrated into the site archive. The Archaeological Contractor shall store the archive in suitable conditions in a secure location until instructions are received from the Consultant for its deposition in an agreed final repository or other transfer.

Five bound copies and a digital copy in PDF format of the final PEA shall be issued to the Client. After instruction from the Consultant, copies of the report (and digital copies of the archive) will be issued by the Archaeological Contractor as detailed below:

- A hard copy and a digital copy of the report and archive in PDF format to the HER.
- Copies of all reports in Microsoft Word.
- All drawings generated by the Archaeological Contractor will be georeferenced, and digitised archaeological trial pit plans shall be provided to the Consultant as AutoCAD drawings (.dwg) and in an ArcView compatible format.

Where further archaeological investigations are required, the Consultant will agree the scope and programme with the Client and Curator.

Key Personnel and Project Team

The archaeological watching brief will be conducted an experienced member of AMS field staff.

Table 2: Project Team

Name	Role	Contact Details
Labhaoise McKenna	Project Manager	[REDACTED]
Dr Alex Portch	AMS Project Officer	[REDACTED]

Programme

The GI works for the A46 Newark Bypass are due to commence 9 May 2023. The programme for excavation of trial pits requiring an archaeological watching brief is anticipated to take between 3 to 4 days to complete.

Safety, Health & Welfare at Work

The archaeological watching brief will be carried out in accordance with current health and safety legislation and the requirements of the GI Contractor and Client. A project-specific Risk Assessment Method Statement (RAMS) will be in place at the commencement of on-site services. All staff will wear appropriate Personal Protective Equipment (PPE).

AMS site staff shall be Construction Skills Certification Scheme (CSCS) cardholders.

Reporting

A draft preliminary report on the watching brief will be completed within two weeks of completion of the fieldwork. This report will be submitted for a two-cycle review by the Client before finalisation. A first draft will be reviewed by Skanska, who will then forward the draft to the client and curator for comments. The finalised report will be compiled, with any resulting comments accounted for and errors remedied. After instruction from Skanska, a hard and digital (in pdf. format) copy of the final archaeological watching brief report will be issued to Skanska. Skanska will forward the report to ECC and Place Services. The digital copy will be in pdf. format and contain all text, images and plans present in the hard copy in a single file.

The report will include the following information at a minimum:

- Executive summary (300 words maximum);
- Introduction and project background;
- Archaeological background;
- Aims and objectives;
- Methodology (equipment, data collection, processing and interpretation);
- Results and discussion;
- Conclusions;
- Bibliography;
- Illustrations;
- Archive Location; and
- Appendices (technical detail and supporting information).

The report will be subject to AMS's internal quality control procedures, which include technical review and copyediting.

Upon completion and approval of the final report, copies of the report will be issued to the Client, as well as the relevant Historic Environment Record, local authority Planning Officer and/or Conservation Officer, following instruction from the Client. An OASIS online record will be created, and a PDF version of the final report submitted. Subject to contractual obligations on confidentiality, copies of the report will be provided to relevant local and national records and published through the Archaeology Data Service.

Archive Storage and Curation

All finds, photographs, drawings and paper archive records will be compiled into a comprehensive and fully cross-referenced archive in accordance with recognised best practice and the requirements of the local authority and/or museum (Historic England 2015, ClfA 2020b, Brown 2011). AMS will seek to secure the transfer of the ownership of artefacts to the receiving museum and inform the Client of the process.

The site archive will be prepared in accordance with relevant national guidelines (Walker 1990, Brown 2011, ClfA 2020b) and with any specific requirements of the Principal Historic Environment Consultant at Place Services. AMS will liaise with the local archive and museum service to ensure the service are aware of the work and to obtain an accession code for the project from the archive and museum service. The archive will be deposited within 6–12 months of project completion, following instruction from the Client. The Archaeological Contractor will be required to confirm when the deposition of the archive has been completed.

Copyright

The copyright of the report and archive will be retained by AMS under the *Copyright, Designs and Patents Act 1988*, with all rights reserved. The Client will be licensed to use each report for the purposes for which it was produced in relation to the project as described in the specification. The archive repository, 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*.

Information relating to the project will be deposited with the Historic Environment Record where it can be freely copied with reference to AMS for the purposes of archaeological research or development control within the planning process.

Where the project documentation or archive contains material that is non-AMS copyright, or the intellectual property of third parties, which AMS are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable users remain bound by the conditions of the *Copyright, Designs and Patents Act 1988* regarding copying and electronic dissemination of such material.

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Figures

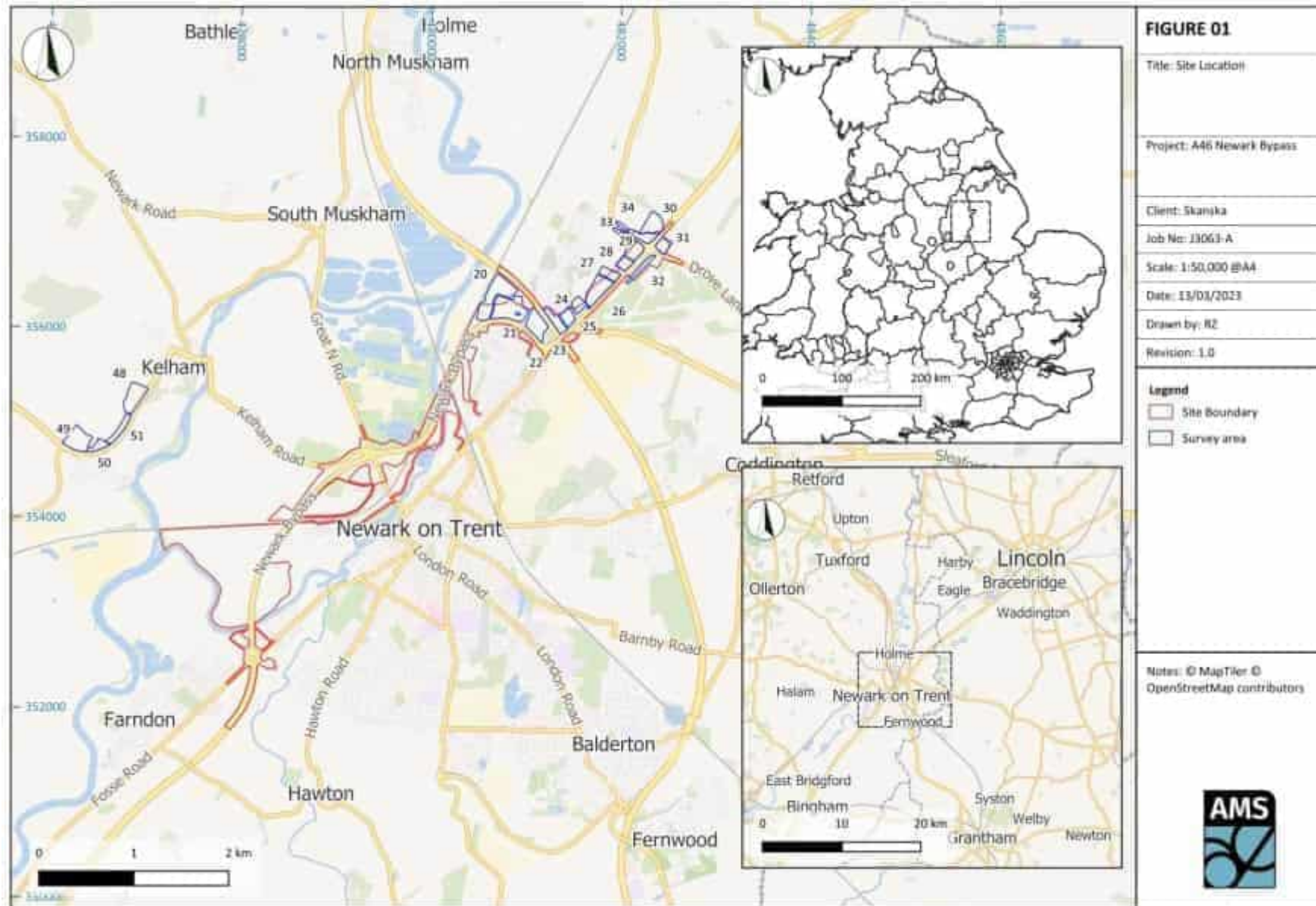


Figure 1: Site location map.



Key to Symbols

Location	Type
A	BH
D	TP

Drawing References

Location Map: os_open_greyscale_no_labels: Contains OS data © Crown Copyright and database right 2020					

P01	15/03/23	PHASE 3 GI	AC	AW	
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

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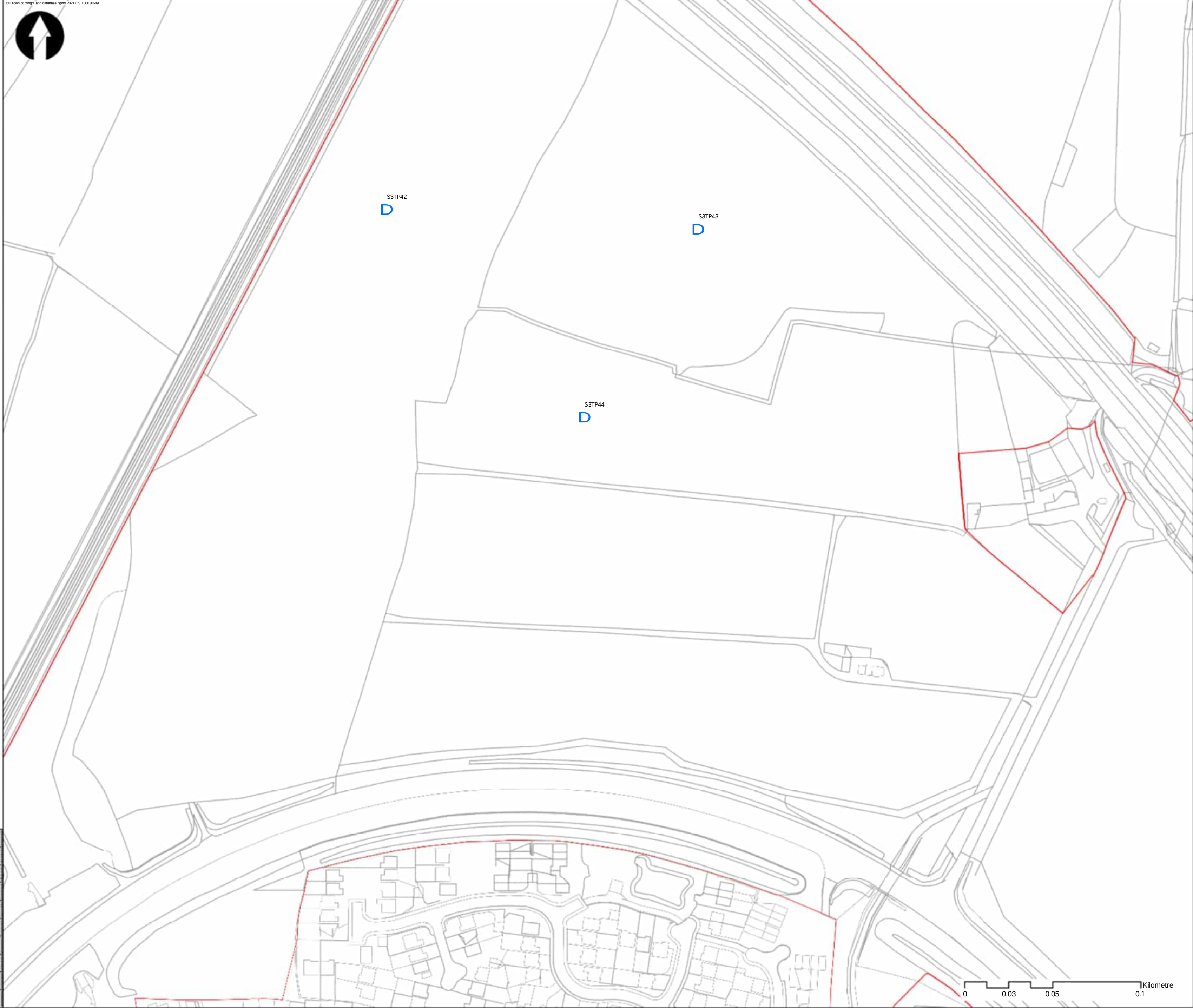
Drawing Status	Suitable for Stage Approval	Status	S4

Project Title	A46 Newark Bypass

Drawing Title	Stage 3 Phase 3 Ground Investigation Exploratory Hole Location Plan Sheet 2 of 3

Scale 1:1000	Designed	Drawn	Checked	Approved
Original Size A1	Date	Date	Date	Date
Drawing Number HE PIN	Originator	Volume	Project Ref. No. 100103345	Revision P01
Location	Type	Role	Number	

Figure 2: Trial Pit locations Kelham.



Notes

Location Map

Key to Symbols

LocationType

A

 BH

D

 TP

Drawing References

Location Map: os_open_greyscale_no_labels: Contains OS data © Crown Copyright and database right 2020

P01	15/03/23	PHASE 3 GI	AC	AW	
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

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Drawing Status	Suitable for Stage Approval	Status	S4

Project Title

A46 Newark Bypass

Drawing Title

Stage 3 Phase 3 Ground Investigation
Exploratory Hole Location Plan
Sheet 3 of 3

Scale 1:1000	Designed	Drawn	Checked	Approved
Original Size A1	Date	Date	Date	Date
Drawing Number HE PIN	Originator	Volume	Project Ref. No. 100103345	Revision P01
Location	Type	Role	Number	

Figure 3: Trial Pit locations between A46 and A1

F. Appendix: Geoarchaeological Coring WSI

A46 Newark Bypass, Nottinghamshire - Written Scheme of Investigation for Geoarchaeological Coring



Prepared for Skanska Construction UK Ltd on behalf of National Highways Regional Delivery Partnership Framework

By Dr Steve Lancaster

2 May 2023

TITLE PAGE

AMS Job No.: J3063-A

Project Name: Regional Delivery Partnership A46 Newark Bypass

Civil Parish Name(s): Averham CP, Newark CP

Grid Reference (OSGB36): 478807 / 354376

Report Status/Revision: 1.2

Revision Date: 2 May 2023

Report Author: Dr Steve Lancaster

Technical Reviewer: Josh Cameron

Approved By: Labhaoise McKenna

File Name: A46 Newark Bypass, Nottinghamshire - Written Scheme of Investigation for Geoarchaeological Coring_v1

Archaeological Management Solutions
 Fahy's Road, Kilrush, Co. Clare. V15 C780



Disclaimer

The results, conclusions and recommendations contained within this report are based on information available at the time of its preparation. Whilst every effort has been made to ensure that all relevant data have been collated, the author and AMS accept no responsibility for omissions and/or inconsistencies that may result from information becoming available subsequent to the report's completion.

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Table of Contents

1	Introduction	7
1.1	Project Background.....	7
1.2	Purpose and Scope of this Assessment.....	7
1.3	Site Location.....	8
1.4	The Proposed Geoarchaeological Strategy	8
1.5	Changes to this Written Scheme of Investigation.....	9
2	Geoarchaeological and Archaeological Background.....	10
2.1	General Archaeological Background.....	10
2.1.1	Palaeolithic and Mesolithic	10
2.1.2	Neolithic and Early Bronze Age.....	10
2.1.3	Later Bronze Age and Iron Age	10
2.1.4	Romano-British period.....	11
2.1.5	Early Medieval and Medieval	11
2.1.6	Post-medieval period.....	11
2.1.7	Modern (AD 1750–present).....	12
2.2	Geoarchaeological Background.....	12
2.3	Results of the Metal Detecting Survey.....	13
2.4	Results of the Field Walking Survey.....	13
3	Project Aims and Objectives	14
4	Project Team	15
5	Methodology.....	15
5.1.1	Standards	15
5.1.2	Pre-commencement	15
5.1.3	Ecological Considerations.....	15
5.1.4	Coring methodology	16
5.1.5	Recording	17
6	Post-Excavation Assessment.....	18
7	Programme.....	18

8	Safety, Health & Welfare at Work	18
9	Reporting.....	18
9.1	Interim report	18
9.2	Preliminary coring report.....	19
9.3	Final coring report	20
10	Archive Storage and Curation	20
11	Copyright	20
12	AMS Check, Review, Approve – Verify Procedure.....	22
13	References.....	22

List of Figures

Figure 1	Site Location
Figure 2	Location of coring areas
Figure 3	Location of proposed geoarchaeological cores

Abbreviations and Definitions

Abbreviation	Definition
AMS	Archaeological Management Solutions
BGS	British Geological Survey
CIfA	Chartered Institute for Archaeologists
DBA	Desk-Based Assessment
DCO	Development Consent Order
EAR	Environmental Assessment Report
EIA	Environmental Impact Assessment
H & S	Health and Safety
OSGB36	Ordnance Survey Great Britain 1936 coordinate system
PPE	Personal Protective Equipment
RAMS	Risk Assessment Method Statement
RTK DPGS	Real Time Kinematic Differential Global Positioning System
SM	Scheduled Monument
WSI	Written Scheme of Investigation

Coordinate System

All grid coordinates in this report use the OSGB36 coordinate reference system unless otherwise stated.

Acknowledgments

AMS gratefully acknowledge the advice received from Dr Andy Howard (Landscape Research Management) and Kris Krawiec (York Archaeology).

1 Introduction

1.1 Project Background

This Written Scheme of Investigation (WSI) has been prepared by Archaeological Management Solutions (AMS) on behalf of Skanska Construction UK Ltd, on behalf of National Highways Regional Delivery Partnership Framework in advance of geoarchaeological coring, forming part of the works undertaken to inform the EIAR for the A46 Newark Bypass, Nottinghamshire (Figure 1).

The A46 Newark Bypass scheme is approximately 6km in length, passing the western and northern extents of Newark-on-Trent, Nottinghamshire, between Farndon and Winthorpe roundabouts. The aim of the scheme is to increase capacity and reduce traffic congestion on the A46 in the vicinity of Newark, improve connectivity from Lincolnshire to the national motorway network, and improve route standard consistency for the A46.

The scheme has been subject to a PCF Stage 2 Environmental Assessment Report (EAR) undertaken by Atkins in 2021 (Highways England 2021), which found archaeologically sensitive areas across the route.

Prior to this phase of assessment, geophysical (Dowling 2022 and 2023), fieldwalking (Gethin 2023) and metal detection surveys (Bartlett & McKenna 2022) and a geoarchaeological desk-based assessment (Lancaster 2023) were carried out. A programme of archaeological trial trenching is to be carried out and this will also have a geoarchaeological component.

1.2 Purpose and Scope of this Assessment

This WSI sets out the aims of the geoarchaeological coring, and the methods and standards that will be employed. It conforms to current best practice, as well as to the guidance outlined in the Chartered Institute for Archaeologists' (CIfA) Standard and guidance for archaeological field evaluation (CIfA 2014). The trenching and test pitting follows geophysical (Dowling 2022), fieldwalking (Gethin 2023) and metal detection surveys (Bartlett & McKenna 2022). A geoarchaeological desk-based assessment (Lancaster 2023) and the design of trenches has taken the survey results into account.

It is intended that the geoarchaeological coring will be implemented across the section of the proposed scheme that crosses the flood plain of the Trent, and a limited part of the flood compensation areas in the vicinity of Kelham. The coring will be used to assess the archaeological and palaeoenvironmental potential of the alluvial deposits that form the superficial geological deposits of this area (Lancaster 2023). The coring will be complemented by geoarchaeological test pitting that will be undertaken, as part of the trial trenching, on soils derived from the Holme Pierrepont Sands and Gravels. These are to be undertaken to check the geoarchaeological potential of these areas: works

on the section of the A46 to the south revealed deposits of Late Upper Palaeolithic material on soils derived from this geological unit. The geoarchaeological test pitting will be carried out as part of the evaluation trenching programme, and the relevant methodological information and location of geoarchaeological test pits is detailed in the relevant WSI. The coring work will be carried out in accordance with the agreed methodology detailed in this WSI. Any variations to this working practice will be agreed in advance with the Archaeological Consultant, the Curator and the Client.

The results of the survey will help inform the Environmental Impact Assessment (EIA), to be submitted as part of the Development Consent Order (DCO) application for the proposed development. The results will also aid future archaeological trial trenching along the scheme.

1.3 Site Location

The geoarchaeological coring will be implemented over 15 fields (designated as Areas 2, 3, 6, 7-12, 14-16, and 18 (Table 1; Figures 2–3). Areas 2, 3, 6-12, 14-16, 18 are located in the flood plain of the Trent. Areas 51 and 48 are located in areas of alluvium between Kelham and Averham. The alluvial deposits in Areas 51 and 48 are probable palaeochannels, constrained within Pleistocene terrace material.

The underlying bedrock of the locality comprises Mercia Mudstone Group, an early Triassic lithostratigraphic group that is widespread in the English Midlands. The bedrock of this type is of fluvial, lacustrine and marine origin (BGS 2022). Over most of the areas to be trenched this geological unit is not further differentiated (Areas 9-12, 14-16, 18, 40 and 48). Where it has been differentiated consists either of Gunthorpe Member mudstones (Areas 3, 6-8) or Edwalton Member mudstones (Area 2). Within the floodplain of the River Trent the superficial deposits are alluvium - clay, silt, sand, and gravel, dating to the Quaternary period. The broad trend of the alluvial deposits is for silts and clays to form the upper part of the deposit sequence and sands and gravels to form the lower part. The geoarchaeological desk-based assessment has tentatively assigned the upper deposits to the Holocene and the lower deposits to the Pleistocene.

1.4 The Proposed Geoarchaeological Strategy

This phase of the evaluation will comprise 38 boreholes (typically 2m – 10m deep). These have been positioned on the basis of two purposes. One set are located in order to record sedimentary sequences at an appropriate level of coverage of the alluvial deposits and to allow for their characterisation and to identify any trends of variation over the area of the flood plain, such as prevalence of more deeply buried palaeochannels that may either not be visible in lidar data or underly the already identified palaeochannels, within the proposed development. The other set have been selected order to sample potential palaeochannels that have been identified during the geoarchaeological desk-based

assessment, including those identified in a large scale mapping exercise previously undertaken in the region (Malone and Stein 2015), which have been re-examined to check the identifications. For all boreholes an additional point of recording is to identify possible archaeological material, potentially including preserved wood, either from naturally fallen trees or worked wood from boats or structures. The boreholes and their principal purpose for investigation are given in Appendix 1.

1.5 Changes to this Written Scheme of Investigation

Should changes to the methodology outlined below be required, they will first be agreed with the Consultant (Skanska and Mott MacDonald) and Curator (the Newark and Sherwood District Council Heritage Officer).

2 Geoarchaeological and Archaeological Background

The following is an adapted summary of the archaeological background given in the EAR (Highways England 2021) and succeeding surveys. The surveys undertaken consisted of geophysical survey over the northern section of the Scheme, and fieldwalking and metal detecting surveys in the southern section of the Scheme where it had been assessed that geophysical survey was unlikely to produce useful results. Please refer to the EAR (Highways England 2021) for location figures depicting sites mentioned in the wider area of the scheme.

2.1 General Archaeological Background

2.1.1 *Palaeolithic and Mesolithic*

There are no known sites of Palaeolithic or Mesolithic age within the area of the scheme subject of the geoarchaeological coring: it is probable that materials of this age are either deeply buried or have been eroded away/reworked by the action of the river. Outside of the floodplain area there are known Late Upper Palaeolithic finds, notably at Farndon. Areas potentially affected by the scheme that may have potential for similar remains will be addressed in the Trial Trenching and Geoarchaeological Test Pitting works.

2.1.2 *Neolithic and Early Bronze Age*

There are no known sites from this period within the floodplain section of the scheme, though Neolithic and Bronze Age material has been recovered from higher ground in the area. Flints (L11808) and burnt stone were recovered from Farndon Fields and sites such as a Neolithic mortuary enclosure (M3612) near the north end of the scheme, as well as a Neolithic and Early Bronze Age occupation site (L12214 and M18427) was identified under the Roman Fosse Way near Langford (L12214 and M18427). Outside of the floodplain, near the probable palaeochannels near Kelham, there have been recent finds of Neolithic pits.

2.1.3 *Later Bronze Age and Iron Age*

Remains of this period are considered rare in Nottinghamshire and are mainly known from isolated finds of bronze objects, such as palstaves from the River Trent (L8514 & L3039): while these are not close to the area of the proposed coring, finds of this type may be expected within the flood plain area, given the known practice of depositing metalwork in bodies of water and wetlands during this period. Settlement evidence, such as the Late Bronze Age and Iron Age pottery recovered from excavations at Farndon Fields (L11810) and further Iron Age sherds recovered at Crankley Point sewage works (L11013), are more indicative of human activity off the floodplain. Finds of Bronze Age

and Iron Age date have recently been uncovered in the area of Kelham, in the near vicinity of the proposed coring at Kelham.

2.1.4 Romano-British period

The Fosse Way Roman Road is presumed to have run along the same alignment as the current A46. It ran from Exeter to Lincoln, and marked the limits of early Roman settlement and connected settlements and production centres. Concentrations of Roman material have been recorded at Farndon Fields and Newark Northgate, and trial trenching near Langford revealed the remains of the original Roman Road (L3737). A small amount of Roman material has been recovered from the flood plain area during the metal detecting survey (See 2.3).

2.1.5 Early Medieval and Medieval

Early Medieval archaeological finds are rare; however, place-name evidence attests to Anglo-Saxon settlements throughout the area of the scheme. Some sites have been found in nearby areas off the flood plain: a high-status female burial (M18359) was found south of the scheme at a cropmark on Winthorpe Road (Newmark-on-Trent) and another Anglo-Saxon inhumation was found inserted in a possible Neolithic barrow (M3612). Excavations of enclosures alongside the Roman road to the south (Newark-on Trent to Widmerpool) suggest continued use into the Anglo-Saxon period.

Newark-on-Trent emerged as a market town in the medieval period. Assets from this period include the castle (1003474) hospital and cemetery (St Leonard's: M3691), a moated site (near Dairy Farm: 1016051), a medieval settlement (Osmundthorpe at Northgate: M18367), a medieval road (M3093), a medieval bridge (M3214), a medieval building (at Northgate allotments: M3690) and many finds that have been identified within the town during minor development works. Medieval finds were recovered during the fieldwalking and metal detecting surveys (see 2.2 and 2.3 below).

2.1.6 Post-medieval period

While there are many standing buildings, agricultural and industrial remains from the post-medieval period within the area of the scheme, relatively few of these are located on the alluvial deposits associated with the floodplain of the Trent. Of those that are, the most notable are the remains relating to the three sieges Newark was subjected to in the First English Civil War. These consist of five Civil War redoubts - 550m south-east of Valley Farm (SM1016046), 680m north-west of Dairy Farm (SM 1016048), 580m ENE of sugar refinery (SM 1016152) and two on Crankley Point (SM 1016049 and SM 1016050), as well as the Earthworks and line of First Circumvallation (M8401/L10511/L8470/L8442).

2.1.7 Modern (AD 1750–present)

Industrial uses continued and more breweries and warehouses were built. The Kelham Home Grown Sugar refinery, along Great North Road, (now operating as British Sugar) was built in 1920. The earliest Ordnance Survey map of the area of the proposed scheme depicts land use in 1883. Most of the land northwest of the River Trent is regular field systems, typical of enclosure-era land divisions. Comparison with current satellite imagery indicates little amalgamation of fields has occurred since.

2.2 Geoarchaeological Background

Across the area of the current floodplain, the alluvial deposits can be broadly divided into two elements. The lower alluvial deposits dominated by sands and gravels, interpreted as the remains of a braided river outwash system of broadly Pleistocene date, means that the potential for *in situ* remains of human activity are low. Coarse sediments of this type generally preserve palaeoenvironmental material poorly, and much material is likely to be re-worked.

The other element is the upper alluvial deposits, dominated by fine grained sediments. These are more likely to be of Holocene date in their initial deposition. The change to a somewhat lower energy pattern of deposition during the Holocene probably reflects the effect of relative sea level rise, which effectively reduced the gradient of the Trent, leading to lower transport capacity, partial infilling of channels and an increased tendency to flooding. The river form would have changed to an anastomosing environment, potentially with multiple channels. While anastomosing rivers have more stable channels than braided systems, these may still change whether through channel shift or avulsion events. Changes in channel course may be reflected in the presence of palaeochannels within the floodplain area, which may be identified by lithological changes, such as the presence of coarser sediments located within fine sediment units. The fine mineral component and organic content of these sediments are indicative of slow or still water, potentially areas that were only periodically wet, potentially including features such as oxbow lakes, or depressions left in the outwash surfaces. These have probably, for the most part, been subject to frequent re-working and therefore little material of archaeological or palaeoenvironmental potential is likely to survive in most deposits. There are, however, two main situations where material of archaeological or palaeoenvironmental significance may survive. The first would be the survival of large organic artefacts or sections of structural elements such as bridges or mill dams. While these may not be strictly *in situ*, the intrinsic informational value of such items would still be high. The relatively thin depth of the fine-grained deposits, combined with the fluctuating water table suggests that the potential for such items to survive within the area of the proposed scheme is relatively low, but such remains would be of notable significance. The other situation would be where surviving discrete palaeochannels or other infilled fluvial features are found.

These have the potential to preserve considerable palaeoenvironmental material, including pollen and insects that can be used to reconstruct the local environments, including potentially detecting the impact of human activity on the environment. Such features may also contain organic artefacts if anoxic conditions obtain within them. The geoarchaeological desk-based assessment (DBA) has identified potential palaeochannels within the footprint of the proposed scheme. While the upper parts of the Holocene alluvial deposits may have been subject to periodic desiccation and oxidation, there is still the potential for some of the more robust palaeoenvironmental material such as pollen to survive, and within deeper parts of this facies more anoxic conditions may preserve more organic material.

2.3 Results of the Metal Detecting Survey

The metal detecting survey was undertaken in two phases. The first phase in September 2022 comprised the survey of fourteen fields, three under arable and eleven under pasture. The second phase was carried out in January 2023 and comprised two fields under arable.

A total of 115 significant metal finds were retrieved from the survey.

The earliest item identified within the area to be subject to geoarchaeological coring consists of the end of a possible Roman period solid copper alloy bracelet or bangle (Area 7).

Some objects, such as a large bulbous copper alloy vessel rim fragment (Area 2), other copper alloy vessel fragments (Area 2 and 3), a lead weight (Area 7), lead waste (Area 9, 14, 18) and a folded lead disc (Area 6) could be of medieval date.

Most objects recovered are well-preserved post-medieval items. Some such as seven musket-calibre balls (Area 7, 9, 10, 18) and a single pistol ball (Area 12) are likely to have been associated with the English Civil War and the sieges of Newark between 1642 and 1646. Several personal items, such as belt buckles (Area 7), may also originate from this period. The remainder of the material was eighteenth to twentieth century in date. All the coins recovered, 29 in total, were eighteenth to twentieth century in date.

2.4 Results of the Field Walking Survey

The fieldwalking survey was carried out in January 2023, immediately after the completion of the Phase 2 metal detecting survey (Gethin and Appleby 2023). Of the areas subject to geoarchaeological coring, it was only possible to survey Area 6.

The survey recovered a small quantity of medieval pottery, thirteenth to fourteenth century in date, a few fragments of clay tobacco pipe and a large amount of late eighteenth to the early twentieth-

century pottery. Many of the artefacts are likely to have been spread over the fields along with manure from nearby farms or Newark itself.

The finds assemblage did not indicate the presence of any early underlying archaeological sites, nor did it include any significant concentration of finds with the potential to date to the English Civil War period.

3 Project Aims and Objectives

3.1 Project Aim

The work is intended to provide data to inform the Environmental Impact Assessment, and to feed into any consequent mitigation strategy. The principal aim of the geoarchaeological coring is to characterise, as far as reasonably possible, the deposit sequence within the floodplain section of the scheme and the alluvial deposits near Kelham. This will concentrate on nature, extent, date, and potential significance of any palaeoenvironmental or geoarchaeological materials within the development area.

This aim will enable the potential value of the deposits in addressing some of the overarching agenda themes presented in the East Midlands Historic Environment Research Framework to be assessed

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Those identified as relevant include:

- Pleistocene and Holocene climatic change;
- Changes in sea level, the configuration of sea and land, the drainage network and the spatial extent of wetlands;
- The impact of human activity upon soil development and geomorphic processes (notably alluviation, colluviation and aeolian deposition);

Few of the specific strategic research objectives closely relate to the evidence types that coring is likely to produce, though Strategic Objective 1D 'Further Investigate Upper Palaeolithic (Period 5) open-air sites in the East Midlands' is relevant. This latter Strategic Objective is also relevant to the other geoarchaeological investigations that will take place as part of the archaeological trial trenching.

3.2 Project Objectives

The test trenching objectives include:

- to identify, characterise and quantify sub-surface geoarchaeological units;

- undertake detailed descriptions of the sedimentary sequence;
- assess the potential recover samples to provide dates and environmental evidence;
- update the deposit model for the scheme;
- incorporate all of the above in a report to the Client; and
- create a physical and digital site archive.

The planned geoarchaeological cores will be taken under the supervision of an experienced geoarchaeologist. The boreholes will be drilled to the base of the alluvial sequence where possible.

4 Project Team

The geoarchaeological coring will be overseen by AMS. It will be led by AMS Geoarchaeologist Dr Steve Lancaster with an assisting geoarchaeologist, surveyor, and the drilling crews. Expert advice from acknowledged experts in the geoarchaeology of the region will also be sought.

5 Methodology

5.1 Geoarchaeological Coring Methods

5.1.1 Standards

All work will be conducted in accordance with the Chartered Institute for Archaeologists' *Code of Conduct and Standard and Guidance for Archaeological Field Evaluations*, and will take cognizance of Historic England's guidance for geoarchaeology and environmental archaeology (2015a and 2015b).

5.1.2 Pre-commencement

Skanska will provide up to date service plans and before ground is broken in each area, service plans will be checked to ensure that groundworks can be conducted safely.

Access points, refuelling points, locations for compounds and welfare will all be agreed with the client prior to the commencement of works. Skanska will inform AMS of any specific landowner requests in advance of the works.

A photographic record of pre-commencement ground conditions will be taken of each area and access points prior to commencement in that area.

5.1.3 Ecological Considerations

AMS will liaise with Mott MacDonald and Skanska to ensure that any ecological exclusion zones are demarcated, and the sampling area will be signed off by a project ecologist before the commencement

of work. A project ecologist will attend to brief and observe the team undertaking the geoarchaeological coring as necessary.

5.1.4 Coring methodology

The outline location of all boreholes have been agreed with the consultant, Martyn Cooper of Mott MacDonald (See Figure 3). These have been determined on the basis of achieving a sufficient spread of cores to characterise the sedimentary sequence within the coring area, including the targeting of known or suspected palaeochannels. These have been identified through the desk-based assessment undertaken by AMS (Lancaster 2023). It is currently envisaged that boreholes will be drilled at 38 separate positions. The numbers of cores are summarised by field in Table 1. A full list forms Appendix 1.

Table 1: List of areas in which geoarchaeological coring.

Field Number	Number of Boreholes
2	6
3	3
6	10
7	3
8	2
9	1
10	1
11	1
12	1
14	1
15	1
16	1
18	2
51	2
48	3

Borehole locations will be marked out by an AMS surveyor with a Leica GS07. The precise locations for drilling will be determined by the geoarchaeologist in the field.

Each location will be scanned using a CAT4+ and Genny and then a narrow hand dug spade pit will be dug to a depth of 1m immediately next to the coring location to ensure no buried services are present. The hand excavation will be under archaeological supervision.

Boreholes will be drilled with an appropriate scale rig, from the current ground surface to the top of the underlying bedrock geology. Sediment cores will be recovered in plastic liners. Continuous samples will be collected through the deposit sequence. The samples will be approximately 100mm in diameter, though narrower cores may be retrieved where deposit density or stoniness prevents using a 100mm diameter cutting edge. The number of cores and a basic record concerning the sediment characteristics that can be observed at the ends of the cores will be made on site by the attending geoarchaeologist.

While it is envisaged that the proposed number of boreholes will be sufficient to provide the evidence required for the EIA, it is acknowledged that further coring work may be required, particularly to inform the detailed design of any mitigation plan. Such works would form a further stage of investigations. Such works would be agreed between Mott MacDonald, Skanska and Sherwood District Council, with the input of Nottinghamshire County Council Archaeology Service and Historic England.

All cores that have achieved a reasonable level of material retention will be retained. Cores that are unsuitable for further description due to sediment consistency or loss will be discarded after basic recording. Reasons for discard will also be recorded.

The borehole locations will be reinstated using a material approved by Skanska.

5.1.5 *Recording*

All feature extents, section points and other locational data will be surveyed in by an AMS surveyor using a Leica GS07 in a manner which can be mapped in GIS within the British National Grid (OSGB36) coordinate system.

The units of the sedimentary sequence recorded in each core will be fully described off-site, following the principles established by the Soil Survey of England and Wales (Hodgson 1976), suitably modified for geoarchaeological work. Characteristics that will be described will include matrix colour and colour variation, soil texture, including the presence and character of coarse and very coarse clasts, which may include components such as stone, ceramic, wood and bone, deposit structure and degree of structural development, and lower boundary form and distinctiveness.

The photographic record will be digital photography, consisting of detailed photographs of individual cores and overlapping core sections to ensure sufficient detail and resolution. Images of at least 10MPx will be generated and will be of sufficient quality and in non-proprietary formats to ensure they are suitable for archive purposes. Suitable photographic scales will be used for these photographs.

6 Post-Excavation Assessment

The retained cores will be assessed for their potential for sub-sampling for environmental analyses, including pollen, insect, plant macrofossils and radiocarbon dating. Where suitable materials for further assessment are identified, these will be noted in the interim report, and recommendations made regarding the specific units to be sampled and the types of assessment to be undertaken.

Recommendations for sampling and handling paleoenvironmental and geoarchaeological materials will follow guidelines produced by Historic England (Historic England 2008, 2011a, 2011b, 2015). Where necessary, the project team will consult Historic England's Scientific Advisor on environmental sampling and dating. Specialists will be consulted where non-standard sampling is required.

7 Programme

The fieldwork element of the geoarchaeological coring for the A46 Newark Project is anticipated to take 2-3 weeks to complete, subject to timely access being arranged. The anticipated start date is 3 May 2023. Detailed core description, assessment and reporting should take another 4-5 weeks: it is envisaged that this element of work will follow on directly from the fieldwork.

8 Safety, Health & Welfare at Work

All work conducted by AMS is in accordance with AMS's Health and Safety Plan, which ensures adherence to the Health and Safety at Work Act 1974 and other relevant legislation. A project specific Risk Assessment Method Statement (RAMS) – will be in place at the commencement of on-site services. This document will highlight the potential hazards, who may be affected and the appropriate preventative measures to be taken. The RAMS will be reviewed and updated throughout the work. All staff will be inducted and briefed prior to commencing on-site work, and have appropriate safety training. Site specific risks and constraints on working will be reviewed and controlled through dynamic risk assessment.

9 Reporting

9.1 Interim report

An interim report for the geoarchaeological coring will be produced immediately after fieldwork. This will summarise in tabular form the geoarchaeological findings, other quantitative data (such as the number of units identified) and be accompanied by a plan of the borehole locations. This report will identify areas of concern or interest that may justify further fieldwork in order to inform the mitigation strategy for the programme.

9.2 Preliminary coring report

A draft report on the geoarchaeological coring will be completed within five weeks of completion of the fieldwork. This report will be submitted to Mott MacDonald and Skanska UK Construction Ltd for review.

The report will include the following information:

- A non-technical summary (300 words maximum);
- Background and aims of geoarchaeological coring;
- Description of the areas cored;
- Methodology;
- Results;
- Discussion and conclusions, including assessment of potential and updated deposit model;
- Recommendations;
- References;
- Figures (plans of borehole locations);
- Plates (site photographs and core photographs);
- Archive Location and quantity (digital, paper, and artefactual);
- Bibliography; and
- Appendices (technical detail and supporting information).

Digital copies of the completed draft preliminary assessment report will be submitted in both Word and PDF format to Mott MacDonald and Skanska for comment. When the amendments of the draft report have been agreed, Mott MacDonald will submit a copy of the draft report to the Newark and Sherwood District Council Heritage Officer. In finalising the report the comments of Mott MacDonald and the relevant stakeholders, via the Newark and Sherwood District Council Heritage Officer will be taken into account.

The final version of the report will be submitted to Mott MacDonald and Skanska within four weeks of the receipt of comments on the draft report.

Upon completion and approval of the report, copies of the report will be issued to the client, as well as relevant Historic Environment Record, local authority Planning Officer and/or Conservation Officer. An OASIS online record will be created, and a PDF version submitted. Subject to contractual obligations

on confidentiality, copies of the report will be provided to relevant local and national records and published through the Archaeology Data Service.

9.3 Final coring report

Should further assessment work be recommended at the preliminary reporting stage, a further report will be compiled, incorporating the findings of the specialist assessments undertaken, including any palaeoenvironmental, artefactual and dating results. It is envisaged that results from the geoarchaeological test pitting programme will also be available by this stage, and these will also be referenced as relevant. The scope and content of this report will be agreed with Mott MacDonald and Skanska in consultation with the relevant stakeholders, via the Newark and Sherwood District Council Heritage Officer.

10 Archive Storage and Curation

All finds, photographs, drawings and paper archive records will be compiled into a comprehensive and fully cross-referenced archive in accordance with Archaeology Data Service's *Guides to Good Practice*¹ (online) and *ADS Guidelines for Depositors* (ADS 2021). It is envisaged that the archive will be deposited within 6–12 months of project completion.

If any artefacts are recovered from the borehole survey they will be retained unless otherwise agreed with the Consultant, Contractor and Newark and Sherwood District Council Heritage Officer for further analysis during the reporting phase of the archaeological mitigation of the main construction phase.

11 Copyright

The copyright of the report and archive will be retained by AMS under the *Copyright, Designs and Patents Act 1988*, with all rights reserved. The client will be licensed to use each report for the purposes that it was produced in relation to the project as described in the specification. The archive repository, however, will be granted an exclusive license 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*.

Information relating to the project will be deposited with the Historic Environment Record where it can be freely copied with reference to AMS for the purposes of archaeological research or development control within the planning process.

¹ Available online @ [REDACTED] on 20 March 2023.

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12 AMS Check, Review, Approve – Verify Procedure

AMS employ a Check, Review, Approve – Verify (CRA-V) procedure for all our reporting deliverables/outputs. This involves the originator (creator of the deliverable) sending the output to be checked once it has been completed. The checker undertakes a line-by-line check of the deliverable to ensure that it meets with requirements. The originator will then address the checker's comments. Once this task has been completed, the deliverable is resent to the checker for a second review before it is sent to a third person for approval. The approver will do an independent check to ensure that the deliverable meets the task brief. Any comments will be addressed prior to verification by the client.

13 References

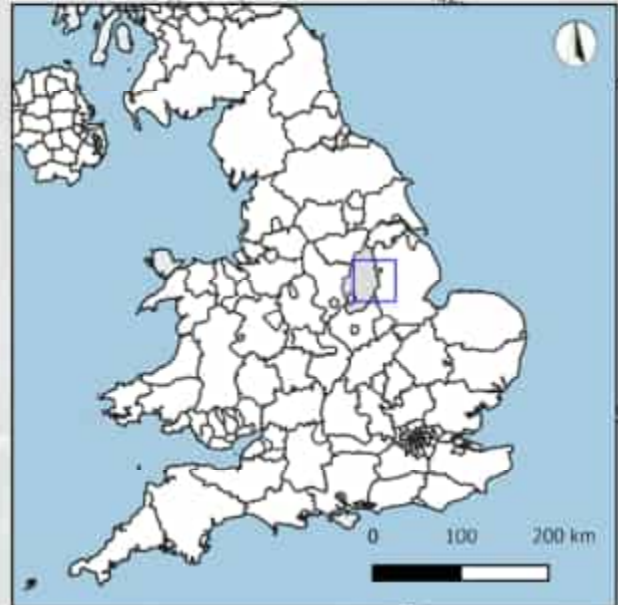
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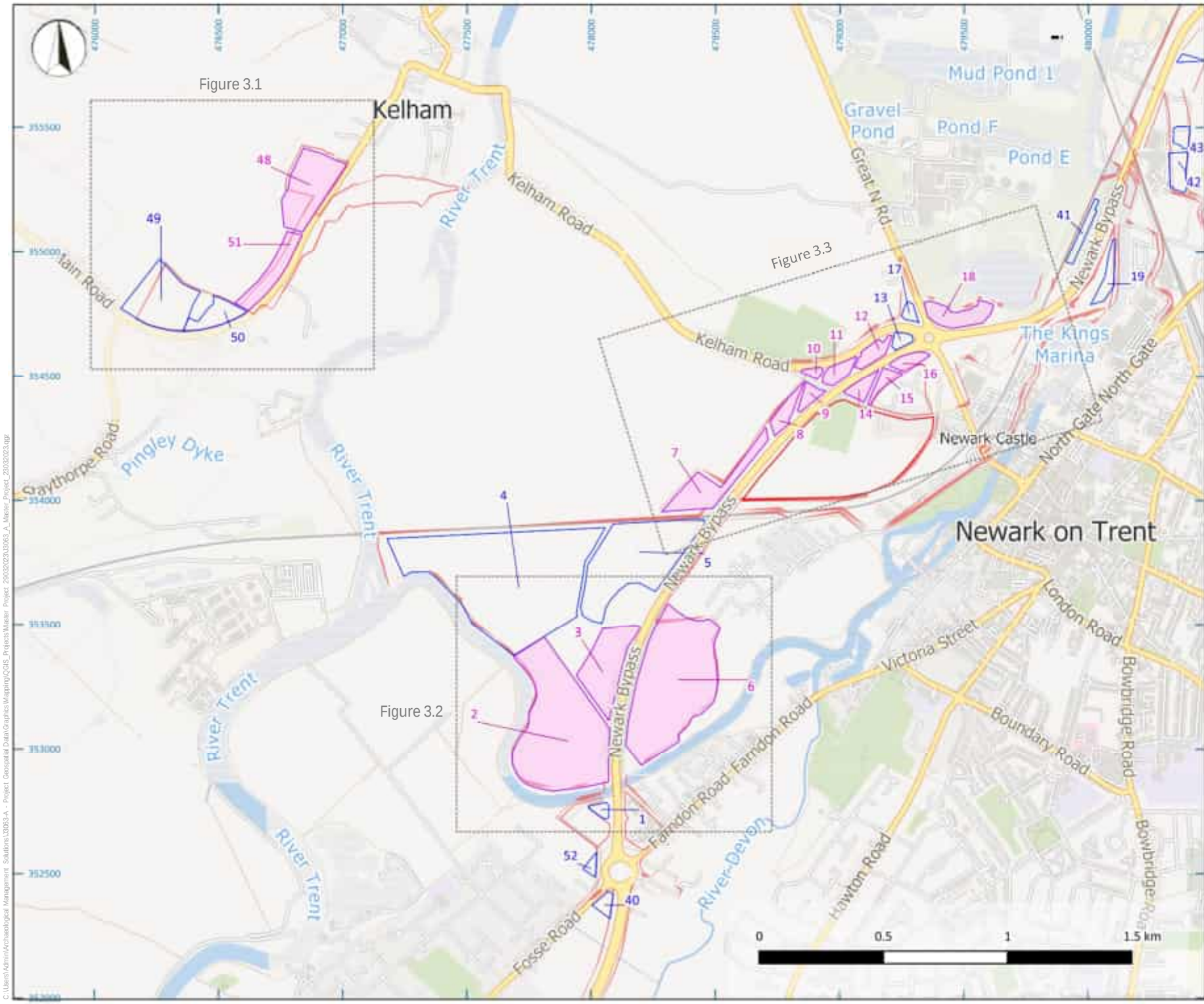
Appendix 1

Borehole Number	Area Number	Provisional drilling depth (M)	Principal Purpose
1	2	7	Palaeochannel (lidar)
2	2	6	Flood plain sequence
3	2	6	Palaeochannel (lidar)
4	2	7	Flood plain sequence
5	2	7	Flood plain sequence
6	2	6	Flood plain sequence
7	3	5	Flood plain sequence
8	3	5	Palaeochannel (lidar)
9	3	5	Palaeochannel (lidar)
10	6	6	Flood plain sequence
11	6	10	Flood plain sequence
12	6	10	Flood plain sequence
13	6	7	Flood plain sequence
14	6	6	Palaeochannel (lidar)
15	6	6	Flood plain sequence
16	6	7	Flood plain sequence
17	8	7	Flood plain sequence
18	8	7	Flood plain sequence
19	9	7	Flood plain sequence
20	10	7	Flood plain sequence
21	11	6	Palaeochannel (lidar)
22	12	6	Flood plain sequence
23	14	6	Flood plain sequence
24	15	6	Flood plain sequence
25	16	7	Palaeochannel (lidar)
26	18	9	Palaeochannel (lidar)
27	18	7	Flood plain sequence
28	48	11	Palaeochannel (lidar)
29	48	11	Palaeochannel (lidar)
30	48	11	Palaeochannel (lidar)
31	51	11	Palaeochannel (lidar)
32	51	11	Palaeochannel (lidar)

33	6	12	Palaeochannel (lidar)
34	6	14	Palaeochannel (lidar)
35	6	11	Flood plain sequence
36	7	8	Flood plain sequence
37	7	14	Palaeochannel (lidar)
38	7	14	Palaeochannel (lidar, GI data)



Project A46 Newark Bypass		
Title Site Location		
Legend Site Boundary		
	Project No. J3063-A	
	Scale @ A4 1:40,000	
	Drawn RZ	Check MD
	Date 26 04 23	Rev. 1.0
	Copyright Notes Notes: © MapTiler © OpenStreetMap contributors Bing Maps ©2022 Microsoft	
CRS OSGB36		
Figure 1		



Project
A46 Newark Bypass

Title
Areas Subject to
Geoarchaeological Coring

Legend
Site Boundary
Areas
Areas Subject to
Geoarchaeological Coring

AMS

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Project No.
J3063-A

Scale @ A4
1:20,000

Drawn
RZ

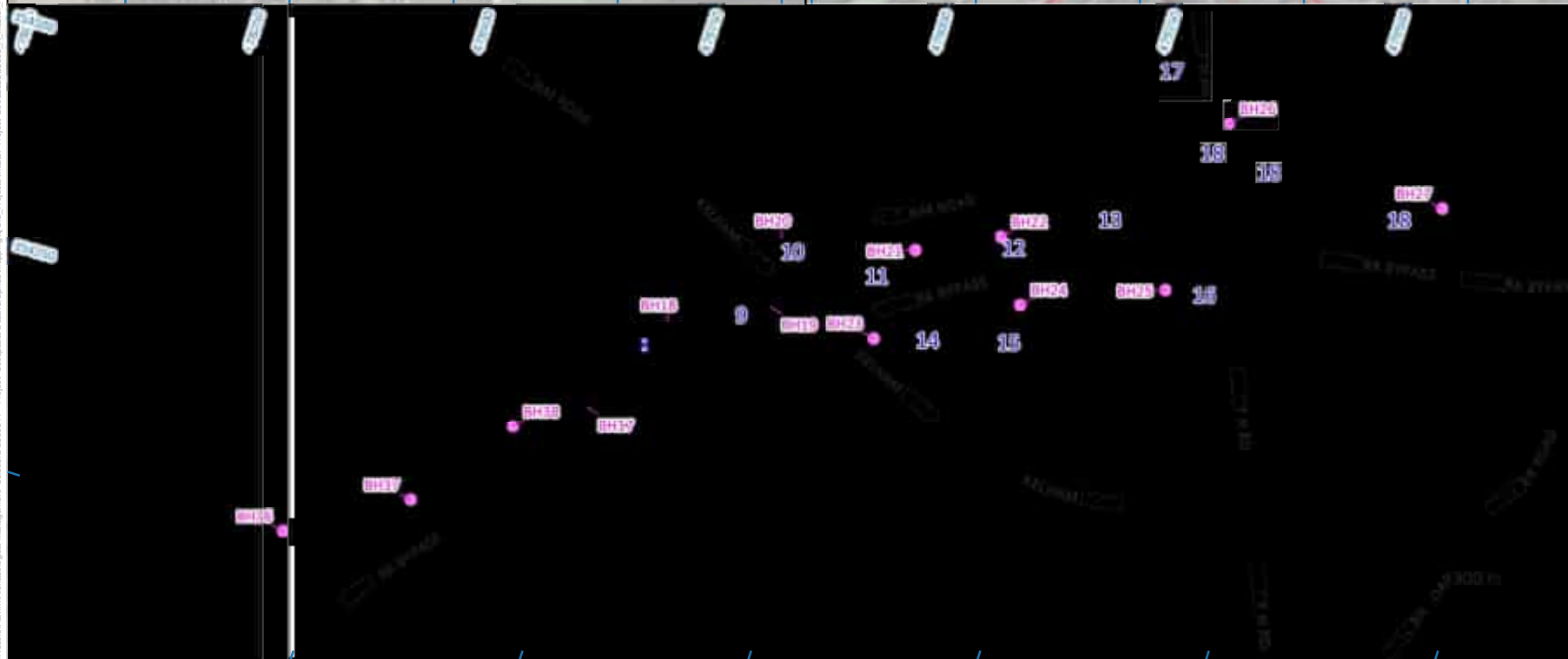
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26 04 23

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MD

Rev.
1.0

CRS
OSGB36

Figure
2



Project	A46 Newark Bypass

Title
Location of
Geoarchaeological Boreholes

Legend

- Site Boundary
- Areas
- Palaeochannels (York Archaeological Trust 2017)
- Coring Locations

	Project No. J3063-A	
	Scale @ A4 -	
	Drawn RZ	Check MD
	Date 26 04 23	Rev. 1.0
Copyright Notes Bing Maps ©2022 Microsoft Location of Figures 3.1, 3.2 and 3.3 in Figure 2		CRS OSGB36
		Figure 3.1–3

G. Appendix: Trial Trench Evaluation WSI

A46 Newark Bypass, Nottinghamshire - Written Scheme of Investigation for Archaeological Trial Trenching and Geoarchaeological Test Pitting



Prepared for Skanska Construction UK Ltd on behalf of National Highways Regional Delivery Partnership Framework

By Dr Ros Ó Maoldúin, Dr Steve Lancaster and Al Curtis

August 2023

TITLE PAGE

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File Name: A46 Newark Bypass WSI for Trial Trenching and Geoarchaeological Test Pitting_Stakeholder draft

Cover Photo: Metal detecting finds from the A46 Newark Bypass

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Disclaimer

The results, conclusions and recommendations contained within this report are based on information available at the time of its preparation. Whilst every effort has been made to ensure that all relevant data have been collated, the authors and AMS accept no responsibility for omissions and/or inconsistencies that may result from information becoming available subsequent to the report's completion.

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Table of Contents

1	Introduction.....	7
1.1	Project Background	7
1.2	Purpose and Scope of this Assessment.....	7
1.3	Site Location.....	8
1.4	The Proposed Archaeological Strategy	8
1.5	Changes to this Written Scheme of Investigation	9
2	Archaeological Background.....	10
2.1	General Archaeological Background.....	10
2.1.1	Palaeolithic.....	10
2.1.2	Mesolithic.....	10
2.1.3	Neolithic and Early Bronze Age.....	10
2.1.4	Later Bronze Age and Iron Age	10
2.1.5	Romano-British period.....	11
2.1.6	Early Medieval	11
2.1.7	Medieval	11
2.1.8	Post-medieval period.....	11
2.1.9	Modern (AD 1750–present)	12
2.2	Scheduled Ancient Monuments adjacent to the Areas of Trial Trenching.....	13
2.3	Results of the Geophysical Survey.....	13
2.4	Results of the Metal Detecting Survey	13
2.5	Results of the Field Walking Survey.....	14
2.6	Results of the Geoarchaeological Coring	14
2.7	Results of the Archaeological Monitoring.....	15
3	Project Aims and Objectives	17
4	Project Team	22
5	Methodology.....	23
5.1.1	Standards	23
5.1.2	Pre-commencement	23

5.1.3	Excavation methodology.....	23
5.2	Hand test pitting.....	26
5.3	Geoarchaeology test pitting.....	27
6	Finds Management.....	29
7	Environmental Sampling.....	30
8	Human Remains	32
9	Programme.....	33
10	Monitoring	35
11	Safety, Health & Welfare at Work.....	36
12	Reporting.....	37
12.1	Interim reports	37
12.2	Preliminary evaluation report	37
12.3	Final evaluation report	38
13	Archive Storage and Curation	39
14	Copyright.....	40
15	References.....	41

List of Tables

Table 1: List of areas in which trial trenching will occur, the number of trenches and previous assessments.....	24
Table 2: List of areas in which hand test pitting will occur, the number of test pits and previous assessments.....	26
Table 3: List of areas in which geoarchaeological test pitting will occur, the number of test pits and previous assessments.....	27
Table 4: Phase of work, field number and form of evaluation	33

List of Figures

Figure 1: Site Location and Areas Plan
Figure 2.1–2: Location of Evaluation Trenches (Northern).
Figure 3.1–3: Location of Evaluation Trenches (Southern and Kelham)
Figure 4: Location of geoarchaeological trenches over greyscale image of gradiometry results (Areas 26–34)
Figure 5: Location of geoarchaeological trenches over greyscale image of gradiometry results (Areas 23–27)
Figure 6: Location of geoarchaeological trenches over greyscale image of gradiometry results (Areas 20–22)
Figure 7: Location of geoarchaeological trenches over greyscale image of gradiometry results (Kelham Areas 48-51)

Abbreviations and Definitions

Abbreviation	Definition
ACIfA	Associate of the Chartered Institute for Archaeologists
AMS	Archaeological Management Solutions
ADS	Archaeological Data Service
BGS	British Geological Survey
CIfA	Chartered Institute for Archaeologists
CP	Civil Parish
DCO	Development Consent Order
EA	Environment Agency
EAR	Environmental Assessment Report
EIA	Environmental Impact Assessment
FRAEP	Flood Risk Activities: environmental permit
H & S	Health and Safety
HER	Historic Environment Record
MIAI	Member of the Institute of Archaeologists of Ireland
OSGB36	Ordnance Survey Great Britain 1936 coordinate system
OSL	Optically Stimulated Luminescence
PPE	Personal Protective Equipment
RAMS	Risk Assessment Method Statement
RTK DPGS	Real Time Kinematic Differential Global Positioning System
SAM	Scheduled Ancient Monument
TL	Thermoluminescence dating
WSI	Written Scheme of Investigation

Coordinate System

All grid coordinates in this report use the OSGB36 coordinate reference system unless otherwise stated.

1 Introduction

1.1 Project Background

This Written Scheme of Investigation (WSI) has been prepared by Archaeological Management Solutions (AMS) on behalf of Skanska Construction UK Ltd on behalf of National Highways Regional Delivery Partnership Framework in advance of trial trenching, hand test pitting and geoarchaeological test pitting on lands forming part of the A46 Newark Bypass, Nottinghamshire (Figure 1).

The A46 Newark Bypass scheme is approximately 6km in length, passing the western and northern extents of Newark-on-Trent, Nottinghamshire, between Farndon and Winthorpe roundabouts. The aim of the scheme is to increase capacity and reduce traffic congestion on the A46 in the vicinity of Newark, improve connectivity from Lincolnshire to the national motorway network, and improve route standard consistency for the A46.

The scheme has been subject to a PCF Stage 2 Environmental Assessment Report (EAR) undertaken by Atkins in 2021 (Highways England 2021), which found archaeologically sensitive areas across the route.

Prior to this phase of assessment, geophysical (Dowling 2022 & 2023), fieldwalking (Gethin 2023) and metal detection surveys (Gethin & Appleby 2023), archaeological and geoarchaeological monitoring (YAT 2022 and AMS 2023b) and Geoarchaeological Coring were carried out (AMS 2023c).

1.2 Purpose and Scope of this Assessment

This WSI sets out the aims of the archaeological trial trenching and geoarchaeological test pitting, and the methods and standards that will be employed. It conforms to current best practice, as well as to the guidance outlined in the Chartered Institute for Archaeologists' (CIfA) Standard and guidance for archaeological field evaluation (CIfA 2014). The trenching and test pitting follows geophysical (Dowling 2022), fieldwalking (Gethin 2023) and metal detection surveys (Gethin & Appleby 2023) and the design of trenches has taken the results of these into account.

It is intended that the archaeological trial trenching will be implemented across the proposed scheme, including the flood compensation areas in the vicinity of Kelham. Those parts of the trial trenching that will take place on soils derived from the Holme Pierrepont Sands and Gravels Member will also have a number of geoarchaeological test pits and hand-dug test pits. These are to be undertaken to check the geoarchaeological assessment of potential of these areas. Works on the section of the A46 to the south revealed deposits of Lower Upper Palaeolithic material on soils derived from this geological unit. The work will be carried out in accordance with the agreed methodology detailed in this WSI. Any variations to this working practice will be agreed in advance with the client.

The results of the survey will help inform Phase 3 of the Scheme Archaeological Management Plan which will set out the archaeological requirements for the scheme post DCO submission/future stages of the scheme. The results will also aid future archaeological trial trenching along the scheme.

1.3 Site Location

The archaeological trial trenching will be implemented over 37 fields (designated as Fields 1–3, 6–18, 20.2, 21.2, 21.3, 22, 23, 22–31, 33, 34, 42, 43 & 48–52) and a combined area of 37,700m² (Table 1; Figures 2–3). Fields 2 and 3, 6–18, 42 and 43 are located in the flood plain of the Trent. Fields 1 and 52 are located south of the river, and Fields 21.2, 21.3, 22 and 23 on the northeastern part of the proposed route, above the flood plain. Fields 48–52 are located between Kelham and Averham.

The hand test pitting and geoarchaeological test-pitting will be undertaken in seven fields (designated as Fields 21.2 and 21.3, 22, 48, 49, 50, 51 and 52).

The underlying bedrock of the locality comprises Mercia Mudstone Group, an early Triassic lithostratigraphic group that is widespread in the English Midlands. The bedrock of this type is of fluvial, lacustrine, and marine origin (BGS 2022). Over most of the areas to be trenched this geological unit is not further differentiated (Fields 9–18, 20.2, 21.2, 21.3, 22, 23, 42, 43 & 48–51). Where it has been differentiated, it consists either of Gunthorpe Member mudstones (Fields 3 & 6–7) or Edwalton Member mudstones (Fields 1, 2, 6 & 52). Within the floodplain of the River Trent, the superficial deposits are alluvium, clay, silt, sand, and gravel, dating to the Quaternary period (Fields 2, 3, 6–18 & 23). Outside of the floodplain, the superficial geology consists of the Holme Pierrepont Sands and Gravels (Fields 1, 21.2, 21.3, 22, 33, 34 & 48–52), a river terrace formation dating to either MIS1 or 2, or Balderton Sands and Gravels (Fields 24–30), another river terrace formation dating to MIS6.

1.4 The Proposed Archaeological Strategy

This phase of the evaluation will comprise a total of 354 trenches (typically 2m wide and 50m in length). This includes a 5% coverage of any lands that have not been subject to geophysical survey and a 3% coverage of those that have. The location of the trenches has been determined by the Consultant (Mott MacDonald) and agreed with the Curator (the Newark & Sherwood District Council Historic Environment Officer and Nottinghamshire County Council Senior Practitioner Archaeology); this was informed by the Desk Based Assessment Mott MacDonald 2023), the geophysical (Dowling 2022), fieldwalking (Gethin 2023) metal-detection (Gethin & Appleby 2023) surveys, geoarchaeological coring recently completed (Lancaster 2023) and archaeological monitoring at Kelham which has just been completed.

The evaluation trenching forms part of a wider strategy to inform and supplement the information in the Environmental Statement. The overall strategy is designed to take account of the very different but still related ground conditions and environmental histories of the floodplain area and the river terraces, in particular understanding the dates of the upper terrace deposits and the human activity on them and how this relates to the accumulation and reworking of the flood plain deposits and the pattern of human activity within that environment.

1.5 Changes to this Written Scheme of Investigation

Should changes to the methodology outlined below be required they will first be agreed with the Consultant (Skanska & Mott MacDonald) and Curators (the Newark & Sherwood District Council Historic Environment Officer & Nottingham County Council Senior Practitioner Archaeology).

2 Archaeological Background

The following is an adapted summary of the archaeological background given in the desk-based assessment (Mott MacDonald 2023) and succeeding surveys. The surveys undertaken consisted of a geophysical survey over the northern section of the Scheme, and fieldwalking and metal detecting surveys in the southern section of the Scheme, where it had been assessed that geophysical survey was unlikely to produce useful results. Please refer to the cultural heritage desk-based assessment (Mott MacDonald 2023) for description and location figures depicting archaeological sites mentioned in the wider area of the scheme.

2.1 General Archaeological Background

2.1.1 *Palaeolithic*

An Upper Palaeolithic site was identified through field walking in 1991 at Farndon Fields (M3571) near the southern end of the scheme (Harding, Ellis & Grant 2014). This is a very rare site type.

2.1.2 *Mesolithic*

There are no known Mesolithic sites within the area of the scheme; however, excavations at the Staythorpe Power Station site – c.2.5km to the west alongside the River Trent – have revealed Mesolithic remains (Cooper 2006).

2.1.3 *Neolithic and Early Bronze Age*

There are no known sites from this period within the floodplain section of the scheme, though Neolithic and Bronze Age material has been recovered from higher ground in the area. Flints (L11808) and burnt stone were recovered from Farndon Fields and a Neolithic mortuary enclosure (M3612) was identified through aerial photography and subsequent excavation near the north end of the scheme. A Neolithic and Early Bronze Age occupation site (L12214 and M18427) was identified under the Roman Fosse Way near Langford (L12214 and M18427).

2.1.4 *Later Bronze Age and Iron Age*

Remains of this period are considered rare in Nottinghamshire and are mainly known from isolated finds of bronze objects, such as palstaves from the River Trent (L8514 and L3039), nevertheless finds of this type may be expected within the flood plain area, given the known practice of depositing metalwork in bodies of water and wetlands during this period. Settlement evidence, indicated by Late Bronze Age and Iron Age pottery recovered from excavations at Farndon Fields (L11810) and further Iron Age sherds recovered at Crankley Point sewage works (L11013), are indicative of human activity off the floodplain.

2.1.5 Romano-British period

The Fosse Way Roman Road is presumed to have run along the same alignment as the current A46. It ran from Exeter to Lincoln, marked the limits of early Roman settlement and connected settlements and production centres. Concentrations of Roman material have been recorded at Farndon Fields and Newark Northgate, and trial trenching near Langford revealed the remains of the original Roman Road (L3737). A small amount of Roman material has been recovered from the flood plain area during the metal detecting survey.

2.1.6 Early Medieval

Archaeological finds are rare; however, place-name evidence attests to Anglo-Saxon settlements throughout the area of the scheme. A high-status female burial (M18359) was found south of the scheme at a cropmark on Winthorpe Road (Newmark-on-Trent) and another inhumation was found in a possible Neolithic barrow (M3612). Excavations of enclosures alongside the Roman road to the south (Newark-on Trent to Widmerpool) suggest continued use into the Anglo-Saxon period.

2.1.7 Medieval

Newark-on-Trent emerged as a marked town in the medieval period. The castle (1003474) in its centre was built in the early twelfth century by the Bishop of Lincoln and sits on the site of an earlier motte-and-bailey. There is also a medieval hospital and cemetery (St Leonard's: M3691, a moated site (near Dairy Farm: 1016051), a medieval settlement (Osmundthorpe at Northgate: M18367), a medieval road (M3093), a medieval bridge (M3214), a medieval building (at Northgate allotments: M3690) and many finds have been identified within the town during minor development works. Medieval finds were recovered during the fieldwalking and metal detecting surveys.

2.1.8 Post-medieval period

There are many standing buildings, agricultural and industrial remains from the post-medieval period within the area of the scheme. However, the most significant remains are those relating to the civil war.

Newark-on-Trent was subjected to three separate sieges from 1643 to 1646 during the English Civil War and a series of defences and forts were built around the town.

The following civil war defences are within the area of the scheme:

- 1016020: Civil War town defences within the Friary Garden (Scheduled Monument);
- 1016046: Civil War redoubt 550m south-east of Valley Farm (Scheduled Monument);
- 1016048: Civil War redoubt 680m north-west of Dairy Farm (Scheduled Monument);

- 1016049: Civil War redoubt on Crankley Point (Scheduled Monument);
- 1016050: Civil War redoubt on Crankley Point (Scheduled Monument);
- 1016150: Queen's Sconce (Scheduled Monument);
- 1016152: Civil War redoubt 580m ENE of sugar refinery (Scheduled Monument);
- 1017402: Civil War Sconce 650m north-west of Devon Bridge (Scheduled Monument);
- 1008258: Hawton Moated site, fishpond, Civil War redoubt, and ridge and furrow (Scheduled Monument);
- L3733: Line of Village Defences at Winthorpe;
- L8532: Line of Rampart at Winthorpe;
- M3027: Fortified village at Farndon;
- M3114: Second Line of Circumvallation;
- M8401/L10511/L8470/L8442: Earthworks and line of First Circumvallation;
- L3664: Civil War earthworks at Newark-on-Trent.

Following the Civil War, the castle was destroyed, and Newark-on-Trent returned to its role as a merchant town. Newark-on-Trent was particularly known for its beer. Warwicks and Richardsons began brewing in 1766 and the Northgate Brewery (M3717) was built in 1871). The Brewery Office (1277425), Maltings (1196413) and almshouses (M3262) still stand and the locations of others are known. Many improvements were made to the river and wharfs and warehouses were constructed. Newark Town Warf (M3274) and Cow Lane Wharf (M3291) likely served the breweries. There are nine Grade II listed warehouses within the area of the scheme.

Post-medieval buildings and structures are present, illustrating the development of Newark during the seventeenth to twentieth centuries. The construction of the Grade II listed building, Great North Road causeway arches, was carried out from the 1760s and completed in 1770.

2.1.9 Modern (AD 1750–present)

In the modern period, Industrial activity continued— more breweries and warehouses were built post-1750. For example, the Kelham Home Grown Sugar refinery, along Great North Road, (now operating as British Sugar) was built in 1920. The earliest Ordnance Survey map of the area of the proposed scheme depicts land use in 1883. Most of the land northwest of the River Trent is regular field systems, typical of enclosure-era land divisions. Comparison with current satellite imagery indicates little amalgamation of fields has occurred since.

2.2 Scheduled Ancient Monuments adjacent to the Areas of Trial Trenching

Fields 1–3 and 6–7 are located north of the southern branch of the River Trent. They are 4km northeast of the Battle of Stoke Registered Battlefield limits, southwest of Newark-on-Trent. SAM 1017402 — a Civil War Sconce — is located c.220m southeast of Field 7 and c.300m northeast of Field 6 (Figure 3).

Fields 8–18 are located 0.5–1km from Newark Castle. Field 8 is located immediately south of SAM 1016048, Civil War redoubt. Field 18 is located immediately south of SAM 1016046, a Civil War redoubt. Field 20.2 is approximately 0.4km east of a Civil War redoubt and earthwork (SAM 1016049, SAM 1016050).

2.3 Results of the Geophysical Survey

The geophysical survey comprised high-resolution magnetic gradiometry undertaken in two phases. During the first phase, undertaken in early September 2022, ten areas (20–24 & 29–32) encompassing c.36 ha was surveyed (Dowling 2022). A second phase was undertaken in late February 2023, concentrating on the northern end of the Scheme (Areas 25–27, 29, 30, 33 & 34) and on potential flood compensation areas (Areas 48, 49 & 51). During the first phase, features of archaeological and potential archaeological interest were identified in at least seven areas. These include evidence for potential settlement and relict field systems in Areas 20, 21, 22 and 30, as well as a range of potential features and structures of possible archaeological interest in Areas 22, 28 and 29. Potential pits, ditches, drains and other tentative features were also mapped by the survey in some of the other areas investigated. During the second phase, a series of small, conjoined enclosures (Area 48) were found in the Kelham area, which may correspond to an HER record. An additional rectilinear enclosure was mapped 75m west of this. To the south (Areas 51) also contained potential evidence of archaeological features. Many possible ditches/drains (Areas 25–27, 29, 30, 48, 49 & 51) and pit-type features (Areas 28, 48 & 51) were also detected, though natural, ferrous or agricultural origins for at least some of these features cannot be ruled out.

2.4 Results of the Metal Detecting Survey

The metal detection survey was undertaken in two phases. The first phase in September 2022 comprised the survey of fourteen fields, three under arable and eleven under pasture. The second phase was carried out in January 2023 and comprised two fields under arable.

A total of 115 significant metal finds were retrieved from the survey.

The earliest items identified include the end of a possible Roman period solid copper alloy bracelet or bangle (Area 7); and a possible end of a second bracelet which may also be of Roman date (Area 4). Two other fragmentary copper alloy objects may also be Roman in date (Area 4).

Some objects, such as a large bulbous copper-alloy vessel rim fragment (Area 2), other copper-alloy vessel fragments (Area 2/3), a lead weight (Area 7), lead waste (Area 9/14/18) and a folded lead disc (Area 6) could be of medieval date.

Most objects recovered are well-preserved post-medieval items. Some such as seven musket-calibre balls (Area 7/9/10/18) and a single pistol ball (Area 12) are likely to have been associated with the English Civil War and the sieges of Newark between 1642 and 1646. Several personal items, such as some belt buckles (Area 4/7), may also originate from this period. The remainder of the material was eighteenth to twentieth century in date. All the coins recovered, 29 in total, were eighteenth to twentieth century in date.

2.5 Results of the Field Walking Survey

The fieldwalking survey was carried out in January 2023, immediately after the completion of Phase 2 of a metal detecting survey (Gethin & Appleby 2023). Initially, it was intended to survey five fields (numbered Areas 2–4, 6 & 7) comprising 60.99ha. However, access to Areas 2, 3 and 7 and a portion of Area 4 was not available. It was therefore only possible to survey Area 6 and part of Area 4. This added up to a total of 18.1ha out of the initial target.

The survey recorded 172 items. There included three sherds of medieval pottery, thirteenth to fourteenth century in date, a few fragments of clay tobacco pipe and a large amount of late eighteenth to the early twentieth-century pottery. Many of the artefacts are likely to have been spread over the fields along with manure from nearby farms or Newark itself.

The finds assemblage did not indicate the presence of any early underlying archaeological sites, nor did it include any significant concentration of finds with the potential to date to the English Civil War period.

2.6 Results of the Geoarchaeological Coring

Geoarchaeological coring (event reference MM1265) was carried out within the Order Limits of the Scheme by the appointed archaeological contractor. This consisted of 38 purposive geoarchaeological boreholes targeting known palaeochannels or floodplain alluvium. The full survey report is available as Appendix K of the Cultural Heritage DBA (which itself is contained in Appendix 6.1 of the ES, Application Document Reference: TR010065/APP/6.3).

Six boreholes (BH 9, 14, 17, 25, 35, 38) which were designed to target known palaeochannels produced organic sediments albeit organic material mixed with minerogenic sediments. However, nine other boreholes targeting palaeochannels failed to produce any organic material. In contrast seven organic deposits were in borehole locations not indicated as being in palaeochannels (BH 2, 4, 10, 18, 23, 24,

27). More detailed consideration of the coring logs and LiDAR map data may determine whether these deposits also indicated the presence of palaeochannels.

Only one borehole (BH 31) located within the Kelham and Averham FCA produced a humified peat deposit, however this proved difficult to sample. The remaining boreholes at Kelham either produced no organic material or were shown to be in the Holme Pierrepont sands and gravels indicating that the palaeochannels were further west than originally thought and unlikely to be impacted by the scheme.

2.7 Results of the Archaeological Monitoring

An Archaeological Watching Brief (MM1264) was undertaken within the Order Limits of the Kelham and Averham FCA, by the appointed archaeological contractor between 9 May 2023 and 11 May 2023. The full survey report is available as Appendix J: A46 Newark Bypass GI Watching Brief Report of the AMP, of the Cultural Heritage DBA (which itself is contained in Appendix 6.1 of the ES, Application Document Reference: TR010065/APP/6.3).

The work involved archaeological monitoring of seven GI trial pits, each measuring between 3.1m and 4.0m in length and 0.5m wide and attaining depths of between 2.2m and 3.0m. While no archaeological features were observed in any of the pits, the work enabled observations to be made regarding the character of underlying deposits and the depth of recent overburden sealing potential archaeological layers and features.

Six of the pits were characterised by geological natural deposits of sand and gravel, likely comprising river terrace deposits, or possibly former gravel islands. Such deposits were generally first revealed around 0.5–0.7m below current ground level, being sealed beneath a simple sequence of subsoil and modern ploughsoil/topsoil; however, in S3TP38, an interface layer was recorded between the gravel and the subsoil comprising frequent small to medium-sized sub-angular stones in a reddish brown coarse sandy silt matrix. Such material may be the product of in-situ pedogenesis and could represent a relatively undisturbed 'ancient soil' that has the potential to contain archaeological artefacts. GI pit S3TP36 in Survey Area 49 was also notable for the thickness of overburden sealing natural sand and gravel with up to 1.2m of modern turf, topsoil and subsoil recorded.

One pit (S3TP42) in area 20 was significant for revealing over 2.0m of alluvial silts and clays overlying coarse gravel within which a small fragment of probable waterlogged wood was noted. The pit was located in an obvious low point in the landscape with pit S3TP43 to the east being higher and characterised by sand and gravel deposits beneath the subsoil and topsoil. Consequently, S3TP42 was

likely excavated through a palaeochannel of the River Trent. While the dates of the channel's formation and abandonment are not currently known, such deposits have the potential to produce long records of vegetation and land-use change/development as well as providing good conditions for the preservation of waterlogged remains, such as fish traps, revetments and river craft.

3 Project Aims and Objectives

3.1 Project Aim

The principal aim of the trial trenching is to determine as far as reasonably possible the presence/absence, location, nature, extent, date, and significance of any archaeological remains within the development area, and to quantify this in a manner which will inform the costing of its mitigation. The current understanding of the scheme indicates that it may impact on archaeological remains relating to the Late Upper Palaeolithic, Bronze Age, Iron Age, Roman, early medieval, medieval and post-medieval periods. Part of the purpose of the evaluation is to check this broad understanding of the range of remains that might be impacted.

In fulfilling the principal aim of the trial trenching it will be possible to identify more closely which research questions the archaeological resource within the scheme area may be capable of addressing. An Archaeological Management Plan (AMP) has been prepared for the scheme. This has identified the relevant research agendas as:

- East Midlands Historic Environment Research Framework (EMHERF);
- Research and Conservation Framework for the British Palaeolithic;
- Understanding the British Iron Age: an agenda for action.

The AMP has identified a number of overarching themes that the archaeological remains potential affected by the scheme may be used to address. These are:

- OT1: Pleistocene and Holocene environmental change
- OT2: Hunter-gatherer subsistence strategies and mobility patterns
- OT3: Development of agriculturally-based settlement patterns
- OT4: The development of fields and field systems
- OT5: The role of rivers as movement corridors, sources of power and socio-political boundaries
- OT6: Development of prehistoric monument complexes
- OT7: Development of funerary monuments and changing burial and memorial practices
- OT8: Battlefield and skirmish sites
- OT9: Development of territorial and administrative (e.g. parish) boundaries.

The outcome of the evaluation will allow the assessment of whether the archaeological remains have the potential to address the research questions identified in the AMP, given below:

Palaeolithic

- PRQ1: How were Early Upper and Late Upper Palaeolithic sites distributed across the landscape, and what contrasts may be observed with earlier and later (Mesolithic) periods?
- PRQ2: How may studies of fauna, pollen and other organic material from palaeochannels, caves, terrace sediments and other deposits refine our understanding of the evolving environment, and how may this have varied spatially?
- PRQ3: How best may we extend and enhance regional fieldwalking or test-pitting programmes as means of prospecting for open-air sites?
- PRQ4: How can we maximise the research yield of Pleistocene sites investigated during developer-funded work?

Early Bronze Age

- BARQ1: Can we define more precisely the chronology of the major monument classes (causewayed enclosures, barrows and cairns etc), and how might this have varied spatially?
- BARQ2: Why may monument complexes have developed, why were some short-lived and others of longer duration, and why do these incorporate such a wide variety of monument types?
- BARQ3: How significant were river-crossing or confluence zones as foci for monument complexes?
- BARQ4: How far can studies of burials, grave goods, house and barrow/cairn structures contribute to studies of status variations within and between communities?

Late Bronze Age and Iron Age

- IARQ1: What can we deduce about the morphology, spatial extent and functions of settlements, and in particular the processes underlying the development in some areas of enclosed occupation or activity foci?
- IARQ2: Why were settlements increasingly enclosed during this period and to what extent may the progress of enclosure have varied regionally?
- IARQ3: How are the nucleated settlements related to one another and to other settlements of the period? In particular, is there evidence for a developing settlement hierarchy?

- IARQ4: Can we shed further light upon the development of field and boundary systems?
- IARQ5: What were the economic, social or political roles of the pit alignments and linear ditch systems that characterised many areas of the East Midlands?
- IARQ6: What may we deduce from studies of linear boundaries with respect to changes in the agrarian landscape?
- IARQ7: What may further analyses of burials and of settlement architecture and morphology contribute to studies of social and political organisation?

Roman

- RRQ1: How did the conquest impact upon rural settlements and landscapes?
- RRQ2: How did field and boundary systems relate to earlier systems of land allotment, and how did these boundary networks develop over time?
- RRQ3: Can we chart more closely the processes of agricultural intensification and expansion and development of field systems?
- RRQ4: To what extent may communication routes have been influenced by late Iron Age settlement patterns and routes of movement?

Early Medieval

- EMRQ1: Can we identify social/political boundaries (e.g. surviving linear earthworks and natural barriers) and/or estate centres?
- EMRQ2: To what extent may rivers such as the Trent or Witham have served as major political and social boundaries during the Anglo-Saxon period?
- EMRQ3: What impact may Germanic and Scandinavian immigration have had upon established rural settlement patterns, and how may place-name evidence contribute to studies of settlement evolution?

Medieval

- MRQ1: Can we clarify further the processes of settlement desertion and shrinkage, especially within zones of dispersed settlement?
- MRQ2: How did medieval manors and manorial estates develop from the Anglo-Saxon period?
- MRQ3: Can we shed further light upon the origins and development of the open-field system and its impact upon agricultural practices?

Post-medieval

- PMRQ1: How can we improve our understanding of the early landscapes of enclosure and improvement and the interrelationship between arable, pasture, woodland, commons and waste?
- PMRQ2: How can we refine our knowledge of Civil War defences and siege works?

The principal aim of the hand test-pitting is to determine as far as reasonably possible the presence/absence, distribution, nature, type and significance of any Palaeolithic remains within those areas with potential for them to be present. This work should allow the following questions should be addressed:

- PRQ1: How were Early Upper and Late Upper Palaeolithic sites distributed across the landscape, and what contrasts may be observed with earlier and later (Mesolithic) periods?
- PRQ3: How best may we extend and enhance regional fieldwalking or test-pitting programmes as means of prospecting for open-air sites?
- PRQ4: How can we maximise the research yield of Pleistocene sites investigated during developer-funded work?

The principal aim of the geoarchaeological test pitting is to confirm and add detail to the broad geological characterisation of the deposits thought to belong to the Home Pierrepont Sand and Gravel Member with respect to their potential to contain (Palaeolithic) archaeological and palaeoenvironmental materials. This work should allow the following questions should be addressed:

- PRQ1: How were Early Upper and Late Upper Palaeolithic sites distributed across the landscape, and what contrasts may be observed with earlier and later (Mesolithic) periods?
- PRQ2: How may studies of fauna, pollen and other organic material from palaeochannels, caves, terrace sediments and other deposits refine our understanding of the evolving environment, and how may this have varied spatially?
- PRQ3: How best may we extend and enhance regional fieldwalking or test-pitting programmes as means of prospecting for open-air sites?
- PRQ4: How can we maximise the research yield of Pleistocene sites investigated during developer-funded work?

3.2 Project Objectives

The trial trenching objectives include:

- to identify, characterise and quantify sub-surface archaeological remains;
- archaeologically test anomalies identified in the geophysical survey;
- recover artefactual and samples other material with the potential to provide spot dates;
- incorporate all of the above in a report to the Client; and
- create a physical and digital site archive.

The hand test pitting objectives include:

- to identify, characterise and quantify Palaeolithic archaeological remains, especially lithic scatters;
- recover artefacts and palaeoenvironmental and dating samples;
- incorporate all of the above in a report to the Client; and
- create a physical and digital site archive.

The geoarchaeological test pitting objectives include:

- to identify and characterise late Pleistocene deposits;
- recover palaeoenvironmental and dating samples;
- incorporate all of the above in a report to the Client; and
- create a physical and digital site archive.

The geoarchaeological test pitting objectives will enable the potential value of the deposits in addressing some of the overarching agenda themes presented in the East Midlands Historic Environment Research Framework to be assessed (East Midlands Historic Environment Research Framework — East Midlands Historic Environment Research Framework (researchframeworks.org)).

Those identified as relevant include:

- Pleistocene and Holocene climatic change;
- Changes in sea level, the configuration of sea and land, the drainage network and the spatial extent of wetlands; and
- The impact of human activity upon soil development and geomorphic processes (notably alluviation, colluviation and aeolian deposition).

4 Project Team

The archaeological trial trenching and hand test pitting will be conducted by AMS. It will be led by AMS licenced archaeological director¹ (MCIfA equivalent) and Senior Archaeologist and Dr Ros Ó Maoldúin (MIAI) with one surveyor, and three teams comprising one director/project officer, one supervisor and two to four skilled archaeological technicians one of which will be the Health and Safety (H&S) specialist.

The geoarchaeological test-pitting will be undertaken by the AMS geoarchaeologist, Dr Steve Lancaster (ACIfA).

Other specialists will be involved as appropriate, whether from AMS or from other archaeological organisations with relevant skills and experience, such as York Archaeology.

¹ Licence eligibility determined by National Monuments Service, Department of Housing, Local Government and Heritage

5 Methodology

5.1 Archaeological Trial Trenching Methods

5.1.1 Standards

All work will be conducted in accordance with the Chartered Institute for Archaeologists' *Code of Conduct and Standard and Guidance for Archaeological Field Evaluations*.

5.1.2 Pre-commencement

The client will provide up-to-date service plans. Before ground is broken in each area, service plans will be checked to ensure that groundworks can be conducted safely.

Access points, refuelling points, locations for compounds and welfare will all be agreed with the client prior to the commencement of works. The client will inform AMS of any specific landowner requests in advance of the works. Landholder licences giving permission to dig will be obtained prior to work commencing.

Environment Agency (EA) Flood Risk Activities: environmental permits (FRAEP) will be obtained for areas within the floodplain.

A photographic record of pre-commencement ground conditions will be taken of each area and access points prior to commencement in that area.

All relevant site staff will be fully briefed in a toolbox talk for each of the identified areas and issued with an area briefing document in order to ensure that they are conversant with the archaeological potential of that area.

5.1.3 Excavation methodology

The location of all trial trenches has been determined by the consultant, Mott MacDonald (Figures 2 and 3: Location of Evaluation Trenches). These have been determined on the basis of known archaeological or historic remains identified within the desk-based assessment (Mott MacDonald 2023), and geophysical survey (Dowling 2022 & 2023), fieldwalking (Gethin 2023), metal detection surveys (Gethin & Appleby 2023) and geoarchaeological coring recently undertaken and archaeological monitoring at Kelham which has just been completed carried out by AMS. In areas where geophysics has been undertaken, trial trenches equivalent to 3% of project footprint will be dug. In areas where no geophysics has been undertaken trial trenches equivalent to 5% of project footprint will be dug.

The areas to be trenched will be reconnoitred prior to setting out trenches in order to check for previously un-noted surface artefacts and topographic features that may be of use in adjusting the

proposed locations of the trenches. Any potential changes to locations of trenches based on the findings of the reconnaissance will be considered in the light of any ecological constraints and landowner wishes.

Trial trench locations will be marked out by an AMS surveyor with a Leica GS07, at the locations determined and provided by Mott MacDonald (Figures 2 & 3). The marked out trial trench locations will be metal-detected prior to excavation. For those areas subject to hand test pitting this will be undertaken prior to the commencement of machine excavation (see 5.2).

Trial Trenches will initially be excavated with a mechanical excavator and tooth-less grading bucket, prior to and during the topsoil strip the topsoil will be scanned for artefacts. Topsoil will be removed under careful archaeological supervision down to the level of archaeological features, deposits or natural subsoil, if no archaeological material is extant. Mechanical excavation will cease when the first archaeologically significant horizon is identified, or when the absence of any such horizon has been adequately demonstrated. On completion of the topsoil strip the trenches will be metal detected for potential artefacts.

Each trench will be cleaned as required and examined by experienced archaeologists for potential archaeological features. Where potential archaeological remains or features are encountered, the exposed archaeology will be cleaned by hand and test excavated in order to establish its nature, extent, depth, date and significance. Where possible the full stratigraphic sequence will be established, with the trench being extended or stepped in order to allow more complete/safe access to features under investigation. Artefacts and samples for environmental analyses and radiocarbon dating will be recovered as required.

All feature extents, section points and other locational data will be surveyed in by an AMS surveyor using a Leica GS07 in a manner which can be mapped in GIS within the British National Grid (OSGB36) coordinate system.

Spoil will be stored alongside trenches, c.1m from the trench edges, unless otherwise specified by the Consultant. Spoil heaps will be metal detected for potential artefacts. Topsoil, subsoil, and archaeological deposits will be kept separate during excavation, to allow for sequential backfilling of excavations. Trenches will not be backfilled without the approval of the Curator and Consultant.

Table 1: List of areas in which trial trenching will occur, the number of trenches and previous assessments.

Trial trenching area	Number of trial trenches	Previous assessments
1	2	N/A
2	79	Metal detection

Trial trenching area	Number of trial trenches	Previous assessments
3	33	Metal detection
6	76	Metal detection Field walking
7	15	Metal detection
8	5	Metal detection
9	3	Metal detection
10	1	Metal detection
11	4	Metal detection
12	4	Metal detection
13	2	Metal detection
14	4	Metal detection
15	3	Metal detection
16	4	Metal detection
17	2	Metal detection
18	9	Metal detection
20.2	5	Geophysical
21.2	14	Geophysical
21.3	1	Geophysical
22	13	Geophysical
23	5	Geophysical
24	6	Geophysical
25	5	Geophysical
26	12	Geophysical
27	3	Geophysical
28	5	Geophysical
29	10	Geophysical
30	12	Geophysical
31	3	Geophysical
34	1	N/A
42	5	N/A
43	3	N/A
48	16	Geophysical
49	15	Geophysical
50	5	Geophysical
51	7	Geophysical

Trial trenching area	Number of trial trenches	Previous assessments
52	1	N/A

5.1.3.1 Palaeochannel Recording and Sampling

A number of trenches have been positioned to intercept known or suspected palaeochannels. Where a palaeochannel is cut by an evaluation trench, the geoarchaeologist will clean an appropriate section for recording. The section will be described using an appropriate descriptive system, based on established schemas, including the Soil Survey of England and Wales (Hodgson 1976), and recording such data as texture, fabric, orientation of particles and structure (Brown 1997). The section selected for cleaning and recording will initially start from the former bank of the channel, in order to get the fullest range of sedimentary units within depth of the trench. Where the channel deposits exceed the initial stripping depth, a sondage up to 1m in depth from the current surface will be machine excavated in order to record the deposits as fully as possible. Excavation deeper than 1m will not take place for health and safety reasons.

Sampling will take place in accordance with Section 7, with a particular emphasis on recovery of bulk samples suitable for plant macrofossil assessment and column samples suitable for microfossil assessment and radiocarbon dating. In addition, where suitable mineral sediments for OSL dating are encountered, appropriate light-proof samples will be taken from the channel section with a view to undertaking OSL dating.

5.2 Hand test pitting

Prior to the excavation of the trial trenches, 1m x 1m hand test pits will be excavated at one end of each of the trial trench locations given below, as well as an additional four in Area 1. Excavation will be undertaken by hand, through the topsoil and into the upper surface of the subsoil. In line with the recommendations of current Historic England guidelines (Historic England 2023) the spoil will be subsampled to give a sample of 100 litres from the topsoil, and complete sieving of any excavated subsoil. The spoil from excavation will be sieved as excavation proceeds, with a sieve mesh size of 10mm. Surveying and recording will be as for the investigation of features in 5.1 above. Should any features be encountered, these will also be investigated and sampled as per 5.1 above. Should the presence of a lithic scatter be detected, care will be taken through careful trowel excavation to determine the extent within the test pit, and the scatter recorded and surveyed *in situ* prior to lifting.

Table 2: List of areas in which hand test pitting will occur, the number of test pits and previous assessments.

Trial trenching area	Number of test pits	Previous assessments
21.2	4	Geophysical
21.3	1	Geophysical
22	13	Geophysical
48	15	Geophysical
49	15	Geophysical
50	5	Geophysical
51	7	Geophysical
52	1	N/A

5.3 Geoarchaeology test pitting

Geoarchaeological test pits will be excavated at the end of each of the excavated trial trenches within the areas shown in Table 3 and depicted on Figures 4–7. The location of the test pit in each excavated trial trench has been determined by the geoarchaeologist. Each test pit will be excavated to a maximum depth of 1m from the current ground surface. Each test pit will be excavated after the trial trench is cleaned and recorded and it has been determined that either there are no archaeological features or that any archaeological features have been fully recorded. Each test pit will be 2m x 2m. The geoarchaeologist will clean an appropriate section for recording. The section will be described using an appropriate descriptive system, based on established schemas, including the Soil Survey of England and Wales (Hodgson 1976), and recording such data as texture, fabric, orientation of particles and structure (Brown 1997). This will be recorded in notes, measured section drawings and photographically. Should suitable sediments be encountered the dating of which will assist in archaeological interpretation, appropriately light-proof samples will be taken for OSL dating. The location of each test pit will be surveyed as per the test trenches themselves. Environmental sampling will be as per Section 7.

Table 3: List of areas in which geoarchaeological test pitting will occur, the number of test pits and previous assessments.

Trial trenching area	Number of test pits	Previous assessments
21.2	4	Geophysical
21.3	1	Geophysical
22	13	Geophysical
48	15	Geophysical
49	15	Geophysical
50	5	Geophysical

51	7	Geophysical
52	1	N/A

6 Finds Management

Finds will be exposed, lifted, cleaned, conserved, marked, bagged, and boxed in line with the standards in:

- Watkinson & Neal (1988) *First Aid for Finds*; and
- Chartered Institute for Archaeologists (2020) *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*,² and

Where finds require conservation, this will be done in accordance with the guidelines of the Institute for Conservation (ICON).³

At the start of work, a finds supervisor will be appointed to oversee the collection, processing, cataloguing, and specialist advice on all artefacts collected.

Artefacts will be collected by hand, sieving, and by metal detector. Excavation areas and spoil will be scanned visually and with a metal detector to aid recovery of artefacts. All finds will be bagged and labelled according to the individual deposit from which they were recovered, ready for later cleaning and analysis. 'Special/small finds' may be located more accurately by GPS if appropriate.

All artefacts recovered from excavated features will be retained for post-excavation processing and assessment, except:

- those which are obviously modern in date;
- where very large volumes are recovered (typically ceramic building material); and
- where directed to discard on site by the Curator.

Where artefacts are not removed from site, a strategy will be employed to ensure a sufficient sample is retained, in order to characterise the date and function of the features they were excavated from. A record will be kept of the quantity and nature of artefacts which are not removed from site.

² https://www.archaeologists.net/sites/default/files/CIfAS%26GFinds_2.pdf

³ <https://www.icon.org.uk/>

7 Environmental Sampling

Sampling methods will follow guidelines produced by Historic England and AMS. Where necessary, the project team will consult Historic England's Scientific Advisor on environmental sampling and dating. If necessary, an AMS environmental specialist(s) will visit the site to advise on sampling strategies which will be reviewed periodically during the length of the test excavation. Specialists will be consulted where non-standard sampling is required (e.g. TL, OSL or archaeomagnetic dating) and if appropriate will be invited to visit.

Paleoenvironmental remains will be sampled and processed in accordance with the relevant guidelines produced by Historic England:⁴

- Historic England 2004. *Dendrochronology: Guidelines on Producing and Interpreting Dendrochronological Dates*.
- Historic England 2006. *Archaeomagnetic Dating. Guidelines for Producing and Interpreting Archaeomagnetic Dates*.
- Historic England 2008. *Luminescence Dating. Guidelines on Using Luminescence Dating in Archaeology*.
- Historic England 2008. *Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains*.
- Historic England 2011. *Environmental Archaeology. A guide to the theory and practice of methods, from sampling and recovery to post excavation*, (2nd ed).
- Historic England 2011. *Waterlogged Wood: Guidelines on the recording, sampling, conservation, and curation of waterlogged wood*.
- Historic England 2008. *Investigative conservation. Guidance on how detailed examination of artefacts from archaeological sites can shed light on their manufacture and use*.
- Historic England 2015. *Archaeometallurgy. Guidelines for Best Practice*.
- Historic England 2015. *Geoarchaeology. Using Earth Sciences to Understand the Archaeological Record*.
- Historic England 2018. *Waterlogged organic artefacts. Guidelines on their recovery, analysis and conservation*.
- Historic England 2019. *Animal Bones and Archaeology. Guidelines for Best Practice*.

Environmental samples (up to 40 litres (l) or 100% of context if less is available) will be taken from a range of potentially datable features and well-stratified deposits to target the recovery of plant remains, fish, bird, small mammal and amphibian bone and small artefacts. Samples will be labelled with the site code, context number, and sample number and a register will be kept.

Larger soil samples (up to 100l) may be taken for the complete recovery of animal bones, marine shell, and small artefacts from appropriate contexts. Smaller bulk samples (general biological samples) of 20l will be taken from any waterlogged deposits present for the recovery of macroscopic plant remains and insects. Series of incremental 2l samples may be taken through buried soils and deep feature fills for the recovery of snails and/or waterlogged plant remains, depending on the nature of the stratigraphy and of the soils and sediments.

Columns will be taken from buried soils, peats and waterlogged feature fills for pollen and/or phytoliths, diatoms, ostracods if appropriate. Soil samples will be taken for soil investigations (particle size, organic matter, bulk chemistry, soil micromorphology etc.) in consultation with the appropriate specialists. Where features containing very small artefacts such as micro debitage and hammer scale are identified, 1l grid sampling may be employed.

Early feedback on selected samples taken during the evaluation will result in a dynamic sampling strategy according to the results of rapid assessment of typically 10l sub-samples.

Typically, 20l of each bulk sample will be processed by standard water flotation using a modified Siraf-style machine and meshes of 0.3mm (flot) and 0.5 or 1mm depending on sediment type and like modes of preservation (residue). The remaining soil from a sample will be subsequently processed or discarded based on the results of an initial assessment. Normally, early prehistoric samples will be fully processed, and samples containing human remains will always be fully processed. Heavy residues will be wet sieved, air dried and selectively sorted. Samples taken exclusively for the recovery of bones, marine shell or artefacts will be wet sieved to 2mm. Waterlogged samples will have a sub-sample (approximately 10l) processed as above and the flot will be assessed whilst wet and again once dried. Snail samples (2l) will be processed by hand flotation with flots and residues collected to 0.5mm; these flots and residues will be sorted by the specialist.

Where practical, waterlogged wood specimens will be recorded in detail on site *in situ*. Until it is possible to lift such specimens, they should be maintained wet, covered and protected from extreme weather (e.g. heating or freezing). When removed, they will be cleaned and photographed, and stored in wet, cool conditions for assessment by a suitably qualified specialist.

8 Human Remains

It is currently envisaged that there is a relatively low probability of encountering human remains at this stage of works. As these works are not intended for full mitigation of stripping of areas, where suspected archaeological human remains are discovered, the location will be surveyed, including the depth of the top of the deposit, recorded as far as possible without further disturbance and then carefully covered. No recovery of human remains will take place without agreement from the Curator and Consultant or a valid licence from the Ministry of Justice.

9 Programme

The archaeological trial trenching and geoarchaeological test pitting for the A46 Newark Project is anticipated to take approximately 6–8 weeks to complete. The anticipated start date is 29th August 2023. It is anticipated that the work will take place in two phases (with Phase 1 being further subdivided) (see Table 4), if required a third phase will be undertaken to account for trenches that had to be delayed due to access/crop/flooding constraints. The Contractor / Consultant will advise on phasing timings, and the programme will be shared with the curator at least three weeks prior to the commencement of works.

Table 4: Phase of work, field number and form of evaluation

Phase	Field number	Number of trenches	Geoarchaeology and Hand Test pitting
1.1	22	13	13
1.1	23	5	N/A
1.1	24	6	N/A
1.1	25	5	N/A
1.1	26	11	N/A
1.1	27	3	N/A
1.1	28	4	N/A
1.1	30	16	N/A
1.1	31	3	N/A
1.1	34	1	N/A
1.2	2	75	N/A
1.2	3	17	N/A
1.2	6	76	N/A
1.2	8	5	N/A
1.2	9	3	N/A
1.2	1	2	N/A
1.2	11	4	N/A
1.2	12	4	N/A
1.2	13	2	N/A
1.2	14	4	N/A
1.2	15	3	N/A
1.2	16	4	N/A
1.2	18	9	N/A
2	7	15	N/A

Phase	Field number	Number of trenches	Geoarchaeology and Hand Test pitting
2	20.2	5	N/A
2	21.2	14	4
2	21.3	1	1
2	29	10	N/A
2	33	1	N/A
2	48	11	15
2	49	9	15
2	50	5	5
2	51	4	7
2	52	1	N/A

10 Monitoring

The responsibility for monitoring the progress of the project, to ensure adherence to the Design Brief, the Scope of Works and WSI and the maintenance of professional standards, lies with the Newark & Sherwood District Council Historic Environment Officer. So that arrangements for monitoring can be made, AMS will inform the Newark & Sherwood District Council Historic Environment Officer and Nottinghamshire County Councils Archaeology Officer of AMS's proposed programme to undertake the work and be given one week's notification, in writing, of the start date of the project. Monitoring requirements will also be included in the project timetable with the agreement of the Newark & Sherwood District Council Historic Environment Officer. If appropriate, the Historic England Regional Science Advisor, may also be invited to attend these meetings.

The archaeological evaluation will be subject to regular monitoring visits by Mott MacDonald, Skanska and the Newark & Sherwood District Council and Nottinghamshire County Council Historic Environment Officers, who will have unrestricted access to the working areas, site records or any other information. Archaeological trenches will be signed off by the Newark & Sherwood District Council Historic Environment Officer. It is envisaged that such sign offs will be subject to in-person inspection of trenches by the Newark & Sherwood District Council Historic Environment Officer and Nottinghamshire County Council Archaeology Officer, with visits to facilitate this being initially on a bi-weekly basis. These visits will be organised by AMS.

Verbal progress reports will be provided to Mott MacDonald and Skanska upon request, with a minimum weekly meeting. These reports will form the basis of weekly written progress reports (via email each Monday) to be provided to Mott MacDonald, Skanska, Newark & Sherwood District Council and Nottinghamshire County Council by AMS during the archaeological fieldwork.

11 Safety, Health & Welfare at Work

All survey works will be carried out in accordance with current H&S legislation. A project specific Risk Assessment Method Statement (RAMS) will be in place at the commencement of on-site services (AMS 2023). This RAMS will conform to the overarching scheme RAMS provided by Skanska as Principal Contractor. All staff will be inducted and briefed prior to commencing on-site work, have appropriate safety training, wear appropriate PPE and use sunscreen when necessary. Site visitors will undergo induction by AMS.

12 Reporting

12.1 Interim reports

Interim reports for each area/field will be produced during the fieldwork, as and when the testing in each area is completed. These will summarise in tabular form, the archaeological findings, other quantitative data (such as the number of artefacts & samples retrieved) and be accompanied by a plan of the remains.

12.2 Preliminary evaluation report

A draft report on the archaeological trial trenching and geoarchaeological test pitting will be completed within four weeks of completion of the fieldwork. This report will be submitted to Mott MacDonald and Skanska UK Construction Ltd for review.

The report will include the following information:

- A non-technical summary (300 words maximum);
- Background and aims of trial trenching and geoarchaeological test pitting;
- Description of the areas tested;
- Methodology;
- Results;
- Discussion and conclusions;
- Recommendations;
- References;
- Figures (digitised plans of feature locations and sections through features);
- Plates (site photographs and finds photographs);
- Archive Location and quantity (digital, paper, & artefactual); and
- Appendices (specialist assessments, technical detail & supporting information).

Digital copies of the completed draft preliminary evaluation report will be submitted in both Word and PDF format to Mott MacDonald and Skanska for comment. When the amendments of the draft report have been agreed, Mott MacDonald will submit a copy of the draft report to the Newark & Sherwood District Council Historic Environment Officer and Nottinghamshire County Council Archaeology Officer. In finalising the report, the comments of Mott MacDonald and the Newark & Sherwood District Council Historic Environment Officer will be considered.

The final version of the report will be submitted to Mott MacDonald and Skanska within four weeks of the receipt of comments on the draft report.

Upon completion and approval of the final report, copies of the report will be issued to the client, as well as relevant Historic Environment Record, local authority Planning Officer and/or Conservation Officer. An OASIS online record will be created, and a PDF version submitted. Subject to contractual obligations on confidentiality, copies of the report will be provided to relevant local and national records and published through the Archaeology Data Service.

12.3 Final evaluation report

Should further assessment work be recommended at the preliminary reporting stage, a further report will be compiled, incorporating the findings of the specialist assessments undertaken, including any palaeoenvironmental, artefactual and dating results. The scope and content of this report will be agreed with Mott MacDonald and Skanska in consultation with the Newark & Sherwood District Council Historic Environment Officer and Nottinghamshire County Council Archaeology Officer.

13 Archive Storage and Curation

The project archive will be prepared in accordance with Archaeology Data Service's *Guides to Good Practice*⁵ (online) and *ADS Guidelines for Depositors* (ADS 2021). It is envisaged that the archive will be deposited within 6–12 months of project completion.

If any artefacts are recovered from the archaeological trial trenching and geoarchaeological test pitting, they will be retained unless otherwise agreed with the Consultant, Contractor and Newark & Sherwood District Council Historic Environment Officer and Nottingham County Council Senior Practitioner Archaeology) for further analysis during the reporting phase of the archaeological mitigation of the main construction phase. It is envisaged that the Newark Museum will be the final depositary of the finds from the archaeological works of the scheme. An accession number has been applied for.

Upon completion and approval of the final report, copies of the report will be issued to the client, as well as relevant Historic Environment Record, Newark & Sherwood District Council Historic Environment Officer and Nottingham County Council Senior Practitioner Archaeology. An OASIS online record will be created, and a PDF version of the final report submitted. Subject to contractual obligations on confidentiality, copies of the report will be provided to relevant local and national records and published through the Archaeology Data Service.

⁵ Available online @ <https://guides.archaeologydataservice.ac.uk/g2gpwiki/> Accessed on 1 August 2022.

14 Copyright

The copyright of the report and archive will be retained by AMS under the *Copyright, Designs and Patents Act 1988*, with all rights reserved. The client will be licensed to use each report for the purposes that it was produced in relation to the project as described in the specification. The archive repository, however, will be granted an exclusive license 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*.

Information relating to the project will be deposited with the Historic Environment Record where it can be freely copied with reference to AMS for the purposes of archaeological research or development control within the planning process.

Where the project documentation or archive contains material that is non-AMS copyright, or the intellectual property of third parties, which AMS are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable. Users remain bound by the conditions of the Copyright, Designs and Patents Act 1988 regarding copying and electronic dissemination of such material.

15 References

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Inset Map

Project
A46 Newark Bypass

Title
Site Location

Legend
Order Limits
Trenching Areas

AMS

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J3063-A

Scale @ A3
1:25,000

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RZ

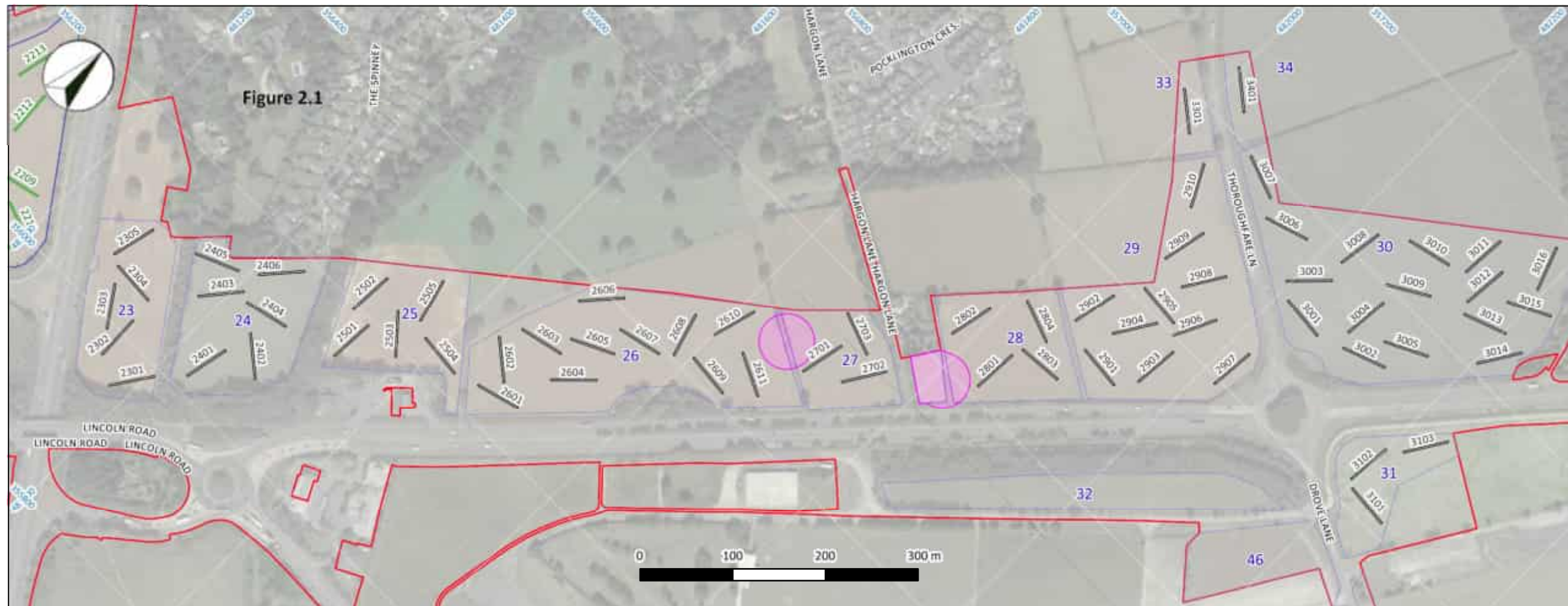
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SL

Date
22 08 23

Rev.
1.2

CRS
OSGB36

Figure
1



Inset Map

Project
A46 Newark Bypass

Title
Title
Location of Evaluation Trenches (Northern)

Legend

- Order Limits
- Areas
- Ecological Exclusion Zone
- Trenches
- Trenches with georchaological investigation



AMS

Project No.
J3063-A

Scale @A3
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Date 22 08 23	Rev. 1.2

Copyright Notes
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Location of Figures 3.1, 3.2 and 3.3 in Figure 3

CRS
OSGB36

Figure
2.1-2



Project
A46 Newark Bypass

Title
Location of Evaluation Trenches
Fields 7-18
Fields 1-3, 6 & 52
Fields 48-51



Legend

- Order Limits
- Areas
- Ecological Exclusion Zone
- Trenches
- Trenches with georchaaeological investigation

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	Scale @A3		1:5,000
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Date		Rev.	
22 08 23		1.2	
Copyright Notes		CRS	
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Location of Figures 3.1, 3.2 and 3.3 in Figure 1		Figure	
		3.1-3	



Inset Map

Project
A46 Newark Bypass

Title
Location of geoarchaeological trenches over greyscale image of gradiometry results. Fields 27-31, 33 & 34

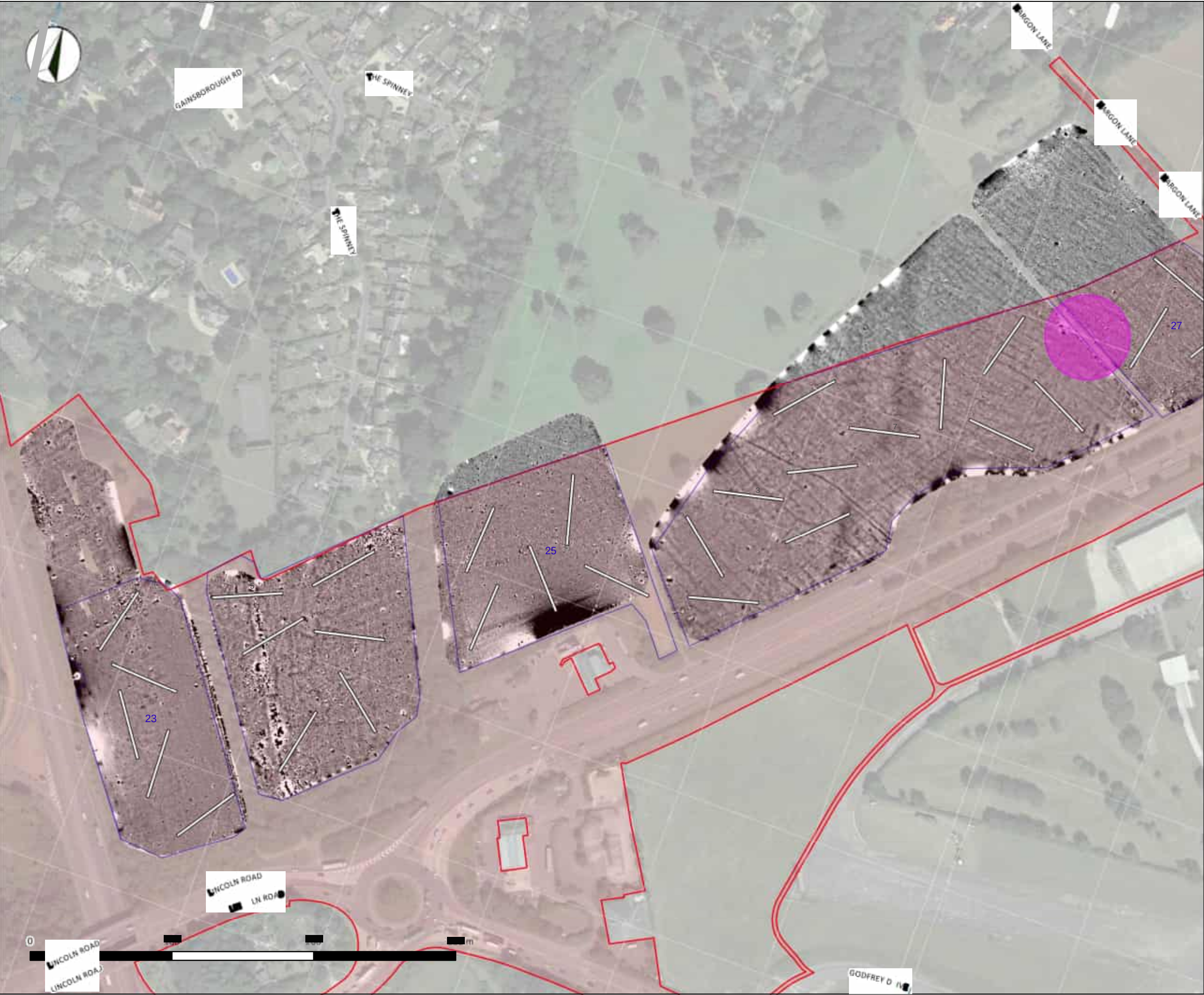
Legend

- Order Limits
- Areas
- Trenches
- Ecological Exclusion Zone

Project No.	
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Drawn	Check
RZ	SL
Date	Rev.
22 08 23	1.2

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OSGB36
Figure
4



Inset Map

Project
A46 Newark Bypass

Title
Location of geoarchaeological trenches over greyscale image of gradiometry results Fields 23–27

Legend

- Order Limits
- J3063A_A46_Trench_Areas_Ply_12072023
- Ecological Exclusion Zone
- Trenches

Project No. J3063-A	
Scale@A3 1:2500	
Drawn RZ	Check SL
Date 22 08 23	Rev. 1.2

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Figure 5



Inset Map

Project
A46 Newark Bypass

Title
Location of geoarchaeological trenches over
greyscale image of gradiometry results
(Areas 20–22)

Legend

- Order Limits
- Areas
- Trenches
- Trenches with georchaological investigation

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1:2500	
Drawn	Check
RZ	SL
Date	Rev.
22 08 23	1.2

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Figure
6



Inset Map

Project
A46 Newark Bypass

Title
Location of geoarchaeological trenches over greyscale image of gradiometry results Fields 48-51

Legend

- Order Limits
- Areas
- Trenches
- Trenches with georchaological investigation

Project No.	
J3063-A	
Scale @A3	
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Drawn	Check
RZ	SL
Date	Rev.
22 08 23	1.2
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Figure	
7	

H. Appendix: Trial Trenching Survey Report

Preliminary A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report



Prepared for Skanska / National Highways

By Pese Salinas, Ros Ó Maoldúin, Steve Lancaster, Marissa Honeyman and Brigid Melloy

October 2024

TITLE PAGE

AMS Job No.: J3063-A

Project Name: A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting

Client Name: Skanska / National Highways

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Technical Reviewers: Josh Cameron

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Disclaimer

The results, conclusions and recommendations contained within this report are based on information available at the time of its preparation. Whilst every effort has been made to ensure that all relevant data have been collated, the authors and AMS accept no responsibility for omissions and/or inconsistencies that may result from information becoming available subsequent to the report's completion.

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Summary

This report details the results of archaeological trial trenching and geoarchaeological test pitting undertaken at Newark-upon-Trent along the route of the proposed A46 Newark Bypass, Nottinghamshire by Archaeological Management Solutions (AMS) on behalf of Skanska Construction UK Ltd between August 2023 and June 2024. The scheme extends for approximately 6km, passing the western and northern extents of Newark-on-Trent, between the Farndon and Winthorpe roundabouts. Prior to the archaeological trial trenching, fieldwalking (Gethin 2023), metal detection (Gethin & Appleby 2023) and geophysical survey (Dowling 2022 & 2023) were undertaken of sections of the proposed route and are reported separately.

The Trial trenching programme has been refined over time with some of the numbered fields removed from the programme. As a result the field numbering system is not fully sequential. Trial trenching was undertaken in the following trenches: 1, 2, 3, 6, 8, 9, 11, 12, 13, 14, 15, 16, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 34, 48, 49, 50 and 51. Fieldwork has been delayed in two fields for access reasons (7 and 52). In total, thus far, 282 trenches (x 50m = 14,100m) of trenching has been carried out across 30 fields. This report details the results of the trial trenching in those 30 fields, which can be grouped into six larger areas.

The first of the six areas included four fields (1, 2, 3 & 6) at the south of the scheme. Little to no archaeological remains were uncovered in this area; however, it is in a floodplain and there are deep soft sediments which were probably largely deposited or reworked in recent times and there is potential for riverine archaeology from the post-medieval era (preserved boats, bridge elements or other riverine infrastructure) to exist within these deposits and the deeper gravel deposits, which may contain even earlier archaeological material and deeper earlier (prehistoric) remains.

The second area comprised nine fields (8, 9, 11–16 & 18), northeast of Newark and southwest of Winthorpe. A metal detecting survey was conducted in every field and recovered occasional post-medieval to medieval finds; however, little to no archaeological remains were uncovered in this area.

The third area comprised three fields (20–22) northeast of Newark and southwest of Winthorpe. Geophysical survey in this area indicated a substantial series of rectilinear enclosures across Fields 20 and 21. The trial trenching confirmed the presence of the rectilinear enclosures, and suggests they are settlement enclosures predominantly dating to the Roman period but also the preceding Iron Age, and that later Saxon settlement is also present outside of the area of the enclosures. The rectilinear settlement enclosures extended across almost the entire breadth of Fields 20 and 21, covering an area of c. 450m east–west by up to 100m north–south, with activity apparently concentrated in Field 20 and the west of Field 21. Analyses of the pottery suggests the settlement originated in the Middle Iron Age but is predominantly Roman. The Roman pottery is dominated by Trent Valley Ware, suggesting a focus of activity in the mid–late first century AD. The latest material is mid-third, or slightly later third-century AD. While only a tentative suggestion based on a small sample, it does appear that this settlement may have gone out of use around that date. The Saxon activity included a sunken-floored building and several pits, all of which occurred outside and to the south of the rectilinear enclosures. Environmental remains including rye, oats, barley, and flax and artefactual remains including loom weights and Charnwood fabric pottery suggest a good level of preservation. Little early Saxon habitation has been excavated within the region and the potential for a more extensive Saxon settlement here presents an important research opportunity.

The fourth area comprised five fields (23–27) southeast of Winthorpe, north of the A1 and south of Hargon Lane. Geophysical survey had indicated possible enclosures in Fields 24 and 26. The enclosure in Field 24 was confirmed but no dating evidence was retrieved from it. Other features within the same field produced Middle Iron Age and early Roman finds. A seventeenth-century musket ball was also retrieved through metal detecting the upcast topsoil of one trench. A scatter of loosely distributed pits and possible postholes was identified in Field 25 and the west of Field 26. These remain undated;

however, lithics found adjacent to some of them suggest a broadly Neolithic to Bronze Age date. A pit found in Field 27, likely dug around or just after 1939, contained 1908 British military webbing, newspaper fragments from 1939 and some tins and other personal items.

The fifth area comprised five fields (28–31 & 34) located northwest of Winthorpe, north of Hargon Lane. Geophysical survey undertaken prior to the archaeological trial trenching (Dowling 2022) did not identify any anomalies suggestive of significant archaeological remains. However, it did record several ‘pit-type anomalies’, some of which were thought likely to be quarry pits in Field 29. It also identified an anomaly likely to be a ring-ditch in the northern part of Field 30, outside of the area to be tested. The archaeological trial trenching only encountered remains in Fields 29 and 31. In Area 29, the pit-type anomalies were confirmed as likely quarry pits of eighteenth–nineteenth-century date, probably for sand and gravel. In Field 31, a scatter of three pits that remain to be dated was discovered.

The sixth area comprised four fields (48–51) located to the west of the scheme, north of Averham and south of Kelham. A potential for Late Upper Palaeolithic remains was identified in this area. No palaeolithic artefacts were found; however, a palaeochannel and fine laminated sands were encountered, and Optically Stimulated Luminescence (OSL) samples were retrieved and are being dated. A cropmark recorded monument (L2958) is recorded in the north of Field 48. The geophysical survey indicated two distinct enclosures here. The first, against the eastern boundary of the field, north of centre, was indicated by a set of rectilinear enclosures with rounded corners. This was comprehensively tested but did not return any dating material. The extent within the area tested and surveyed is approximately 500m by 300m. The other enclosure manifested in the magnetometer survey as an L-shaped anomaly, with more angular corners. Archaeological trial trenching revealed it to be a ditched enclosure with internal features, all of Roman date. The pottery suggested dates ranging from AD 45 to 250. The archaeological trial trenching also revealed a pit of Neolithic date, located midway between the two enclosures.

The archaeological trial trenching suggests that the remains along the route of the proposed A46 Newark Northern Bypass have the potential to contribute to several of the developing overarching themes (OTs) and research questions identified in the draft Archaeological Management Plan (AMP). The mitigation requirements for the scheme will be detailed within the next draft of the AMP produced by Skanska/Mott MacDonald as part of the Development Consent Order (DCO) application.

Table of Contents

1	Introduction.....	26
1.1	Project Background	26
1.2	Purpose and Scope of this Assessment	26
1.2.1	Project Aim.....	27
1.2.2	Project Objectives.....	30
1.3	Site Location.....	31
1.4	The Archaeological Strategy	31
2	Methodology	33
2.1	Archaeological Trial Trenching Methods	33
2.1.1	Standards	33
2.1.2	Pre-commencement	33
2.1.3	Excavation methodology.....	33
2.1.4	Palaeochannel Recording and Sampling	36
2.2	Hand Test Pitting Methods	36
2.3	Geoarchaeological Test Pitting.....	37
2.4	Finds Management.....	37
2.5	Environmental Sampling.....	38
2.6	Strategy for dealing with Human Remains	39
3	Findings	40
3.1	Field 1	40
3.1.1	Area specific archaeological background	40
3.1.2	Results of the trial trenching	40
3.1.3	Summary and Conclusions	40
3.2	Field 2	40
3.2.1	Area specific archaeological background	40
3.2.2	Results of the trial trenching	41
3.2.3	Summary and Conclusions	43

3.3	Field 3.....	43
3.3.1	Area specific archaeological background	43
3.3.2	Results of the trial trenching	44
3.3.3	Summary and Conclusions	44
3.4	Field 6.....	44
3.4.1	Area specific archaeological background	44
3.4.2	Results of the trial trenching	45
3.4.3	Summary and Conclusions	45
3.5	Field 8.....	45
3.5.1	Area specific archaeological background	45
3.5.2	Results of the trial trenching	46
3.5.3	Summary and Conclusions	46
3.6	Field 9.....	47
3.6.1	Area specific archaeological background	47
3.6.2	Results of the trial trenching	47
3.6.3	Summary and Conclusions	47
3.7	Field 11	48
3.7.1	Area specific archaeological background	48
3.7.2	Results of the trial trenching	48
3.7.3	Summary and Conclusions	48
3.8	Field 12	48
3.8.1	Area specific archaeological background	48
3.8.2	Results of the trial trenching	48
3.8.3	Summary and Conclusions	49
3.9	Field 13.....	49
3.9.1	Area specific archaeological background	49
3.9.2	Results of the trial trenching	49
3.2.3	Summary and Conclusions	43

3.10 Field 14	50
3.10.1 Area specific archaeological background	50
3.10.2 Results of the trial trenching	50
3.10.3 Summary and Conclusions	50
3.11 Field 15	51
3.11.1 Area specific archaeological background	51
3.11.2 Results of the trial trenching	51
3.11.3 Summary and Conclusions	51
3.12 Field 16	51
3.12.1 Area specific archaeological background	51
3.12.2 Results of the trial trenching	51
3.12.3 Summary and Conclusions	52
3.13 Field 18	52
3.13.1 Area specific archaeological background	52
3.13.2 Results of the trial trenching	52
3.13.3 Summary and Conclusions	53
3.20 Field 20	53
3.20.1 Area specific archaeological background	53
3.20.2 Results of the trial trenching	54
3.20.3 Summary and Conclusions	57
3.21 Field 21	58
3.21.1 Area specific archaeological background	58
3.21.2 Results of the trial trenching	59
3.21.3 Results of the hand test pitting	62
3.21.4 Results of the geoarchaeological test pitting	62
3.21.5 Summary and Conclusions	62
3.22 Field 22	63
3.22.1 Area specific archaeological background	63
3.22.3 Summary and Conclusions	63

3.22.2 Results of the trial trenching	63
3.22.3 Results of the hand test pitting	65
3.22.4 Results of the geoarchaeological test pitting	65
3.22.5 Summary and Conclusions	66
3.23 Field 23	66
3.23.1 Area specific archaeological background	66
3.23.2 Results of the trial trenching	66
3.23.3 Summary and Conclusions	67
3.24 Field 24	67
3.24.1 Area specific archaeological background	67
3.24.2 Results of the trial trenching	68
3.24.3 Summary and Conclusions	70
3.25 Field 25	70
3.25.1 Area specific archaeological background	70
3.25.2 Results of the trial trenching	70
3.25.3 Summary and Conclusions	72
3.26 Field 26	72
3.26.1 Area specific archaeological background	72
3.26.2 Results of the trial trenching	73
3.26.3 Summary and Conclusions	74
3.27 Field 27	75
3.27.1 Area specific archaeological background	75
3.27.2 Results of the trial trenching	75
3.27.3 Summary and Conclusions	75
3.28 Field 28	76
3.28.1 Area specific archaeological background	76
3.28.2 Results of the trial trenching	76
3.2.3 Summary and Conclusions	43

3.29 Field 29	76
3.29.1 Area specific archaeological background	76
3.29.2 Results of the trial trenching	77
3.29.3 Summary and conclusions.....	78
3.30 Field 30	78
3.30.1 Area specific archaeological background	78
3.30.2 Results of the trial trenching	79
3.30.3 Summary and Conclusions	80
3.31 Field 31	81
3.31.1 Area specific archaeological background	81
3.31.2 Results of the trial trenching	81
3.31.3 Summary and Conclusions	81
3.32 Field 34	81
3.32.1 Area specific archaeological background	81
3.32.2 Results of the trial trenching	81
3.32.3 Summary and Conclusions	82
3.33 Field 48	82
3.33.1 Area specific archaeological background	82
3.33.2 Results of the trial trenching	83
3.33.3 Results of the hand test pitting	86
3.33.4 Results of the geoarchaeological test pitting	86
3.33.5 Summary and Conclusions	86
3.34 Field 49	87
3.34.1 Area specific archaeological background	87
3.34.2 Results of the trial trenching	87
3.34.3 Results of the hand test pitting	88
3.34.4 Results of the geoarchaeological test pitting	88
3.2.3 Summary and Conclusions	43

3.35 Field 50	88
3.35.1 Area specific archaeological background	88
3.35.2 Results of the trial trenching	88
3.35.3 Results of the hand test pitting	89
3.35.4 Results of the geoarchaeological test pitting	89
3.35.5 Summary and Conclusions	89
3.36 Field 51	89
3.36.1 Area specific archaeological background	89
3.36.2 Results of the trial trenching	90
3.36.3 Results of the geoarchaeological test pitting	91
3.36.4 Summary and Conclusions	91
4 Discussions, Conclusions and Recommendations.....	93
4.1 Discussions and Conclusions.....	93
4.1.1 Fields 1, 2, 3 and 6	93
4.1.2 Fields 8 to 9, 11–16 and 18	94
4.1.3 Fields 20, 21 and 22	95
4.1.4 Fields 23 to 27	97
4.1.5 Fields 28 to 31 and 34.....	98
4.1.6 Fields 48 to 51	99
4.2 Recommendations for Mitigation	101
References	102
Online Sources.....	103
Appendix 1.1: Context Register	104
Appendix 1.2: Site Finds Register	181
Appendix 1.3: Site Sample Register.....	187
Appendix 1.4.1: Drawing Register (Phase 1).....	189
Appendix 1.4.2: Drawing Register (Phase 2).....	192
Appendix 1.4.3: Drawing Register (Phase 3).....	197
Appendix 1.5: Photograph Register.....	198
Appendix 2.1: Hand Test Pit Descriptions.....	271
Appendix 3.2.3 - Summary and Conclusions	43

Appendix 2.1.1: Photograph Register: Hand Test Pits.....	276
Appendix 2.2: Geoarchaeological Test Pit Descriptions	278
Appendix 3: Neolithic Pottery Report	
Appendix 4: Iron Age, Roman and Mediaeval Pottery, Fired Clay Fragments and Loom Weights Report	
Appendix 5: Animal Bone Report	
Appendix 6: Worked Flint and Small Finds Report	
Appendix 7: Miscellaneous Small Finds Report	
Appendix 8: Twentieth-Century Pit Contents Report	
Appendix 9: Environmental Samples Report	

List of Tables

Table 1: List of fields in which trial trenching occurred, the number of trenches and previous assessments.....	35
Table 2: List of areas/fields in which hand test pitting occurred, the number of test pits and previous assessments.....	36
Table 3: List of fields in which geoarchaeological test pitting occurred, the number of test pits and previous assessments.	37
Table 4: Summary of trenches in Field 1.....	40
Table 5: Metal detecting artefactual details in Field 2.....	41
Table 6: Summary of trenches in Field 2.....	43
Table 7: Metal detecting artefactual details in Field 3.....	43
Table 8: Summary of trenches in Field 3.....	44
Table 9: Metal detecting artefactual details in Field 6.....	45
Table 10: Summary of trenches in Field 6.....	45
Table 11: Metal detecting artefactual details in Field 8.....	46
Table 12: Summary of trenches in Field 8.....	46
Table 13: Metal detecting artefactual details in Field 9.....	47
Table 14: Summary of trenches in Field 9.....	47
Table 15: Summary of trenches in Field 11	48
Table 16: Summary of trenches in Field 12	49
Table 17: Summary of trenches in Field 13	49
Table 18: Metal detecting artefactual details in Field 14.....	50
Table 19: Summary of trenches in Field 14	50
3.2.3 Summary and Conclusions	43

Table 20: Summary of trenches in Field 15	51

3.2.3 Summary and Conclusions	43

Table 21: Summary of trenches in Field 16	52
Table 22: Metal detecting artefactual details in Field 18	52
Table 23: Summary of trenches in Field 18	53
Table 24: Principal geophysical anomalies in Field 20	53
Table 25: Summary of trenches in Field 20	56
Table 26: Principal geophysical anomalies in Field 21	58
Table 27: Summary of trenches in Field 21	61
Table 28: Principal geophysical anomalies in Field 22	63
Table 29: Summary of trenches in Field 22	65
Table 30: Summary of trenches in Field 23	67
Table 31: Principal geophysical anomalies in Field 24	67
Table 32: Summary of trenches in Field 24	69
Table 33: Summary of trenches in Field 25	71
Table 34: Principal geophysical anomalies in Field 26	72
Table 35: Summary of trenches in Field 26	74
Table 36: Summary of trenches in Field 27	75
Table 37: Summary of trenches in Field 28	76
Table 38: Principal geophysical anomalies in Field 28	77
Table 39: Summary of trenches in Field 29	77
Table 40: Principal geophysical anomalies in Field 30	78
Table 41: Summary of trenches in Field 30	80
Table 42: Summary of trenches in Field 31	81
Table 43: Summary of trenches in Field 34	82
Table 44: Principal geophysical anomalies in Field 48	83
Table 45: Summary of trenches in Field 48	85
Table 46: Summary of trenches in Field 49	87
Table 47: Summary of trenches in Field 50	89
Table 48: Principal geophysical anomalies in Field 51	90
Table 49: Summary of trenches in Field 51	90

List of Figures

Figure 1: Site Location

Figure 2.1–2: Location of Evaluation Trenches (Northern)

Figure 3.1–3: Location of Evaluation Trenches (Southern)

Figure 4: Plan of excavated Field 1 Trenches

Figure 5: Plan of excavated Field 2 Trenches

Figure 6.1: Field 2 Excavated Plan

Figure 6.2: Field 2 Sections

Figure 7: Plan of excavated Field 3 Trenches

Figure 8: Plan of excavated Field 6 Trenches

Figure 9: Plans of excavated Field 8 Trenches

Figure 10: Plan of excavated Field 9 Trenches

Figure 11: Plan of excavated Field 11 Trenches

Figure 12: Plan of excavated Field 12 Trenches

Figure 13: Plan of excavated Field 13 Trenches

Figure 14: Plan of excavated Field 14 Trenches

Figure 15: Plan of excavated Field 15 Trenches

Figure 16: Plan of excavated Field 16 Trenches

Figure 17.1: Field 16 Excavated Plan ii

Figure 18: Plan excavated Field 18 Trenches

Figure 19.1: Field 18 Excavated Plan ii

Figure 20: Plan excavated Field 20 Trenches

Figure 21.1: Field 20 Excavated Plan

Figure 21.2: Field 20 Sections

Figure 21.3: Field 20 Sections ii

Figure 22: Plan excavated Field 21 Trenches

Figure 23.1: Field 21 Excavated Plan i

Figure 23.2: Field 21 Excavated Plan ii

Figure 23.3: Field 21 Sections

Figure 23.4: Field 21 Sections ii

Figure 24: Plan Excavated Field 22 Trenches

Figure 25.1: Field 22 Excavated Plan

Figure 25.2: Field 22 Sections

Figure 25.3: Field 22 Sections ii

Figure 26: Plan of Excavated 23 Trenches

Figure 27.1: Field 23 Excavated Plan

Figure 27.2: Field 23 Sections

Figure 28: Plan of Excavated Field 24 Trenches

Figure 29.1: Field 24 Excavated Plan

Figure 29.2: Field 24 Sections

Figure 29.3: Field 24 Sections

Figure 30: Plan of Excavated Field 25 Trenches

Figure 31.1: Field 25 Excavated Plan

Figure 31.2: Field 25 Sections

Figure 32: Plan of Excavated Field 26 Trenches

Figure 33.1: Field 26 Excavated Plan

Figure 33.2: Field 26 Sections

Figure 34: Plan of Excavated Field 27 Trenches

Figure 35.1: Field 27 Excavated Plan

Figure 35.2: Field 27 Sections

Figure 36: Plan of Excavated Field 28 Trenches

Figure 37.1: Field 28 Excavated Plan

Figure 38: Plan of Excavated Field 29 Trenches

Figure 39.1: Field 29 Excavated Plan

Figure 39.2: Field 29 Sections

Figure 40: Plan of Excavated Field 30 Trenches

Figure 41.1: Field 30 Excavated Plan i

Figure 41.2: Field 30 Excavated Plan ii

Figure 41.3: Field 30 Sections i

Figure 41.4: Field 30 Sections ii

Figure 42: Plan of excavated Field 31 Trenches

Figure 43.1: Field 31 Excavated Plan

Figure 43.2: Field 31 Sections

Figure 44: Plan of Excavated Field 34 Trenches

Figure 45: Plan of Excavated Field 48 Trenches

Figure 46.1: Field 48 Excavated Plan i

Figure 46.2: Field 48 Excavated Plan ii

Figure 46.3: Field 48 Sections i

Figure 46.4: Field 48 Sections

Figure 47: Plan of Excavated Field 49 and 50 Trenches

Figure 48.1: Fields 49 & 50 Excavated Plan

Figure 48.2: Fields 49 & 50 Sections

Figure 49: Plan of Excavated Field 51 Trenches

Figure 50.1: Field 51 Excavated Plan

Figure 50.2: Field 51 Sections

List of Plates

- Plate 1: General stratigraphy of Trench 0101, looking east-northeast (Scale: 2m)
- Plate 2: General stratigraphy of Trench 0102, looking northwest (Scale: 2m)
- Plate 3: Sondage in Trench 0101, looking east-southeast (Scale: 1 x 2m)
- Plate 4: Post-excavation of Trench 0101, looking north (Scale: 2 x 1m)
- Plate 5: Post-excavation of Trench 0102, looking southwest (Scale: 2 x 1m)
- Plate 6: Sondage in Trench 0250, showing level of water table, looking east-northeast (Scale: 2 x 1m)
- Plate 7: Sondage in Trench 0258, showing level of water table, looking west (Scale: 2m)
- Plate 8: General stratigraphy of Trench 0221, looking west (Scale: 2 x 1m)
- Plate 9: General stratigraphy of Trench 0260, looking east (Scale: 2 x 1m)
- Plate 10: Sondage in Trench 0217, looking northwest (Scale: 2 x 1m)
- Plate 11: Sondage in Trench 0241, looking northeast (Scale: 2m)
- Plate 12: Sondage in Trench 0255, looking northeast (Scale: 2m)
- Plate 13: Post-excavation of Trench 0213, looking west (Scale: 2 x 1m)
- Plate 14: North-northwest-facing section of C.021304 (Scale: 2 x 1m)
- Plate 15: Post-medieval–modern artefacts from C.021304 (no scale)
- Plate 16: Post-excavation of Trench 0214, looking northeast (Scale: 2 x 1m)
- Plate 17: Southeast-facing section of C.021404 (Scale: 2 x 1m)
- Plate 18: Clay tobacco pipes from C.021404 (no scale)
- Plate 19: Glass shard from C.021404 (no scale)
- Plate 20: Post-medieval–modern pottery from C.021404 (no scale)
- Plate 21: Post-excavation photograph of Trench 0217, looking east-northeast (Scale: 2 x 1m)
- Plate 22: Northwest-facing section of C.021705, looking southeast (Scale: 2 x 1m)
- Plate 23: Post-medieval–modern pottery from C.021707 (no scale)
- Plate 24: Glass from C.021707 (no scale)
- Plate 25: Pre-excavation photograph of C.026905, looking east (Scale: 0.1m)
- Plate 26: Post-excavation photograph of Trench 0205, looking southeast (Scale: 2 x 1m)
- Plate 27: Post-excavation photograph of Trench 0215, looking north (Scale: 2 x 1m)
- Plate 28: Post-excavation photograph of Trench 0239, looking west (Scale: 2 x 1m)
- Plate 29: General stratigraphy of Trench 0302, looking east-northeast (Scale: 2 x 1m)
- Plate 30: General stratigraphy of Trench 0314, looking southwest (Scale: 2 x 1m)

- Plate 31: Sondage in Trench 0311, looking southeast (Scale: 2m)
- Plate 32: Post-excavation photograph of Trench 0307, looking north (Scale: 2 x 1m)
- Plate 33: Post-excavation photograph of Trench 0314, looking southeast (Scale: 2 x 1m)
- Plate 34: Post-excavation photograph of Trench 0317, looking southwest (Scale: 2 x 1m)
- Plate 35: General stratigraphy of Trench 0635, looking northwest (Scale: 1m)
- Plate 36: General stratigraphy of Trench 0602, looking east (Scale: 2 x 1m)
- Plate 37: General stratigraphy of Trench 0653, looking northwest (Scale: 1m)
- Plate 38: Post-excavation photograph of Trench 0611, looking northeast (Scale: 1m)
- Plate 39: Post-excavation photograph of Trench 0623, looking west (Scale: 1m)
- Plate 40: General stratigraphy in Trench 0801, looking east (Scale: 2 x 1m)
- Plate 41: General stratigraphy in Trench 0803, looking northwest (Scale: 2 x 1m)
- Plate 42: Sondage in Trench 0801, showing water level, looking east-southeast (Scale: 2 x 1m)
- Plate 43: Post-excavation photograph of Trench 0802, looking northwest (Scale: 2 x 1m)
- Plate 44: Post-excavation photograph of Trench 0802, looking northeast (Scale: 2 x 1m)
- Plate 45: General stratigraphy in Trench 0901, looking northwest (Scale: 2 x 1m)
- Plate 46: General stratigraphy in Trench 0903, looking southwest (Scale: 2 x 1m)
- Plate 47: Post-excavation photograph of Trench 0901, looking northeast (Scale: 2 x 1m)
- Plate 48: Post-excavation photograph of Trench 0902, looking northeast (Scale: 2 x 1m)
- Plate 49: General stratigraphy in Trench 1101, looking northeast (Scale: 2 x 1m)
- Plate 50: General stratigraphy in Trench 1104, looking north (Scale: 2 x 1m)
- Plate 51: Sondage in Trench 1101, showing water level, looking southeast (Scale: 2m)
- Plate 52: Post-excavation photograph of Trench 1102, looking southeast (Scale: 2 x 1m)
- Plate 53: Post-excavation photograph of Trench 1103, looking northeast (Scale: 2 x 1m)
- Plate 54: General stratigraphy in Trench 1203, looking southeast (Scale: 2 x 1m)
- Plate 55: General stratigraphy in Trench 1204, looking northeast (Scale: 2 x 1m)
- Plate 56: Post-excavation photograph of Trench 1201, looking northeast (Scale: 2 x 1m)
- Plate 57: Post-excavation photograph of Trench 1202, looking northwest (Scale: 2 x 1m)
- Plate 58: General stratigraphy in Trench 1301, looking northeast (Scale: 2 x 1m)
- Plate 59: General stratigraphy in Trench 1302, looking northeast (Scale: 2 x 1m)
- Plate 60: Post-excavation photograph of Trench 1301, looking southwest (Scale: 2 x 1m)
- Plate 61: Post-excavation photograph of Trench 1302, looking west-northwest (Scale: 2 x 1m)
- Plate 62: General stratigraphy in Trench 1401, looking south (Scale: 2 x 1m)
- Plate 63: General stratigraphy in Trench 1404, looking west-northwest (Scale: 2 x 1m)
- Plate 64: Post-excavation photograph of Trench 1402, looking southeast (Scale: 2 x 1m)

- Plate 65: Post-excavation photograph of Trench 1403, looking west (Scale: 2 x 1m)
- Plate 66: General stratigraphy in Trench 1501, looking southwest (Scale: 2 x 1m)
- Plate 67: General stratigraphy in Trench 1503, looking northeast (Scale: 2 x 1m)
- Plate 68: Post-excavation photograph of Trench 1502, looking southwest (Scale: 2 x 1m)
- Plate 69: Post-excavation photograph of Trench 1503, looking northwest (Scale: 2 x 1m)
- Plate 70: General stratigraphy in Trench 1601, looking east (Scale: 1m)
- Plate 71: General stratigraphy in Trench 1604, looking northwest (Scale: 1m)
- Plate 72: Post-excavation photograph of Trench 1602, looking southeast (Scale: 1m)
- Plate 73: Post-excavation photograph of Trench 1603, looking northeast (Scale: 1m)
- Plate 74: General stratigraphy in Trench 1809, looking north-northeast (Scale: 1m)
- Plate 75: General stratigraphy in Trench 1808, looking north (Scale: 1m)
- Plate 76: Southeast-facing section of test pit in Trench 1805, looking northwest (Scale: 1m)
- Plate 77: Post-excavation photograph of Trench 1804, looking south (Scale: 1m)
- Plate 78: Post-excavation photograph of Trench 1809, looking east (Scale: 1m)
- Plate 79: North-northeast-facing section of modern pit C.180104, looking south-southwest (Scale: 1m)
- Plate 80: Plan of modern disturbance C.180904, looking southwest (Scale: 1 x 1m)
- Plate 81: General stratigraphy of Trench 2001 and water table, looking southeast (Scale: 2 x 1m)
- Plate 82: General stratigraphy of Trench 2002, looking north-northeast (Scale: 2 x 1m)
- Plate 83: Post-excavation photograph of Trench 2005, looking north (Scale: 2 x 1m)
- Plate 84: South-southeast-facing section of C.200105, looking north (Scale: 2 x 1m)
- Plate 85: Post-excavation photograph of Trench 2002, looking east (Scale: 2 x 1m)
- Plate 86: South-facing section of C.200307, looking north (Scale: 2 x 1m)
- Plate 87: Samian Ware pottery sherd (Find #2.3) retrieved from C.200306 (no scale)
- Plate 88: Mid-excavation photograph of C.200306 and C.200308, with C.200305 in the centre (Scale: 2 x 1m)
- Plate 89: Post-excavation photograph of Trench 2003, looking west-southwest (Scale: 2 x 1m)
- Plate 90: Mid-excavation photograph of C.200308, looking west-southwest (Scale: 2 x 1m)
- Plate 91: Roman pot (Find #2.4) in situ and later retrieved from C.200308 (Scale: 0.1m)
- Plate 92: Mid-excavation photograph of C.200310, looking north (Scale: 0.65m)
- Plate 93: North-northwest-facing section of C.200309 and C.200313, looking south-southeast (Scale: 2 x 1m)
- Plate 94: Mid-excavation photograph of C.200310, looking west (Scale: 1m)
- Plate 95: Mid-excavation photograph of C.200404, C.200409, C.200412, C.200414 and C.200416, looking north (Scale: 2 x 1m)

- Plate 96: Pottery retrieved as bulk finds from C.200413 (no scale)
- Plate 97: West-facing section of C.200407, looking east (Scale: 2 x 1m)
- Plate 98: South-facing section of C.200407 showing charcoal and burnt clay, looking north (Scale: 2 x 1m)
- Plate 99: Loom weights (Finds #2.7) retrieved from C.200408 (no scale)
- Plate 100: Loom weight (Finds #2.8) retrieved from C.200406 (no scale)
- Plate 101: West-facing section of C.200418, looking east (Scale: 1m)
- Plate 102: Southwest-facing section of C.200420, looking east (Scale: 1m)
- Plate 103: East-facing section of C.200510, looking west (Scale: 2m)
- Plate 104: West-facing section of C.200506, looking east (Scale: 2m)
- Plate 105: West-facing section of C.200508, looking east (Scale: 2 x 1m)
- Plate 106: General stratigraphy of Trench 2106, looking north-northwest (Scale: 2 x 1m)
- Plate 107: General stratigraphy of Trench 2103, looking northeast (Scale: 2 x 1m)
- Plate 108: Pre-excavation photograph of C.210106, looking northeast (Scale: 2 x 1m)
- Plate 109: West-facing section of C.210105, looking east (Scale: 2 x 1m)
- Plate 110: North-northeast-facing section of C.210209, looking southwest (Scale: 2 x 1m)
- Plate 111: North-northeast-facing section of C.210205, looking south-southwest (Scale: 2 x 1m)
- Plate 112: East-northeast-facing section of C.210309, looking west-southwest (Scale: 2 x 1m)
- Plate 113: South-facing section of C.210307, looking north (Scale: 2 x 1m)
- Plate 114: North-northwest-facing sections of C.210315 and C.210317, looking southeast (Scale: 2 x 1m)
- Plate 115: Pre-excavation photograph of C.210505, looking north-northeast (Scale: 2 x 1m)
- Plate 116: South-facing section of C.210605, looking north (Scale: 2 x 1m)
- Plate 117: North-facing section of C.210708, looking south (Scale: 2 x 1m)
- Plate 118: South-southeast-facing section of C.210705 and C.210710, looking north-northwest (Scale: 2 x 1m)
- Plate 119: South-facing section of C.210712, looking north (Scale: 2 x 1m)
- Plate 120: East-southeast-facing section of C.210820, looking northwest (Scale: 1m)
- Plate 121: West-northwest-facing section of C.210805, looking southeast (Scale: 0.5m)
- Plate 122: East-facing section of C.210818, looking west (Scale: 0.3m)
- Plate 123: East-northeast-facing section of C.210822, looking west-southwest (Scale: 0.3m)
- Plate 124: East-northeast-facing section of C.210814, looking west-southwest (Scale: 1m)
- Plate 125: Northeast-facing section of C.210807, looking southwest (Scale: 0.5m)
- Plate 126: South-facing section of C.210810 and C.210812, looking north (Scale: 1m)

- Plate 127: North-facing section of C.210907, looking south (Scale: 2 x 1m)
- Plate 128: North-northwest-facing section of C.210911, looking south-southeast (Scale: 2 x 1m)
- Plate 129: Pre-excavation photograph of C.211005, looking northeast (Scale: 2 x 1m)
- Plate 130: East-northeast-facing section of C.211205, looking west-southwest (Scale: 0.5m)
- Plate 131: General stratigraphy of Trench 2204, looking east-northeast (Scale: 2 x 1m)
- Plate 132: General stratigraphy of Trench 2208, looking northwest (Scale: 2 x 1m)
- Plate 133: Post-excavation photograph of Trench 2211, looking south (Scale: 1m)
- Plate 134: Southwest-facing section of C.221105, looking northeast (Scale: 1m)
- Plate 135: Southwest-facing section of C.221107, looking northeast (Scale: 1m)
- Plate 136: Post-excavation photograph of Trench 2203, looking northeast (Scale: 2 x 1m)
- Plate 137: Post-excavation photograph of Trench 2206, looking west (Scale: 1m)
- Plate 138: Post-excavation photograph of Trench 2209, looking northeast (Scale: 1m)
- Plate 139: Slot through C.220309, C.220313, C.220315 and C.220318, looking west (no scale)
- Plate 140: Slot through C.220604, looking south-southeast (Scale: 1m)
- Plate 141: Slot through C.220905 and C.220907, looking west (Scale: 2 x 1m)
- Plate 142: Post-excavation photograph of Trench 2201, looking south (Scale: 2 x 1m)
- Plate 143: North-facing section of C.220105, looking south (Scale: 2 x 1m)
- Plate 144: South-facing section of C.220305 and C.220307, looking north (Scale: 2m)
- Plate 145: Post-excavation photograph of Trench 2205, looking south (Scale: 2 x 1m)
- Plate 146: Post-excavation photograph of Trench 2301, looking south-southwest (Scale: 2 x 1m)
- Plate 147: General stratigraphy of Trench 2301, looking northwest (Scale: 2 x 1m)
- Plate 148: Post-excavation photograph of Trench 2302, looking southeast (Scale: 2 x 1m)
- Plate 149: Post-excavation photograph of Trench 2304, looking west (Scale: 2 x 1m)
- Plate 150: Post-excavation photograph of Trench 2401, looking north-northeast (Scale: 2 x 1m)
- Plate 151: General stratigraphy of Trench 2401, looking northwest (Scale: 2 x 1m)
- Plate 152: Northwest-facing section of C.240105, looking east-southeast (Scale: 1m)
- Plate 153: Southeast-facing section of C.240110, looking west-northwest (Scale: 2 x 1m)
- Plate 154: North-facing section of C.240107, looking south (Scale: 0.5m)
- Plate 155: Northwest-facing section of C.240114, looking southeast (Scale: 2 x 1m; 0.5m)
- Plate 156: East-northeast-facing section of C.240112, looking west-northwest (Scale: 1m)
- Plate 157: Post-excavation photograph of Trench 2402, looking southeast (Scale: 2 x 1m)
- Plate 158: General stratigraphy of Trench 2402, looking northeast (Scale: 2 x 1m)
- Plate 159: West-northwest-facing section of C.240205, looking northeast (Scale: 2 x 1m)
- Plate 160: East-northeast-facing section of C.240207, looking west-southwest (Scale: 1m)

- Plate 161: Northeast-facing section of C.240209, looking west-southwest (Scale: 2 x 1m)
- Plate 162: Post-excavation photograph of Trench 2403, looking southwest (Scale: 2 x 1m)
- Plate 163: General stratigraphy of Trench 2403, looking northwest (Scale: 2 x 1m)
- Plate 164: South-southeast-facing section of C.240305, looking northwest (Scale: 1m)
- Plate 165: Southeast-facing section of C.240307, looking northwest (Scale: 0.5m)
- Plate 166: Southeast-facing sections of C.240309 and C.240311, looking northwest (Scale: 2 x 0.5m)
- Plate 167: Post-excavation photograph of Trench 2404, looking east (Scale: 2 x 1m)
- Plate 168: General stratigraphy of Trench 2404, looking south (Scale: 2 x 1m)
- Plate 169: West-facing section of C.240405, looking east (Scale: 1m)
- Plate 170: East-northeast-facing section of C.240407, looking west (Scale: 1m)
- Plate 171: North-northeast-facing section of C.240409, looking south-southwest (Scale: 0.5m)
- Plate 172: Post-excavation photograph of Trench 2405, looking east (Scale: 2 x 1m)
- Plate 173: General stratigraphy of Trench 2405, looking north-northwest (Scale: 2 x 1m)
- Plate 174: Mid-excavation photograph of C.240505 and C.240507, looking southwest (Scale: 4 x 1m)
- Plate 175: South-southeast-facing section of C.240509, looking north-northwest (Scale: 0.5 & 2m)
- Plate 176: South-facing section of C.240511, looking north (Scale: 1m)
- Plate 177: Post-excavation photograph of Trench 2406, looking northeast (Scale: 2 x 1m)
- Plate 178: General stratigraphy of Trench 2406, looking southeast (Scale: 2 x 1m)
- Plate 179: North-facing section of C.240605, looking south (Scale: 2 x 1m & 0.5m)
- Plate 180: South-southwest-facing section of C.240607, looking northeast (Scale: 1m & 0.5m)
- Plate 181: Northeast-facing section of C.240609, looking southwest (Scale: 1m)
- Plate 182: Northeast-facing section of C.250205, looking west-southwest (Scale: 0.5m)
- Plate 183: Southwest-facing section of C.250211, looking northeast (Scale: 0.5m)
- Plate 184: South-facing section of C.250207, looking north (Scale: 0.5m)
- Plate 185: Northwest-facing section of C.250209, looking east-southeast (Scale: 0.5m)
- Plate 186: Post-excavation photograph of Trench 2502, looking north (Scale: 2 x 1m)
- Plate 187: General stratigraphy of Trench 2502, looking west (Scale: 2 x 1m)
- Plate 188: Post-excavation photograph of Trench 2503, looking south (Scale: 2 x 1m)
- Plate 189: General stratigraphy of Trench 2503, looking east (Scale: 2 x 1m)
- Plate 190: East-facing section of C.250305, looking west (Scale: 0.5m)
- Plate 191: Post-excavation photograph of Trench 2504, looking southeast (Scale: 2 x 1m)
- Plate 192: General stratigraphy of Trench 2504, looking northeast (Scale: 2 x 1m)
- Plate 193: South-facing section of C.250407, looking north (Scale: 1m)
- Plate 194: South-facing section of C.250405, looking north (Scale: 1m)

- Plate 195: Post-excavation photograph of Trench 2505, looking south (Scale: 2 x 1m)
- Plate 196: General stratigraphy of Trench 2505, looking east-northeast (Scale: 2 x 1m)
- Plate 197: North-facing section of C.250505, looking south (Scale: 0.5m)
- Plate 198: Northwest-facing section of C.250507, looking southeast (Scale: 0.5m)
- Plate 199: Post-excavation photograph of Trench 2601, looking east (Scale: 2 x 1m)
- Plate 200: General stratigraphy of Trench 2601, looking north-northwest (Scale: 2 x 1m)
- Plate 201: Southeast-facing section of C.260105, looking northwest (Scale: 0.5m)
- Plate 202: East-northeast-facing section of C.260107, looking west-northwest (Scale: 0.5m)
- Plate 203: Post-excavation photograph of Trench 2602, looking southeast (Scale: 2 x 1m)
- Plate 204: General stratigraphy of Trench 2602, looking northeast (Scale: 2 x 1m)
- Plate 205: Southeast-facing section of C.260205, looking northwest (Scale: 0.5m)
- Plate 206: Southeast-facing section of C.260207, looking northwest (Scale: 0.5m)
- Plate 207: Post-excavation photo of Trench 2603, looking east-southeast (Scale: 2 x 1m)
- Plate 208: General stratigraphy of Trench 2603, looking north-northwest (Scale: 2 x 1m)
- Plate 209: South-facing section of C.260305, looking north (Scale: 1m)
- Plate 210: Southwest-facing section of C.260307, looking north-northeast (Scale: 2 x 1m)
- Plate 211: Northwest-facing section of C.260309, looking east-southeast (Scale: 1m)
- Plate 212: Post-excavation photograph of Trench 2605, looking north-northeast (Scale: 2 x 1m)
- Plate 213: General stratigraphy of Trench 2605, looking north-northwest (Scale: 2 x 1m)
- Plate 214: East-facing section of C.260505, looking west (Scale: 1m)
- Plate 215: Post-excavation photograph of Trench 2611, looking southeast (Scale: 2 x 1m)
- Plate 216: General stratigraphy of Trench 2611, looking north-northeast (Scale: 2 x 1m)
- Plate 217: Southwest-facing section of C.261105, looking northeast (Scale: 2 x 1m)
- Plate 218: Geophysical anomaly G3 in Trench 2611 (Scale: 2m)
- Plate 219: Post-excavation photograph of Trench 2703, looking east (Scale: 2 x 1m)
- Plate 220: General stratigraphy of Trench 2703, looking north-northeast (Scale: 2 x 1m)
- Plate 221: Southwest-facing section of C.270305, looking northeast (Scale: 0.5m)
- Plate 222: Southwest-facing section of C.270307, looking northeast (Scale: 0.5m)
- Plate 223: Mid-excavation photograph of C.270307 & C.270309, looking northeast (Scale: 2 x 1m)
- Plate 224: Bulk finds in-situ in C.270305, looking northwest (Scale: 0.1m)
- Plate 225: Post-excavation photograph of Trench 2802, looking south (Scale: 2 x 1m)
- Plate 226: General stratigraphy of Trench 2802, looking east (Scale: 2 x 1m)
- Plate 227: Post-excavation photograph of C.280205, looking southeast (Scale: 2 x 1m)
- Plate 228: South-southeast-facing section of C.290505, looking north-northwest (Scale: 2 x 1m)

- Plate 229: West-facing section of C.290507, looking east (Scale: 2 x 1m)
- Plate 230: East-southeast-facing section of C.290510, looking west-northwest (Scale: 2 x 1m)
- Plate 231: Post-excavation photograph of Trench 2904, looking south (Scale: 2 x 1m)
- Plate 232: Post-excavation photograph of Trench 2902, looking south (Scale: 2 x 1m)
- Plate 233: Post-excavation photograph of Trench 3005, looking east-northeast (Scale: 2 x 1m)
- Plate 234: General stratigraphy of Trench 3005, looking north (Scale: 2 x 1m)
- Plate 235: Pre-excavation photograph of C.300505 (GA 05), looking south-southeast (Scale: 2 x 1m)
- Plate 236: Southeast-facing section of C.300505, looking north-northwest (Scale: 2 x 1m)
- Plate 237: Post-excavation photograph of Trench 3013, looking east-northeast (Scale: 2 x 1m)
- Plate 238: General stratigraphy of Trench 3013, looking south (Scale: 2 x 1m)
- Plate 239: North-northwest-facing section of C.301305, looking south-southeast (Scale: 2 x 1m)
- Plate 240: West-southwest-facing section of C.301605, looking east (Scale: 2 x 1m)
- Plate 241: West-southwest-facing section of C.301607, looking east-northeast (Scale: 2 x 1m)
- Plate 242: Northeast-facing section of C.300107, looking southwest (Scale: 2 x 1m)
- Plate 243: Post-excavation photograph of Trench 3003, looking northeast (Scale: 2 x 1m)
- Plate 244: Northwest-facing section of C.300305, looking southeast (Scale: 1 x 1m)
- Plate 245: North-facing section of C.300511, looking south (Scale: 2 x 1m)
- Plate 246: South-southeast-facing section of C.300605, looking northwest (Scale: 2 x 1m)
- Plate 247: Post-excavation photograph of Trench 3008, looking south (Scale: 2 x 1m)
- Plate 248: General stratigraphy of Trench 3008, looking west (Scale: 2 x 1m)
- Plate 249: Pre-excavation photograph of C.300805, looking south-southeast (Scale: 2 x 1m)
- Plate 250: Metal object from C.300804, Find #2.1 (no scale)
- Plate 251: East-facing section of C.300807, looking west (Scale: 2 x 1m)
- Plate 252: North-northwest-facing section of C.300200, looking south (Scale: 2 x 1m)
- Plate 253: Post-excavation photograph of Trench 3009, looking southwest (Scale: 2 x 1m)
- Plate 254: Post-excavation photograph of Trench 3014, looking south-southwest (Scale: 2 x 1m)
- Plate 255: Post-excavation photograph of Trench 3102, looking east (Scale: 1m)
- Plate 256: General stratigraphy of Trench 3102, looking west (Scale: 1m)
- Plate 257: North-facing section of C.310205, looking south (Scale: 1m)
- Plate 258: South-facing sections of C.310207 and C.310209, looking north (Scale: 1m)
- Plate 259: General stratigraphy of Trench 3401, looking southwest (Scale: 1m)
- Plate 260: Post-excavation photograph of Trench 3401, looking north-northwest (Scale: 1m)
- Plate 261: Post-excavation photograph of Trench 4801, looking northeast (Scale: 2 x 1m)
- Plate 262: General stratigraphy of Trench 4801, looking northwest (Scale: 2 x 1m)

- Plate 263: East-southeast-facing section of C.480107, looking northwest (Scale: 2 x 1m)
- Plate 264: Post-excavation photograph of Trench 4805, looking southwest (Scale: 1m)
- Plate 265: General stratigraphy of Trench 4805, looking northwest (Scale: 2 x 1m)
- Plate 266: East-southeast-facing section of C.480504, looking northwest (Scale: 2 x 1m)
- Plate 267: West-northwest-facing section of C.480507, looking southeast (Scale: 0.5m)
- Plate 268: East-northeast-facing section of C.480511 and C.480513, looking west (Scale: 1m)
- Plate 269: West-southwest-facing section of C.480509, looking east (Scale: 0.5m)
- Plate 270: Post-excavation photograph of Trench 4806, looking north-northwest (Scale: 2 x 1m)
- Plate 271: West-facing section of C.480605, looking east (Scale: 2 x 1m)
- Plate 272: Post-excavation photograph of Trench 4808, looking southwest (Scale: 1m)
- Plate 273: South-southeast-facing section of C.480805, looking north-northwest (Scale: 2 x 1m)
- Plate 274: Southeast-facing section of C.480807, looking northwest (Scale: 1m)
- Plate 275: Southeast-facing section of C.480809, looking north-northwest (Scale: 1m & 0.5m)
- Plate 276: West-facing section of C.480811, looking east (Scale: 0.5m)
- Plate 277: Post-excavation photograph of Trench 4809, looking north (Scale: 2 x 1m)
- Plate 278: General stratigraphy of Trench 4809, looking west (Scale: 2 x 1m)
- Plate 279: Southwest-facing section of C.480905, looking northeast (Scale: 1m)
- Plate 280: East-southeast-facing section of C.480918 and C.480916, looking west-northwest (Scale: 1m)
- Plate 281: East-southeast-facing section of C.480915, looking northwest (Scale: 1m)
- Plate 282: Pottery finds in situ retrieved from C.480915, looking north (Scale: 0.3m)
- Plate 283: South-facing section of C.480907, looking north (Scale: 0.3m)
- Plate 284: South-southeast-facing section of C.480909 and C.480911, looking north-northwest (Scale: 1m & 0.3m)
- Plate 285: East-southeast-facing section of C.480921, looking west-northwest (Scale: 0.5m)
- Plate 286: Post-excavation photograph of Trench 4810, looking west-southwest (Scale: 2 x 1m)
- Plate 287: General stratigraphy of Trench 4810, looking northwest (Scale: 2 x 1m)
- Plate 288: South-facing section of C.481005, looking north (Scale: 1m)
- Plate 289: Post-excavation photograph of Trench 4811, looking west (Scale: 2 x 1m)
- Plate 290: Northeast-facing section of C.481105, looking southwest (Scale: 1m)
- Plate 291: South-southwest-facing section of C.481107, looking north (Scale: 0.5m)
- Plate 292: Post-excavation photograph of Trench 4813, looking north-northwest (Scale: 1m)
- Plate 293: Northeast-facing section of C.481305, looking southwest (Scale: 0.5m)
- Plate 294: East-facing section of C.481307, looking west (Scale: 1m)

- Plate 295: Post-excavation photograph of Trench 4814, looking west (Scale: 2 x 1m)
- Plate 296: West-northwest-facing section of C.481405, looking east-southeast (Scale: 0.5m)
- Plate 297: Post-excavation photograph of Trench 4802, looking northeast (Scale: 2 x 1m)
- Plate 298: Post-excavation photograph of Trench 4812, looking west (Scale: 2 x 1m)
- Plate 299: General stratigraphy of Trench 4901, looking west (Scale: 2 x 1m)
- Plate 300: General stratigraphy of Trench 4906, looking east (Scale: 2 x 1m)
- Plate 301: General stratigraphy of Trench 4907, looking north-northwest (Scale: 2 x 1m)
- Plate 302: Post-excavation photograph of Trench 4907, looking northeast (Scale: 2 x 1m)
- Plate 303: Post-excavation photograph of Trench 4902, looking north-northeast (Scale: 2 x 1m)
- Plate 304: Post-excavation photograph of Trench 4906, looking north-northeast (Scale: 2 x 1m)
- Plate 305: General stratigraphy of Trench 5003, looking northeast (Scale: 2 x 1m)
- Plate 306: General stratigraphy of Trench 5004, looking north-northwest (Scale: 2 x 1m)
- Plate 307: Post-excavation photograph of Trench 5003, looking west (Scale: 2 x 1m)
- Plate 308: Post-excavation photograph of Trench 5004, looking west (Scale: 2 x 1m)
- Plate 309: Southwest-facing section of C.500105, looking northeast (Scale: 2 x 1m)
- Plate 310: General stratigraphy of Trench 5101 (Scale: 2 x 1m)
- Plate 311: General stratigraphy of Trench 5103 with paleochannel, looking north-northwest (Scale: 2 x 1m)
- Plate 312: Post-excavation photograph of Trench 5102, looking north-northeast (Scale: 2 x 1m)
- Plate 313: Post-excavation photograph of Trench 5103, looking east-northeast (Scale: 2 x 1m)
- Plate 314: Post-excavation photograph of Trench 5104, looking northeast (Scale: 2 x 1m)
- Plate 315: West-northwest-facing section of C.510206, looking east-southeast (Scale: 1m)

Abbreviations and Definitions

Abbreviation	Definition
AMP	Archaeological Management Plan
AMS	Archaeological Management Solutions
BARQ	Early Bronze Age Question
DCO	Development Consent Order
EAR	Environmental Assessment Report
EIA	Environmental Impact Assessment
EMHERF	East Midlands Historic Environment Research Framework
EMRQ	Early medieval Research Question
GIS	Geographical Information System
HER	Historic Environment Record
MIS	Marine Isotope Stage
MRQ	Medieval Research Question/Multiperiod Research Question
OS	Ordnance Survey
OSGB36	Ordnance Survey Great Britain 1936 coordinate system
OSL	Optically Stimulated Luminescence
OT	Overarching Theme
PCF	Project Control Framework
PMRQ	Post-medieval Research Question
PRQ	Palaeolithic Research Question
RRQ	Roman Research Question
SM	Scheduled Monument
WSI	Written Scheme of Investigation

Coordinate System

All grid coordinates in this report use the OSGB36 coordinate reference system unless otherwise stated.

1 Introduction

1.1 Project Background

This Trial Trenching and Geoarchaeological Test Pitting Report has been prepared by Archaeological Management Solutions (AMS) for Skanska Construction UK Ltd acting on behalf of National Highways Regional Delivery Partnership Framework. It details the results of advance trial trenching, hand test pitting and geoarchaeological test pitting on lands that are being considered to form part of the upgraded A46 Newark Bypass, Nottinghamshire (Figure 1).

The A46 Newark Bypass scheme is approximately 6km in length, passing the western and northern extents of Newark-on-Trent, Nottinghamshire, between Farndon and Winthorpe roundabouts. The aim of the scheme is to increase capacity and reduce traffic congestion on the A46 in the vicinity of Newark, improve connectivity from Lincolnshire to the national motorway network, and improve route standard consistency for the A46.

The scheme has been subject to a Project Control Framework (PCF) Stage 2 Environmental Assessment Report (EAR) undertaken by Atkins in 2021 (Highways England 2021), which found archaeologically sensitive areas across the route. Prior to this phase of assessment, geophysical (Dowling 2022 & 2023), fieldwalking (Gethin 2023), metal detection surveys (Gethin & Appleby 2023), archaeological and geoarchaeological monitoring (Lowther & Keyworth 2022; AMS 2023a), Geoarchaeological Coring (AMS 2023b) and desk-based assessment (AMS 2023c) were carried out.

The fieldwork covered in this report took place between 29 August–13 September 2023, 25 September–6 October 2023, 9–27 October 2023, 1–7 November 2023, 15–17 January 2024 and 17–26 June 2024.

1.2 Purpose and Scope of this Assessment

This phase of trial trenching and test pitting was carried out to help inform Phase 3 of the Scheme Archaeological Management Plan (AMP) which will set out the archaeological requirements for the scheme post Development Consent Order (DCO) submission/future stages of the scheme. The results will also aid in the future design of archaeological trial trenching along the scheme.

Trial trenching was initially planned for 52 fields (Fields 1–52); however, a number of trenches were removed from the programme. Trial trenching was undertaken in fields 1, 2, 3, 6, 8, 9, 11, 12, 13, 14, 15, 16, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 34, 48, 49, 50 and 51. Trial trenching in two areas has been delayed (7 and 52). In total, thus far, 282 trenches (x 50m = 14,100m) were excavated across 30 fields.

The hand test pitting and geoarchaeological test-pitting was originally planned to be undertaken in six of the fields covered in this report (Fields 21, 22, 48, 49, 50 & 51) in order to assess geoarchaeological potential and for the potential presence of palaeolithic lithics, on the basis of having soils derived from the Holme Pierrepont Sands and Gravels Member. While geoarchaeological test pitting was completed in all these fields, hand test pitting was only undertaken in Fields 21, 22, 48 and 51. It was apparent that the hand test pitting was not reaching levels likely to have any potential to contain Palaeolithic material as found at Farndon. It was therefore agreed with the curators that hand test pitting was not a useful approach and would not be used in Fields 49 and 50. Supplementary geoarchaeological test pits were recorded in selected trenches in Fields 1, 8, 9 11 and 13–15.

1.2.1 Project Aim

The principal aim of the trial trenching was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, and significance of any archaeological remains within the development area, and to quantify this in a manner which will inform the mitigation design and resourcing. The current understanding of the scheme indicates that it may impact on archaeological remains relating to the Late Upper Palaeolithic, Bronze Age, Iron Age, Roman, early medieval, medieval, and post-medieval periods. Part of the purpose of the evaluation was to check this broad understanding of the range of remains that might be impacted.

In fulfilling the principal aim of the trial trenching, it has also been possible to identify more closely which research questions the archaeological resource within the scheme area may be capable of addressing. The draft AMP has been prepared for the scheme (Skanska Mott MacDonald 2024), and it incorporates the findings of the various archaeological surveys. This has identified the relevant research agendas as:

- East Midlands Historic Environment Research Framework (EMHERF);
- Research and Conservation Framework for the British Palaeolithic; and
- Understanding the British Iron Age: an agenda for action.

The draft AMP has identified a number of overarching themes that the archaeological remains potentially affected by the scheme may be used to address. These are:

- OT1: Pleistocene and Holocene environmental change;
- OT2: Hunter-gatherer subsistence strategies and mobility patterns;
- OT3: Development of agriculturally based settlement patterns;
- OT4: The development of fields and field systems;
- OT5: The role of rivers as movement corridors, sources of power and socio-political boundaries;

- OT6: Development of prehistoric monument complexes;
- OT7: Development of funerary monuments and changing burial and memorial practices;
- OT8: Battlefield and skirmish sites; and
- OT9: Development of territorial and administrative (e.g. parish) boundaries.

The outcome of this evaluation allows assessment of whether the archaeological remains have the potential to address the research questions identified in the draft AMP, given below:

1.2.1.1 Palaeolithic

- PRQ1: How were Early Upper and Late Upper Palaeolithic sites distributed across the landscape, and what contrasts may be observed with earlier and later (Mesolithic) periods?
- PRQ2: How will studies of fauna, pollen and other organic material from palaeochannels, caves, terrace sediments and other deposits refine our understanding of the evolving environment, and how may this have varied spatially?
- PRQ3: How best may we extend and enhance regional fieldwalking or test-pitting programmes as means of prospecting for open-air sites?
- PRQ4: How can we maximise the research yield of Pleistocene sites investigated during developer-funded work?

1.2.1.2 Early Bronze Age

- BARQ1: Can we define more precisely the chronology of the major monument classes (causewayed enclosures, barrows, and cairns etc), and how might this have varied spatially?
- BARQ2: Why may monument complexes have developed, why were some short-lived and others of longer duration, and why do these incorporate such a wide variety of monument types?
- BARQ3: How significant were river-crossing or confluence zones as foci for monument complexes?
- BARQ4: How far can studies of burials, grave goods, house, and barrow/cairn structures contribute to studies of status variations within and between communities?

1.2.1.3 Late Bronze Age and Iron Age

- IARQ1: What can we deduce about the morphology, spatial extent, and functions of settlements, and in particular the processes underlying the development in some areas of enclosed occupation or activity foci?
- IARQ2: Why were settlements increasingly enclosed during this period and to what extent may the progress of enclosure have varied regionally?
- IARQ3: How are the nucleated settlements related to one another and to other settlements of the period? In particular, is there evidence for a developing settlement hierarchy?
- IARQ4: Can we shed further light upon the development of field and boundary systems?
- IARQ5: What were the economic, social, or political roles of the pit alignments and linear ditch systems that characterised many areas of the East Midlands?

- IARQ6: What may we deduce from studies of linear boundaries with respect to changes in the agrarian landscape?
- IARQ7: What may further analyses of burials and of settlement architecture and morphology contribute to studies of social and political organisation?

1.2.1.4 Roman

- RRQ1: How did the conquest impact upon rural settlements and landscapes?
- RRQ2: How did field and boundary systems relate to earlier systems of land allotment, and how did these boundary networks develop over time?
- RRQ3: Can we chart more closely the processes of agricultural intensification and expansion and development of field systems?
- RRQ4: To what extent may communication routes have been influenced by late Iron Age settlement patterns and routes of movement?

1.2.1.5 Early Medieval

- EMRQ1: Can we identify social/political boundaries (e.g. surviving linear earthworks and natural barriers) and/or estate centres?
- EMRQ2: To what extent may rivers such as the Trent or Witham have served as major political and social boundaries during the Anglo-Saxon period?
- EMRQ3: What impact may Germanic and Scandinavian immigration have had upon established rural settlement patterns, and how may placename evidence contribute to studies of settlement evolution?

1.2.1.6 Medieval

- MRQ1: Can we clarify further the processes of settlement desertion and shrinkage, especially within zones of dispersed settlement?
- MRQ2: How did medieval manors and manorial estates develop from the Anglo-Saxon period?
- MRQ3: Can we shed further light upon the origins and development of the open-field system and its impact upon agricultural practices?

1.2.1.7 Post-medieval

- PMRQ1: How can we improve our understanding of the early landscapes of enclosure and improvement and the interrelationship between arable, pasture, woodland, commons, and waste?
- PMRQ2: How can we refine our knowledge of Civil War defences and siege works?

1.2.1.8 Test pitting

The principal aim of the hand test-pitting was to determine as far as reasonably possible the presence/absence, distribution, nature, type, and significance of any Palaeolithic remains within those areas with potential for them to be present. This work allowed the following questions to be addressed:

- PRQ1: How were Early Upper and Late Upper Palaeolithic sites distributed across the landscape, and what contrasts may be observed with earlier and later (Mesolithic) periods?

- PRQ2: How will studies of fauna, pollen, and other organic material from palaeochannels, caves, terrace sediments and other deposits refine our understanding of the evolving environment, and how may this have varied spatially?
- PRQ3: How best may we extend and enhance regional fieldwalking or test-pitting programmes as means of prospecting for open-air sites?
- PRQ4: How can we maximise the research yield of Pleistocene sites investigated during developer-funded work?

1.2.2 *Project Objectives*

The trial trenching objectives included:

- identify, characterise and quantify subsurface archaeological remains;
- archaeologically test anomalies identified in the geophysical survey;
- recover artefactual and other material with the potential to provide spot dates;
- incorporate all of the above in a report to the Client; and
- create a physical and digital site archive.

The hand test pitting objectives included:

- identify, characterise and quantify Palaeolithic archaeological remains, especially lithic scatters;
- recover artefacts and palaeoenvironmental and dating samples;
- incorporate all of the above in a report to the Client; and
- create a physical and digital site archive.

The geoarchaeological test pitting objectives included:

- identify and characterise late Pleistocene deposits;
- recover palaeoenvironmental and dating samples;
- incorporate all of the above in a report to the Client; and
- create a physical and digital site archive.

The geoarchaeological test pitting objectives will enable an assessment of potential value of the deposits in addressing some of the overarching agenda themes presented in the East Midlands Historic Environment Research Framework¹. Those identified as relevant include:

- Pleistocene and Holocene climatic change;
- Changes in sea level, the configuration of sea and land, the drainage network, and the spatial extent of wetlands; and

¹ (East Midlands Historic Environment Research Framework (researchframeworks.org))

- The impact of human activity upon soil development and geomorphic processes (notably alluviation, colluviation and aeolian deposition).

1.3 Site Location

Fields 1, 2, 3, 6, 8, 9, 11, 12, 13, 14, 15, 16 and 18 are located in the floodplain of the River Trent. Fields 20, 21, 22, 23, 24–30, 33 and 34 on the northeastern part of the proposed route are above the floodplain. Fields 48–52 are located between Kelham and Averham.

Geoarchaeological test-pitting was undertaken in six fields (designated as Fields 21, 22, 48, 49, 50, and 51) in order to better understand the Late Pleistocene environment and the potential for Palaeolithic archaeology. The hand test pitting was undertaken in four fields (Fields 21, 22, 48 and 51) to understand the potential for Palaeolithic archaeology. Geoarchaeological test pitting was undertaken at the request of the Curator in floodplain locations to better understand the sedimentary sequence (Fields 1, 8, 9, 13, 14, 15).

The underlying bedrock of the locality comprises Mercia Mudstone Group, an early Triassic lithostratigraphic group that is widespread in the English Midlands. The bedrock of this type is of fluvial, lacustrine, and marine origin (BGS 2022).² Over most of the areas to be trenched, this geological unit is not further differentiated (Fields 9–18, 20.2, (21.2, 21.3), 22, 23, 42, 43 & 48–51). Where it has been differentiated, it consists either of Gunthorpe Member mudstones (Fields 3 & 6–7) or Edwalton Member mudstones (Fields 1, 2, 6 & 52). Within the floodplain of the River Trent, the superficial deposits are alluvium, clay, silt, sand, and gravel, dating to the Quaternary period (Fields 2, 3, 6–18 & 23). Outside of the floodplain, the superficial geology consists of the Holme Pierrepont Sands and Gravels (Fields 1, (21.2, 21.3), 22, 33, 34 & 48–52), a river terrace formation dating to either MIS1 or 2, or Balderton Sands and Gravels (Fields 24–30), another river terrace formation dating to MIS6.

1.4 The Archaeological Strategy

This phase of the evaluation comprised a total of 282 trenches (typically 1.8–2m wide and 50m in length). This included an approximate 5% coverage of any lands that have not been subject to geophysical survey and a 3% coverage of those that have. The location of the trenches was determined by the Consultant (Mott MacDonald) and agreed with the Curator (the Newark & Sherwood District Council Historic Environment Officer and Nottinghamshire County Council Senior Practitioner Archaeology); this was informed by previous desk based work (Highways England 2021), the geophysical (Dowling 2022 & 2023), fieldwalking (Gethin 2023), metal-detection (Gethin & Appleby

² Available online @ <https://www.bgs.ac.uk/>. Accessed 06/02/2024.

2023) surveys, and the recently completed archaeological monitoring and geoarchaeological coring at Kelham (AMS 2023a & b).

The trial trenching forms part of a wider strategy to inform and supplement the information in the scheme AMP. The overall strategy is designed to take account of the very different but still related ground conditions and environmental histories of the floodplain area and the river terraces, in particular understanding the dates of the upper terrace deposits and the human activity on them and how this relates to the accumulation and reworking of the floodplain deposits and the pattern of human activity within that environment.

2 Methodology

2.1 Archaeological Trial Trenching Methods

2.1.1 Standards

All work was conducted in accordance with the Chartered Institute for Archaeologists' *Code of Conduct: Professional Ethics in Archaeology* (CIfA 2014a) and *Standard and Guidance for Archaeological Field Evaluation* (CIfA 2014b) or the *Standard for Archaeological Field Evaluation* (CIfA 2023a) and *Universal Guidance for Archaeological Field Evaluation* (CIfA 2023b) as relevant to the dates of fieldwork.

2.1.2 Pre-commencement

The Client provided up-to-date service plans. Before ground was broken in each area, these service plans were checked to ensure that groundworks could be conducted safely.

Access points, refuelling points, locations for compounds and welfare were agreed with the Client prior to the commencement of works. The Client informed AMS of any specific landowner requests in advance of the works. Landholder licences giving permission to dig were obtained prior to work commencing.

Environment Agency (EA) Flood Risk Activities: environmental permits (FRAEP) were obtained for areas within the floodplain.

A photographic record of pre-commencement ground conditions was taken of each area and access points prior to commencement in that area.

All relevant site staff were fully briefed in a toolbox talk for each of the identified areas and issued with an area briefing document in order to ensure that they were conversant with the archaeological potential of that area.

2.1.3 Excavation methodology

The location of all trial trenches was determined by the consultant, Mott MacDonald (Figures 2.1–2; 3.1–3). These were determined on the basis of known archaeological or historic remains identified within the desk-based assessment (Highways England. 2021), and geophysical survey (Dowling 2022 & 2023), fieldwalking (Gethin 2023), metal detection surveys (Gethin & Appleby 2023) and geoarchaeological coring recently undertaken and archaeological monitoring at Kelham (AMS 2023a & b) which has just been completed by AMS. In areas where geophysics had been undertaken, trial trenches equivalent to 3% of project footprint were dug. In areas where no geophysics had been undertaken, trial trenches equivalent to 5% of project footprint were dug.

The areas to be trenched were reconnoitred prior to setting out trenches in order to check for previously unrecorded surface artefacts and topographic features that may have been of use in adjusting the proposed locations of the trenches. Any potential changes to locations of trenches based on the findings of the reconnaissance were considered in the light of any ecological constraints and landowner wishes.

Trial trench locations were marked out by an AMS surveyor with a Leica GS07, at the locations determined and provided by Mott MacDonald (Figures 2.1–2 & 3.1–3). The marked-out trial trench locations were metal-detected prior to excavation. For those areas subject to hand test pitting this was undertaken prior to the commencement of machine excavation.

Trial trenches were initially excavated with a mechanical excavator and toothless grading bucket. Prior to and during the topsoil strip, the topsoil was scanned for artefacts, visually and with a metal detector. Topsoil was removed under careful archaeological supervision down to the level of archaeological features, deposits, or natural subsoil if no archaeological material was extant. Mechanical excavation ceased when the first archaeologically significant horizon was identified, or when the absence of any such horizon was adequately demonstrated. On completion of the topsoil strip, the trenches were metal detected for potential artefacts.

Each trench was cleaned as required and examined by experienced archaeologists for potential archaeological features. Where potential archaeological remains or features were encountered, the exposed archaeology was cleaned by hand and test excavated in order to establish its nature, extent, depth, date and significance. Where possible the full stratigraphic sequence was established, with the trench being extended or stepped in order to allow more complete/safe access to features under investigation. Artefacts and samples for environmental analyses and radiocarbon dating were recovered as required.

All feature extents, section points and other locational data was surveyed in by an AMS surveyor using a Leica GS07 in a manner which could be mapped in a Geographical Information System (GIS) within the British National Grid (OSGB36) coordinate system.

Spoil was stored alongside trenches, c.1m from the trench edges, unless otherwise specified by the Consultant. Spoil heaps were metal detected for potential artefacts. Topsoil, subsoil, and archaeological deposits were kept separate during excavation, to allow for sequential backfilling of excavations. Trenches were only backfilled after the approval of the Curator and Consultant.

Table 1: List of fields in which trial trenching occurred, the number of trenches and previous assessments.

Trial-trenching Field	Number of trial trenches planned in WSI	Number of trial trenches excavated	Previous assessments
1	2	2	N/A
2	79	69	Metal detection
3	33	17	Metal detection
6	76	33	Metal detection Field walking
7	15	Postponed	Metal detection
8	5	4	Metal detection
9	3	3	Metal detection
11	4	4	Metal detection
12	4	4	Metal detection
13	2	2	Metal detection
14	4	4	Metal detection
15	3	3	Metal detection
16	4	4	Metal detection
18	9	7	Metal detection
20	5	5	Geophysical
21	15	15	Geophysical
22	13	13	Geophysical
23	5	5	Geophysical
24	6	6	Geophysical
25	5	5	Geophysical
26	12	11	Geophysical
27	3	3	Geophysical
28	5	4	Geophysical
29	10	6	Geophysical
30	12	16	Geophysical
31	3	3	Geophysical
34	1	1	N/A
48	16	15	Geophysical
49	15	9	Geophysical
50	5	5	Geophysical
51	7	4	Geophysical
52	1	Postponed	N/A

2.1.4 Palaeochannel Recording and Sampling

A number of trenches were positioned to intercept known or suspected palaeochannels. Where a palaeochannel was cut by a trial trench, the geoarchaeologist cleaned an appropriate section for recording. The section was described using an appropriate descriptive system, based on established schemas, including the *Soil Survey Field Handbook* (Hodgson 1976), and recorded such data as texture, fabric, orientation of particles and structure (Brown 1997). The section selected for cleaning and recording initially started from the former bank of the channel, in order to get the fullest range of sedimentary units within depth of the trench.

Sampling took place with a particular emphasis on recovery of bulk samples suitable for plant macrofossil assessment and column samples suitable for microfossil assessment and radiocarbon dating. In addition, where suitable mineral sediments for OSL dating were encountered, appropriate light-proof samples were taken from the channel section with a view to undertaking OSL dating.

2.2 Hand Test Pitting Methods

Prior to the excavation of the trial trenches, 1m x 1m hand test pits were excavated at one end of each of the trial trench locations given below (Table 2). Two of the fields it had originally been planned to hand test pit were excluded from this work in agreement with the Curator due to the absence of useful results from this approach. Excavation was undertaken by hand, through the topsoil and into the upper surface of the subsoil. In line with current Historic England guidelines (Historic England 2023), the spoil was subsampled to give a sample of 10 litres from the topsoil, and complete sieving of any excavated subsoil was undertaken. The spoil from excavation was sieved as excavation proceeded, with a sieve mesh size of 10mm. Surveying and recording was as for the investigation of features in 2.1 above. Where features were encountered, they were also to be investigated and sampled as per 2.1 above. Had *in-situ* lithic scatters been uncovered, they would have been recovered through careful trowel excavation to determine their extent within the test pit, and the scatter recorded and surveyed *in situ* prior to lifting.

Table 2: List of areas/fields in which hand test pitting occurred, the number of test pits and previous assessments.

Trial trenching area/field	Number of test pits	Previous assessments
21.2	4	Geophysical
21.3	1	Geophysical
22	13	Geophysical
48	15	Geophysical
51	4	Geophysical

2.3 Geoarchaeological Test Pitting

Geoarchaeological test pits were excavated at the end of each of the excavated trial trenches within the areas shown in Table 3. The location of the test pit in each excavated trial trench was determined by the geoarchaeologist. Each test pit was excavated to a maximum depth of 1m from the current ground surface. Each test pit was excavated after the trial trench was cleaned and recorded and it was determined that either there were no archaeological features or that any archaeological features had been fully recorded. Each test pit was 2m x 2m. The geoarchaeologist cleaned an appropriate section for recording. The section was described using an appropriate descriptive system, based on established schemas, including the *Soil Survey Field Handbook* (Hodgson 1976), and recording such data as texture, fabric, orientation of particles and structure (Brown 1997). This was recorded in notes, measured section drawings and photographically. Light-proof samples for OSL dating were taken of sediments deemed to have a potential to assist in archaeological interpretation. The location of each test pit was surveyed as per the test trenches themselves.

Table 3: List of fields in which geoarchaeological test pitting occurred, the number of test pits and previous assessments.

Trial trenching area	Number of test pits	Previous assessments
1	2	N/A
8	1	Metal detecting
9	1	Metal detecting
13	1	Metal detecting
14	1	Metal detecting
15	1	Metal detecting
21	5	Geophysical
22	13	Geophysical
48	15	Geophysical
49	9	Geophysical
50	5	Geophysical
51	4	Geophysical

2.4 Finds Management

Finds were exposed, lifted, cleaned, conserved, marked, bagged, and boxed in line with the standards in:

- Watkinson & Neal (1988) *First Aid for Finds*; and
- Chartered Institute for Archaeologists *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials* (CIfA 2014c).

At the start of work, a finds supervisor was appointed to oversee the collection, processing, cataloguing, and specialist advice on all artefacts collected.

Artefacts were collected by hand, sieving, and by metal detector. Excavation areas and spoil were scanned visually and with a metal detector to aid recovery of artefacts. All finds were bagged and labelled according to the individual deposit from which they were recovered, ready for later cleaning and analysis. 'Special/small finds' were located more accurately by GPS, when appropriate.

All artefacts recovered from excavated features were retained for post-excavation processing and assessment except:

- those which are obviously modern in date;
- where very large volumes are recovered (typically ceramic building material); and
- where directed to discard on site by the Curator.

Where artefacts were not removed from site, a strategy was employed to ensure a sufficient sample was retained in order to characterise the date and function of the features they were excavated from. A record was kept of the quantity and nature of artefacts which were not removed from site.

2.5 Environmental Sampling

Sampling methods followed guidelines produced by Historic England (listed below) and guidelines produced internally by AMS. Should it have been necessary, the project team would have consulted Historic England's Scientific Advisor on environmental sampling and dating. An AMS environmental specialist was either on site or on call to visit the site to advise on and review sampling strategies. Specialists were consulted where non-standard sampling was required (e.g. TL, OSL or archaeomagnetic dating) and were on call if needed.

Palaeoenvironmental remains and dating material were sampled and processed in accordance with the relevant guidelines produced by Historic England:

- Historic England 2004. *Dendrochronology: Guidelines on Producing and Interpreting Dendrochronological Dates*.
- Historic England 2006. *Archaeomagnetic Dating. Guidelines for Producing and Interpreting Archaeomagnetic Dates*.
- Historic England 2008. *Luminescence Dating. Guidelines on Using Luminescence Dating in Archaeology*.
- Historic England 2008. *Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains*.
- Historic England 2008. *Investigative conservation. Guidance on how detailed examination of artefacts from archaeological sites can shed light on their manufacture and use*.

- Historic England 2011. *Environmental Archaeology. A guide to the theory and practice of methods, from sampling and recovery to post excavation* (2nd ed.).
- Historic England 2011. *Waterlogged Wood: Guidelines on the recording, sampling, conservation, and curation of waterlogged wood*.
- Historic England 2015. *Archaeometallurgy. Guidelines for Best Practice*.
- Historic England 2015. *Geoarchaeology. Using Earth Sciences to Understand the Archaeological Record*.
- Historic England 2018. *Waterlogged organic artefacts. Guidelines on their recovery, analysis and conservation*.
- Historic England 2019. *Animal Bones and Archaeology. Guidelines for Best Practice*.

Environmental samples (up to 40 litres (l) or 100% of context if less is available) were taken from a range of potentially datable features and well-stratified deposits to target the recovery of plant remains, fish, bird, small mammal and amphibian bone and small artefacts. Samples were labelled with the site code, context number, and sample number and a register was kept.

2.6 Strategy for dealing with Human Remains

Human Remains were not encountered during these works. Should human remains or suspected human remains have been encountered, as these works are not intended for full mitigation of stripping of areas, the location would have been surveyed, including the depth of the top of the deposit, recorded as far as possible without further disturbance and then carefully covered, pending discussions with the Curator and Consultant.

3 Findings

3.1 Field 1

3.1.1 Area specific archaeological background

This field was not the subject of any prior survey but is located in a potentially archaeologically sensitive area. Farndon Windmill, a Grade II Listed Building dating to 1823, is located c.20m west of Field 1. A further c.46m to the west, there is a possible Iron Age or Romano-British settlement at Farndon, investigated in 2000 (FARI 2000). The projected second line of circumvallation at Newark (M3114), suggested by a seventeenth-century map depicting the Siege of Newark-on-Trent (6 March 1645–8 May 1646) (National Highways 2021) passes through the southwestern half of Field 1. Part of Field 1 is mapped as being underlain by the Holme Pierrepont Sands and Gravels, which deposit in the Farndon area has produced Late Upper Palaeolithic finds.

3.1.2 Results of the trial trenching

There were two 50m machine-dug trenches excavated in Field 1 (Figure 3.2, Figure 4). The topsoil in this field was generally of a loose dark blackish brown clayey silt, 0.2–0.25m on top of redeposited mid-brown clayey silt with inclusions of gravel, tarmac, redbrick and concrete. The subsoil layer, measuring 0.2–0.7m deep, was a compact yellowish-brown and greyish-blue clay marl to a moderately compact reddish-brown silty clay (Plates 1–2; see Appendix 1.1: Context Register). The underlying deposit was presented as a compact bluish-grey and yellowish-brown clay marl (Plate 3). No archaeological features were uncovered as a result of the trial trenching (Table 4; Plates 4–5).

Table 4: Summary of trenches in Field 1

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
0101–0102	No archaeology.	None.

3.1.3 Summary and Conclusions

Field 1 did not produce any features of archaeological significance.

3.2 Field 2

3.2.1 Area specific archaeological background

This field is in active floodplains (Figures 3.2, 5). It was previously the subject of a metal detecting survey which produced twenty finds that were mostly post-medieval in date with two finds that may be medieval (Gethin & Appleby 2023; Table 5). The projected second line of circumvallation at Newark (M3114), suggested by a seventeenth-century map depicting the Siege of Newark-on-Trent (6 March 1645–8 May 1646), is located across the River Trent from Field 2. Also across the river is the location

of a possible Iron Age or Romano-British settlement at Farndon (M3018), which was investigated in 2000 (Fari 2000).

Table 5: Metal detecting artefactual details in Field 2

Trench no.	Metal detecting finds details
0202	F#36 (silver alloy 1942 George VI shilling) found near E end of trench.
0204	F#36 (silver alloy 1942 George VI shilling) found to S of the W end of the trench.
0206	F#30 (copper-alloy half penny early eighteenth-century date) found near W end of trench.
0210	F#28 (lead rifle bullet later nineteenth-century date) found east of trench.
0213	F#32 (copper-alloy nineteenth-century Victoria farthing) found south of trench.
0214	F#32 (copper-alloy nineteenth-century Victoria farthing) found at south end of trench; F#33 found at north end of trench.
0220	F#35 (copper-alloy vessel fragment) found near north end of trench.
0221	F#31 (copper-alloy vessel rim fragment) found near north end of trench.
0222	F#31 (copper-alloy vessel rim fragment) found near north end of trench.
0223	F#33 (plumb-bob or balance weight, possibly medieval) near south end of trench.
0227	F#28 (lead-rifle bullet later nineteenth-century date) found near south end of trench.
0236	F#29 (copper-alloy button possibly eighteenth–nineteenth-century date) found immediately northeast of trench.
0239	F#35 (copper-alloy vessel fragment) found south of trench.
0245	F#29 (copper-alloy button possibly eighteenth–nineteenth-century date) found near south end of trench.
0251	F#26 (broken 50 calibre cartridge, WWII American) found near middle of trench.
0258	F#25 (copper-alloy vessel fragment) found at north end of trench.
0259	F#22 (copper-alloy vessel rim fragment) found near middle of trench.
0260	F#23 (copper-alloy vessel fragment, possible medieval date) found near north end of trench.
0261	F#23 (copper-alloy vessel fragment, possible medieval date) found to southeast of end of trench.
0263	F#21 (copper-alloy decorative fitting possibly eighteenth–nineteenth century) found to west of trench.
0264	F#21 (copper-alloy decorative fitting possibly eighteenth–nineteenth century) found to east of trench.
0268	F#17 (copper-alloy pierced disc fitting, possibly post-medieval) found to east of trench; F#18 found at south end of trench; F#19 found at north end of trench.

3.2.2 Results of the trial trenching

There were 69 50m machine-dug trenches excavated in Field 2 (Figure 5). All trenches were dug to a depth of c.1m, not reaching pre-Holocene deposits, and after consultation with the Curator (Ursilla Spence from Nottinghamshire County Council) a selection of eight sondages were excavated in this

field to 1.5–3m depth to find possible archaeological remains, and to identify the level of the water table. These sondages were dug in the following trenches: 0217, 0224, 0241, 0246, 0249, 0250, 0255 and 0258. The water table was reached at a depth from 1.2m in Trench 0250 (Plate 6) and at 2m in Trench 0258 (Plate 7); across the field it was reached at an average depth of c.1.4m.

The topsoil comprised friable, dark-greyish brown silty clay with occasional inclusions of pebbles, flecks of charcoal and modern debris and ranged from 0.15–0.5m in depth. Alluvially deposited, mottled, mid-greyish-reddish brown silty clay subsoil with occasional manganese inclusions lay beneath this (Plates 8–9; see Appendix 1.1: Context Register). This was only excavated until the trenches reached 1m in depth, revealing between 0.2m and 0.8m depth of the subsoil. Underlying natural sands and gravels were only occasionally reached where sondages were dug. Where the sondages reached natural layers, it presented as a mid-greyish orange to mid-greyish brown sandy gravel with frequent inclusions of small–medium sub-angular and sub-rounded stones (Plates 10–12).

Possible or definite archaeological remains were found in four of the trenches (Figure 6.1; Table 6): Trenches 0213–0214, 0217 and 0269.

Trench 0213 contained one feature of archaeological potential, an alluvial deposit layer (C.021304), which produced sherds of modern pottery, pieces of glass and fragments of clay tobacco pipes (Plates 13–15; Figure 6.2.1). The clay tobacco pipe fragments are likely eighteenth-century in date (Appendix 7).

Trench 0214 also contained an alluvial deposit layer (C.021404) from which fragments of possible post-medieval bricks, pieces of colourless vessel glass and occasional fragments of clay tobacco pipes were retrieved (Plates 16–20; Figure 6.2.2). The clay tobacco pipe fragments, numbering seven pieces from a small bowl and stem, came from the same pipe with a spurred bowl with moulded feathers rising from the base and a thin stem fragment from the mouthpiece. This clay pipe likely dates to c.1840–80. The pieces of glass are unlikely to date earlier than the twentieth century (Appendix 7).

Trench 0217 (Plate 21) contained the cut of a palaeochannel (Plate 22) oriented east-southeast–west-northwest, which had four fills: C.021706, C.021707, C.021708 and C.021709 (Figure 6.2.3). A possible fragment of a land drain and pieces of colourless vessel glass (Appendix 7) dating to the nineteenth–twentieth centuries were retrieved from these fills (Plates 23–24).

The final trench, Trench 0269, contained one pit (C.026905) (Plate 25; Figure 6.2.6). It was subcircular in plan, 0.4m in maximum diameter, contained a charcoal-rich fill (C.026904) and had signs of oxidisation on its edges suggesting *in-situ* burning. No artefacts were found in it. A sample (S#2.1; see

Appendix 1.3: Site Sample Register) taken from its fill (C.026904) produced charcoal only (Appendix 9). This sample may be suitable for dating.

The remainder of the trenches (0201–0212, 0215–0216 & 0218–0268) did not produce any archaeological remains (Plates 26–28).

Table 6: Summary of trenches in Field 2

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
0201–0212	No archaeology.	None.
0213	1 deposit (C.021304).	Modern ceramic building material and eighteenth-century clay pipe from C.021304
0214	1 deposit (C.021404).	Nineteenth-century clay pipe and modern ceramic building material from C.021404.
0215–0216	No archaeology.	None.
0217	1 palaeochannel (C.021705).	Nineteenth–twentieth-century ceramics and glass from fills C.021704 and C.021707.
0218–0268	No archaeology.	None.
0269	1 pit (C.026905).	S#2.1 from C.026904.

3.2.3 Summary and Conclusions

In Field 2, 69 trenches were excavated, possible features were found in four trenches. Apart from one, the features are all likely of relatively modern date and relate to agricultural activity in the area. Sherds of pottery found in some features may have been brought in via manuring. The one feature (C.026905) which may be of antiquity was a small subcircular pit with a charcoal-rich fill, which appears to have been burnt *in situ*. Preliminary analyses of an undated sample of its fill revealed charcoal only.

3.3 Field 3

3.3.1 Area specific archaeological background

Field 3 was also located in active floodplains (Figure 3.2). Prior to the trial trenching, it was the subject of a metal detecting survey (Gethin & Appleby 2023) which produced sixteen finds that were mostly post-medieval in date (Table 7).

Table 7: Metal detecting artefactual details in Field 3

Trench no.	Metal detecting finds details
0301	F#16 (copper-alloy vessel fragment possibly eighteenth–nineteenth-century date) found near north end of trench.

Trench no.	Metal detecting finds details
0302	F#13 (possible post-medieval sheet of copper-alloy) found near south end of trench; F#10 (modern copper-alloy object) found near north end of trench.
0303	F#10 (modern copper-alloy object) found immediately south of trench.
0304	F#6 (fragment of decorative copper-alloy fitting, possibly eighteenth–nineteenth-century date) and F#11 (post-medieval copper-alloy vessel rim fragment) found at south end of trench.
0306	F#5 (copper-alloy button possibly eighteenth–nineteenth century) found near south end of trench.
0310	F#3 (unworked piece of flint) found just north of trench; F#4 found just south of trench.
0312	F#14 (tinned-copper button possibly nineteenth century) found just west of trench.
0317	F#12 (modern unidentified object) found just west of trench.

3.3.2 Results of the trial trenching

There were seventeen 50m machine-dug trenches in Field 3 (Figure 7). The topsoil in this field was generally of a friable, dark-greyish brown to mottled-blackish grey silty clay and was measured at a depth of 0.2–0.4m. The subsoil layer, measuring 0.6–0.8m deep, was a friable, light- to mid-reddish brown silty, sandy clay (Plates 29–30). The underlying deposit was only reached in one trench (Trench 0311) and presented as a mottled-brownish grey clay with occasional inclusions of manganese and clayey alluvial gravel (Plate 31). No archaeological features were uncovered as a result of the trial trenching (Table 8) (Plates 32–34).

Table 8: Summary of trenches in Field 3

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
0301–0317	No archaeology.	None.

3.3.3 Summary and Conclusions

Field 3 did not produce any features of archaeological significance. The finds recovered during the metal detecting survey were likely incidental and dropped or washed into the field.

3.4 Field 6

3.4.1 Area specific archaeological background

Field 6 is located c.300m southwest of SM 1017402 (a Civil War Sconce). It occurs in an active floodplain and was therefore not suitable for geophysical survey. It was the subject of a metal detecting survey (Gethin & Appleby 2023) that produced four finds which date from the medieval to the post-medieval period (Table 9).

Table 9: Metal detecting artefactual details in Field 6

Trench No.	Metal detecting finds details
0604	F#102 (possible lead token) found to southeast of trench.
0612	F#103 (possible post-medieval white metal object) and F#104 (George I or II copper halfpenny) found to southwest of trench.
0650	F#114 (copper-alloy button likely dating to the nineteenth century) found toward northern end of trench.

3.4.2 Results of the trial trenching

There were 76 trenches programmed for this field, but after a number of trenches were excavated, it was agreed with Nottinghamshire County Council Curator Ursilla Spence to limit further trial trenching. The trenches excavated were: 0601–0608; 0610–0615; 0621–0625; 0631; 0633–0635; 0639; 0641; 0643; 0653; 0655; 0661; 0666; and 0668–0669 (Figure 8).

The topsoil in Field 6 comprised friable dark-greyish brown to dark-brownish grey silty clay and measured 0.25–0.4m deep. The subsoil layer was of a friable mid-reddish brown silty clay with occasional manganese inclusions and ranged between 0.1–0.8m in depth (Plates 35–37). Underlying sediments were only reached in Trenches 0605–0608, 0610–0615, 0621–0625, 0631, 0633–0635, 0637, 0639, 0641, 0643, 0653, 0655 and 0666. Where they were uncovered, they were noted as being a mottled light-brownish grey to mid-reddish brown silty, sandy clay with occasional inclusions of sub-rounded stones, manganese, and fragments of iron pan. These lower sediments were only exposed to a depth of 0.1m (see Appendix 1.1: Context Register).

No archaeological features were uncovered as a result of the trial trenching (Plates 38–39; Table 10).

Table 10: Summary of trenches in Field 6

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
0601–0669	No archaeology.	None.

3.4.3 Summary and Conclusions

Field 6 did not produce any features of archaeological significance. The finds recovered during the metal detecting survey were likely incidental and dropped or washed into the field.

3.5 Field 8

3.5.1 Area specific archaeological background

Field 8 is located 0.5–1km northwest of Newark Castle and is immediately south of SAM 1016048 (Civil War redoubt) and c.160m south of SAM 1016051 (a moated site). It was the subject of a metal

detecting survey (Gethin & Appleby 2023) that produced seven post-medieval finds, only one of which was located in the immediate vicinity of a trench (Table 11).

Table 11: Metal detecting artefactual details in Field 8

Trench No.	Metal detecting finds details
0803	F#77 (copper-alloy button, possibly 18 th /19 th century in date) found to southeast of trench

3.5.2 Results of the trial trenching

There were four 50m trenches excavated in this field (Figure 3.1).

The topsoil in Field 8 comprised a loose dark brown sandy, clayey silt with rare inclusions of clay tobacco pipe fragments and modern pottery and measured 0.18–0.25m deep. The subsoil layer was of a compact mid-reddish brown sandy, clayey silt (more clayey than the topsoil) and measured approximately 0.6m in depth (Plates 40–41). Underlying sediments were only reached in Trenches 0801 and 0803–0804 at depths of 0.8–1m. Where they were uncovered, they were noted as being a well-sorted reddish brown sandy gravel comprising quartz and flint stones averaging 2cm in size (Plate 42; see Appendix 1.1: Context Register). A small amount of modern material such as pottery, glass, animal bones and metal objects were recovered from the topsoil layer in this field.

No archaeological features were uncovered as a result of the trial trenching (Plates 43–44; Table 12).

Table 12: Summary of trenches in Field 8

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
0801	No archaeology.	Metal object (topsoil).
0802	No archaeology.	None.
0803	No archaeology.	Post-medieval to modern pottery, glass, CTP, animal bone (topsoil).
0804	No archaeology.	Post-medieval to modern CTP and pottery (topsoil).

3.5.3 Summary and Conclusions

Field 8 did not produce any features of archaeological significance. The finds recovered during the metal detecting survey and from the topsoil were likely incidental and dropped into the field.

3.6 Field 9

3.6.1 Area specific archaeological background

Field 9 is located 0.5–1km northwest of Newark Castle, c.90m southeast of SAM 1016048 (Civil War redoubt) and c.190m southeast of SAM 1016051 (a moated site). It was the subject of a metal detecting survey (Gethin & Appleby 2023) that produced thirteen post-medieval finds (Table 13).

Table 13: Metal detecting artefactual details in Field 9

Trench No.	Metal detecting finds details
0901	F#67 (copper-alloy 1902 Edward VII half penny) found at south end of trench
0902	F#68 (possible lead token, possibly 16 th –18 th century date) found at south end of trench
0903	F#59 (lead musket ball) found toward middle of trench

3.6.2 Results of the trial trenching

There were three 50m trenches excavated in this field (Figure 3.1).

The topsoil in Field 9 comprised a loose dark blackish-brown clayey, sandy silt with rare inclusions of charcoal flecks, pebbles, modern pottery and clay tobacco pipe fragments. The layer measured 0.2–0.25m deep. The subsoil layer was of a compact mid-reddish brown sandy, clayey silt, with some soft silty sand, with occasional inclusions of pebbles and rare inclusions of charcoal flecks and measured approximately 0.8–1m in depth (Plates 45–46; see Appendix 1.1: Context Register). Underlying sediments were not reached in this field. Two metal objects were recovered from metal detecting the spoil heaps, but these are likely modern in date.

No archaeological features were uncovered as a result of the trial trenching (Plates 47–48; Table 14).

Table 14: Summary of trenches in Field 9

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
0901	No archaeology.	Modern metal objects.
0902–0903	No archaeology.	None.

3.6.3 Summary and Conclusions

Field 9 did not produce any features of archaeological significance (Figure 10). The finds recovered during the metal detecting were likely incidental and dropped into the field.

3.7 Field 11

3.7.1 Area specific archaeological background

Field 11 is located 0.5–1km northwest of Newark Castle (Figure 3.1). It was the subject of a metal detecting survey (Gethin & Appleby 2023) which did not produce any finds.

3.7.2 Results of the trial trenching

There were four 50m trenches excavated in this field (Figure 11).

The topsoil in Field 11 comprised a loose dark brown clayey, sandy silt which measured 0.2–0.25m deep. The subsoil layer was of a loose mid-reddish brown sandy, clayey silt to compact mid-greyish- and reddish-brown silty clay and measured approximately 0.35–0.9m in depth (Plates 49–50; see Appendix 1.1: Context Register). Underlying sediments were exposed at approximately 1–1.05m depths, where it presented variously as mid-yellowish-brown sand and compact mid-brownish-grey silty clay (Plate 51).

No archaeological features were uncovered as a result of the trial trenching (Plates 52–53; Table 15).

Table 15: Summary of trenches in Field 11

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
1101–1104	No archaeology.	None.

3.7.3 Summary and Conclusions

Field 11 did not produce any features of archaeological significance.

3.8 Field 12

3.8.1 Area specific archaeological background

Field 12 is located 0.5–1km north-northwest of Newark Castle (Figure 3.1). It was the subject of a metal detecting survey (Gethin & Appleby 2023) which produced a single find (F#56, a lead pistol ball).

3.8.2 Results of the trial trenching

There were four 50m trenches excavated in this field (Figure 12).

The topsoil in Field 12 comprised a loose dark brown clayey, sandy silt which measured 0.2–0.25m deep. The subsoil layer was of a compact mid-reddish-brown silty, sandy clay and measured approximately 0.35–0.9m in depth (Plates 54–55; see Appendix 1.1: Context Register). Underlying sediments were exposed at approximately 1–1.05m depths, where it generally did not present with any change from the natural subsoil, with occasional spots of well-sorted, mid-reddish-brown sandy gravel.

No archaeological features were uncovered as a result of the trial trenching (Plates 56–57; Table 16).

Table 16: Summary of trenches in Field 12

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
1201–1204	No archaeology.	None.

3.8.3 Summary and Conclusions

Field 12 did not produce any features of archaeological significance. The lead pistol ball recovered during the metal detecting survey was likely incidental.

3.9 Field 13

3.9.1 Area specific archaeological background

Field 13 is located 0.5–1km north-northwest of Newark Castle (Figure 3.1). It was the subject of a metal detecting survey (Gethin & Appleby 2023) which produced a single find (F#57, a copper-alloy nail of possible nineteenth-century date).

3.9.2 Results of the trial trenching

There were two 50m trenches excavated in this field (Figure 13).

The topsoil in Field 13 comprised a loose dark brown clayey, sandy silt which measured 0.2–0.25m deep. The subsoil layer was of a compact mid-reddish-brown sandy, clayey silt and measured approximately 0.6–0.7m in depth (Plates 58–59; see Appendix 1.1: Context Register). Underlying sediments were exposed at approximately 0.8–1.05m depths, where it exhibited no change from the subsoil in Trench 1301 and presented as loose mid-reddish-brown silty sand in Trench 1302. Trench 1302 also contained a small section of modern dumped material, likely from the original construction of the A46, in the southern end of the trench. A few pieces of modern glass and pottery were recovered from the topsoil in this field.

No archaeological features were uncovered as a result of the trial trenching (Plates 60–61; Table 17).

Table 17: Summary of trenches in Field 13

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
1301	No archaeology.	Modern glass and pottery.
1302	No archaeology.	None.

3.9.3 Summary and Conclusions

Field 13 did not produce any features of archaeological significance. The copper-alloy nail recovered during the metal detecting survey and the pottery and glass recovered from the topsoil were likely incidental and dropped into the field.

3.10 Field 14

3.10.1 Area specific archaeological background

Field 14 is located 0.5–1km northwest of Newark Castle (Figure 3.1). It was the subject of a metal detecting survey (Gethin & Appleby 2023) which produced seven finds mostly dating to the post-medieval period (Table 18).

Table 18: Metal detecting artefactual details in Field 14

Trench No.	Metal detecting finds details
1401	F#51 (post-medieval barrel key or winding key) found near middle of trench
1402	F#54 (copper-alloy George III half-penny, late 18 th /early 19 th -century date) found near middle of trench
1403	F#55 (molten/lead waste piece) found near west end of trench

3.10.2 Results of the trial trenching

There were four 50m trenches excavated in this field (Figure 14).

The topsoil in Field 14 comprised a loose mid-blackish-brown sandy clay which measured 0.15–0.2m deep. The subsoil layer was of a loose mid-reddish-brown silty clay and measured approximately 0.7–0.8m in depth (Plates 62–63; see Appendix 1.1: Context Register). Underlying sediments were exposed at approximately 1.5m depths, where it presented as loose mid-reddish-brown sandy, silty clay with dark brownish black flecks throughout.

No archaeological features were uncovered as a result of the trial trenching (Plates 64–65; Table 19).

Table 19: Summary of trenches in Field 14

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
1401–1404	No archaeology.	None.

3.10.3 Summary and Conclusions

Field 14 did not produce any features of archaeological significance. The finds recovered during the metal detecting survey was likely incidental and dropped into the field.

3.11 Field 15

3.11.1 Area specific archaeological background

Field 15 is located 0.5–1km northwest of Newark Castle (figure 3.1). It was the subject of a metal detecting survey (Gethin & Appleby 2023) which did not produce any finds.

3.11.2 Results of the trial trenching

There were three 50m trenches excavated in this field (Figure 15).

The topsoil in Field 15 comprised a loose dark brown clayey, sandy silt to mid-greyish-brown sandy clay which measured 0.1–0.25m deep. The subsoil layer was of a loose mid-reddish-brown silty, sandy clay and clayey sand and measured approximately 0.8–0.9m in depth (Plates 66–67; see Appendix 1.1: Context Register). Underlying sediments were exposed at approximately 0.8–0.95m depths, where it exhibited no change from the subsoil in Trenches 1501 and 1502 and presented as loose mid-reddish-brown clay in Trench 1503.

No archaeological features were uncovered as a result of the trial trenching (Plates 68–69; Table 20).

Table 20: Summary of trenches in Field 15

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
1501–1503	No archaeology.	None.

3.11.3 Summary and Conclusions

Field 15 did not produce any features of archaeological significance.

3.12 Field 16

3.12.1 Area specific archaeological background

Field 16 is located 0.5–1km north-northwest of Newark Castle (Figure 3.1). It was the subject of a metal detecting survey (Gethin & Appleby 2023) which did not produce any finds. A medieval–Georgian-era road (M3093) passes through the easternmost corner of this field.

3.12.2 Results of the trial trenching

There were four 50m trenches excavated in this field (Figure 16).

The topsoil in Field 16 comprised a dark greyish-brown sandy clay which measured 0.17–0.2m deep. The subsoil layer was of a mid-brown sandy silt and measured approximately 0.63–1m in depth (Plates 70–71; see Appendix 1.1: Context Register). The natural layer presented as a mid-yellowish-brown silty clay.

One ditch of likely modern date was uncovered as a result of the trial trenching (Plates 72–73; Table 21; Figure 17.1). This ditch did not produce any artefactual or dating material.

Table 21: Summary of trenches in Field 16

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
1601	No archaeology.	None.
1602	1 ditch (C.160204)	None.
1603–1604	No archaeology.	None.

3.12.3 Summary and Conclusions

Field 16 produced only one feature; however, this ditch (C.160204) is likely of modern date. It was possibly a service trench.

3.13 Field 18

3.13.1 Area specific archaeological background

Field 18 is located 0.5–1km north of Newark Castle and immediately south of SAM 1016046 (Civil War redoubt) (Figure 3.1). A medieval–Georgian-era road (M3093) passes through the western portion of the field, which is also adjacent to two Grade II listed buildings: causeway arches dated to 1770 (1196289) and a causeway culvert dated to 1770 (1297727). It was the subject of a metal detecting survey (Gethin & Appleby 2023) which produced twelve finds which were mostly post-medieval in date (Table 22).

Table 22: Metal detecting artefactual details in Field 18

Trench No.	Metal detecting finds details
1804	F#38 (copper-alloy buckle possibly 19 th century date) found to the west of trench
1806	F#43 (copper-alloy early 18 th century half-penny) found toward south end of trench
1808	F#48 (molten/waste lead piece) found toward middle of trench

3.13.2 Results of the trial trenching

There were nine 50m trenches planned for Field 18, but only seven were excavated (Figure 18). Trenches 1802 and 1803 presented health and safety concerns and were deemed unsafe for excavation.

The topsoil in Field 18 comprised a dark brown silty clay which measured 0.27–0.3m deep. The subsoil layer was of a mid-brown silty clay and measured approximately 0.6–0.8m in depth (Plates 74–75; see Appendix 1.1: Context Register). Underlying sediments were exposed via a test pit in Trench 1805 (Plate 76), where it presented as mid-yellowish-brown sandy silt.

Two features of likely modern date were uncovered as a result of the trial trenching (Plates 77–78; Table 23). These included a pit (Plate 79) which contained occasional inclusions of brick fragments and an area of modern disturbance (Plate 80) which was not excavated due to the potential presence of hazardous materials.

Table 23: Summary of trenches in Field 18

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
1801	1 modern pit (C.180105)	None.
1804–1808	No archaeology.	None.
1809	1 area of modern disturbance (C.180904).	None.

3.13.3 Summary and Conclusions

Field 18 produced only two features; however, both are likely of modern date. The pit may be associated with the construction of the nearby bridge. The finds recovered during the metal detecting survey were likely incidental and dropped into the field.

3.20 Field 20

3.20.1 Area specific archaeological background

This field was previously the subject of geophysical survey (Dowling 2023) (Figure 2). The survey shows several anomalies, seven of which were specifically marked as being of note (Table 24). Anomalies G2, G6 (only present in Field 21) and G7 were interpreted as a rectilinear network of ditches suggestive of field systems or settlement. These anomalies extended over an area measuring about 320m east–west by 135m north–south and occupied slightly higher ground in the southern sectors of Fields 20 and 21.

Table 24: Principal geophysical anomalies in Field 20

Geophysical Anomaly	Description
G1	Integrated array of slender, linear, curvilinear, and circular positive magnetic anomalies. Network of overlapping and interconnected ditches, possibly indicative of ancient settlement. Extends over an area measuring about 140m NW–SE by 65m NE–SW. Located directly south of A1 and corresponds to cropmark monument M3606. May be associated with G4 and G5.
G2	Integrated array of slender, linear and curvilinear positive anomalies. Rectilinear network of ditches suggestive of former field system/s and/or settlement (320m E–W by 135m N–S). Occupies slightly higher ground in southern sectors of Fields 20 and 21. Possibly associated with G6 and G7.

Geophysical Anomaly	Description
G3	Band of weak magnetic responses. Possible palaeochannel and/or artificial watercourse. Located at northern perimeter of G2 and traced for a distance of c.210m. Interpretation is very tentative.
G4	Positive linear. Possible linear ditch (c.120m NW–SE). May form part of G1 or represent a later field boundary. Not depicted on historical maps.
G5	Weak circular, curvilinear and ‘pit-type’ positive anomalies. Possible footprint of several circular structure/buildings (averaging 5m in diameter), as well as other discrete features, comprising potential ditches and possible pits/deposits. Seemingly associated with G1.
G7	Multiple, discrete, positive linears. Possible ditches. May be related to G2.

3.20.2 Results of the trial trenching

There were five 50m machine-dug trenches excavated in Field 20 (Figure 20). Definite archaeological remains were found in four trenches with a high density of archaeological features from several periods, including the Iron Age, the Roman period and the early medieval or Saxon period (Table 25; Figure 21.1).

The topsoil comprised 0.35–0.4m deep friable dark-blackish brown silty clay with gravel and roots. It contained inclusions of pottery, charcoal, glass, bone and plastic. The 0.1m thick subsoil comprised friable mid-brown silty clay with inclusions of gravel, pottery, charcoal, bone and glass (Plates 81–83). The underlying natural comprised purplish-brown silty clay with gravel and lenses of blue clay, identified as highly weathered Mercia Mudstone (Appendix 1.1: Context Register).

Trench 2001 contained one northwest to southeast oriented ditch (C.200105), 3.8m wide, 0.8m deep (Figure 21.2.1; Plate 84), with a single fill (C.200104). It did not contain any artefactual or other dating evidence and did not manifest as a recognisable anomaly in the geophysical survey, probably because of the homogeneous and similar composition of its fill to the surrounding natural (C.210103).

Trench 2002 was located in the south end of the field, and it was the only trench with no archaeological remains present (Plate 85). Topographically, it was in the highest part of the field, and the underlying geological substrate (C.200203) appeared just below the topsoil. This may indicate more soil erosion in this part of the field, and the potential loss of archaeological features.

Trench 2003 contained two parallel ditches located towards the east end of the trench that corresponded with geophysical anomaly G2 (Figure 20, 21.1), a pit, the remains of a surface and a possible kiln. Ditch C.200307 was oriented north-northwest–south-southeast (Figures 21.3.1–21.3.2; Plate 86). It appears to be the outer ditch of the rectilinear network of ditches or enclosures. The fill (C.200306) of the ditch produced sherds of an unreeded hammerhead Mancetter mortarium (dated to AD220–250) and one sherd of Samian Ware (F#2.3; Appendix 1.2: Site Finds Register) (Plate 87),

which was dated to AD200–250 (Appendix 4). Ditch C.200307 also contained animal bone fragments, including cattle, pig, and horse (Appendix 5). Immediately inside the eastern part of ditch C.200307, a layer of compacted brownish-yellow clay (C.200305) (Plates 88–89) was uncovered. This is interpreted as a surface and seemed to correspond to a level of occupation related to ditch C.200307. The second ditch (C.200313) contained two fills, neither of which produced artefactual dating evidence (Figure 21.3.1). It was cut by a subcircular pit (C.200309) filled by a charcoal-rich deposit (C.200308) (Figures 21.2.7 & 21.3.1), from which more than 27 sherds of Roman pottery, including a complete vessel dated to between AD45–100, were retrieved (Plates 90–91; Appendix 4). The stratigraphic relationships between these features suggests that the ditch (C.200313) dates to an earlier phase of activity, possibly an earlier Roman or even Iron Age phase. The ditch (C.200313) was also partially overlain by a small, cobbled surface or fireplace and *in-situ* burnt clay (C.200310) at the eastern edge of the yellow floor surface C.200305 (Plates 92–94; Figure 21.3.1). Many of these features were sealed by a deposit C.200304 (Figure 21.3.1) recorded for about 15m at the eastern end of the trench that contained Trent Valley Ware dating from AD45 (Appendix 4) and fragments of cattle and horse bone (Appendix 5).

Trench 2004 contained three ditches, four pits (one of which is interpreted as a sunken-floored-building) and one deposit. Geophysical anomaly G2 was discernible in this trench and corresponded to three parallel and associated ditches (C.200412, C.200414 & C.200416), all running east–west (Plate 95; Figure 21.2.5). These associated ditches were sealed by deposit C.200404, which produced animal bones, including cattle, pig, sheep, and horse (Appendix 5), and Roman pottery sherds (Plate 96) dating from AD250 (Appendix 4).

Towards the south end of Trench 2004, a group of associated features dating to the Saxon period were uncovered. These included a rectangular pit C.200407 with rounded corners which is interpreted as part of a sunken-floored-building (Figures 21.2.2–21.2.3; Plates 97–98). This feature measured c.4.45m long and extended beyond the limits of the trench. Its fills (C.200406 & C.200408) produced an important assemblage of archaeological remains (Appendix 1.2: Site Finds Register), including loom weights (F#2.6–2.8; Plates 99–100) dating to AD400–700 (Appendix 4), an indeterminate copper-alloy object (F#2.2; Appendix 6), two Saxon pottery sherds dating to AD400–700 (Appendix 4), fragments of metal slag and one fragment of a cow tooth (Appendix 5). The basal fill (C.200406) contained an abundance of charcoal and burnt clay, perhaps indicating the house burnt down or the presence of some sort of industrial waste. A sample (S#2.8; Appendix 1.3: Site Sample Register) taken from this fill contained grains of rye (*Secale cereale*), oat (*Avena sp.*) and moderate numbers of flax (*Linum utitissimum*) (Appendix 9). The most dominant material in this sample was charcoal, some of which were tentatively identified as oak (*Quercus*). Sample #2.9, also taken from C.200406, contained rare

grains of rye (*s. cereale*), barley (*H. vulgare*) and moderately abundant flax seeds (*L. utititissimum*), as well as legumes, knotweeds (*Polygonaceae*) and grass seeds (Appendix 9).

There were two more features near the Saxon house, towards the centre of the trench: a pit (C.200418) (Plate 101; Figure 21.2.6) and a ditch (C.200420) (Plate 102; Figure 21.2.4). The pit (C.200418) was circular in plan, c.1.7m diameter and 0.48m deep. It contained a large quantity of stones, a moderate amount of animal bone (including fragments of chopped cattle pelvis, horn core fragments and sheep teeth) (Appendix 5), sherds of Middle Iron Age pottery (Appendix 4) and one fragment of a decorated loom weight (Appendix 1.2: Site Finds Register). Pit C.200418 cut ditch C.200420, which did not produce any archaeological remains.

Geophysical anomaly G2 was also discernible in Trench 2005. It corresponded with ditch C.200510 (Figure 21.3.3; Plate 103), an east–west oriented ditch, 3m wide and 0.55m deep. The fill of the ditch (C.200509) produced two sherds of Roman pottery dated from AD70 (Appendix 4) and a fragment of a cattle tooth (Appendix 5).

Towards the north of Trench 2005, a curvilinear gully (C.200506) was partially exposed (Plate 104; Figure 21.3.4). Its exposed portion had a maximum diameter of c.1.4m and depth of c.0.6m. It contained a single fill (C.200505) which produced one fragment of possible Middle Iron Age pottery (Appendix 4).

One linear feature (C.200508) (Plate 105; Figure 21.3.5), interpreted as a gully and oriented northwest–southeast, was dug at the north end of the trench. This feature produced no archaeological remains.

A large deposit (C.200504) lay under the subsoil and sealed all the archaeological remains in Trench 2005 (Figure 21.3.3). This layer appeared to have formed after occupation of the site ended and the field was turned to agricultural use.

Table 25: Summary of trenches in Field 20

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
2001	1 ditch (C.200105).	None.
2002	No archaeology.	None.
2003	1 deposit (C.200304), 2 floor surfaces (C.200305 & C.200310), 2 ditches (C.200307 & C.200313); 1 pit (C.200309) and 1 charcoal-rich deposit (C.200308).	S#2.7 from C.200306. S#2.17 from C.200308. Roman pottery (including F#2.4) from C.200304, C.200306 & C.200308.

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
2004	1 deposit (C.200404), 3 pits (C.200407, C.200418 & C.200409) and 4 ditches (C.200412, C.200414, C.200416 & C.200420).	S#2.8 and S#2.9 from C.200406. S#2.10 from C.200410. S#2.11 from C.200411. S#2.13 from C.200413. S#2.12 from C.200415. S#2.18 from C.200417. Loom weights (F#2.6, 2.7 & 2.8) from C.200406 & C.200408. Roman pottery sherds from C.200404. Copper alloy object from C.200408.
2005	1 deposit (C.200504), 1 structure (C. 200506), 1 gully (C.200508) and 1 ditch (C.200510).	S#2.19 from C.200509. S#2.20 from C.200505. S#2.21 from C.200504. Roman pottery from C.200504, C.200507 & C.200509. Iron Age pottery from C.200505.

3.20.3 Summary and Conclusions

The geophysical survey indicated a set of rectilinear enclosures extending from Field 20 into 21, likely representing a settlement with outlying field systems. There were five 50m machine-dug test trenches excavated in Field 20 and archaeological or potential archaeological remains were discovered in four. These confirmed the presence of the remains indicated by the geophysical survey and revealed them to represent a multiphase settlement site of Middle–Late Iron Age and Roman date with outlying Saxon remains.

The majority of the dated remains were of the Roman period and the layout of the Iron Age remains was obscured by these. Most of the Iron Age pottery was found as residual material in Roman features. Several features did appear to be of Iron Age date however; these included a ditch (C.200313) sealed under a small, cobbled surface (C.200310) dated through finds of pottery to AD45–120 in Trench 2003, and a possible structure (C.200510) partially exposed and excavated in Trench 2005.

The extent of the Roman remains appears well-defined in the geophysical survey. The features revealed in the trial trenching suggest activity is concentrated in Field 20, with possible industrial activity and surfaces among the remains. On the basis of pottery retrieved, settlement would seem to span from early conquest up until the third century AD (Appendix 4).

A sunken-floored-building (C.200407) and associated features in Trench 2004 are of early medieval or Saxon date. They occur outside of the rectilinear enclosures and may indicate the presence a larger Saxon settlement on the site.

The undated ditch found in Trench 2001 that did not manifest in the geophysical survey suggests that further remains may lie in this part of the field.

3.21 Field 21

3.21.1 Area specific archaeological background

This field was previously the subject of geophysical survey (Dowling 2023) which showed several anomalies, six of which were of particular note and numbered (Table 26). G2, G6 and G7 marked a series of geophysical anomalies that combined to form a rectilinear network of ditches, which may suggest a field system or settlement that extended 320m east–west by 135m north–south, from Field 21 into Field 20. Geophysical anomaly G2 appeared to be defined by a palaeochannel to its north, just outside the area tested. There was one curvilinear feature tested by Trench 2110 that appeared to run against the line of some of the rectilinear enclosures and may belong to a different phase of activity.

Table 26: Principal geophysical anomalies in Field 21

Geophysical Anomaly	Description
G2	Integrated array of slender, linear and curvilinear positive anomalies. Rectilinear network of ditches suggestive of former field systems and/or settlement (c.320m E–W by 135m N–S). Occupies slightly higher ground in southern sectors of Fields 20 & 21. Possibly associated with G6 and G7.
G3	Band of weak magnetic responses. Possible palaeochannel and/or artificial watercourse. Located at northern perimeter of G2 and traced for a distance of c.210m. Interpretation is very tentative.
G6	Faint, slender, semi-circular positive anomaly. Possible western arc of small enclosure/structure, some 10m in diameter (N–S). Tentative feature but may be associated with G2.
G7	Multiple, discrete, positive linear anomalies. Possible ditches. May be related to G2.
G8	Faint, slender, positive lineation. Probable relict field boundary, c.50m in length (NE–SW). Marked on the first-edition six-inch Ordnance Survey Map (1884; surveyed 1883–84) and the first-edition 25-inch Ordnance Survey Map (1892–1914).
G9	Slender, positive linear anomaly. Probable relict field boundary, c.50m in length (roughly N–S). Recorded on the first-edition six-inch Ordnance Survey Map (1884; surveyed 1883–84) and the first-edition 25-inch Ordnance Survey Map (1892–1914).

3.21.2 Results of the trial trenching

There were fifteen 50m machine-dug trenches excavated in Field 21 (Figure 22). Possible or definite archaeological remains were found in ten of the trenches (Table 27; Appendix 1.1: Context Register; Figures 23.1–23.2).

The topsoil in this field was of a friable greyish brown silty loam and measured 0.35–0.4m deep. The subsoil was a friable reddish brown clayey silt, measuring 0.35–0.4m deep. The natural layer changes from yellowish- and reddish-brown sand and sandy gravels (Plates 106–107).

Trench 2101 contained two ditches which corresponded with geophysical anomaly G2 and were located towards the northern end of the trench (Figure 23.1). Ditch C.210107 was oriented east–west and measured 1.2m wide (Plate 108; Figure 23.3.1). Ditch C.210105, located c.9m north of C.210107 and oriented north-northwest–south-southeast, measured 1.84m wide (Plate 109; Figure 23.3.2). These two ditches corresponded with the same ditch within the overall G2 anomaly and appeared to be part of a rectilinear enclosure. Neither ditch produced any artefactual or other dating evidence.

Geophysical anomaly G2 was also discernible in Trench 2102, in ditch C.210209, which was oriented northeast–southwest (Plate 110; Figure 23.1). Trench 2102 also contained a second ditch (C.210205) (Plate 111) parallel to C.210209, although C.210205 did not correspond to a geophysical anomaly (Figures 23.3.3–23.3.4). Neither produced any artefactual or other dating evidence and both were likely related to modern agricultural activity or field boundaries.

Trench 2103 revealed several archaeological features, some of which were demonstrably of Roman date. One ditch C.210309 (Figure 23.3.5; Plate 112), oriented east–west, was recorded in the northern end of the trench and corresponded with geophysical anomaly G2 and formed part of a rectilinear enclosure (Figures 22 & 23.1). The two fills of this ditch (C.210308 & C.210310) produced a substantial quantity of Roman handmade pottery sherds dated from c.AD70 (Appendix 4) and a bent rectangular-sectioned iron object, possibly a fitting (F#2.9; Appendix 1.2: Site Finds Register; Appendix 6). Towards the centre of Trench 2103 was a pit (C.210307) which measured 2.27m long and 0.48m deep (Plate 113; Figure 23.3.6). This feature was interpreted as a charcoal-production pit, the fills of which (C.210306, C.210311, C.210312 & C.210313) suggested two possible episodes of use. Red scorched soil present at the base of the pit C.210307 indicated intense *in-situ* burning. Preliminary analysis of a sample from fill C.210306 (Sample#2.28; Appendix 1.3: Site Sample Register) was determined as consisting entirely of wood charcoal and no other charred plant remains (Appendix 9). Although no artefactual dating evidence was found, Curator Matthew Adams (Lincolnshire County Council) suggested, from comparison with charcoal-production pits found south of Newark, that it is likely of Roman date. Two pits (C.210315 & C.210317) (Plate 114; Figures 23.3.7–23.3.8) were excavated

towards the southeast end of Trench 2103 but did not produce any artefactual or other dating evidence.

Trench 2105 only produced one linear feature (C.210505), which was oriented north-northeast–south-southwest and was identified as a possible gully, likely modern in date (Plate 115; Figure 23.3.9). No artefactual or other dating evidence was recovered from this feature.

Only one linear feature was excavated in Trench 2106: a furrow (C.210605), oriented northwest–southeast, which did not produce any artefactual or any other dating evidence (Plate 116; Figure 23.3.10).

Trench 2107 contained three associated ditches, all running north–south, which corresponded with geophysical anomaly G2. Ditch C.210708 (Figure 23.4.1; Plate 117) was located at the western edge of the trench. It contained a single fill (C.210707) which produced four sherds of Roman pottery dated to AD250–400 (Appendix 4). Towards the centre of the trench a second ditch (C.210710) with a recut (C.210705) was recorded (Plate 118; Figure 23.4.2). Four sherds of Roman pottery were retrieved from the main fill of this ditch (C.210704), dated from post-AD70 (Appendix 4). Towards the east of the trench a third ditch (C.210712) did not produce any artefactual or other dating evidence (Plate 119; Figure 23.4.3). Combined with the geophysical survey results these ditches suggest a series of at least four sub-rectangular enclosures, only some of which are likely contemporary (Figure 22).

Trench 2108 contained two ditches that seem to correspond to the geophysical anomaly G2 (Figure 22 & 23.2) and several other features that did not manifest in the survey. Ditch (C.210820) (Plate 120) was a northwest–southeast oriented ditch. Two fragments of cattle teeth (Appendix 5) and one fragment of early Roman pottery, dated AD45–120, were retrieved from its fill (Appendix 4). A second ditch terminus (C.210816), oriented northwest–southeast, which cut ditch C.210820, produced three fragments of Middle Iron Age pottery (Appendix 4; Figure 23.4.8). A ditch or possible gully (C.210810), oriented north-northeast–south-southwest, likely belonged to a later period of activity, as the fill (C.210809) produced eleven sherds of Roman pottery dating from post-AD45 (Appendix 4; Figure 23.4.6). The remaining archaeological features uncovered in Trench 2108 did not correspond with any geophysical anomaly and did not produce any artefactual or other dating evidence. These features consisted of four undated circular or subcircular pits (C.210805, C.210814, C.210818 & C.210822) one of which produced a fragment of a sheep tooth and a dog mandible fragment (Appendix 5), two undated gullies (C.210807) and a possible field boundary / gully (C.210812) (Plates 121–126; Figures 23.4.4, 23.4.7 & 23.4.9–23.4.10).

Three linear features or possible ditches were expected to be found in Trench 2109 based on the geophysical survey; however, the trench only produced one furrow or possible undated shallow ditch

terminus (C.210907), oriented north-northeast–south-southwest, and one undated circular pit (C.210911) (Plates 127–128; Figures 23.4.11 & 23.4.12). Other features excavated in this trench were determined to be non-archaeological.

Two ditches associated with geophysical anomaly G2 were discernible in Trench 2110: ditch C.211005 (Plate 129; Figure 23.4.13) was oriented east-northeast–west-southwest, and ditch C.211007 (Figure 23.4.14), oriented northeast–southwest. Neither feature produced any archaeological remains or dating evidence.

Trench 2112 revealed one small ditch (C.211205) (Plate 130; Figure 23.4.15) running east–west, which may correspond with geophysical anomaly G2. This feature did not produce any artefactual or dating evidence.

The remaining trenches excavated in this field (Trenches 2104, 2111 & 2113–2115) did not produce any archaeological features.

Table 27: Summary of trenches in Field 21

No.	Summary of archaeological remains	Artefactual or other dating evidence
2101	2 ditches (C.210405 & C.210107).	None.
2102	2 ditches (C.210205 & C.210209).	Modern pottery from C.210205.
2103	2 ditches (C.210305 & C.210309), 1 pit (C.210307) and 2 possible pits/ postholes (C.210315 & C.210317).	S#2.28 from C.230306. Roman pottery from C.210308 and C.210310. Iron object (F#2.9) from C.210308.
2104	No archaeology present.	None.
2105	1 linear (C.210505).	None.
2106	1 furrow (C.210605).	None.
2107	3 ditches (C.210708, C.210710 & C.210712).	Roman pottery from C.210704 and C.210707.
2108	4 pits (C.210805, C.210814, C.210818 & C.210822), 3 gullies (C.210807, C.210810 and C.210812), 1 ditch terminus (C.210816) and 1 ditch (C.210820).	S#2.22 from C.210809. Roman pottery from C.210809 and C.210819. Iron Age from C.210815.
2109	1 furrow (C.210907) and 1 pit (C.210911).	None.
2110	1 linear (C.211005) and 1 ditch (C.211007).	None.
2111	No archaeology present.	None.
2112	1 ditch (C.211205).	None.
2113–2115	No archaeology present.	None.

3.21.3 Results of the hand test pitting

A limited number of hand test pits were excavated within this field within or close to the ends of Trenches 2105, 2106, 2113, 2114, 2115. Hand test pitting produced very little material, restricted to a fragment of modern pottery and a fragment of modern glass.

3.21.4 Results of the geoarchaeological test pitting

A limited number of geoarchaeological test pits were excavated within Field 21 (Trenches 2105, 2106, 2113, 2114, 2115). These were excavated as the nature of the Quaternary sediments in these areas was unclear, specifically whether there were any present rather than the local soils forming directly from the underlying solid geological deposits (Mercia Mudstone), and if present which Quaternary formation they were likely to belong to.

The results of the test pitting revealed considerable variation in Quaternary sediments present. The range of mixed sandy gravels with local occurrences of banded sands and gravels, in some cases with horizontally orientated clasts, are consistent with gravel terrace deposits. Geoarchaeological Test Pits (GPT) 2113 and 2114 had notable deposits of dense angular gravel, including flint fragments. These are not recorded as a feature of the Holme Pierrepont Sand and Gravel but are consistent with descriptions of the older Balderton Sands and Gravels. Within Test Pit 2115 deposits appear to be more consistent with the Holme Pierrepont Sands and Gravels, pointing to the transition between these two formations lying between Trenches 2113 and 2115. The deposits observed (GPT 05 and 06) are consistent with the Holme Pierrepont Sand and Gravel.

3.21.5 Summary and Conclusions

There were fifteen 50m machine-dug trenches excavated in Field 21. Archaeological remains demonstrably associated with a Roman phase of occupation were excavated in three of these trenches (2103, 2107 & 2108). These included ditches and pits containing Roman pottery. A probable charcoal-production pit in Trench 2103 is also likely dated to the Roman period, on the basis of comparative sites south of Newark.

Ditches excavated in Trenches 2101, 2102, 2110 and 2112 did not produce any artefactual or other dating evidence but appear to also form part of the rectilinear field system and may be of Iron Age Roman date. Residual sherds of Iron Age pottery retrieved from Roman ditches in this field also suggest an earlier occupation in this field.

A number of possible postholes/ pits in Trench 2103 (C.210315 & C.210317) and four undated circular or subcircular pits (C.210805, C.210814, C.210818 & C.210822) excavated in Trench 2108 did not

produce any archaeological evidence but could be related to Roman ditches and may indicate the presence of structures.

3.22 Field 22

3.22.1 Area specific archaeological background

This area was previously the subject of geophysical survey (Dowling 2023) during which three principal geophysical anomalies were identified (Table 28). G2 and G3 correspond to field boundaries marked on the first-edition six-inch OS map (1884; surveyed 1883–84) and the first-edition 25-inch OS Map (1892–1914). Additionally, the projected route of the first line of circumvallation of Newark (M8401), suggested by a seventeenth-century map depicting the Siege of Newark-on-Trent (6 March 1645–8 May 1646) passes through the southwestern portion of the field.

Table 28: Principal geophysical anomalies in Field 22

Geophysical Anomaly	Description
G1	Elongated 'U-shaped' positive linear anomaly. Possible flat-bottomed, 'U-shaped' feature, perhaps defined by narrow ditches. Measures about 50m NE–SW by 5m NW–SE. The precise nature and significance of this anomaly are uncertain. Modern origin also conceivable.
G2	Slender, irregular positive band. Former (infilled) stream ditch. Recorded as a field boundary on the first-edition six-inch Ordnance Survey Map (1884; surveyed 1883–84) and the first-edition 25-inch Ordnance Survey Map (1892–1914).
G3	Faint, slender, positive lineation. Probable relict field boundary, c.90m in length (NE–SW). Marked on the early OS maps.

3.22.2 Results of the trial trenching

There were thirteen 50m machine-dug trenches excavated in Field 22 (Figure 24). Possible or definite archaeological remains were found in eight of the trenches (Table 29; Appendix 1.1: Context Register); however, these are all likely related to modern agricultural activity or field boundaries.

The topsoil in this field was of a friable dark-brownish grey to dark-reddish brown silty clay and measured 0.25–0.4m deep. The subsoil was a friable mid-reddish brown to mid-brown silty clay, measuring between 0.1m and 0.8m in depth. The natural layer tended to be of a mottled light- to mid-brownish grey to light-brownish yellow sandy clay with occasional sub-rounded stones and manganese inclusions and fragments of iron pan (Plates 131–132).

G1, the 'U-shaped' anomaly, was discernible in Trench 2211 (Plate 133) and corresponded with ditches C.221105 and C.221107 (Figures 25.1 & 25.3.2–25.3.3; Plates 134–135), both oriented northeast–southwest. No artefactual or other dating evidence was retrieved from either cut. Their purpose remains unclear; however, it is possible that they are modern in date.

G2 was discernible in three trenches: Trenches 2203, 2206 and 2209 (Plates 136–138). In Trench 2203, the geophysical anomaly corresponded with ditches C.220313, C.220315 and C.220318 (Figures 25.1 & 25.2.3; Plate 139), all oriented north-northwest–south-southeast. Fragments of possible Roman roof tiles were retrieved from C.220316, the upper fill of C.220318 (Appendix 4). As the geophysical anomaly was tracked northward, it corresponded to C.220604, oriented east-northeast–west-southwest, which produced a single fragment of a late seventeenth–early eighteenth-century clay pipe stem (Appendix 7), in Trench 2206 and C.220905, oriented east–west, which produced sherds of modern pottery, and C.220907, oriented north-northeast–south-southwest, in Trench 2209 (Plates 140–141; Figure 25.3.1). This geophysical anomaly was recorded as a field boundary on the OS maps and appears to be a canalised stream.

The third geophysical anomaly, G3, was discernible in Trenches 2201 and 2203 (Plate 142). In Trench 2201 it corresponded with a linear cut (C.220105), oriented northeast–southwest, which produced sherds of modern pottery (Plate 143; Figure 25.2.1). The geophysical anomaly corresponded to ditches C.220305 and C.220307 in Trench 2203 (Plate 144; Figure 25.2.2), both oriented northeast–southwest. A single roof tile, likely modern in date, was retrieved from C.220306, the fill of C.220307 (Appendix 7). This fill also produced fragments of clay tobacco pipes, including a bowl identified as likely being Oswald Type 17, dating to c.1640–70, and fragments of a decorated clay pipe bowl likely dating to c.1800–40 (Appendix 7).

The remaining archaeological features uncovered in Trenches 2205, 2207 and 2212 did not correspond with any of the principal geophysical anomalies (Figure 23.1). Trench 2205 (Plate 145) contained three features: two gullies (C.220505) and (C.220507) and one gully terminus (C.220509) (Figure 25.2.4). The two gullies C.220505 and C.220507, oriented northwest–southeast, are roughly parallel to one another and to a linear positive trend picked up by the geophysical survey. Fragments of red brick, likely modern in date, were retrieved from the fills of both features. Trench 2207 contained a single feature, a ditch (C.220705), which corresponded to a linear positive trend and was oriented northwest–southeast but did not produce any artefactual or other dating evidence (Figure 25.2.5). Trench 2212 also only contained a single feature, a furrow (C.221205), oriented northwest–southeast, which corresponded to a linear positive trend (Figure 25.3.4). The geophysical survey also picked up an irregular patch of ‘ferrous-type’ anomaly, within which the furrow was excavated. This ‘ferrous-type’ anomaly was likely modern in date.

Table 29: Summary of trenches in Field 22.

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
2201	1 ditch (C.220105).	Modern pottery from C.220104.
2202	No archaeology.	None.
2203	5 ditches (C.220305, C. 220307, C.220313, C.220315 & C.220318).	Seventeenth- & nineteenth-century clay pipe from C.220306. Modern pottery sherds from C.220308, ceramic building material from C.220316, 1 Roman tile fragment from C.220306.
2204	No archaeology.	None.
2205	2 gullies (C.220505 & C.220507) and 1 gully terminus (C.220509)	Red bricks from C.220504 & C.220506.
2206	1 modern stream ditch (C.220604).	Late seventeenth–early eighteenth-century clay pipe from C.220606.
2207	1 ditch (C.220705).	None.
2208	No archaeology.	None.
2209	1 modern stream ditch (C.220905) and 2 furrows (C.220907 & C.220909).	Modern pottery sherds from C.220904.
2210	No archaeology.	None.
2211	2 ditches (C.221105 & C.221107).	None.
2212	1 furrow (C.221205).	None.
2213	No archaeology.	None.

3.22.3 Results of the hand test pitting

Thirteen test pits were hand dug in Field 22. Six of the test pits produced finds from the topsoil, in all cases including modern pottery (Test Pits 2201, 2203B, 2204A, 2208B, 2209B, 2211A), as well as clay pipes (Test Pits 2204A, 2211A) and clay building material (Test Pits 3, 4). No finds from earlier periods were observed.

3.22.4 Results of the geoarchaeological test pitting

Geoarchaeological test pits were dug in all of the trenches. In all the test pits, the upper soils and sediments largely consisted of silty sandy loams. An intermittent layer of moderately sorted gravel was observed across a number of the test pits. Banded sands and gravels were observed in all but two test pits (GTP 2208 and 2210 (A) being the exceptions), with the banded deposits being observed beginning at depths from 0.69m to 0.85m across the area. The deposits observed are consistent with those expected from a river terrace and conform to the published descriptions of the Holme

Pierrepoint Sands and Gravels Member. No observed deposits contained any traces of human activity or resembled the deposits at Farndon that have produced Late Upper Palaeolithic material.

3.22.5 Summary and Conclusions

There were thirteen 50m machine-dug trenches excavated in Field 22. Possible or definite archaeological remains were found in eight of the trenches; however, these all features are likely related to modern agricultural activity or field boundaries.

Geophysical anomaly G2 corresponds with a field boundary recorded on the early OS maps and is likely a canalised stream. It was excavated in Trenches 2203 (C.220313, C.220313 & C.220318), 2206 (C.220604) and 2209 (C.220905) and its fills produced modern pottery.

A 'U-shaped' anomaly with no dating evidence was excavated in Trench 2211 (C.221105 & C.221107). Its purpose and date remain unclear.

A modern linear cut was excavated in Trench 2201 (C.220105) and Trench 2203 (C.220305 & C.220307).

The remaining archaeological features uncovered in this field consist of five modern gullies, one furrow and a ditch without any archaeological remains or dating evidence most likely related to modern agricultural activity in the field.

Trenches 2202, 2204, 2208, 2210 and 2213 did not encounter any archaeological features.

3.23 Field 23

3.23.1 Area specific archaeological background

This area was previously the subject of geophysical survey (Dowling 2023) which showed several anomalies, one of which was numbered G4. This is possibly a relict field boundary and corresponds to one marked on both the first-edition six-inch OS map (1884; surveyed 1883–84) and the first-edition 25-inch OS map (1892–1914). The remaining anomalies (probable plough trends) are also likely associated with this phase.

3.23.2 Results of the trial trenching

There were five 50m machine-dug trenches excavated in Field 23 (Figure 26). Possible or definite archaeological remains were found in all five trenches (Table 30; Appendix 1.1: Context Register).

G4, the possible relict field boundary, was discernible in Trench 2305 and corresponded with the cut of a furrow or ditch (C.230507; Figures 27.1 & 27.2.5), oriented northwest–southeast. It seems likely that it was a very shallow ditch, only present in the topsoil, and not archaeologically recognisable. A

stone hone of possible post-medieval to modern date (F#1.1; Appendix 1.2: Site Finds Register; Appendix 7) was found in the topsoil (C.230501) approximately 2m from C.230507.

The remaining archaeological features uncovered in Trenches 2301–2304 did not correspond with any geophysical anomalies, nor did they produce any artefactual or other dating evidence (Figures 27.1 & 27.2; Plate 146–149). They may be related to modern agricultural activity in the field.

Table 30: Summary of trenches in Field 23

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
2301	1 furrow (C.230105).	None.
2302	1 ditch (C.230205).	None.
2303	1 ditch (C.230305).	None.
2304	1 ditch (C.230405).	None.
2305	2 cuts (C.230505 & C.230507).	Stone hone from topsoil (C.230501).

3.23.3 Summary and Conclusions

A total of five 50m trenches (2301–2305) were dug in Field 23. Archaeology was uncovered in every trench; however, these features likely relate to modern agricultural activity or field boundaries. The stone hone (F#1.1; see Appendix 1.2: Site Finds Register) may belong to the same period of activity as the archaeological features.

3.24 Field 24

3.24.1 Area specific archaeological background

This area was previously the subject of geophysical survey (Dowling 2023). The survey shows several anomalies that were considered likely ditches and plough trends and three principal geophysical anomalies (see Table 31). Among these is a set of rectilinear enclosures (G1). An irregularly shaped patch of a 'ferrous-type' anomaly, likely of modern date, was also noted in the northern corner of the field.

Table 31: Principal geophysical anomalies in Field 24

Geophysical Anomaly	Description
G1	A faint array of slender linear, rectilinear, and curvilinear anomalies extending over an area c.155m NW–SE by 85m NE–SW, possibly indicating former enclosures and/or field systems.
G2	A linear band of discrete, enhanced magnetic anomalies and 'ferrous-type' responses, possibly the bank of a relict field boundary c.150m NW–SE, which corresponds with land division recorded on the first-edition six-inch OS Map (1884; surveyed 1884–84) and the first-edition 25-inch OS Map (1892–1914).
G3	A weak, intermittent positive linear which may be the ditch of relict field boundary G2.

3.24.2 *Results of the trial trenching*

There were six 50m machine-dug trenches excavated in Field 24 (Figure 28). Possible or definite archaeological remains were found in all six trenches (Table 32; Figure 29.1; Appendix 1.1: Context Register). Trenches 2401–2405 each cut across part of G1, while Trenches 2401, 2403 and 2405 cut across G2 and G3.

Trench 2401 contained five cuts, four of which corresponded to a geophysical anomaly (Plates 150–151). Toward the southern end of the trench was a ditch terminus C.240105, from which early Roman pottery (Trent Valley Ware), dating to AD45–120, was retrieved (Figure 29.2.2; Plate 152) (Appendix 4). Linear feature C.240110, oriented northwest–southeast, was likely the remnant of a field boundary, likely the one depicted on the historical maps (Plate 153; Figure 29.2.1). Two more cuts, C.240107 and C.240114, were excavated toward the centre of the trench (Plates 154–155; Figures 29.2.3 & 29.2.4). C.240107 was the cut of a pit, half of which extended beyond the limits of the trench. C.240114 was the cut of a ditch, oriented northwest–southeast, that corresponded to a positive trend in the geophysical survey. The fill of this ditch (C.240113) produced a sherd of shelly Middle Iron Age pottery (Appendix 4) and a large broken flint flake (Appendix 6) with retouch along one side and a shattered chunk comprising part of a small pebble which has traces of retouch and use-wear along one edge and may have been used as a rudimentary scraper. The final cut C.240112 (Plate 156; Figure 29.2.5), oriented east–west, was located toward the northern end of the trench and corresponded to one of the linear anomalies of G1, which extends northeast towards Trench 2402. The composition of the fill and the cut's orientation are the same as those of a ditch in Trench 2402 (C.240205), suggesting that C.240112 and C.240205 were part of the same feature.

The second trench, 2402 (Figure 29.1; Plate 157–158), contained three cuts: a ditch terminus (C.240205; Plate 159; Figure 29.2.6), a ditch (C.240207; Plate 160; Figure 29.2.8) and a possible gully terminus (C.240209; Plate 161; Figure 29.2.7). Of these three features, only C.240207, which was oriented east-northeast–west-northwest, corresponded with a geophysical anomaly, a curvilinear anomaly (G1) that was also uncovered as C.240405 in Trench 2404. The other two features likely relate to modern agricultural activity in the area.

Trench 2403 (Plates 162–163) contained one ditch (C.240305) and three pits (C.240307, C.240309 & C.240311). Ditch C.240305 (Plate 164; Figure 29.2.9) was oriented northwest–southeast, corresponded with G2 and may be the remnants of a line of land division marked on the historical maps. The three pits (Plates 165–166; Figures 29.2.10–29.2.12) are undated and did not produce any artefactual or other datable evidence.

Trench 2404 (Plates 167–168) contained three features, one of which (C.240405; Figure 29.3.1; Plate 169) was oriented west-northwest–east-southeast and corresponded with a curvilinear anomaly (G1) which was also excavated in Trench 2402, as mentioned above. A sample (S#1.3, Appendix 1.3: Site Sample Register) taken from the fill of this ditch (C.240404) was noted as comprising moderate amounts of hulled barley (*Hordeum vulgare*) and abundant wild seeds (Appendix 9). The remaining two features (C.240407 & C.240409; Plates 170–171; Figures 29.3.2 & 29.3.2) were undated pits.

The fifth trench, 2405 (Plates 172–173), contained four ditches (C.240505, C.240507, C.240509 & C.240511; Plates 174–176; Figures 29.3.4–29.3.7), all of which corresponded to a geophysical anomaly. C.240509 and C.240511 were both oriented north-northwest–south-southeast and corresponded to G2 and G3 respectively and may represent the remnants of land division depicted on the historical maps. This was the same anomaly noted elsewhere as C.240305, C.240105 and C.340110. The remaining two ditches (C.240507 & C.240505) corresponded to features of probable antiquity. C.240507 traversed the trench on a west-northwest to east-southeast orientation and corresponded to a possible curvilinear enclosure noted in the northern half of the field. No artefacts were retrieved from its fill (C.240506), though a sample produced some charcoal and some fragments of unidentifiable plant material (Appendix 9).

Trench 2406 (Plates 177–178) contained three possible ditches (C.240605, C.240607 & C.240609; Figures 29.3.8–29.3.10; Plates 179–181), all oriented north-northeast–south-southwest. These were roughly in line with positive trends picked up by the geophysical survey. A seventeenth-century lead musket ball (F#1.2; Appendix 1.2: Site Finds Register) was recovered during metal detecting of the upcast topsoil from the trench (C.240601) (Appendix 6).

Table 32: Summary of trenches in Field 24

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
2401	1 ditch terminus (C.240105), 1 pit (C.240107), 2 ditches (C.240114 & C.240112) and 1 field boundary (C.240110).	Early Roman pottery from C.240104. Middle Iron Age pottery and lithics from C.240113. Middle Iron Age pottery and flint scraper from C.240113. S#1.4 from C.240111.
2402	2 ditches (C.240205 & C.240207) and 1 gully (C.240209).	None.
2403	1 ditch (C.240305) and 3 pits (C.240307, C.240309 & C.240311).	None.
2404	2 pits (C.240407 & C.240409) and 1 ditch (C.240405).	S#3 from C.240404.
2405	4 ditches (C.240505, C.240507, C.240509 & C.240511).	S#5 from C.240506.

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
2406	1 linear (C.240607) and 2 cuts (C.240605 & C.240609).	Musket ball from C.240601.

3.24.3 Summary and Conclusions

A total of six 50m trenches (2401–2406) were dug in Field 24. Archaeology was uncovered in every trench; however, some of these features may relate to modern agricultural activity or field boundaries. The rectilinear enclosure postulated in the geophysical survey (Dowling 2023) was confirmed as present; however, it has not been dated. Sections through ditches (e.g. C.240407 & C.240207) definitely associated with the enclosures did not produce any artefactual dating evidence, despite being enlarged in a search for finds.

A ditch terminus in Trench 2401 (C.240105) did produce early Roman pottery (Trent Valley Ware) dating to AD45–120, and another ditch (C.240114) produced Middle Iron Age pottery and lithics. A seventeenth-century musket ball (F#1. 2; see Appendix 1.2: Site Finds Register) was found in the metal detecting of upcast topsoil from Trench 2406. This could be related to a skirmish or other event relevant to the Civil War.

3.25 Field 25

3.25.1 Area specific archaeological background

This area was previously the subject of geophysical survey (Dowling 2023). The survey shows several anomalies that were considered likely ditches and plough trends, one of which was numbered G5. This corresponds with a field boundary marked on both the first-edition six-inch OS Map (1884; surveyed 1883–84) and the first-edition 25-inch OS Map (1892–1914). The other ditches and plough trends were also considered as likely associated with this phase. Multiple ‘ferrous-type’ anomalies, likely of modern date, were also noted.

Field 25 is located c.120m to the northwest of the former site of RAF Winthorpe, which opened in 1940 and was declared inactive in 1959.

3.25.2 Results of the trial trenching

There were five 50m machine-dug trenches excavated in Field 25 (Figure 30). Possible or definite archaeological remains were found in four of the five trenches (Table 33; Appendix 1.1: Context Register).

G5 was depicted by the geophysical survey as crossing through Trenches 2502 and 2503, but it was not discernible in either trench. G5 corresponds with a field boundary marked on both the first-edition six-inch OS Map (1884; surveyed 1883–84) and the first-edition 25-inch OS Map (1892–1914) but was

not visible upon excavation. It seems likely that this was a very shallow ditch, only present in the topsoil, and not archaeologically recognisable.

Two gullies (C.250205 & C.250211; Plates 182–183; Figures 31.2.1 & 31.2.4), both oriented northeast–southwest, and two postholes or small pits (C.250207 & C.250209; Plates 184–185; Figures 31.2.2 & 31.2.3) were discovered in Trench 2502 (Figure 31.1; Plates 186–187). The linear features may be of agricultural origin and of relatively modern date; however, struck lithics were found in the fill (C.240204) of gully C.240205. These flints included a narrow blade-like flake with marginal retouch and use-wear and a retouched flake suggesting prehistoric activity of broadly Neolithic to Bronze Age date, within the vicinity (Appendix 1.2: Site Finds Register; Appendix 6). The two postholes or small pits are likely of archaeological significance, although they were too far apart to be part of the one structure. Possible Middle Iron Age pottery was found in the topsoil (C.250201) in the vicinity of Trench 2502 (Appendix 4).

Trench 2503 (Plates 188–189) contained only one feature, a ditch (C.250305; Plate 190; Figure 31.2.5), oriented east-northeast–west-southwest, which produced sherds of modern ceramic material. The geophysical survey also identified a magnetic disturbance in the southeastern end of the trench.

Two features were uncovered in Trench 2504 (Plate 191–192): a pit (C.250407; Plate 193; Figure 31.2.6), half of which extended beyond the limits of the trench, and a gully (C.250405; Plate 194; Figure 31.2.7), oriented north-northeast–south-southwest. Neither feature produced any artefactual or other dating evidence.

Trench 2505 (Plate 195–196) contained two features: one ditch (C.250505; Plate 197; Figure 31.2.8) and one gully (C.250507; Plate 198; figure 31.2.9), both oriented north-northwest–south-southeast. Possible medieval pottery was recovered from the fill (C.250504) of ditch C.250505 (Appendix 4). The geophysical report also picked up a positive linear trend crossing through the northern section of the trench. This, however, is likely a modern feature.

Table 33: Summary of trenches in Field 25

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
2501	No archaeology.	None.
2502	2 gullies (C.250205 & C.250211), 2 postholes/pits	Lithics from C.240204, Possible Middle Iron Age pottery from the topsoil (C.250201).
2503	1 ditch (C.250305).	Modern pottery from C.250304.
2504	1 pit (C.250407) and 1 gully (C.250405).	None.

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
2505	1 ditch (C.250505) and 1 gully (C.250507).	Possible medieval pottery from C.250504.

3.25.3 Summary and Conclusions

There were five 50m machine-dug trenches excavated in Field 25. Archaeological or potential archaeological remains were discovered in four of the five trenches; however, most of these are likely agricultural field boundaries of relatively recent date.

A pit in Trench 2504 and two postholes in Trench 2502 may be of prehistoric date. Lithics of broadly Neolithic to Bronze Age date and a sherd of possible Middle Iron Age pottery were found in their vicinity.

Medieval pottery was found in the topsoil and in one linear ditch. This is likely to originate from a nearby settlement but may have arrived in this field through manuring and does not necessarily suggest settlement in the immediate vicinity.

3.26 Field 26

3.26.1 Area specific archaeological background

Field 26 is located across the A46 from the former RAF Winthorpe, which opened in 1940 and was declared inactive in 1959. This field was previously the subject of geophysical survey (Dowling 2023) which shows numerous anomalies that are likely relict field boundaries, possible ditches, possible pits/spread and a possible palaeochannel. In addition, there were four principal geophysical anomalies identified in the geophysical survey (see Table 34). In addition, there were numerous small, 'ferrous-type' anomalies scattered across the field, likely modern in date.

Table 34: Principal geophysical anomalies in Field 26

Geophysical Anomaly	Description
G1	Possible ditch, c.100m NW–SE, possibly associated with G2 and G3 and corresponds to a cropmark recorded on aerial imagery from 2022.
G2	Possible curving 'ditch-type' feature, c.105m NE–SW, possibly associated with G1 and G3 and may comprise part of a cropmark complex recorded on aerial imagery from 2022.
G3	Possible intersecting ditches, c.60m E–W, possibly associated with G1 and G2 and corresponds to a cropmark recorded on aerial imagery from 2022.
G4	Possible pits/spreads which may contain burnt or fired material. Archaeological interpretation is cautious as modern/natural origin is also possible.

3.26.2 *Results of the trial trenching*

There were eleven 50m machine-dug trenches excavated in Field 26 (Figure 32). Possible or definite archaeological remains were found in five of the eleven trenches (Table 35; Figure 33.1; Appendix 1.1: Context Register). Trenches 2604 and 2606–2610 did not reveal any archaeological features.

Three principal geophysical anomalies (G1–G3) picked out on the geophysical survey corresponded with cropmarks recorded on aerial imagery from 2022. These anomalies were surveyed and investigated but were determined to be non-archaeological, aside from a part of G3, which was discernible in Trench 2611 as C.261105, a ditch oriented northeast–southwest. A palaeochannel, also picked up on the geophysical survey although not identified in any of the trenches, ran between G1–2 and G3. They appear to respect the banks of the palaeochannel, although it cannot be determined if G1–3 and the palaeochannel are contemporary.

The fourth principal geophysical anomaly, G4, comprising three areas of possible pits/spreads identified in both Field 26 and Field 27, was not located in any of the trenches in either area. Its identification as archaeological was tentative and as yet there is no evidence to prove this either way.

Trench 2601 (Plates 199–200) contained one gully (C.260105; Figure 33.2.2; Plate 201) and one plough furrow (C.260107; Plate 202; Figure 33.2.1), both oriented northwest–southeast. C.260104, the fill of C.260105, produced a sherd of medieval–post-medieval pottery (see Appendix 1.2: Site Finds Register). Both features are likely related to agricultural activity in the area and may be relicts of land drains. The pottery find may be incidental to the feature, possibly brought in through manuring of the field.

Trench 2602 (Plate 203–204) contained two pits/postholes (C.260205 and C.260207; Figures 33.2.3 & Figures 33.2.4; Plates 205–206), with approximately 33m of space between them. Given the distance, they are unlikely to be part of a structure. Two samples were taken, one from the black clayey fill (C.260204) of C.260205 (S#1.1; Appendix 1.3: Site Sample Register) and one from the charred stones of fill (C.260206) of C.260207 (S#1.2; Appendix 1.3: Site Sample Register). Preliminary analysis of S#1.1 has produced uncharred roots and some small fragments of charcoal; S#1.2 has produced fragments of hazel nutshell and charcoal (Appendix 9).

Three linear features were uncovered in Trench 2603 (Plates 207–208): two parallel ditches (C.260305 and C.260307; Figures 33.2.5 & 33.2.7; Plates 209–210), oriented north-northeast–south-southwest, and one furrow (C.260309; Plate 211; Figure 33.2.6), oriented northwest–southeast. Ditch C.260307 corresponded to an anomaly shown on the geophysical survey but did not produce any artefactual or other dating evidence. All three features likely relate to modern agricultural activity in the area.

Trench 2605 (Plate 212–213) contained a single feature: a linear ditch (C.260505; Figure 33.2.8; Plate 214), oriented northwest–southeast, which corresponded with a possible relict field boundary that cut across the field in a roughly east–west direction. This possible relict field boundary was picked up on the geophysical survey and was perpendicular to another possible relict field boundary which extended into the neighbouring Field 27. A third relict field boundary picked up by the geophysical survey ran parallel to the second one, before turning 90° westward, and also crossed into Field 27.

Trench 2611 (Plate 215–216) also only contained a single feature: C.261105 (Figure 33.2.9; Plate 217), a cut of a feature associated with G3 (Plate 218) which was oriented northeast–southwest. A single sherd of late medieval pottery dated AD1300–1600 (Appendix 4) was retrieved from the fill of this feature (C.261104); however, it may be unrelated to the feature itself and may instead have been brought in through manuring.

Table 35: Summary of trenches in Field 26

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
2601	1 gully (C.260105) and 1 plough furrow (C.260107).	Possible post-medieval pottery from C.260104.
2602	2 pits/postholes (C.260205 & C.260207).	S#1.1 from C.260204. S#1.2 from C.260206.
2603	2 ditches (C.260305 & C.260307) and 1 furrow (C.260309).	None.
2604	No archaeology.	None.
2605	1 linear ditch (C.260505).	None.
2606–2610	No archaeology.	None.
2611	1 ditch (C.261105).	Late medieval pottery from C.261104.

3.26.3 Summary and Conclusions

A total of eleven 50m trenches were dug in Field 26; however, only Trenches 2601–2603, 2605 and 2611 produced any archaeological features. The principal geophysical anomalies and cropmarks appear to be a mixture of palaeochannels and field boundaries relating to relatively modern agricultural activity, although finds of two medieval pottery sherds indicate some older phases of activity.

The two pits/postholes from Trench 2602 are likely of antiquity and may be related to the scattered activity also noted in Field 25 that was tentatively associated with lithics of a broadly Neolithic to Bronze Age date.

3.27 Field 27

3.27.1 Area specific archaeological background

This field was previously the subject of geophysical survey (Dowling 2023) which shows several anomalies that are likely relict field boundaries and plough trends. In addition, there was one principal geophysical anomaly, G4, which marked a possible relict field boundary. In addition, there were numerous small, ‘ferrous-type’ anomalies scattered across the field, likely modern in date.

Field 27 is located across the A46 from the former site of RAF Winthorpe, which opened in 1940 and was declared inactive in 1959.

3.27.2 Results of the trial trenching

There were three 50m machine-dug trenches excavated in Field 27 (Figure 34). The only trench in which archaeological remains were found was Trench 2703 (Plates 219–220; Figure 35.1). It contained a pit (C.270305), a gully (C.270307) and relict field boundary (C.270309; Plates 221–223), (Table 36; Figure 35.2; Appendix 1.1: Context Register). The relict field boundary (C.270309) and gully were both oriented north-northeast–south-southwest and ran adjacent to one another (Figure 35.2). They both correspond with G4, a boundary marked on both the first-edition six-inch OS Map (1884; surveyed 1883–84) and the first-edition 25-inch OS Map (1892–1914). The pit (C.270305) is located c.23m to the southeast of the other two features. It was an elongated rectangular pit with vertical sides and a flat base. A total of seventeen bags of artefacts were recovered from it (Plate 224; see Appendix 1.2: Site Finds Register) and included brass fittings from a British military webbing of a pattern dating to 1908–1937, newspaper from 1939, two fragments of chopped cattle ribs, at least ten metal tins and other objects of iron, glass and copper alloy (Appendices 5–8). Given the military character of some of the contents of the pit, their date and vicinity to the former RAF Winthorpe Airfield, they seem likely to have been buried by a military person. The shape of the pit suggests it was dug with a flat bladed implement such as a spade or entrenching tool (Appendix 8).

Table 36: Summary of trenches in Field 27

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
2701–2702	No archaeology.	None.
2703	1 elongated rectangular pit (C.270305), 1 gully (C.270307) and 1 field boundary (C.270309).	Metal tins, newspaper, brass webbing fittings, glass bottles and cattle bone from C.270304

3.27.3 Summary and Conclusions

Of the three 50m trenches dug in Field 27, only one, Trench 2703, contained any archaeological features. It contained three features: a gully and relict field boundary, and a pit. The pit C.270305

contained remnants of British military webbing and a number of personal objects. It was likely dug around 1939 during or shortly after the construction of the former RAF Winthorpe Airfield (Appendix 8).

3.28 Field 28

3.28.1 Area specific archaeological background

This field was previously the subject of geophysical survey (Dowling 2023) which shows numerous anomalies that are likely plough trends. In addition, there was one principal geophysical anomaly, G1, which marked several ‘pit-type’ anomalies which may contain burnt or fired material. In addition, there were numerous small, ‘ferrous-type’ anomalies scattered across the field, likely modern in date.

Field 28 is located across the A46 from the former site of RAF Winthorpe, which opened in 1940 and was declared inactive in 1959.

3.28.2 Results of the trial trenching

There were four 50m machine-dug trenches excavated in Field 28 (Figures 36 & 37.1). Archaeology was found only in Trench 2802 (Plate 225–226), which contained one furrow (C.280205; Plate 227) (Table 37; Appendix 1.1: Context Register). This furrow did not produce any artefactual or other dating evidence and is likely related to modern agricultural activity.

Table 37: Summary of trenches in Field 28

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
2801	No archaeology.	None.
2802	1 furrow (C.280205).	None.
2803–2804	No archaeology.	None.

3.28.3 Summary and Conclusions

Only one trench in Field 28 uncovered any potential archaeological features: a single furrow which did not contain any artefacts. The activity in this field is likely modern in date.

3.29 Field 29

3.29.1 Area specific archaeological background

This field was previously the subject of geophysical survey (Dowling 2023). The survey shows numerous anomalies that are likely plough trends running northwest–southeast as well as three principal anomalies (see Table 38) which mainly correspond to quarry pits.

Field 29 is located across the A46 from the former site of RAF Winthorpe which opened in 1940 and was declared inactive in 1959.

Table 38: Principal geophysical anomalies in Field 28

Geophysical Anomaly	Description
G1	Several 'pit-type' anomalies; possible archaeology. These may contain burnt or fired material; however, the archaeological interpretation is cautious.
G2	Irregular zone of weak-positive magnetism. Possible quarry pit (c.70m N-S by 32m E-W) located c.55m southwest of (3). Not marked on historical maps.
G3	Subcircular zone of weak-positive magnetism. Possible quarry pit c.20m in diameter N-S. Located c.55m northeast of (2). Not marked on historical maps.

3.29.2 Results of the trial trenching

There were six 50m machine-dug trenches excavated in Field 29 (Figure 38). The only remains identified were three pits, which are interpreted as eighteenth–nineteenth-century quarry pits, in Trench 2905 (Table 39; Figures 39.1).

The first pit (C.290503; Plate 228; Figure 39.2.3) was sub-linear in shape and directly corresponded with one of the geophysical anomalies labelled as part of G1 and interpreted as a 'pit-type anomaly'. Oriented east-southeast–west-northwest, this pit extended beyond the 2m width of the trench and measured 1.51m wide and 0.47m deep. It contained a single fill which produced moderate inclusions of bricks as well as two sherds of modern pottery. This has been interpreted as a probable quarry pit.

The second pit (C.290507; Plate 229; Figure 39.2.1) also directly corresponded with geophysical anomaly G1, although where the geophysics displayed a pit shape anomaly, it presented as a linear in the trench. Oriented east-southeast–west-northwest, it was 1.6m wide and 1.8m long. Due to health and safety concerns it was only excavated to a depth of 1m which was insufficient to determine a base. The excavated portion contained two fills: an upper fill (C.290506) which produced occasional bricks, eighteenth–nineteenth-century pottery sherds, animal bone and fragments of clay pipe bowls and stems all of which were retrieved as bulk finds and a basal fill (C.290508) that presented mostly sterile, and which was not fully excavated due to previously noted health and safety concerns. The size and date of this pit suggest it served as a quarry pit.

The last pit (C.290510; Plate 230; Figure 39.2.2) was irregular in shape and was located between the previously discussed pits. It did not produce any artefactual or dating evidence but has been interpreted as a likely extension of quarry pit C.290505, which was 1.26m away.

No archaeological features were discernible in the other trenches (Plates 231–232).

Table 39: Summary of trenches in Field 29

Trench No.	Summary of archaeological remains	Artefactual or other datable material
2901–2904	No archaeology.	None.

Trench No.	Summary of archaeological remains	Artefactual or other datable material
2905	3 pits (C.290505, C.290507 and C.290510).	Eighteenth–nineteenth-century ceramic artefacts from C.290504, C.290506 and C.290508.
2906	No archaeology.	None.

3.29.3 Summary and conclusions

There were six machine-dug trenches excavated in Field 29 with only possible archaeology presenting in Trench 2905. The activity in this field most likely relates to modern quarrying activity.

3.30 Field 30

3.30.1 Area specific archaeological background

This field was previously the subject of geophysical survey (Dowling 2023) which showed several anomalies mostly corresponding with plough trends. However, five principal anomalies were identified (Table 40). G1 corresponds with a possible ring-ditch or circular structure which was considered to have possible association with two further subcircular anomalies (G2 and G3); however, these lie outside the scope of the trench plan. Additionally, there were two linear features that did lie within the scope of the trench plan and were considered possible ditches or field boundaries (G4 and G5), the latter of which may comprise a former field drain.

Field 30 is located across the A46 from the former site of RAF Winthorpe, which opened in 1940 and was declared inactive in 1959.

Table 40: Principal geophysical anomalies in Field 30

Geophysical Anomaly	Description
G1	Positive magnetic annulus. Possible ring-ditch or circular structure defined by a narrow ditch or slot trench, approx. 10m in overall diameter (N–S). Appears to be breached by a c.1.2m-wide entrance gap on W. Possibly associated with G2 and G3 located c.60m and 20m to N and S respectively.
G2	Faint, discontinuous subcircular anomaly. Possible circular enclosure, c.20m in N–S diameter. Tentative feature. Lies about 60m N of G1.
G3	Weak, discontinuous subcircular anomaly. Possible circular enclosure, c.13m in N–S diameter. Tentative feature. Lies about 20m S of G1.
G4	Positive linear anomaly. Possible ditch. Extends beyond the limits of the survey area to E and W. May comprise a former field boundary. Significance uncertain.
G5	Faint, short positive linear anomaly. Possible ditch. Extends beyond the limits of the survey area to N. May comprise a former field boundary/field drain.

3.30.2 Results of the trial trenching

There were sixteen 50m machine-dug trenches excavated in Field 30 (Figure 40). Possible or definite archaeological remains were found in ten of these trenches (Table 41; Figures 41.1 & 41.2; Appendix 1:1 Context Register).

G5 (Table 40) was discernible in Trench 3005 (Plates 233–234) as a ditch (C.300505; Plates 235–236; Figure 41.3.4), oriented north-northeast–south-southwest, and in Trench 3013 (Plates 237–238) as a ditch (C.301305; Plate 239; Figure 41.4.5), oriented north-northeast–south-southwest. Ditch C.300505 contained a single fill (C.300504) which produced a high concentration of charcoal flecks and chunks in the eastern section of the fill along with burnt stone inclusions. Ditch C.301305 also contained a single fill, did not produce any artefactual evidence, but did contain traces of charcoal flecks, albeit in significantly smaller concentrations.

G4 and G5 (Table 40) were also identified in Trench 3016 as two respective ditches: C.301605 (Plate 240; Figure 41.4.6), oriented northwest–southeast, and C.301607 (Plate 241; Figure 41.4.7), oriented northeast–southwest. Ditch C.301605 contained a single fill but did not produce any artefactual or other dating evidence. Ditch C.301607 contained two fills (C.301606 and C.301608) and, similarly to previous ditches associated with G5, both contained small concentrations of charcoal flecks but did not contain any artefacts.

Trench 3001 contained one linear (C.300107; Plate 242; Figure 41.3.1), oriented north-northeast–south-southwest, which corresponded with positive trend lines identified by the geophysics as probable plough lines. No artefacts were found in this context.

The remaining archaeological features did not correspond with any geophysical anomalies. Trench 3003 (Plate 243) contained one undated pit (C.300305; Plate 244; Figure 41.3.3). Trench 3005 contained a further linear (C.300511; Plate 245; Figure 41.3.5), oriented northwest–southeast. The sole feature identified in Trench 3006 was also a linear (C.300605; Plate 246; Figure 41.4.1), oriented northwest–southeast, with a single fill and, apart from charcoal flecks in this instance, none of these features produced any artefactual or other dating evidence.

Trench 3008 (Plates 247–248) contained one possible pit (C.300805; Plate 249; Figure 41.4.3) with a single fill (C.300804). It was very irregular in shape, but a metal object, possibly the end of a tool such as a chisel or a punch, was found within its fill (Find #2.1; Plate 250; Appendix 1.2: Site Finds Register; Appendix 6). It may be the remains of a tree throw rather than a pit. A ditch (C.300807; Plate 251; Figure 41.4.2), oriented northwest–southeast, was also identified in Trench 3008 but did not produce any artefactual or other dating evidence.

The remaining features, all furrows, uncovered in Trenches 3002, 3004, 3005 and 3011 did not correspond with any geophysical anomalies, nor did they produce any artefactual or other dating evidence (Plate 252). They may be related to modern agricultural activity in the field.

The remainder of the trenches (3007, 3009–3010, 3012 & 3014–3015) did not produce any archaeological remains (Plates 253–254).

Table 41: Summary of trenches in Field 30

Trench No.	Summary of archaeological remains	Artefactual or other dating evidence
3001	1 linear (C.300107).	None.
3002	2 furrows (C.300200).	None.
3003	1 pit (C.300305).	None.
3004	3 furrows (C.300400)	None.
3005	1 ditch (C.300505), 1 furrow (C.300509) and 1 linear (C.300511).	S#2.2 from C.300504.
3006	1 ditch (C.300605).	None.
3007	No archaeology.	None.
3008	1 possible pit/tree throw (C.300805) and 1 ditch (C.300807).	F#2.1 from C.300804
3009–3010	No archaeology.	None.
3011	1 furrow (C.301105).	None.
3012	No archaeology.	None.
3013	1 ditch (C.301305).	None.
3014–3015	No archaeology.	None.
3016	2 ditches (C.301605 & C.301607)	None.

3.30.3 Summary and Conclusions

There were sixteen 50m machine-dug trenches excavated in Field 30. Possible archaeology was found in ten trenches (Table 41): Trenches 3001–3006, 3008, 3011, 3013 and 3016. The majority of these remains were furrows or ditches which correspond with former field boundaries (G5) identified by the geophysics; however, few or no artefactual evidence was retrieved from them. There were also two pits (C.300305 and C.300805) and two linear features (C.300107 and C.300911) identified. At least one of the pits (C.300805) may have been a tree throw. A metal artefact (F#2.1) retrieved from it may be a piece of a tool, possibly relating to the modern agricultural activity in the field.

3.31 Field 31

3.31.1 Area specific archaeological background

This field was previously the subject of geophysical survey (Dowling 2023) which shows an extensive ‘ferrous-type’ debris field across the area, likely modern in date. Several additional anomalies included an area of magnetic disturbance and two parallel linear features (labelled G3), possibly drains. These linear anomalies may have been associated with the perimeter fence of the former RAF Winthorpe, within which Field 31 lies.

3.31.2 Results of the trial trenching

Three 50m machine-dug trenches were excavated in Field 31 (Figure 42). Archaeology was found only in Trench 3102 (Plates 255–256), which contained three pits (C.310205, C.310207 & C.310209; Plate 257–258) (Table 42; Figures 43.1 & 43.2; Appendix 1.1: Context Register). S#1.6, taken from the fill (C.310208) of C.310209 was determined to be dominated by uncharred material (see Appendix 1.3: Site Sample Register). It is possible these pits may be archaeologically significant.

Table 42: Summary of trenches in Field 31

Trench No.	Summary of archaeological remains	Artefactual or other datable material
3101	No archaeology.	None.
3102	3 pits (C.310205, C.310207 & C.310209).	S#1.6 from C.310208.
3103	No archaeology.	None.

3.31.3 Summary and Conclusions

Only one trench in Field 31 uncovered any potential archaeological features. Three pits were revealed in Trench 3102. These may be archeologically significant. A single sample taken from the fill (C.310208) of C.310207 may help to date these features.

3.32 Field 34

3.32.1 Area specific archaeological background

This field was previously the subject of geophysical survey (Dowling 2023) which only showed several anomalies that are likely plough trends in this field. No major geophysical anomalies were detected.

3.32.2 Results of the trial trenching

One 50m machine-dug trench was excavated in Field 34 (Figure 32). The topsoil in this field was a mid-greyish brown sand and was measured at a depth of 0.35m. The subsoil layer, measuring 0.2m deep, was a mid-orangish brown sand with occasional stone inclusions (Plate 259). The natural layer was a

light-orangish brown sand with gravel lenses (Plate 260). No archaeological features were uncovered during trial trenching (Table 43).

Table 43: Summary of trenches in Field 34

Trench No.	Summary of archaeological remains	Artefactual or other datable material
3401	No archaeology.	None.

3.32.3 Summary and Conclusions

There was only one 50m machine-dug trench in Field 34 which did not produce any features of archaeological significance.

3.33 Field 48

3.33.1 Area specific archaeological background

A previously recorded monument, a cropmark enclosure (L2958) recognised in aerial photographs, occurs within Field 48 near the centre of the northern half of the field.

Roman settlement (M8317) is recorded in the field immediately west of Field 48 and recent development there have, in addition to Roman remains, revealed a burnt mound of probable Bronze Age date and Neolithic pits (Curator Matthew Adams (Lincolnshire County Council), pers. comm).

A possible Neolithic long barrow or mortuary enclosure is recorded c. 200m southeast of Field 48 (Mon N. 1434395).³

This field was previously the subject of geophysical survey (Dowling 2023) which identified three principal anomalies:

(Table 44). G1 includes a series of small, conjoined sub-rectangular enclosures that may correspond to the previously recorded cropmark enclosure (L2958). Combined they are at least 70m long, 45m wide and extend out of the surveyed area, under the 'Main Road' to the east. G2 is an L-shaped anomaly that forms the partial outline of what appears to be a rectilinear enclosure, 75m west of G1. G3 is a small rectangular positive anomaly, representing a possible trench, c.11 by 2.2m in plan. Finally, there are also west-northwest–east-southeast trends across much of the field, likely representing agricultural features such as plough marks or ridge and furrow, and numerous dipolar magnetic anomalies that may mark the locations of iron objects or pit-type features.

³ Record available online @ https://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=158c6ea3-9ee5-42b2-a42c-2d8535126e66&resourceID=19191

Table 44: Principal geophysical anomalies in Field 48

Geophysical Anomaly	Description
G1	Integrated array of slender, rectilinear, and curvilinear positive magnetic anomalies. Network of interconnected ditches, seemingly indicative of an ancient, NE–SW oriented, field/enclosure system. Recorded anomalies cover an area about 70m NE–SW by 45m NW–SE; extends beyond eastern boundary of survey area and full extent is unknown. Likely corresponds to cropmark monument L2958 and be associated with several ‘pit-type’ anomalies mapped in its vicinity. Lies about 75m to E of G2.
G2	‘L-shaped’ positive anomaly. Possible partial footprint of rectilinear enclosure, approx. 40m in length (NE–SW) by 26m in width (NW–SE). Several ‘pit-type’ anomalies and a slender positive linear mapped in immediate vicinity of G2 may represent associated features. Located about 75m to W of G1.
G3	Small rectangular positive anomaly. Possible small trench (c.11m in length by 2.2m in width). Tentative feature.

3.33.2 Results of the trial trenching

There were fifteen 50m machine-dug trenches excavated in Field 48 (Figure 45). Possible or definite archaeological remains were found in nine of the trenches (Table 45; Figures 46.1 & 46.2). Trenches 4808 and 4811 each cut across part of G1, while G2 and G3 were each cut across by Trench 4809 and 4801 respectively.

Trench 4801 (Plates 261–262) contained a single northwest–southeast orientated ditch (C.480107; Plate 263; Figure 46.3.1) which corresponds to a small rectangular geophysical anomaly identified as G3. It contained three fills (C.480106, C.480105 & C.480104) but did not produce any artefactual or other dating evidence and at present remains undated.

Trenches 4802–4804 did not reveal any archaeological features.

Trench 4805 (Plate 264–265) contained two ditches / linear (C.480504 & 480507), a pit (C.480511) and two possible postholes (C.480509 & C.480513) (Figures 46.3.2–46.3.6). One of the ditches (C.480504) was orientated northwest–southeast, was 0.5m deep and contained a single fill (480505; Plate 266). The relationship was not clarified but it appears to have cut a second linear (C.480507; Plate 267) and pit (C.480511; Plate 268) which were also identified. The remaining cuts belong to two possible postholes (C.480509 & C.480513; Plates 268–269) which were close in proximity to each other as well as to the pit (C.480511). None of the features in Trench 4805 produced any artefactual or other dating evidence and they remain undated.

Trench 4806 (Plate 270) contained one east–west orientated ditch (C.480605) that contained one fill (C.480604; Figure 46.3.7; Plate 271). The trench excavated across it did not produce any artefactual material and it remains undated.

Trench 4808 (Figures 46.1 & 46.3; Plate 272) contained four cuts. The ditch (C.480805) (Plate 273; Figure 46.3.11) located near the end of the trench does appear to correspond with the rectilinear anomaly G1 (

Table 44) identified by the geophysics as a possible enclosure. There was also a gully (C.480807) (Plate 274; Figure 46.3.10) identified towards the centre of the trench. A further two subcircular pits (C.480809) and (C.480811) (Plates 275–276; Figures 46.3.8 & 46.3.9) were identified in close proximity to each other. Each pit contained a single fill of a similar composition to the subsoil (Appendix 1.1: Context Register) with pit (C.480809), in particular, being noted for potentially displaying a natural undulation in natural gravel filled by the subsoil. No artefacts were present in any of the features in Trench 4808, nor were there any feature specific samples retrieved.

Trench 4809 (Figures 46.1; Plates 277–278) contained an extensive number of features. Three of the cuts identified were those of ditches (C.480905, C.480915 & C.480918), all of which correspond with different sections of the rectilinear anomaly (G2) identified by the geophysics survey as possible field enclosures. The first ditch (C.480905) (Plate 279; Figure 46.4.1) was measured to a depth of 0.84m and contained three fills. The second ditch (C.480918) contained a single fill but was cut by a later gully with a single fill (C.480916) (Figure 46.4.5; Plate 280). This seems to be an inner ditch of the rectilinear anomaly (G2) and was located at the opposite end of the trench and appeared to run parallel to a third. The third and last ditch (C.480915) (Plate 281; Figure 46.4.6) seems to be the outer ditch of the rectilinear anomaly (G2) belonging to an early Roman period of occupation dated AD45–100. It contained one sherd of Roman pottery, dating from post-AD70, in its upper fill (C.480913) and 111 Nene Valley Colour Coated Ware sherds, dating to AD150–250, in its basal fill (C.480914) (Plate 282). A partial cattle tooth was recovered from basal fill C.480914 (Appendix 5).

A further three cuts, possible pits/postholes, were also identified in Trench 4809. A sub oval-shaped pit (C.480907) (Figure 46.4.3; Plate 283) contained a single fill. Two additional oval/sub-oval shaped cuts, also with single fills, were located 5m away and are both interpreted as possible postholes (C.480909) and (C.480911; Plate 284; Figure 46.4.4). These features do not seem to correspond with any principal geophysical anomaly but are positioned within both aforementioned inner and outer ditches (C.480916) and (C.480915) perhaps reflecting internal structures. One sherd of early Roman pottery (Trent Valley Ware, AD45–100) was recovered from one of the pit fills (C.480908) (Appendix 1.2: Site Finds Register; Appendix 4). A gully terminus (C.480921) (Plate 285) was also identified in Trench 4809 but did not produce any artefactual or other dating evidence.

Trench 4810 (Plates 286–287) was positioned in the centre of the field. It contained a circular pit (C.481005) (Plate 288; Figure 46.4.7) with a single fill from which eight sherds of Middle Neolithic pottery were retrieved as bulk finds (Appendix 1.2: Site Finds Register). The pottery includes a large rim sherd, the top and interior of which have been decorated with incised herringbone motif, and the external body of which has irregular rows of paired fingertip impressions. This and other morphological features have allowed the pottery to be further identified as Peterborough Ware in the Mortlake substyle, dating to the second half of the fourth millennium (Appendix 3).

Trench 4811 (Plate 289) contained two ditches (C.481105) (Plate 290; Figure 46.4.8) and (C.481107) (Plate 291; Figure 46.4.9). The smaller of the two C.481105 contained a single fill with a compact reddish-brown clay. C.481106 has been interpreted as a potentially natural redeposit. The larger ditch (C.481105) was measured to a width of 2m and a depth of 0.49m and seemed to extend beyond the trench limits. This ditch corresponds to a section of an array of interconnected anomalies identified in the geophysical survey as a possible enclosure ditch (G1); however, it did not yield any artefacts or further evidence for occupation.

Trench 4813 (Plate 292) also contained two ditches, C.481305 and C.481307 (Plates 293–294; Figures 46.4.8 & 46.4.9). These ditches each contained single fills but did not produce any artefactual or other dating evidence. They do, however, line up roughly with the plough trends identified in the geophysical survey and are likely related to modern agricultural activity.

The final trench with archaeological potential was Trench 4814 (Plate 295) with one undated pit (C.481405; Plate 296). The remainder of the trenches (Trenches 4802–4804, 4807, 4812 and 4815) did not produce any archaeological remains (Plates 297–298).

Table 45: Summary of trenches in Field 48

Trench No.	Summary of archaeological remains	Artefactual or other datable material
4801	1 ditch (C.480107)	None.
4802–4804	No archaeology.	None.
4805	1 ditch (C.480504), 1 linear (C.480507), 2 postholes (C.480509 & C.480513), 1 pit (C.480511).	None.
4806	1 ditch (C.480605)	None.
4807	No archaeology.	None.
4808	1 ditch (C.480805), 1 gully (C.480807). 2 pits (C.480809 & C.480811).	None.

Trench No.	Summary of archaeological remains	Artefactual or other datable material
4809	3 ditches (C.480905, C.480915 & C.480818), 3 pits/postholes (C.480907, C.480909 & C.480911), 1 gully (C.480916) and 1 gully terminus (C.480921).	Roman pottery from C.480908, C.480913, C.480914 and C.480915.
4810	1 pit (C.481005).	Middle Neolithic pottery from (C.481004).
4811	2 ditches (C.481105 & C.481107).	None.
4812	No archaeology.	None.
4813	2 ditches (C.481305 & C.481307).	None.
4814	1 pit (C.481405).	None.
4815	No archaeology.	None.

3.33.3 Results of the hand test pitting

Fifteen hand dug test pits were excavated prior to the machine excavation of each of the trenches. Four of the test pits produced finds: Test Pit 4805A contained modern pottery and an iron fragment; Test Pit 4812M a fragment of clay building material; Test Pit 4813B contained a fragment of modern pottery and clay building material; Test Pit 4814B contained a fragment of modern pottery.

3.33.4 Results of the geoarchaeological test pitting

The sequence recorded across most of this area consisted of an overlying layer of mixed sandy gravel, which formed the parent material for most of the topsoils across the field. Underlying these are banded, moderately to well sorted, sands and gravels. In some locations (GTP 4805, 4808, 4810A, 4814, 4815) these include deposits of finely laminated sands that have been identified as possibly being the same deposit types found at Farndon that produced Late Upper Palaeolithic lithics. Some of these finely laminated deposits and other overlying/underlying well sorted deposits have been sampled for OSL dating. One sample was selected from GTP4808, dating material from 0.83-0.88m below ground level, giving a date of 10490BC-8050BC (GL23078). The full dating report is in Appendix 10. In general, the deposits observed are consistent with the sediments to be expected in a river terrace and are consistent with published descriptions of the Holme Pierrepont Sand and Gravel Member, which is mapped across this area by the British Geological Survey.

3.33.5 Summary and Conclusions

There were fifteen 50m machine-dug trenches excavated in Field 48. There was a high concentration of archaeological remains across the field in nine of these trenches yielding evidence for Middle Neolithic and Roman activity, and an undated phase. The geophysical anomalies were discernible where targeted.

G1, a set of interconnected sub rectangular enclosure ditches in the east of the area, was confirmed as present and identified in Trenches 4811 and 4808 (Figure 45) as ditches C.480805 and C.481105. However, it remains undated.

G2 was identified in Trench 4809 as ditches (C.480905, C.480915 and C.480918) and associated internal pits/postholes (G2; C.480907, C.480909 and C.480911). A small rectangular anomaly (G3) first considered tentative by the geophysics was discernible in the field as a ditch (C.480107); however, its purpose in relation to the other activity in the field remains unclear. Nearly all the pottery recovered in this field came from one ditch (C.480915) with dates ranging from AD70–250, which indicates activity here to be of Roman origin, principally of Antonine or slightly later. The limited pottery sherds dating to the Middle Neolithic period presents evidence of earlier activity occurring here, though only further investigation could determine the extent of this. The busy archaeological landscape in this field contained many other features that did not produce any dating or artefactual evidence (Table 45). The only current indication of a possible purpose or occupation period lies in their juxtaposition to the Mid-Neolithic and Roman activity. The extent to which these features relate to each other, while probable, remains unclear.

3.34 Field 49

3.34.1 Area specific archaeological background

This field was previously the subject of geophysical survey (Dowling 2023). No major geophysical anomalies that could be interpreted as archaeological remains were found.

3.34.2 Results of the trial trenching

There were nine 50m machine-dug trenches in Field 49 (Figure 47). The topsoil in this field was generally of a loose, dark-brown humic loam sandy silt and was measured at a depth of 0.32–0.36m. The subsoil layer, measuring 0.08–0.5m deep, was a loose, mid-brown sandy silt with pebbles (Plates 299–301). The natural layer presented as a loose, orangish brown gravel sand.

No archaeological features were uncovered during trial trenching (Table 46) (Plates 302–304).

Table 46: Summary of trenches in Field 49

Trench No.	Summary of archaeological remains	Artefactual or other datable material
4901–4909	No archaeology.	None.

3.34.3 Results of the hand test pitting

This area had originally been selected for hand test pitting; however, the lack of archaeological finds from adjacent areas and observations from the geoarchaeological test pits suggested hand test pits would not reach the deposits with the potential for Palaeolithic finds. It was consequently agreed with Curator (the Newark & Sherwood District Council Historic Environment Officer and Nottinghamshire County Council Senior Practitioner Archaeology) that hand test pitting would not be required for this field.

3.34.4 Results of the geoarchaeological test pitting

Geoarchaeological test pits were excavated in all nine of the trenches. In contrast to the deposit sequences encountered in Fields 48 and 51, also in the Kelham area, the upper sediments contained few clasts and only a small proportion of silt. Underlying these were sands and gravels, generally becoming better sorted with depth, with alternating bands of sands and gravels being observed in most of the test pits. In two cases (GPT4904 and 4907) fine laminae were observed within the bands. These deposits did not, however, closely resemble the descriptions of the Farndon deposits that had produced Palaeolithic material. The Quaternary geology of the area is mapped as belonging to the Holme Pierrepont Sand and Gravel Member, and the observations of the geoarchaeological test pits are consistent with this.

3.34.5 Summary and Conclusions

There were nine 50m machine-dug trenches in Field 49 which did not produce any features or finds of archaeological significance.

3.35 Field 50

3.35.1 Area specific archaeological background

This field was assessed for geophysical investigation (Dowling 2023) but proved unsuitable for survey owing to dense overgrown and uneven terrain.

3.35.2 Results of the trial trenching

There were five 50m machine-dug trenches excavated in Field 50 (Figure 47). The topsoil in this field was generally of a greyish black humic silty sand with gravels and was measured at a depth of 0.35–0.43m. The subsoil layer, measuring 0.15–0.35m deep, was a light-orangish brown sandy gravel (Plates 305–306). The natural layer presented as a light-brown sandy gravel with sand and gravel lenses as a result of alluvial deposition (Plates 307–308). Only one feature of archaeological potential was identified in Field 50 (Table 47; Figure 48.1). This was a pit (C.500105; Figure 48.2.2; Plate 309) in

Trench 5001 which contained one fill and produced a single sherd of modern pottery. This feature is likely modern in date.

Table 47: Summary of trenches in Field 50

Trench No.	Summary of archaeological remains	Artefactual or other datable material
5001	1 pit (C.500105).	1 sherd of modern pottery from (C.500104).
5002–5005	No archaeology.	None.

3.35.3 Results of the hand test pitting

This area had originally been selected for hand test pitting. On the basis of the poor recovery of material, and the observation based on the geoarchaeological test pits elsewhere in the vicinity that the hand test pits would not reach the deposits with the potential for Palaeolithic finds, it was agreed with the Curator (the Newark & Sherwood District Council Historic Environment Officer and Nottinghamshire County Council Senior Practitioner Archaeology) that hand test pitting would not be required for this field.

3.35.4 Results of the geoarchaeological test pitting

Geoarchaeological test pits were excavated in all five of the trenches. In contrast to the deposit sequences encountered in Fields 48 and 51, also in the Kelham area, the upper sediments contained few clasts and only a small proportion of silt. Underlying these were sands and gravels, generally becoming better sorted with depth, with alternating bands of sands and gravels being observed in most of the test pits. In one case (GPT5002(A)) fine laminae were observed within the bands. These deposits did not, however, closely resemble the descriptions of the Farndon deposits that had produced Palaeolithic material. The Quaternary geology of the area is mapped as belonging to the Holme Pierrepont Sand and Gravel Member, and the observations of the geoarchaeological test pits are consistent with this.

3.35.5 Summary and Conclusions

There were five 50m machine-dug trenches excavated in Field 50 which did not produce any features of archaeological significance, just one pit or ditch terminus was excavated in Trench 5001, and it is likely to be relate to modern agricultural activity.

3.36 Field 51

3.36.1 Area specific archaeological background

This field was subject to geophysical investigation (Dowling 2023). No definite archaeological features were visible in the geophysical survey but there are several anomalies that could be of archaeological interest (Table 48).

Table 48: Principal geophysical anomalies in Field 51

Geophysical Anomaly	Description
G1	Strong positive curvilinear anomaly. Possible artificial feature, such as a ditch/drainage channel or levelled bank, associated with natural (e.g., water deposition) and/or anthropogenically introduced/influenced magnetised soils and burnt materials. There is a possibility that this anomaly reflects a band of natural-floodplain-sediments (possible palaeochannel infill).
G2	Weak, slender positive curvilinear anomaly. Possible narrow ditch/drain. Tentative feature.
G3	Mass anomalies of enhanced magnetism. Possible natural deposits rich in magnetic iron compounds (e.g., iron pan). However, an anthropogenic origin, whether archaeological or modern (e.g., agricultural), cannot be ruled out.
G4	Narrow positive linear anomaly. Relict field boundary. Marked on both the first-edition six-inch OS Map (1884; surveyed 1883–84) and the first-edition 25-inch OS Map (1892–1914). Concentration of ferrous responses along its line suggest the former presence of wire fencing.
G5	Slender negative linear anomaly. Possible ditch/drain.

3.36.2 Results of the trial trenching

There were four 50m machine-dug trenches excavated in Field 51 (Figure 49; Plates 310–314). Archaeological remains were found only in Trench 5102 (Table 49; Figure 50.1), where geophysical anomaly G2 was discernible. This consists of one ditch C.510206 (Figure 50.2.1; Plate 315), measuring 1.39m wide and 0.5m depth with remains of post-medieval and modern pottery, two fragments of brown bottle glass (Appendix 7) and fragments of post-medieval red bricks (possibly from a hearth) (Appendix 7) located in the centre of the trench. A small deposit containing charcoal C.510204 was excavated over this ditch from where three sherds of residual Roman pottery were retrieved. This ditch seems to correspond with a relict field boundary also visible in the first-edition OS map.

One strong positive curvilinear anomaly (G1) found during the geophysics survey and discernible in Trench 5103 as C.510305 and Trench 5104 as C.510407 was initially interpreted as a palaeochannel. Feature C.510407 does not appear to be palaeochannel but may be a deep furrow or shallow ditch.

Table 49: Summary of trenches in Field 51

Trench No.	Summary of archaeological remains	Artefactual or other datable material
5101	No archaeology.	None.
5102	1 deposit (C.510204) and 1 ditch (C.510206).	Post-medieval to modern pottery, glass, and ceramic building material from C.510205. Three sherds of Roman pottery retrieved from C.510204 are considered residual.
5103	Palaeochannel (C.510305).	S#2.3 from C.510302. S#2.4 from C.510303.
5104	Ditch/furrow (C.510407).	None.

3.36.3 Results of the geoarchaeological test pitting

Geoarchaeological test pits were excavated in all four of the trenches. The sequence recorded across most of this area consisted of an overlying layer of mixed sandy gravel, which formed the parent material for most of the topsoils across the field. Underlying these are moderately sorted sands and gravels: deposits of banded gravels like those observed in Field 48 were not found.

One test pit (GPT5103(M)) was located in order to investigate a probable palaeochannel originally noted in LiDAR data, in the geophysics survey (anomaly G1) and targeted by the previous geoarchaeological coring (AMS 2023b). This test pit revealed a relatively thick layer of well sorted clay silt, which also formed the parent material for the overlying topsoil. This deposit was further investigated and its extent within the trench (5103) was determined. This deposit probably constitutes the feature observed within the LiDAR data (AMS 2023c.) (Figures 49, 50.1 & 50.2.2). It is interpreted as a flood channel deposit rather than a palaeochannel deposit.

Underlying this deposit is a thin organic silty clay with a weakly developed crumb structure, developing from a layer of organic silt/heavily humified peat. This deposit is intermittent in its extent, appearing to sit in channel forms. These channel forms are interpreted as the beds of smaller water courses, with the peaty deposit forming as the channels have naturally infilled. The organic silty clay is interpreted as a stabilisation layer/weakly developed topsoil that developed from the peat channel infill. This process was interrupted by the deposition of the clay silt, probably during a flood event. Such an event would have considerably changed local drainage patterns, blanketing the former channels. The peaty organic fills had been subject to a high degree of root penetration, with these areas infilled with mineral sediments and reworked organic material. This degree of disturbance was sufficient that it was assessed that reliable dating and environmental samples could not be obtained. OSL sampling was undertaken on the overlying flood channel deposit, and the samples have been dated. The dates produced were 150BC–AD80 (GL23076) for the flood channel deposit and 2260BC–1820BC (GL23077) for the buried soil. The full dating report is given in Appendix 10.

In general, the deposits in Field 51, aside from the flood channel/palaeochannel deposits, that were observed are consistent with the sediments to be expected in a river terrace and are consistent with published descriptions of the Holme Pierrepont Sand and Gravel Member, which is mapped across this area by the British Geological Survey.

3.36.4 Summary and Conclusions

There were four 50m machine-dug trenches excavated in Field 51. One trench (5102) uncovered a potential archaeological feature: a single ditch related to a relict field boundary which contained modern, post-medieval pottery, glass and ceramic building material. A possible furrow/ditch was

found in Trench 5104. Three sherds of Roman pottery retrieved from this area are considered residual but do suggest activity within the vicinity. A palaeochannel running north–south across the north of this field was excavated in Trench 5103.

4 Discussions, Conclusions and Recommendations

4.1 Discussions and Conclusions

This report has detailed the results of archaeological trial trenching and geoarchaeological test pitting along the route of the proposed A46 Newark Bypass at Newark-upon-Trent between August 2023 and June 2024. Trial trenching was initially planned for 52 fields (Fields 1–52); however, the programme has been refined over time with some of the numbered fields removed from the programme. As a result the field numbering system is not fully sequential. Trial trenching in two areas has been delayed (7 and 52). In total, thus far, 282 trenches (50m) or 14,100m of linear trenching has been carried out across 30 fields. This report details the results of the trial trenching in those 30 fields. For the purposes of discussion, the results have been grouped into six areas:

- Fields 1, 2, 3 and 6
- Fields 8 to 9, 11 to 16 and 18
- Fields 20, 21 and 22
- Fields 23 to 27
- Fields 28 to 31 and 34
- Fields 48 to 51

4.1.1 Fields 1, 2, 3 and 6

Fields 1, 2, 3 and 6 were located in the floodplain, on the northern banks of a branch of the River Trent. Prior to trial trenching, a programme of metal detecting and fieldwalking retrieved a small number of post-medieval and potentially medieval finds, but these did not occur in concentrations or suggest prolonged or archaeologically significant activity. Borehole data indicates deep soft sediments (1.15 to 2.82m) and trenches were excavated to a depth of 1m with deeper sondages dug at a selection of trench ends, so natural subsoils and underlying deposits were only occasionally encountered.

Both trenches planned for Field 1 were excavated. No archaeological remains were uncovered.

All 69 planned trenches were excavated in Field 2. Relatively modern deposits were encountered in two trenches and a palaeochannel was encountered in another. Nineteenth- to twentieth-century ceramics were retrieved from all of these. The only other feature of potential archaeological significance was a single pit containing a charcoal-rich fill, with evidence of *in-situ* burning. An environmental sample from this has produced charcoal only and the pit remains undated.

All seventeen planned trenches were excavated in Field 3 and no archaeological remains were uncovered.

After on-site consultation with the Nottinghamshire Curator (Ursilla Spence) only 33 of the 76 planned trenches were excavated in Field 6. No archaeological remains were uncovered.

Very few remains of archaeological significance were found in Fields 2, 3 and 6; however, most sediments encountered comprised recently deposited or reworked soft sediments and there is potential for remains at deeper depths. The nature and depth of the soft sediments suggests this has long been a very dynamic environment and is therefore unlikely to have been the site of any prolonged settlement or other relatively permanent structures. The datable artefacts retrieved from the trenching have not been earlier than the Seventeenth Century, despite being found at depths of approximately a metre. This indicates that material of medieval or earlier date will mostly be found at greater depths. There remains a potential for archaeological remains, potentially including preserved organic or other riverine related archaeological remains (boats, bridges etc), both within the soft sediments and the underlying gravels, with the probable chronological split indicated above.

The main overarching themes of relevance concern Pleistocene and Holocene environmental change (OT1) and research questions relating to it in the East Midlands Historic Environment Research Framework (EMHERF). The principal research objectives for the Palaeolithic across England relates to the identification of useful deposits from palaeochannels and other suitable sedimentary sequences that may produce evidence such as pollen that will enhance our understanding of the evolution of the environment, the spatial variation of this evolution and obtain a secure chronological sequence for these changes.

Artefactual finds and features are relatively rare and the development of geoarchaeological deposit models and careful environmental sampling can enhance the existing baseline. It is envisaged that the most useful deposits are likely to occur at greater depths than the upper fine sediments, but the potential for more recent channels to provide at least basic datable artefactual material has been demonstrated by the evaluation trenching.

4.1.2 Fields 8 to 9, 11–16 and 18

Fields 8 to 9, 11 to 16 and 18 were located west of the A1, northwest of Newark and southwest of Winthorpe, a little northwest of the River Trent. The underlying geology and sediments of these fields are alluvial deposits, including substantial depths of soft sediments overlying sands and gravels. All fields were subject to a metal detecting survey, which produced some metal artefacts that dated between the post-medieval and modern eras. These finds were likely incidental and dropped into the field, as only Fields 16 and 18 produced any features. These features, however, are likely modern in date.

4.1.3 *Fields 20, 21 and 22*

Fields 20, 21 and 22 were located south of the A1, northeast of Newark and southwest of Winthorpe, just east of where two branches of the River Trent reconnect. The underlying geology and sediments of these fields vary: in Field 20 there were very limited Quaternary deposits, and those over most of Field 21 are not types associated with Palaeolithic remains. Within Field 22 the underlying Quaternary deposits belong to the Holme Pierrepont Sands and Gravels Member, but do not appear to contain the sediment types associated with Palaeolithic remains at Farndon. Geophysical survey in this area indicated a substantial series of rectilinear enclosures across Fields 20 and 21. The archaeological trial trenching was restricted to an area south of an east–west underground metal pipe visible in the geophysical survey and all planned trenches were excavated.

The trial trenching confirmed the presence of the rectilinear enclosures, and suggests they are settlement enclosures predominantly dating to the Roman period but also the preceding Iron Age, and that later Saxon settlement is also present outside of the area of the enclosures.

The rectilinear settlement enclosures extended across almost the entire breadth of Fields 20 and Field 21, covering an area of c. 450m east–west by up to 100m north–south, with activity apparently concentrated in Field 20 and the west of Field 21. Analyses of the pottery suggests the settlement originated in the Middle Iron Age but the remains are predominantly Roman. Iron Age pottery was retrieved from several trenches. In most cases these were found mixed through Roman period features; however, in a few cases, distinct Iron Age contexts could be discerned, occasionally cut or overlain by Roman contexts. The Roman pottery is dominated by Trent Valley Ware, suggesting a focus of activity in the mid–late first century AD. The latest material is mid-third, or slightly later third-century AD. While only a tentative suggestion based on a small sample, it does appear that this settlement may have gone out of use around that date.

The Saxon remains in Field 20 included a sunken-floored building and several pits, all of which occurred outside and to the south of the rectilinear enclosures. Loom weights and Charnwood fabric pottery, iron slag, some copper-alloy fragments and animal bone retrieved in the trial trenching evidence a good level of preservation. In addition to this, samples from the sunken-floored building returned palaeoenvironmental remains including rye, oats, barley, and flax. An important early Anglo-Saxon burial (M18359; AD500–634)⁴ is recorded just across the A46, within the enclosure ditch of a possible Neolithic mortuary enclosure (M3612). The surrounding area is also rich in Saxon placenames and later settlement is known; however, little early Saxon habitation has been excavated within the region

⁴ Details available online @ <https://her.nottinghamshire.gov.uk/Monument/MNT26013>. Accessed 02/01/2024.

and the potential for a more extensive Saxon settlement here presents an important research opportunity.

Field 22 was largely devoid of features of archaeological significance. The ditches and other linear features that were discovered are mostly demonstrably related to relatively recent agricultural activity and field enclosure. The possible palaeochannel running north–south in the east of this area is a partially canalised watercourse, which can be seen as part of the local field boundary system on the 1892–1914 OS 25-inch map, and nineteenth and twentieth-century pottery was retrieved from its fill.

In summary, the rectilinear enclosures identified in the geophysical survey were confirmed in the trial trenching and further identified as a Middle Iron Age to late Roman period settlement, with later Saxon habitation, and some outlying ditches that were not evident in the geophysical survey. The remains are concentrated in Fields 20 and 21.

These remains have the potential to contribute to several of the developing AMP's overarching themes (Skanska Mott MacDonald, 2024 [forthcoming], including OT3: the 'Development of agriculturally based settlement patterns, OT4: the 'The development of fields and fieldsystems' and OT5: 'The role of rivers as movement corridors, sources of power and socio-political boundaries'.

The extent of the Iron Age remains is poorly defined, largely concealed within the plan of the geophysical anomalies by the later Roman archaeological remains and only discernible within the test trenches. They are, however, likely to represent settlement of Middle to Later Iron Age date and have potential to contribute to IARQ1–7 (Section 1.2.1.3) and, should they prove to have continued in use to before Roman conquest, to RRQ1–2 (Section 1.2.1.4).

The Roman remains are more clearly defined as a series of newly defined sub-rectangular settlement and field enclosures. Their presence on and presumed reorganisation of an earlier Iron Age site, close to the major communication routes of the River Trent and the Fosse Way, is of direct relevance to RRQ1–4 (Section 1.2.1.4) and further mitigation would have the potential to significantly contribute to these questions. The pottery specialist has highlighted the potential for a larger collection that might be obtained during mitigation to contribute to RRQ1–2, and also notes that it would 'be useful in defining the nature of occupation on these sites as well as providing the principal chronological evidence to help determine the sequence and phasing' (Evans: Appendix 4).

The discovery of the Saxon-type (early medieval) sunken floored building may be indicative of a larger Saxon settlement. The lack of excavated Saxon settlement in the region is clearly articulated in the EMHERF: 'There are, for example, no excavated settlements in huge areas of Derbyshire and

Nottinghamshire. Settlement patterns and material culture in these areas are simply unknown'.⁵ The artefactual and environmental remains retrieved from the building and associated pits already provide some information on the practices that were carried out within them and on the surrounding contemporary environment. The environmental specialist has highlighted the high quality of the environmental remains retrieved during the trial trenching which are partially waterlogged and offer 'a unique opportunity to gain valuable environmental data... [and further recommends that during mitigation] any dated Saxon features are sampled [and] where waterlogged deposits are found consideration should be given to monolith sampling for pollen, which is urgently needed to establish land use in the area' (Appendix 9). These remains are clearly of major regional importance and further mitigation has the potential to contribute to EMRQ1–3 (Section 1.2.1.5).

The continuous or successive phases of settlement at this location also have a potential to contribute to multiperiod research questions, especially in relation to continuity and change. These are articulated in Multi-period Research Questions (MRQ)2–3, which focus on changes in landscape organisation, settlement and field patterns and the role of the River Trent.

4.1.4 *Fields 23 to 27*

The Quaternary geology of these fields consist of sands and gravels of the Balderton Sand and Gravel Member, dating up to three million years ago. Due to the age and climatic conditions under which these sediments were deposited they do not have the potential for Palaeolithic remains to be incorporated within them. All areas were subjected to geophysical survey prior to archaeological trial trenching and a probable enclosure was recorded in Field 24, while anomalies that aligned with cropmarks in Field 26 were also suspected to form a possible enclosure.

The archaeological trial trenching confirmed the enclosure in Field 24, and while it failed to date the enclosure, it also found Middle and Later Iron Age pottery in unconnected features within the same field. A musket ball was also retrieved during metal detecting in this field. The linear anomalies in Field 26 comprised field boundaries, other agricultural features and some natural features and are not of substantive archaeological significance. A scatter of smaller archaeological features, pits, and possible postholes of unknown date were found in Field 25 and the west end of Field 26. Some lithics were found in their vicinity suggesting they may be of Neolithic or Bronze Age date.

A twentieth-century pit was found in the east end of Field 27. It contained remnants of a post-1908 British army waist belt and munition pouches, bottles, personal body creams and tins, some with chicken bones adhering and newspaper fragments identified as being from a Daily Mail newspaper

⁵ [REDACTED]

from between July and August 1939. The pit was rectangular and had straight sides, suggesting it may have been dug with a spade or perhaps a military entrenching tool. It was less than 100m from the former RAF Winthorpe and there were planes there by August 1940. It is likely to have something to do with the building of the airfield, perhaps a deserter or other person hiding their kit. The pit was fully recorded during the trial trenching.

The concentration of remains and an enclosure in Field 24 and scattered remains in Fields 25/26 have the potential to contribute to several of the OTs (Section 1.2.1). The scattered remains in Fields 25/26 are likely to relate to occasional transient use of the landscape, on the basis of lithics found in potential association, during the Neolithic or Bronze Age. While many of the research questions outlined in the AMP/ Written Scheme of Investigation (WSI) relate to monument classes, this form of transient activity has the potential to inform our understanding of the landscapes between monuments and settlements, and also with regard to debates over 'Models of Occupation' as articulated in the Neolithic and Early to Middle Bronze Age section of the EMHRF.⁶

In the absence of a date for the enclosure in Field 24, it is currently difficult to predict which specific chronologically based research questions they have potential to contribute to; however, its dating and characterisation will likely contribute to OT3, 4 & 5. There are some Middle to Iron Age remains within Field 24, so in concert with the remains uncovered in Fields 20 and 21, these have potential to contribute to IARQ1–7 (Section 1.2.1.3). The find of the musket ball in Field 24 might be linked to a Civil War skirmish and if so, would be of relevance to OT8: Battlefield and skirmish sites. The related PMRQs (Section 1.2.1.7) are primarily focused on defences and siege works; however, as suggested by the wider aforementioned OT, evidence of smaller skirmishes is important to the overall understanding of how the Civil War played out around Newark.

4.1.5 Fields 28 to 31 and 34

This Quaternary geology of these fields consists of sands and gravels of the Balderton Sand and Gravel Member, dating up to 3MYA. Due to the age and climatic conditions under which these sediments were deposited, they do not have the potential for *in-situ* Palaeolithic remains to be incorporated within them. Geophysical survey was undertaken across all of these fields prior to archaeological trial trenching (Dowling 2022). It did not identify any anomalies suggestive of significant archaeological remains within the area to be tested. It did record several 'pit-type anomalies, some of which were thought likely to be quarry pits in Field 29 and it did identify an anomaly likely to be a ring-ditch in the northern part of Field 30, outside of the area to be tested.

⁶

The archaeological trial trenching only encountered remains in Fields 29 and 31. In Field 29, the pit-type anomalies were confirmed as likely quarry pits of eighteenth–nineteenth century date, probably for sand and gravel. In Field 31, a scatter of pits (three) that remain to be dated were discovered. An environmental sample from one produced uncharred wild seeds and leaves, suggesting waterlogging, and charcoal. Similarly, to the scattered undated features within Fields 25/26, these remains are likely to represent occasional transient activity within the landscape between areas of settlement and/or monuments at some point in prehistory or perhaps up until the medieval period. Depending on the date of these features, they have a potential to impact on several OTs and/or research questions outlined in the AMP.

4.1.6 Fields 48 to 51

Fields 48 to 51 were located to the west of the scheme, between Averham and Kelham. The underlying Quaternary geology across this area comprises Holme Pierrepont Sands and Gravels that are part of the system of gravel terraces associated with the Trent. The dating of these deposits is unclear, but similar sediments at Farndon have contained Late Upper Palaeolithic artefacts (Harding *et al.* 2014). OSL samples were taken from Field 48 and a date obtained: 10490BC - 8050BC (GL23078) which aligns with the Farndon dates. No palaeolithic artefacts were found during the hand test pitting. In addition, a flood channel fill and underlying palaeochannel(s) in Field 51 were identified. OSL samples were taken from a buried soil in the palaeochannel and this dated to 2260BC - 1820BC (GL23077). A further OSL sample was taken from the flood channel deposit and this was dated to 150BC - AD80 (GL23076).

Three of the four fields in this area (48, 49 & 51) were the subject of geophysical survey prior to the trial trenching (Dowling 2022). The only area in which substantial archaeological remains were revealed was Field 48. A cropmark recorded monument L2958⁷ is recorded in the Nottinghamshire Historic Environment Record (HER) north of centre in this field. The geophysical survey indicated that there were actually two distinct enclosures. The first, against the eastern boundary of the field, north of centre, is indicated by a set of rectilinear enclosures with rounded corners. This was comprehensively tested but did not return any dating material. The extent within the area tested and surveyed is approximately 500m by 300m. The other enclosure manifested in the magnetometer survey as an L-shaped anomaly, with more angular corners, archaeological trial trenching revealed it to be a ditched enclosure with internal features, all of Roman date. The pottery suggested dates ranging from AD 45 to 250.

⁷ Details available online @ <https://her.nottinghamshire.gov.uk/Monument/MNT5626>. Accessed 02/01/2024.

A cropmark of likely Roman date is recorded in the field to the west (M8317)⁸ and recent development there has uncovered Roman remains and a burnt mound of likely Bronze Age date.

The archaeological trial trenching also revealed a pit of Neolithic date, located midway between the two enclosures. Sherds of a Middle Neolithic Impressed Ware vessel – a Peterborough Ware pot in the Mortlake substyle – were retrieved from it. While common in the east and south of England, this type of pottery is very rare in this part of England, and it is therefore of high regional importance. More Neolithic remains have recently been found at a recent development to the northwest (Matthew Adams pers. comm.), a potential Neolithic mortuary enclosure is located several hundred metres to the southwest⁹ and a Neolithic scraper (laurel leaf: L5687)¹⁰ was found on the banks of the Trent to the southeast.

The Neolithic was not directly addressed in the aims of the WSI; however, the discovery of those in Field 48 and neighbouring areas should now form part of the next revision of the AMP. The EMHERF stresses the academic debates over types of landscape use during the Neolithic expressed in conflicting ‘mobility models’¹¹ and new finds of Neolithic settlement or other land use have the potential to contribute to these, especially when they can be tied in with the distribution of Neolithic burial monuments which are more typically visible.

The Roman remains are of direct relevance to RRQ1–4 (Section 1.2.1.4) and further mitigation would have the potential to significantly contribute to these questions.

The presence of a flood channel and associated underlying palaeochannels and buried soil within Field 51 has added information to the themes raised in OT5 with regard to identifying the presence of a flood channel, the prior existence of palaeochannels running northwest–southeast across the field in proximity to settlement activity beyond the boundary of the project, and also the evolution of the landscape, with the palaeochannels fills locally forming a buried soil dated to around 2260–1820BC and the subsequent covering of this by a flood deposit dated to 150BC–AD80. This suggests that the palaeochannels were not active by the early to mid-Bronze Age or were subject to frequent diversions of course leading to small channels being cut off. Given this is a period of relative sea-level rise, the latter seems most likely. The continuation of relative sea-level rise may well also explain the flood

⁸ Details available online

channel deposit, though the date is earlier than the incursion noted Romano-British coastal contexts, which are usually dated to the fourth century.

Within Field 48, banded sands and gravels of a type similar to those at Farndon, which produced Late Upper Palaeolithic *in-situ* stone tools were observed. Although no artefacts were recovered from these layers, an OSL date of 10490BC–8050BC would indicate potential for such artefacts to be present. This means that there is potential to address research question PRQ1: How were Early Upper and Late Upper Palaeolithic sites distributed across the landscape, and what contrasts may be observed with earlier and later (Mesolithic) periods?

4.2 Recommendations for Mitigation

The mitigation requirements for the scheme will be detailed within the AMP produced by Skanska/Mott MacDonald as part of the DCO application. Mitigation workshops were held on 13 December 2023 and 7 August 2024 with the historic environment stakeholders from Nottinghamshire County Council, Newark and Sherwood District Council and Historic England. At this workshop AMS presented the preliminary findings of the trial trenching and Skanska/Mott MacDonald discussed the construction impacts and mitigation requirements for the Preliminary and Main Works stages of the scheme. The results of these discussions will inform the AMP.

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Appendix 1.1: Context Register

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0101	010101	Layer	Topsoil layer. Loose dark blackish-brown clayey silt on top of a redeposit of mid-brown clayey silt with occasional inclusions of gravel, tarmac, red brick and concrete.	50	1.5	0.2-0.25
0101	010102	Layer	Subsoil layer. Compact yellowish-brown and greyish-blue clay marl.	50	1.5	0.35-0.9
0101	010103	Layer	Natural layer. Compact yellowish-brown and greyish-blue clay marl.	50	1.5	N/A
0102	010201	Layer	Topsoil layer. Loose dark blackish-brown silty clay.	50	1.5	0.2-0.5
0102	010202	Layer	Subsoil layer. Moderately compacted mid-reddish-brown silty clay.	50	1.5	0.6-0.7
0102	010203	Layer	Natural layer. Compact bluish-grey and yellowish-brown clay marl.	50	1.5	N/A
0201	020101	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.2–0.3
0201	020102	Layer	Subsoil layer. Mottled mid-greyish-brown silty clay with occasional manganese inclusions.	50	2	0.5–0.7
0201	020103	Layer	Natural layer. N/A.	N/A	N/A	N/A
0202	020201	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.2–0.3
0202	020202	Layer	Subsoil layer. Mottled mid-reddish-brown silty clay with occasional manganese inclusions.	50	2	0.8
0202	020203	Layer	Natural layer. N/A.	N/A	N/A	N/A
0202	020204	Fill	Fill of linear C.020205.	N/A	N/A	N/A
0202	020205	Cut	Cut of linear.	N/A	N/A	N/A
0203	020301	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.2–0.3
0203	020302	Layer	Subsoil layer. Mottled mid-greyish-brown silty clay with occasional manganese inclusions.	50	2	0.8
0203	020303	Layer	Natural layer. N/A.	N/A	N/A	N/A
0204	020401	Layer	Topsoil layer. Loose dark greyish-brown sandy clay with moderate inclusions of small/medium rounded/sub-rounded stones.	50	2	0.2–0.3

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0204	020402	Layer	Subsoil layer. Mid-brownish-orange clay sand, with moderate small/medium sub-rounded sub-angular stones.	50	2	0.25–0.35
0204	020403	Layer	Natural layer. N/A.	N/A	N/A	N/A
0205	020501	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0205	020502	Layer	Subsoil layer. Mid-greyish-brown silty clay with occasional manganese inclusions.	50	2	0.65
0205	020503	Layer	Natural layer. N/A.	N/A	N/A	N/A
0206	020601	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.2–0.3
0206	020602	Layer	Subsoil layer. Mottled mid-reddish-brown silty clay with occasional manganese inclusions.	50	2	0.6–0.8
0206	020603	Layer	Natural layer. N/A.	N/A	N/A	N/A
0207	020701	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.2–0.3
0207	020702	Layer	Subsoil layer. Mottled mid-greyish-brown silty clay with occasional manganese inclusions.	50	2	0.7–0.8
0207	020703	Layer	Natural layer. N/A.	N/A	N/A	N/A
0208	020801	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.4
0208	020802	Layer	Subsoil layer. Mottled mid-greyish-brown silty clay with occasional manganese inclusions.	50	2	0.6
0208	020803	Layer	Natural layer. N/A.	N/A	N/A	N/A
0209	020901	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.2–0.3
0209	020902	Layer	Subsoil layer. Mottled mid-greyish-brown silty clay with occasional manganese inclusions.	50	2	0.75
0209	020903	Layer	Natural layer. N/A.	N/A	N/A	N/A
0210	021001	Layer	Topsoil layer. Dark greyish-brown silty clay.	50	2	0.2–0.3
0210	021002	Layer	Subsoil layer. Mid-greyish-brown silty clay with occasional manganese inclusions.	50	2	0.6
0210	021003	Layer	Natural layer. N/A.	N/A	N/A	N/A
0211	021101	Layer	Topsoil layer. Dark greyish-brown silty clay.	50	2	0.2–0.25

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0211	021102	Layer	Subsoil layer. Mid-greyish-brown silty clay with occasional manganese inclusions.	50	2	0.5–0.7
0211	021103	Layer	Natural layer. N/A.	N/A	N/A	N/A
0212	021201	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	40	2	0.35
0212	021202	Layer	Subsoil layer. Mid-greyish-brown silty clay with occasional manganese inclusions.	40	2	0.65
0212	021203	Layer	Natural layer. N/A.	N/A	N/A	N/A
0213	021301	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0213	021302	Layer	Subsoil layer. Mid-greyish-brown silty clay with occasional manganese inclusions.	50	2	0.2
0213	021303	Layer	Natural layer. N/A.	N/A	N/A	N/A
0213	021304	Layer	Alluvial deposit layer. Dark greyish-black clayey-silt with inclusions of occasional pottery sherds, rare glass shards and charcoal flecks.	50	2	0.2
0214	021401	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0214	021402	Layer	Subsoil layer. Mid-greyish-brown silty clay with occasional manganese inclusions.	50	2	0.62
0214	021403	Layer	Natural layer. N/A.	N/A	N/A	N/A
0214	021404	Layer	Alluvial deposit layer. Dark greyish-black clayey silt with inclusions of occasional pottery sherds, rare clay pipe fragments, glass shards and charcoal flecks.	18	2	0.15
0215	021501	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0215	021502	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.65
0215	021503	Layer	Natural layer. N/A.	N/A	N/A	N/A
0216	021601	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.4
0216	021602	Layer	Subsoil layer. Mid-reddish-brown sandy silty clay.	50	2	0.6
0216	021603	Layer	Natural layer. N/A.	N/A	N/A	N/A
0217	021701	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0217	021702	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.65
0217	021703	Layer	Natural layer. N/A.	N/A	N/A	N/A
0217	021704	Fill	Uppermost fill of paleochannel C.021705. Sub-linear shape in plan, friable dark brownish-black clayey silt with frequent rounded/sub-rounded pebble and pottery sherd inclusions. Under layer C.021701. Over fill C.021706.	7.5	0.2	0.15
0217	021705	Cut	Cut of paleochannel. Linear shape in plan with a imperceptible break of slope at top to gently sloping sides and a imperceptible break of slope to an uneven, slightly concave base. Filled by C.021704, C.021706, C.021707, C.021708, and C.021709.	11.57	2	0.55
0217	021706	Fill	Upper fill of paleochannel C.021705. Sub-linear shape in plan, soft light brownish-yellow gravel sand with frequent rounded to sub-rounded pebbles and inclusions of occasional pottery sherds and rare plastic. Under fill C.021704. Over fill C.021707.	9.5	2	0.15
0217	021707	Fill	Middle fill of paleochannel C.021705. Sub-linear shape in plan, loose, light reddish-brown silty gravel with inclusions of frequent rounded/sub-rounded pebbles and rare root stems, burnt wood, pottery sherds and glass shards. Under fill C.021706. Over fill C.021708.	9.5	2	0.25
0217	021708	Fill	Lower fill of paleochannel C.021705. Sub-linear shape in plan, very soft dark blackish-brown silt with occasional red mottling and inclusions of very occasional sub-rounded pebbles (1cm), occasional charcoal flecks, pottery sherds and rare fragments of plastic and metal. Under fill C.021707. Over fill C.021709.	9	2	0.15
0217	021709	Fill	Basal fill of paleochannel C.021705. Sub-linear shape in plan, weakly cemented/compact dark greyish-black silty clay with frequent manganese inclusions and rare fragments of plastic. Under fill C.021708.	9	2	0.1
0217	021710	Fill	Fill of modern deposit C.021711. Sub-ovoid shape in plan, loose, dark blackish-brown silty sand with red sandstone, rare fragments of plastic, occasional pottery sherds, charcoal flecks, gravel, and roots. Under C.021702.	2.32	1.12	0.07
0217	021711	Cut	Cut of modern deposit. Sub-ovoid shape in plan, with a northerly imperceptible, and southerly gradual break of slope at the top and vertical sides to a slightly uneven base. Cuts C.021703. Filled by C.021710.	2.32	1.12	0.07

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0217	021712	Fill	Fill of natural deposit C.021713. Irregular shape in plan, soft, dark greyish-black silt with frequent up to 0.2m long charcoal fleck inclusions. Under C.021701.	0.15	0.35	0.02
0217	021713	Cut	Cut of natural deposit. Irregular shape in plan, imperceptible break of slope at top with gently sloped sides and a imperceptible break of slope at base to a slightly concave base. Filled by C.021712.	0.15	0.35	0.02
0218	021801	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.4
0218	021802	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.6
0218	021803	Layer	Natural layer. N/A.	N/A	N/A	N/A
0219	021901	Layer	Topsoil layer. Dark greyish-brown sandy silty clay with pebbles, ceramic and bricks.	50	2	0.4–0.5
0219	021902	Layer	Subsoil layer. Mid-reddish-brown sandy silty clay.	50	2	0.5
0219	021903	Layer	Natural layer. N/A.	N/A	N/A	N/A
0220	022001	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0220	022002	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.65
0220	022003	Layer	Natural layer. N/A.	N/A	N/A	N/A
0221	022101	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.37
0221	022102	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.65
0221	022103	Layer	Natural layer. N/A.	N/A	N/A	N/A
0222	022201	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0222	022202	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.65
0222	022203	Layer	Natural layer. N/A.	N/A	N/A	N/A
0223	022301	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0223	022302	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.65
0223	022303	Layer	Natural layer. N/A.	N/A	N/A	N/A

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0224	022401	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles and gravel.	50	2	0.35
0224	022402	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.65
0224	022403	Layer	Natural layer. N/A.	N/A	N/A	N/A
0225	022501	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3
0225	022502	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.7
0225	022503	Layer	Natural layer. N/A.	N/A	N/A	N/A
0226	022601	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.25
0226	022602	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.75
0226	022603	Layer	Natural layer. N/A.	N/A	N/A	N/A
0227	022701	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3
0227	022702	Layer	Subsoil layer. Mottled mid-greyish-brown silty clay with occasional manganese inclusions.	50	2	0.75
0227	022703	Layer	Natural layer. N/A.	N/A	N/A	N/A
0228	022801	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.35
0228	022802	Layer	Subsoil layer. Mottled mid-greyish-brown silty clay with occasional manganese inclusions.	50	2	0.8
0228	022803	Layer	Natural layer. N/A.	N/A	N/A	N/A
0229	022901	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3
0229	022902	Layer	Subsoil layer. Friable mid-reddish-brown sandy silty clay.	50	2	0.5
0229	022903	Layer	Natural layer. Mid-greyish-orange sandy clay with sub-rounded sub-angular stones.	25	2	0.1
0230	023001	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.25–0.35
0230	023002	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.5–0.7
0230	023003	Layer	Natural layer. N/A.	N/A	N/A	N/A
0231	023101	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0231	023102	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.4
0231	023103	Layer	Natural layer. Light greyish-brown sandy clayey gravel with sub-rounded stones.	25	2	0.1
0232	023201	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.15–0.25
0232	023202	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.5
0232	023203	Layer	Natural layer. Grey gravel with sub-angular, sub-rounded stones.	50	2	0.1
0233	023301	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3
0233	023302	Layer	Subsoil layer. Mottled mid-greyish-brown silty sandy clay with occasional manganese inclusions.	50	2	0.6–0.8
0233	023303	Layer	Natural layer. Grey gravel with sub-angular, sub-rounded stones.	50	2	0.1
0234	023401	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3
0234	023402	Layer	Subsoil layer. Dark reddish-brown silty sandy clay with occasional sub-angular, sub-rounded stone inclusions.	50	2	0.6
0234	023403	Layer	Natural layer. Mid-greyish-red sandy gravel with frequent small/medium, sub-angular, sub-rounded stone inclusions.	2.5	2	0.1
0235	023501	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.3
0235	023502	Layer	Subsoil layer. Mid-greyish yellow sandy silt with sandy gravel.	50	2	0.8
0235	023503	Layer	Natural layer. N/A.	N/A	N/A	N/A
0236	023601	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0236	023602	Layer	Subsoil layer. Light reddish-brown sandy silty gravel.	50	2	0.8
0236	023603	Layer	Natural layer. N/A.	N/A	N/A	N/A
0237	023701	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3
0237	023702	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.7
0237	023703	Layer	Natural layer. N/A.	N/A	N/A	N/A

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0238	023801	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0238	023802	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.65
0238	023803	Layer	Natural layer. N/A.	N/A	N/A	N/A
0239	023901	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0239	023902	Layer	Subsoil layer. Light reddish-brown silty sand.	50	2	0.65
0239	023903	Layer	Natural layer. N/A.	N/A	N/A	N/A
0240	024001	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0240	024002	Layer	Subsoil layer. Light reddish-brown silty sand.	50	2	0.65
0240	024003	Layer	Natural layer. N/A.	N/A	N/A	N/A
0241	024101	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0241	024102	Layer	Subsoil layer. Light reddish-brown sandy silty clay.	50	2	0.65
0241	024103	Layer	Natural layer. N/A.	N/A	N/A	N/A
0242	024201	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0242	024202	Layer	Subsoil layer. Light reddish-brown sandy silt.	50	2	0.65
0242	024203	Layer	Natural layer. N/A.	N/A	N/A	N/A
0243	024301	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0243	024302	Layer	Subsoil layer. Mid-reddish-brown clayey silty sand.	50	2	0.65
0243	024303	Layer	Natural layer. N/A.	N/A	N/A	N/A
0244	024401	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0244	024402	Layer	Subsoil layer. Light reddish-brown sandy silty clay.	50	2	0.65
0244	024403	Layer	Natural layer. N/A.	N/A	N/A	N/A
0245	024501	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.4

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0245	024502	Layer	Subsoil layer. Mid-reddish-brown sandy silty clay.	50	2	0.6
0245	024503	Layer	Natural layer. N/A.	N/A	N/A	N/A
0246	024601	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0246	024602	Layer	Subsoil layer. Light greyish-brown silty sand.	50	2	0.65
0246	024603	Layer	Natural layer. N/A.	N/A	N/A	N/A
0247	024701	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0247	024702	Layer	Subsoil layer. Light greyish-brown sandy silt with gravel.	50	2	0.3–0.8
0247	024703	Layer	Natural layer. N/A.	N/A	N/A	N/A
0248	024801	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3
0248	024802	Layer	Subsoil layer. Friable mid-reddish-brown silty clay.	50	2	0.6
0248	024803	Layer	Natural layer. N/A.	N/A	N/A	N/A
0249	024901	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0249	024902	Layer	Subsoil layer. Mid-reddish-brown sandy silty clay.	50	2	0.65
0249	024903	Layer	Natural layer. N/A.	N/A	N/A	N/A
0250	025001	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0250	025002	Layer	Subsoil layer. Light greyish-brown silty sand.	50	2	0.65
0250	025003	Layer	Natural layer. N/A.	N/A	N/A	N/A
0251	025101	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.25–0.35
0251	025102	Layer	Subsoil layer. Friable mid-reddish-brown silty clay.	50	2	0.6
0251	025103	Layer	Natural layer. N/A.	N/A	N/A	N/A
0252	025201	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3
0252	025202	Layer	Subsoil layer. Friable mid-reddish-brown silty clay.	50	2	0.75

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0252	025203	Layer	Natural layer. N/A.	N/A	N/A	N/A
0253	025301	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3
0253	025302	Layer	Subsoil layer. Friable mid-reddish-brown silty clay.	50	2	0.6–0.8
0253	025303	Layer	Natural layer. Mid-brownish-grey sandy gravel with frequent small sub-rounded, sub-angular stones and occasional manganese inclusions.	1	2	0.1
0254	025401	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0254	025402	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.65
0254	025403	Layer	Natural layer. N/A.	N/A	N/A	N/A
0255	025501	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.4
0255	025502	Layer	Subsoil layer. Mid-reddish-brown silty clay with gravel.	50	2	0.6
0255	025503	Layer	Natural layer. N/A.	N/A	N/A	N/A
0256	025601	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3
0256	025602	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.6
0256	025603	Layer	Natural layer. N/A.	N/A	N/A	N/A
0257	025701	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.4
0257	025702	Layer	Subsoil layer. Mid-reddish-brown sandy silty clay with gravel lenses.	50	2	0.6
0257	025703	Layer	Natural layer. N/A.	N/A	N/A	N/A
0258	025801	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.15–0.25
0258	025802	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.7
0258	025803	Layer	Natural layer. Mid-grey gravelly sand.	2	2	0.25
0259	025901	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.38
0259	025902	Layer	Subsoil layer. Mid-reddish-brown sandy silty clay with gravel lenses.	50	2	0.6

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0259	025903	Layer	Natural layer. N/A.	N/A	N/A	N/A
0260	026001	Layer	Topsoil layer. Dark greyish-brown silty clay with pebbles, charcoal, ceramic, and bricks.	50	2	0.35
0260	026002	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.6
0260	026003	Layer	Natural layer. N/A.	N/A	N/A	N/A
0261	026101	Layer	Topsoil layer. Dark brownish-grey silty clay.	50	2	0.3–0.36
0261	026102	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.6
0261	026103	Layer	Natural layer. N/A.	N/A	N/A	N/A
0262	026201	Layer	Topsoil layer. Dark brownish-grey silty clay.	50	2	0.35
0262	026202	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.6
0262	026203	Layer	Natural layer. N/A.	N/A	N/A	N/A
0263	026301	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3
0263	026302	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.6
0263	026303	Layer	Natural layer. N/A.	N/A	N/A	N/A
0264	026401	Layer	Topsoil layer. Friable mid-greyish-brown silty clay.	50	2	0.15–0.25
0264	026402	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.7
0264	026403	Layer	Natural layer. N/A.	N/A	N/A	N/A
0265	026501	Layer	Topsoil layer. Dark brownish-grey silty clay.	50	2	0.35
0265	026502	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.65
0265	026503	Layer	Natural layer. N/A.	N/A	N/A	N/A
0266	026601	Layer	Topsoil layer. Dark brownish-grey silty clay.	50	2	0.35
0266	026602	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.65
0266	026603	Layer	Natural layer. N/A.	N/A	N/A	N/A

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0267	026701	Layer	Topsoil layer. Friable mid-greyish-brown silty clay.	50	2	0.25–0.35
0267	026702	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.5
0267	026703	Layer	Natural layer. N/A.	N/A	N/A	N/A
0268	026801	Layer	Topsoil layer. Mid-greyish-brown sandy silty clay.	50	2	0.35
0268	026802	Layer	Subsoil layer. Light greyish-brown silty sand.	50	2	0.5
0268	026803	Layer	Natural layer. N/A.	N/A	N/A	N/A
0269	026901	Layer	Topsoil layer. Friable mid-greyish-brown silty clay.	50	2	0.25–0.35
0269	026902	Layer	Subsoil layer. Mid-reddish-brown silty clay.	50	2	0.6
0269	026903	Layer	Natural layer. N/A.	N/A	N/A	N/A
0269	026904	Fill	Fill of pit C.026905. Subcircular shape in plan, friable, mottled blackish-grey silty clay with moderate charcoal flecks and burnt clay inclusions. Under C.026901.	0.4	0.37	0.03
0269	026905	Cut	Cut of pit. Subcircular shape in plan, gradual break of slope at top with concave sides and a gradual break of slope at bottom to a flat base. Filled by C.026904.	0.4	0.37	0.03
0301	030101	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3
0301	030102	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.6–0.8
0301	030103	Layer	Natural layer. Mottled brownish-grey sandy clay with occasional manganese and occasional clayey alluvial gravel inclusions.	50	2	0.2
0302	030201	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.2–0.3
0302	030202	Layer	Subsoil layer. Light greyish-brown silty clay.	50	2	0.6–0.8
0302	030203	Layer	Natural layer. N/A.	N/A	N/A	N/A
0303	030301	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.3
0303	030302	Layer	Subsoil layer. Light greyish-brown silty clay.	50	2	0.7
0303	030303	Layer	Natural layer. N/A.	N/A	N/A	N/A

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0304	030401	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	46.45	2	0.3
0304	030402	Layer	Subsoil layer. Light greyish-brown silty clay.	46.45	2	0.7
0304	030403	Layer	Natural layer. N/A.	N/A	N/A	N/A
0305	030501	Layer	Topsoil layer. Friable, mottled, blackish grey silty clay.	50	2	0.2–0.3
0305	030502	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.6–0.8
0305	030503	Layer	Natural layer. N/A.	N/A	N/A	N/A
0306	030601	Layer	Topsoil layer. Friable, mottled, blackish grey silty clay.	50	2	0.2–0.3
0306	030602	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.6–0.8
0306	030603	Layer	Natural layer. N/A.	N/A	N/A	N/A
0307	030701	Layer	Topsoil layer. Friable, mottled, blackish-grey silty clay.	50	2	0.2–0.3
0307	030702	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.6–0.8
0307	030703	Layer	Natural layer. N/A.	N/A	N/A	N/A
0308	030801	Layer	Topsoil layer. Friable, mottled, blackish grey silty clay.	50	2	0.2–0.3
0308	030802	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.6–0.8
0308	030803	Layer	Natural layer. N/A.	N/A	N/A	N/A
0309	030901	Layer	Topsoil layer. Friable dark brownish-grey silty sandy clay with occasional modern pottery inclusions.	50	2	0.2–0.3
0309	030902	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.6–0.8
0309	030903	Layer	Natural layer. N/A.	N/A	N/A	N/A
0310	031001	Layer	Topsoil layer. Friable dark brownish-grey silty sandy clay with occasional modern pottery and red brick inclusions.	50	2	0.2–0.3
0310	031002	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.6–0.8

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0310	031003	Layer	Natural layer. N/A.	N/A	N/A	N/A
0311	031101	Layer	Topsoil layer. Friable dark brownish-grey silty sandy clay with occasional modern pottery inclusions.	50	2	0.2–0.3
0311	031102	Layer	Subsoil layer. Friable mid-reddish-brown silty sandy clay.	50	2	0.6–0.8
0311	031103	Layer	Natural layer. N/A.	N/A	N/A	N/A
0312	031201	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.4
0312	031202	Layer	Subsoil layer. Light reddish-brown silty clay.	50	2	0.6
0312	031203	Layer	Natural layer. N/A.	N/A	N/A	N/A
0313	031301	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.32
0313	031302	Layer	Subsoil layer. Light reddish-brown silty clay.	50	2	0.7
0313	031303	Layer	Natural layer. N/A.	N/A	N/A	N/A
0314	031401	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.32
0314	031402	Layer	Subsoil layer. Light reddish-brown silty clay.	50	2	0.7
0314	031403	Layer	Natural layer. N/A.	N/A	N/A	N/A
0315	031501	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.3
0315	031502	Layer	Subsoil layer. Light reddish-brown silty sand.	50	2	0.7
0315	031503	Layer	Natural layer. N/A.	N/A	N/A	N/A
0316	031601	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.3
0316	031602	Layer	Subsoil layer. Light reddish-brown silty sand.	50	2	0.7
0316	031603	Layer	Natural layer. N/A.	N/A	N/A	N/A
0317	031701	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.3
0317	031702	Layer	Subsoil layer. Light reddish-brown silty sand.	50	2	0.7

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0317	031703	Layer	Natural layer. N/A.	N/A	N/A	N/A
0601	060101	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.35
0601	060102	Layer	Subsoil layer. Friable mid-reddish-brown silty clay with occasional manganese inclusions.	50	2	0.4
0601	060103	Layer	Natural layer. N/A.	N/A	N/A	N/A
0602	060201	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.35
0602	060202	Layer	Subsoil layer. Friable mid-reddish-brown silty clay with occasional manganese inclusions.	50	2	0.4
0602	060203	Layer	Natural layer. N/A.	N/A	N/A	N/A
0603	060301	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.35
0603	060302	Layer	Subsoil layer. Friable mid-reddish-brown silty clay with occasional manganese inclusions.	50	2	0.55
0603	060303	Layer	Natural layer. N/A.	N/A	N/A	N/A
0604	060401	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.25
0604	060402	Layer	Subsoil layer. Friable mid-reddish-brown silty clay with occasional manganese inclusions.	50	2	0.7
0604	060403	Layer	Natural layer. N/A.	N/A	N/A	N/A
0605	060501	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.25
0605	060502	Layer	Subsoil layer. Friable mid-reddish-brown silty clay with occasional manganese inclusions.	50	2	0.75
0605	060503	Layer	Natural layer. Mid-brownish-grey silty clay with occasional sub-rounded stones. Present only in centre.	<50	2	0.1
0606	060601	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.3
0606	060602	Layer	Subsoil layer. Friable mid-reddish-brown silty clay.	50	2	0.75
0606	060603	Layer	Natural layer. Mottled brownish-grey sandy clay with occasional sub-rounded stones and occasional manganese inclusions. Present only in centre.	<50	2	0.1
0607	060701	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.3

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0607	060702	Layer	Subsoil layer. Friable mid-reddish-brown silty clay with occasional manganese inclusions.	50	2	0.7
0607	060703	Layer	Natural layer. Light brownish-grey sandy clay with occasional sub-rounded stones.	50	2	0.1
0608	060801	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.35
0608	060802	Layer	Subsoil layer. Friable mid-reddish-brown silty clay with occasional manganese inclusions.	50	2	0.6
0608	060803	Layer	Natural layer. Mottled brownish-grey sandy clay with occasional sub-rounded stones and occasional manganese inclusions.	50	2	0.1
0609	N/A	N/A	Trench pending / cancelled to reduce total trench nos.			
0610	061001	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.32
0610	61002	Layer	Subsoil layer. Soft mid-reddish-brown silty clay with rounded to sub-rounded stones along the lower section.	50	2	0.24
0610	061003	Layer	Natural layer. Mid-reddish-brown silty clay.	50	2	0.1
0611	061101	Layer	Topsoil layer. Dark greyish brown sandy loam.	50	2	0.3
0611	061102	Layer	Subsoil layer. Mid-reddish-brown silty sand.	50	2	0.4
0611	061103	Layer	Natural layer. N/A.	N/A	N/A	N/A
0612	061201	Layer	Topsoil layer. Dark reddish-brown sandy loam.	50	2	0.25
0612	061202	Layer	Subsoil layer. Reddish-brown silty sand.	50	2	0.55
0612	061203	Layer	Natural layer. Brownish-yellow sand with fragments of iron pan.	50	2	0.1
0613	061301	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.3
0613	061302	Layer	Subsoil layer. Reddish-brown silty sand.	50	2	0.5
0613	061303	Layer	Natural layer. Brownish-yellow sand with fragments of iron pan.	50	2	0.1
0614	061401	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.35
0614	061402	Layer	Subsoil layer. Friable mid-reddish-brown silty clay with occasional manganese inclusions.	50	2	0.6

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0614	061403	Layer	Natural layer. Mottled brownish-grey sandy clay with occasional sub-rounded stones and occasional manganese inclusions.	50	2	0.1
0615	061501	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.26
0615	061502	Layer	Subsoil layer. Reddish-brown silty sand.	50	2	0.38
0615	061503	Layer	Natural layer. Brownish-yellow sand with fragments of iron pan.	50	2	0.1
0616–0620	N/A	N/A	Trench pending / cancelled to reduced total trench no.	N/A	N/A	N/A
0621	062101	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.3
0621	062102	Layer	Subsoil layer. Friable mid-reddish-brown silty clay with occasional manganese inclusions.	50	2	0.6
0621	062103	Layer	Natural layer. Light brownish-grey sandy clay with occasional sub-rounded stones. Present only in centre.	50	2	0.1
0622	062201	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.4
0622	062202	Layer	Subsoil layer. Friable mid-reddish-brown silty clay with occasional manganese inclusions.	50	2	0.6
0622	062203	Layer	Natural layer. Light brownish-grey sandy clay with occasional sub-rounded stones. Present only in scattered patches throughout.	50	2	0.1
0623	062301	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.37
0623	062302	Layer	Subsoil layer. Reddish-brown silty sand.	50	2	0.5
0623	062303	Layer	Natural layer. Brownish-yellow sand with fragments of iron pan.	50	2	0.1
0624	062401	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.29
0624	062402	Layer	Subsoil layer. Reddish-brown silty sand.	50	2	0.4
0624	062403	Layer	Natural layer. Brownish-yellow sand with fragments of iron pan.	50	2	0.1
0625	062501	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.3
0625	062502	Layer	Subsoil layer. Friable mid-reddish-brown silty clay.	50	2	0.8

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0625	062503	Layer	Natural layer. Mottled brownish-grey sandy clay with occasional sub-rounded stones and occasional manganese inclusions.	50	2	0.1
0626–0630	N/A	N/A	Trench pending / cancelled to reduced total trench no.	N/A	N/A	N/A
0631	063101	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.3
0631	063102	Layer	Subsoil layer. Friable mid-reddish-brown silty clay.	50	2	0.7
0631	063103	Layer	Natural layer. Mottled brownish-grey sandy clay with occasional sub-rounded stones and occasional manganese inclusions.	50	2	0.1
0632	N/A	N/A	Trench pending / cancelled to reduced total trench no.	N/A	N/A	N/A
0633	063301	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.3
0633	063302	Layer	Subsoil layer. Reddish-brown silty sand.	50	2	0.48
0633	063303	Layer	Natural layer. Light brownish-yellow clayey sand with fragments of iron pan.	50	2	0.1
0634	063401	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.34
0634	063402	Layer	Subsoil layer. Reddish-brown silty sand.	50	2	0.46
0634	063403	Layer	Natural layer. Light brownish-yellow clayey sand.	50	2	0.1
0635	063501	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.27
0635	063502	Layer	Subsoil layer. Reddish-brown silty sand.	50	2	0.51
0635	063503	Layer	Natural layer. Light brownish-yellow clayey sand.	50	2	0.1
0636	N/A	N/A	Trench pending / cancelled to reduced total trench no.	N/A	N/A	N/A
0637	063701	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.25
0637	063702	Layer	Subsoil layer. Friable mid-brown silty clay.	50	2	0.7
0637	063703	Layer	Natural layer. Mottled greyish-brown sand with occasional sub-rounded stones and moderate manganese inclusions.	50	2	0.1
0638	N/A	N/A	Trench pending / cancelled to reduced total trench no.	N/A	N/A	N/A

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0639	063901	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.25
0639	063902	Layer	Subsoil layer. Reddish-brown silty sand.	50	2	0.55
0639	063903	Layer	Natural layer. Dark grey silty clay with yellowish-brown sand mottling.	50	2	0.1
0640	N/A	N/A	Trench pending / cancelled to reduced total trench no.	N/A	N/A	N/A
0641	064101	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.25
0641	064102	Layer	Subsoil layer. Friable mid-brown silty clay.	50	2	0.7
0641	064103	Layer	Natural layer. Mottled brownish-grey sandy clay with occasional sub-rounded stones and occasional manganese inclusions.	50	2	0.1
0642	N/A	N/A	Trench pending / cancelled to reduced total trench no.	N/A	N/A	N/A
0643	064301	Layer	Topsoil layer. Friable dark greyish-brown silty clay.	50	2	0.35
0643	064302	Layer	Subsoil layer. Friable mid-brown silty clay.	50	2	0.7
0643	064303	Layer	Natural layer. Mottled greyish-brown sand with occasional sub-rounded stones and moderate manganese inclusions.	50	2	0.1
0644–0652	N/A	N/A	Trench pending / cancelled to reduce total trench nos.	N/A	N/A	N/A
0653	065301	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.3
0653	065302	Layer	Subsoil layer. Friable mid-brown silty clay.	50	2	0.8
0653	065303	Layer	Natural layer. Mid-greyish-blue clay with occasional sub-rounded stones.	50	2	0.1
0654	N/A	N/A	Trench pending / cancelled to reduced total trench no.	N/A	N/A	N/A
0655	065501	Layer	Topsoil layer. Friable dark brownish-grey silty clay.	50	2	0.3
0655	065502	Layer	Subsoil layer. Friable mid-brown silty clay.	50	2	0.1
0655	065503	Layer	Natural layer. Mid-greyish-brown silty sand with occasional sub-rounded stones and occasional manganese inclusions.	50	2	0.1
0656–0660	N/A	N/A	Trench pending / cancelled to reduce total trench nos.	N/A	N/A	N/A

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0661	066101	Layer	Topsoil layer. Loose dark blackish-brown clayey silt.	50	2	0.2–0.25
0661	066102	Layer	Subsoil layer. Moderately compact mid-yellowish-brown silty clay.	50	2	0.6–0.65
0661	066103	Layer	Natural layer. Soft mid-yellowish-brown clayey sand and silty sand.	50	2	N/A
0662–0665	N/A	N/A	Trench pending / cancelled to reduce total trench nos.	N/A	N/A	N/A
0666	066601	Layer	Topsoil layer. Loose dark blackish-brown clayey silt.	50	2	0.2–0.25
0666	066602	Layer	Subsoil layer. Moderately compacted mid-yellowish-brown silty clay.	50	2	0.45
0666	066603	Layer	Natural layer. Soft mid-yellowish-brown clayey sand and silty sand.	50	2	N/A
0667–0672	N/A	N/A	Trench pending / cancelled to reduce total trench nos.	N/A	N/A	N/A
0668	066801	Layer	Topsoil layer. Loose dark blackish-brown clayey silt.	50	2	0.2–0.25
0668	066802	Layer	Subsoil layer. Moderately compacted mid-yellowish-brown silty clay.	50	2	0.5
0668	066803	Layer	Natural layer. Soft mid-yellowish-brown clayey sand.	50	2	N/A
0669	066901	Layer	Topsoil layer. Loose dark blackish-brown clayey silt.	50	2	0.2–0.25
0669	066902	Layer	Subsoil layer. Moderately compacted mid-yellowish-brown silty clay.	50	2	0.6
0669	066903	Layer	Natural layer. Soft mid-yellowish-brown clayey sand.	50	2	N/A
0670–0672	N/A	N/A	Trench pending / cancelled to reduce total trench nos.	N/A	N/A	N/A
0801	080101	Layer	Topsoil layer. Loose dark brown sandy, clayey silt.	50	2	0.18–0.25
0801	080102	Layer	Subsoil layer. Compact mid-reddish-brown sandy, clayey silt.	50	2	0.6
0801	080103	Layer	Natural layer. Loose, well-sorted mid-reddish-brown sandy gravel comprising quartz and flint stones, averaging 2cm in size.	50	2	N/A
0802	080201	Layer	Topsoil layer. Loose dark brown sandy, clayey silt with rare inclusions of modern pottery and clay tobacco pipes.	50	2	0.2–0.25
0802	080202	Layer	Subsoil layer. Compact mid-reddish-brown sandy, clayey silt.	50	2	0.6

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
0802	080203	Layer	Natural layer. N/A	50	2	N/A
0803	080301	Layer	Topsoil layer. Loose dark brown sandy, clayey silt with rare inclusions of modern pottery and clay tobacco pipes.	50	2	0.2–0.25
0803	080302	Layer	Subsoil layer. Loose mid-brown clayey, silty sand.	50	2	0.8
0803	080303	Layer	Natural layer. Loose mid-brown sandy gravel.	50	2	N/A
0804	080401	Layer	Topsoil layer. Loose dark blackish-brown sandy, clayey silt with rare inclusions of modern pottery and clay tobacco pipes.	50	2	0.18–0.25
0804	080402	Layer	Subsoil layer. Compact mid-reddish-brown sandy, clayey silt.	50	2	0.6
0804	080403	Layer	Natural layer. Loose, well-sorted mid-reddish-brown sandy gravel comprising quartz and flint stones, averaging 2cm in size.	50	2	N/A
0901	090101	Layer	Topsoil layer. Loose dark brown clayey, sandy silt.	50	2	0.2–0.25
0901	090102	Layer	Subsoil layer. Loose mid-reddish-brown clayey silt.	50	2	0.8–1
0901	090103	Layer	Natural layer. N/A.	50	2	N/A
0902	090201	Layer	Topsoil layer. Loose dark brown clayey, sandy silt.	50	2	0.2–0.25
0902	090202	Layer	Subsoil layer. Moderately compact mid-reddish-brown sandy, clayey silt and some soft, silty sand with rare inclusions of possible red roof tile fragments and red brick fragments.	50	2	0.6
0902	090203	Layer	Natural layer. N/A.	50	2	N/A
0903	090301	Layer	Topsoil layer. Loose, dark blackish-brown clayey, sandy silt with very occasional inclusions of charcoal flecks, pebbles, modern pottery and clay tobacco pipe fragments.	50	2	0.2–0.25
0903	090302	Layer	Subsoil layer. Moderately compact mid-reddish-brown sandy, clayey silt with occasional inclusions of pebbles and rare inclusions of charcoal flecks.	50	2	0.6
0903	090303	Layer	Natural layer. N/A.	50	2	N/A
1101	110101	Layer	Topsoil layer. Loose dark brown clayey, sandy silt.	50	2	0.2–0.25
1101	110102	Layer	Subsoil layer. Compact mid-reddish-brown sandy, clayey silt.	50	2	0.6

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
1101	110103	Layer	Natural layer. Compact mid-yellowish-brown sand.	50	2	N/A
1102	110201	Layer	Topsoil layer. Loose dark brown clayey, sandy silt.	50	2	0.2–0.25
1102	110202	Layer	Subsoil layer. Loose to lightly compact mid-reddish-brown sandy, clayey silt.	50	2	0.6
1102	110203	Layer	Natural layer. Compact mid-brownish-grey silty clay.	50	2	N/A
1103	110301	Layer	Topsoil layer. Loose dark brown clayey silt.	50	2	0.2–0.25
1103	110302	Layer	Subsoil layer. Compact mid-greyish- and reddish-brown silty clay.	50	2	0.6
1103	110303	Layer	Natural layer. Compact mid-greyish- and reddish-brown silty clay.	50	2	N/A
1104	110401	Layer	Topsoil layer. Loose dark brown clayey, sandy silt.	50	2	0.2–0.25
1104	110402	Layer	Subsoil layer. Loose mid-reddish-brown sandy, clayey silt.	50	2	0.35–0.9
1104	110403	Layer	Natural layer. Compact mid-brownish-grey silty clay.	50	2	N/A
1201	120101	Layer	Topsoil layer. Loose dark brown clayey, sandy silt.	50	2	0.2–0.25
1201	120102	Layer	Subsoil layer. Loose to lightly compact mid-reddish-brown sandy, clayey silt.	50	2	0.6
1201	120103	Layer	Natural layer. Loose, well-sorted mid-reddish-brown sandy gravel comprising quartz and flint stones, averaging 2cm in size.	50	2	N/A
1202	120201	Layer	Topsoil layer. Loose dark brown sandy, clayey silt.	50	2	0.2–0.25
1202	120202	Layer	Subsoil layer. Lightly compact mid-reddish-brown sandy, clayey silt.	50	2	0.6
1202	120203	Layer	Natural layer. Lightly compact mid-reddish-brown sandy, clayey silt.	50	2	N/A
1203	120301	Layer	Topsoil layer. Loose dark brown clayey sandy silt.	50	2	0.2–0.25
1203	120302	Layer	Subsoil layer. Compact mid-reddish-brown clayey silt.	50	2	0.6
1203	120303	Layer	Natural layer. Compact mid-reddish-brown clayey silt.	50	2	N/A
1204	120401	Layer	Topsoil layer. Loose dark brown clayey silt.	50	2	0.2–0.25

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
1204	120402	Layer	Subsoil layer. Compact mid-reddish-brown silty clay.	50	2	0.6
1204	120403	Layer	Natural layer. Compact mid-reddish-brown silty clay.	50	2	N/A
1301	130101	Layer	Topsoil layer. Loose dark brown clayey silt.	50	2	0.2–0.25
1301	130102	Layer	Subsoil layer. Compact mid-reddish-brown silty clay.	50	2	0.6
1301	130103	Layer	Natural layer. Compact mid-reddish-brown silty clay.	50	2	N/A
1302	130201	Layer	Topsoil layer. Loose dark brown clayey silt.	50	2	0.2–0.25
1302	130201	Layer	Subsoil layer. Loose mid-reddish-brown sandy, clayey silt.	50	2	0.6
1302	130203	Layer	Natural layer. Loose mid-reddish-brown silty sand.	50	2	N/A
1401	140101	Layer	Topsoil layer. Loose mid-blackish-brown sandy clay.	50	2	0.15–0.2
1401	140102	Layer	Subsoil layer. Loose mid-reddish-brown silty clay.	50	2	0.7–0.8
1401	140103	Layer	Natural layer. Loose mid-reddish-brown sandy, silty clay with frequent dark brownish black flecks throughout.	50	2	N/A
1402	140201	Layer	Topsoil layer. Loose mid-blackish-brown sandy clay.	50	2	0.15–0.2
1402	140202	Layer	Subsoil layer. Loose mid-reddish-brown silty clay.	50	2	0.7–0.8
1402	140203	Layer	Natural layer. Loose mid-reddish-brown sandy, silty clay with frequent dark brownish black flecks throughout.	50	2	N/A
1403	140301	Layer	Topsoil layer. Loose mid-blackish-brown sandy clay.	50	2	0.15–0.2
1403	140302	Layer	Subsoil layer. Loose mid-reddish-brown silty clay.	50	2	0.7–0.8
1403	140303	Layer	Natural layer. Loose mid-reddish-brown sandy, silty clay with frequent dark brownish black flecks throughout.	50	2	N/A
1404	140401	Layer	Topsoil layer. Loose mid-blackish-brown sandy clay.	50	2	0.15–0.2
1404	140402	Layer	Subsoil layer. Loose mid-reddish-brown silty clay.	50	2	0.7–0.8

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
1404	140403	Layer	Natural layer. Loose mid-reddish-brown sandy, silty clay with frequent dark brownish black flecks throughout.	50	2	N/A
1501	150101	Layer	Topsoil layer. Loose dark brown clayey, silty sand.	50	2	0.2–0.25
1501	150102	Layer	Subsoil layer. Loose mid-reddish-brown clayey sand.	50	2	0.6
1501	150103	Layer	Natural layer. Loose mid-reddish-brown clayey sand.	50	2	N/A
1502	150201	Layer	Topsoil layer. Loose dark brown clayey, silty sand.	50	2	0.2–0.25
1502	150202	Layer	Subsoil layer. Loose mid-reddish-brown clayey sand.	50	2	0.6
1502	150203	Layer	Natural layer. Loose mid-reddish-brown clayey sand.	50	2	N/A
1503	150301	Layer	Topsoil layer. Loose mid-greyish-brown sandy clay.	50	2	0.1
1503	150302	Layer	Subsoil layer. Loose mid-reddish-brown silty, sandy clay.	50	2	0.9
1503	150303	Layer	Natural layer. Loose mid-reddish-brown clay.	50	2	N/A
1601	160101	Layer	Topsoil layer. Dark greyish-brown sandy clay.	50	2	0.17–0.2
1601	160102	Layer	Subsoil layer. Mid-brown sandy silt.	50	2	0.63–1
1601	160103	Layer	Natural layer. Mid-yellowish-brown sand.	50	2	N/A
1602	160201	Layer	Topsoil layer. Dark greyish-brown sandy clay.	50	2	0.15–0.18
1602	160202	Layer	Subsoil layer. Mid-brown clayey silt.	50	2	0.48–0.77
1602	160203	Layer	Natural layer. Mid-yellowish-brown silty clay.	50	2	N/A
1602	160204	Cut	Cut of ditch. Linear shape in plan with very steep sides to a flat base. Cuts C.160202 & C.160203. Filled by C.160205 & C.160206.	1.8	1	0.92
1602	160205	Fill	Lower fill of linear ditch C.160204. Very dark greyish-brown friable ashy soil with rare inclusions of rotting wood and one small fragment of iron. Under C.160206.	1.8	0.58	0.92

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
1602	160206	Fill	Upper fill of linear ditch C.160204. Mid-greyish brown firm silty clay with no inclusions. Over C.160205.	1.8	0.37	0.92
1603	160301	Layer	Topsoil layer. Dark brown sandy clay.	50	2	0.12–0.2
1603	160302	Layer	Subsoil layer. Mid-brown sandy silt.	50	2	0.36–0.85
1603	160303	Layer	Natural layer. Mid-yellowish-grey sandy silt.	50	2	N/A
1604	160401	Layer	Topsoil layer. Dark greyish-brown sandy clay.	50	2	0.19–0.25
1604	160402	Layer	Subsoil layer. Mid-brown sandy silt with frequent inclusions of red brick fragments.	50	2	0.81–0.95
1604	160403	Layer	Natural layer. Mid-yellowish-brown sand with frequent inclusions of black flecks.	50	2	N/A
1801	180101	Layer	Topsoil layer. Dark blackish-brown silty clay.	50	2	0.3
1801	180102	Layer	Subsoil layer. Mid-brown silty sand.	50	2	0.1
1801	180103	Layer	Natural layer. N/A.	50	2	N/A
1801	180104	Cut	Cut of pit. Sub-oval shape in plan with a gradual break of slop at top to straight sides with a gentle break of slope at bottom to a flat base. Cutting C.180102. Filled by C.180105.	3	1.5	0.13
1801	180105	Fill	Fill of modern pit C.180104. Sub-oval shape in plan, loosely compacted dark brownish-grey silty sand with occasional inclusions of small stones and brick fragments.	3	1.5	0.13
1802	N/A	N/A	Trench cancelled due to H&S concerns.	N/A	N/A	N/A
1803	N/A	N/A	Trench cancelled due to H&S concerns.	N/A	N/A	N/A
1804	180401	Layer	Topsoil layer. Dark brown silty clay.	50	2	0.27–0.29
1804	180402	Layer	Subsoil layer. Mid-brown silty clay.	50	2	0.68–0.81
1804	180403	Layer	Natural layer. N/A.	50	2	N/A
1805	180501	Layer	Topsoil layer. Dark brown silty clay.	50	2	0.27–0.3
1805	180502	Layer	Subsoil layer. Mid-brown silty clay.	50	2	0.75–0.82

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
1805	180503	Layer	Natural layer. Mid-yellowish-brown sandy silt.	50	2	N/A
1806	180601	Layer	Topsoil layer. Dark brown silty clay.	50	2	0.28–0.3
1806	180602	Layer	Subsoil layer. Mid-brown silty clay.	50	2	0.65–0.77
1806	180603	Layer	Natural layer. N/A.	50	2	N/A
1807	180701	Layer	Topsoil layer. Dark brown silty clay.	50	2	0.25–0.28
1807	180702	Layer	Subsoil layer. Mid-brown silty clay.	50	2	0.65–0.8
1807	180703	Layer	Natural layer. N/A.	50	2	N/A
1808	180801	Layer	Topsoil layer. Dark brown silty clay.	50	2	0.28–0.3
1808	180802	Layer	Subsoil layer. Mid-brown silty clay.	50	2	0.62–0.67
1808	180803	Layer	Natural layer. N/A.	50	2	N/A
1809	180901	Layer	Topsoil layer. Dark greyish-brown silty clay.	50	2	0.25–0.28
1809	180902	Layer	Subsoil layer. Mid-brown silt.	50	2	0.7
1809	180903	Layer	Natural layer. N/A.	50	2	N/A
1809	180904	Cut	Cut of disturbance. Linear shape in plan. This feature contains material from 1960s-70s. It was not excavated due to very recent date and the presence of potentially hazardous material.	1.6	3.4	N/A
1809	180905	Fill	Fill of modern disturbance C.180904. Linear shape in plan, loosely compacted dark grey sandy silt with frequent inclusions of charcoal and pebbles and very frequent inclusions of modern rubbish, including metal scrap, pipes and glass bottles.	1.6	3.4	N/A
2001	200101	Layer	Topsoil layer. Dark greyish-black silty clay with charcoal, plastic and pottery inclusions.	50	2	0.35
2001	200102	Layer	Subsoil layer. Mid-brown silty clay.	50	2	0.3
2001	200103	Layer	Natural layer. Purplish-brown clay with blue clay lenses.	50	2	0.1

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2001	200104	Fill	Fill of ditch C.200105. Linear shape in plan, moderately compacted light greyish-brown clayey silt with rare rock inclusions dispersed randomly. Under C.200102.	2	3.8	0.8
2001	200105	Cut	Cut of ditch. Linear shape in plan, with a sharp break of slope at top, steeply stepped to concave sides and with a gentle break of slope at bottom to a concave base. Cuts C.200103. Filled by C.200104.	2	3.8	0.8
2002	200201	Layer	Topsoil layer. Dark blackish-brown silty clay with inclusions of pottery, charcoal, glass, bone, plastic, gravel, and roots.	50	2	0.35
2002	200202	Layer	Subsoil layer. Mid-brown silty clay with inclusions of pottery, charcoal, bone, glass and gravel.	50	2	0.3
2002	200203	Layer	Natural layer. Purplish-brown silty clay with gravel and lenses of blue clay.	50	2	0.1
2003	200301	Layer	Topsoil layer. Greyish-black sandy silty clay with charcoal, animal bone, plastic, clay pipe, ceramic and gravel inclusions.	50	2	0.3
2003	200302	Layer	Subsoil layer. Mid-brown silty clay with pottery inclusions.	50	2	0.1
2003	200303	Layer	Natural layer. Brownish-red clay with blue clay lenses.	50	2	0.2
2003	200304	Deposit	Deposit/spread. Rectangular shape in plan, loose to moderately compact mid-brown clay silt with pottery, occasional flint, charcoal flecks and animal bone inclusions. Under C.200302. Over C.200306 and C.200305.	25	2	0.26
2003	200305	Surface	Plaster-like floor surface. Rectangular shape in plan, compact brownish-yellow clay. Under C.200302. Over C.200303. Possibly associated with C.200310, and ditches C.200307, C.200309, C.200313.	2.6	2	0.17
2003	200306	Fill	Fill of ditch C.200307. Linear shape in plan, compact to loose, dark reddish-brown silty clay with occasional rounded to sub-rounded pebbles, frequent pottery sherds (including roman Samian ware) and rare charcoal flecks and animal bone inclusions. Under C.200304. Associated with C.200305 and C. 200308.	2.68	2	0.73
2003	200307	Cut	Cut of ditch. Linear shape in plan, sharp break of slope at top to almost vertical and slightly stepped westerly sides and a gradual break of slope at bottom to an uneven, slightly concave, base. Filled by C.200306. Possibly associated with surface C.200305 and ditches C.200309 and C.200313.	2.68	2	0.73

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2003	200308	Fill	Fill of cut C.200309. Sub-linear/circular shape in plan, loose to moderately compact mid-reddish-brown silty clay on top of a thick basal charcoal layer with animal bone, rare flint, frequent pottery sherds (including fully intact pot F#2.4) and rare copper fragment inclusions. Under fill C.200304. Possibly associated with ditches C.200307 and C.200313.	2.3	2	0.2
2003	200309	Cut	Cut of pit. Sub-linear/circular shape in plan, sharp break of slope at top to gently stepped sides and a sharp break of slope at bottom to a slightly uneven base. Cuts C.200311. Filled by C.200308.	2.3	2	0.2
2003	200310	Surface	Stone fireplace surface. Sub-circular shape in plan, loose pinkish-red rounded boulders (0.1m diameter average) and animal bone inclusions. Under basal fill C.200308. Possibly associated with C.200305, C.200309, and ditches C.200307 and C.200313.	0.35	0.35	0.15
2003	200311	Fill	Upper fill of ditch C.200313. Sub-linear shape in plan, loose to moderately compact mid-brown clay silt with charcoal fleck inclusions. Under cut C.200309. Over fill C.200312.	2	1.14	0.18
2003	200312	Fill	Basal fill of ditch C.200313. Sub-linear shape in plan, loose to moderately compacted brownish-grey clayey silt with charcoal fleck inclusions. Under C.200311. Possibly associated with C.200305, C.200310 and ditches C.200307 and C.200309.	2	0.64	0.12
2003	200313	Cut	Cut of ditch. Sub-linear shape in plan, gradual break of slope at top to gently stepped sides and a sharp break of slope at bottom to an uneven base. Cuts C.200303. Filled by C.200311 and C.200312.	2	1.14	0.3
2004	200401	Layer	Topsoil layer. Dark greyish-brown silty clay.	50	2	0.38
2004	200402	Layer	Subsoil layer. Mid-greyish-brown silty clay.	50	2	0.2
2004	200403	Layer	Natural layer. Light brown sandy silty clay with gravel.	50	2	0.1
2004	200404	Deposit	Possible occupation layer deposit. Linear shape in plan, loose mid-brown silty sandy clay with occasional sub-rounded sub-angular stones, occasional bone, pottery sherds, charcoal flecks, and natural flint inclusions. Under C.200402. Over C.200412, C.200414 and C.200416.	N/A	7.8	0.32
2004	200405	N/A	VOID	N/A	N/A	N/A
2004	200406	Fill	Basal fill of semi-sunken house C.200407. Sub-rectangular shape in plan, moderately compacted dark brownish-grey clayey silt with frequent charcoal flecks and burnt clay at the base. Under C.200408.	4.4	2	0.3

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2004	200407	Cut	Cut of semi-sunken house. Sub-rectangular shape in plan, sharp break of slope at top to nearly vertical sides and a sharp break of base at bottom to mostly flat base. Cuts C.200403. Filled by C.200408 and C.200406.	4.45	2	0.56
2004	200408	Fill	Upper fill of semi-sunken house C.200407. Sub-rectangular shape in plan, moderately compact brownish-grey clayey silt with frequent charcoal flecks, burnt clay, rare pottery, animal bone, copper alloy and slag inclusions. Under C.200402. Over C.200406.	4.45	2	0.26
2004	200409	Cut	Cut of linear. Linear shape in plan, easterly rounded corners, sharp break of slope at top to concave sides and a gradual break of slope at bottom to a concave u-shaped base. Cuts C.200404. Filled by C.200410.	1.38	0.5	0.62
2004	200410	Fill	Fill of linear C.200409. Linear shape in plan, loose dark greyish-brown silty sandy clay with occasional sub-rounded sub-angular stones and occasional pottery sherds, natural flint pieces and charcoal fleck inclusions. Under C.200402.	1.38	0.5	0.62
2004	200411	Fill	Fill of linear C.200412. Linear shape in plan, loose mid-greyish-brown sandy silty clay with occasional sub-rounded sub-angular stones, occasional animal bone, charcoal flecks, and natural flint piece inclusions. Under C.200404.	1.8	0.77	0.25
2004	200412	Cut	Cut of linear. Linear shape in plan, sharp break of slope at top to steep concave sides and a imperceptible break of slope at bottom to a concave u-shaped base. Filled by C.200411. Associated with C.200414 and C.200416.	1.8	0.77	0.25
2004	200413	Fill	Fill of linear C.200414. Linear shape in plan, loose mid-greyish-brown sandy clay with occasional sub-angular sub-rounded stones, occasional charcoal flecks and natural flint piece inclusions. Under C.200404.	1.8	1.35	0.34
2004	200414	Cut	Cut of linear. Linear shape in plan, sharp break of slope at top to sloping concave sides and a imperceptible break of slope at bottom to a u-shaped base. Associated with C.200412 and C.200416. Filled by C.200413.	1.8	1.35	0.34
2004	200415	Fill	Fill of linear C.200416. Linear shape in plan, loose mid-brown sandy clay with occasional sub-angular sub-rounded stones and occasional charcoal flecks and natural flint piece inclusions. Under C.200404.	1.8	1.14	0.22

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2004	200416	Cut	Cut of linear. Linear shape in plan, sharp break of slope at top to sloping concave sides and a imperceptible break of slope at bottom to a u-shaped base. Over C.200403. Filled by C.200415. Associated with C.200412 and C.200414.	1.8	1.14	0.22
2004	200417	Fill	Fill of pit C.200418. Semi-circular shape in plan, quite compact greyish-brown silty sand with occasional pebbles, moderate animal bone and pottery sherd inclusions. Under C.200402.	1.71	1.71	0.48
2004	200418	Cut	Cut of pit. Semi-circular shape in plan, sharp break of slope at top to moderately sloped vertical sides and a imperceptible break of slope at bottom to a concave base. Cuts C.200419. Filled by C.200418.	1.71	1.71	0.48
2004	200419	Fill	Fill of ditch C.200420. Linear shape in plan, quite compact greyish-brown silty sand with rare pebble inclusions. Under C.200418.	1	0.93	0.23
2004	200420	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to moderately sloping vertical sides and a imperceptible break of slope at bottom to a concave base. Over C.200403.	1	0.93	0.23
2005	200501	Layer	Topsoil layer. Dark greyish-brown silty clay.	50	2	0.2–0.3
2005	200502	Layer	Subsoil layer. Mid-greyish-brown silty clay.	50	2	0.3–0.65
2005	200503	Layer	Natural layer. Reddish-orange sandy clay with gravel lenses.	50	2	0.1
2005	200504	Deposit	Layer deposit. Irregular shape in plan, moderately compact mid-greyish-brown sandy silt with occasional charcoal flecks, pottery sherds, and small sub-rounded stone inclusions. Under C.200502. Over C.200503.	15	2	0.4
2005	200505	Fill	Fill of possible structure C. 200506. Irregular shape in plan, soft dark greyish-brown silty clay with occasional charcoal and sub-rounded stone inclusions. Under C.200502.	3.5	1.4	0.6
2005	200506	Cut	Cut of possible structure. Irregular shape in plan, with sharp break of slope at top to sloping vertical sides and a gradual break of slope at bottom to a generally flat base. Over C.200503. Filled by C.200505.	3.5	1.4	0.6
2005	200507	Fill	Fill of gully C.200508. Linear shape in plan, fairly compact mid-brown gravelly silty sand with charcoal fleck inclusions. Under C.200502.	1.91	0.53	0.2
2005	200508	Cut	Cut of gully. Irregular shape in plan, with a sharp break of slope at top to sloping vertical sides and a sharp break of slope at bottom to a V-shaped base. Over C.200503. Filled by C.200507.	1.91	0.53	0.2

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2005	200509	Fill	Fill of ditch C.200510. Linear shape in plan, moderately compact greyish-brown sandy silt with rare charcoal flecks, pottery sherds, animal bone and occasional rock inclusions.	1	3	0.55
2005	200510	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to concave slightly stepped sides and a gradual break of slope at bottom to a concave base. Over C.200504. Filled by C.200509.	1	3	0.55
2101	210101	Layer	Topsoil layer. Greyish-brown sandy loam.	50	2	0.32
2101	210102	Layer	Subsoil layer. Brown silty sand.	50	2	0.28
2101	210103	Layer	Natural layer. Reddish-brown sandy clay and greyish-brown sand with gravel patches.	50	2	0.1
2101	210104	Fill	Fill of ditch C.210105. Linear shape in plan, loose mid-brown silty sand with occasional small stones and charcoal fleck inclusions. Under C.210102.	2.1	1.83	0.38
2101	210105	Cut	Cut of ditch. Indeterminate shape in plan, gradual sloping sides with a imperceptible break of slope at bottom to an even w-shaped base. Filled by C.210104.	2.1	1.83	0.24
2101	210106	Fill	Fill of ditch C.210107. Linear shape in plan, loose light brown silty sand and occasional small pebbles with charcoal flecks and root inclusions. Under C.210102. Filled by C.210106.	4.64	1.2	0.2
2101	210107	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to sloping vertical sides and a gradual southern/sharp northern break of slope at bottom to an uneven base. Cuts C.210103. Filled by C.210106.	4.64	1.2	0.2
2102	210201	Layer	Topsoil layer. Greyish-brown silty loam.	50	2	0.33
2102	210202	Layer	Subsoil layer. Reddish-brown clayey silt.	50	2	0.37
2102	210203	Layer	Natural layer. Yellowish-brown sandy gravel.	50	2	0.1
2102	210204	Fill	Uppermost fill of ditch C.210205. Linear shape in plan, very soft mid-reddish-brown clayey silt with rare pottery sherds and rounded to sub-rounded pebble (0.015m) inclusions. Under C.210202. Over upper fill C.210206. Associated with ditch C.210209.	2.2	2	0.48
2102	210205	Cut	Cut of ditch. Linear shape in plan, gradual break of slope at top to steeply sloped sides with a southeasterly gradual/northwesterly imperceptible break of slope at bottom to an uneven, more sloping down southeasterly to a concave base. Cuts C.210203. Filled by fills C.210204, C.210206 and C.210207.	2.2	2	0.64

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2102	210206	Fill	Upper fill of ditch C.210205. sub-linear shape in plan, firm light yellowish-brown clayey silt with very occasional rounded to sub-rounded pebble (0.01-0.03m) inclusions. Under uppermost fill C.210204. Over basal fill C.210207.	2	0.36	0.2
2102	210207	Fill	Basal fill of C.210205. Sub-linear shape in plan, friable/loose dark blackish-brown silty gravel with frequent rounded to sub-rounded pebble (0.01-0.1m) inclusions. Under upper fill C.210206.	2.2	0.22	0.4
2102	210208	Fill	Fill of ditch C.210209. Linear shape in plan, loose mid-brown clayey silt with rare roots and pebble inclusions. Under fill C.210202. Possibly associated with ditch C.210205.	2	2	0.1–0.42
2102	210209	Cut	Cut of ditch. Linear shape in plan, sharp break of slope at top to moderately steep sloping sides and a gradual break of slope at bottom to a slightly uneven/mostly flat base. Cuts C.210203. Filled by C.210208.	2	2	0.1–0.42
2103	210301	Layer	Topsoil layer. Greyish-black sandy silt with gravel.	50	2	0.35
2103	210302	Layer	Subsoil layer. Mid-brown sandy silt with gravel.	50	2	0.4
2103	210303	Layer	Natural layer. Light brown sand with sandy gravel lenses.	50	2	0.1
2103	210304	N/A	VOID	N/A	N/A	N/A
2103	210305	N/A	VOID	N/A	N/A	N/A
2103	210306	Fill	Lower fill of pit C.210307. Sub-oval shape in plan, soft black clayey charcoal with occasional chunks of burnt wood inclusions. Under upper fill C.210312. Over basal fill C.210313.	2.15	N/A	0.06–0.1
2103	210307	Cut	Cut of pit. Sub-oval shape in plan, sharp break of slope at top to steep sides and a gradual break of slope at bottom to a concave base. Cuts C.210303. Filled by C.210311, C.210312, C.210306 and C.210313.	2.27	1.2	0.48
2103	210308	Fill	Upper fill of linear C.210309. Linear shape in plan, loose dark greyish-brown clayey sand with occasional small sub-rounded sub-angular stones, occasional pottery sherds, charcoal flecks and very occasional metal fragments. Under C.210302. Over basal fill C.210310.	1.8	1.7	0.38
2103	210309	Cut	Cut of linear. Linear shape in plan, sharp break of slope at top to steeply sloping sides and a northerly sharp/southerly imperceptible break of slope at bottom to a flat but northerly sloping base. Cuts C.210303. Filled by upper fill C.210308 and basal fill C.210310.	1.8	1.7	0.54

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2103	210310	Fill	Basal fill of linear C.210309. Linear shape in plan, loose mottled reddish-brown sandy gravel with frequent small sub-rounded sub-angular stones and occasional pottery sherd inclusions. Under upper fill C.210308.	1.8	1.02	0.12
2103	210311	Fill	Uppermost fill of pit C.210307. Sub-oval shape in plan, soft light greyish-brown silty sand with occasional charcoal flecks and occasional sub-rounded stone inclusions. Under C.210302. Over upper fill C.2103012.	1.76	N/A	0.18
2103	210312	Fill	Upper fill of pit C.210307. Sub-oval shape in plan, soft dark greyish-brown silty sand with frequent charcoal flecks and heat-affected sub-rounded stone inclusions. Under uppermost fill C.210311. Over lower fill C.210306.	2	N/A	0.08–0.42
2103	210313	Fill	Basal fill of C.210307. Sub-oval shape in plan, soft mid-greyish-brown silty sand with occasional small sub-rounded stone inclusions. Under lower fill C.210306.	1.62	N/A	0.48
2103	210314	Fill	Fill of pit C.210315. Circular shape in plan, soft mid-greyish-brown silty sand with occasional small pebbles and very occasional charcoal fleck inclusions. Under C.210302.	0.44	0.4	0.25
2103	210315	Cut	Cut of pit. Circular shape in plan, sharp break of slope at top to steep sides and a sharp break of slope at bottom to a concave base. Cuts C.210303. Filled by C.210314. Possibly associated with pit C.210317.	0.44	0.4	0.25
2103	210316	Fill	Fill of pit C.210317. Sub-oval shape in plan, soft mid-greyish-brown silty sand with occasional small pebbles and very occasional charcoal fleck inclusions. Under C.210302.	0.5–0.55	0.34	0.23
2103	210317	Cut	Cut of pit. Sub-oval shape in plan, with a sharp break of slope at top to steep sides and a imperceptible break of slope at bottom to a concave base. Cuts C.210303. Filled by C.210316. Possibly associated with pit C.210315.	0.5–0.55	0.34	0.23
2104	210401	Layer	Topsoil layer. Greyish-black silty sand with loose gravel, charcoal flecks and pottery.	50	2	0.35
2104	210402	Layer	Subsoil layer. Mid-brown silty sand with gravel.	50	2	0.4
2104	210403	Layer	Natural layer. Mottled clayey silty sand with gravel.	50	2	0.1
2105	210501	Layer	Topsoil layer. Greyish-black silty sand with loose gravel, charcoal flecks and pottery.	50	2	0.35
2105	210502	Layer	Subsoil layer. Loose mid-brown silty sand with gravel.	50	2	0.4

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2105	210503	Layer	Natural layer. Very loose, mid-brown sandy gravel lenses and silty sand with mottled clay.	50	2	0.1
2105	210504	Fill	Fill of linear C.210505. Linear shape in plan, loose mid-greyish-brown silty clay with occasional small sub-angular sub-rounded stones and occasional charcoal fleck inclusions. Under C.210502.	2.8	0.58	0.22
2105	210505	Cut	Cut of linear. Linear shape in plan, gradual break of slope at top to moderately sloping to vertical sides and a imperceptible break of slope at bottom to a concave base. Cuts C.210503. Filled by C.210504.	2.8	0.58	0.22
2106	210601	Layer	Topsoil layer. Greyish-black silty sand with loose gravel, charcoal flecks and pottery.	50	2	0.35
2106	210602	Layer	Subsoil layer. Loose mid-brown silty sand with gravel.	50	2	0.4
2106	210603	Layer	Natural layer. Very loose mid-brown sandy gravel lenses and sand layers.	50	2	0.1
2106	210604	Fill	Fill of furrow C.210605. Linear shape in plan, loose mid-brown silty sand with occasional small pebbles and gravelly stone inclusions. Under C.210602.	2.08	1.39	0.16
2106	210605	Cut	Cut of furrow. Linear shape in plan, westerly gradual/easterly sharp break of slope at top to sloping vertical sides and a westerly gradual/easterly sharp break of slope at bottom to a flat base. Cuts C.210603. Filled by C.210604.	2.08	1.39	0.16
2107	210701	Layer	Topsoil layer. Greyish-brown sandy loam.	50	2	0.29
2107	210702	Layer	Subsoil layer. Brown silty sand.	50	2	0.33
2107	210703	Layer	Natural layer. Yellowish and reddish-brown sand with patches of gravel.	50	2	0.1
2107	210704	Fill	Upper fill of recut ditch C.210705. Linear shape in plan, very soft dark greyish-brown clayey silt with very occasional charcoal flecks, occasional rounded/sub-rounded pebbles (0.01–0.05m), pottery sherds and organic material. Under C.210701. Over basal fill C.210706.	2.6	2	0.46
2107	210705	Cut	Cut of recut ditch. Linear shape in plan, westerly gradual/easterly sharp break of slope at top to steeply sloped and slightly concave sides with a gradual break of slope at bottom to an uneven, triple concave base. Cuts fill C.210709. Filled by upper fill C.210704 and basal fill C.210706. Possibly associated with ditches C.210708, C.210710 and C.210712.	2.6	2	0.46

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2107	210706	Fill	Basal fill of recut ditch C.210705. Irregular shape in plan, very soft dark black clayey silt with frequent charcoal flecks and rare rounded/sub-rounded pebble (0.01-0.05m) inclusions. Under upper fill C.210704.	2	0.6	0.1
2107	210707	Fill	Fill of ditch C.210708. Linear shape in plan with very loose mid-greyish-brown clayey sandy silt and charcoal flecks, frequent roots, rare flint shards, green-tinged slabbed mud rock, occasional pottery sherds, and rare burnt stone (0.08m) inclusions. Under C.210701. Possibly associated with ditches C.210710 and C.210712.	2	1.35	0.26–0.44
2107	210708	Cut	Cut of ditch. Linear shape in plan, sharp break of slope at top to almost vertical slightly westerly sloping sides and a sharp break of slope at bottom to a w-shaped base. Cuts C.210702 and C.210703. Filled by C.210707.	2	1.35	0.26–0.44
2107	210709	Fill	Fill of ditch C.210710. Linear shape in plan with very soft dark greyish-brown clayey silt and occasional rounded/sub-rounded pebbles (0.01–0.1m) and rare charcoal fleck inclusions. Under cut C.210705 and fill C.210701.	2	0.72	0.38
2107	210710	Cut	Cut of ditch. Linear shape in plan, easterly sharp otherwise imperceptible break of slope at top to steeply sloped easterly concave sides and a imperceptible break of slope at bottom to an uneven base. Filled by C.210709. Possibly associated with ditches C.210705 and C.210712.	2	0.72	0.38
2107	210711	Fill	Fill of ditch C.210712. Linear shape in plan with loose dark brown silty sand and rare flint shards, rare roots, frequent pebbles (0.02–0.08m) and charcoal fleck inclusions. Under C.210702.	2	1.6	0.1–0.46
2107	210712	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to vertical sides and a gradual break of slope at bottom to a slightly u-shaped base. Cuts C.210703. Filled by C.210711. Possibly associated with ditches C.210705 and C.210710.	2	1.6	0.1–0.46
2108	210801	Layer	Topsoil layer. Greyish-brown sandy loam.	50	2	0.26
2108	210802	Layer	Subsoil layer. Brown silty sand.	50	2	0.28
2108	210803	Layer	Natural layer. Yellowish and reddish-brown sand with patches of gravel.	50	2	0.1
2108	210804	Fill	Fill of pit C.210805. Circular shape in plane with loose greyish-brown silty sand and occasional small pebble inclusions. Under C.210802.	0.73	0.73	0.27

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2108	210805	Cut	Cut of pit. Circular shape in plan and a sharp break of slope at top to moderately sloping sides and a imperceptible break of slope at bottom to a concave base. Cuts C.210803. Filled by C.210804.	0.73	0.73	0.27
2108	210806	Fill	Fill of gully terminus C.210807. Sub-linear shape in plan with loose greyish-brown silty sand and occasional small pebble inclusions. Under C.210802.	2	0.6	0.11
2108	210807	Cut	Cut of gully terminus. Sub-linear shape in plan with a sharp break of slope at top to shallow sloping sides and a imperceptible break of slope at bottom to a concave base. Cuts C.210803. Filled by C.210806	2	0.6	0.11
2108	210808	Layer	Layer between parallel gullies C.210810 and C.210812. Linear shape in plan with loose mottled yellowish-brown and brownish grey sandy silt with gravel inclusions. Over C.210803. Cut by C.210810 and C.210812.	2	0.3	0.25
2108	210809	Fill	Fill of gully C.210810. Linear shape in plan with loose greyish-brown sandy silt and gravel and pottery inclusions. Under C.210802.	2	0.5	0.27
2108	210810	Cut	Cut of gully. Linear shape in plan with a sharp break of slope at top to steep sides and a gradual break of slope to a concave bottom. Cuts C.210808. Filled by C.210809. Possibly associated with parallel gully C.210812 and layer C.210808.	2	0.5	0.27
2108	210811	Fill	Fill of gully C.210812. Linear shape in plan with loose greyish-brown sandy silt and gravel inclusions. Under C.210802.	2	0.4	0.25
2108	210812	Cut	Cut of gully. Linear shape in plan with a sharp break of slope at top to steep convex sides and a gradual break of slope at bottom to a concave base. Cuts C.210808 and C.210803. Filled by C.210811. Possibly associated with parallel gully C.210810 and layer C.210808.	2	0.4	0.25
2108	210813	Fill	Fill of pit C.210814. Sub-circular shape in plan with loose greyish-brown and some light reddish-brown silty sand and occasional small pebble and animal bone inclusions. Under C.210802.	1.98	0.67	0.34
2108	210814	Cut	Cut of pit. Sub-circular shape in plan with a sharp break of slope at top to steep sloping sides and a gradual break of slope at bottom to a concave base. Cuts C.210803. Filled by C.210813.	1.98	0.67	0.34
2108	210815	Fill	Fill of ditch C.210816. Linear shape in plan with firm greyish-brown silty sand and gravel, pottery sherd and animal bone inclusions. Possibly associated with ditch C.210820.	2	1.62	0.58

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2108	210816	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to moderately sloping sides and a imperceptible break of slope at bottom to a flat base. Filled by C.210815.	2	1.62	0.58
2108	210817	Fill	Fill of pit C.210818. Circular shape in plan with loose greyish-brown silty sand with occasional small pebble inclusions. Under C.210802.	0.43	0.43	0.07
2108	210818	Cut	Cut of pit. Circular shape in plan with a gradual break of slope at top to shallow sloping sides and a imperceptible break of slope to a concave base. Cuts C.210803. Filled by C.210817.	0.43	0.43	0.07
2108	210819	Fill	Fill of ditch C.210820. Linear shape in plan with moderately compacted brownish-grey sandy silt with gravel, animal bone, pottery sherd and small rock inclusions. Under C.210802. Possibly associated with ditch C.210816.	2	1.17	0.33
2108	210820	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to concave sides and a gradual break of slope at bottom to a concave base. Filled by C.210819.	2	1.17	0.33
2108	210821	Fill	Fill of pit C.210822. Sub-circular shape in plan with loose light greyish-brown sandy silt. Under C.210802.	0.8	0.4	0.18
2108	210822	Cut	Cut of pit. Sub-circular shape in plan with a sharp break of slope at top to steep concave sides and a gradual break of slope at bottom to a concave base. Cuts C.210803. Filled by C.210821.	0.8	0.4	0.18
2109	210901	Layer	Topsoil layer. Light greyish-black gravelly sand.	50	2	0.35
2109	210902	Layer	Subsoil layer. Reddish-brown sandy gravel.	50	2	0.25
2109	210903	Layer	Natural layer. Light brown gravelly sand with sandy gravel lenses.	50	2	0.1
2109	210904	N/A	VOID	N/A	N/A	N/A
2109	210905	N/A	VOID	N/A	N/A	N/A
2109	210906	Fill	Fill of furrow C.210907. Linear shape in plan with loose light brown silty sand with occasional small pebbles and charcoal fleck inclusions. Under C.210902.	1.55	1.27	0.24
2109	210907	Cut	Cut of furrow. Sub-linear shape in plan with northern rounded corner and westerly sharp/easterly gradual break of slope at top to sloping vertical sides and a gradual break of slope at bottom to a relatively flat base. Cuts C.210903. Filled by C.210906.	1.55	1.27	0.24
2109	210908	N/A	VOID	N/A	N/A	N/A

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2109	210909	N/A	VOID	N/A	N/A	N/A
2109	210910	Fill	Fill of pit C.210911. Circular shape in plan with loose mid-brown silty sand and occasional small stones and root inclusions. Under C.210902.	1.15	1.16	0.21
2109	210911	Cut	Cut of pit. Circular shape in plan with rounded corners and a gradual break of slope at top to sloping vertical sides and a gradual break of slope at bottom to a relatively flat base. Cuts C.210903. Filled by C.210910	1.15	1.16	0.21
2110	211001	Layer	Topsoil layer. Greyish-brown sandy loam.	50	2	0.33
2110	211002	Layer	Subsoil layer. Brown silty sand.	50	2	0.58
2110	211003	Layer	Natural layer. Light brown sand and lenses of gravel.	50	2	0.1
2110	211004	Fill	Fill of linear C.211005. Linear shape in plan with loose mid-greyish-brown clayey sand and occasional small sub-rounded sub-angular stones and very occasional charcoal fleck inclusions. Under C.211002.	1.8	1.02	0.32
2110	211005	Cut	Cut of linear. Linear shape in plan with a gradual break of slope at top to moderately sloping concave sides and a imperceptible break of slope at bottom to a concave base. Filled by C.211004.	1.8	1.02	0.32
2110	211006	Fill	Fill of ditch C.211007. Linear shape in plan with loose greyish-brown silty sand with very frequent gravel inclusions. Under C.211002.	2	1.36	0.43
2110	211007	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to moderately sloping vertical sides and a imperceptible break of slope at bottom to a concave base. Cuts C.211003. Filled by C.211006.	2	1.36	0.43
2111	211101	Layer	Topsoil layer. Greyish-brown sandy loam.	50	2	0.35
2111	211102	Layer	Subsoil layer. Brown silty sand.	50	2	0.33
2111	211103	Layer	Natural layer. Light brownish-yellow sand and gravel lenses.	50	2	0.1
2112	211201	Layer	Topsoil layer. Greyish-brown sandy loam.	50	2	0.31
2112	211202	Layer	Subsoil layer. Brown silty sand.	50	2	0.25
2112	211203	Layer	Natural layer. Yellowish-brown sand with gravel lenses.	50	2	0.1

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2112	211204	Fill	Fill of ditch C.211205. Linear shape in plan with loose greyish-brown silty gravelly sand. Under C.211202.	2	0.8	0.16
2112	211205	Cut	Cut of ditch. Linear shape in plan with a gradual break of slope at top to shallow concave sides and a gradual break of slope at bottom to a concave base. Cuts C.211203. Filled by C.211204.	2	0.8	0.16
2113	211301	Layer	Topsoil layer. Greyish-brown sandy loam.	50	2	0.34
2113	211302	Layer	Subsoil layer. Brown silty sand.	50	2	0.15
2113	211303	Layer	Natural layer. Yellowish and reddish-brown sand with gravel lenses.	50	2	0.1
2114	211401	Layer	Topsoil layer. Greyish-brown sandy loam.	50	2	0.35
2114	211402	Layer	Subsoil layer. Brown silty sand.	50	2	0.35
2114	211403	Layer	Natural layer. Light greyish-brown sandy clay.	50	2	0.1
2115	211501	Layer	Topsoil layer. Greyish-brown sandy loam.	50	2	0.34
2115	211502	Layer	Subsoil layer. Brown silty sand.	50	2	0.16
2115	211503	Layer	Natural layer. Yellowish and reddish-brown sand with gravel lenses.	50	2	0.1
2201	220101	Layer	Topsoil layer. Greyish-black humic silty sand with gravel with ceramic, pottery and plastic inclusions.	50	2	0.35
2201	220102	Layer	Subsoil layer. Mid-brown silty sand.	50	2	0.4
2201	220103	Layer	Natural layer. Mottled light- to mid-brown silty sand with gravel (sub-angular quartz and flint).	50	2	0.1
2201	220104	Fill	Fill of linear C.220105. Linear shape in plan with loose greyish-blackish brown clayey silt with charcoal flecks, rare roots, flint shards, large stone (0.125m), smaller stones (0.03–0.05m) and pottery sherd inclusions. Under C.220102.	5.85	0.7	0.3
2201	220105	Cut	Cut of linear. Linear shape in plan with a sharp break of slope at top to steep sides and a gradual break of slope at bottom to a narrow concave base. Cuts C.220103. Filled by C.220104.	5.85	0.7	0.3
2202	220201	Layer	Topsoil layer. Greyish-black humic silty sand with gravel with ceramic, pottery, and plastic inclusions.	50	2	0.35

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2202	220202	Layer	Subsoil layer. Mid-brown silty sand.	50	2	0.4
2202	220203	Layer	Natural layer. Mottled light- to mid-brown silty sand with gravel (sub-angular quartz and flint).	50	2	0.1
2203	220301	Layer	Topsoil layer. Greyish-black humic silty sand with gravel with ceramic, pottery, and plastic inclusions.	50	2	0.35
2203	220302	Layer	Subsoil layer. Mid-brown silty sand.	50	2	0.4
2203	220303	Layer	Natural layer. Mottled light- to mid-brown silty sand with gravel (sub-angular quartz and flint).	50	2	0.1
2203	220304	Fill	Fill of ditch C.220305. Wide linear shape in plan with quite compact brown silty sand with light reddish-brown flecks and frequent small pebble inclusions. Cut by ditch C.220307. Under C.220302.	2	1.6	0.66
2203	220305	Cut	Cut of ditch. Wide linear shape in plan with imperceptible break of slope at top to sloping vertical sides and a imperceptible break of slope to a concave base. Cutting C.220303. Filled by C.220304.	2	1.6	0.66
2203	220306	Fill	Fill of ditch C.220307. Linear shape in plan with quite loose dark greyish-brown silty sand and occasional small pebble and clay pipe fragment inclusions. Under C.220302.	2	1.4	0.48
2203	220307	Cut	Cut of ditch. Linear shape in plan with sharp break of slope at top to moderately sloping sides and a imperceptible break of slope at bottom to a concave base. Cuts C.220304. Filled by C.220306.	2	1.4	0.48
2203	220308	Fill	Fill of ditch C.220309. Linear shape in plan with compact dark brownish-grey silty clay and frequent fragments of modern pottery sherds, bricks and glass inclusions. Under C.220301.	2	2.2	0.67
2203	220309	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to steep sloping sides and a gradual break of slope at bottom to a concave base. Cuts C.220310, C.220311, C.220303 and C.220314. Filled by C.220308.	2	2.2	0.67
2203	220310	Fill	Uppermost fill of ditch C.220213. Linear shape in plan with compact mottled brownish-yellow and brownish-grey silty clay with gravel inclusions. Over upper fill C.220311. Cut by C.220309.	1	1.8	0.25
2203	220311	Fill	Upper fill of ditch C.220213. Linear shape in plan with compact greyish-brown silty clay with occasional gravel inclusions. Under uppermost fill C.220310. Over basal fill C.220312. Cut by C.220309.	1	1.5	0.35
2203	220312	Fill	Basal fill of ditch C.220213. Linear shape in plan with moderately compacted greyish-brown clayey silt with gravel inclusions. Under upper fill C.220311.	1	0.35	0.12

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2203	220313	Cut	Cut of ditch. Linear shape in plan with a imperceptible break of slope at top to very steep sloping sides and a gradual break of slope at bottom to a concave base. Cut by C.220309. Cuts C.220303 and C.220314. Filled by C.220310, C.220311 and C.220312.	2	1.8	0.7
2203	220314	Fill	Fill of ditch C.220315. Linear shape in plan with loose orangish-brown clayey sand with gravel inclusions. Under C.220313 and C.220302. Cut by C.220313.	2	1.2	0.7
2203	220315	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to steep sloping sides and a gradual break of slope at bottom to a concave base. Cuts C.220316 and C.220303. Filled by C.220314.	1	1.2	0.7
2203	220316	Fill	Upper fill of ditch C.220318. Linear shape in plan with loose yellowish-brown sandy silt and gravel inclusions. Under C.220315 and C.220302. Over basal fill C.220317. Cut by C.220315.	2	1.5	0.6
2203	220317	Fill	Basal fill of ditch C.220318. Linear shape in plan with moderately compacted greyish-brown silty clay with gravel inclusions. Under upper fill C.220316.	1	1	0.25
2203	220318	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to steep sloping sides and a gradual break of slope at bottom to a flat base. Cut by C.220313. Cuts C.220303. Filled by C.220316 and C.220317.	2	1.6	0.8
2204	220401	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.32
2204	220402	Layer	Subsoil layer. Brown silty sand.	50	2	0.2
2204	220403	Layer	Natural layer. Yellowish-brown sand with gravel.	50	2	0.1
2205	220501	Layer	Topsoil layer. Greyish-black humic silty sand with gravel with ceramic, pottery, and plastic inclusions.	50	2	0.35
2205	220502	Layer	Subsoil layer. Dark brown silty sand with gravel.	50	2	0.4
2205	220503	Layer	Natural layer. Mottled grey light- to mid-brown silty sand with gravel lenses (sub-angular quartz and flint).	50	2	0.1
2205	220504	Fill	Fill of gully C.220505. Linear shape in plan with moderately compact greyish-brown sandy silt and rare randomly dispersed gravel, rare brick and rare charcoal fleck inclusions. Under C.220502.	2	0.26	0.1

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2205	220505	Cut	Cut of gully. Linear shape in plan with a sharp break of slope at top to moderately steep concave sides and a gradual break of slope at bottom to a concave base. Cuts C.220503. Filled by C.220504.	2	0.26	0.1
2205	220506	Fill	Fill of gully C.220507. Linear shape in plan with moderately compacted greyish-brown sandy silt and rare gravel inclusions. Under C.220502.	2	0.32	0.15
2205	220507	Cut	Cut of gully. Linear shape in plan with a sharp break of slope at top to moderately steep concave sides and a gradual break of slope at bottom to a concave base. Cuts C.220503. Filled by C.220506.	2	0.32	0.15
2205	220508	Fill	Fill of gully terminus C.220509. Sub-semi-circular shape in plan with firmly compacted grey and brown mottled silty sand with occasional small gravel inclusions. Under C.220502.	0.71	0.5	0.18
2205	220509	Cut	Cut of gully terminus. Sub-semi-circular shape in plan with a sharp break of slope at top, moderately sloping sides and a imperceptible break of slope at bottom to a generally flat base. Filled by C.220508.	0.71	0.5	0.18
2206	220601	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.32
2206	220602	Layer	Subsoil layer. Brown silty sand.	50	2	0.2
2206	220603	Layer	Natural layer. Yellowish-brown sand with gravel.	50	2	0.1
2206	220604	Cut	Cut of watercourse containing three deposits. Linear shape in plan with a gradual break of slope at to moderately steep sloping sides and a gradual break of slope at bottom to an indeterminate base. Filled by C.220607, C.220606 and C.220605.	2	4.5	1
2206	220605	Fill	Basal fill of watercourse C.220604. Light greyish brown. Under upper fill C.220606. Further information could not be obtained due to severity of depth.	2	N/A	N/A
2206	220606	Fill	Upper fill of watercourse C.220604. Recorded under waterlogged conditions with cohesive, pliable/stiff dark grey clayey silt with lenses of reddish-brown sand and sandy clay and with frequent roots and occasional randomly dispersed stone (0.01–0.02m), inclusions. Under uppermost fill C.220607. Over basal fill C.220605.	2	N/A	N/A
2206	220607	Fill	Uppermost fill of watercourse C.220604. Yellowish-brown sandy silty loam with occasional stone (0.01–0.02m) inclusions. Over upper fill C.220606.	2	4.5	N/A
2207	220701	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.32

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2207	220102	Layer	Subsoil layer. Brown silty sand.	50	2	0.2
2207	220703	Layer	Natural layer. Yellowish-brown sand with gravel.	50	2	0.1
2207	220704	Fill	Fill of ditch C.220705. Linear shape in plan with moderately compacted mid-brown silty clay with very occasional sub-rounded pebble (0.01m) inclusions. Under C.220701.	N/A	1.9	0.68
2207	220705	Cut	Cut of ditch. Linear shape in plan with a shape easterly/westerly break of slope at top to 30° angled and undulating sides and an easterly gradual/westerly sharp break of slope at bottom to a u-shaped base that flattens out in the centre. Filled by C.220704.	N/A	1.9	0.68
2208	220801	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.32
2208	220802	Layer	Subsoil layer. Brown silty sand.	50	2	0.2
2208	220803	Layer	Natural layer. Yellowish-brown sand with gravel.	50	2	0.1
2209	220901	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.32
2209	220902	Layer	Subsoil layer. Brown silty sand.	50	2	0.2
2209	220903	Layer	Natural layer. Yellowish-brown sand with gravel.	50	2	0.1
2209	220904	Fill	Upper fill of linear C.220905. Sub-linear shape in plan with hard sticky mottled greyish-brown silty clay and occasional sub-rounded stones, charcoal flecks, clay pipe fragments, modern pottery sherds and glass shard inclusions. Cut by linear C.220907 and C.220909. Under C.220902. Over basal fill C.220910.	1.8	N/A	N/A
2209	220905	Cut	Cut of linear. Sub-linear shape in plan with a gradual break of slope at top to steeply sloping concave sides and a imperceptible break of slope at bottom to a flat base. Cut by linear C.220907 and C.220909. Filled by C.220904.	1.8	N/A	N/A
2209	220906	Fill	Fill of linear C.220907. Linear shape in plan with hard compact mottled blackish-grey sandy clay and occasional small sub-rounded stones, occasional charcoal flecks and occasional modern pottery sherd inclusions. Under C.220901.	1.8	1.5	0.18
2209	220907	Cut	Cut of linear. Linear shape in plan with a sharp break of slope at top to gently sloping sides and a imperceptible break of slope at bottom to a concave base. Cuts C.220904 and C.220905. Filled by C.220906. Associated with C.220909.	1.8	1.5	0.18

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2209	220908	Fill	Fill of linear C.220909. Linear shape in plan with moderately compacted mottled blackish-grey sandy clay and occasional small sub-angular stones, occasional charcoal flecks and occasional modern pottery sherd inclusions. Under C.220901.	1.8	1.24	0.18
2209	220909	Cut	Cut of linear. Linear shape in plan with a sharp break of slope at top to moderately sloping concave sides and a imperceptible break of slope at bottom to a concave base. Cuts C.220904 and C.220905. Filled by C.220908.	1.8	1.24	0.18
2209	220910	Fill	Basal fill of linear C.220905. Linear shape in plan with hard bluish-grey clay. Under upper fill C.220904.	1.8	1.74	0.08–0.14
2210	221001	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.32
2210	221002	Layer	Subsoil layer. Brown silty sand.	50	2	0.2
2210	221003	Layer	Natural layer. Yellowish-brown sand with gravel.	50	2	0.1
2211	221101	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.32
2211	221102	Layer	Subsoil layer. Brown silty sand.	50	2	0.2
2211	221103	Layer	Natural layer. Yellowish-brown sand with gravel.	50	2	0.1
2211	221104	Fill	Fill of ditch C.221105. Linear shape in plan with loose dark brown mottled with darker brown silty sand and occasional gravel inclusions. Under C.221102. Possibly associated with C.221107.	2	0.84	0.26
2211	221105	Cut	Cut of ditch. Linear shape in plan with a moderate break of slope at top to moderately sloping sides and a imperceptible break of slope at bottom to a rounded concave base. Filled by C.221104. Possibly associated with C.221107.	2	0.84	0.26
2211	221106	Fill	Fill of ditch C.221107. Curvilinear shape in plan with loose dark brown mottled with darker brown silty sand and occasional gravel inclusions. Under C.221102.	2	0.85	0.32
2211	221107	Cut	Cut of ditch. Curvilinear shape in plan with a sharp break of slope at top to moderately sloping sides and a imperceptible break of slope at bottom to a generally flat base. Cuts C.221103. Filled by C.221106. Associated with C.221105.	2	0.85	0.32
2212	221201	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.32
2212	221202	Layer	Subsoil layer. Brown silty sand.	50	2	0.2

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2212	221203	Layer	Natural layer. Yellowish-brown sand with gravel.	50	2	0.1
2212	221204	Fill	Fill of furrow C.221205. Linear shape in plan with soft dark greyish-brown silty clay and rounded/sub-rounded pebble (1–3mm) inclusions. Under C.221201.	2	1.54	0.3
2212	221205	Cut	Cut of furrow. Linear shape in plan with a northerly sharp/southerly gradual break of slope at top to a northerly steep/southerly gradual sloped sides and a imperceptible break of slope at bottom to a concave base. Filled by C.221204.	2	1.54	0.3
2213	221301	Layer	Topsoil layer. Dark greyish-brown sandy loam.	50	2	0.34
2213	221302	Layer	Subsoil layer. Brown silty sand.	50	2	0.43
2213	221303	Layer	Natural layer. Yellowish-brown sand with gravel.	50	2	0.1
2301	230101	Layer	Topsoil layer. Light brownish-black sandy silt with gravel and modern traction.	50	2	0.35
2301	230102	Layer	Subsoil layer. Reddish-brown sandy, silty clay with gravel and inclusions of pebble.	50	2	0.12
2301	230103	Layer	Natural layer. Reddish-brown silty clay with some lenses of sandy gravel with inclusions of pebbles.	50	2	0.1
2301	230104	Fill	Basal fill of C.230105. Linear shape in plan, moderately compact greyish-brown silty clay with abundant rocks. Under fill C.230102.	2	0.4	0.08
2301	230105	Cut	Cut of shallow gully/fill. Linear shape in plan with a gentle break of slop at top to concave, moderately steep sides and a gradual break of slope to a concave base. Cuts C.230103. Filled by C.230104.	2	0.4	6.08
2302	230201	Layer	Topsoil layer. Light brownish-black sandy silt with gravel and modern traction.	50	2	0.45
2302	230202	Layer	Subsoil layer. Reddish-brown sandy, silty clay with gravel and inclusions of pebble.	50	2	0.3
2302	230203	Layer	Natural layer. Reddish-brown silty clay with some lenses of sandy gravel with inclusions of pebbles.	50	2	0.1
2302	230204	Fill	Fill of ditch C.230205. Linear shape in plan, loosely compacted, greyish-brown silty sand with frequent pebbles. Under fill C.230202.	2	1.37	0.27
2302	230205	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to moderately sloping sides and a step with some breaks to a mostly flat base. Cuts C.230203. Filled by C.230204.	2	1.37	0.27
2303	230301	Layer	Topsoil layer. Light brownish-black sandy silt with gravel and modern traction.	50	2	0.4

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2303	230302	Layer	Subsoil layer. Reddish-brown sandy, silty clay with gravel and inclusions of pebble.	50	2	0.45
2303	230303	Layer	Natural layer. Reddish-brown silty clay with some lenses of sandy gravel with inclusions of pebbles.	50	2	0.1
2303	230304	Fill	Fill of terminal ditch C.230305. Irregular shape in plan, loosely compacted, reddish-blackish brown sandy clay with flint sherds, charcoal, root ends and pebbles. Under fill C.230302.	1.56	0.52	0.22
2303	230305	Cut	Cut of terminal ditch. Sub-circular shape in plan with a steep break of slope at top to steeply to moderately sloping sides and a moderate break of slope to an uneven base with clumps of natural clay at the bottom. Cuts C.230303. Filled by C.230304.	1.56	0.52	0.22
2304	230401	Layer	Topsoil layer. Light brownish-black sandy silt with gravel and modern traction.	50	2	0.4
2304	230402	Layer	Subsoil layer. Reddish-brown sandy, silty clay with gravel and inclusions of pebble.	50	2	0.45
2304	230403	Layer	Natural layer. Reddish-brown silty clay with some lenses of sandy gravel with inclusions of pebbles.	50	2	0.1
2304	230404	Fill	Fill of ditch/furrow C.230405. Linear shape in plan, moderately compacted, greyish-brown silty clay with numerous rock inclusions that are more frequent in the east side. Under fill C.230402.	2	1	0.2
2304	230405	Cut	Cut of ditch/furrow C.230405. Linear shape in plan with a gentle break of slope at top to moderately steep sides that are steeper in the lower part to a sharp break of slope to a convex base. Cuts C.230403. Filled by C.230404.	2	1	0.2
2305	230501	Layer	Topsoil layer. Light brownish-black sandy silt with gravel and modern traction.	50	2	0.45
2305	230502	Layer	Subsoil layer. Reddish-brown sandy, silty clay with gravel and inclusions of pebble.	50	2	0.15
2305	230503	Layer	Natural layer. Reddish-brown silty clay with some lenses of sandy gravel with inclusions of pebbles.	50	2	0.1
2305	230504	Fill	Fill of ditch C.230505. Linear shape in plan, loosely compacted, greyish-brown silty sand with occasional small pebbles. Under fill C.230502.	2	0.69	0.14
2305	230505	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to moderately sloping sides and a concave base. Cuts C.230503. Filled by C.230504.	2	0.69	0.14
2305	230506	Fill	Fill of ditch/furrow C.230507. Linear shape in plan, moderately compacted, greyish-brown silty clay with occasional rocks and roots. Under fill C.230502.	3	0.8	0.2

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2305	230507	Cut	Cut of furrow/ditch. Linear shape in plan with an invisible break of slope at top on northwest side to moderately steep, concave sides to a flat base. Cuts C.230503. Filled by C.230506.	3	0.8	0.2
2401	240101	Layer	Topsoil layer. Light greyish-brown sandy-silt and gravel.	50	2	0.32
2401	240102	Layer	Subsoil layer. Light brown sandy, silty clay with occasional inclusions of gravel.	50	2	0.4
2401	240103	Layer	Natural layer. Very loosely compacted, light brown sandy gravel with lenses of loose sand.	50	2	0.1
2401	240104	Fill	Fill of ditch terminus C.240105. Sub-circular shape in plan, loosely compacted, greyish-brown sand with frequent small pebbles and pottery. Under C.240102.	1	0.93	0.27
2401	240105	Cut	Cut of ditch terminus. Sub-circular shape in plan (geophysical survey shows curvilinear shape) with a sharp break of slope at top to moderately sloping sides and an invisible break of slope at bottom to a concave base. Cuts C.240102 and C.240103. Filled by C.240104.	1	0.93	0.27
2401	240106	Fill	Fill of pit C.240107. Semicircular shape in plan, loosely compacted, greyish-brown sand with frequent small pebbles. Under C.240102.	N/A	N/A	0.22
2401	240107	Cut	Cut of pit. Semicircular shape in plan with a sharp break of slope at top to moderately sloping sides and invisible break of slope at bottom to a concave base. Cuts C.240102 and C.240103. Filled by C.240106.	N/A	N/A	0.22
2401	240108	Fill	Upper fill of modern field boundary C.240110. V-shaped band shape in plan, loosely compacted, blackish-brown silty sand with numerous pebbles (2cm in size), sparse roots, charcoal and burnt stones. Under C.240101. Over fill C.240109.	2.11	2	0.23
2401	240109	Fill	Basal fill of C.240110. U-shaped in plan, loosely compacted, mid-greyish-brown silty sand with 1–2cm pebble inclusions. Under C.240108.	2.25	2	0.25
2401	240110	Cut	Cut of modern field boundary. Curvilinear shape in plan with moderately steep break of slope at top to moderately steep sides and a gradual slope at bottom to a concave base. Cuts C.240103. Filled by C.240108 and C.240109.	2.25	2	0.48
2401	240111	Fill	Fill of ditch C.240112. Linear shape in plan, loosely compacted, greyish-brown sand and gravel with very frequent pebbles. Under C.240102. Probably the same as C.240304.	2	2.08	0.49

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2401	240112	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to moderate sloping sides and an invisible break of slope at bottom to a concave base. Cuts C.240103. Filled by C.240111. Probably the same ditch as C.240305.	2	2.06	0.49
2401	240113	Fill	Fill of ditch C.240114. Linear shape in plan, moderate loosely compacted, dark brown sand with gravel and pebbles (sandy gravel) and numerous inclusions, including Middle Iron Age pottery sherds, knapped flint, quartz, flint, pebbles (3cm in size) and gravel. Under C.240102. Over C.240103.	1.41	2	0.4
2401	240114	Cut	Cut of ditch. Linear shape in plan with a steep break of slope at top to steeply sloping sides and moderately steep break of slope at bottom to a flat bottom that sloped gently to the north. Cutting C.240103. Filled by C.240113.	1.41	2	0.4
2402	240201	Layer	Topsoil layer. Dark brownish-grey silty sand with numerous inclusions of roots.	50	2	0.35
2402	240202	Layer	Subsoil layer. Light brown sandy, silty clay with occasional inclusions of gravel.	50	2	0.2
2402	240203	Layer	Natural layer. Light reddish-brown sandy, silty clay with some gravel inclusions.	50	2	0.1
2402	240204	Fill	Fill of curvilinear feature C.240205. Sub-semi-circular in plan, loosely compacted mid-greyish brown sandy silt with 1–2cm pebble inclusions. Under C.240202.	2.1	0.84	0.25
2402	240205	Cut	Cut of curvilinear feature. Curvilinear shape in plan with a steep break of slope at top to moderately steep sides and slope at bottom that broke gradually on the right side and steeply on the left side to a slightly undulating base. Cutting C.240203. Filled by C.240204.	2.1	0.84	0.25
2402	240206	Fill	Fill of ditch C.240207. Linear shape in plan, quite loosely compacted greyish-brown silty sand with occasional small pebble inclusions. Under C.240202.	2	1.09	0.37
2402	240207	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to moderately sloping sides and an imperceptible break of slope at bottom to a concave base. Cutting C.240203. Filled by C.240206.	2	1.09	0.37
2402	240208	Fill	Fill of possible gully terminus C.240209. Linear shape in plan, compacted dark greyish-brown silty sand with rare pebble inclusions. Under C.240202.	0.7	0.8	0.2
2402	240209	Cut	Cut of possible gully terminus. Linear shape in plan with a gradual break of slope at top to gently sloping sides and a gradual break of slope at bottom to a concave base. Cutting C.240203. Filled by C.240208.	0.7	0.8	0.2

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2403	240301	Layer	Topsoil layer. Dark brownish-grey silty sand with numerous inclusions of roots.	50	2	0.35
2403	240302	Layer	Subsoil layer. Light brown sandy, silty clay with occasional inclusions of gravel.	50	2	0.2
2403	240303	Layer	Natural layer. Light reddish-brown sandy, silty clay with some gravel inclusions.	50	2	0.12
2403	240304	Fill	Fill of ditch C.240305. Linear shape in plan, loosely compacted greyish-brown sand, and gravel with frequent pebble inclusions. Under C.240302.	2	2.28	0.51
2403	240305	Cut	Cut of ditch. Wide, linear shape in plan with a sharp break of slope at top to moderately sloping sides and an imperceptible break of slope at bottom to a concave base. Cutting C.240303. Filled by C.240304.	2	2.28	0.51
2403	240306	Fill	Fill of pit C.240307. Sub-circular shape in plan, loosely compacted greyish-brown sand, and gravel with very frequent inclusions of small pebbles. Under C.240302.	0.45	0.45	0.21
2403	240307	Cut	Cut of pit. Sub-circular shape in plan with a sharp break of slope at top to moderately sloping sides and an imperceptible break of slope at bottom to a narrowly concave base. Cutting C.240303. Filled by C.240306.	0.45	0.45	0.21
2403	240308	Fill	Fill of pit C.240309. Subcircular shape in plan, loosely compacted greyish-brown sand and gravel with very frequent pebble inclusions. Under C.240302.	0.62	0.62	0.14
2403	240309	Cut	Cut of pit. Sub-circular shape in plan with a sharp break of slope at top to shallow sloping sides and an imperceptible break of slope at bottom to a concave base. Cutting C.240303. Filled by C.240308.	0.62	0.62	0.14
2403	240310	Fill	Fill of pit C.240311. Circular shape in plan, loosely compacted dark brown sand with occasional small pebble inclusions. Under C.240302.	0.33	0.33	0.06
2403	240311	Cut	Cut of pit. Circular shape in plan with a gradual break of slope at top to very shallow sloping sides and no break of slope at bottom to a concave base. Cutting C.240303. Filled by 240310	0.33	0.33	0.06
2404	240401	Layer	Topsoil layer. Dark brownish-grey silty sand with numerous inclusions of roots.	50	2	0.35
2404	240402	Layer	Subsoil layer. Light brown sandy, silty clay with occasional inclusions of gravel.	50	2	0.58
2404	240403	Layer	Natural layer. Light reddish-brown sandy, silty clay with some gravel inclusions.	50	2	0.12

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2404	240404	Fill	Fill of enclosure ditch C.240405. Linear shape in plan, moderately compacted greyish brown, with some lighter yellowish patches, silty sand with occasional small rock inclusions that are more frequent towards the base. Under C.240402. Cut by a land drain.	20	1.1	0.37
2404	240405	Cut	Cut of enclosure ditch. Linear shape in plan with a sharp break of slope at top to steeply sloping sides and a gradual break of slope at bottom to a concave base. Cut by a land drain. Cutting C.240403. Filled by C.240404.	20	1.1	0.37
2404	240406	Fill	Fill of small pit C.240407. Sub-rectangular shape in plan, loosely compacted, greyish-brown silty sand with occasional inclusions of small rocks. Under C.240402.	0.3	0.4	0.16
2404	240407	Cut	Cut of small pit. Sub-rectangular shape in plan with rounded corners and a sharp break of slope at top to vertical sides and a sharp break of slope at bottom to a concave/stepped base. Cutting C.240403. Filled by C.240406.	0.3	0.4	0.16
2404	240408	Fill	Fill of possible pit C.240409. Irregular shape in plan, moderately compacted greyish-brown silty sand with occasional inclusions of small rocks, with larger rocks near the base. Under C.240402.	0.8	0.7	0.2
2404	240409	Cut	Cut of possible pit. Irregular shape in plan with rounded corners and a sharp to gentle break of slope at top to steeply sloping sides and a gradual break of slope at bottom to an uneven/concave base. Cutting C.240403. Filled by C.240408.	0.8	0.7	0.2
2405	240501	Layer	Topsoil layer. Dark brownish-grey silty sand with numerous inclusions of roots.	50	2	0.3
2405	240502	Layer	Subsoil layer. Light brown sandy, silty clay with occasional inclusions of gravel. No subsoil to west end of trench.	50	2	0.58
2405	240503	Layer	Natural layer. Light reddish-brown sandy, silty clay with some gravel inclusions.	50	2	0.3
2405	240504	Fill	Fill of linear ditch C.240505. Linear shape in plan, loosely compacted light greyish-brown silty sand with inclusions of pebbles of various sizes. Under C.240503.	2	1.2	0.25
2405	240505	Cut	Cut of linear ditch. Linear shape in plan with a gradual break of slope at top to concave sides and a gradual break of slope at bottom to a gentle base. Cutting C.240503.	2	1.2	0.25
2405	240506	Fill	Fill of ditch C.240507. Linear shape in plan, loosely compacted light greyish-brown silty sand with inclusions of pebbles of various sizes. Under C.240501.	4	1.2	0.33

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2405	240507	Cut	Cut of linear ditch. Linear shape in plan with a sharp break of slope at top to concave sides and a gradual break of slope at bottom to a gentle base. Cutting C.240503. Filled by C.240506.	2	0.6	0.33
2405	240508	Fill	Fill of ditch C.240509. Linear shape in plan, very softly compacted light brown sand with inclusions of large pebbles. Under C.240501.	4	2.4	0.38
2405	240509	Cut	Cut of ditch. Linear shape in plan with a gradual break of slope at top to gently sloping sides and a gradual break of slope at bottom to a concave base. Cutting C.240503. Filled by C.240508.	2	2.4	0.38
2405	240510	Fill	Fill of ditch C.240511. Linear shape in plan, compacted dark greyish-brown silty sand with moderate inclusions of pebbles. Under C.240502.	4	1.38	0.32
2405	240511	Cut	Cut of ditch. Linear shape in plan with a gradual break of slope at top to gently sloping sides and a gradual break of slope at bottom to a concave base. Cutting C.240503. Filled by C.240510.	2	1.38	0.32
2406	240601	Layer	Topsoil layer. Dark greyish-brown silty sand with numerous inclusions of roots.	50	2	0.37
2406	240602	Layer	Subsoil layer. Light brown sandy, silty clay with occasional inclusions of gravel.	50	2	0.58
2406	240603	Layer	Natural layer. Light brown sandy, silty clay with some gravel inclusions.	50	2	0.3
2406	240604	Fill	Fill of sub-circular ditch C.240605. Sub-circular shape in plan, loosely compacted mid-brown silty sand with scattered pebble inclusions (3cm on average) and inclusions of flint sherds, roots, and charcoal. Under C.240602. Over C.240605.	1.8	1.2	0.11
2406	240605	Cut	Cut of sub-circular ditch. Sub-circular shape in plan with a gentle break of slope at top to gently sloping sides and a gradual break of slope at bottom to a gradually concave base. Cutting C.240603. Filled by C.240604.	1.8	1.2	0.11
2406	240606	Fill	Fill of possible ditch C.240607. Linear shape in plan, loosely compacted greyish-brown silty sand with frequent inclusions of rocks. Under C.240602.	3	1.2	0.35
2406	240607	Cut	Cut of possible ditch. Linear shape in plan with a sharp break of slope at top to steeply sloping sides and a gradual break of slope at bottom to a flat base. Cutting C.240603. Filled by C.240606.	3	1.2	0.35
2406	240608	Fill	Fill of possible ditch C.240609. Linear shape in plan, loosely compacted greyish-brown silty sand with abundant inclusions of rocks. Under C.240602.	3	0.95	0.35

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2406	240609	Cut	Cut of possible ditch. Linear shape in plan with a sharp break of slope at top to steeply sloping sides and a gradual break of slope at bottom to a flat base. Cutting C.240603. Filled by C.240608.	3	0.95	0.35
2501	250101	Layer	Topsoil layer. Dark brown silty sand, with numerous inclusions of roots.	50	2	0.4
2501	250102	Layer	Subsoil layer. Greyish-brown silty sand with inclusions of oxidised flecks.	50	2	0.4
2501	250103	Layer	Natural layer. Greyish-orange silty sand with inclusions of pebbles.	50	2	0.4
2502	250201	Layer	Topsoil layer. Dark brown silty sand.	50	2	0.3
2502	250202	Layer	Subsoil layer. Greyish-brown silty sand with inclusions of oxidised flecks.	50	2	0.28
2502	250203	Layer	Natural layer. Greyish-orange silty sand with inclusions of pebbles.	50	2	0.1
2502	250204	Fill	Fill of gully C.250205. Linear shape in plan, moderately compacted light yellowish-grey silty sand with common small angular rock inclusions and very rare flint. Under C.250202.	2	0.35	0.08
2502	250205	Cut	Cut of gully. Linear shape in plan with a moderately sharp break of slope at top to shallowly sloping sides and a gradual break of slope at bottom to a concave base. Cutting C.250203. Filled by C.250204.	2	0.35	0.08
2502	250206	Fill	Fill of posthole C.250207. Sub-circular shape in plan, moderately compacted light yellowish-grey silty sand with occasional inclusions of small angular rocks. Under C.250202. Cut by C.250213.	0.3	0.25	0.1
2502	250207	Cut	Cut of posthole. Sub-circular shape in plan with a sharp break of slope at top to moderately steep sides and a gradual break of slope at bottom to a concave base. Cut by C.250213. Cutting C.250203. Filled by C.250206.	0.3	0.25	0.1
2502	250208	Fill	Fill of posthole C.250209. Circular shape in plan, moderately compacted light brownish-grey silty sand with common inclusions of small angular stones. Under C.250202.	0.28	0.28	0.15
2502	250209	Cut	Cut of posthole. Circular shape in plan with a sharp break of slope at top to steeply sloping sides and a gradual break of slope at bottom to a concave base. Cutting C.250203. Filled by C.250208.	0.28	0.28	0.15
2502	250210	Fill	Fill of gully C.250211. Linear shape in plan, loosely compacted greyish-brown silty sand with frequent inclusions of small pebbles. Under C.250202.	2	0.42	0.07
2502	250211	Cut	Cut of gully. Linear shape in plan with a gradual break of slope at top to gently sloping sides and an invisible break of slope at bottom to a concave base. Cutting C.250203. Filled by C.250210.	2	0.42	0.07

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2503	250301	Layer	Topsoil layer. Dark brown silty sand.	50	2	0.3
2503	250302	Layer	Subsoil layer. Greyish-brown silty sand with inclusions of oxidised flecks.	50	2	0.28
2503	250303	Layer	Natural layer. Greyish-orange silty sand with inclusions of pebbles.	50	2	0.1
2503	250304	Fill	Fill of gully C.250305. Linear shape in plan, loosely compacted light greyish-brown silty with rare inclusions of stones of various sizes. Under C.250302.	1.8	0.55	0.14
2503	250305	Cut	Cut of modern gully. Linear shape in plan with concave corners and a moderate break of slope at top to gently sloping sides and a gradual break of slope at bottom to a concave base. Cutting C.250303. Filled by C.250304.	1.8	0.55	0.14
2504	250401	Layer	Topsoil layer. Dark brown silty sand.	50	2	0.3
2504	250402	Layer	Subsoil layer. Greyish-brown silty sand with inclusions of oxidised flecks.	50	2	0.28
2504	250403	Layer	Natural layer. Greyish-orange silty sand with inclusions of pebbles.	50	2	0.1
2504	250404	Fill	Fill of gully C.250405. Linear shape in plan, moderately compacted greyish-brown silty sand with occasional small angular rocks. Under C.250402.	2	0.95	0.2
2504	250405	Cut	Cut of gully. Linear shape in plan with a gradual to gentle break of slope at top to shallowly sloping sides and a gradual break of slope at bottom to a concave base. Cutting C.250403. Filled by C.250404.	2	0.95	0.2
2504	250406	Fill	Fill of pit C.250407. Semicircular shape in plan, loosely compacted dark greyish brown silty sand with frequent small to medium pebbles. Under C.250402.	1.59	1.59	0.3
2504	250407	Cut	Cut of pit. Semicircular shape in plan with a sharp break of slope at top to moderately sloping sides and invisible break of slope at bottom to a concave base. Cutting C.250403. Filled by C.250406.	1.59	1.59	0.3
2505	250501	Layer	Topsoil layer. Moderately compacted dark brownish-black silty sand with quartz, flint, and stone pebble inclusions.	50	2	0.3
2505	250502	Layer	Subsoil layer. Moderately compacted light brownish-grey silty sand with patches of orange.	50	2	0.28
2505	250503	Layer	Natural layer. Greyish-orange silty sand with inclusions of pebbles.	50	2	0.1

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2505	250504	Fill	Fill of ditch C.250505. Linear shape in plan, loosely compacted greyish-brown silty sand with occasional inclusions of small pebbles. Under C.250502.	20	0.61	0.11
2505	250505	Cut	Cut of ditch. Linear shape in plan with a gradual break of slope at top to moderately sloping sides and an invisible break of slope at bottom to a concave base. Cutting C.250503. Filled by C.250504.	20	0.61	0.11
2505	250506	Fill	Fill of gully C.250507. Linear shape in plan, loosely compacted light greyish-brown silty sand with rare inclusions of stones. Under C.250502.	1	0.43	0.13
2505	250507	Cut	Cut of gully. Linear shape in plan with gentle corners and a moderate (close to 45°) break of slope at top to concave sides and a gentle break of slope at bottom to a concave base. Cutting C.250503. Filled by C.250508.	1	0.43	0.13
2601	260101	Layer	Topsoil layer. Dark greyish-brown silty sand with inclusions of gravel and pebbles.	50	2	0.38
2601	260102	Layer	Subsoil layer. Mid-greyish-brown silty sand.	50	2	0.4
2601	260103	Layer	Natural layer. Light pinkish-red silty sand with inclusions of gravel and pebbles.	50	2	0.1
2601	260104	Fill	Fill of gully C.260105. Linear shape in plan, loosely compacted greyish brown mottled with light reddish-brown sand with occasional inclusions of small pebbles. Under C.260102.	2	0.52	0.09
2601	260105	Cut	Cut of gully. Linear shape in plan with a sharp break of slope at top to gently sloping sides and an invisible break of slope at bottom to a concave base. Cutting C.260103. Filled by C.260104.	2	0.52	0.09
2601	260106	Fill	Fill of plough furrow C.260107. Linear shape in plan, loosely compacted dark brown silty sand with inclusions of pebbles 2–3cm in size and flint shards. Under C.260102. Over C.260103.	2.5	0.4	0.18
2601	260107	Cut	Cut of plough furrow. Linear shape in plan with moderately sloping sides and a gradual break of slope at bottom to a concave base. Cutting C.260103. Filled by C.260106.	2.5	0.4	0.18
2602	260201	Layer	Topsoil layer. Dark greyish-brown silty sand with inclusions of gravel and pebbles.	50	2	0.38
2602	260202	Layer	Subsoil layer. Mid-greyish-brown silty sand.	50	2	0.4
2602	260203	Layer	Natural layer. Light pinkish-red silty sand with inclusions of gravel and pebbles.	50	2	0.1
2602	260204	Fill	Fill of pit C.260205. Subcircular shape in plan, compacted black clay with rare inclusions of stones. Under C.260202.	0.56	0.5	0.12

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2602	260205	Cut	Cut of pit. Subcircular shape in plan with concave corners and a gradual break of slope at top to gently sloping sides and a gradual break of slope at bottom to a concave base. Cutting C.260203. Filled by C.260204.	0.56	0.5	0.12
2602	260206	Fill	Fill of small pit/posthole C.260207. Circular shape in plan, loosely compacted mottled dark greyish-brown and greyish-brown silty sand with occasional small rocks dispersed throughout the fill and very frequent rocks close to the base with rare inclusions of charcoal and charred rocks. Under C.260202.	0.4	0.4	0.12
2602	260207	Cut	Cut of small pit/posthole. Circular shape in plan with an invisible to sharp break of slope at top to moderately steep sides and a gradual break of slope at bottom to a concave base. Cutting C.260203. Filled by C.260206.	0.4	0.4	0.12
2603	260301	Layer	Topsoil layer. Dark greyish-brown silty sand with inclusions of gravel and pebbles.	50	2	0.38
2603	260302	Layer	Subsoil layer. Mid-greyish-brown silty sand.	50	2	0.4
2603	260303	Layer	Natural layer. Light pinkish-red silty sand with inclusions of gravel and pebbles.	50	2	0.1
2603	260304	Fill	Fill of ditch C.260305. Linear shape in plan, moderately compacted dark greyish-brown silty sand with very frequent inclusions of small rocks. Under C.260301. Parallel to ditch C.260307.	2	0.7	0.36
2603	260305	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to very steep sides and a gradual break of slope at bottom to a concave base. Cutting C.260303. Filled by C.260304. Parallel to ditch C.260307.	2	0.7	0.36
2603	260306	Fill	Fill of ditch C.260307. Linear shape in plan, loosely compacted dark greyish-brown silty sand with moderate inclusions of stones of various sizes. Under C.260301. Parallel to ditch C.260305.	1.8	1.86	0.88
2603	260307	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to vertical sides and a sharp break of slope at bottom to a flat base. Cutting C.260303. Filled by C.260306. Parallel to ditch C.260305.	1.8	1.86	0.88
2603	260308	Fill	Fill of furrow C.260309. Linear shape in plan, moderately compacted light orangish-brown silty sand with frequent inclusions of small rocks randomly dispersed in the fill. Under C.260301.	2	0.8	0.15

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2603	260309	Cut	Cut of furrow. Linear shape in plan with a sharp break of slope at top to moderately steep, concave sides and a gentle break of slope at bottom to a slightly concave base. Cutting C.260303. Filled by C.260308.	2	0.8	0.15
2604	260401	Layer	Topsoil layer. Dark greyish-brown silty sand with inclusions of gravel and pebbles.	50	2	0.38
2604	260402	Layer	Subsoil layer. Mid-greyish-brown silty sand.	50	2	0.4
2604	260403	Layer	Natural layer. Light pinkish-red silty sand with inclusions of gravel and pebbles.	50	2	0.1
2605	260501	Layer	Topsoil layer. Dark greyish-brown silty sand with inclusions of gravel, pebbles, charcoal, and some modern debris.	50	2	0.38
2605	260502	Layer	Subsoil layer. Mid-greyish-brown silty sand.	50	2	0.4
2605	260503	Layer	Natural layer. Light pinkish-red silty sand with inclusions of gravel and pebbles.	50	2	0.1
2605	260504	Fill	Fill of ditch C.260505. Linear shape in plan, loosely compacted greyish-brown sand with frequent inclusions of small pebbles. Under C.260502.	3	1.48	0.32
2605	260505	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to moderately sloping sides and an invisible break of slope at bottom to a wide, concave base. Cutting C.260503. Filled by C.260504.	3	1.48	0.32
2606	260601	Layer	Topsoil layer. Dark greyish-brown silty sand with inclusions of gravel and pebbles.	50	2	0.44
2606	260602	Layer	Subsoil layer. Mid-greyish-brown silty sand.	50	2	0.12
2606	260603	Layer	Natural layer. Light pinkish-red silty sand with inclusions of gravel and pebbles.	50	2	0.1
2607	260701	Layer	Topsoil layer. Dark greyish-brown silty sand with inclusions of gravel and pebbles.	50	2	0.38
2607	260702	Layer	Subsoil layer. Mid-greyish-brown silty sand.	50	2	0.15
2607	260703	Layer	Natural layer. Light pinkish-red silty sand with inclusions of gravel and pebbles.	50	2	0.1
2608	260801	Layer	Topsoil layer. Dark greyish-brown silty sand with inclusions of gravel and pebbles.	50	2	0.4
2608	260802	Layer	Subsoil layer. Mid-greyish-brown silty sand.	50	2	0.22
2608	260803	Layer	Natural layer. Light pinkish-red silty sand with inclusions of gravel and pebbles.	50	2	0.1

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2609	260901	Layer	Topsoil layer. Dark greyish-brown silty sand with inclusions of gravel and pebbles.	50	2	0.38
2609	260902	Layer	Subsoil layer. Mid-greyish-brown silty sand.	50	2	0.4
2609	260903	Layer	Natural layer. Light pinkish-red silty sand with inclusions of gravel and pebbles.	50	2	0.1
2610	261001	Layer	Topsoil layer. Dark greyish-brown silty sand with inclusions of gravel and pebbles.	50	2	0.4
2610	261002	Layer	Subsoil layer. Mid-greyish-brown silty sand.	50	2	0.4
2610	261003	Layer	Natural layer. Light pinkish-red silty sand with inclusions of gravel and pebbles.	50	2	0.1
2611	261101	Layer	Topsoil layer. Dark greyish-brown silty sand with inclusions of gravel and pebbles.	50	2	0.32
2611	261102	Layer	Subsoil layer. Mid-greyish-brown silty sand.	50	2	0.4
2611	261103	Layer	Natural layer. Orangish-brown silty sand with inclusions of gravel and pebbles.	50	2	0.1
2611	261104	Fill	Fill of cut C.261105. Curvilinear/sub-semicircular, loosely compacted orangish-brown sandy silt with inclusions of pebbles and possible medieval pottery. Under C.261102.	2	N/A	0.4
2611	261105	Cut	Cut. Curvilinear shape in plan with a moderately steep break of slope at top to steeply sloping sides to a flat base. Cutting C.261103. Filled by C.251104.	N/A	N/A	N/A
2701	270101	Layer	Topsoil layer. Blackish-dark brown silty sand with numerous inclusions of roots.	50	2	0.4
2701	270102	Layer	Subsoil layer. Blackish-dark brown silty sand.	50	2	0.23
2701	270103	Layer	Natural layer. Light reddish-brown sandy clay with some gravel inclusions and occasional lenses of sand.	50	2	0.1
2702	270201	Layer	Topsoil layer. Blackish-dark brown silty sand with numerous inclusions of roots.	50	2	0.35
2702	270202	Layer	Subsoil layer. Blackish-dark brown silty sand.	50	2	0.23
2702	270203	Layer	Natural layer. Light reddish-brown sandy clay with some gravel inclusions and occasional lenses of sand.	50	2	0.1
2703	270301	Layer	Topsoil layer. Blackish-dark brown silty sand with numerous inclusions of roots.	50	2	0.4
2703	270302	Layer	Subsoil layer. Blackish-dark brown silty sand.	50	2	0.23

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2703	270303	Layer	Natural layer. Light reddish-brown sandy clay with some gravel inclusions and occasional lenses of sand.	50	2	0.1
2703	270304	Fill	Fill of gully C.270305. Linear shape in plan, loosely compacted dark greyish-brown silty sand with moderate inclusions of stones. Under C.270301.	1	0.32	N/A
2703	270305	Cut	Cut of terminus linear gully. Linear shape in plan with a sharp break of slope at top with vertical sides and a sharp break of slope at bottom to a flat base. Cutting C.270301. Filled by C.270304.	1	0.32	N/A
2703	270306	Fill	Fill of gully C.260307. Linear shape in plan, moderately compacted brownish-grey silty sand. Under C.270302. Associated with C.270309.	2	0.25	0.03
2703	270307	Cut	Cut of gully. Linear shape in plan with a moderate break of slope at top to shallowly sloping sides and a gentle break of slope at bottom to a concave base. Cutting C.270303. Filled by C.270306. Associated with C.270309.	2	0.25	0.03
2703	270308	Fill	Fill of field boundary C.270309. Linear shape in plan, moderately compacted yellowish-brown silty sand with frequent inclusions of small angular stones. Under C.270301. Associated with C.270307.	2	3.5	0.15
2703	270309	Cut	Cut of field boundary. Linear shape in plan with a gentle break of slope at top to shallowly sloping sides and a gentle break of slope at bottom to an uneven base. Cutting C.270303. Filled by C.270308. Associated with C.270307.	2	3.5	0.15
2801	280101	Layer	Topsoil layer. Greyish-brown silty sand with numerous inclusions of roots and gravel.	50	2	0.5
2801	280102	Layer	Subsoil layer. Brownish-orange silty sand with gravel inclusions.	50	2	0.1
2801	280103	Layer	Natural layer. Mixed orange and orangish-grey silty-sand with gravel inclusions	50	2	0.1
2802	280201	Layer	Topsoil layer. Greyish-brown silty sand with numerous inclusions of roots and gravel.	50	2	0.3
2802	280202	Layer	Subsoil layer. Brownish-orange silty sand with gravel inclusions.	50	2	0.21
2802	280203	Layer	Natural layer. Mixed orange and orangish-grey silty-sand with gravel inclusions	50	2	0.1
2802	280204	Fill	Fill of furrow C.280205. Linear shape in plan, loosely compacted light brown silty sand with moderate inclusions of pebbles. Under C.280201.	2	1.28	0.12
2802	280205	Cut	Cut of furrow. Linear shape in plan with a gentle break of slope at top to moderately steep sides and a gradual break of slope at bottom to a concave base. Cutting C.280203. Filled by C.280204.	2	1.28	0.12

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2803	280301	Layer	Topsoil layer. Greyish-brown silty sand with numerous inclusions of roots and gravel.	50	2	0.45
2803	280302	Layer	Subsoil layer. Brownish-orange silty sand with gravel inclusions.	50	2	0.25
2803	280303	Layer	Natural layer. Mixed orange and orangish-grey silty-sand with gravel inclusions	50	2	0.1
2804	280401	Layer	Topsoil layer. Greyish-brown silty sand with numerous inclusions of roots and gravel.	50	2	0.5
2804	280402	Layer	Subsoil layer. Brownish-orange silty sand with gravel inclusions.	50	2	0.2
2804	280403	Layer	Natural layer. Mixed orange and orangish-grey silty-sand with gravel inclusions	50	2	0.1
2901	290101	Layer	Topsoil layer. Dark-greyish brown humic silty sand with moderate small to medium sub-rounded, sub-angular stones.	50	2	0.4
2901	290102	Layer	Subsoil layer. Loose mid-brown silty sand.	50	2	0.1–0.15
2901	290103	Layer	Natural layer. Loose reddish-brown silty sand with gravel and occasional pockets of mid-orangish gravel.	50	2	N/A
2902	290201	Layer	Topsoil layer. Dark-greyish brown humic silty sand with moderate small to medium sub-rounded, sub-angular stones.	50	2	0.4
2902	290202	Layer	Subsoil layer. Loose mid-brown silty sand.	50	2	0.1–0.15
2902	290203	Layer	Natural layer. Loose reddish-brown silty sand with gravel and occasional pockets of mid-orangish gravel.	50	2	N/A
2903	290301	Layer	Topsoil layer. Dark-greyish brown humic silty sand with moderate small to medium sub-rounded, sub-angular stones.	50	2	0.4
2903	290302	Layer	Subsoil layer. Loose mid-brown silty sand.	50	2	0.1–0.15
2903	290303	Layer	Natural layer. Loose reddish-brown silty sand with gravel and occasional pockets of mid-orangish gravel.	50	2	N/A
2904	290401	Layer	Topsoil layer. Dark-greyish brown humic silty sand with moderate small to medium sub-rounded, sub-angular stones.	50	2	0.4
2904	290402	Layer	Subsoil layer. Loose mid-brown silty sand.	50	2	0.1–0.15

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2904	290403	Layer	Natural layer. Loose reddish-brown silty sand with gravel and occasional pockets of mid-orangish gravel.	50	2	N/A
2905	290501	Layer	Topsoil layer. Dark-greyish brown humic silty sand with moderate small to medium sub-rounded, sub-angular stones.	50	2	0.4
2905	290502	Layer	Subsoil layer. Loose mid-brown silty sand.	50	2	0.1–0.15
2905	290503	Layer	Natural layer. Loose reddish-brown silty sand with gravel and occasional pockets of mid-orangish gravel.	50	2	N/A
2905	290504	Fill	Fill of pit C.290505. Sub-linear shape in plan with loose mid-greyish brown silty sand and inclusions of frequent small sub-rounded sub-angular stones, frequent roots, moderately large bricks (avg. 10cm) and two sherds of pottery.	2+	1.5	0.47
2905	290505	Cut	Cut of pit. Sub-linear shape in plan with a south-westerly gradual and northeasterly sharp break of slope at top to gentle and vertical respectively sloping sides and a gentle and sharp respectively break of slope at bottom to a tapering concave base. Filled by C.290504.	2+	1.5	0.47
2905	290506	Fill	Upper fill of quarry pit C.290507. Linear shape in plan with loose mid-greyish brown silty sand with occasional bricks, modern pottery sherds, animal bone, clay pipe stems and fragments of bowl and occasional sub-rounded sub-angular stones. Over basal fill C.290508.	1.8	1.6	1
2905	290507	Cut	Cut of quarry pit. Linear shape in plan with a sharp break of slope at top to almost vertical sides and a imperceptible break of slope at bottom due to unknown base. Filled by upper fill C.290506 and basal fill C.290508.	1.8	1.6	1
2905	290508	Fill	Basal fill of quarry pit C.290507. Linear shape in plan with loose mottled greyish-black clayey sand and occasional small sub-rounded stones. Under upper fill C.290506.	0.9	0.32	N/A
2905	290509	Fill	Fill of quarry pit C.290510. Irregular shape in plan with loose mottled greyish-brown silty sand and occasional sub-rounded stones.	0.94	1.28	0.37
2905	290510	Cut	Cut of quarry pit. Irregular shape in plan with rounded corners where present, a sharp break of slope at top to irregular concave sides and a gradual break of slope at bottom to an uneven base. Same as C.290505.	0.94	1.28	0.37

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
2906	290601	Layer	Topsoil layer. Dark-greyish brown humic silty sand with moderate small to medium sub-rounded, sub-angular stones.	50	2	0.4
2906	290602	Layer	Subsoil layer. Loose mid-brown silty sand.	50	2	0.1–0.15
2906	290603	Layer	Natural layer. Loose reddish-brown silty sand with gravel and occasional pockets of mid-orangish gravel.	50	2	N/A
3001	300101	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.35–0.4
3001	300102	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.1–0.2
3001	300103	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.1
3001	300104	Fill	Fill of natural deposit C.300105. Curvilinear shape in plan with loose orangish-brown fine sand with lenses of gravel and pebble (1–2cm) inclusions. Under C.300102.	2	2.15	0.08–0.18
3001	300105	Cut	Cut of natural deposit. Curvilinear shape in plan with a gradual break of slope at top to moderately sloping sides and a imperceptible break of slope at bottom to a flat base. Filled by C.300104.	2	2.15	0.08–0.18
3001	300106	Fill	Fill of linear C.300107. Sub-circular shape in plan with loose orangish-brown sand and small pebbles inclusions. Under C.300101.	1.35	1.2	0.26
3001	300107	Cut	Cut of linear. Sub-circular shape in plan with rounded corners and a gradual break of slope at top to gradually sloping north sides / steep slopping south sides and a gradual break of slope at bottom to a flat base. Filled by C.300106.	1.35	1.2	0.26
3002	300201	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.35
3002	300202	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.15
3002	300203	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.1
3003	300301	Layer	Topsoil layer. Mid-brown sandy silt with small pebbles (2cm) and flint.	50	2	0.32
3003	300302	Layer	Subsoil layer. Light orangish-brown sandy silt with flint and small pebbles (0.12m).	50	2	0.09
3003	300303	Layer	Natural layer. Orangish-red silty sand with flint and small stones (0.2m).	50	2	0.2
3003	300304	Fill	Fill of pit C.300305. Circular shape in plan with loose blackish-brown fine sand clumps of silty clay and gravel with flint, pebbles (2–3cm) and charcoal fleck inclusions. Under C.300302.	0.48	0.48	0.12

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
3003	300305	Cut	Cut of pit. Circular shape in plan with a sharp break of slope at top to moderately steep sloping sides and a gradual break of slope at bottom to a slightly concave base. Cuts C.300303. Filled by C.300304.	0.48	0.48	0.12
3004	300401	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.35
3004	300402	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.15
3004	300403	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.1
3005	300501	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.35–0.45
3005	300502	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.1–0.2
3005	300503	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.1
3005	300504	Fill	Fill of ditch C.300505. Linear shape in plan with loose mid-greyish-brown fine sand with pebbles (3cm), charcoal flecks and chunks, burnt stones, roots and flint inclusions. Under C.300502.	2	2.46	0.22–0.62
3005	300505	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to almost vertical sides and a sharp break of slope at bottom to an uneven base sloping east. Cuts C.300503. Filled by C.300504.	2	2.46	0.22–0.62
3005	300506	N/A	VOID	N/A	N/A	N/A
3005	300507	N/A	VOID	N/A	N/A	N/A
3005	300508	Fill	Fill of furrow C.300509. Linear shape in plan with loose mid-brown silty sand with occasional small pebbles and flint nodule inclusions. Under C.300501.	1.56	1.93	0.08
3005	300509	Cut	Cut of furrow. Linear shape in plan with a gradual break of slope at top to gradually sloping sides and a gradual break of slope at bottom to a flat base. Filled by C.300508.	1.56	1.93	0.08
3005	300510	Fill	Fill of linear C.300511. Linear shape in plan with loose orangish-brown silty sand and frequent small pebbles and occasional flint inclusions. Under C.300501.	2.03	1.56	0.29
3005	300511	Cut	Cut of liner. Linear shape in plan with a sharp break of slope at top to concave sides and a gradual break of slope at bottom to a concave base. Cuts C.300503. Filled by C.300510.	2.03	1.56	0.29
3006	300601	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.35
3006	300602	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.2

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
3006	300603	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.1
3006	300604	Fill	Fill of linear ditch C.300605. Sub-rectangular shape in plan with loose blackish-brown silty sand and charcoal flecks, gravel, pebbles (3–4cm) and flint inclusions. Under C.300602.	2.46	0.44–0.68	0.17
3006	300605	Cut	Cut of linear ditch. Linear shape in plan with sharp break of slope at top to moderately steep sides and a gradual break of slope at bottom to a concave base. Cuts C.300603. Filled by C.300604.	2.46	0.44–0.68	0.17
3007	300701	Layer	Topsoil layer. Mid-brown sandy silt with small pebbles (2cm) and flint.	50	2	0.36
3007	300702	Layer	Subsoil layer. Light orangish-brown sandy silt with flint and small pebbles (0.12m).	50	2	0.11
3007	300703	Layer	Natural layer. Orangish-red silty sand with flint and small stones (0.2m).	50	2	0.1
3008	300801	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.35
3008	300802	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.2
3008	300803	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.1
3008	300804	Fill	Fill of pit C.300805. Irregular shape in plan with loose greyish-black mottled with mid-greyish-brown sand and pebbles (3cm), charcoal flecks and metal fragment inclusions. Under C.300802.	2.02	1.25	0.16
3008	300805	Cut	Cut of pit. Irregular shape in plan with a sharp break of slope at top to almost vertical sides and a sharp break of slope at bottom to an uneven base. Cuts C.300803. Filled by C.300804.	2.02	1.25	0.16
3008	300806	Fill	Fill of linear ditch C.300807. Linear shape in plan with loose dark brown fine sand with pebbles, occasional roots and gravel inclusions. Under C.300802.	2	1.3	0.4
3008	300807	Cut	Cut of linear ditch. Linear shape in plan with a sharp break of slope at top to moderately steep sides and a gradual break of slope at bottom to a flat base sloping south. Cuts C.300803. Filled by C.300806.	2	1.3	0.4
3009	300901	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.35
3009	300902	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.12
3009	300903	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.1
3010	301001	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.35

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
3010	301002	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.2
3010	301003	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.1
3011	301101	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.35
3011	301102	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.15
3011	301103	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.1
3011	301104	Fill	Fill of furrow C.301105. Linear shape in plan with loose orangish-brown silty sand and frequent small pebble inclusions. Under C.301101.	2.14	1.12	0.15
3011	301105	Cut	Cut of furrow. Linear shape in plan with a gradual break of slope at top to even sloping sides and a gradual break of slope at bottom to a flat base. Cuts C.301103. Filled by C.301104.	2.14	1.12	0.15
3012	301201	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.35
3012	301202	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.12
3012	301203	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.2
3013	301301	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.4
3013	301302	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.2
3013	301303	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.1
3013	301304	Fill	Fill of ditch C.301305. Linear shape in plan with loose reddish-brown fine sand with gravel and pebbles (3cm), roots, flint and charcoal fleck inclusions. Under C.301202.	2	1.85	0.45
3013	301305	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to steep sloping sides and a gradual break of slope at bottom to a concave base. Cuts C.301303. Filled by C.301304.	2	1.85	0.45
3014	301401	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.4
3014	301402	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.22
3014	301403	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.1
3015	301501	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.35

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
3015	301502	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.1–0.2
3015	301503	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.1
3016	301601	Layer	Topsoil layer. Brownish-black humic sand with gravel (2–3cm).	50	2	0.4
3016	301602	Layer	Subsoil layer. Light reddish-brown sandy gravel.	50	2	0.15
3016	301603	Layer	Natural layer. Orangish-brown sand with gravel lenses of sub-angular quartz and flint gravel (2cm).	50	2	0.1
3016	301604	Fill	Fill of linear C.301605. Linear shape in plan with loose orangish-brown silty clay and moderate small pebbles inclusions. Under C.301601.	1.8	1.88	0.35
3016	301605	Cut	Cut of linear. Linear shape in plan with a gradual break of slope at top to gently sloping sides and a gradual break of slope at bottom to a concave base. Cuts C.301603. Filled by C.301604.	1.8	1.88	0.35
3016	301606	Fill	Upper fill of ditch C.301607. Linear shape in plan with loose mid-orangish-brown gravel sand and roots, pebbles, charcoal flecks, and flint inclusions. Under C.301602. Over basal fill C.301608.	2	2.58	0.2
3016	301607	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to moderately steep sloping sides and a sharp break of slope at bottom to a concave base. Cuts C.301603. Filled by upper fill C.301606 and basal fill C.301608.	2	2.58	0.66
3016	301608	Fill	Basal fill of ditch C.301607. Linear shape in plan sloping south with loose blueish brown sandy gravel and frequent pebbles, roots, charcoal flecks, and flint inclusions. Under upper fill C.301606.	2	2.58	0.46
3101	310101	Layer	Topsoil layer. Dark brown silty sand with occasional inclusions of rounded pebbles.	50	2	0.25
3101	310102	Layer	Subsoil layer. Orangish-brown silty sand with pebble inclusions.	50	2	0.05
3101	310103	Layer	Natural layer. Orangish-brown silty sand with inclusions of rounded gravel.	50	2	0.1
3102	310201	Layer	Topsoil layer. Moderately compacted dark greyish-brown silty sand.	50	2	0.25
3102	310202	Layer	Subsoil layer. Orangish-brown silty sand with pebble inclusions.	50	2	0.1
3102	310203	Layer	Natural layer. Orangish-brown silty sand with inclusions of rounded gravel.	50	2	0.1
3102	310204	Fill	Fill of pit C.310205. Subcircular shape in plan, loosely compacted mid-greyish brown sandy gravel with inclusions of flint shards and 2–4cm pebbles. Under C.310202.	0.6	0.56	0.15

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
3102	310205	Cut	Cut of pit. Subcircular shape in plan with a steep break of slope at top to steeply sloping sides and a moderate break of slope at bottom to a slightly concave base. Cutting C.310203. Filled by C.310204.	0.6	0.56	0.15
3102	310206	Fill	Fill of pit C.310207. Circular shape in plan, loosely compacted greyish-brown silty sand with occasional inclusions of small pebbles. Under C.310202.	0.5	0.5	0.14
3102	310207	Cut	Cut of pit. Circular shape in plan with a sharp break of slope at top to shallowly sloping sides and no break of slope at bottom to a concave base. Cutting C.310203. Filled by C.310206.	0.5	0.5	0.14
3102	310208	Fill	Fill of pit C.310209. Circular shape in plan, loosely compacted greyish-brown silty sand with occasional inclusions of small pebbles. Under C.310202.	0.75	0.75	0.33
3102	310209	Cut	Cut of pit. Circular shape in plan with a sharp break of slope at top to steeply sloping sides and no break of slope at bottom to a concave base. Cutting C.310203. Filled by C.310208.	0.75	0.75	0.33
3103	310301	Layer	Topsoil layer. Moderately compacted dark greyish-brown silty sand.	50	2	0.25
3103	310302	Layer	Subsoil layer. Orangish-brown silty sand with pebble inclusions.	50	2	0.1
3103	310303	Layer	Natural layer. Orangish-brown silty sand with inclusions of rounded gravel.	50	2	0.1
3401	340101	Layer	Topsoil layer. Mid-greyish-brown sand.	50	2	0.35
3401	340102	Layer	Subsoil layer. Mid-orangish-brown sand with occasional stone inclusions.	50	2	0.2
3401	340103	Layer	Natural layer. Light orangish-brown sand with gravel lenses.	50	2	0.1
4801	480101	Layer	Topsoil layer. Dark grey silty sand with frequent gravel.	50	2	0.46
4801	480102	Layer	Subsoil layer. Brown silty sand with frequent gravel.	50	2	0.12
4801	480103	Layer	Natural layer. Yellowish-brown sand with gravel lenses.	50	2	0.1
4801	480104	Fill	Uppermost fill of ditch C.480107. Linear shape in plan with loose greyish-brown silty sand and gravel and frequent pebble inclusions. Under C.480102. Over upper fill C.480105.	2	1.66	0.48
4801	480105	Fill	Upper fill of ditch C.480107. Linear shape in plan with loose dark greyish-brown silty sand and frequent small pebble inclusions. Under uppermost fill C.480104. Over basal fill C.480106.	2	2.72	0.38

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
4801	480106	Fill	Basal fill of ditch C.480107. Linear shape in plan with loose light greyish-brown silty sand and frequent small pebble inclusions. Under upper fill C.480105.	2	1.86	0.44
4801	480107	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to moderately sloping sides and a imperceptible break of slope at bottom to a shallow concave base. Cuts C.480103. Filled by C.480104, C.480105 and C.480106.	2	2.98	0.78
4802	480201	Layer	Topsoil layer. Dark grey silty sand with frequent gravel.	50	2	0.28
4802	480202	Layer	Subsoil layer. Brown gravelly sand.	50	2	0.1
4802	480203	Layer	Natural layer. Yellowish-brown sand with gravel lenses and iron pan.	50	2	0.1
4803	480301	Layer	Topsoil layer. Dark grey silty sand with frequent gravel.	50	2	0.33
4803	480302	Layer	Subsoil layer. Brown silty sand with frequent gravel.	50	2	0.22
4803	480303	Layer	Natural layer. Brownish-yellow silt with yellowish-brown sand and gravel lenses.	50	2	0.1
4803	480304	N/A	VOID	N/A	N/A	N/A
4804	480401	Layer	Topsoil layer. Dark grey silty sand with frequent gravel.	50	2	0.19–0.38
4804	480402	Layer	Subsoil layer. Brown sandy silt.	50	2	0.1
4804	480403	Layer	Natural layer. Brownish-yellow sand with gravel lenses.	50	2	0.1
4805	480501	Layer	Topsoil layer. Greyish-brown sandy loam with frequent gravel.	50	2	0.3–0.36
4805	480502	Layer	Subsoil layer. Brown silty sand with some small pebbles.	50	2	0.1–0.2
4805	480503	Layer	Natural layer. Brownish-yellow sand with gravel lenses.	50	2	0.1
4805	480504	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to steep sloping sides and a gradual break of slope at bottom to a flat base. Cuts C.480503. Filled by C.480505.	2	3.5	0.5
4805	480505	Fill	Fill of ditch C.480504. Linear shape in plan with loose light yellowish-brown silty sand and occasional rocks and pockets of gravel inclusions. Under C.480502.	2	3.5	0.5
4805	480506	Fill	Fill of possible feature C.480507. Linear shape in plan with moderately compacted dark brownish-grey sandy silt and occasional randomly dispersed small rocks inclusions. Under C.480502.	2	0.45	0.14

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
4805	480507	Cut	Cut of possible feature. Linear shape in plan with a sharp break of slope at top to steep sloping sides and a sharp break of slope at bottom to a flat base. Cuts C.480503. Filled by C.480506.	2	0.45	0.14
4805	480508	Fill	Fill of possible posthole C.480509. Sub-circular shape in plan with loose dark greyish-brown silty sand and occasional small rocks and gravel inclusions more concentrated on SE side. Under C.480502.	0.33	0.33	0.11
4805	480509	Cut	Cut of possible posthole. Sub-circular shape in plan with a sharp break of slope at top to steep sloping sides and a northwesterly gradual/ southeasterly sharp break of slope at bottom to a slightly concave base. Cuts C.480503. Filled by C.480508.	0.33	0.33	0.11
4805	480510	Fill	Fill of pit C.480511. Curvilinear shape in plan with moderately compacted greyish-brown silty sand and occasional rock inclusions more frequent along the sides and base. Under C.480502. Possibly associated with C.480513.	2	0.46	0.18
4805	480511	Cut	Cut of pit. Curvilinear shape in plan with rounded corners and a sharp break of slope at top to almost vertical easterly/steep concave westerly sides and a gradual break of slope at bottom to a slightly concave base. Cuts C.480503. Filled by C.480510.	2	0.46	0.18
4805	480512	Fill	Fill of possible posthole C.480513. Circular shape in plan with loose mid-greyish-brown silty sand and frequent small rock inclusions. Under C.480502.	0.2	0.2	0.08
4805	480513	Cut	Cut of possible posthole. Circular shape in plan with a sharp break of slope at top to uneven steep sloping sides and a gradual break of slope at bottom to an uneven base. Cuts C.480503. Filled by C.480512.	0.2	0.2	0.08
4806	480601	Layer	Topsoil layer. Dark grey silty sand with frequent gravel.	50	2	0.34
4806	480602	Layer	Subsoil layer. Brown silty sand with frequent gravel.	50	2	0.18–0.23
4806	480603	Layer	Natural layer. Brownish-yellow sandy gravel.	50	2	0.1
4806	480604	Fill	Fill of ditch C.480605. Linear shape in plan with loose greyish-brown silty sand and gravel, pebbles and iron pan inclusions. Under C.480602.	2	2.3	0.34
4806	480605	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to concave sides and a moderately sharp break of slope at bottom to a flat base. Cuts C.480603. Filled by C.480604.	2	2.3	0.34
4807	480701	Layer	Topsoil layer. Dark grey silty sand with frequent gravel.	50	2	0.32

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
4807	480702	Layer	Subsoil layer. Brown silty sand with frequent gravel.	50	2	0.15–0.17
4807	480703	Layer	Natural layer. Brownish-yellow sand with gravel lenses.	50	2	0.1
4808	480801	Layer	Topsoil layer. Greyish-brown sandy loam with frequent gravel.	50	2	0.3–0.38
4808	480802	Layer	Subsoil layer. Brown silty sand.	50	2	0.1–0.5
4808	480803	Layer	Natural layer. Brownish-yellow sand with gravel lenses.	50	2	0.1
4808	480804	Fill	Fill of ditch C.480805. Linear shape in plan with compact dark brownish-grey silty sand and moderate stone inclusions. Under C.480802.	2	1.36	0.62
4808	480805	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to moderately sloping sides and a gradual break of slope at bottom to a concave base. Cuts C.480803. Filled by C.480804.	2	1.36	0.62
4808	480806	Fill	Fill of gully C.480807. Linear shape in plan with loose dark brownish-grey silty sand and moderate stone inclusions. Under C.480802.	2	0.9	0.35
4808	480807	Cut	Cut of gully. Linear shape in plan with a sharp break of slope at top to concave sides and a gradual break of slope at bottom to a concave base. Cuts C.480803. Filled by C.480806.	2	0.9	0.35
4808	480808	Fill	Fill of pit C.480809. Sub-circular shape in plan with very loose mid-brown silty sand and gravel (1–3cm) inclusions. Under C.480802.	1.1	0.7	0.29
4808	480809	Cut	Cut of pit. Sub-circular shape in plan with a sharp break of slope at top to moderately sloping sides and a gradual break of slope at bottom to a concave base. Cuts C.480809. Filled by C.480808. Associated with C.480811.	1.1	0.7	0.29
4808	480810	Fill	Fill of pit C.480811. Sub-circular shape in plan with loose mid-brown gravel sand and roots and flint inclusions. Under C.480802.	0.45	0.45	0.12
4808	480811	Cut	Cut of pit. Sub-circular shape in plan with a sharp break of slope at top to steep sloping sides and a gradual break of slope at bottom to a slightly concave base. Cuts C.480803. Filled by C.480810.	0.45	0.45	0.12
4809	480901	Layer	Topsoil layer. Dark grey silty sand with frequent gravel.	50	2	0.4
4809	480902	Layer	Subsoil layer. Brown silty sand with frequent gravel.	50	2	0.1–0.12
4809	480903	Layer	Natural layer. Yellowish-brown sand with gravel lenses.	50	2	0.1

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
4809	480904	Fill	Uppermost fill of ditch C.480905. Linear shape in plan with loose light brown silty sand and frequent small pebble inclusions. Under C.480902. Over upper fill C.480912.	2	1.38	0.84
4809	480905	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to uneven steeply sloped sides and a imperceptible break of slope at bottom to a concave base. Cuts C.480903. Filled by C.480904, C.480912 and C.480922.	2	1.38	0.84
4809	480906	Fill	Fill of pit C.480907. Sub-oval shape in plan with loose dark greyish-brown silty sand and moderately sorted gravel stone inclusions. Under C.480902.	0.8	0.63	0.18
4809	480907	Cut	Cut of pit. Sub-oval shape in plan with a sharp break of slope at top to concave sides and a gradual break of slope at bottom to a concave base. Cuts C.480903. Filled by C.480906.	0.8	0.63	0.18
4809	480908	Fill	Fill of pit or possible post hole C.480909. Oval shape in plan with loose dark greyish-brown silty sand and frequent small rocks, gravel and rare charcoal flecks and pottery sherd inclusions. Under C.480902. Associated with C.480911.	0.75	0.65	0.18
4809	480909	Cut	Cut of pit or possible post hole. Oval shape in plan with a sharp break of slope at top to almost vertical sides and a sharp break of slope at bottom to a flat base. Cuts C.480903. Filled by C.480908. Associated with C.480911.	0.76	0.65	0.18
4809	480910	Fill	Fill of possible posthole C.480911. Sub-oval shape in plan with loose dark greyish-brown silty sand and gravel and stone inclusions. Under C.480902.	0.4	0.34	0.2
4809	480911	Cut	Cut of possible posthole. Sub-oval shape in plan with a sharp break of slope at top to concave sides and a gradual break of slope at bottom to a concave base. Cuts C.480903. Filled by C.480910. Associated with C.480909.	0.4	0.34	0.2
4809	480912	Fill	Upper fill of ditch C.480905. Linear shape in plan with loose greyish-brown silty sand and very frequent small pebble inclusions. Under uppermost fill C.480904. Over basal fill C.480922.	2	0.97	0.23
4809	480913	Fill	Upper fill of Roman ditch C.480915. Linear shape in plan with very loose greyish-brown silty sand and frequent small pebble and rare Roman pottery inclusions. Under C.480902. Over basal fill C.480913.	2	1.4	0.37
4809	480914	Fill	Basal fill of Roman ditch C.480915. Linear shape in plan with quite compact brownish-grey silty sand and very frequent small pebbles, animal bone and frequent Roman pottery inclusions. Under upper fill C.480913.	2	0.87	0.32

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
4809	480915	Cut	Cut of Roman ditch. Linear shape in plan with a sharp break of slope at top to moderately steep sloping sides and a sharp break of slope at bottom to a flat base. Cuts C.480903. Filled by C.480913 and C.480914.	2	1.4	0.69
4809	480916	Cut	Cut of gully. Linear shape in plan with a sharp break of slope at top to concave sides and a moderately gradual break of slope at bottom to a concave base. Cuts C.480919. Filled by C.480917.	2	0.73	0.34
4809	480917	Fill	Fill of gully C.480916. Linear shape in plan with loose brownish-grey silty sand and frequent variable sizing stone inclusions. Under C.480902.	2	0.73	0.34
4809	480918	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to concave sides and a moderately gradual break of slope at bottom to a flat base. Cuts C.480903. Filled by C.480919.	2	0.85	0.35
4809	480919	Fill	Fill of ditch C.480918. Linear shape in plan with compact dark brownish-grey silty sand and moderate stone inclusions. Under C.480916. Cut by C.480916.	2	0.85	0.35
4809	480920	Fill	Fill of gully terminus C.480921. Sub-linear shape in plan with loose greyish-brown silty sand and frequent pebble inclusions. Under C.480902.	2	0.6	0.11
4809	480921	Cut	Cut of gully terminus. Sub-linear shape in plan with a sharp break of slope at top to shallow sloping sides and a imperceptible break of slope at bottom to a concave base. Filled by C.480920.	2	0.6	0.11
4809	480922	Fill	Basal fill of ditch C.480905. Linear shape in plan with quite loose brownish-grey silty sand and frequent small pebble inclusions. Under upper fill C.480912.	2	0.57	0.28
4810	481001	Layer	Topsoil layer. Dark grey silty sand with frequent gravel.	50	2	0.32
4810	481002	Layer	Subsoil layer. Brown silty sand with frequent gravel.	50	2	0.3
4810	481003	Layer	Natural layer. Yellowish-brown sand with gravel lenses.	50	2	0.1
4810	481004	Fill	Fill of prehistoric pit C.481005. Circular shape in plan with loose dark brown silty sand and occasional small pebble and pottery sherd inclusions. Under C.481002.	0.92	0.92	0.23
4810	481005	Cut	Cut of prehistoric pit. Circular shape in plan with a sharp break of slope at top to moderately sloping sides and a imperceptible break of slope at bottom to a concave base. Cuts C.481003. Filled by C.481004.	0.92	0.92	0.23
4811	481101	Layer	Topsoil layer. Dark grey silty sand with frequent gravel.	50	2	0.32

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
4811	481102	Layer	Subsoil layer. Brown sandy silt with frequent gravel.	50	2	0.3
4811	481103	Layer	Natural layer. Brownish-yellow sand with gravel lenses.	50	2	0.1
4811	481104	Fill	Fill of ditch C.481105. Linear shape in plan with quite loose light brown silty sand and occasional small pebble inclusions. Under C.481102.	2	2	0.49
4811	481105	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to moderately sloping sides and a gradual break of slope at bottom to a mostly flat base. Cuts C.481103. Filled by C.481104.	2	2	0.49
4811	481106	Fill	Fill of ditch C.481107. Linear shape in plan with compact reddish-brown clay and very occasional small stone (2–4cm) inclusions. Under C.481102.	2	0.8	0.24
4811	481107	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to concave sides and a gradual break of slope at bottom to a concave base. Cuts C.481103. Filled by C.481106.	2	0.8	0.24
4812	481201	Layer	Topsoil layer. Dark grey silty sand with frequent gravel.	50	2	0.37
4812	481202	Layer	Subsoil layer. Brown sandy silt with frequent gravel.	50	2	0.18
4812	481203	Layer	Natural layer. Brownish-yellow sand with gravel lenses.	50	2	0.1
4812	481204	Cut	Cut of possible geological feature. Irregular shape in plan with a sharp break of slope to concave sides and a sharp break of slope at bottom to a concave base. Cuts C.481203. Filled by C.481205.	2.92	0.5	0.32
4812	481205	Fill	Fill of possible geological feature C.481204. Irregular shape in plan with loose dark greyish-brown silty sand and moderate stone inclusions. Under C.481202.	2.92	0.5	0.32
4813	481301	Layer	Topsoil layer. Dark grey silty sand with frequent gravel.	50	2	0.25
4813	481302	Layer	Subsoil layer. Brown silty sand with frequent gravel.	50	2	0.2
4813	481303	Layer	Natural layer. Brownish-yellow sand with gravel lenses.	50	2	0.1
4813	481304	Fill	Fill of ditch C.481305. Linear shape in plan with moderately compact reddish-brown silty clay and very occasional rounded pebble (1–4cm) inclusions. Under C.481302.	2	1.08	0.21
4813	481305	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to concave sides and a gradual break of slope at bottom to a concave base. Cuts C.481303. Filled by C.481304.	2	1.08	0.21

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
4813	481306	Fill	Fill of ditch C.481307. Linear shape in plan with compact dark brownish-grey silty sand and moderate stone inclusions. Under C.481202.	2	1.6	0.34
4813	481307	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to concave sides and a gradual break of slope at bottom to a concave base. Cuts C.481303. Filled by C.481306.	2	1.6	0.34
4814	481401	Layer	Topsoil layer. Dark grey silty sand with frequent gravel.	50	2	0.33
4814	481402	Layer	Subsoil layer. Brown sandy silt with frequent gravel.	50	2	0.23
4814	481403	Layer	Natural layer. Brownish-yellow sand with gravel lenses.	50	2	0.1
4814	481404	Fill	Fill of pit C.481405. Circular shape in plan with loose greyish-brown silty sand and occasional small pebble inclusions. Under C.481402.	0.55	0.55	0.15
4814	481405	Cut	Cut of pit. Circular shape in plan with a sharp break of slope at top to moderately sloping sides and a imperceptible break of slope at bottom to a concave base. Cuts C.481403. Filled by C.481404.	0.55	0.55	0.15
4815	481501	Layer	Topsoil layer. Dark grey silty sand with frequent gravel.	50	2	0.32
4815	481502	Layer	Subsoil layer. Brown sandy silt with frequent gravel.	50	2	0.2
4815	481503	Layer	Natural layer. Brownish-yellow sand with gravel lenses.	50	2	0.1
4901	490101	Layer	Topsoil layer. Loose dark brown humic loam sandy silt.	50	2	0.35
4901	490102	Layer	Subsoil layer. Loose mid-brown sandy silt.	50	2	0.32
4901	490103	Layer	Natural layer. Loose orangish-brown gravel sand.	50	2	0.1
4902	490201	Layer	Topsoil layer. Loose dark brown humic loam sandy silt.	50	2	0.36
4902	490202	Layer	Subsoil layer. Loose mid-brown sandy silt.	50	2	0.32
4902	490203	Layer	Natural layer. Loose orangish-brown sandy gravel.	50	2	0.1
4902	490204	Fill	Fill of pit C.490205. Sub-oval shape in plan with loose light yellowish-brown sandy silt and occasional roots and pebble inclusions. Under C.490202.	0.74	0.55	0.17
4902	490205	Cut	Cut of pit. Sub-oval shape in plan with a sharp break of slope at top to moderately sloping sides and a gradual break of slope at bottom to a slightly concave base. Cuts C.490203. Filled by C.490204.	0.74	0.55	0.17

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
4903	490301	Layer	Topsoil layer. Loose dark brown humic loam sandy silt.	50	2	0.32
4903	490302	Layer	Subsoil layer. Loose mid-brown sandy silt with pebbles.	50	2	0.36
4903	490303	Layer	Natural layer. Loose orangish-brown gravel sand.	50	2	0.1
4904	490401	Layer	Topsoil layer. Loose dark brown humic loam sandy silt.	50	2	0.32
4904	490402	Layer	Subsoil layer. Loose mid-brown sandy silt with pebbles.	50	2	0.36
4904	490403	Layer	Natural layer. Loose orangish-brown gravel sand.	50	2	0.1
4905	490501	Layer	Topsoil layer. Mid-greyish-brown silty sand.	50	2	0.34
4905	490502	Layer	Subsoil layer. Light orangish-brown silty sand.	50	2	0.44
4905	490503	Layer	Natural layer. Light greyish-brown sandy gravel.	50	2	0.1
4906	490601	Layer	Topsoil layer. Loose dark brown humic loam sandy silt.	50	2	0.36
4906	490602	Layer	Subsoil layer. Loose mid-brown sandy silt with pebbles.	50	2	0.08–0.4
4906	490603	Layer	Natural layer. Loose orangish-brown gravel sand.	50	2	0.1
4907	490701	Layer	Topsoil layer. Loose dark brown humic loam sandy silt.	50	2	0.32
4907	490702	Layer	Subsoil layer. Loose mid-brown sandy silt with pebbles.	50	2	0.36
4907	490703	Layer	Natural layer. Loose orangish-brown gravel sand.	50	2	0.1
4908	490801	Layer	Topsoil layer. Loose dark brown humic loam sandy silt.	50	2	0.35
4908	490802	Layer	Subsoil layer. Loose mid-brown sandy silt with pebbles.	50	2	0.5
4908	490803	Layer	Natural layer. Loose orangish-brown gravel sand.	50	2	0.1
4909	490901	Layer	Topsoil layer. Loose dark brown humic loam sandy silt.	50	2	0.35
4909	490902	Layer	Subsoil layer. Loose mid-brown sandy silt with pebbles.	50	2	0.5
4909	490903	Layer	Natural layer. Loose orangish-brown gravel sand.	50	2	0.1
5001	500101	Layer	Topsoil layer. Greyish-black humic sandy silt with gravels.	50	2	0.35

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
5001	500102	Layer	Subsoil layer. Light orangish-brown sandy gravel.	50	2	0.15–0.35
5001	500103	Layer	Natural layer. Mid-brown sandy silt.	50	2	0.1
5001	500104	Fill	Upper fill of modern ditch terminus C.500105. Sub-semicircular shape in plan with loose dark brown mottled with reddish-brown silty clay and roots, pebbles (1–2cm), flint, and modern pottery inclusions. Under C.500102. Over basal fill C.500106.	0.96	1.1	0.62
5001	500105	Cut	Cut of modern ditch terminus. Cuts C.500103. Sub-semicircular shape in plan with a sharp break of slope at top to almost vertical sides and a sharp break of slope at bottom to a narrowly tapered u-shaped base. Cuts C.500103. Filled by C.500104 and C.500106.	0.96	1.1	0.62
5001	500106	Fill	Basal fill of modern ditch terminus C.500105. Sub-semicircular shape in plan with loose greyish-brown silty clay and frequent root inclusions. Under upper fill C.500104.	0.96	1.1	0.62
5002	500201	Layer	Topsoil layer. Brown humic sandy silt with gravels.	50	2	0.35
5002	500202	Layer	Subsoil layer. Light orangish-brown sandy gravel.	50	2	0.15–0.35
5002	500203	Layer	Natural layer. Mid-brown sandy silty gravel (1–2cm) with lenses of red clayey sand and gravel.	50	2	0.1
5003	500301	Layer	Topsoil layer. Greyish-black humic sandy silt with gravels.	50	2	0.35
5003	500302	Layer	Subsoil layer. Light orangish-brown sandy gravel.	50	2	0.15–0.35
5003	500303	Layer	Natural layer. Light brown sandy gravel with sand and gravelly sand lenses (alluvial deposit) and bioturbation.	50	2	0.1
5004	500401	Layer	Topsoil layer. Greyish-black humic sandy silt with gravels.	50	2	0.43
5004	500402	Layer	Subsoil layer. Light orangish-brown sandy gravel.	50	2	0.15–0.35
5004	500403	Layer	Natural layer. Light brown sandy gravel with sand and gravelly sand lenses (alluvial deposit) and bioturbation.	50	2	0.1
5005	500501	Layer	Topsoil layer. Greyish-black humic silty sand with gravels.	50	2	0.43
5005	500502	Layer	Subsoil layer. Light orangish-brown sandy gravel.	50	2	0.15–0.35
5005	500503	Layer	Natural layer. Light brown sandy gravel with sand and gravelly sand lenses (alluvial deposit) and bioturbation.	50	2	0.1

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
5101	510101	Layer	Topsoil layer. Firm dark grey silty sand with frequent gravel.	50	2	0.36–0.5
5101	510102	Layer	Subsoil layer. Loose brown silty sand with frequent gravel.	50	2	0.14
5101	510103	Layer	Natural layer. Loose yellowish-brown sand with infrequent gravel and iron patches.	50	2	0.1
5102	510201	Layer	Topsoil layer. Firm dark grey silty sand with frequent gravel.	50	2	0.38
5102	510202	Layer	Subsoil layer. Loose brown silty sand with frequent gravel.	50	2	0.02
5102	510203	Layer	Natural. Yellowish-brown sand mottled with reddish-brown patches and with frequent gravel.	50	2	0.1
5102	510204	Deposit	Charcoal deposit in of ditch C.510206. Sub-linear/irregular shape in plan with loose black charcoal and sand and frequent pebble and pottery inclusions. Under C.510202. Over C.510205.	2	0.78	0.66
5102	510205	Fill	Fill of ditch C.510206. Linear shape in plan with quite loose greyish-brown silty sand and occasional small pebbles and charcoal fleck, brick, glass, pottery, and metal inclusions. Under C.510204.	2	1.39	0.5
5102	510206	Cut	Cut of ditch. Linear shape in plan with a sharp break of slope at top to steep sloping sides and a sharp break of slope at bottom to a mostly flat base. Cuts C.510203. Filled by C.510204 and C.510205.	2	1.39	0.5
5103	510301	Layer	Topsoil layer. Dark grey clayey silt.	50	2	0.19
5103	510302	Layer	Subsoil layer. Grey clayey silt.	50	2	0.11
5103	510303	Layer	Natural layer. Reddish-yellow sandy silt.	50	2	0.1
5103	510304	N/A	Paleo fill. Under C.510303. Over C.510305.	N/A	N/A	N/A
5103	510305	N/A	Sand with gravels. Under C.510304.	N/A	N/A	N/A
5104	510401	Layer	Topsoil layer. Dark greyish-brown sandy clayey silt.	50	2	0.36
5104	510402	Layer	Subsoil layer. Reddish-grey and brown clayey silt and occasional gravel.	50	2	0.14
5104	510403	Layer	Natural layer. Yellowish-brown with bluish-grey mottled sandy silt.	50	2	0.1
5104	510404	N/A	VOID	N/A	N/A	N/A
5104	510405	N/A	VOID	N/A	N/A	N/A

Trench	Context	Type	Detailed Description	L (m)	W (m)	D (m)
5104	510406	Fill	Fill of paleochannel C.510407. Irregular shape in plan with loose light brown sand and small pebbles. Under C.510402.	2.02	1.65	0.31
5104	510407	Cut	Cut of paleochannel. Irregular shape in plan with rounded corners and a gradual break of slope at top to gradual sloping sides and a sharp break of slope at bottom to a rounded concave base. Cuts C.510403. Filled by C.510406.	2.02	1.65	0.31

Appendix 1.2: Site Finds Register

Context Number	Associated Feature	Material	Object Name	Registered Finds number
080101	N/A	Copper alloy	Metal object	N/A
080301	N/A	Ceramic	Pottery	N/A
080301	N/A	Glass	Glass	N/A
080301	N/A	Ceramic	CTP	N/A
080301	N/A	Bone	Animal Bone	N/A
080301	N/A	Iron	Metal object	N/A
080401	N/A	Ceramic	Pottery	N/A
080401	N/A	Ceramic	CTP	N/A
090101	N/A	Iron	Metal object	N/A
090101	N/A	Iron	Metal object	N/A
130101	N/A	Glass	Glass	N/A
130101	N/A	Ceramic	Pottery	N/A
021304	N/A	Ceramic	Pottery	N/A
021304	N/A	Ceramic	Clay tobacco pipe	N/A
021404	N/A	Ceramic	Pottery	N/A
021404	N/A	Glass	Glass	N/A
021404	N/A	Ceramic	Clay tobacco pipe	N/A
021404	N/A	Iron	Iron	N/A
021404	N/A	Bone	Animal Bone	N/A
021704	021705	Iron	Metal	N/A

Context Number	Associated Feature	Material	Object Name	Registered Finds number
021707	021705	Glass	Glass	N/A
021707	021705	Ceramic	Pottery	N/A
021708	021705	Ceramic	Pottery	N/A
021710	021711	Ceramic	Pottery	N/A
030302	N/A	Ceramic	Pottery	N/A
200304	N/A	Ceramic	Pottery	N/A
200304	N/A	Bone	Animal Bone	N/A
200304	N/A	N/A	Vitrified fragment	N/A
200306	200307	Ceramic	Samian Ware sherd	2.3
200306	200307	Ceramic	Pottery	N/A
200306	200307	Bone	Animal Bone	N/A
200308	200309	Ceramic	Pottery	2.4
200308	200309	Metal	Copper	2.5
200308	200309	Ceramic	Pottery	N/A
200308	200309	Bone	Animal Bone	N/A
200311	200312	Ceramic	Pottery	N/A
200401	N/A	Ceramic	Pottery	N/A
200404	N/A	Stone	Burnt stone	N/A
200404	N/A	Ceramic	Pottery	N/A
200404	N/A	Bone	Animal Bone	N/A
200406	200407	Ceramic	Loom weight	2.6
200406	200407	Ceramic	Loom weight	2.8

Context Number	Associated Feature	Material	Object Name	Registered Finds number
200406	200407	Ceramic/clay	Loom weights	N/A
200408	200407	Metal	Copper alloy	2.2
200408	200407	Ceramic	Loom weight	2.7
200408	200407	Bones	Animal Bone	N/A
200408	200407	Ceramic/clay	Loom weights	N/A
200408	200407	Iron	Slag	N/A
200408	200407	Ceramic	Pottery	N/A
200408	200407	Wood/Charcoal	Charred wood/charcoal	N/A
200411	200412	Bone	Animal Bone	N/A
200417	200418	Ceramic	Pottery	N/A
200417	200418	Bone	Animal Bone	N/A
200417	200418	Ceramic/clay	Loom weight fragment	N/A
200417	200418	Stone	Stone	N/A
200504	N/A	Ceramic	Pottery	N/A
200504	N/A	Bone	Animal Bone	N/A
200505	200506	Ceramic	Pottery	N/A
200509		Bone	Animal Bone	N/A
200509		Ceramic	Pottery	N/A
210204		Ceramic	Pottery	N/A
210302	above linear 210309	Ceramic	Pottery	N/A
210308	210309	Iron	Metal object	2.9
210308	210309	Ceramic	Pottery	N/A

Context Number	Associated Feature	Material	Object Name	Registered Finds number
210310	210309	Ceramic	Pottery	N/A
210704	210705	Ceramic	Pottery	N/A
210707	210708	Ceramic	Pottery	N/A
210809		Ceramic	Pottery	N/A
210813		Bone	Animal Bone	N/A
210815		Ceramic	Pottery	N/A
210819		Bone	Animal Bone	N/A
210819		Ceramic	Pottery	N/A
220104	220105	Ceramic	Pottery	N/A
220104		Ceramic	Pottery	N/A
220306		Ceramic	Ceramic building material	N/A
220306		Ceramic	Clay tobacco pipe	N/A
220306		Ceramic	Pottery	N/A
220308		Glass	Glass	N/A
220308		Ceramic	Pottery	N/A
220316		Ceramic	Pottery	N/A
220904		Ceramic	Pottery	N/A
230502	N/A	Stone	Stone hone	1.1
240104	240105	Ceramic	Pottery	N/A
240104	240105	Ceramic	Pottery	N/A
240113	240114	Ceramic	Pottery	N/A
240113	240114	Flint	Flint flake	N/A

Context Number	Associated Feature	Material	Object Name	Registered Finds number
240601	N/A	Lead	Musket ball	1.2
250201	N/A	Ceramic	Pottery	N/A
250204	250205	Flint	Flint	N/A
250304	250305	Ceramic	Pottery	N/A
250504	N/A	Ceramic	Pottery	N/A
260104	260105	Ceramic	Pottery	N/A
261102	N/A	Ceramic	Pottery	N/A
261104	261105	Ceramic	Pottery	N/A
270302	N/A	Metal	Metal	N/A
270304	270305	Iron	Can	N/A
270304	270305	Metal	Tin	N/A
270304	270305	Paper	Newspaper	N/A
270304	270305	Copper alloy	Webbing fitting	N/A
270304	270305	Glass	Bottle top	N/A
270304	270305	Bone	Animal bone	N/A
270304	270305	Metal	Tin foil	N/A
270304	270305	Glass	Glass bottles	N/A
270304	270305	Iron	Mess tin (possible)	N/A
270304	270305	Paper	Paper	N/A
270304	270305	Iron	Flask (possible)	N/A
270304	270305	Iron	Cans	N/A
270304	270305	Iron	Tin	N/A

Context Number	Associated Feature	Material	Object Name	Registered Finds number
270304	270305	Iron	Mess tin (possible)	N/A
270304	270305	Iron	Sheet	N/A
270304	270305	Iron	Tin	N/A
290504	290505	Ceramic	Pottery	N/A
290506	290507	Mixed	Pottery, clay pipes, animal bone, brick	N/A
290508	290507	Mixed	Brick tile and clay pipe stems	N/A
300804	300805	Iron	Metal object	2.1
480908	480909	Ceramic	Pottery	N/A
480913	480915	Ceramic	Pottery	N/A
480914	480915	Ceramic	Pottery	N/A
480914	480915	Bone	Animal bone	N/A
481004	481005	Ceramic	Pottery	N/A
510205	510206	Ceramic	Pottery	N/A
510205	510206	Iron	Iron	N/A
510205	510206	Glass	Glass	N/A
510205	510206	Ceramic	Ceramic building material	N/A

Appendix 1.3: Site Sample Register

Trench No.	Sample No.	Context No.	Associated Feature	Sample Type
2602	1.1	260204	260205	Bulk
2602	1.2	260206	260207	Petrographic sample
2404	1.3	240404	240405	Bulk
2404	1.4	240111	240112	Bulk
2405	1.5	240506	240507	Bulk
3102	1.6	310208	310209	Bulk
0269	2.1	026904	026908	Bulk
3005	2.2	300504	300505	Bulk
5103	2.3	510302	N/A	OSL
5103	2.4	510303	N/A	OSL
4808	2.5	4808	83-88	OSL
4808	2.6	4808	100-105	OSL
2003	2.7	200306	200307	Bulk
2004	2.8	200406	200407	Bulk
2004	2.9	200406	200407	Bulk
2004	2.10	200410	200409	Bulk
2004	2.11	200411	200412	Bulk
2004	2.12	200415	200416	Bulk
2004	2.13	200413	200414	Bulk
5110	2.14	5110	39-57	OSL
5110	2.15	5110	60-71	OSL
5104	2.16	5104	78-92	OSL
2003	2.17	200308	200309	Bulk
2004	2.18	200417	200418	Bulk
2005	2.19	200509	200510	Bulk
2005	2.20	200505	200506	Bulk
2005	2.21	200504	N/A	Bulk
2108	2.22	210804	210805	Bulk
2004	2.23	200408	200407	Bulk
2004	2.24	200408	200407	Bulk
2004	2.25	200408	200407	Industrial residue
2004	2.26	200408	200407	Bulk
0214	2.27	021404	N/A	Industrial residue

Trench No.	Sample No.	Context No.	Associated Feature	Sample Type
2103	2.28	210306	210307	Bulk
2103	2.29	210310	210309	Bulk
2209	2.30	220910	220905	Bulk

Appendix 1.4.1: Drawing Register (Phase 1)

Drawing Number	Type	Scale (m)	Trench	Description
1:1	Section	1:10	2505	North-facing section of ditch C.250505
1:2	Section	1:10	2505	Northwest-facing section of gully C.250507
1:3	Section	1:10	2502	Southwest-facing section of gully C.250211
1:4	Section	1:10	2502	Northeast-facing section of gully C.250205
1:5	Section	1:10	2502	South-facing section of posthole C.250207
1:6	Section	1:10	2502	West-facing section of posthole C.250209
1:7	Section	1:10	2503	East-facing section of gully C.250305
1:8	Section	1:10	2509	South-facing section of gully C.250405
1:9	Section	1:10	2602	Southeast-facing section of pit C.260205
1:10	Section	1:10	2601	Southeast-facing section of gully C.260105
2:1	Section	1:10	2504	South-facing section of pit C.250407 with bulk
2:2	Section	1:10	2602	Southeast-facing section of small pit/posthole C.260207
2:3	Section	1:10	2601	Southeast-facing section of plough furrow C.260107
2:4	Section	1:10	2605	East-facing section of ditch C.260505
2:5	Section	1:10	2703	Southwest-facing section of gully terminus C.270305
3:1	Section	1:10	2603	South-facing section of ditch C.260305
3:2	Section	1:10	2603	Northwest-facing section of C.260307
3:3	Section	1:20	2603	South-facing section of ditch C.260307
3:4	Section	1:20	2611	Section of cut C.261105
3:5	Section	1:20	2703	Southwest-facing section of gully C.270309

Drawing Number	Type	Scale (m)	Trench	Description
3:6	Section	1:10	2703	Southwest-facing section of gully C.270307
3:7	Section	1:20	2802	Section of furrow C.280205
4:1	Section	1:10	2402	West-facing section of curvilinear feature C.240205
4:2	Section	1:10	2401	West-facing section of ditch terminus C.240105
4:3	Section	1:10	2401	North-facing section of pit C.240107
4:4	Section	1:10	2404	East-facing section of ditch C.240407
4:5	Section	1:10	2404	East-facing section of enclosure ditch C.240405
4:6	Section	1:10	2405	North-facing section of linear ditch C.240505
4:7	Section	1:10	2405	South-facing section of linear ditch C.240507
5:1	Section	1:20	2402	Northeast-facing section of gully C.240209
5:2	Section	1:20	2401	East-facing section of modern field boundary C.240110
5:3	Section	1:10	2403	Southeast-facing section of ditch C.240305
5:4	Section	1:10	2404	East-facing section of pit C.240407
5:5	Section	1:10	2404	North-facing section of possible pit C.240409
6:1	Section	1:10	2401	Southeast-facing section of ditch C.240112
6:2	Section	1:20	2405	Southeast-facing section of ditch C.240509
6:3	Section	1:10	2403	Southeast-facing section of pit C.240307
6:4	Section	1:10	2403	Southeast-facing section of pit C.240309
6:5	Section	1:10	2403	Southeast-facing section of pit C.240311
6:6	Section	1:20	2406	South-facing section of subcircular ditch C.240605
7:1	Section	1:20	2401	West-facing section of ditch C.240114
7:2	Section	1:20	2405	South-facing section of ditch C.240511

Drawing Number	Type	Scale (m)	Trench	Description
7:3	Section	1:10	2406	Section of possible ditch C.240607
7:4	Section	1:10	2406	Section of possible ditch C.240609
7:5	Section	1:10	2301	Section of C.230105
7:6	Section	1:10	2302	Northeast-facing section of ditch C.230205
7:7	Section	1:10	2304	Section of C.230405
7:8	Section	1:10	2303	Southwest-facing section of terminal ditch C.230305
8:1	Section	1:10	3102	North-facing section of pit C.310205
8:2	Section	1:10	3102	Southeast-facing section of pit C.310207
8:3	Section	1:10	3102	Southwest-facing section of pit C.310209

Appendix 1.4.2: Drawing Register (Phase 2)

Drawing Number	Type	Scale (m)	Trench	Description
1:1	Section	1:10	3003	Northwest-facing section of circular pit C.300305
1:2	Section	1:10	3006	Southeast-facing section of linear ditch C.300605
1:3	Section	1:10	3008	South-facing section of pit C.300805
1:4	Section	1:20	3001	North-facing section of natural deposit C.300105
1:5	Section	1:20	3001	North-facing section of linear C.300107
1:6	Section	1:20	3005	Northwest-facing section of furrow C.300509
1:7	Section	1:20	3005	Northwest-facing section of linear C.300511
1:8	Section	1:20	3008	East-facing section of linear ditch C.300807
2:1	Section	1:20	3005	South-facing section of ditch C.300505
2:2	Section	1:20	3013	Northwest-facing section of ditch C.301305
2:3	Section	1:20	3016	West-facing section of ditch C.301607
3:1	Section	1:20	3016	West-facing section of linear C.301605
3:2	Section	1:20	3011	West-facing section of furrow C.301105
3:3	Section	1:50	0217	South southwest-facing section of paleochannel C.021705
3:4	Section	1:20	0217	Northwest-facing section of modern deposit C.021711
3:5	Section	1:10	0217	Southeast-facing section of natural deposit C.021713
3:6	Section	1:50	0214	Northwest-facing section of alluvial deposit layer C.021404
4:1	Section	1:10	4813	Northeast-facing section of ditch C.481305
4:2	Section	1:10	4811	South-facing section of ditch C.481107
4:3	Section	1:20	4805	Southeast-facing section of ditch C.480505

Drawing Number	Type	Scale (m)	Trench	Description
5:1	Section	1:200	0213	Southwest-facing section of alluvial deposit layer C.021304
5:2	Section	1:10	2004	East-facing section of semi-sunken house C.200407
5:3	Section	1:10	2004	South-facing section of semi-sunken house C.200407
6:1	Section	1:20	4808	Southeast-facing section of ditch C.480805
6:2	Section	1:10	4811	Northeast-facing section of ditch C.481105
6:3	Section	1:10	4808	Southeast-facing section of gully C.480807
6:4	Section	1:10	4808	South-facing section of pit C.480809
6:5	Section	1:10	4808	West-facing section of pit C.480811
7:1	Section	1:10	0269	West southwest-facing section of burnt pit C.026905
7:2	Section	1:20	2003	South-facing section of ditch C.200307
7:3	Section	1:20	2107	South-facing section of ditch C.210705
7:4	Section	1:20	2107	North-facing section of ditch C.210708
8:1	Section	1:10	5102	Northwest-facing section of ditch C.510206
8:2	Section	1:10	5104	Northwest-facing section of paleochannel C.510407
8:3	Section	1:20	4801	Southeast-facing section of ditch C.480107
8:4	Section	1:20	4806	West-facing section of ditch C.480605
8:5	Section	1:10	4809	Southeast-facing section of pit/possible post hole C.480909 and possible post hole C.480911
8:6	Section	1:10	4809	South-facing section of pit C.480907
8:7	Section	1:10	4809	Southeast-facing section of ditch C.480915
9:1	Section	1:20	2107	North-facing section of ditch C.210712
9:2	Section	1:10	2101	Northwest-facing section of ditch C.210105

Drawing Number	Type	Scale (m)	Trench	Description
9:3	Section	1:20	2101	Northwest-facing section of ditch C.210107
10:1	Section	1:10	4809	Southeast-facing section of gully C.480916 and ditch C.480918
10:2	Section	1:10	4812	West-facing section of possible geological feature C.481204
10:3	Section	1:10	4809	Southwest-facing section of ditch C.480905
10:4	Section	1:10	4809	Southwest-facing section of gully terminus C.480921
10:5	Section	1:20	4813	East-facing section of ditch C.481307
10:6	Section	1:10	4814	Northwest-facing section of pit C.481405
10:7	Section	1:10	4810	Southwest-facing section of pit C.481005
10:8	Section	1:10	4805	Northeast-facing section of possible post hole C.480513
10:9	Section	1:10	4805	Northeast-facing section of pit C.480511
10:10	Section	1:10	4805	Southwest-facing section of possible post hole C.480509
10:11	Section	1:10	4805	West-facing section of possible feature C.480507
11:1	Section	1:20	5103	Southeast-facing section of paleochannel C.510304
11:2	Section	1:10	2109	North-facing section of furrow C.210907
11:3	Section	1:10	2109	North-facing section of pit C.210911
12:1	Section	1:10	2004	West-facing section of pit C.200418
12:2	Section	1:10	2004	Southwest-facing section of ditch C.200420
12:3	Section	1:20	2005	East-facing section of possible structure C.200506
12:4	Section	1:10	2108	Northeast-facing section of gully terminus C.210807
12:5	Section	1:10	2108	Northwest-facing section of pit C.210805
13:1	Section	1:20	2001	Southeast-facing section of ditch C.200105

Drawing Number	Type	Scale (m)	Trench	Description
13:2	Section	1:50	2003	Northwest-facing section of deposit C.200304, surface C.200305, ditch C.200307, ditch C.200309, surface C.200310 and ditch C.200313
13:3	Section	1:20	2003	Northwest-facing section of ditch C.200309
13:4	Section	1:10	2108	South-facing section of gully C.210810 and gully C.210812
13:5	Section	1:10	2108	Northeast-facing section of pit C.210814
13:6	Section	1:20	2108	Northwest-facing section of ditch C.210816
13:7	Section	1:20	2108	East-facing section of pit C.210818
13:8	Section	1:10	2108	Northeast-facing section of pit C.210822
14:1	Section	1:20	2004	East-facing section of layer C.200404, linear C.200409, linear C.200412, linear C.200414 and linear C.200416
14:2	Section	1:10	2005	West-facing section of gully C.200508
14:3	Section	1:20	2110	West southwest-facing section of linear C.211005
15:1	Section	1:20	2005	West-facing section of deposit C.200504 ditch C.200510
15:2	Section	1:20	2103	Southwest-facing section of linear C.210309
15:3	Section	1:20	2103	South-facing section of pit C.210307
15:4	Section	1:10	2103	Northwest-facing section of pit C.210315
15:5	Section	1:10	2103	Northwest-facing section of pit C.210317
16:1	Section	1:10	2205	Northeast-facing section of gully terminus C.220509
16:2	Section	1:10	2211	Southwest-facing section of ditch C.221107
16:3	Section	1:10	2211	Southwest-facing section of ditch C.221105
16:4	Section	1:10	2112	Northeast-facing section of ditch C.211205
16:5	Section	1:10	2110	Northeast-facing section of ditch C.211007

Drawing Number	Type	Scale (m)	Trench	Description
16:6	Section	1:10	2203	South-facing section of ditches C.220305 and C.220307
16:7	Section	1:20	2212	West-facing section of furrow C.221205
17:1	Section	1:20	2102	Northeast-facing section of ditch C.210209
17:2	Section	1:20	2102	Southwest-facing section of ditch C.210205
17:3	Section	1:20	2106	South-facing section of furrow C.210605
17:4	Section	1:10	2105	South southwest-facing section of linear C.210505
17:5	Section	1:10	2201	Northeast-facing section of linear C.220105
18:1	Section	1:20	2207	North-facing section of ditch C.220705
18:2	Section	1:20	2209	South southeast-facing section of linear C.220905, linear C.220907 and linear C.220909
19:1	Section	1:10	2203	Southeast-facing section of ditch C.220309, ditch C.220313, ditch C.220315 and ditch C.220318
20:1	Section	1:20	5001	Southwest-facing section of ditch terminus C.500105
20:2	Section	1:10	4902	Southwest south-facing section of C.490205
21:1	Section	1:20	2905	ESE-facing section of C.290505
21:2	Section	1:20	2905	NW-facing section of C.290507
21:3	Section	1:10	2905	SSE-facing section of C.290510

Appendix 1.4.3: Drawing Register (Phase 3)

Drawing Number	Type	Scale (m)	Trench	Description
1:1	Section	1:10	1602	South-facing section of ditch C.160203
1:2	Section	1:10	1801	Northeast-facing section of pit C.180102

Appendix 1.5: Photograph Register

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1	250505	N	mid-ex	2505	1 x 2	linear feature
2	250505	N	section 1-1	2505	1 x 2	linear feature
3	250507	NW	section 1-2	2505	1 x 1	pit
4	250501, 250507, 250503	W	N/A	2505	1 x 2	general stratigraphy of trench
5	250503	N	trench (final)	2505	1 x 2	end of trench 2505
6	250503	N	trench (final)	2505	1 x 2	end of trench 2505
7	230211	SW	plan	2302	1 x 0.5	linear
8	230211	SW	section	2302	1 x 0.5	linear
9	250203	W	pre-ex	2502	1 x 0.5	post hole/pit
10	250207	S	post-ex section	2502	1 x 0.5	linear
11	250207	S	post-ex plan	2502	1 x 0.5	linear
12	250205	NE	post-ex section	2502	1 x 0.5	post hole/pit
13	250205	NE	post-ex plan	2502	1 x 0.5	post hole/pit
14	250205	W	post-ex section	2502	1 x 0.5	post hole/pit
15	13	S	pre-ex	N/A	1 x 1	linear
16	1, 2, 3	E	N/A	N/A	1 x 2	general stratigraphy of trench
17	250203	S	trench (final)	2502	1 x 2	end of trench 2505
18	N/A	N/A	N/A	N/A	N/A	NO PHOTO
19	250101, 250107, 250103	W	N/A	2501	1 x 2	general stratigraphy of trench
20	250103	N	N/A	2501	1 x 2	end of trench 2501

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
21	250305	E	section	2503	0.5 x 1	linear
22	250305	E	plan	2503	0.5 x 1	linear
23	250405	S	section	2504	1 x 1	linear 250405
24	250407	SW	section	2504	1 x 1	pit
25	250407	SW	section	2504	1 x 1	pit
26	250301, 250302, 250303	W	N/A	2503	1 x 2	general stratigraphy of trench
27	250303	N	trench (final)	2503	1 x 2	end of trench 2503
28	250303	N	trench (final)	2503	1 x 2	end of trench 2503
29	250401, 250402, 250403	W	post-ex	2504	1 x 2	top, subsoil and natural
30	250403	N	post-ex	2504	1 x 2	trench final
31	260204, 260205	SE	pre-ex	2602	1 x 0.5	pit
32	N/A	N/A	N/A	N/A	N/A	NO PHOTO
33	260206, 260207	SE	pre-ex	2602	1 x 0.5	possible posthole
34	260204, 260205	SE	mid-ex section	2602	1 x 0.5	pit, section
35	260204, 260205	SE	mid-ex	2602	1 x 0.5	pit, section
36	260206, 260207	SE	mid-ex section	2602	1 x 1	possible posthole (oven cut)
37	260101, 260102, 260103	SW	layer	2601	1 x 2	general stratigraphy of 2601
38	260105	SE	mid-ex section	2601	0.5 x 1	gully
39	260105	SE	mid-ex section	2601	0.5 x 1	gully
40	260103	NW	post-ex	2602	1 x 2	trench (final)
41	260103	NW	post-ex	2602	1 x 2	trench (final)

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
42	260701, 260702, 260703	SW	layer	2607	1 x 2	general stratigraphy of 2602
43	260707	NEE	mid-ex section	2601	0.5 x 1	section of linear feature (plough furrow)
44	260305	SSW	mid-ex section	2603	0.5 x 1	section of [360305]
45	260103	W	post-ex	2601	1 x 2	trench (final)
46	260401, 260402, 260403	NW	layer	2604	1 x 2	general stratigraphy of 2604
47	260403	NE	post-ex	2604	1 x 2	trench (final)
48	260308	NW	section	2603	1	furrow
49	260501, 260502, 260503	SE	layer	2605	1 x 2	general stratigraphy of 2605
50	260305	N/A	N/A	2603	1 x 1	VOID
51	260307	N/A	N/A	2603	2 x 1	ditch
52	260307	N/A	N/A	2603	2 x 1	ditch
53	260307	N/A	N/A	2603	2 x 1	ditch
54	260301, 260302, 260303	S	layer	2603	1 x 2	general stratigraphy of 2603
55	260505	E	mid-ex	2605	0.5 x 1	gully section
56	260505	E	mid-ex	2605	0.5 x 1	gully section
57	260501, 260502, 260503	SE	layer	2605	1 x 2	general stratigraphy of 2605
58	260309	NNW	mid-ex	2603	1 x 2	section of furrow
59	260303	NW	post-ex	2603	1 x 2	trench final
60	260503	W	post-ex	2605	1 x 2	trench final
61	N/A	N/A	N/A	N/A	N/A	NO PHOTO (?)
62	260701, 260702, 260703	SE	layer	2607	1 x 2	general stratigraphy

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
63	260703	SW	post-ex	2607	1 x 2	trench final
64	260601, 260602, 260603	SE	layer	2606	1 x 2	general stratigraphy
65	260603	SW	post-ex	2606	1 x 2	trench final
66	260901, 260902, 260903	N	layer	2609	1 x 2	general stratigraphy
67	260903	E	post-ex	2609	1 x 2	trench final
68	261101, 261102, 261103	SSW	layer	2611	1 x 2	general stratigraphy
69	261103	NW	post-ex	2611	1 x 2	trench final
70	261003	S	post-ex	2610	1 x 2	lenses of gravels manual deposits
71	261003	SE	post-ex	2610	1 x 2	lenses of gravels manual deposits
72	261003	E	post-ex	2610	1 x 2	lenses of gravels manual deposits
73	261001, 261002, 261003	E	layer	2610	1 x 2	general stratigraphy
74	261003	E	post-ex	2610	1 x 2	trench final
75	260801, 260802, 260803	E	layer	2608	1 x 2	general stratigraphy
76	260808	NNW	post-ex	2608	1 x 2	trench final
77	3A	NE	post-ex	N/A	1 x 2	location of geophysical anomaly 3A
78	3A	NE	post-ex	N/A	1 x 2	location of geophysical anomaly 3A
79	260303	NW	post-ex	2603	1 x 2	location of geophysical anomaly 1
80	260303	NW	post-ex	2603	1 x 2	location of geophysical anomaly 1
81	260303	NW	post-ex	2603	1 x 2	location of geophysical anomaly 1

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
82	260303	SE	post-ex	2603	1 x 2	location of geophysical anomaly 1
83	270303, 270304	NE	post-ex	2703	0.5 x 1	SW-facing section of linear
84	270303, 270304	NE	post-ex	2703	0.5 x 1	SW-facing section of linear
85	270305, 270304	NE	post-ex	2703	0.5 x 1	SW-facing section
86	270305, 270304	NE	post-ex	2703	0.5 x 1	SW-facing section
87	260101, 260102, 260103 250101, 250102, 250103	ESE	layer	2601, 2501	2 x 1	general stratigraphy 2701 wrong number
88	260103	NNE	post-ex	2601	2 x 1	trench final 2701 wrong number
89	270201, 270202, 270203	SE	layer	2702	2 x 1	general stratigraphy
90	270201, 270202, 270203	SE	layer	2702	2 x 1	general stratigraphy
91	270203	NE	post-ex	2702	2 x 1	trench final
92	2, 7, 3, 4	N/A	finds photo	N/A	0.1	cu alloy fittings for canvas bag
93	2, 7, 3, 4	N/A	finds photo	N/A	0.1	cu alloy fittings for canvas bag
94	2, 7, 3, 4	N/A	finds photo	N/A	0.1	cu alloy fittings for canvas bag
95	2, 7, 3, 4	N/A	finds photo	N/A	0.1	cu alloy fittings for canvas bag
96	2, 7, 3, 4	N/A	finds photo	N/A	0.1	cu alloy fittings for canvas bag
97	N/A	N/A	N/A	N/A	N/A	VOID
98	2, 7, 3, 4	N/A	finds photo	N/A	0.1	Iron can - w/ animal bone on one
99	2, 7, 3, 4	N/A	finds photo	N/A	0.1	Iron can - w/ animal bone on one
100	2, 7, 3, 4	N/A	finds photo	N/A	0.1	creams etc
101	2, 7, 3, 4	N/A	finds photo	N/A	0.1	glass bottle

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
102	2, 7, 3, 4	N/A	finds photo	N/A	0.1	newspaper frags
103	2, 7, 3, 4	N/A	finds photo	N/A	0.1	newspaper frags
104	261105	NE	post-ex	2611	2 x 1	S-facing section of ditch
105	270101, 270102, 270103	E	layer	2701	2 x 1	general stratigraphy
106	270103	WSW	post-ex	2701	2 X 1	trench final
107	270303, 270307	SW	section	2703	0.5	shallow gully/part of field boundary
108	270307	SW	section	2703	0.5	shallow gully/part of field boundary
109	270307	SW	location	2703	0.5	shallow gully/part of field boundary
110	270309	SW	section	2703	2 x 1	field boundary
111	270307, 270309	SW	location	2703	2 x 1	features of 7 and 9
112	G2	W	location	2606	2 x 1	location of geophysical anomaly
113	N/A	N/A	N/A	N/A	N/A	VOID
114	N/A	N/A	N/A	N/A	N/A	VOID
115	G2	NW	location	2606	2	location of geophysical anomaly
116	N/A	N/A	N/A	N/A	N/A	VOID
117	G2	NW	location	2606	2 x 1	location of geophysical anomaly
118	N/A	N/A	N/A	N/A	N/A	VOID
119	260603	WSW	trench	2606	2 x 1	trench final
120	270301, 270302, 270303	N	layer	2703	2 x 1	general stratigraphy
121	270303	E	post-ex	2703	2 x 1	trench final
122	280205	ESE	post-ex	2802	2 x 1	post-ex (furrow)

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
123	280205	S	post-ex	2802	2 x 1	post-ex (furrow)
124	280201, 280202, 280203	E	layer	2802	2 x 1	general stratigraphy
125	280203	S	trench	2802	2 x 1	trench final
126	240205	SW	post-ex	2402	2 x 1	post-ex curvilinear feature C.240205
127	240209	E	post-ex	2402	2 x 1	pit C.240209
128	240205	E	section	2402	1 x 1	E-facing section of ditch C.240405
129	240305	E	section	2403	1 x 1	E-facing section of ditch C.240405
130	240105	W	section	2401	1 x 1	section of pit C.240105
131	240105	W	section	2401	1 x 1	section of pit C.240105
132	240107	N	section	2401	1 x 1	section of pit
133	240107	N	section	2401	1 x 1	section of pit
134	240407	E	section	2404	1 x 1	section of ditch
135	240407	E	section	2404	1 x 1	section of ditch
136	240110	E	post-ex	2401	2 x 1	E-facing section of modern field boundary C.240110
137	240110	E	post-ex	2401	2 x 1	E-facing section of modern field boundary C.240110
138	240405	E	location	2404	2 x 1	location/plan ditch C.240405
139	240405	E	location	2404	2 x 1	location/plan ditch C.240405
140	240405	E	location	2404	2 x 1	location/plan ditch C.240405
141	240405	E	location	2404	2 x 1	location/plan of ditch C.240405
142	240112	E	post-ex	2401	1 x 1	section of C.240112

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
143	240112	E	post-ex	2401	1 x 1	section of C.240112
144	240505	N	post-ex	2405	1 x 1, 1 x 0.5	section of C.240505
145	240505	N	post-ex	2405	1 x 1, 1 x 0.5	section of C.240505
146	240505	N	post-ex	2405	1 x 1, 1 x 0.5	section of C.240505
147	240505	N	post-ex	2405	1 x 1, 1 x 0.5	section of C.240505
148	N/A	N/A	N/A	N/A	N/A	VOID
149	N/A	N/A	N/A	N/A	N/A	VOID
150	240507	E	post-ex	2405	1 x 1, 1 x 0.5	section of C.240507
151	240507	E	post-ex	2405	1 x 1, 1 x 0.5	section of C.240507
152	240507	E	post-ex	2405	1 x 1, 1 x 0.5	section of C.240507
153	N/A	N/A	N/A	N/A	N/A	VOID
154	240305	S	post-ex	2403	1 x 1	section of C.240305
155	240305	S	post-ex	2403	1 x 1	section of C.240305
156	240105	N/A	finds photo	2401	N/A	pot - iron age
157	240113	N/A	finds photo	2401	N/A	flint flake
158	240113	N/A	finds photo	2401	N/A	pot - prehistoric
159	N/A	N/A	finds photo	N/A	N/A	stone hone
160	240114	NW	post-ex	2401	2 x 1, 1 x 0.5	section of ditch C.240114
161	240114	W	post-ex	2401	2 x 1, 1 x 0.5	section of ditch C.240114 in plan
162	240407	E	section	2404	1 x 0.5	section of pit C.240407
163	240407	E	section	2404	1 x 0.5	section of pit C.240407

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
164	240409	NE	section	2404	1 x 0.5	section of pit C.240409
165	240409	NE	section	2404	1 x 0.5	section of pit C.240409
166	240401, 240402, 240403	SW	layer	2402	2 x 1	general stratigraphy of 2402
167	240403	SE	post-ex	2402	2 x 1	end of trench final 2402
168	240509	S	post-ex	2405	1 x 1, 1 x 0.5	section of C.240509
169	240509	S	post-ex	2405	1 x 1, 1 x 0.5	section of C.240509
170	240505, 240507	NE	post-ex	2405	1 x 1, 1 x 0.5	section of ditches C.240505 and C.240507
171	240505, 240507	SW	post-ex	2405	1 x 1, 1 x 0.5	section of ditches C.240505 and C.240507
172	240101, 240102, 240103	E	layer	2401	2 x 1	general stratigraphy of 2401
173	240101, 240102, 240103	E	layer	2401	2 x 1	general stratigraphy of 2401
174	240103	S	post-ex	2401	2 x 1	end of trench (final) 2401
175	240401, 240402, 240403	N	layer	2404	2 x 1	general stratigraphy of 2404
176	240401, 240402, 240403	N	layer	2404	2 x 1	general stratigraphy of 2404
177	240403	W	post-ex	2404	2 x 1	end of trench (final) 2404
178	240407	SE	post-ex	2403	1 x 0.5	section of C.240307
179	240409, 240411	SE	post-ex	2403	2 x 0.5	sections of C.240309 and C.240311
180	240409	SE	post-ex	2403	1 x 0.5	section of C.240309
181	N/A	N/A	N/A	N/A	N/A	VOID
182	N/A	N/A	N/A	N/A	N/A	VOID
183	N/A	N/A	N/A	N/A	N/A	VOID
184	240311	S	post-ex	2403	1 x 0.5	section of C.240311

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
185	N/A	N/A	N/A	N/A	N/A	VOID
186	240511	S	N/A	2405	1 x 1	section C.240511
187	240511	S	N/A	2405	1 x 1	section C.240511
188	240511	S	N/A	2405	1 x 0.5, 2 x 1	section C.240511
189	240605	N	post-ex	2406	1 x 0.5, 2 x 1	north-facing section of subcircular ditch C.240605
190	240605	S	post-ex	2406	1 x 0.5, 2 x 1	south-facing section of subcircular ditch C.240605
191	240607	SW	section	2406	1 x 1	section C.240607
192	240607	SW	section	2406	1 x 1	section C.240607
193	240609	NE	section	2406	1 x 1	section C.240609
194	240609	NE	section	2406	1 x 1	section C.240609
195	240301, 240302, 240303	SE	layer	2403	2 x 1	general stratigraphy of 2403
196	240303	NE	post-ex	2403	2 x 1	end of trench (final) 2403
197	240501, 240502, 240503	S	layer	2405	2 x 1	general stratigraphy of 2405
198	240503	W	post-ex	2405	2 x 1	end of trench (final) 2405
199	240207	W	post-ex	2402	2 x 1	section of C.240207
200	240207	W	post-ex	2402	2 x 1	section of C.240207
201	240601, 240602, 240603	NW	layer	2406	2 x 1	general stratigraphy 2406 (board has wrong number)
202	240603	W	post-ex	2406	2 x 1	general stratigraphy 2406 (board has wrong number)
203	240601, 240602, 240603	NW	post-ex	2406	2 x 1	general stratigraphy

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
204	240603	W	post-ex	2406	2 x 1	final trench
205	310103	E	post-ex	3101	1 x 1	trench final
206	310103	E	post-ex	3101	1 x 1	trench final
207	310101, 310102, 310103	N	layer	3101	1 x 1	section (trench)
208	310303	SSW	post-ex	3103	1 x 1	trench final
209	310301, 310302, 310303	ESE	layer	3103	1 x 1	WNW-facing section (trench)
210	310204, 310205	S	post-ex	3102	1 x 1	N-facing section of pit
211	310207, 310209	N	post-ex	3102	1 x 1	S-facing section of pits C.310207 and C.310209
212	N/A	N/A	N/A	3102	1 x 1	rodent bone from natural
213	N/A	SE	N/A	3102	1 x 1	rodent activity
214	310201, 310202, 310203	E	layer	3102	1 x 1	general stratigraphy of 3102
215	310203	N	post-ex	3102	1 x 1	final trench photo
216	270304	SW	post-ex	2703	1 x 1	section of C.270304
217	270304	SE	post-ex	2703	1 x 1	section of C.270304
218	270304	SE	finds photo	2703	1 x 0.1	finds retrieved from C.27034
219	270304	SE	finds photo	2703	1 x 0.1	finds retrieved from C.27034
220	270304	SW	finds photo	2703	1 x 0.1	finds retrieved from C.27034
221	270304	NE	finds photo	2703	1 x 0.1	finds retrieved from C.27034
222	270304	NE	finds photo	2703	1 x 0.1	finds retrieved from C.27034
223	N/A	E	layer	2604	1 x 1	geophysical anomaly - palaeochannel
224	N/A	E	layer	2604	1 x 1	geophysical anomaly - palaeochannel

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
225	N/A	E	layer	2604	1 x 1	geophysical anomaly - palaeochannel
226	280403	E	post-ex	2804	1 x 1	final trench photo of 2804
227	280401, 280402, 280403	S	layer	2804	1 x 1	general stratigraphy of 2804
228	280303	E	post-ex	2803	1 x 1	final trench photo of 2803
229	280301, 280302, 280303	S	layer	2803	1 x 1	general stratigraphy of 2803
230	280103	S	post-ex	2801	1 x 1	final trench photo of 2801
231	280101, 280102, 280103	NE	layer	2801	1 x 1	general stratigraphy of 2801
232	240105	W	post-ex	2401	1 x 1	section of C.240105 (further excavated to 1m)
233	240207	NE	post-ex	2402	1 x 1	section of C.240207 (further excavated to 1m)
234	240405	W	post-ex	2404	1 x 1	section of C.240405 (further excavated to 1m)
235	240505	W	post-ex	2405	1 x 1	section of C.240505 (further excavated to 1m)
236	240505, 240507	W	post-ex	2405	2 x 1	sections of C.240505 and C.240507 (further excavated to 1m)
237	240505, 240507	E	post-ex	2405	2 x 1	sections of C.240505 and C.240507 (further excavated to 1m)
238	240507	E	post-ex	2405	1 x 1	section of C.240507 (further excavated to 1m)
239	230305	SW	pre-ex	2303	2 x 1	pre-ex of ditch terminus C.230305
240	230305	SW	pre-ex	2303	2 x 1	pre-ex of ditch terminus C.230305
241	230305	SW	pre-ex	2303	2 x 1	pre-ex of ditch terminus C.230305

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
242	230105	SE	post-ex	2301	1 x 1	section of C.230105
243	230105	SE	post-ex	2301	1 x 1	section of C.230105
244	230205	NE	post-ex	2302	1 x 1	section of C.230205
245	230205	NE	post-ex	2302	1 x 1	section of C.230205
246	230705	NE	post-ex	2703	2 x 1	section of C.270305
247	230705	NE	post-ex	2703	2 x 1	section of C.270305
248	230103	N	post-ex	2301	2 x 1	final trench photo of 2301
249	230101, 230102, 230103	SE	layer	2301	2 x 1	general stratigraphy of 2301
250	230201, 230202, 230203	E	layer	2302	2 x 1	general stratigraphy of 2302
251	230203	N	post-ex	2302	2 x 1	final trench photo of 2302
252	230301, 230302, 230303	W	layer	2303	2 x 1	general stratigraphy 2303
253	230405	SE	post-ex	2304	1 x 1	section of C.230405
254	230405	SE	post-ex	2304	1 x 1	section of C.230405
255	230305	SW	post-ex	2303	1 x 1	section of ditch terminus C.230305
256	230305	SW	post-ex	2303	1 x 1	section of ditch terminus C.230305
257	230303	SE	post-ex	2303	2 x 1	final trench photo of 2303
258	230505	NW	post-ex	2305	1 x 1	section of C.230505
259	230505	NW	post-ex	2305	2 x 1	section of C.230505
260	230401, 230402, 230403	S	layer	2304	2 x 1	linear feature
261	230403	E	post-ex	2304	2 x 1	linear feature
262	230501, 230502, 230503	W	layer	2305	2 x 1	pit

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
263	230507	S	post-ex	2305	2 x 1	general stratigraphy of trench
264	230507	S	post-ex	2305	2 x 1	end of trench 2505
265	230503	S	post-ex	2305	2 x 1	end of trench 2505
427	1, 2, 3	N/A	Layer	5101	1 x2	General stratigraphy of trench
428	N/A	N/A	N/A	N/A	N/A	VOID
429	3	SW	Post-ex	5101	1 x2	Final trench photo
430	3	NE	Post-ex	5101	1 x2	Final trench photo
431	1, 2, 3	SE	Layer	5101	1 x2	General stratigraphy of trench with sondage
432	3	SW	Post-ex	5102	1 x2	Final trench photo
433	3	NE	Post-ex	5102	1 x2	Final trench photo with sondage
434	1, 2, 3	ESE	Layer	5102	1 x2	General stratigraphy of trench
435	1, 2, 3	SSE	Layer	5103	1 x2	General stratigraphy of trench
436	3	WSW	Post-ex	5103	1 x2	Final trench photo
437	3	NE	Post-ex	5103	1 x2	Final trench photo
438	1, 2, 3	SE	Layer	5103	1 x2	General stratigraphy of trench with paleochannel
439	1, 2, 3	SSE	Layer	5103	1 x2	General stratigraphy of trench with paleochannel
440	3	SW	Post-ex	5104	1 x2	Final trench photo
441	3	NE	Post-ex	5104	1 x2	Final trench photo with sondage
442	1, 2, 3	ESE	Layer	5104	1 x2	General stratigraphy of trench

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
443	4, 5	WNW	Mid-ex	5102	1 x1	Section of ditch C.510206
444	4, 5	WNW	Mid-ex	5102	1 x1	Section of ditch C.510206
445	3	SW	Post-ex	4801	1 x2	Final trench photo
446	3	NE	Post-ex	4801	1 x2	Final trench photo
447	1, 2, 3	SE	Layer	4801	1 x2	General stratigraphy of trench with sondage
448	5	SE	Mid-ex	5104	1 x2	Section of C.510405
449	6	NW	Mid-ex	5104	1 x2	Section of paleochannel C.510407
450	3	SW	Post-ex	4802	1 x2	Final trench photo
451	1, 2, 3	SE	Layer	4802	1 x2	General stratigraphy of trench with sondage
452	3	NE	Post-ex	4802	1 x2	Final trench photo
453	3	SE	Post-ex	4803	1 x2	Final trench photo
454	N/A	ENE	Pre-ex	4803	1 x2	Circular feature
455	N/A	NE	Pre-ex	4803	1 x2	Linear
456	N/A	NE	Pre-ex	4803	1 x2	Paleo channel
457	1, 2, 3	SW	Layer	4803	1 x2	General stratigraphy of trench with sondage
458	3	NW	Post-ex	4803	1 x2	Final trench photo
459	4, 5, 6	SE	Mid-ex	4801	1 x2	Section of ditch C.480107
460	4, 5, 6	E	Mid-ex	4801	1 x2	Section of ditch C.480107
461	4, 5, 6	SE	Mid-ex	4801	1 x2	Section of ditch C.480107

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
462	3	SSE	Post-ex	4806	1 x2	Final trench photo
463	4	SW	Pre-ex	4806	1 x2	Ditch C.480605
464	3	N	Post-ex	4806	1 x2	Final trench photo
465	1, 2, 3	ENE	Layer	4806	1 x2	General stratigraphy of trench with sondage
466	3	NW	Post-ex	4807	1 x2	Final trench photo
467	1, 2, 3	SSW	Layer	4807	1 x2	General stratigraphy of trench with sondage
468	3	ESE	Post-ex	4807	1 x2	Final trench photo
469	3	SW	Post-ex	4804	1 x2	Final trench photo
470	1, 2, 3	SE	Layer	4804	1 x2	General stratigraphy of trench with sondage
471	3	ENE	Post-ex	4804	1 x2	Final trench photo
472	4	W	Mid-ex	4806	1 x2	Section of ditch C.480605
473	4	W	Mid-ex	4806	1 x2	Section of ditch C.480605
474	3	S	Post-ex	4809	1 x2	Final trench photo
475	1, 2, 3	E	Layer	4809	1 x2	General stratigraphy of trench with sondage
476	3	N	Post-ex	4809	1 x2	Final trench photo
477	3	E	Post-ex	4812	1 x2	Final trench photo
478	1, 2, 3	S	Layer	4812	1 x2	General stratigraphy of trench with sondage
479	3	W	Post-ex	4812	1 x2	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
480	8, 9	SE	Pre-ex	4809	1 x1	Pit C.480909
481	10, 11	SSE	Pre-ex	4809	0.3 x1	Post hole C.480911
482	8, 9, 10, 11	SSE	Mid-ex	4809	0.3 x1 & 1 x1	Section of pit C.480909 and post hole C.480911
483	8, 9, 10, 11	SSE	Mid-ex	4809	0.3 x1 & 1 x1	Section of pit C.480909 and post hole C.480911
484	7	S	Mid-ex	4809	0.3 x1	Section of pit C.480907
485	7	S	Mid-ex	4809	0.3 x1	Section of pit C.480907
486	15	SSW	Finds	4809	0.3 x1	Finds in situ retrieved from ditch C.480915
487	3	SSE	Post-ex	4813	2 x1	Final trench photo
488	1, 2, 3	ENE	Layer	4813	2 x1	General stratigraphy of trench with sondage
489	3	NW	Post-ex	4813	2 x1	Final trench photo
490	3	WNW	Post-ex	4814	2 x1	Final trench photo
491	3	E	Post-ex	4814	2 x1	Final trench photo
492	1, 2, 3	SSW	Layer	4814	2 x1	General stratigraphy of trench with sondage
493	3	E	Post-ex	4815	2 x1	Final trench photo
494	3	W	Post-ex	4815	2 x1	Final trench photo
495	1, 2, 3	S	Layer	4815	2 x1	General stratigraphy of trench with sondage
496	3	ESE	Post-ex	4811	2 x1	Final trench photo
497	3	W	Post-ex	4811	1 x1	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
498	1, 2, 3	S	Layer	4811	2 x1	General stratigraphy of trench with sondage
499	13, 14, 15	ESE	Mid-ex	4809	1 x1	Section of ditch C.480915
500	13, 14, 15	ESE	Mid-ex	4809	1 x1	Section of ditch C.480915
501	3	ENE	Post-ex	4810	2 x1	Final trench photo
502	1, 2, 3	SSE	Layer	2211	1 x1	General trench photo
503	1, 2, 3	WSW	Layer	2207	1 x1	General trench photo
504	1, 2, 3	NNW	Layer	2204	1 x1	General trench photo
505	1, 2, 3	NE	Layer	2202	1 x1	General trench photo
506	1, 2, 3	NNE	Layer	2201	1 x1	General trench photo
507	1, 2, 3	ESE	Layer	2203	1 x1	General trench photo
508	1, 2, 3	SSE	Layer	2206	1 x1	General trench photo
509	1, 2, 3	NNW	Layer	2210	1 x1	General trench photo
510	1, 2, 3	NNW	Layer	2210	1 x1	General trench photo
511	1, 2, 3	SW	Layer	2205	1 x1	General trench photo
512	1, 2, 3	S	Layer	2209	1 x1	General trench photo
513	1, 2, 3	W	Layer	2208	1 x1	General trench photo
514	1, 2, 3	W	Layer	2208	1 x1	General trench photo
515	1, 2, 3	E	Layer	2212	1 x1	General trench photo
516	1, 2, 3	E	Layer	2213	1 x1	General trench photo
517	4, 5	WNW	Mid-ex	2205	1 x 0.3	Section of gully C.220505
518	6, 7	WNW	Mid-ex	2205	1 x 0.3	Section of gully C.220507

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
519	8, 9	NE	Mid-ex	2205	1 x 0.5	Section of gully terminus C.220509
520	4, 5	WSW	Mid-ex	2211	1 x1	Section of ditch C.221105
521	6, 7	WSW	Mid-ex	2211	1 x1	Section of ditch C.221107
760	17, 19	SE	Mid-ex	4809	1 x1	Section of gully C.480916 and ditch C.480918
761	17, 19	SE	Mid-ex	4809	1 x1	Section of gully C.480916 and ditch C.480918
762	3	SW	Post-ex	4808	1 x1	Final trench photo
763	3	NE	Post-ex	4808	1 x1	Final trench photo
764	3	SW	Post-ex	4805	1 x1	Final trench photo
765	3	NE	Post-ex	4805	1 x1	Final trench photo
766	3	NNE	Post-ex	4804	1 x1	Final trench photo
767	3	SSW	Post-ex	4804	1 x1	Final trench photo
768	3	SSW	Post-ex	4810	1 x1	Final trench photo
769	3	NNW	Post-ex	4810	1 x1	Final trench photo
770	3	W	Post-ex	4811	1 x1	Final trench photo
771	3	ENE	Post-ex	4811	1 x1	Final trench photo
772	3	SE	Post-ex	4813	1 x1	Final trench photo
773	3	NW	Post-ex	4813	1 x1	Final trench photo
774	3	W	Post-ex	4814	1 x1	Final trench photo
775	3	NE	Post-ex	4814	1 x1	Final trench photo
776	3	NE	Post-ex	4815	1 x1	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
777	3	W	Post-ex	4815	1 x1	Final trench photo
778	4, 5	W	Post-ex	4812	0.5 x1	Possible geological feature C.481204
779	4	N	Post-ex	4812	0.5 x1	Possible geological feature C.481204
780	4, 12, 22	SW	Mid-ex	4809	1 x1	Section of ditch C.480905
781	4, 12, 22	SW	Mid-ex	4809	1 x1	Section of ditch C.480905
782	20	ESE	Mid-ex	4809	0.5 x1	Section of gully terminus C.480921
783	1, 2, 3	N/A	Layer	4814	1 x2	General stratigraphy of trench
784	6	E	Mid-ex	4813	1 x1	Section of ditch C.481307
785	6	E	Mid-ex	4813	1 x2	Section of ditch C.481307
786	6, 7	E	Mid-ex	4813	1 x2	Section of ditch C.481307
787	1, 2, 3	N/A	Layer	4813	1 x1	General stratigraphy of trench
788	4	WNW	Mid-ex	4814	0.5 x1	Section of pit C.481405
789	1, 2, 3	S	Layer	4815	1 x2	General stratigraphy of trench
790	1, 2, 3	SW	Layer	4811	1 x2	General stratigraphy of trench
791	6	S	Mid-ex	4811	0.5 x1	Section of ditch C.481107
792	6	S	Mid-ex	4811	0.5 x1	Section of ditch C.481107
793	1, 2, 3	SE	Layer	4810	1 x1 & 0.5 x1	General stratigraphy of trench
794	1, 2, 3	SE	Layer	4808	1 x2	General stratigraphy of trench
795	1, 2, 3	SE	Layer	4805	1 x2	General stratigraphy of trench
796	4, 5	S	Mid-ex	4810	1 x1	Section of pit C.481005
797	4	SSE	Mid-ex	4808	1 x1	Section of ditch C.480805

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
798	4	SSE	Mid-ex	4808	1 x1	Section of ditch C.480805
799	4	SSE	Mid-ex	4808	1 x2	Section of ditch C.480805
800	10, 11, 12, 13	ENE	Mid-ex	4805	1 x1	Section of pit C.480511 and post hole C.480513
801	10, 11, 12, 13	ENE	Mid-ex	4805	1 x1	Section of pit C.480511 and post hole C.480513
802	9	SW	Mid-ex	4805	0.5 x1	Section of post hole C.480509
803	9	WSW	Mid-ex	4805	0.5 x1	Section of post hole C.480509
804	6	SW	Mid-ex	4805	0.5 x1	Section of possible feature C.480507
805	6	WNW	Mid-ex	4805	0.5 x1	Section of possible feature C.480507
806	4	NE	Mid-ex	4811	1 x1	Section of ditch C.481105
807	4	NE	Mid-ex	4813	0.5 x1	Section of ditch C.481305
808	7	SE	Mid-ex	4808	1 x1	Section of gully C.480807
809	7	SE	Mid-ex	4808	1 x1 & 0.5 x1	Section of gully C.480807
810	8, 9	SE	Mid-ex	4808	1 x1 & 0.5 x1	Section of pit C.480809
811	10, 11	W	Mid-ex	4808	1 x1	Section of pit C.480811
812	5	SE	Mid-ex	4805	1 x2	Section of ditch C.480504
813	5	SE	Mid-ex	4805	1 x2	Section of ditch C.480504
814	5	SE	Mid-ex	4805	1 x2	Section of ditch C.480504
815	3	NNE	Post-ex	0611	1 x1	Final trench photo
816	3	SW	Post-ex	0611	1 x1	Final trench photo
817	3	NE	Post-ex	0622	1 x1	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
818	3	SW	Post-ex	0622	1 x1	Final trench photo
819	3	SSE	Post-ex	0621	1 x1	Final trench photo
820	3	NW	Post-ex	0621	1 x1	Final trench photo
821	3	NW	Post-ex	0613	1 x1	Final trench photo
822	3	SE	Post-ex	0613	1 x1	Final trench photo
823	3	SSE	Post-ex	0613	1 x1	Final trench photo
824	3	NNW	Post-ex	0612	1 x1	Final trench photo
825	3	SW	Post-ex	0615	1 x1	Final trench photo
826	3	NE	Post-ex	0615	1 x1	Final trench photo
827	3	SE	Post-ex	0624	1 x1	Final trench photo
828	3	ENE	Post-ex	0624	1 x1	Final trench photo
829	3	SE	Post-ex	0633	1 x1	Final trench photo
830	3	WNW	Post-ex	0633	1 x1	Final trench photo
831	3	W	Post-ex	0623	1 x1	Final trench photo
832	3	E	Post-ex	0623	1 x1	Final trench photo
833	3	SSW	Post-ex	0634	1 x1	Final trench photo
834	3	NNE	Post-ex	0634	1 x1	Final trench photo
835	3	SW	Post-ex	0635	1 x1	Final trench photo
836	3	NNE	Post-ex	0635	1 x1	Final trench photo
837	1, 2, 3	SSE	Layer	0635	1 x1	General stratigraphy of trench
838	1, 2, 3	SE	Layer	0634	1 x1	General stratigraphy of trench

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
839	1, 2, 3	SSW	Layer	0633	1 x1	General stratigraphy of trench
840	1, 2, 3	N	Layer	0623	1 x1	General stratigraphy of trench
841	1, 2, 3	SSE	Layer	0611	1 x1	General stratigraphy of trench
842	1, 2, 3	ESE	Layer	0639	1 x1	General stratigraphy of trench
843	3	SW	Post-ex	0639	1 x1	Final trench photo
844	3	NE	Post-ex	0639	1 x1	Final trench photo
845	1, 2, 3	ESE	Layer	0653	1 x1	General stratigraphy of trench
846	3	SE	Post-ex	2102	1 x1	Final trench photo
847	3	NW	Post-ex	2102	1 x1	Final trench photo
848	3	W	Post-ex	2107	1 x1	Final trench photo
849	3	E	Post-ex	2107	1 x1	Final trench photo
850	3	SW	Post-ex	2108	1 x1	Final trench photo
851	3	NE	Post-ex	2108	1 x1	Final trench photo
852	3	E	Post-ex	2109	1 x1	Final trench photo
853	3	W	Post-ex	2109	1 x1	Final trench photo
854	3	SE	Post-ex	2110	1 x1	Final trench photo
855	3	NW	Post-ex	2110	1 x1	Final trench photo
856	3	SW	Post-ex	2111	1 x1	Final trench photo
857	3	NNE	Post-ex	2111	1 x1	Final trench photo
858	3	NNW	Post-ex	2112	1 x1	Final trench photo
859	3	SSE	Post-ex	2112	1 x1	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
860	3	W	Post-ex	2114	1 x1	Final trench photo with sondage
861	3	E	Post-ex	2114	1 x1	Final trench photo
862	3	SE	Post-ex	2113	1 x1	Final trench photo with sondage
863	3	WNW	Post-ex	2113	1 x1	Final trench photo
864	3	NE	Post-ex	2115	1 x1	Final trench photo
865	3	SW	Post-ex	2115	1 x1	Final trench photo with sondage
866	3	N	Post-ex	2213	1 x1	Final trench photo
867	3	S	Post-ex	2213	1 x1	Final trench photo
868	3	N	Post-ex	2212	1 x1	Final trench photo
869	3	S	Post-ex	2212	1 x1	Final trench photo
870	3	WSW	Post-ex	2209	1 x1	Final trench photo
871	3	ENE	Post-ex	2209	1 x1	Final trench photo
872	3	ESE	Post-ex	2210	1 x1	Final trench photo
873	3	WNW	Post-ex	2210	1 x1	Final trench photo
874	3	E	Post-ex	2206	1 x1	Final trench photo with sondage
875	3	W	Post-ex	2206	1 x1	Final trench photo
876	3	E	Post-ex	2207	1 x1	Final trench photo
877	3	W	Post-ex	2207	1 x1	Final trench photo
878	3	S	Post-ex	2211	1 x1	Final trench photo
879	3	N	Post-ex	2211	1 x1	Final trench photo
880	N/A	N/A	N/A	N/A	N/A	VOID

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
881	N/A	N/A	N/A	N/A	N/A	VOID
882	N/A	N/A	N/A	N/A	N/A	VOID
883	N/A	N/A	N/A	N/A	N/A	VOID
884	1, 2, 3	N/A	Profile	2113	1 x1	Geological test pit profile
885	1, 2, 3	N/A	Profile	2114	1 x1	Geological test pit profile
886	1, 2, 3	N/A	Profile	2115	1 x1	Geological test pit profile
887	1, 2, 3	N/A	Profile	2106	1 x1	Geological test pit profile
888	1, 2, 3	N/A	Profile	2105	1 x1	Geological test pit profile
1538	4	SW	Pre-ex	3003	1 x2	Circular pit C.300305
1539	4	SW	Pre-ex	3003	1 x2	Circular pit C.300305
1540	N/A	N/A	N/A	N/A	N/A	VOID
1541	1, 2, 3	SE	Layer	3003	1 x2	General stratigraphy of trench
1542	4, 5	NW	Mid-ex	3003	1 x1	Section of circular pit C.300305
1543	4, 5	NW	Mid-ex	3003	1 x1	Section of circular pit C.300305
1544	3	SW	Post-ex	3003	1 x2	Final trench photo
1545	1, 2, 3	SW	Layer	3001	1 x2	General stratigraphy of trench
1546	N/A	N/A	N/A	N/A	N/A	VOID
1547	N/A	N/A	N/A	N/A	N/A	VOID
1548	3	NNW	Post-ex	3001	1 x2	Final trench photo
1549	1, 2, 3	SW	Layer	3007	1 x2	General stratigraphy of trench
1550	3	NW	Post-ex	3007	1 x2	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1551	4	E	Mid-ex	3006	1 x2	Section of linear ditch C.300605
1552	4	SE	Mid-ex	3006	1 x2	Section of linear ditch C.300605
1553	4	S	Mid-ex	3006	1 x2	Section of linear ditch C.300605
1554	4	SE	Mid-ex	3006	1 x2	Section of linear ditch C.300605
1555	1, 2, 3	N	Layer	3006	1 x2	General stratigraphy of trench
1556	1, 2, 3	N	Layer	3006	1 x2	General stratigraphy of trench
1557	3	E	Post-ex	3006	1 x2	Final trench photo
1558	4	N	Pre-ex	3008	1 x2	Pit C.300805
1559	4	S	Mid-ex	3008	1 x2	Section of pit C.300805
1560	4	S	Mid-ex	3008	1 x2	Section of pit C.300805
1561	4	S	Mid-ex	3008	1 x2	Section of pit C.300805
1562	3	N	Post-ex	3008	1 x2	Final trench photo
1563	1, 2, 3	NW	Layer	3008	1 x2	General stratigraphy of trench
1564	1, 2, 3	NW	Layer	3008	1 x2	General stratigraphy of trench
1565	1, 2, 3	S	Layer	3009	1 x2	General stratigraphy of trench
1566	3	E	Post-ex	3009	1 x2	Final trench photo
1567	3	E	Post-ex	3009	1 x2	Final trench photo
1568	3	N	Post-ex	3004	1 x2	Final trench photo
1569	1, 2, 3	E	Layer	3004	1 x2	General stratigraphy of trench
1570	1, 2, 3	E	Layer	3004	1 x2	General stratigraphy of trench
1571	3	W	Layer	3005	1 x2	VOID (wrong trench number)

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1572	3	W	Post-ex	3002	1 x2	Final trench photo
1573	1, 2, 3	S	Layer	3002	1 x2	General stratigraphy of trench
1574	1, 2, 3	S	Layer	3002	1 x2	General stratigraphy of trench
1575	3	W	Post-ex	3005	1 x2	Final trench photo
1576	1, 2, 3	S	Layer	3005	1 x2	General stratigraphy of trench
1577	1, 2, 3	S	Layer	3005	1 x2	General stratigraphy of trench
1578	3	N	Post-ex	3011	1 x2	Final trench photo
1579	1, 2, 3	W	Layer	3011	1 x2	General stratigraphy of trench
1580	3	E	Post-ex	3010	1 x2	Final trench photo
1581	1, 2, 3	N	Layer	3010	1 x2	General stratigraphy of trench
1582	4, 5	N	Pre-ex	3001	1 x2	Natural deposit C.300105
1583	5	N	Post-ex	3001	1 x2	Natural lenses of sand and gravel
1584	5	N	Post-ex	3001	1 x2	Natural lenses of sand and gravel
1585	5	N	Post-ex	3001	1 x2	Natural lenses of sand and gravel
1586	5	N	Post-ex	3001	1 x2	Natural lenses of sand and gravel
1587	6	E	Mid-ex	3001	1 x2	Section of linear C.300107
1588	4	E	Mid-ex	3001	1 x2	Section of linear C.300105
1589	4	N	Pre-ex	3005	1 x2	Ditch C.300505 GA05
1590	6	E	Pre-ex	3005	1 x2	Non-archaeology; topsoil
1591	8	NW	Pre-ex	3005	1 x2	Furrow C.300509
1592	6, 7	E	Mid-ex	3008	1 x2	Section of linear ditch C.300807

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1593	6, 7	E	Mid-ex	3005	1 x2	Section of furrow C.300507. Wrong number on photo; should be C.300509
1594	4, 5	S	Mid-ex	3005	1 x2	Section of ditch C.300505
1595	4, 5	S	Mid-ex	3005	1 x2	Section of ditch C.300505
1596	10, 11	N	Mid-ex	3005	1 x2	Section of linear C.300511
1597	N/A	N/A	N/A	N/A	N/A	VOID
1598	N/A	N/A	N/A	N/A	N/A	VOID
1599	1, 2, 3	NE	Layer	3401	1 x1	General stratigraphy of trench
1600	3	SE	Post-ex	3401	1 x1	Final trench photo
1601	3	W	Post-ex	3005	1 x2	Final trench photo
1602	4, 5	S	Pre-ex	3013	1 x2	Ditch C.301305 GA05 field boundary
1603	8, 9	N	Mid-ex	3005	1 x2	Section of furrow C.300509
1604	1, 2, 3	E	Layer	3008	1 x2	General stratigraphy of trench
1605	3	S	Post-ex	3008	1 x2	Final trench photo
1606	4	W	Pre-ex	3016	1 x2	Linear C.301605 GA04 field boundary
1607	1, 2, 4, 5	N	Mid-ex	3013	1 x2	Section of ditch C.301305 GA05 field boundary
1608	1, 2, 3	N	Layer	3013	1 x2	General stratigraphy of trench
1609	3	W	Post-ex	3013	1 x2	Final trench photo
1610	4, 5	W	Mid-ex	3016	1 x2	Section of linear C.301605
1611	6, 7	SW	Pre-ex	3016	1 x2	Ditch C.301607 GA05 field boundary
1612	1, 2, 3	NW	Layer	3014	1 x2	General stratigraphy of trench

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1613	3	N	Post-ex	3014	1 x2	Final trench photo
1614	7	N	Post-ex	3014	1 x2	Final trench photo
1615	4, 5	E	Pre-ex	3011	1 x2	Furrow C.301105
1616	1, 2, 3	N	Layer	3015	1 x2	General stratigraphy of trench
1617	3	SW	Post-ex	3015	1 x2	Final trench photo
1618	1, 2, 3	E	Layer	3012	1 x2	General stratigraphy of trench
1619	3	S	Post-ex	3012	1 x2	Final trench photo
1620	4, 5	W	Mid-ex	3011	1 x2	Section of furrow C.301105
1621	1, 2, 3	E	Layer	3011	1 x2	General stratigraphy of trench
1622	3	S	Post-ex	3011	1 x2	Final trench photo
1623	1, 2, 3	W	Layer	3016	1 x2	General stratigraphy of trench
1624	1, 2, 3	W	Layer	3016	1 x2	General stratigraphy of trench
1625	00	N	Mid-ex	3002	1 x2	Furrow
1626	00	NW	Mid-ex	3002	1 x2	Furrow
1627	00	N	Mid-ex	3004	1 x2	Furrow
1628	00	NW	Mid-ex	3004	1 x2	Furrow
1629	00	NW	Mid-ex	3004	1 x2	Furrow
1630	00	E	Post-ex	3008	1 x2	Furrow
1631	00	E	Post-ex	3008	1 x2	Furrow
1632	00	NW	Mid-ex	3014	1 x2	Furrow
1633	6, 8, 7	W	Mid-ex	3016	1 x2	Section of ditch C.301607 GA05

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1634	6, 8, 7	E	Mid-ex	3016	1 x2	Section of ditch C.301607 GA05
1635	6, 8, 7	E	Mid-ex	3016	1 x2	Section of ditch C.301607 GA05
1636	6, 8, 7	W	Mid-ex	3016	1 x2	Section of ditch C.301607 GA05
1637	6, 8, 7	W	Mid-ex	3016	1 x2	Section of ditch C.301607 GA05
1638	3	N	Post-ex	3016	1 x2	Final trench photo
1639	3	S	Post-ex	0302	1 x2	Final trench photo
1640	1, 2, 3	W	Layer	0302	1 x2	General stratigraphy of trench
1641	1, 2, 3	S	Layer	0303	1 x2	General stratigraphy of trench
1642	1, 2, 3	W	Layer	0303	1 x2	General stratigraphy of trench
1643	1, 2, 3	S	Layer	0303	1 x2	General stratigraphy of trench
1644	1, 2	E	Layer	0312	1 x2	General stratigraphy of trench
1645	N/A	N/A	N/A	N/A	N/A	VOID
1646	1, 2	SW	Post-ex	0312	1 x2	Final trench photo
1647	1, 2	SE	Layer	0313	1 x2	General stratigraphy of trench
1648	1, 2	SW	Post-ex	0313	1 x2	Final trench photo
1649	N/A	N/A	N/A	N/A	N/A	VOID
1650	N/A	N/A	N/A	N/A	N/A	VOID
1651	N/A	N/A	N/A	N/A	N/A	VOID
1652	N/A	N/A	N/A	N/A	N/A	VOID
1653	1, 2	E	Layers	0314	1 x2	General stratigraphy of trench
1654	2	NW	Post-ex	0314	1 x2	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1655	1, 2, 3	E	Layers	0315	1 x2	General stratigraphy of trench
1656	3	NE	Post-ex	0315	1 x2	Final trench photo
1657	1, 2, 3	SE	Layer	0317	1 x2	General stratigraphy of trench
1658	3	NE	Post-ex	0317	1 x2	Final trench photo
1659	1, 2, 3	S	Layer	0316	1 x2	General stratigraphy of trench
1660	3	SW	Post-ex	0316	1 x2	Final trench photo
1661	1, 2, 3	W	Layer	0219	1 x2	General stratigraphy of trench
1662	1, 2, 3	W	Layer	0219	1 x2	General stratigraphy of trench
1663	3	S	Post-ex	0219	1 x2	Final trench photo
1664	4, 5	NE	Pre-ex	0217	1 x2	Gravel and charcoal deposit in paleochannel C.021705
1665	4, 5	SW	Pre-ex	0217	1 x2	Gravel and charcoal deposit in paleochannel C.021705
1666	1, 2	SE	Layer	0217	1 x2	Sondage (-3m) trench
1667	1, 2	NE	Working shot	0217	1 x2	Water table (-1.6m) filled up the sondage
1668	1, 2	SE	Layer	0217	1 x2	General stratigraphy of trench
1669	1, 2	SW	Layer	0218	1 x2	General stratigraphy of trench
1670	1, 2	S	Post-ex	0218	1 x2	Final trench photo
1671	1, 2	W	Layer	0216	1 x2	General stratigraphy of trench
1672	1, 2	W	Layer	0216	1 x2	General stratigraphy of trench
1673	1, 2	N	Post-ex	0216	1 x2	Final trench photo
1674	1, 2	NW	Layer	0215	1 x2	General stratigraphy of trench

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1675	1, 2	S	Post-ex	0215	1 x2	Final trench photo
1676	1, 2, 3	E	Layer	0304	1 x2	General stratigraphy of trench
1677	1, 2, 3	E	Layer	0304	1 x2	General stratigraphy of trench
1678	3	S	Post-ex	0304	1 x2	Final trench photo
1679	4	N/A	Working shot	0217	1 x1	Wooden stake in ditch C.021705
1680	4	N/A	Working shot	0217	N/A	Wooden stake in ditch C.021705
1681	1, 2, 3	E	Layer	0221	1 x2	General stratigraphy of trench
1682	3	S	Post-ex	0221	1 x2	Final trench photo
1683	1, 2, 3	SE	Layer	0214	1 x2	General stratigraphy of trench
1684	3	SW	Post-ex	0214	1 x2	Final trench photo
1685	1, 2, 3	W	Layer	0205	1 x2	General stratigraphy of trench
1686	3	NW	Post-ex	0205	1 x2	Final trench photo
1687	1, 2, 3	SE	Layer	0222	1 x2	General stratigraphy of trench
1688	3	NE	Post-ex	0222	1 x2	Final trench photo
1689	3	S	Working shot	0224	1 x2	Sondage
1690	3	SE	Working shot	0224	1 x2	Sondage
1691	3	SE	Working shot	0224	1 x2	Sondage
1692	1, 2, 3	SW	Layer	0224	1 x2	General stratigraphy of trench
1693	3	NW	Post-ex	0224	1 x2	Final trench photo
1694	1, 2, 3	S	Layer	0213	1 x2	General stratigraphy of trench
1695	3	E	Post-ex	0213	1 x2	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1696	1, 2, 3	SW	Layer	0208	1 x2	General stratigraphy of trench
1697	3	NW	Post-layer	0208	1 x2	Final trench photo
1698	1, 2, 3	N	Layer	0212	1 x2	General stratigraphy of trench
1699	3	NW	Post-ex	0212	1 x2	Final trench photo
1700	4, 6, 7, 8, 9	NW	Mid-ex	0217	1 x2	Section of paleochannel C.021705
1701	4, 6, 7, 8, 9	N	Mid-ex	0217	1 x2	Section of paleochannel C.021705
1702	4, 6, 7, 8, 9	S	Mid-ex	0217	1 x2	Section of paleochannel C.021705
1703	4, 6, 7, 8, 9	SW	Mid-ex	0217	1 x2	Section of paleochannel C.021705
1704	1, 2, 3	SE	Layer	0220	1 x2	General stratigraphy of trench
1705	3	NE	Post-ex	0220	1 x2	Final trench photo
1706	1, 2, 3	W	Layer	0238	1 x2	General stratigraphy of trench
1707	3	NE	Post-ex	0238	1 x2	Final trench photo
1708	1, 2, 3	SW	Layer	0223	1 x2	General stratigraphy of trench
1709	1, 2, 3	SW	Layer	0223	1 x2	General stratigraphy of trench
1710	3	NW	Post-ex	0223	1 x2	Final trench photo
1711	10, 11	SE	Pre-ex	0217	1 x2	Modern deposit C.021711
1712	13	NW	Pre-ex	0217	1 x1	Natural deposit splodge C.021713
1713	1, 2, 3	S	Layer	0239	1 x2	General stratigraphy of trench
1714	3	E	Post-ex	0239	1 x2	Final trench photo
1715	1, 2, 3	SE	Layer	0240	1 x2	General stratigraphy of trench
1716	3	SW	Post-ex	0240	1 x2	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1717	1, 2	SW	Layer	0241	1 x2	Sondage
1718	1, 2	S	Layer	0241	1 x2	Sondage
1719	1, 2, 3	S	Layer	0241	1 x2	General stratigraphy of trench
1720	3	W	Post-ex	0241	1 x2	Final trench photo
1721	3	W	Post-ex	0241	1 x2	Final trench photo
1722	1, 2, 3	SW	Layer	0242	1 x2	General stratigraphy of trench
1723	3	SE	Post-ex	0242	1 x2	Final trench photo
1724	1, 2, 3	SW	Layer	0236	1 x2	General stratigraphy of trench
1725	3	NW	Post-ex	0236	1 x2	Final trench photo
1726	10	NW	Mid-ex	0217	1 x2	Section of modern deposit C.021711
1727	12	SW	Mid-ex	0217	1 x2	Section of natural deposit C.021713
1728	3	SW	Post-ex	0217	1 x2	Final trench photo
1729	3	SW	Post-ex	0217	1 x2	Final trench photo
1730	1, 2	NW	Layer	0244	1 x2	General stratigraphy of trench
1731	2	N	Post-ex	0244	1 x2	Final trench photo
1732	1, 2	W	Layer	0243	1 x2	General stratigraphy of trench
1733	1, 2	S	Post-ex	0243	1 x2	Final trench photo
1734	1, 2	W	Layer	0245	1 x2	General stratigraphy of trench
1735	1, 2	N	Post-ex	0245	1 x2	Final trench photo
1736	1, 2	NW	Layer	0235	1 x2	General stratigraphy of trench
1737	1, 2	N	Post-ex	0235	1 x2	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1738	1, 2	N	Post-ex	0235	1 x2	Final trench photo
1739	1, 2	SE	Layer	0246	1 x2	Sondage collapse
1740	1, 2	NW	Layer	0249	1 x2	General stratigraphy of trench
1741	1, 2	NE	Post-ex	0249	1 x2	Final trench photo
1742	1, 2	SW	Layer	0247	1 x2	General stratigraphy of trench
1743	1, 2	SE	Post-ex	0247	1 x2	Final trench photo
1744	1, 2	S	Layer	0250	1 x2	General stratigraphy with water table
1745	1, 2	W	Layer	0250	1 x2	General stratigraphy with water table
1746	1, 2	S	Post-ex	0250	1 x2	Final trench photo
1747	1, 2	W	Layer	0246	1 x2	General stratigraphy with water table
1748	1, 2	S	Post-ex	0246	1 x2	Final trench photo
1749	1, 2	SW	Layer	0255	1 x2	Sondage
1750	1, 2	SW	Layer	0255	1 x2	Sondage
1751	4	SE	Mid-ex	0214	1 x1	Section of alluvial deposit layer/paleo pond C.021404
1752	4	W	Mid-ex	0214	1 x2	Section of alluvial deposit layer/paleo pond C.021404
1753	4	NW	Mid-ex	0214	1 x2	Section of alluvial deposit layer/paleo pond C.021404
1754	4	NW	Mid-ex	0214	1 x2	Section of alluvial deposit layer/paleo pond C.021404
1755	4	SW	Mid-ex	0214	1 x2	Section of alluvial deposit layer/paleo pond C.021404

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1756	4	NW	Mid-ex	0214	1 x2	Section of alluvial deposit layer/paleo pond C.021404
1757	4	NW	Mid-ex	0214	1 x2	Section of alluvial deposit layer/paleo pond C.021404
1758	4	SE	Mid-ex	0214	1 x2	Section of alluvial deposit layer/paleo pond C.021404
1759	4	NW	Mid-ex	0214	1 x2	Section of alluvial deposit layer/paleo pond C.021404
1760	4	NW	Mid-ex	0214	1 x2	Section of alluvial deposit layer/paleo pond C.021404
1761	1, 2	W	Layer	0260	1 x2	General stratigraphy
1762	3	N	Post-ex	0260	1 x2	Final trench photo
1763	1, 2	SW	Layer	0261	1 x2	General stratigraphy of trench
1764	3	NW	Post-ex	0261	1 x2	Final trench photo
1765	3	NW	Post-ex	0262	1 x2	Final trench photo
1766	1, 2	S	Layer	0262	1 x2	General stratigraphy of trench
1767	1, 2	SE	Layer	0259	1 x2	General stratigraphy of trench
1768	3	SW	Post-ex	0259	1 x2	Final trench photo
1769	3	N	Post-ex	0257	1 x2	Final trench photo
1770	1, 2	W	Layer	0257	1 x2	General stratigraphy of trench
1771	1, 2	W	Layer	0255	1 x2	General stratigraphy of trench
1772	1, 2	W	Layer	0255	1 x2	General stratigraphy of trench
1773	3	W	Post-ex	0255	1 x2	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1774	N/A	N/A	N/A	N/A	N/A	VOID
1775	3	SW	Post-ex	0254	1 x2	Final trench photo
1776	1, 2	SE	Layer	0254	1 x2	General stratigraphy of trench
1777	4	SW	Mid-ex	0213	1 x2	Section of alluvial deposit layer/paleo pond C.021304
1778	4	N	Mid-ex	0213	1 x2	Section of alluvial deposit layer/paleo pond C.021304
1779	4	E	Mid-ex	0213	1 x2	Section of alluvial deposit layer/paleo pond C.021304
1780	3	E	Post-ex	0213	1 x2	Final trench photo
1781	1, 2	NE	Layer	0265	1 x2	General stratigraphy of trench
1782	3	NW	Post-ex	0265	1 x2	Final trench photo
1783	1, 2	SW	Layer	0266	1 x2	General stratigraphy of trench
1784	3	NW	Post-ex	0266	1 x2	Final trench photo
1785	1, 2	SW	Layer	0268	1 x2	General stratigraphy of trench
1786	3	SE	Post-ex	0268	1 x2	Final trench photo
1787	1, 2	NE	Layer	0610	1 x2	General stratigraphy of trench
1788	3	NW	Post-ex	0610	1 x2	Final trench photo
1789	N/A	N/A	N/A	N/A	N/A	VOID
1790	N/A	N/A	N/A	N/A	N/A	VOID
1791	N/A	N/A	N/A	N/A	N/A	VOID
1792	N/A	N/A	N/A	N/A	N/A	VOID

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1793	1, 2, 3	NW	Layer	2003	1 x2	General stratigraphy
1794	3	W	Post-ex	2003	1 x2	Final trench
1795	3	E	Post-ex	2003	1 x2	Final trench
1796	8, 6	N	Mid-ex	2004	1 x1	Section of semi-sunken house C.200407
1797	8, 6	N	Mid-ex	2004	1 x1	Section of semi-sunken house C.200407
1798	10	E	Mid-ex	2004	1 x1	Section of linear C.200409
1799	10	E	Mid-ex	2004	1 x1	Section of linear C.200409
1800	10	E	Mid-ex	2004	1 x1	Section of linear C.200409
1801	4	N	Finds	2005	N/A	Fragments of pottery in situ
1802	4	S	Finds	2005	N/A	Fragments of pottery in situ
1803	4	S	Finds	2005	N/A	Fragments of pottery in situ
1804	1, 2, 3	S	Layer	2106	1 x2	General stratigraphy
1805	3	E	Post-ex	2106	1 x2	Final trench photo
1806	1, 2, 3	W	Layer	2106	1 x2	General stratigraphy
1807	1, 2, 3	W	Layer	2104	1 x2	General stratigraphy
1808	3	SW	Post-ex	2104	1 x2	Final trench photo
1809	N/A	N/A	N/A	N/A	N/A	VOID (wrong trench number)
1810	N/A	N/A	N/A	N/A	N/A	VOID (wrong trench number)
1811	3	NW	Post-ex	2103	1 x2	Final trench photo
1812	1, 2, 3	SW	Layer	2103	1 x2	General stratigraphy
1813	1, 2, 3	W	Layer	2105	1 x2	General stratigraphy

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1814	3	SW	Post-ex	2105	1 x2	Final trench photo
1815	1, 2, 3	NW	Layer	2001	1 x2	General stratigraphy
1816	3	SW	Post-ex	2001	1 x2	Final trench photo
1817	1, 2, 3	SW	Layer	2002	1 x2	General stratigraphy
1818	3	W	Post-ex	2002	1 x2	Final trench photo
1819	3	W	Post-ex	2002	1 x2	Final trench photo
1820	8, 6	N	Mid-ex	2004	1 x2	Section of semi-sunken house C.200407
1821	8, 6	N	Mid-ex	2004	1 x2	Section of semi-sunken house C.200407
1822	8, 6	W	Mid-ex	2004	1 x2	Section of semi-sunken house C.200407
1823	8, 6	N	Mid-ex	2004	1 x2	Section of semi-sunken house C.200407
1824	8, 6	E	Mid-ex	2004	1 x2	Section of semi-sunken house C.200407
1825	8, 6	E	Mid-ex	2004	1 x2	Section of semi-sunken house C.200407
1826	8, 6	S	Mid-ex	2004	1 x2	Section of semi-sunken house C.200407
1827	8, 6	S	Mid-ex	2004	1 x2	Section of semi-sunken house C.200407
1828	N/A	N/A	N/A	N/A	N/A	VOID
1829	4	SSW	Mid-ex	2004	1 x2	Section of layer C.200404
1830	4	W	Mid-ex	2004	1 x2	E-facing section of layer C.200404 (northern portion)
1831	4	W	Mid-ex	2004	1 x2	E-facing section of layer C.200404 (northern portion)
1832	4, 11, 12	W	Pre-ex / Mid-ex	2004	1 x2	Mid-ex section of central portion of layer C.200404 and pre-ex of linear C.200412

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1833	4, 13	W	Pre-ex / Mid-ex	2004	1 x2	Mid-ex section of southern portion of layer C.200404 and pre-ex of linear C.200414
1834	4, 11, 13	NW	Pre-ex / Mid-ex	2004	1 x2	Mid-ex e-facing section of layer C.200404 and pre-ex of linear C.200412 and linear C.200414
1835	1, 2, 3	W	Layer	2204	1 x2	General stratigraphy of trench
1836	3	N	Post-ex	2204	1 x2	Final trench photo
1837	1, 2, 3	SW	Layer	2202	1 x2	General stratigraphy of trench
1838	3	SE	Post-ex	2202	1 x2	Final trench photo
1839	1, 2, 3	E	Layer	2201	1 x2	General stratigraphy of trench
1840	3	S	Post-ex	2201	1 x2	Final trench photo
1841	1, 2, 3	SE	Layer	2203	1 x2	General stratigraphy of trench
1842	1, 2, 3	SE	Layer	2203	1 x2	General stratigraphy of trench
1843	3	W	Post-ex	2203	1 x2	Final trench photo
1844	1, 2, 3	E	Layer	2205	1 x2	General stratigraphy of trench
1845	3	N	Post-ex	2205	1 x2	Final trench photo
1846	1, 2, 3	E	Layer	2208	1 x2	General stratigraphy of trench
1847	3	S	Post-ex	2208	1 x2	Final trench photo
1848	N/A	N/A	N/A	N/A	N/A	VOID
1849	4, 10, 11, 15	E	Mid-ex	2004	1 x2	E-facing section of deposit layer C.200404 and linear features C.200409, C.200412 and C.200416

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1850	4, 13, 15	E	Mid-ex	2004	1 x2	E-facing section of deposit layer C.200404 and linear features C.200414 and C.200416
1851	4, 13, 15	E	Mid-ex	2004	1 x2	E-facing section of deposit layer C.200404 and linear features C.200414 and C.200416
1852	4, 10, 11, 13, 15	S	Mid-ex	2004	1 x2	Deposit layer C.200404 and linear features C.200409, C.200412, C.200414 and C.200416
1853	17	W	Pre-ex	2004	1 x2	Pit C.200418
1854	5, 8	S	Mid-ex	2003	1 x2	Fill C.200308 and floor surface C.200305
1855	5, 8	E	Mid-ex	2003	1 x2	Fill C.200308 and floor surface C.200305
1856	4, 9	E	Post-ex	2004	1 x2	Section of linear C.200409
1857	4, 9	E	Post-ex	2004	1 x2	Section of linear C.200409
1858	7	S	Working shot	2004	N/A	Backfilling by hand of semi-sunken house C.200407
1859	7	S	Working shot	2004	N/A	Backfilling by hand of semi-sunken house C.200407
1860	7	S	Working shot	2004	N/A	Backfilling by hand of semi-sunken house C.200407
1861	7	S	Working shot	2004	N/A	Backfilling by hand of semi-sunken house C.200407
1862	18	W	Post-ex	2004	1 x2	Pit C.200418
1863	18	W	Post-ex	2004	1 x2	Pit C.200418
1864	7	-	Working shot	2004	N/A	Backfill of semi-sunken house C.200407
1865	7	-	Working shot	2004	N/A	Backfill of semi-sunken house C.200407

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1866	8	E	Working shot	2003	1 x2	Charcoal and pottery find #2.4
1867	8	E	Working shot	2003	1 x2	Charcoal and pottery find #2.4
1868	8	E	Working shot	2003	1 x2	Charcoal and pottery find #2.4
1869	8	NE	Working shot	2003	1 x2	Charcoal and pottery find #2.4
1870	8	NE	Working shot	2003	1 x2	Charcoal and pottery find #2.4
1871	8	NE	Working shot	2003	1 x2	Charcoal and pottery find #2.4
1872	8	E	Working shot	2003	1 x2	Charcoal and pottery find #2.4
1873	9	E	Working shot	2004	N/A	Backfill of linear C.200409
1874	20	W	Post-ex	2004	1 x1	Ditch C.200420
1875	6	S	Mid-ex	2003	1 x2	Section of ditch C.200307
1876	6	S	Mid-ex	2003	1 x2	Section of ditch C.200307
1877	6	N	Mid-ex	2003	1 x2	Section of ditch C.200307
1878	6	N	Mid-ex	2003	1 x2	Section of ditch C.200307
1879	4	S	Mid-ex	2001	1 x2	Section of ditch C.200105
1880	4	S	Mid-ex	2001	1 x2	Section of ditch C.200105
1881	4	S	Mid-ex	2001	1 x2	Section of ditch C.200105
1882	4	S	Mid-ex	2001	1 x2	Section of ditch C.200105
1883	4	S	Mid-ex	2001	1 x2	Section of ditch C.200105
1884	4	W	Mid-ex	2001	1 x3	Section of ditch C.200105
1885	4, 10, 11, 15	E	Mid-ex	2004	1 x2	Section of deposit layer C.200404 and linear features C.200409, C.200412, C.200414 and C.200416

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1886	4, 13, 15	E	Mid-ex	2004	1 x2	Section of deposit layer C.200404 and linear features C.200414 and C.200416
1887	4, 13, 15	E	Mid-ex	2004	1 x2	Section of deposit layer C.200404 and linear features C.200414 and C.200416
1888	4, 13, 15	N	Mid-ex	2004	1 x2	Section of deposit layer C.200404 and linear features C.200414 and C.200416
1889	4, 10, 11, 13, 15	S	Mid-ex	2004	1 x2	Section of deposit layer C.200404 and linear features C.200409, C.200412, C.200414 and C.200416
1890	5, 6	E	Mid-ex	2005	1 x2	Section of possible structure C.200506
1891	5, 6	E	Mid-ex	2005	1 x2	Section of possible structure C.200506
1892	5, 6	W	Mid-ex	2005	1 x2	Section of possible structure C.200506
1893	5, 6	W	Mid-ex	2005	1 x2	Section of possible structure C.200506
1894	5, 6	W	Mid-ex	2005	1 x2	Section of possible structure C.200506
1895	4, 9, 12, 16	W	Post-ex	2004	1 x2	Deposit layer C.200404 and linear features C.200409, C.200412 and C.200416
1896	4, 9, 12, 16	E	Post-ex	2004	1 x2	Deposit layer C.200404 and linear features C.200409, C.200412 and C.200416
1897	4, 9, 12, 16	E	Post-ex	2004	1 x2	Deposit layer C.200404 and linear features C.200409, C.200412 and C.200416
1898	4, 14	E	Post-ex	2004	1 x2	Deposit layer C.200404 and linear C.200414
1899	4, 14	E	Post-ex	2004	1 x2	Deposit layer C.200404 and linear C.200414
1900	4, 9, 12, 14, 16	S	Post-ex	2004	1 x2	Deposit layer C.200404 and linear features C.200409, C.200412, C.200414 and C.200416

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1901	4, 9, 12, 14, 16	N	Post-ex	2004	1 x2	Deposit layer C.200404 and linear features C.200409, C.200412, C.200414 and C.200416
1902	4, 9, 12, 14, 16	N	Post-ex	2004	1 x2	Final photo of deposit layer C.200404 and linear features C.200409, C.200412, C.200414 and C.200416
1903	8, 9, 11, 12, 13	NW	Mid-ex	2003	1 x2	Section of ditches C.200309 and C.200313
1904	8, 9, 11, 12, 13	N	Mid-ex	2003	1 x2	Section of ditches C.200309 and C.200313
1905	8, 9	E	Mid-ex	2003	1 x2	General view of fill C.200308 and ditches C.200309 and C.200313
1906	8, 9	W	Mid-ex	2003	1 x2	General view of fill C.200308 and ditches C.200309 and C.200313
1907	8, 9	S	Mid-ex	2003	1 x2	Section of ditches C.200309 and C.200313
1908	8, 9	SE	Mid-ex	2003	1 x2	Section of ditches C.200309 and C.200913
1909	8, 9	SE	Mid-ex	2003	1 x2	Section of ditches C.200309 and C.200313
1910	8, 9	E	Mid-ex	2003	1 x2	Section of ditches C.200309 and C.200313
1911	3	E	Post-ex	2003	1 x2	Final trench photo
1912	7	W	Mid-ex	2005	1 x2	Section of gully C.200508
1913	4, 9, 12, 14, 16	E	Post-ex	2004	1 x2	Deposit layer C.200404 and linear features C.200409, C.200412, C.200414 and C.200416
1914	4, 14, 16	E	Post-ex	2004	1 x2	Deposit layer C.200404 and linear features C.200414 and C.200416
1915	4, 9, 12	E	Post-ex	2004	1 x2	Deposit layer C.200404 and linear features C.200409 and C.200412

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1916	9	E	Mid-ex	2005	1 x2	Section of ditch C.200510
1917	9	E	Mid-ex	2005	1 x2	Section of ditch C.200510
1918	4	E	Mid-ex	2005	1 x2	Section of layer deposit C.200504
1919	4	E	Mid-ex	2005	1 x2	Section of layer deposit C.200504
1920	5, 6	E	Mid-ex	2005	1 x2	Section of possible structure C.200506
1921	5, 6	W	Mid-ex	2005	1 x2	Section of possible structure C.200506
1922	4	W	Mid-ex	2005	1 x2	Section of layer deposit C.200504
1923	9, 10	W	Mid-ex	2005	1 x2	Section of ditch C.200510
1924	6	NNE	Mid-ex	2108	0.5 x1	Section of gully terminus C.210807
1925	6	NNE	Mid-ex	2108	0.5 x1	Section of gully terminus C.210807
1926	4	NNW	Mid-ex	2108	0.5 x1	Section of pit C.210805
1927	10	E	Post-ex	2003	1 x1	Stone surface (fireplace) C.200310 (wrong field number on photo board in photo; should be 2003)
1928	10	SE	Post-ex	2003	1 x1	Stone surface (fireplace) C.200310 (wrong field number on photo board in photo; should be 2003)
1929	10	S	Post-ex	2003	1 x1	Stone surface (fireplace) C.200310 (wrong field number on photo board in photo; should be 2003)
1930	10	ENE	Post-ex	2003	1 x1	Stone surface (fireplace) C.200310 (wrong field number on photo board in photo; should be 2003)

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1931	10	ENE	Post-ex	2003	1 x1	Stone surface (fireplace) C.200310 (wrong field number on photo board in photo; should be 2003)
1932	10	NNE	Post-ex	2003	1 x1	Stone surface (fireplace) C.200310 (wrong field number on photo board in photo; should be 2003)
1933	1, 2, 3	W	Post-ex	2005	1 x2	General stratigraphy of trench
1934	1, 2, 3	S	Post-ex	2005	1 x2	Final trench photo
1935	1, 2, 3	S	Post-ex	2005	1 x2	Final trench photo
1936	8	N/A	Finds	2003	N/A	Find #5 Copper
1937	8	N/A	Finds	2004	N/A	Find #7 loom weight
1938	17	N/A	Finds	2004	N/A	Find #6 loom weight
1939	6	N/A	Finds	2004	N/A	Find #8 loom weight
1940	13	N/A	Finds	2004	N/A	Pottery sherds
1941	8	N/A	Finds	2004	N/A	Find #2 copper alloy strip
1942	6	N/A	Finds	2003	N/A	Find #3 Roman (Samian Ware) pottery sherd
1943	4	N/A	Finds	3008	N/A	Find #1 metal object
1944	8	N/A	Finds	2003	N/A	Find #4 pottery vessel
1945	8	N/A	Finds	2003	N/A	Pottery sherds
1946	4	N/A	Finds	0214	N/A	Modern pottery
1947	4	N/A	Finds	2004	N/A	Roman pottery sherds
1948	4	N/A	Finds	2005	N/A	Pottery sherds

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1949	4	N/A	Finds	0213	N/A	Modern pottery
1950	6	N/A	Finds	2003	N/A	Pottery sherds
1951	8	N/A	Finds	2004	N/A	Pottery sherds
1952	8	N/A	Finds	0217	N/A	Modern pottery
1953	10	N/A	Finds	0217	N/A	Modern pottery
1954	4	N/A	Finds	2004	N/A	Burnt stone
1955	4	N/A	Finds	2003	N/A	Pottery sherds
1956	12	N/A	Finds	2004	N/A	Pottery sherds
1957	17	N/A	Finds	2004	N/A	Stone with ochre
1958	1	N/A	Finds	2004	N/A	Pottery sherds
1959	4	N/A	Finds	2017	N/A	Metal object
1960	2	N/A	Finds	0303	N/A	Pottery
1961	7	N/A	Finds	0217	N/A	Modern pottery
1962	4	N/A	Finds	0214	N/A	CTP
1963	5	N/A	Finds	2005	N/A	Pottery
1964	4	N/A	Finds	0214	N/A	Glass
1965	7	N/A	Finds	2004	N/A	Pottery
1966	7	N/A	Finds	0217	N/A	Glass
1967	4, 5	E	Pre-ex	2103	1 x2	Ditch C.210305
1968	4, 5	E	Pre-ex	2103	1 x2	Ditch C.210305
1969	4, 5, 9, 10	N	Pre-ex	2107	1 x2	Ditch C.210705 and ditch C.210710

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1970	4, 5	S	Pre-ex	2109	1 x2	Linear C.210905
1971	6	S	Pre-ex	2109	1 x2	Furrow C.210907
1972	8	S	Pre-ex	2109	1 x2	C.210908
1973	9	S	Post-ex	2109	1 x2	Pit C.210909 possibly non-archaeology
1974	8, 9, 11	S	Mid-ex	2108	1 x1	Section of gullies C.210810 and C.210812
1975	8, 9, 11	SSE	Mid-ex	2108	1 x1	Section of gullies C.210810 and C.210812
1976	13	E	Mid-ex	2108	1 x1	Section of pit C.210814
1977	6, 7	NE	Pre-ex	2103	1 x2	Pit C.210307
1978	6, 7	SE	Pre-ex	2103	1 x2	Pit C.210307
1979	6, 7	SE	Pre-ex	2103	1 x2	Pit C.210307
1980	4, 5	S	Mid-ex	2109	1 x2	Section of linear; non-archaeology
1981	8	S	Post-ex	2109	1 x2	Rabbit hole; non-archaeology
1982	8	S	Post-ex	2109	1 x2	Rabbit hole; non-archaeology
1983	15, 17	N	Pre-ex	2108	1 x1	Ditch C.210816 and pit C.210818
1984	8, 9	NE	Pre-ex	2103	1 x2	Linear C.210309
1985	8, 9	E	Pre-ex	2103	1 x2	Linear C.210309
1986	8, 9	E	Pre-ex	2103	1 x2	Linear C.210309
1987	9	ESE	Pre-ex	2107	1 x2	Ditch C.210708
1988	9	NW	Pre-ex	2107	1 x2	Ditch C.210708
1989	6	N	Mid-ex	2109	1 x2	Section of furrow C.210907
1990	15	NW	Mid-ex	2108	1 x1	Section of ditch C.210816

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1991	15, 16	NW	Mid-ex	2108	1 x1	Section of ditch C.210816
1992	19, 20	SE	Mid-ex	2108	1 x1	Section of ditch C.210820
1993	17	E	Mid-ex	2108	0.3 x1	Section of pit C.210818
1994	17	E	Mid-ex	2108	0.3 x1	Section of pit C.210818
1995	21	ENE	Mid-ex	2108	0.3 x1	Section of pit C.210822
1996	21	SE	Mid-ex	2108	0.3 x1	Section of pit C.210822
1997	8, 10, 9	ENE	Mid-ex	2103	1 x2	Section of linear C.210309
1998	8, 10, 9	ENE	Mid-ex	2103	1 x2	Section of linear C.210309
1999	8, 10, 9	SW	Mid-ex	2103	1 x2	Section of linear C.210309
2000	8, 10, 9	SW	Mid-ex	2103	1 x2	Section of linear C.210309
2001	6, 7	S	Mid-ex	2103	1 x2	Section of pit C.210307
2002	6, 7	S	Mid-ex	2103	1 x2	Section of pit C.210307
2003	6, 7	W	Mid-ex	2103	1 x2	Section of pit C.210307
2004	4, 6, 5, 9, 10	SE	Mid-ex	2107	1 x2	Section of ditches C.210705 and C.210710
2005	4, 6, 5, 9, 10	SE	Mid-ex	2107	1 x2	Section of ditches C.210705 and C.210710
2006	4, 6, 5, 9, 10	NNW	Mid-ex	2107	1 x2	Section of ditches C.210705 and C.210710
2007	4, 6, 5, 9, 10	NNW	Mid-ex	2107	1 x2	Section of ditches C.210705 and C.210710
2008	7	N	Mid-ex	2107	1 x2	Section of ditch C.210708
2009	7	S	Mid-ex	2107	1 x2	Section of ditch C.210708
2010	00	S	Mid-ex	2109	1 x2	Section of furrows; non archaeology
2011	00	S	Mid-ex	2109	1 x2	Section of furrows; non-archaeology

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2012	10	NNW	Mid-ex	2109	1 x2	Section of pit C.210911
2013	3	W	Post-ex	2109	1 x2	Final trench photo
2014	11, 12, 6, 13, 7	SSW	Mid-ex	2103	1 x2	Section of pit C.210307
2015	11, 12, 6, 13, 7	SSW	Mid-ex	2103	1 x2	Section of pit C.210307
2016	11, 12, 6, 13, 7	W	Mid-ex	2103	1 x2	Section of pit C.210307
2017	00	N	Mid-ex	2019	1 x2	Section of furrows; non-archaeology
2018	11, 12	S	Pre-ex	2107	1 x2	Ditch C.210712
2019	8, 10, 9	NE	Post-ex	2103	1 x2	Section of ditch C.210309
2020	8, 10, 9	N	Post-ex	2103	1 x2	Section of ditch C.210309
2021	8, 10, 9	S	Post-ex	2103	1 x2	Section of ditch C.210309
2022	8, 10, 9	SE	Post-ex	2103	1 x2	Section of ditch C.210309
2023	8, 10, 9	SE	Post-ex	2103	1 x2	Section of ditch C.210309
2024	11, 12, 6, 13	S	Mid-ex	2103	1 x2	Section of pit C.210307
2025	11, 12, 6, 13	S	Mid-ex	2103	1 x2	Section of pit C.210307
2026	11, 12, 6, 13	S	Mid-ex	2103	1 x2	Section of pit C.210307
2027	11, 12, 6, 13	W	Mid-ex	2103	1 x2	Section of pit C.210307
2028	11, 12, 6, 13	W	Mid-ex	2103	1 x2	Section of pit C.210307
2029	11, 12, 6, 13	E	Mid-ex	2103	1 x2	Section of pit C.210307
2030	11, 12, 6, 13	E	Mid-ex	2103	1 x2	Section of pit C.210307
2031	11	S	Mid-ex	2107	1 x2	Section of linear C.210712
2032	11	N	Mid-ex	2107	1 x2	Section of linear C.210712

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2033	4	W	Mid-ex	2101	1 x2	Section of ditch C.210105
2034	6, 7	SW	Pre-ex	2101	1 x2	Ditch C.210107
2035	4	W	Mid-ex	2101	1 x2	Section of ditch C.210105
2036	3	E	Post-ex	2107	1 x2	Final trench photo
2037	4, 5	NE	Pre-ex	2102	1 x2	Ditch C.210205
2038	4, 5	NE	Pre-ex	2102	1 x2	Ditch C.210205
2039	14, 16	NW	Mid-ex	2103	1 x2	Section of pits C.210315 and C.210317
2040	14, 16	NW	Mid-ex	2103	1 x2	Section of pits C.210315 and C.210317
2041	4, 5	SW	Pre-ex	2110	1 x2	Linear C.211005
2042	4, 5	SW	Pre-ex	2110	1 x2	Linear C.211005
2043	4	NE	Mid-ex	2112	1 x1	Section of ditch C.211205
2044	N/A	N/A	Working shot	NA	N/A	N/A
2045	6	-	Mid-ex	2101	1 x2	Section of ditch C.210107
2046	4, 6, 7	N	Mid-ex	2102	1 x2	Section of ditch C.210205
2047	8	NW	Mid-ex	2102	1 x2	Section of ditch C.210209
2048	N/A	N/A	N/A	N/A	N/A	VOID
2049	4	SW	Mid-ex	2110	1 x2	Section of linear C.211005
2050	4	SW	Mid-ex	2110	1 x2	Section of linear C.211005
2051	3	SE	Post-ex	2103	1 x2	Final trench photo
2052	6	SW	Mid-ex	2110	1 x1	Section of ditch C.211007
2053	6	SW	Mid-ex	2110	1 x2	Section of ditch C.211007

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2054	3	NW	Post-ex	2102	1 x2	Final trench photo
2055	3	NW	Post-ex	2102	1 x2	Final trench photo
2056	4	N	Mid-ex	2106	1 x2	Section of furrow C.210605
2057	4, 5	SE	Pre-ex	2105	1 x2	Gully C.210505
2058	4, 5	S	Pre-ex	2105	1 x2	Gully C.210505
2059	4	S	Mid-ex	2105	1 x2	Section of gully C.210505
2060	4	E	Mid-ex	2105	1 x2	Section of gully C.210505
2061	4	S	Mid-ex	2106	1 x2	Section of furrow C.210605
2062	N/A	N/A	N/A	N/A	N/A	VOID
2063	N/A	N/A	N/A	N/A	N/A	VOID
2064	N/A	N/A	N/A	N/A	N/A	VOID
2065	4, 5	SE	Pre-ex	2207	1 x2	Ditch C.220705
2066	4, 5	W	Pre-ex	2209	1 x2	Linear C.220905 (GA stream)
2067	4, 5	W	Pre-ex	2209	1 x2	Linear C.220905 (GA stream)
2068	4, 5	E	Pre-ex	2209	1 x2	Linear C.220905 (GA stream)
2069	4, 5	N	Pre-ex	2201	1 x2	Linear C.220105
2070	4, 5	N	Pre-ex	2201	1 x2	Ditch C.220705 (wrong trench number in photo-on-photo board; should be 2207)
2071	4	N	Mid-ex	2201	1 x2	Section of ditch C.220105
2072	4	N	Mid-ex	2201	1 x2	Section of ditch C.220105
2073	N/A	N/A	N/A	N/A	N/A	VOID
2074	N/A	N/A	Working shot	2203	N/A	Working shot

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2075	N/A	N/A	Working shot	2203	N/A	Working shot
2076	N/A	N/A	Working shot	2203	N/A	Working shot
2077	N/A	N/A	Working shot	2203	N/A	Working shot
2078	N/A	N/A	Working shot	2203	N/A	Working shot
2079	3	S	Post-ex	2204	1 x2	Final trench photo
2080	3	S	Post-ex	2204	1 x2	Final trench photo
2081	3	N	Post-ex	2201	1 x2	Final trench photo
2082	3	N	Post-ex	2201	1 x2	Final trench photo
2083	4	N	Mid-ex	2207	1 x2	Section of ditch C.220705
2084	00	N	Mid-ex	2204	1 x2	Linear; non-archaeology
2085	4, 6	S	Mid-ex	2203	1 x2	Section of ditches C.220305 and C.220307
2086	4, 6	S	Mid-ex	2203	1 x2	Section of ditches C.220305 and C.220307
2087	8, 10, 11, 12, 14, 16, 17	N	Mid-ex	2203	1 x2	Section of stream; ditches C.220309, C.220313, C.220315 and C.220318
2088	8, 10, 11, 12, 14, 16, 17	N	Mid-ex	2203	1 x2	Section of stream; ditches C.220309, C.220313, C.220315 and C.220318
2089	8, 10, 11, 12, 14, 16, 17	S	Mid-ex	2203	1 x2	Section of stream; ditches C.220309, C.220313, C.220315 and C.220318
2090	8, 10, 11, 12, 14, 16, 17	SE	Mid-ex	2203	N/A	Section of stream; ditches C.220309, C.220313, C.220315 and C.220318
2091	8, 10, 11, 12, 14, 16, 17	E	Mid-ex	2203	N/A	Section of stream; ditches C.220309, C.220313, C.220315 and C.220318
2092	N/A	N/A	N/A	N/A	N/A	VOID (wrong trench number)

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2093	N/A	N/A	N/A	N/A	N/A	VOID (wrong trench number)
2094	N/A	N/A	N/A	N/A	N/A	VOID (wrong trench number)
2095	3	S	Post-ex	2212	1 x2	Final trench photo
2096	4	W	Mid-ex	2212	1 x2	Section of furrow C.221205
2097	4	W	Mid-ex	2212	1 x2	Section of furrow C.221205
2098	4, 6	E	Mid-ex	2209	1 x2	Slot in stream; linear C.220905 and linear C.220907
2099	4, 6	E	Mid-ex	2209	1 x2	Slot in stream; linear C.220905 and linear C.220907
2100	4, 6	E	Mid-ex	2209	1 x2	Slot in stream; linear C.220905 and linear C.220907
2101	4, 6	E	Mid-ex	2209	1 x2	Slot in stream; linear C.220905 and linear C.220907
2102	4, 6	N	Mid-ex	2209	1 x2	Slot in stream; linear C.220905 and linear C.220907
2103	7, 6, 5	N	Mid-ex	2206	1 x2	Slot in stream C.220604
2104	7, 6, 5	N	Mid-ex	2206	1 x2	Slot in stream C.220604
2105	8	SE	Mid-ex	2209	1 x2	Section of linear/furrow C.220909
2106	8	SW	Mid-ex	2209	1 x2	Section of linear/furrow C.220909
2107	4	E	Mid-ex	2209	1 x2	Final slot in stream; linear C.220905
2108	4	E	Mid-ex	2209	1 x2	Final slot in stream; linear C.220905
2109	3	S	Post-ex	5005	1 x2	Final trench photo
2110	3	S	Post-ex	5005	1 x2	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2111	1, 2, 3	E	Layer	5005	1 x2	General stratigraphy of trench
2112	1, 2, 3	E	Layer	5005	1 x2	General stratigraphy of trench
2113	00	W	Pre-ex	5005	N/A	Possible feature
2114	00	W	Mid-ex	5005	1 x1	Possible feature; non-archaeology
2115	3	S	Post-ex	5005	1 x2	Final trench photo
2116	3	E	Post-ex	5004	1 x2	Final trench photo
2117	1, 2, 3	S	Layer	5004	1 x2	General stratigraphy of trench
2118	1, 2, 3	S	Layer	5004	1 x2	General stratigraphy of trench
2119	1, 2, 3	S	Layer	5004	1 x2	General stratigraphy of trench
2120	3	NE	Post-ex	5002	1 x2	Final trench photo
2121	1, 2, 3	SE	Layer	5002	1 x2	General stratigraphy of trench
2122	1, 2, 3	SW	Layer	5003	1 x2	General stratigraphy of trench
2123	00, 3	W	Mid-ex	5003	1 x1	Non-archaeology
2124	3	E	Post-ex	5003	1 x2	Final trench photo
2125	1, 2, 3	W	Layer	5001	1 x2	General stratigraphy of trench
2126	4, 5	SW	Post-ex	5001	1 x2	Section of ditch terminus C.500105
2127	1, 2, 3	S	Layer	4909	1 x2	General stratigraphy of trench
2128	N/A	N/A	N/A	N/A	N/A	VOID
2129	3	W	Post-ex	4909	1 x2	Final trench photo
2130	1, 2, 3	S	Layer	4907	1 x2	General stratigraphy of trench
2131	3	SW	Post-ex	4907	1 x2	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2132	3	SE	Post-ex	5001	1 x2	Final trench photo
2133	3	E	Post-ex	4904	1 x2	Final trench photo
2134	1, 2, 3	N	Layer	4904	1 x2	General stratigraphy of trench
2135	00	NE	Mid-ex	4904	1 x1	Slot in natural sand
2136	3	N	Post-ex	4901	1 x2	Final trench photo
2137	1, 2, 3	E	Layer	4901	1 x2	General stratigraphy of trench
2138	00	W	Mid-ex	4901	1 x2	Slot in natural
2139	3	S	Post-ex	4902	1 x2	Final trench photo
2140	1, 2, 3	E	Layer	4902	1 x2	General stratigraphy of trench
2141	4, 5	S	Mid-ex	4902	1 x1	Section of possible pit; non-archaeology
2142	3	W	Post-ex	4903	1 x2	Final trench photo
2143	1, 2, 3	N	Layer	4903	1 x2	General stratigraphy of trench
2144	5	S	Post-ex	4902	1 x1	Section of possible pit; non-archaeology
2145	00	W	Pre-ex	4903	1 x1	Furrow; non-archaeology
2146	1, 2, 3	W	Layer	4906	1 x2	General stratigraphy of trench
2147	3	S	Post-ex	4906	1 x2	Final trench photo
2148	00	S	Pre-ex	4903	1 x1	Possible linear; non-archaeology
2149	00	S	Mid-ex	4903	1 x1	Possible linear; non-archaeology
2150	3	N	Post-ex	4906	1 x2	Final trench photo
2151	1, 2, 3	S	Layer	4905	1 x2	General stratigraphy of trench
2152	1, 2, 3	N	Layer	4905	1 x2	General stratigraphy of trench

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2153	3	W	Post-ex	4905	1 x2	Final trench photo
2154	00	NW	Pre-ex	4903	1 x1	Possible linear; non-archaeology
2155	00	S	Mid-ex	4903	1 x1	Section of possible linear; non-archaeology
2156	00	SE	Mid-ex	4903	1 x1	Section of possible linear; non-archaeology
2157	3	S	Post-ex	4908	1 x2	Final trench photo
2158	1, 2, 3	E	Layer	4908	1 x2	General stratigraphy of trench
2159	00	N	Mid-ex	4902	1 x2	Section of possible linear; non-archaeology
2530	N/A	N/A	N/A	N/A	N/A	VOID
2531	1, 2, 3	SSW	Layer	2906	1 x2	General stratigraphy of trench
2532	3	ESE	Post-ex	2906	1 x2	Final trench photo
2533	5	SSW	Pre-ex	2905	1 x1	Pre-ex of pit C.290505 (GA01)
2534	7	NNE	Pre-ex	2905	1 x1	Pre-ex of pit C.290507 (GA01)
2535	00	ESE	Mid-ex	2905	1 x2	Mid-ex of furrow #1
2536	00	ESE	Mid-ex	2905	1 x2	Mid-ex of furrow #1
2537	00	ESE	Mid-ex	2905	1 x2	Mid-ex of furrow #2
2538	00	ESE	Mid-ex	2905	1 x2	Mid-ex of furrow #2
2539	7	W	Mid-ex	2905	1 x2	Mid-ex of pit C.290507 (GA01)
2540	7	W	Mid-ex	2905	1 x2	Mid-ex of pit C.290507 (GA01)
2541	1, 2, 3	ESE	Layer	2905	1 x2	General stratigraphy of trench
2542	5	SSE	Mid-ex	2905	1 x2	Mid-ex of pit C.290505 (GA01)
2543	5	SSE	Mid-ex	2905	1 x2	Mid-ex of pit C.290505 (GA01)

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2544	10	E	Pre-ex	2905	1 x2	Pre-ex of pit C.290510
2545	10	ESE	Pre-ex	2905	1 x2	Pre-ex of pit C.290510
2546	10	ESE	Mid-ex	2905	1 x2	Mid-ex of pit C.290510
2547	10	ESE	Mid-ex	2905	1 x2	Mid-ex of pit C.290510
2548	1, 2, 3	E	Layer	2904	1 x2	General stratigraphy of trench
2549	3	S	Post-ex	2904	1 x2	Final trench photo
2550	N/A	N/A	N/A	N/A	1 x2	VOID
2551	N/A	N/A	N/A	N/A	1 x2	VOID
2552	3	E	Post-ex	2903	1 x2	Final trench photo
2553	1, 2, 3	E	Layer	2902	1 x2	General stratigraphy of trench
2554	3	NNE	Post-ex	2902	1 x2	Final trench photo
2555	3	NNE	Post-ex	2902	1 x2	Final trench photo
2556	N/A	N/A	N/A	N/A	N/A	VOID
2557	1, 2, 3	NNE	Layer	2901	1 x2	General stratigraphy of trench
2558	1, 2, 3	NNE	Layer	2901	1 x2	General stratigraphy of trench
2559	3	E	Post-ex	2901	1 x2	Final trench photo
2560	3	E	Post-ex	2901	1 x2	Final trench photo
2561	1, 2, 3	E	Layer	2902	1 x2	General stratigraphy of trench
2562	3	N	Post-ex	2902	1 x2	Final trench photo
2563	3	W	Post-ex	2903	1 x2	Final trench photo
2564	3	W	Post-ex	2903	1 x2	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2565	N/A	N/A	N/A	N/A	1 x2	VOID
2566	1, 2, 3	N	Layer	2903	1 x2	General stratigraphy of trench
2567	1, 2, 3	N	Layer	2903	1 x2	General stratigraphy of trench
2568	1, 2, 3	E	Layer	2904	1 x2	General stratigraphy of trench
2569	3	N	Post-ex	2904	1 x2	Final trench photo
2570	3	N	Post-ex	2904	1 x2	Final trench photo
2571	3	SW	Post-ex	2905	1 x2	Final trench photo
2572	3	SW	Post-ex	2905	1 x2	Final trench photo
2573	3	SW	Post-ex	2905	1 x2	Final trench photo
2574	3	SW	Post-ex	2905	1 x2	Final trench photo
2854	3	SSE	Post-ex	0305	1 x2	Final trench photo
2855	1, 2, 3	SW	Layer	0305	1 x2	General stratigraphy of trench
2856	3	NNE	Post-ex	0306	1 x2	Final trench photo
2857	1, 2, 3	NW	Layer	0306	1 x2	General stratigraphy of trench
2858	N/A	N/A	N/A	N/A	N/A	VOID
2859	3	N	Post-ex	0307	1 x2	Final trench photo
2860	1, 2, 3	E	Layer	0307	1 x2	General stratigraphy of trench
2861	3	SE	Post-ex	0308	1 x2	Final trench photo
2862	1, 2, 3	NNE	Layer	0308	1 x2	General stratigraphy of trench
2863	3	NW	Post-ex	0310	1 x2	Final trench photo
2864	1, 2, 3	NNE	Layer	0310	1 x2	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2865	3	NWW	Post-ex	0309	1 x2	Final trench photo
2866	1, 2, 3	ESE	Layer	0309	1 x2	General stratigraphy of trench
2867	1, 2, 3	SE	Layer	0311	1 x2	Sondage 2.5m deep
2868	1, 2, 3	SE	Layer	0311	1 x2	General stratigraphy of trench
2869	3	SW	Post-ex	0311	1 x2	Final trench photo
2870	1, 2, 3	E	Layer	0301	1 x2	General stratigraphy of trench with sondage
2871	1, 2, 3	S	Layer	0301	1 x2	General stratigraphy of trench with sondage
2872	1, 2, 3	S	Post-ex	0301	1 x2	Final trench photo
2873	3	E	Post-ex	0204	1 x2	Final trench photo
2874	1, 2, 3	N	Layer	0204	1 x2	General stratigraphy of trench
2875	1, 2, 3, 4, 5	S	Mid-ex	0202	1 x2	Section of linear C.020205
2876	1, 2, 3, 4, 5	S	Mid-ex	0202	1 x2	Section of linear C.020205
2877	3	E	Post-ex	0202	1 x2	Final trench photo
2878	N/A	N/A	N/A	N/A	N/A	VOID
2879	3	W	Post-ex	0201	1 x2	Final trench photo
2880	1, 2, 3	N	Layer	0201	1 x2	General stratigraphy of trench
2881	N/A	N/A	N/A	N/A	N/A	VOID
2882	3	SW	Post-ex	0203	1 x2	Final trench photo
2883	1, 2, 3	NW	Layer	0203	1 x2	General stratigraphy of trench
2884	3	N	Post-ex	0206	1 x2	Final trench photo

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2885	1, 2, 3	N	Layer	0206	1 x2	General stratigraphy of trench
2886	3	N	Post-ex	0207	1 x2	Final trench photo
2887	1, 2, 3	W	Layer	0207	1 x2	General stratigraphy of trench
2888	3	SE	Post-ex	0209	1 x2	Final trench photo
2889	1, 2, 3	NNE	Layer	0209	1 x2	General stratigraphy of trench
2890	3	NE	Post-ex	0228	1 x2	Final trench photo
2891	1, 2, 3	SE	Layer	0228	1 x2	General stratigraphy of trench
2892	3	N	Post-ex	0227	1 x2	Final trench photo
2893	1, 2, 3	NW	Layer	0227	1 x2	General stratigraphy of trench
2894	3	E	Post-ex	0230	1 x2	Final trench photo
2895	1, 2, 3	S	Layer	0230	1 x2	General stratigraphy of trench
2896	3	S	Post-ex	0229	1 x2	Final trench photo with possible linear C.022905
2897	1, 2, 3	WSW	Layer	0229	1 x2	General stratigraphy of trench
2898	4, 5	N	Pre-ex	0229	1 x2	GA Linear C.022905
2899	4, 5	E	Pre-ex	0229	1 x2	GA Linear C.022905
2900	3	S	Post-ex	0210	1 x2	Final trench photo
2901	1, 2, 3	W	Layer	0210	1 x2	General stratigraphy of trench
2902	3	S	Post-ex	0211	1 x2	Final trench photo
2903	1, 2, 3	NE	Layer	0211	1 x2	General stratigraphy of trench
2904	3	N	Post-ex	0226	1 x2	Final trench photo
2905	1, 2, 3	WNW	Layer	0226	1 x2	General stratigraphy of trench

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2906	N/A	N/A	N/A	N/A	N/A	VOID
2907	3	SSE	Post-ex	0232	1 x2	Final trench photo
2908	1, 2, 3	NE	Layer	0232	1 x2	General stratigraphy of trench
2909	3	NNE	Post-ex	0234	1 x2	Final trench photo
2910	1, 2, 3	SE	Layer	0234	1 x2	General stratigraphy of trench
2911	1, 2, 3	NE	Mid-ex	0229	1 x2	Non-archaeology
2912	1, 2, 3	NNE	Mid-ex	0229	1 x2	Non-archaeology
2913	3	NW	Post-ex	0233	1 x2	Final trench photo
2914	1, 2, 3	SW	Layer	0233	1 x2	General stratigraphy of trench
2915	3	SSW	Post-ex	0225	1 x2	Final trench photo
2916	1, 2, 3	SE	Layer	0225	1 x2	General stratigraphy of trench
2917	3	NE	Post-ex	0237	1 x2	Final trench photo
2918	1, 2, 3	SE	Layer	0237	1 x2	General stratigraphy of trench
2919	3	SW	Post-ex	0231	1 x2	Final trench photo
2920	1, 2, 3	NW	Layer	0231	1 x2	General stratigraphy of trench
2921	3	N	Post-ex	0248	1 x2	Final trench photo
2922	1, 2, 3	SW	Layer	0248	1 x2	General stratigraphy of trench
2923	3	NNW	Post-ex	0251	1 x2	Final trench photo
2924	1, 2, 3	SW	Layer	0251	1 x2	General stratigraphy of trench
2925	3	NW	Post-ex	0252	1 x2	Final trench photo
2926	1, 2, 3	SW	Layer	0252	1 x2	General stratigraphy of trench

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2927	3	SSW	Post-ex	0256	1 x2	Final trench photo
2928	1, 2, 3	NW	Layer	0256	1 x2	General stratigraphy of trench
2929	3	S	Post-ex	0253	1 x2	Final trench photo
2930	1, 2, 3	E	Layer	0253	1 x2	General stratigraphy of trench
2931	1, 2, 3	SW	Layer	0258	1 x2	General stratigraphy of trench with sondage
2932	1, 2, 3	SW	Layer	0258	1 x2	General stratigraphy of trench with sondage
2933	3	NW	Post-ex	0258	1 x2	Final trench photo
2934	3	S	Post-ex	0263	1 x2	Final trench photo
2935	1, 2, 3	W	Layer	0263	1 x2	General stratigraphy of trench
2936	3	SSE	Post-ex	0264	1 x2	Final trench photo
2937	1, 2, 3	ENE	Layer	0264	1 x2	General stratigraphy of trench
2938	3	SW	Post-ex	0267	1 x2	Final trench photo
2939	1, 2, 3	NW	Layer	0267	1 x2	General stratigraphy of trench
2940	3	N	Post-ex	0269	1 x2	Final trench photo
2941	1, 2, 3	E	Layer	0269	1 x2	General stratigraphy of trench
2942	4, 5	E	Pre-ex	0269	N/A	Burnt pit C.026905
2943	4, 5	OVERHEAD	Pre-ex	0269	N/A	Burnt pit C.026905
2944	4, 5	OVERHEAD	Pre-ex	0269	N/A	Burnt pit C.026905
2945	4, 5	E	Pre-ex	0269	N/A	Burnt pit C.026905
2946	4, 5	NE	Mid-ex	0269	N/A	Section of burnt pit C.026905 facing WSW

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2947	4, 5	E	Mid-ex	0269	N/A	Section of burnt pit C.026905 facing WSW
2948	4, 5	NE	Mid-ex	0269	N/A	Section of burnt pit C.026905 facing WSW
2949	5	OVERHEAD	Post-ex	0269	N/A	Section of burnt pit C.026905
2950	3	NNW	Post-ex	0607	1 x2	Final trench photo
2951	1, 2, 3	ENE	Layer	0607	1 x2	General stratigraphy of trench
2952	3	SW	Post-ex	0604	1 x2	Final trench photo
2953	1, 2, 3	E	Layer	0604	1 x2	General stratigraphy of trench
2954	3	S	Post-ex	0605	1 x2	Final trench photo
2955	1, 2, 3	E	Layer	0605	1 x2	General stratigraphy of trench
2956	3	N	Post-ex	0621	1 x2	Final trench photo
2957	1, 2, 3	NE	Layer	0621	1 x2	General stratigraphy of trench
2958	3	NE	Post-ex	0622	1 x2	Final trench photo
2959	1, 2, 3	SE	Layer	0622	1 x2	General stratigraphy of trench
2960	3	SE	Post-ex	0603	1 x2	Final trench photo
2961	1, 2, 3	NE	Layer	0603	1 x2	General stratigraphy of trench
2962	3	SE	Post-ex	0601	1 x2	Final trench photo
2963	1, 2, 3	SSE	Layer	0601	1 x2	General stratigraphy of trench
2964	3	S	Post-ex	0602	1 x2	Final trench photo
2965	1, 2, 3	E	Layer	0602	1 x2	General stratigraphy of trench
2966	3	SSE	Post-ex	0606	1 x2	Final trench photo
2967	1, 2, 3	ENE	Layer	0606	1 x2	General stratigraphy of trench

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2968	3	S	Post-ex	0608	1 x2	Final trench photo
2969	1, 2, 3	E	Layer	0608	1 x2	General stratigraphy of trench
2970	3	SW	Post-ex	0614	1 x2	Final trench photo
2971	1, 2, 3	NNW	Layer	0614	1 x2	General stratigraphy of trench
2972	N/A	N/A	N/A	N/A	N/A	VOID
2973	3	NNE	Post-ex	0625	1 x2	Final trench photo
2974	1, 2, 3	W	Layer	0625	1 x2	General stratigraphy of trench
2975	3	SW	Post-ex	0631	1 x2	Final trench photo
2976	1, 2, 3	NW	Layer	0631	1 x2	General stratigraphy of trench
2977	3	SE	Post-ex	0641	1 x2	Final trench photo
2978	1, 2, 3	NNE	Layer	0641	1 x2	General stratigraphy of trench
2979	3	SSE	Post-ex	0637	1 x2	Final trench photo
2980	1, 2, 3	ENE	Layer	0637	1 x2	General stratigraphy of trench
2981	3	NNW	Post-ex	0643	1 x2	Final trench photo
2982	1, 2, 3	SW	Layer	0643	1 x2	General stratigraphy of trench
2983	3	NNE	Post-ex	0655	1 x2	Final trench photo
2984	1, 2, 3	NW	Layer	0655	1 x2	General stratigraphy of trench
2985	3	NE	Post-ex	0653	1 x2	Final trench photo
2986	1, 2, 3	NW	Layer	0653	1 x2	General stratigraphy of trench
2987	3	SW	Post-ex	2101	1 x2	Final trench photo
2988	1, 2, 3	SE	Layer	2101	1 x2	General stratigraphy of trench

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
2989	1, 2, 3	W	Layer	0666	1 x 2	General stratigraphy of trench
2990	3	S	Post-ex	0666	1 x 2	Final trench photo
23	N/A	NE	trench (final)	0901	1 x 2	trench overview of 0901
24	1, 2	SE	section	0901	1 x 2	section showing stratigraphy
25	N/A	WNW	trench (final)	0901	1 x 2	trench overview of 0901
26	1, 2	NE	section	0903	1 x 2	section showing stratigraphy
27	1, 2	NE	section	0903	1 x 2	section showing stratigraphy
28	N/A	E	trench (final)	0903	1 x 2	trench overview of 0903
29	1, 2	SE	section	0902	1 x 2	section showing stratigraphy
30	N/A	NE	trench (final)	0902	1 x 2	trench overview of 0902
31	N/A	NE	trench (final)	0902	1 x 2	trench overview of 0902
32	1, 2	W	section	0801	1 x 2	section showing stratigraphy
33	N/A	ESE	post-ex	0801	1 x 2	test pit in 0801 at 1.5m
34	N/A	SW	trench (final)	0801	1 x 2	trench overview of 0801
35	1, 2	NE	section	0802	1 x 2	section showing stratigraphy
36	N/A	NW	trench (final)	0802	1 x 2	trench overview of 0802
37	1, 2	E	section	0804	1 x 2	section showing stratigraphy
38	N/A	NE	trench (final)	0804	1 x 2	trench overview of 0804
39	1, 2	SE	section	0803	1 x 2	section showing stratigraphy
40	N/A	ENE	trench (final)	0803	1 x 2	trench overview of 0803
41	1, 2	SE	section	1103	1 x 2	section showing stratigraphy

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
42	N/A	ENE	trench (final)	1103	1 x 2	trench overview of 1103
43	1, 2	SE	section	1301	1 x 2	section showing stratigraphy
44	N/A	SW	trench (final)	1301	1 x 2	trench overview of 1301
45	1, 2	SW	section	1302	1 x 2	section showing stratigraphy
46	N/A	WNW	trench (final)	1302	1 x 2	trench overview of 1302
47	N/A	N/A	working shot	1204	N/A	metal detecting of spoil heaps
48	N/A	N/A	working shot	1204	N/A	metal detecting of spoil heaps
49	N/A	N/A	working shot	1204	N/A	metal detecting of spoil heaps
50	N/A	N/A	working shot	1204	N/A	metal detecting of spoil heaps
51	N/A	N/A	working shot	1204	N/A	metal detecting of spoil heaps
52	1, 2	SW	section	1204	1 x 2	section showing stratigraphy
53	N/A	W	trench (final)	1204	1 x 2	trench overview of 1204
54	1, 2	WNW	section	1203	1 x 2	section showing stratigraphy
55	N/A	NE	trench (final)	1203	1 x 2	trench overview of 1203
56	1, 2	NE	section	1202	1 x 2	section showing stratigraphy
57	N/A	NW	trench (final)	1202	1 x 2	trench overview of 1202
58	1, 2	NW	section	1201	1 x 2	section showing stratigraphy
59	N/A	NE	trench (final)	1201	1 x 2	trench overview of 1201
60	1, 2	S	section	1104	1 x 2	section showing stratigraphy
61	N/A	E	trench (final)	1104	1 x 2	trench overview of 1104
62	1, 2	SW	section	1102	1 x 2	section showing stratigraphy

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
63	N/A	SE	trench (final)	1102	1 x 2	trench overview of 1102
64	N/A	N/A	N/A	N/A	N/A	VOID
65	N/A	N/A	N/A	N/A	N/A	VOID
66	N/A	N/A	N/A	N/A	N/A	VOID
67	N/A	N/A	N/A	N/A	N/A	VOID
68	N/A	N/A	N/A	N/A	N/A	VOID
69	1, 2	NNE	section	1101	2 x 1	north-northeast-facing section of test pit in T1101
70	1, 2	NNE	section	1101	2 x 1	north-northeast-facing section of test pit in T1101
71	1, 2	WNW	section	1101	2 x 1	north-northeast-facing section of test pit in T1101
72	1, 2	WNW	section	1101	2 x 1	north-northeast-facing section of test pit in T1101
73	1, 2	WNW	section	1101	2 x 1	north-northeast-facing section of test pit in T1101
74	1, 2	SSW	section	1101	2 x 1	north-northeast-facing section of test pit in T1101
75	N/A	N/A	working shot	1101	N/A	working shot
76	1, 2	NE	section	1101	1 x 2	section showing stratigraphy
77	1, 2	SW	section	1101	1 x 2	section showing stratigraphy
78	N/A	WNW	trench (final)	1101	1 x 2	trench overview of 1101
79	N/A	WNW	trench (final)	1101	1 x 2	trench overview of 1101

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
80	N/A	WNW	trench (final)	1101	1 x 2	trench overview of 1101
81	N/A	WNW	trench (final)	1503	1 x 2	trench overview of 1503
82	1, 2	SSW	section	1503	1 x 2	section showing stratigraphy
83	N/A	SW	trench (final)	1502	1 x 2	trench overview of 1502
84	N/A	SW	trench (final)	1502	1 x 2	trench overview of 1502
85	1, 2	SE	section	1502	1 x 2	section showing stratigraphy
86	1, 2	NE	section	1501	1 x 2	section showing stratigraphy
87	1, 2	NE	section	1501	1 x 2	section showing stratigraphy
88	N/A	WNW	trench (final)	1501	1 x 2	trench overview of 1501
89	N/A	WNW	trench (final)	1501	1 x 2	trench overview of 1501
90	1, 2	N	section	1401	1 x 2	section showing stratigraphy
91	N/A	NW	trench (final)	1401	1 x 2	trench overview of 1401
92	N/A	NW	trench (final)	1401	1 x 2	trench overview of 1401
93	1, 2	SSE	section	0102	1 x 2	section showing stratigraphy
94	1, 2	SSE	section	0102	1 x 2	section showing stratigraphy
95	N/A	SW	trench (final)	0102	1 x 2	trench overview of 0102
96	1, 2	SW	section	0101	1 x 2	section showing stratigraphy
97	1, 2	NW	section	0101	1 x 2	section showing stratigraphy
98	1, 2	NW	section	0101	1 x 2	section showing stratigraphy
99	N/A	N/A	N/A	N/A	N/A	VOID
100	N/A	NNW	trench (final)	0101	1 x 2	trench overview of 0101

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
101	N/A	SSE	trench (final)	0101	1 x 2	trench overview of 0101
102	N/A	SE	trench (final)	1402	1 x 2	trench overview of 1402
103	1, 2	SW	section	1402	1 x 2	section showing stratigraphy
104	1, 2	SE	section	1403	1 x 2	section showing stratigraphy
105	N/A	W	trench (final)	1403	1 x 2	trench overview of 1403
106	N/A	SW	trench (final)	1404	1 x 2	trench overview of 1404
107	1, 2	ESE	section	1404	1 x 2	section showing stratigraphy
108	1, 2	NE	section	0669	1 x 2	section showing stratigraphy
109	N/A	SE	trench (final)	0669	1 x 2	trench overview of 0669
110	N/A	SSE	trench (final)	0668	1 x 2	trench overview of 0668
111	1, 2	NNE	section	0668	1 x 2	section showing stratigraphy
112	1, 2	ESE	section	0661	1 x 2	section showing stratigraphy
113	N/A	SW	trench (final)	0661	1 x 2	trench overview of 0661
114	1, 2	ESE	section	0666	1 x 2	section showing stratigraphy
115	N/A	NNE	trench (final)	0666	1 x 2	trench overview of 0666
1118	N/A	SW	trench (final)	1604	1 x 1	trench overview of 1604
1119	N/A	NE	trench (final)	1604	1 x 1	trench overview of 1604
1120	1, 2	SE	section	1604	1 x 1	section showing stratigraphy
1121	1, 2	NW	section	1601	1 x 1	section showing stratigraphy
1122	N/A	SW	trench (final)	1601	1 x 1	trench overview of 1601
1123	N/A	SW	trench (final)	1601	1 x 1	trench overview of 1601

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1124	N/A	NE	trench (final)	1601	1 x 1	trench overview of 1601
1125	1, 2	S	section	1603	1 x 1	section showing stratigraphy
1126	N/A	NE	trench (final)	1603	1 x 1	trench overview of 1603
1127	N/A	SW	trench (final)	1603	1 x 1	trench overview of 1603
1128	1, 2	SW	section	1602	1 x 1	section showing stratigraphy
1129	1, 2	SW	section	1602	1 x 1	section showing stratigraphy
1130	1, 2	SW	section	1602	1 x 1	section showing stratigraphy
1131	N/A	SE	trench (final)	1602	1 x 1	trench overview of 1602
1132	N/A	NW	trench (final)	1602	1 x 1	trench overview of 1602
1133	1, 2	SSW	section	1809	1 x 1	section showing stratigraphy
1134	N/A	W	trench (final)	1809	1 x 1	trench overview of 1809
1135	N/A	E	trench (final)	1809	1 x 1	trench overview of 1809
1136	N/A	N/A	finds photo	1809	0.1 x 1	photo of modern glass bottle
1137	N/A	N/A	finds photo	1809	0.1 x 1	photo of modern glass bottle
1138	4, 5	SW	plan	1809	1 x 1	plan of modern disturbance (C.180904)
1139	4, 5	S	plan	1809	1 x 1	plan of modern disturbance (C.180904)
1140	4, 5	SW	plan	1809	1 x 1	plan of modern disturbance (C.180904)
1141	4, 5	SW	plan	1809	1 x 1	plan of modern disturbance (C.180904)
1142	4, 5	S	plan	1809	1 x 1	plan of modern disturbance (C.180904)
1143	1, 2	S	section	1808	1 x 1	section showing stratigraphy
1144	N/A	W	trench (final)	1808	1 x 1	trench overview of 1808

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1145	N/A	E	trench (final)	1808	1 x 1	trench overview of 1808
1146	1, 2	SE	section	1807	1 x 1	section showing stratigraphy
1147	N/A	SW	trench (final)	1807	1 x 1	trench overview of 1807
1148	N/A	NE	trench (final)	1807	1 x 1	trench overview of 1807
1149	1, 2	NW	section	1806	1 x 1	section showing stratigraphy
1150	N/A	SW	trench (final)	1806	1 x 1	trench overview of 1806
1151	N/A	NE	trench (final)	1806	1 x 1	trench overview of 1806
1152	1, 2	SE	section	1806	1 x 1	section showing stratigraphy
1153	N/A	SW	trench (final)	1805	1 x 1	trench overview of 1805
1154	N/A	NE	trench (final)	1805	1 x 1	trench overview of 1805
1155	1, 2	W	section	1804	1 x 1	section showing stratigraphy
1156	N/A	S	trench (final)	1804	1 x 1	trench overview of 1804
1157	N/A	N	trench (final)	1804	1 x 1	trench overview of 1804
1158	1, 2	NW	section	1801	1 x 1	section showing stratigraphy
1159	N/A	NE	trench (final)	1801	1 x 1	trench overview of 1801
1160	N/A	SW	trench (final)	1801	1 x 1	trench overview of 1801
1161	4, 5	NNE	section	1801	1 x 1	north-northeast-facing section of pit C.180104
1162	4, 5	NNE	section	1801	1 x 1	north-northeast-facing section of pit C.180104
1163	4, 5	NNE	section	1801	1 x 1	north-northeast-facing section of pit C.180104

Photo No	Context No	Facing	Type	Trench	Scale (m)	Description
1164	1, 2	SE	section	1805	1 x 1	southeast-facing section of test pit
1165	1, 2	SE	section	1805	1 x 1	southeast-facing section of test pit
1166	1, 2	SE	section	1805	1 x 1	southeast-facing section of test pit

Appendix 2.1: Hand Test Pit Descriptions

Hand Test Pit 2105B

Dark yellow brown humic sandy silt loam, lower boundary flat, sharp, 37cm. Occasional to frequent gravel, 10–20mm. Subsoil red brown silty gravelly silt, dense. Finds of modern pottery and glass fragments. Photo HP28, facing W.

Hand Test Pit 2106B

Mid to dark yellow brown humic sandy silt loam, 40cm. Lower boundary flat to undulating, sharp, possible tree throw in NE quadrant. Subsoil dull red brown silty coarse sand. Photo HP27, facing N.

Hand Test Pit 2113B

Dark to mid yellow brown humic silty sandy loam with frequent gravel, 15–30mm, sub-rounded to rounded, 40cm deep. Lower boundary flat to small scale undulating, sharp. Subsoil red brown slightly silty gravelly sand. Gravel 15–25mm, sub-rounded to rounded. Distribution and orientation random. HP30, facing W.

Hand Test Pit 2115B

Dark to mid yellow brown humic sandy silt and with frequent to occasional gravel, 15–35mm, 38cm deep. Lower boundary flat, clear. Red brown silty sandy loam with frequent gravel, 8–30mm, sub-rounded to rounded, 28cm to underlying sandy gravel. Photo 31, facing SW.

Hand Test Pit 2201

Dark yellow brown sandy loam. Lower boundary sharp, flat to undulating. Rare finds of modern pottery. Possible feature in SE corner, fill: sandy silt loam, yellow to grey-brown, frequent inclusions of coal, occasional gravel. Photo HP01, facing NNE.

Hand Test Pit 2202A

Mid-dark yellow brown humic sandy silt loam, 37cm deep. Lower boundary sharp, undulating to irregular, on to yellow orange gravelly sand. Frequent rooting in upper section. Photo HP33, facing N.

Hand Test Pit 2203B

Dark-mid yellow brown sandy loam, increasing in sand and fine gravel content with depth, 38 cm deep. Lower boundary sharp, convoluted, with considerable plough scarring. Limited pottery and CBM (post-medieval-modern) in topsoil. Concentration of brick fragments? and possibly fire affected stone at

interface with subsoil in SE corner, in plough scars. Subsoil light orange to yellow brown slightly gravelly silt sand. Photo HP32, facing N.

Hand Test Pit 2204A

Dark yellow brown humic sandy loam to sandy silt loam, 44cm deep. Lower boundary sharp, undulating to red brown slightly gravelly coarse to medium sand. Occasional clay pipe fragment, modern pottery, and red clay CBM/field drain. Photo HP34, facing N.

Hand Test Pit 2205A

Dark yellow brown humic sandy loam to sandy silt loam. Lower boundary sharp, undulating on to dull yellow orange silty sand with frequent gravel. No finds. Photo HP02, facing NNW.

Hand Test Pit 2206A

Dark to mid greyish-yellow brown humic sandy loam. Lower boundary sharp and undulating on to buff yellow silty sand with occasional grit/fine gravel. No finds. Photo HP03, facing NE.

Hand Test Pit 2207A

Dark yellow brown humic sandy loam to sandy silt loam, 40cm deep. Lower boundary undulating, sharp on to red brown slightly gravelly coarse sand. Photo HP35 facing N.

Hand Test Pit 2208B

Dark yellow brown humic silty sandy loam with occasional gravel. Lower boundary sharp, undulating, on to dull yellow orange medium to coarse sand with occasional gravel. Occasional to rare finds, modern pottery, some concentration in base of plough furrows. Photo HP07, facing WNW.

Hand Test Pit 2209B

Dark yellow brown humic sandy silt loam to silty sandy loam with occasional gravel. Lower boundary sharp and convoluted, with 50–70mm region of involuted top and sub soil. Subsoil pale orange to yellow silty sand, dense, with lens of dense gravel, 4–8mm. Very rare finds: modern pottery including willow pattern. Photo HP05, facing N.

Hand Test Pit 2210B

Dark yellow- brown humic sandy loam with occasional to frequent gravel, lower boundary sharp and undulating, with frequent ploughing scarring of underlying subsoil. Sub-soil is a dull orange yellow slightly silty sand with frequent dark orange mottling. Photo HP04, facing NNE.

Hand Test Pit 2211A

Dark yellow brown sandy silt topsoil, 35cm deep, lower boundary sharp and undulating, on to red brown sandy gravel. Clay pipe and nineteenth-century pottery fragment in topsoil. Photo HP36, facing N.

Hand Test Pit 2212M

Dark yellow brown humic sandy loam with occasional gravel and fragments of modern pottery, 32cm deep. Lower boundary sharp, flat to undulating, onto pale yellow brown slightly silty sand with rare gravel. Photo HP06, facing N.

Hand Test Pit 2213

Dark yellow brown sandy silt to sandy silt loam, 40cm deep, sharp undulating boundary onto red brown gravelly sand to gravelly sandy loam. No finds. Photo HP37, facing SSE.

Hand Test Pit 2214A

Dark to mid yellow brown clay silt loam with occasional to frequent gravel, 8–25mm. Lower boundary flat, sharp. Subsoil buff to yellow brown silt loam with rare to occasional gravel, 10–30mm. Photo HP29 facing W.

Hand Test Pit 4801A

Dark yellow brown humic silty sandy loam with frequent gravel, 55cm, lower boundary undulating, sharp to clear on to yellow brown sandy gravel, loose. Photo HP12, facing N.

Hand Test Pit 4802B

Dark yellow brown humic very gravelly sandy loam. Lower boundary clear to sharp, flat to undulating on to yellow brown sandy gravel, loose. Photo HP08, facing N.

Hand Test Pit 4803B

Dark to mid yellow brown humic silty sandy loam with frequent gravel, 44cm. Lower boundary sharp, flat to undulating on to red brown sandy gravel, moderately compact. No finds. Photo HP13, facing N.

Hand Test Pit 4804A

Dark yellow brown humic sandy loam with common to abundant gravel. Lower boundary sharp flat to undulating on to dull orangish-brown gravelly sand, moderately compact. No finds. Photo HP09, facing N.

Hand Test Pit 4805A

Dark yellow brown humic silty sandy loam with common gravel, 36cm deep. Lower boundary clear to sharp, flat to undulating onto dull red brown silty sandy gravel to silty gravelly sand, dense. Finds: modern pottery, unworked bone, iron fragment. Photo HP11, facing NW.

Hand Test Pit 4806A

Mid to dark yellow brown humic silty sandy loam with common to frequent gravel, lower boundary clear, flat to undulating, on to dull yellow to orangish-brown silty sand with common to abundant gravel. No finds. Photo HP18, facing NW.

Hand Test Pit 4807A

Mid yellow brown humic silty sandy loam with common to frequent gravel, 33cm deep. Lower boundary clear to sharp undulating, on to yellow brown silty sand with common gravel, compact to firm. No finds. Photo HP19, facing N.

Hand Test Pit 4808B

Yellow brown relatively dense clay sandy loam, occasional gravel, lower boundary clear, flat to undulating onto dense sandy silt to silty sand with occasional gravel. Clear plough scars in subsoil. No finds. Photo HP10, facing NE.

Hand Test Pit 4809A

Dark yellow brown silty sandy loam with common to frequent gravel. Lower boundary clear to sharp, undulating. Subsoil red brown silty sand with common gravel. No finds. Photo HP21, facing NNW.

Hand Test Pit 4810B

Mid to dark yellow brown humic silty sandy loam with occasional to frequent gravel, 36 cm deep. Lower boundary sharp, flat to undulating. Subsoil red brown slightly silty gravelly sand. No finds. Photo HP25, facing N.

Hand Test Pit 4811A

Mid to dark yellow brown humic sandy silt loam frequent gravel, 33 cm deep, lower boundary clear, undulating. Subsoil red brown silty sand with frequent gravel, compact. No finds. Photo HP20, facing W.

Hand Test Pit 4812M

Dark yellow brown humic silty sandy loam with frequent gravel 32cm deep. Lower boundary clear, flat to undulating. Subsoil silty sand with frequent to common gravel, poorly/bimodally sorted. Rare finds of CBM. Photo HP22, facing NE.

Hand Test Pit 4813B

Mid yellow brown humic silty sandy loam with frequent gravel, 50cm deep. Lower boundary clear, undulating. Subsoil red brown gravelly sand, dense. Occasional finds of modern pottery and very rare CBM fragments. Photo HP26, facing NNE.

Hand Test Pit 4814B

Mid to dark yellow brown humic silty sandy loam with occasional to frequent gravel. Lower boundary clear to sharp, undulating. Subsoil silty sand, with occasional gravel, yellow brown to buff brown. Modern pottery (very rare). Photo HP24, facing N.

Hand Test Pit 4815A

Mid to dark yellow brown humic sandy silt loam with occasional gravel, 37 cm deep. Lower boundary clear, undulating. Subsoil silty sand to sandy silt with occasional gravel. No finds. Photo HP23, facing NE.

Hand Test Pit 5101A

Mid yellow brown silty humic sandy loam with occasional gravel, 49 cm deep, lower boundary flat to undulating, on to yellow brown silty sandy loam with common to frequent gravel. Topsoil finds modern pottery, iron fragment. Photo HP15, facing E.

Hand Test Pit 5102A

Dark yellow brown humic sandy silt with frequent gravel, 40cm deep. Lower boundary clear to sharp undulating on to yellow brown gravelly sand. Photo HP14, facing W.

Hand Test Pit 5103A

Mid grey to yellow brown silty clay loam, soft to pliable, lower boundary clear to sharp, undulating on to buff grey pliable silt clay. No finds. Photo HP16, facing NE.

Hand Test Pit 5104A

Humic yellow brown sandy clay loam, firm to pliable. Occasional gravel. Lower boundary clear, flat to undulating, on to red brown silt clay, firm to pliable, one possible worked flint, heavily battered from topsoil. Photo HP17, facing N.

Appendix 2.1.1: Photograph Register: Hand Test Pits

Photo No.	Context No.	Facing	Type	Scale	Comment
1	2201	NNE	Post-ex	N/A	Hand Test Pit
2	2205A	NNW	Post-ex	N/A	Hand Test Pit
3	2206A	NE	Post-ex	N/A	Hand Test Pit
4	2210B	NNE	Post-ex	N/A	Hand Test Pit
5	2209B	N	Post-ex	N/A	Hand Test Pit
6	2212M	N	Post-ex	N/A	Hand Test Pit
7	2208B	WNW	Post-ex	N/A	Hand Test Pit
8	4802B	N	Post-ex	N/A	Hand Test Pit
9	4804A	N	Post-ex	N/A	Hand Test Pit
10	4808B	NE	Post-ex	N/A	Hand Test Pit
11	4805A	NW	Post-ex	N/A	Hand Test Pit
12	4801A	N	Post-ex	N/A	Hand Test Pit
13	4803B	N	Post-ex	N/A	Hand Test Pit
14	5102A	W	Post-ex	N/A	Hand Test Pit
15	5101A	E	Post-ex	N/A	Hand Test Pit
16	5103A	NE	Post-ex	N/A	Hand Test Pit
17	5104A	N	Post-ex	N/A	Hand Test Pit
18	4806A	NW	Post-ex	N/A	Hand Test Pit
19	4807A	N	Post-ex	1 x1	Hand Test Pit
20	4811A	W	Post-ex	1 x1	Hand Test Pit

Photo No.	Context No.	Facing	Type	Scale	Comment
21	4809A	NNW	Post-ex	1 x1	Hand Test Pit
22	4812M	NE	Post-ex	1 x1	Hand Test Pit
23	4815A	NE	Post-ex	1 x1	Hand Test Pit
24	4814B	N	Post-ex	1 x1	Hand Test Pit
25	4810B	N	Post-ex	1 x1	Hand Test Pit
26	4813B	NNE	Post-ex	1 x1	Hand Test Pit
27	2106B	N	Post-ex	1 x1	Hand Test Pit
28	2105B	W	Post-ex	1 x1	Hand Test Pit
29	2214A	W	Post-ex	1 x1	Hand Test Pit
30	2113B	W	Post-ex	1 x1	Hand Test Pit
31	2115B	SW	Post-ex	N/A	Hand Test Pit
32	2203B	N	Post-ex	N/A	Hand Test Pit
33	2202A	N	Post-ex	N/A	Hand Test Pit
34	2204A	N	Post-ex	N/A	Hand Test Pit
35	2207A	N	Post-ex	N/A	Hand Test Pit
36	2211A	N	Post-ex	N/A	Hand Test Pit
37	2213	SSE	Post-ex	N/A	Hand Test Pit

Appendix 2.2: Geoarchaeological Test Pit Descriptions

Supplementary GTP 0101

0-30 Dark yellow brown humic to organic slightly sandy silt to slightly sandy silt loam. Well developed crumb structure. Rare to occasional clasts, 20-40mm, sub-rounded to rounded. Random distribution and orientation. Heavy rooting. Lower boundary undulating, clear to diffuse.

30-50 Mixed dark yellow brown humic clay silt loam. Frequent clasts, 15-40mm, sub-rounded to rounded, plus fragments of brick, tarmac and mudstone. Massive structure. Lower boundary undulating, sharp.

50-119 Orange becoming grey with depth, well sorted clay silt. Massive structure. Frequent orange pore centred mottles. Heavy rooting (relates to mottle distribution). Lower boundary flat, sharp.

119-134 Dark grey brown humic to organic clay silt, with grit rounded grit, 1-2mm and gravel, rounded 8-40mm. Random distribution and orientation of clasts. Lower boundary undulating, clear to diffuse.

134-140 Yellow and grey silty clay. Massive structure. Occasional pore centred mottles. Rare grit and clasts, rounded, 1-5mm. Lower boundary undulating, clear to sharp.

140-165+ Yellow sandy gravelly clay, transitioning around 150cm to clayey sandy gravel. Clasts 10-60mm, sub-rounded to rounded, randomly distributed and orientated. Water ingress from 155-160cm.

Supplementary GTP 0102

0-15 Dark yellow brown humic silt loam. Moderately developed crumb structure. Heavy rooting. Lower boundary flat, clear to diffuse.

15-30 Red brown clay silt loam, with lenses of grey clay silt. Occasional clasts, 3-6mm, sub-rounded to rounded. Lower boundary flat, sharp.

30-40 Dark yellow brown humic silt loam. Weakly developed crumb structure. Lower boundary flat, diffuse.

40-115 Red brown to grey brown clay silt. Weakly developed fine blocky structure becoming massive with depth. Frequent pore centred yellow to orange mottles. Lower boundary flat, clear to diffuse.

115-142 Grey silty clay to clay silt. Weakly developed fine blocky structure. Common pore centred yellow brown mottles, 1-2mm.

Supplementary GTP 0801

0-28 Mid to dark yellow brown humic silt loam. Well developed crumb structure with heavy fine rooting. Very rare clasts, 8-15mm, sub-rounded to rounded. Worm sorted layer at base of unit. Lower boundary flat, clear to diffuse.

28-76 Yellow to orange brown to slightly sandy silt loam. Rare grit (rounded, 1-2mm). Weakly to moderately developed crumb structure. Lower boundary flat (western end) to serrate (eastern end), clear.

76-96 Yellow brown to yellow grey brown sandy clay loam to sandy silt loam. Well sorted. Weakly developed blocky structure. Lower boundary serrate to gently undulating, clear.

96-104 Grey brown silty clay gravel. Gravel 20-40mm, sub-rounded to rounded, random distribution and orientation. Lower boundary flat, sharp.

104+ Yellow brown sandy gravel. Gravel 20-40mm, sub-rounded to rounded. Random distribution and weak horizontal orientation.

Supplementary GTP 0901

0-27 Mid to dark yellow brown humic silt loam. Weakly to moderately developed crumb structure, Lower boundary flat to gently undulating, clear.

27-108 Dull red brown to yellow red brown clay silt loam. Sand and grit (angular, 1-2mm) content increases with depth. Massive structure. Lower boundary gently undulating, clear to diffuse.

108+ Grey brown clay silt loam to clay loam. Sand and grit (angular, 1-2mm). Weakly developed blocky structure. Frequent weakly to moderately developed fine manganese nodules, 1-3mm. Water ingress from 140.

Supplementary GTP 1101

0-30 Dark yellow brown humic silt loam. Weakly developed crumb structure, Lower boundary flat, clear to sharp.

30-140 Grey clay silt loam to clay silt loam, becoming clay loam with depth. Massive structure. Lower boundary flat, sharp.

140+ Yellow brown loose moderately to well sorted sand. Massive structure.

Supplementary GTP 1302

0-32 Dark yellow brown slightly humic clay silt loam. Moderately developed crumb structure with heavy fine rooting. Very rare clasts, coal, 4-7mm, angular to sub-angular. Lower boundary flat, diffuse.

32-88 Grey to red brown clay silt loam. Rare grit (sub-angular to rounded, 2mm). Weakly developed crumb structure moderately developed fine blocky structure. Between 71-88cm occasional dark brown nodules/mottles, 2-4mm. Lower boundary undulating, clear.

88-134+ Yellow brown moderately sorted silty fine to medium sand. Massive structure. Frequent dark brown mottles, 5-50mm. Water ingress from 120cm.

Supplementary GTP 1402

0-28 Dark yellow brown humic silt loam. Well developed crumb structure. Lower boundary flat, sharp.

28-110 Orange brown silt loam to clay silt loam. Fine fraction increases proportion with depth. Weakly developed fine blocky structure becoming massive with depth. Lower boundary flat, sharp.

110-130 Silty gravel. Weakly expressed horizontal orientation and random distribution. Gravel 8-40mm, sub-rounded to rounded. Lower boundary flat, sharp.

130-165+ Slightly silty gravel. Gravel 8-50mm, sub-rounded to rounded. Weakly to moderately expressed horizontal orientation, random distribution.

Supplementary GTP 1503

0-28 Dark yellow brown humic silt loam. Lower boundary flat, clear to diffuse.

28-105 Orange brown silt loam to sandy silt loam. Fine fraction increases proportion with depth. Weakly to moderately developed blocky/crack structure. Lower boundary flat, clear to sharp.

105-121 Yellow brown compact clay loam. Occasional to frequent well developed black brown mottles. Heavy rooting (relates to mottle distribution). Lower boundary flat, clear.

121-135 Red grey brown clay silt to clay silt loam, with occasional rounded grit, 1-2mm. Grit content increases with depth. Weakly developed fine blocky to massive structure. Lower boundary flat to gently undulating, clear.

135+ Red to grey brown gravelly clay loam to clay silt loam. Grading to silty/clay gravel. Gravel 10-30mm, sub-rounded to rounded.

GTP 2105(B)

0–33 Dark yellow brown humic sandy silt loam with occasional clasts. Clasts are 10–30mm sub-rounded to rounded gravel. Lower boundary flat to gently undulating, sharp.

33–51 Dull red brown silty sand loam with occasional clasts. Gravel 20–35mm, sub-angular to rounded, partial concentration at top of unit. Lower boundary flat, clear to diffuse.

51–58 Dull orange-brown sandy silt loam to sandy clay loam. Massive structure, except abundant fine rooting channels. Lower boundary gently undulating, clear.

58–80 Grey brown slightly humic silty clay loam. Massive structure. Lower boundary undulating to serrated, sharp.

80+ Densely packed gravel with silt/silty sand infills. Gravel has horizontal orientation. Gravel 15–30mm, occasionally up to 90mm, sub-rounded to rounded. Occasionally imbricated at top of unit.

GTP 2106(B)

0–41 Dark yellow brown humic silty sand loam with occasional clasts. Clasts are 10–30mm sub-rounded to rounded gravel. Lower boundary undulating to convoluted, clear to sharp.

41–70 Red brown silty sandy gravel. Gravel 10–40mm, sub-rounded to rounded. Gravel has weakly expressed horizontal orientation. Lower boundary flat, clear.

70–87 Mid red brown silty, sandy gravel. Gravel 10–40mm, sub-rounded to rounded. Gravel has weakly developed horizontal orientation. Locally imbricated at base of unit. Lower boundary gently undulating, clear.

87–107 Dull orange-brown medium to coarse sand (moderately sorted). Massive structure. Lower boundary undulating, sharp.

107+ Heavily weathered Mercia Mudstone.

GTP 2113(A)

0–38 Dark yellow brown humic silty sand loam with occasional clasts. Clasts are 10–20mm sub-rounded to rounded gravel. Lower boundary flat, locally serrate, sharp.

38–50 Red brown clay sand loam with common clasts. Clasts are gravel 20–35mm, sub-angular to rounded, partial concentration at top of unit. Lower boundary flat, clear to diffuse.

50–74 Dull red-brown sandy gravel. Upper layer fine gravel/grit (2–4mm), most of unit 15–45mm, most of gravel sub-rounded to rounded, with occasional sub-angular clasts. Consistency dense, distribution and orientation random. Lower boundary flat, diffuse.

74–94 Red-brown gravel with silt infills. Gravel 20–40mm, sub-angular to rounded. Massive structure, random distribution, and orientation of clasts. Lower boundary flat, diffuse.

94–110+ Red brown clay silt, with grey mottles. Abundant gravel reducing to common with depth. Gravel angular to sub-rounded, 30–60mm.

GTP 2114(B)

0–38 Dark yellow brown humic silty sand loam with occasional clasts. Clasts are 10–20mm sub-rounded to rounded gravel. Lower boundary flat, locally serrate, sharp.

38–50 Red brown clay sand loam with common clasts. Clasts are gravel 20–35mm, sub-angular to rounded, partial concentration at top of unit. Lower boundary flat, clear to diffuse.

50–74 Dull red-brown sandy gravel. Upper layer fine gravel/grit (2–4mm), most of unit 15–45mm, most of gravel sub-rounded to rounded, with occasional sub-angular clasts. Consistency dense, distribution and orientation random. Lower boundary flat, diffuse.

74–94 Red-brown gravel with silt infills. Gravel 20–40mm, sub-angular to rounded. Massive structure, random distribution, and orientation of clasts. Lower boundary flat, diffuse.

94–110+ Red-brown clay silt, with grey mottles. Abundant gravel reducing to common with depth. Gravel angular to sub-rounded, 30–60mm.

GTP 2115

0–35 Dark yellow brown humic sandy loam with occasional clasts. Clasts are 8–50mm sub-rounded to rounded gravel. Lower boundary flat to gently undulating, sharp to clear.

35–70 Red brown silty sand with occasional clasts, becoming frequent from 50cm. Clasts are gravel 10–30mm, sub-rounded to rounded. Lower boundary flat, clear.

70–87 Yellow-brown silty sandy gravel. Gravel 15–35mm. Weakly expressed horizontal orientation. Lower boundary flat to gently undulating, coarse.

87–108 Yellow-brown banded sands and gravel. Gravels are moderately/clear horizontal orientation. Gravel 15–40mm, sub-angular to rounded. Sand coarse. Gravel bands 4–7cm thick, sand bands 15–18cm. Lower boundary flat to gently undulating, clear to sharp.

108–150+ Yellow brown to red-brown banded sand. Rare gravel sub-rounded, 10–30mm.

GTP 2201(A)

0–38 Dark yellow brown humic silty sand loam. Rare to occasional clasts. Clasts are 10–30mm sub-angular to rounded gravel. Lower boundary undulating, sharp.

38–69 Dull red brown sandy loam. Occasional clasts. Clasts are 10–20mm sub-angular to rounded gravel. Lower boundary flat, diffuse.

69–110+ Banded sands and gravels: main elements consist of dull red brown sandy loam with frequent 10–20mm sub-rounded to rounded gravel and poorly sorted sand with silt and gravel (sub-rounded to rounded, 5–10mm). Bands are 80–120mm thick.

GTP 2202(A)

0–36 Dark yellow brown humic silty sand loam to sandy silt loam. Rare to occasional clasts. Clasts are 20–50mm sub-rounded to rounded gravel. Lower boundary convoluted to stepped, sharp.

36–56 Red brown clay to silty sand loam. Rare clasts. Clasts are 15–25mm sub-angular to rounded gravel. Lower boundary very irregular (rooting/burrowing), clear.

56–79 Buff-yellow mixed silty clay with silty sand clay, increasing sand and fine gravel at base of unit. Heavily penetrated from both units above (larger roots, invertebrate burrowing). Lower boundary gently undulating, sharp.

79–108+ Red brown bands of alternating silty sandy gravel, clasts 5–15mm, sub-rounded to rounded, buff clay silts (lenses). Bands 8–12cm thick, undulating form.

GTP 2203

0–5 Dark yellow brown humic sandy silt. Rare clasts. Clasts are 10–20mm sub-angular to rounded gravel. Lower boundary undulating, sharp.

35–59 Dull yellow to red brown silty sand loam. Occasional clasts. Clasts are 5–15mm sub-rounded to rounded gravel. Frequent vertical channels. Lower boundary very irregular (rooting/burrowing), clear.

59–89 Buff to dull red brown gravelly sand. Massive structure to weakly expressed horizontal orientation to gravel. Gravel 5–15mm, sub-rounded to rounded. Lower boundary gently undulating (long wavelength 800mm), sharp.

89–105+ Yellow to dull orange brown bands of sand. Well sorted, alternating medium sand and silty medium to fine. Bands approximately 80mm.

GTP 2204(A)

0–43 Dark yellow brown humic silty sand loam with occasional to rare clasts. Clasts are 10–20mm sub-rounded to rounded gravel. Lower boundary undulating to serrated, sharp.

43–65 Red brown clay to silty sand loam. Lower boundary flat to undulating, diffuse.

65–74 Buff-yellow clay to silty sand loam. Massive structure. Lower boundary undulating, clear.

74–120+ Red brown bands of alternating silty sandy gravel, clasts 5–15mm, sub-rounded to rounded, moderately well sorted medium to coarse sand with rare to occasional gravel, 5–15mm, sub-rounded to rounded. Bands 8–12cm thick, undulating form.

GTP 2205

0–32 Dark yellow brown humic silty sand loam with occasional clasts. Clasts are 10–20mm sub-rounded to rounded gravel. Lower boundary flat, locally convoluted, sharp.

32–44 Dull red brown sandy silt loam to silty sand loam. Rare to occasional clasts. Clasts are 10–20mm, sub-rounded to rounded gravel. Lower boundary, clear to diffuse.

44–68 Buff sandy clay loam. Rare to occasional gravel, 10–30mm, sub-rounded to rounded. Dense orange mottling. Lower boundary flat, clear to diffuse.

68–85 Dull red brown, moderately sorted sandy gravel. Gravel, 4–8mm, sub-rounded to rounded. Gravel has weak horizontal orientation. Lower boundary undulating, sharp.

85–110+ Orange banded sand and gravel. Gravel 5–15mm, sub-rounded to rounded, gravel moderately sorted. Bands 80–120mm thickness.

GTP 2206(A)

0–31 Dark yellow brown humic silty sand loam with rare clasts. Clasts are 10–20mm sub-rounded to rounded gravel. Lower boundary flat, sharp.

31–60 Buff to buff brown silty sand with rare to occasional clasts. Clasts are gravel 10–20mm, sub-angular to rounded. Lower boundary deeply undulating, sharp.

60–100+ Buff banded gravelly sands and sandy gravels, and medium to well sorted sands. Bands 80–120mm thickness. Gravels within bands unoriented. Gravel and sand rich bands heavily panned (iron/iron-organic). Very rare gravel, 4–8mm, sub-angular to angular. Lower boundary slanting to the southeast, undulating, sharp.

GTP 2207(B)

0–40 Dark yellow brown humic silty sand loam with occasional to rare clasts. Clasts are 10–20mm sub-rounded to rounded gravel. Lower boundary undulating to serrated, sharp.

40–60 Yellow brown silty sand loam with occasional to rare clasts. Clasts are gravel 10–20mm, sub-rounded to rounded. Lower boundary undulating, sharp.

60–88 Orange-brown gravels, gravelly sands and sands, lenticular to banded structure. Gravel 5–15mm. Weakly expressed horizontal orientation. Lower boundary flat to gently undulating, coarse.

88–120+ Yellow-brown to yellow coarse sand. Weakly expressed/occasional laminar structure. Band of red, slightly silty sand at 90–94cm.

GTP 2208

0–43 Dark yellow brown humic silty sand loam with very rare clasts. Clasts are 10–15mm sub-rounded to rounded gravel. Lower boundary flat to locally convoluted, sharp.

43–68 Red brown silty sand loam with very rare clasts. Clasts are gravel 10–20mm, sub-angular to rounded. Lower boundary slanting to the southeast, undulating, diffuse.

68–78 Buff to pale orange yellow clay silt to clay silt loam. Very rare gravel, 4–8mm, sub-angular to angular. Lower boundary slanting to the southeast, undulating, sharp.

78–96 Red-brown silty sandy gravel. Gravel 5–10mm, sub-rounded to rounded, weak horizontal orientation. Lower boundary slanting (southeast), stepped, sharp.

96–120+ Pale yellow and red brown medium sand, becoming coarse with depth. Rare clasts, gravel, 20–40mm, sub-angular to sub-rounded.

GTP 2209(A)

0–33 Mid-dark yellow brown humic slightly silty sand loam with occasional clasts. Clasts are 10–40mm sub-rounded to rounded gravel. Lower boundary stepped, locally serrated, sharp.

33–70 Yellow brown silty sand to silty sand loam. Occasional clasts, 5–15mm, sub-angular to rounded. Massive structure. Lower boundary flat to gently undulating, clear.

70–90+ Red-brown bands of sand (slightly silty, fine to medium) with rare fine gravel 4–8mm, sub-angular to rounded, and fine gravel (5–15mm, sub-rounded to rounded).

GTP 2210(A)

0–39 Mid-dark yellow brown humic slightly silty sand loam with occasional clasts. Clasts are 10–30mm sub-angular to rounded gravel. Lower boundary flat, locally convoluted, sharp.

39–69 Yellow brown to red brown slightly silty sand. Occasional clasts, 5–15mm, sub-angular to rounded. Massive structure. Lower boundary flat to gently undulating, clear.

69–94+ Buff to yellow-brown to brick red sand. Occasional gravel 5–15mm, sub-angular to rounded. Sand fines with depth, gravel becomes rare.

GTP 2211(B)

0–37 Dark yellow brown humic silty sand loam with occasional to rare clasts. Clasts are 10–30mm sub-rounded to rounded gravel. Lower boundary flat to gently undulating, sharp.

37–60 Dark red brown silty sand to silty sand loam. Occasional to rare clasts, 10–30mm, sub-rounded to rounded. Massive structure. Lower boundary flat to gently undulating, clear to sharp.

60–100+ Yellow-brown to red-brown lenticular/banded silty sands, sands gravel. Gravel 15–35mm. Bands have undulating form.

GTP 2212(A)

0–37 Dark yellow brown humic silty sand loam. Occasional gravel, 10–35mm, sub-rounded to rounded. Lower boundary undulating to serrated, sharp.

37–47 Red brown silty sand gravel. Gravel 15–30mm, becoming 3–15mm from 47cm, mainly finer lower in unit. Sub-angular to rounded. Lower boundary flat to gently undulating, clear.

47–74 Yellow brown sandy silty gravel. Gravel, 10–35mm, sub-angular to sub-rounded. Gravel randomly distributed and orientated. Lower boundary flat to gently undulating, sharp to clear.

74–90 Orange and red-brown banded sand and gravel. Sand moderately to well sorted, coarse. Gravel 10–35mm, sub-angular to rounded. Gravel randomly distributed and orientated. Bands 50–80mm thick.

GTP 2213(B)

0–41 Dark yellow brown humic silty sand loam. Lower boundary flat to locally serrated, sharp.

41–57 Red brown silty sand loam with rare to occasional clasts. Clasts are gravel 15–30mm, sub-angular to rounded. Lower boundary flat, clear.

57–68 Yellow brown sandy silt loam. Rare to occasional gravel, 5–15mm, sub-angular to sub-rounded. Massive structure. Lower boundary flat, sharp.

68–85 Dull red-brown moderately sorted sandy gravel. Gravel 4–8mm, sub-rounded to rounded, weak horizontal orientation. Lower boundary undulating, sharp.

85–110+ Orange and red-brown banded sand and gravel. Gravel 5–15mm, sub-rounded to rounded, moderately sorted.

GTP 4801

0–36 Mid to dark yellow brown humic silty sand loam with occasional to frequent clasts. Clasts are gravel 20–40 mm, sub-rounded to rounded. Lower boundary flat to undulating, sharp.

36–50 Yellow brown sandy gravel to gravelly sand. Clasts are gravel 20–35mm, sub-rounded to rounded. Gravel poorly sorted, randomly distributed, weakly horizontally orientated. Lower boundary flat, clear.

50–80 Yellow brown slightly sandy gravel. Well sorted. Structured in diagonally aligned bands, including of 2–6mm sub-rounded to rounded gravel and 8–20mm sub-rounded gravel, alternating with poorly sorted gravelly sand and sandy gravel. Lower boundary gently undulating, clear.

88–92+ Banded buff to yellow sandy gravel. Moderately sorted, randomly distributed, and weakly horizontally orientated. Alternates with weakly to moderately sorted gravelly sand. Bands 80–100mm.

GTP 4802

0–36 Mid to dark yellow brown humic silty sand loam with frequent clasts. Clasts are gravel 10–40 mm, sub-rounded to rounded. Lower boundary undulating, locally serrate, sharp.

36–54 Red brown sandy gravel. Clasts are gravel 10–40mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Clusters of fine gravel, 5–15mm, 90mm across. Lower boundary flat, clear.

54–71 Dark yellow gravelly sand. Clasts are gravel 5–15mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Black panning and nodules intermittently distributed toward base of unit. Lower boundary flat to gently undulating, clear to sharp.

71–100+ Orange yellow to pale yellow sandy gravel. Moderately sorted, randomly distributed and weakly horizontally orientated. Clasts are gravel 10–40mm, sub-rounded to rounded. Gravel randomly distributed and orientated.

GTP 4803A

0–33 Mid to dark yellow brown humic silty sand loam. Lower boundary undulating, clear.

33–50 Buff yellow becoming grey clay, slightly silty sand. Compact to stiff consistency. Rare clasts: gravel 10–40mm, sub-rounded to rounded. Incipient crumb structure. Lower boundary flat, clear to sharp.

50–100+ Grey sandy gravel. Clasts are gravel 15–45mm, sub-rounded to rounded. Frequent diffuse orange mottling.

GTP 4804

0–31 Dark yellow brown humic silty sand loam with occasional clasts. Clasts are gravel 10–25 mm, sub-rounded to rounded. Lower boundary flat to undulating, sharp.

31–47 Red brown gravelly sand. Clasts are gravel 10-25mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat to undulating, clear to sharp.

47–63 Yellow brown moderately sorted medium sand with frequent clasts. Clasts are gravel, binomial 2–3mm, sub-angular to sub-rounded, and sub-rounded to rounded 8–12mm. Lower boundary flat, sharp.

63–74 Dull yellow brown well sorted slightly silty fine sand, with lenses of coarse sand. Lenses 100–150mm across, up to 15mm thick, crescentic form. Lower boundary flat to gently undulating, sharp.

74–83 Pale yellow to buff yellow well sorted medium to coarse sand with rare to occasional clasts. Clasts are gravel, sub-rounded to rounded, 10mm, with coarser gravel at top of unit.

83–89 Red brown laminated fine and coarse sand. Lower boundary flat to very gently undulating, clear to sharp.

89–102+ Buff yellow silty fine sand, laminar structure. Laminae of medium to well sorted yellow sands and orange gravels, layers 1–2cm.

GTP 4805

0–33 Dark yellow brown humic silty sand loam with frequent clasts. Clasts are gravel 8–25 mm, sub-rounded to rounded. Lower boundary flat to undulating, diffuse to clear.

33–49 Red brown gravelly sand. Clasts are gravel 8–30mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat to undulating, sharp.

49–63 Intermittent band of orange brown sandy gravel. Gravel 3–15mm, sub-angular to rounded.

63–73 Buff yellow brown medium to coarse sand, with frequent clasts. Clasts are gravel, 5–20mm, sub-rounded to rounded. Pockets with higher gravel concentrations or silty fine sand. Lower boundary highly irregular, clear to sharp.

73–83 Buff moderately to well sorted silty sand with occasional clasts. Clasts are gravel, 5–12mm, sub-rounded to rounded. Pockets of well sorted medium sand and slightly sandy silt, pockets approximately 4cm across. Lower boundary undulating, sharp.

83–109+ Yellow buff moderately to well sorted medium sand, with lenses of red brown silty sand (lenses 20cm across, 1–2cm thick) and fine laminated sands. Frequent root and invertebrate burrows.

GTP 4806A

0–34 Dark yellow brown humic silty sand with occasional clasts. Clasts are gravel 20–40 mm, sub-rounded to rounded. Lower boundary flat to undulating, sharp to clear.

34–84 Buff becoming dull yellow silt sand, with occasional clasts. Clasts are gravel 15–45mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat, clear to sharp.

84–93 Yellow orange well sorted medium to coarse sand. Lower boundary flat, sharp.

93–100+ Orange brown and grey slightly sandy gravel, with thin laminae/bands of clay sand (5mm thick). Gravel horizontally orientated and banded, weakly imbricated with a western orientation. Clasts are gravel 10–40mm, sub-rounded to rounded.

GTP 4807B

0–33 Dark yellow brown humic silty sand with occasional clasts. Clasts are gravel 20–40 mm, sub-rounded to rounded. Lower boundary flat to undulating, sharp to clear.

33–64 Mid to dark yellow brown to red brown poorly sorted gravelly sand. Gravel 5–30mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat, clear.

64–99 Loose yellow brown gravelly sand. Gravel 2–25mm, sub-rounded to rounded. Finer sub-angular gravel in pockets with a weak horizontal orientation. Rest of gravel randomly distributed and orientated. Lower boundary undulating, clear to sharp (probably erosive contact).

99–120+ Pale yellow laminated coarse sand. Common diffuse light orange mottling, dark red mottling/panning and ferro-organic/manganese nodules.

GTP 4808

0–45 Dark yellow brown humic sandy silt loam with occasional to frequent clasts. Clasts are gravel 10–25 mm, sub-rounded to rounded. Lower boundary undulating, sharp to clear.

45–67 Red brown slightly silty gravelly sand. Gravel 8–25mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat, diffuse.

67–72 Red brown gravelly medium to coarse sand. Frequent gravel 1–3mm, sub-angular to rounded. Occasional to frequent gravel 8–20mm. Lower boundary undulating, clear (probably erosive contact).

72–110+ Yellow and orange banded sandy gravel, sand, gritty silty sand and sand. Bands have some internal lamination. Band boundaries clear to sharp, flat to slanted orientation. Frequent root and invertebrate burrows.

GTP 4809

0–33 Mid to dark yellow brown humic silty sand loam with occasional to frequent clasts. Clasts are gravel 10–25 mm, sub-rounded to rounded. Lower boundary flat to undulating, clear.

33–55 Dull red brown silty sand gravel to silty gravelly sand. Gravel 8–45mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat, clear to sharp.

55–100+ Banded gravels and sandy gravels. Gravel bands well sorted, 3–8mm, sub-angular to rounded. Bands 20–40mm thick. Weak horizontal alignment. Sandy gravels, moderately sorted 8–25mm, sub-rounded to rounded. Bands 100–150mm thick. Leached and panned layers at 81cm and 87cm, discontinuous layers.

GTP 4810A

0–40 Dark yellow brown humic sandy silt loam. Lower boundary gently undulating, sharp.

40–56 Yellow brown gravelly coarse sand. Gravel 10–15mm, occasionally 20–40mm, sub-rounded to rounded. Gravel randomly distributed, weakly horizontally orientated. Lower boundary gently undulating to flat, sharp.

56–65 Yellow, well sorted, coarse sand. Weakly laminated with black iron pan at top of unit with red brown weakly developed iron panning close to base. Lower boundary flat, clear.

65–76 Buff brown fine sand with occasional lenses of silty sand. Lenses 150mm x 20mm. Lower boundary undulating (700–800mm wavelength), sharp.

76–100+ Pale yellow gravelly sand. Clasts are gravel 10–20mm, sub-rounded to rounded.

GTP 4811

0–32 Dark to mid yellow brown humic sandy silt loam to silty sand loam with occasional clasts. Clasts are gravel, 10–30mm, sub-rounded to rounded. Lower boundary flat to gently undulating, sharp.

32–58 Red brown firm silty gravelly coarse sand. Gravel 8–40mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat, diffuse.

58–69 Red brown gravelly sand. Occasional pockets of well sorted silty fine sand (4–6cm across) and well sorted coarse sand (2–3cm). Lower boundary undulating, sharp.

69–91 Yellow brown to red brown medium to coarse sand with frequent gravel, 1–3mm, sub-angular to sub-rounded and occasional to rare gravel, 10–25mm, sub-rounded to rounded. Gravel weakly horizontally oriented. Lower boundary undulating, sharp.

91–109+ Buff yellow sand. Banded structure, main bands of well sorted sand of varying grades, with one red band of silty clay sand. Clasts are gravel 10–20mm, sub-rounded to rounded.

GTP 4812

0–32 Mid to dark yellow brown humic silty sand loam with occasional to frequent clasts. Clasts are gravel 10–25 mm, sub-rounded to rounded. Lower boundary flat to undulating, clear.

32–48 Red brown silty sand with frequent gravel. Gravel 10–40mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat, clear.

48–85 Buff yellow sandy gravel. Gravel 10–40mm, sub-rounded to rounded, randomly distributed, and weakly horizontally orientated. Lower boundary flat to undulating, sharp.

85–100+ Pale yellow moderately to well sorted sand with rare clasts. Clasts are gravel 8–12mm, sub-rounded to rounded. Gravel randomly distributed and orientated.

GTP 4813

0–33 Mid to dark yellow brown humic silty sand. Lower boundary undulating, clear to sharp.

33–55 Red brown silty sand with occasional to frequent gravel. Gravel 15–40mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat, clear.

55–73 Orange brown slightly silty sand with occasional to frequent clasts. Clasts are gravel 5–30mm, sub-rounded to rounded, mainly randomly distributed, and orientated, with occasional pockets of gravel at base of unit with weak horizontal orientation. Lower boundary flat, clear.

73–83 Orange yellow moderately sorted medium to coarse sand with occasional clasts. Clasts are gravel 5–30mm, sub-rounded to rounded, randomly distributed, and orientated. Lower boundary flat, clear.

83–100+ Pale yellow to orange brown sandy gravel. Clasts are gravel 8–40mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Occasional areas of red and black mottling/panning.

Whole profile below topsoil has abundant infilled vertical root channels/invertebrate burrows.

GTP 4814

0–34 Mid to dark yellow brown humic silty sand. Lower boundary undulating to flat, clear to sharp.

34–54 Red brown silty sand with occasional gravel. Gravel 10–20mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat, clear to diffuse.

54–72 Red brown sandy silty gravel. Clasts are gravel 10–30mm, sub-rounded to rounded, randomly distributed, and orientated. Lower boundary flat, clear to sharp.

72–82 Bands of grit, sand and sandy gravel. Gravel is orange brown. Bands have weak horizontal orientation. Lower boundary flat, sharp.

82–100 Pale yellow well sorted fine to medium sand. The sand has a weakly expressed laminar structure, with local iron pan matching the laminar structure. Lower boundary flat, sharp.

100+ Orange brown sandy gravel, 15–45mm, sub-rounded to rounded, with localised iron panning.

GTP 4815

0–35 Mid yellow brown humic silty sand loam. Lower boundary undulating to flat, clear.

35–61 Orange brown silty sand loam, with very rare gravel. Gravel 10mm rounded. Gravel randomly distributed and orientated. Lower boundary flat, sharp.

61–82 Red orange brown coarse sandy gravel. Clasts are gravel 15–45mm, sub-rounded to rounded, randomly distributed, and orientated. Lower boundary flat, clear to sharp.

82–93 Orange yellow to brown sandy gravel to gravelly sand. Gravel 10–70mm, sub-rounded to rounded. Weak horizontal orientation. Lower boundary flat, sharp.

93–110+ Banded to laminated sand. Colours vary from deep red to pale yellow. One band of sandy gravel (100–103cm). Bands/laminae vary in sand grade.

GTP 4901

0–27 Dark yellow brown humic silty sand with occasional clasts. Clasts are gravel 8–40 (50)mm, sub-rounded to rounded. Lower boundary flat to gently undulating, sharp.

27–68 Yellow brown silty sand loam, with occasional clasts. Clasts are gravel 8–35mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat, clear.

68–89 Yellow brown sandy gravel. Sand coarse. Gravel, 10–40mm, sub-rounded to rounded. Gravel randomly distributed, weakly horizontally orientated. Lower boundary gently undulating, clear.

89–96 Red brown to yellow brown fine gravel. Gravel 2–4mm, sub-angular to rounded and 10–30mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat to gently undulating, sharp.

96–100 Buff brown slightly silty moderately to well sorted sand. Massive structure. Lower boundary gently undulating to sloping, sharp.

100–116 Yellow brown sandy gravel. Gravel 5–40mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat, clear.

116–120+ Yellow brown gravelly coarse sand. Gravel 15–30mm, sub-rounded to rounded. Gravel randomly distributed and orientated.

GTP 4902

0–35 Dark yellow brown humic silty sand loam with occasional clasts. Clasts are gravel 10–20 mm, sub-rounded to rounded. Lower boundary gently undulating, sharp.

35–63 Yellow brown sandy silt loam to silty sand loam, with occasional clasts. Clasts are gravel 10–20mm, sub-rounded to rounded. Lower boundary flat to sloping (sloping to the north), clear.

63–79 Yellow brown sandy gravel. Sand coarse. Gravel, 8–35mm, sub-rounded to rounded. Gravel randomly distributed, weakly horizontally orientated. Lower boundary flat to sloping (sloping to the north), clear to sharp.

79–105+ Red brown sandy gravel. Gravel 20–50mm, sub-angular to rounded. Gravel randomly distributed, weak horizontal orientation, lower imbricated.

GTP 4903

0–35 Dark yellow brown humic silty sand to silty sand loam with frequent clasts. Clasts are gravel 10–45 mm, sub-rounded to rounded. Lower boundary gently undulating, sharp.

35–57 Yellow brown sandy silt loam to silty sand loam, with occasional clasts. Clasts are gravel 10–20mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary, clear to diffuse.

57–77 Dull red brown gravelly sand. Sand fine. Gravel, 15–25mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary sloping, clear to sharp.

77–100+ Yellow brown sandy gravel. Sand content increases with depth. Gravel 20–40mm (70mm), sub-angular to rounded. Gravel randomly distributed and orientated.

GTP 4904

0–34 Dark yellow brown humic silty sand loam with occasional to frequent clasts. Clasts are gravel 8–25mm, sub-rounded to rounded. Lower boundary undulating, sharp.

34–44 Dull red brown silty sand loam to silty sand, with occasional to frequent clasts. Clasts are gravel 10–30mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat, clear.

44–78 Yellow brown sandy gravel, with frequent gravel, locally gravelly sand. Sand coarse. Gravel, 8–30 (40)mm, sub-rounded to rounded. Gravel randomly distributed, weakly horizontally orientated. Lower boundary undulating, clear.

78–93 Pale yellow brown gravelly sand, moderately sorted medium to coarse sand. Gravel 5–35mm, sub-rounded to rounded. Gravel randomly distributed, weakly horizontally orientated. Lower boundary flat to gently sloping, sharp.

93–110+ Banded, locally lenticular, sand. Sand grade varies between bands, each band/lens well sorted, generally stone free. Coarse sand bands have a laminar structure.

GTP 4905

0–39 Dark yellow brown humic silty sand to silty sand loam with occasional. Clasts are gravel 10–25mm, sub-rounded to rounded. Lower boundary flat, clear to diffuse.

39–82 Yellow brown to dull orange brown sandy silt loam, with occasional clasts. Clasts are gravel 8–40mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary flat, clear.

82–110 Dull yellow brown to grey brown silty gravelly sand. Gravel, 15–45mm, sub-rounded to rounded. Gravel generally randomly distributed and orientated, locally imbricated/clustered. Lower boundary flat, diffuse.

110+ Blue grey to buff grey stiff silty (clay) sand with occasional clasts. Clasts are gravel, sub-rounded to rounded, 20–25mm.

GTP 4906

0–30 Dark yellow brown humic sandy silt loam with occasional to frequent clasts. Clasts are gravel 10–40 mm, sub-rounded to rounded. Lower boundary flat, sharp.

30–50 Yellow brown slightly silty gravelly sand, with occasional clasts. Clasts are gravel 10–40mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Pockets/lenses of 3–4mm gravel toward base of unit. Lower boundary flat, clear to diffuse.

50–100+ Yellow brown gravelly sand to sandy gravel. Gravel, 10–30 (40)mm, sub-rounded to rounded. Gravel randomly distributed, weakly horizontally orientated. Lenses/bands of buff yellow well sorted medium sand, and red moderately sorted coarse sand. Bands 80–100mm thick

GTP 4907

0–42 Dark yellow brown humic silty sand loam with occasional clasts. Clasts are gravel 10–30mm, sub-rounded to rounded. Lower boundary flat, sharp.

42–64 Red brown silty sand loam with occasional clasts. Clasts are gravel 10–40mm, sub-rounded to rounded. Massive to weakly developed crumb structure. Lower boundary gently undulating, clear (slight concentration of gravel).

64–88 Yellow brown to red brown slightly silty sand, with frequent gravel. Gravel, 10–40mm, sub-rounded to rounded. Lower boundary flat, clear to sharp, with fine gravel (5–10mm sub-rounded to rounded).

88–117+ Buff to buff yellow well sorted medium sand, with occasional thin laminae of fine sand and silty sand.

GTP 4908

0–31 Dark yellow brown humic silty sand with occasional clasts. Clasts are gravel 15–35mm, sub-rounded to rounded. Lower boundary flat, clear.

31–94 Yellow brown sandy silt loam with occasional clasts. Clasts are gravel 10–50mm, sub-rounded to rounded. Massive with frequent rooting and vertical channels. Lower boundary gently undulating, clear.

94+ Yellow brown silty gravelly sand. Gravel, 15–40mm, sub-rounded to rounded. Gravel randomly distributed and orientated.

GTP 4909

0–42 Dark yellow brown humic silty sand loam with occasional clasts. Clasts are gravel 10–40mm, sub-rounded to rounded. Lower boundary flat, sharp.

42–73 Dull red brown to orange brown silty fine to medium sand with occasional to frequent clasts. Clasts are gravel 10–35mm, sub-angular to rounded. Massive to weakly developed crumb structure. Lower boundary flat, clear.

73–83 Mid yellow brown to red brown silty fine to medium sand, with very rare gravel. Gravel, 5–10mm, sub-rounded to rounded. Lower boundary undulating, sloping, clear to sharp.

83–120+ Banded pale yellow and buff sand, varies between coarse and medium grade, with occasional silt and thin bands of intermittent gravel (10–20mm, sub-rounded to rounded). Bands 100–200mm thick.

GTP 5001(B)

0–48 Dark yellow brown humic silty sand loam with occasional clasts. Clasts are gravel 10–20mm, sub-rounded to rounded. Lower boundary flat, sharp.

48–77 Dull red-brown silty sand loam to sandy silt loam, with occasional to frequent clasts. Clasts are gravel 10–30mm, sub-rounded to rounded. Gravel weakly developed horizontal orientation. Frequent to common roots and vertical channels. Lower boundary flat, diffuse.

77–100+ Yellow-brown silty sand loam. Fine rooting and vertical channels. Local orange mottling, mainly associated with channels.

GTP 5002(A)

0–43 Mid to dark yellow brown humic silt loam with rare clasts. Clasts are gravel 10–20mm, sub-rounded to rounded. Lower boundary flat, sharp.

43–50 Yellow brown sandy silt with very rare clasts. Clasts are gravel 10–20mm, sub-rounded rounded. Lower boundary undulating, sharp.

50–60 Yellow brown to red-brown sandy gravel, silt in upper 1–2cm. Clasts are gravel 5–35mm, sub-rounded to rounded. Gravel randomly distributed and orientated. Lower boundary undulating to serrated, clear.

60–72 red brown sandy (coarse) gritty gravel. Gravel is 8–20mm, sub-rounded to rounded. Weakly to moderately expressed horizontal orientation. Sand and grit grade fines with depth. Lower boundary gently undulating, clear to sharp.

72–93 Alternating bands of red brown gritty sand, buff silty sand, yellow slightly gravelly sand, buff fine sand. Bands 10–20mm thick. Bands locally cut by gravels. Finer material bands have laminar structure. Gravel components horizontally orientated. Lower boundary flat to gently undulating, clear to sharp.

93–120+ Yellow brown sandy gravel, 5–30mm, sub-rounded to rounded. Mainly random distribution and orientation, with local areas of weak horizontal orientation and rare imbricated gravels. Occasional areas of manganese/ferrous-organic nodules.

GTP 5003

0–43 Dark yellow brown humic sandy silt loam with occasional clasts. Clasts are gravel 8–30mm, sub-angular to rounded. Lower boundary flat to gently undulating, sharp.

43–68 Red brown sandy silt loam to silty sand loam with occasional clasts. Clasts are gravel 10–20mm, sub-rounded to rounded. Lower boundary flat to undulating, sharp.

68–91 Red-brown silty sandy/gritty gravel. Gravel 5–30mm, sub-rounded to rounded, weak horizontal orientation. Lower boundary undulating, sharp.

91–120+ Alternating bands/lenses of red-brown coarse sand, buff-brown silty medium-fine sand, yellow-brown sandy silt, red-brown gravelly sand (10–20mm, sub-rounded to rounded), buff medium sand. Bands 20–100mm thick. Gravels horizontal orientation.

GTP 5004

0–43 Dark yellow brown humic sandy silt loam with occasional clasts. Clasts are gravel 10–30mm, sub-rounded to rounded. Lower boundary undulating to stepped, sharp.

43–87 Yellow brown sandy silt loam to silty sand with very rare clasts. Clasts are gravel 10–15mm, rounded. Weakly developed crumb structure. Lower boundary undulating, diffuse, blending into the unit below.

87–103 Buff brown to grey-brown silty sandy loam to silty sand. Mainly massive structure, locally lenticular. Lower boundary flat to gently undulating, clear to sharp.

103–111 Buff grey gravelly silty sand to sandy silt. Clasts are gravel 10–20mm, occasionally up to 60mm, sub-angular to sub-rounded. Lower boundary gently undulating, clear to sharp.

111–130+ Alternating bands/lenses of fine sand, silty sand, coarse sand, slightly sandy silt. Bands 10–20mm thick. Lenses 40–80mm wide.

GTP 5005

0–43 Dark to mid yellow brown humic sandy silt loam with occasional clasts, becoming frequent with depth. Clasts are gravel 20–40mm, sub-rounded to rounded. Lower boundary flat to gently undulating, clear to sharp.

43–50 Red brown slightly humic silty sandy gravel. Clasts are gravel 20–40mm, sub-angular to rounded. Gravel randomly distributed and orientated. Lower boundary flat, clear to sharp.

50–71 Yellow brown sandy gravel becoming gravelly sand by base of unit. Gravel, 10–20mm, sub-angular to rounded. Densely packed at top of unit. Weak to moderately developed horizontal orientation. Lower boundary flat, sharp.

71–74 Gritty gravel. Gravel 3–10mm, sub-rounded to rounded, fining to top of unit. Lower boundary gently undulating to flat, very sharp.

74–101 Pale yellow brown to buff banded sand and fine gravel (grits), with occasional lenses of silty sand. Gravel 5–15mm, sub-rounded to rounded, moderately sorted. Sands vary from medium to coarse, sometimes gritty. Bands 20–80mm thick. Bands slope orientated 25–30 degrees, south to north. Lower boundary flat, clear to sharp.

101–120+ Alternating bands of red brown silty sand, buff grey sandy silt, yellow buff medium sand, yellow brown coarse sand, fine but gritty sand. Pale yellow brown to buff banded sand and yellow brown fine gravel (grits). Gravel 5–15mm, sub-rounded to rounded, moderately sorted. Sands vary from medium to coarse, sometimes gritty. Bands 10–25mm thick. Bands horizontal orientated. Rare manganese/ferrous-organic nodules.

GTP 5101B

0–40 Mid to dark yellow brown humic silty sand loam with occasional to frequent clasts. Clasts are gravel 20–40mm, sub-rounded to rounded. Lower boundary flat to undulating, sharp.

40–62 Buff sandy silt to silty sand with abundant clasts. Clasts are gravel 10–70 mm (20–40mm), sub-angular to rounded. Massive structure, friable. Lower boundary flat, diffuse.

62–92 Buff, becoming yellow around 78cm, silty sand, with frequent orange mottles (weakly impregnated, 2–8mm across), manganese nodules 1–2mm, occasional clasts. Gravel, 10–40mm, sub-rounded to rounded. Lower boundary flat to gently undulating, clear.

92–99 Buff to yellow moderately sorted medium sand. Massive structure. Lower boundary undulating (70mm wavelength), clear.

99+ Yellow grey moderately to weakly sorted coarse sand, with common clasts. Gravel, 2–4mm.

GTP 5102B

0–34 Mid yellow brown humic silty sand loam with occasional clasts. Clasts are gravel 20–40mm, sub-rounded to rounded. Lower boundary undulating, sharp.

34–48 Buff yellow sandy silt sand with common clasts. Clasts are gravel 20–35 mm, sub-rounded to rounded. Lower boundary undulating, sharp to clear. Thickness varies to as little as 40mm.

48–68 Dull yellow weakly to moderately sorted sand, with occasional vertical mottles (heavily impregnated). Lower boundary undulating (80cm wavelength), sharp.

68–98(88) Yellow brown, with buff lenses, of sandy gravel. Gravel 20–40mm, sub-rounded to rounded, randomly distributed, alignment dipping to the south. Lower boundary clear, sloping to the south.

98+ Orange brown to buff moderately sorted sandy gravel, 5–15mm, sub-rounded to rounded, with concentration of gravel to top of unit.

GTP 5103M

0–30 Mid grey brown humic clay silt to clay silt loam. Massive structure. Lower boundary undulating, clear (Unit 1 on section drawing).

30–60 Buff grey moderately to well sorted silty clay to clay silt. Massive to weakly developed blocky structure. Abundant dull orange reticulated mottling. Lower boundary flat to gently undulating, diffuse (Unit 2 on section drawing).

60–65 Grey brown organic silty clay, weakly developed crumb structure. Lower boundary flat to undulating, clear (Unit 3 on section drawing).

65–83 Dark brown humic silt, heavily humified peat (no organic structure visible), with buff lenses of grey sand (10x25mm) and pockets and vertical channels of yellow sand. Lower boundary clear, sloping to the south (Unit 4 on section drawing).

83–100+ Dark orange brown silty clay to clay silt, with dense nodule formation, often associated with root locations, red-brown, 5–70mm across.

GTP 5104

0–40 Mid yellow brown humic silty sand, frequent clasts. Clasts are gravel, 10–20mm, sub-rounded to rounded. Massive structure. Lower boundary flat to undulating, sharp.

40–100 Orange brown becoming buff brown silty gravelly sand. Gravel sub-rounded to rounded, 15–40mm. Clast distribution and orientation is random. Massive structure. Lower boundary flat, clear.

100–110+ Yellow unsorted medium to coarse sand with occasional to frequent gravel (10–40mm, sub-rounded to rounded).

Appendix 3: Neolithic Pottery Report

ASSESSMENT OF THE NEOLITHIC POTTERY FROM A46 NEWARK BYPASS, NOTTINGHAMSHIRE (NN23)

REPORT No. 171

30th November 2023

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Report prepared for Archaeology Warwickshire

ASSESSMENT OF THE NEOLITHIC POTTERY FROM A46 NEWARK BYPASS, NOTTINGHAMSHIRE (NN23)

ALEX GIBSON

Introduction

In November 2023, 116g of pottery from the A46 Newark By-pass, Nottinghamshire (NN23) was sent to the writer for assessment. The pottery was unpacked onto plastic finds trays for examination.

The pottery is fragmentary and was received in a dry and cleaned state. The sherds were examined to determine fabric characteristics, details of technology, formal traits, decoration and to assign a ceramic tradition.

Two small sherds had crumbled during transit.

Overview

The pottery comprises eight sherds weighing a total of 116g. They are in a soft, friable fabric, generally black throughout, and containing large angular quartz inclusions up to 6mm across and which frequently break the surfaces of the smaller, thicker sherds. In these sherds, the fabric averages 10-12mm thick whilst in the larger sherd (fig 1) the fabric is much thinner at about 8mm thick. Some of the larger sherds have a bright red outer surface suggesting oxidation and possibly burning.

The largest sherd has an everted and angled T-sections rim decorated on top with crudely executed incised herringbone motif. The inner lip of the rim has been formed by adding a strip of clay to another wise everted and slightly rolled rim form. Inside and below the rim there is a zone of incised lattice motif equally poorly executed. On the exterior below the rim is a slight concave neck and below this, on the belly of the pot, are irregular rows of paired fingertip impressions resulting in raised ridges in the centre of each pair. Three horizontal rows are visible.

One of the smaller sherds has traces of similar impressions so it is likely that all sherds belong to the same vessel, the greater thickness of the smaller sherds being due to the fact that they are from nearer the (rounded) base of the vessel.

Assessment

The sherds represent part of an Impressed Ware vessel of the Middle Neolithic. In particular, the decorated rim form indicates a Peterborough Ware pot in the Mortlake substyle. Impressed Ware is common in eastern and southern England and is remarkably uniform in its formal characteristics. It is, however, imprecisely dated due to its longevity and also a plateau in the radiocarbon calibration curve at this time which results in individual dates having wide timespans. Current dating suggests that it was in use from the beginning of the second half of the 4th millennium (c.3500 BC) until the 30th or 29th C BC. Mortlake is stylistically the 2nd of the three Peterborough Ware substyles generally agreed to have developed out of the stylistically less well developed Ebbsfleet sub-style and to probably have developed into the stylistically later Fengate sub-style. The chronological basis of this stylistic progression remains to be confirmed by radiocarbon dating and there was undoubtedly a time in the 2nd half of the 4th millennium when all three styles were in contemporaneous use.

Recommendations

The pottery is of high regional importance and warrants publication in a local or national journal or as a separate section in the larger excavation report. The vessel warrants illustration. It should be placed in its regional context and, if materials are available, be supported by radiocarbon dates to help refine regional chronologies.



Fig 1: Mortlake style vessel from Newark.

Appendix 4: Iron Age, Roman and Mediaeval Pottery, Fired Clay Fragments and Loom Weights Report

The pottery from Newark (NN23); an assessment

Jeremy Evans with a contribution by Gwladys Monteil (18/11/2023)

Introduction

Some 386 sherds of pottery were presented for examination, along with 33 fragments of fired clay and 5 fragments of Roman tile. The pottery weighed 7.487kg. Two sherds, weighing 6g were mediaeval. The Minimum Numbers of Rims (MNR) per context count was 28, with two being Iron Age and 26 Roman.

The pottery was subject to a rapid scan and recorded into the Warwickshire/OAU 13 major fabric classes and some major individual fabrics using the Warwickshire Museum/OAU recording system (Booth 2000). Fabric codes are those of the author's Derbyshire County fabric series used on many sites in Derbyshire and Nottinghamshire.

The pottery came from 355 trenches along a path of 6km. The first and obvious point to make is that for the number of trenches the quantity of pottery is small. Given that many sites are in the river flood-plain most of the area, when utilised agriculturally, is likely to have been water meadows and is not likely to have been occupied on a permanent basis.

There are four groups of pottery which might indicate some form of occupation.

Firstly, that from Trenches 2003, 2004 and 2005 in Field 20.2, yielding 73, 48 and 42 sherds respectively.

Secondly, that from Trenches 2103, 2107 and 2108 in Field 21.2, yielding 41, 12 and 15 sherds respectively. Field 21.2 is immediately adjacent to Field 20.2 and both of these groups may be from the same site.

Thirdly, Trench 2401 in Field 24 produced 23 sherds.

Fourthly, Trench 4809 produced 114 sherds, nearly all from 480914. The WSI notes 'Fields 21.2, 21.3, 22 and 23 on the northeastern part of the proposed route, above the flood plain. Fields 48–52 are located between Kelham and Averham'. Thus, unsurprisingly, all the pottery from potential settlement foci comes from sites above the flood plain.

Taphonomy

Table 001 shows the occurrence of pottery by context type from the site. As is usual with basic level rural sites the vast majority of the pottery comes from ditches and gullies, some 66.1% (Nosh). Unusually the second highest proportion comes from layers, at 18.1% (Nosh), with pits, which generally hold second place, at the low level of 1.3% (Nosh).

The average sherd weight from the trenches is high at 19.4g. This high level and may suggest that some of the ceramics are fairly primary. There is a complete profile of a greyware globular jar with a stubby, everted, straight, rising rim from 200308 and much of a BB copy sandy jar of Antonine date from 480914.

Table 001 Proportions of pottery by context type

Context type	% of NOSH	% of WT	% of MNR
1 Topsoil	5.18%	5.84%	7.14%
2 Subsoil	7.77%	6.87%	0.00%
3 Layers	18.13%	22.65%	35.71%
9 Pit fills	1.30%	0.19%	0.00%
13 Ditch fills	62.95%	61.11%	53.57%
14 Gully fills	3.11%	1.48%	0.00%
30 Scoop/hollow	0.26%	0.20%	0.00%
99 Grubenhauser fills	1.04%	1.58%	3.57%
Grand Total	386	7487	28

Chronology

Appendix 1 shows the Spot Dating for each context with pottery. In terms of possible sites none produces an adequately sized assemblage to give a good dating profile.

The site in Field 20 might have originated in the Mid Iron Age, but only context 200505 might be of this date, with a few other sherds residual in Roman contexts. Context 200408 contains two Saxon sherds, the bowl rim being in the Charnwood fabric. It also contains circular Saxon loom weight fragments (see Loom Weights below). Activity in the mid-late first century is well attested by the presence of quantities of Trent Valley ware. There are some greywares and the latest material is the unreeded hammerhead Mancetter mortarium from 200306 dated AD210–250, the two greyware wide-mouthed jars with hooked rims from 200404 which probably date after the mid third century (Darling and Precious 2014) and a Rheinzabern East Gaulish Dr37 bodysherd dated AD200–250.

The site in Field 21 is similar. There are no putative Iron Age contexts, but one residual sherd. First century Trent Valley wares are well-represented, as is early shell-tempered material, but greywares

are present and there is a single Nene valley colour-coated ware beaker from 210707 dated AD250–400. Trench 2108 only has first century AD material.

In Field 24, Trench 2401 produced Trent Valley ware, some early shell-tempered sherd and some greyware which might suggest activity in the mid–later first century AD.

Field 48 produced Roman material, nearly all of which was from Trench 480914. This included many sherds from two BB copy jars of Hadrianic-Antonine and Antonine dates respectively, a small jar in Nene Valley colour-coated ware dated AD150–250, and a profile of an East Gaulish Dr 33 samian cup, dated AD150–250.

This suggests activity here was principally Antonine (mid–to late-second century AD) or a little later.

Overall, the pottery suggests some Iron Age activity, followed by a burst of activity in the mid-later first century AD, slowing markedly in the second and with occasional activity in the later Roman period. The latest pieces are the two wide-mouthed jars with hooked rims from 200404 which probably date after the mid third century AD (Darling and Precious 2014). The absence of developed beaded and flanged bowls might suggest the site ended before c.AD270, although the collection is too small for this to be at all certain.

Fabric supply

Table 002 shows the occurrence of fabric classes in the overall collection from the site. Amphorae sherds and BB1 sherds are both completely absent from the site. Shell-tempered fabrics account for 3.1% (Nosh) of the group. This all appears to be Mid Iron Age or first century AD material. Finewares are represented by Nene Valley colour-coated ware (F01) at 0.5% (Nosh) and sherds from a colour-coated Hunt Cup in F04, amounting to 1.0% (Nosh). The Nene Valley material included a small jar dated AD150-250 and a necked beaker dated AD250-400, whilst the Hunt Cup in F04 probably dates in the range AD100-250.

Table 002 Fabric occurrence in the total A46 Newark collection

Row Labels	Sum of NOSH	Sum of WT	Sum of MNR
C00	2.33%	1.95%	3.57%
C00?	0.78%	0.12%	0.00%
F01	0.52%	0.20%	7.14%

F04?	1.04%	0.20%	0.00%
G00	46.11%	57.78%	21.43%
M01	1.55%	4.92%	7.14%
O00	1.81%	1.08%	0.00%
O00?	0.26%	0.09%	0.00%
P00	2.07%	1.74%	7.14%
R00	41.19%	29.85%	50.00%
S20	0.26%	0.80%	0.00%
S30	0.26%	0.39%	3.57%
W00	1.30%	0.80%	0.00%
Z20	0.52%	0.08%	0.00%
Grand Total	386	7487	28

The largest fabric group is class G, which is entirely composed of Trent Valley wares of mid first to possibly early second century date. Mortaria amount to 1.6% (Nosh) and, as is usual, consisted entirely of Mancetter-Hartshill. Oxidised wares amount to 2.1% (Nosh) of the collection and Iron Age style fabrics (P00) provided another 2.1% (Nosh). Reduced wares furnished the second largest fabric class at 41.2% (Nosh). These date from the Flavian period onwards, but the latest pieces are the two hooked rimmed wide-mouthed jars from wide-mouthed jars from 200404 which probably date after the mid third century (Darling and Precious 2014). There are no developed beaded and flanged bowls, and supply may have ended before the end of the third century.

Samian ware amounts to 0.5% (Nosh) and includes a Dr 27 CGS decorated bowl bodysherd, dated AD120–200 and an East Gaulish Dr 33 profile, dated AD220–250.

Whitewares provide 1.2% (Nosh) of the total collection.

Function and finewares

Table 003 shows a functional analysis of all the rimsherds from the site. The assemblage is highly dominated by jars at 75% (MNR). This is a fairly high figure, even for a basic level rural site, although the chronological emphasis on the first century AD may help explain this, as in this period basic level

sites do often have very high jar levels (cf Evans et al 2017; Evans and Rann forthcoming). Similarly, tableware levels are very low at 10.8% (MNR) even for a basic level rural site. Mortaria are quite well-represented at 7.1% (Nosh) but levels in the East Midlands on roads running north from Mancetter quite often have quite high levels. The only slightly surprising figure is the 7.2% (MNR) of cups and beakers. This is below urban levels but at the top end of the range for basic level rural sites.

Fineware levels, at 2.1% (Nosh), are typical for a basic level rural site. They consist of 1.6% (Nosh) of colour-coated wares and 0.5% (Nosh) of samian wares.

Table 003 Functional analysis of all rimsherds from the A46 Newark collection by MNR

N	Lids	Other	Mortaria	Dishes	Bowls	Beakers& Cups	Wide-mouthed jars	jars	Storage jars	Constricted-necked jars	Flagons	Amphorae
28 rims	0	0	7.1%	3.6%	7.2%	7.2%	10.7 %	53.6 %	10.7 %	0	0	0

Potential

There are three foci for possible occupation in Fields 20.2/21.2, 24 and 48. Further work ought to take place on these and the pottery from the assessment ought to be included in the post-excavation work on these groups. The pottery will provide the principal dating evidence for this phase of the work.

Retention and Conservation

All the stratified material should be retained and requires no conservation measures other than stable storage conditions. Discard of the unstratified material is not recommended, but if it is to be undertaken the mortaria, amphorae, samian, stamped vessels, and colour coated wares should all be retained, as should vessels which are good examples of their type, and a record should be kept of all material discarded.

Updated Research Aims

The Research Priorities to be reviewed are:

- RRQ1: How did the conquest impact upon rural settlements and landscapes?
- RRQ2: How did field and boundary systems relate to earlier systems of land allotment, and how did these boundary networks develop over time?
- RRQ3: Can we chart more closely the processes of agricultural intensification and expansion and development of field systems?
- RRQ4: To what extent may communication routes have been influenced by late Iron Age settlement patterns and routes of movement?

The pottery has the potential to contribute to RRQ1 and RRQ2 if a larger collection is obtained from the sites. Similarly, a collection of greater size should be useful in defining the nature of occupation on these sites as well as providing the principal chronological evidence to help determine the sequence and phasing.

Costings

It does not seem appropriate at this stage to quote for analysis of the pottery obtained when further work is clearly required on the sites producing the pottery. The pottery which is the subject of this report ought to be incorporated into the publication reports of those further works.

Fired clay and loom weights

Context 200406, SF 6

A fragment of an annular loom weight. Upper surface decorated with some oblique cuts. Base slightly flattened. Gray core with oxidised orange-brown margins and surfaces, with some-common brown ironstone inclusions c0.5-1mm and some moderate sand temper c0.3-0.4mm.

Ext Diam c12cm, int diam c5-6cm, Ht 34mm, Wt 68g, RE c20%. Hurst (1959) type 1, cAD400-700.



Context 200406, SF 8

a) A fragment of a rather bun-shaped annular loom weight. It has a dark grey core and margins and orange-brown surfaces with some vegetable temper voids and occasional moderate sand and very occasional large white quartz inclusions. Hurst (1959) type 2, perhaps 7th–8th century.

Ext Diam 11cm, int diam 3cm, Ht 40mm, Wt 139g, RE 32%

b) Fragment of an annular loom weight. It has a black core, and thin orange-brown margins and surfaces with occasional–some red ironstone inclusions c0.4-1mm and occasional moderate sand c0.2-0.4mm.

Ext diam 10cm, Int diam 6-7cm, Ht 42mm, Wt xxxg, RE xxx% Hurst (1959) type 1, AD400–700

c) Seven fragments of reduced fired clay, perhaps from b). Wt 25g



Context 200408 SF 7

a) A fragment of an annular loom weight. It has a black core and pale brown margins and surfaces with common red ironstone inclusions c.0.3-1mm, occasional moderate sand c.0.3-0.4mm and very occasional large organic voids.

Ext diam 10cm, Int diam 4cm, Ht 32mm, Wt 66g, RE 28%. Hurst (1959) type 1, AD400–700

b) Two fragments, possibly from the same annular loom weight. Fabric the same as a) above.

Ext diam 12cms, Int diam 6cm, Ht 33mm, Wt 125g, RE44%

c) Fragment of another annular loom weight with black core and orange-brown surfaces, with some-common large organic temper voids and some ironstone. Not measurable. Wt 15g

d) Nine fragments of unmeasurable fired clay, reduced black, with occasional moderate sand. Perhaps from one or more other loom weights. Unmeasurable. Wt 72g



None of the loom weights are complete, but if the RE and Wt figures are used to reconstruct a theoretical complete weight they range from 235 to 340g. This is quite well below the c.500g for the loom weights from the set at Pakenham (Plunkett 1999).

Fired clay fragments

Table 004 lists the occurrence of fired clay fragments from the site

Table 004 The occurrence of fired clay fragments

Context	Nosh	Wt	Description
200302	2	6	OXID, SANDY FIRED CLAY OBJECT??
200304	4	9	V SANDY FIRED CLAY FRGS
200408	10	96	OXID, SANDY FIRED CLAY
200408	17	35	OXID, SANDY FIRED CLAY

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Appendix 1: Spot dating

Context	Nosh	Date
30302	1	Soapy white b-s, AD45–100
200302	25	Whiteware & Trent Valley ware, AD45+
200304	5	Trent Valley ware, AD45+
200306	23	EGS Dr37 b-s, AD200–250, Mancetter unreeded hammerhead mort, AD220–250
200308	30	Greyware, AD70+
200404	26	2 x WMJ w hooked undercut rims, prob AD250+
200408	4	Saxon, C5–7
200411	2	Trent Valley ware, AD45+
200413	13	Greyware storage jar, AD70+
200417	3	MIA
200504	39	Trent Valley jars, AD45+
200505	1	Shelly handmd, b-s, MIA?
200509	2	Grey b-s, AD70+
210302	2	Trent Valley ware, AD45+
210308	35	Greyware AD70+, prob Flavian
210310	4	Greyware AD70+, prob LC2+ (Darling & Precious 2014)
210707	4	NVCC necked bkr, AD250-400
210704	8	Greyware b-s, AD70+
210809	11	Trent Valley ware, AD45+
210815	3	MIA
210819	1	Trent Valley tradn b-s, AD45–120
240101	19	Grey b-s, AD70+
240102	2	Trent Valley ware, AD45+

240113	2	Shelly b-s, MIA?
250201	1	Shelly b-s, MIA?
250504	1	Med b-s
261104	1	Late Med b-s
280104	1	Oxidised b-s, Roman or Med
480908	2	Trent Valley b-s, AD45+
480913	1	Greyware b-s, AD70+
480914	111	NVCC sml jar, AD150–250
510204	3	Oxidised b-s AD45+

200401	1	Imbrex frag, Roman
220316	1	Roman tile

Appendix 2: Decorated samian ware, Dr Gwladys Monteil

Cat. no.1 – (200306) –Dr.37, Rheinzabern. The mould was likely old or dirty which means the decoration lacks definition but four motifs are visible: the bottom half of M51a (Ricken and Fischer 1963,41), next to M111 in medallion K20a (ibid, 58 and 266), with a small rosette below which is probably O39a (ibid, 225) despite the poor moulding. All of those point to the style known as “Ware B mit Zierglied O382” (Ricken 1948, Taf.228, 16F for M111 and 51a, Taf.229, 6F for rosette). Early to mid-3rd c. AD.

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Appendix 5: Animal Bone Report

A46 Bypass, Newark, Nottinghamshire: NN23

Animal Bone Assessment

S. Hamilton-Dyer

02 December 2023

A small assemblage of animal bones (under a kilogram) was recovered during trial trenching. The material comes from a variety of feature types including pits, ditches and occupation layers.

The bones and teeth were recovered from a total of 13 features and numbers approximately 246 fragments. Several of these are recently fragmented pieces and were counted as single bones and teeth after rejoining, resulting in a lower individual specimen count of 69. Taxonomic identifications were made to the best achievable level using the author's modern comparative collections. Ribs and vertebrae of the ungulates were assigned only to the level of cattle/horse-sized and sheep/pig-sized. Undiagnostic shaft and other fragments have been similarly divided into size class. Any fragments that could not be assigned even to this level have been recorded as indeterminate mammal only.

Tables 1–2 contains summary taxon counts by context together with short notes on the material.

The remains are mainly of cattle bones and teeth and cattle-sized rib, vertebra and limb shaft fragments. These together total 43 of the 69 specimens. Remains of other taxa are few; they include sheep/goat, pig, horse and a fragment of probable dog mandible. No remains of birds, wild mammals or fish are present in this small collection.

The condition of the bone varies between features from poor, with bone material fragmentary and suffering attrition from soil chemicals, to good with bones and teeth intact and with little surface damage. Most features were recorded as having bone in fair condition; most specimens recognisable to taxon and anatomical element, with minor surface erosion and with recordable features such as butchery, fusion information and tooth wear visible. Most of the individual bones are not complete but a few are measurable.

The butchery style visible on specimens from pit 200418 and gully 270305 suggests a Roman or later date for these fills; bone from other features has no distinctive butchery or taxa that indicate possible period of origin.

Overall, the remains from this site are typically dominated by the bones and teeth of the main domestic mammals. The assemblage as it stands is too small for further

analysis. While not all bone is well preserved and there will be taphonomic bias there are indications that greater amounts of bone, with potential for useful analysis, are likely to be recovered from larger excavations in the area.

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Table 1: Identification of Animal Bones

Context No.	Condition of Bones	cattle bones	cattle teeth	sheep bones	sheep teeth	pig teeth	horse bones	dog bones	cattle sized	sheep/pig sized	indet. mammal	total NISP	bones	loose teeth	Frag Count
200304	fair	1					1		4			6	6	0	37
200306	fair	3	1			1	1		10		10	26	24	2	64
200308	poor	1	1									2	1	1	32
200404	fair	1	1	1	1		1				1	6	4	2	28
200408	poor		1						4			5	4	1	22
200411	fair	2										2	2	0	12
200417	fair	2			1				4		4	11	10	1	35
200504	poor		1						1			2	1	1	4
200509	good		1									1	0	1	1
210813	poor				1			1				2	0	2	5
210819	fair		2									2	0	2	2
270304	good								1	2		3	3	0	3
480914	fair		1									1	0	1	1
Total:		10	9	1	3	1	3	1	24	2	15	69	55	14	246

Table 2: Description of Animal Bone Fragments

Context No.	Associated Feature	Condition of Bones	Notes	Frag Count
200304	200304	fair	horse metapodial distal pieces, shaft fragments, ear os ?cattle	37
200306	200307	fair	cattle astragalus, pelvis pieces, mandible fragment, horse scapula distal in pieces, pig male lower canine, cattle sized vertebra, other fragments largely from the bones	64
200308	200309	poor	cattle mandible fragment with tooth roots much fragmented	32
200404	200404	fair	horse femur shaft in pieces, cattle humerus shaft in pieces, cattle tooth, sheep/g metacarpus and 3rd upper molar	28
200408	200407	poor	one or more cattle molar fragments, shaft fragments	22
200411	200412	fair	cattle mandible hinge, humerus fragment	12
200417	200418	fair	chopped cattle pelvis in pieces, horn core fragments, sheep/g lower molar 3 at stage d (Grant 1982).	35
200504	200504	poor	calcined fragment, fragments of cattle tooth	4
200509	200510	good	cattle upper molar	1
210813	210814	poor	sheep/g tooth frag? mandible fragment of ?dog	5
210819	210820	fair	cattle upper molar	2
270304	270305	good	2 rib fragments, one chopped, cattle size vertebra chopped	3
480914	480915	fair	fragment	1
				Total: 246

Appendix 6: Worked Flint and Small Finds Report

Newark, Nottinghamshire (NN23). Worked Flint Assessment by Lynne Bevan

Four worked flints weighing a total of 22 grams from Newark, Nottinghamshire were examined for purposes of assessment in cognisance of the procedures of assessment as set out in MAP 2 (English Heritage 1991), to provide both a quantification of the assemblage and a qualitative overview of its potential for further analysis.

Raw Material

The flint was in a good, fresh condition and the raw material used was translucent medium-dark brown and dark grey in colour and of a good quality. The small amounts of cortical survival on the flint were thin and compacted which is generally characteristic of flint from a secondary source, probably local gravels.

Summary

The flints included a narrow blade-like flake with marginal retouch and use-wear, and a retouched flake (250504), both made from the same translucent brown flint and probably originating from the same industry or episode. Other finds consisted of a large broken flake with retouch along one side (240113), and a shattered chunk comprising part of a small pebble which has traces of retouch and use-wear along one edge and may have been used as a rudimentary scraper (Unstratified 3900).

None of the flints were distinctive or chronologically diagnostic, and a later Neolithic to Early Bronze Age date is most probable for most of them. However, one of the flints, the large, retouched flake, may be later in date, since it came from a context (240113) which also yielded two body sherds of shelly Middle Iron Age pottery (Evans 2023). Many Iron Age sites have produced groups of flintwork from pits and other features which could be contemporary with Iron Age activity (Humphrey and Young 2003; Young and Humphrey 1999). However, close dating of this particular flint is not possible since later Bronze Age and Iron Age flint assemblages exhibit similar characteristics, including simple core/flake technology, utilising a hard hammer technique, and lack of skill in knapping, leading to the production of broad, squat flakes which were used for expedient tasks and then discarded (Butler 2005, 189). While this broad flake could belong to either of these industries, it came from a ditch fill and, as such, may have been a residual find from an earlier phase of activity on the site and was, therefore, not contemporary with the pottery.

Recommendations for Further Work

The four worked flints from the site are not closely dateable and their distribution is scattered. They appear to relate to brief, single episodes of activity in the vicinity of the site rather than settlement of any duration.

In broad terms their presence attests to human activity on the site, probably during the later Neolithic, and Bronze Age periods, potentially extending into the Iron Age in one case, though this cannot be proven based upon the current evidence available.

In conclusion, while this small assemblage is interesting on a purely local basis in terms of the information it provides regarding episodes of prehistoric activity in the landscape, it is of limited value at the present time. However, should further worked flint be recovered during subsequent work in the immediate area, the flints discussed here should be considered as part of a potentially larger assemblage rather than being reported on in detail at this stage.

Recommendations for Conservation and Storage

It is recommended that the worked flint is retained for comparative purposes in the event of future flint finds from the area.

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Newark, Nottinghamshire (NN23). Small Finds Assessment by Lynne Bevan

This assessment was undertaken in cognisance of the procedures of assessment as set out in MAP 2 (English Heritage 1991), to provide a quantification of the assemblage and a qualitative overview of its potential for further analysis. The finds are discussed and evaluated below according to material group, with the more diagnostic and potentially significant finds being discussed in more detail.

Thirteen small finds recovered from a site near Newark were examined, several of which comprised several broken fragments from the same objects. The breakdown of small finds by materials was as follows: copper-alloy objects (5), iron objects (7) and lead objects (1).

In addition, two recent finds were recovered which are not considered further here: a modern iron bolt (123) and several fragments of silver foil (270304). The foil came from a context from which the remains of a World War 1 knapsack was recovered. The circular shape of some of the foil fragments is suggestive of them once being part of a lid or bottle top.

Copper Alloy

The copper-alloy objects were mainly in a good, stable condition. They included a fragment of leaded copper alloy which may have originated from a broken vessel or fitting (187), a small square-sectioned fragment of rod, possibly from a toilet instrument of some kind (200308), a rectangular fragment of strip (126), and three fragments of folded sheet (SF 2, 200408). In addition, a small round-sectioned tubular object encased in a ferrule with a splayed terminal (123), now broken at both ends, was recovered. This object has an aged appearance and appears to have been a fitting of some kind, perhaps part of a broken key or lock. While it came from a context which also yielded a modern iron bolt which is not considered in this report, a Medieval or Post-Medieval date may be possible for this item and further research will be required for it when work is concluded on the site. The square-sectioned fragment of rod was too small for close identification, although a Roman date is likely for this item since it came from a context which yielded greyware pottery dating to AD 70 (Evans 2023). A Roman date is also likely for both the leaded copper alloy fragment and the fragment of strip, although a later date cannot be ruled out.

The three fragments of folded sheet, which were in a degraded condition, came from a context which yielded two sherds of Anglo-Saxon pottery and fragments from an Anglo-Saxon circular loomweight (Evans 2023). However, while they may have originated from a copper-alloy object associated with the Anglo-Saxon material, their poor standard of preservation precluded further identification.

Iron Objects

Most of the items were fragmentary and, in a poor, corroded condition which precluded close identification in most cases. X-rays were not available at the time of assessment.

Identifiable items included of part of a large horseshoe (021704), the end of a tool, possibly a small chisel or punch (SF 1, 300804), and two large nails (3102063 and 510205). Less identifiable material consisted of a bent rectangular-sectioned object which appears to be pointed at one end, possibly a fitting of some kind (210308), a large bolt-like object with a bun-shaped head (51/02), and a small fragment of iron, possibly part of a nail shaft, with burnt material attached to the end (21708).

The shape of the horseshoe and the presence of a toe clip indicate a later 19th century date for this item. None of the other iron objects were closely identifiable or dateable.

Lead Object

A 17th century musket ball (SF 2, 240601) was recovered from topsoil.

Discussion

The small finds assemblage was small and very limited in its potential for dating and further research. With the exception of the horseshoe and the musket ball, both of which were later finds, most of the small finds were broken and poorly preserved and could not be properly identified or dated. While some items may have been of Roman or Anglo-Saxon date, based on associated pottery, none of the finds were significant in themselves. Nevertheless, they should all be retained for comparison with any further finds resulting from future work in the immediate area.

Recommendations for Conservation and Storage

The small finds are currently stable and will not require specialist conservation at the present time beyond being stored under controlled conditions.

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Appendix 7: Miscellaneous Small Finds Report

NN23 miscellaneous finds by Dr Cathy Coutts, MCIfA

Clay tobacco pipe

Four contexts produced fragments of clay tobacco pipe.

Context 220306 produced a small bulbous bowl with an incipient spur and stem bore of between 3mm–3.2mm similar to Oswald Type 17 (Oswald 1975, 40 Fig 4, G) which dates to c.1640–70.

Context 021404 produced seven fragments of a smashed bowl and stem of the same pipe with a spurred bowl with moulded feathers rising from the base and a thin stem fragment from the mouth-piece end of the stem. The pipe probably dates to c.1840–80.

Context 220306 produced three fragments of clay pipe bowl (two adjoining), one of which is decorated with oak leaves flanking the mould mark on the front, probably dating to c.1800–1840.

Context 021304 produced three adjoining fragments of an undecorated clay pipe bowl and a stem, possibly 18th century in date.

Context 220606 produced a single fragment of slender clay pipe stem from the mouth-piece end of the stem; the bore suggests a possible date of late 17th or early 18th century.

Glass

Two fragments of brown bottle glass were recovered (from contexts 270304 and 510205) and the remainder colourless vessel glass. Context 270304, in addition to a piece of brown bottle glass produced two complete vessels; a paste jar with hexagonal rounded sided 87mm high with a rim diameter of 42mm (no maker indicated), a narrow Art Deco type bottle, possibly for hair tonic, with a metal screw cap (bottle height 128mm, width 60mm, depth 28mm). The mould registration number on the base [778380] indicates a registration date of 1932. The remaining piece from this context was a long, colourless bottle neck with mould seams, probably early 20th century. Contexts 021404, 21707 and 220808 produced colourless fragments of vessel glass. It is quite possible that none of this glass recovered is earlier than 20th century in date.

Ceramic Building Material (CBM)

The term ceramic building material covers both bricks and tiles, although generally where these are identifiable as such the specific terms are used, while CBM will refer to those small fragments that could either be from either bricks or tiles. The largest fragments from 510205 are unquestionably brick with the most complete fragment measuring 52mm thick. All three fragments from this context are hand-made from poorly mixed clay containing fragments of limestone and two have sooting on one surface suggesting that they may have been from a hearth. A small fragment from 4200, one from

021304 and another fragment from 220308 are in a similar fabric and all are likely to have been from earlier post-medieval bricks. One of the fragments from 3900 is also in a similar fabric. The abraded fragment from 30302 is likely to be from a brick but is in a sandier fabric than the ones described above.

The majority of the rest of the CBM is likely to have derived from post-medieval roof tiles. These have finer, sandier fabrics but all are hand-made. Contexts 3800 (13mm thick) and 220306 (20mm thick) both have a single fragment identifiable as roof tile with two surfaces, while the remaining fragments from these contexts could be from bricks or tiles, as could three from 3900. 021404 produced a slightly curved fragment, probably from a land drain and 220606 produced another fragment of ceramic land drain.

Hone stone

Context 230502 produced a cigar-shaped, fine-grained micaceous sandstone sharpening stone (SF1) measuring c.150mm long (one end broken) and with a diameter of 30–36mm. Such rounded sharpening stones are typically used for sharpening curved blades such as scythes and billhooks and are still sold today.

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Appendix 8: Twentieth-Century Pit Contents Report

NN 23: Twentieth-century pit contents by Bryn Gethin

Several metal artefacts, including Iron and Aluminium tins and brass fittings with bits of canvas attached, glass artefacts, and newspaper fragments were recovered from the fill (270304) of a long, narrow pit (270305) in Field 27, Trench 3 (Plate 1).

The brass fittings

The brass fittings include 6 buckles, 9 strap ends and 12 buttons/press studs and 4 belt stiffeners/loops (Plate 2). These were parts of a set of 1908 pattern British Army webbing. The metal parts indicate the remains of:

- one waist belt with attachment straps,
- 2 sets of ammunition pouches, each consisting of five pouches for clips of rifle ammunition, and
- several other buckles and strap ends, probably representing the fittings of two shoulder straps and possibly parts of a water bottle holder.

The entrenching tool cover, entrenching tool handle carrier and haversack appear to be missing and the bayonet holder would have left no trace, being entirely cloth.

This webbing was designed in 1908 and was not superseded until a new pattern was introduced in 1937. It took several years for the old pattern to fall out of use.¹

Metal tins

There were at least ten metal tins. The majority were of Iron and had degraded to a point that they were unrecognisable. One had survived well as it was made from aluminium. It was marked as on the front as "Gibbs Dentifrice" and on the back with D & W Gibbs Ltd, Great Britain, Watford, London (Plate 3).² It was a type of tooth cleaner that consisted of a solid, soap-like block. Two of the other cans probably contained shoe polish, and a larger example might have contained a whole chicken; there were chicken bones adhering to the corrosion on its interior. Another was the shape of a sardine or other fish tin.

¹ 1908 pattern webbing. Available online @ [REDACTED]

[REDACTED] d 15/12/2023.

The Newspaper

Legible newspaper fragments were also recovered. A fragment of cartoon entitled –EELZEBU–, enabled the newspaper to be identified as The Daily Mirror, which had a cartoon strip called Beelzebub Jones which ran from 1937 to 1945.³ There are various frustratingly fragmentary parts of the newspaper which mention the military, the French, the Germans, Italy, the Americans and Munich. It seems that the newspaper may be from a date shortly before the outbreak of The Second World War. This identification is most soundly supported by mention of ‘Soviet-Man’ ‘still the scene of soviet and Japanese forces.....’. It is likely that this refers to the Battle of Khalkhin Gol, a short military campaign, essentially an undeclared war, between the Japanese occupation forces of Manchuria and the Soviet Union which occurred between July and the end of August 1939. The lack of numerous other mentions of war suggests that the article refers to the earlier fighting, just before the declaration of WWII in Europe on September 1st 1939.

The glass artefacts

There glass artefacts included a shard of brown bottle glass, a p paste jar with hexagonal rounded sided 87mm high with a rim diameter of 42mm (no maker indicated), a narrow Art Deco type bottle, possibly for hair tonic, with a metal screw cap (bottle height 128mm, width 60mm, depth 28mm). The mould registration number on the base [778380] indicates a registration date of 1932 (See Appendix 7: Miscellaneous Small Finds Report).

Discussion

The contents of the pit included food, personal items and British military webbing. The webbing is of 1908 design but some of the other artefacts and most tellingly the newspaper fragments suggest that the deposition did not take place until or shortly after 1939. The pit the material was buried in was long, narrow, and had vertical sides, the type of pit that might have been dug with an entrenching tool. The pit was located on the western side of the Fosse way, now the A46, less than 100m from the edge of the former RAF Winthorpe, now the site of Newark Showground. This was opened in 1940 with aircraft arriving on site by at least the end of August of that year.⁴ It seems likely that the objects were the possessions of a British serviceman involved with the guarding or construction of the airfield during 1939, perhaps by a deserter trying to conceal items before absconding.

³ Beelzebub Jones Cartoon. Available online [REDACTED] Accessed 15/12/2023.

⁴ RAF Winthorpe. Available online @ Accessed https://en.wikipedia.org/wiki/RAF_Winthorpe Accessed 15/12/2023.



Plate 1: Pit 270305 with some artefacts still *in situ*



Plate 2: Metal fittings from 1908 pattern British army webbing.



Plate 3: Examples of probable shoe polish tin and Gibbs Dentifrice tin.



Plate 4: Metal tin fragments with chicken bones adhering.



Plate 5: A selection of the newspaper fragments.



Plate 6: The glass objects from the pit.

Appendix 9: Environmental Samples Report

Draft Paleoenviromental Report by Bekky Hillman

Introduction

1. A suite of 29 samples of between 5 and 40 litres were taken during Phases 1 and 2 of evaluations at Newark on Trent. Samples were taken from eight pit features and eleven ditches and five layers.
2. Samples were processed in entirety by Archaeology Warwickshire using the standard procedures for floatation with residues retained on a 500micron mesh and flots retained on a 300micron sieve. Dried flots were sieved and fractionated into 4mm, 2mm and <2mm fractions from which any charcoal or charred remains were sorted, separated and bagged.
3. All samples were rapidly assessed using an Aspen stereo binocular microscope (X10-500). Results are shown in Table 1.
4. The assessment considers archaeobotanical potential, preservation of the remains and quantities recovered and have been graded in the table according to these parameters with 1: high potential with well-preserved remains, high numbers or rare remains, 2: good potential with reasonable preservation that can provide useful information , 3: low potential but may be worth looking at if the context is important or unusual and 4: very low potential with little or no charred remains present.
5. Nomenclature for cereals follows Zohary et al. 2012 and other plants Stace 2019. The term seed may include achene, fruit, nutlet in assessment.

Results

Prehistoric

Context 200505 Structure 200506 (Sample 2.20) (Phase 2)

This sample contained a moderate quantity of charred material that could be industrial debris. It is unlikely to have been bread or dung as no seeds were found within the material so it more likely to be slag or fire debris. There were no identifiable plant remains other than rare 2mm fragments of charcoal.

Transitional

Context 240111 Ditch 240112 (Sample 1.4) (Phase 1)

This sample contained rare indeterminate grain fragments and a single fragment of probable rachis. Wild seeds of clover (*Trifolium sp.*), corncockle (*Agrostemma githago*) and several grasses were also recovered as were rare fragments of hazel nutshell (*Corylus avellana*). Charcoal was rare with no fragments of 4mm recovered.

Context 200411 Linear 200412 (Sample 2.11) (Phase 2)

This sample contained a single grain of barley (*Hordeum sp.*) and other charred plant fragments that were unidentifiable. Charcoal of 4mm was rare and there were only slightly more moderate quantities of 2mm fragments.

Context 200504 Layer (Sample 2.21) (Phase 2)

This sample contained rare grain fragments, some of which were possibly barley. There were also rare fragmentary probable grass seeds and charred material which was unidentifiable. Charcoal of 4mm was rare but there were more moderate quantities of 2mm fragments.

Roman

Context 200308 Linear 200309 (Sample 2.4) (Phase 2)

This sample contained rare unidentifiable small fragments of charred plant material, rare spikelet forks and small fragments of hazel nutshell (*C. avellana*). Charcoal of 4mm was rare but there were more moderate 2mm fragments.

Context 200306 Ditch 200307 (Sample 2.7) (Phase 2)

This sample contained only rare small flecks of charcoal and no other charred plant material.

Context 200413 Linear 200414 (Sample 2.13) (Phase 2)

This sample contained rare fragments of charred material that was poorly preserved and therefore unidentifiable. Charcoal was also rare with no 4mm fragments and less than 25 of 2mm.

Context 200308 Ditch 200309 (Sample 2.17) (Phase 2)

This sample contained two wheat grains and rare fragments of indeterminate grains. The sample was dominated by charcoal with moderate 4mm fragments and abundant 2mm ones.

Context 200509 Ditch 200510 (Sample 2.19) (Phase 2)

This sample contained rare fragments of unidentifiable charred plant material and rare 2mm fragments of charcoal.

Context 210310 Linear 210309 (Sample 2.29) (Phase 2)

This sample contained rare fragments of grains that were indeterminate and a single 2mm legume (Fabaceae). Charcoal was rare with no 4mm fragments and less than twenty 2mm. The sample was dominated by uncharred woody material.

Saxon

Context 200406 Semi-sunken house (Samples 2.8 and 2.9) (Phase 2)

Sample 8 contained rare grains of rye (*Secale cereale*) and oat (*Avena sp.*). From the small proportion (10%) of the smaller fraction that was assessed there were moderate numbers of flax (*Linum utitatisimum*) and a large quantity of burnt material likely to be some type of industrial waste. By far the most dominant material in this sample was charcoal with abundant fragments that were over 10mm some of which were tentatively identified as oak (*Quercus*).

Sample 9 was a smaller flot but also contained rare grains of rye (s. *cereale*) barley (*H. vulgare*) and moderately abundant flax seeds (*L. utitatisimum*) there were also rare legumes of 2mm, knotweeds (Polygonaceae) and grass seeds. Charcoal was again the most dominant with abundant 4mm and 2mm fragments and moderate umbers that were larger than 10mm.

Context 200408 Sunken house 200407 (Sample 2.23) (Phase 2)

This sample consisted only of charcoal, there were abundant fragments that were more than 10mm, 4mm and 2mm, but no other charred plant remains.

Context 200417 Pit 200418 (Sample 2.18) (Phase 2)

This sample contained no charred plant material other than charcoal. Whilst fragments of 4mm were rare 2mm fragments were more moderate. The sample was dominated by uncharred material such as wild seeds, leaf and wood fragments indicating some degree of waterlogging.

Undated

Context 260204 Pit 260205 (Sample 1.1) (Phase 1)

This sample was dominated by uncharred roots, there were no charred plant remains other than rare fragments of charcoal of 2mm and smaller.

Context 26904 Pit 26905 (Sample 2.1) (Phase 2)

This sample contained no charred plant material other than rare fragments of 4mm and 2mm charcoal.

Context 260206 Pit 260207 (Sample 1.2) (Phase 1)

This sample was dominated by fragments of hazel nutshell (*Corylus avellana*), there were no cultivated or wild plant seeds. There were rare fragments of 4mm and 2mm charcoal.

Context 240404 Pit 240405 (Sample 1.3) (Phase 1)

This sample contained moderate numbers of hulled barley (*Hordeum vulgare*) and abundant wild seeds. These included possible medick/melilot (cf. *Medicago/Melilotus*), stinking mayweed (*Anthemis cotula*), heather (*Erica* sp.), cleavers (*Galium* sp.), knotweeds (Polygonaceae), brassicas (Brassicaceae), legumes (Fabaceae) of 1mm, 2mm and 2.5mm some of which are identifiable to species level and several different varieties of grasses (Poaceae). Charcoal of 4mm was rare and whilst there were more moderate numbers of 2mm charcoal fragments, roots and stem material likely from heather were the dominant material.

Context 240506 Ditch 240507 (Sample 1.5) (Phase 1)

This sample contained rare fragments of unidentifiable plant material, rare 4mm charcoal and more moderate quantities of 2mm fragments.

Context 310208 Pit 310209 (Sample 1.6) (Phase 1)

This sample was dominated by uncharred material including fragments of leaf, stem and wild seeds. Charred material was very rare and limited to small fragments of charcoal and unidentifiable charred fragments.

Context 200410 Linear 200409 (Sample 2.10) (Phase 2)

This sample contained moderately abundant cultivated cereal grains including both hulled wheat (*Triticum dicoccum/spelta*) and some free threshing wheat (*Triticum aestivum/durum*), barley and oats (*Avena* sp.) which could have been wild or cultivated, there was also a single flax seed. Chaff from cultivated grains included barley rachis segments and spelt wheat (*T. spelta*) glume bases. Wild seeds consisted of legumes (Fabaceae) of 2mm and several grasses. Charcoal was less dominant than grains with rare 4mm fragments and only slightly more moderate quantities of 2mm fragments.

Context 200415 Linear 200416 (Sample 2.12) (Phase 2)

This sample contained rare fragments of charred material that was poorly preserved and therefore unidentifiable. Charcoal was also rare with no 4mm fragments and less than 25 of 2mm.

Context 210804 Pit 210805 (Sample 2.22) (Phase 2)

This sample contained rare cultivated grains of wheat and barley with a single free threshing wheat glume base also recovered. Other charred remains included grasses and rare 4mm and 2mm charcoal fragments. The sample was dominated by uncharred material including fragments of tree bark and small stems indicating some degree of waterlogging.

Context 210306 Pit 210307 (Sample 2.28) (Phase 2)

This sample consisted purely of charcoal, there were abundant fragments that were more than 10mm, 4mm and 2mm, but no other charred plant remains.

Discussion

Charred plant material was recovered from all samples, though most contexts sampled contained low quantities. Some samples, notably those from the dated Roman and Saxon features contained abundant and diverse well-preserved material. This included both cultivated plants such as wheat, barley and flax and wild seeds often found with crops and on rough ground. This shows some level of cultivation, processing and possibly industrial activities were happening in different areas.

Although all samples from layers were dated either by finds or stratigraphically only one sample from a pit contained dating material whilst eight of the ditch samples were from dated contexts.

Some features, whilst excavated in wet conditions, show signs of historical waterlogging. The preservation of organic material has transformed our knowledge with much more diverse assemblages recovered from the anaerobic conditions (Hunter-Dowse pers comm).

One Neolithic feature was excavated but not sampled during excavations. Evidence for Neolithic occupation in the East Midlands is limited. Clear evidence of agricultural activity is rare and the discard of waste may have occurred in more discrete areas and pits (Healy 1992). Evidence from intensive surveys in this area have identified local foci whereas less intensive methodologies have failed in this identification (EMHERF).

There appear to be two main areas of occupation, the first being that around Fields 23 and 24, the second in Field 20.2. The plant remains are diverse including quantities of cultivated and wild seeds, charcoal and also hazel nutshells. There is potential to study the environment and changing local land uses over time using charcoal, cultivated and wild plant material; agricultural practices and how these may have changed; industrial activities and how these communities lived and traded with other communities. The presence of charcoal and hazel nutshell material will allow AMS dating of material.

Some pit fills have abundant uncharred material such as leaves, wild seeds and bark fragments indicating that there is a degree of waterlogging. These conditions are particularly seen in Field 20 around Trenches 4, 5 and 6 which have Saxon finds and Field 21 Trench 8 which was undated but contained cultivated grains, chaff and uncharred material.

Evidence for Late Bronze Age and/or Iron Age settlement in Nottinghamshire is sporadic, however open settlements have been found in Girton as part of a strip map and sample project prior to gravel extraction (EMHERF). Iron Age settlement evidence has been recovered from excavations at Farndon Fields and Crankley Point. Roman artefacts were recovered from Newark Northgate, the A46 Newark to Widmerpool improvements and Langford (EMHERF).

The evidence for agricultural practice and environment in the Roman period for the area shows a concentration of interventions in river valleys and nucleated settlements, therefore rural contexts should be prioritised (EMHERF).

A high-status Saxon female burial was found in Newmark-on-Trent and excavations from Newark-on-Trent to Widmerpool suggest settlement use in to the Anglo-Saxon period (Cooke and Mudd 2009). There are no excavated settlements from the Saxon period in huge areas of Derbyshire and Nottinghamshire, settlement patterns and material culture in these areas are simply not known (EMHERF; Anglo Saxon Period).

Recommendations based on recovered evidence and The Regional Research Framework

It is recommended that all Neolithic features should be sampled with samples of 40 litres where possible to maximise recovery. Recovery of dated charred plants remains is required to answer questions about the spread of crops and use of gathered resources.

Dated or dateable prehistoric contexts should be sampled, the limited prehistoric context samples here show a variable preservation and abundance of ecofacts therefore samples of 40L should be taken where possible. Particular attention should be given to any Bronze Age features where only three sites have been investigated in the region.

Iron Age contexts should be sampled to find evidence of the increase in wheat and spelt production from the Bronze Age and the spread of agricultural practice, this may be highlighted with groups of arable weeds that are associated with cultivation on a larger scale rather than those associated with garden production (van der Veen 1992) and also remains of chaff from dehusking before storage. Samples should be of 40L where possible to maximise recovery.

A targeted research strategy may be suitable for the Roman period to help more accurately date activity and understand the processes of agricultural and environmental change (EMHERF; Roman Period), however expanding our knowledge of the transitional period and the introduction of new crops, herbs and fruits will need consideration. The regional framework also recommends analysis and dating of boundary ditches and field systems is needed and priority should be given to small towns, villas and the rural economy.

The Saxon period sees all classes of evidence under-represented with particular evidence needed of the change from spelt to free threshing wheat and a possible hiatus in cultivation. Evidence of an agricultural expansion and the exploitation of woodlands should be prioritised, with samples of 40L where possible to maximise recovery.

The Saxon remains recovered in Field 20.2 offer a unique opportunity to gain valuable environmental data especially with some areas that may show signs of being waterlogged. With little available Saxon information in the area, it is recommended that any dated Saxon features are sampled and that consideration should be given to potential waterlogged material.

Where waterlogged deposits are found consideration should be given to monolith sampling for pollen, which is urgently needed to establish land use in the area (EMHERF).

No medieval features were found during this phase of excavations, should any be encountered during mitigation there are gaps specifically in evidence for the introduction of river wheat, crop rotation and field systems, the urban and rural diets and living conditions and woodland management.

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Table 1: Processed Samples

Sample No.	Context	Sample Taken / Processed (L)	8mm res discarded (KG)	<8mm res (KG)	Flot charred / uncharred (ML)	Charcoal 4mm	Charcoal 2mm	Grain	Legume / pea	Weed seed	Chaff	Overall Potential Charred Remains
1.1	260204				<5/5		C					4
1.2	260206	10	2.11	2.62	20/-	C	C					4 but C14 with HNS
1.3	240404				25/2	C	A	B	C	A*		1
1.4	240111				10/10		B	C	C	B		2
1.5	240506				10/20	C	B					4
1.6	310208	20			<5/20		C					4
2.1	026904	5	0.015	0.135	10/-	C	C					4
2.4	200308				10/-	C	A					3
2.7	200306	10	0.005	0.355	<5/5							4
2.8	200406				1000/-	A** some >10mm	A**	B				2
2.9	200406				200/1	A** some >10mm	A**	B				1
2.10	200410	20	0.300	3.335	25/5	C	A	A*	C	B	B	1
2.11	200411	20	0.720	7.615	15/2	C	B	C				4
2.12	200415	20	0.475	7.235	5/5		B					4
2.13	200413	40	0.725	12.485	5/1		C					4
2.17	200308	10	0.070	0.585	40/5	A	A**	C				4

Sample No.	Context	Sample Taken / Processed (L)	8mm res discarded (KG)	<8mm res (KG)	Flot charred / uncharred (ML)	Charcoal 4mm	Charcoal 2mm	Grain	Legume / pea	Weed seed	Chaff	Overall Potential Charred Remains
2.18	200417	10	0.080	0.555	10/5	C	A					4
2.19	200509				10/5		C					4
2.20	200505	20	0.200	2.505	10/		C					
2.21	200504	20	0.670	5.135	30/10	C	B	C		C		3
2.22	210804				5/20		B	C		C	C	2
2.23	200408				200	A** many >10mm	A**					4
2.28	210306				500	A** many >10mm	A**					4
2.29	210310				5/5		C	C		C		4



Inset Map

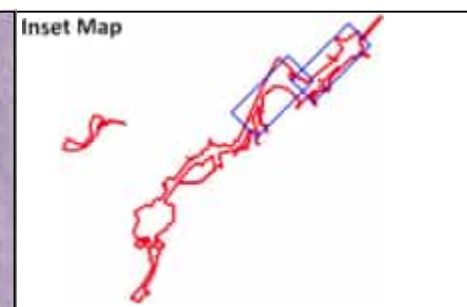
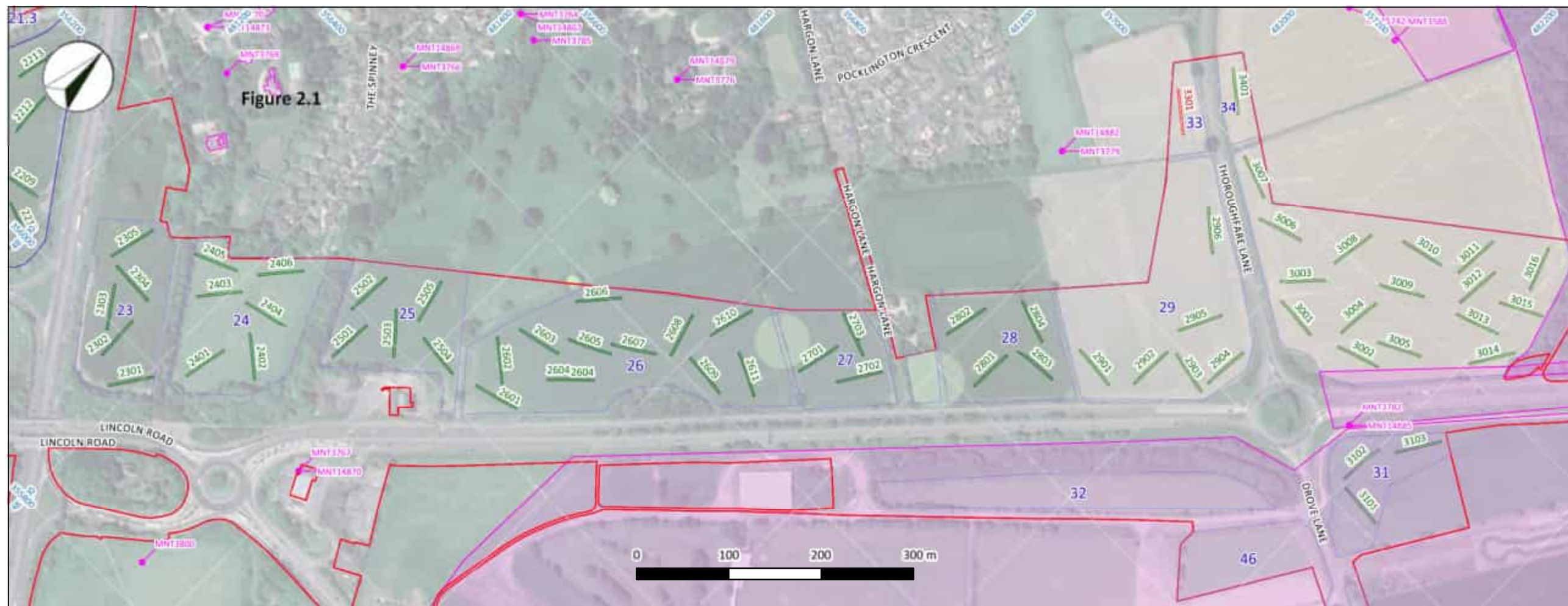
Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Site Location

Legend

- Order Limits
- Trenching Areas
- Monuments

	Project No. J3063-A	
	Scale @ A3 1:30,000	
	Drawn RZ	Check -
	Date 23 07 24	Rev. 1.0
Copyright Notes Notes: © MapTiler © OpenStreetMap contributors Bing Maps ©2022 Microsoft		CRS OSGB36
		Figure 1



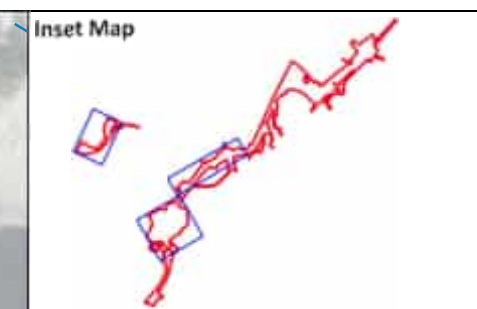
Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Title
Location of Evaluation Trenches (Northern)

- Legend**
- Order Limits
 - Areas
 - Ecological Exclusion Zone
 - Monuments
 - Excavated Trench
 - Cancelled
 - To Be Excavated

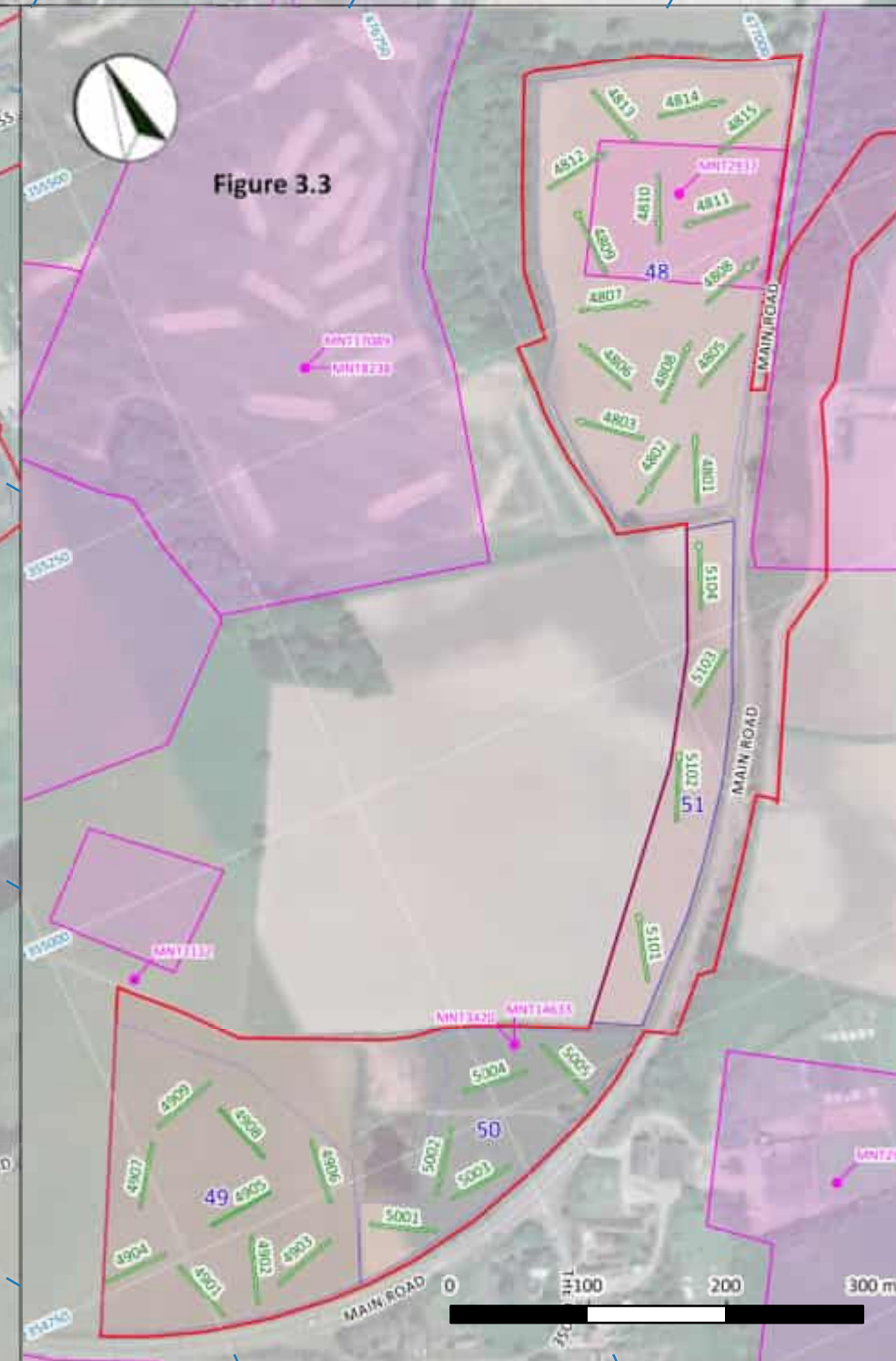


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	Scale @A3		1:5,000
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	RZ		-
Date	23 07 24		Rev.
			1.0
Copyright Notes Bing Maps ©2023 Microsoft	CRS		
			OSGB36
	Figure		
			2.1-2



Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Location of Evaluation Trenches
Fields 7-18
Fields 1-3, 6 & 52
Fields 48-51



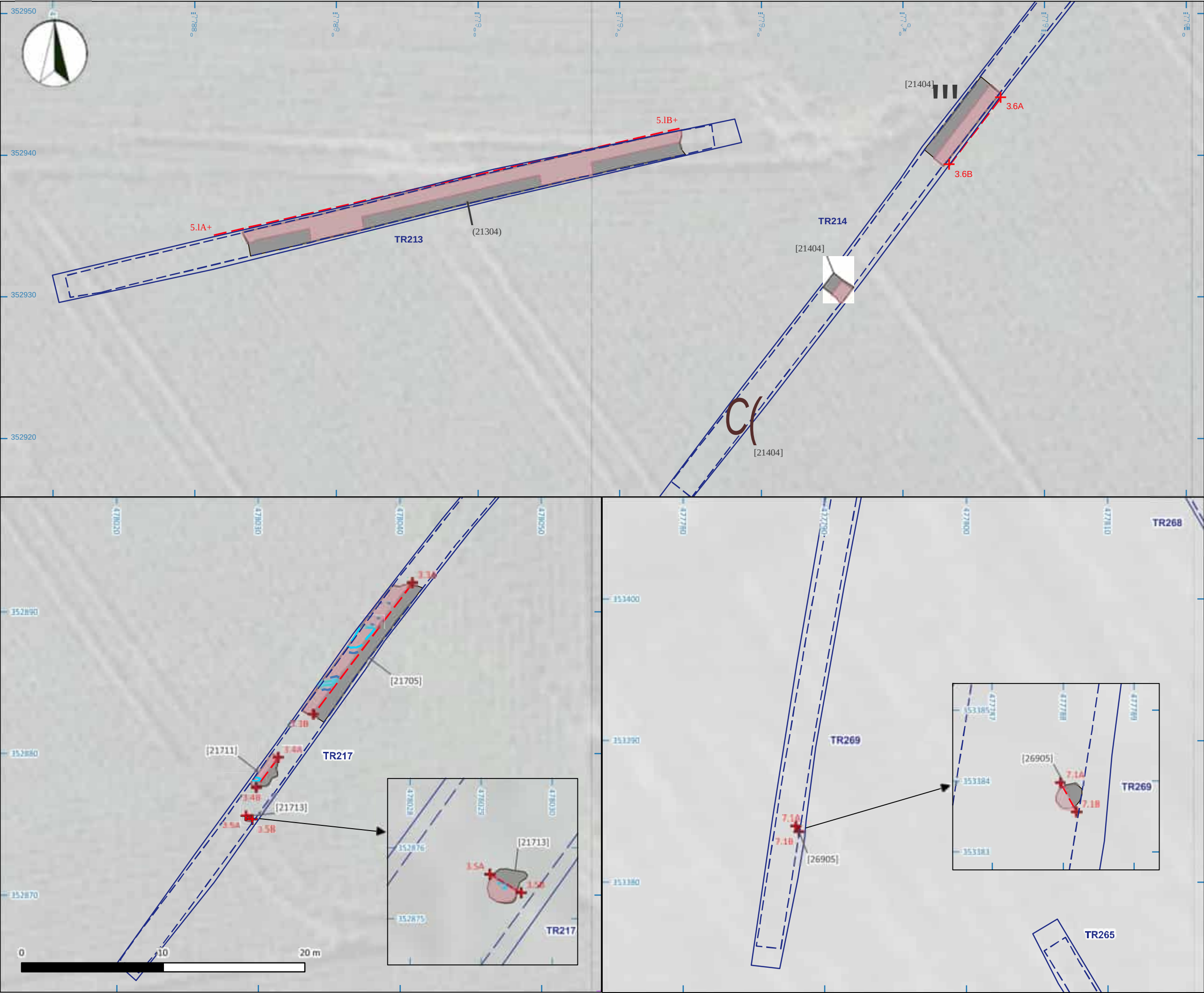
Legend

- Order Limits
- Areas
- Ecological Exclusion Zone
- Monuments
- Excavated Trench
- Cancelled
- To Be Excavated

	Project No. 13063-A	
	Scale @A3 1:5,000	
	Drawn AB	Check -
	Date 13 09 24	Rev. 1.1
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		Figure 3.1-3



Inset Map 	
Project A46 Newark Bypass Trial Trenching and Geoarchaeological Test	
Title Plan of excavated Field 2 trenches	
Legend Order Limits Areas Non-archaeology Surveyed Trench Archaeology Surveyed Trenches Cancelled Trench To be excavated	
	Project No. I3063-A
	Scale @A3 1:2,500
	Drawn by AB Checked by -
	Date 23 07 24 Revision 1.0
Notes Bing Maps ©2023 Microsoft	
CRS EPSG:27700	
Figure 5	



Inset Map

Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

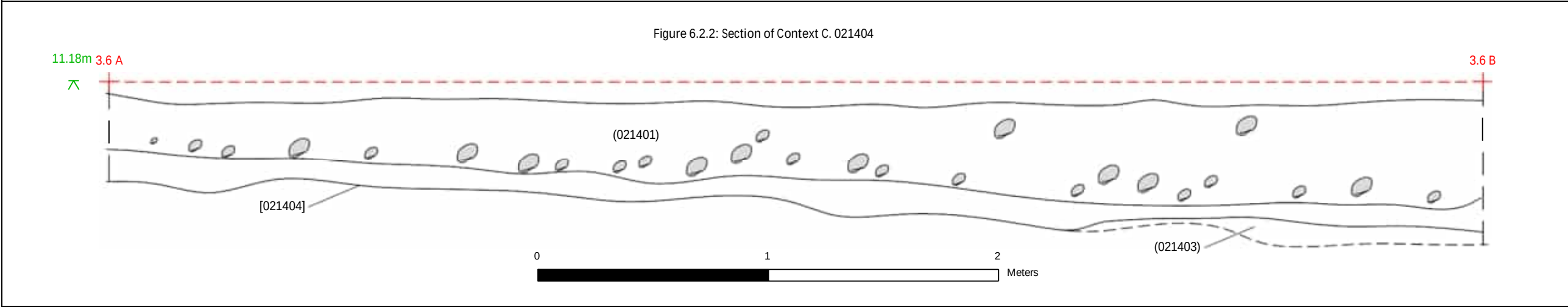
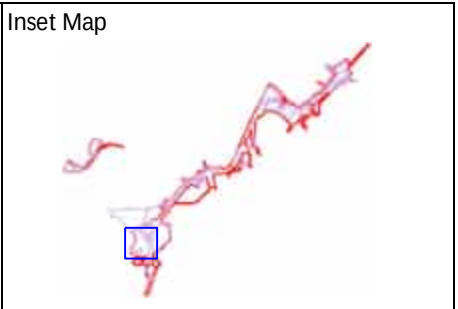
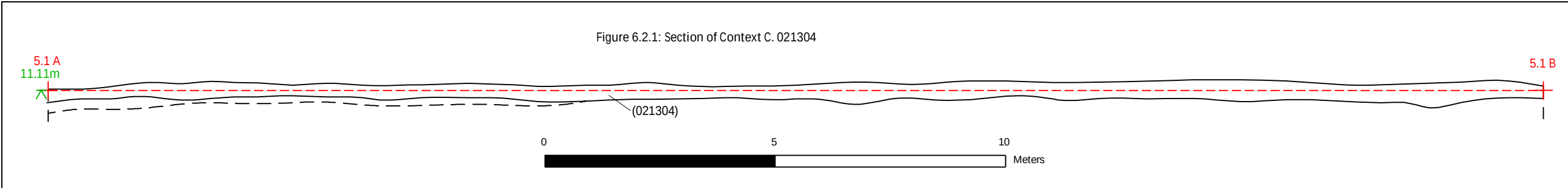
Title

Plans of features in Trenches 0213, 0214, 0217 & 0269

Legend

- Order Limits
- Areas
- Trench - Top
- Trench - Base
- Feature
- Excavated
- Base of feature
- Break of Slope
- Section Line
- Section Point

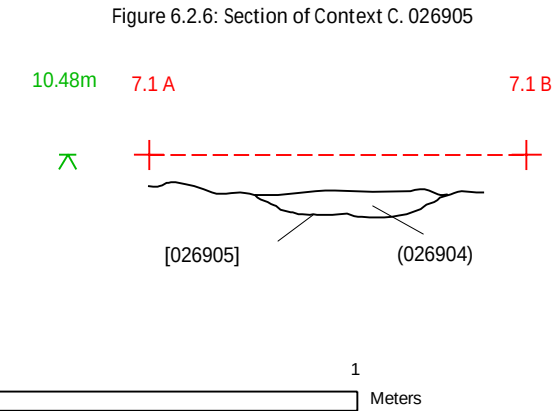
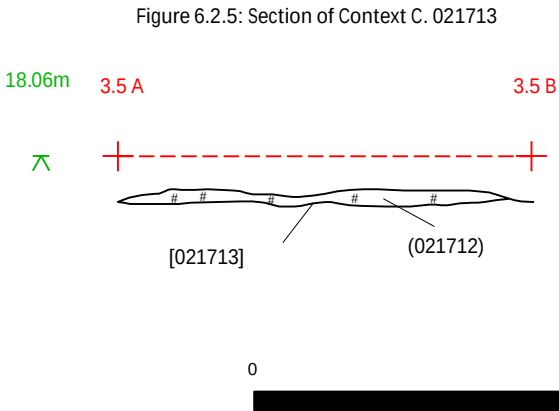
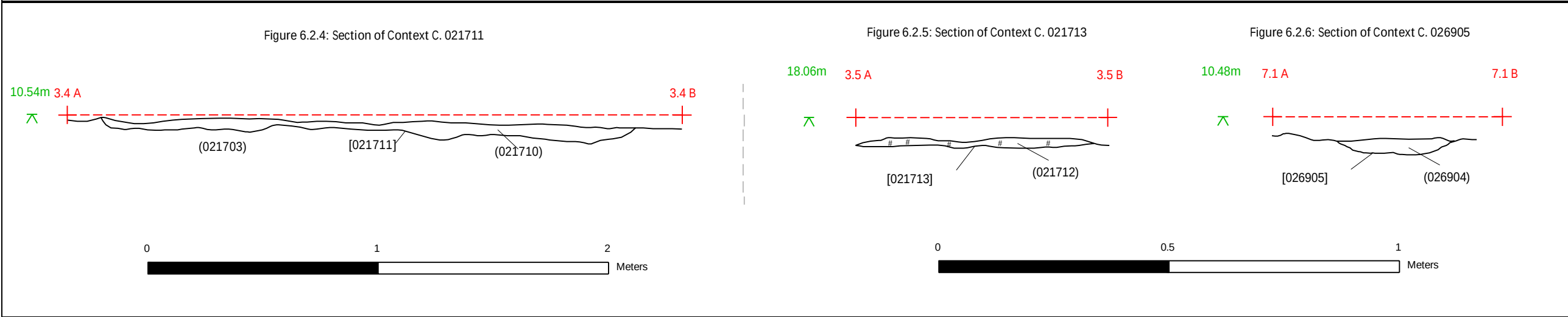
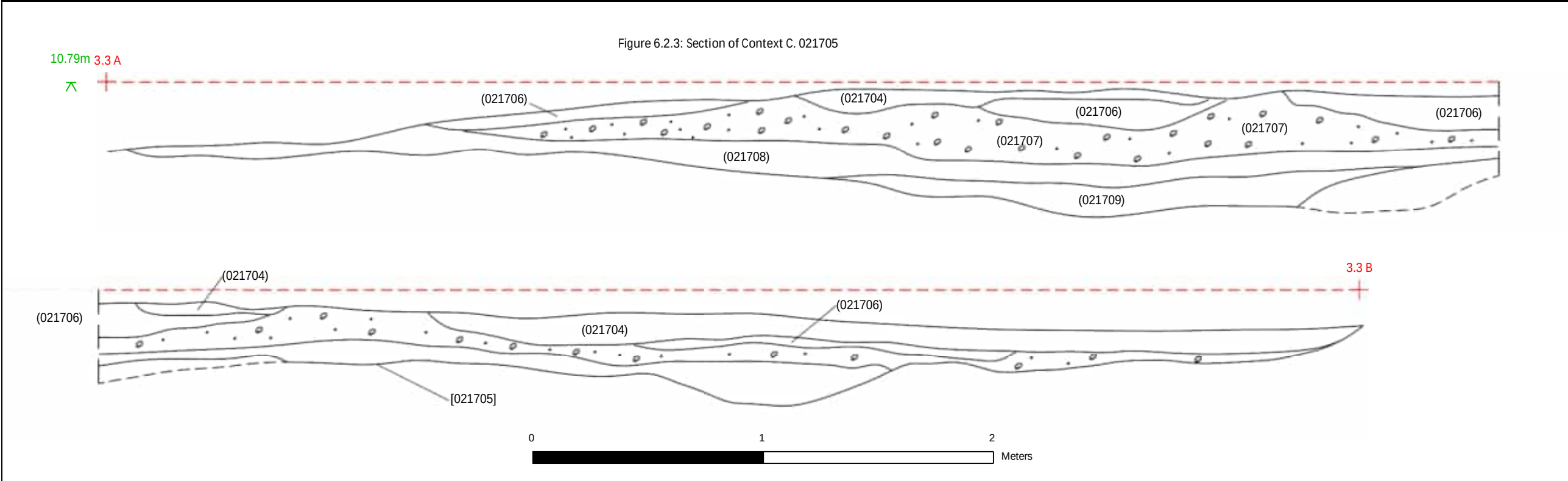
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Scale@A3	1:250	
Drawn by	AB	Checked by
Date	13 09 24	Revision
Notes		CRS
Map data ©2023 Google		EPSG:27700
		Figure
		6.1



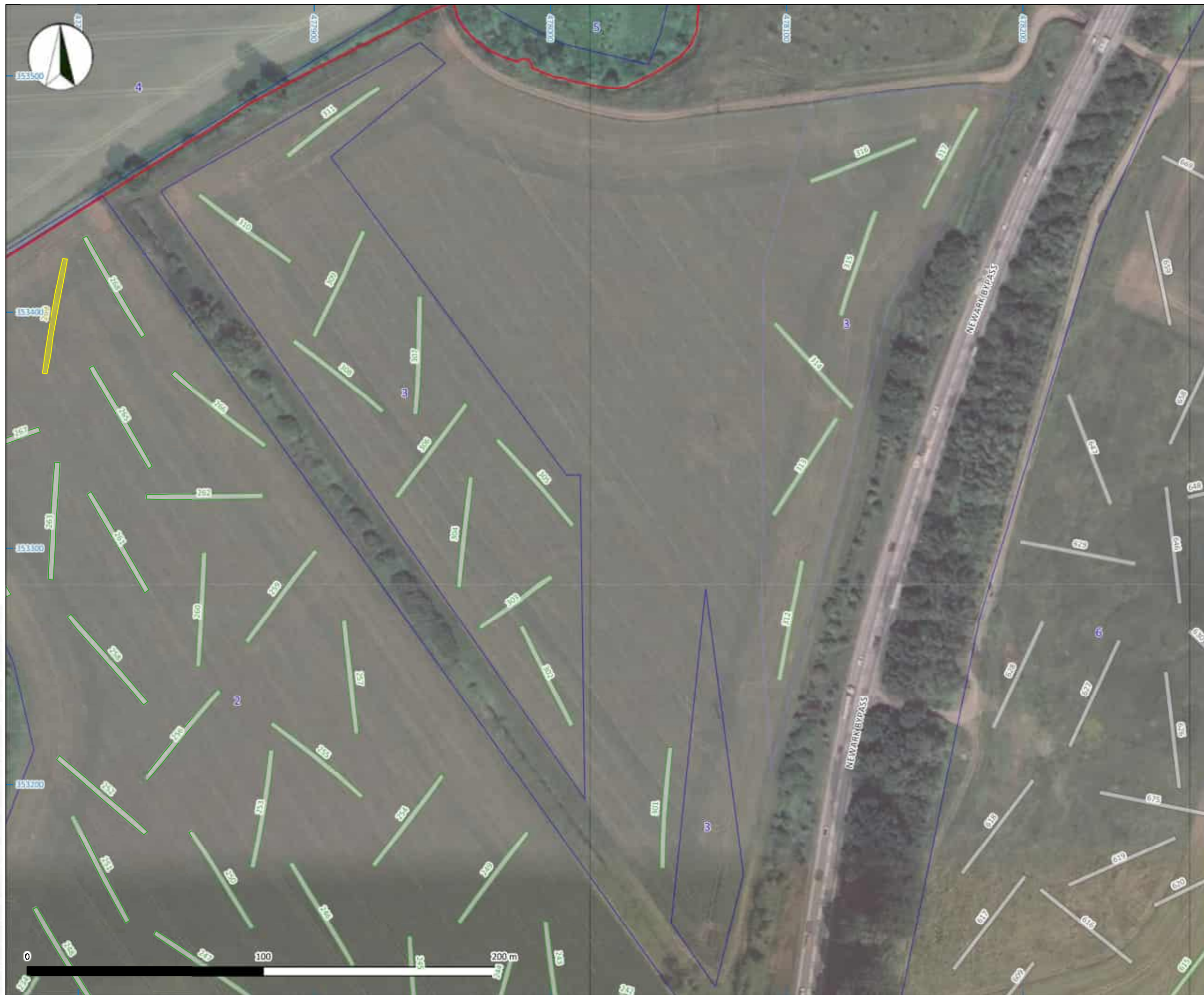
Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trenches 0213, 0214,
0217 & 0269

- Legend
- + Section Point
 - - Section Line
 - X OD Level
 - Stone
 - - Overcut
 - ## Charcoal
 - () Fill/Deposit
 - [] Cut



	Project No. J3063-A	
	Scale @A3 1:10, 1:20 & 1:100	
	Drawn by AB	Checked by -
	Date 24 07 24	Revision 1.0
	Notes Sections location shown on Figure 6.1	
		CRS EPSG: 27700
		Figure 6.2





Inset Map

Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Plan of excavated Field 6 trenches

Legend

- Order Limits
- Areas
- Non-archaeology Surveyed Trench
- Archaeology Surveyed Trenches
- Cancelled Trench

Project No.
13063-A

Scale @A3
1:2,500

Drawn by
AB

Checked by
-

Date
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Revision
1.1

Notes
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Figure
8



Inset Map

Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title

Plan of excavated Field 8 trenches

Legend

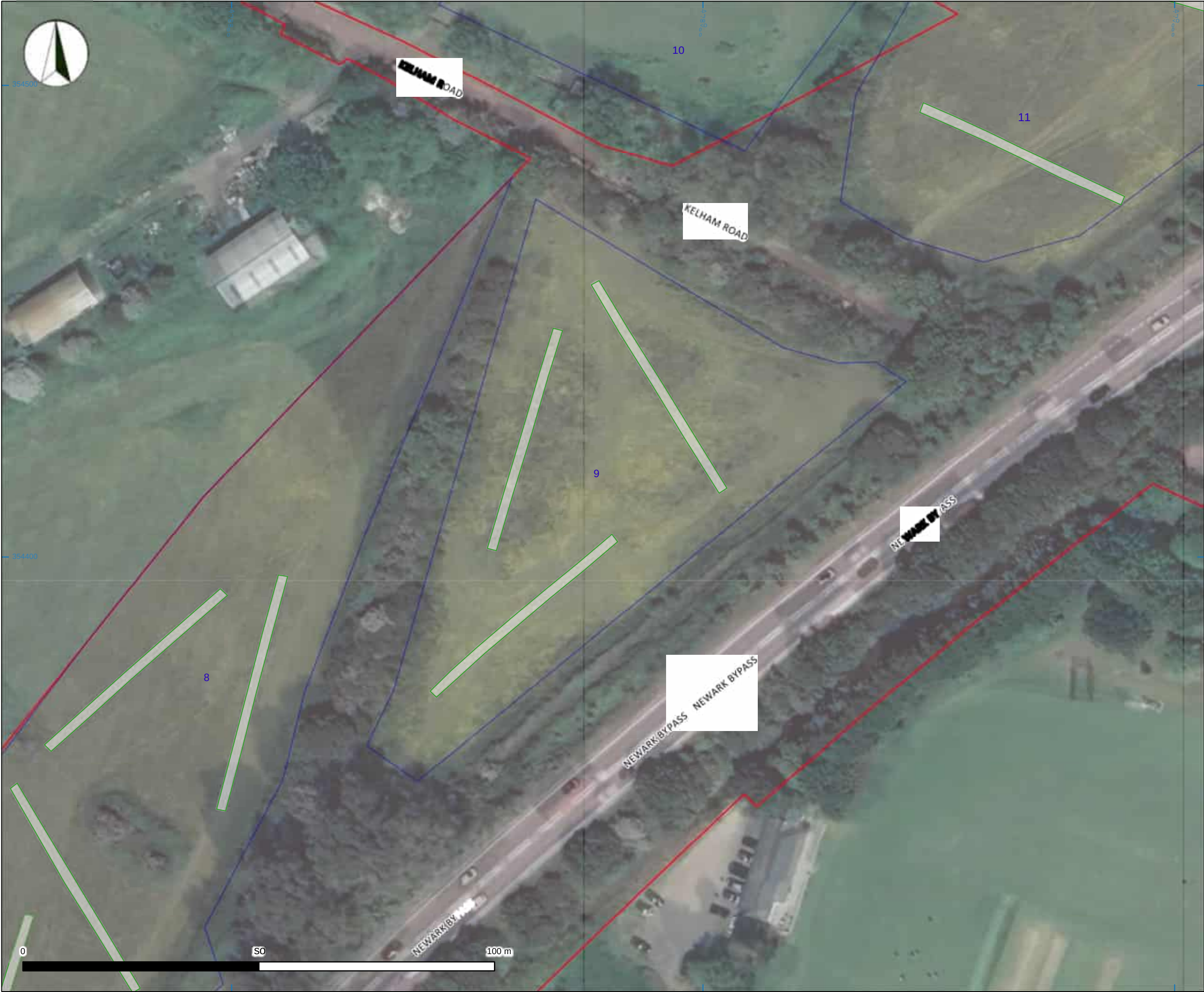
- D** Order Limits
- D** Areas
- Non-archaeology Surveyed Trench

Project No.	
J3063-A	
Scale@A3	
1:750	
Drawn by	Checked by
AB	
Date	Revision
13 09 24	1.1

Notes

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EPSG:27700
Figure
9



Inset Map

Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Plan of excavated Field 9 trenches

Legend

- D** Order Limits
- D** Areas
- Non-archaeology Surveyed Trench

Project No.
J3063-A

Scale@A3
1:750

Drawn by AB	Checked by
Date 13 09 24	Revision 1.1

Notes
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Figure
10



Inset Map

Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title

Plan of excavated Field 11 trenches

Legend

D

Order Limits

D

Areas

Non-archaeology Surveyed Trench

AMS

Project No.

J3063-A

Scale@A3

1:750

Drawn by

AB

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1.1

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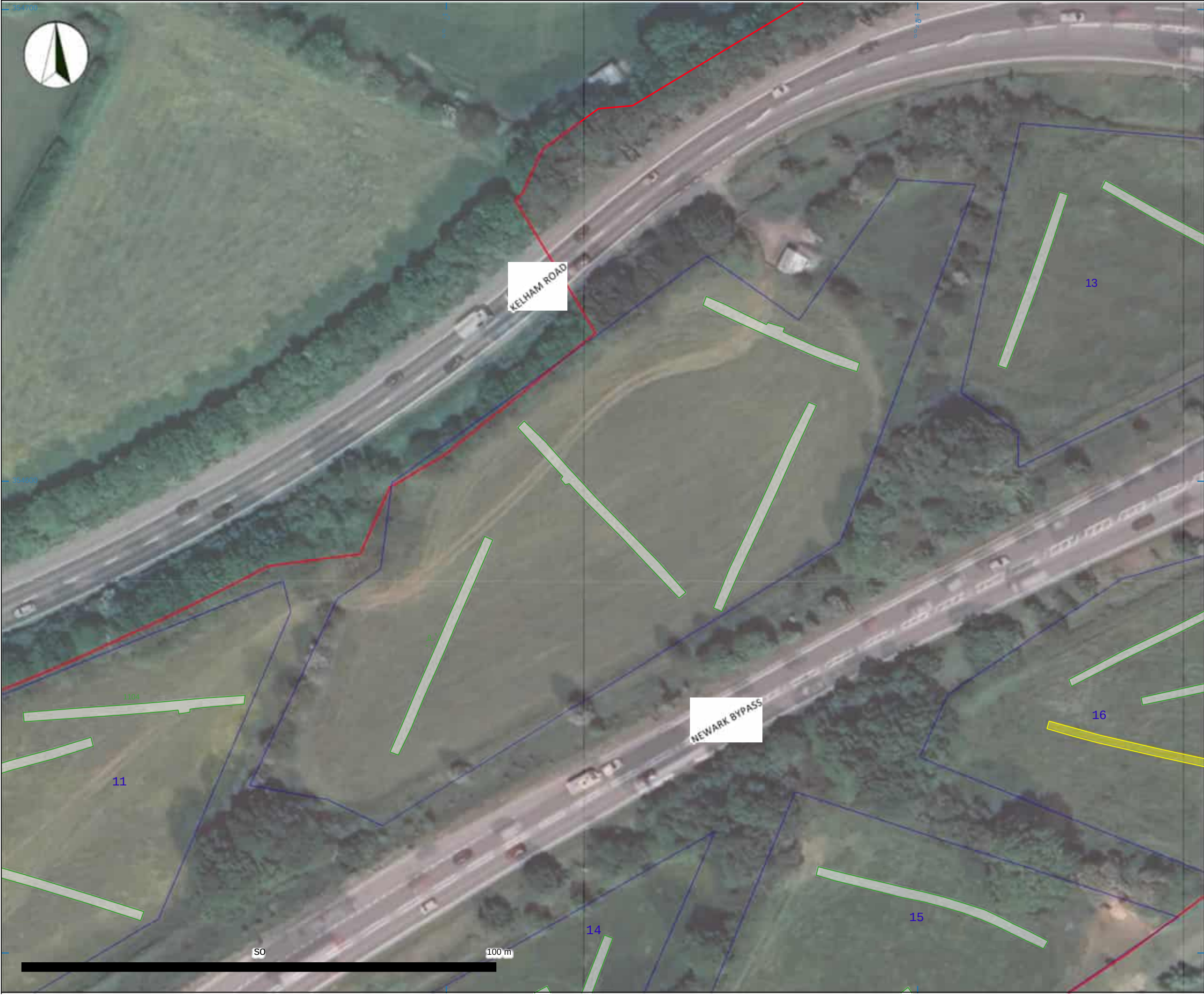
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Figure

11



Inset Map

Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Plan of excavated Field 12 trenches

Legend

- D Order Limits
- D Areas
- Non-archaeology Surveyed Trench
- Archaeology Surveyed Trenches

Project No.
J3063-A

Scale@A3
1:750

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Figure
12



Inset Map

Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Plan of excavated Field 13 trenches

Legend

- D** Order Limits
- D** Areas
- Non-archaeology Surveyed Trench
- Archaeology Surveyed Trenches

Project No.
J3063-A

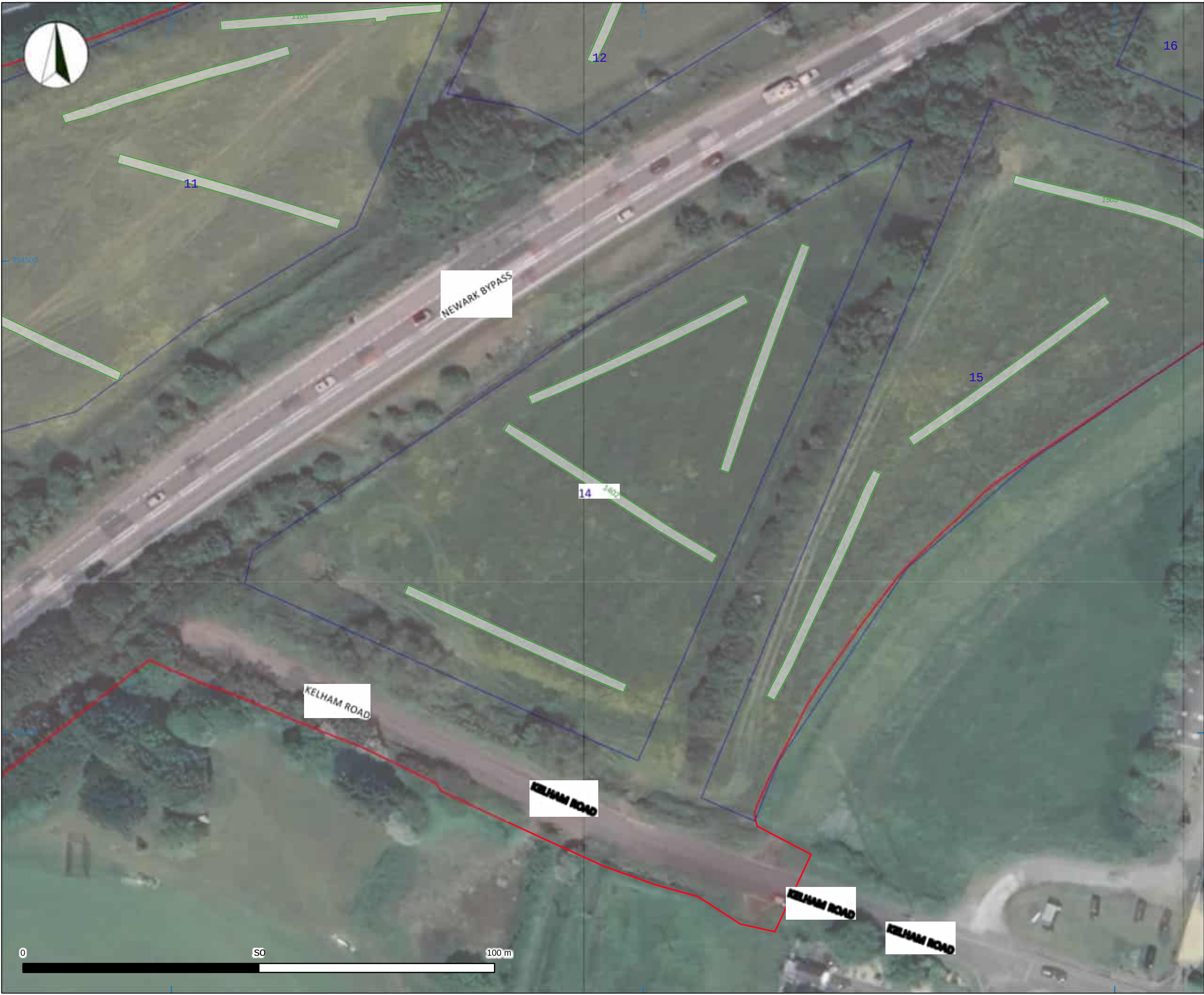
Scale@A3
1:750

Drawn by AB	Checked by
Date 13 09 24	Revision 1.1

Notes
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Figure
13



Inset Map

Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Plan of excavated Field 14 trenches

Legend

D

Order Limits

D

Areas

Non-archaeology Surveyed Trench

	Project No. J3063-A	
	Scale@A3 1:750	
	Drawn by AB	Checked by
	Date 13 09 24	Revision 1.1
Notes Bing Maps ©2023 Microsoft		CRS EPSG:27700
		Figure 14



Inset Map

Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title

Plan of excavated Field 15 trenches

Legend

- D** Order Limits
- D** Areas
- Non-archaeology Surveyed Trench
- Archaeology Surveyed Trenches

Project No. J3063-A	
Scale@A3 1:750	
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Notes

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Figure 15



Inset Map

Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Plan of excavated Field 16 trenches

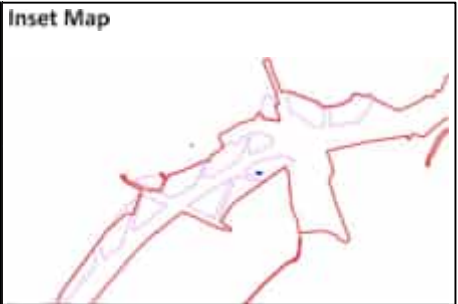
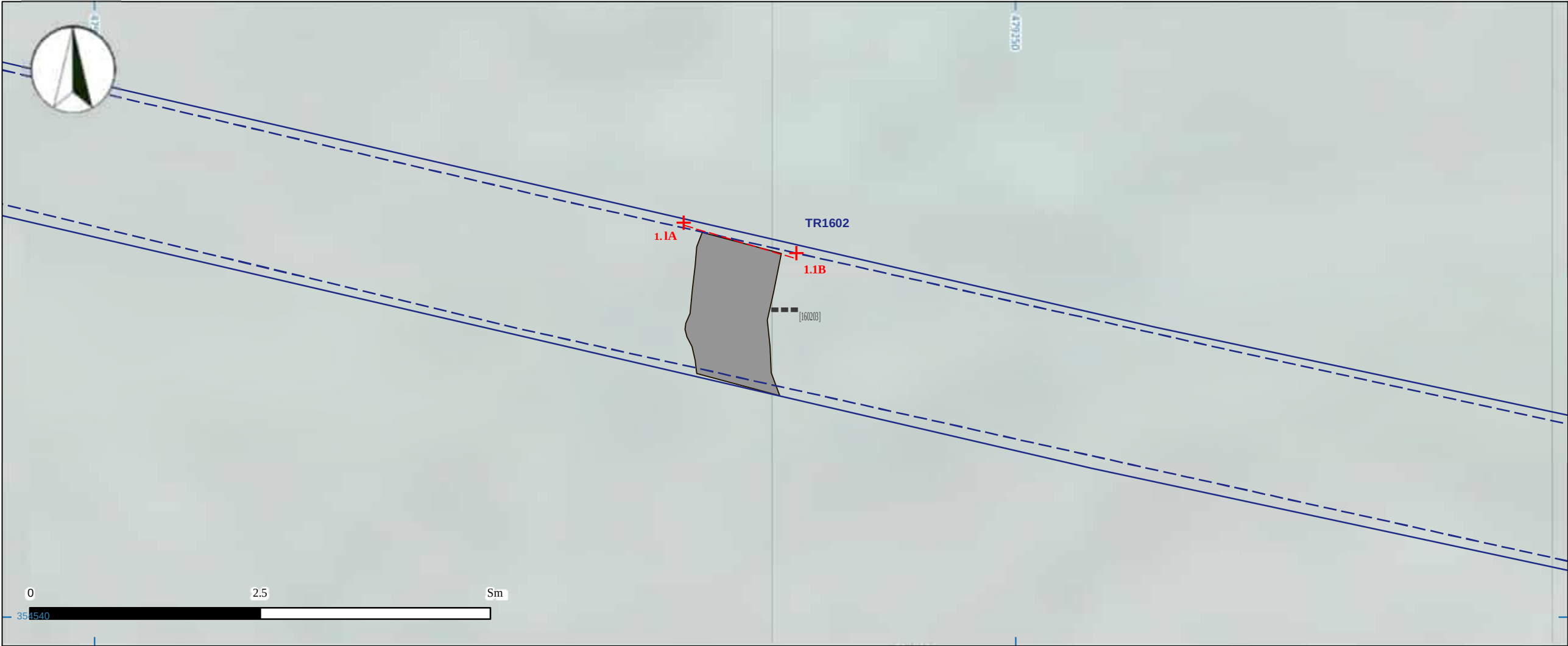
Legend

- D** Order Limits
- D** Areas
- Non-archaeology Surveyed Trench
- Archaeology Surveyed Trenches

Project No. J3063-A	
Scale@A3 1:750	
Drawn by AB	Checked by
Date 13 09 24	Revision 1.1

Notes
Bing Maps ©2023 Microsoft

CRS EPSG:27700
Figure 16

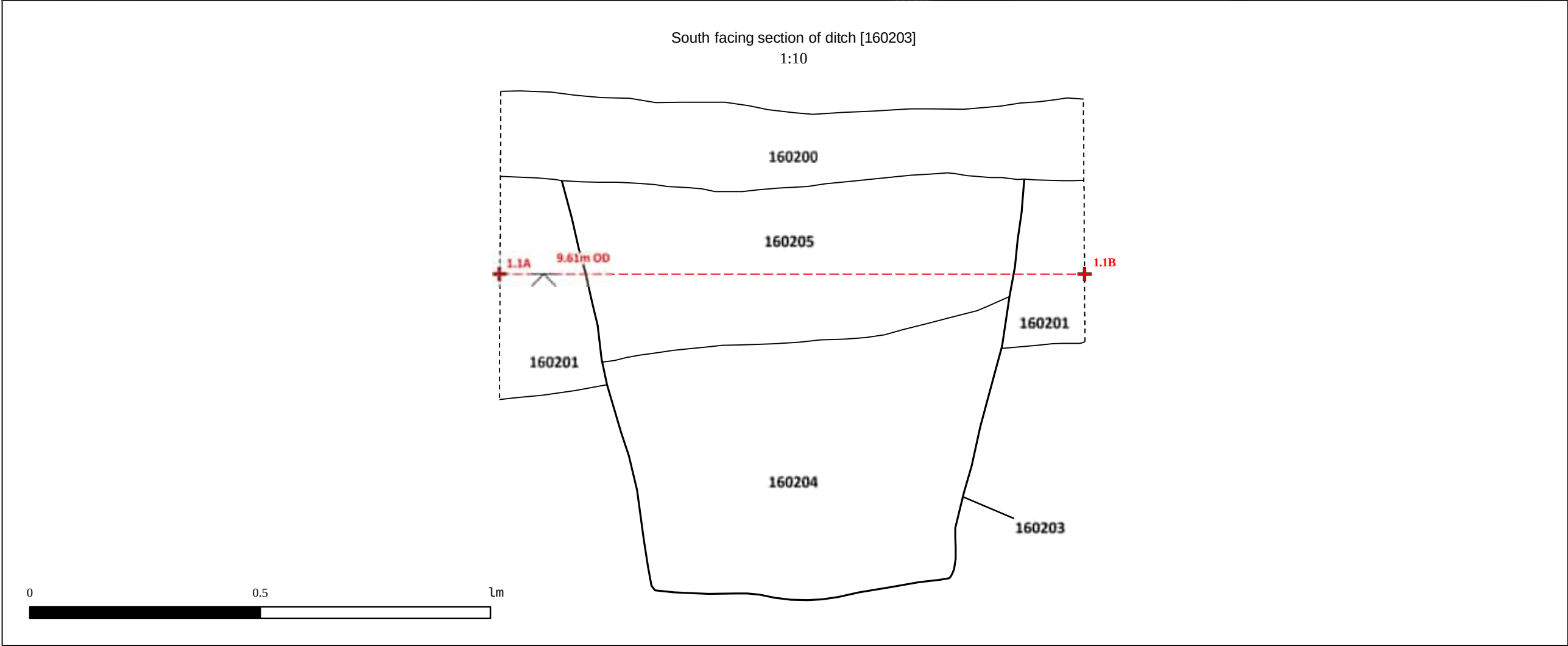


Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

Title
Plans of features in Trench 1602

Legend

- Order Limits
- Areas
- Trench - Top
- Trench - Base
- Feature
- Section Line
- Section Point
- Level



	Project No. J3063-A	
	Scale@A3 1:50	
	Drawn by AB	Checked by
	Date 13 09 24	Revision 1.1
Notes Map data ©2023 Google		CRS EPSG:27700
		Figure 17.1



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Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test

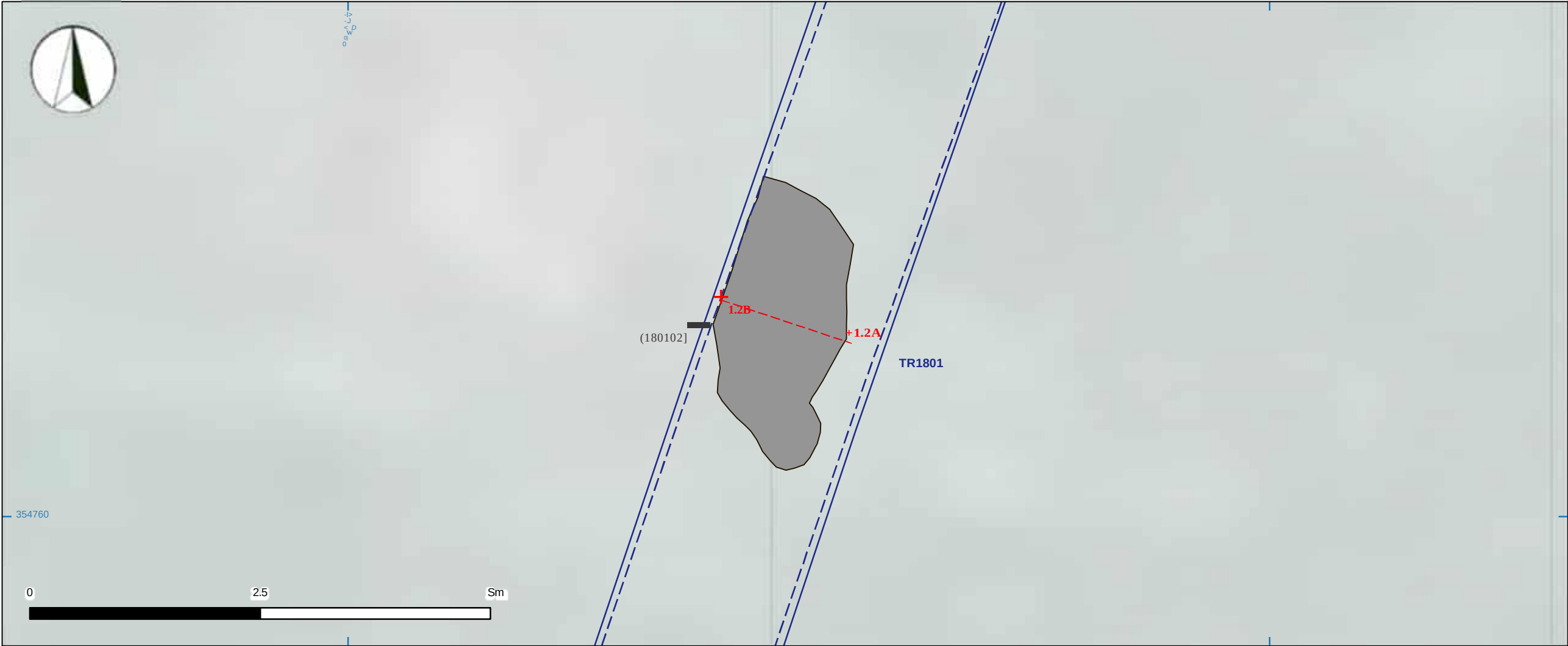
Title

Plan of excavated Field 18 trenches

Legend

- D** Order Limits
- D** Areas
- Non-archaeology Surveyed Trench
- Archaeology Surveyed Trenches
- Cancelled

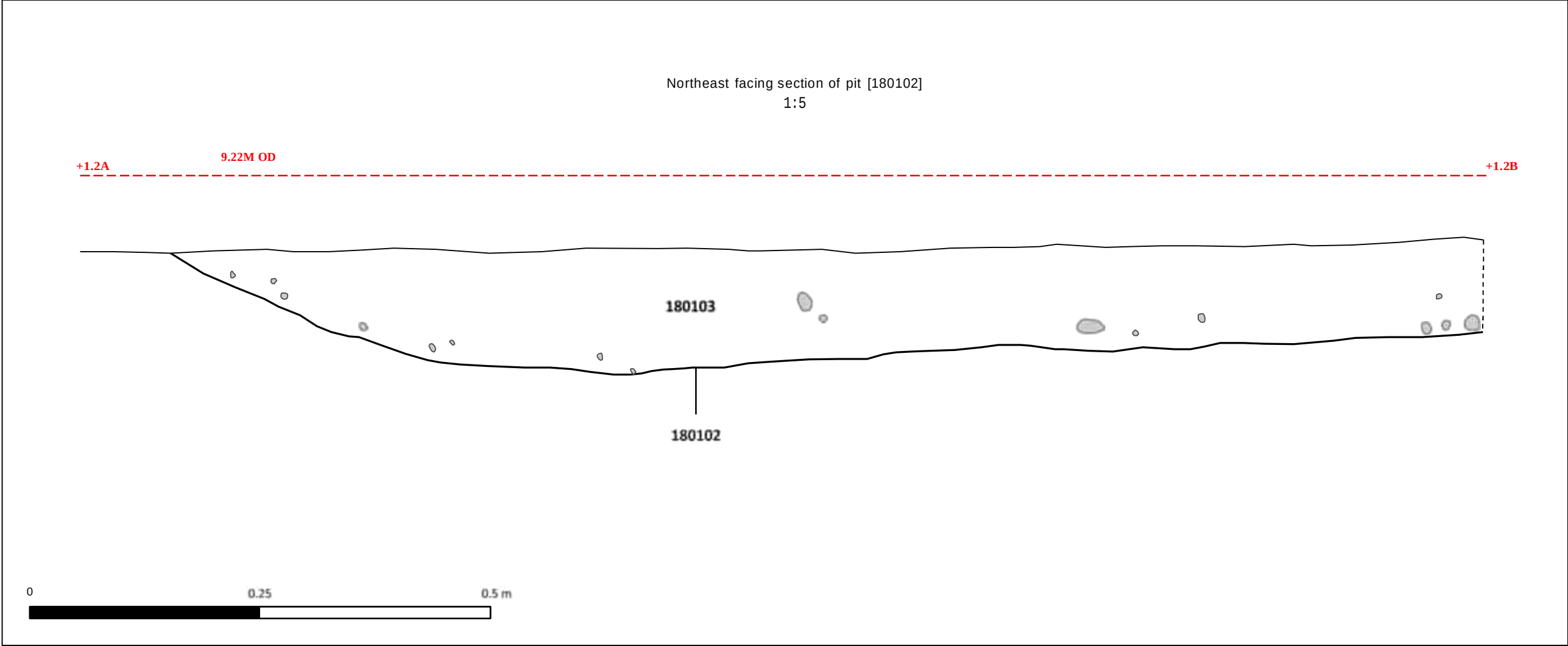
Project No.	
J3063-A	
Scale@A3	
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Drawn by	Checked by
AB	
Date	Revision
13 09 24	1.1
Notes	
Bing Maps ©2023 Microsoft	
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EPSG:27700	
Figure	
18	



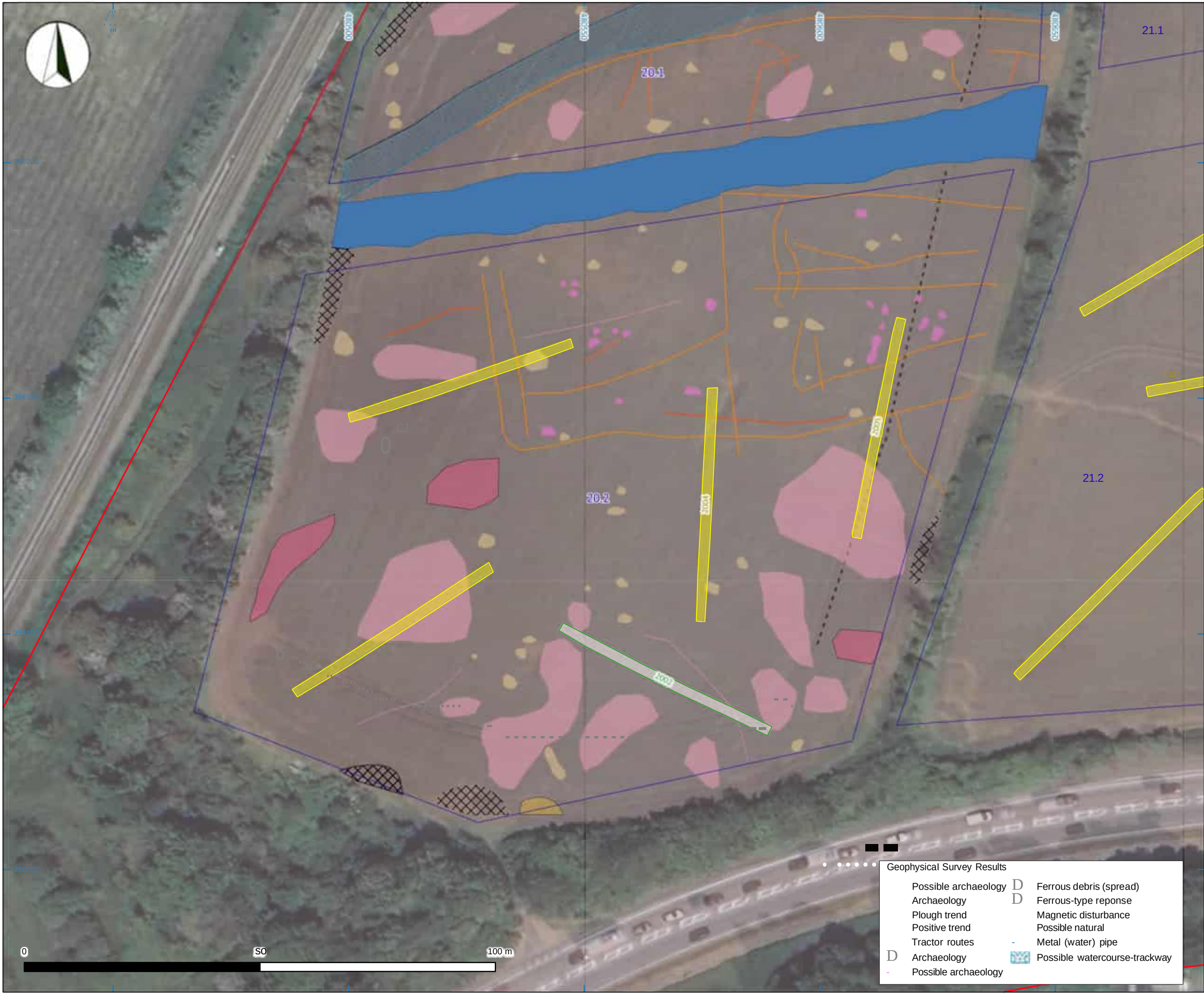
Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

Title
Plans of feature in Trench 1801

- Legend**
-  Order Limits
 -  Areas
 -  Trench - Top
 -  Trench - Base
 -  Feature
 -  Section Line
 -  Section Point
 -  Level



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	Scale@A3 1:50	
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	Date 13 09 24	Revision 1.1
Notes Map data ©2023 Google		CRS EPSG:27700
		Figure 19.1



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Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title

Plan of excavated Field 20 trenches

Legend

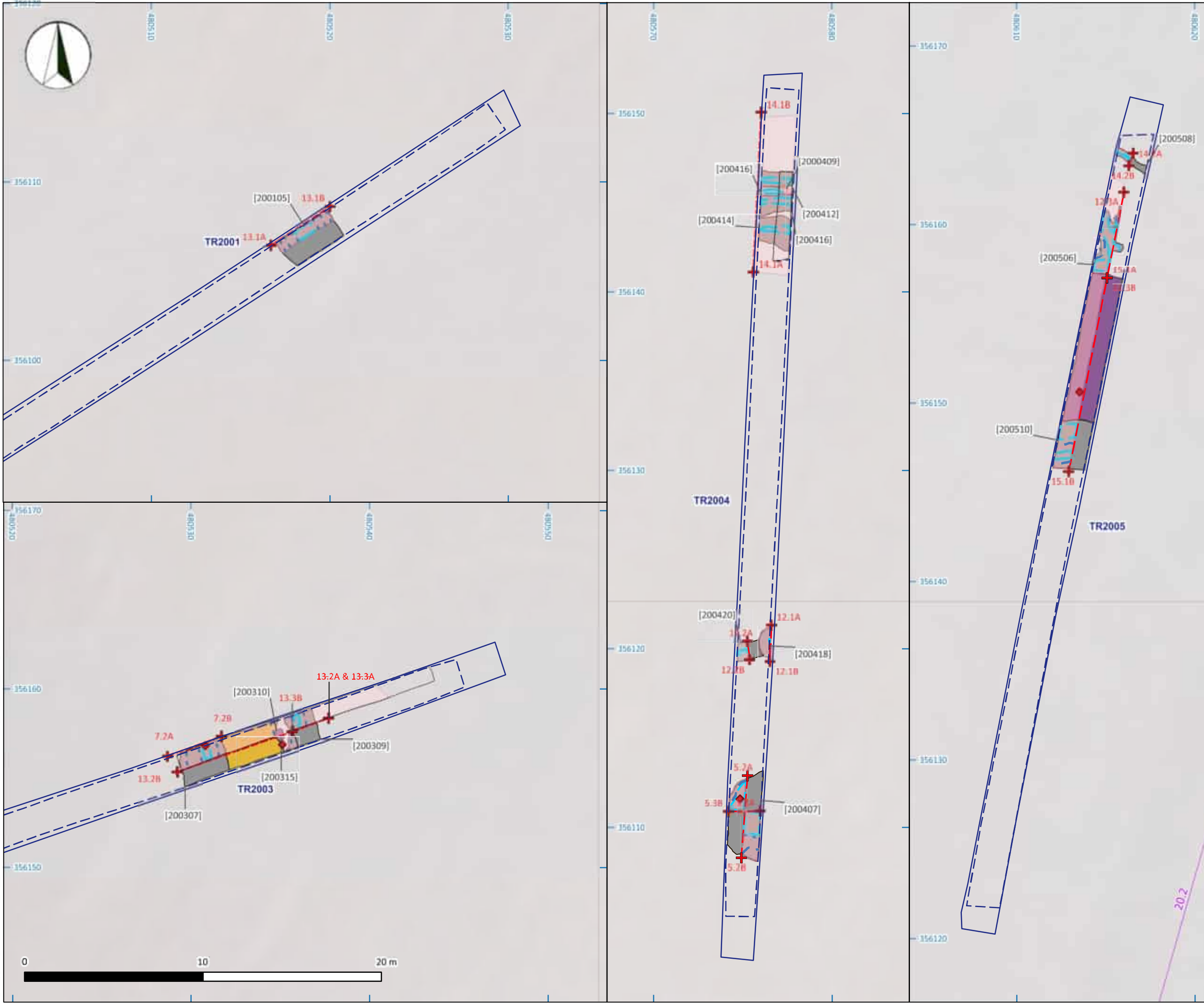
D Order Limits

D Areas

Non-archaeology Surveyed Trench

Archaeology Surveyed Trenches

Project No.	
J3063-A	
Scale@A3	
1:750	
Drawn by	Checked by
AB	
Date	Revision
23 07 24	1.0
Notes	
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EPSG:27700	
Figure	
20	



Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

Title
Plans of features in Trenches 2001, 2003, 2004 and 2005

- Legend**
- Order Limits
 - Areas
 - Trench - Top
 - Trench - Base
 - Feature
 - Excavated
 - Furrow
 - Section Point
 - Section Line
 - Base of feature
 - Break of Slope
 - Surface
 - Deposit
 - Finds

	Project No. J3063-A	
	Scale @A3 1:200	
	Drawn by AB	Checked by -
	Date 13 09 24	Revision 1.1
Notes Map data ©2023 Google		CRS EPSG:27700
		Figure 21.1

Figure 21.2.1 : Section of Context C.200105

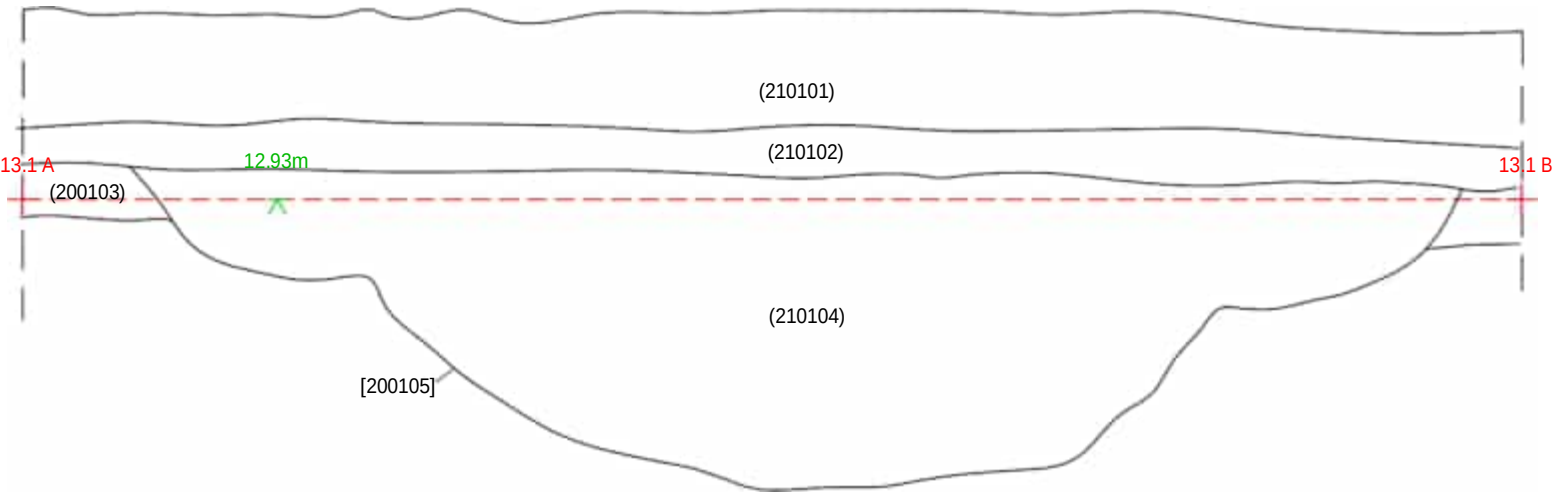


Figure 21.2.2: Section of Context C. 200407

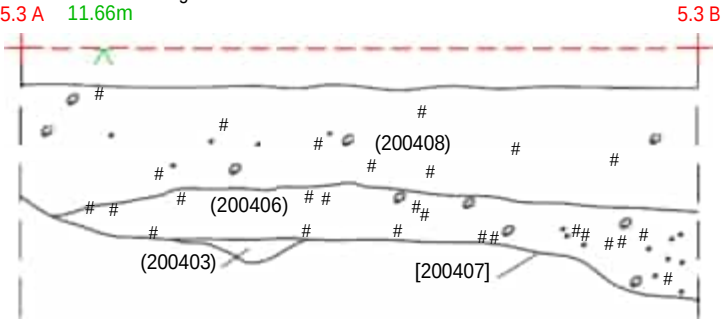


Figure 21.2.3: Section of Context C. 200407

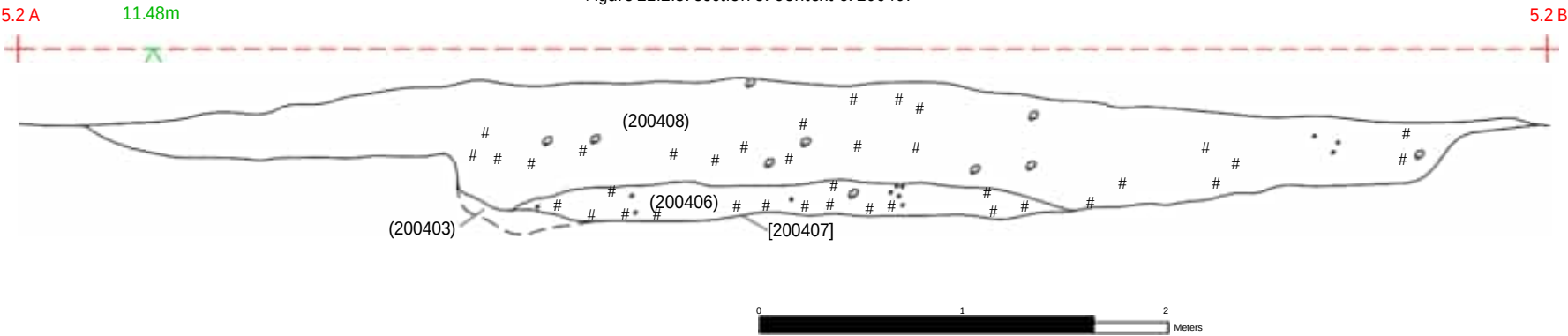


Figure 21.2.4 : Section of Context C. 200420

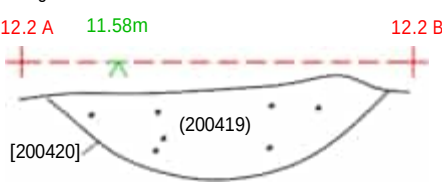


Figure 21.2.5 : Section of Context C.200409, C.200412, C.200414 and C.200416

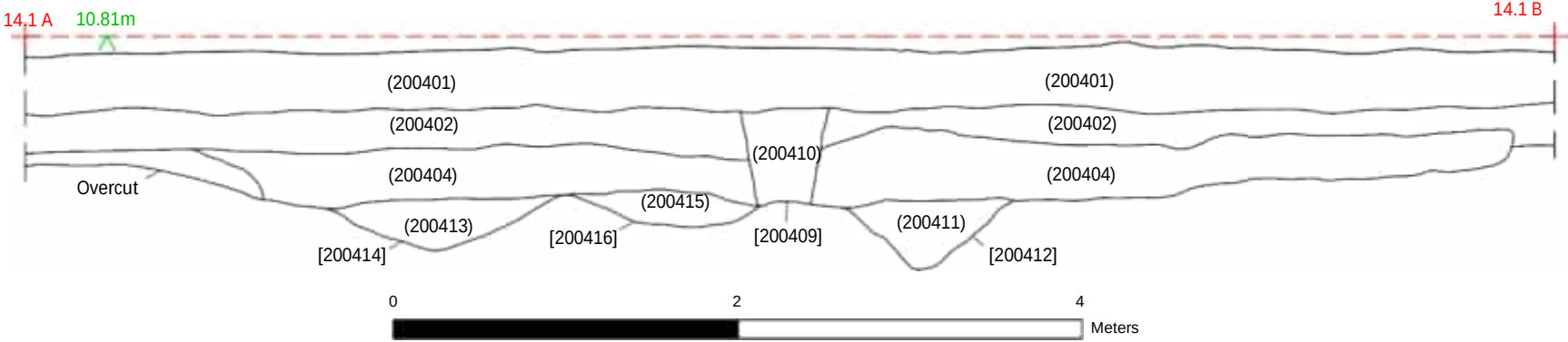


Figure 21.2.6: Section of Context C. 200418

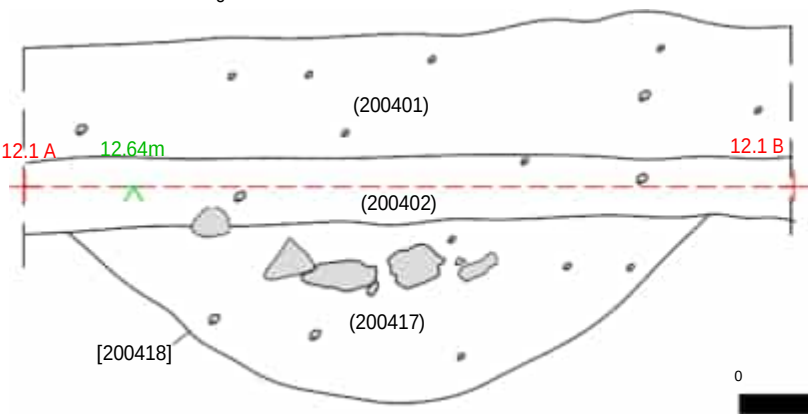
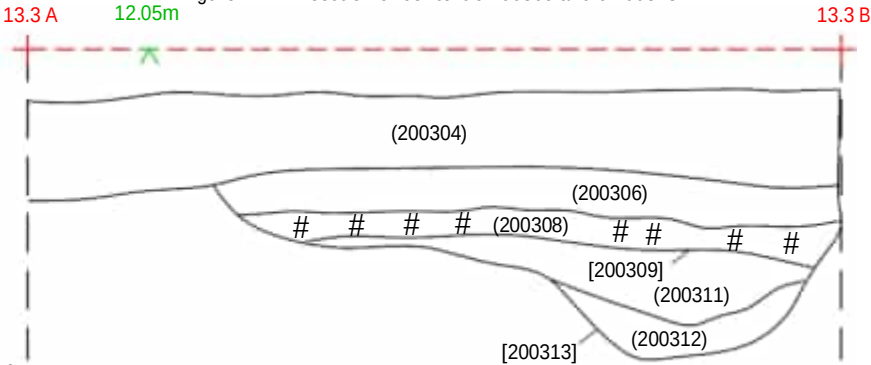


Figure 21.2.7 : Section of Context C.200309 and C.200313



Inset Map



Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trenches 2001, 2004
and 2003(i)

Legend

- Section Point
- Section Line
- OD Level
- Stone
- Overcut
- Charcoal
- Fill/Deposit
- Cut

	Project No. J3063-A	
	Scale @A3 1:20 & 1:40	
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	Date 24 07 24	Revision 1.0
	Notes Sections location shown on Figure 21.1	
		CRS EPSG: 27700
		Figure 21.2

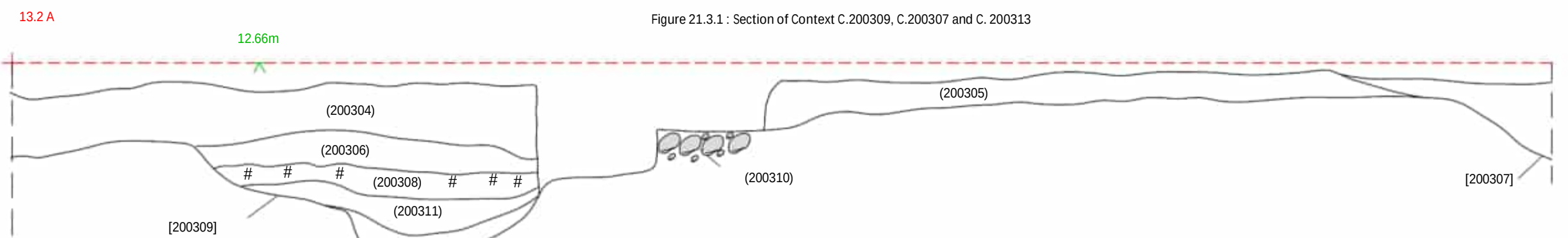


Figure 21.3.1 : Section of Context C.200309, C.200307 and C. 200313

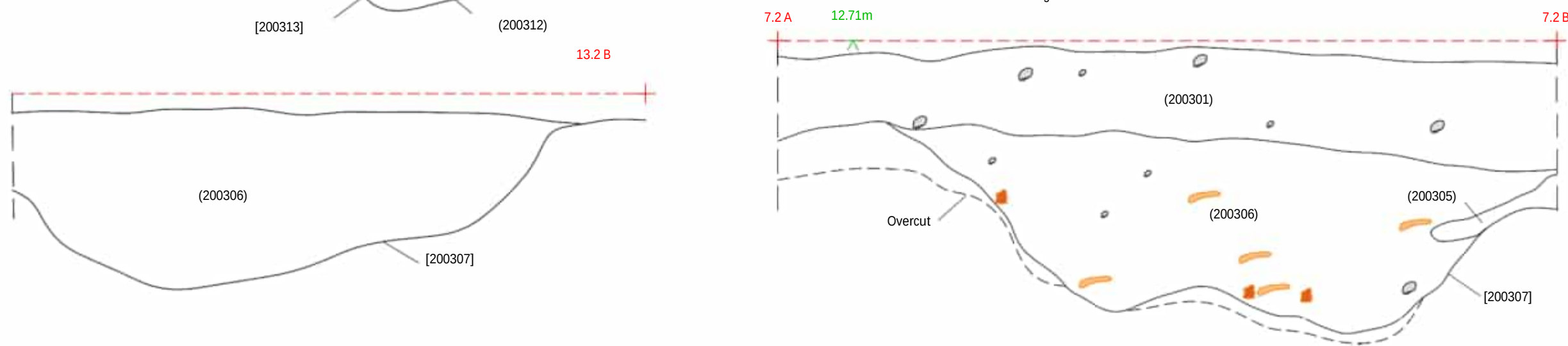


Figure 21.3.2: Section of Context C. 200307

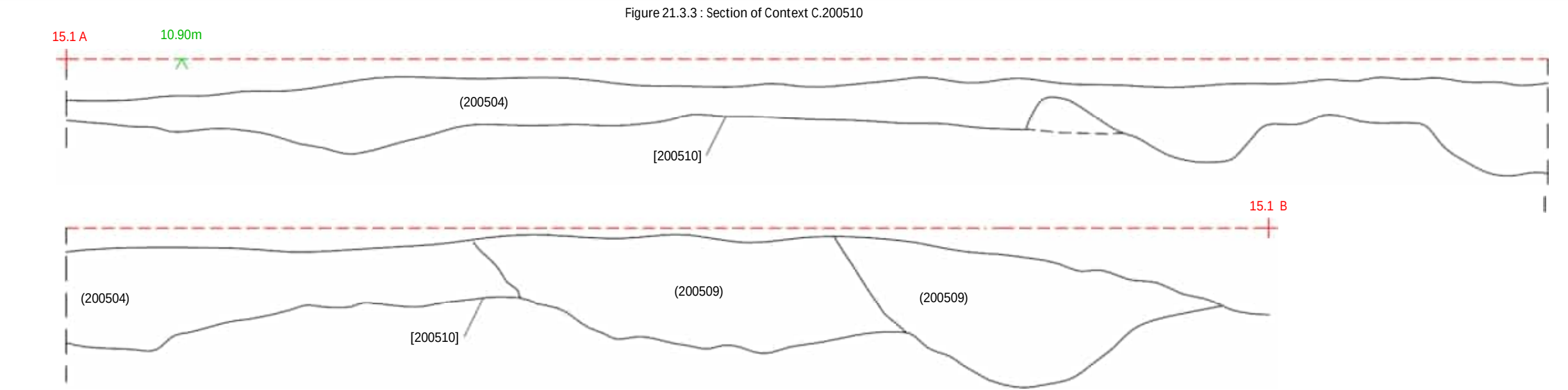


Figure 21.3.3 : Section of Context C.200510

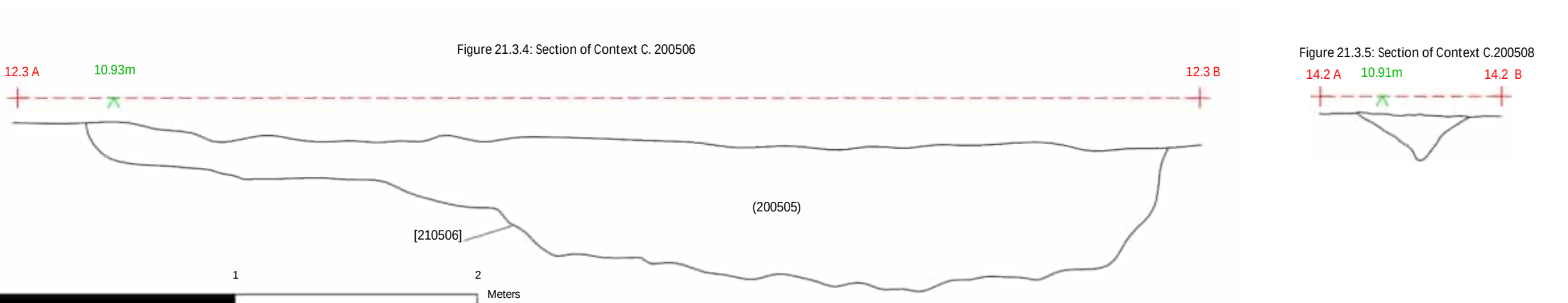
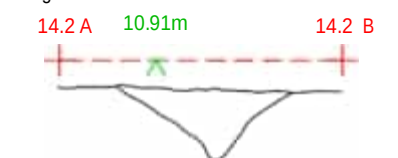


Figure 21.3.4: Section of Context C. 200506

Figure 21.3.5: Section of Context C.200508



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Project

A46 Newark Bypass Trial Trenching and Georarchaeological Test

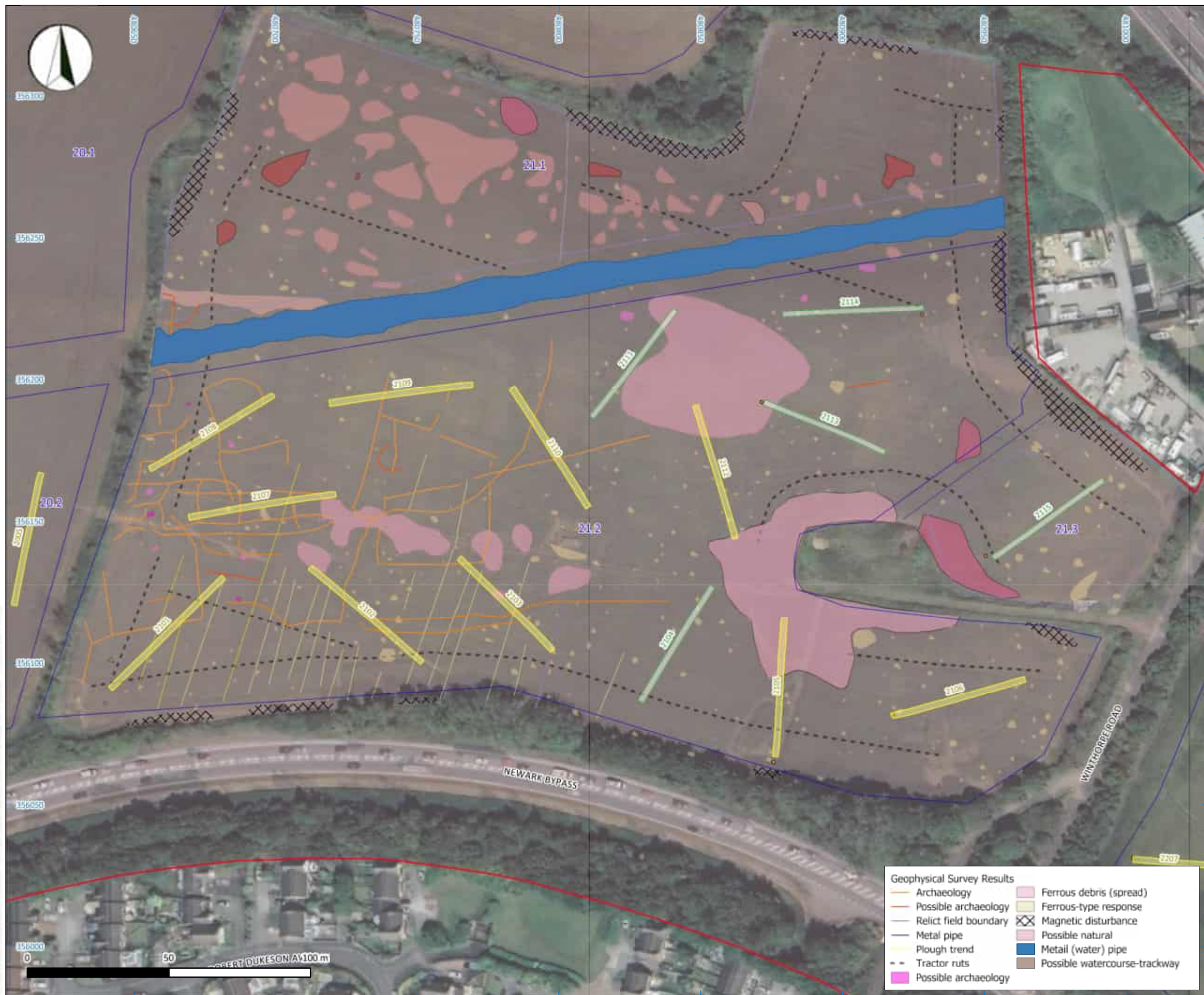
Title

Sections of features Trenches 2003(ii) and 2005.

Legend

- Section Point
- Section Line
- OD Level
- Stone
- Overcut
- Charcoal
- Fill/Deposit
- Cut
- Bone
- Pottery

	Project No.		
	J3063-A		
	Scale @A3		
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Drawn by	AB	Checked by	-
Date	24 07 24	Revision	1.0
Notes		CRS	
		EPSG: 27700	
Sections location shown on Figure 21.1		Figure 21.3	



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Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

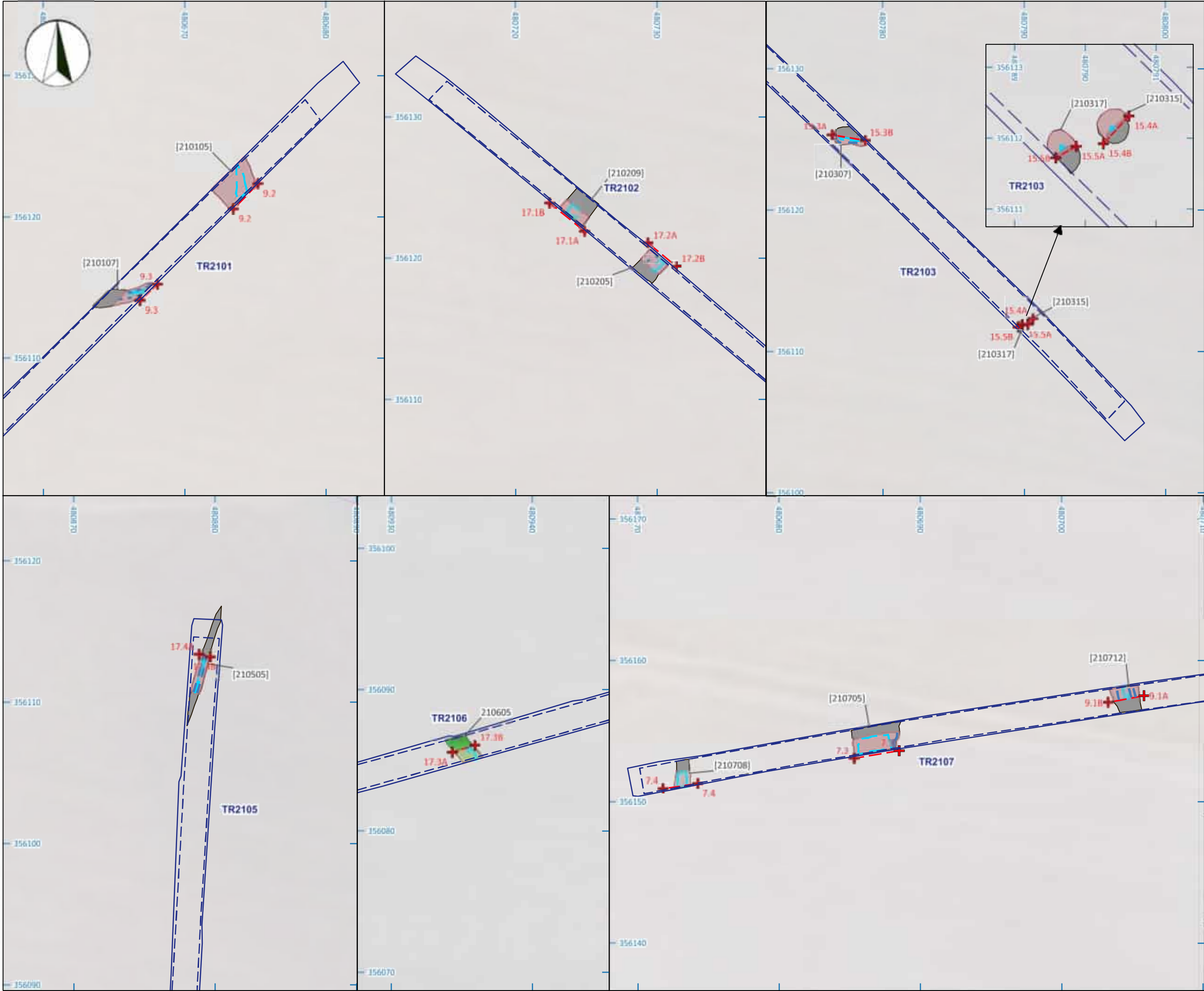
Title
Plan of excavated Field 21 trenches

Legend

- Order Limits
- Areas
- Non-archaeology Surveyed Trench
- Archaeology Surveyed Trenches

	Project No. 13063-A	
	Scale @A3 1:1,250	
	Drawn by AB	Checked by -
	Date 13 09 24	Revision 1.1
	Notes Bing Maps ©2023 Microsoft	

CRS EPSG:27700
Figure 22



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Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

Title

Plans of features in Trenches 2101, 2102, 2103, 2105, 2106 and 2107

Legend

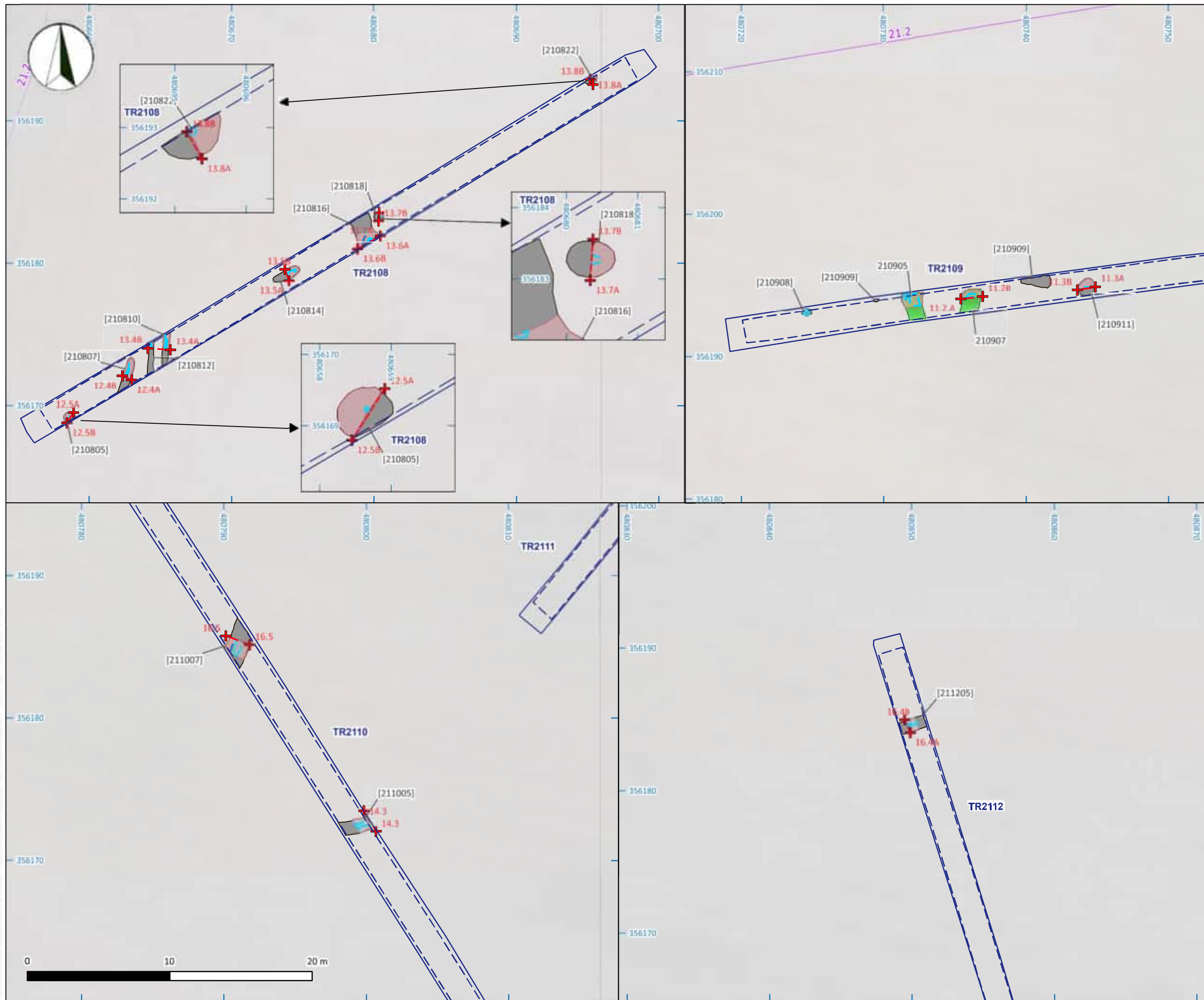
- Order Limits
- Areas
- Trench - Top
- Trench - Base
- Feature
- Excavated
- Furrow
- Section Point
- Section Line
- Base of feature
- Break of Slope

Project No.	
J3063-A	
Scale @A3	
1:250	
Drawn by	Checked by
AB	-
Date	Revision
13 09 24	1.1

Notes

Map data ©2023 Google

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EPSG:27700
Figure
23.1



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Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

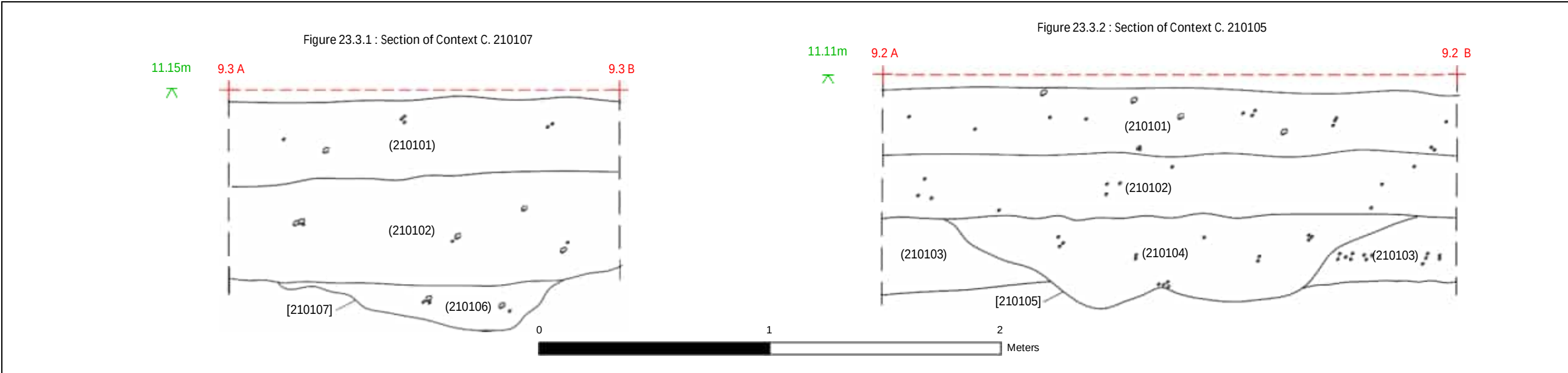
Title

Plans of features in Trenches 2108, 2109, 2110 and 2112

Legend

- Order Limits
- Areas
- Trench - Top
- Trench - Base
- Feature
- Excavated
- Furrow
- Section Point
- Section Line
- Base of feature
- Break of Slope

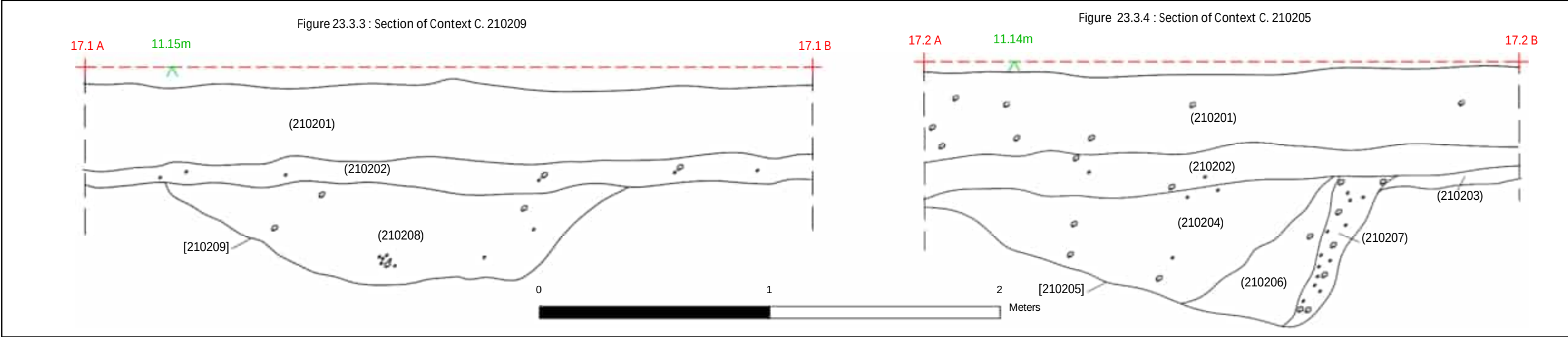
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Date	13 09 24	Revision
1.1		CRS
Map data ©2023 Google		EPSG:27700
Figure		23.2



Inset Map

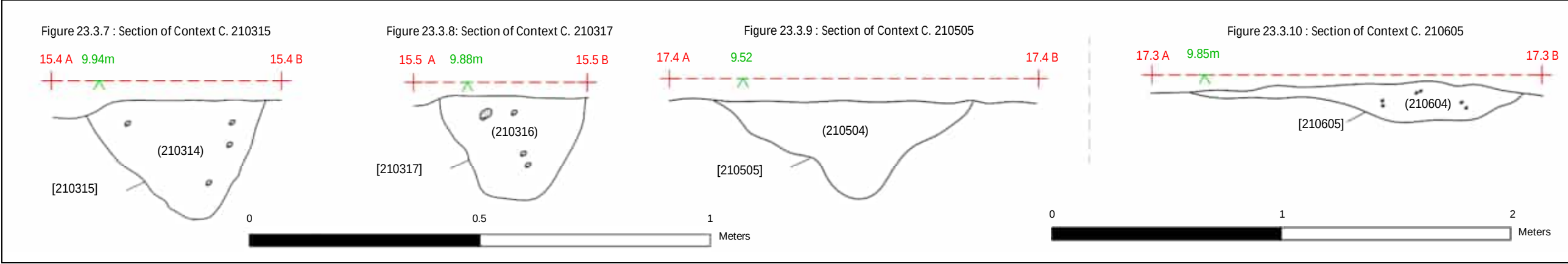
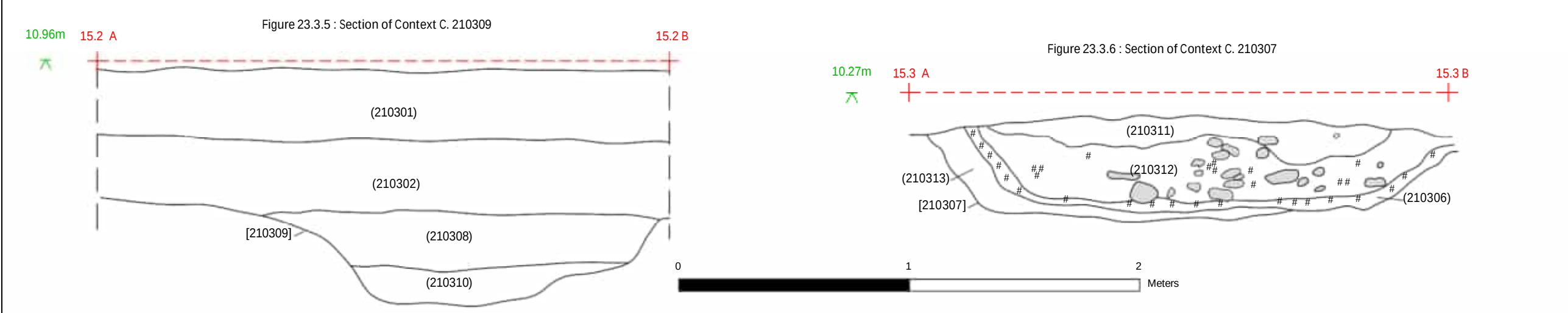
Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trenches 2101, 2102,
2103, 2105 and 2106



Legend

- Section Point
- Section Line
- OD Level
- Stone
- Overcut
- Charcoal
- Fill/Deposit
- Cut



AMS

Project No.
J3063-A

Scale @A3
1:10 & 1:20

Drawn by
AB

Checked by
-

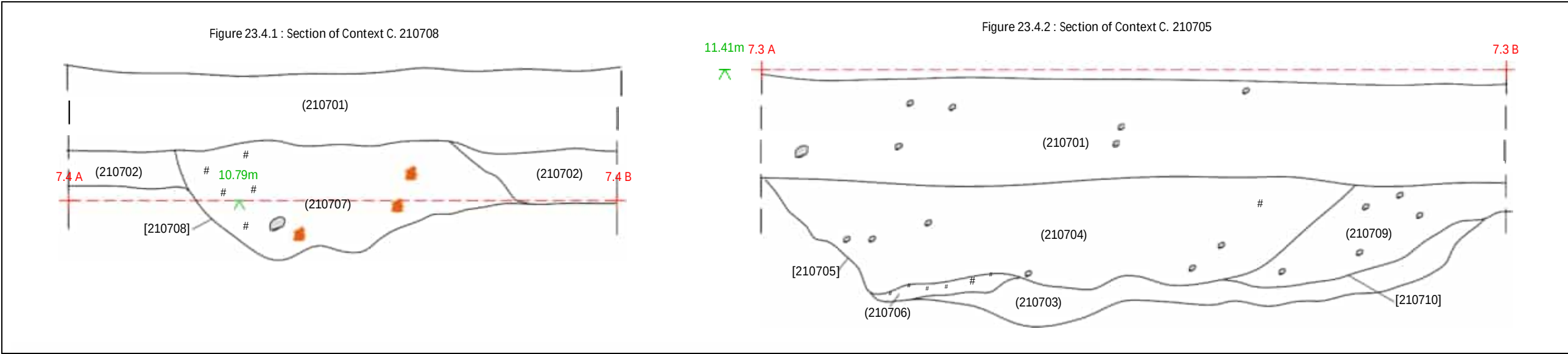
Date
24 07 24

Revision
1.0

Notes
Sections location shown on Figure
23.1

CRS
EPSG: 27700

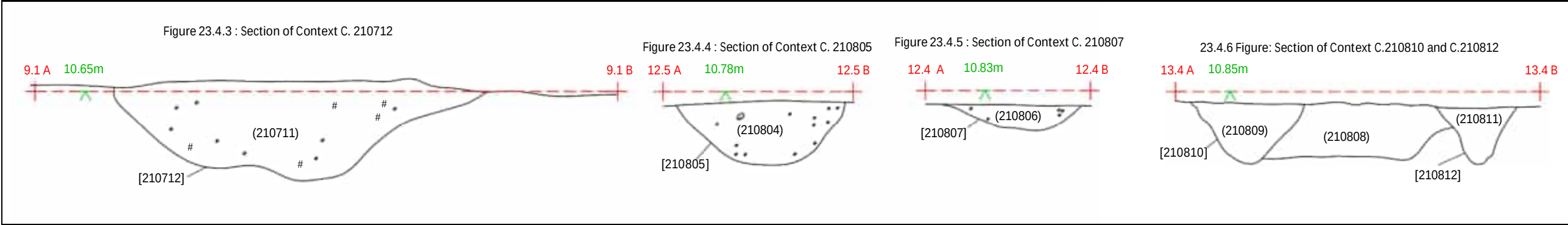
Figure
23.3



Inset Map

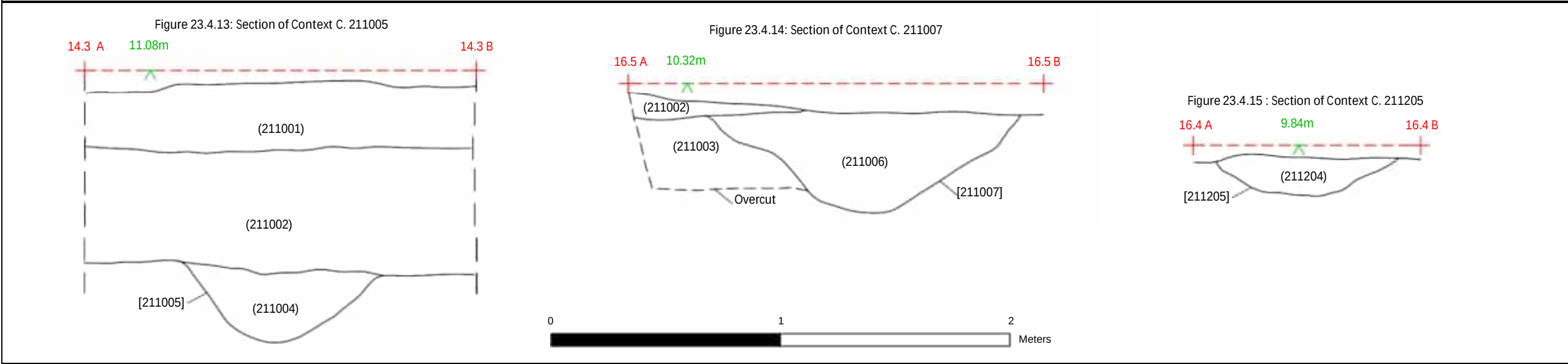
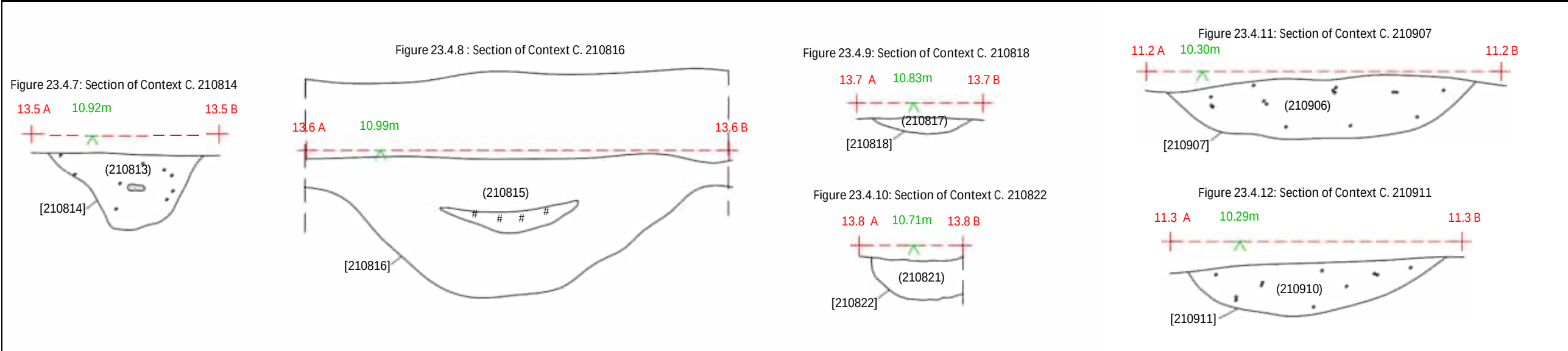
Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trenches 2107, 2108,
2109, 2110 and 2112



Legend

- Section Point
- Section Line
- OD Level
- Stone
- Overcut
- Charcoal
- Fill/Deposit
- Cut
- Pottery



Project No.
J3063-A

Scale @A3
1:20

Drawn by
AB

Checked by
-

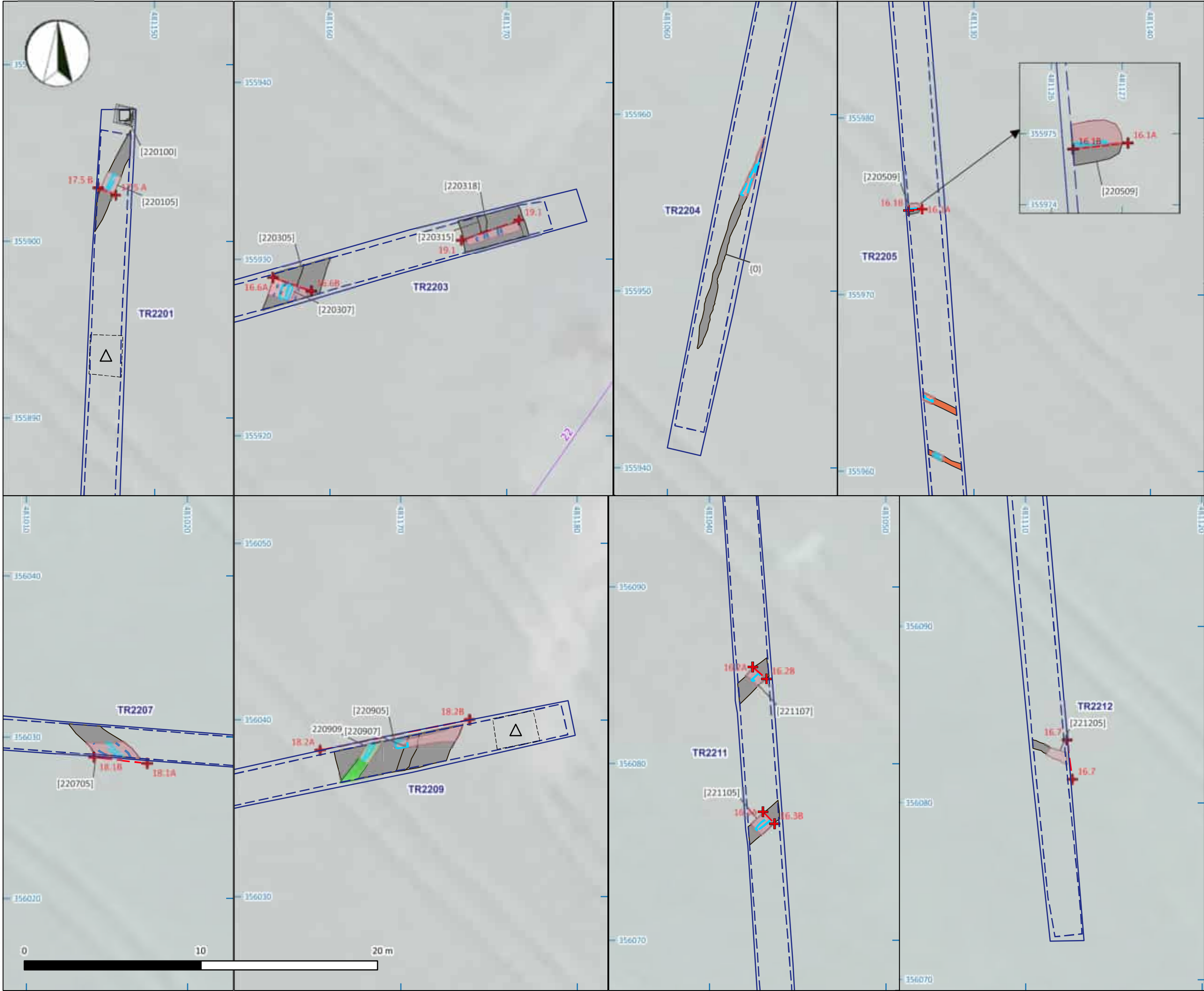
Date
24 07 24

Revision
1.0

Notes
Sections location shown on Figure
23.1 and Figure 23.2

CRS
EPSG: 27700

Figure
23.4



Inset Map

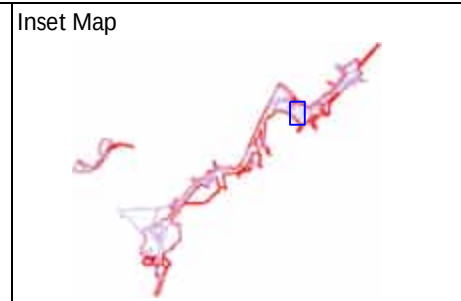
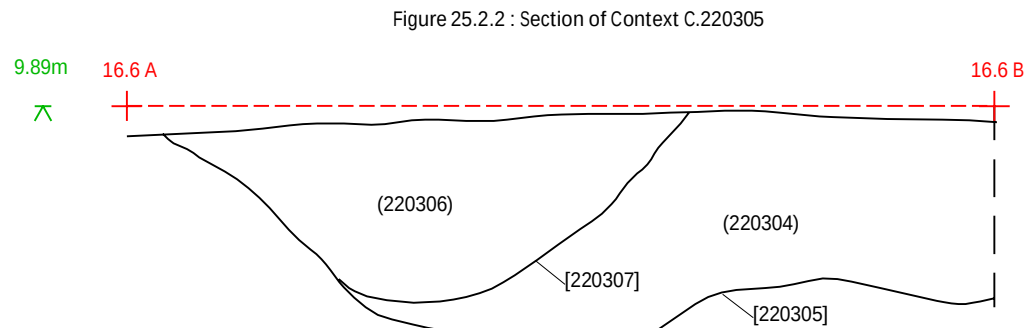
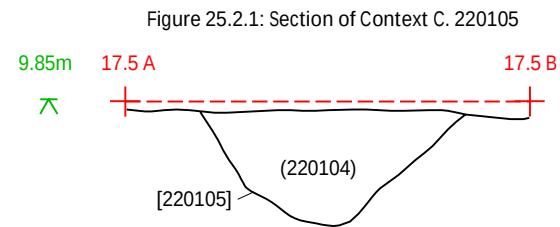
Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

Title
Plans of features in Trenches 2201, 2203, 2204, 2205, 2207, 2209, 2211 and 2212

Legend

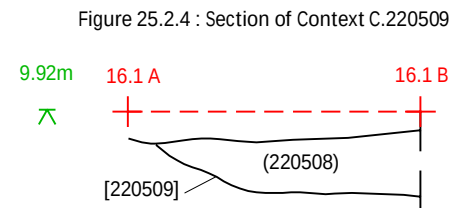
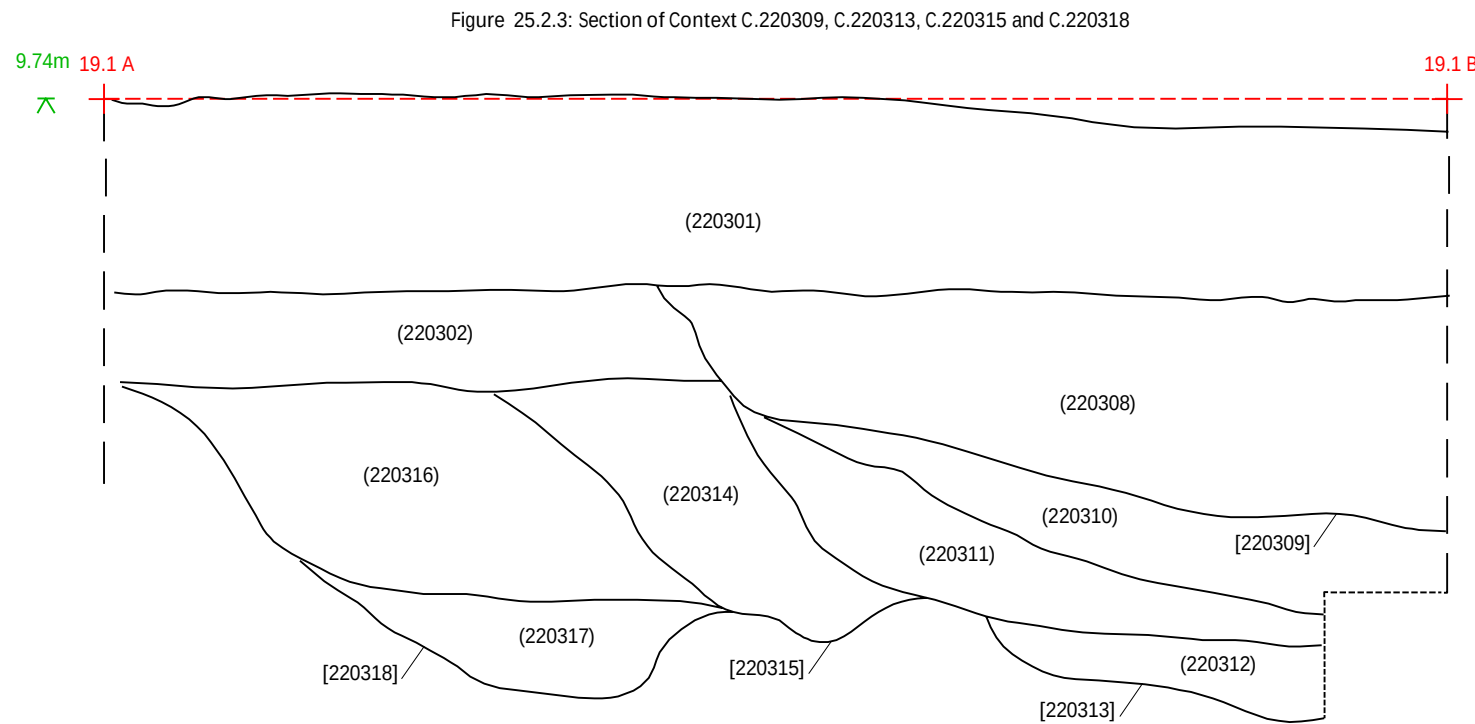
- Order Limits
- Areas
- Trench - Top
- Trench - Base
- Feature
- Excavated
- Furrow
- Section Point
- Section Line
- Base of feature
- Break of Slope
- Drain
- Georarchaeological Test Pit
- Hand Test Pit

Project No. J3063-A	
Scale @A3 1:200	
Drawn by AB	Checked by -
Date 23 07 24	Revision 1.0
Notes Map data ©2023 Google.	
CRS EPSG:27700	
Figure 25.1	

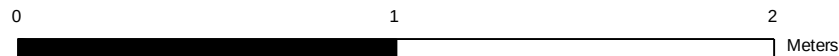
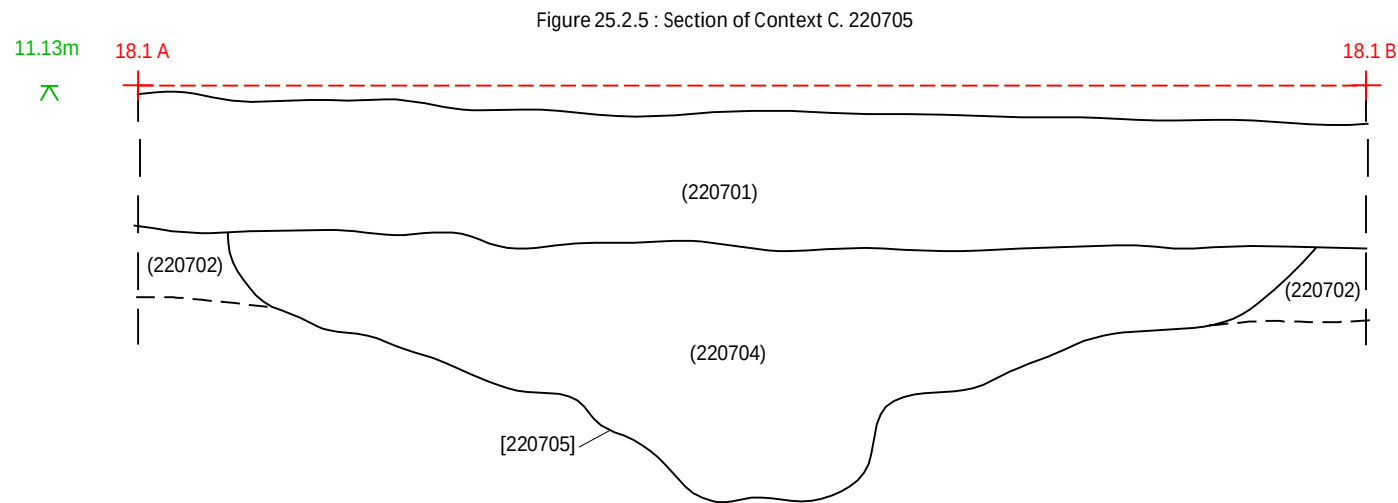


Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

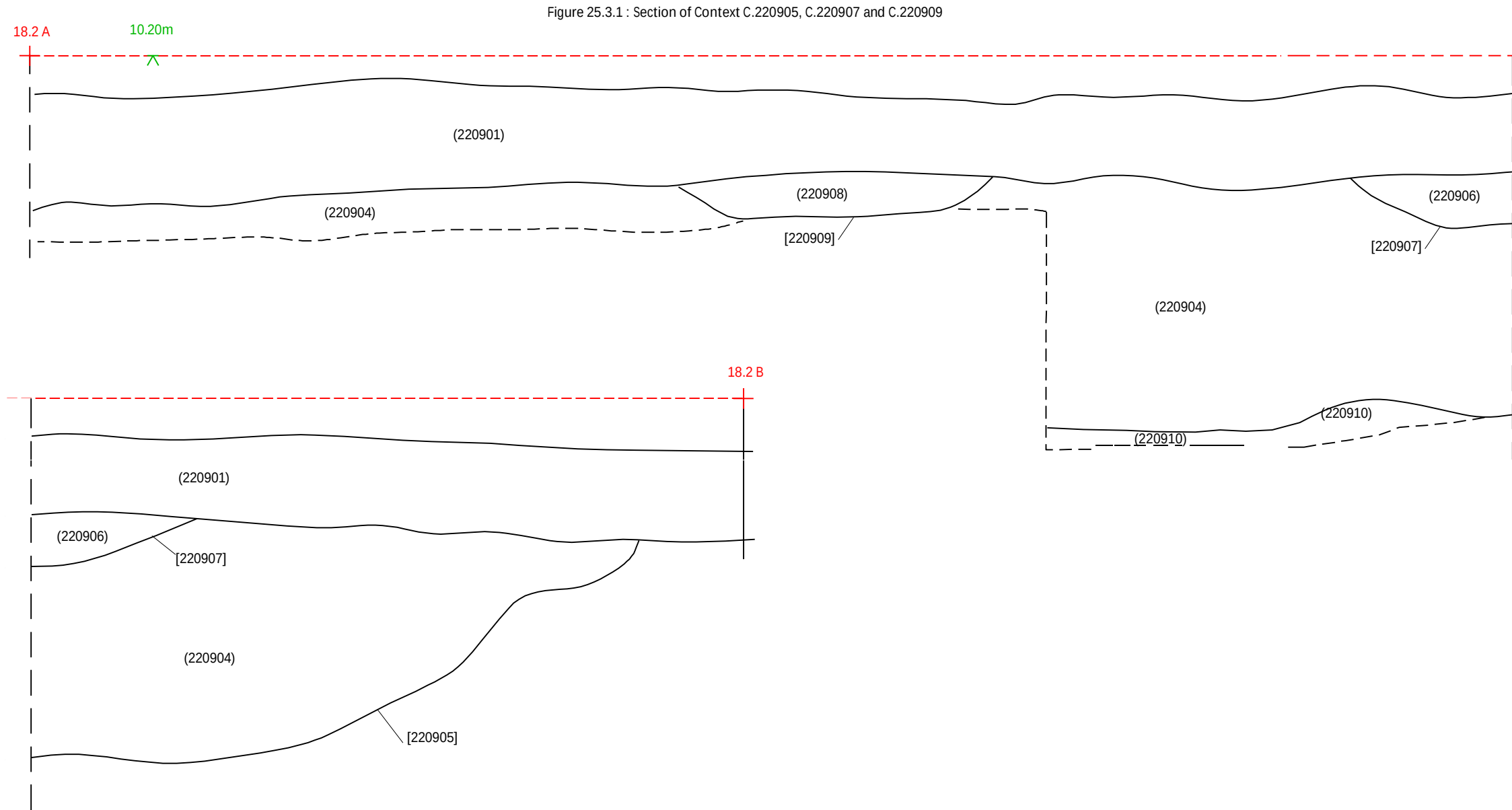
Title
Sections of features in Trenches 2201, 2203,
2205 and 2207



- Legend
- Section Point
 - Section Line
 - OD Level
 - Stone
 - Overcut
 - Fill/Deposit
 - Cut



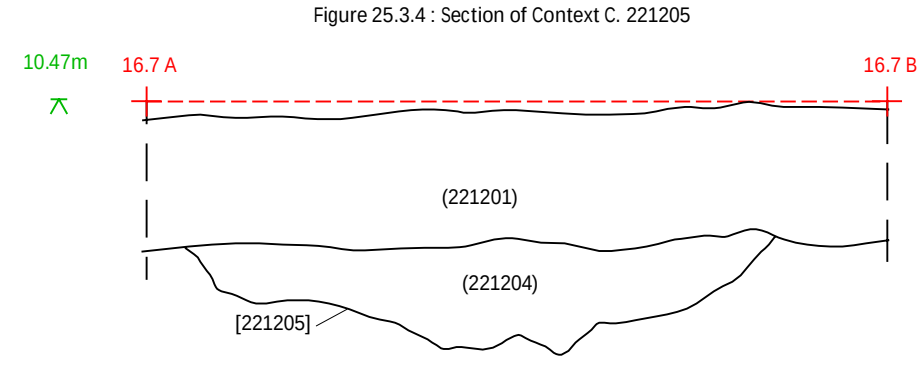
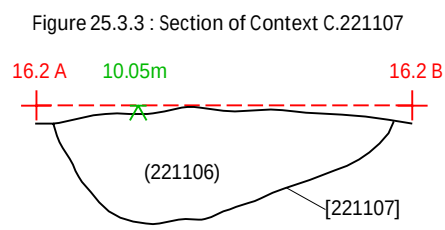
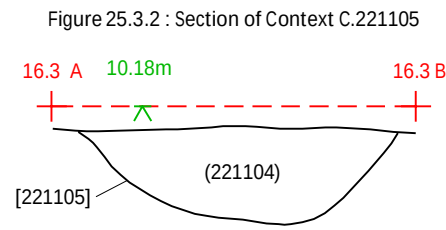
	Project No. J3063-A	
	Scale @A3 1:20	
	Drawn by AB	Checked by -
	Date 24 07 24	Revision 1.0
	Notes Sections location shown on Figure 25.1	
		CRS EPSG: 27700
		Figure 25.2



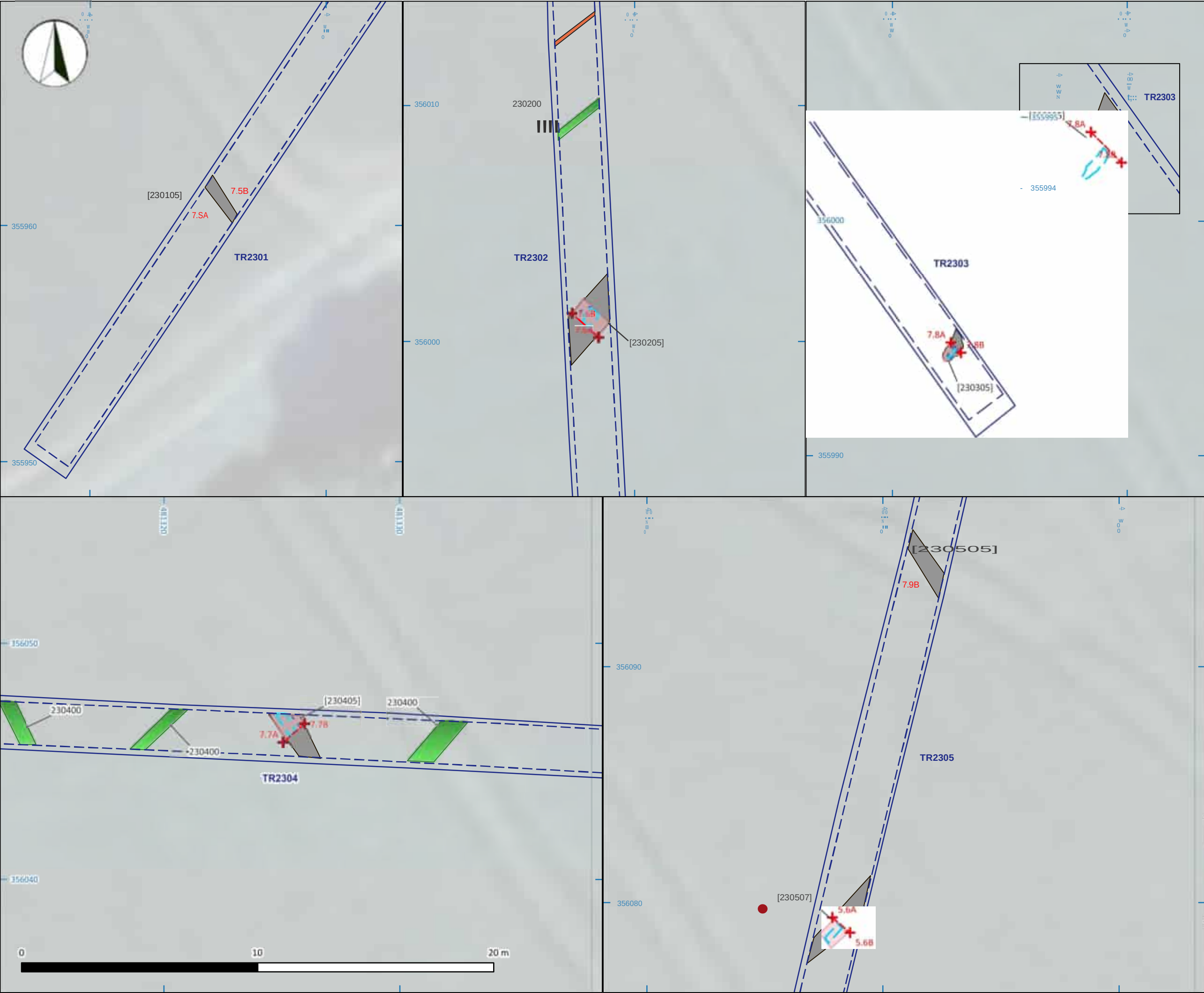
Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trenches 2209, 2211
and 2212

- Legend
- Section Point
 - Section Line
 - OD Level
 - Stone
 - Overcut
 - Fill/Deposit
 - Cut



	Project No. J3063-A	
	Scale @A3 1:20	
	Drawn by AB	Checked by -
	Date 24 07 24	Revision 1.0
	Notes Sections location shown on Figure 25.1	
		CRS EPSG: 27700
		Figure 25.3



Inset Map

Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

Title

Plans of features in Trenches 2301, 2302, 2303, 2304 and 2305

Legend

- Order Limits
- Areas
- Trench - Top
- Trench - Base
- Feature
- Excavated
- Furrow
- Section Point
- Section Line
- Base of feature
- Break of Slope
- Drain
- Finds

	Project No. J3063-A	
	Scale@A3 1:150	
	Drawn by AB	Checked by
	Date 13 09 24	Revision 1.1
	Notes Map data ©2023 Google.	

CRS EPSG:27700
Figure 27.1

Figure 27.2.1 : Section of Context C. 230105

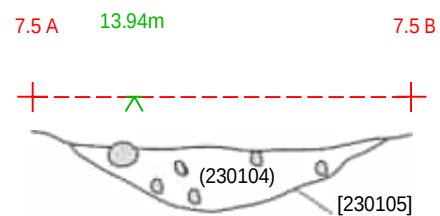


Figure 27.2.2 : Section of Context C. 230205

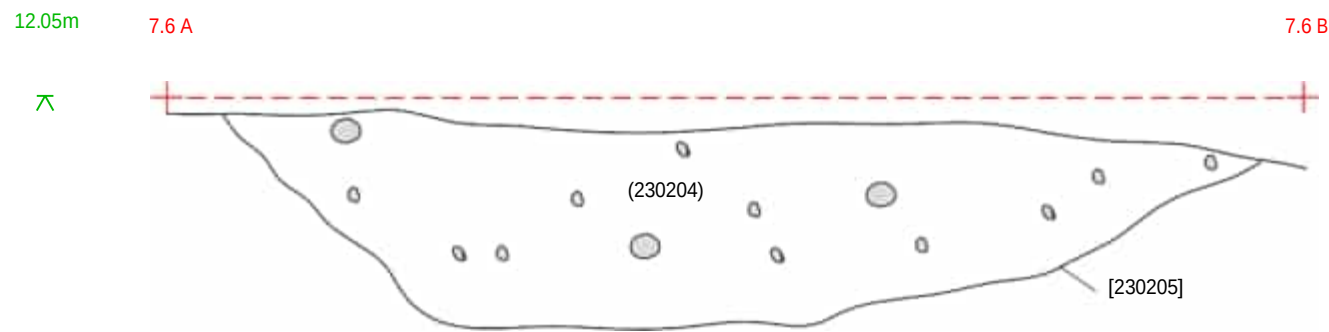


Figure 27.2.3 : Section of Context C. 230305

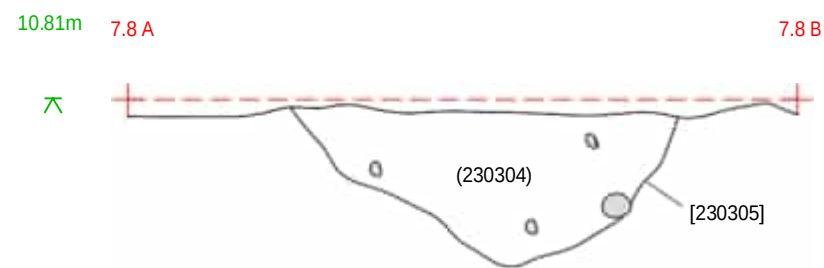


Figure 27.2.4 : Section of Context C. 230405

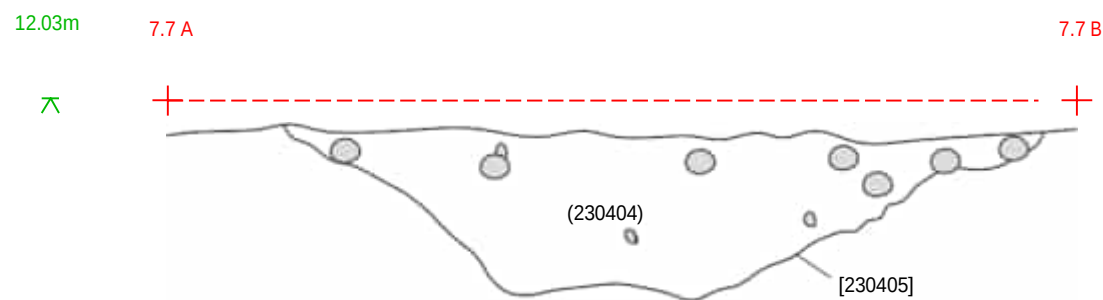


Figure 27.2.5 : Section of Context C. 230507

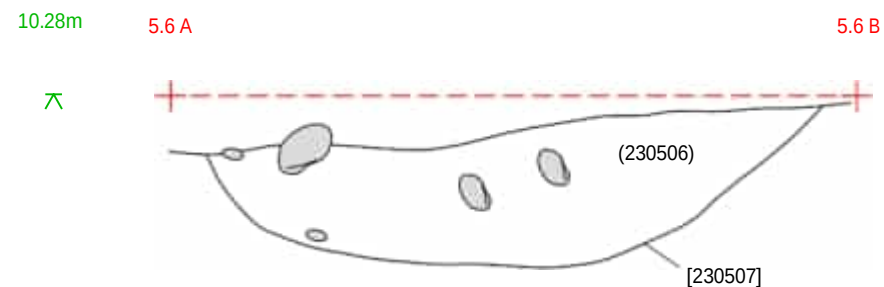
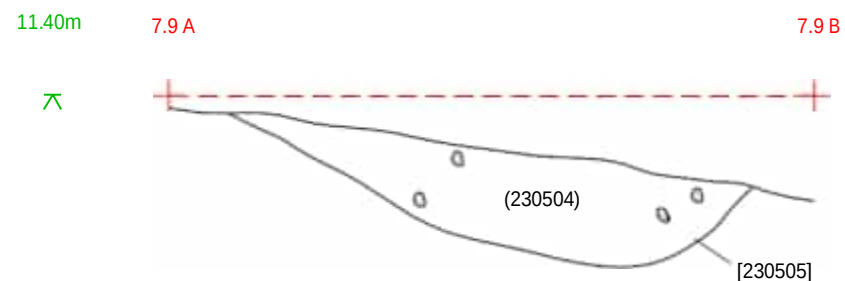


Figure 27.2.6 : Section of Context C. 230505



Inset Map



Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trenches 2301, 2302,
2303 and 2205

Legend

- Section Point
- Section Line
- OD Level
- Stone
- Overcut
- Fill/Deposit
- Cut

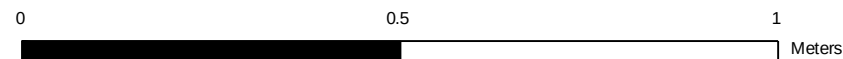


Project No.	J3063-A
Scale @A3	1:10
Drawn by AB	Checked by -
Date 24 07 24	Revision 1.0

Notes
Sections location shown on Figure
27.1

CRS
EPSG: 27700

Figure
27.2





Inset Map

Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title

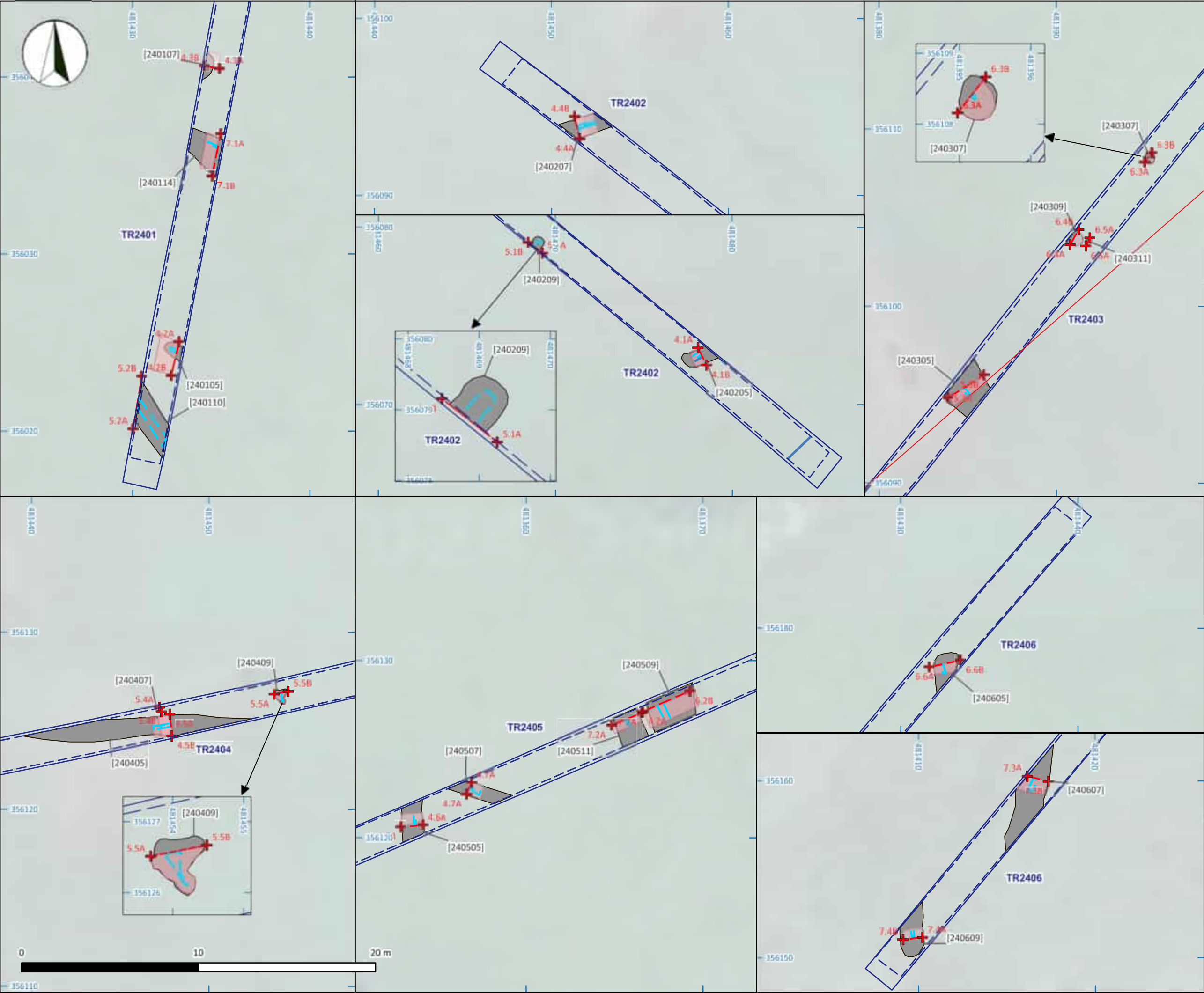
Plan of excavated Field 24 trenches

Legend

- Order Limits
- Areas
- Non-archaeology Surveyed Trench
- Archaeology Surveyed Trenches

	Project No. J3063-A	
	Scale @A3 1:750	
	Drawn by AB	Checked by -
	Date 23 07 24	Revision 1.0
	Notes Bing Maps ©2023 Microsoft	

CRS EPSG:27700
Figure 28



Inset Map

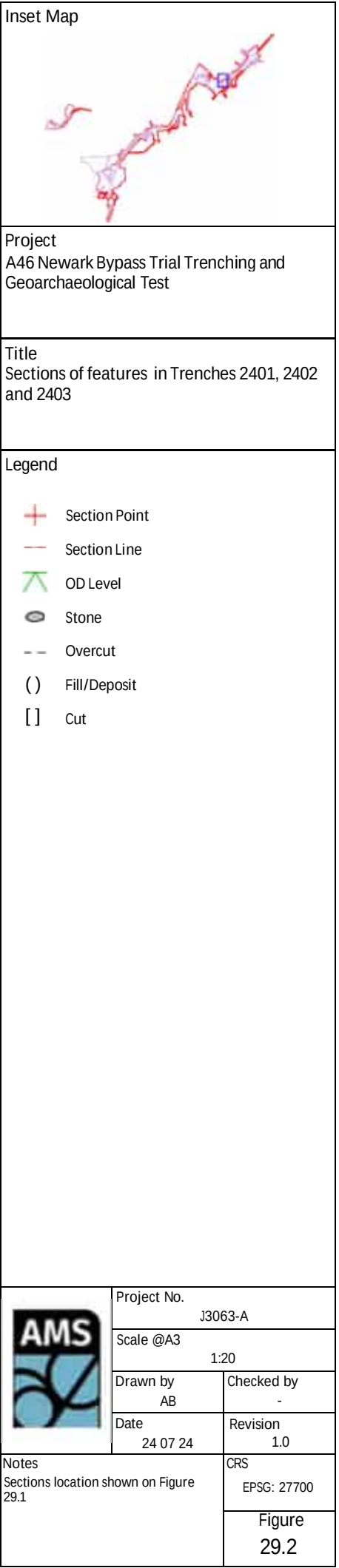
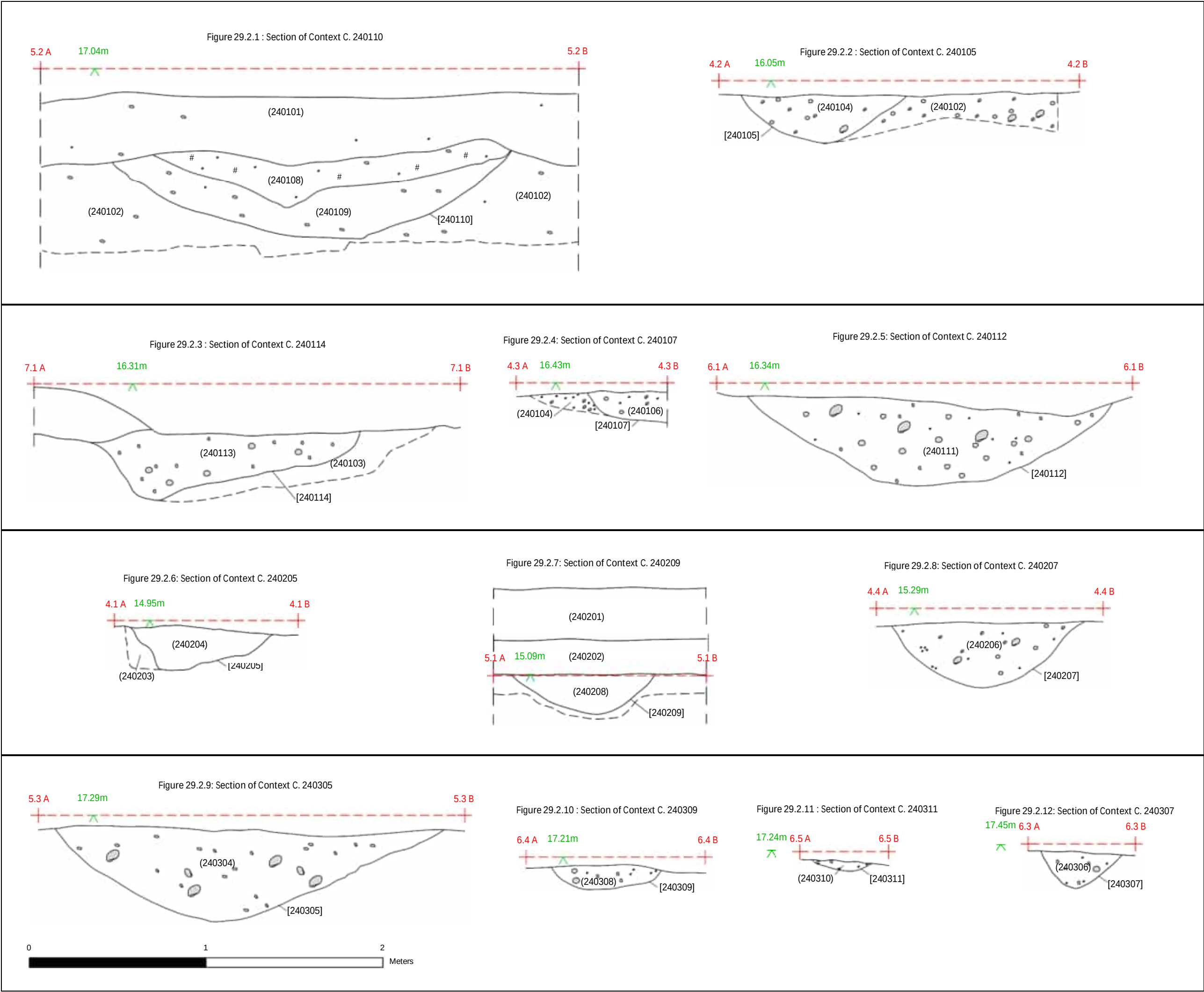
Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

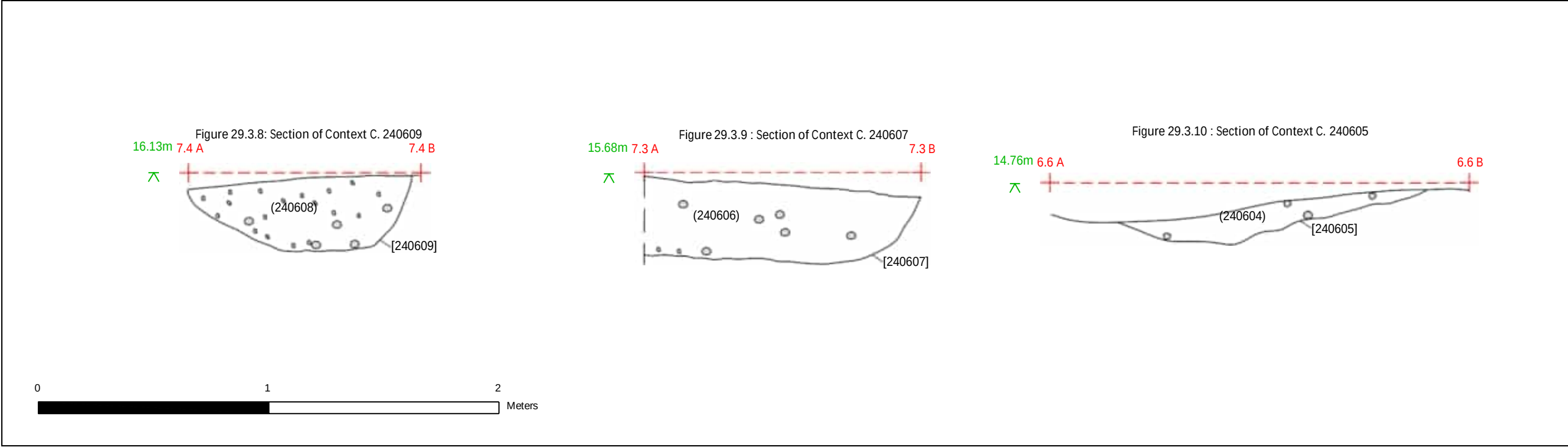
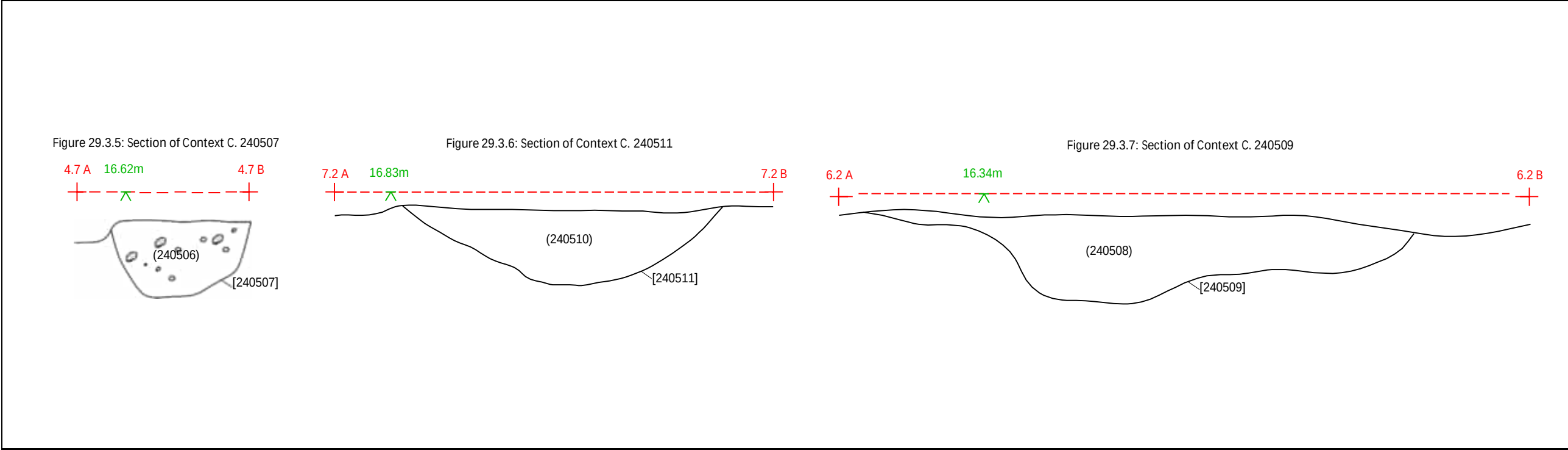
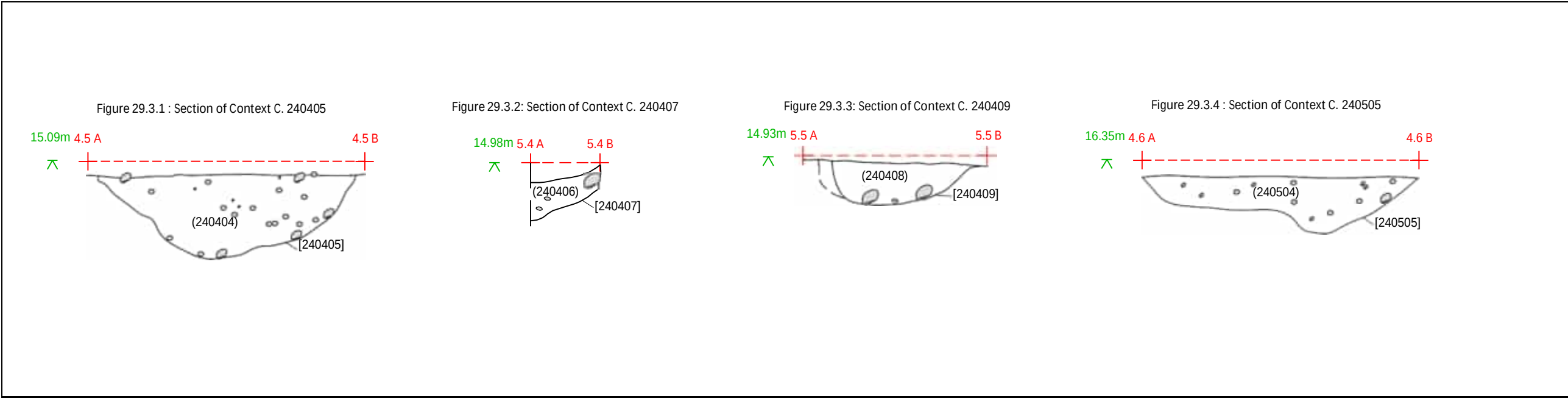
Title
Plans of features in Trenches 2401, 2402, 2403, 2404, 2405 and 2406

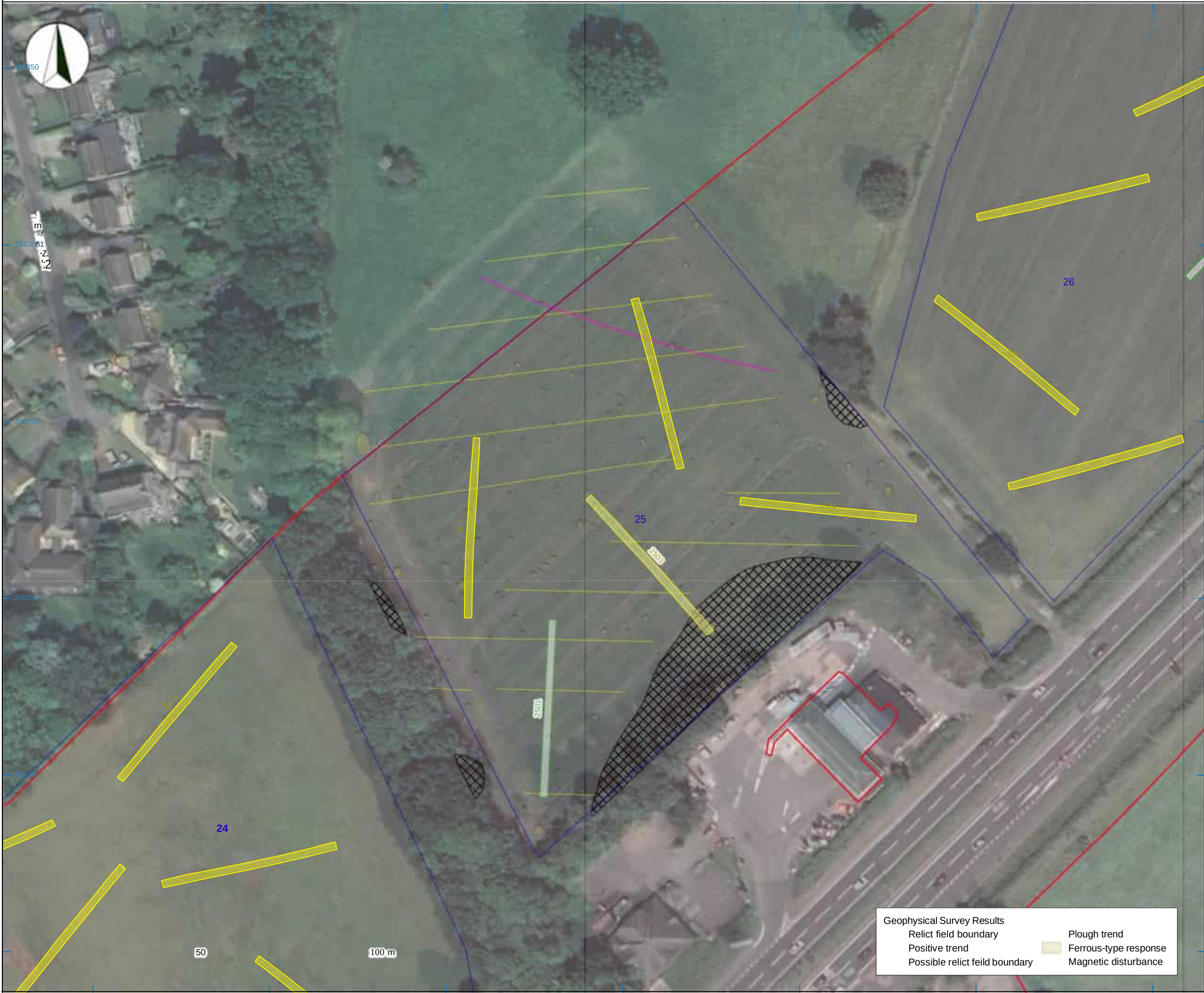
Legend

- Order Limits
- Areas
- Trench - Top
- Trench - Base
- Feature
- Excavated
- Section Point
- Section Line
- Base of feature
- Break of Slope

	Project No. J3063-A	
	Scale @A3 1:200	
	Drawn by AB	Checked by -
	Date 23 07 24	Revision 1.0
Notes Map data ©2023 Google.		CRS EPSG:27700
		Figure 29.1







Inset Map

Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title

Plan of excavated Field 25 trenches

Legend

D Order Limits
D Areas
Non-archaeology Surveyed Trench
Archaeology Surveyed Trenches

Project No.

J3063-A

Scale@A3

1:1,000

Drawn by AB	Checked by
Date 23 07 24	Revision 1.0

Notes

Bing Maps ©2023 Microsoft

CRS

EPSG:27700

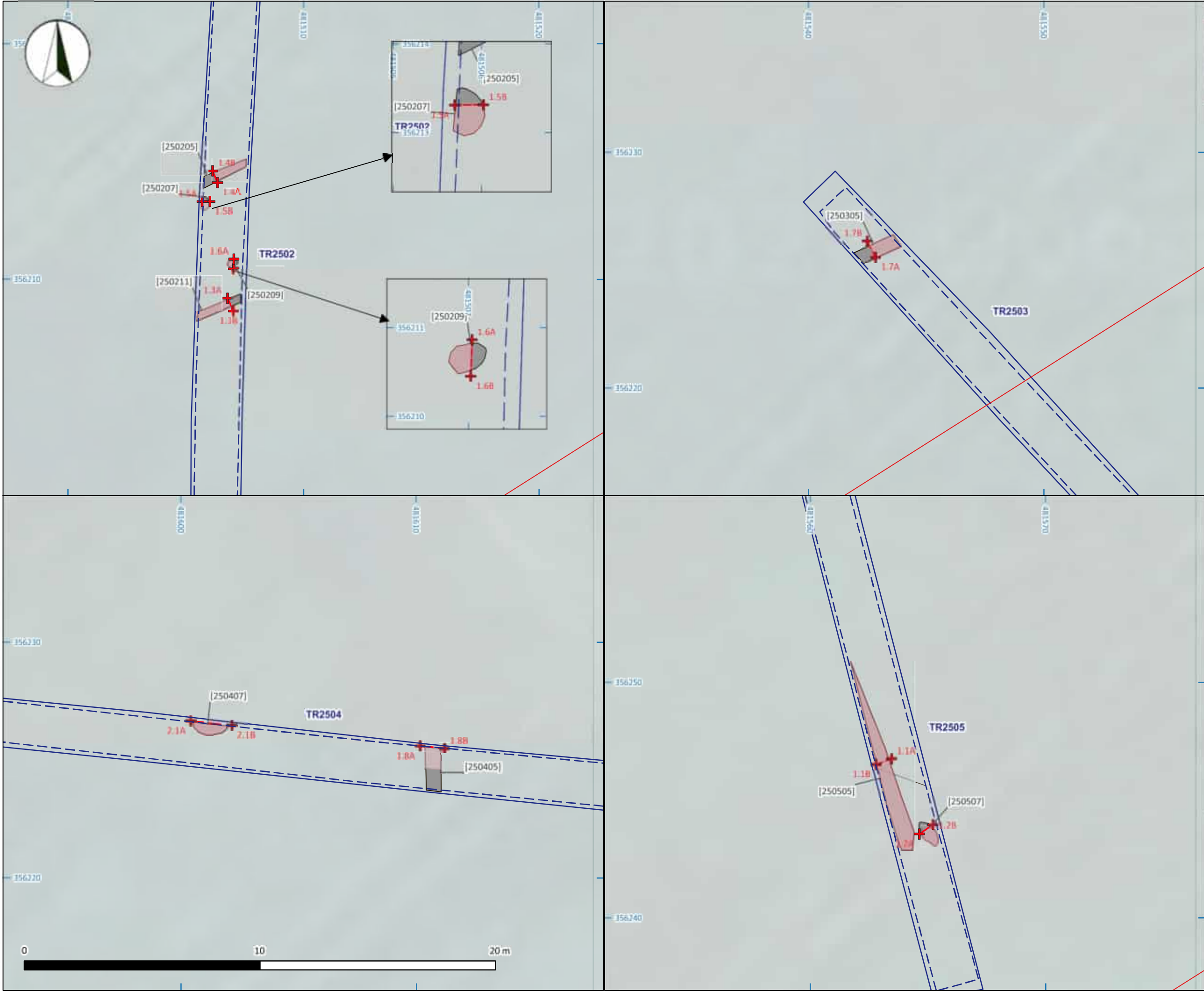
Figure

30

Geophysical Survey Results

Relict field boundary
Positive trend
Possible relict feild boundary

Plough trend
Ferrous-type response
Magnetic disturbance



Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

Title
Plans of features in Trenches 2502, 2503, 2504 and 2505

- Legend**
- Order Limits
 - Areas
 - Trench - Top
 - Trench - Base
 - Feature
 - Excavated
 - Section Point
 - Section Line

	Project No. J3063-A	
	Scale @A3 1:150	
	Drawn by AB	Checked by -
	Date 13 09 24	Revision 1.1
Notes Map data ©2023 Google.		CRS EPSG:27700
		Figure 31.1

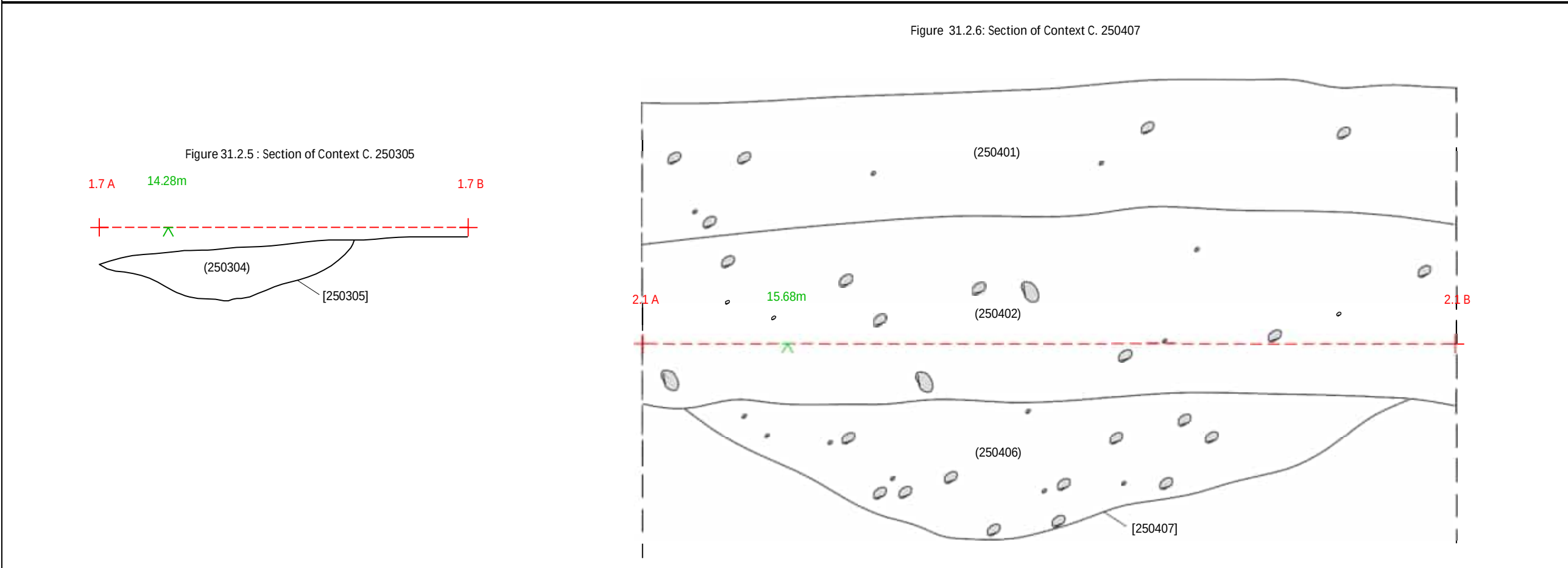
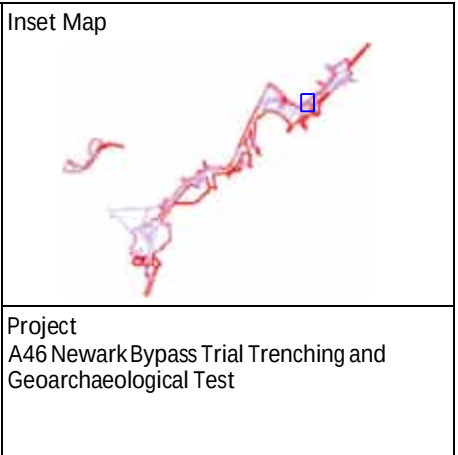
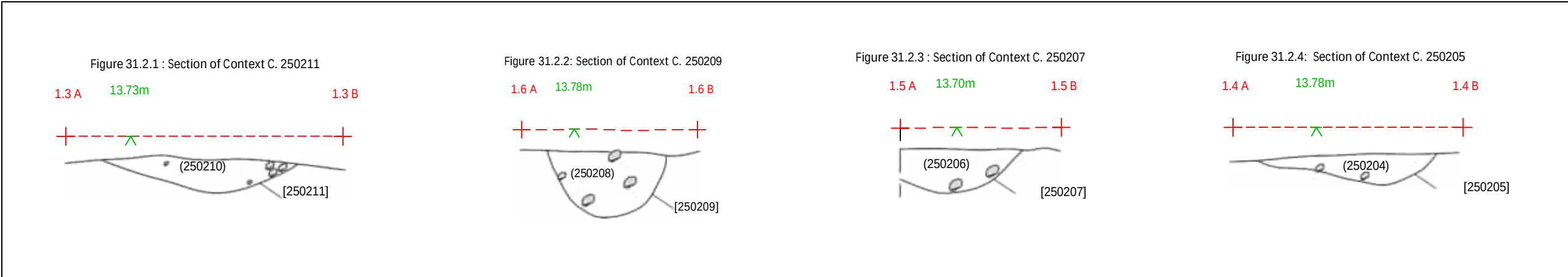


Figure 31.2.6: Section of Context C. 250407

2.1 A

15.68m

2.1 B

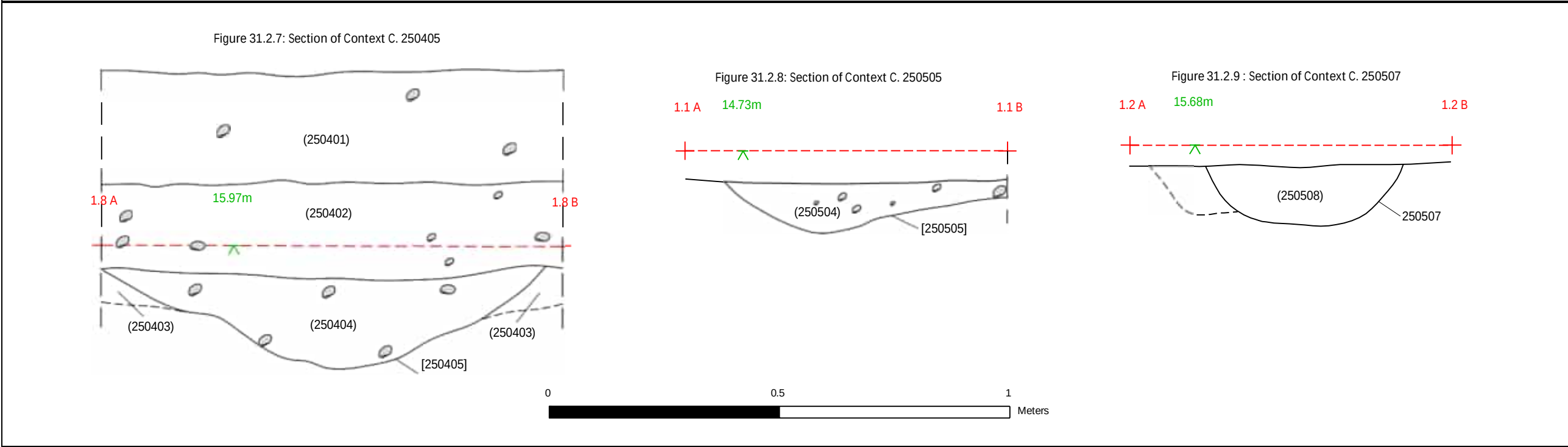
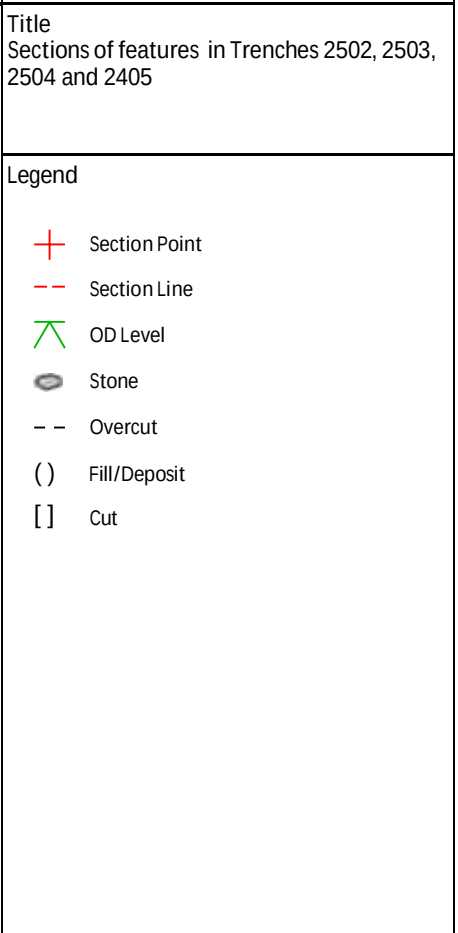


Figure 31.2.8: Section of Context C. 250505

1.1 A

14.73m

1.1 B

Figure 31.2.9 : Section of Context C. 250507

1.2 A

15.68m

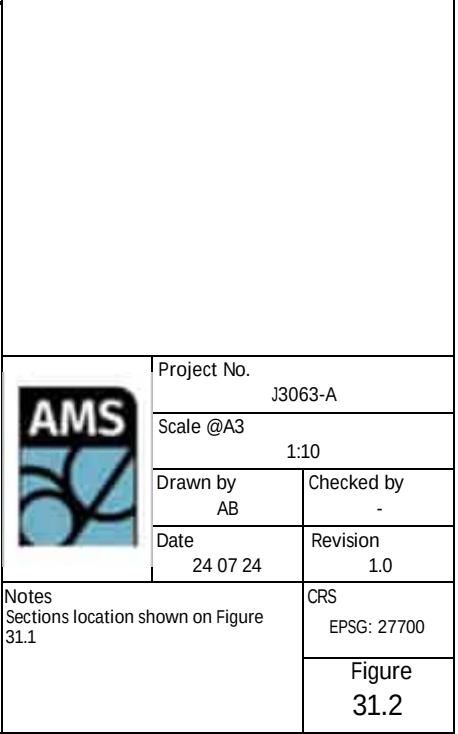
1.2 B

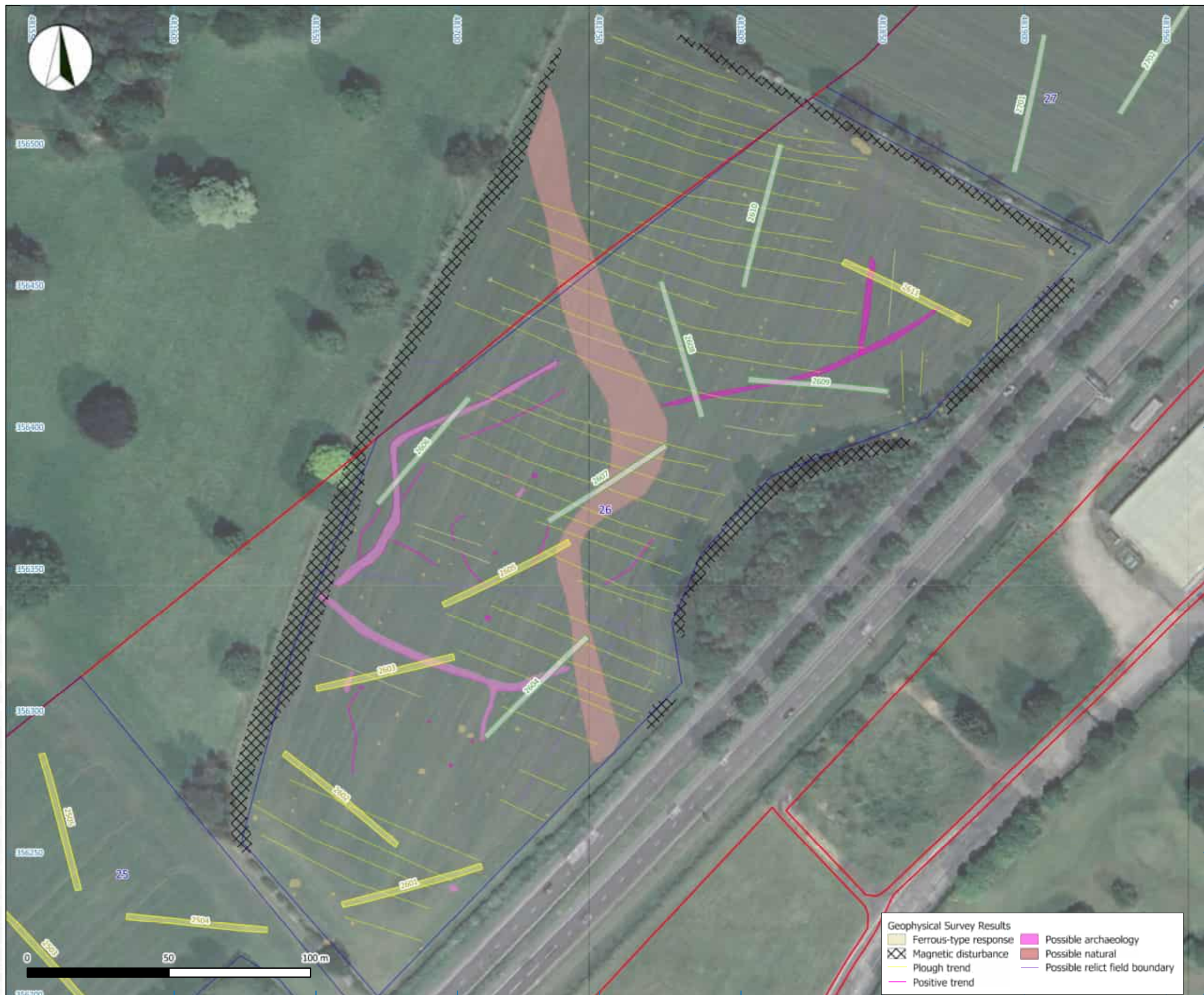
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0.5

1

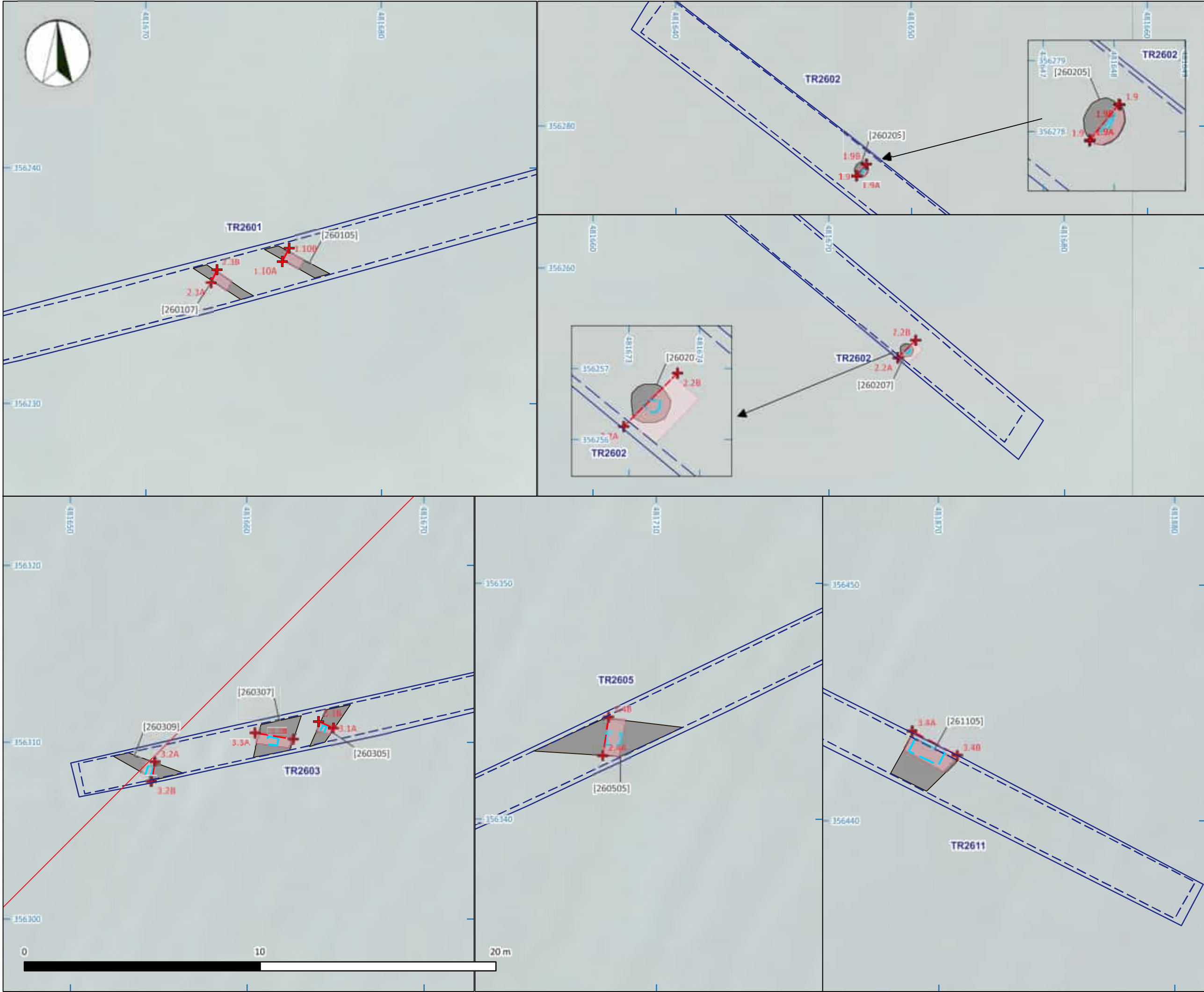
Meters





Inset Map 	
Project A46 Newark Bypass Trial Trenching and Geoarchaeological Test	
Title Plan of excavated Field 26 trenches	
Legend Order Limits Areas Non-archaeology Surveyed Trench Archaeology Surveyed Trenches	
AMS 	Project No. 13063-A
	Scale @A3 1:1,250
	Drawn by AB
	Checked by -
Notes Bing Maps ©2023 Microsoft	Date 23 07 24
	Revision 1.0
CRS EPSG:27700	
Figure 32	

Geophysical Survey Results	
Ferrous-type response Magnetic disturbance Plough trend Positive trend	Possible archaeology Possible natural Possible relict field boundary



Inset Map

Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

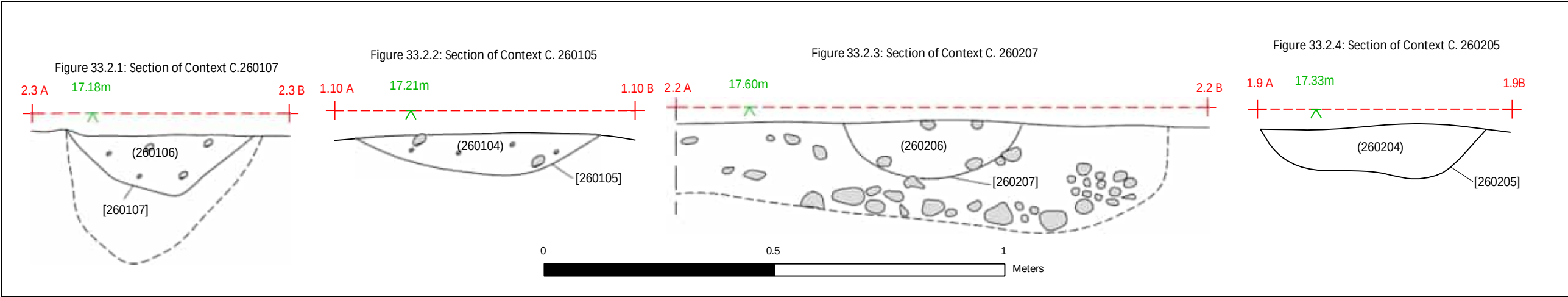
Title

Plans of features in Trenches 2601, 2602, 2603, 2605 and 2611

Legend

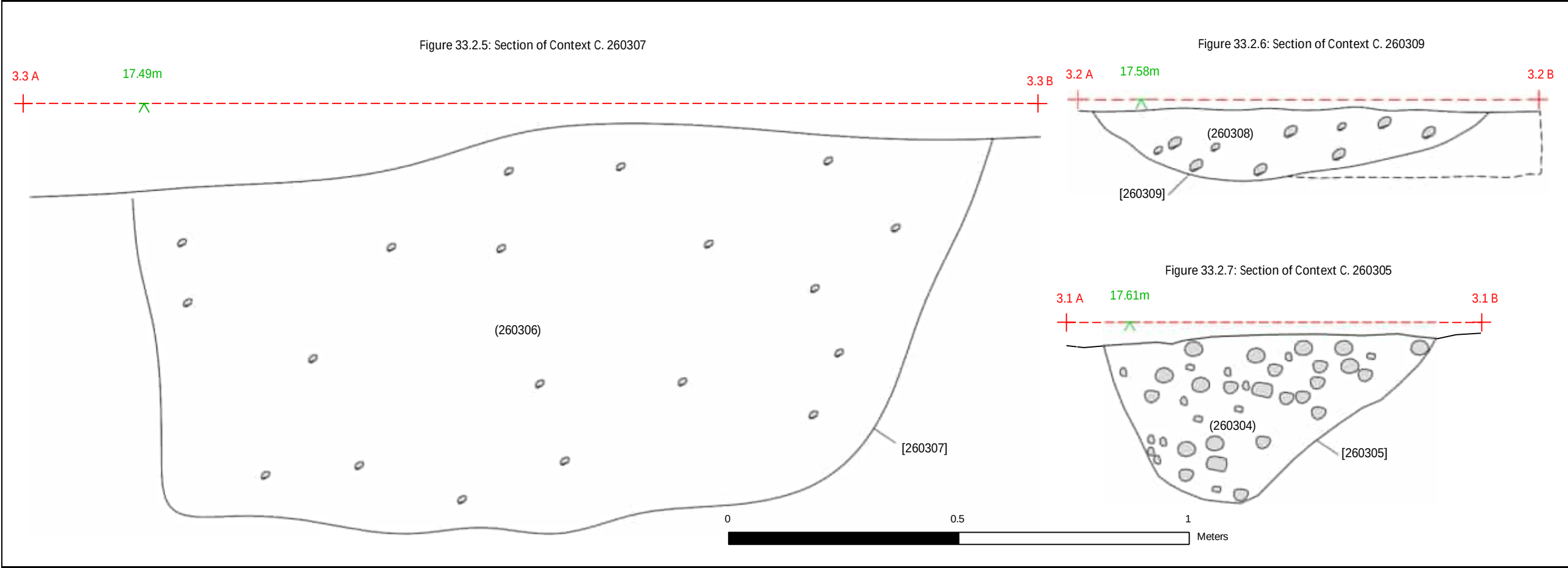
- Order Limits
- Areas
- Trench - Top
- Trench - Base
- Feature
- Excavated
- Section Point
- Section Line
- Base of feature
- Break of Slope

	Project No.	
	J3063-A	
	Scale @A3	
	1:150	
Drawn by	AB	Checked by
Date	23 07 24	Revision
Notes		CRS
Map data ©2023 Google.		EPSG:27700
		Figure
		33.1



Inset Map

Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test



Title
Sections of features in Trenches 2601, 2602,
2603, 2605 and 2611

Legend

+

 Section Point

- -

 Section Line

^

 OD Level

●

 Stone

- -

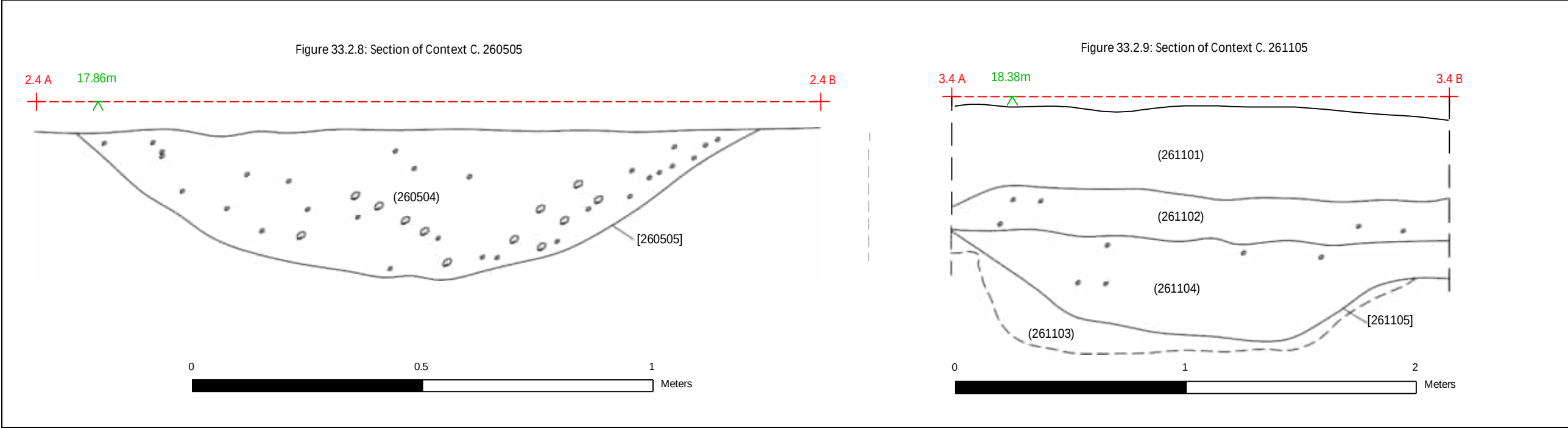
 Overcut

()

 Fill/Deposit

[]

 Cut



AMS

Project No.
J3063-A

Scale @A3
1:10 & 1:20

Drawn by
AB

Checked by
-

Date
24 07 24

Revision
1.0

Notes
Sections location shown on Figure
33.1

CRS
EPSG: 27700

Figure
33.2



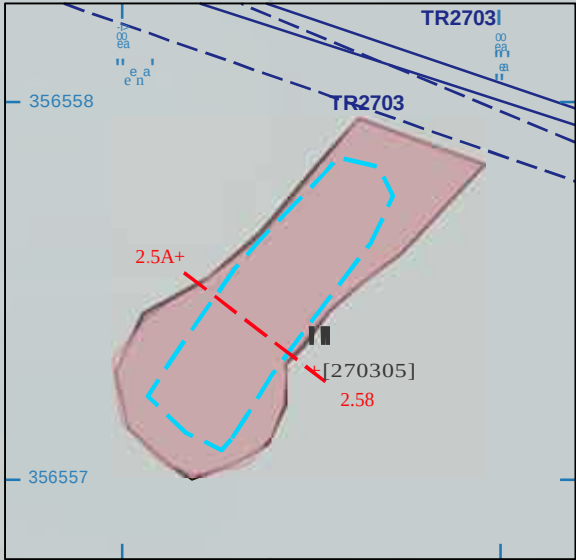
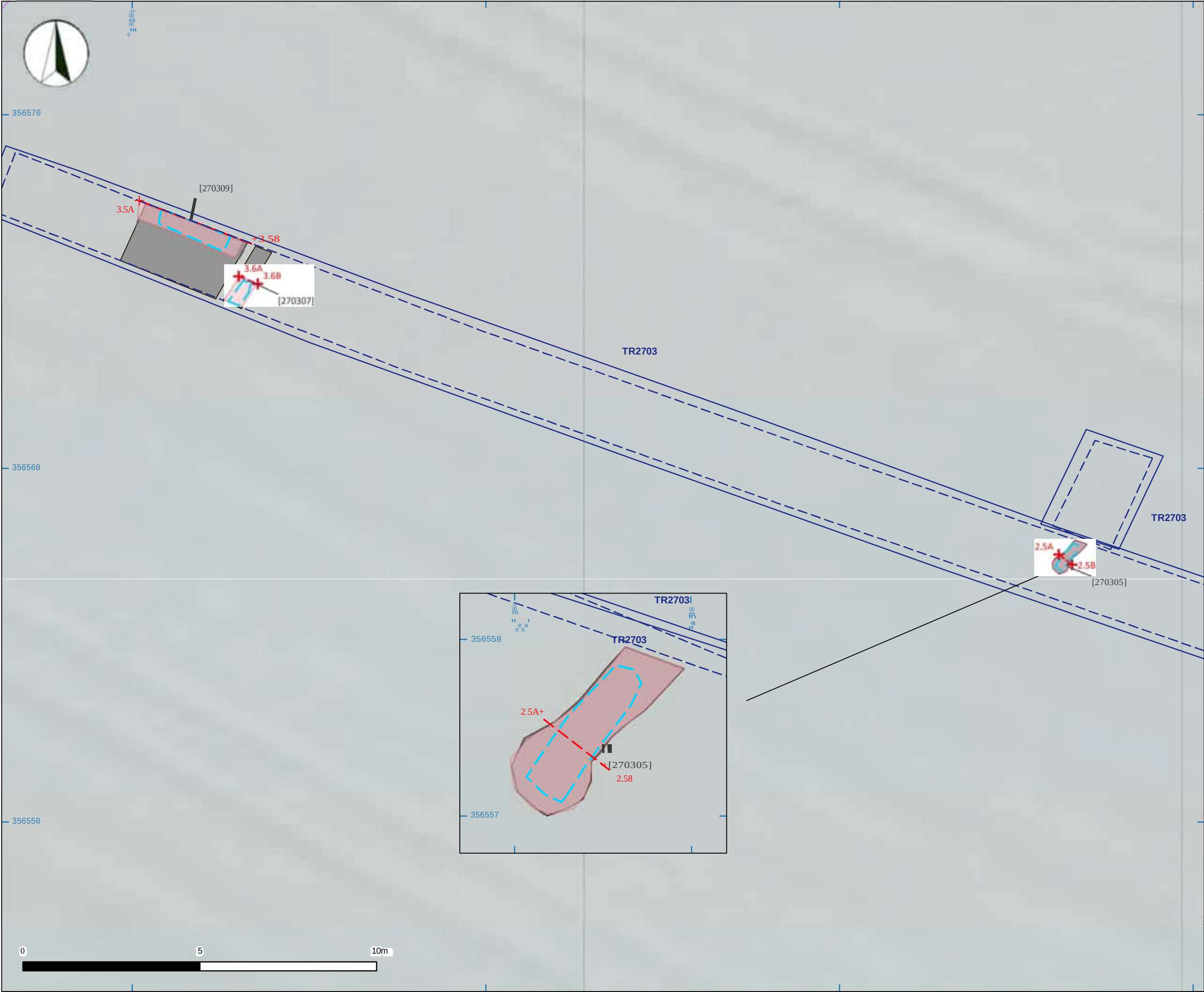
Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title	Plan of excavated Field 27 trenches

Legend

- D** Order Limits
- D** Areas
-  Non-archaeology Surveyed Trench
-  Archaeology Surveyed Trenches

	Project No.		J3063-A
	Scale@A3		1:500
	Drawn by	Checked by	
	AB		
	Date	Revision	
	23 07 24	1.0	
Notes		CRS	
Bing Maps ©2023 Microsoft		EPSG:27700	
		Figure	
		34	



Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

Title
Plans of features in Trench 2703

- Legend**
- D Order Limits
 - D Areas
 - D Trench - Top
 - D Trench - Base
 - D Feature
 - D Excavated
 - + Section Point
 - Section Line
 - Base of feature
 - Break of Slope

	Project No. J3063-A	
	Scale@A3 1:100	
	Drawn by AB	Checked by
	Date 23 07 24	Revision 1.0
Notes Map data ©2023 Google.		CRS EPSG:27700
		Figure 35.1

Figure 35.2.1 : Section of Context C. 270309

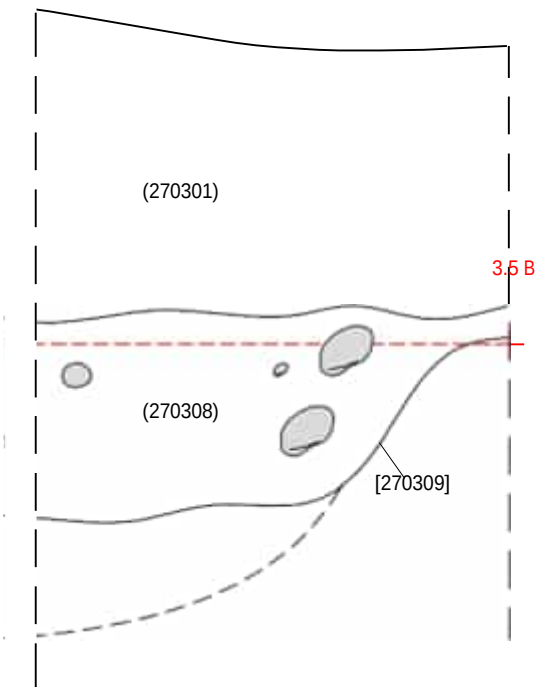
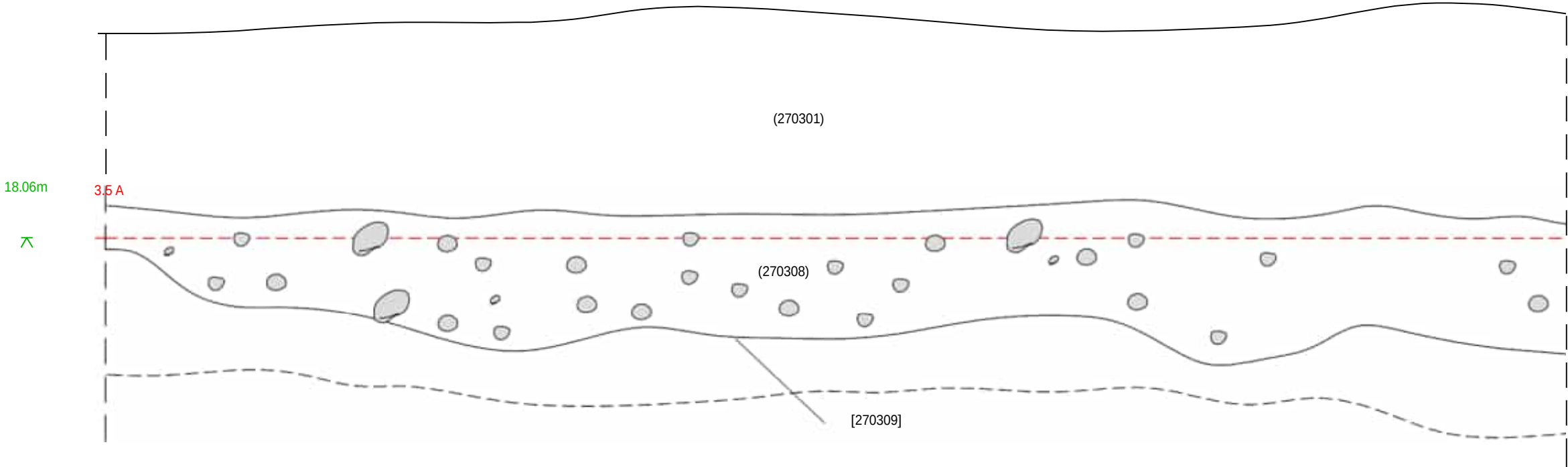


Figure 35.2.2 : Section of Context C. 270307

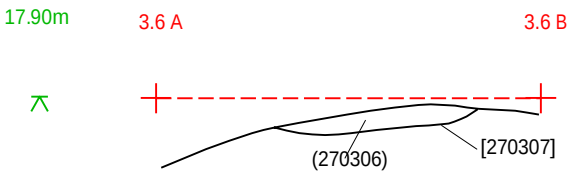
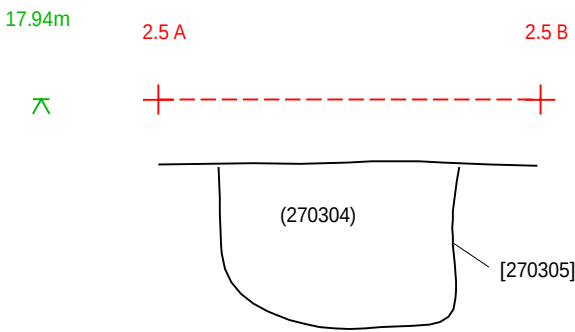


Figure 35.2.3: Section of Context C. 270305



Inset Map



Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trench 2703

Legend

- + Section Point
- - Section Line
- ↗ OD Level
- Stone
- - Overcut
- () Fill/Deposit
- [] Cut



Project No.
J3063-A

Scale @A3
1:10

Drawn by
AB

Checked by
-

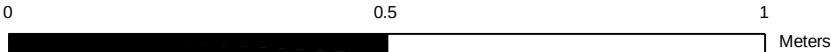
Date
24 07 24

Revision
1.0

Notes
Sections location shown on Figure
35.1

CRS
EPSG: 27700

Figure
35.2





Inset Map

Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Plan of excavated Field 28 trenches

Legend

- Order Limits
- Areas
- Non-archaeology Surveyed Trench
- Archaeology Surveyed Trenches

	Project No. J3063-A	
	Scale @A3 1:750	
	Drawn by AB	Checked by -
	Date 13 09 24	Revision 1.1
	Notes Bing Maps ©2023 Microsoft	

Geophysical Survey Results	
Plough trend	Ferrous-type response
Possible archaeology	Magnetic disturbance

CRS EPSG:27700
Figure 36



Inset Map

Project

A46 Newark Bypass Trial Trenching and Geomorphological Test Pitting Report

Title

Plans of features in Trenches 2801, 2803 and 2804

Legend

- Order Limits
- Areas
- Trench - Top
- Trench - Base
- Furrow

	Project No. J3063-A	
	Scale@A3 1:400	
	Drawn by AB	Checked by
	Date 13 09 24	Revision 1.1

Notes

Map data ©2023 Google.

CRS EPSG:27700



Inset Map

Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Plan of excavated Field 29 trenches

Legend

- Order Limits
- Areas
- Non-archaeology Surveyed Trench
- Archaeology Surveyed Trenches

	Project No. 13063-A	
	Scale @A3 1:1,000	
	Drawn by AB	Checked by -
	Date 24 07 24	Revision 1.0
	Notes Bing Maps ©2023 Microsoft	

CRS EPSG:27700
Figure 38

Figure 39.2.1 : Section of Context C.290507

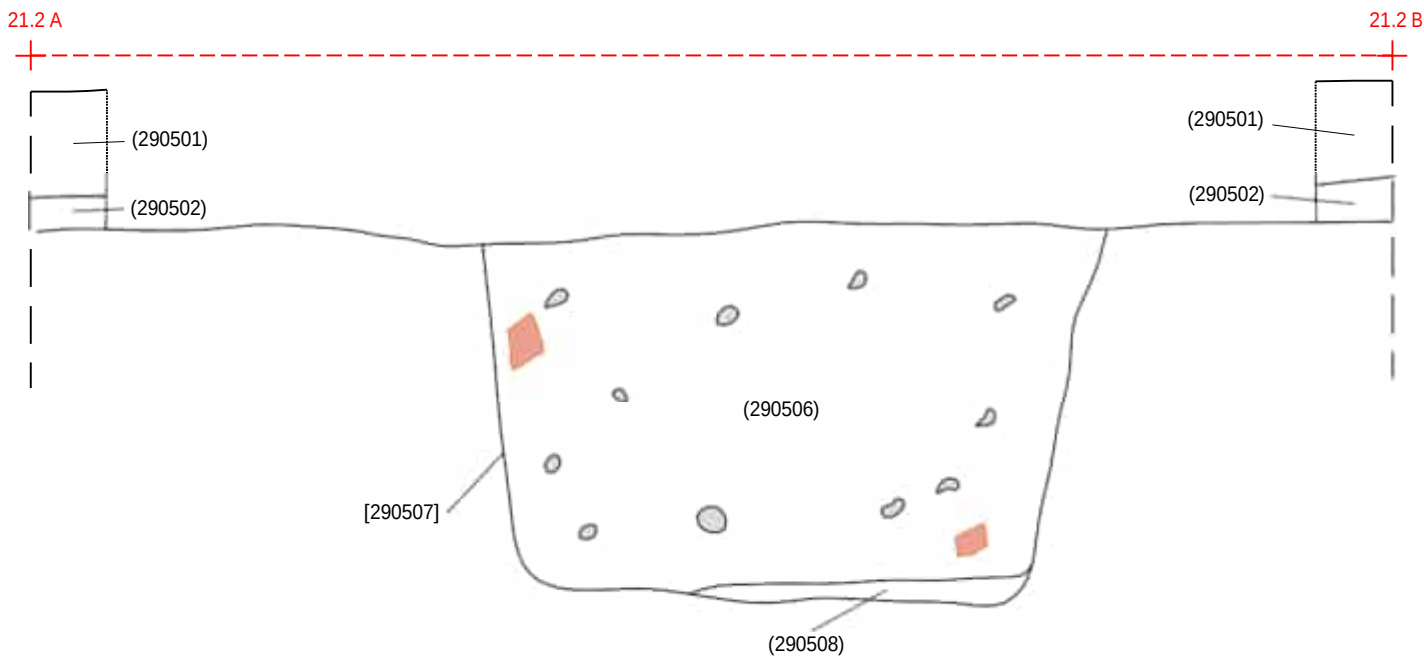


Figure 39.2.2 : Section of Context C.290510

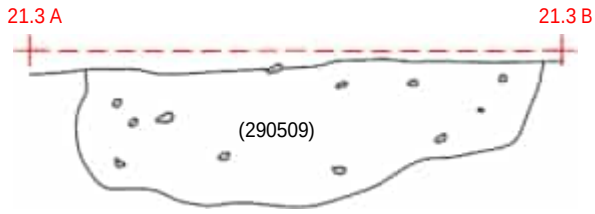
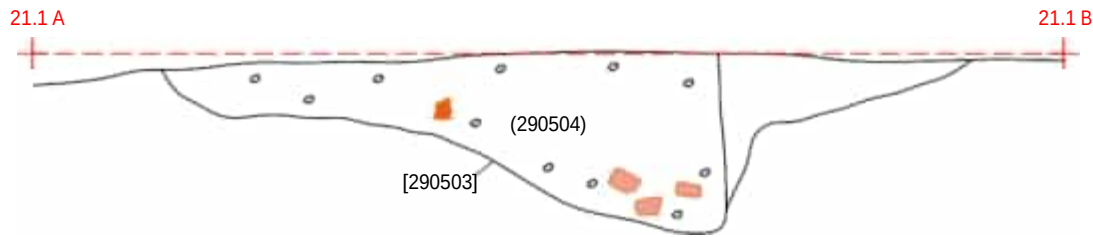


Figure 39.2.3 : Section of Context C.290505



Inset Map



Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trench 2905

Legend

- + Section Point
- - Section Line
- OD Level
- Stone
- - Overcut
- () Fill/Deposit
- [] Cut
- Pottery
- Brick



Project No.
J3063-A

Scale @A3
1:10

Drawn by
AB

Checked by
-

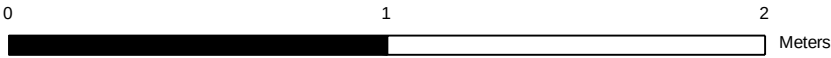
Date
24 07 24

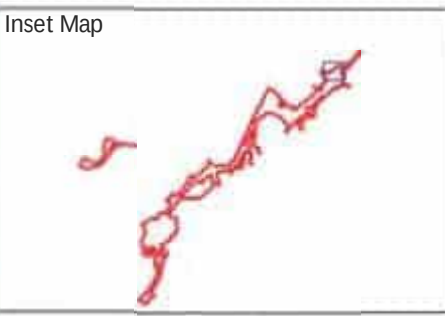
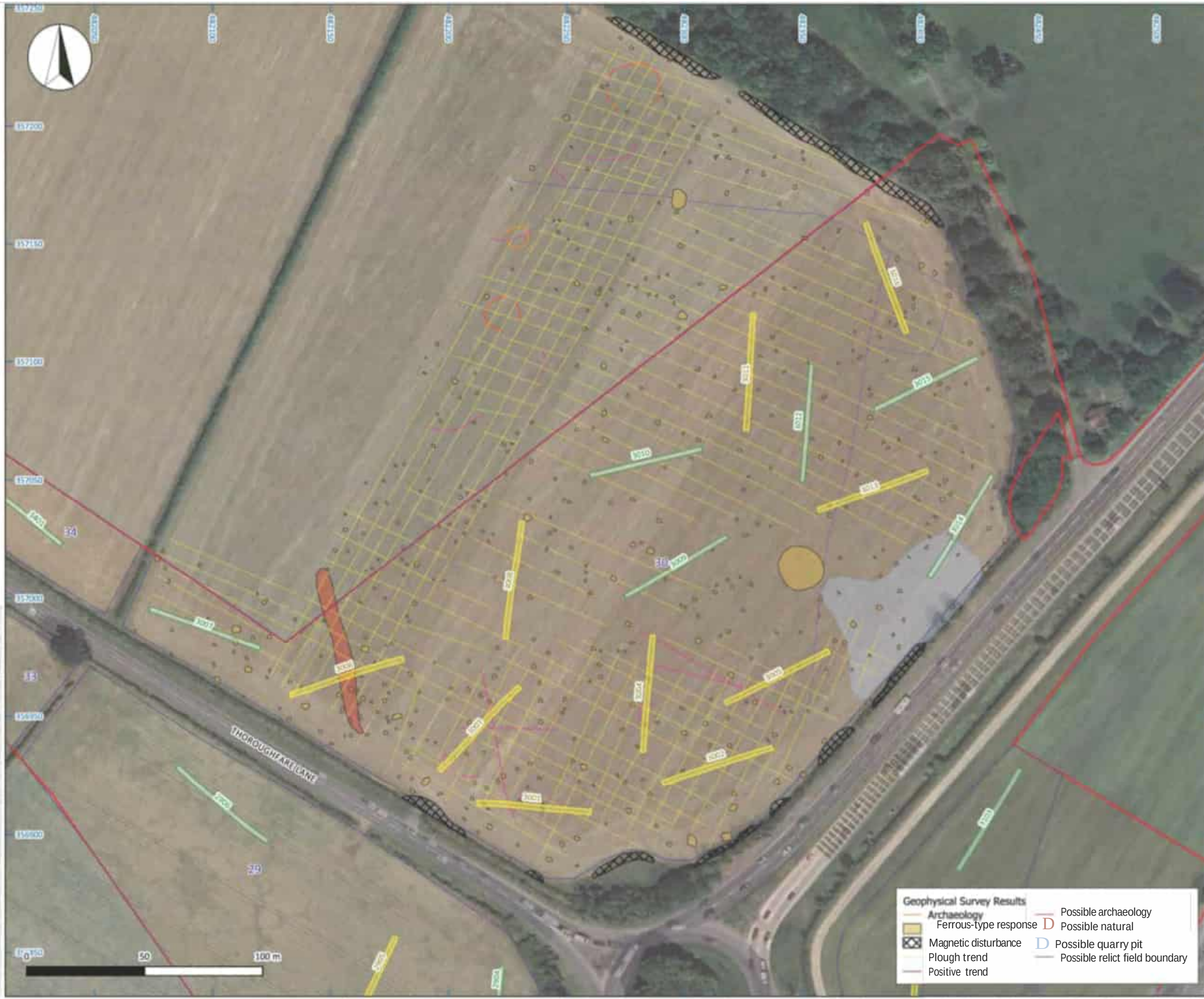
Revision
1.0

Notes
Sections location shown on Figure
39.1

CRS
EPSG: 27700

Figure
39.2





Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Plan of excavated Field 30 trenches

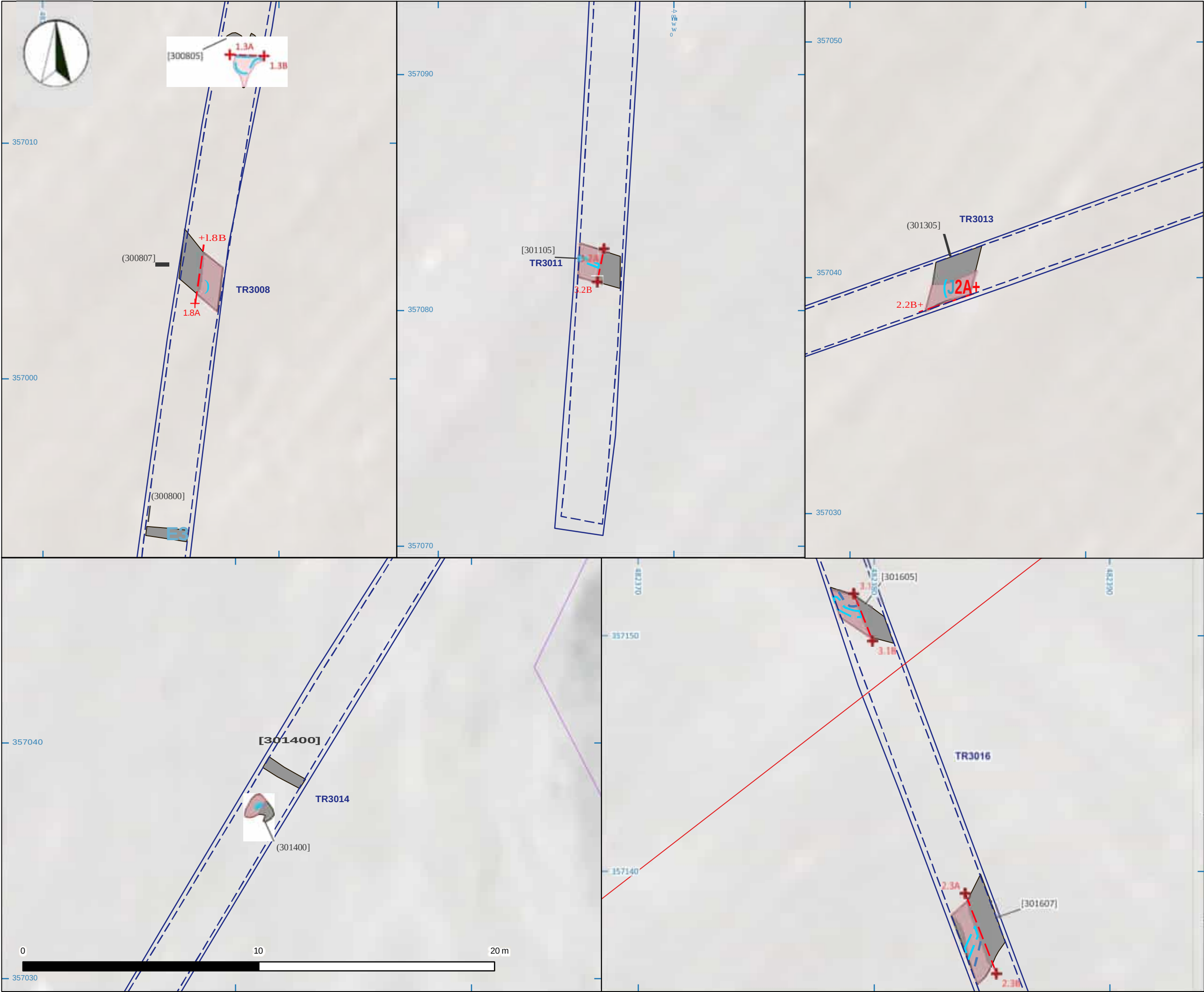
- Legend
- D Order Limits
 - D Areas
 - Non-archaeology Surveyed Trench
 - Archaeology Surveyed Trenches

- Geophysical Survey Results
- Archaeology
 - Ferrous-type response
 - X Magnetic disturbance
 - Plough trend
 - Positive trend
 - D Possible archaeology
 - D Possible natural
 - D Possible quarry pit
 - Possible relict field boundary



Project No.	J3063-A
Scale@A3	1:1,500
Drawn by	AB
Checked by	
Date	24 07 24
Revision	1.0
CRS	EPSG:27700
Figure	40

Notes
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Inset Map

Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

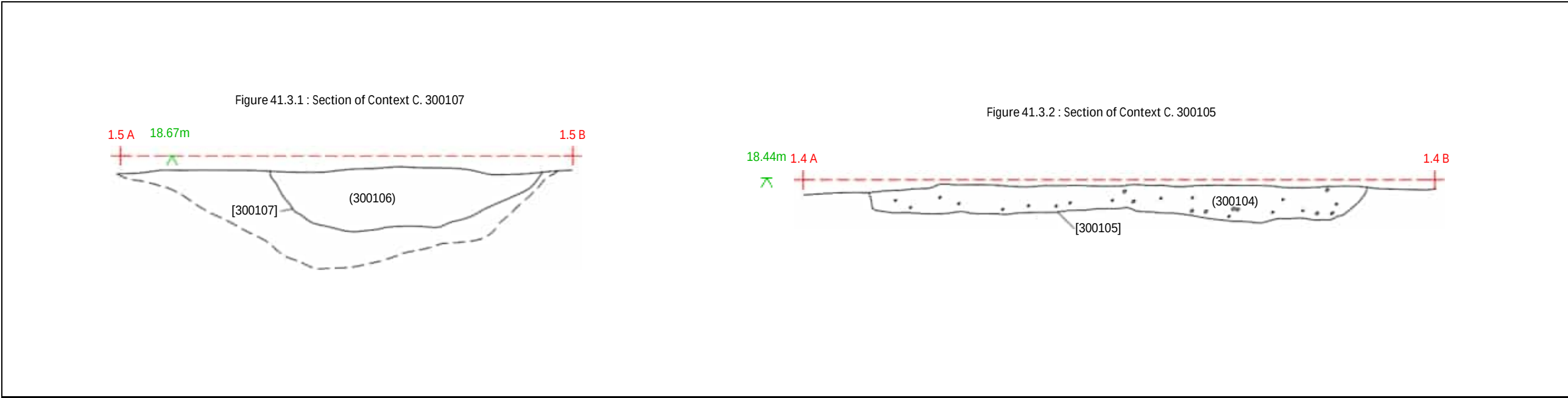
Title

Plans of features in Trenches 3008, 3011, 3013, 3014 and 3016

Legend

- D Order Limits
- D Areas
- D Trench - Top
- D Trench - Base
- D Feature
- D Excavated
- + Section Point
- Section Line
- Base of feature
- Break of Slope

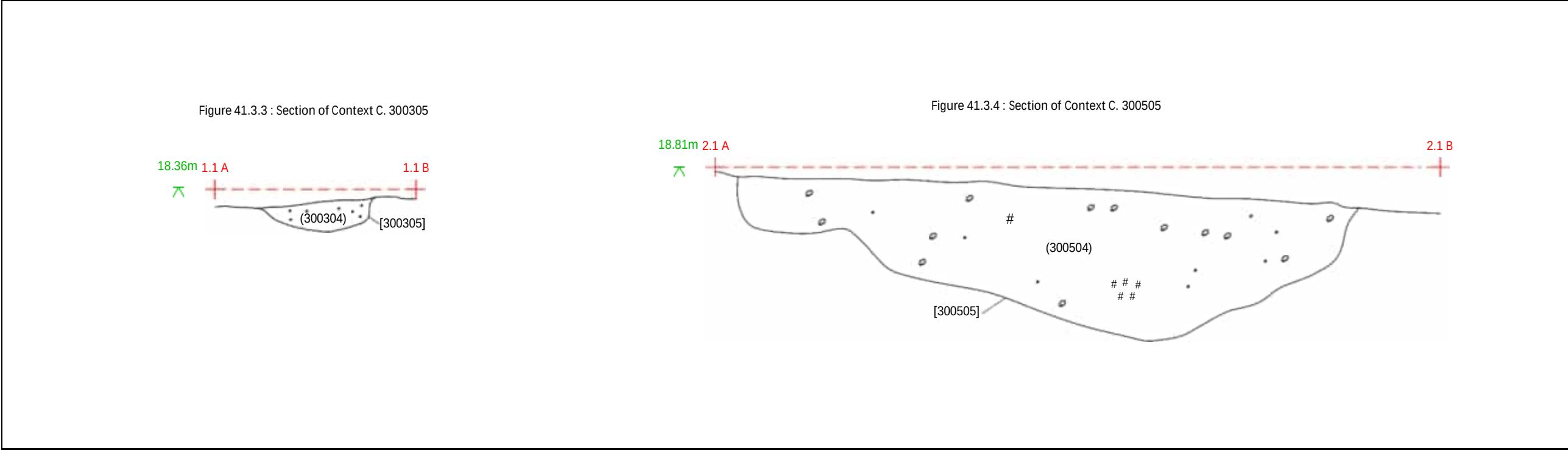
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	Date 24 07 24	Revision 1.0
Notes Map data ©2023 Google.		CRS EPSG:27700
		Figure 41.2



Inset Map

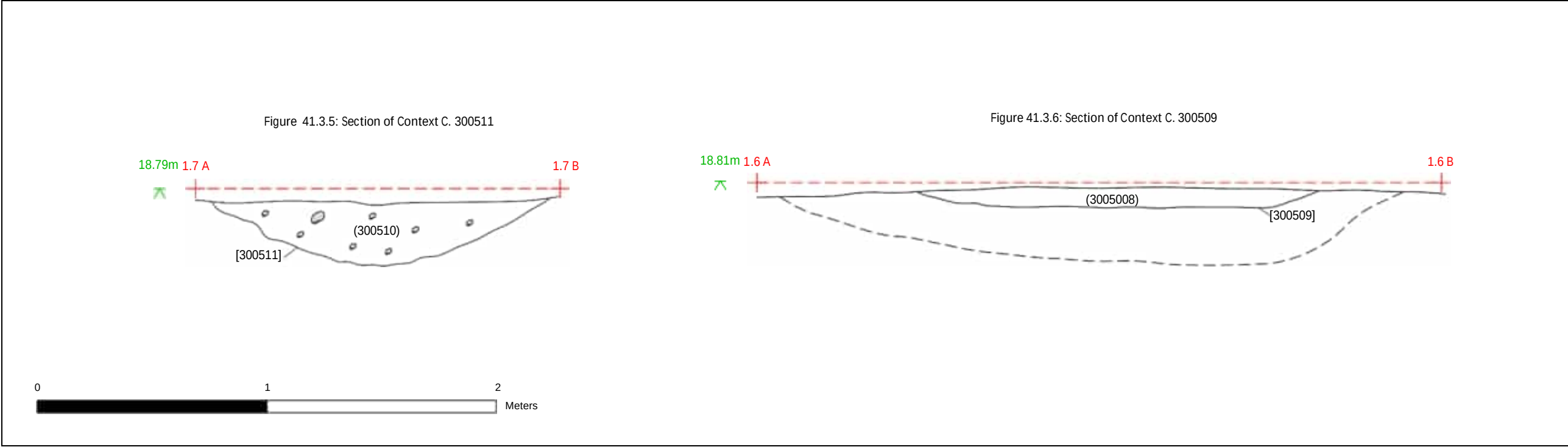
Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trenches 3001, 3003
and 3005



Legend

- Section Point
- Section Line
- OD Level
- Stone
- Overcut
- () Fill/Deposit
- [] Cut
- ### Charcoal



AMS

Project No.
J3063-A

Scale @A3
1:20

Drawn by
AB

Checked by
-

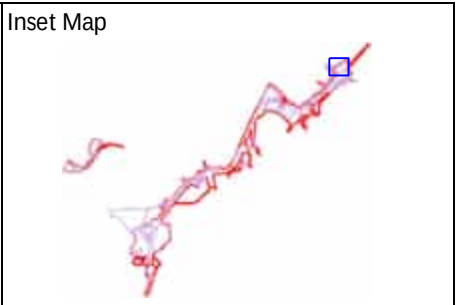
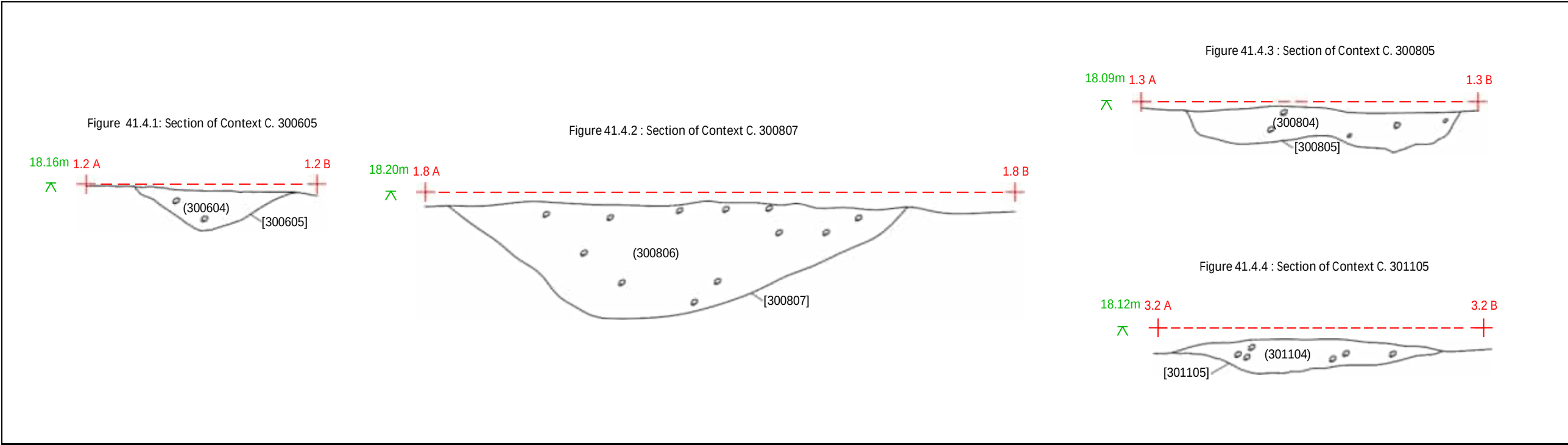
Date
24 07 24

Revision
1.0

Notes
Sections location shown on Figure
41.1

CRS
EPSG: 27700

Figure
41.3

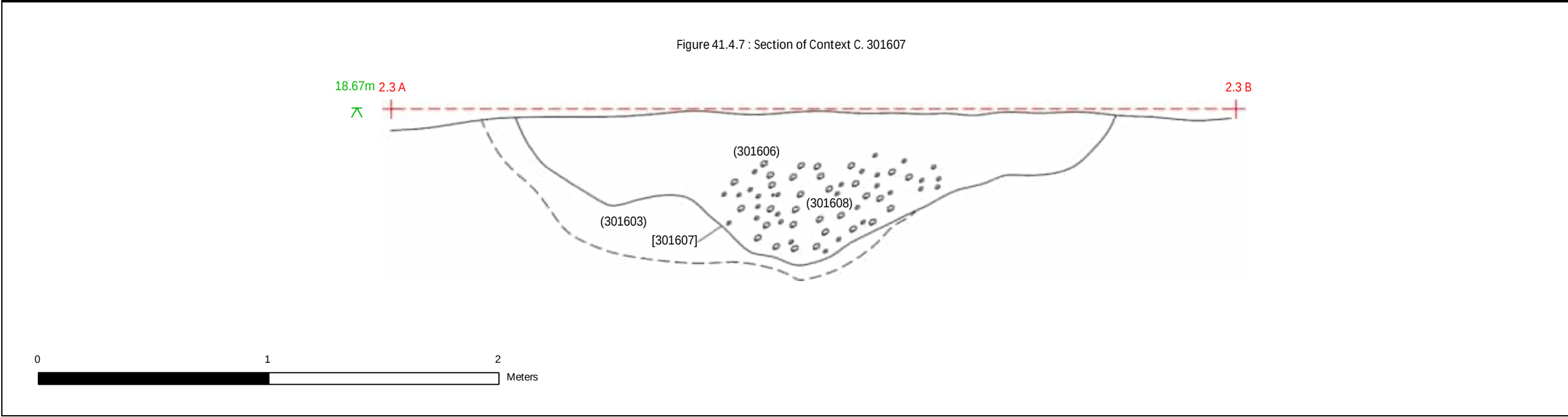
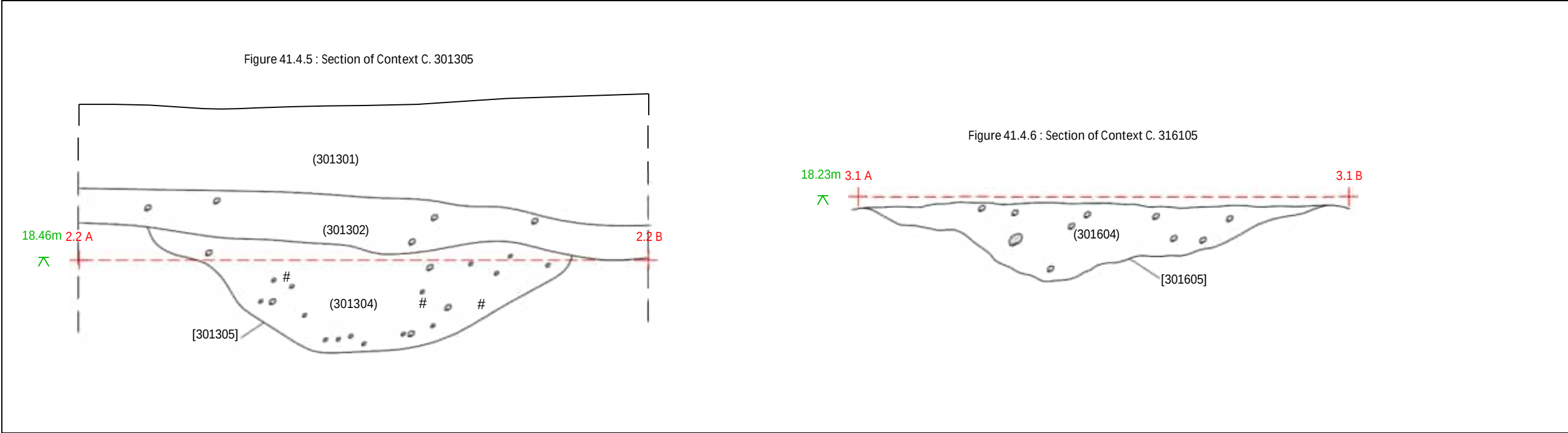


Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trenches 3006, 3008,
3011, 3013 and 3016

Legend

- Section Point
- Section Line
- OD Level
- Stone
- Overcut
- Fill/Deposit
- Cut



	Project No.	
	J3063-A	
	Scale @A3	
	1:20	
	Drawn by	Checked by
	AB	-
	Date	Revision
	24 07 24	1.0
Notes Sections location shown on Figure 41.1 and 41.2		CRS EPSG: 27700
		Figure 41.4



Inset Map

Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title

Plan of excavated Field 31 trenches

Legend

D Order Limits

D Areas

Non-archaeology Surveyed Trench

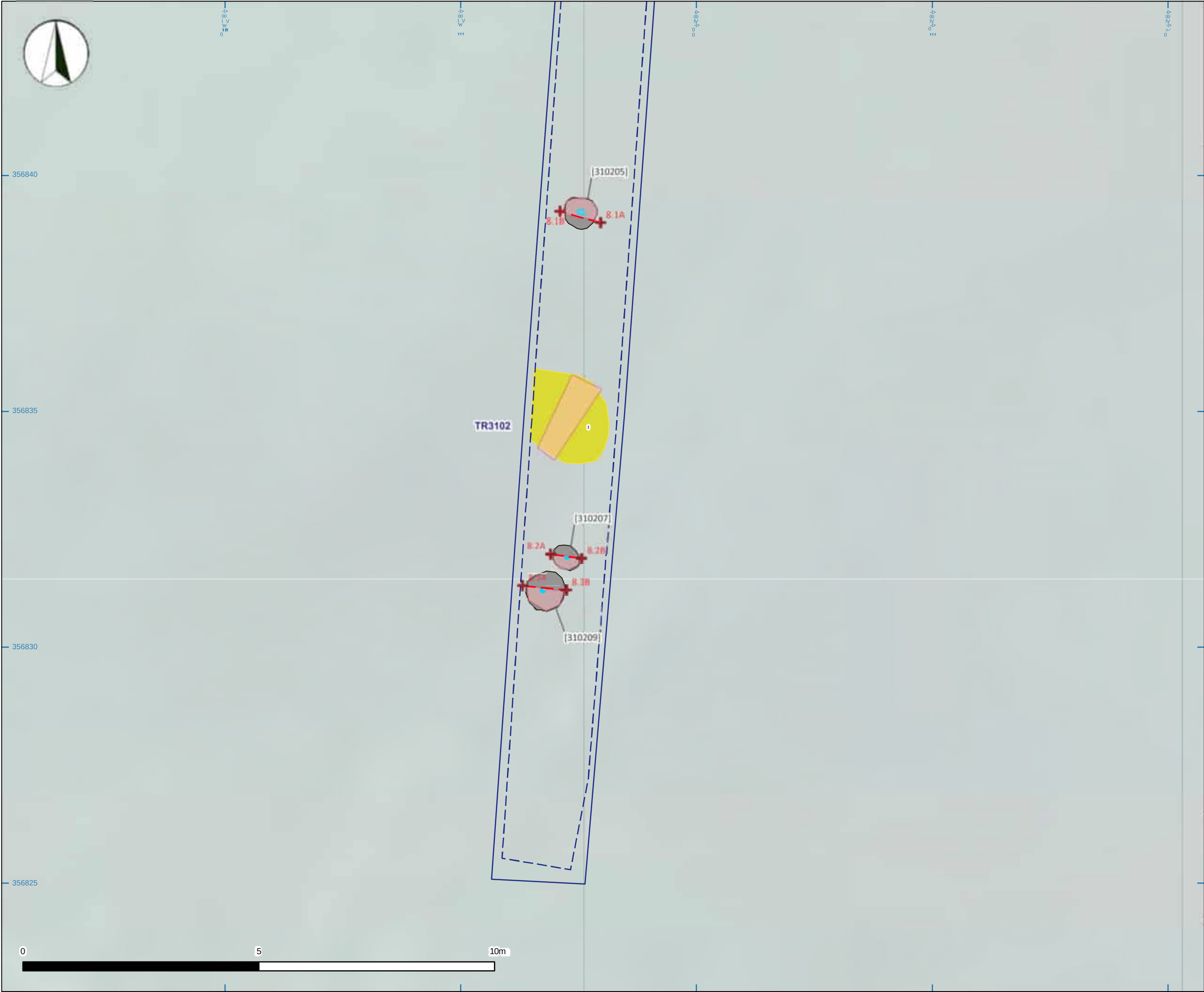
Archaeology Surveyed Trenches

Project No.	
J3063-A	
Scale@A3	
1:750	
Drawn by	Checked by
AB	
Date	Revision
24 07 24	1.0

Notes

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CRS
EPSG:27700
Figure
42



Inset Map

Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

Title

Plans of features in Trench 3102

Legend

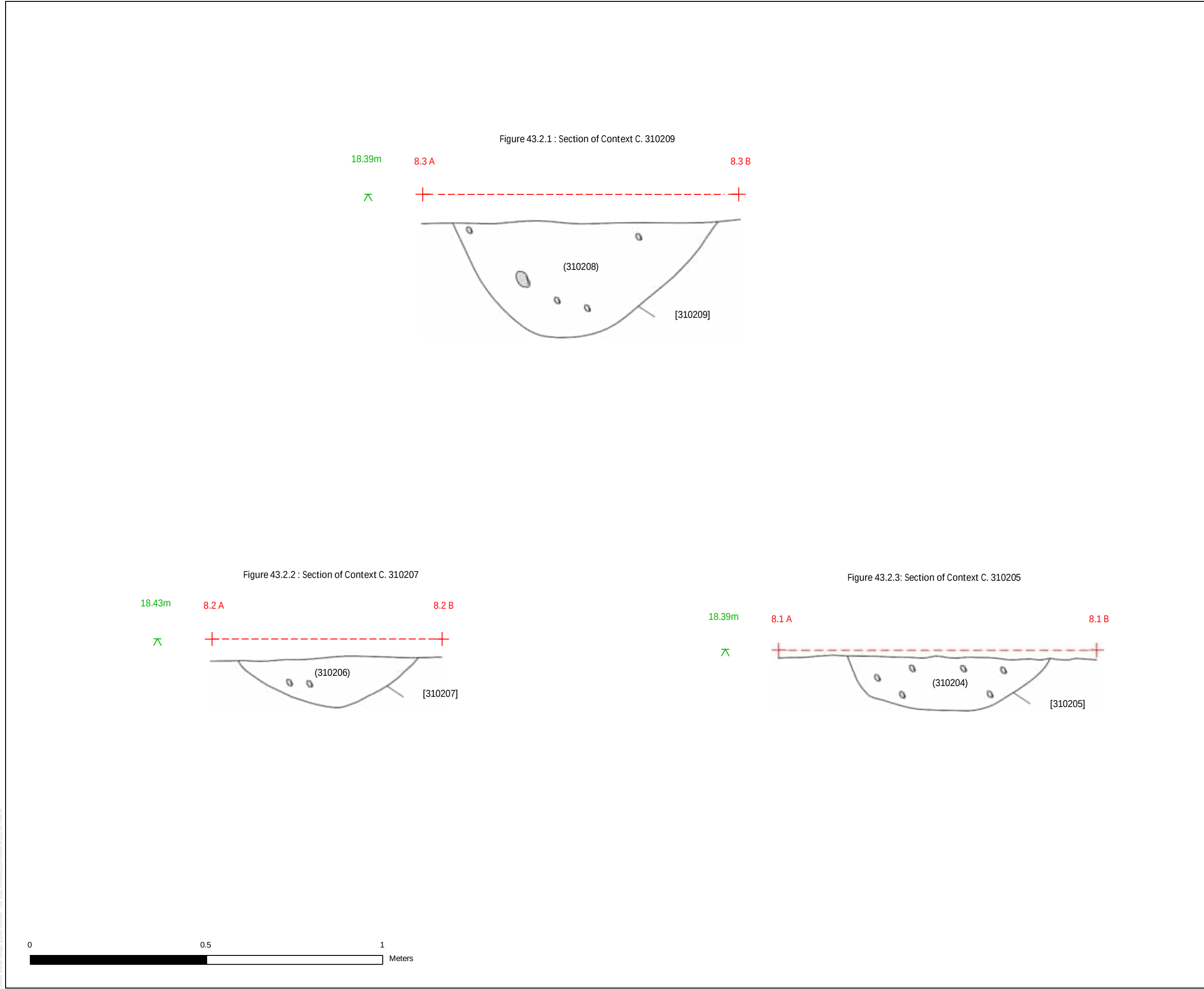
- Order Limits
- Areas
- Trench - Top
- Trench - Base
- Feature
- Excavated
- Natural
- Section Point
- Section Line
- Base of feature
- Break of Slope

Project No.	
J3063-A	
Scale@A3	
1:75	
Drawn by	Checked by
AB	
Date	Revision
24 07 24	1.0

Notes

Map data ©2023 Google.

CRS
EPSG:27700
Figure
43.1



Inset Map

Project

A46 Newark Bypass Trial Trenching and Gearchaeological Test

Title

Sections of features in Trench 3102

Legend

- Section Point
- Section Line
- OD Level
- Stone
- Overcut
- Fill/Deposit
- Cut

Project No.	
J3063-A	
Scale @A3	
1:10	
Drawn by	Checked by
AB	-
Date	Revision
24 07 24	1.0

Notes

Sections location shown on Figure 43.1

CRS

EPSG: 27700

Figure 43.2



Inset Map

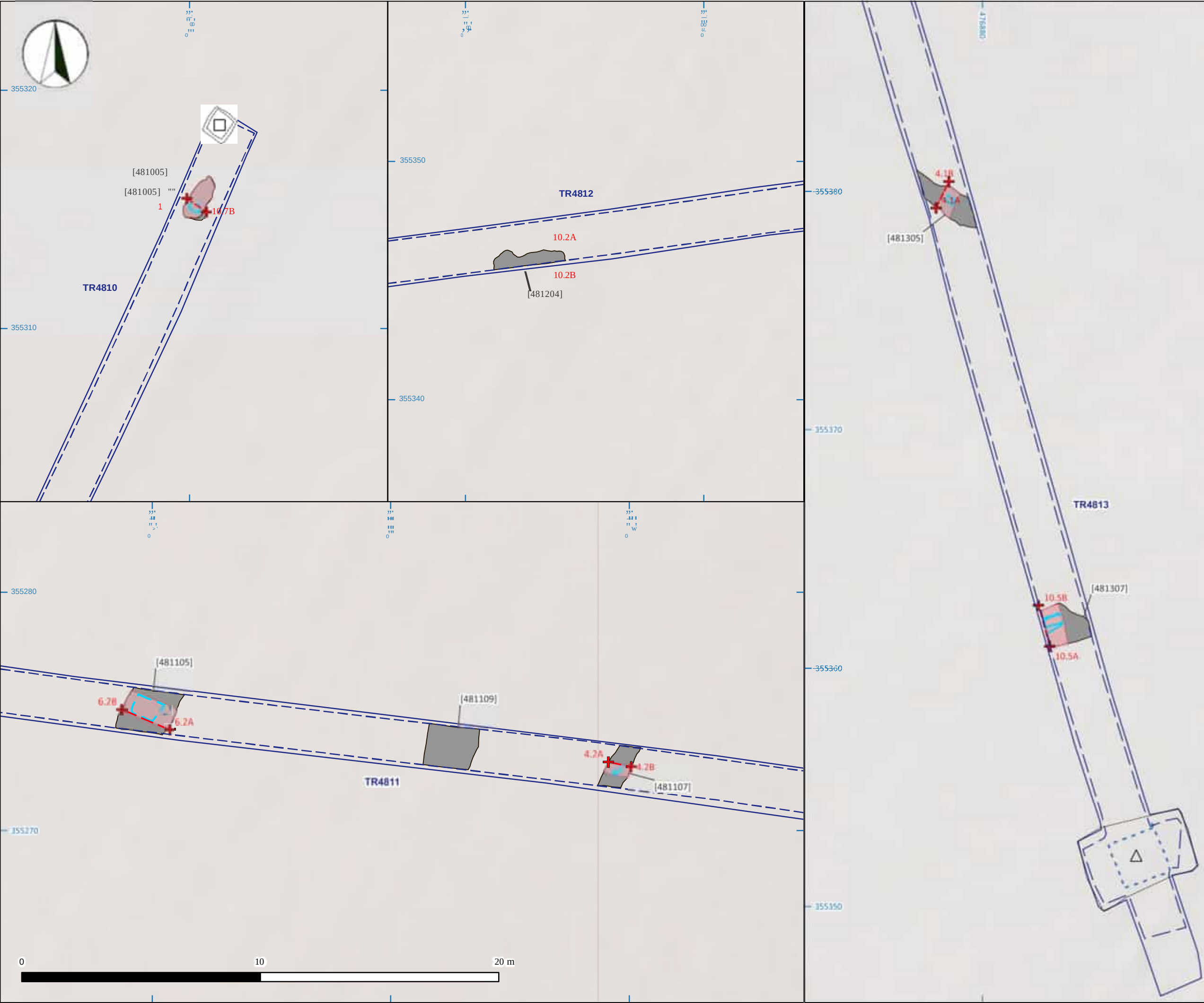
Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Plan of excavated Field 34 trenches

Legend

- Order Limits
- Areas
- Non-archaeology Surveyed Trenches
- Cancelled

Project No. J3063-A	
Scale@A3 1:500	
Drawn by AB	Checked by -
Date 13 09 24	Revision 1.1
Notes Bing Maps ©2023 Microsoft	
CRS EPSG:27700	
Figure 44	



Inset Map

Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

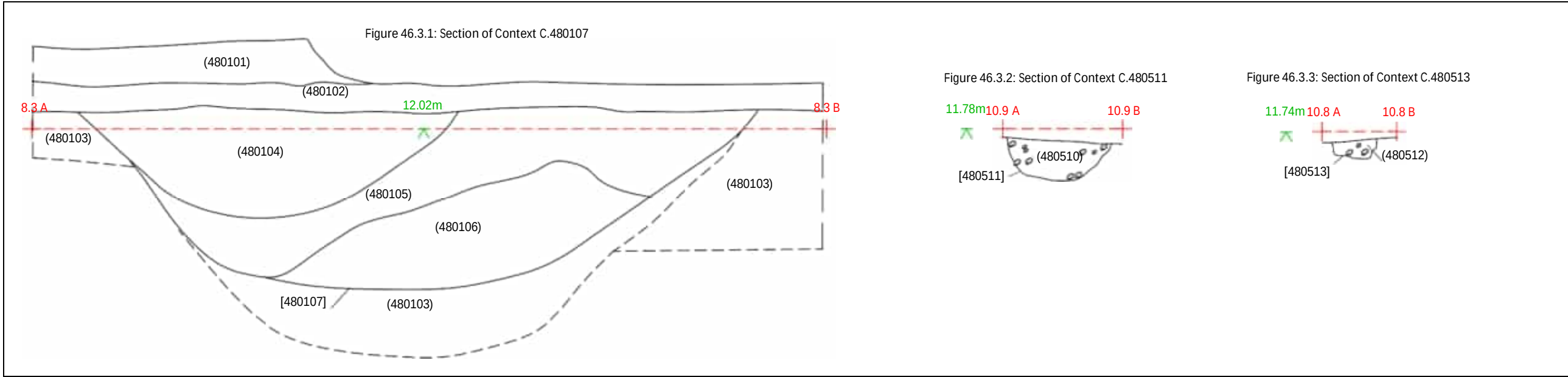
Title

Plans of features in Trenches 4810, 4811, 4812 and 4813

Legend

- D Order Limits
- D Areas
- D Trench - Top
- D Trench - Base
- D Feature
- D Excavated
- + Section Point
- Section Line
- Base of feature
- Break of Slope
- D. Georchaaeological Test Pit
- Hand Test Pit

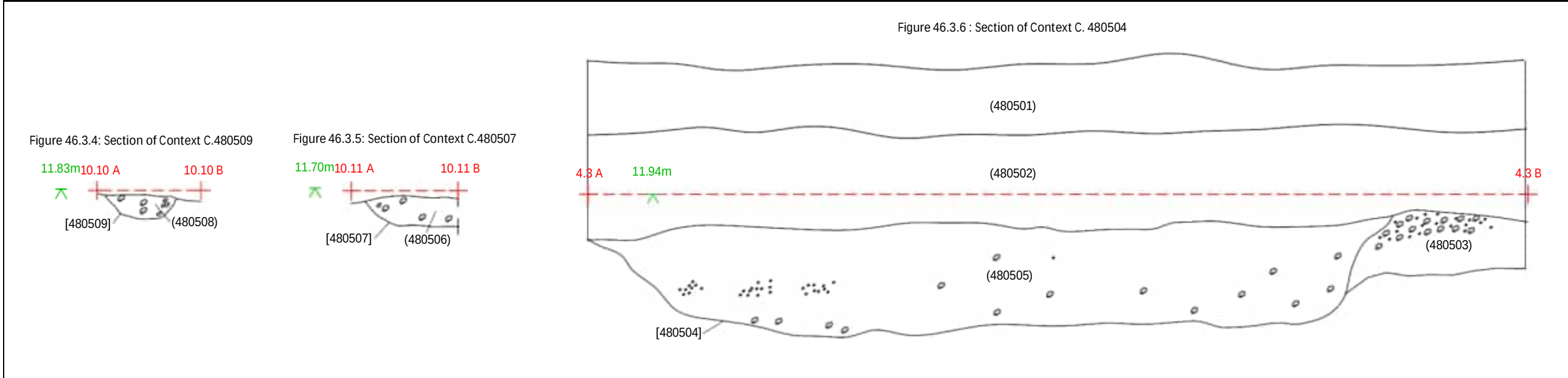
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Drawn by	AB	Checked by
Date	24 07 24	Revision
		1.0
Notes		CRS
Map data ©2023 Google.		EPSG:27700
		Figure
		46.2



Inset Map

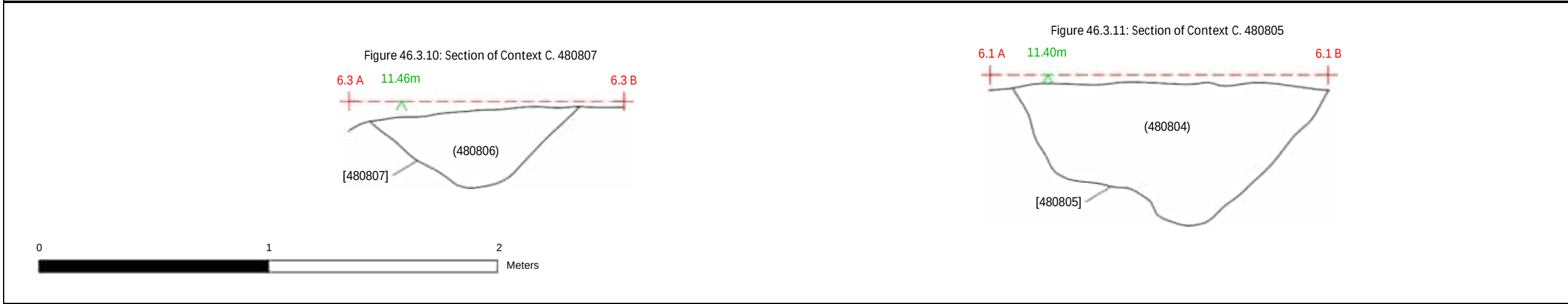
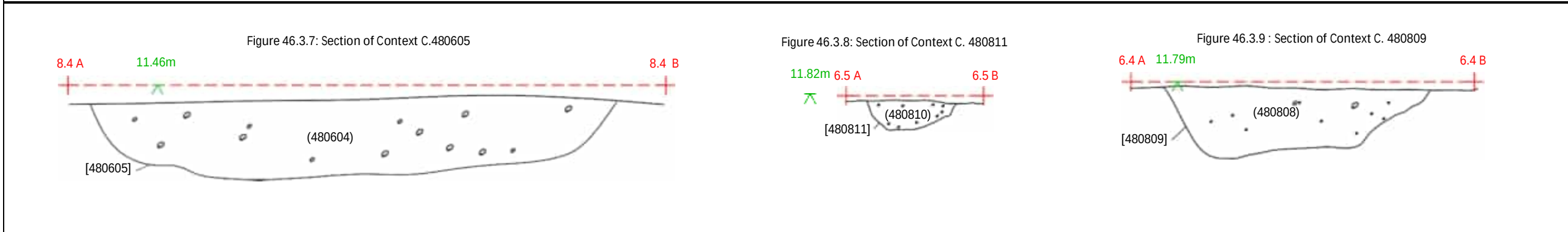
Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trenches 4801, 4805,
4806 and 4808



Legend

- Section Point
- Section Line
- OD Level
- Stone
- Overcut
- () Fill/Deposit
- [] Cut
- ## ## Charcoal



AMS

Project No. J3063-A

Scale @A3 1:20

Drawn by AB

Checked by -

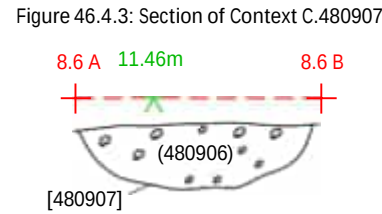
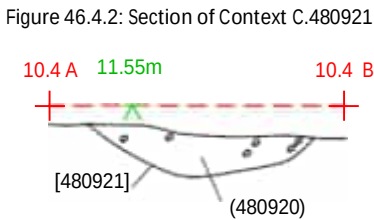
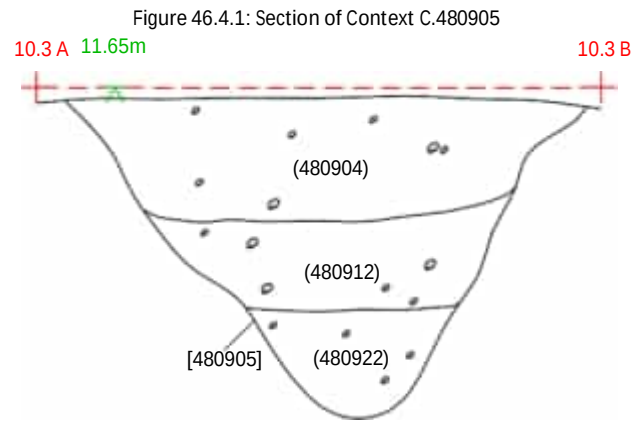
Date 24 07 24

Revision 1.0

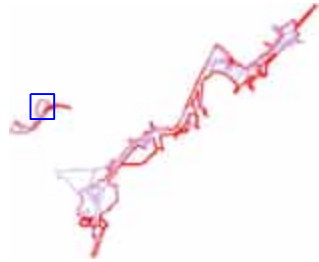
Notes
Sections location shown on Figure 46.1

CRS
EPSG: 27700

Figure 46.3

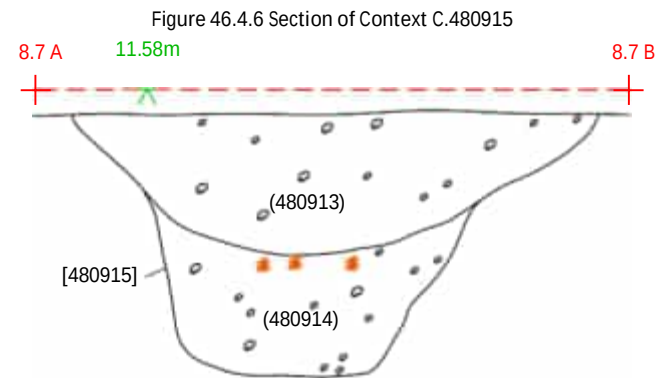
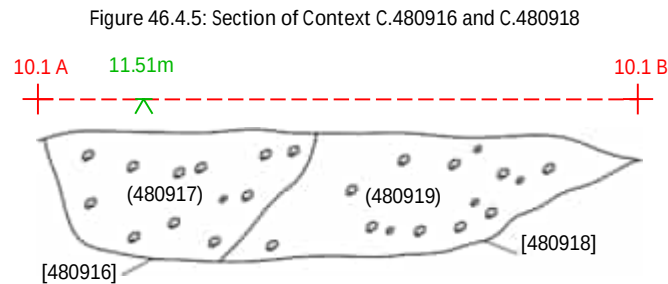
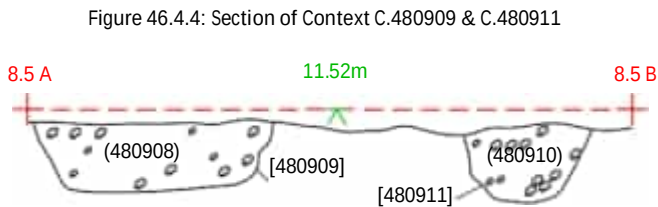


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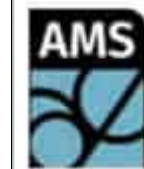
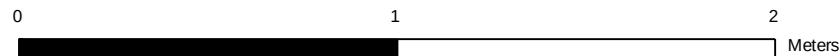
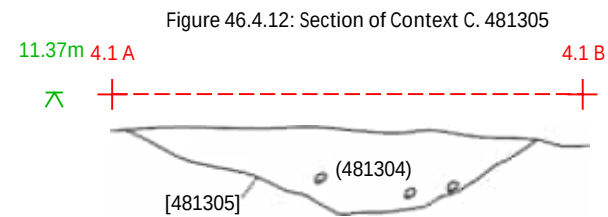
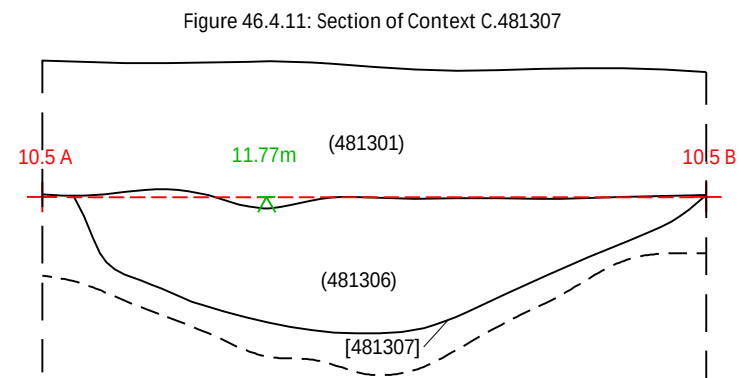
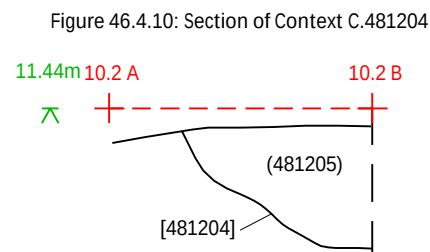
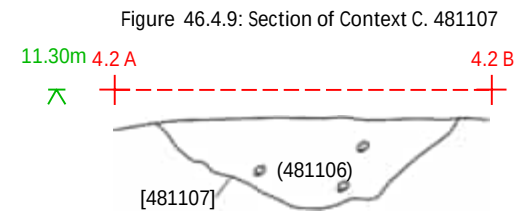
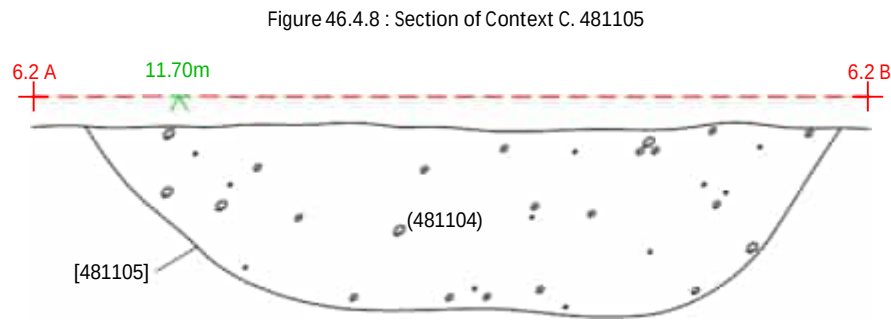
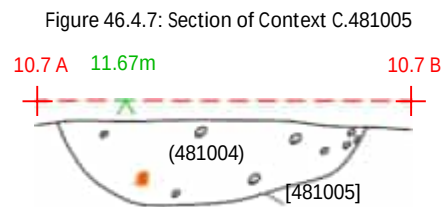
Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trenches 4809, 4810,
4811, 4812 and 4813



Legend

- + Section Point
- Section Line
- ^ OD Level
- Stone
- Overcut
- Fill/Deposit
- Cut
- Pottery

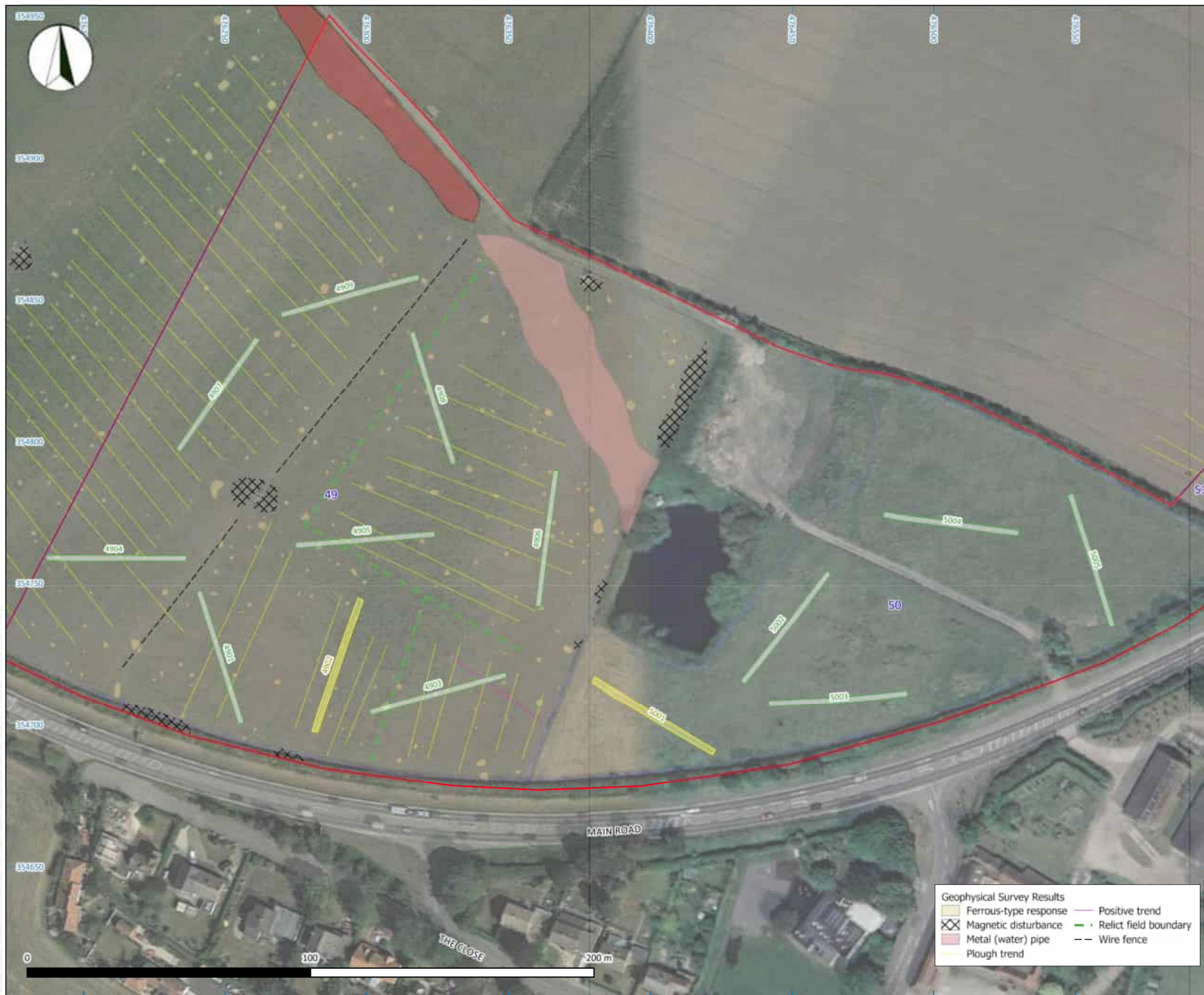


Project No. J3063-A	
Scale @A3 1:20	
Drawn by AB	Checked by -
Date 24 07 24	Revision 1.0

Notes
Sections location shown on Figure
46.1 and 46.2

CRS
EPSG: 27700

Figure
46.4



Inset Map

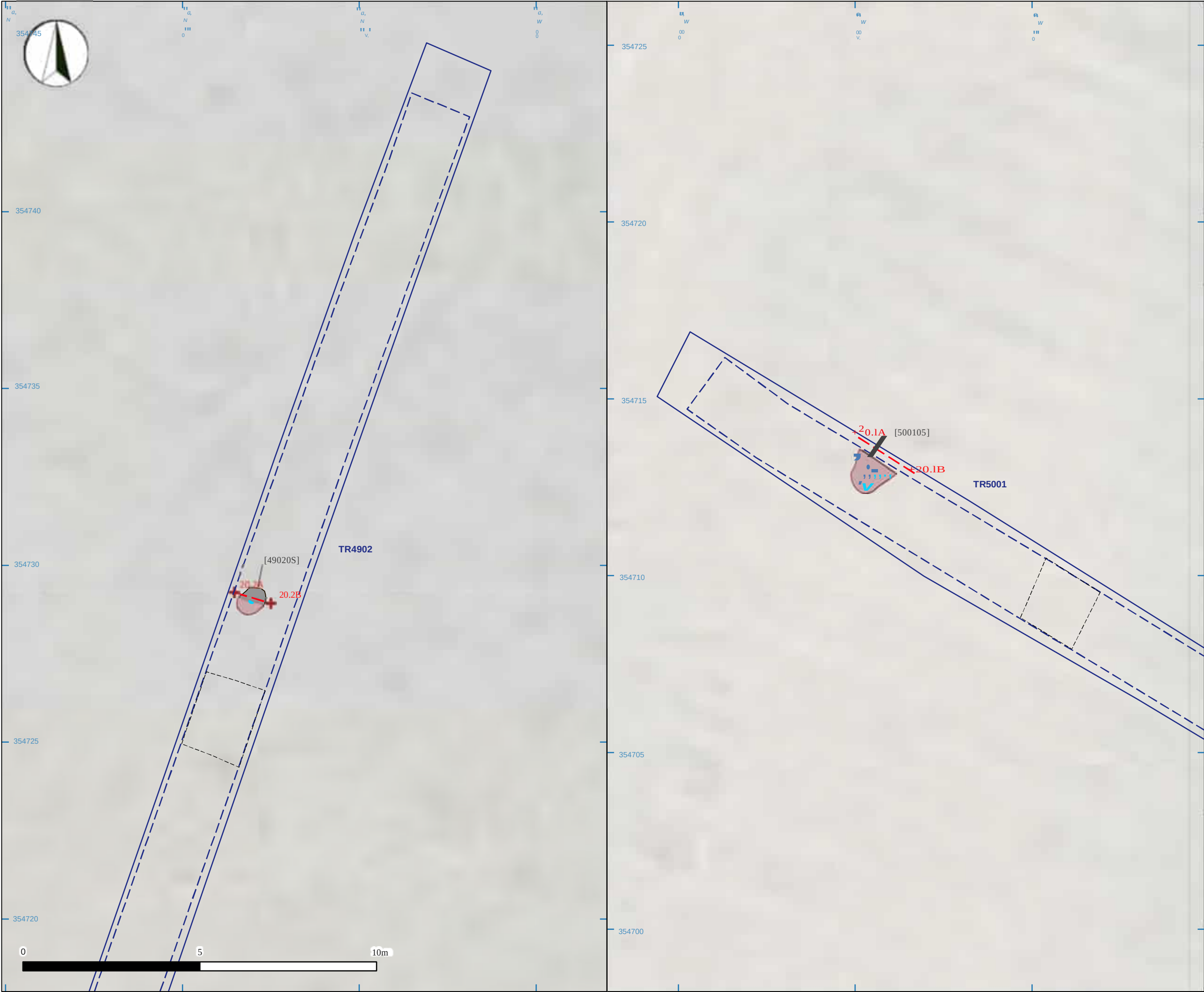
Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

Title
Plan of excavated Field 49 and Field 50 trenches

Legend

- Order Limits
- Areas
- Non-archaeology Surveyed Trench
- Archaeology Surveyed Trench
- Geoarchaeological Test Pit

AMS	Project No. 13063-A	
	Scale @A3 1:1,250	
	Drawn by AB	Checked by -
	Date 24 07 24	Revision 1.0
Notes Bing Maps ©2023 Microsoft		CRS EPSG:27700
		Figure 47



Inset Map

Project

A46 Newark Bypass Trial Trenching and Geoarchaeological Test Pitting Report

Title

Plans of features in Trenches 4902 and 5001

Legend

- D Order Limits
- D Areas
- D Trench - Top
- Trench - Base
- D Feature
- D Excavated
- + Section Point
- Section Line
- Base of feature
- Break of Slope
- D. Georchaeological Test Pit

	Project No. J3063-A	
	Scale@A3 1:100	
	Drawn by AB	Checked by
	Date 24 07 24	Revision 1.0
Notes Map data ©2023 Google.		CRS EPSG:27700
		Figure 48.1

Figure 48.2.1: Section of Context C.490205

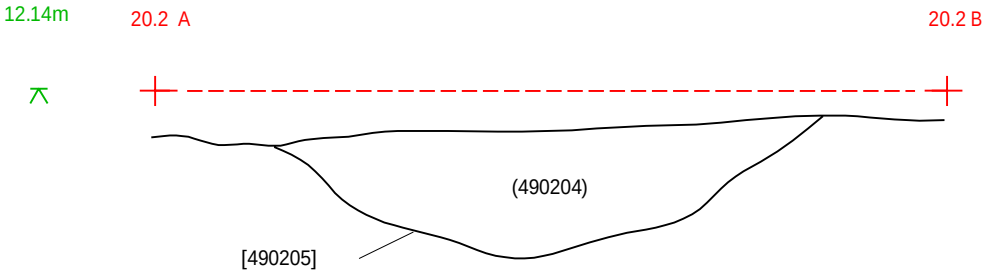
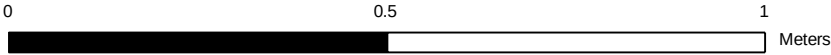
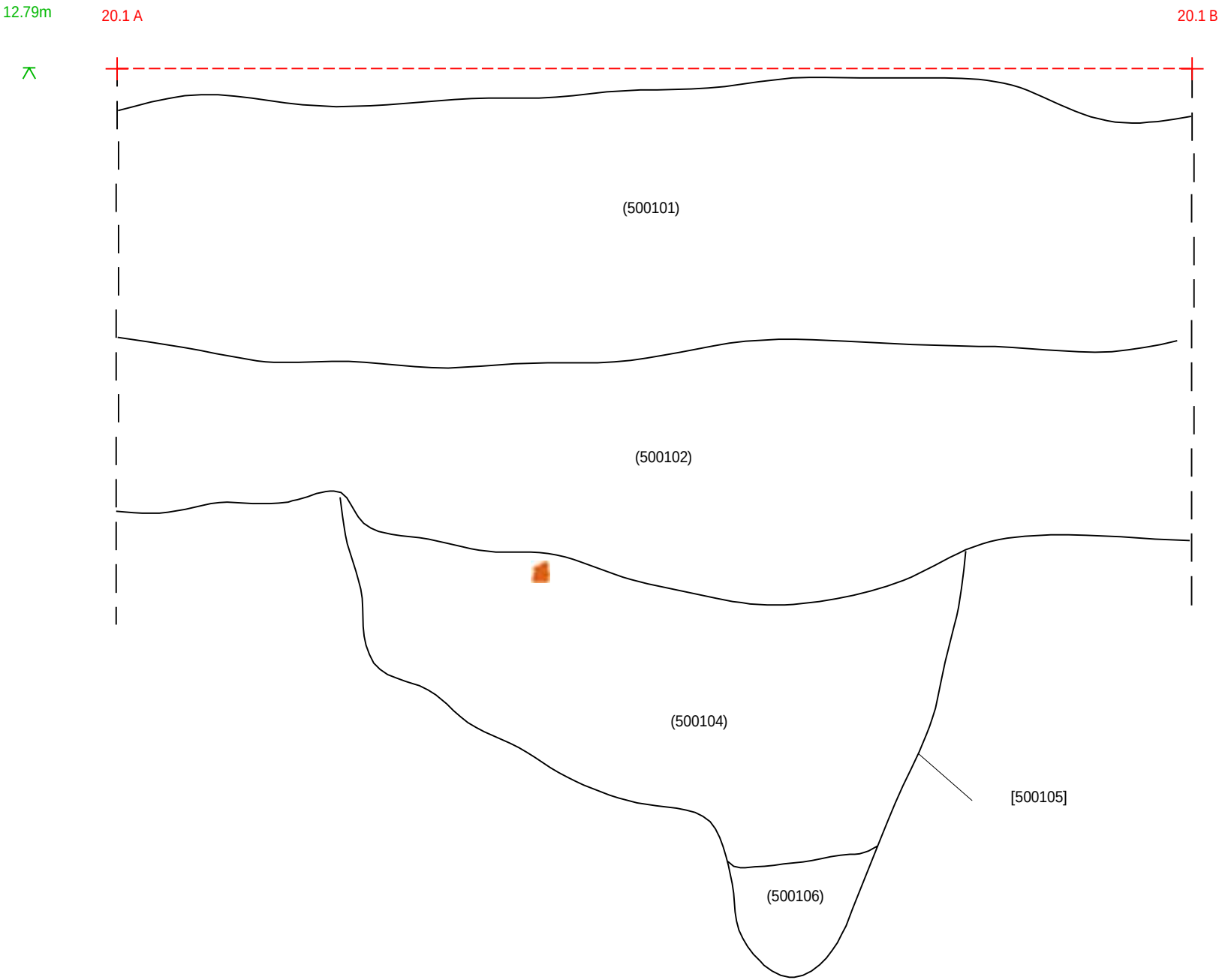
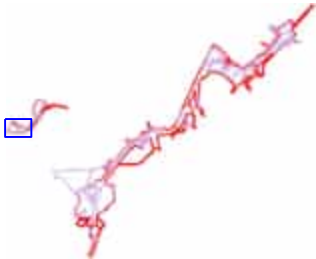


Figure 48.2.2: Section of Context C.500105



Inset Map



Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trenches 4902 and
5001

Legend

- Section Point
- Section Line
- OD Level
- Stone
- Overcut
- Fill/Deposit
- Cut
- Pottery



Project No.	
J3063-A	
Scale @A3	
1:10	
Drawn by	Checked by
AB	-
Date	Revision
24 07 24	1.0

Notes
Sections location shown on Figure
48.1

CRS
EPSG: 27700

Figure
48.2



Inset Map

Project
A46 Newark Bypass Trial Trenching and Geoarchaeological Test

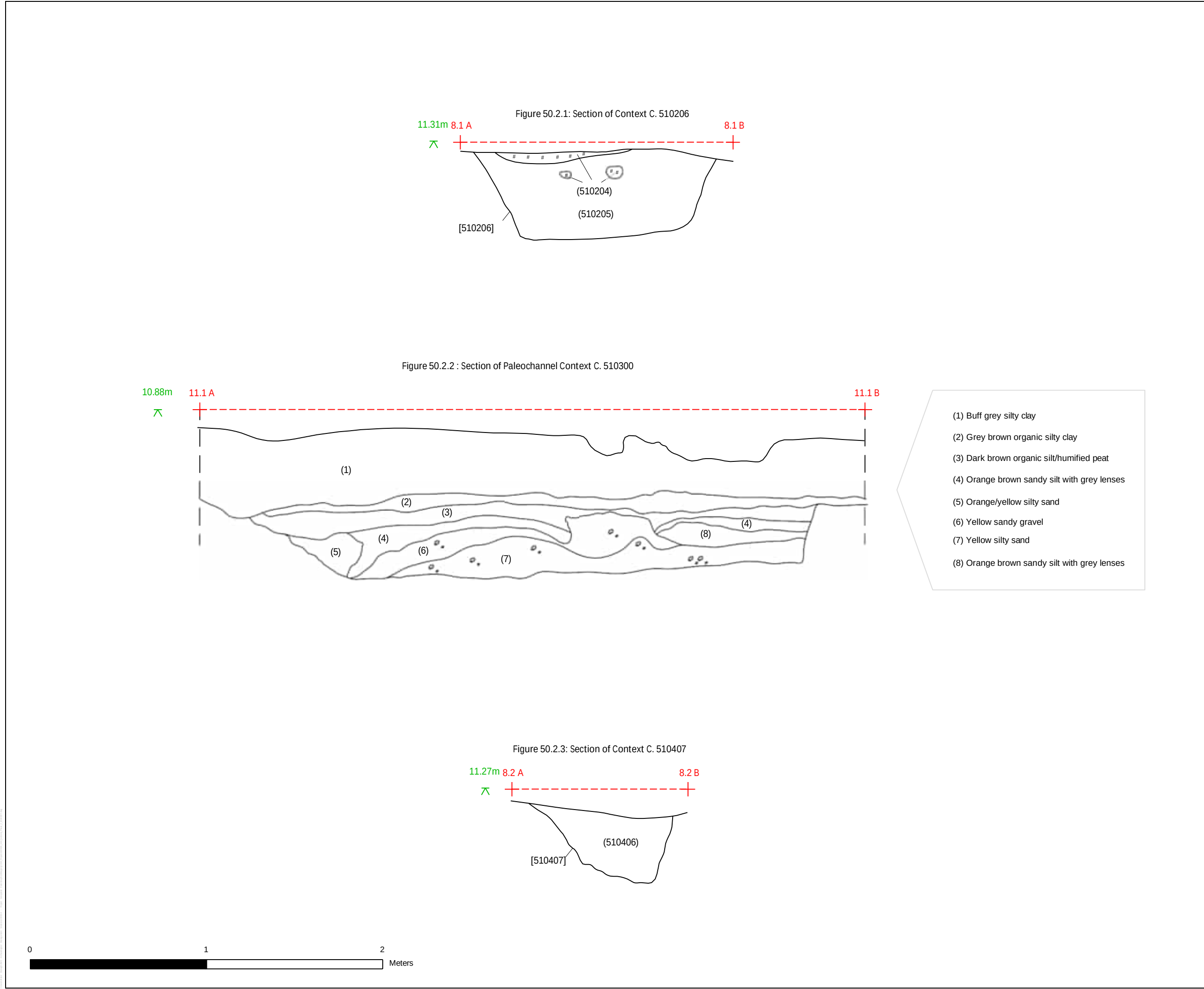
Title
Plan of excavated Field 51 trenches

Legend

- Order Limits
- Areas
- Non-archaeology Surveyed Trench
- Archaeology Surveyed Trench
- Geoarchaeological Test Pit
- Hand Test Pit

	Project No. 13063-A	
	Scale @A3 1:1,250	
	Drawn by AB	Checked by -
	Date 24 07 24	Revision 1.0
	Notes Bing Maps ©2023 Microsoft	

CRS EPSG:27700
Figure 49



Inset Map

Project
A46 Newark Bypass Trial Trenching and
Geoarchaeological Test

Title
Sections of features in Trenches 5102, 5103
and 5104

Legend

- Section Point
- Section Line
- OD Level
- Stone
- Overcut
- Fill/Deposit
- Cut
- Charcoal

	Project No. J3063-A	
	Scale @A3 1:10	
	Drawn by AB	Checked by -
	Date 24 07 24	Revision 1.0

Notes
Sections location shown on Figure
50.1

CRS
EPSG: 27700

Figure
50.2

Plates



Plate 1: General stratigraphy of Trench 0101, looking east-northeast (Scale: 2m)



Plate 2: General stratigraphy of Trench 0102, looking northwest (Scale: 2m)



Plate 3: Sondage in Trench 0101, looking east-southeast (Scale: 2m)



Plate 4: Post-excavation of Trench 0101, looking north (Scale: 2 x 1m)



Plate 5: Post-excavation of Trench 0102, looking southwest (Scale: 2 x 1m)



Plate 6: Sondage in Trench 0250, showing level of water table, looking east-northeast (Scale: 2 x 1m)



Plate 7: Sondage in Trench 0258, showing level of water table, looking west (Scale: 2m)



Plate 8: General stratigraphy of Trench 0221, looking west (Scale: 2 x 1m)



Plate 9: General stratigraphy of Trench 0260, looking east (Scale: 2 x 1m)



Plate 10: Sondage in Trench 0217, looking northwest (Scale: 2 x 1m)



Plate 11: Sondage in Trench 0241, looking northeast (Scale: 2m)



Plate 12: Sondage in Trench 0255, looking northeast (Scale: 2m)



Plate 13: Post-excavation of Trench 0213, looking west (Scale: 2 x 1m)



Plate 14: North-northwest-facing section of C.021304 (Scale: 2 x 1m)



Plate 15: Post-medieval-modern artefacts from C.021304 (no scale)



Plate 16: Post-excavation of Trench 0214, looking northeast (Scale: 2 x 1m)



Plate 17: Southeast-facing section of C.021404 (Scale: 2 x 1m)



Plate 18: Clay tobacco pipes from C.021404 (no scale)



Plate 19: Glass shard from C.021404 (no scale)



Plate 20: Post-medieval-modern pottery from C.021404 (no scale)



Plate 21: Post-excavation photograph of Trench 0217, looking east-northeast (Scale: 2 x 1m)



Plate 22: Northwest-facing section of C.021705, looking southeast (Scale: 2 x 1m)



Plate 23: Post-medieval–modern pottery from C.021707 (no scale)



Plate 24: Glass from C.021707 (no scale)



Plate 25: Pre-excavation photograph of C.026905, looking east (Scale: 0.1m)



Plate 26: Post-excitation photograph of Trench 0205, looking southeast (Scale: 2 x 1m)



Plate 27: Post-excitation photograph of Trench 0215, looking north (Scale: 2 x 1m)



Plate 28: Post-excitation photograph of Trench 0239, looking west (Scale: 2 x 1m)



Plate 29: General stratigraphy of Trench 0302, looking east-northeast (Scale: 2 x 1m)



Plate 30: General stratigraphy of Trench 0314, looking southwest (Scale: 2 x 1m)



Plate 31: Sondage in Trench 0311, looking southeast (Scale: 2m)



Plate 32: Post-excavation photograph of Trench 0307, looking north (Scale: 2 x 1m)



Plate 33: Post-excavation photograph of Trench 0314, looking southeast (Scale: 2 x 1m)



Plate 34: Post-excavation photograph of Trench 0317, looking southwest (Scale: 2 x 1m)



Plate 35: General stratigraphy of Trench 0635, looking northwest (Scale: 1m)



Plate 36: General stratigraphy of Trench 0602, looking east (Scale: 2 x 1m)



Plate 37: General stratigraphy of Trench 0653, looking northwest (Scale: 1m)



Plate 38: Post-excitation photograph of Trench 0611, looking northeast (Scale: 1m)



Plate 39: Post-excitation photograph of Trench 0623, looking west (Scale: 1m)



Plate 40: General stratigraphy in Trench 0801, looking east (Scale: 2 x 1m)



Plate 41: General stratigraphy in Trench 0803, looking northwest (Scale: 2 x 1m)



Plate 42: Sondage in Trench 0801, showing water level, looking east-southeast (Scale: 2 x 1m)



Plate 43: Post-excavation photograph of Trench 0802, looking northwest (Scale: 2 x 1m)



Plate 44: Post-excitation photograph of Trench 0802, looking northeast (Scale: 2 x 1m)



Plate 45: General stratigraphy in Trench 0901, looking northwest (Scale: 2 x 1m)



Plate 46: General stratigraphy in Trench 0903, looking southwest (Scale: 2 x 1m)



Plate 47: Post-excavation photograph of Trench 0901, looking northeast (Scale: 2 x 1m)



Plate 48: Post-excavation photograph of Trench 0902, looking northeast (Scale: 2 x 1m)



Plate 49: General stratigraphy in Trench 1101, looking northeast (Scale: 2 x 1m)



Plate 50: General stratigraphy in Trench 1104, looking north (Scale: 2 x 1m)



Plate 51: Sondage in Trench 1101, showing water level, looking southeast (Scale: 2m)



Plate 52: Post-excavation photograph of Trench 1102, looking southeast (Scale: 2 x 1m)



Plate 53: Post-excavation photograph of Trench 1103, looking northeast (Scale: 2 x 1m)



Plate 54: General stratigraphy in Trench 1203, looking southeast (Scale: 2 x 1m)



Plate 55: General stratigraphy in Trench 1204, looking northeast (Scale: 2 x 1m)



Plate 56: Post-excavation photograph of Trench 1201, looking northeast (Scale: 2 x 1m)



Plate 57: Post-excavation photograph of Trench 1202, looking northwest (Scale: 2 x 1m)



Plate 58: General stratigraphy in Trench 1301, looking northeast (Scale: 2 x 1m)



Plate 59: General stratigraphy in Trench 1302, looking northeast (Scale: 2 x 1m)



Plate 60: Post-excavation photograph of Trench 1301, looking southwest (Scale: 2 x 1m)



Plate 61: Post-excavation photograph of Trench 1302, looking west-northwest (Scale: 2 x 1m)



Plate 62: General stratigraphy in Trench 1401, looking south (Scale: 2 x 1m)



Plate 63: General stratigraphy in Trench 1404, looking west-northwest (Scale: 2 x 1m)



Plate 64: Post-excavation photograph of Trench 1402, looking southeast (Scale: 2 x 1m)



Plate 65: Post-excavation photograph of Trench 1403, looking west (Scale: 2 x 1m)



Plate 66: General stratigraphy in Trench 1501, looking southwest (Scale: 2 x 1m)



Plate 67: General stratigraphy in Trench 1503, looking northeast (Scale: 2 x 1m)



Plate 68: Post-excavation photograph of Trench 1502, looking southwest (Scale: 2 x 1m)



Plate 69: Post-excavation photograph of Trench 1503, looking northwest (Scale: 2 x 1m)



Plate 70: General stratigraphy in Trench 1601, looking east (Scale: 1 x 1m)



Plate 71: General stratigraphy in Trench 1604, looking northwest (Scale: 1 x 1m)



Plate 72: Post-excitation photograph of Trench 1602, looking southeast (Scale: 1 x 1m)



Plate 73: Post-excitation photograph of Trench 1603, looking northeast (Scale: 1 x 1m)



Plate 74: General stratigraphy in Trench 1809, looking north-northeast (Scale: 1 x 1m)



Plate 75: General stratigraphy in Trench 1808, looking north (Scale: 1 x 1m)



Plate 76: Southeast-facing section of test pit in Trench 1805, looking northwest (Scale: 1 x 1m)



Plate 77: Post-excavation photograph of Trench 1804, looking south (Scale: 1 x 1m)



Plate 78: Post-excitation photograph of Trench 1809, looking east (Scale: 1 x 1m)



Plate 79: North-northeast-facing section of modern pit C.180104, looking south-southwest (Scale: 1 x 1m)



Plate 80: Plan of modern disturbance C.180904, looking southwest (Scale: 1 x 1m)



Plate 81: General stratigraphy of Trench 2001 and water table, looking southeast (Scale: 2 x 1m)



Plate 82: General stratigraphy of Trench 2002, looking north-northeast (Scale: 2 x 1m)



Plate 83: Post-excavation photograph of Trench 2005, looking north (Scale: 2 x 1m)



Plate 84: South-southeast-facing section of C.200105, looking north (Scale: 2 x 1m)



Plate 85: Post-excavation photograph of Trench 2002, looking east (Scale: 2 x 1m)



Plate 86: South-facing section of C.200307, looking north (Scale: 2 x 1m)



Plate 87: Samian Ware pottery sherd (Find #2.3) retrieved from C.200306 (no scale)



Plate 88: Mid-excavation photograph of C.200306 and C.200308, with C.200305 in the centre (Scale: 2 x 1m)



Plate 89: Post-excavation photograph of Trench 2003, looking west-southwest (Scale: 2 x 1m)



Plate 90: Mid-excavation photograph of C.200308, looking west-southwest (Scale: 2 x 1m)



Plate 91: Roman pot (Find #2.4) *in situ* and later retrieved from C.200308 (Scale: 0.1m)



Plate 92: Mid-excavation photograph of C.200310, looking north (Scale: 0.65m)



Plate 93: North-northwest-facing section of C.200309 and C.200313, looking south-southeast (Scale: 2 x 1m)



Plate 94: Mid-excavation photograph of C.200310, looking west (Scale: 1m)



Plate 95: Mid-excavation photograph of C.200404, C.200409, C.200412, C.200414 and C.200416, looking north (Scale: 2 x 1m)



Plate 96: Pottery retrieved as bulk finds from C.200413 (no scale)



Plate 97: West-facing section of C.200407, looking east (Scale: 2 x 1m)



Plate 98: South-facing section of C.200407 showing charcoal and burnt clay, looking north (Scale: 2 x 1m)



Plate 99: Loom weights (Finds #2.7) retrieved from C.200408 (no scale)



Plate 100: Loom weight (Finds #2.8) retrieved from C.200406 (no scale)



Plate 101: West-facing section of C.200418, looking east (Scale: 1m)



Plate 102: Southwest-facing section of C.200420, looking east (Scale: 1m)



Plate 103: East-facing section of C.200510, looking west (Scale: 2m)



Plate 104: West-facing section of C.200506, looking east (Scale: 2m)



Plate 105: West-facing section of C.200508, looking east (Scale: 2 x 1m)



Plate 106: General stratigraphy of Trench 2106, looking north-northwest (Scale: 2 x 1m)



Plate 107: General stratigraphy of Trench 2103, looking northeast (Scale: 2 x 1m)



Plate 108: Pre-excavation photograph of C.210106, looking northeast (Scale: 2 x 1m)



Plate 109: West-facing section of C.210105, looking east (Scale: 2 x 1m)



Plate 110: North-northeast-facing section of C.210209, looking southwest (Scale: 2 x 1m)



Plate 111: North-northeast-facing section of C.210205, looking south-southwest (Scale: 2 x 1m)



Plate 112: East-northeast-facing section of C.210309, looking west-southwest (Scale: 2 x 1m)



Plate 113: South-facing section of C.210307, looking north (Scale: 2 x 1m)



Plate 114: North-northwest-facing sections of C.210315 and C.210317, looking southeast (Scale: 2 x 1m)



Plate 115: Pre-excavation photograph of C.210505, looking north-northeast (Scale: 2 x 1m)



Plate 116: South-facing section of C.210605, looking north (Scale: 2 x 1m)



Plate 117: North-facing section of C.210708, looking south (Scale: 2 x 1m)



Plate 118: South-southeast-facing section of C.210705 and C.210710, looking north-northwest (Scale: 2 x 1m)



Plate 119: South-facing section of C.210712, looking north (Scale: 2 x 1m)



Plate 120: East-southeast-facing section of C.210820, looking northwest (Scale: 1m)



Plate 121: West-northwest-facing section of C.210805, looking southeast (Scale: 0.5m)



Plate 122: East-facing section of C.210818, looking west (Scale: 0.3m)



Plate 123: East-northeast-facing section of C.210822, looking west-southwest (Scale: 0.3m)



Plate 124: East-northeast-facing section of C.210814, looking west-southwest (Scale: 1m)



Plate 125: Northeast-facing section of C.210807, looking southwest (Scale: 0.5m)



Plate 126: South-facing section of C.210810 and C.210812, looking north (Scale: 1m)



Plate 127: North-facing section of C.210907, looking south (Scale: 2 x 1m)



Plate 128: North-northwest-facing section of C.210911, looking south-southeast (Scale: 2 x 1m)



Plate 129: Pre-excavation photograph of C.211005, looking northeast (Scale: 2 x 1m)



Plate 130: East-northeast-facing section of C.211205, looking west-southwest (Scale: 0.5m)



Plate 131: General stratigraphy of Trench 2204, looking east-northeast (Scale: 2 x 1m)



Plate 132: General stratigraphy of Trench 2208, looking northwest (Scale: 2 x 1m)



Plate 133: Post-excavation photograph of Trench 2211, looking south (Scale: 1m)



Plate 134: Southwest-facing section of C.221105, looking northeast (Scale: 1m)



Plate 135: Southwest-facing section of C.221107, looking northeast (Scale: 1m)



Plate 136: Post-excitation photograph of Trench 2203, looking northeast (Scale: 2 x 1m)



Plate 137: Post-excitation photograph of Trench 2206, looking west (Scale: 1m)



Plate 138: Post-excavation photograph of Trench 2209, looking northeast (Scale: 1m)



Plate 139: Slot through C.220309, C.220313, C.220315 and C.220318, looking west (no scale)



Plate 140: Slot through C.220604, looking south-southeast (Scale: 1m)



Plate 141: Slot through C.220905 and C.220907, looking west (Scale: 2 x 1m)



Plate 142: Post-excitation photograph of Trench 2201, looking south (Scale: 2 x 1m)



Plate 143: North-facing section of C.220105, looking south (Scale: 2 x 1m)



Plate 144: South-facing section of C.220305 and C.220307, looking north (Scale: 2m)



Plate 145: Post-excavation photograph of Trench 2205, looking south (Scale: 2 x 1m)



Plate 146: Post-excavation photograph of Trench 2301, looking south-southwest (Scale: 2 x 1m)



Plate 147: General stratigraphy of Trench 2301, looking northwest (Scale: 2 x 1m)



Plate 148: Post-excitation photograph of Trench 2302, looking southeast (Scale: 2 x 1m)



Plate 149: Post-excitation photograph of Trench 2304, looking west (Scale: 2 x 1m)



Plate 150: Post-excavation photograph of Trench 2401, looking north-northeast (Scale: 2 x 1m)



Plate 151: General stratigraphy of Trench 2401, looking northwest (Scale: 2 x 1m)



Plate 152: Northwest-facing section of C.240105, looking east-southeast (Scale: 1m)



Plate 153: Southeast-facing section of C.240110, looking west-northwest (Scale: 2 x 1m)



Plate 154: North-facing section of C.240107, looking south (Scale: 0.5m)



Plate 155: Northwest-facing section of C.240114, looking southeast (Scale: 2 x 1m; 0.5m)



Plate 156: East-northeast-facing section of C.240112, looking west-northwest (Scale: 1m)



Plate 157: Post-excavation photograph of Trench 2402, looking southeast (Scale: 2 x 1m)



Plate 158: General stratigraphy of Trench 2402, looking northeast (Scale: 2 x 1m)



Plate 159: West-northwest-facing section of C.240205, looking northeast (Scale: 2 x 1m)



Plate 160: East-northeast-facing section of C.240207, looking west-southwest (Scale: 1m)



Plate 161: Northeast-facing section of C.240209, looking west-southwest (Scale: 2 x 1m)



Plate 162: Post-excavation photograph of Trench 2403, looking southwest (Scale: 2 x 1m)



Plate 163: General stratigraphy of Trench 2403, looking northwest (Scale: 2 x 1m)



Plate 164: South-southeast-facing section of C.240305, looking northwest (Scale: 1m)



Plate 165: Southeast-facing section of C.240307, looking northwest (Scale: 0.5m)



Plate 166: Southeast-facing sections of C.240309 and C.240311, looking northwest (Scale: 2 x 0.5m)



Plate 167: Post-excitation photograph of Trench 2404, looking east (Scale: 2 x 1m)



Plate 168: General stratigraphy of Trench 2404, looking south (Scale: 2 x 1m)



Plate 169: West-facing section of C.240405, looking east (Scale: 1m)



Plate 170: East-northeast-facing section of C.240407, looking west (Scale: 1m)



Plate 171: North-northeast-facing section of C.240409, looking south-southwest (Scale: 0.5m)



Plate 172: Post-excavation photograph of Trench 2405, looking east (Scale: 2 x 1m)



Plate 173: General stratigraphy of Trench 2405, looking north-northwest (Scale: 2 x 1m)



Plate 174: Mid-excavation photograph of C.240505 and C.240507, looking southwest (Scale: 4 x 1m)



Plate 175: South-southeast-facing section of C.240509, looking north-northwest (Scale: 0.5 & 2m)



Plate 176: South-facing section of C.240511, looking north (Scale: 1m)



Plate 177: Post-excitation photograph of Trench 2406, looking northeast (Scale: 2 x 1m)



Plate 178: General stratigraphy of Trench 2406, looking southeast (Scale: 2 x 1m)



Plate 179: North-facing section of C.240605, looking south (Scale: 2 x 1m & 0.5m)



Plate 180: South-southwest-facing section of C.240607, looking northeast (Scale: 1m & 0.5m)



Plate 181: Northeast-facing section of C.240609, looking southwest (Scale: 1m)



Plate 182: Northeast-facing section of C.250205, looking west-southwest (Scale: 0.5m)



Plate 183: Southwest-facing section of C.250211, looking northeast (Scale: 0.5m)



Plate 184: South-facing section of C.250207, looking north (Scale: 0.5m)



Plate 185: Northwest-facing section of C.250209, looking east-southeast (Scale: 0.5m)



Plate 186: Post-excavation photograph of Trench 2502, looking north (Scale: 2 x 1m)



Plate 187: General stratigraphy of Trench 2502, looking west (Scale: 2 x 1m)



Plate 188: Post-excavation photograph of Trench 2503, looking south (Scale: 2 x 1m)



Plate 189: General stratigraphy of Trench 2503, looking east (Scale: 2 x 1m)



Plate 190: East-facing section of C.250305, looking west (Scale: 0.5m)



Plate 191: Post-excavation photograph of Trench 2504, looking southeast (Scale: 2 x 1m)



Plate 192: General stratigraphy of Trench 2504, looking northeast (Scale: 2 x 1m)



Plate 193: South-facing section of C.250407, looking north (Scale: 1m)



Plate 194: South-facing section of C.250405, looking north (Scale: 1m)



Plate 195: Post-excavation photograph of Trench 2505, looking south (Scale: 2 x 1m)



Plate 196: General stratigraphy of Trench 2505, looking east-northeast (Scale: 2 x 1m)



Plate 197: North-facing section of C.250505, looking south (Scale: 0.5m)



Plate 198: Northwest-facing section of C.250507, looking southeast (Scale: 0.5m)



Plate 199: Post-excitation photograph of Trench 2601, looking east (Scale: 2 x 1m)



Plate 200: General stratigraphy of Trench 2601, looking north-northwest (Scale: 2 x 1m)



Plate 201: Southeast-facing section of C.260105, looking northwest (Scale: 0.5m)



Plate 202: East-northeast-facing section of C.260107, looking west-northwest (Scale: 0.5m)



Plate 203: Post-excitation photograph of Trench 2602, looking southeast (Scale: 2 x 1m)



Plate 204: General stratigraphy of Trench 2602, looking northeast (Scale: 2 x 1m)



Plate 205: Southeast-facing section of C.260205, looking northwest (Scale: 0.5m)



Plate 206: Southeast-facing section of C.260207, looking northwest (Scale: 0.5m)



Plate 207: Post-excavation photo of Trench 2603, looking east-southeast (Scale: 2 x 1m)



Plate 208: General stratigraphy of Trench 2603, looking north-northwest (Scale: 2 x 1m)



Plate 209: South-facing section of C.260305, looking north (Scale: 1m)



Plate 210: Southwest-facing section of C.260307, looking north-northeast (Scale: 2 x 1m)



Plate 211: Northwest-facing section of C.260309, looking east-southeast (Scale: 1m)



Plate 212: Post-excavation photograph of Trench 2605, looking north-northeast (Scale: 2 x 1m)



Plate 213: General stratigraphy of Trench 2605, looking north-northwest (Scale: 2 x 1m)



Plate 214: East-facing section of C.260505, looking west (Scale: 1m)



Plate 215: Post-excavation photograph of Trench 2611, looking southeast (Scale: 2 x 1m)



Plate 216: General stratigraphy of Trench 2611, looking north-northeast (Scale: 2 x 1m)



Plate 217: Southwest-facing section of C.261105, looking northeast (Scale: 2 x 1m)



Plate 218: Geophysical anomaly G3 in Trench 2611 (Scale: 2m)



Plate 219: Post-excitation photograph of Trench 2703, looking east (Scale: 2 x 1m)



Plate 220: General stratigraphy of Trench 2703, looking north-northeast (Scale: 2 x 1m)



Plate 221: Southwest-facing section of C.270305, looking northeast (Scale: 0.5m)



Plate 222: Southwest-facing section of C.270307, looking northeast (Scale: 0.5m)



Plate 223: Mid-excavation photograph of C.270307 & C.270309, looking northeast (Scale: 2 x 1m)



Plate 224: Bulk finds *in-situ* in C.270305, looking northwest (Scale: 0.1m)



Plate 225: Post-excavation photograph of Trench 2802, looking south (Scale: 2 x 1m)



Plate 226: General stratigraphy of Trench 2802, looking east (Scale: 2 x 1m)



Plate 227: Post-excavation photograph of C.280205, looking southeast (Scale: 2 x 1m)



Plate 228: South-southeast-facing section of C.290505, looking north-northwest (Scale: 2 x 1m)



Plate 229: West-facing section of C.290507, looking east (Scale: 2 x 1m)



Plate 230: East-southeast-facing section of C.290510, looking west-northwest (Scale: 2 x 1m)



Plate 231: Post-excavation photograph of Trench 2904, looking south (Scale: 2 x 1m)



Plate 232: Post-excavation photograph of Trench 2902, looking south (Scale: 2 x 1m)



Plate 233: Post-excavation photograph of Trench 3005, looking east-northeast (Scale: 2 x 1m)



Plate 234: General stratigraphy of Trench 3005, looking north (Scale: 2 x 1m)



Plate 235: Pre-excavation photograph of C.300505 (GA 05), looking south-southeast (Scale: 2 x 1m)



Plate 236: Southeast-facing section of C.300505, looking north-northwest (Scale: 2 x 1m)



Plate 237: Post-excitation photograph of Trench 3013, looking east-northeast (Scale: 2 x 1m)



Plate 238: General stratigraphy of Trench 3013, looking south (Scale: 2 x 1m)



Plate 239: North-northwest-facing section of C.301305, looking south-southeast (Scale: 2 x 1m)



Plate 240: West-southwest-facing section of C.301605, looking east (Scale: 2 x 1m)



Plate 241: West-southwest-facing section of C.301607, looking east-northeast (Scale: 2 x 1m)



Plate 242: Northeast-facing section of C.300107, looking southwest (Scale: 2 x 1m)



Plate 243: Post-excavation photograph of Trench 3003, looking northeast (Scale: 2 x 1m)



Plate 244: Northwest-facing section of C.300305, looking southeast (Scale: 1 x 1m)



Plate 245: North-facing section of C.300511, looking south (Scale: 2 x 1m)



Plate 246: South-southeast-facing section of C.300605, looking northwest (Scale: 2 x 1m)



Plate 247: Post-excavation photograph of Trench 3008, looking south (Scale: 2 x 1m)



Plate 248: General stratigraphy of Trench 3008, looking west (Scale: 2 x 1m)



Plate 249: Pre-excavation photograph of C.300805, looking south-southeast (Scale: 2 x 1m)



Plate 250: Metal object from C.300804, Find #2.1 (no scale)



Plate 251: East-facing section of C.300807, looking west (Scale: 2 x 1m)



Plate 252: North-northwest-facing section of C.300200, looking south (Scale: 2 x 1m)



Plate 253: Post-excitation photograph of Trench 3009, looking southwest (Scale: 2 x 1m)



Plate 254: Post-excavation photograph of Trench 3014, looking south-southwest (Scale: 2 x 1m)



Plate 255: Post-excavation photograph of Trench 3102, looking east (Scale: 1m)



Plate 256: General stratigraphy of Trench 3102, looking west (Scale: 1m)



Plate 257: North-facing section of C.310205, looking south (Scale: 1m)



Plate 258: South-facing sections of C.310207 and C.310209, looking north (Scale: 1m)



Plate 259: General stratigraphy of Trench 3401, looking southwest (Scale: 1m)



Plate 260: Post-excitation photograph of Trench 3401, looking north-northwest (Scale: 1m)



Plate 261: Post-excitation photograph of Trench 4801, looking northeast (Scale: 2 x 1m)



Plate 262: General stratigraphy of Trench 4801, looking northwest (Scale: 2 x 1m)



Plate 263: East-southeast-facing section of C.480107, looking northwest (Scale: 2 x 1m)



Plate 264: Post-excitation photograph of Trench 4805, looking southwest (Scale: 1m)



Plate 265: General stratigraphy of Trench 4805, looking northwest (Scale: 2 x 1m)



Plate 266: East-southeast-facing section of C.480504, looking northwest (Scale: 2 x 1m)



Plate 267: West-northwest-facing section of C.480507, looking southeast (Scale: 0.5m)



Plate 268: East-northeast-facing section of C.480511 and C.480513, looking west (Scale: 1m)



Plate 269: West-southwest-facing section of C.480509, looking east (Scale: 0.5m)



Plate 270: Post-excitation photograph of Trench 4806, looking north-northwest (Scale: 2 x 1m)



Plate 271: West-facing section of C.480605, looking east (Scale: 2 x 1m)



Plate 272: Post-excavation photograph of Trench 4808, looking southwest (Scale: 1m)



Plate 273: South-southeast-facing section of C.480805, looking north-northwest (Scale: 2 x 1m)



Plate 274: Southeast-facing section of C.480807, looking northwest (Scale: 1m)



Plate 275: Southeast-facing section of C.480809, looking north-northwest (Scale: 1m & 0.5m)



Plate 276: West-facing section of C.480811, looking east (Scale: 0.5m)



Plate 277: Post-excavation photograph of Trench 4809, looking north (Scale: 2 x 1m)



Plate 278: General stratigraphy of Trench 4809, looking west (Scale: 2 x 1m)



Plate 279: Southwest-facing section of C.480905, looking northeast (Scale: 1m)



Plate 280: East-southeast-facing section of C.480918 and C.480916, looking west-northwest (Scale: 1m)



Plate 281: East-southeast-facing section of C.480915, looking northwest (Scale: 1m)



Plate 282: Pottery finds *in situ* retrieved from C.480915, looking north (Scale: 0.3m)



Plate 283: South-facing section of C.480907, looking north (Scale: 0.3m)



Plate 284: South-southeast-facing section of C.480909 and C.480911, looking north-northwest (Scale: 1m & 0.3m)



Plate 285: East-southeast-facing section of C.480921, looking west-northwest (Scale: 0.5m)



Plate 286: Post-excitation photograph of Trench 4810, looking west-southwest (Scale: 2 x 1m)



Plate 287: General stratigraphy of Trench 4810, looking northwest (Scale: 2 x 1m)



Plate 288: South-facing section of C.481005, looking north (Scale: 1m)



Plate 289: Post-excavation photograph of Trench 4811, looking west (Scale: 2 x 1m)



Plate 290: Northeast-facing section of C.481105, looking southwest (Scale: 1m)



Plate 291: South-southwest-facing section of C.481107, looking north (Scale: 0.5m)



Plate 292: Post-excavation photograph of Trench 4813, looking north-northwest (Scale: 1m)



Plate 293: Northeast-facing section of C.481305, looking southwest (Scale: 0.5m)



Plate 294: East-facing section of C.481307, looking west (Scale: 1m)



Plate 295: Post-excavation photograph of Trench 4814, looking west (Scale: 2 x 1m)



Plate 296: West-northwest-facing section of C.481405, looking east-southeast (Scale: 0.5m)



Plate 297: Post-excavation photograph of Trench 4802, looking northeast (Scale: 2 x 1m)



Plate 298: Post-excavation photograph of Trench 4812, looking west (Scale: 2 x 1m)



Plate 299: General stratigraphy of Trench 4901, looking west (Scale: 2 x 1m)



Plate 300: General stratigraphy of Trench 4906, looking east (Scale: 2 x 1m)



Plate 301: General stratigraphy of Trench 4907, looking north-northwest (Scale: 2 x 1m)



Plate 302: Post-excitation photograph of Trench 4907, looking northeast (Scale: 2 x 1m)



Plate 303: Post-excitation photograph of Trench 4902, looking north-northeast (Scale: 2 x 1m)



Plate 304: Post-excavation photograph of Trench 4906, looking north-northeast (Scale: 2 x 1m)



Plate 305: General stratigraphy of Trench 5003, looking northeast (Scale: 2 x 1m)



Plate 306: General stratigraphy of Trench 5004, looking north-northwest (Scale: 2 x 1m)



Plate 307: Post-excavation photograph of Trench 5003, looking west (Scale: 2 x 1m)



Plate 308: Post-excavation photograph of Trench 5004, looking west (Scale: 2 x 1m)



Plate 309: Southwest-facing section of C.500105, looking northeast (Scale: 2 x 1m)



Plate 310: General stratigraphy of Trench 5101 (Scale: 2 x 1m)



Plate 311: General stratigraphy of Trench 5103 with paleochannel, looking north-northwest (Scale: 2 x 1m)



Plate 312: Post-excavation photograph of Trench 5102, looking north-northeast (Scale: 2 x 1m)



Plate 313: Post-excavation photograph of Trench 5103, looking east-northeast (Scale: 2 x 1m)



Plate 314: Post-excitation photograph of Trench 5104, looking northeast (Scale: 2 x 1m)



Plate 315: West-northwest-facing section of C.510206, looking east-southeast (Scale: 1m)