

Stonestreet Green Solar

Environmental Statement

Volume 4: Appendices

Chapter 7: Cultural Heritage

Appendix 7.1: Archaeological Desk Based Assessment

Part 1 of 2

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Version 1

June 2024

APFP Regulation 5(2)(a) Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009





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EPL 001 LIMITED STONESTREET GREEN SOLAR ENVIRONMENTAL STATEMENT VOLUME 4 APPENDIX 7.1 ARCHAEOLOGICAL DESK BASED ASSESSMENT



GM12014/004-012 Recorded superficial geology across the Site



1 INTRODUCTION

- 1.1.1 This Archaeological Desk Based Assessment ('DBA') has been produced by Wardell Armstrong on behalf of EPL 001 Limited ('the Applicant') to inform ES Volume 2, Chapter 7: Cultural Heritage (Doc Ref. 5.2) in relation to the Development Consent Order ('DCO') application for Stonestreet Green Solar ('the Project').
- 1.1.2 This report has been prepared in respect to the Project on land at Stonestreet Green, near Aldington, Kent referred to as 'the Site'. The Project comprises the construction, operation, maintenance, and decommissioning of solar photovoltaic ('PV') arrays and energy storage, together with associated infrastructure and an underground cable connection to the existing National Grid ('NG') Sellindge Substation.
- 1.1.3 The Project will include a generating station (incorporating solar arrays) with a total capacity exceeding 50 megawatts ('MW'). The agreed grid connection for the Project will allow the export and import of up to 99.9 MW of electricity to the grid. The Project will connect to the existing National Grid Sellindge Substation via a new 132 kilovolt ('kV') substation ('Project Substation') constructed as part of the Project and cable connection under the Network Rail and High Speed 1 ('HS1') railway. See ES Volume 2, Chapter 3: Project Description (Doc Ref. 5.2) for further details regarding the Project.
- 1.1.4 The location of the Project is shown on **ES Volume 3**, **Figure 1.1**: **Site Location Plan (Doc Ref. 5.3)**. The Project will be located within the Order limits (the land shown in the **Works Plans (Doc Ref. 2.3)** within which the Project can be carried out. The Order limits plan is provided as **ES Volume 3**, **Figure 1.2**: **Order Limits (Doc Ref. 5.3)**.
- 1.1.5 This DBA was prepared in October 2022 for the Preliminary Environmental Information Report ('PEIR') stage and was updated in February 2024 for submission of the DCO application. A description of the key changes and updates made to the October 2022 DBA is provided in Section 4.
- 1.1.6 This report provides an assessment of the significance of any known or potential heritage assets of an archaeological nature within the Order limits. It also sets out the potential below ground effects on the archaeological resource as result of the Project and details appropriate mitigation measures for reducing/avoiding these potential effects, where appropriate. The baseline conditions presented in this document provide the evidence base for the



environmental impact assessment ('EIA') and inform decisions in relation to avoiding, minimising and/or mitigating the effect on known archaeological assets and potential archaeological assets. This report is presented as ES Volume 4, Appendix 7.1 (Doc Ref. 5.4) to ES Volume 2, Chapter 7: Cultural Heritage (Doc Ref. 5.2).

- 1.1.7 This assessment does not consider indirect effects on upstanding heritage assets, which are addressed in the ES Volume 4, Appendix 7.2: Heritage Statement (Doc Ref. 5.4).
- 1.1.8 This assessment was undertaken following the Standards and Guidance of the Chartered Institute for Archaeologists¹ (ClfA) and in accordance with National Policy Statements ('NPS') and in accordance with terminology expressed within the National Planning Policy Framework (NPPF)². Information on legislation and relevant planning policy and guidance is provided in Section 2 of this report.

Scope and Content

- 1.1.9 This report is structured as follows:
 - **Section 2:** Legislation, Planning Policy and Guidance sets out the relevant statutes of law, planning policy and guidance used to ensure the project adheres to governmental legislation.
 - **Section 3:** Description of the Site sets out the location of the Site, and includes a description of the land within and surrounding it, as well as a baseline of the known heritage assets.
 - Section 4: Methodology sets out the methodology used throughout the assessment.
 - Section 5: Baseline Information sets out the known information about the Site, which includes previous and current land use, archaeological work undertaken within the Site, and an archaeological baseline, as well as an assessment of various sources, which includes aerial photography, historic mapping and Light Detection and Ranging ('LiDAR').

Available at

https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf_Accessed September 2023, checked May 2024

¹ Available at: https://www.archaeologists.net/sites/default/files/ClfAS%26GDBA_4.pdf Accessed June 2022, checked May 2024

² Available at:



- **Section 6:** Archaeological Potential and Value sets out a summary of the archaeological potential of the Site.
- Section 7: Assessment Conclusions.
- Section 8: Glossary.
- Section 9 Bibliography.



2 LEGISLATION, PLANNING POLICY AND GUIDANCE

2.1 Legislation

- 2.1.1 The Project is defined as a Nationally Significant Infrastructure Project ('NSIP') under the Planning Act 2008 (amended by the Localism Act 2011). The Act establishes the procedure for applying for, examining and determining applications for development consent for NSIPs. Under Regulation 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ('EIA Regulations'), the Secretary of State must not make a DCO for EIA development unless an EIA has been carried out. Schedule 4 of the EIA Regulations list the information that must be included in an environmental statement which includes cultural heritage.
- 2.1.2 Consent for an NSIP takes the form of a DCO. Section 33 of the Planning Act 2008 provides that, to the extent that a DCO is required for development, a number of specified consents do not need to be obtained for that development, including for example planning permission and certain consents under the Ancient Monuments and Archaeological Areas Act 1979 and Planning (Listed Buildings and Conservation Areas) Act 1990.
- 2.1.3 Designated heritage assets protected by statutory legislation comprise Scheduled Monuments, Protected Military Remains, Listed Buildings and Conservation Areas.
- 2.1.4 Nationally significant archaeological sites, monuments and structures are protected under the Ancient Monuments and Archaeological Areas Act 1979³, which provides for a schedule of nationally important monuments. It should be noted that this Act makes no provision for the setting of scheduled monuments, which is a matter of planning policy only.
- 2.1.5 Hedgerows are afforded protection under the Hedgerows Regulations 1997⁴. Hedgerows are deemed important on archaeological or historic grounds and when they meet certain criteria, as set out under Annex 3.
- 2.1.6 The Protection of Military Remains ('PMR') Act 1986⁵ was introduced in 1986. The aim of the Act is to secure the protection from unauthorised interference of the remains of military aircraft and vessels that have crashed, sunk or been

³ Available at: https://www.legislation.gov.uk/ukpga/1979/46 Accessed June 2022, checked May 2024

⁴ Available at: https://www.legislation.gov.uk/uksi/1997/1160/contents/made Accessed June 2022, checked May 2024

⁵ Available at https://www.legislation.gov.uk/ukpga/1986/35/contents Accessed June 2022, checked May 2024



stranded and of associated human remains; and for connected purposes. In order to undertake works within an area of PMR a licence must be obtained.

2.2 National Planning Policy

Overarching NPS for Energy (EN-1) ('NPS EN-1')

2.2.1 The revised NPS EN-1⁶ came into force in early 2024. Section 5.9 of NPS EN-1 sets out the matters to be considered in the assessment of any likely significant heritage impacts of the Project. It states that, "The construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment above, at, and below the surface of the ground" (paragraph 5.9.1).

2.2.2 NPS EN-1 states:

'As part of the ES the applicant should provide a description of the significance of the heritage assets affected by the proposed development, including any contribution made by their setting. The level of detail should be proportionate to the importance of the heritage assets and no more than is sufficient to understand the potential impact of the proposal on their significance.' (paragraph 5.9.10).

'Where a site on which development is proposed includes, or the available evidence suggests it has the potential to include, heritage assets with an archaeological interest, the applicant should carry out appropriate desk-based assessment and, where such desk-based research is insufficient to properly assess the interest, a field evaluation.' (paragraph 5.9.11).

'The applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage assets affected can be adequately understood from the application and supporting documents. Studies will be required on those heritage assets affected by noise, vibration, light and indirect impacts, the extent and detail of these studies will be proportionate to the significance of the heritage asset affected.' (paragraph 5.9.12).

'The applicant is encouraged, where opportunities exist, to prepare proposals which can make a positive contribution to the historic environment, and to

Available

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1147380/NPS _EN-1.pdf Accessed May 2024



consider how their scheme takes account of the significance of heritage assets affected.' (paragraph 5.9.13).

National Policy Statement for Renewable Energy Infrastructure (EN-3) ('NPS EN-3') 7

- 2.2.3 In considering the impact on the historic environment as set out in Section 5.9 of NPS EN-1 and whether the Secretary of State is satisfied that the substantial public benefits would outweigh any loss or harm to the significance of a designated heritage asset, NPS EN-3 states that the Secretary of State should take into account the positive role that large-scale renewable projects play in the mitigation of climate change, the delivery of energy security and the urgency of meeting the net zero target (paragraph 2.3.8).
- 2.2.4 NPS EN-3 confirms that solar developments may affect heritage assets (sites, monuments, buildings, and landscape) both above and below ground, and their impacts will require expert assessment in most cases (paragraph 2.10.107). NPS EN-3 recognises, however, that 'Equally, solar PV developments may have a positive effect, for example archaeological assets may be protected by a solar PV farm as the site is removed from regular ploughing and shoes or low-level piling is stipulated' (paragraph 2.10.110).
- 2.2.5 NPS EN-3 reiterates the requirement for the submission of an appropriate deskbased assessment and, where necessary, a field evaluation, 'Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest' (paragraph Furthermore, NPS EN-3 goes on to state that 'In some instances, field studies may include investigative work (and may include trial trenching beyond the boundary of the proposed site) to assess the impacts of any ground disturbance, such as proposed cabling, substation foundations or mounting supports for solar panels on archaeological assets. The extent of investigative work should be proportionate to the sensitivity of, and extent of, proposed ground disturbance in the associated study area.' (paragraphs 2.10.114 to 2.10.115).
- 2.2.6 Paragraphs 2.10.116 to 2.10.119 of NPS EN-3 state that: 'Applicants should take account of the results of historic environment assessments in their design proposal. Applicants should consider what steps can be taken to ensure

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⁷ Available at: https://assets.publishing.service.gov.uk/media/65a7889996a5ec000d731aba/nps-renewable-energy-infrastructure-en3.pdf Accessed May 2024



heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. As the significance of a heritage asset derives not only from its physical presence but also from its setting, careful consideration should be given to the impact of large-scale solar farms which depending on their scale, design, and prominence, may cause substantial harm to the significance of the asset. Applicants may need to include visualisations to demonstrate the effects of a proposed solar farm on the setting of heritage assets.'

- 2.2.7 With regards to mitigation, 'The ability of the applicants to microsite specific elements of the proposed development during the construction phase should be an important consideration by the Secretary of State when assessing the risk of damage to archaeology. Where requested by the applicant, the Secretary of State should consider granting consents which allow for the micrositing within a specified tolerance of elements of the permitted infrastructure, so that precise locations can be amended during the construction phase if unforeseen circumstances, such as the discovery of previously unknown archaeology, arise.' (paragraphs 2.10.137 to 2.10.138).
- 2.2.8 In addition, 'Solar farms are generally consented on the basis that they will be time-limited in operation. The Secretary of State should therefore consider the length of time for which consent is sought when considering the impacts of any indirect effect on the historic environment, such as effects on the setting of designated heritage assets.' (paragraph 2.10.160).
 - National Planning Policy Statement for Electricity Networks (EN-5) ('NPS EN-5')⁸
- 2.2.9 Section 2 of NPS EN-5 sets out particular generic impacts of new electrical networks, concerning heritage, biodiversity and geological conservation, landscape and visual, noise and vibration, and electric and magnetic field effects.
 - National Planning Policy Framework ('NPPF')
- 2.2.10 The NPPF⁹ sets out the Government's planning policies for England and how these should be applied to contribute to the achievement of sustainable development. The NPPF confirms that it does not contain specific policies for

⁸ Available at: https://assets.publishing.service.gov.uk/media/65a78a5496a5ec000d731abb/nps-electricity-networks-infrastructure-en5.pdf Accessed May 2024.

⁹ Department for Levelling Up, Housing and Communities (DLUHC, 2023). Accessed May 2024.



NSIPs, which are determined in accordance with the Planning Act 2008 and relevant NPSs, as well as any other matters that are relevant (which may include the NPPF) (paragraph 5). The NPPF requires plans, both strategic and non-strategic, to make provision for the conservation and enhancement of the historic environment (paragraphs 20d and 28). Section 16 of the NPPF sets out a series of policies that are to be considered in development management decisions in relation to the heritage consent regimes established in the Ancient Monuments and Archaeological Areas Act 1979 and the Planning (Listed Buildings and Conservation Areas) Act 1990.

2.3 Local Planning Policy

2.3.1 The Site falls entirely within the jurisdiction of Ashford Borough Council ('ABC'). Applicable local planning policy is set out in the Ashford Local Plan 2030 (adopted 2019)¹⁰. Relevant policies are quoted in full below:

Ashford Local Plan 2030

Policy ENV3a - Landscape Character and Design

All proposals for development in the borough shall demonstrate particular regard to the following landscape characteristics, proportionately, according to the landscape significance of the site:

- a) Landform, topography and natural patterns of drainage;
- b) The pattern and composition of trees and woodlands;
- c) The type and composition of wildlife habitats;
- d) The pattern and composition of field boundaries;
- e) The pattern and distribution of settlements, roads and footpaths;
- f) The presence and pattern of historic landscape features;
- g) The setting, scale, layout, design and detailing of vernacular buildings and other traditional man made features;
- h) Any relevant guidance given in the Landscape Character SPD;
- i) Existing features that are important to and contribute to the definition of the local landscape character shall be retained and incorporated into the proposed development; and,
- j) Any non-designated, locally-identified, significant landscape features justified in a Parish Plan or equivalent document.

¹⁰ Available at: https://www.ashford.gov.uk/media/jw3nbvq1/adopted-ashford-local-plan-2030.pdf Accessed June 2022, checked May 2024



Policy ENV5 - Protecting Important Rural Features

All development in the rural areas of the Borough shall protect and, where possible, enhance the following features:

- a) Ancient woodland and semi-natural woodland;
- b) River corridors and tributaries;
- c) Rural lanes which have a landscape, nature conservation or historic importance;
- d) Public rights of way; and,
- e) Other local historic or landscape features that help to distinguish the character of the local area.

Policy ENV10 - Renewable and Low Carbon Energy

Planning applications for proposals to generate energy from renewable and low carbon sources will be permitted provided that:

- a) The development, either individually or cumulatively does not result in significant adverse impacts on the landscape, natural assets or historic assets, having special regard to nationally recognised designations and their setting, such as AONBs, Conservation Areas and Listed Buildings;
- The development does not generate an unacceptable level of traffic or loss of amenity to nearby residents (visual impact, noise, disturbance, odour);
- c) Provision is made for the decommissioning of the infrastructure once operation has ceased, including the restoration of the site to its previous use; and,
- d) Evidence is provided to demonstrate effective engagement with the local community and local authority. A statement should be submitted alongside any planning application illustrating how the proposal complies with the criteria above and any mitigation measures necessary and be informed by a Landscape and Visual Impact Assessment.

Policy ENV13 - Conservation and Enhancement of Heritage Assets

Proposals which preserve or enhance the heritage assets of the Borough, sustaining and enhancing their significance and the contribution they make to local character and distinctiveness, will be supported. Proposals that make sensitive use of heritage assets through regeneration, particularly where



these bring redundant or under-used buildings and areas into appropriate and viable use consistent with their conservation, will be encouraged.

Development will not be permitted where it will cause loss or substantial harm to the significance of heritage assets or their settings unless it can be demonstrated that substantial public benefits will be delivered that outweigh the harm or loss.

Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, or where a non-designated heritage asset is likely to be impacted, harm will be weighed against the public benefits of the proposal, including securing the optimum viable use of the heritage asset.

All applications with potential to affect a heritage asset or its setting should be supported by a description of the asset's historic, architectural or archaeological significance with an appropriate level of detail relating to the asset and the likely impact of the proposals on its significance.

Policy ENV15 - Archaeology

The archaeological and historic integrity of Scheduled Monuments and other important archaeological sites, together with their settings, will be protected and where possible enhanced. Development which would adversely affect such designated heritage assets will be assessed in line with Policy ENV13.

In addition, where the assessment outlined in Policy ENV13 reveals that important or potentially significant archaeological heritage assets may exist, developers will be required to arrange for field evaluations to be carried out in advance of the determination of planning applications.

Where the case for development affecting a site of archaeological interest is accepted, any archaeological remains should be preserved in situ as the preferred approach. Where this is not possible or justified, appropriate provision for preservation by record may be an acceptable alternative dependent upon their significance. Any archaeological recording should be by an approved archaeological body and take place in accordance with a specification and programme of work to be submitted to and approved by the Borough Council in advance of development commencing.'

2.4 Guidance

2.5 The assessment was undertaken in consideration of the following guidance:



- Standards and Guidance of the Chartered Institute for Archaeologists¹¹ (ClfA);
- Planning Practice Guidance (PPG): Historic environment¹²;
- Historic England Good Practice Advice (GPA) notes¹³;
- Guidance on Heritage Impact Assessments for Cultural World Heritage Properties, International Council on Monuments and Sites (ICOMOS, 2011)¹⁴;
- Principles of Cultural Heritage Impact Assessment in the UK, IEMA, IHBC and ClfA (2021)¹⁵;
- The Setting of Heritage Assets Historic Environment Good Practice Advice in Planning Note 3 (Second Edition, 2017)¹⁶;
- Standards and Guidance for Historic Environment Desk-Based Assessment, CIfA (2020)¹⁷;
- Heritage Strategy: Ashford Borough Council (October 2017)¹⁸; and
- Design Manual for Roads and Bridges, LA 104 Environmental Assessment and Monitoring (Highways England, 2020)¹⁹.

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¹¹ Available at: ClfA Code, regulations and standards & guidance | Chartered Institute for Archaeologists Accessed January 2024

¹² Available at: Historic environment - GOV.UK (www.gov.uk) Accessed January 2024

¹³ Available at: Search All Publications | Historic England Further referenced below

¹⁴ Available at: icomos_guidance_on_heritage_impact_assessments_for_cultural_world_heritage_properties.pdf (iccrom.org) Accessed January 2024

¹⁵ Available at: Principles-of-CHIA-V2[4].pdf (ihbc.org.uk) Accessed January 2024

¹⁶ Available at: Historic England (2018), The Setting of Heritage Assets. Available at: https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/heag180-gpa3-setting-heritage-assets/. Accessed: January 2024.

¹⁷ Chartered Institute for Archaeologists (2020), Standard and guidance for historic environment desk-based assessment. Available at: https://www.archaeologists.net/sites/default/files/CIfAS%26GDBA_4.pdf. Accessed: January 2024.

Ashford Borough Council (2017), Heritage Strategy. Available at: https://www.ashford.gov.uk/media/50edc0ta/adoptedashfordheritagestrategy.pdf. Accessed: January 2024.
 Available at: LA 104 - Environmental assessment and monitoring (standardsforhighways.co.uk) Accessed



3 DESCRIPTION OF THE SITE

3.1 Introduction

3.1.1 **ES Volume 2, Chapter 2: Site and Context (Doc Ref. 5.2)** provides a detailed description of the Site and its surrounding areas, including key features, designations and key sensitive receptor locations that may be affected by the Project. This section provides a summary for this DBA.

3.2 Location and Extent

- 3.2.1 The Site of the Project is located approximately 6.5km to the south east of Ashford Town Centre and approximately 13.7km to the west of Folkestone Town Centre, in the county of Kent. The Site is situated on land located to the north and west of the village of Aldington, centred at Ordnance Survey ('OS') National Grid Reference ('NGR') TR 05898 37766.
- 3.2.2 The Site is within the administrative boundaries of ABC and Kent County Council ('KCC').
- 3.2.3 The Site covers an area of approximately 192 ha (approximately 474 acres) and is predominantly in agricultural use for arable crops and grazing.

Site Description

- 3.2.4 The Site comprises primarily agricultural fields delineated by hedgerows and tree belts. **ES Volume 3, Figure 2.1: Field Boundaries and Site Area Plan** (**Doc Ref. 5.3**) provides a Field Boundaries and Site Area Plan. For ease of reference, the areas of the Site are subsequently referred to as follows:
 - South Western Area (Fields 1 to 9).
 - Central Area (Fields 10 to 19 and 23 to 25).
 - South Eastern Area (Fields 20 to 22).
 - Northern Area (Fields 26 to 29).
 - Project Substation (location of the Project Substation, in the north western section of Field 26).
 - 'Cable Route Corridor' (export of electricity from the Project at 132kV via underground cables (the 'Grid Connection Cable') to the Sellindge Substation). 'Cable Route Crossing' (use of an existing cable duct under the HS1 railway or through Horizontal Directional Drilling ('HDD') beneath HS1 for the Grid Connection Cable).



- Sellindge Substation (location of the existing Sellindge Substation).
- 3.2.5 The East Stour River (as shown on **ES Volume 3, Figure 2.2: Environmental Designations (Doc Ref. 5.3)**) flows in an east to west direction through the Northern Area (Fields 26 to 29) and adjacent to Fields 25 and 19 within the Central Area. There are a number of unnamed drains (small open channel watercourses) running through the Site, which generally flow north / north-west to drain into the East Stour River.
- 3.2.6 The Site includes a section of the existing Sellindge Substation and an area of land on the eastern side of the Sellindge Substation. Existing National Grid transmission lines connecting to the Sellindge Substation cross the South Eastern Area. There are no other existing built development structures within the Site.
- 3.2.7 Bank Road / Roman Road bisects the Central and South Western Areas of the Site, while Station Road / Calleywell Lane runs north to south within and adjacent to the Central Area of the Site. The Site also includes Bank Farm access track, which connects to Roman Road. Part of Goldwell Lane forms part of the Site, as cabling for the Project is proposed to be laid beneath the road surface.

Surrounding Area

- 3.2.8 The predominant surrounding land use in all directions is agriculture.
- 3.2.9 HS1 bounds the Northern Area and the Cable Route Corridor. A railway line operated by Network Rail runs between Ashford and Westenhanger and is located immediately adjacent to the HS1 railway line. The M20 motorway lies north of the railway, approximately 250m from the Site at its closest point, with distance to the M20 from the Site increasing towards the west. On the northern side of the railway line there is Sellindge Substation (which forms part of the Site), HS1 feeder station and the Sllindge Sewage Treatment Works.
- 3.2.10 The main residential area and other amenities (e.g. shops, pubs, open space) associated with the village of Aldington are located predominantly to the south and east of the Site. There are a small number of residential properties close to the Order limits.



4 METHODOLOGY

- 4.1.1 This DBA assesses potential impacts to buried archaeological remains as a result of the Project. The following sets out the evidential sources and impact assessment methodology.
- 4.1.2 This report conforms to guidelines and standards laid down in the following documents:
 - Code of Conduct: professional ethics in archaeology, Chartered Institute for Archaeologists: Reading (ClfA, 2022);
 - Standards and Guidance for Historic Environment Desk-Based Assessment, ClfA (2020);
 - Guidance on Heritage Impact Assessments for Cultural World Heritage Properties, International Council on Monuments and Sites (ICOMOS, 2011); and
 - Principles of Cultural Heritage Impact Assessment in the UK, IEMA, IHBC and ClfA (2021).

Study Area

4.1.3 A study area of 1km radius from the Site was used in this DBA. This study area both identifies known archaeological remains within the Site; and provides sufficient data to represent the archaeological character of the area.

Archaeological Data Sources

- 4.1.4 The standard collation of all known non-designated heritage assets in Kent is Kent Historic Environment Record ('HER'). This includes records of known and suspected heritage assets, including those identified through fieldwork, artefact finds and those identified through documentary sources such as historic maps and aerial photographs.
- 4.1.5 Information on designated heritage assets has been sourced from Historic England datasets²⁰. A 1km search area from the Site has been implemented to identify archaeological designated heritage assets which may provide information about the archaeological potential of the Site. These include Scheduled Monuments, PMR (crash sites), Registered Parks and Gardens and Registered Battlefields, although only PMR (crash sites) exist within the search radius. Relevant entries within an approximate 1km radius have been plotted

Available at: https://historicengland.org.uk/listing/the-list/data-downloads/ Accessed June 2022, checked September 2023



on drawing GM12014/004-001: Designated Heritage Assets of an Archaeological Nature within 1km of the Site.

Historical and Cartographic Sources

- 4.1.6 The principal sources for this type of evidence were:
 - the Kent Archives and Local History Centre;
 - Groundsure Historic Mapping;
 - online sources holding historic Ordnance Survey (OS) and Tithe maps;
 - DEFRA's LiDAR²¹ datasets (formerly held by the Environment Agency);
 - Historic England Archives; and
 - Historic England's Aerial Photo Explorer²².
- 4.1.7 Relevant documents are listed in the Bibliography.

Secondary Sources

- 4.1.8 All sources are listed in the Bibliography. The principal sources of secondary material, including 'grey literature' detailing previous archaeological fieldwork, were:
 - Kent HER;
 - the Kent Archives and Local History Centre;
 - the Archaeology Data Service ²³; and
 - the Wardell Armstrong in-house library.

Geological/Geotechnical Information

4.1.9 A description of the superficial and solid geology of the local and surrounding area was compiled in order to assess the likely presence and potential condition of any archaeological remains on the Site. This information was drawn from appropriate maps published by the Geological Survey of Great Britain²⁴, and reproduced as Drawings GM12014/004-011: Recorded underlying geology across the Site and GM12014/004-012: Recorded superficial geology across the Site. Further information on geological conditions is discussed in light of the

²¹ Light Detection and Ranging

²² Available at: https://historicengland.org.uk/research/results/aerial-archaeology-mapping-explorer/ Accessed June 2022, checked September 2023

²³ Available at: https://archaeologydataservice.ac.uk/ Accessed June 2022, checked September 2023

²⁴ Available at: https://www.bgs.ac.uk/ Accessed June 2022, checked May 2024



results of archaeological fieldwork undertaken as part of this assessment, which is discussed in Section 5.

Site Inspection/Walkover

- 4.1.10 To support this desk-based assessment, a physical walkover of the Site was undertaken on 8 and 9 March and 15 December 2022 and 28 February 2024. Photographs taken during the walkover are included at Annex 1. The walkover had the following purposes:
 - to examine the areas of archaeological potential identified during the desk-based assessment in particular, with a view to gauging the likely survival and condition of archaeological remains;
 - to identify signs of disturbance or truncation within the Site which could affect archaeological potential;
 - to review the presence/absence of earthworks indicative of the presence of archaeological remains i.e., ridge and furrow earthworks;
 - to confirm the presence/absence of historic hedgerows; and
 - to inform the assessment of effects element of ES Volume 2, Chapter
 7: Cultural Heritage (Doc Ref. 5.2).

Geophysical Survey

4.1.11 A geophysical survey (Magnitude Surveys 2023) was undertaken to inform this desk-based assessment and is included at Annex 5. The geophysical survey was undertaken to a previous iteration of the Order limits and therefore excludes small areas of the Site as defined by Order limits, although these relate to a widening of the proposed Cable Route Corridor and changes to the Site where this connects to the Sellindge Substation; therefore, the survey represents an effective characterisation of the archaeological potential of the Site.

Archaeological Monitoring

4.1.12 Archaeological monitoring was undertaken on test pits and window sample boreholes as part of ground investigation works undertaken at the Site by Wardell Armstrong in February 2023. The report on this (WA 2023a) is included at Annex 6.



Trial Trenching

4.1.13 Targeted trial trench archaeological evaluation and geoarchaeological test pitting at the Site was undertaken in July and August 2023. This was undertaken according to a brief prepared by, and a Written Scheme of Investigation (WSI) agreed with, the Archaeological Advisor at KCC (included as Appendix B of the Archaeological Management Strategy ('AMS') (Doc Ref. 7.17)). The targeted trial trench archaeological evaluation and geoarchaeological test pitting report is included at Annex 7 and the results of the work are discussed where relevant in this DBA report.

4.2 Assessment of Significance

- 4.2.1 Where an impact assessment is required, the importance or significance of the asset, the magnitude of impact on the asset and the resulting significance of effect of such impacts, are considered using the methodologies as set out in **Annex 2** of this report.
- 4.2.2 The assessment considers the potential for unrecorded archaeological remains to exist within the Site in addition to the known archaeological resource identified in the baseline. The potential for unrecorded archaeological remains to exist within the Site has been determined by professional judgement guided by an assessment of the existing heritage resource and the impact of previous modern development or disturbance at the Site.
- 4.2.3 Assessment of the archaeological resources draws on three factors: a. An assessment of the potential survival of any known or unknown archaeological deposits to remain extant within the Site based on an evaluation of previous ground interventions; b. An assessment for the potential for archaeological deposits to exist within the Site based on the results of the baseline study, and c. An assessment of the significance of known and potential archaeological assets within the Site, as well as within the defined study area.
- 4.2.4 The level of disturbance to buried archaeological remains caused by historic development has been assessed based on available data listed above, with particular attention paid to historic boreholes and available data obtained from previous archaeological evaluations and excavations (interventions) within the study area.
- 4.2.5 The archaeological potential of land within the Site is rated 'high', 'medium', 'low', 'negligible', or 'unknown'. This rating is based on an understanding of the archaeological resource including its national, regional and local context. This



includes the number, proximity and significance of known and predicted archaeological/historical sites or findspots within the Site and the 1km study area.

Assumptions and Limitations

4.2.6 The information provided by Historic England National Datasets and Kent HER (consulted November 2021, January 2022 and January 2024) is representative of the known recorded archaeology. The accuracy of this data has been checked where possible and appropriate, although the assessment is reliant on this data.

Consultation

- 4.2.7 Consultation was undertaken with KCC for the Applicant between 17 May 2022 and 22 January 2024. The Senior Archaeological Officer (SAO) provided, by email correspondence received on 18 May 2022, advice on appropriate data sources and information to be included within this DBA to inform the EIA in support the DCO application.
- 4.2.8 A programme of geophysical survey (detailed magnetometry) of the Site was undertaken in January 2022 in accordance with a WSI approved by KCC Senior Archaeological Advisor in December 2021.
- 4.2.9 A programme of pre-determination intrusive fieldwork was requested by the SAO in email correspondence received on 18 May 2022. It was recommended that it comprise targeted trial trenching and geoarchaeological test-pitting. A meeting with the SAO was arranged on 24 April 2023 to discuss the scope of the work and highlight the likely requirement for further post-determination evaluative fieldwork.
- 4.2.10 In an email dated 2 June 2023, the SAO requested geoarchaeological test pits within each of the four trenches located across the location of the Project Substation, and asked for trenches along the Roman Road to be adjusted so that they lay perpendicular, not parallel. A WSI was then sent to KCC for approval on 16 June 2023; and it was approved by the SAO on 28 June 2023. The intrusive archaeological fieldwork was undertaken in August 2023, in accordance with a WSI approved by KCC SAO in June 2023.
- 4.2.11 The trial trenching report was revised in light of comments received from KCC via email on 18 January 2024.
- 4.2.12 KCC Archaeology Specification documents were provided as follows:



- KCC Spec Manual B_Detailed Palaeolithic Excavation (DRAFT) Revised by KCC 15 04 19
- KCC Spec Manual B_GenericPrelimPalEval (DRAFT) Revised by KCC 17.08.18
- KCC Spec Manual B_Geoarch dba and deposit model document v1.9 (003) FINAL DRAFT 0921
- KCC Spec Manual B_Palaeolithic Watching Brief (DRAFT)_Revised by KCC 30 09 18
- KCC SPEC MANUAL PART B Trial trenching requirements v9.1 BC HER updates; and
- KCC specification for Archaeological Monitoring on phased schemes, 2017.
- 4.2.13 These documents were all taken into account for the relevant fieldwork items undertaken.
- 4.2.14 Correspondence with KCC, dated 18 May 2022, outlined their request for the Archaeological Landscape Assessment as a separate document 'in view of the scale, nature, location and visual impact of the proposed scheme situated in a rural area'. The scope of the Archaeological Landscape Assessment was discussed with KCC via email with examples provided on 1 July 2022. Its content was approved by KCC via email on 11 January 2024.
- 4.2.15 The draft version of the **AMS** (**Doc Ref. 7.17**) was sent to KCC for approval in December 2023. It was revised in light of comments received from KCC via email on 22 January 2024.



5 BASELINE INFORMATION

5.1 Topography

- 5.1.1 The Site itself sits predominantly within the bowl-like landscape of the East Stour River valley, for the most part occupying low lying land adjacent to the river itself. The Site also extends to a degree up the northern flank of the Aldington Ridge in the south. Land within the Site is undulating, within the wider rolling hill landscape.
- 5.1.2 Several watercourses run through and adjacent to the Site, the most significant of which is the East Stour River, within a valley to the north of Fields 19 and 24 and, further east, Fields 28 and 29, and the south of Fields 25 and 26 and 27; as well as the Cable Route Corridor extending eastwards.
- 5.1.3 An agricultural drain is situated to the north of Fields 16, 15 and 18 and south of Field 19. An Ordinary Watercourse is situated to the north of Field 23 and south of Field 24. The south-eastern part of the Site, comprising Fields 19, 20 and 21, has an agricultural drain running through it, on an approximate north to south alignment.
- 5.1.4 Topographically, the land within the Site is lowest at c. 44m above ordnance datum ('AOD') within the north-east (Field 19) and is highest within the southwest at c. 75m AOD (Field 8). Land located in the Central Area of the Site slopes towards the East Stour River in the north, where it plateaus as the proximity to the river recedes.
- 5.1.5 Bank Road runs to the south-west of the Central Area (Fields 10 and 12) and north-east of the South Western Area (Fields 2, 3, 4, 5, 6 and 9), at a generally elevated position. It is at c. 68m AOD at its highest point, adjacent to Field 12 at the eastern extent, and at c. 46m AOD adjacent to Field 2 at the west.
- 5.1.6 To the north of Bank Road, levels within the Site generally descend towards the East Stour River, with levels in the far north of the Site, within the Central Area in Field 19, recorded at a height of c.45m AOD.
- 5.1.7 Immediately to the south of the road, within the South Western Area, the land at Clap Hill (Field 9) is recorded at a height of c.71m AOD. The ground then drops quite steeply to the south-west, with levels recorded at c.55m AOD in the far south-west of Field 6. Within Field 2, levels are lower in the vicinity of the road to the north, recorded at c.46m AOD. The ground then rises in the south, to c.54m AOD.



- 5.1.8 The South Eastern Area (Fields 20-22) is located on a north-west facing slope, which lies at a height of c.64m AOD in the south-east and descends to a height of c.52m in the north-west.
- 5.1.9 Levels within the Northern Area fluctuate. Fields 25 and 26, which are located to the north of the East Stour River, lie on a southeast facing slope. Levels are recorded at c.60m AOD at the highest point in the northwest corner of Field 26, with levels dropping to 47m AOD closest to the river. The eastern extent of Field 28 lies on the slopes of Bested Hill, hence there is a rise in levels from c.47m AOD within the vicinity of the river to c.60m AOD along its eastern boundary.

5.2 Geology and Soils

- 5.2.1 Fields 4-6, 8-13, 20 and 25 partially or wholly lie on Hythe Beds (sandstone and limestone) surrounded by a rim of Atherfield Clay (mudstone), which generally lie across a high point in the landscape, known as the Aldington Ridge (Drawing GM12014/004-011: Recorded underlying geology across the Site). This ridge stands above the plain of the Low Weald, located to the south of the ridge. The good quality loam soils are generally well-drained. The remainder of the Site to the north, as well as Fields 1, 2, 3 and 7 to the south-west of the ridge, lie on Weald Clay Formation (Mudstone), which is generally low-lying.
- 5.2.2 The area to the north of the ridge has been characterised as the Upper Stour Valley, within the floodplain of the East Stour River and subject to flooding. The area of the Site to the south-west of the ridge is characterised as Old Romney Shoreline Wooded Farmlands (GM12014/004-011: Recorded underlying geology across the Site).
- 5.2.3 The majority of the Site has no mapped superficial geology (Drawing GM12014/004-012: Recorded superficial geology across the Site). Those fields which partially or wholly are located near to the East River Stour, Fields 16, 18 and 24-29, partially or wholly lie on Alluvium (clay, silt, sand and gravel), formed up to two million years ago, and represent a local environment previously dominated by rivers.
- 5.2.4 Made Ground was not identified within the Site in the Groundsure Report, but frequent brick fragments were recorded within a gravel surface cover layer, which was identified within several fields. This may indicate underlying reworked natural ground.
- 5.2.5 The Soils and Agricultural Land classification survey undertaken for the Site (reported in **ES Volume 4, Appendix 16.1: Soils and Agricultural Land (Doc.**



- **Ref. 5.4)** confirmed the presence of the Denchworth, Oxpasture and Fladbury soil series within the Site, all heavy textured (clayey) soils with impeded drainage, liable to waterlogging in wetter months and droughtiness in dryer, hotter months. Topsoils were generally stoneless to slightly stony in isolated regions. The upper subsoil and lower subsoil displayed mottling throughout the Site with the consistency becoming firmer at depth.
- 5.2.6 A review of the available BGS borehole records located adjacent to the HS1/Channel Tunnel Rail Link recorded the bedrock geology as follows:
 - Hythe Formation: Firm to stiff yellow brown mottles orange slightly sandy CLAY, and Medium dense yellow brown clayey fine SAND with occasional white calcareous lenses. The borehole records indicated that values recorded from SPTs within the Hythe Formation ranged between 10 and 19.
 - Atherfield Clay Formation: Stiff fissured grey CLAY with a little sand and occasional gravel of lithorelics. The borehole records indicated that values recorded from SPTs within the Atherfield Clay Formation ranged between 21 and 32.
 - Weald Clay Formation: Firm to stiff blue grey to brown fissured CLAY with occasional lamination/lenses of silt and sand. The borehole records indicated that values recorded from SPTs within the Weald Clay Formation ranged between 16 and 50.
 - A thick layer of Made Ground (up to 8m deep) has been recorded adjacent to the HS1/Channel Tunnel Rail Link, and within the northernmost extent of the Site.
- 5.2.7 The ground investigation works encountered bedrock in TP02 at 1.50 mbgl and was recorded as "(Medium strong) light grey sandy partially weathered LIMESTONE with rare, fragmented fossil content".

5.3 Settlement Pattern

5.3.1 The historic settlement of the search area comprises a number of dispersed settlements focused along historic roads, and scattered farmsteads set back from the lanes, predominantly with the largely 17th/18th century origins. There are some recent individual housing developments sporadically located along the lanes.

5.4 Land Use



5.4.1 Land use in the search area is characterised by large arable fields and areas of smaller pasture, with mixed plantation woodlands. Fields are typically defined by gappy hedgerows, a number of which are historic (as defined by the Hedgerows Regulations 1997)²⁵, and shrubs and trees (see Annex 3). Modern fencing boundaries are also present. There are no ancient woodlands within the Site. To the south of the Site and south of Frith Road is Poulton Wood which has been identified as an ancient semi-natural woodland (designated as a Local Nature Reserve).

5.5 Designated Heritage Assets

Designated Heritage Assets within the Site

5.5.1 Within the boundary of the Site is a PMR crash site of a Messerschmitt Bf109E-4 (**HER DKE22255**). This is located within on or the vicinity of the Site, north east of Handen Farm, towards the southern extent of the Site.

Designated Heritage Assets outside of the Site

- 5.5.2 Three additional Protected Military Remains (PMR) crash sites are located within the wider 1km search area.
- 5.5.3 The nearest designated heritage assets of an archaeological nature include the scheduled sites of a Romano-British villa 1.6km to the south-east of Field 22 (NHLE 1004216) and a Bronze Age Barrow Cemetery (NHLE 1475132) approximately 1.72km south-east of the cable route.

5.6 Non-Designated Heritage Assets

Non-Designated Heritage Assets within the Site

- 5.6.1 The Kent Historic Environment Record (HER) records 18 entries within the Order limits, plotted on drawings GM12014/002: HER Identified Non-Designated Heritage Assets within 1km of the Site: Prehistoric to Roman, GM12014/003: HER Identified Non-Designated Heritage Assets within 1km of the Site: Early Medieval to Medieval and GM12014/004: HER Identified Non-Designated Heritage Assets within 1km of the Site: Post-Medieval, Modern and Unknown. Of these recorded entries, 15 are findspots largely found through metal detecting and are of Roman to Post Medieval date.
- 5.6.2 The remaining three entries comprise Bank Road/Roman Road which bisects the central and western part of the Site and respects the alignment of a

²⁵ Available at: https://www.legislation.gov.uk/uksi/1997/1160/contents/made Accessed June 2022, checked May 2024



- projected Romano Road (**HER TR 04 SE 120**), and two Post Medieval farmsteads (**HER MKE88378** and **MKE88379**).
- 5.6.3 Non-designated heritage assets outside the Site are further discussed as part of the baseline below.

5.7 Historic Landscape Characterisation

- 5.7.1 The Historic Landscape Characterisation (HLC) data provided by the HER has identified that the fields central to the Site are thought to originate from the Late Medieval or 17th / 18th centuries with the remaining areas being of either 19th /20th century origin or unknown. The HLC types suggest the landscape has remained in agricultural use since at least the Late Medieval period, and possibly earlier. The archaeological landscape represented by the Site has also been assessed, the results of which are included as **Annex 4** of this report. This assessment has allowed a comprehensive study of the present landscape within the Order limits and concluded that it largely reflects the 17th /18th century agricultural alterations of the area. A number of surviving individual landscape features have been identified with origins in this period, predominantly field boundaries respected by hedgerows and tracks and public rights of way.
- 5.7.2 Piecemeal evidence for earlier land use is represented by discrete upstanding features in the landscape, namely Roman Road/Bank Road and Aldington Mount, and although associated activity may survive (and certainly does in relation to the Roman Road), this would be applicable to sub-surface archaeological remains which are not represented in the present landscape. Such sub-surface archaeological potential has been identified elsewhere within the Order limits by geophysical surveys and the archaeological trial trenching, but again such sub-surface features are not respected by elements of the present landscape, which is multilayered and interconnected.

5.8 Previous Archaeological Work

- 5.8.1 Within the search area of the Site and its vicinity, a number of archaeological fieldwork projects have been undertaken at various locations. As part of this assessment, the archaeological fieldwork has been reviewed to understand the archaeology uncovered within the landscape surrounding the Site and how this may inform the archaeological potential of the Site.
- 5.8.2 Where located within the 1km study area from the Site, the archaeological fieldwork has been discussed within the appropriate chronological section



- above (Section 5.6) in order to better correlate with and understand the archaeological potential of land within the Site.
- 5.8.3 This section includes relevant archaeological fieldwork outside the search area, where geology and topography of the evaluated sites have similarities to that of the Site. The following previous archaeological investigations have been included due to propensity of evidence for activity from the Prehistoric period to the early Roman period (periods identified as being of particular potential for the Project) on similar geology to that within the Site.

Kingsnorth Green

- 5.8.4 The geological conditions at Kingsnorth Green are similar to those at the Site, i.e. poorly draining Weald Clay. Archaeological fieldwork at Kingsnorth Green, located c.3.6km west of the Site, has comprised geophysical survey to reveal archaeological and geological anomalies, and trial trenching to target and test the veracity of the geophysical survey results.
- 5.8.5 The trial trenching recorded possible evidence for Neolithic activity in the form of a single pit. Activity during this period was likely to have been transient and short lived. It also revealed some Bronze Age and Iron Age activity in the form of an Early Bronze Age ring ditch, a Middle/Late Bronze Age cremation and a Late Iron Age oven evident within proximity to an area of alluvium in the northern part of the Kingsnorth Green site.
- 5.8.6 At the highest point within Kingsnorth Green, and within an area of relatively concentrated anomalies identified through the geophysical survey, early Roman pottery was recovered from an archaeological feature. Other features recorded in its vicinity included a concentration of Late Iron Age/Early Roman ditches and pits thought to be indicative of a small-scale settlement occupation. These were located at a height of 50m AOD.

Park Farm East and South East

5.8.7 Geology in this area is alluvium (sand, gravel and silt) over Wealdon Clay, similar to that within parts of the Site. Park Farm East, c.2.3km west of the Site, was initially subject to trial trenching at c.2% (CGMS 2003²⁶). In general, the trial trenching recorded the presence of a field system potentially dating from

Available at: https://archaeologydataservice.ac.uk/archiveDS/archiveDownload?t=arch-1352-1/dissemination/pdf/Kent/GL9066.pdf Accessed June 2022, checked May 2024



the Bronze Age to the early Iron Age periods, although little dating evidence was encountered.

- 5.8.8 The earliest evidence for probable settlement-related activity comprised an isolated pit located at 41.3m AOD, and another isolated pit at 37.7m AOD. Both pits contained Late Bronze Age/Early Iron Age pottery. A posthole of Mid to Late Iron Age date was found within the same trench as the latter pit and activity into the Late Iron Age was evident on a slightly raised area within the valley floor, above 37m AOD. This was targeted by later excavation which recorded eight Iron Age round houses (Wessex Archaeology, ND²⁷).
- 5.8.9 The trial trenching also recorded further Late Iron Age activity within an area of Wealdon Clay in close vicinity to sand and gravel deposits located towards the side and crest of a hill at 42.1m AOD. This area was also targeted by excavation (Wessex Archaeology 2004). The excavation recorded Iron Age roundhouses most likely of Late Iron Age date. Some Late Bronze Age re-deposited pottery was recorded within one of the roundhouse gullies. The roundhouses were incorporated into rectilinear enclosure systems predominantly of Late Iron Age date. An iron smelting furnace was also recorded. The alignment of later enclosure ditches perpendicular to the nearby Roman Road between Lympne and Maidstone (400-500m north-east) and the presence of Romanised pottery fragments within the earlier enclosure ditch fills suggests a settlement which spanned the Late Iron Age/early Roman periods (Wessex Archaeology, ND), indicative of continuation of occupation of land with well drained soils.

Cheesemans Green

5.8.10 Cheesemans Green is located c.1.66km north-west of the Site, on Aldington Ridge and underlain by Weald Clay in the vicinity of alluvium, similar to the Site. It was subject to archaeological trial trenching, a strip, map and sample excavation with watching briefs, as part of a mixed-use development. Whilst the fieldwork recorded evidence of Mesolithic activity, the earliest dated features were of Middle to Late Bronze Age date. These included a barrow with associated mortuary features and roundhouses. Subsequent enclosures and land divisions attest to Iron Age/Roman occupation of the landscape, suggesting continued rural settlement with associated agricultural activities from at least the late Bronze Age into the Roman period again indicating continual occupation of a landscape attuned to agricultural activity.

²⁷ Available at: http://www.kentarchaeology.org.uk/10/005.pdf Accessed June 2022, checked May 2024



5.9 Archaeological Baseline

Palaeolithic

- 5.9.1 There is no known evidence for palaeolithic activity within the Site, or the 1km search area, except the possible discovery of Palaeolithic implements as residual material during the partial excavation of a possible medieval windmill mound (*confer* 5.6.2).
- 5.9.2 The Archaeological Landscape Assessment (Annex 4) includes a study of the Palaeolithic potential, and the results of The Mapping Palaeolithic Britain Project 2013-2017 (Ashton et al, 2019) and Kent's specific Palaeolithic Character Area studies (KCC 2015), combined with Site-specific investigations to inform the Project, suggest the overall potential for features or deposits of the Palaeolithic period surviving within the Site is low. However, it should be noted that a possible palaeosoil, 0.12m thick, was identified in one test pit towards the western extent of Field 25, beneath the Head/Solifluction deposits at 0.8m below OD. However, it was not deemed suitable for sieving, and no artefacts were recovered.
- 5.9.3 The results of Palaeolithic/geoarchaeological test pitting are discussed in the Prehistoric and Roman section below.
- 5.9.4 There are no recorded Prehistoric assets within the Site.
- 5.9.5 A large mound, identified as a possible round barrow on the HER due to its appearance, is located c.346m north of the Site (TR 03 NE 20/TR 03 NE 242). However, results from targeted trial trenching in 1967 suggest it is an early mill mound of the medieval period, constructed over a dried-up spring. Residual prehistoric lithic material including possible Palaeolithic, Mesolithic and Neolithic implements, and sherds dating from the Bronze Age to the Roman Period were recovered, as well as a bronze disc which may have been a Roman coin and pottery up to the 14th century.
- 5.9.6 Over 150 Mesolithic artefacts were found outside the Site at Evegate Farm (TR 03 NE 27) comprising 129 retouched blades and flakes and 32 scrapers; a graver and an axe were also found. These were found approximately 130m north of the Site and 220m south of the mound detailed above. Therefore, these two sites may be indicative of reoccurring activity within an area north of the Site.
- 5.9.7 A number of Mesolithic artefacts have been recovered from Aldington Mount (**TR 03 NE 6**), c.10m from the Site. Aldington Mount is tentatively dated to the



Roman period (though this is uncertain, see paragraph 5.14.2 below for further discussion). The context of the Mesolithic finds is unclear, however, as the trial trench excavation in the 1960s encountered Mesolithic artefacts stratigraphically above hundreds of 15th century sherds; therefore, these must have been residual.

- 5.9.8 A lithic scatter was recovered east of the Site during field walking prior to the Channel Tunnel Rail Link (CTRL) works (Oxford Archaeological Unit 1994²⁸). The lithic scatter was spread across two areas, one to the west of the sewage works (TR 03 NE 218), c. 262m from the Site, and another further east (TR 03 NE 217), c.667m from the Site. The western scatter included hard hammer struck flakes, a possible knife fragment and burnt flints. The eastern scatter included hard hammer struck flints and a fragment of a saddle quern; saddle querns are Bronze Age in date. A further flint scatter comprising artefacts from the Mesolithic to Bronze Age periods has been recovered c.225m west of the north-eastern extent of the Order limits and c.290m north of the cable route (TR 03 NE 59).
- 5.9.9 The trial trench evaluation identified evidence of activity dating to the Bronze Age in Field 26. This activity was represented by struck flint, including a possible 'horned' scraper, recovered in two ditches and small pit in the southern end of Trench 1. It is possible that these features relate to Prehistoric agricultural activity, perhaps on the very outskirts of a settlement.
- 5.9.10 There are several records outside the Site relating to the Bronze Age period which include an arrowhead (**TR 03 NE 219**), located c.280m north of the Site, and copper alloy blade (**MKE109473**) located c.880m east of Field 22. Four Bronze Age ditches, possibly part of a wider field system (**TR 03 NE 60**), are recorded c.270m west of the north-eastern extent of the Site and c.340m north of the cable route, and a Late Bronze Age to Early Medieval site at Little Stock Farm (**TR 03 NE 61**) c.330m north of the Site have also been identified as part of the CTRL works (Wessex Archaeology 1999²⁹). The complex arrangement of archaeological features at the Little Stock Farm site dated to the Late Bronze Age and Late Iron Age, though artefacts of the Early Medieval period were also encountered (*confer* 5.6.29).

²⁸ Available at: Oxford Archaeological Unit. (1994) Union Railways Limited Channel Tunnel Rail Link: 1994 Surface Collection Survey Part 1 of 2, August 1995 Accessed July 2022, checked May 2024

²⁹ Available at: Wessex Archaeology. (1999) Channel Tunnel Rail Link Archaeological Evaluation at Little Stock Farm Accessed July 2022, checked May 2024



- 5.9.11 Generally, the Prehistoric finds discussed above are located north of the Site, with the exception of the Bronze Age copper alloy blade and barrow cemetery recorded to the east. The Mesolithic finds c.10m from the Site have been discounted as their context is uncertain and appear residual. This apparent concentration of activity to the north of the Site may be the result of the targeted work undertaken as part of the CTRL works and relative the lack of archaeological investigation further south, rather than a true representation of the use of the land in the prehistoric period. However, it should be noted that the Prehistoric activity is primarily focussed toward the north of the East Stour River and located on an area of higher ground (c.25m higher than the land to the south adjacent to the river), on Hythe and Atherfield Clay bedrock. It may be surmised that this location had topographical advantage, chosen because the higher land is unlikely to flood, whilst still having a water source and fertile ground to the south. The land also provides a better vantage point over the rolling hills and can been considered a strategic vantage point.
- 5.9.12 No Iron Age features or finds are recorded within the Site.
- 5.9.13 The Iron Age period is largely represented within the search area through findspots of coins, brooches and pottery recorded in the HER. However, there is some evidence of settlement and agricultural activity through the presence of field systems from the Late Iron Age onwards, with continued presence into the subsequent Romano-British and Medieval periods.
- 5.9.14 Known Late Iron Age settlement evidence is, as with earlier prehistoric activity, located to the north of the Site. A Late Iron Age/Roman Site at Little Stock Farm was found in 1999 prior to the CTRL works (TR 03 NE 66) c.322m north of the Site (Wessex Archaeology 1999³⁰). A total of 67 archaeological deposits/features were recorded during the works which included 11 ditches, 16 gullies, 17 pits, 17 post-holes, three hearths, two burials and one quarry. The artefacts were of Neolithic to Medieval date (the earlier material is recorded under HER reference TR 03 NE 61 mentioned above). The Late Iron Age material demonstrates intensive occupation of this settlement site in the form of structural remains, enclosures, hearths, refuse pits and placed deposits. The Roman period activity appears to comprise only a field system, perhaps suggesting that the settlement relocated during this period with the land in use mainly for agricultural purposes.

³⁰ Available at: Wessex Archaeology. (1999) Channel Tunnel Rail Link Archaeological Evaluation at Little Stock Farm Accessed July 2022, checked May 2024



- 5.9.15 Two additional field systems have also been identified within the vicinity of the Site. The first is a Late Iron Age to Medieval system (TR 03 NE 62) found during the CTRL works, located c.89m north of the Site (Wessex Archaeology 1999). It comprised a series of ditches and pits and may have formed part of the aforementioned settlement at Little Stock Farm (TR 03 NE 66). The second field system is a Late Iron Age to Early Roman field system (TR 03 NE 205) located c.240m north of the cable route. This was also identified during the CTRL works, and although there were Mesolithic to Medieval features identified, the environmental evidence suggested the field system was open grassland up to the early second century when it was abandoned and reverted to woodland.
- 5.9.16 Further evidence for Late Iron Age to Roman/Early Medieval rural activity was identified as part of the CTRL works at Bower Road (**TR 03 NE 203**), approximately 570m north of the Site (Oxford Archaeology 2003³¹). This included a large pond believed to be fed by two drainage ditches dating to the Iron Age. The Romano-British activity was represented by a field system, replaced in the 1st century, and abandoned in the 2nd century, leaving a post-built structure. A waterhole and cremation were found, dating to the 3rd century, and the post-built structure was also modified around this time. Other associated features included a 4th century AD pit and wall.
- 5.9.17 An additional 10 HER entries of the Iron Age period within the 1km search area are findspots (MKE109073, MKE109074, MKE55905, MKE56210, MKE56211, MKE56247, MKE69420, TR 03 NE 194, TR 03 NE 223). The nearest, recovered from within 20m of the Site, is a copper alloy brooch (MKE55802).
- 5.9.18 The Iron Age is well attested to within the wider area where settlement, although sparse, appears to have been concentrated on localised areas of high ground within the poorly drained Weald Clay. The sporadic areas of higher ground appear to have been ideal for overseeing pastoral farming, utilising the low-lying flood plain for grazing and the higher ground for stock enclosures in times of severe flood. Enclosures appear to have respected and re-used earlier Bronze Age divisions.
- 5.9.19 As described above in the Iron Age discussion, recorded settlement and agricultural activity within the search area indicates a continued presence into the Romano-British period, and a number of findspots of coins, brooches and pottery are also recorded in the HER. Three Romano-British findspots are

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³¹ Available at: Oxford Archaeology. (2003) CRTL Project Area 440 Archaeological Watching Briefs. Accessed July 2022, checked May 2024



recorded within the Site, consisting of a copper alloy mount (MKE55807) and two copper alloy brooches (MKE55849 and MKE94405). In addition, the projected course of a Roman road (existing as the present Bank Road/ Roman Road) at Aldington (TR 04 SE 120) is recorded by the HER to bisect the central and western part of the Site; and some evidence for this was found by the trial trenching undertaken to support this assessment (WA, 2023b).

- 5.9.20 The projection of the Roman road was originally based on the discovery of features interpreted as evidence of this road during electricity works in 2005 (Canterbury Archaeological Trust 2006; TR 03 NE 207). Features uncovered comprised a raised causeway with ragstone rubble and chippings over the top. The projected course of the Roman road (TR 04 SE 120) would have connected Maidstone to Dover via Lympne and formed a southern parallel to both Watling Street and the Pilgrim's Way. The road's association with Dover may have resulted in a higher military presence and a higher amount of internationally traded goods. It would have also likely attracted roadside settlement along it. No such evidence is recorded within the Site by the HER, although evidence from targeted trial trenching as part of the Project (WA 2023b) encountered possible remains of such activity: Six postholes and two ditches were identified in a trench in Field 4, associated with a large assemblage of late 1st century AD pottery and aligning with features revealed by the geophysical survey. On the opposite side of the road in Field 10, another trench revealed three pits and a large sub-rectangular feature, and Roman pottery sherds and animal bone were recovered. Carbonised cereal remains from these features suggest associated arable farming. Slag material consistent with iron working was also recovered, predominantly from a trench in Field 4, though not from datable deposits.
- 5.9.21 Roman ironworking has been identified c.530m to the south-east of the Site (**TR 03 NE 28**), near to Partridge Farm, based on the discovery of a number of areas of dark soil and one instance of iron slag in 1975. Associated with these features were coarse-ware sherds dating from the Romano-British to the Medieval period. In the early Roman period, the Weald was of industrial importance, particularly iron production (Andrews 2010³²).
- 5.9.22 As well as the road and ironworks, additional evidence for Roman period activity is recorded in the form of flue tiles and bricks found in 1935/6, c.325m southwest of the road and 506m south of the Site (**TR 03 NE 5**) in a garden in which

³² Available at: Andrews, C. (2010) 'Roman Kent' in Lawson, T. and Killingray, D. (ed.) An historical atlas of Kent. Accessed March 2022, checked May 2024



sherds of 1st century AD pottery and the foundations of a building, possibly a hypocaust, were also found. In the Second World War, the house associated with this garden was occupied by troops and the finds were stolen from a cupboard, so the dating of the finds cannot now be confirmed.

- 5.9.23 Aldington mount (TR 03 NE 6) is located c.10m from the edge of the Order limits (east of Field 9) and c.17m south-west of the Roman Road. Due to its position near the road the mound had tentatively been recorded as Roman, however no dating evidence of this period has been recovered. An excavation in c.1967 confirmed the mound was constructed of sand which was not of local origin and contained Mesolithic flakes, blades and a scraper which were scattered to depths of c.1.67m. Another turf line with charcoal covered an earlier mound. At a depth of c.2.1m a hard packed floor, channelled with a large amount of charcoal was found but no dating evidence was recovered. A trial trench, cut c.19.8m east of the excavation into the mound, found 15th century sherds. Therefore, the context of these finds, at best, is uncertain. It seems likely that the mount may be a medieval site, the presence of a 15th century barn at the nearby Bank farm attesting to activity of this period in the vicinity.
- 5.9.24 An additional 11 Roman period HER entries within the search area relate to findspots and include brooches, coins, pottery fragments, a knife and an earring (MKE108415, MKE109111, MKE109218, MKE112261, MKE112271, MKE55906, MKE78910, MKE96596, TR 03 NE 220, TR 03 NE 221, TR 03 NE 25).
- 5.9.25 With regard to the artefact finds within the Site, the copper alloy mount (MKE55807) was retrieved from Field 29 and the brooches (MKE55849 and MKE94405) within Fields 12 and 6 respectively, either side of the projected Roman road (TR 04 SE 120). Due to these finds being isolated they are likely transient finds resulting from casual loss (particularly likely for the brooches from road users), or later deposition through manuring scatters, rather than representative of a settlement or occupation activity. In addition to the Roman pottery assemblage and features revealed during the trial trench evaluation for the Project, six iron hobnails (Manning Type 10) were also recovered from the trench in Field 4, typically used on the soles of Roman boots and sandals, and also likely casual losses from users of the adjacent road.
- 5.9.26 From the evidence presented above, Romano-British activity is known to the north of the Site, which is part of activity from the Prehistoric period through to the Medieval period, indicating a continuity of land use on higher ground.



- Single-period activity solely of the Romano-British period is also indicated to the south of the Site.
- 5.9.27 Evidence within the Site indicates possible Romano British settlement activity adjacent to the Roman road within Fields 4 and 10, and additional, associated, remains might be anticipated. The findspots within the search area likely signify transient activity relating to the use of the road, or later depositing through agricultural practice.
- 5.9.28 In the Early Medieval period, the landscape of Kent was divided into lathes (internal territorial landholdings) which linked Wealden wood pastures with their associated settlements, a system with probable 6th century origins. The Site lay within the Lathe of Scray, although it is unclear whether this resulted in any physical impacts on the landscape. Known evidence for activity of the Early Medieval period within the search area is represented by inhumations and possible occupation evidence, although only findspots are recorded from within the Order limits.
- 5.9.29 Possible Early Medieval features have been identified approximately 570m north of the Site, where two ditches of possible Romano-British or Early Medieval date existed within the Late Iron Age/ Roman rural site (TR 03 NE 203) indicating a possible continued use into the Early Medieval period. In addition, the field systems at Park Wood Cottage (TR 03 NE 62) c.89m north of the Site include potential Early Medieval features. Although these settlements may have included Early Medieval activity no dating evidence to confirm this has been identified.
- 5.9.30 Three Early Medieval inhumations were uncovered in 1828 on Bower Farm (TR 03 NE 10), c.891m north of the Site. The three graves were orientated on an east-west alignment and were rich in finds including swords, spearheads and brooches, and some contained garnets, rings and decorated buckles. The finds dated to the 6th and 7th centuries and one brooch was potentially manufactured in Scandinavia.
- 5.9.31 The Church of St Martin at Aldington c.740m from the Site has Early Medieval origins, and would have formed the focus of a settlement, further attesting to activity of the period in the wider area (**TR 03 NE 130**).
- 5.9.32 The remaining evidence for Early Medieval activity comes from 10 artefact findspots, five of which are within the Site and five from the search area. All five findspots within the Site were found within Field 10, suggesting a group of lost possessions, especially since these were to the north of the Roman Road. The



assets included three silver coins (MKE55817, MKE55777 and MKE55778), a copper alloy brooch (MKE55816) and a copper alloy key (MKE55834). Early Medieval pottery sherds (TR 03 NE 246) were found at Bank Farm (MKE83195), 22m south of the Site, during a watching brief in 2014.

- 5.9.33 The Early Medieval findspots from the search area include two silver pennies (TR 03 NE 195 and TR 03 NE 225), c.844m south of the Site; silver dress/personal accessories (MKE55588) and a gemstone (MKE55589), found c.469m north of the Site; and a Byzantine copper alloy coin (MKE55904), c.814m north of the Site.
- 5.9.34 The above evidence attests to some Early Medieval use of the landscape to the north of the Site, although this remains unconfirmed. Within the Site, Early Medieval activity is demonstrated by findspots in close proximity to the projected Roman road and likely represent continued use of the road.
- 5.9.35 The Domesday Book of 1086 recorded two settlements within the vicinity of the Site, known as 'Evegate' and 'Stansted'.
- 5.9.36 Evegate is plotted on modern OS mapping to the west of Park Wood Cottage and is no longer occupied. Evegate was under the Lordship of Hugh de Montfort who was also the Tenant-in-Chief; the settlement contained one villager, one men's plough team and eight acres of meadow. Prior to the conquest the Overlord was King Edward in 1066.
- 5.9.37 Stansted is plotted within the vicinity of the modern-day Stonestreet Green: in 1086 it was recorded in the Hundred of Street and contained 39 households. There were 20 villagers and 19 smallholders recorded alongside 10 men's plough teams. The Lord and Tenant-in-Chief in 1086 were the Canons of Dover. This suggests that in the immediate vicinity of the Site was a medieval settlement, which probably originated in the late Early Medieval period (Powell-Smith 2022³³).
- 5.9.38 Documentary evidence also shows that the land within the Order limits was historically associated with three parishes, Aldington (south-eastern part), Mersham (western part) and Smeeth (far eastern part). The boundaries of these parishes are mapped on Tithe mapping and on historic Ordnance Survey maps. Often such boundaries are based on immovable and distinctive markers in the landscape, to minimise land disputes, which would have been well-established

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³³ Available at: Powell-Smith A 2000 *Open Domesday* Accessed 2022: https://opendomesday.org/_Accessed June 2022, checked May 2024



signifiers of landholdings; often since the medieval period. The parish boundaries within the Site are not respected by present field boundaries (which largely respect the 17th/18th century arrangement), which suggests earlier, and perhaps medieval, origins for the parish boundaries. Some examples of parish boundaries include man-made features, such as ditches. Analysis of LiDAR data, site walkovers and geophysical survey results have not revealed any such features within the Site; however, the potential for subsurface remains of such features cannot be ruled out.

- 5.9.39 Archaeological evidence for Medieval activity within the search area includes occupational, agricultural and transient activity. As with the Prehistoric, Iron Age and Romano-British periods, Little Stock Farm c.340m north of the Site was used during the medieval period (TR 03 NE 67) with a possible settlement, quarry, enclosure and field system identified. The stone quarry was located within a ditched enclosure which may have been used for domestic/industrial activity. Old Mill House (TR 03 NE 80) and Stone Hill Cottage and Old Forge Cottage (TR 03 NE 77), c. 818m and 86m to the north-east of the Site respectively, also have Medieval origins.
- 5.9.40 At Aldington Mount (**TR 03 NE 6**), previously mentioned within the discussion of Roman remains, above, hundreds of pottery sherds from the 15th century were located within the area of an original floor, which more likely indicates a Medieval origin of this site. Aldington Mount lies 10m from the edge of the Order limits.
- 5.9.41 Other activity for the period includes a possible Medieval/Post Medieval sheep fold (TR 03 NE 204), c.558m north of the Site; and a large Medieval ditch (TR 03 NE 206) c.182m north of the cable route, both revealed by the CTRL works. The ditch was found to contain 13th and 14th century pottery.
- 5.9.42 A medieval mill pond and associated dam (**TR 03 NE 21**) was identified prior to 1969 c.605m north of the Site. The mill pond would have been small and may have provided an alternative source of power for the nearby possible windmill site, north of Park Wood (**TR 03 NE 20**), located c.346m north of the Site, discussed in paragraphs 5.9.48 and 5.9.49.
- 5.9.43 A single Medieval artefact find of a Medieval copper alloy padlock (MKE109471) is recorded within the Site, at the eastern extent of the cable route. In addition, seven findspots are recorded within 20m of the Site near Field 29: a copper alloy pin (MKE55803), copper alloy buckle (MKE55804), copper



alloy strap end (MKE55805), three silver coins (MKE55806, MKE55808 and MKE55809); and an iron horseshoe (MKE55810).

- 5.9.44 Within the search area there are a further 18 findspots of Medieval date (MKE108468, MKE109071, MKE109072, MKE109075, MKE109077, MKE109110, MKE109271, MKE112291, MKE55900, MKE55901, MKE55972, MKE55973, MKE55982, MKE79201, MKE79202, MKE93488, TR 03 NE 251, TR 03 NE 30). These include pins, buckles, coins, a horseshoe, pottery, a figurine, a finger ring, a lead weight and seals.
- 5.9.45 Medieval activity is recorded across the search area and attests to the presence of numerous domestic and agricultural buildings, many of which are statutory listed, and have 14th, 15th and 16th century origins. The evidence collectively suggests increased activity across a wider area during this period, in comparison to preceding periods, although there is no evidence for intensive activity such as settlement within the Site.
- 5.9.46 The highest number of known assets in the search area of any period date to the Post Medieval period. This period is represented by farmsteads, findspots, mills and post holes. Of the 68 HER entries of this period, 59 are farmsteads or outfarms which shows the continued importance of agriculture to the local economy (confer Annex 4).
- 5.9.47 Two of these outfarms were once within the Site, although do not survive as above ground remains: one within Field 29, adjacent to Backhouse Wood (MKE88378; seen on an aerial photograph of 1940 but gone by 1959); and one within Field 26 (MKE88379; shown as an L-shaped building on First Edition Ordnance Survey mapping but not shown on later mapping or imagery). Further detail on the Post Medieval landscape is provided in Annex 4, but the landscape during the post medieval period comprised a dispersed pattern of settlement based on agriculture, with the land within the Site subjected to piecemeal enclosure during the 17th and 18th centuries, divided amongst approximately 11-15 landholdings, although predominantly under the overall ownership of two individuals by the mid-19th century.
- 5.9.48 In the search area, the remains of a smock mill (**TR 03 NE 31**) survive 724m south of the Site. The smock mill was extant until 1910, when it was partially dismantled for safety reasons. The base of the mill remains in use as a shop. A second mill is also recorded c.791m north -east of the Site: Stone Hill (**TR 03 NE 255**), built after 1819 and demolished prior to c.1898.



- 5.9.49 Three post holes were identified during a 2014 watching brief (**TR 03 NE 245**) during the construction of new housing 553m west of the Field 20. These produced three clay tobacco pipes dating from the 17th and 19th centuries, two sherds of pottery, a single animal bone, two fragments of ceramic building material and two hand forged iron nails. The postholes were interpreted as the remains of a fence which relates to agricultural land use (Archaeology South-East 2014³⁴).
- 5.9.50 Two Post Medieval findspots are recorded within the Site: a silver coin (MKE55835); and a copper alloy jetton (MKE112330), both from Field 12. These are close to the Roman road, where medieval finds have also been recovered, and likely evidence the continued use of the road into the Post Medieval period.
- 5.9.51 A further eight Post Medieval findspots known from the search area, including four coins (MKE55815, MKE55963, MKE55964, and MKE55967), pottery sherds (TR 03 NE 246), a copper alloy pipe tamper (MKE109470), a gold finger ring (MKE112329) and a copper alloy jetton (MKE112330). These finds are transient in nature likely resulting from casual loss, or later deposition through manuring scatters.
- 5.9.52 The Tithe Map records 75 fields within the Site, of which 42 were under pasture, 20 under arable, 6 were wooded, 3 were for hops, 2 were gardens, 1 was a pond and 1 was a quarry. This stone quarry and limekiln are depicted on the Tithe map within Field 5 of the Site and further evidence for small scale industrial activity within the Site is also suggested by the fieldname 'kiln field', within Field 6, though this could be related to the stone quarry with limekilns to the north-west, rather than be indicative of a separate kiln site. The quarry was no longer in existence by 1898. The only other evidence for non-agricultural activity in the vicinity comes in the form of the 19th century London and Dover Railway line to the north of the Site (**TQ 84 SW 1**).
- 5.9.53 Much of the rural landscape visible today within the Site and the surrounding landscape has its origins in the 17th/18th century, although as discussed above such activity appears to represent the continuation and expansion of settlement and activity established in the Medieval period, albeit with the reorganisation of the agricultural landscape.

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³⁴ Available at: Archaeology South East (2014) An Archaeological Watching Brief at the Old Abattoir, Roman Road, Aldington, Kent. Accessed July 2022, checked May 2024



- 5.9.54 The modern period is represented within the search area by four Second World War plane crash sites, all protected through the PMR Act 1986. One of these, the crash site of a Messerschmitt Bf109E-4 (**DKE22255/TR 03 NE 231**), is on or within the Site (north east of Handen Farm) at NGR TR 05949, 13741. The plane was involved in a dogfight over Kent against the allies and was shot down, crash landing at Handen Farm on 5 September 1940. The pilot, Lt Heinz Schnabel, was captured and the aircraft written off (Wanstall 2018³⁵). A photograph of the plane taken after it landed within the field shows it to be mostly in one piece, with some damage to the nose and the tip of one of the wings missing³⁶. Based on this photographic evidence it is thought that the plane and any associated remains are likely to have been salvaged following the crash.
- 5.9.55 A further crash took place in the same type of plane, on 5 October 1940, c.515m south-west of the Site (**DKE22256/TR 03 NW 113**), the pilot, again, being captured, and the aircraft written off. No information is known on whether the crash sites were subsequently excavated.
- 5.9.56 Two Supermarine Spitfires are recorded as having crashed in 1940 within the area. On 4 September 1940 a crash took place, 870m west of the Site, the pilot bailed out and the aircraft was written off (DKE22252/TR 03 NW 114). This crash site was excavated in 1980 by Brenzett Aeronautical Museum. A week later, on 11 September 1940 another crash took place, approximately 513m north of the Site, in which the pilot did not survive (DKE22227/TR 03 NE 234). This crash site was excavated in October 1974 by Kent Battle of Britain Museum.
- 5.9.57 The presence of crashed Second World War aircrafts within the vicinity of the Site and the wider landscape is not uncommon with extensive flight activity relating to the Battle of Britain, which took place in 1940 across southern England, meaning that Kent was often the backdrop to air battles. This resulted in hundreds of planes being shot and downed. It is unlikely that additional, unrecorded crash sites exist within the Site, or that artefactual material relating to the recorded crash site survives. The lack of land structures such as antitank traps and pillboxes within the search area suggests the Site was in an area not considered to be vulnerable from ground attack.

³⁵ Available at https://www.seekanddestroy.info/blog/me109-shot-down-by-41-squadron Accessed June 2022, checked May 2024

³⁶ Available at https://www.seekanddestroy.info/blog/me109-shot-down-by-41-squadron Accessed May 2024.



5.9.58 There are five HER entries of unknown origin within the vicinity of the Site. These include two findspots: a Copper Alloy Toggle (MKE56439), located c.398m north of the Site; and a copper object (MKE94398), located c.140m north of the north-eastern extent of the Site. There are also three possible below ground features, including a linear geophysical anomaly (TR 03 NE 226) c.874m east of the Site; a soil mark of a possible enclosure (TR 003 NE 236), c.417m north of the Site; and a cropmark of a ring ditch to the east of Aldington (TR 03 NE 237), c.109m east of Field 20. Although these are close to the Site the lack of dating evidence means they can only inform as to possible former human activity within the vicinity of the Site. The findspots are transient in nature.

5.10 Cartographic Sources

- 5.10.1 The earliest historic maps reviewed as part of the assessment was Andrews and Dury's map of Kent, 1769, which is not a detailed survey and only shows the general area in the vicinity of the Site (Drawing GM12014/004-005: Historic Mapping 1769 Andrews and Dury Map of Kent). This map annotates the settlements of Broad Oak, Clap Hill and Stonestreet Green (annotated as Stone Stead Green) within the vicinity of the Site, and individual farmsteads including Bank House (now known as Bank Farm), Handen and Greadley Farm, as well as 'Havegate Mill'. The present roads through the area including Roman Road, Frith Road, Calleywell Lane and Goldwell Lane, are also shown although not named. Overall, the map shows the dispersed nature of settlement in the area at this time.
- 5.10.2 The 1797 Ordnance Survey drawing was the earliest map viewed which shows the Site in detail (Drawing GM12014/004-006: Historic Mapping 1797 Ordnance Survey). The fields are more numerous and smaller in size than the current layout. The 1797 map shows the three main roads crossing through the Site: Roman Road/Bank Lane running north-west to south-east; and Church Lane and Calleywell Lane, both running north-east to south-east, with the additional loop of Goldwell Lane, east of Stonestreet Green, to the east of Calleywell Lane. These routes largely reflect the undulating landscape: the north-west to south-east routes following the higher ground; and the north-east to south-western roads crossing and inter-linking the lower-lying landscape in the shallow valley of the East Stour River. The settlement shown on the map continues to reflect that characteristic of dispersed farmsteads, though with a more concentrated settlement in the immediate vicinity of the Site at Stonestreet Green.



5.10.3 Land within the Site was within the parishes of Mersham (recorded 1841), Aldington (recorded 1842) and Smeeth (recorded 1840) (Drawing GM12014/004-007: Historic Mapping - Tithe Maps of Smeeth (1840), Mersham (1841) & Aldington (1842)). A fuller analysis of the Tithe Awards is included in the Archaeological Landscape Assessment in Annex 4. The mapping shows that some fields had been amalgamated since the late 18th century. In addition, a lime kiln and stone quarry are recorded within Field 5 and a second kiln may have been present in Field 6, suggested through fieldname evidence. Table 5.1 contains a summary of each field with any features of note identified:

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Table 5.1: Sur	Table 5.1: Summary of Tithe Map Observations				
Site Field Number & Tithe Map	Land Parcel Description	Features			
1 (Mersham)	Elements of four land parcels (599, 600, 601 and 603).	Two footpaths cross field Three former internal field boundaries			
2 (Mersham)	Elements of two land parcels (599 and 600).	One footpath crosses field One former internal field boundary South-eastern field boundary to lane remains			
3 (Mersham)	Elements of five land parcels (565, 567, 568, 569 and 587).	Four former internal field boundaries External field boundaries remain			
4 (Mersham)	One land parcel (566).	External field boundaries remain			
5 (Mersham)	Four land parcels (570, 571, 572 and 573)	Land parcel 570 is a stone quarry and 571, a field which covers the majority of Field 5, 'quarry field'. Parcel 571 contained a lime kiln. The two land parcels to the south-west are woodland. The boundary on the west remains unchanged.			



Table 5.1: Sur	Table 5.1: Summary of Tithe Map Observations				
Site Field Number & Tithe Map	Land Parcel Description	Features			
6 (Mersham)	One land parcel (82)	External field boundaries remain			
7 (Mersham and Aldington)	Elements of 10 land parcels (574, 575, 79, 79a, 80, 86, 81, 81a, 87 and 89).	Nine former internal boundaries External field boundaries remain			
8 (Aldington)	Five land parcels (84, 85, 126, 127 and 132).	Four former internal boundaries External boundaries remain			
9 (Aldington)	Two land parcels 83 and 133.	External boundaries remain Bank House farm survives to the south-east			
10 (Mersham and Aldington)	Two land parcels (558 and 559).	One former internal field boundary External field boundaries remain			
11 (Mersham and Aldington)	Two land parcels (559 and 134).	One former internal field boundary External field boundaries remain			
12 (Aldington)	Elements of three land parcel (157, 156 and 136).	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '			
13 (Aldington)	Elements of six land parcels (135, 136, 156, 139, 137 and 150).	Two footpaths cross field Former sheepfold at NW corner of 137 Five former field boundaries			



Table 5.1: Sur	Table 5.1: Summary of Tithe Map Observations			
Site Field Number & Tithe Map	Land Parcel Description	Features		
		Elements of external field boundaries remain		
14 (Aldington)	Three land parcels (139, 138 and 142).	Two former internal field boundaries Element of eastern external field boundary remains		
15 (Aldington)	Two land parcels (149 and 150).	One former internal field boundary External field boundaries remain		
16 (Aldington)	Two land parcels (142 and 143).	One former internal field boundary External field boundaries on west, north and east remain		
17 (Aldington)	Five land parcels (152, 151, 222, 223 and 153).	Four former internal field boundaries Small structure southern extent parcel 151 External boundaries mostly remain.		
18 (Aldington)	Two land parcels (148 and 233).	Two footpaths cross field One former internal field boundary Small structure SE extent parcel 148 External boundaries remain		
19 (Aldington)	Five land parcels (145, 146, 146a, 147 and 147a).	One footpath crosses field Four former internal field boundaries External boundaries remain		
20 (Aldington)	Five land parcels (335, 334, 333, 333a and 340).	One footpath crosses parcel 340 Three former internal field boundaries		



Table 5.1: Sur	Table 5.1: Summary of Tithe Map Observations				
Site Field Number & Tithe Map	Land Parcel Description	Features			
		West and east external boundaries remain			
21 (Aldington)	One land parcel (340).	Two footpaths cross field East and west external boundaries remain			
22 (Aldington)	One land parcel (341).	External boundaries remain			
23 (Aldington)	One land parcel (235).	Two footpaths cross field External boundaries remain			
24 (Smeeth)	Part of a much larger land parcel (139).	Two footpaths cross field Western external boundary remains, though historically a millrace or small burn			
25 (Smeeth)	One land parcel (149).	Western, northern and southern boundaries remain			
26 (Smeeth)	Three land parcels (36, 135 and 136).	Footpath crosses 136. Two former internal field boundaries Western extent contains an unlabelled small feature within an enclosure 'Shingleton Field' External boundaries remain			
27 (Smeeth)	Two land parcels (132 and 133).	Footpath crosses 132 and 133 The land parcel includes an underpass for a stream beneath the railway, separating plots			



Table 5.1: Summary of Tithe Map Observations			
Site Field Number & Tithe Map	Land Parcel Description	Features	
		External boundaries remain	
28 (Smeeth and Aldington)	Two land parcels (134 and 353).	Footpath crosses 134. Former internal field boundary External boundaries remain	
29 (Aldington)	Two land parcels (354 and 355)	Former internal field boundary Former structure at southern extent External boundaries remain	

- 5.10.4 The 25-inch OS Map of 1898 (Kent LXXIII.7), revised in 1896, shows some changes to the land within the Site, largely in the form of field boundaries being altered (Drawing GM12014/004-008: Historic Mapping – Ordnance Survey Mapping 1898 and 1946):
 - Field 1: Internal field boundaries moved and altered;
 - Field 3: one internal field boundary removed;
 - Field 5: quarry and lime kiln no longer shown;
 - Field 7: three internal field boundaries removed;
 - Field 8: internal field boundaries aligned and standardised;
 - Field 11: an internal field boundary removed;
 - Field 17: two field boundaries and a small structure removed;
 - Field 18: the internal field boundary and small structure removed and the public footpath realigned;
 - Field 19: small former gardens removed from north-east boundary, a footpath realigned, new footpaths created along the southern boundary and towards the northern boundary, as well as construction of a sheepfold towards the southern extent;



- Field 20: realignment of a field boundary and creation of a field boundary, as well as the realignment of a footpath;
- Field 21: the realignment of a footpath;
- Field 23: a footbridge now shown (although probably existed previously as the footpaths led here);
- Field 24: the removal of one footpath;
- Field 26: the removal of a field boundary and annotation of a small structure (previously depicted) as 'sheepfold', 'Smeeth Station' buildings had been constructed at the northern extent of the field and an L-shaped building had been constructed towards the northern-eastern extent;
- Field 28: the removal of the internal field boundary and introduction of new footpath adjacent to it; and
- Field 29: the removal of the internal field boundary and two new footpaths crossing the parcel.
- 5.10.5 The 25-inch OS Map of 1946 (Kent LXXIII.3), revised in 1939, shows some further changes to field boundaries (Drawing GM12014/004-008: Historic Mapping Ordnance Survey Mapping 1898 and 1946):
 - Field 7: a fourth former internal field boundary removed;
 - Field 10: an additional field boundary shown;
 - Field 11: internal field boundary removed;
 - Field 17: two additional internal field boundaries shown;
 - Field 18: two additional field boundaries shown;
 - Field 19: one internal field boundary removed;
 - Field 20: the extension of an orchard from the west to within the field;
 - Field 22: the removal of the narrow strip of woodland at the western extent;
 - Field 24: now shown containing electricity pylons; and
 - Field 26: new rectangular building shown to the south of Smeeth station, with the removal of L-shaped building further east.

5.11 Aerial Photographs



- 5.11.1 Aerial photography was viewed using Historic England's Aerial Photo Explorer³⁷ and Historic England Archives, in addition to reviewing cartographic sources. This provides a live snapshot of the landscape and its use at that moment in time. Aerial photography largely shows the Site in agricultural use.
- 5.11.2 A photograph from 1940 shows a building, potentially a house, reached via a track to the south-west within Field 29. Faint trackways are visible across the eastern field. This is at the same location as the building first shown on the Tithe map mentioned above.
- 5.11.3 A photograph from 1946 (RAF_106G_UK_1449_RP_3332) was taken from above Stonestreet Green. The field boundaries remain similar to the 1946 OS map. Field 20 contains an orchard, as noted above. No bomb damage or cratering is noted in the Site.
- 5.11.4 Several photographs from 1959 cover the Site. The land parcel containing Fields 12-16 shows some field boundaries no longer in existence; Field 20 contained fewer field boundaries although some internal divisions survived; and Field 29 no longer contains a building.
- 5.11.5 Satellite Imagery from 1990 (Google Earth image 12/1990, courtesy of KCC) shows many of the internal field boundaries still in place. There had been some removal of field boundaries within Fields 12-16, although Field 12 was relatively unchanged from Tithe map of 1842. Field 17 no longer contained internal boundaries and Field 19 had been divided centrally rather than to the east.
- 5.11.6 By 2003 (the date of satellite imagery), most internal divisions within each field no longer survived and the current field layout had been established. Fields 10-11, 12-16 and 20-22 had been amalgamated into larger fields.

5.12 Geophysical Survey

- 5.12.1 To inform the EIA, the Site has been subject to a geophysical survey which was undertaken in 2022 (see Annex 5) (Magnitude Surveys 2023). The whole Site was surveyed, other than c.3.63 hectares of land which was not suitable for survey owing to ground conditions, inaccessible areas such as Sellindge substation and small areas owing to minor changes to the final Order limits.
- 5.12.2 The survey identified possible features of archaeological origin within the southwest of the Site across Fields 1 and 2, 4, 5, 7 and 8 (Drawing GM12014/004-

³⁷ Accessible at https://historicengland.org.uk/research/results/aerial-archaeology-mapping-explorer/ Accessed June 2022, checked May 2024



- 010: Features identified through geophysical survey). Fragmented partial enclosures, possibly indicating the presence of former field systems, were recorded in the western extent of Field 1, with similar, more concentrated features across the centre of Field 2. A possible enclosure, measuring c. 70m by c. 30m with internal subdivisions, was identified in the centre of Field 4 and the western extent of Field 5, along with possible associated anomalies surrounding the enclosure. Two possible double-ditched trackways were identified across the centre of Fields 7 and 8, with the trackway in Field 8 appearing to culminate at a sub-rectilinear enclosure, measuring c. 53m by c. 17m. These features are undated, although their form suggests a possible late Prehistoric to Medieval date.
- 5.12.3 Anomalies of agricultural origin were identified, including drainage features and evidence of modern ploughing, along with mapped and unmapped field boundaries and tracks, likely of Post Medieval or Modern origin.
- 5.12.4 Anomalies of an undetermined origin were also identified across the Site. These may relate to archaeological, agricultural, Modern or natural origins. The impact of Modern activity was identified around field edges, surrounding pylons and buried services which may have obscured weaker anomalies. Natural variations were also identified across the area, likely from topographical changes and changes in underlying geology.
- 5.12.5 No geophysical anomalies were noted within with Site (north east of Handen Farm) which may be indicative of any aircraft remains, further indicating that the aircraft has been salvaged.
- 5.12.6 Furthermore, no geophysical anomalies were noted in the location of the kiln and stone quarry recorded on the Mersham Tithe map, within Field 5; nor within the parcel recorded as "Kiln Field" on the Aldington Tithe map (Field 6). It is however possible that any remains could have been masked by overlying natural spread.

5.13 Archaeological Monitoring

- 5.13.1 To inform the EIA, archaeological monitoring of ground investigations, which comprised the excavation of 3 trial pits and 3 windowless sample boreholes, was undertaken in February 2023 (see Annex 6) (Wardell Armstrong 2023).
- 5.13.2 The trial pits and boreholes were spread across the Site. Windowless sample borehole 3 (WS3) was positioned in the Northern Area of Site, Field 27; the final two (WS5 and WS8) were situated in the South-Western Area, in Fields 4 and



- 7 respectively. Trial Pit 3 (TP3) was located in the Central Area, within Field 25, Trial Pit 4 (TP4) within the cable route to Sellindge Substation, and finally, Trial Pit 5 (TP5) in the South Eastern Area, within Field 21.
- 5.13.3 No archaeological deposits or features were observed during the course of the ground investigation. Much of the Site was set to grass with topsoil to a maximum depth of 0.40m. Below this, alluvium comprising fine silty sandy clays were encountered to a minimum thickness of 0.50m and a maximum thickness of 1.15m to the north, in close proximity to the East Stour River.
- 5.13.4 However, the absence of observed archaeology within the trial pits and windowless borehole samples does not preclude the possibility of the presence of below ground archaeology. It should be noted that geologically recent fluvial deposits, such as the alluvium recorded during this ground investigation, can mask preserved in-situ archaeological deposits.

5.14 Archaeological Trial Trenching

- 5.14.1 To inform the EIA, a trial trench archaeological evaluation, which comprised the excavation of 13 trenches and 4 geoarchaeological test pits, was undertaken between July and August 2023 (see Annex 7) (Wardell Armstrong 2023). Four of the trenches, along with the test pits, were placed within the Northern Area, specifically within Field 26. The remaining nine trenches were positioned either side of Bank Road, with Trenches 5, 6, 7 and 8 to the north-east, within the Central Area of the Site, and Trenches 9, 10, 11, 12 and 13 to the south-west, in the South-Western Area.
- 5.14.2 The geoarchaeological test pits were undertaken to form a palaeoenvironmental assessment of the palaeolithic archaeological and Pleistocene/Holocene palaeoenvironmental potential of the sediments. Bedrock was attained in all of the test pits and no substantial body of Pleistocene sediments was encountered. Pleistocene sediments, where present, were fine grained, thin and probably discontinuous down slope and represent poorly developed Head/Solifluction deposits.
- 5.14.3 The investigation revealed evidence of activity dating to the Bronze Age in Field 26. This activity was represented by struck flint, including a possible 'horned' scraper, recovered in two ditches and small pit in the southern end of Trench 1.
- 5.14.4 Evidence of Roman settlements was established at Bank Farm. This activity was represented by a series of pits and postholes and two ditches cut into a



deposit containing a flint blade in Trench 9. These pits and ditches were all aligned with features indicated on the geophysical survey, suggesting that there is possibly a Roman enclosure within the field Trench 9 was excavated in, on the southwestern side of Roman Road. Roman pottery and iron nails were recovered from the deposits.

- 5.14.5 Further Roman activity was indicated by a series of three pits and a large, shallow sub rectangular feature. These features were all observed in Trench 6. Roman pottery dating to the 1st Century AD was recovered from the fills of these features. These features, while separated by several fields, suggest that there were settlements along this section of the projected Roman road that may have begun in the Prehistoric period, flourished in the Roman period with the introduction of the road.
- 5.14.6 Modern deposits relating to the construction of the railway bank were encountered in Trench 4, and a large natural depression was recorded in Trench 10. Undated features were also recorded in Trench 8, but as this trench was opposite the modern farmyard for Bank Farm, it is considered that they could be related to post medieval agricultural activity.

5.15 LIDAR

5.15.1 LiDAR dataⁱ³⁸ shows several potential features within the boundary of the Site (Drawing GM12014/004-009: LiDAR data). All fields show signs of ploughing through ridge and furrow cultivation of uncertain, although likely medieval or early post medieval, origin. Fields 3, 4, 7, 18, 19, 21, 22, 23, 24, 25 and 28 show no features on LiDAR imagery. Linear features potentially representing former field boundaries of the Post Medieval or Modern periods are visible within Fields 1, 2, 8, 9, 10, 11, 12, 13, 14, 15 and 16. Other features are summarised in the Table 5.2 below:

Table 5.2: Features noted from LiDAR data			
Field	LIDAR		
number(s)			
5-6	Various anomalies, corroborating the geophysical survey		
	results which identified one of archaeological potential within		
	this area. May be linked to quarrying undertaken during the		
	19 th century.		
17	Some linear features on a north – south alignment.		

³⁸ SURVEY/LIDAR_Composite_1m_DTM_2015_Hillshade (ImageServer) (data.gov.uk), accessed June 2022

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Table 5.2: Features noted from LiDAR data		
Field	Lidar	
number(s)		
20	Large north-east south-west aligned feature.	
26	A series of anomalies within the western half of the field.	
27	A group of linear features forming an F-shape towards the	
	centre of the field – likely natural relating to watercourses	
29	Potential for earlier field boundaries and potential linear	
	features at the eastern extent.	

5.16 UXO Survey

- 5.16.1 UXO specialist Zetica has carried out an UXO Desk Study and Assessment of the Site, which forms part of the Phase I Geoenvironmental and Geotechnical Desk study (ES Volume 4, Appendix 11.2 (Doc Ref. 5.4)).
- 5.16.2 The report concludes that no records have been found indicating that the Site was bombed and no other significant sources of UXO hazard have been identified on the Site. Given this, it is considered that the Site has a low UXO hazard level
- 5.16.3 In relation to the PMR aircraft within the Site close to Handen Farm (DKE22255), records indicate that the aircraft was on return from escort duties from a Luftwaffe bombing mission and it is highly unlikely that any bombs were on board when it landed. The photographic evidence shows that the aircraft did not explode on impact and stayed relatively intact with only minimal spread of debris. The report states that the aircraft was removed from the field and broken up away from the Site.

5.17 Site Visit

- 5.17.1 A site visit and walkover was undertaken in March 2022, December 2022 and February 2024. The conditions were clear and dry. The aim of the site visit was to identify the potential for below ground remains within the Site and to confirm if any known features recorded in the HER were visible. Site photographs are included in **Annex 1**.
- 5.17.2 The open landscape parcels of the Site were under arable use with a mix of early crop, fields recently harvested and ploughed fields. The following individual potential archaeological features were observed during the visit:



- Field 22 At the northern boundary, crop in the shape of a semi-circle with significantly poorer growth, possibly suggesting previous disturbance in the area. Nothing is shown here on the geophysical survey or the LiDAR data.
- Field 29 A potential linear feature was identified within the eastern half of the Site leading up an area of higher land. This linear was not identified on geophysical survey, although some anomalies were recorded within this field. LiDAR data does show linear features within this field.
- 5.17.3 In addition to the above, although many former internal field boundaries noted from cartographic sources have been removed, a number of surviving hedgerows were noted which respect boundaries marked on Tithe mapping of the mid-19th century. These include the hedgerows forming the boundaries to Fields 3, 4, 6, 8, 9, 10, 11, 12, 13, 15, 17, 18, 19, 22, 23, 27, 28 and 29, as well as elements of the easternmost boundary of Field 14, the western, northern and eastern of Fields 16 and 25 and the western and eastern boundaries of Fields 20, 21; which all also survive as hedgerows. Historic Hedgerows have been assessed based on criteria defined by Hedgerow Regulations 1997 in Annex 3.
- 5.17.4 No above ground earthworks, which may be indicative of buried archaeological remains, were noted elsewhere on the Site. This includes the fields where the LiDAR data and geophysical survey results show possible archaeological anomalies.
- 5.17.5 No features or scatters indicative of the remains of the PMR crash site of Messerschmitt Bf109E-4 (DKE22255) were noted within the Site, further supporting the conclusion that the plane was removed at the time of the downing.



6 ARCHAEOLOGICAL POTENTIAL AND VALUE

- 6.1.1 The baseline, including the archaeological fieldwork undertaken as part of the assessment (Annexes 5 to 7 of this report), combined with the Archaeological Landscape Assessment (Annex 4 of this report), indicates the potential for surviving remains of the Prehistoric, Iron Age, Romano-British, Early Medieval, Medieval, Post Medieval and Modern periods within and in the vicinity of the Site. The majority of known evidence within the Site is of agricultural origin or represented through transient finds, although the presence of a Roman road and possible roadside activity encountered in a trial trench suggests similar activity could be found in the immediate vicinity. Within the wider landscape, known evidence includes funerary and settlement activity associated with the Prehistoric and Roman periods.
- 6.1.2 Table 6.1 summarises known features which have been identified within each field within the Site and which have the potential to retain sub-surface remains which may be impacted by the Project, as well as upstanding historic hedgerows which may also be impacted:

Table 6.1: Features identified within the Site			
Field No.	Features	Period	
1	 Former field boundaries (Tithe mapping, LiDAR) Fragmented partial enclosures, possible field systems (geophysical survey) 	Post Medieval; unknown	
2	 Roman road (TR 04 SE 120) Former field boundary (Tithe mapping, LiDAR) Enclosures, possible field systems (geophysical survey) 	Roman; Post Medieval; unknown	
3	Former field boundaries (Tithe mapping)External field boundaries survive as hedgerows	Post Medieval	
4	 Roman road (TR 04 SE 120) Possible roadside structure and ironworking evidence (geophysical survey) Western extent of possible enclosure (geophysical survey) External field boundaries survive as hedgerows 	Roman; Unknown	
5	 Roman road (TR 04 SE 120) Lime kiln (Tithe mapping) Quarry (Tithe mapping) Eastern extent of possible enclosure (geophysical survey, LiDAR) 	Roman; Post Medieval; unknown	
6	 Roman road (TR 04 SE 120) Possible former kiln ('kiln field' fieldname on Tithe Apportionment) Uncertain features (LiDAR) 	Roman; Post Medieval;	



Table 6.1: Features identified within the Site			
Field No.	Features	Period	
	 Findspot – Roman copper alloy brooch (MKE94405) External field boundaries survive as hedgerows 	unknown; Roman	
7	 Part of Parish boundary (Tithe mapping, First Edition OS mapping) Former field boundaries (Tithe mapping) Western extent of two double-ditched trackways (geophysical survey) 	Medieval; Post Medieval; unknown	
8	 Former field boundaries (Tithe mapping, LiDAR) Eastern extent of two double-ditched trackways (geophysical survey) Sub rectangular enclosure at end of one trackway (geophysical survey) External field boundaries survive as hedgerows 	Post Medieval; unknown	
9	 Roman road (TR 04 SE 120) Former field boundary (LiDAR) External field boundaries survive as hedgerows 	Roman; Likely Post Medieval	
10	 Roman road (TR 04 SE 120) Part of Parish boundary (Tithe mapping, First Edition OS mapping) Former field boundary (Tithe mapping, LiDAR) Former field boundary (1946 OS mapping) Findspots – three silver coins (MKE55817, MKE55777, MKE55778), a copper alloy brooch (MKE 55816) and a copper alloy key (MKE55834) External field boundaries survive as hedgerows 	Roman; Medieval; Early Medieval; Post Medieval; Modern	
11	 Roman road (TR 04 SE 120) Part of Parish boundary (Tithe mapping, First Edition OS mapping) Former field boundary (Tithe mapping, LiDAR) External field boundaries survive as hedgerows 	Roman; Medieval; Post Medieval	
12	 Former field boundary (LiDAR) Findspot – Roman copper alloy brooch (MKE 55849) Findspot – Post medieval copper alloy jetton (MKE 112330) External field boundaries survive as hedgerows 	Roman; Post Medieval	
13	 Former field boundaries (Tithe mapping, LiDAR) Former sheepfold (Tithe mapping) Findspot – Post medieval silver coin (MKE 55835) Elements of external field boundaries survive as hedgerows 	Post Medieval	
14	 Former field boundaries (Tithe mapping, LiDAR) Elements of eastern external field boundary survives as hedgerows 	Post Medieval	
15	- Former field boundary (Tithe mapping, LiDAR) - External field boundaries survive as hedgerows	Post Medieval	



Table 6.1: Features identified within the Site			
Field No.	Features	Period	
16	 Former field boundary (Tithe mapping) External field boundaries on west, north and east survive as hedgerows 	Post Medieval	
17	 Former field boundaries (Tithe mapping, LiDAR) Former structure (Tithe mapping) Former field boundaries (1946 OS mapping) Location of Messerschmitt Bf109E-4 crash site (DKE22255/TR 03 NE 231) Uncertain features (LiDAR) External field boundaries mostly survive as hedgerows 	Post Medieval; modern; unknown	
18	 Former field boundary (Tithe mapping) Former structure (Tithe mapping) Former field boundaries (1946 OS mapping) External field boundaries survive as hedgerows 	Post Medieval; modern	
19	 Part of Parish boundary (Tithe mapping, First Edition OS mapping) Former field boundaries (Tithe mapping) Former sheepfold (First Edition OS mapping) External field boundaries survive as hedgerows 	Post Medieval	
20	 Former field boundaries (Tithe mapping, First Edition OS mapping) Former orchard (1946 OS mapping) Large north-east south-west aligned feature (LiDAR) External field boundaries to west and east survive as hedgerows 	Post Medieval; modern; unknown	
21	 External field boundaries to east and west survive as hedgerows 	Post Medieval	
22	Semi-circular feature (site visit observation)External field boundaries survive as hedgerows	Unknown	
23	 Former footbridge (Tithe mapping and First Edition OS mapping) External field boundaries survive as hedgerows 	Post Medieval	
24	None Noted.	N/A	
25	 External field boundaries to west, north and east survive as hedgerows 	Post Medieval	
26	 Former field boundaries (Tithe mapping) Former sheepfold (Tithe mapping) Smeeth Station (First Edition OS mapping) Outfarm north-east of Evegate Mill (MKE88379), shown as L-shaped building on First Edition OS mapping Former rectangular building (1946 OS mapping) A series of anomalies (LiDAR) 	Post Medieval; Modern; unknown	
27	- A series of anomalies forming approximate F-shape – possibly natural relating to watercourses (LiDAR) - External field boundaries survive as hedgerows	Unknown	



Table 6.1: Features identified within the Site			
Field No.	Features	Period	
28	 - Part of Parish boundary (Tithe mapping, First Edition OS mapping) - Former field boundaries (Tithe mapping) - External field boundaries survive as hedgerows 	Medieval; Post Medieval	
29	 Former field boundary (Tithe mapping, LiDAR) Outfarm adjacent to Backhouse Wood (MKE88378), seen on Tithe mapping and a 1940 AP, gone by 1959 (AP) Linear anomalies at eastern extent (LiDAR and site visit observation) Findspot – Roman copper alloy mount (MKE 55807) External field boundaries survive as hedgerows 	Roman; Post Medieval; unknown	
Cable route	- Findspot – Medieval copper alloy padlock (MKE109471)	Medieval	

6.1.3 These identified features can be further summarised in terms of feature types and attributed to approximate periods for ease of understanding, as shown in Table 6.2, although it should be noted that only archaeological excavation can truly indicate whether such features survive and what their nature, level of survival, value and likely origin are:

Table 6.2: Value of features identified within the Site			
Feature	Field Nos.	Period	Value
Roman Road	2, 4, 5, 6, 9, 10 11	Roman	Low
Roman roadside features	4, 10	Roman	Low
Undated probable former field systems/enclosures/trackways	1, 2, 3, 4, 5, 7, 8, 9	Undated	Low
Potential features associated with Parish Boundaries	7, 10, 19, 28	Medieval	Low
Agricultural features (e.g. former field boundaries, footbridge, sheepfolds, farmsteads, structures)	12, 13, 14, 15, 16,		Low
Industrial remains (lime kiln, quarrying activity, structures	5, 6, 26	Post Medieval	Low



associated with Smeeth Station)			
Messerschmitt Bf109E-4 crash site	17	Modern	High
Findspots of various periods	6, 10, 12, 13, 29, cable route	Various	Very Low
Undated features of uncertain origin	6, 17, 20, 22, 26, 27, 29	Undated	Low
Upstanding historic hedgerows (upstanding elements of 17 th /18 th century landscape)	3, 4, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 27, 28, 29	Post medieval	Medium

6.1.4 As well as the above known features with the potential to retain below ground evidence including historic hedgerows; there is nevertheless some potential for unknown below ground archaeological features to survive within the Site, based on the known baseline. This potential is summarised per period below.

Palaeolithic

6.1.5 Overall, it is considered that the potential for Palaeolithic remains within the Site is low. Based on the known geology of the Site, it is considered that any potential is likely to limited to alluvial deposits associated with the East Stour River, which are located either partially or wholly across Fields 15, 16, 18, 19, 23, 24 and 26-29, though investigations undertaken as part of the Project did not encounter deposits of particular interest.

Prehistoric

6.1.6 The Prehistoric period is represented in the landscape to the north of the Site. This comprises settlement, field systems and artefacts all of which is indicative of a repeated reuse of the landscape, common during the Prehistoric period. This is especially prevalent at the settlement site at Low Stock Farm, which evidences a continuation of activity up to the Medieval period. These settlement features are present north of the East Stour River. This is a key consideration when identifying the potential for archaeological remains of this period. The land



chosen for settlement is c.70m AOD, on well-drained soils overlying Hythe and Atherfield Clay bedrock. The land to the south is at a lower height of c.45m AOD, on poorly draining Weald Clay within the river valley. As such, this low-lying land would likely have been more susceptible to flooding, whereas the land to the north would have, most likely, remained dry whilst also being conveniently located near to a water source and fertile ground. This is reflected by known activity along the Kent Downs, where Prehistoric activity often occurred on higher ground. The elevated ground would have also provided a better vantage point to identify hazards and / or resources. Lower lying ground was often used for agricultural purposes.

- 6.1.7 Within the Site, the elevated areas of ground are noted to be underlain by Hythe and Atherfield Clay bedrock, which lie partially or wholly across Fields 4-6, 8-14, 17, 20, and 22; these fields being located along Aldington Ridge. The geophysical survey identified potential archaeological features within Fields 1, 2, 4, 5, 7 and 8, with agricultural, and/or undetermined features also identified across the Site. As such, Fields 4, 5 and 8 are estimated to hold higher potential for Prehistoric remains than land elsewhere in the Site. In the north of the Site, across Fields 25, 26, 28 and 29, whilst these are also located on similar geology their proximity and similar elevation to the East Stour River is judged to reduce the potential for remains of this date. However, both at Cheesemans Green and Park Farm East, Prehistoric settlement is noted in areas of higher ground where the underlying geology is noted to be poor-draining Wealdon Clay; therefore, geology cannot be solely relied upon to inform potential.
- 6.1.8 In consideration of the baseline presented above, the potential for Prehistoric activity is judged to be **moderate** within the higher parts of the Site, which comprise the north-eastern, south-western and south-eastern parts, where the topography and geology of the land indicate that the land may have been more attractive for occupation and/or settlement activity and/ or industrial activity, for example, iron smelting. There is no evidence for Prehistoric funerary activity within the Site.
- 6.1.9 The lower-lying land within the Order limits, in close proximity to the East Stour River is also considered to have some potential for Prehistoric remains, although this is considered to be **low** due to the potential for flooding.
- 6.1.10 Elsewhere, within the Order limits where low-lying land is identified which is not in association with a clear water source, the potential for prehistoric remains is considered to be **negligible**.



Iron Age

- 6.1.11 The baseline evidence for Iron Age activity within the search area, as found for the Prehistoric period, indicates a land use of settlement at higher points within the landscape to reduce the risk of flooding, provide a better vantage point whilst maintaining proximity to the East Stour River, and for access to available water source and fertile ground. It is also recognised that water sources were attractive places for industrial activity, as well as some ritual activity. It is notable that no Iron Age evidence is noted on the high ground in close proximity to the Site, including along Aldington Ridge.
- 6.1.12 It is judged that there is **moderate** potential for surviving evidence of Iron Age activity within the Site. Late Iron Age agricultural activity is more likely within the northern part of the Site.

Romano-British

- 6.1.13 The projected route of the Romano-British road (the alignment of which Bank Road / Roman Road follows) bisects the Site to the south of Fields 10 and 12 and to the north of Fields 1- 6 and 9. Although no clear evidence for associated activity is visible on LiDAR data or from the geophysical survey results, evidence from the trial trench evaluation has revealed a possible roadside structure within Field 6.
- 6.1.14 The adjacent Aldington Mount, however, appears less likely to be a Roman barrow, and more likely indicative of later medieval settlement, but there is a probable Roman site located c.325m south of the Romano-British Road (and 500m south of the Site). This attests to a wider Roman landscape, which included trade, military movement strategic vantage points and settlement. Furthermore, the road's association with Dover may have resulted in a higher military presence and a higher amount of internationally traded goods.
- 6.1.15 Settlement elsewhere on the Site cannot be ruled out either, the evidence at Kingsnorth Green and Park Farm East illustrating that Roman settlement did occur on the poorly draining Weald Clay.
- 6.1.16 Considering the above, it is judged that there is **moderate** to **high** potential for surviving evidence of Romano-British activity within the Site. Romano-British agricultural activity is more likely in the south along Aldington Ridge where there is potential for associated roadside and / or transient activity in the vicinity of the projected Romano-British Road (Fields 2, 4, 5, 6, 9, 10, 12, 13), and within



the north of the Site where the geology and topography of the Site more likely supports such remains.

Early Medieval

- 6.1.17 The Early Medieval period is largely represented through findspots and the presence of inhumations (i.e., The burial custom where a body is placed unburned in a grave is prevalent in the archaeological record across various periods and regions. This practice is often considered a significant cultural trait rooted in ideological beliefs.) c.880m north of the Site (TR 03 NE 10). The findspots are evidence of transient activity across the landscape. The lack of settlement activity during this period is not uncommon throughout Britain, with evidence for occupation generally sparse. The Domesday Book does identify settlement in the vicinity of the Site, at Evegate to the west of Park Wood Cottage and Stansted within the vicinity of modern-day Stonestreet Green. As such, there is potential for associated activity close to these areas during the latter half of this period, although it should be noted there are no finds recorded to confirm this. The surrounding land was likely used for agricultural purposes during this period (including that of the Site), with potential settlement evidence to be within the immediate area of Stansted (now known as Stonestreet Green). Extensive agricultural processes in the proceeding periods might explain why no early field boundaries or ridge and furrow are identifiable on LiDAR data or the geophysical survey results. Over one thousand years of continued agricultural use may have truncated landscape features leaving limited above discernible ground remains. The Roman Road, however, likely continued to be used during this period as a prominent landmark feature in use until the Post Medieval period.
- 6.1.18 Overall, the potential for activity dating to the Early Medieval period within the Site is judged to be **negligible** to **low**.

Medieval

6.1.19 The evidence for the Medieval period, similar to the Early Medieval period, comes from documentary evidence for settlement near to the Site, although no definitive evidence has been found from within the Order limits. The recorded settlements at Evegate and Stansted (now known as Stonestreet Green) shows there was occupation during this period, which would have had associated agricultural activity. This is further demonstrated through the presence of a known field system within the study area. The HER also records industrial activity, including a quarry, associated enclosure c. 335m north of the Site at a



multi-phased site and mill pond, c.615m north of the Site. The land within the Site was historically within three parishes, and parish boundaries shown on OS mapping may have originated in the medieval period, with associated banks and ditches possible, though no such features have been identified by the baseline studies. Aldington Mount, 15m from the edge of the Order limits, may have been a medieval farmstead.

- 6.1.20 Medieval remains, if present within the Order limits, would likely relate to agricultural practices.
- 6.1.21 In consideration of the baseline presented above in Sections 5 and 6, there is **moderate** to **high** potential for remains from the Medieval period to be extant within the Site. If present, these remains would likely relate to agricultural practices, which would be of low value.

Post Medieval

- 6.1.22 Known evidence for the Post Medieval period in the Site and its vicinity reflects the continued dominance of agricultural processes in the local economy. This is evidenced through the high concentration of post medieval farmsteads. The proliferation of post medieval farmsteads combined with the results from the archaeological landscape assessment has concluded that the land within the Order limits is predominantly of 17th/18th century character.
- 6.1.23 Tithe Mapping records a quarry and a limestone kiln within Field 5, although no evidence of this was observed during the site walkover nor recorded by the geophysical survey. There is also the possibility of a second kiln within Field 6; again, no evidence observed during the site walkover nor recorded by the geophysical survey (albeit remains may have been masked by natural spreads). These features demonstrate that there was some industrial activity within the Site, albeit small scale and largely related to agricultural activity; the quarry is not shown on the 1898 OS map.
- 6.1.24 Two former farmsteads, or outfarms, are also known from within the Site, one within Field 26 and one within Field 29, so associated remains could survive in these areas. Similarly, the geophysical survey results and LiDAR data have shown former field boundaries and likely agricultural features across the Site. Except for possible features associated with Smeeth Station, suggested from structures within the Order limits in Field 26, the remaining known assets are of a transient nature; objects lost by people travelling across or working the land.



6.1.25 In consideration of the baseline presented, there is a **high** potential for archaeological remains of the Post Medieval period within the Site, likely of an agricultural nature, potentially, although not necessarily with some associated domestic activity at the locations of the outfarms. Fields 5 and 6 may retain sub surface remains of quarrying and kilns.

Modern

- 6.1.26 Little change occurred in the nature of landscape use into the 20th century, although increased mechanisation of agricultural practices in the late 20th century has resulted in the removal of internal field boundaries, resulting in larger, prairie-style fields. A new building had been added to the south of Smeeth Station by 1946, but the station closed in 1954, and all structures have since been cleared.
- 6.1.27 A Second World War era PMR crash site is recorded within the Site, with three more recorded in the search area. A photograph of the plane within the Order limits, which was taken after it landed within the field, shows it to be mostly in one piece, with some damage to the nose and the tip of one of the wings missing ³⁹. Based on this photographic evidence, as well as the negative results in this area from the UXO report and geophysical survey, it is considered that the plane and any associated pieces were salvaged at the time of its landing. This is further strengthened by no above ground evidence noted during the site walkover. Whilst there is potential for smaller associated remains to have been missed, the potential for any associated remains is judged to be negligible.
- 6.1.28 Overall, it is judged that there is **moderate** to **high** potential for discrete finds of the Modern period to be present within the Order limits.

Undated

6.1.29 The geophysical survey results have identified possible features of an archaeological origin within Fields 1 and 2, 4, 5, 7 and 8 which may comprise enclosures, field systems and double ditched trackways. Features within Fields 1, 2 and 7 are located on the low-lying Weald Clay Formation, whilst those recorded within Fields 4 and 5 are located on a west facing slope, on Atherfield Clay Formation. Features in Field 8 appear to be located across both Weald Clay Formation and Atherfield Clay Formation.

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³⁹ Available at https://www.seekanddestroy.info/blog/me109-shot-down-by-41-squadron Accessed June 2022, checked May 2024



- 6.1.30 The features are undated, although seem likely to date from between the late Prehistoric and Medieval periods. However, it is notable that none of the features are located in proximity to any known water sources, unlike that which is often found with Prehistoric and Roman sites. Furthermore, none of the features appear to relate to the projected Romano-British Road, which transects the Site.
- 6.1.31 It is judged that there is **moderate** potential for undated archaeological remains to be present within the Site.



7 ASSESSMENT CONCLUSION

7.1.1 This assessment, undertaken with due respect to guidance published by Historic England and with the utilisation of terminology in full accordance with the NPSs, has described the significance of designated and non-designated archaeological assets, including historic landscape features, with the potential to be affected by the Project. It has also determined the potential for unknown buried archaeological remains to be present within Site.

Designated assets

- 7.1.2 The PMR crash site of Messerschmitt Bf109E-4 (**DKE22255**) falls on or within the vicinity of the Site (north east of Handen Farm). However, this appears to have been salvaged at the time of its landing. It is therefore judged that if there are any remains found associated with the PMR Messerschmitt plane crash within the Site, these are most likely to comprise small metal components only.
- 7.1.3 There are no other designated archaeological assets within the Site.

Non-designated assets

- 7.1.4 Overall, there is no evidence for archaeological remains of high (national) importance to be present within the Site; the PMR crash site is by definition of national importance, there is no evidence to reasonably indicate the potential for the presence of archaeological remains which would preclude development.
- 7.1.5 The Kent HER records 18 entries within the Order limits. Of these recorded entries, 15 are findspots largely found through metal detecting and are of Roman to Post Medieval date. The remaining three entries comprise Bank Road/Roman Road which bisects the central and western part of the Site and respects the alignment of a projected Romano Road (HER TR 04 SE 120), and two Post Medieval farmsteads (HER MKE88378 and MKE88379).
- 7.1.6 Geoarchaeological test pits were undertaken in order to form a palaeoenvironmental assessment of the Palaeolithic archaeological and Pleistocene/Holocene palaeoenvironmental potential of the sediments. No substantial body of Pleistocene sediments was encountered and the potential for Palaeolithic remains is considered to be Low, though if present, dependent on their nature, they could be considered to be up to Medium value, based on rarity and likely regional importance.
- 7.1.7 Geophysical survey has highlighted possible archaeological features. The majority of these features were identified as being of agricultural origin, comprising earlier field boundaries and ridge and furrow cultivation. However,



- possible archaeological features were identified in Fields 1, 3, 4, 6 and 7, including a potential square enclosure within Field 7.
- 7.1.8 The trial trench archaeological evaluation identified evidence of Roman settlement at Bank Farm, evidenced by a series of pits and postholes and two ditches. These features reflected the results of the geophysical survey, suggesting that there is possibly a Roman enclosure on the southwestern side of Roman Road.
- 7.1.9 Further Roman activity suggests that there was settlement along the section of the projected Roman road within the Site, that may have begun in the Prehistoric period, and flourished in the Roman period with the introduction of the road.
- 7.1.10 The potential for prehistoric remains overall is considered to vary from between Negligible and Moderate across the Site, with the potential for Iron Age remains considered to be Moderate. If present, dependent on their nature and condition, these remains would likely be of Low value, based on an anticipated local importance.
- 7.1.11 In light of the evidence from archaeological evaluation within the Site, the potential for remains of the Roman period is considered to be Moderate to High. These would likely be of Low value, based on an anticipated local importance.
- 7.1.12 The potential for remains of the Early Medieval and Medieval periods is considered to be Negligible to Low for Early Medieval and Moderate to High for Medieval . If present, dependent on their nature, they would likely be of Low value, based on an anticipated local importance.
- 7.1.13 Since at least the 17th/18th century, and probably much earlier, the Site has remained in agricultural use, as evidenced by cartographic records. The potential for Post Medieval remains is considered to be High, although these would likely be of Low value, based on an anticipated local importance.
- 7.1.14 The potential for Modern remains is considered to be Moderate to High, although again such remains would likely be of Low value, based on an anticipated local importance.
- 7.1.15 There is, however, still a risk that unexpected archaeological remains of all periods may be discovered within the Site, which would be addressed by archaeological mitigation, to be secured through the implementation of a programme of archaeological works by DCO Requirement and subject to agreement with KCC. An Archaeological Management Strategy (Doc Ref.



7.17) which sets out the scope, guiding principles and methods for the planning and implementation of further archaeological mitigation works has been produced in consultation with KCC, which demonstrates the commitment of a programme of archaeological mitigation as part of the Project.

Historic Landscape

7.1.16 The Archaeological Landscape Assessment (Annex 4) identified that the current landscape within the Site derives from 17th to 18th century enclosure, with few earlier elements of the landscape surviving. The surviving historic landscape elements are judged to be of medium value. Further detail at a landscape level is provided in the Archaeological Landscape Assessment at **Annex 4.**

Response to Policy

- 7.1.17 In respect to NPS EN-1 and NPS EN-3, this report constitutes the appropriate desk-based assessment required which has included an assessment of heritage assets with an archaeological interest. Archaeological mitigation through the implementation of a programme of archaeological works are secured by Requirement in the **Draft Development Consent Order (Doc Ref. 3.1)** and subject to agreement with ABC in consultation with KCC. An **AMS (Doc Ref. 7.17)**, which sets out the scope, guiding principles and methods for the planning and implementation of further archaeological mitigation works, has been produced which demonstrates the commitment of a programme of archaeological mitigation as part of the Project.
- 7.1.18 In respect to the adopted local plan policy, the proposals would not be in contradiction of ABC policy ENV15, whereby an appropriate archaeological response is secured by Requirement in the **Draft Development Consented Order (Doc Ref. 3.1)** which would ensure an appropriate programme of recording and archiving in the circumstance where non-designated archaeological remains may be lost.

Assessment

7.1.19 The Project has the potential for direct impact on known and unknown archaeological assets at the Site. These assets identified within this DBA are assessed regarding impact and significance in **ES Volume 2**, **Chapter 7**: **Cultural Heritage (Doc Ref. 5.2)**.



8 GLOSSARY

Archaeological Interest

There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.

Source: Historic England Conservation Principles 2017

Architectural Interest

The properties of a place resulting from and revealing the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types.

Source: Historic England Conservation Principles 2017

Artistic Interest

The influence of human imagination and skill to convey meaning through all forms of creative expression on the physical properties of a place and its setting or on their associations and appreciation. Artistic interest may relate to the influence of a place on art as well as the use of skill and design embodied in its fabric.

Source: Historic England Conservation Principles 2017

Harm

Changes for the worse, here primarily referring to the effect of inappropriate interventions on the heritage interest of a place that reduces their values to society.

Source: Historic England Conservation Principles 2017

Historic Interest

The connections between a place and past lives and events.

Source: Historic England Conservation Principles 2017

Significance

The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but

also from its setting.

Source: NPPF 2023.



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EPL 001 LIMITED STONESTREET GREEN SOLAR ENVIRONMENTAL STATEMENT VOLUME 4 APPENDIX 7.1 ARCHAEOLOGICAL DESK BASED ASSESSMENT



Annex 1 Archaeology Site Visit Plates



All photographs taken on the 8th March 2022, using a Canon PowerShot SX620 HS with a 25-625 (25x) f/3.2-6.6 lens.

See the Plate Location Plan provided at the end of this Annex for the location of each Plate.



Plate 1: View of hard standing and chicken sheds next to Field 1 and 2.





Plate 2: View looking north-east across Field 1.



Plate 3: View looking north, Field 2.





Plate 4: View looking south, Field 3.



Plate 5: View looking south-east, Field 3.





Plate 6: View looking east, Fields 4 & 5.



Plate 7: Looking west from Field 4 across to Field 3.





Plate 8: Looking north, Field 6.



Plate 9: Looking west, Field 7.





Plate 10: Looking south, Field 8.



Plate 11: Looking south-east, Field 9.





Plate 12: Looking south, Field 9.



Plate 13: View north, Field 10.





Plate 14: Looking north, Fields 10 and 11.



Plate 15: View looking north-west, Field 12.





Plate 16: Looking north, Fields 13 and 14.



Plate 17: View east, Field 13.





Plate 18: View looking north, Fields 13 and 14.



Plate 19: View looking north-west across Fields 13, 14, 15 and 16.





Plate 20: View north, Field 16.



Plate 21: View west, Field 17.





Plate 22: View north-west, Field 17.



Plate 23: No visible remains of Protected Military Remains crash site of Messerschmitt Bf109E-4 (HER DKE22255), Photo of Field 17.





Plate 24: View north-west, Fields 18 and 19.



Plate 25: View north across Fields 18 and 19.





Plate 26: View across Fields 21 and 22 looking north.



Plate 27: View across Field 20.





Plate 28: View north towards Fields 21 and 22. The overhead lines which cross the field can be seen here.



Plate 29: Field 23 looking south east





Plate 30: Looking west from Field 23 towards Fields 18 and 19



Plate 31: Looking north across Field 23





Plate 32: Looking north across Field 24



Plate 33: Looking south-west across Field 24





Plate 34: Looking south across Field 25 which shows the existing infrastructure within the Field.



Plate 35: Looking across Field 25 toward the south-west





Plate 36: Looking north east across Field 25 where the existing infrastructure can be seen on the left of the photograph and farming apparatus to the right



Plate 37: Western extent of Field 26 showing a stoned area and silage bales. Photograph taken looking north toward the train line.





Plate 38: Photograph taken looking east across Field 26, train line and road can be seen to the left of the image and Fields 27/28/29 can be seen in the distance on the right half of the image



Plate 39: Photograph taken looking east across the southern half of Field 26





Plate 40: Photograph taken looking east across Field 27



Plate 41: Photograph taken looking west across Field 27 with Field 26 clearly present in the background.





Plate 42: Photograph taken facing west with Fields 26 and 27 on the right side of the image



Plate 43: Photograph taken facing south. This shows the most south-eastern extent of Field 29

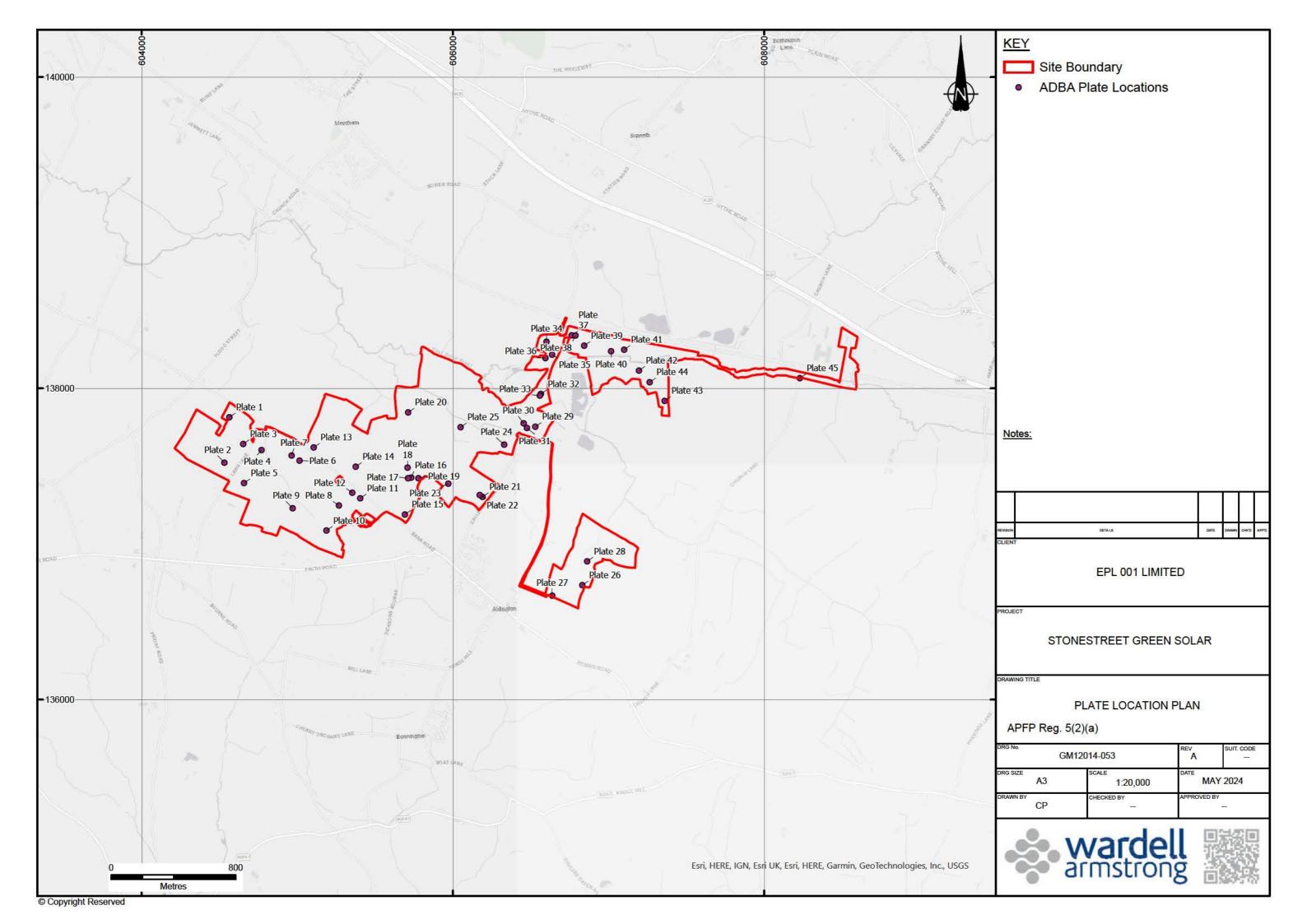




Plate 44: Photograph taken facing east across Field 29



Plate 45: Photograph taken from Church Lane facing east along the Cable Route Corridor





Annex 2 Archaeology Impact Assessment Methodology



Archaeology Impact Assessment Methodology

The assessment methodology to be employed to assessing the impact of the proposals upon archaeological assets has been informed by the following documents:

- Guidance on Heritage Impact Assessments for Cultural World Heritage Properties; ICOMOS (2011);
- Principles of Cultural Heritage Impact Assessment in the UK; IEMA, IHBC and CIfA (2021);
- NPPF (2023);
- The Setting of Heritage Assets; Historic England (2017); and
- Design Manual for Roads and Bridges, LA 104 Environmental Assessment and Monitoring (Highways England, 2020).

The purpose of the assessment approach is to understand the archaeological asset/s affected and evaluate the consequences of change. To evaluate the consequences of change the following three steps are to be followed:

- understanding change (a factual statement of how a proposal would change an archaeological asset or its setting, including how it is experienced);
- assessing impact (a measure of the degree to which any change would impact on significance); and
- 3. weighting the effect (the measure that brings together the magnitude of the impact and the archaeological asset's importance).

This approach is advocated by ICOMOS, IEMA and Highways England.

Using professional judgement, archaeological assets will be assessed on an individual basis and regional variations and individual qualities are taken into account, where applicable. It is proposed that value is ascribed to an asset using the following guidance:

Assigned	Typical description/value	
Value		
Very High	Very high importance and rarity, international scale and very limited potential for substitution such as World Heritage Sites, Scheduled Monuments, Grade I listed buildings, Grade I Registered Parks and Gardens, archaeological remains of equal significance to a schedule monument	



Assigned Value	Typical description/value
High	High importance and rarity, national scale, and limited potential for substitution such as Grade II* listed buildings, some Grade II listed buildings, some Conservation Areas, Grade II* and some Grade II Registered Parks and Gardens, Registered Battlefields. Non-designated heritage assets (archaeological sites, historic buildings, monuments, parks, gardens or landscapes) that can be shown to have demonstrable national or international importance. Well preserved historic landscape character areas, exhibiting considerable coherence, time-depth or other critical factor(s).
Medium	Medium or high importance and rarity, regional scale, limited potential for substitution such as some Grade II listed buildings, some Conservation Areas, some non-designated heritage assets which retain a high degree of integrity and authenticity. Non-designated heritage assets (archaeological sites, historic buildings, monuments, park, gardens or landscapes) that can be shown to have demonstrable regional importance. Averagely preserved historic landscape character areas, exhibiting reasonable coherence, time-depth or other critical factor(s). Historic townscapes with historic integrity in that the assets that constitute their make-up are clearly legible.
Low	Low or medium importance and rarity, local scale such as some non-designated heritage assets including some locally listed buildings and archaeological sites, historic buildings, monuments, park, gardens or landscapes that can be shown to have demonstrable local importance. Assets whose values are compromised by poor preservation or survival of contextual associations to justify inclusion into a higher grade.
Very Low	Very low importance and rarity, local scale such as non-designated heritage assets which have been largely altered previously in terms of fabric, context for example. Assets whose values are compromised by poor preservation or survival of contextual associations to justify inclusion into a higher grade. Landscape with no or little significant historical merit

This is based upon the 2011 guidance presented by ICOMOS, Highways England and in consideration of the NPPF.

In understanding the effect of a change of a heritage asset it is proposed magnitude or scale of impact to a heritage asset be assigned with reference to a four-point scale, as follows:

Grade	Typical description/value
High	Changes such that the asset and its significance are totally altered or destroyed. Comprehensive change to, or total loss of, elements of setting that would result in harm to the asset and the ability to understand and appreciate its significance.
Medium	Change such that the asset and its significance are significantly altered or modified. Changes such that the setting of the asset is notably different, affecting the significance and resulting in changes in the ability to the understand and appreciate the significance of the asset.



Low	Changes such that the significance of the asset is slightly altered.			
	Changes to the setting that have a slight impact on the significance			
	resulting in changes in our ability to understand and appreciate the			
	significance of the asset.			
Very	Changes to the asset that hardly affect significance. Changes to the			
Low	setting of an asset that have little effect on significance and no real change			
	in our ability to understand and appreciate the significance of the asset.			

In assigning weight to a potential impact, the below Matrix, adapted from the 2011 ICOMOS guidance is used as a guide. In assessing whether impact is deemed to be significant in terms of EIA, this is also based upon professional judgement with full consideration as to the significance of an asset and where that significance is derived from.

	Very	Slight	Moderate/large	Large/ very	Very large
	High			large	
Value	High	Slight	Slight/moderate	Moderate/large	Large/very
					large
	Medium	Neutral/slight	Slight	Slight/Moderate	Moderate/large
Asset	Low	Neutral/slight	Neutral/ slight	Slight	Slight/moderate
SS	Very	Neutral	Neutral/ slight	Neutral/ slight	Slight
٩	Low				
		Very Low	Low	Medium	High
		Magnitude / Scale of Impact			



Annex 3 Historic Hedgerow Assessment



Historic Hedgerow Assessment

In determining which hedgerows are important on archaeological or historic grounds, the Hedgerows Regulations 1997 state the following criteria:

Hedgerows Regulations 1997 Schedule 1 Part II

- 1. The hedgerow marks the boundary, or part of the boundary, of at least one historic parish or township; and for this purpose "historic" means existing before 1850.
- 2. The hedgerow incorporates an archaeological feature which is—
 - (a) included in the schedule of monuments compiled by the Secretary of State under section 1 (schedule of monuments) of the Ancient Monuments and Archaeological Areas Act 1979; or
 - (b) recorded at the relevant date in a Sites and Monuments Record.
- The hedgerow—
 - (a) is situated wholly or partly within an archaeological site included or recorded as mentioned in paragraph 2 or on land adjacent to and associated with such a site; and
 - (b) is associated with any monument or feature on that site.
- 4. The hedgerow—
 - (a) marks the boundary of a pre-1600 AD estate or manor recorded at the relevant date in a Sites and Monuments Record or in a document held at that date at a Record Office; or
 - (b) is visibly related to any building or other feature of such an estate or manor.
- The hedgerow—
 - (a) is recorded in a document held at the relevant date at a Record Office as an integral part of a field system pre-dating the Inclosure Acts; or
 - (b) is part of, or visibly related to, any building or other feature associated with such a system, and that system—
 - (i) is substantially complete; or
 - (ii) is of a pattern which is recorded in a document prepared before the relevant date by a local planning authority, within the meaning of the 1990 Act, for the purposes of development control within the authority's area, as a key landscape characteristic.



Criteria 1

No hedgerows are indicated by the historic mapping as denoting a parish boundary. Parish boundaries fall within the Site, although are not marked by hedgerows. As such, no hedgerows would be classified as important under the Paragraph 1 criterion.

Criteria 2

There are no scheduled monuments within the Site. Therefore, no hedgerows within the Site would be classified as important under Paragraph 2 criteria.

Criteria 2b

There are some historic hedgerows associated with the Roman Road, which has been utilised as landscape division; however, there is no anticipated impact to these hedgerows.

Criteria 3

There are some historic hedgerows associated with the Roman Road, which has been utilised as landscape division; however, there is no anticipated impact to these hedgerows.

Criteria 4

The land within the footprint of the Site is not known to have been associated with a pre-1600 AD estate. Therefore, no hedgerows within the Site would be classified as important under Paragraph 4 criteria.

Criteria 5

Maps suitable to assess the presence of important hedgerows under these criteria comprise:

- 1797 Ordnance Survey;
- Smeeth Tithe map of 1840;
- Aldington Tithe map 1841; and
- Mersham Tithe map 1842.

A number of surviving hedgerows were noted which respect boundaries marked on Tithe mapping of the mid-19th century. These include the hedgerows forming the boundaries to Fields 3, 4, 6, 8, 9, 10, 11, 12, 13, 15, 17, 18, 19, 22, 23, 27, 28 and 29, as well as elements of the easternmost boundary of Field 14; the western, northern and eastern of Fields 16 and 25; and the western and eastern boundaries of Fields 20, 21, which all also survive as hedgerows.



Historic hedgerows noted existing within the Site are identified in Figure GM12014 004-014 Surviving historic landscape features within the Order limits at Annex 4: Archaeological Landscape Assessment.



Annex 4 Archaeological Landscape Assessment



EPL 001 LIMITED

STONESTREET GREEN SOLAR

ARCHAEOLOGICAL LANDSCAPE ASSESSMENT

May 2024



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STONESTREET GREEN SOLAR

ARCHAEOLOGICAL LANDSCAPE ASSESSMENT

May 2024



This report has been prepared by Wardell Armstrong LLP with all reasonable skill, care and diligence, within the terms of the Contract with the Client. The report is confidential to the Client and Wardell Armstrong LLP accepts no responsibility of whatever nature to third parties to whom this report may be made known.

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ENERGY AND CLIMATE CHANGE ENVIRONMENT AND SUSTAINABILITY INFRASTRUCTURE AND UTILITIES

LAND AND PROPERTY



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APPENDICES

APPENDIX 1: PLATES

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DRAWINGS (APPENDIX 3)

GM12014 004-013 A representation of the $17^{th}/18^{th}$ century landscape based on mid- 19^{th} century mapping

GM12014 004-014 Surviving historic landscape features within the Site boundary



SUMMARY

Wardell Armstrong LLP (WA) was commissioned by EPL 001 Limited (the 'Applicant') to undertake an archaeological landscape assessment of land at Stonestreet Green, near Aldington, Kent (centred NGR TR 05834 37447), referred to as 'the Site', in relation to the Development Consent Order (DCO) application for Stonestreet Green Solar ('the Project'). The Project comprises the construction, operation, maintenance, and decommissioning of solar photovoltaic ('PV') arrays and energy storage, together with associated infrastructure and an underground cable connection to the existing National Grid Sellindge Substation.

This archaeological landscape assessment work aims to help inform the Archaeological Desk Based Assessment for the Site, which will provide an assessment of the significance of any known or potential heritage assets of an archaeological nature within the Site and set out the potential below ground impacts on the archaeological resource as a result of the Project; and support the Heritage Statement, which will consider indirect impacts on heritage assets. This assessment forms **Annex 4** of the Archaeological Desk Based Assessment.

This assessment has allowed a comprehensive study of the present landscape within the Order limits and concluded that it largely reflects the 17th/18th century agricultural alterations of the area. A number of surviving individual landscape features have been identified with origins in this period, predominantly field boundaries respected by hedgerows and tracks and public rights of way.

Piecemeal evidence for earlier land use is represented by discrete upstanding features in the landscape, namely Roman Road/Bank Road and Aldington Mount, and although associated activity may survive (and certainly does in relation to the Roman Road), this would be applicable to sub-surface archaeological remains which are not represented in the present landscape. Such sub-surface archaeological potential has been identified elsewhere within the Site boundary by geophysical surveys and the archaeological trial trenching, but again such sub-surface features are not respected by elements of the present landscape.

Impacts identified as a result of the Project which would affect an understanding and appreciation of the 17th/18th century landscape include: the loss of approximately 150m of hedgerow, which will need to be removed predominantly to facilitate construction of the Project. However, the removal of hedgerows will be offset by the provision of approximately 5.4km of new native hedgerows within the Site. New hedgerows will be planted respecting historic boundaries; changes to public rights of way (PRoWs: several will be slightly rerouted although one will more readily match its historic alignment); and changes as a result of the



introduction of new infrastructure into the landscape. Glint and glare impacts have been assessed to be minimal but visual impacts of the Project will affect a wide area, particularly to the south-west. Impacts on the historic landscape to the north-east have already occurred as a result of modern intrusions, particularly the HS1/CTRL railway and the M20 Motorway. New areas of planting proposed in the Project aim to reduce wider visual impacts on the setting of surrounding heritage assets.



1 INTRODUCTION

1.1 Circumstances of the Archaeological Landscape Assessment

- 1.1.1 This report has been prepared by Wardell Armstrong LLP (WA) on behalf of EPL 001 Limited ('the Applicant') to inform on the archaeological and heritage interest in relation to the Development Consent Order (DCO) application for Stonestreet Green Solar ('the Project').
- 1.1.2 The Project comprises the construction, operation, maintenance, and decommissioning of solar photovoltaic ('PV') arrays and energy storage, together with associated infrastructure and an underground cable connection to the existing National Grid Sellindge Substation.
- 1.1.3 The Project will include a generating station (incorporating solar arrays) with a total capacity exceeding 50 megawatts ('MW'). The agreed grid connection for the Project will allow the export and import of up to 99.9 MW of electricity to the grid. The Project will connect to the existing National Grid Sellindge Substation via a new 132 kilovolt ('kV') substation constructed as part of the Project and cable connection under the Network Rail and High Speed 1 ('HS1') railway.
- 1.1.4 The location of the Project is shown on ES Volume 3, Figure 1.1: Site Location Plan (Doc Ref. 5.3). The Project will be located within the Order limits (the land shown on the Works Plans (Doc Ref. 2.3) within which the Project can be carried out). The Order limits plan is provided as ES Volume 3, Figure 1.2: Order Limits (Doc Ref. 5.3). Land within the Order limits is known as the 'Site'. The archaeological landscape assessment has been undertaken of land within the Site, which is at Stonestreet Green, near Aldington, Kent (centred NGR TR 05898 37766).

1.2 The Purpose of the Archaeological Landscape Assessment

- 1.2.1 This archaeological landscape assessment work, alongside other methodologies, including desk-based assessment, heritage statement, geophysical survey, and trial trench evaluation, aims to help inform on the archaeological and heritage interest of the areas to be affected by the Project.
- 1.2.2 The archaeological landscape assessment work will contribute to the above by identifying the impacts of the Project at a broader chronological landscape level rather than on individual heritage assets (which are discussed in the main baseline assessments ES Volume 4, Appendix 7.1: Archaeological Desk Based Assessment (Doc Ref. 5.4) and ES Volume 4, Appendix 7.2: Heritage Statement (Doc Ref. 5.4)).



2 METHODOLOGY

2.1 Introduction

2.1.1 The preparation of this document has been undertaken in accordance with relevant professional standards and procedures and in accordance with advice on the scope discussed by stakeholders, namely the archaeological advisor to Kent County Council ('KCC') and Ashford Borough Council ('ABC').

2.2 Datasets

- 2.2.1 A number of data sources were interrogated by this assessment, aiming to provide a comprehensive coverage to identify all potential landscape features:
 - DEFRA's LiDAR¹ datasets (formerly held by the Environment Agency);
 - historic Google Earth imagery;
 - historic BING imagery;
 - Britain from Above images;
 - CUCAP aerial images;
 - geological and topographic information;
 - 19th century, and later, mapping;
 - mapping associated with the Aldington Manor Estate;
 - · datasets from the Historic Environment Record; and
 - the results of other investigations for the Site, including ground investigation works, site visits and surveys.

-

¹ Light Detection and Ranging



3 BASELINE INFORMATION

3.1 Location

- 3.1.1 The Site is located approximately 6.5km to the south east of Ashford Town Centre and approximately 13.7km to the west of Folkestone Town Centre, in the county of Kent. The Site is situated on land located to the north and west of the village of Aldington, centred at Ordnance Survey ('OS') National Grid Reference ('NGR') TR 05898 37766.
- 3.1.2 The Site is within the administrative boundaries of ABC and KCC.
- 3.1.3 The Site covers an area of approximately 192 ha (approximately 474 acres) and comprises primarily agricultural fields delineated by hedgerows and tree belts. ES Volume 3, Figure 2.1 (Doc Ref. 5.3) provides a Field Boundaries and Site Area Plan, which numbers individual fields. For ease of reference, the areas of the Site are subsequently referred to as follows:
 - South Western Area (Fields 1 to 9).
 - Central Area (Fields 10 to 19 and 23 to 25).
 - South Eastern Area (Fields 20 to 22).
 - Northern Area (Fields 26 to 29).
 - Project Substation (location of the Project Substation, in the north western section of Field 26).
 - 'Cable Route Corridor' (export of electricity from the Project at 132 kilovolt ('kV') via underground cables (the 'Grid Connection Cable') to the Sellindge Substation). 'Cable Route Corridor' (use of an existing cable duct under the High Speed 1 / Channel Tunnel Rail Link ('HS1') railway or through Horizontal Directional Drilling ('HDD') beneath HS1 for the Cable Route connection).
 - Sellindge Substation (location of the existing Sellindge Substation).
- 3.1.4 The East Stour River flows in an east to west direction through the Northern Area (Fields 26 to 29) and adjacent to Fields 26 and 19 within the Central Area as shown in ES Volume 3, Figure 2.1 (Doc Ref. 5.3). There are a number of unnamed drains (small open channel watercourses) running through the Site, which generally flow north / north west to drain into the East Stour River.



- 3.1.5 The Site includes a section of the existing Sellindge Substation and an area of land on the eastern side of the Sellindge Substation. Station Road / Calleywell Lane runs north to south within and adjacent to the central part of the Site. Bank Road / Roman Road bisect the Central and South Western Areas of the Site. The Site also includes Bank Farm access track, which connects to Roman Road. Part of Goldwell Lane forms part of the Site, as cabling is proposed to be laid beneath the road surface (see ES Volume 2, Chapter 3: Project Description (Doc Ref. 5.2) for further details). There are no other existing built development structures within the Site.
- 3.1.6 The Northern Area lies adjacent to and is accessed via Station Road. The South Eastern Area lies adjacent to and is accessed via Goldwell Lane. The Central Area lies adjacent to and can be accessed via Station Road, Calleywell Lane and Roman Road. The South Western Area lies adjacent to Roman Road and Laws Lane and can be accessed via Roman Road.
- 3.1.7 Existing National Grid transmission lines connecting to the Sellindge Substation cross the South Eastern Area.

3.2 **Topography**

- 3.2.1 The land to be affected by the Project is undulating, within a wider rolling hill landscape type. Several watercourses run through and adjacent to the Site, the most significant of which is the East Stour River, within a valley to the north of Fields 19 and 24 and, further east, Fields 28 and 29, and south of Fields 25 and 26 and 27 and the Cable Route Corridor which extends eastwards. Smaller tributaries to the East Stour River cross the Site, one forming a field drain to the north of Fields 16, 15 and 18 and south of Field 19; and another to the north of Field 23 and south of Field 24. The parcel of land in the south-eastern part of the Site, comprising Fields 20, 21 and 22, has a small watercourse running through it, approximately north to south.
- 3.2.2 Topographically, the Site is lowest at approximately 44m above Ordnance Datum ('AOD') within Field 19 in the north east and is highest at the Goldwell Lane Site entrance at 76m AOD (see ES Volume 3, Figure 8.3: Topography Plan and Figure 8.4: Topography Plan Site Level (Doc Ref. 5.3)). Land located in the Central Area of the Site slopes towards the East Stour River in the north, where it plateaus as proximity to the East Stour River lessens.
- 3.2.3 Bank Road runs to the south-west of Fields 10 and 12 and north-east of Fields 2, 3, 4, 5, 6 and 9, at a generally elevated position, at c. 68m AOD at its highest point,



adjacent to Field 12 at the eastern extent, and at c. 46m AOD adjacent to Field 2 to the west. To the north of the road, levels within the Site generally descend towards the East Stour River, with levels in the far north of the Site, in Field 19, recorded at a height of c.44m AOD. Immediately to the south of the road and within the Site, the land at Clap Hill (Field 9) is recorded at a height of c.71m AOD. The ground then drops quite steeply to the south-west, with levels recorded at c.55m AOD in the far south-west of Field 6. Within Field 2, levels are lower in the vicinity of the road to the north, recorded at c.46m AOD. The ground then rises in the south, to c.54m AOD. Fields 20-22 are located on a north-west facing slope, which lies at a height of c.64m AOD in the south-east and descends to a height of c.52m in the north-west. Fields 25 and 26 which are located to the north of the East Stour River, lie on a southeast facing slope, with levels recorded at c.60m AOD at the highest point in the northwest corner of Field 26, and levels dropping to 47m AOD closest to the river. The eastern extent of Field 28 lies on the slopes of Bested Hill and hence there is a rise in levels from c.47m AOD within the vicinity of the river to c.60m AOD along its eastern boundary.

3.3 **Geology**

- 3.3.1 Fields 4-6, 8-13, 20 and 25 partially or wholly lie on Hythe Beds (sandstone and limestone) surrounded by a rim of Atherfield Clay (mudstone), which generally lie across a high point in the landscape, known as the Aldington Ridge (ES Volume 4, Appendix 7.1 GM12014-004-011 Recorded underlying geology across the Site). This ridge stands above the plain of the Low Weald, located to the south of the ridge. The good quality loam soils are generally well-drained. The remainder of the Site to the north, as well as Fields 1, 2, 3 and 7 to the south-west of the ridge, lie on Weald Clay Formation (Mudstone), which is generally low-lying.
- 3.3.2 The area to the north of the ridge has been characterised as the Upper Stour Valley, within the floodplain of the East Stour River and subject to flooding. The area of the Site to the south-west of the ridge is characterised as Old Romney Shoreline Wooded Farmlands (ES Volume 4, Appendix 7.1 GM12014-004-011 Recorded underlying geology across the Site).
- 3.3.3 The majority of the Site has no mapped superficial geology (ES Volume 4, Appendix 7.1 GM12014-004-012 Recorded superficial geology across the Site). Those fields, which partially or wholly are located near to the East River Stour, Fields 15, 16, 18, 19 and 23-29, partially or wholly lie on Alluvium (clay, silt, sand and gravel), formed



- up to two million years ago, and represent a local environment previously dominated by rivers.
- 3.3.4 The details soils and Agricultural Land Classification survey undertaken for the Site (ES Volume 4, Appendix 16.1: Agricultural Land and Soils Report (Doc Ref. 5.4)) confirmed the presence of the Denchworth, Oxpasture and Fladbury soil series within the Site, all heavy textured (clayey) solds with impeded drainage, liable to waterlogging in wetter months and droughtiness in dryer, hotter months. Topsoils were generally stoneless to slightly stony in isolated regions. The upper subsoil and lower subsoil displayed mottling throughout the Site with the consistency becoming firmer at depth.

3.4 **Borehole Records**

- 3.4.1 A total of 142 borehole records are known from within 250m of the Site (predominantly along the northern site boundary associated with HS1/CTRL). The records generally displayed Made Ground to 8m depth, of which the material predominantly consisted of dark grey and brown fine to coarse sand, yellow brown sandy gravelly clay, blue grey mottled brown clay and blue grey clayey fine to coarse sand. Gravel inclusions were described as flint, brick, claystone, limestone, slag, coal, basalt, and concrete. A layer of flood plain deposits is recorded within one of the boreholes between 8.05m and 8.70m. This material was described as dark browngrey sandy clay, with angular to subangular fine to coarse gravel or flint with low cobble content. Weald Clay has been recorded between 0.95m and 4m, and 7.6m and 15.3m and is typically described as stiff blue grey, grey, and green-grey clay with occasional medium gravel size pockets of light grey silt.
- 3.4.2 Ground Investigation analyses have been undertaken to inform on land contamination assessment included within ES Volume 2, Chapter 11: Land Contamination (Doc. Ref. 5.3) within the Site boundary. These broadly confirmed the conjectured geological setting of the site with the general sequence of strata being topsoil overlying natural superficial deposits of organic soil, clay, sand, and occasional deposits of gravel. Anthropogenic materials such as brick, cement and ceramics were recorded in TP01 (at the south-eastern extent of Field 18), TP02 (at the south-western extent of Field 10), TP05 (at the far western extent of Field 27), WS02 (at the south-western extent of Field 17), WS04 (at the south-eastern extent of Field 25), WS05 (at the northern extent of Field 3) and WS08 (at the south eastern extent of Field 7), to a maximum depth of 0.80 mbgl across the site. Natural



superficial deposits were encountered in all trial pits and boreholes across the site and revealed a soft brown slightly silty slightly sandy clay of between 0.1 and 0.15m thick, overlying an organic soil (topsoil) of 0.2-0.35m thick of soft brown slightly silty slightly sandy clay with occasional gravel, overlying a loose to very dense light brownish yellow slightly silty slightly gravelly sand of between 0.4 and 2.6m thick, overlying a loose light yellowish brown silty gravel 0.7m thick, itself overlying a soft to firm greyish yellow slightly silty slightly sandy clay of 0.1 to 3.4m thickness.

3.5 Archaeological and Historical Background

3.5.1 A comprehensive historical and archaeological background has been detailed in the main Archaeological Desk Based Assessment (ES Volume 4, Appendix 7.1), for which this document is a supporting annex (Annex 4). What is included below, is intended only as a summary, relevant to understanding the landscape to be affected by the Project, and the impacts that the Project will have at a broader landscape level.

Palaeolithic

- 3.5.2 Access to Britain has depended on its island/peninsula history, which is the result of cyclical changes in climate and sea level and also major landscape changes caused by glaciation and fluvial erosion. Potential routes into the Britain were from the Netherlands, Belgium and northern France into the valleys of the Thames, Bytham and Great Ouse, or from western or south-western France into the Solent system. It has been argued that it is likely that these river valleys would have provided natural routeways, not only because they provided resources, but also, during warmer periods, they may have acted as open corridors across an otherwise densely forested landscape (The Mapping Palaeolithic Britain Project 2013-2017).
- 3.5.3 Documented 'evidence' for landscape use during the palaeolithic, as recorded in HER datasets for instance, comes from the discovery of artefacts, rather than any form of settlement, industrial or ritual site, limiting the understanding of how early hominid species interacted with the landscape. Even in Kent, where some of the Country's most important Neanderthal discoveries have been made, the 'sites' comprise what would otherwise be stray findspots, recovered as single items from the landscape or, in the most interesting cases, from natural geological deposits in which they had been incorporated and been preserved.
- 3.5.4 As lithic artefacts tend to survive best, these are the most commonly discovered.

 This makes an interpretation of a landscape and landscape use from this early period



almost impossible, as a 'significant discovery' can be seen to reveal more about the geological and preservation conditions of a specific findspot location than the significance of that location to those that used the implement (Wenban-Smith et al, 2019, 14). This is particularly important when considering also post-depositional processes (from one extreme of total dispersal by glacial action, solifluction or high energy fluvial torrents to the other, such as gentle burial by fine-grained aeolian, colluvial or alluvial processes).

- 3.5.5 Arguably, a more reliable way of assessing the palaeolithic landscape is by understanding the distribution and prevalence of Pleistocene deposits. Two important elements need to be considered: firstly that the landscape in most parts of the world, including south-east England, has changed markedly since the beginning of the Middle Pleistocene, and secondly, is the enormous amount of change which occurred throughout the Early Palaeolithic. 'Very little of the landscape in which these people lived now survives. The land surfaces they occupied have almost entirely been destroyed during intervening episodes of climatic change' (Wenban-Smith et al, 2019, 20). Such studies have found that the rich palaeolithic resource of the South-East comes mostly from fluvial deposits associated with the Middle Thames (north Surrey), the Lower Thames (north-west Kent) and the Stour (north-east Kent), though 'important remains are also known from numerous deposits associated with smaller rivers and tributary valleys, notably the site of Cuxton from terrace deposits of the Medway' (op. cit. 76). Despite this, palaeolithic character areas have been attributed across the County, not just north Kent, and the area in which the Site lies has been identified as part of the Stour Palaeolithic Character Area (KCC 2015).
- 3.5.6 Within this broad character type, the western part of the Site lies within the eastern extent of 'Southern Ashford, Kingsnorth terrace remnants'. There are various minor fluvial terrace outcrops in this area, though none within the Site or vicinity, and it is unknown whether these related to an early northward course of the Great Stour River, or an east-west course of a defunct river. The Palaeolithic potential of this area has been identified as low.
- 3.5.7 The northern part of the Site lies within *'Stour alluvium, within Wealden basin'*, which is focused on the East River Stour where the Stour alluvium and underlying deposits have been identified. The East Stour River, which flows in an east to west direction, is within, and adjacent to, the northern part of the Site. The highest



potential here is for Late Upper Palaeolithic material surviving within these underlying deposits at the edge of the alluvial floodplain, although Middle Devensian (pre-Last Glacial Maximum) deposits have been encountered. They were preserved in the vicinity of Conningbrook Manor, c.5.65km north-west of the Site, and have potential for Early Upper Palaeolithic material. Artefacts such as handaxes and other Lower/Middle Palaeolithic deposits from higher Stour terraces are also possible. The likelihood of Palaeolithic remains within this PCA has been identified as 'moderate in places, otherwise low'. For the Site, however, it is considered that the potential is low.

- 3.5.8 Most of the Site is located within an area identified as 'General Weald, without mapped Pleistocene deposits'. This area covers the internal part of the Weald basin, where there is an undulating plain of solid bedrock formed variously of Weald Clay, Tunbridge Wells Sand and Wadhurst Clay. For the most part, this area contains no mapped Pleistocene deposits, although there is likely to be unmapped patches scattered within the area, as well as shallow depressions infilled by aeolian sediment. The Palaeolithic potential of this PCA has been identified by the PCA survey as 'very low'.
- 3.5.9 In February 2023 (ES Volume 4, Appendix 7.1: Archaeological Desk-based Assessment, Annex 6: Archaeological Monitoring Report (Doc Ref. 5.4)), three trial pits and three window sample boreholes, which formed part of ground investigations for engineering purposes, were undertaken under archaeological monitoring to inform on the Palaeolithic archaeological and Pleistocene/Holocene palaeoenvironmental potential of below-ground sediments within the Site boundary. The test pits were located at the eastern extent of the Cable Route Corridor, east of Field 27, within Field 26 and within Field 21, and the window samples were taken from the eastern extent of Field 27, the northern extent of Field 3 and the northwestern extent of Field 21. These revealed no deposits or features of archaeological or palaeoenvironmental potential, only revealing a modern ceramic drain at 0.6m below OD from the within Field 3.
- 3.5.10 In July 2023 (ES Volume 4, Appendix 7.1: Archaeological Desk-based Assessment, Annex 7: Trial Trenching Report (Doc Ref. 5.4)), a programme of palaeolithic/geoarchaeological test pitting was undertaken in association with targeted archaeological trial trenching for the Project to further inform on the Palaeolithic archaeological and Pleistocene/Holocene palaeoenvironmental potential



of below-ground sediments within the Site boundary. Four test pits were excavated within archaeological trial trenches 1-4 excavated in Field 26, to target potential areas of alluvium within the area to be affected by the Project Substation. No substantial Pleistocene sediments were encountered, and, where present, these were predominantly fine-grained, thin and probably discontinuous down slope and represent poorly developed Head/Solifluction deposits. In Test Pit 1, however, towards the western extent of Field 26 (NGR 606753,138338), a possible palaeosoil, 0.12m thick, was encountered beneath the Head/Solifluction deposits at 0.8m below OD. It was deemed that no sediments were encountered which warranted sieving, and no artefacts were recovered.

Prehistoric (Bronze Age and earlier)

- 3.5.11 The Mesolithic period marks the (re)introduction of modern humans; these hunter gatherer communities would have traversed the heavily wooded uplands, tracking animal herds and collecting plant foods. Such activity is elusive and transitory, mainly known from the archaeological record by find scatters. It is likely that river systems such as that of the East Stour River would have played a role in resources for human groups and been a foci for small bands of hunters during the early prehistoric period, perhaps evidenced by Mesolithic artefacts found in the area. Such artefacts have been recovered from approximately 15m from the southern boundary of the Site (HER TR 03 NE 6; though these are of uncertain derivation, found in association with 15th century site at a supposedly Roman feature), 130m to the north of the Site (HER TR 03 NE 27) and 350m north of the Site (HER TR 03 NE 20). In addition, the targeted archaeological trial trench evaluation undertaken as part of the Project in July 2023 recovered 4 artefacts of likely Mesolithic origin within the Site boundary; one from topsoil removed from Trench 4 within Field 26, and three from unstratified material in Trench 9 within Field 4 (ES Volume 4, Appendix 7.1: Archaeological Desk-based Assessment, Annex 7: Trial Trenching Report (Doc Ref. 5.4)).
- 3.5.12 Distinct changes occurred during the Neolithic period, which is characterised by the transition to agricultural practices and a more long-term settlement pattern. Humans altered the landscape to suit their requirements as opposed to exploiting the landscape as existing, and more ritual activity is represented in the archaeological record through large ceremonial and funeral monuments. Evidence for settlement during the period is relatively rare, however, represented by pits, middens, postholes and artefact scatters. There is no known evidence for activity of



this period within the study area or Site boundary, although the targeted archaeological trial trench evaluation recovered 2 artefacts of likely Late Neolithic or Early Bronze Age origin within the Site boundary; one large flake from topsoil removed from Trench 9 within Field 4, and a small end scraper from subsoil removed from Trench 12 within Field 9.

- 3.5.13 During the Bronze Age, metalworking was developed, leading to improved tools, and new types of pottery and funerary traditions also appeared. The climate became wetter and cooler, perhaps partially explaining the higher occurrences of settlement activity of the period in the archaeological record, although farming too may have improved survivability and increased populations. Within the study area, Bronze Age activity is represented by artefacts in the form of a lithic scatter in two concentrations 300m east of the Site (HER TR 03 NE 218), an arrowhead c. 310m north of the Site (HER TR 03 NE 219), a copper alloy blade c. 880m east of the Field 22 (HER MKE109743). In addition, a small horned scraper was recovered from a north-east south-west aligned ditch towards the southern extent of Trench 1 towards the western extent of Field 26 during the targeted trial trench evaluation in July 2023. Another ditch and pit in the same trench may be indicative of Bronze Age activity within the Site boundary, perhaps of agricultural activity, and perhaps at the edge of a nearby associated settlement. Similar features were encountered in Trench 3 to the south-east of Trench 1, but also towards the western extent of Field 26, though these were undated.
- 3.5.14 In addition, settlement activity has also been identified in the area, including a possible agricultural field system represented by four ditches c. 340m north of the cable route (which extends east of Field 27) (HER TR 03 NE 60) and a complex of features at Little Stock Farm c.335m north of the Site (HER TR 03 NE 61). Funerary activity is also represented in the area by three Scheduled Monuments, all to the east of the Site: a Barrow Cemetery comprising seven barrows, 1.9km away (NHLE 1475132), an associated bell barrow 3km away (NHLE 147133) and a round barrow 3.5km away (NHLE 1475688). A further Prehistoric cemetery is recorded to the northeast of the Site on Swinyard Hill and in West Wood on the North Downs where several scheduled barrows are situated, as well as to the east, in the vicinity of Tolsford Hill, all over 7km away from the Site.

Iron Age

3.5.15 A total of 10 stray artefacts of the Iron Age period have been encountered within the



vicinity of the Site, including coins, brooches and pottery, the nearest being a copper alloy brooch from within 30m of the Site. More definitive evidence for longer term use of the landscape comes from field systems and settlement sites identified, particularly to the north of the Site. Four such sites were found as part of the HS1/CTRL works to the north of the Site. The first, c. 325m to the north, had late Iron Age origins, though the field system, if not the associated settlement, continued in use into the Roman period (HER TR 03 NE 66). Three others comprised only field systems; one was encountered c. 90m north of the Site and continued into the early medieval period (HER TR 03 NE 62), the second, c. 240m north of the cable route, appears to have been abandoned in the 2nd century AD (HER TR 03 NE 205), and the third was found approximately 570m north of Field 19, initially comprising a large pond fed by two Iron Age period ditches, used as a more extensive field system during the Roman period, during which it underwent several reorganisations and included a post-built structure, a waterhole a 3rd century AD cremation and a 4th century AD pit and wall (HER TR 03 NE 203).

Romano-British

- 3.5.16 This continuity of landscape use extended into the Roman period in many of the examples cited above. One main alteration was the construction of a road, evidence for which, in the form of a raised causeway covered with ragstone rubble and chippings, was encountered 220m south of the site in 2005, and has been projected to bisect the central and western part of the Site (as Bank Road/Roman Road; HER TR 04 SE 120). The projected course has the road connecting Maidstone to Dover via Lympne and running south of and parallel to both Watling Street and the Pilgrim's Way.
- 3.5.17 Such a route might suggest the potential for associated roadside settlement, cremations and/or the higher potential for stray finds from increased footfall. Although no structural or burial evidence had previously been identified, the targeted archaeological trial trench evaluation in July 2023 included the excavation of nine trial trenches either side of the projected road within the redline boundary. Roman activity was encountered in the form of six postholes and two ditches within Trench 9 in Field 4, associated with a large assemblage of late 1st century AD pottery, potentially indicative of settlement activity, according with features revealed by the geophysical survey. In addition, on the opposite side of the road in Field 10, the easternmost trench, Trench 6, revealed three pits and a large sub-rectangular



feature, as well as Roman pottery sherds and animal bone. Carbonised cereal remains from these features suggest associated arable farming also occurred. Slag material consistent with iron working was also recovered, predominantly from Trench 9 in Field 4, though not from datable deposits; although quarrying activity and a limekiln is known from the post medieval period in Field 5, and Field 6 had the fieldname 'kilnfield'.

- 3.5.18 Stray finds from the area are also known, with 14 Roman-era findspots recorded within the HER, comprising coins, brooches, a knife and an earring, and including a copper alloy mount (HER MKE55807) and two copper alloy brooches from within the Site itself (HER MKE55849 and MKE94405). In addition to the Roman pottery assemblage recovered from the July 2023 targeted trial trench evaluation, six Manning Type 10 iron hobnails were also recovered from Trench 9 in Field 4, typically used on the soles of Roman boots and sandals, likely casual losses from users of the adjacent road.
- 3.5.19 In the wider area, possible evidence for a structure of Roman origin has been recorded from the discovery of flue tiles and bricks in 1935/6 in a garden which also produced sherds of 1st century AD pottery and the foundations of a building *c*. 325m south of the Roman road and 625m south-west of Field 20 (HER TR 03 NE 5).
- 3.5.20 The Weald more generally has been identified to be of Roman industrial importance, particularly for iron, developed from earlier exploitation during the Iron Age. A possible ironworks was suggested by the presence of a fragment of iron slag and areas of dark soil associated with coarse-ware sherds of the Roman to medieval periods, encountered c. 510m south of the Site, near Partridge Farm, in 1975 (TR 03 NE 5). Further away again are the known Roman period sites of a scheduled Romano-British villa, including coin finds dating from 289-350AD (NHLE 1004216), 1.6km east of the Site and c. 550m north of the projected Roman road and situated on a north-west facing slope (located at approximately 80m AOD), on Hythe and Atherfield Clay bedrock, overlooking a tributary of the East Stour River.

Early Medieval

3.5.21 In the early medieval period, the landscape of Kent was divided into lathes (internal territorial landholdings) which linked Wealden wood pastures with their associated settlements, a system with probable 6th century origins. The Site lay within the Lathe of Scray, although it is unclear whether this resulted in any physical impacts on land within the Site boundary. Known evidence for early medieval activity in the area



comes from the continued use of two sites to the north of the Site (HER TR 02 NE 203 and HER TR 03 NE 62), as well as the 1828 discovery of three inhumations at Bower Farm c. 880m north of the Site (HER TR 03 NE 10). These were rich in grave goods, comprising swords, spearheads, several brooches, and some contained garnets, rings and decorated buckles of 6th or 7th century date. A concentration of finds encountered close to the Roman road within the Site helps confirm its continued use, and include three silver coins (HER MKE55817, HER MKE55777 and HER MKE55778), a copper alloy brooch (HER MKE55816) and a copper alloy key (HER MKE55834). Five further early medieval findspots have been discovered beyond the Site boundary in the wider area, and pottery sherds of the period were also found in 2014 during a watching brief at Bank Farm, 30m south of the Site (HER TR 03 NE 246).

Medieval

- 3.5.22 As well as a continuation in use of an earlier site into the medieval period (Little Stock Farm, HER TR 03 NE 67) two additional nearby settlements, Evegate and Stansted, are recorded in the Domesday Book. Evegate contained one villager, one men's plough team and eight acres of meadow. The site of Evegate, no longer existing, though Evegate Mill retains its name, was located to the west of Park Wood Cottage according to modern Ordnance Survey mapping, north of the railway line, just to the north of the Site. The settlement of Stansted lay in the vicinity of the present-day Stonestreet Green and included 39 households, 20 villagers, 19 smallholders and 10 men's plough teams.
- 3.5.23 The Site encompasses land historically associated with three parishes, Aldington (south-eastern part), Mersham (western part) and Smeeth (far eastern part). The boundaries of these parishes are mapped on tithe mapping and on historic Ordnance Survey maps, and often such boundaries are based on immovable and distinctive markers in the landscape, to minimise land disputes. They would have been well-established signifiers of landholdings, often since the medieval period. The parish boundaries within the Site are not respected by field boundaries (the landscape pattern largely respects post medieval alterations), which suggests pre 17th/18th century origins, and perhaps earlier, medieval, origins. Some such boundaries are enhanced by man-made features, such as ditches, to allow for easier identification, and any such surviving elements in the present landscape could represent the medieval period. LiDAR, site walkovers and geophysical survey results revealed no



such features within the Site boundary.

- 3.5.24 Aldington Mount, a site recorded within the HER 10m to the south of the Site (south of Field 12 and east of Field 9), and historically assumed to be Roman, upon investigation actually produced hundreds of pottery sherds of 15th century date (HER TR 03 NE 28). It survives as an upstanding feature in the landscape, and measures 24m north-east to south-west and 20m transversely. It has been significantly adversely impacted, partly destroyed on the north-west by the Bank farm access road, scarred with pits from vandalism or wartime trenching, affected by a 20m archaeological trench in c. 1967, and, according to the HER record, 'the top has been slightly mutilated by cattle'. It survives to a height of approximately 3m, visible above surrounding hedgerows, and is passed by a public right of way. A 15th century barn is known at Bank farm, nearby, which may be linked. Other archaeological investigations in the area, as part of the HS1/CTRL works, have revealed a large medieval ditch (HER TR 03 NE 206), c. 185m north of the cable route, east of Field 27, and a possible medieval sheepfold (HER TR 03 NE 204) c. 620m north of the Site. Further east, c. 680m north of the Site, a medieval mill pond and associated dam have been identified (HER TR 03 NE 21).
- 3.5.25 An additional total of 25 stray finds of medieval date have been retrieved from the wider area, none within the Site itself. This, combined with the presence of extant statutorily listed domestic and agricultural buildings originating in the 14th, 15th and 16th centuries, further attests to medieval activity in the area.
- 3.5.26 Agriculture became increasingly important during the medieval period, moving away from the dominance of pig grazing of the later prehistoric and early medieval periods into sheep grazing. During the 15th and 16th centuries, the cloth and wool trade flourished in the wider area, 'Biddenden, for example, has a number of significant heritage assets from this important period of the Borough's history including the Grade 1 listed Old Cloth Workers Hall' (Ashford Borough Council 2017, 21).
- 3.5.27 Brewing too, helped shape the landscape of the area with the associated requirement for hop growing, oast houses and farmsteads. Moated sites, such as that at Mersham, would have been impressive aristocratic residences, designed for status rather than defence, and many were directly associated with livestock rearing (Ashford Borough Council 2017, 22). But for the Site itself, agriculture dominated the landscape during this period, albeit it with more concentrated rural settlements established, the closest being Stansted, the origins of modern Stonestreet Green, as



well as dispersed farmsteads, perhaps demonstrated in the vicinity by Aldington Mount (HER TR 03 NE 28).

Post-medieval

- 3.5.28 The post-medieval period is, not surprisingly based on countrywide changes of rapid population expansion and industrial advances of the period, the most represented period in the study area, with a total of 68 HER entries. Of these, 58 are farmsteads, demonstrating the continued importance of agriculture to the area. Two outfarms are known from within the Site boundary, one adjacent to Backhouse Wood (HER MKE88378) and one to the north-east of Evegate Mill (HER MKE88379), neither now surviving above ground. The post medieval period is also the period most easily understood, after the modern, from the documentary and cartographic record.
- 3.5.29 In 1799, the parish of Aldington was described as 'exceedingly pleasant and healthy...[with] several hamlets in it, as at Aldington-corner, Stone-street-green, which lies in the vale near the river, and at Claphill' (Hasted 1799, 314). Aldington-Fright, further west, was once a chace, 'for deer and wild beasts, belonging to the archbishop's manor of Aldington' (op.cit.). By the late 18th century, this had become an area of wide, open heath, 'separated into two parts by some cottages and lands inclosed round them, which have been purloined from it. Round the whole of the Fright, there are numbers of houses and cottages, at different distances from each other' (op.cit.). Although this demonstrates that informal piecemeal 'enclosure' had occurred through encroachment prior to the late 18th century, formal enclosure through Parliamentary Act did not occur until 1821, and, in the vicinity of the Site, seems only to have impacted Aldington Frith (Kent Archives U1220/E1). In 1799, the area outside Alington Frith was described as follows, 'the corn-land in this parish is very fertile. There is some hop-ground, and but little wood, most of which lies to the southward of the village, on a height, in which is a very conspicuous toll of trees, called Aldington-knoll' (Hasted 1799, 314).
- 3.5.30 Smeeth was a small parish, documented in 1799 as formerly known as Smede, 'a name signifying an open smooth plain, and king Offa in 791, gave the pasture for fifty hogs binnam Smede' (Hasted 1799, 2) and 'the head of the river Stour, which rises at Postling, flows along the southern side of this parish, where there is a mill on it, called Evegate-mill, and so on to Mersham towards Ashford' (op. cit.). Smeeth seemed to have been hierarchically under Aldington, and Mersham is not described as a separate parish in 1799. An Elizabeth I era Estate Plan of Aldington (1558-1603;



NA MPI 1/248; Plate 1) shows the manorial landholding extending some distance westwards from the settlement of Aldington, and west of Bellington Priory and Manor, though south of Claphill and Stonestreet Green and south of the Site. The map confirms the dispersed nature of settlements by this date, with buildings largely situated along roadsides, with some trees, including an area of enclosed woodland, or copse, perhaps Poulton Wood or Blackthorn Wood known from First Edition Ordnance Survey mapping.

- 3.5.31 This dispersed pattern of settlement, based on agriculture, is shown across the wider landscape too, evidenced by Andrews and Dury's County map of 1769 (see GM12014/004-006) which shows the main routes through the landscape, dotted by farmsteads. Those in the vicinity of the Site by this date included Bank House, Greadley Farm, and Hamden to the west, and a concentration of structures at 'Stone Stead Green'. The mill, later Evegate Mill, is annotated 'Havegate Mill', but as the farmstead to the north is 'EveGate', this is likely to represent a mistake, rather than an earlier name for the mill.
- 3.5.32 The earliest map to illustrate the area in detail is the 1797 Ordnance Survey Drawing (see GM12014/004-007). The 1797 drawing shows the three main roads crossing through the Site, Roman Road/Bank Lane running north-west to south-east, and Church Lane and Calleywell Lane both running north-east to south-east, with the additional loop of Goldwell Lane east of Stonestreet Green to the east of Calleywell Lane. These routes largely reflect the undulating landscape, the north-west to southeast routes following the higher ground, and the north-east to south-western roads crossing and inter-linking the lower lying landscape in the shallow valley of the East Stour River. It is possible that these routes have earlier origins, perhaps in the medieval period, based on the concentrated settlement of Stone Street Green as Stansted in that period, though obviously Roman Road/Bank Lane likely has even earlier origins. Additional access routes, five in total, extend south-westwards from Roman Road/Bank Lane to Aldington Frith, two of which cross the western part of the Site. Although the overall settlement pattern reflects a pattern characteristic of dispersed farmsteads, a more concentrated settlement in the immediate vicinity of the Site existed at Stonestreet Green, annotated on the 1797 map as StoneStead green (ES Volume 4, Appendix 7.1, GM12014/004-007 Historic Mapping - Tithe Maps of Smeeth (1840), Mersham (1841) & Aldington (1842)).
- 3.5.33 Discrete farmsteads, with which the land within the Site boundary is likely to have



been associated, include a structure at the crossroads at Broad Oak, to the west of the Site, Bank House, to the south, Grigley House, to the north, Evegate Mill to the north, and Simnell and Goldwell, either side of Goldwell Lane, to the east of StoneStead Green and west of the south-eastern part of the Site (Fields 20-22). Mudge's Map of 1801 (Plate 2) no longer depicts Grigley House, though this seems to be an omission, as Gregory Farm is referenced at the same location in the Tithe Apportionments and is shown on the 1898 Ordnance Survey Map, though was demolished by 1906. This was in existence by 1769 as Greadley Farm and seems to show a structure on the south side of Roman Road/Bank Lane, east of Broadoak crossroads just to the north of Field 3. This structure is listed as two cottages on the Tithe Apportionment for Mersham. Madge's Map also shows areas of higher ground, and field boundaries indicate that these too were utilised as agricultural fields.

- 3.5.34 Backhouse Wood, just to the south of Fields 28 and 29, known as Great Backhouse Wood on the Tithe Apportionment for Aldington, had already been established by the late 18th century, and remains broadly unchanged today. Other areas of probable woodland formerly occupied areas of the Site in the late 18th century (ES Volume 4, Appendix 7.1, GM12014/004-007 Historic Mapping - Tithe Maps of Smeeth (1840), Mersham (1841) & Aldington (1842)), including within the western part of the Site in the vicinity of Fields 3, 7 and 8, also shown on Mudge's 1801 map (Appendix 1, Plate 2), and 20 and 22, not clear on the 1801 map. The funnel-shaped pattern of the fields on the 1797 drawing (ES Volume 4, Appendix 7.1, GM12014/004-006 Historic Mapping - 1797 Ordnance Survey), now comprising Fields 3 and 7, suggest that this was once an access into, and perhaps encroachment of, Aldington Freight, the former medieval chace to the south. By 1840-2 (ES Volume 4, Appendix 7.1, GM12014/004-007 Historic Mapping - Tithe Maps of Smeeth (1840), Mersham (1841) & Aldington (1842)), this had been subdivided into more regular sized parcels, and only a narrow strip at the northern extent of the former woodland here (now the southern extent of Fields 4 and 5 and northern extent of Field 7) remained wooded. The only other area within the Site which remained wooded by the mid-19th century was the eastern extent of the cable route, to the immediate west of Church Lane.
- 3.5.35 The remainder of the Site in the late 18th century comprised a pattern of irregular-shaped, though similarly sized fields, associated with the nearby farmsteads. Comparisons between the 1797 drawing (**ES Volume 4, Appendix 7.1**, GM12014/004-006 Historic Mapping 1797 Ordnance Survey) and the Tithe Award



- mapping of the area (**ES Volume 4, Appendix 7.1**, GM12014/004-007 Historic Mapping Tithe Maps of Smeeth (1840), Mersham (1841) & Aldington (1842)), indicate that the field layout had changed little by the early 19th century.
- 3.5.36 None of the field systems as mapped on post medieval cartographic sources are characteristic of the early medieval, or earlier, periods. The Historic Landscape Characterisation study has identified the earliest surviving boundaries within the Site as dating from the late medieval or 17th/18th centuries, and these are applicable to Fields 7-19, 11-15, 17, 25, 26 and part of 28. There are some surviving hedgerows which respect the line of such boundaries, and these may have 17th/18th century origins, certainly predating 1850, and meet the criteria of the Hedgerow Regulations Act. The Site lies within the HLCA Central Valley Area, characterised as being 'dominated by regular and wavy bounded fields with a considerable subsidiary element of 'prairie' fields, all of which indicate extensive agricultural activity over the last 200+ years' (Croft, Munby and Ridley 2001, 3-12).
- 3.5.37 Tithe Award mapping of the area (ES Volume 4, Appendix 7.1, GM12014/004-007 Historic Mapping Tithe Maps of Smeeth (1840), Mersham (1841) & Aldington (1842)), and associated apportionments (Appendix 2) show that the majority of the land was held by two landowners, Sir Edward Knatchbull, Baronet and William Deedes Esq, though other owners accounted for smaller land parcels, and that the land was associated with between 11 to 15 landholdings or farmsteads. They also show that of the then 77 fields comprising the Site, 44 were pasture, 20 arable, 6 were wooded, 3 were for hops, 2 were gardens, 1 was a pond and 1 was a quarry. One of the areas of wood was within the south-western part of Field 1, known as Broadoak Wood, and this had been felled by 1898. Although agricultural practices included crop rotation and this is only a snapshot of landuse at one particular time, it does further suggest the dominance of grazing. Fieldnames within the apportionment suggest that more hops had once been grown within the area, and also that cottages fronting Bank Lane/Roman Road may have been built as almshouses to serve Mersham.
- 3.5.38 Evidence for small scale industrial activity within the Site is also suggested, by the fieldname 'kiln field', within Field 6, though this could be related to the stone quarry with limekilns depicted to the north-west, rather than be indicative of a separate kiln site.
- 3.5.39 Some absorption of smaller fields into larger fields had occurred within the Site by



1898, along with a reduction in woodland, and the former quarry and limekiln within Field 4 no longer survived by 1898 (ES Volume 4, Appendix 7.1, GM12014/004-008 Historic Mapping – Ordnance Survey Mapping 1898 and 1946). Overall, however, field amalgamation was minimal, and the overall pattern was largely retained into the early 20th century. The Ordnance Survey map of 1898 also depicts a number of public footpaths across the Site. Although historically, routeways across the landscape by foot were long established, accepted under common law, enclosure and agricultural reforms of the post medieval period led to major changes to the pattern of paths. Those depicted across the site on the 1898 Ordnance Survey map are likely the result of the 17th/18th century developments affecting and characterising the Site, and are mostly aligned north to south, providing short cuts from the largely north-west south-east and north-east to south-west roads, linking farmsteads and settlements, used by agricultural labourers.

Modern

- 3.5.40 During the 1939-45 conflict Ashford Borough was, in common with the rest of Kent, at the front line of defence. In the skies above the borough, elements of the Battle of Britain were fought out (ABC 2017, 22). This is evidenced in the vicinity of the Site by the presence of four crash sites, one of which lies within the Site, within Field 17, and which is protected through the Protectory of Military Remains Act (HER DKE22255). The crashed plane survived largely in one piece, the pilot survived and was captured, and the aeroplane was salvaged and removed. There is now no evidence, either from the results of the geophysical survey or LiDAR imagery, of the crash site.
- 3.5.41 By the mid-20th century (**ES Volume 4, Appendix 7.1**, GM12014/004-008 Historic Mapping Ordnance Survey Mapping 1898 and 1946), further field boundaries had been removed, and by 2003, the Site layout matched that as survives presently.

3.6 **Summary**

3.6.1 The potential for land within the Site boundary retaining evidence for human activity during the palaeolithic is at most, low, and mostly very low. Any understanding of the palaeolithic within the Site boundary would derive from any surviving below ground artefacts or deposits, as demonstrated by the results of the palaeolithic test pitting ((ES Volume 4, Appendix 7.1: Archaeological Desk-based Assessment, Annex 7: Trial Trenching Report (Doc Ref. 5.4)). The landscape as surviving reflects little of its palaeolithic past, and the present experience of the landscape retains nothing that would be easily recognised as representative of that period.



- 3.6.2 Generally, known evidence for human activity from the Mesolithic to Bronze Age periods are located north of the Site, with the exception of the Bronze Age copper alloy blade and the barrow cemetery and individual barrows recorded to the east. Sub-surface archaeological features relating to prehistoric activity have been encountered within Field 26 during the targeted archaeological trial trench evaluation, but no upstanding features of the period are present within the Site boundary. It is notable that prehistoric activity to the north of the East Stour River is located on an area of higher ground (c.25m higher than the land to the south, adjacent to the river), and located on Hythe and Atherfield Clay bedrock. It may be surmised that this location had topographical advantage, possibly chosen due to the land being unlikely to flood, whilst still having a local water source and fertile ground to the south. The land also provides a better vantage point over the rolling hills.
- 3.6.3 Similarly, the barrows noted to the east of the Site are located on and around the summits of low hills, situated at 80m aOD, suggesting that an elevated position was important in their siting, and are on Hythe and Sandgate bedrock. Seeking higher ground is not uncommon, as demonstrated within the wider area which contains the North Downs (approximately 4.5km north of the Site and extending further away). The Kent Downs contains upstanding remains from the Neolithic and Bronze Age periods in the form of megalithic monuments and barrows. The area is on significantly higher ground than that at the Site at c.185m aOD (at the points nearest to the Site) and underlain by chalk bedrock. The Site at present retains no evidence for upstanding prehistoric features and bears no relation to the landscape as experienced during the prehistoric period.
- 3.6.4 Known evidence for Iron Age activity in the area indicates sparse settlement directly associated with larger field systems concentrated on localised areas of high ground on Weald Clay, suggesting these higher areas were utilised for habitation, more controlled pastural farming and stock enclosures during flood events with nearby low-lying flood plains utilised for grazing. The enclosures appear to have utilised preexisting Bronze Age systems showing a continuity in the use of landscape, though perhaps increased use. Despite this, the landscape within the Site boundary retains no evidence for Iron Age features and does not retain any upstanding elements which reflect the landscape of the Iron Age period.
- 3.6.5 In the Roman period, the landscape to the north of the Site continued in agricultural use from the preceding periods. The main alteration to the landscape was the



creation of a Roman road, though this may have earlier origins, the course of which has been projected to cross the Site as Bank Road/Roman Road, a likelihood confirmed by the targeted archaeological trial trench evaluation undertaken as part of the Project, evidence from which also suggests associated roadside activity may have occurred. A villa is known to have been established to the east of the Site, to the north of the road at an elevated location overlooking the landscape, and the possible remains of a second structure was found in a garden to the south of the projected route of the Roman road in the 1930s. Despite this, the land within the Site boundary retains no easily recognisable upstanding elements of the Roman period.

- 3.6.6 For the early medieval era, the evidence seems to suggest a reduction in the use of the landscape during this period (albeit absence of evidence is not evidence of absence), with a continuity of use of earlier sites to the north. Bank Road/Roman Road too, certainly established by the Roman period, continued to be used, demonstrated by findspot evidence, but surviving evidence of elements of the early medieval in the present landscape are not apparent.
- 3.6.7 Throughout the medieval period, agriculture continued to dominate the landscape although more concentrated rural settlements were established, the closest being Stansted, the origins of modern Stonestreet Green, as well as dispersed farmsteads, perhaps demonstrated in the vicinity by Aldington Mount (HER TR 03 NE 6), which may be of 15th century date. It is intervisible with Stonestreet Green, which has medieval origins, which presently displays little of these origins, but is at an elevated position, overlooking the lower land to the north-east. However, the origins of Aldington Mount are uncertain, and so it can be argued that this feature demonstrates little value as a significant element of the medieval landscape, and there are no other contenders for upstanding surviving elements of the medieval landscape.
- 3.6.8 The evidence shows that the landscape at present reflects landuse and alterations of the post medieval period. The overall settlement pattern comprised dispersed farmsteads with more concentrated settlement in the immediate vicinity of the Site at Stonestreet Green continuing from the medieval period. Wealth from the success of the wool trade resulted in the replacement of earlier, medieval, structures, and additional discrete farmsteads were established populating the landscape. Although the earliest surviving boundaries within the Site date from the late medieval or



- $17^{th}/18^{th}$ centuries according to the Historic Landscape Characterisation study, this assessment suggests that much of the landscape presently reflects the $17^{th}/18^{th}$ century.
- 3.6.9 The survivability of 17th/18th century elements within the Site boundary has been impacted by field amalgamation in the late 19th century, and, following the temporary role of the landscape forming the background to the Battle of Britain above, more significant amalgamations in the 20th century with the impacts of increased mechanisation to agricultural processes. The divisions of the land within the Site, as understood in the mid 19th century, prior to the field amalgamations of later periods, are shown on GM12014/004-013 within Appendix 3, along with field boundaries and landuse at that time, to aid an understanding of the landscape as experienced in the 17th/18th century. Comparison with GM12014/004-014 within Appendix 3, which show surviving historic elements of the landscape on modern mapping, includes modern developments, demonstrating the impacts on the historic landscape since the mid-19th century.
- 3.6.10 Modern developments introduced into the immediate vicinity of the Project include landscape-level schemes such as High Speed 1/Channel Tunnel Rail Link (HS1/CTRL), essentially respecting the pre-existing 19th century route of the London and South-Eastern Railway to the immediate north of the Site and the motorway route, the M20, to the north-east, linking Folkestone to the M25. These have truncated the Site's relationship with the wider landscape to the north, affecting an understanding of the 17th/18th century landscape represented within the redline boundary and wider area.
- 3.6.11 Despite this, public rights of way and historic hedgerows representing field boundaries with 17th/18th century origins survive within the Site, mapped on GM12014/004-013 within Appendix 3. Also mapped are Aldington mount, and the Roman road, both also surviving elements of the present landscape representing historic land use.



4 IMPACT ASSESSMENT

4.1 **Project Impacts**

- 4.1.1 Other assessments produced as part of the Project, as detailed above, address individual features and historic assets and the potential impacts of the Project. This assessment addresses the potential impacts of the Project at a landscape level, both the direct impacts of the Project upon the landscape as represented within the redline boundary, and the indirect impacts of changes to the land within Site upon its wider landscape setting.
- 4.1.2 The Project will result in impacts occurring during construction, operational and decommissioning phases. Construction phase only impacts as defined in this assessment include a 20m wide construction corridor for the cable route extending east of Field 27, trenches up to 2m wide and 1.5m deep for cabling to connect the Intermediate Substations to the Project Substation and temporary construction compounds in Fields 9, 18, 20, 23 and 25. As-yet undefined additional construction-phase only impacts are likely to occur from vegetation clearance to facilitate access and visibility splays, foundation trenches for operational-phase structures and associated cabling, any temporary storage/lay down areas and any new or upgraded access tracks to enable/enhance access.
- 4.1.3 Operational-phase only impacts would comprise the establishment of Solar PV Panels within Fields 1-25. These will be mounted on PV frames/tables which will be up to 3.5m above ground level. The solar PV panels will be protected by deer-proof fencing with a maximum height of 2.5m, which itself will be set back from existing hedgerows by at least 3.2m. Acoustic barriers will extend to a maximum height of 4m above ground level around Inverter Stations. Associated infrastructure required during the operational phase includes Inverter Stations to be located within most fields allocated for solar PV panels, and these will have foundations. Co-located with the Invertor Stations will be the Battery Energy Storage System, DC-DC converters and Transformers. Intermediate Substations will be positioned in Fields 3, 15, 20 and 26, and the Project Substation will be sited within Field 26.
- 4.1.4 Decommissioning-phase related impacts will be minimal due to the relative ease of returning the land back to agricultural use – much of the infrastructure relating to the Project, in contrast to housing developments, or other energy-related projects, such as nuclear, are uncomplicated to uninstall and remove.



4.2 Summary of Impacts

4.2.1 In terms of the archaeological landscape, and at a landscape level, the operational impacts are most applicable, the construction and decommissioning impacts being more short-term, although for impacts within the Site boundary, construction phase impacts are also applicable. These impacts can be summarised as direct and non-indirect impacts, as below:

Type of Impact	Receptor		
Direct impact – construction and operational phases – loss of a range of upstanding features representative of the 17 th /18 th century landscape	The state of the s		
Indirect impacts – operational phase – introduction of modern infrastructure and associated glint and glare within the landscape affecting setting, views and understanding	the redline boundary		

4.3 Direct Impacts

- 4.3.1 The Project will result in the loss of upstanding features reflective of the 17th/18th century landscape within the redline boundary during the construction phase. This will impact hedgerows and public rights of way.
- 4.3.2 Historic hedgerow, totalling approximately 150m will be removed during the construction phase, which will be replanted during the operational phase, with the remainder reinstated upon decommission. Thus, overall, the landscape will remain unaffected at a landscape level in terms of hedgerow removal. In addition, hedgerow planting will occur, totalling approximately 5.4km, resulting in the re-instating of the anticipated 17th/18th century layout as depicted on mid-19th century mapping. This will result in hedgerow boundaries between Fields 1/2, between Fields 3/4 and Fields 3/7, between Fields 4/5, Fields 6/7, Fields 10/11, Fields 12/13, Fields 13/14, Fields 14/16, Fields 15/17, Fields 15/18, Fields 17/18 and Fields 23/24.
- 4.3.3 Seven public rights of way will be redirected as a result of the Project. The historic lane leading north of Goodwin Farm will be retained, though it may require upgrading. It is possible that some will be temporarily closed during the construction phase.

4.4 Embedded Mitigation

4.4.1 Hedgerows impacted by the Project will be reinstated and new hedgerows planted, respecting former, lost, boundaries. This, combined with the retention of existing trees, newly planted areas of native woodland, carr woodland, orchards, scrub or



woodland edge planting, tussock grassland margins, wet meadow grassland, meadow grassland skylark plots, and winter bird crop strips, will help to soften the impacts of change during the operational phase within the landscape on the wider historical landscape.

4.4.2 Generally, public rights of way realignments are minor, and will continue to allow access and an appreciation of the post medieval landscape, albeit it in a transformed state during the operational phase. The rerouted public right of way at the eastern extent of Field 26 will more readily match its historic alignment.

4.5 **Indirect Impacts**

4.5.1 The Project will result in the introduction of new infrastructure into the landscape. The solar PV panels and associated fencing, Inverter Stations, Intermediate Substations and Project Substation, with associated glint and glare impacts, will have an effect on an understanding of the historic landscape, both within and beyond the redline boundary, and affect the setting of the wider landscape beyond the redline boundary. Glint and glare could introduce a new and distracting element to views from public rights of way and access routes across the area.

4.6 **Embedded Mitigation**

- 4.6.1 Additional planting is planned at the edges of the fields and surrounding the Project to minimise immediate impacts on setting. As the area is relatively low-lying, with higher land levels to the north and south, impacts on the wider landscape would be anticipated. A glint and glare assessment (ES Volume 4, Appendix 16.2: Solar Photovoltaic Glint and Glare Study (Doc Ref. 5.4)) has confirmed that public rights of way will remain unaffected but that solar reflections are geometrically possible towards a 2.2km section of Goldwell Lane, a 0.5km section of Forge Hill, a 0.9km section of Roman Road, a 2.4km section of Frith Road and a 0.7km section of Chequer Tree Farm Road. It established that existing vegetation significantly obstructs views towards the identified sections of Forge Hill, Roman Road, Frith Road and Chequer Tree Lane. The retention, or reinstatement, of such vegetation will therefore minimise impacts significantly.
- 4.6.2 Zones of Theoretical Visibility modelling (refer to **ES Volume 3, Figure 8.1: Zone of Theoretical Visibility (Doc Ref. 5.3))** indicates that elements of the Project will be visible across a wider landscape, particularly to the south-west, from Romney Marsh to the south-west of Newchurch, and to the north-east, along the North Downs in a



stretch from Etchinghill north-westwards towards Wye. The Pilgrim's Way trackway follows this alignment, though lies a little to the south-west of the intervisible zone. In the immediate vicinity of the Site, intervisibility is restricted to the route of Frith Road and Bank Road from the eastern extent of Frith Road, though more extensive to the east, where it extends in places as far as Court-at-Street and Sellindge, to the north, where it extends to the M20 and in places, beyond to Brabourne Lees, and to the north-west, where it extents in places to the A2042 road south-east of Ashford. This will not be mitigated against, though modern intrusions into the landscape have already affected longer views and setting, particularly the HS1/CTRL railway and the M20, which sever the Site from the wider landscape to the north.



5 CONCLUSION

- 5.1.1 This study has allowed a comprehensive study of the present landscape within the redline boundary and concluded that it largely reflects the 17th/18th century agricultural alterations of the area. A number of surviving individual landscape features have been identified with origins in this period, predominantly field boundaries respected by hedgerows and tracks and public rights of way.
- 5.1.2 Piecemeal evidence for earlier landuse is represented by discrete upstanding features in the landscape, namely Roman Road/Bank Road and Aldington Mount, and although associated activity may survive (and certainly does in relation to the Roman Road), this would be applicable to sub-surface archaeological remains which are not represented in the present landscape. Such sub-surface archaeological potential has been identified elsewhere within the Site boundary by geophysical surveys and the archaeological trial trenching, but again such sub-surface features are not respected by elements of the present landscape.
- 5.1.3 Impacts, as a result of the Project, have been identified which would affect an understanding and appreciation of the 17th/18th century landscape:
 - Hedgerow loss: some will be replanted during the operational phase, and all
 will replanted during the decommissioning phase. Additional hedgerows will
 be planted during the construction/operational phase, respecting historic
 boundaries. New areas of woodland and other planting will also be
 introduced, which will not only reflect the former higher level of woodland
 known the mid-19th century but reduce wider impacts to setting and visually.
 - Public rights of way realignment: several will be slightly rerouted during the construction/operational phase and this is presumably permanent. One of these, however, will more readily match its historic alignment.
 - Introduction of New Infrastructure: the Project will affect all areas within the redline boundary, introducing modern infrastructure with visual impacts to the historic landscape; glint and glare impacts (ES Volume 4, Appendix 16.2: Solar Photovoltaic Glint and Glare Study (Doc Ref. 5.4)) have been assessed to be minimal. Although studies (ES Volume 2, Chapter 8: LVIA (Doc Re. 5.2)) have shown that visual impacts of the Project will affect a wide area, particularly to the south-west and north-east, impacts to the north-east have already occurred as a result of modern intrusions, including the M20 and



HS1/CTRL routes and new areas of planting aim to reduce wider impacts to setting and visually.



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APPENDIX 1: PLATES

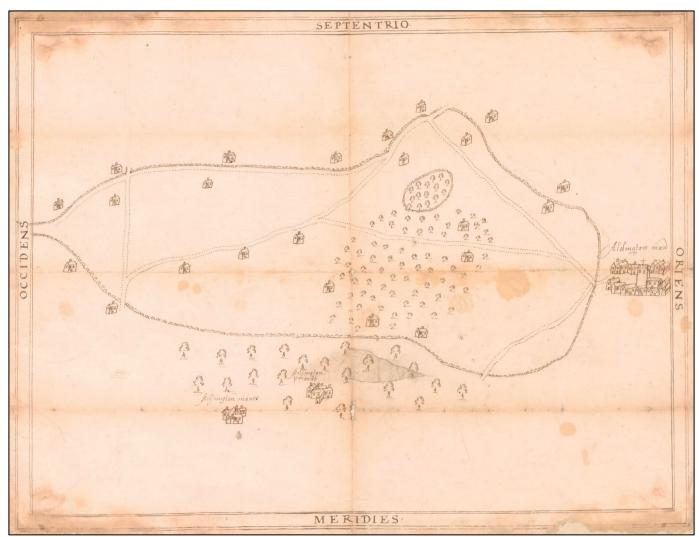


Plate 1: Plan of Aldington manor and Bilsington priory and manor, Kent (NA MPI 1/258, 1558-1603)





Plate 2: Extract from Mudge's Map of 1801 (after Mapco.net)



APPENDIX 2: TITHE AWARD INFORMATION

The table below provides a summary of the evidence from the Tithe Awards and Plans applicable to each field within the Site:

Field	Historic	Landowner	Occupier	Fieldname	Use
No.	Plot Nos.	On the control of the			75.77.50
1	601	Sir Edward Knatchbull Baronet	Richard Harris	Broadoaks Field	Hops
	600			Eighteen Acres	Pasture
	599			Fourteen Acres	Pasture
	603		Sir Edward Knatchbull Baronet	Broadoak Wood	Wood
2	600	Sir Edward Knatchbull Baronet	Richard Harris	Eighteen Acres	Pasture
2	599			Fourteen Acres	Pasture
3	565	Thomas Law and Catherine Gurr	William Sillibourne	Almshouse Meadow	Pasture
	567			Wood Field	Pasture
	568			Five Acres	Pasture
	569			Long Field	Pasture
	587			Eight Acres	Pasture
4	566	Thomas Law and Catherine Gurr	William Sillibourne	Hilly Meadow	Pasture
5	570	Sir Edward Knatchbull Baronet	Charles Raynor	Stone Quarry and Lime Kilns	-
	571			Part of Quarry Field	Arable
	572			Shaw	Wood
	573	Thomas Piddlesden	John Murton	Shaw	Wood
6	82	Sir Edward Knatchbull Baronet	Charles Raynor	Kiln Field	Arable
7	574	Thomas Piddlesden	John Murton	Rutton Wood Field	Arable
	575			Part of Six Acres	Pasture
	79		John Harnett	Wood Field	Arable
	79a			Shave	Wood
	80	Charles Butcher and Elizabeth Wyman	Charles Raynor	Little Wood	Wood
	86			Goodwin Lane Field	Arable
	81	Elizabeth Raynor	Elizabeth Raynor	Goodwin Lane Field	Pasture
	81a			Shave	Wood
	87	Thomas Carpenter	Thomas Carpenter	Middle Field	Pasture
	89			Goodwin Lane Field	Pasture
8	84	Sir Edward Knatchbull Baronet	Charles Raynor	Shave Field	Pasture



Field	Historic	Landowner	Occupier	Fieldname	Use
No.	Plot Nos.				
	85	Charles Butcher and Elizabeth Wuman	Charles Raynor	Cow Field	Pasture
	126	Charles Butcher and Elizabeth Wyman	Charles Raynor	Side Hills	Pasture
	132	Sir Edward Knatchbull Baronet	Charles Raynor	Bank House Field	Pasture
9	83	Charles Butcher and Elizabeth Wyman	Charles Raynor	Rock Field	Arable
9	133	Sir Edward Knatchbull Baronet	Charles Raynor	Barn Field	Arable
10	558	Sir Edward Knatchbull Baronet	Richard Harris	South Stour Rock	Arable
10	559	Sir Edward Knatchbull Baronet	Charles Raynor	Part of Thistley Field	
11	559	Sir Edward Knatchbull Baronet	Charles Raynor	Part of Thistley Field	Arable
11	134	Sir Edward Knatchbull Baronet	Charles Raynor	Hone Rocks	Arable
12	157	Sir Edward Knatchbull Baronet	Charles Raynor	Ten Acres	Arable
y.	135	Sir Edward Knatchbull Baronet	Charles Raynor	Spring Field	Pasture
	136			Hop Garden	Hops
10	156			Hop Garden	Arable
13	139	William Deedes Esquire	William Whitehead	Long Field	Pasture
	137			Grove	Pasture
	150			Seven Acres	Pasture
[139	William Deedes Esquire	William Whitehead	Long Field	Pasture
14	138			Green Footpath Field	Pasture
	142	Separation of the second of th		Gregory Field	Pasture
45	149	were B. L. E. S.	William Whitehead	Oak Mead	Pasture
15	150	William Deedes Esquire		Seven Acres	Pasture
10	142	William Deader Francisco	William Whitehead	Gregory Field	Pasture
16	143	William Deedes Esquire		Common Mead Field	Arable
	152			Pond	-
	151			Pond Field	Pasture
17	222	William Deedes Esquire	MCIE MICA-LI	Poulton Field	Arable
17	223		William Whitehead	Old Hop Garden	Arable
	154			Barn Field	Pasture
	153	Dean & Chapter of Canterbury		Poulton Field	Pasture
10	148	annual and the second second	u I put	Inner Field	Pasture
18	233	William Deedes Esquire	Humphrey Philpott	Firminger Mead	Pasture
19	145	William Deedes Esquire	Humphrey Philpott	Common Mead	Pasture

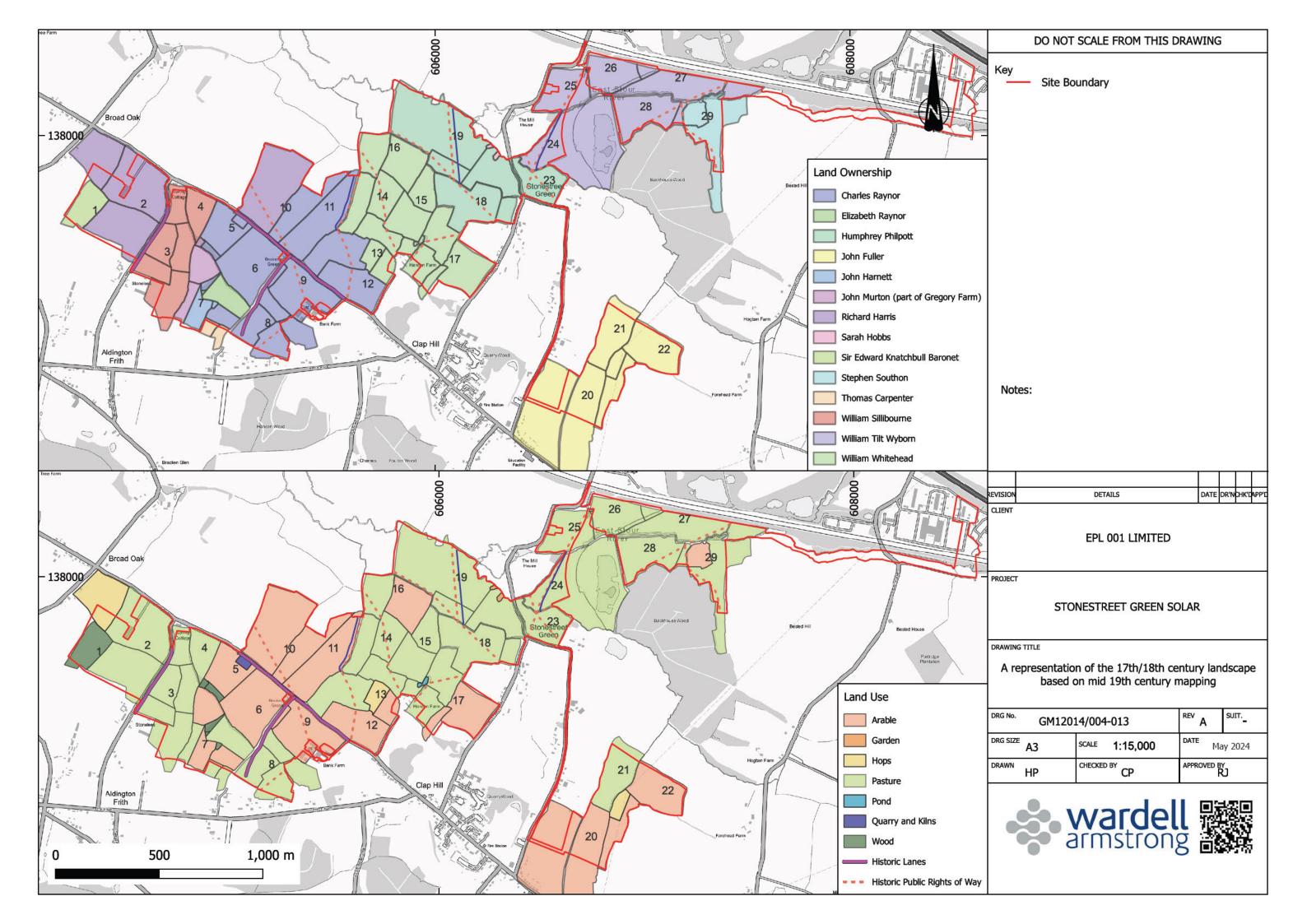


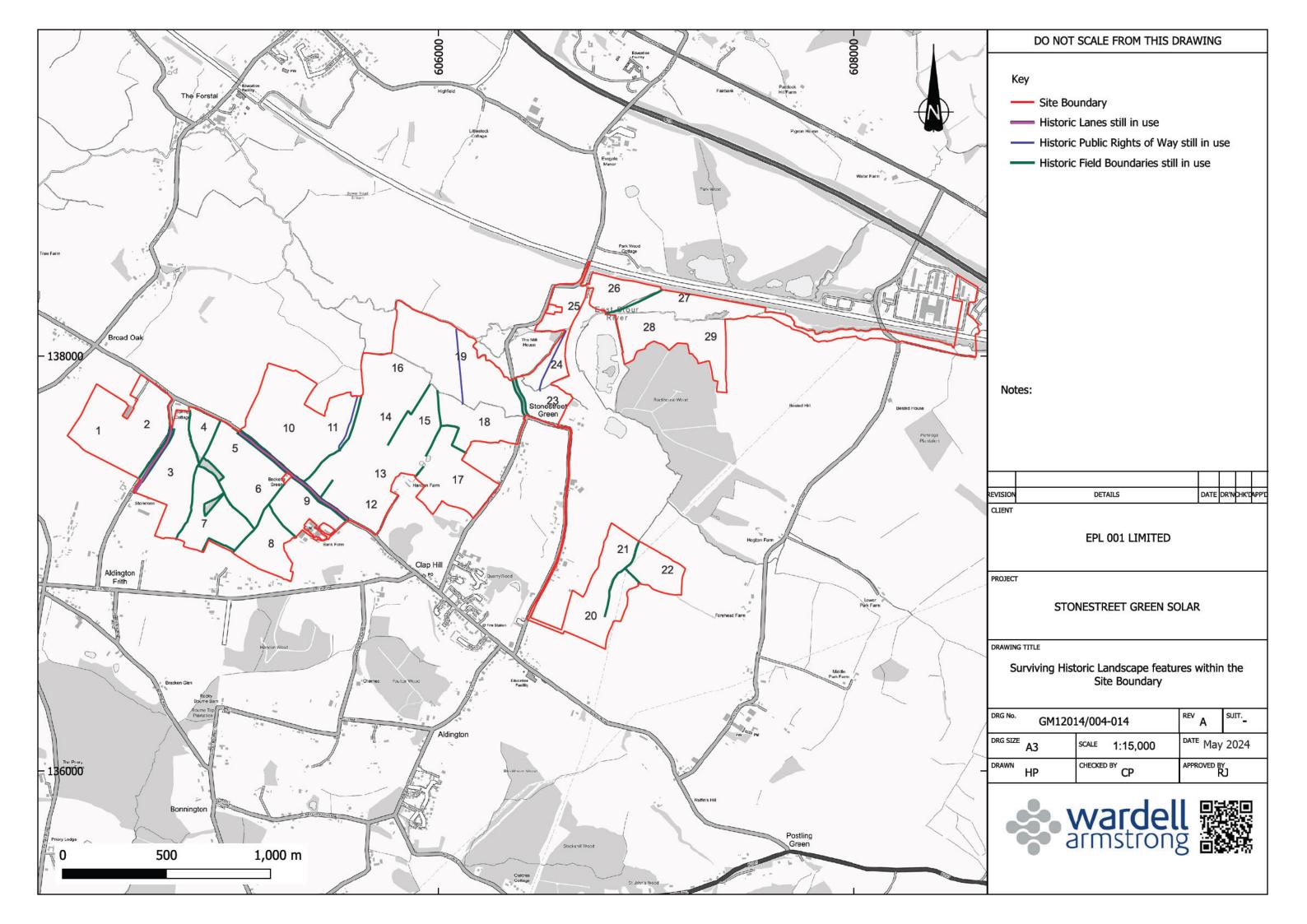
Field No.	Historic Plot Nos.	Landowner	Occupier	Fieldname	Use
	146	Dean & Chapter of Canterbury	Humphrey Philpott	Common Field	Pasture
	146a	Sir Edward Knatchbull Baronet	Sarah Hobbs	Garden	G C
	147a	Sir Edward Knatchbull Baronet	Saran Hobbs	Garden	2
	147	William Deedes Esquire	Humphrey Philpott	Seven Acres	Pasture
	335	****	V V V V V V V V V V V V V V V V V V V	Corner Field	Arable
	334			Copt Hall Field	Arable
20	333	William Deedes Esquire	John Fuller	Smeedlands	Arable
	333a			Smeedlands	Hops
	340			Part of Fifteen Acres	Pasture
21	340	William Deedes Esquire	John Fuller	Part of Fifteen Acres	Pasture
22	341	William Deedes Esquire	John Fuller	Nine Acres	Arable
23	235	Sir Edward Knatchbull Baronet	Humphrey Philpott	Pell Mead	Pasture
24	139	Sir Edward Knatchbull Baronet	William Tilt Wyborn	Great Meadow	Pasture
25	149	Sir Edward Knatchbull Baronet	William Tilt Wyborn	Widdens	Pasture
	36	10 00 10	William Tilt Wyborn	Shingleton Field	Pasture
26	136	Sir Edward Knatchbull Baronet		Part of Lower Side Hills	Pasture
20	135	Sir Edward Knatchbull Baronet		Part of Old Hop Garden	Pasture
	137			Part of Lowe Side Hills	Pasture
27	133	Sir Edward Knatchbull Baronet	William Tilt Wyborn	Part of Slip Meadow and Nine Acres	Pasture
21	132	Sir Edward Knatchbull Baronet		Part of Lodge Meadow	Pasture
20	134	Sir Edward Knatchbull Baronet	William Tilt Wyborn	Part of Fourteen Acres	Pasture
28	353	3ii Edward Knatchbull Baronet		Aldington Field	Pasture
20	354	William Dander Familia	Stankan Sauthan	River Field	Arable
29	355	William Deedes Esquire	Stephen Southon	Great Holmes	Pasture



APPENDIX 3: DRAWINGS

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EPL 001 LIMITED STONESTREET GREEN SOLAR ENVIRONMENTAL STATEMENT VOLUME 4 APPENDIX 7.1 ARCHAEOLOGICAL DESK BASED ASSESSMENT



Annex 5 Geophysical Survey





Geophysical Survey Report

of

Stonestreet Green Solar

For EPL 001 Limited

Magnitude Surveys Ref: MSTR1120

OASIS Number: magnitud1-508316

June 2024



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Issue Date:

06 June 2024

Abstract

Magnitude Surveys were commissioned to assess the subsurface archaeological potential of a c. 189ha area of land at Stonestreet Green . A fluxgate gradiometer survey was successfully completed across the majority of the survey area, although areas within the survey area, totalling c. 3.63ha, were unable to be surveyed due to unsuitable ground conditions. The survey identified areas of possible archaeology, including a possible enclosure and internal divisions in the northwest, along with multiple linear and curvilinear negative anomalies in the west and south, which possibly form parts of field systems, along with possible double ditched trackways. Anomalies of an agricultural origin were also identified, including drainage features, mapped and unmapped field boundaries, tracks, and evidence of modern ploughing. Anomalies of an undetermined origin were also identified across the survey area, and while these may relate to agricultural, modern or natural origins, an archaeological origin cannot be ruled out. The impact of modern activity on the results is present around area edges, surrounding pylons, and buried services, which may have obscured any weaker anomalies, if present. Natural variations were identified across the survey area, and are likely to be related to topographical changes, and to changes in the underlying geology, as well as the former route of a stream.

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The following table shows which area letter in the report corresponds to which area numbers used by the client on their layout plans (Area numbers 18 to 20 were either not part of the quoted area or were unable to be surveyed).

Area Letter	Area Number
A	1
В	1
С	2
D	3
E	4 & 5
F	6
G	7
Н	8
T .	9 & 10
1	11, 12, 13, 14 & 15
K	16
L	17
M	21
N	22
0	23
P	24
Q	25
R	26
S	27
T	Outside the redline boundary
U	Outside the redline boundary
V	Second Deployment
W	Second Deployment
X	Third Deployment

1. Introduction

- 1.1. Magnitude Surveys Ltd (MS) was commissioned by EPL 001 Limited to undertake a geophysical survey over a c. 189ha survey area (TR 06037 37363).
- 1.2. The geophysical survey comprised hand carried and quad towed GNNS positioned fluxgate gradiometer survey. Magnetic survey is the standard primary geophysical method for archaeological applications in the UK due to its ability to detect a range of different features. The technique is particularly suited for detecting fired or magnetically enhanced features, such as ditches, pits, kilns, sunken featured buildings (SFBs) and industrial activity (David et al., 2008).
- 1.3. The survey was conducted in line with the current best practice guidelines produced by Historic England (David et al., 2008), the Chartered Institute for Archaeologists (CIfA, 2020) and the European Archaeological Council (Schmidt et al., 2015).
- 1.4. It was conducted in line with a WSI produced by MS (Langston, 2021).
- 1.5. The survey commenced on 10/01/2022 and took three and a half weeks to complete. A second deployment commenced on 07/09/2022 and took three days to complete. A third deployment commenced on 21/12/2022 and took three days to complete.

2. Quality Assurance

- 2.1. Magnitude Surveys is a Registered Organisation of the Chartered Institute for Archaeologists (CIfA), the chartered UK body for archaeologists, and a corporate member of ISAP (International Society for Archaeological Prospection).
- 2.2. The directors of MS are involved in cutting edge research and the development of guidance/policy. Specifically, Dr Chrys Harris has a PhD in archaeological geophysics from the University of Bradford, is a Member of CIfA and has served as the Vice-Chair of the International Society for Archaeological Prospection (ISAP); Finnegan Pope-Carter has an MSc in archaeological geophysics and is a Fellow of the London Geological Society, as well as a member of GeoSIG (CIfA Geophysics Special Interest Group); Dr Paul Johnson has a PhD in archaeology from the University of Southampton, is a Fellow of the Society of Antiquaries of London, has been a member of the ISAP Management Committee since 2015, and is currently the Chair of the Archaeological Prospection Community of the European Archaeological Association.
- 2.3. All MS managers, field and office staff have degree qualifications relevant to archaeology or geophysics and/or field experience.

3. Objectives

3.1. The objective of this survey was to assess the subsurface archaeological potential of the survey area.

4. Geographic Background

4.1. The Site (Figure 1) is located approximately 2.4km to the south-east of Ashford and approximately 13.7km to the west of Folkestone town centre, in the county of Kent. It is situated on land located to the north of the village of Aldington that is currently predominantly used for arable cropping and grazing (Figure 1). Gradiometer survey was undertaken across 21 areas under arable cultivation and pasture. The High Speed 1/Channel Tunnel Rail Link ('HS1') is located to the north of the site boundary and is within 100m at its closest point. The M20 motorway carriageway lies approximately 45m further to the north of HS1. On the opposite side of the HS1 railway line to the site (between HS1 and the M20 motorway), there is a UK Power Networks ('UKPN') and NG substation, and a sewage treatment works. There is an existing UKPN 11 kilovolt ('kV') substation and access track located within the cable route corridor in the north-eastern part of the survey area. There is also an existing c.11MW solar project located to the east of the main part of the survey area (lying to the south of the cable route corridor). The East Stour River flows in an east to west direction to the north the northern part of the survey area. A large pond is located approximately 25m to the east of the part of the survey area that lies adjacent to Station Road, near Backhouse Wood. Station Road / Calleywell Lane runs north to south adjacent to the central part of the survey area. Bank Road / Roman Road bisects the central and western parts of the site. Residential dwellings of the village of Aldington are located predominantly to the south and east of the survey area. Residential dwellings are located adjacent to the east of the survey area (Figure 2). Areas within the survey area, totalling c. 3.68ha, were unable to be surveyed due to unsuitable ground conditions.

4.2. Survey considerations:

Ī	Survey	Ground Conditions	Further Notes
	Area		
	Α	The survey area consisted of a	The survey area was bordered on all sides by
		flat grass field.	metal fencing with trees present in the
			southwest. Areas in the south and northeast
			could not be surveyed due to waterlogged
N			ground.
	В	The survey area consisted of an	The area was bordered to the north by a wire
7		arable field with young crop,	fence, to the southwest and east by a hedge, and
		sloping down to the north.	to the east by a hedge and a water filled ditch.
			The field continued to the south. Three trees
			were present in the west of the survey area.
	C	The survey area consisted of a	The survey area was bordered on all sides by
P		flat arable stubble field.	hedges and wire fencing. The northern boundary
			included three metal gates. A fourth metal gate
			was located on the southernmost boundary.
			There were areas of boggy ground in the north
ŀ	_		and southwest.
١	D	The survey area consisted of a	The survey area was bordered by wire fencing,
١		grass field, gently sloping to the	hedgerows and drainage ditches on all sides,
		south and west.	with a patch of woodland to the south. Overhead
			cables followed the north-eastern boundary of
1			the survey area. Metal gates were present at the
L			northeast, southwest and southeast corners of

		the survey area. An area of waterlogged ground was present at the north-western end of the survey area. A stockpile of earth at the western edge of the survey area could not be surveyed.
E	The survey area consisted of a grass field, with a gentle slope down from the northeast to southwest.	The survey area was bordered to the north by a ditch and road, and by a ditch and hedge on other boundaries. Metal gates provided access across the south, west and southwestern boundaries. A large pile of manure was present on the northern area and could not be surveyed.
F	The area consisted of an arable field, with a slope down to the northwest.	The area was bordered on all sides by hedges and trees.
G	The survey area consisted of a grass field, sloping down to the northwest and southwest.	The area was bordered to the north, west and southwest by wire fencing and hedges, to the south by wooden fences, and to the east by trees and hedges. A metal gate was present in the southwest.
Н	The survey area consisted of a grass field, sloping down to the southwest in the west.	The area was bordered to the north, northeast, east and southwest by hedges and metal fencing, and to the south by farm buildings, stacked hay bales and farm equipment. Overhead cables and pylons ran northwest to southeast across the centre of the area.
I	The survey area consisted of an arable field sloping steeply down to the northeast.	The area was bordered to the northwest by bushes and hedges, and to all other sides by hedges. Pylons and overhead cables ran along the southern boundary. Waterlogged areas in the northeast of the area could not be surveyed.
J	The survey area consisted of an arable field with young crop, sloping steeply down to the north.	The area was bordered on all sides by a mixture of hedges and trees with additional metal fencing on the south-eastern border. A small area in the north of the survey area was waterlogged and could not be surveyed. A treeline ran south from the northern boundary into the survey area.
K	The survey area consisted of an arable field with young crop, sloping down to the south.	The area was bordered to the north, east, west and southwest by hedges. The field continued to the south. A pond was present on the western boundary, and areas of boggy mud were unable to be surveyed in the north and south.
L	The survey area consisted of a flat arable stubble field.	The area was bordered to the north and southwest by a ditch and stream, to the east by a hedge and ditch, to the southeast by hedges, trees, a ditch and a wire fence, and to the south by wire fencing, a ditch and a hedge. A footpath was present running northwest to southeast in the northeast of the survey area.
М	The area consisted of a cultivated field, sloping down to the northwest.	The area was bordered by hedges to the north, east, and south, with a water course ran along the western edge of the area. A pylon stood in

_		
		the eastern corner of the survey area with overhead cables running to the northeast and southwest.
N	The survey area consisted of a flat arable fallow field.	The area was bordered to the east, south and west by hedges, and a watercourse and hedge were present to the north. A public footpath ran north to south across the centre of the survey area. Overhead cables ran north to south and east to west across the survey area meeting at a pylon in the southeast.
0	The survey area consisted of a flat grass field.	The area was bordered on all sides by hedges and wire fencing. Utilities access points were located in the north, southwest and southeast of the area. A metal gate was present in the north. Overhead power cables ran north to south across the centre of the survey area.
P	The survey area consisted of a grass field, gently sloping down from north to south.	The area was bordered to the north, east and west by hedges and metal fencing, and to the south by overgrown vegetation. Parts of the south of the field were unable to be surveyed, due to wet, boggy ground. An electrical substation was present in the centre of the field, with overhead cables running east, west and south from it. Access to the station was via raised gravel track from a metal gate on the western boundary.
Q	The survey area consisted of a grass field, sloping down from the northwest corner.	The area was bordered to the north by a grass embankment and a railway, to the southeast by hedges and a metal fence, and to the south and east by a farm track and metal silo. A metal gate was present in the south of the survey area, and a hay baler was present on the western boundary. In the southern corner of the survey area was a flat concrete pad.
R	The survey area consisted of a flat arable field.	The area was bordered to the north by a metal fence, a grass embankment and a railway, to the west by overgrown vegetation and a ditch, and to the south and east by a grass verge, trees and a stream. Overhead cables were present just beyond the southern boundary, running east to west.
S	The survey area consisted of an arable stubble field sloping down to the west in the east of the area.	The area was bordered to the north by a stream and overgrown vegetation, to the east and west by hedges and to the south by a metal fence and trees. Two sets of overhead cables and pylons were present in the north and centre of the survey area, running east to west.
T	The survey area consisted of an undulating grass field.	The survey area was bordered on all sides by combined hedges and metal fences. Two areas of steep ground were present in the centre and southeast and could not be surveyed.

U	The survey area consisted of a flat grass field.	The area was bordered on all sides and across the centre by wire fence. A large ditch prevented survey in the east of the area as did farm equipment stored in the centre.
V	The area consisted of an arable field, sloping down to the north.	The area was bordered by hedges and trees to the north, west, and south, with a watercourse present along the eastern boundary. A line of trees ran north to south in the centre of the area. A pylon was present on the eastern boundary, with overhead cables running north to south in the east.
W	The survey area consisted of a series of arable and pasture fields along a cable corridor.	The areas were bordered to the north by trees, and to the east and west by hedges and trees. The fields continued to the south.
Х	The area consisted of a flat arable field, with young crop.	The area was bordered to the north and south by trees, hedges and a stream, to the east by trees and a road, and to the west by trees and hedges. An area in the west was unable to be surveyed due to waterlogged ground. Pylons and overhead cables ran northwest to southeast across the northeast of the area.

- 4.3. The underlying geology comprises mudstone of the Weald Clay Formation across the majority of the survey area with bands of mudstone of the Atherfield Clay Formation across the north of Areas P, east of Areas R, S, and W, south of Areas J, M, and V, west of Area W, northwest of Areas Q, D, and G, and through the centre of Areas E, I, and V. Bands of interbedded sandstone and limestone of the Hythe Formation were also identified across to the north of Area E, east of Area V, south if Area J, west of Area V, southeast of Area S, northwest of Area Q, and across the centre of Areas I and H. Superficial deposits consist of bands of clay, silt, sand and gravel alluvium, across Areas J, N, O, P, Q, R, S, W, and X with a band of clay and Silt Head across the east of Area W (British Geological Survey, 2024).
- 4.4. The soils consist of slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils across the majority of the survey area, with bands of freely draining slightly acid but base-rich soils in the centre of the survey area, and loamy and clayey floodplain soils with naturally high groundwater in the north (Soilscapes, 2024).

5. Archaeological Background

- 5.1. The following is a summary of an Environmental Impact Assessment Scoping Report produced by Barton Willmore, and provided by the client (Barton Willmore, 2022). The site boundary mentioned within the following is the larger c. 189ha site.
- 5.2. The protected crash site of a Second World War aircraft is located within the south of the site boundary, to the northeast of Handen Farm. Five further protected crash sites are noted within the 1km search area of the site boundary, to the north and southwest, and east.
- 5.3. The nearest Scheduled Monument to the site boundary comprises a cemetery of seven barrows, dating from around the Early Bronze Age period, located c. 880m southeast of the site boundary. Within the wider area are the scheduled remains of a Romano-British building,

located c.1.6km southeast of the site boundary and Bilsington Priory, located c.1.5km south of the site.

- 5.4. Within the 1km search area from the site boundary, there are eight highly graded listed buildings, comprising two Grade I and six Grade II listed buildings. In close vicinity to the western part of the site boundary (approximately 65m to the west) is the Grade II listed Stonelees, a 15th century house. Within the wider area, there are five Grade I and six Grade II listed buildings. Within the 1km search area from the site boundary, there are 69 Grade II listed buildings. Ten of these buildings are recorded within 100m of the site boundary. Within the wider area, the most southern tip of the Grade II registered Hatch Park is located c.1.5km north of the site boundary.
- 5.5. The Kent HER records two Conservation Areas within the 1km search area from the site boundary, comprising the Aldington Clap Hill Conservation Area, located approximately 200m to the south of the site boundary and the Aldington Church Conservation Area, located approximately 460m to the southeast. Within the wider area, there is Smeeth Conservation Area, located approximately 1.1km north of the site boundary and Bilsington Conservation Area, located approximately 2.6km south.
- 5.6. The Kent HER records that the site partially falls within the Stour Palaeolithic Character Area of the Weald Basin, which has low Palaeolithic potential. A number of sites and findspots are recorded within the site boundary. The findspots have been recovered via metal detecting. The earliest findspots date to the Romano-British period and comprise two copper alloy brooches and a copper alloy mount. Bank Road / Roman Road bisects the central and western part of the site.
- 5.7. Saxon findspots have been recovered within the site boundary, comprising a copper alloy brooch, a silver coin of Aethelred II and a copper alloy key (locking).
- 5.8. Medieval findspots recovered within the site boundary comprise two pottery vessels, numerous silver coins, copper alloy buckles, mount and strap fittings, and a copper alloy unidentified object.
- 5.9. The post-medieval period is represented within the site boundary by farms and a silver coin of Henry VIII.
- 5.10. The cropmark of a square enclosure is recorded within the centre of the site boundary to the north of Handen Farm but remains undated.

6. Methodology

6.1.Data Collection

6.1.1. Magnetometer surveys are generally the most cost effective and suitable geophysical technique for the detection of archaeology in England. Therefore, a magnetometer survey should be the preferred geophysical technique unless its use is precluded by any specific survey objectives or the site environment. For this site, no factors precluded the recommendation of a standard magnetometer survey. Geophysical survey therefore comprised the magnetic method as described in the following section.

- 6.1.2. Geophysical prospection comprised the magnetic method as described in the following table.
- 6.1.3. Table of survey strategies:

Method	Instrument	Traverse Interval	Sample Interval
Magnetic	Bartington Instruments Grad-13 Digital Three-Axis Gradiometer	1m	200Hz reprojected to 0.125m

- 6.1.4. The magnetic data were collected using MS' bespoke quad-towed cart and hand-carried GNSS-positioned system.
 - 6.1.4.1. MS' cart and hand-carried system was comprised of Bartington Instruments Grad 13 Digital Three-Axis Gradiometers. Positional referencing was through a multi-channel, multi-constellation GNSS Smart Antenna RTK GPS outputting in NMEA mode to ensure high positional accuracy of collected measurements. The RTK GPS is accurate to 0.008m + 1ppm in the horizontal and 0.015m + 1ppm in the vertical.
 - 6.1.4.2. Magnetic and GPS data were stored on an SD card within MS' bespoke datalogger. The datalogger was continuously synced, via an in-field Wi-Fi unit, to servers within MS' offices. This allowed for data collection, processing and visualisation to be monitored in real-time as fieldwork was ongoing.
 - 6.1.4.3. A navigation system was integrated with the RTK GPS, which was used to guide the surveyor. Data were collected by traversing the survey area along the longest possible lines, ensuring efficient collection and processing.

6.2.Data Processing

6.2.1. Magnetic data were processed in bespoke in-house software produced by MS. Processing steps conform to the EAC and Historic England guidelines for 'minimally enhanced data' (see Section 3.8 in Schmidt *et al.*, 2015: 33 and Section IV.2 in David *et al.*, 2008: 11).

<u>Sensor Calibration</u> – The sensors were calibrated using a bespoke in-house algorithm, which conforms to Olsen *et al.* (2003).

<u>Zero Median Traverse</u> – The median of each sensor traverse is calculated within a specified range and subtracted from the collected data. This removes striping effects caused by small variations in sensor electronics.

<u>Projection to a Regular Grid</u> – Data collected using RTK GPS positioning requires a uniform grid projection to visualise data. Data are rotated to best fit an orthogonal grid projection and are resampled onto the grid using an inverse distance-weighting algorithm.

<u>Interpolation to Square Pixels</u> – Data are interpolated using a bicubic algorithm to increase the pixel density between sensor traverses. This produces images with square pixels for ease of visualisation.

6.3. Data Visualisation and Interpretation

- 6.3.1. This report presents the gradient of the sensors' total field data as greyscale images. The gradient of the sensors minimises external interferences and reduces the blown-out responses from ferrous and other high contrast material. However, the contrast of weak or ephemeral anomalies can be reduced through the process of calculating the gradient. Consequently, some features can be clearer in the respective gradient or total field datasets. Multiple greyscale images of the gradient and total field at different plotting ranges have been used for data interpretation. Greyscale images should be viewed alongside the XY trace plot (Figures 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 63, 66, 69, 72, 75, 78, 81 & 84). XY trace plots visualise the magnitude and form of the geophysical response, aiding anomaly interpretation.
- 6.3.2. Geophysical results have been interpreted using greyscale images and XY traces in a layered environment, overlaid against open street maps, satellite imagery, historical maps, LiDAR data, and soil and geology maps. Google Earth (2024) was also consulted, to compare the results with recent land use.
- 6.3.3. Geodetic position of results All vector and raster data have been projected into OSGB36 (ESPG27700) and can be provided upon request in ESRI Shapefile (.SHP) and Geotiff (.TIF) respectively. Figures are provided with raster and vector data projected against OS Open Data.

7. Results

7.1.Qualification

7.1.1. Geophysical results are not a map of the ground and are instead a direct measurement of subsurface properties. Detecting and mapping features requires that said features have properties that can be measured by the chosen technique(s) and that these properties have sufficient contrast with the background to be identifiable. The interpretation of any identified anomalies is inherently subjective. While the scrutiny of the results is undertaken by qualified, experienced individuals and rigorously checked for quality and consistency, it is often not possible to classify all anomaly sources. Where possible, an anomaly source will be identified along with the certainty of the interpretation. The only way to improve the interpretation of results is through a process of comparing excavated results with the geophysical reports. MS actively seek feedback on their reports, as well as reports from further work, in order to constantly improve our knowledge and service.

7.2.Discussion

- **7.2.1.** The geophysical results are presented in combination with historical maps (Figures 4, 6, 8, 10, 12, 14, 16 & 18).
- 7.2.2. A fluxgate gradiometer survey was successfully completed across most of the survey area, although areas within the survey area, totalling c. 3.63ha, were unable to be surveyed due to unsuitable ground conditions. The survey has identified areas of possible archaeology in the northwest, south and west of the survey area. Anomalies of agricultural origin have also been identified across the survey area, along with anomalies of undetermined origin. The impact of modern activity across the survey area is generally limited to area edges and surrounding buried services and pylons, which could have obscured weaker anomalies, if they were present. Natural variation in the geological background is evident across the survey area and is likely to have been caused by the topographic changes or the change in underlying geology, with the route of a former watercourse also identified in the northwest (Section 4.3).
- 7.2.3. Evidence of archaeological activity has been identified in the northwest, south and west of the survey area. A possible enclosure has been detected in the northwest, with possible evidence of subdivisions within, and adjacent linear anomalies to the east (Figure 4). In the west and south of the survey area, further linear and curvilinear negative anomalies have been identified (Figures 3, 4, 5 & 6). These anomalies appear fragmentary in places, but some do appear to form partial enclosures, and could represent field systems. Two possible double ditched trackways have been identified in the south (Figure 6), along with further possible rectilinear enclosures. Due to their comparatively weak signal it is difficult to be certain of the exact extent and relationship of these to the other anomalies.
- 7.2.4. Agricultural activity has been identified across the survey area. Linear and curvilinear anomalies, along with spreads of more magnetically enhanced material have been identified, some of which collocate with former field boundaries or tracks marked on 2nd Edition OS mapping (Figures 4, 6, 8, 10, 12 & 18). Those that do not correspond with

known former boundaries present a similar magnetic signal, or follow a similar alignment to those that do, and it is likely that these are unmapped former field boundaries or similar. Numerous linear anomalies have been identified in the northeast, centre, east, south and west of the survey area, on varying orientations, and are characteristic of field drains. Across the survey area, modern ploughing trends have also been identified. These appear to correlate with the recent ploughing regime visible on satellite imagery (Figures 4, 6, 8, 10, 12 & 18).

7.2.5. Across the survey area, linear and curvilinear anomalies have been detected, along with some stronger, small, discrete anomalies (Figures 20, 23, 26, 29, 32, 35, 38, 41, 44, 50, 53, 56, 59, 62, 65, 68, 71, 80 & 83). Because of the lack of any diagnostic morphology or signal, they have been classified as undetermined, and agricultural, natural, or modern origins are considered possible, though an archaeological interpretation cannot be entirely ruled out.

7.3.Interpretation

7.3.1. General Statements

- 7.3.1.1. Geophysical anomalies will be discussed broadly as classification types across the survey area. Only anomalies that are distinctive or unusual will be discussed individually.
- 7.3.1.2. Data Artefact Data artefacts usually occur in conjunction with anomalies with strong magnetic signals due to the way in which the sensors respond to very strong point sources. They are usually visible as minor 'streaking' following the line of data collection. While these artefacts can be reduced in post-processing through data filtering, this would risk removing 'real' anomalies. These artefacts are therefore indicated as necessary in order to preserve the data as 'minimally processed'.
- 7.3.1.3. **Ferrous (Spike)** Discrete dipolar anomalies are likely to be the result of isolated pieces of modern ferrous debris on or near the ground surface.
- 7.3.1.4. Ferrous/Debris (Spread) A ferrous/debris spread refers to a concentration of multiple discrete, dipolar anomalies usually resulting from highly magnetic material such as rubble containing ceramic building materials and ferrous rubbish.
- 7.3.1.5. Magnetic Disturbance The strong anomalies produced by extant metallic structures, typically including fencing, pylons, vehicles and service pipes, have been classified as 'Magnetic Disturbance'. These magnetic 'haloes' will obscure weaker anomalies relating to nearby features, should they be present, often over a greater footprint than the structure causing them.
- 7.3.1.6. **Undetermined** Anomalies are classified as Undetermined when the origin of the geophysical anomaly is ambiguous and there is no supporting contextual evidence to justify a more certain classification. These anomalies are likely to be the result of geological, pedological or agricultural processes, although an

archaeological origin cannot be entirely ruled out. Undetermined anomalies are generally distinct from those caused by ferrous sources.

7.3.2. Magnetic Results - Specific Anomalies

- 7.3.2.1. Possible Archaeology (Areas D & E) Weak linear and curvilinear anomalies with some strong enhancements along the length of the anomalies have been identified in the centre of Area D [D1] & [E1], with a possible associated linear anomaly 40m to the south in Area D (Figures 29 & 32). The anomalies appear to form a possible enclosure, measuring c. 70m by c. 30m, with internal subdivisions, along with possible associated anomalies surrounding the enclosure.
- 7.3.2.2. Possible Archaeology (Areas A, B, F & G) Across Areas A, B, F & G, weak linear and curvilinear negative anomalies have been identified, with some anomalies presenting a positive signal (Figures 19, 20, 22, 23, 25, 26, 28, 29, 31, 32, 34 & 35). These anomalies appear to form fragmented partial enclosures, possibly indicating the presence of field systems, along with weaker linear anomalies surrounding them. In the centre of Areas F and G, two possible double ditched trackways have been identified (Figures 26 & 35), with the trackway in Area G [G1] appearing to extend up into a sub-rectilinear enclosure, measuring c. 53m by c. 17m.
- 7.3.2.3. Agricultural (Spread, Strong and Weak) Across Areas A, C, F, G, I, J, K, S, V and X weak linear anomalies with some stronger enhancements have been identified, along with spreads of more magnetically enhanced material in the west of Area A, east of Area X, and the centre of Areas C, G, K, and V (Figures 19, 20, 22, 23, 25, 26, 28, 29, 31, 32, 34, 35, 37, 38, 40, 41, 43, 44, 46, 47, 49, 50, 52, 53, 61, 62, 63, 64, 79, 80, 82 & 83). Many of these anomalies appear to collocate with former field boundaries or tracks visible on historical OS maps (Figures 4, 6, 8, 10, 12 & 18). The anomalies that do not correspond with former boundaries appear similar in appearance and strength to those that do and are likely unmapped field boundaries or similar.
- 7.3.2.4. **Agricultural (Trend)** Across the majority of the survey area, regularly spaced, weak linear anomalies have been identified (Figures 4, 6, 8, 10, 12, & 14). Many of these anomalies match with the plough direction recorded at the time of survey or with previous orientations visible on satellite imagery.
- 7.3.2.5. **Drainage Feature** Across Areas C, D, E, G, I, J and K a number of weak and dipolar linear anomalies on varying orientations have been identified (Figures 19, 20, 22, 23, 25, 26, 28, 29, 31, 32, 34, 35, 37, 38, 40, 41, 46, 47, 49 & 50). The form of these anomalies, and their orientation with regard to the field layout and topography, is suggestive of drainage features, with the dipolar anomalies likely to be ceramic drains.
- 7.3.2.6. **Undetermined (Strong & Weak)** Across the survey area, weak linear and curvilinear anomalies have been detected, with areas of stronger enhancement

along their lengths, along with some stronger discrete anomalies (Figures 20, 23, 26, 29, 32, 35, 38, 41, 44, 50, 53, 56, 59, 62, 65, 68, 71, 80 & 83). These do not collocate with any features marked on historical OS maps or satellite imagery (Figures 4, 6, 8, 10, 12, 14 & 18). Due to their ambiguous origin, and the fact that these anomalies do not form coherent layouts and present a different magnetic signal to the identified possible archaeology, they have been categorised as 'Undetermined'. However, an archaeological, agricultural, or natural origin cannot be ruled out.

7.3.2.7. **Natural (Weak)** – Across the survey area, weak curvilinear bands of natural variation, along with zones of more magnetically enhanced material have been detected (Figures 3-18). These follow the changes in the underlying geology (Section 4.2) as well as the topography noted across the area (Section 4.1) and are indicative of the possible movement of sediment down slopes. Within Field X, the route of a former waterway can be seen adjacent to the north-eastern boundary (Figures 46, 47, 49 & 50).

8. Conclusions

- 8.1. A fluxgate gradiometer survey has been undertaken across the majority of the survey area, although areas within the survey area, totalling c. 3.63ha, were unable to be surveyed due to unsuitable ground conditions. The geophysical survey has detected a range of different anomalies of archaeological, natural and agricultural origins. Anomalies of an undetermined provenance have also been detected. Modern interference was generally limited to the edges of the survey area, although pylons, and buried services have all created magnetic interference which could have obscured weaker anomalies if present.
- 8.2. Possible archaeological activity has been identified in the northwest, west, south and southeast. These include partial sub-rectilinear enclosures with internal subdivisions in the southeast, northwest and west, along with associated linear and curvilinear anomalies forming possible field systems in the west and southeast, and two possible double ditched trackways in the south and southeast. Further, more fragmentary, disjointed linear and curvilinear anomalies have been detected in the west and southeast of the area, and while they form less coherent forms than the archaeology in the northwest and southeast, they still present a signal indicative of anthropogenic activity.
- 8.3. The survey also identified former field boundaries and tracks, along with possible unmapped field boundaries across the survey area. Drainage features were identified in the centre, north and south, on varying orientations. Evidence of modern ploughing was also identified across the survey area.
- 8.4. Anomalies of an undetermined origin have been identified across the survey area. A more conclusive classification cannot be provided from the geophysical data alone, due to the lack of any further diagnostic supportive evidence. Whilst these anomalies are likely to have a modern, natural or agricultural origin, an archaeological cannot be ruled out.

9. Archiving

- 9.1. MS maintains an in-house digital archive, which is based on Schmidt and Ernenwein (2013). This stores the collected measurements, minimally processed data, georeferenced and ungeoreferenced images, XY traces and a copy of the final report.
- 9.2. MS contributes reports to the ADS Grey Literature Library upon permission from the client, subject to any dictated time embargoes.

10. Copyright

10.1. Copyright and intellectual property pertaining to all reports, figures and datasets produced by Magnitude Services Ltd is retained by MS. The client is given full licence to use such material for their own purposes. Permission must be sought by any third party wishing to use or reproduce any IP owned by MS.

11. References

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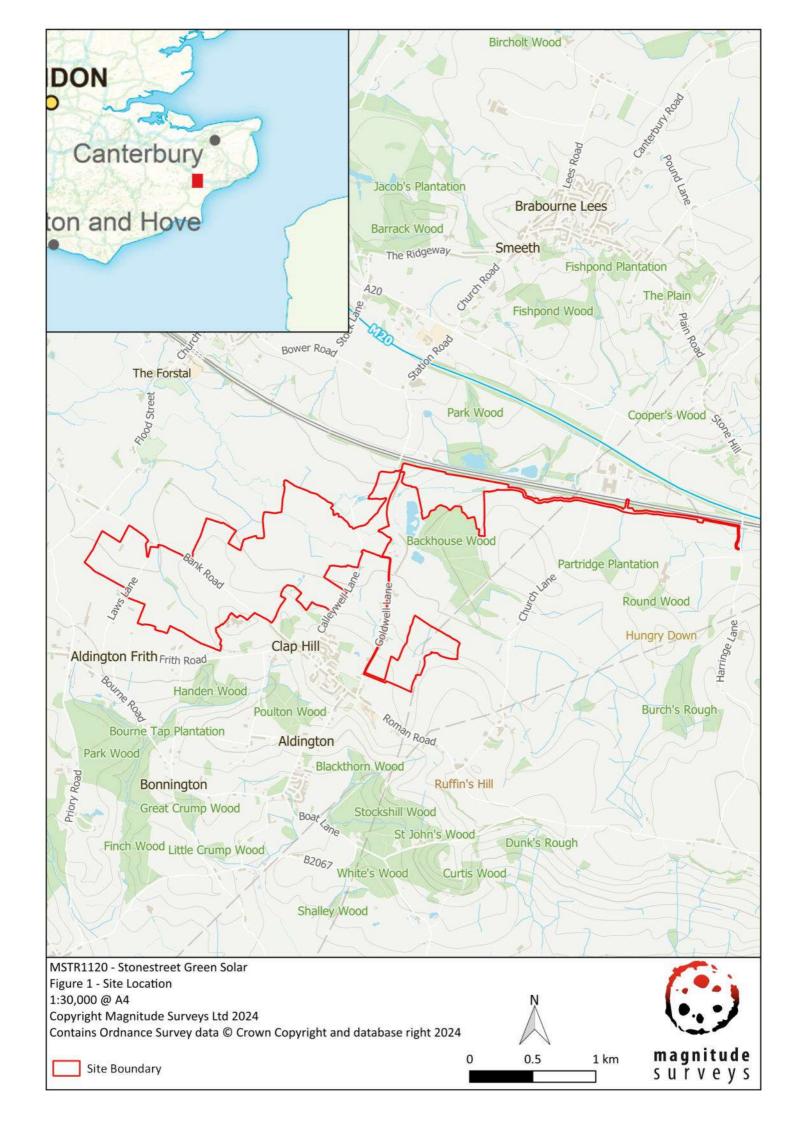
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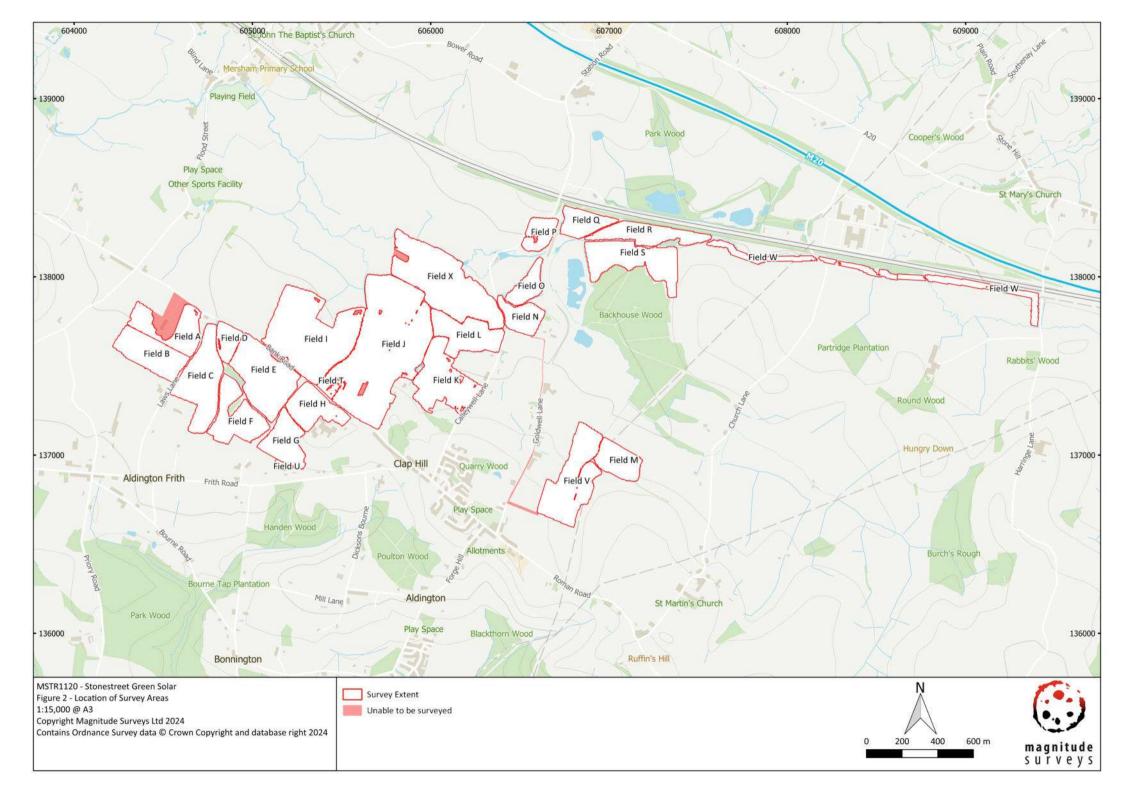
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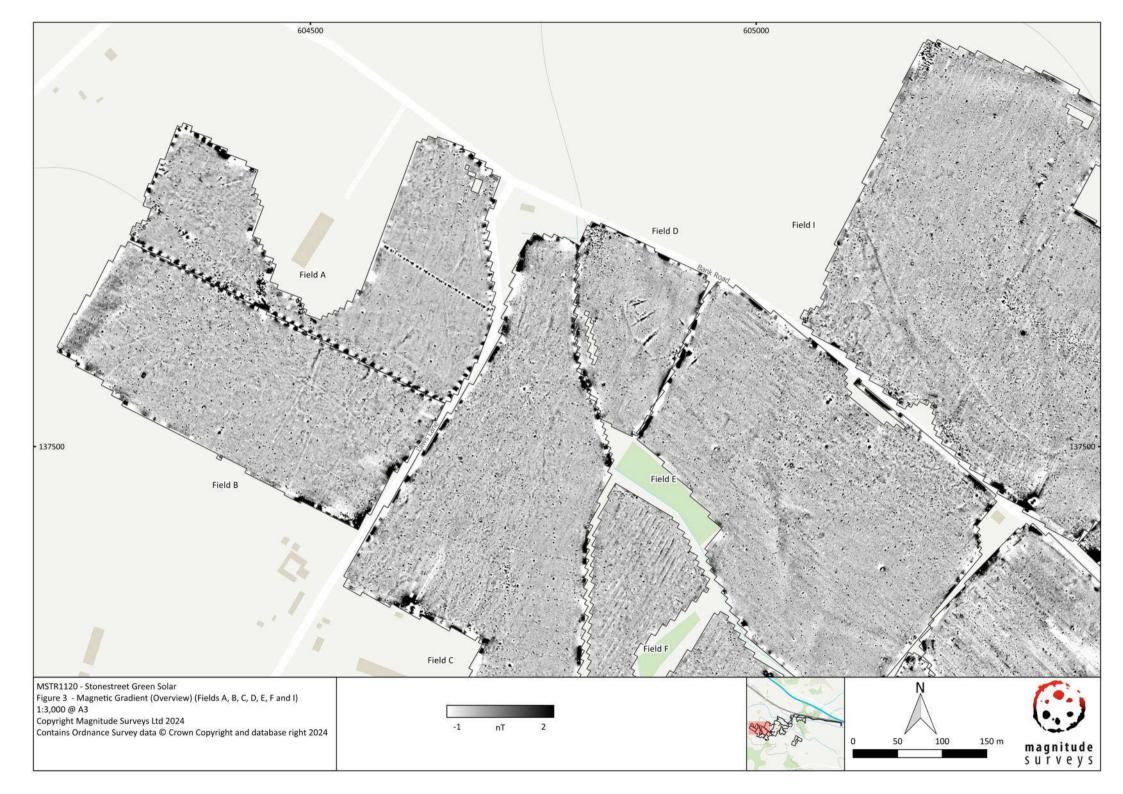
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Survey Dates	2022-01-10 to 2022-02-03		
Project Lead	Alison Langston BA PCIfA		
Project Officer	Alison Langston BA PCIfA		
HER Event No	Assigned once completed report is sent to the HER		
OASIS No	magnitud1-508316		
S42 Licence No	N/A		
Report Version	1.0		

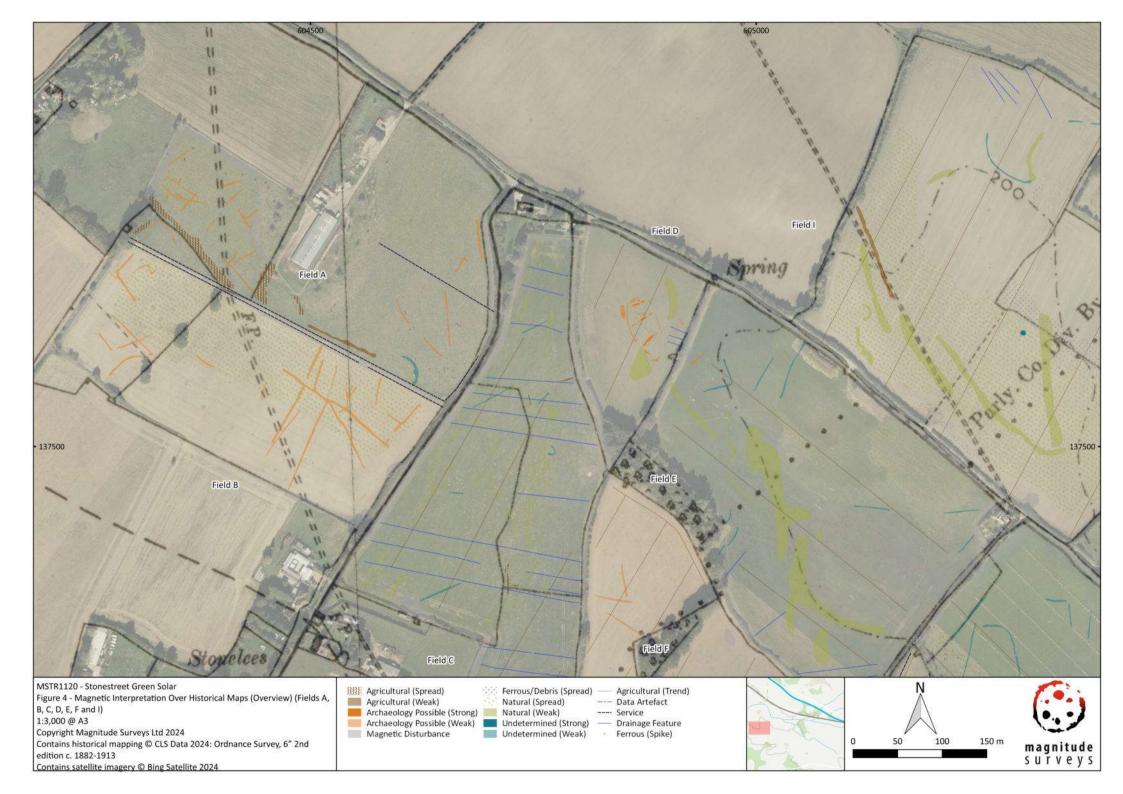
13. Document History

Version	Comments	Author	Checked By	Date
0.1	Initial draft for Project Lead to Review	AG, IT	AL	16 February 2022
0.2	Draft for Director Approval	AL, MM	PSJ	18 February 2022
0.3	Client Corrections	AL	PSJ	16 May 2022
0.4	Further Client Comments	AL	AL	12 July 2022
0.5	Further Client Corrections, Addition of OASIS number and Addition of Second Deployment	IT, BO	PSJ	17 October 2022
0.6	Addition of Third Deployment	AP, AW	AL	12 January 2023
1.0	Final Version of Report	JH	JH	06 June 2024

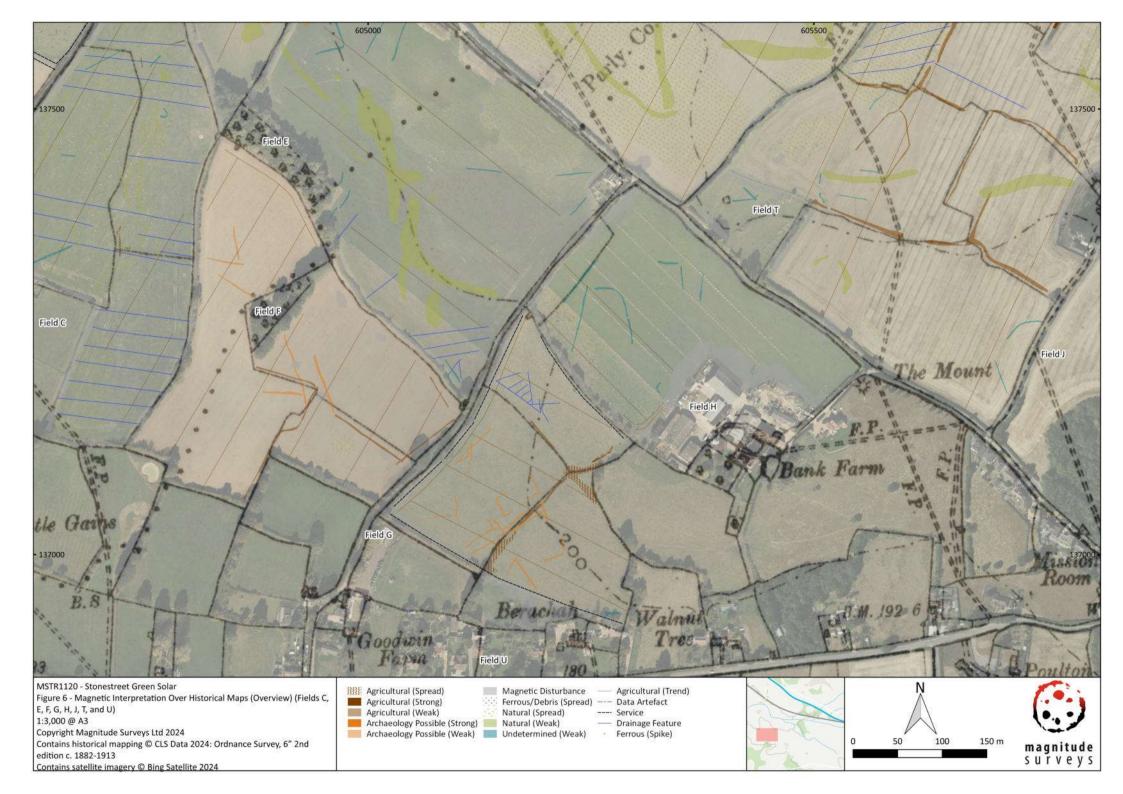


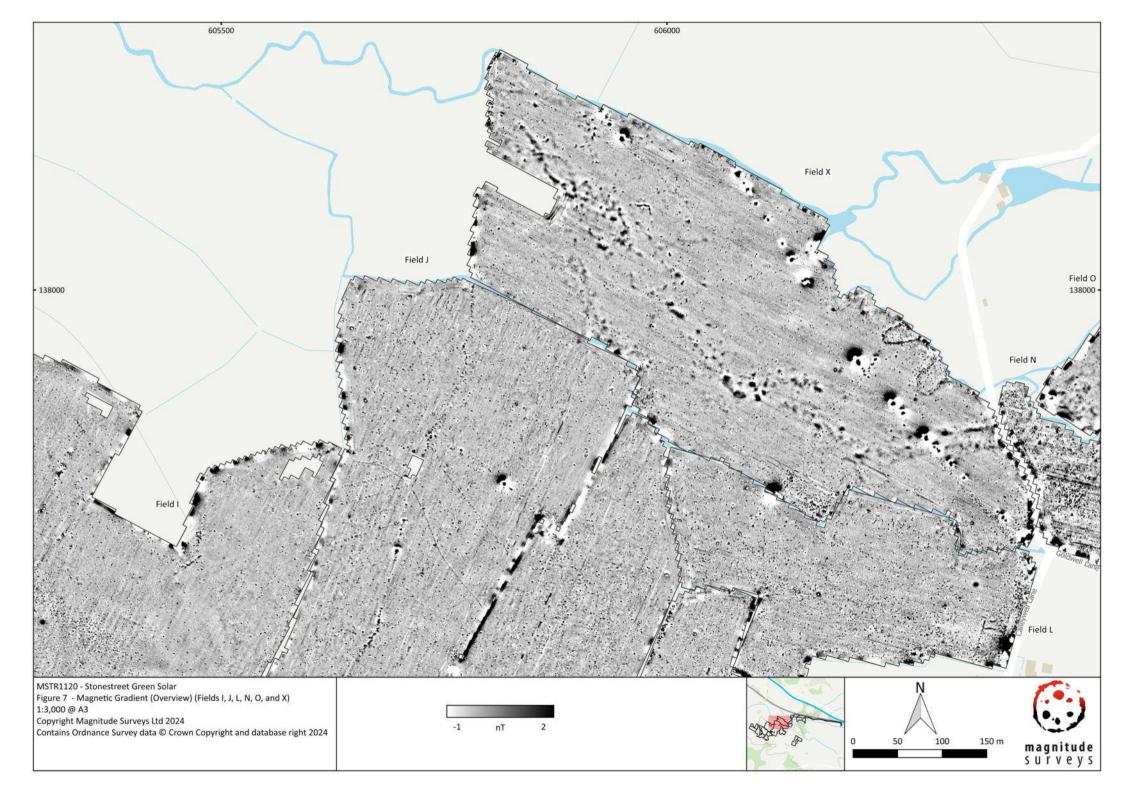


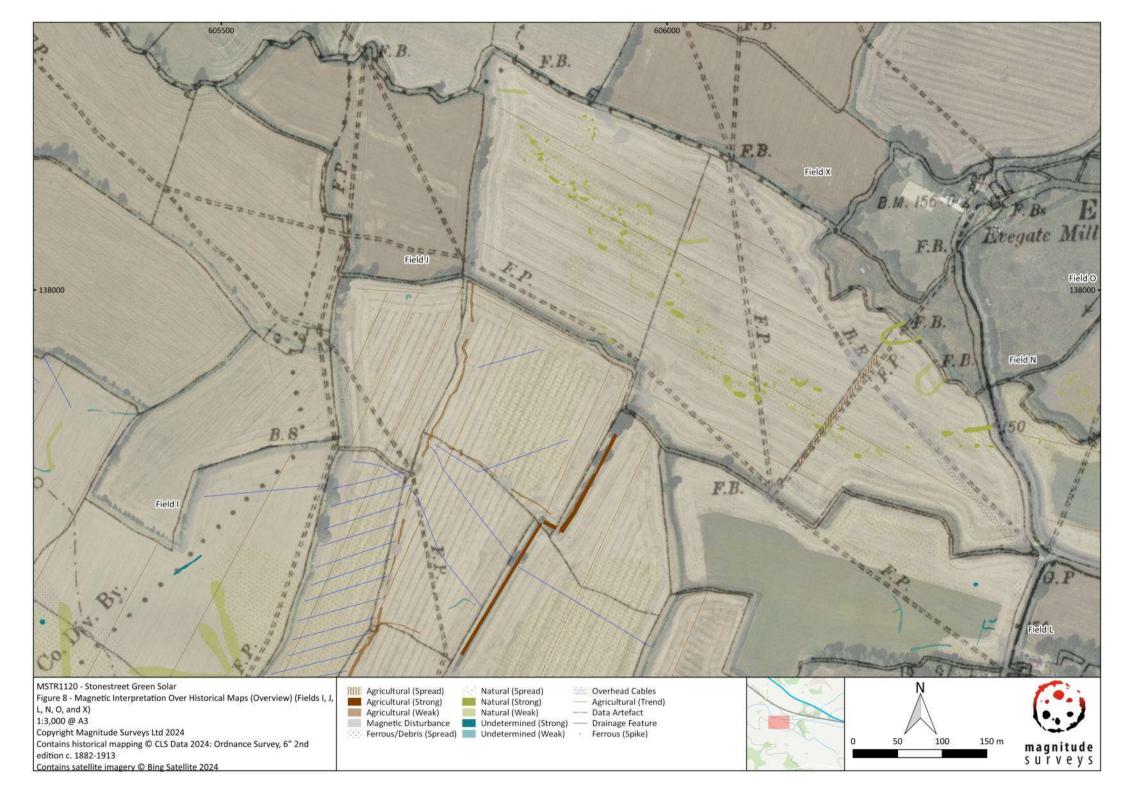


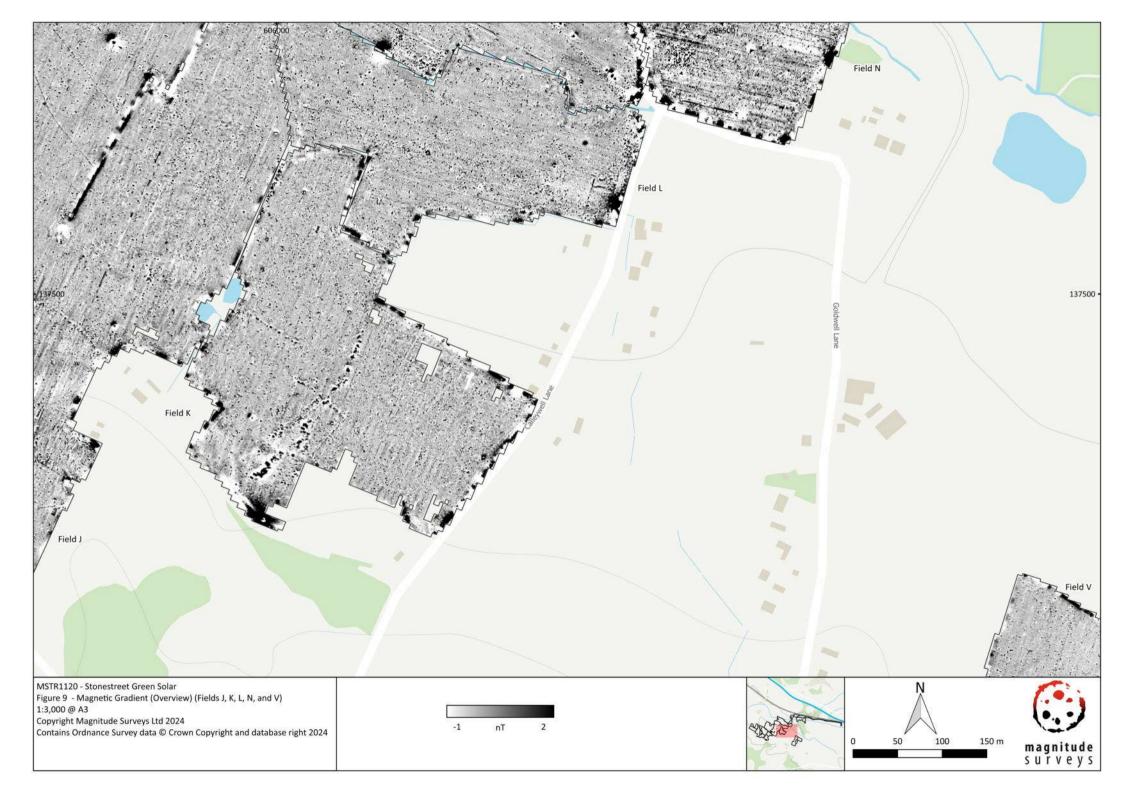


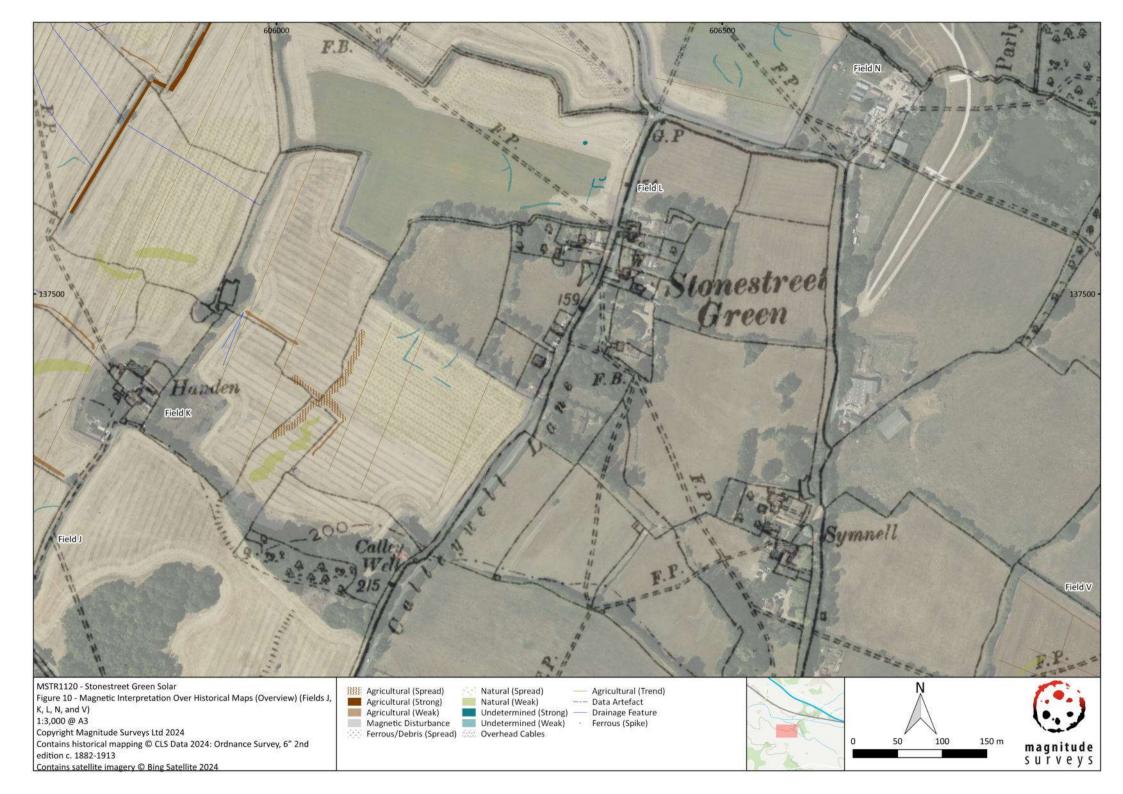


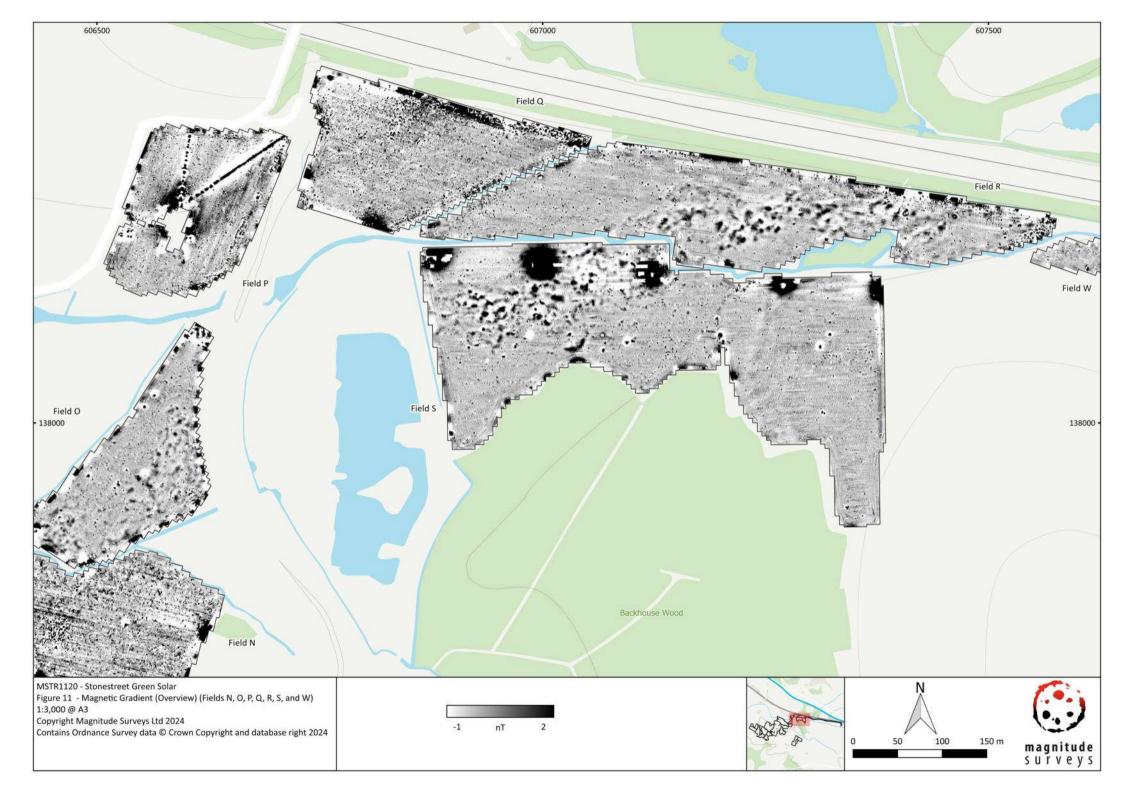


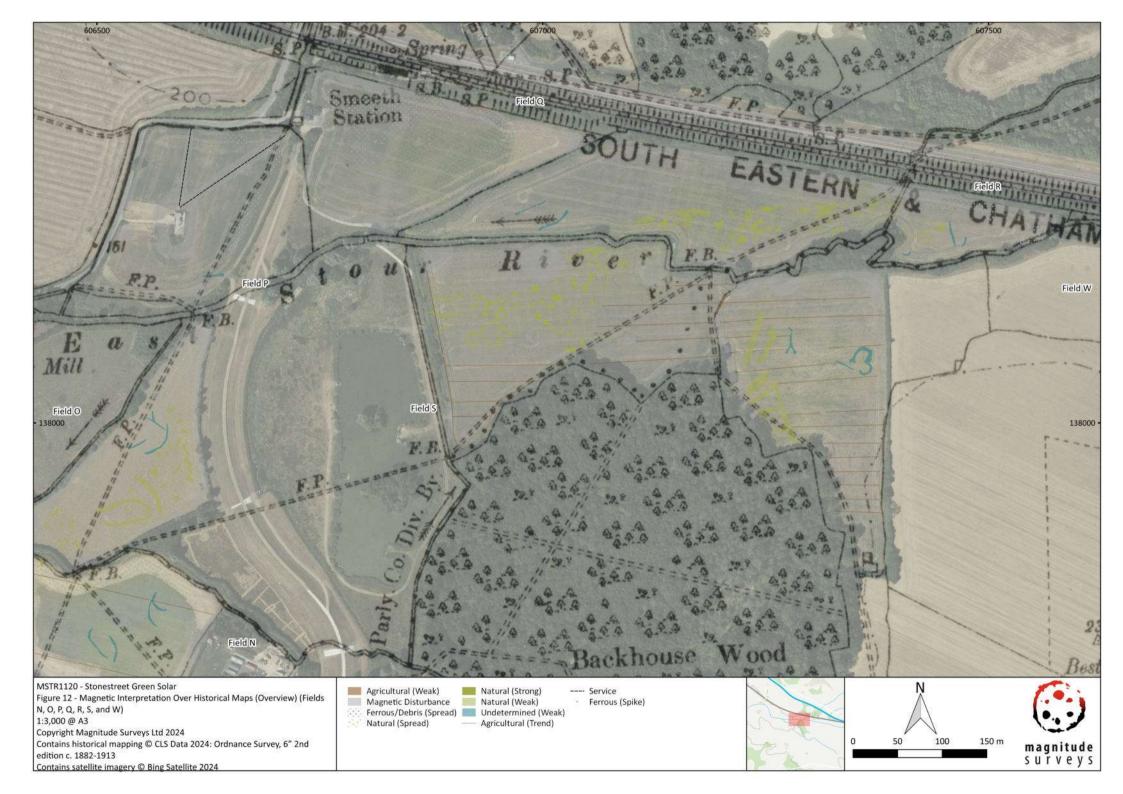


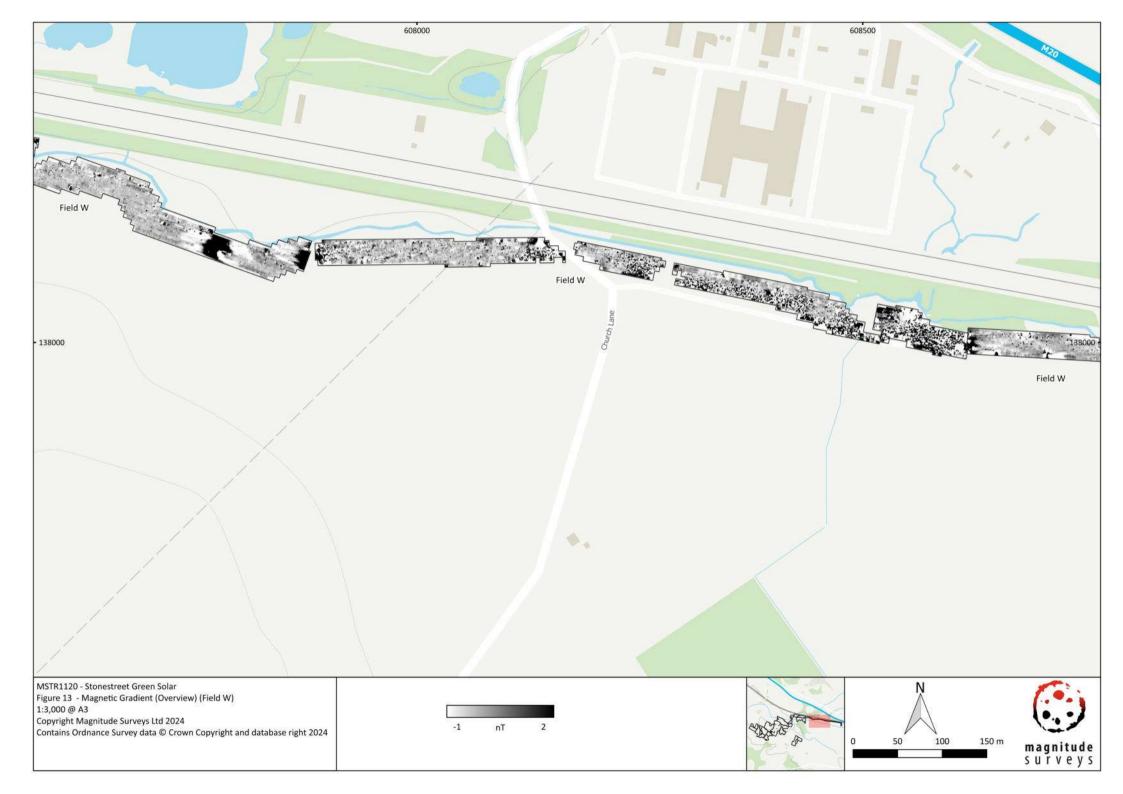


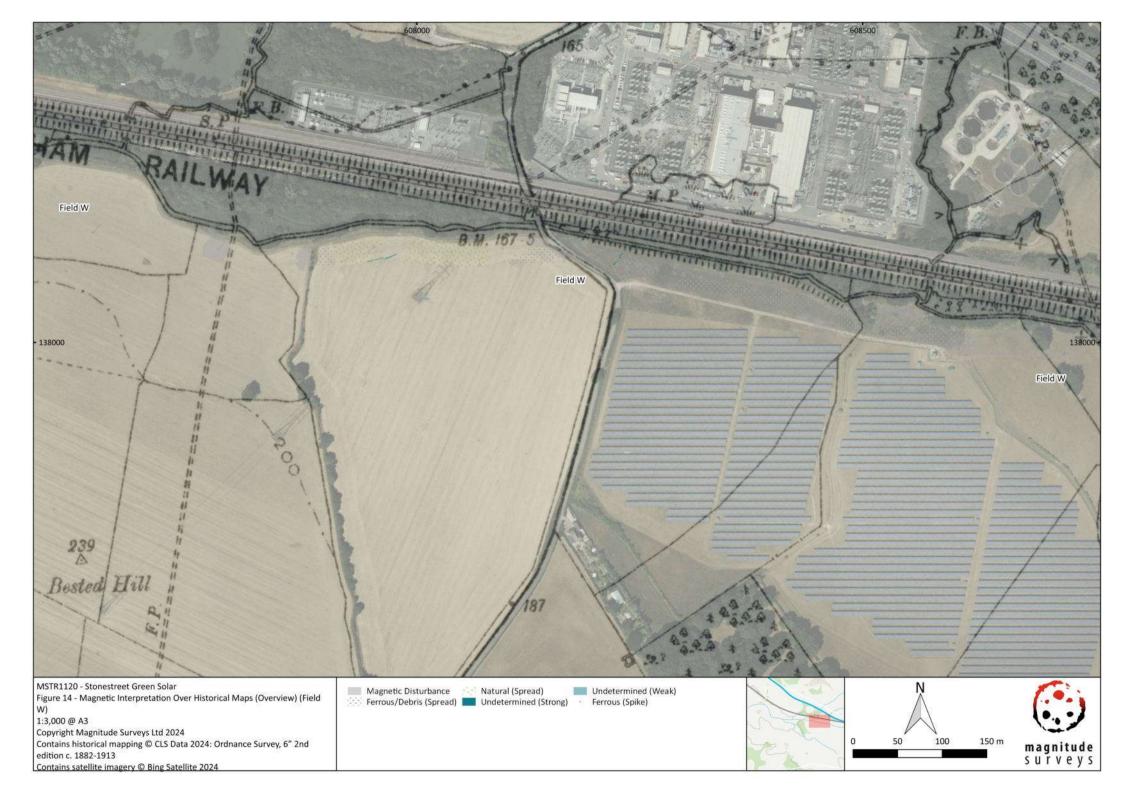


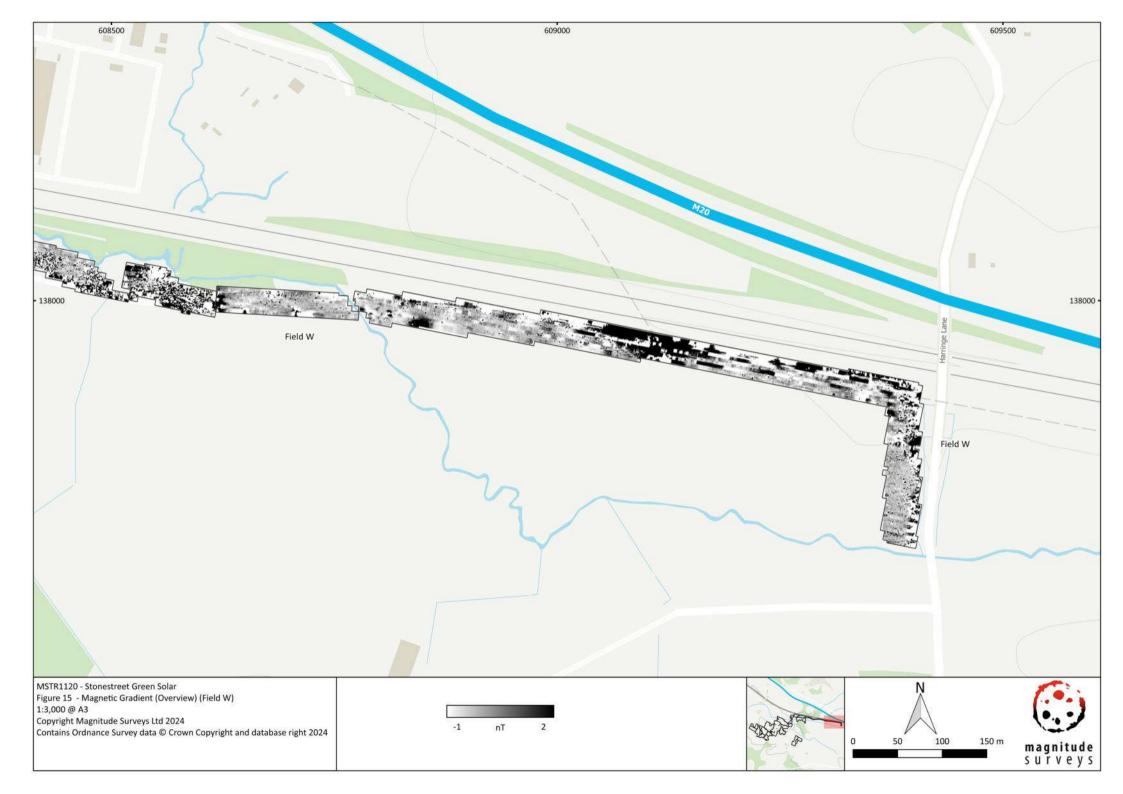


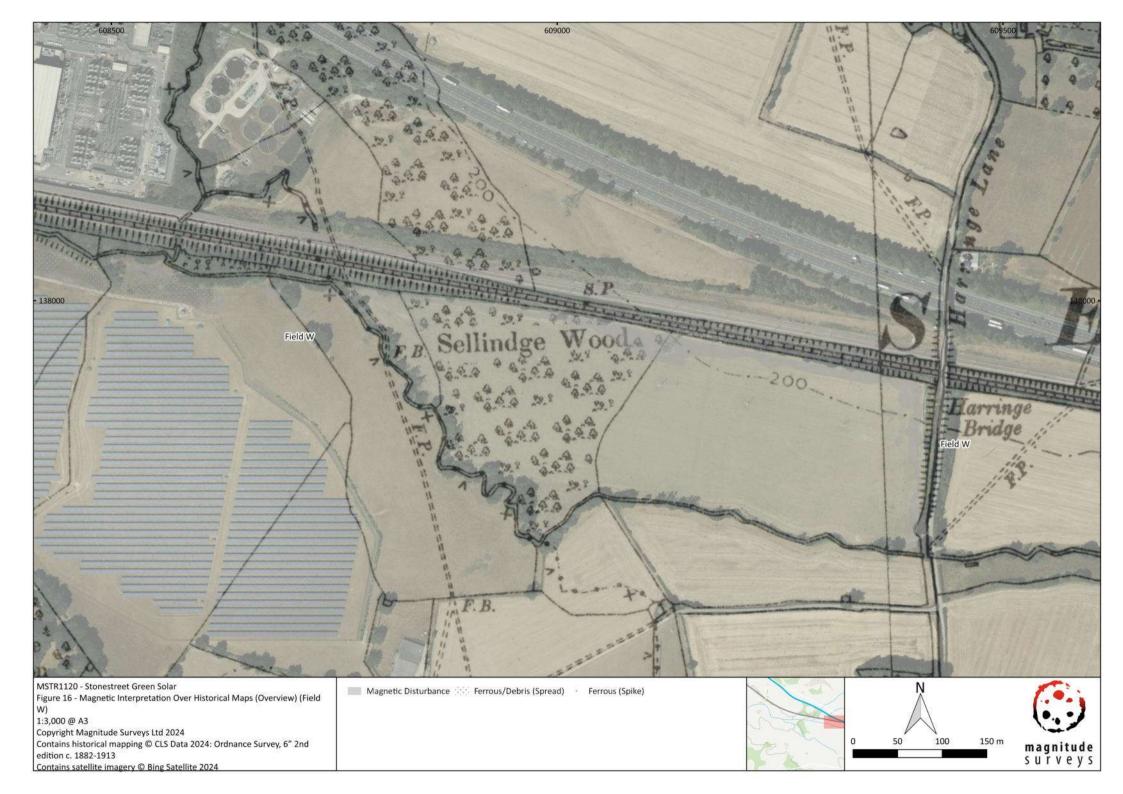


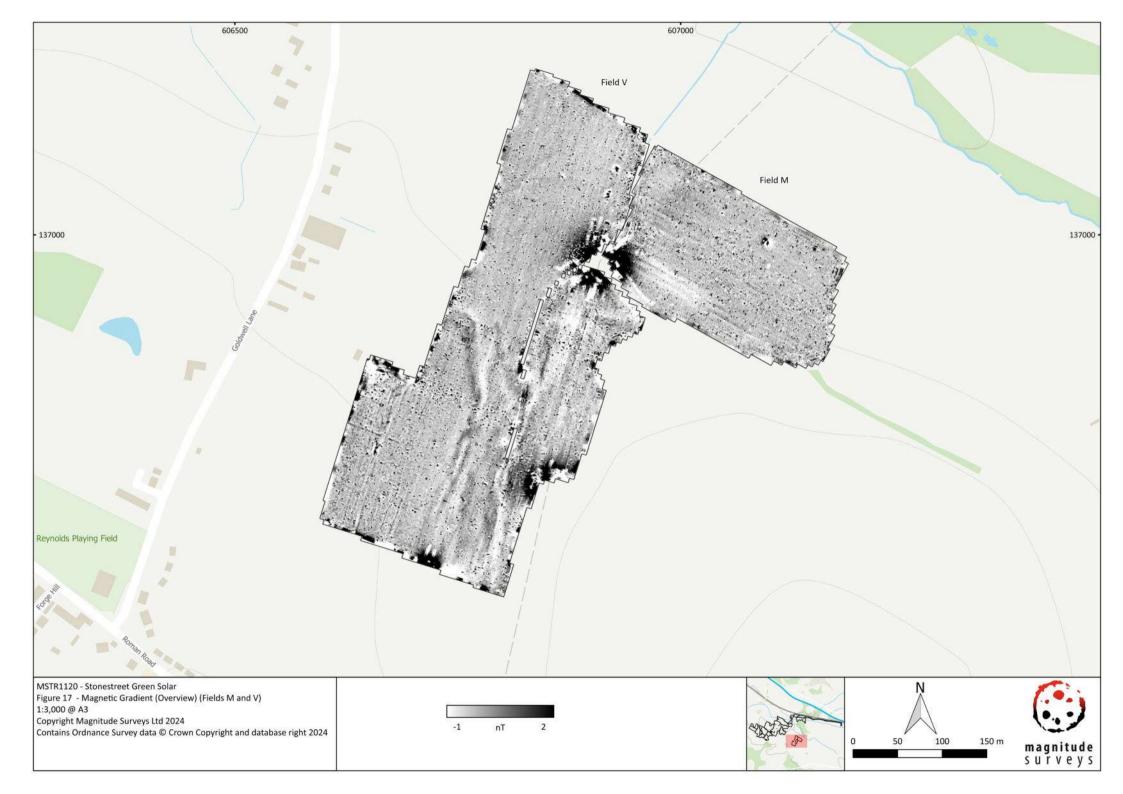


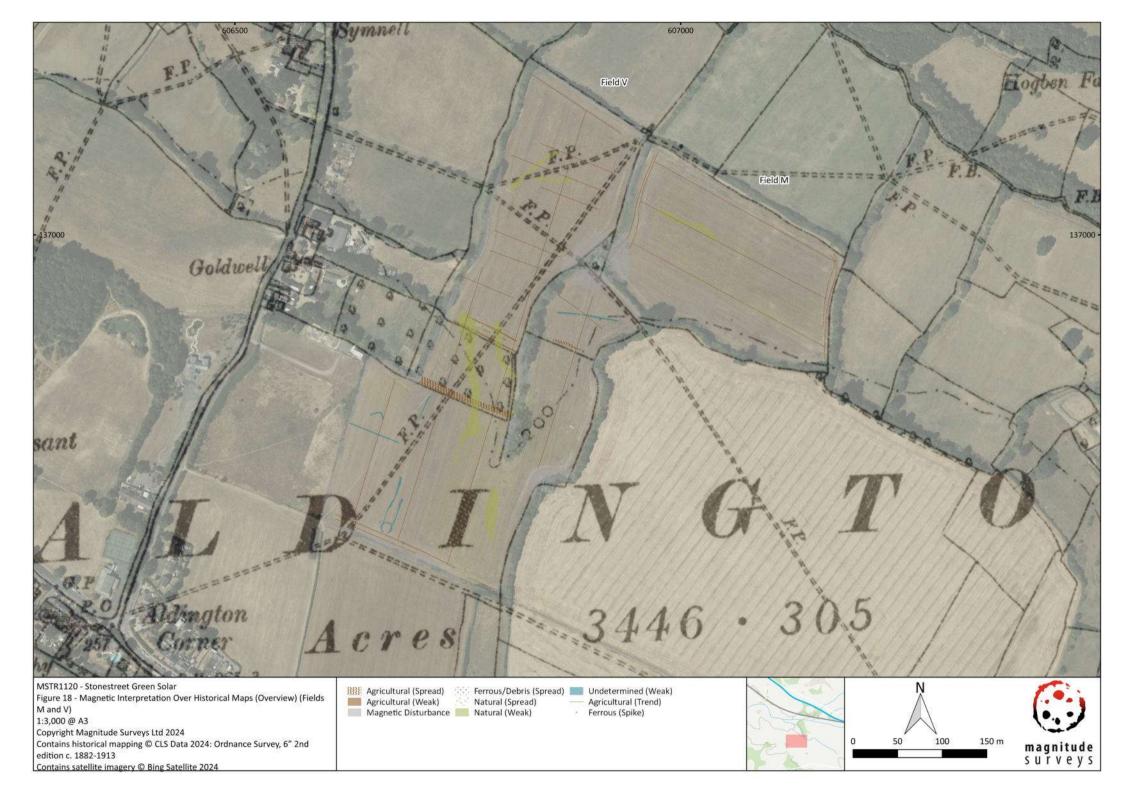


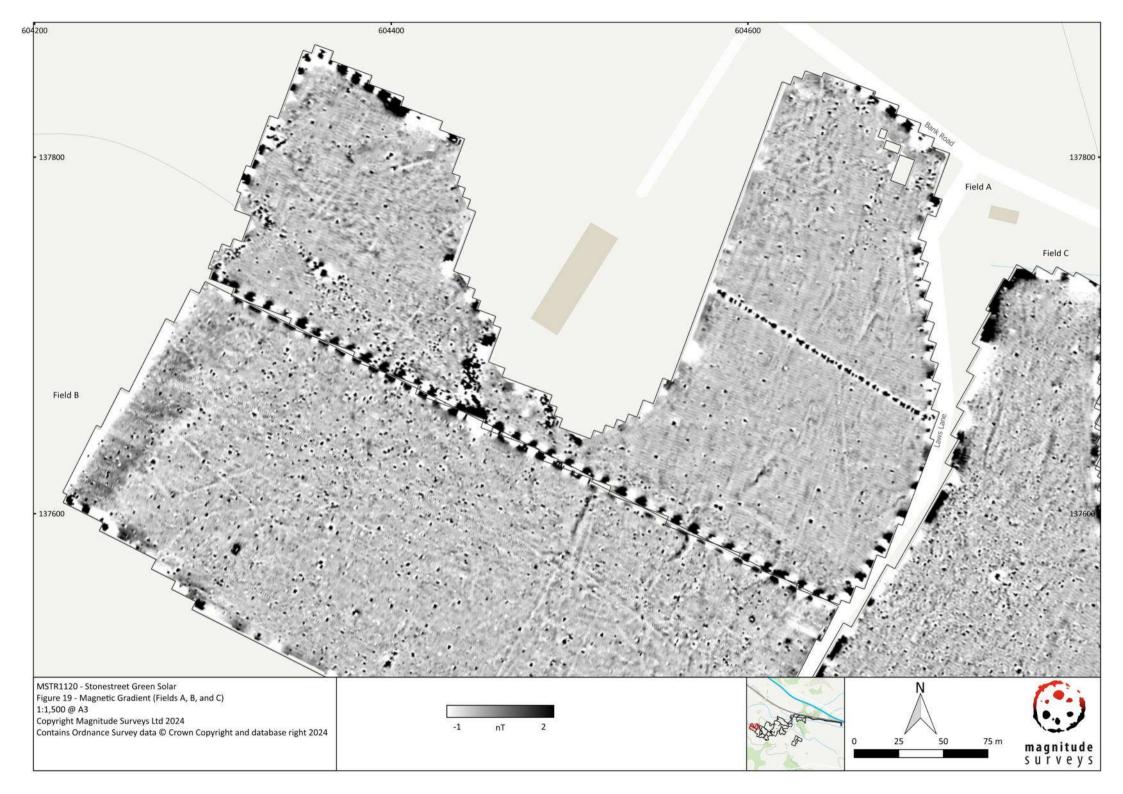


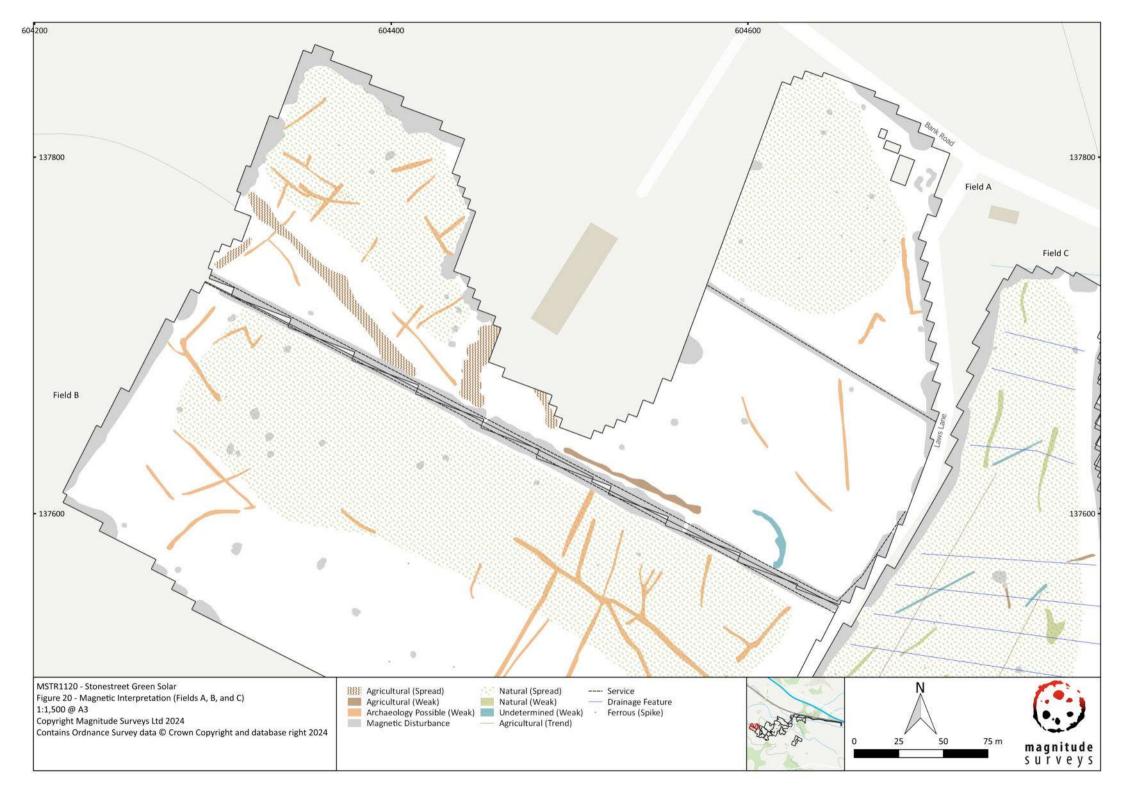


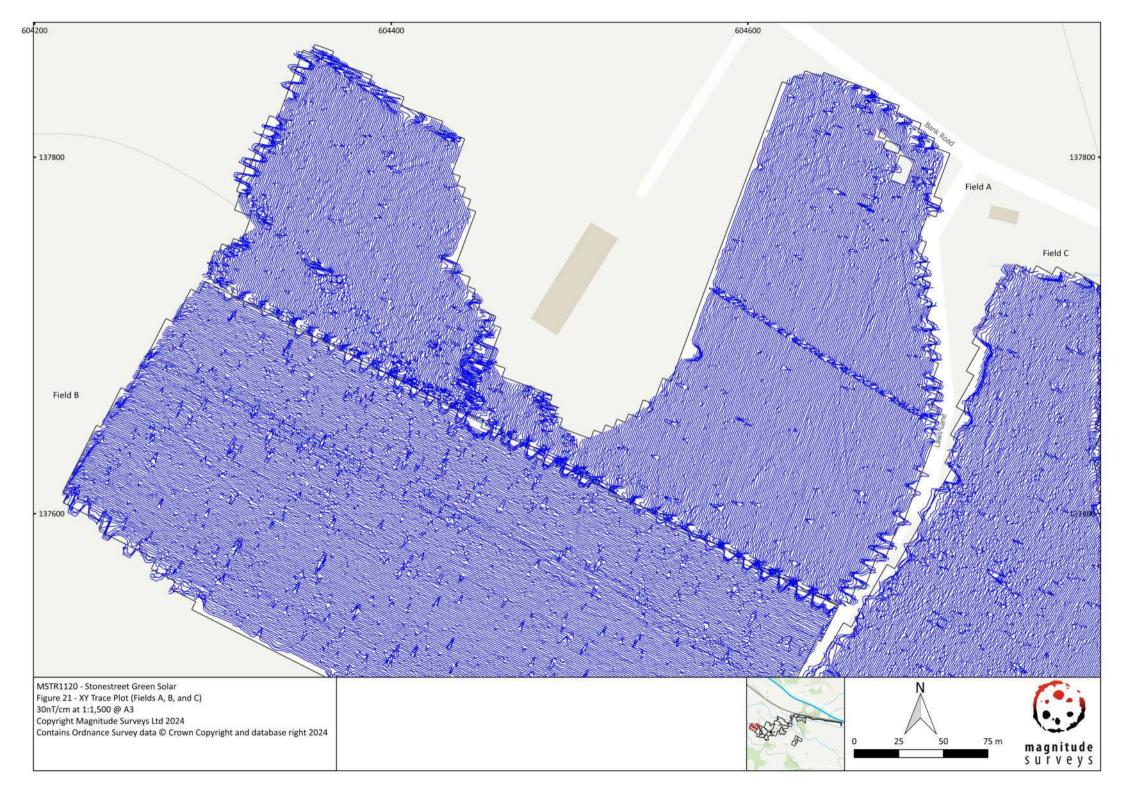


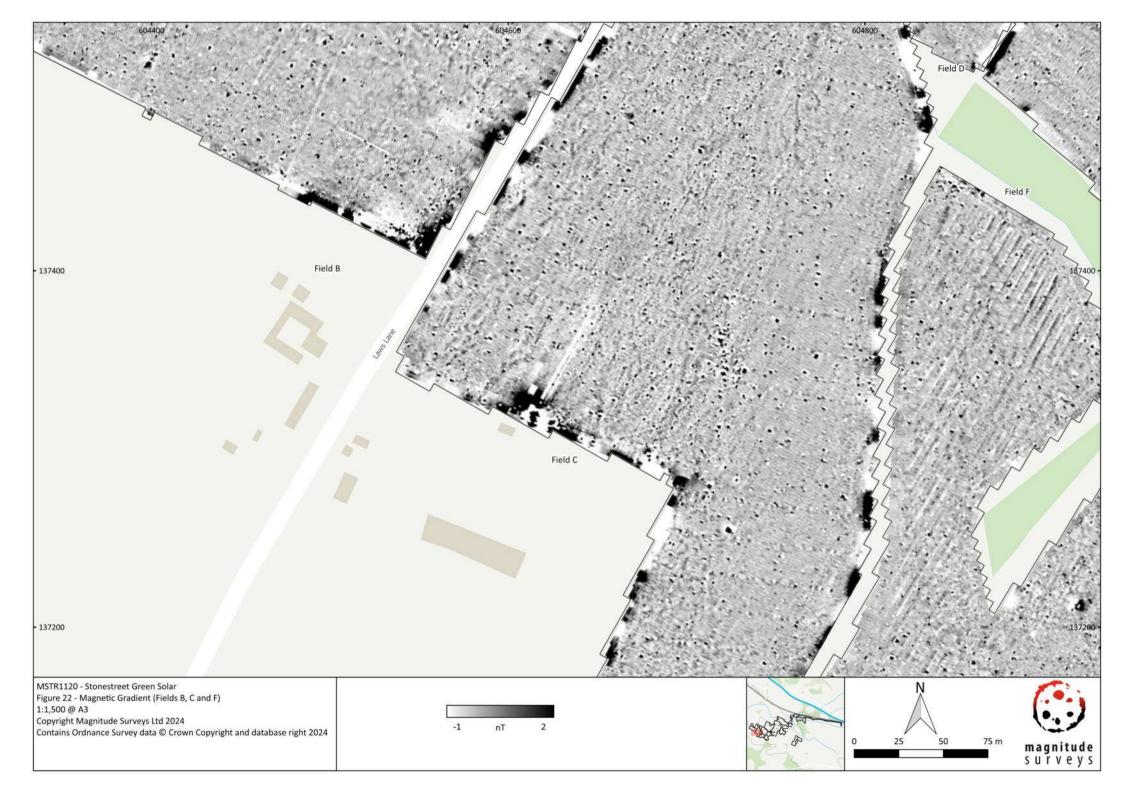


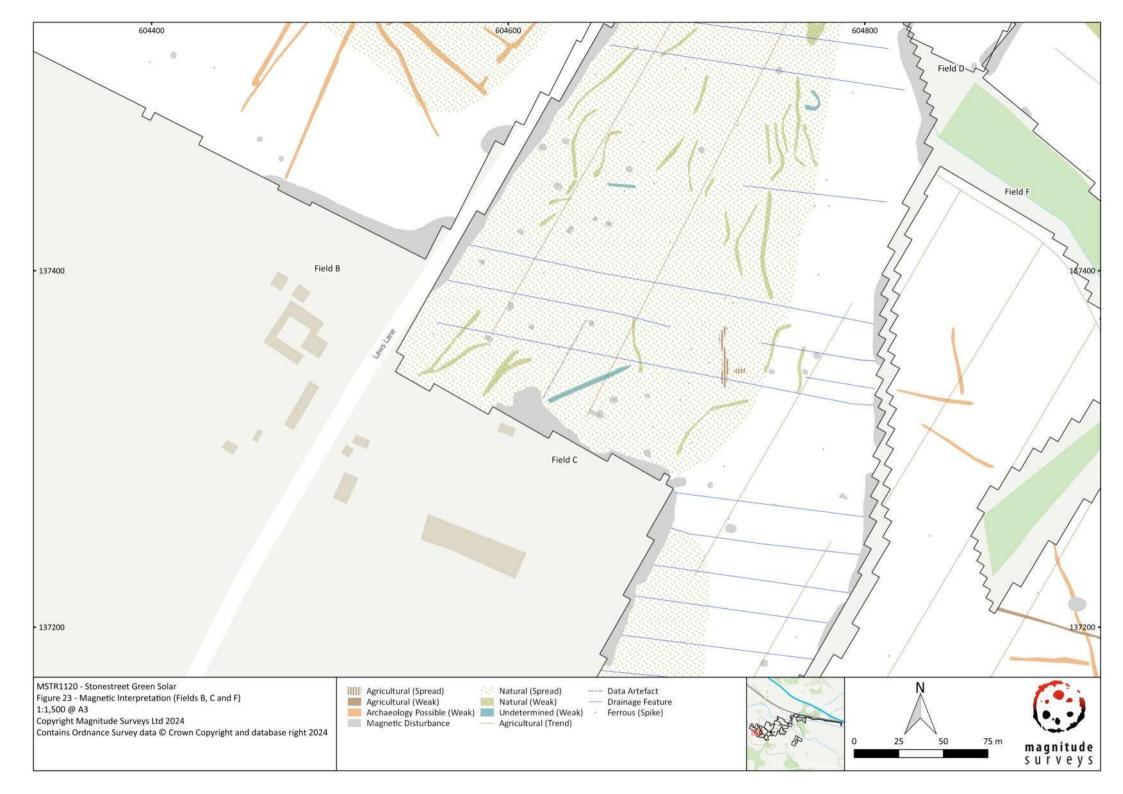


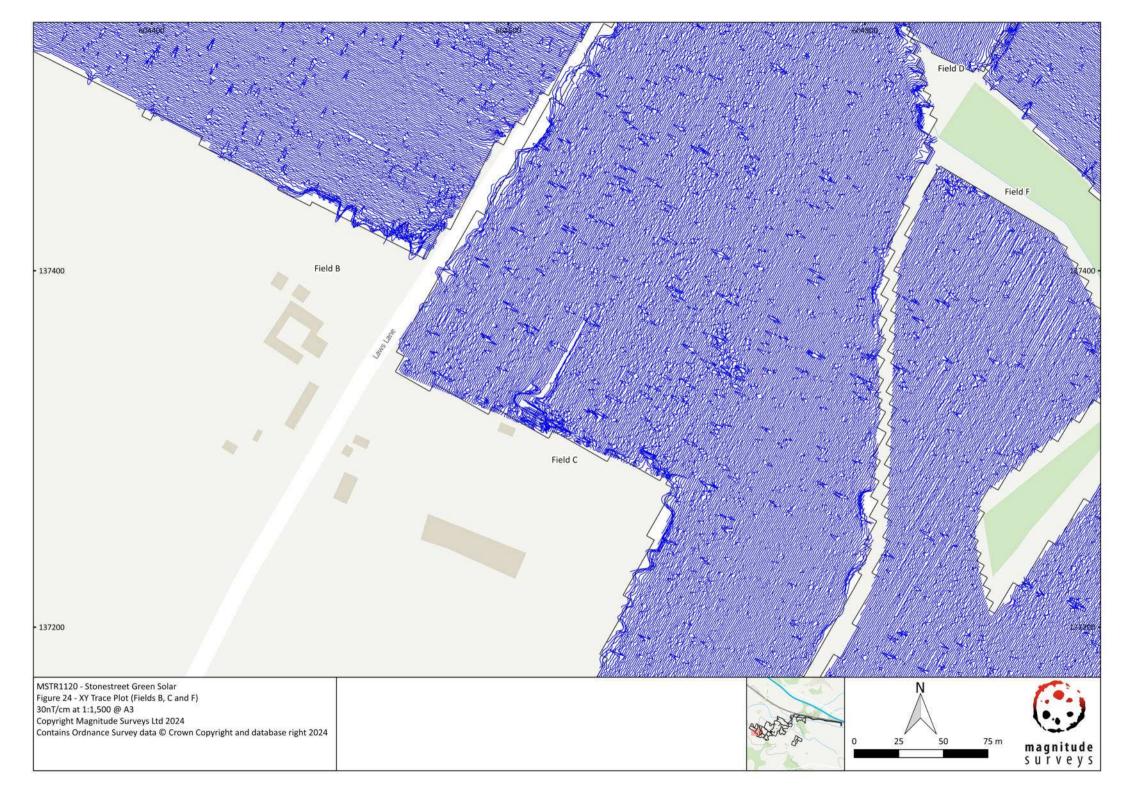




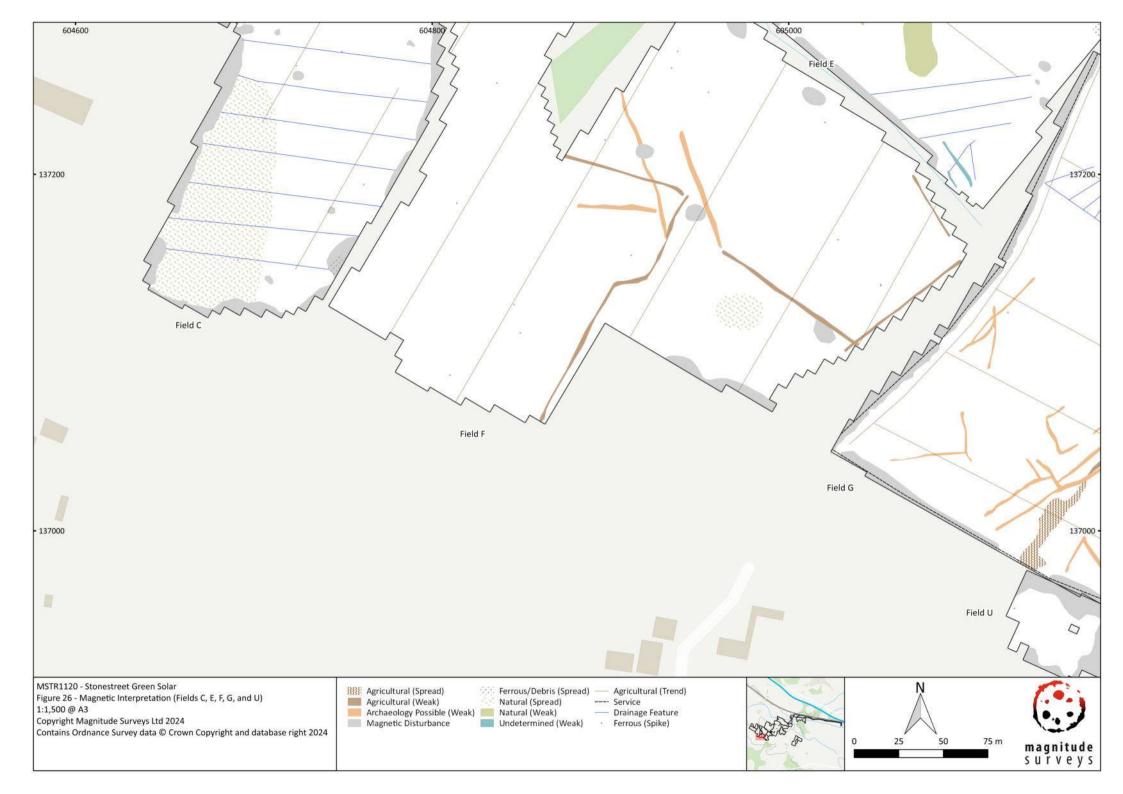




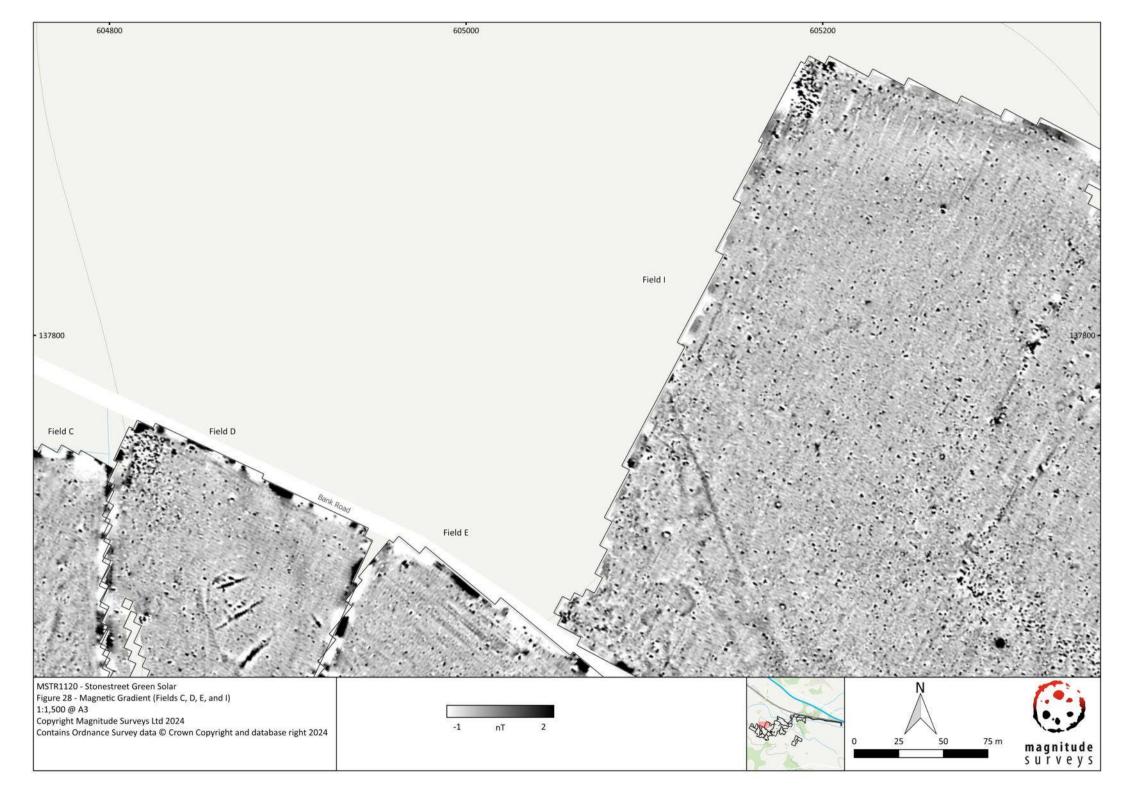


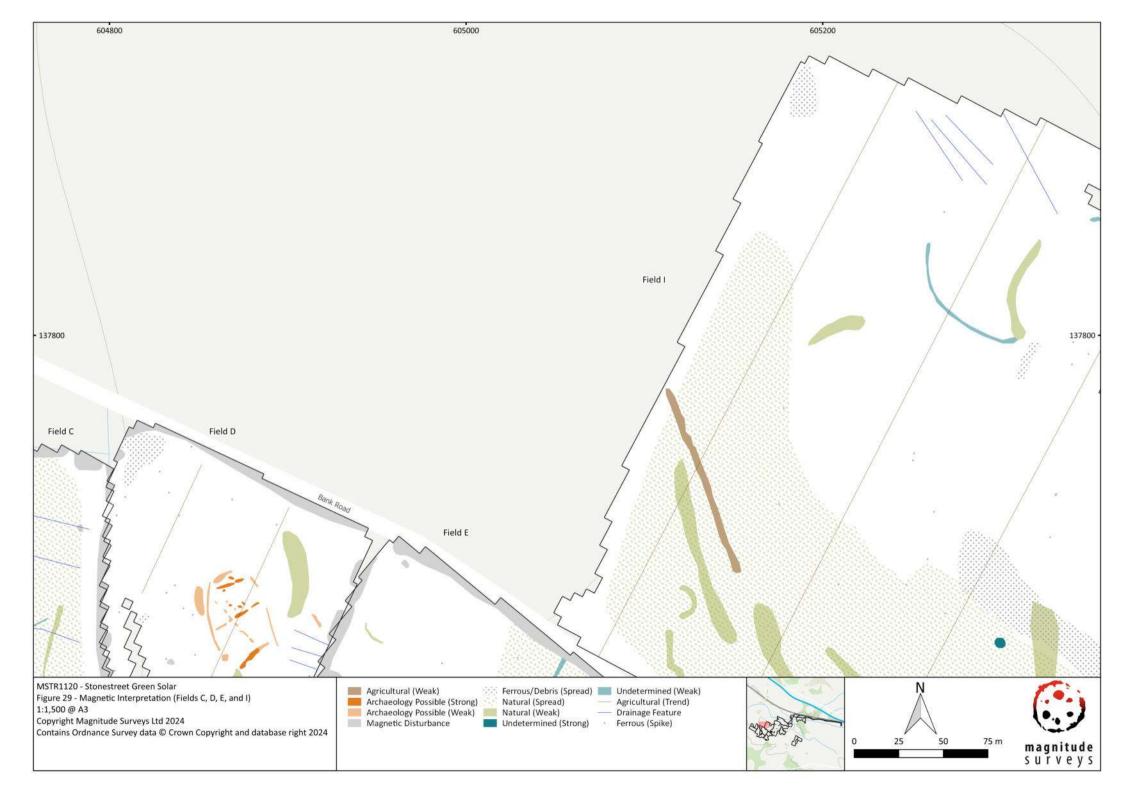


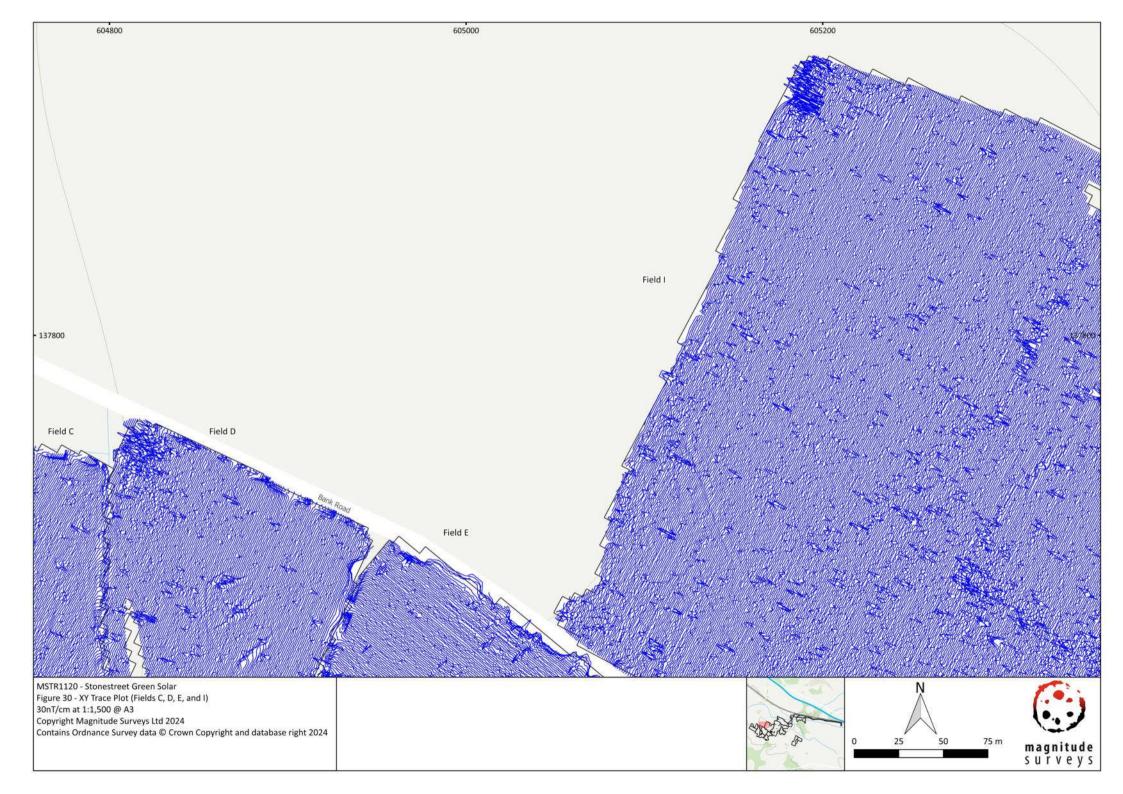


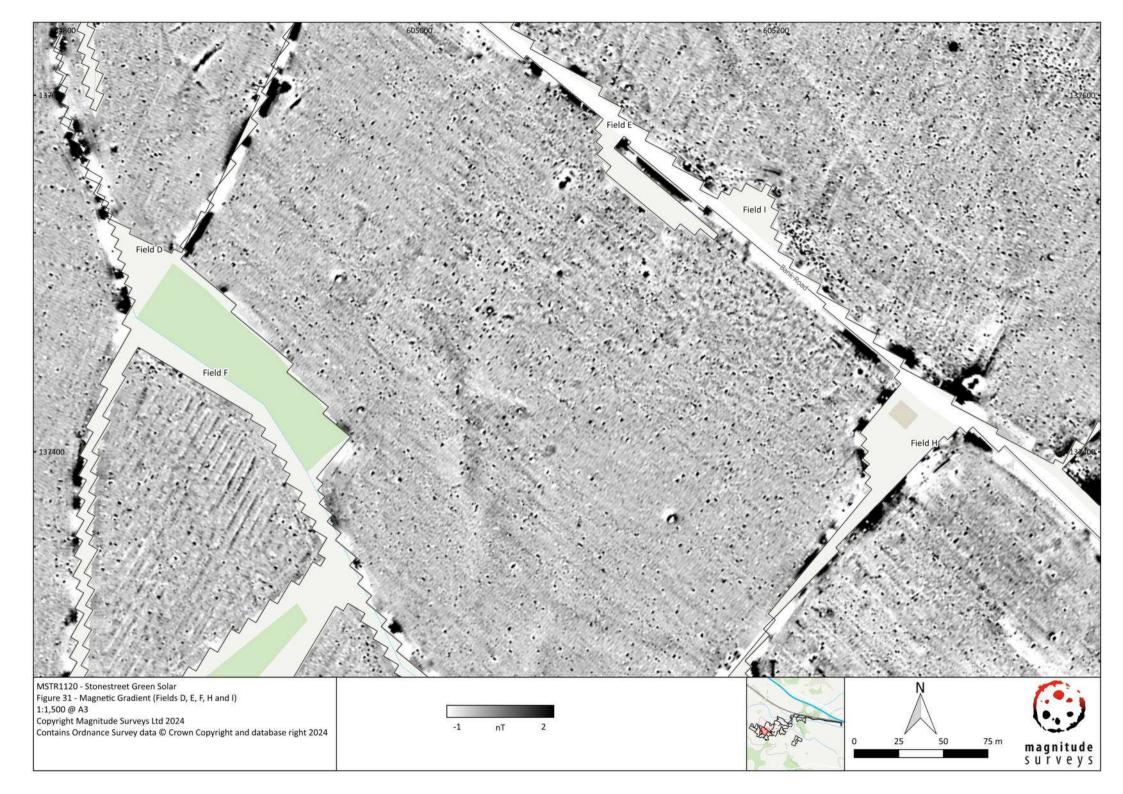


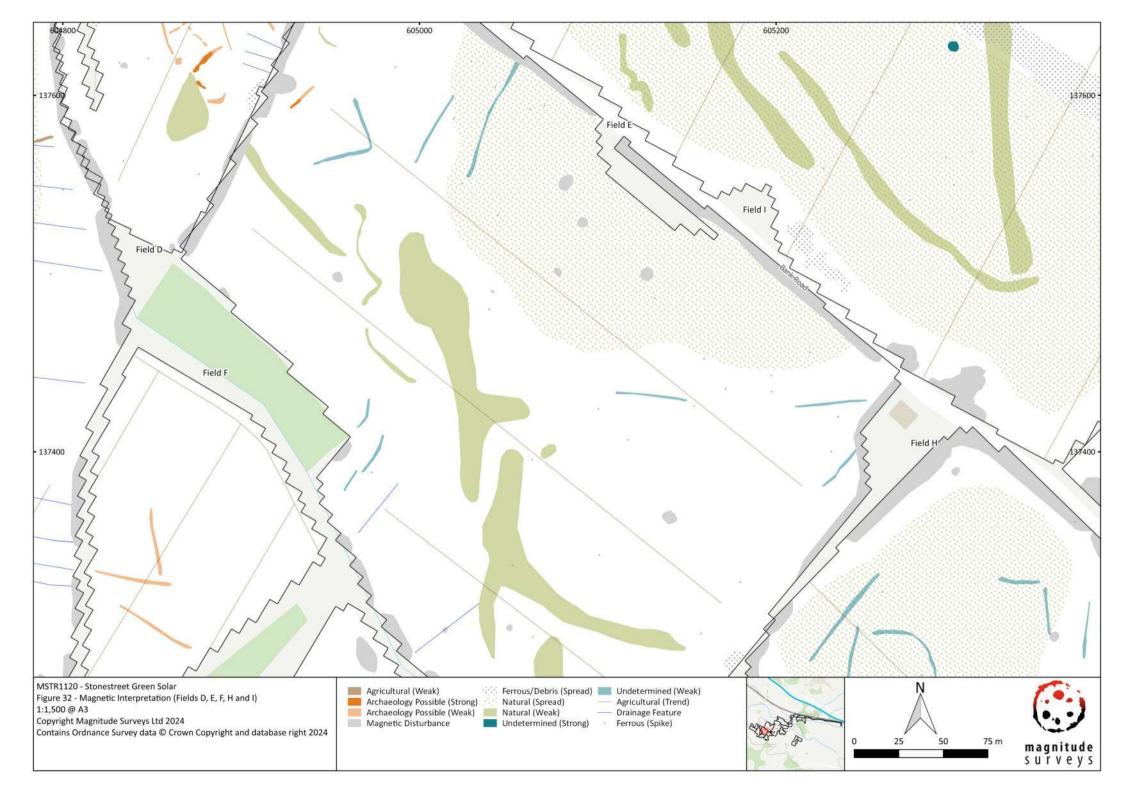


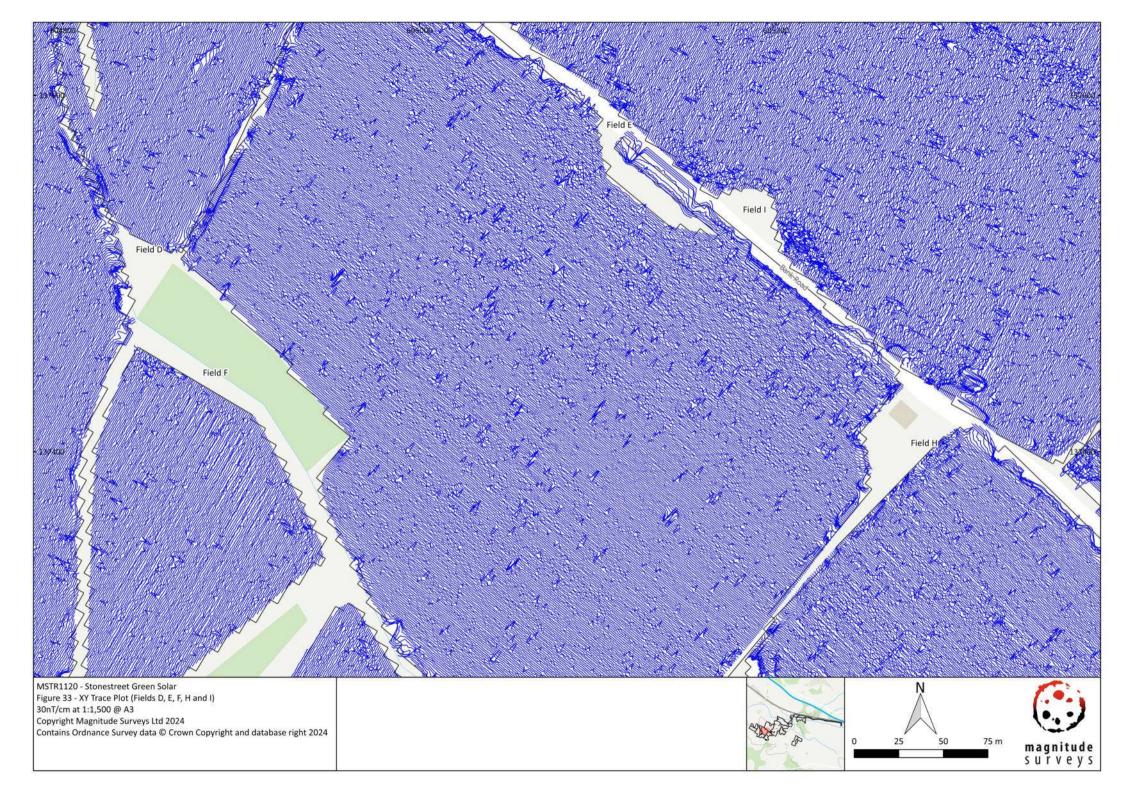




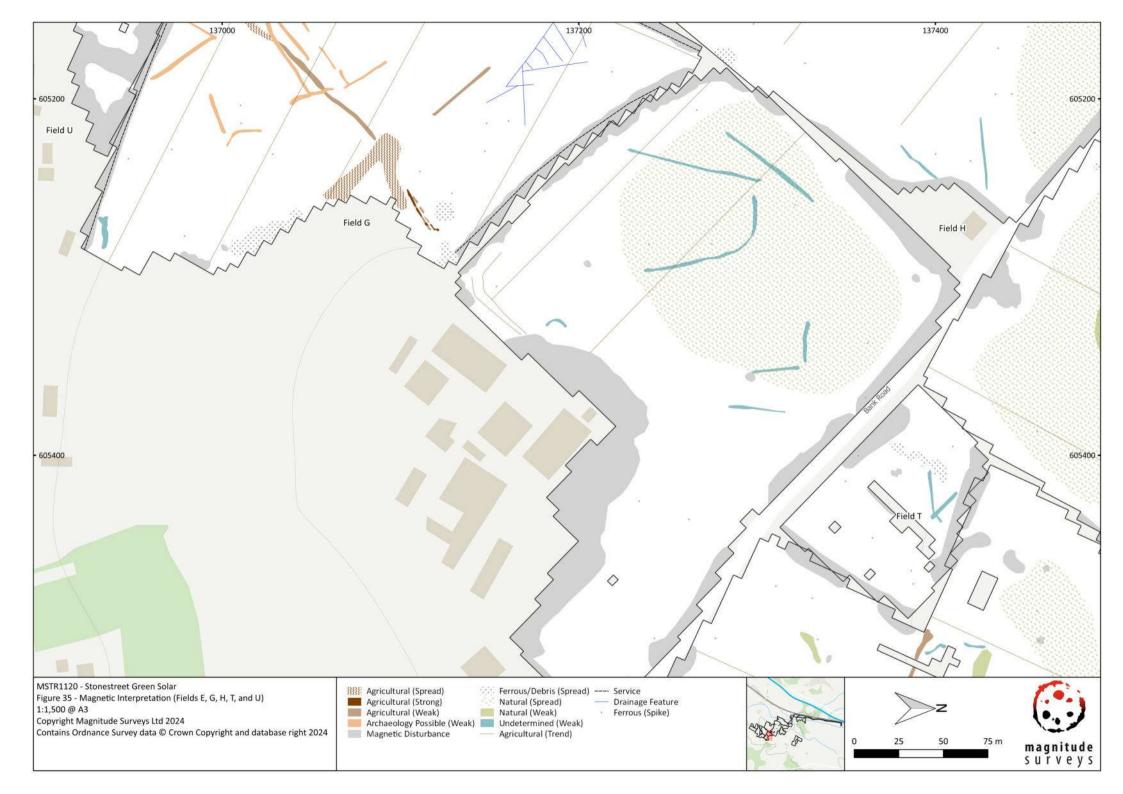




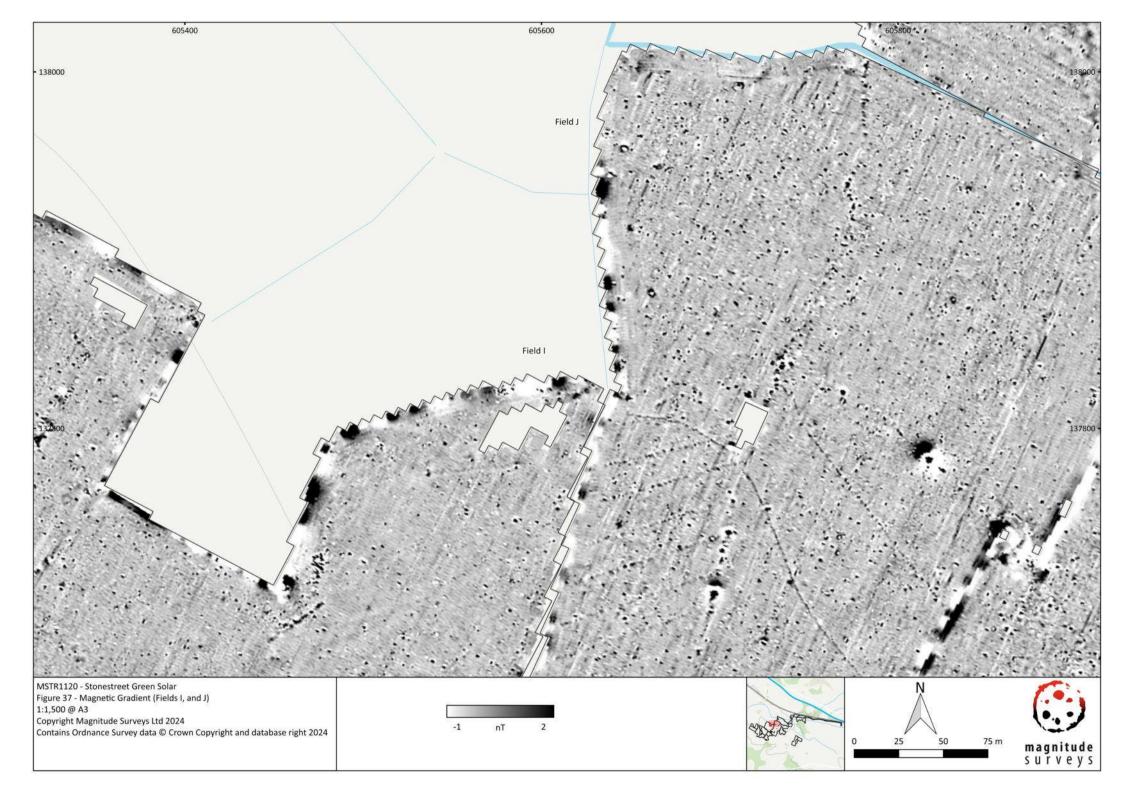


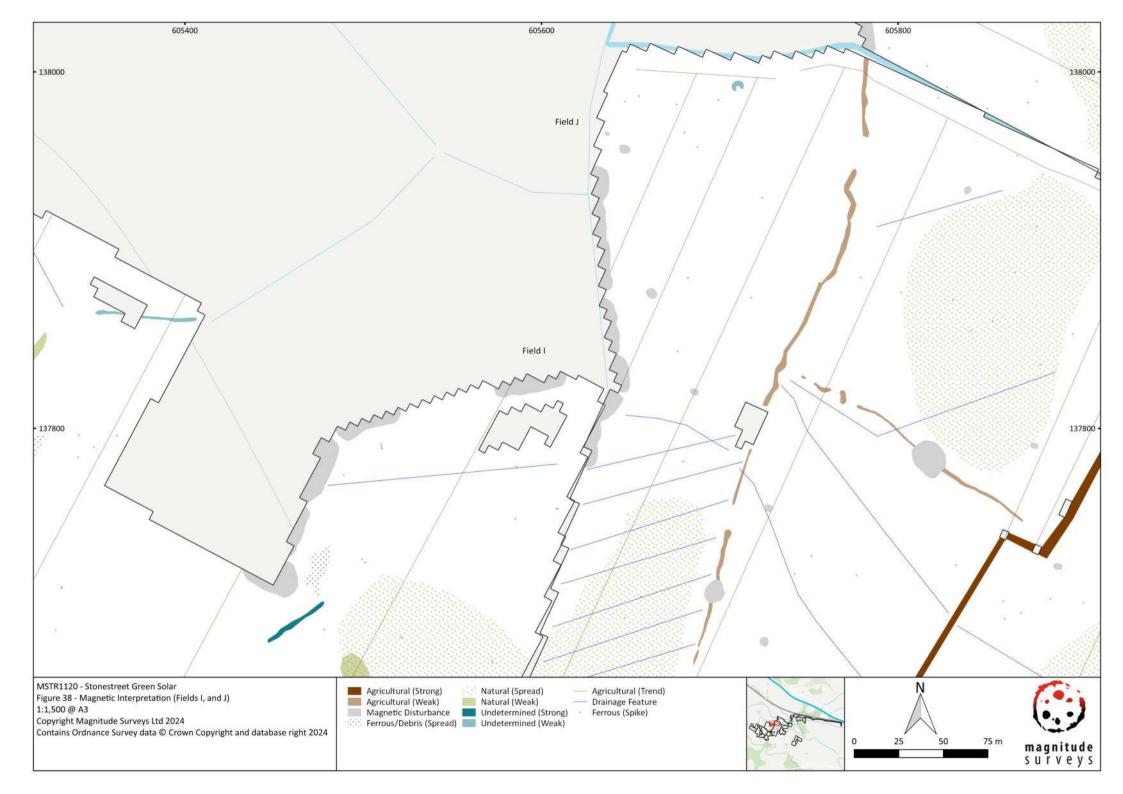


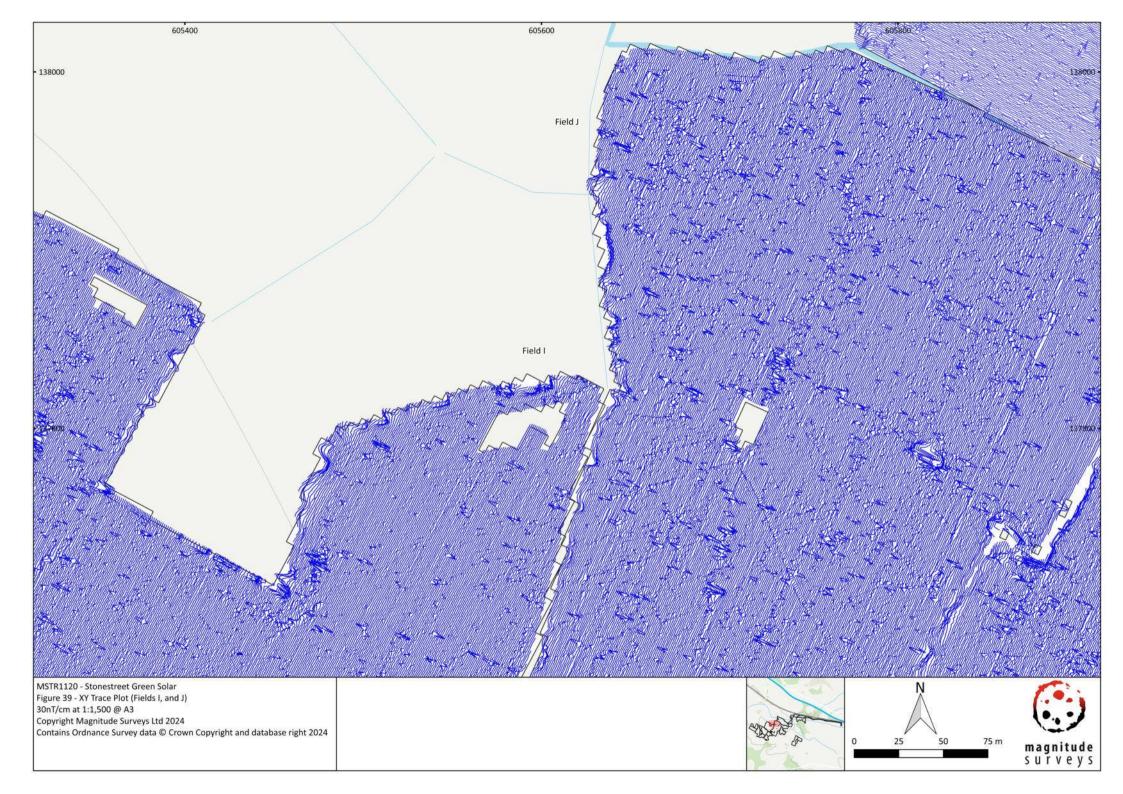


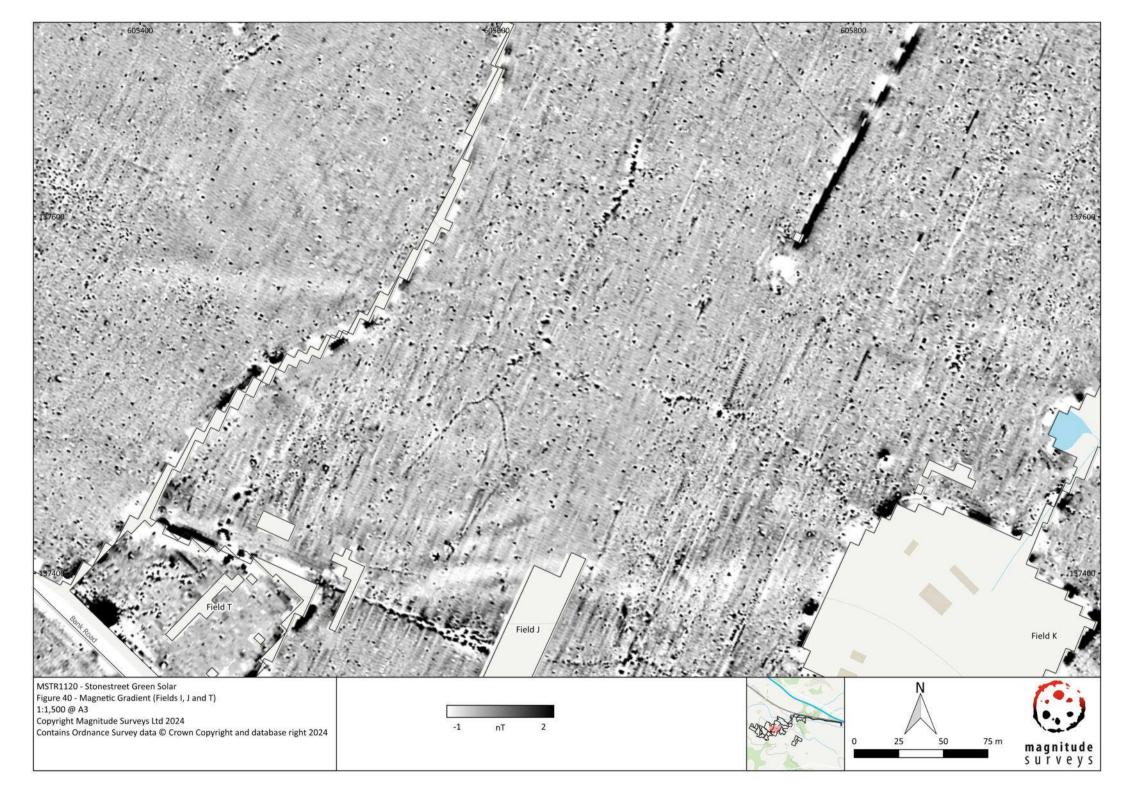


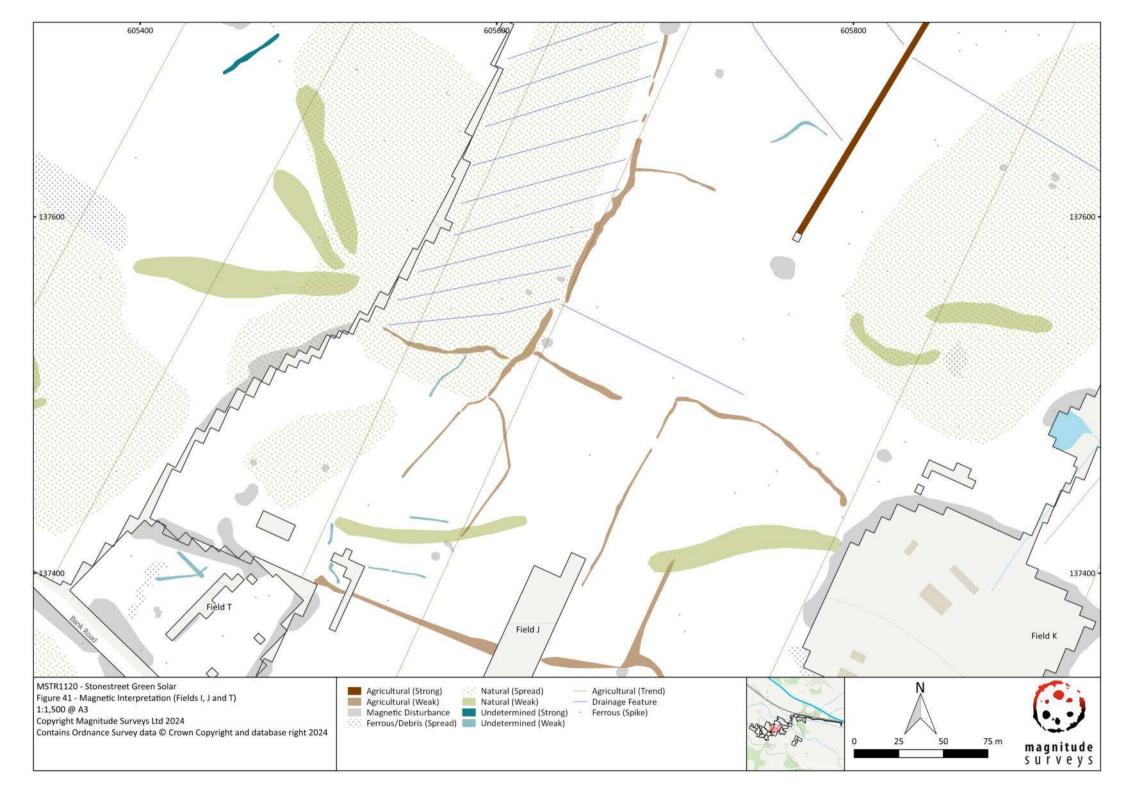


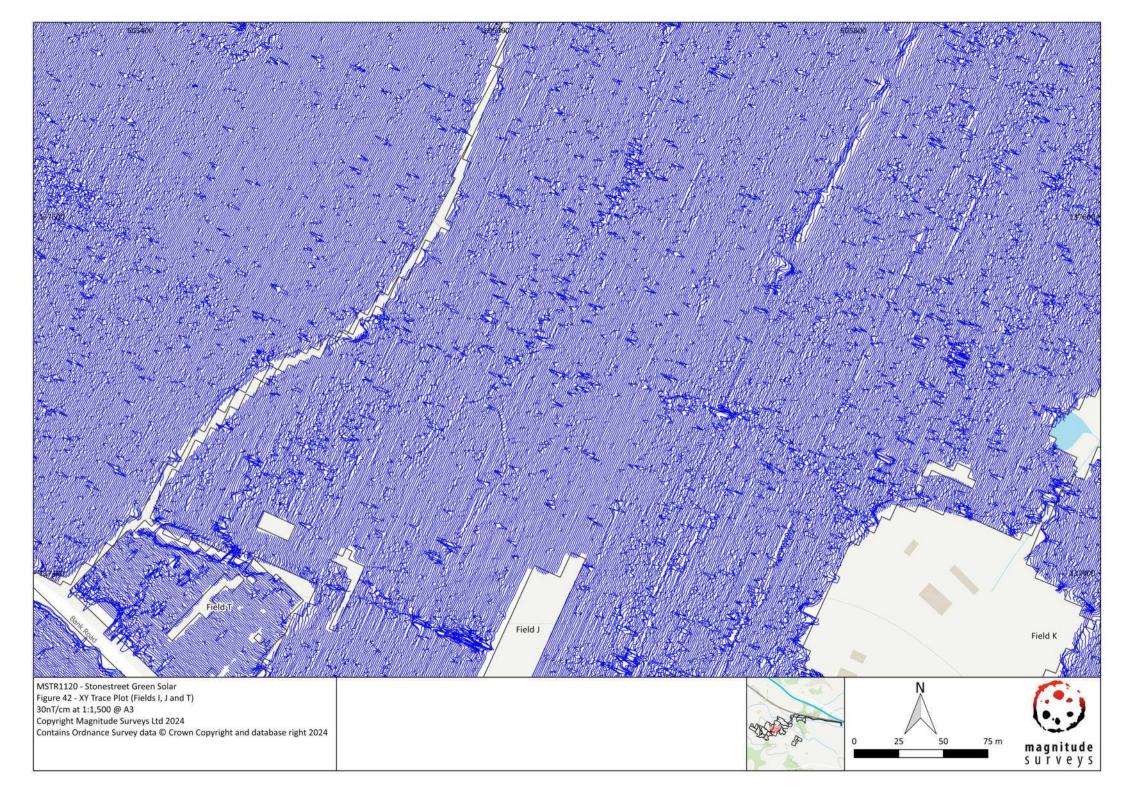


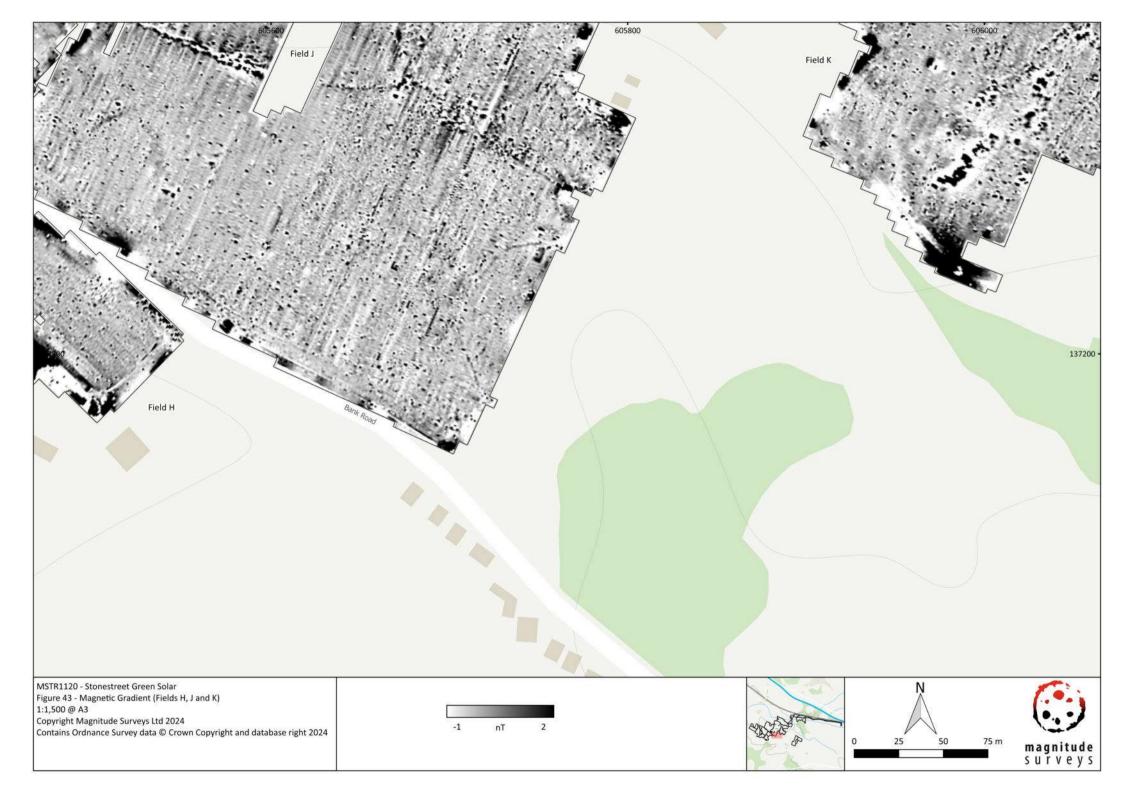


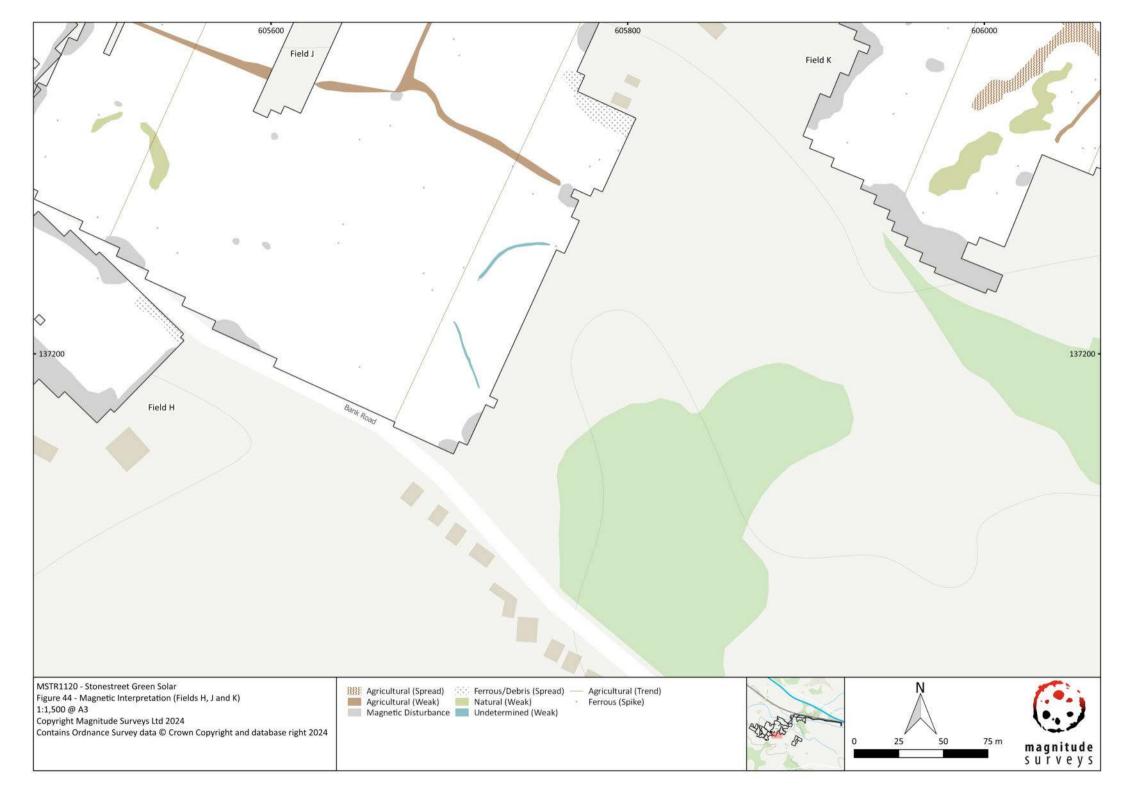


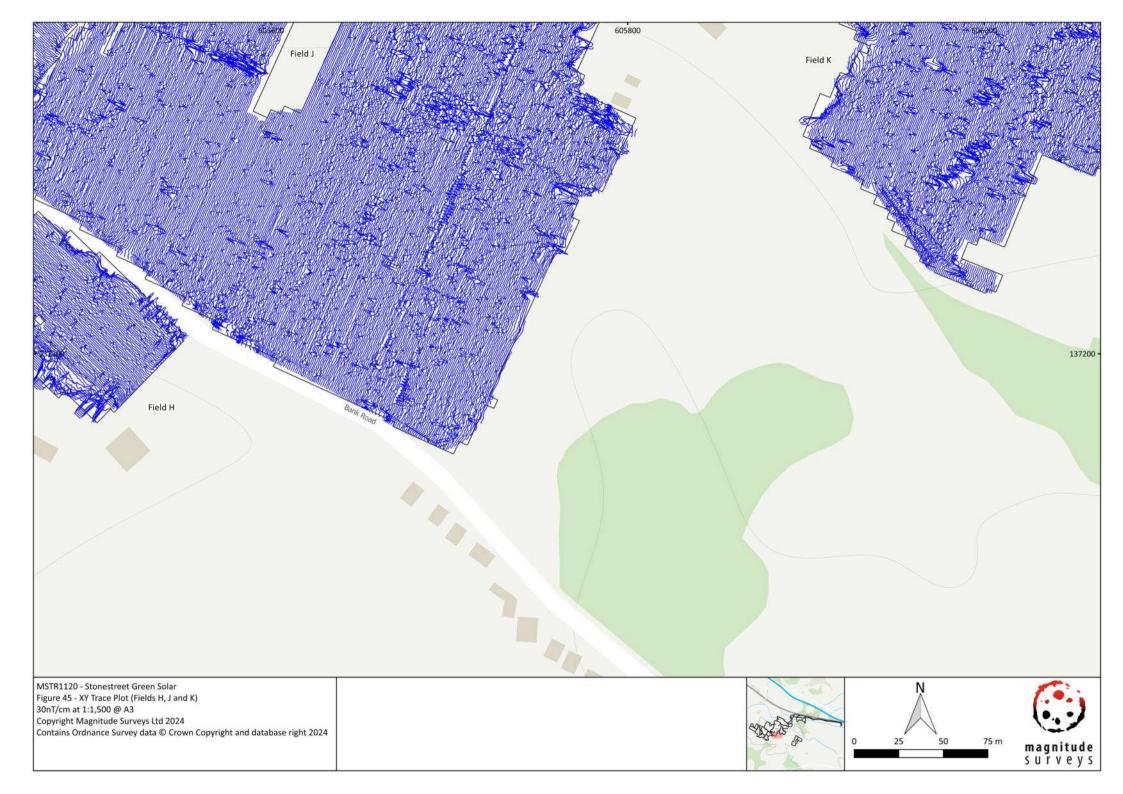


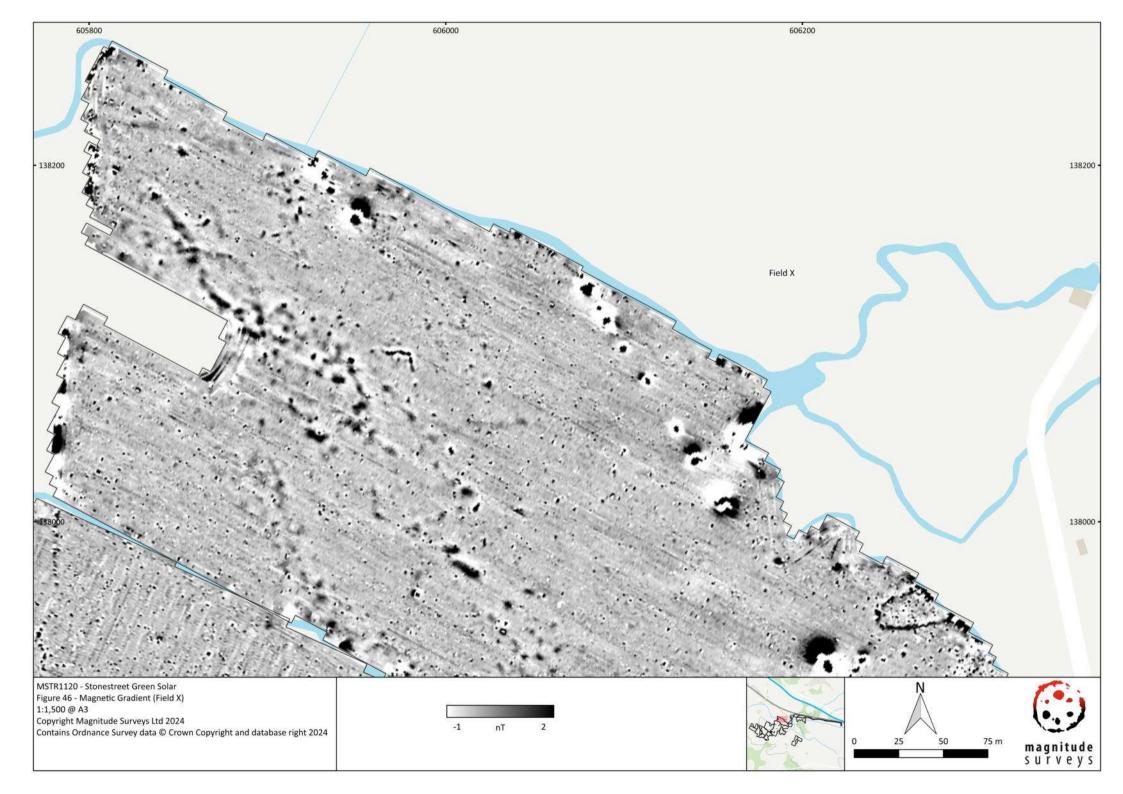


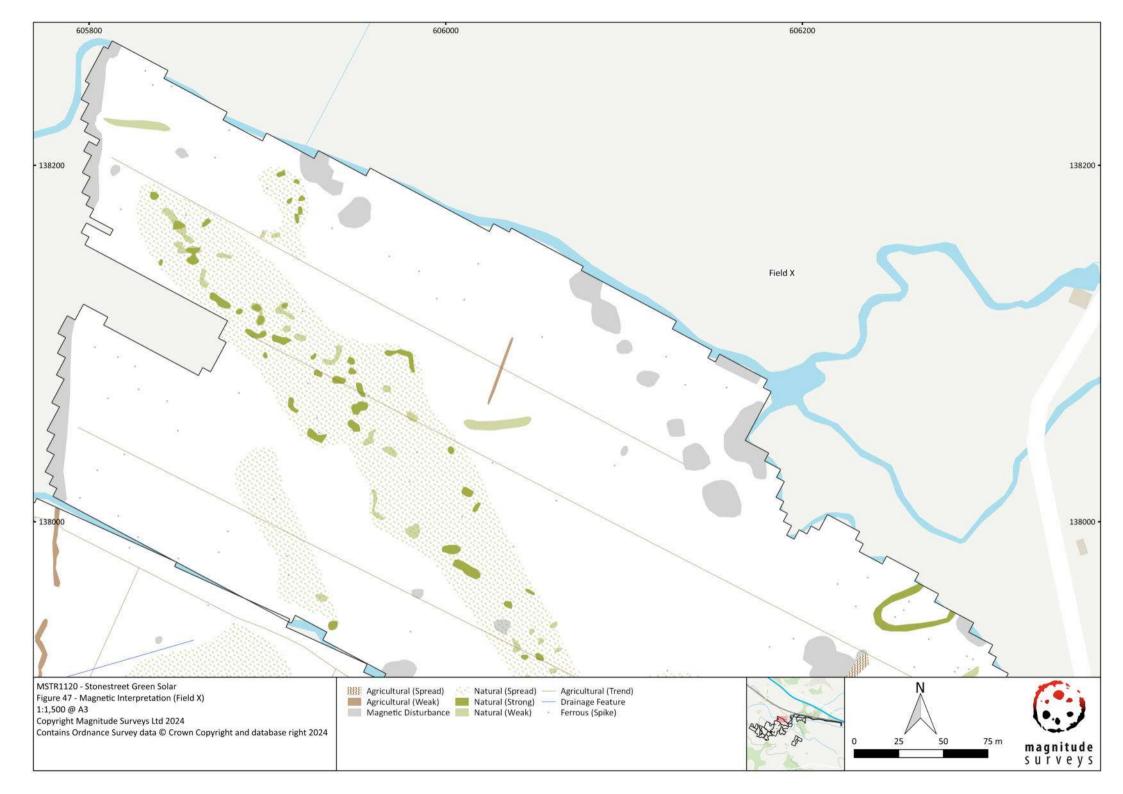


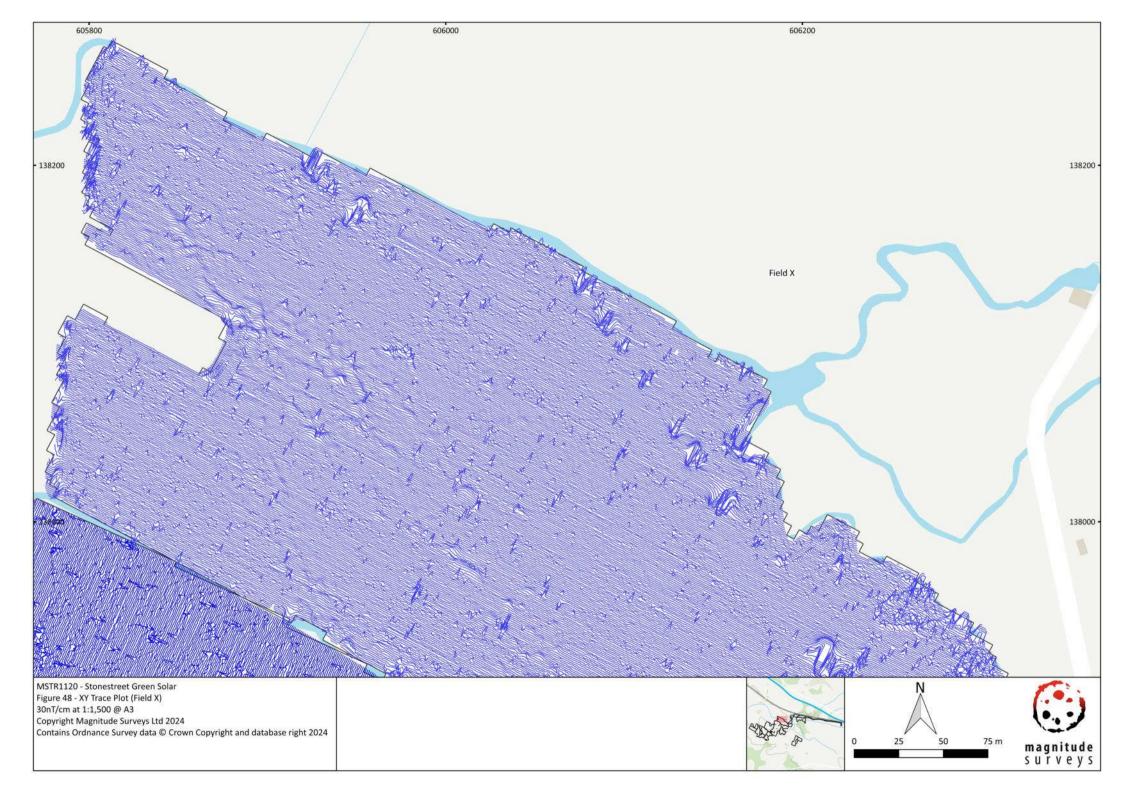


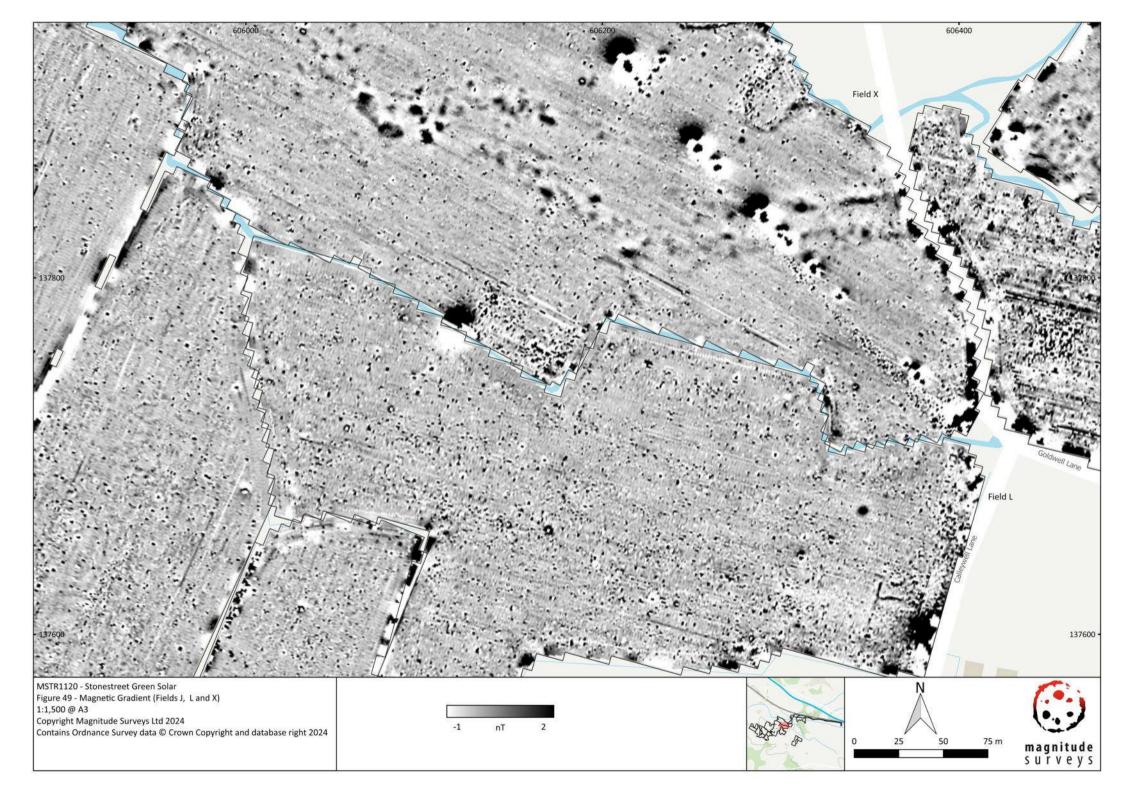


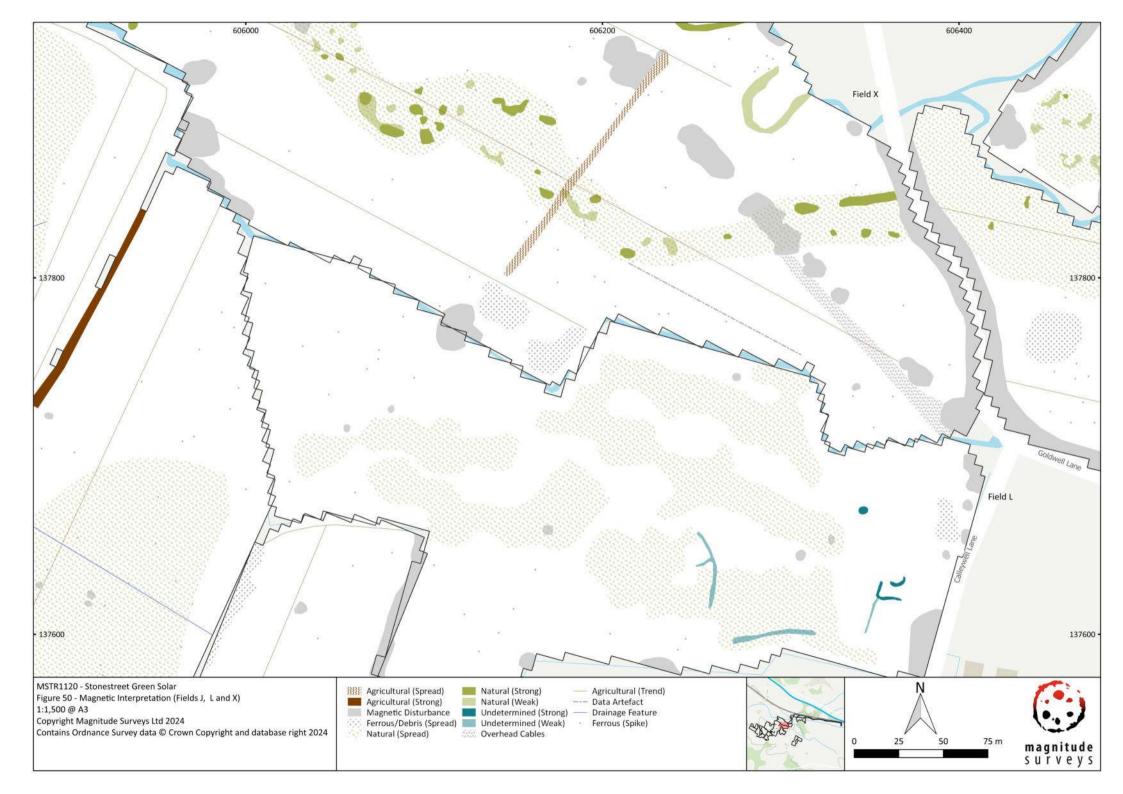


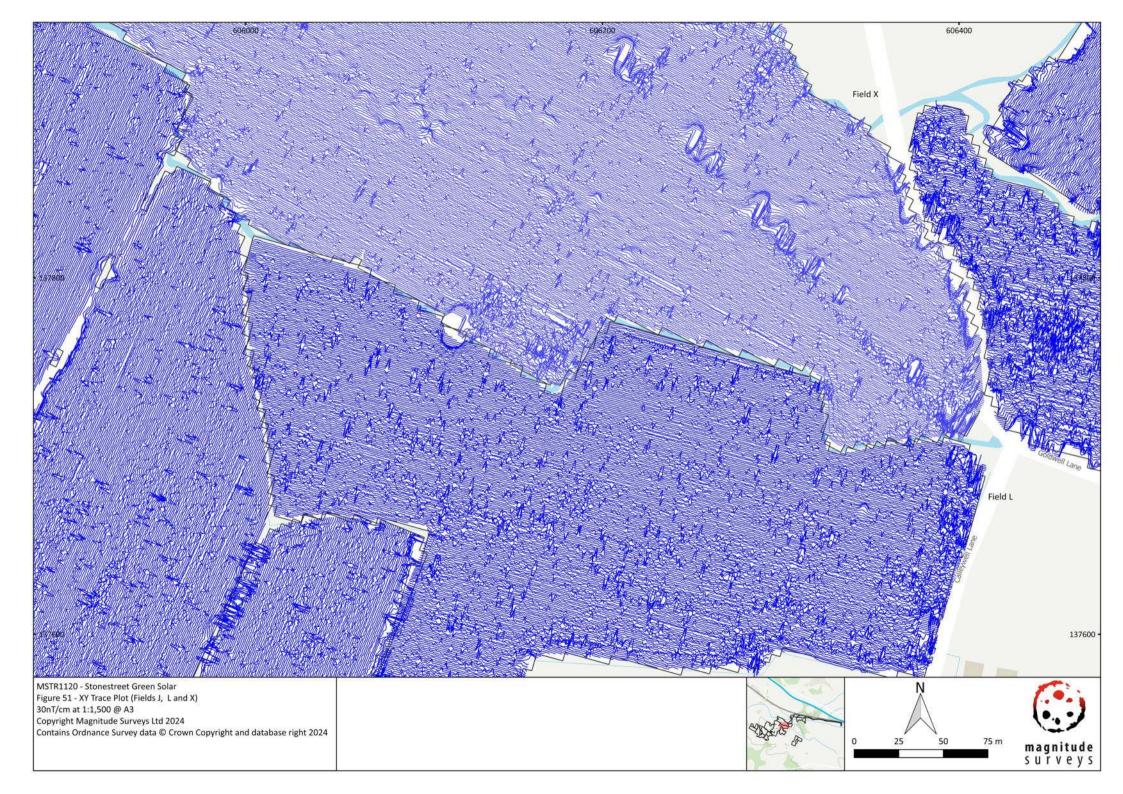




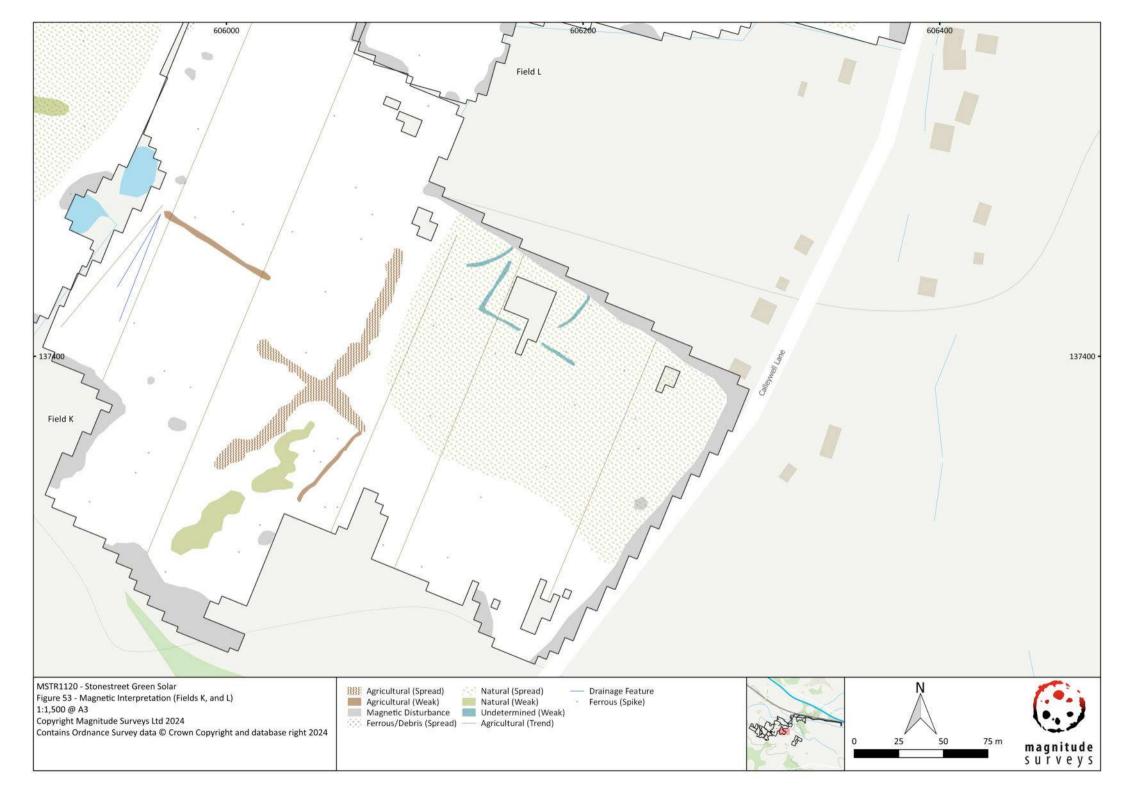


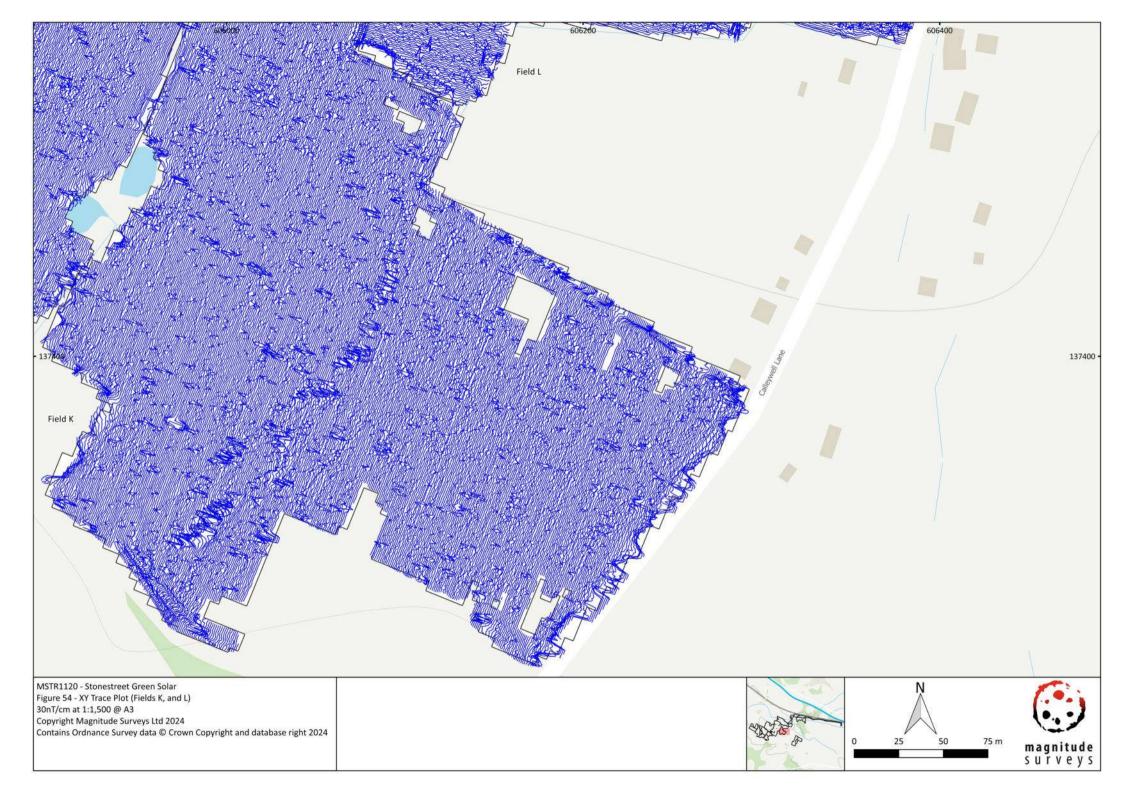


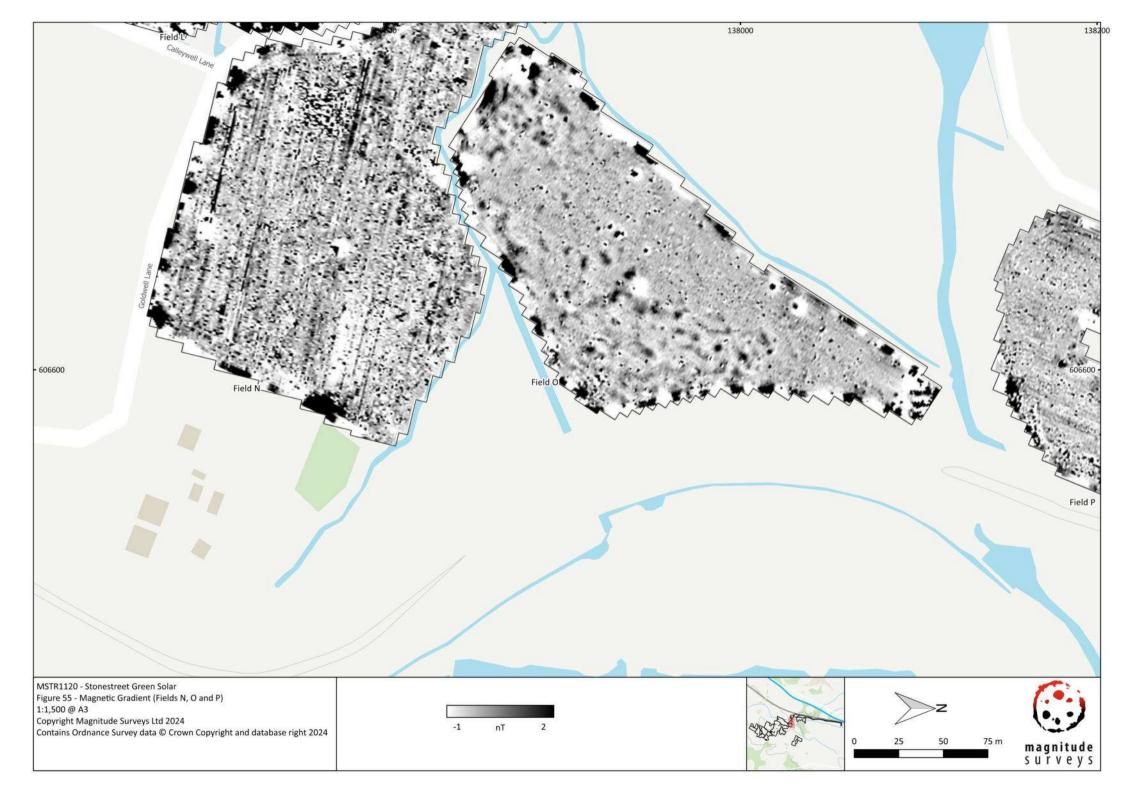


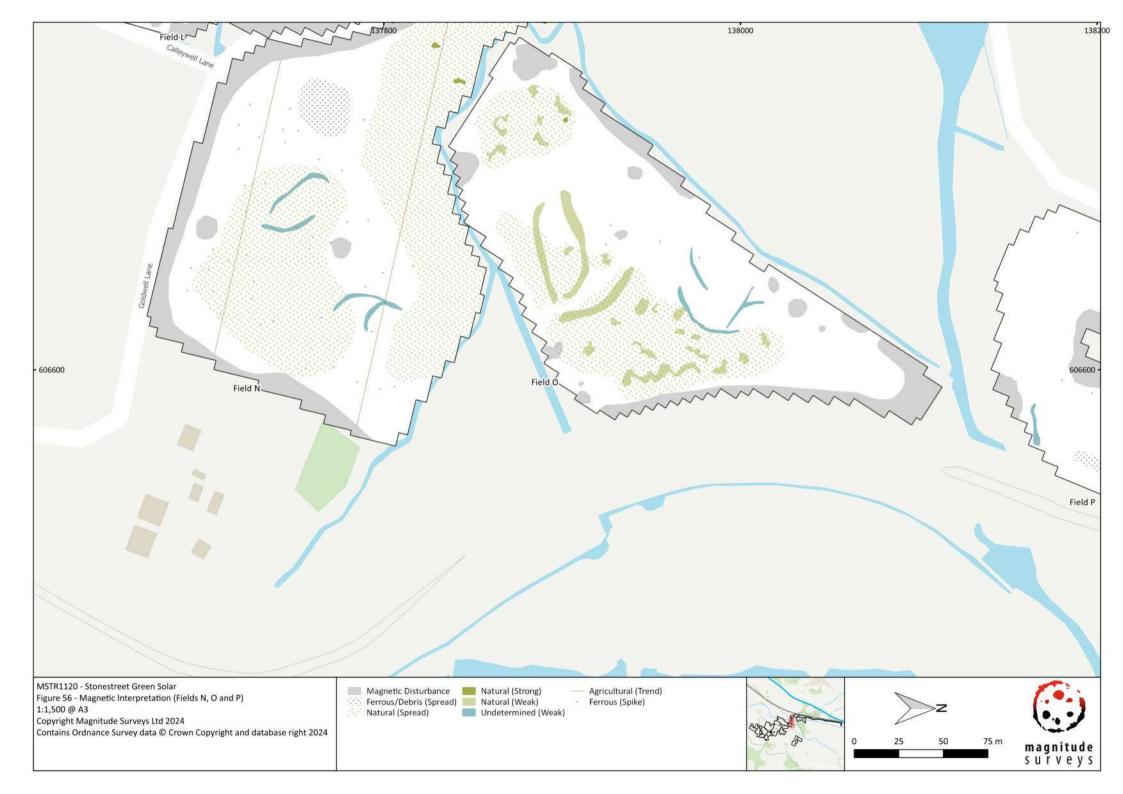


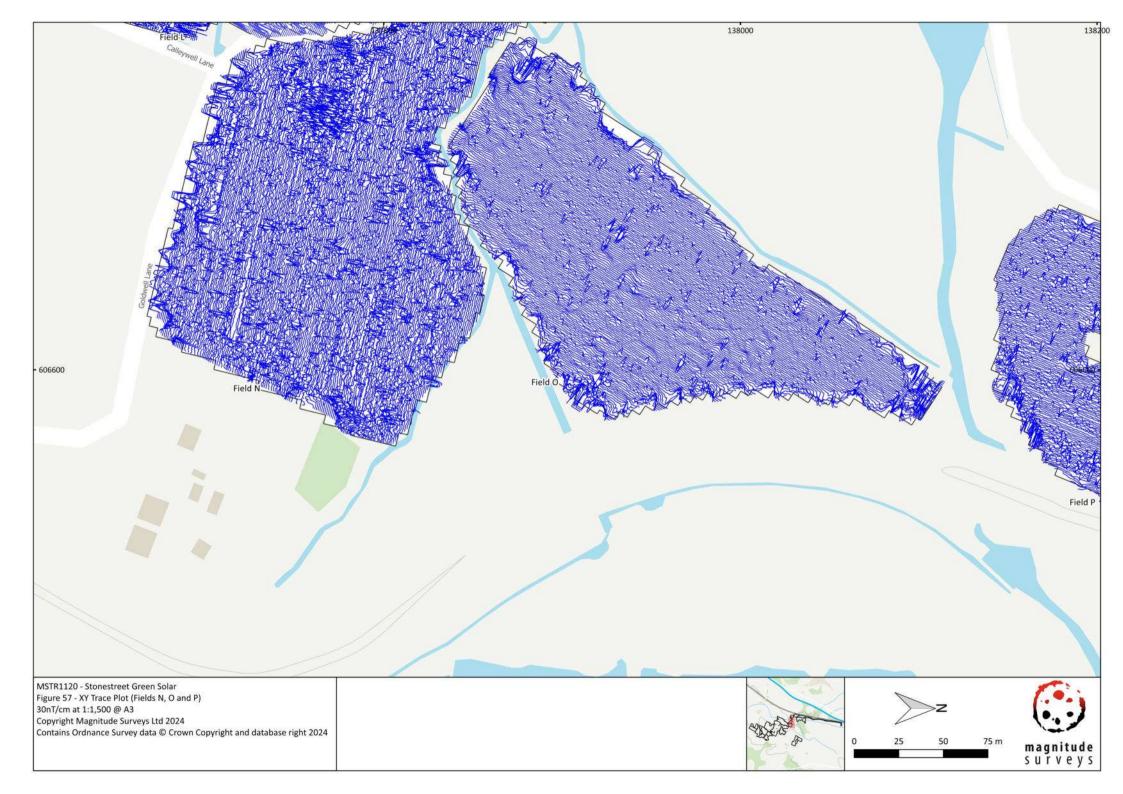


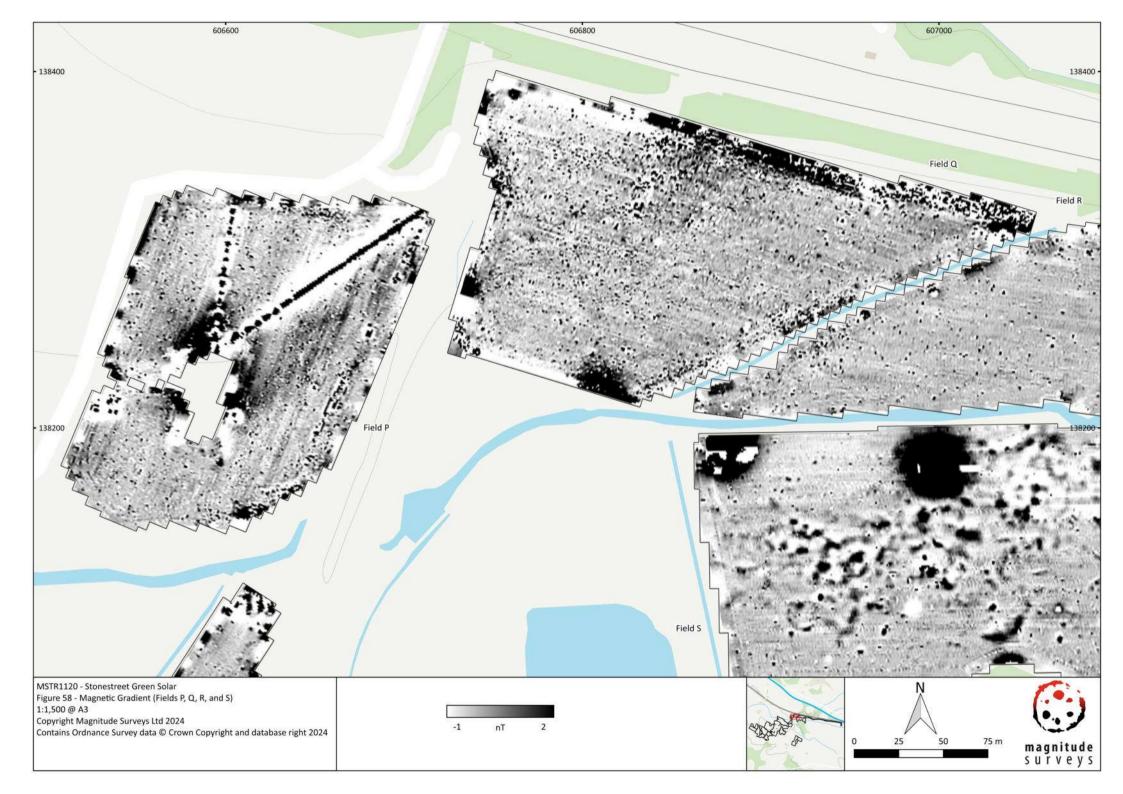


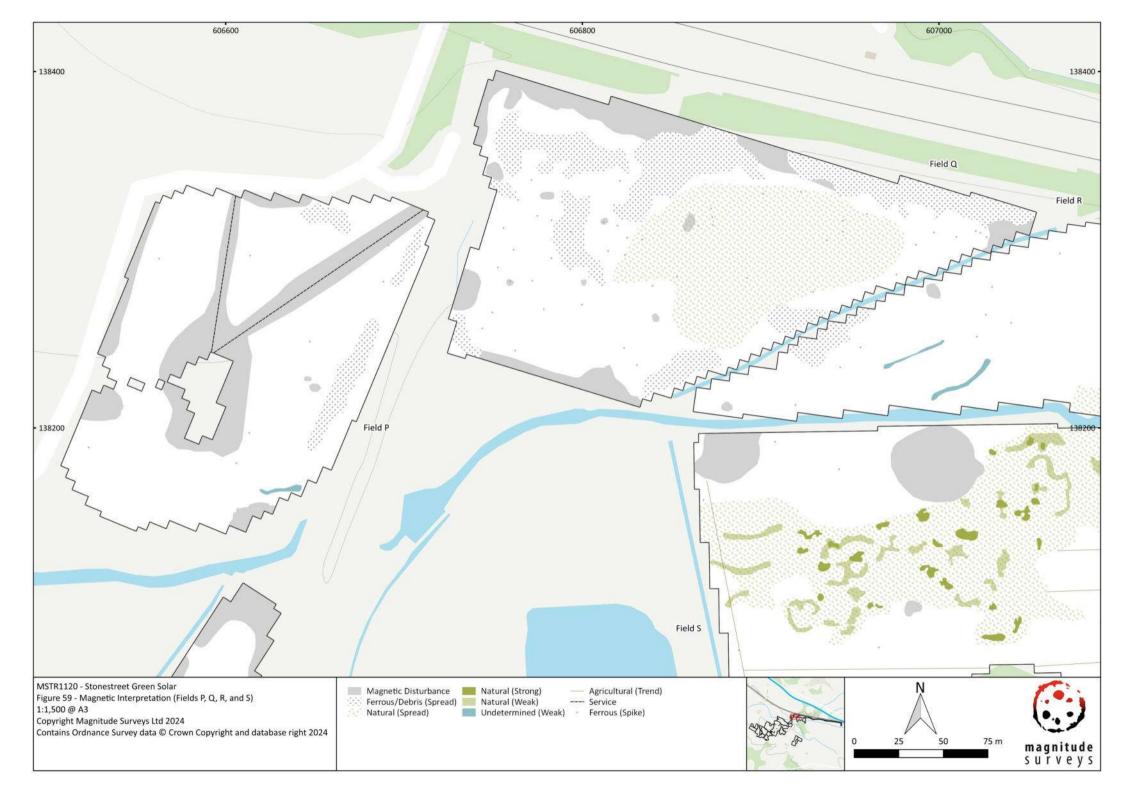


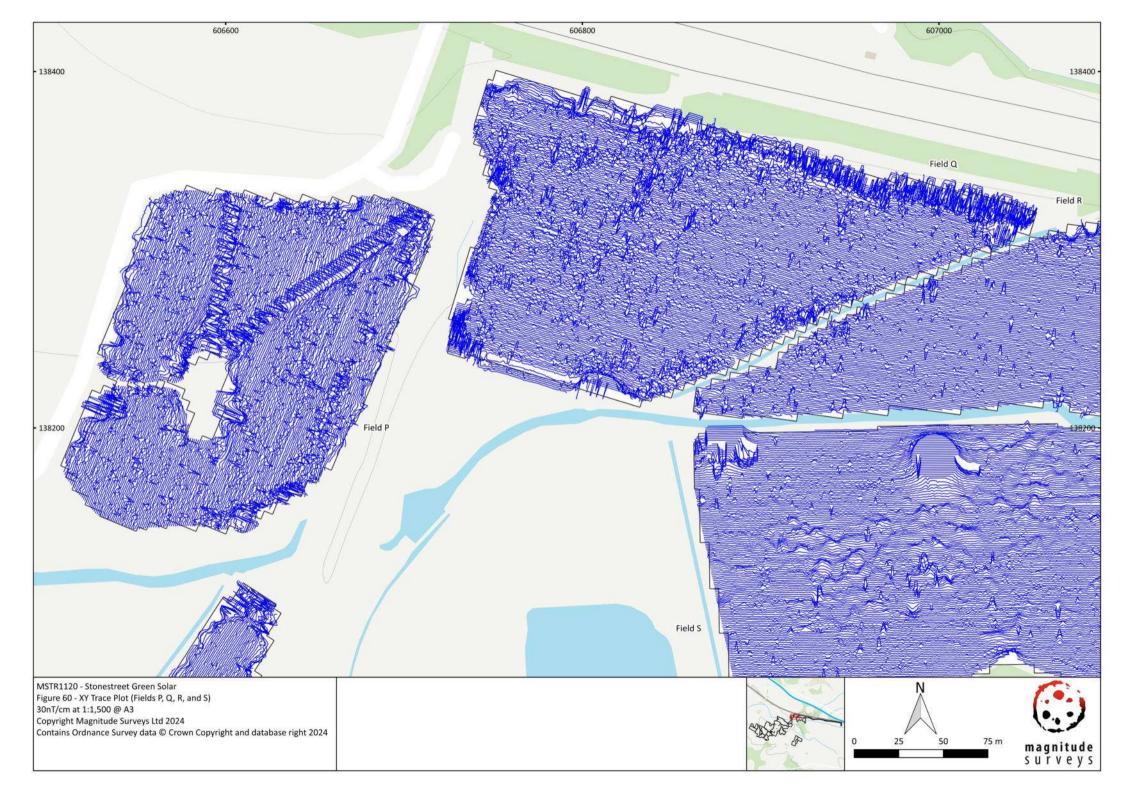


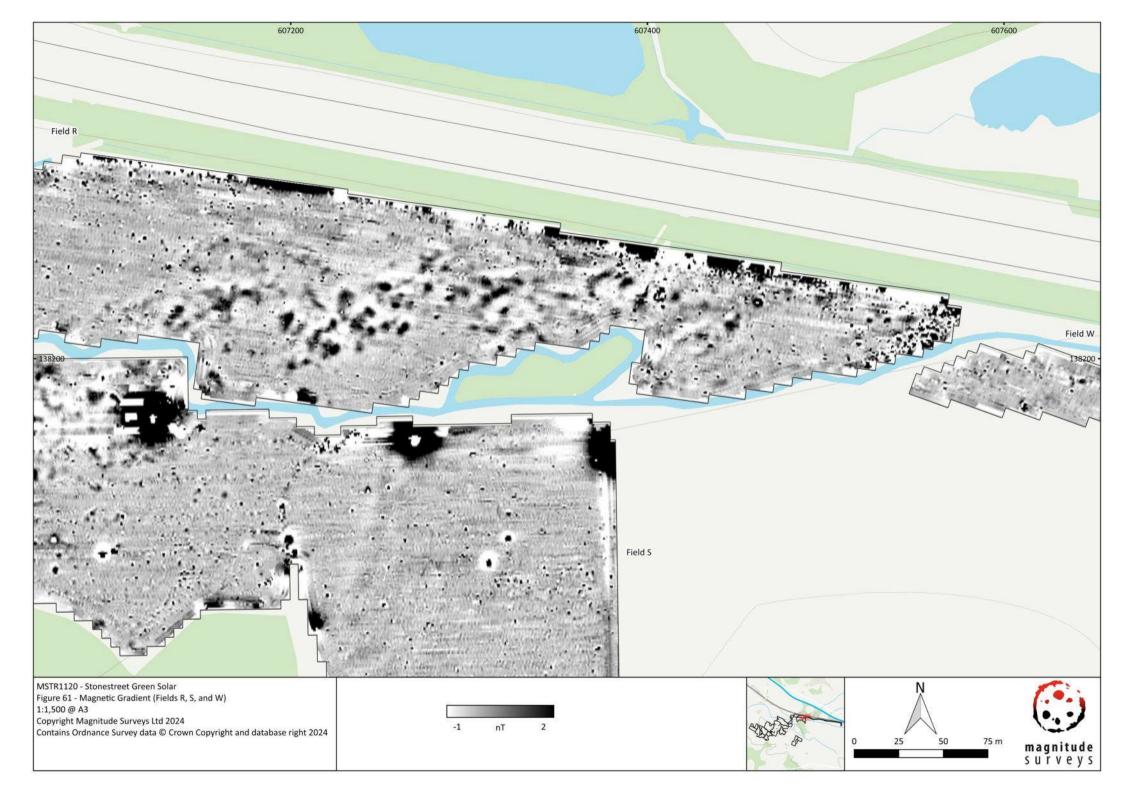


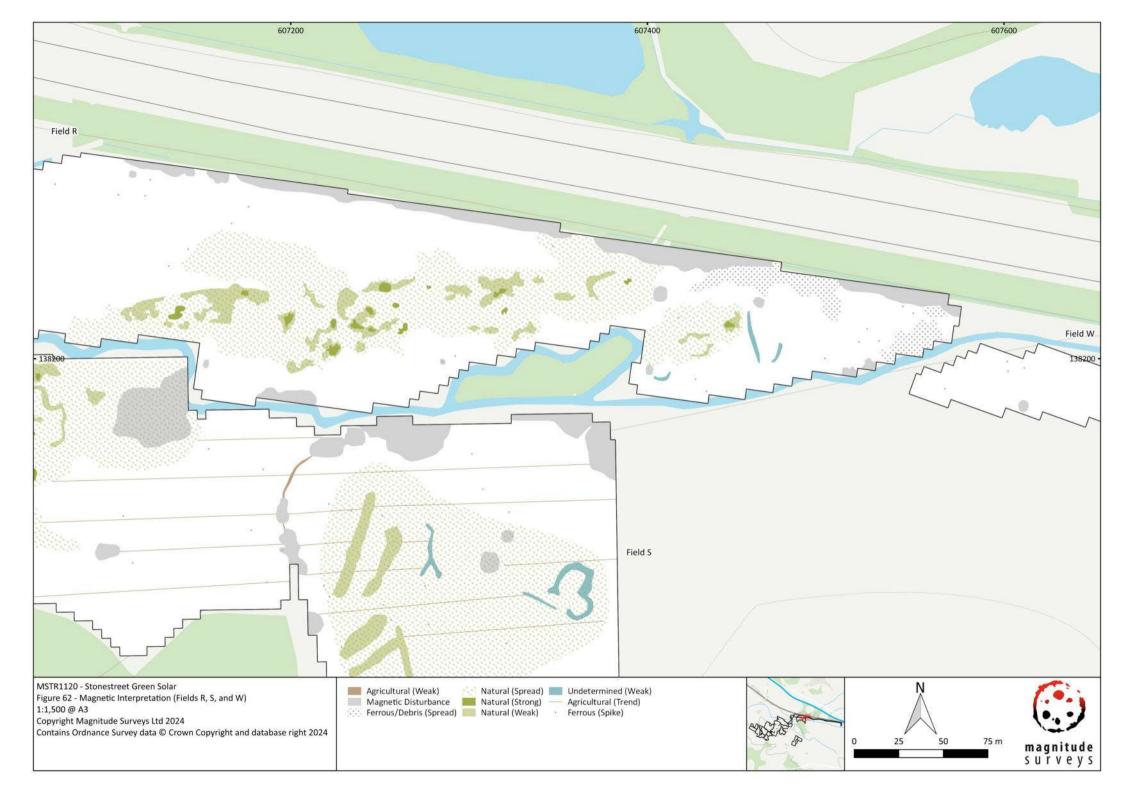


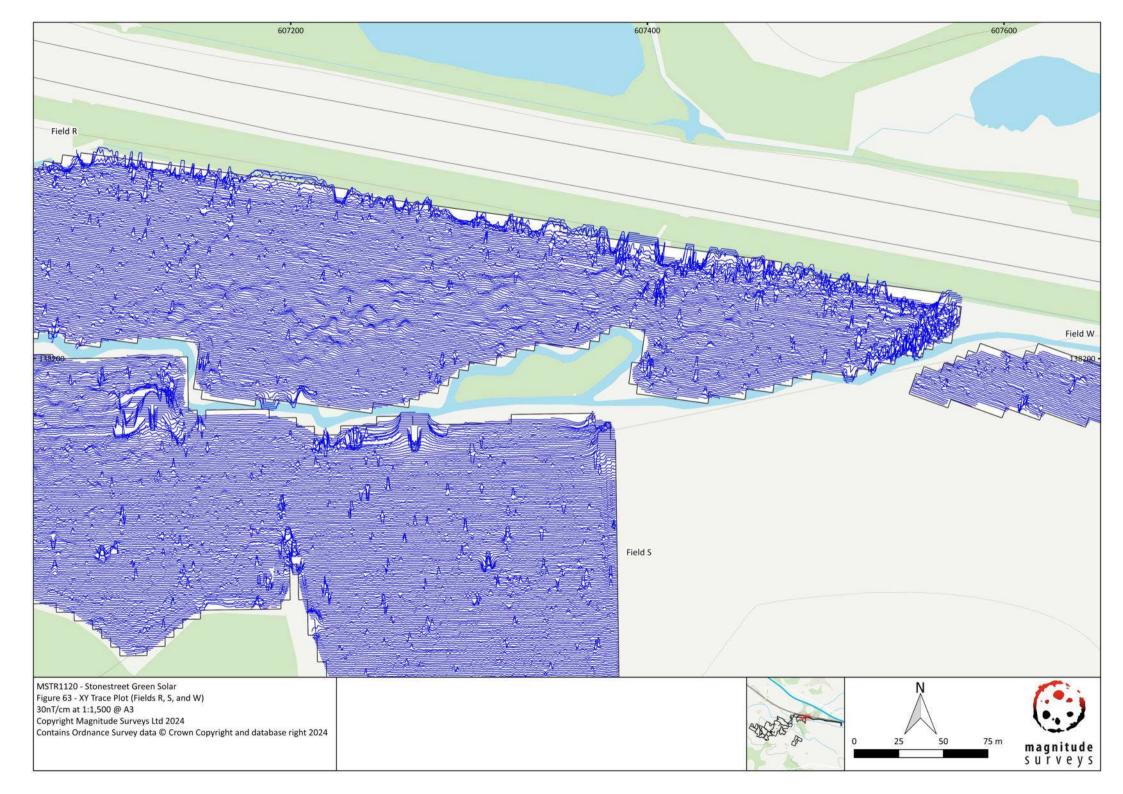


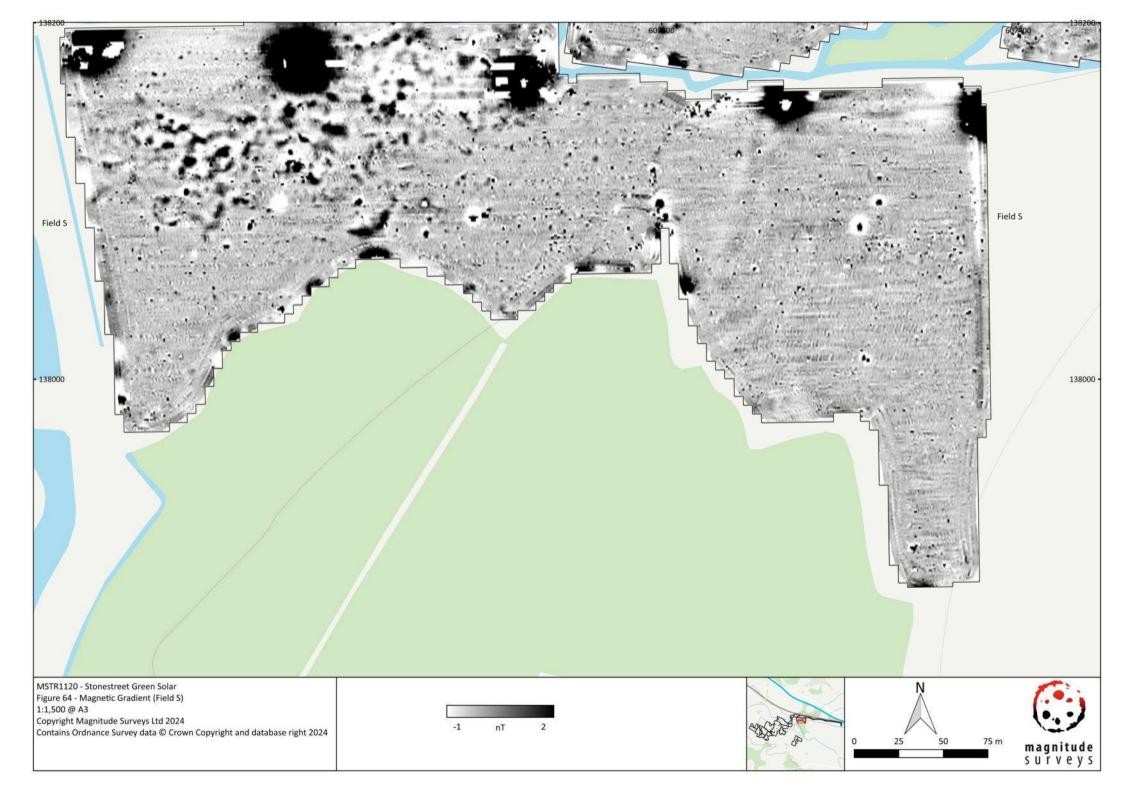


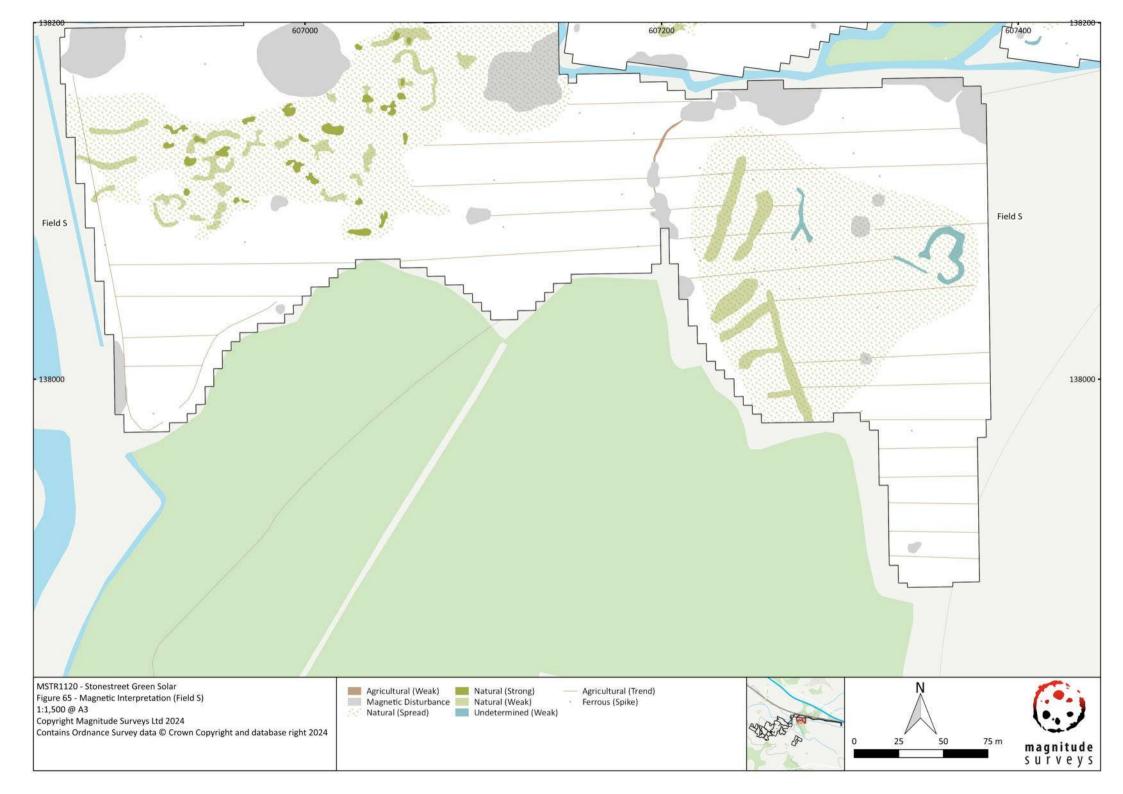


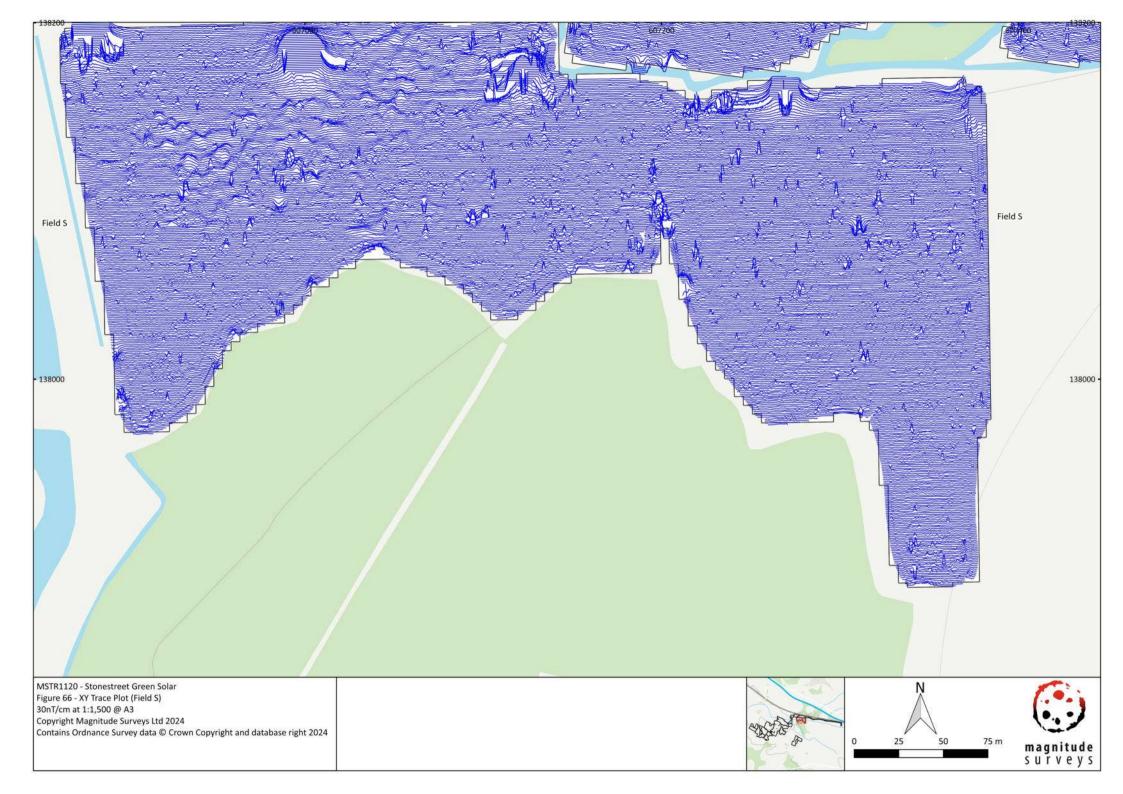


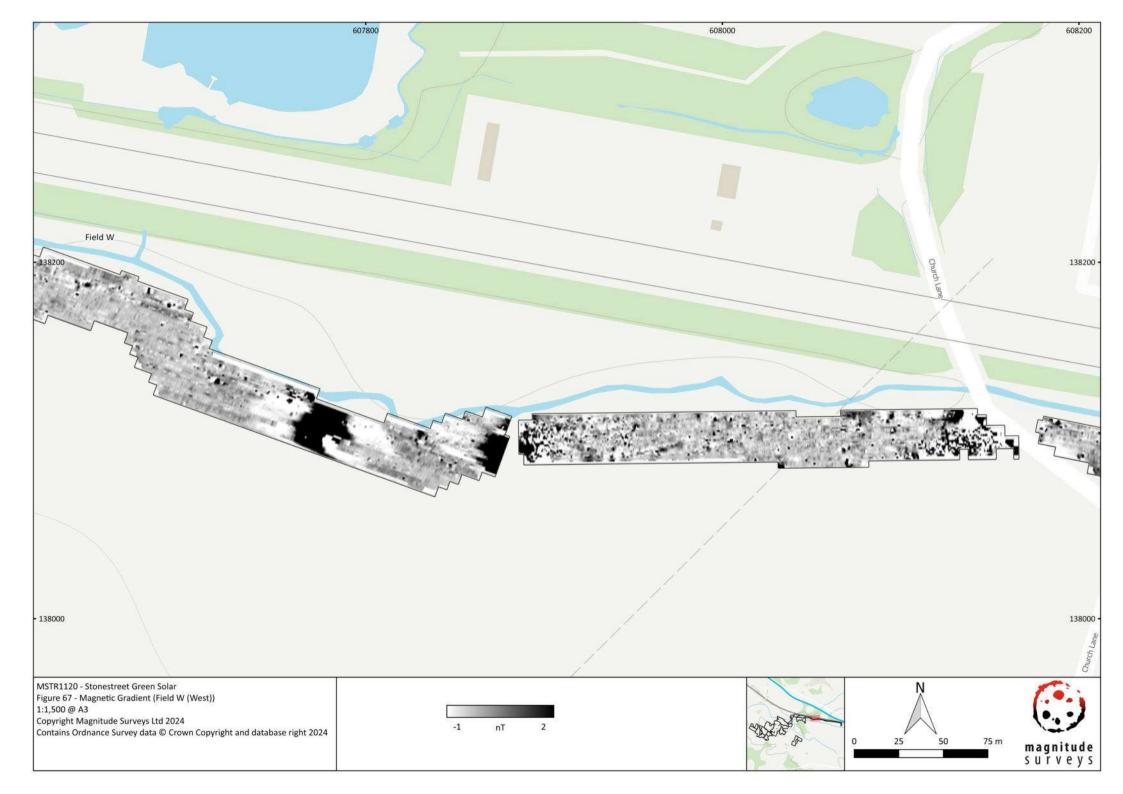


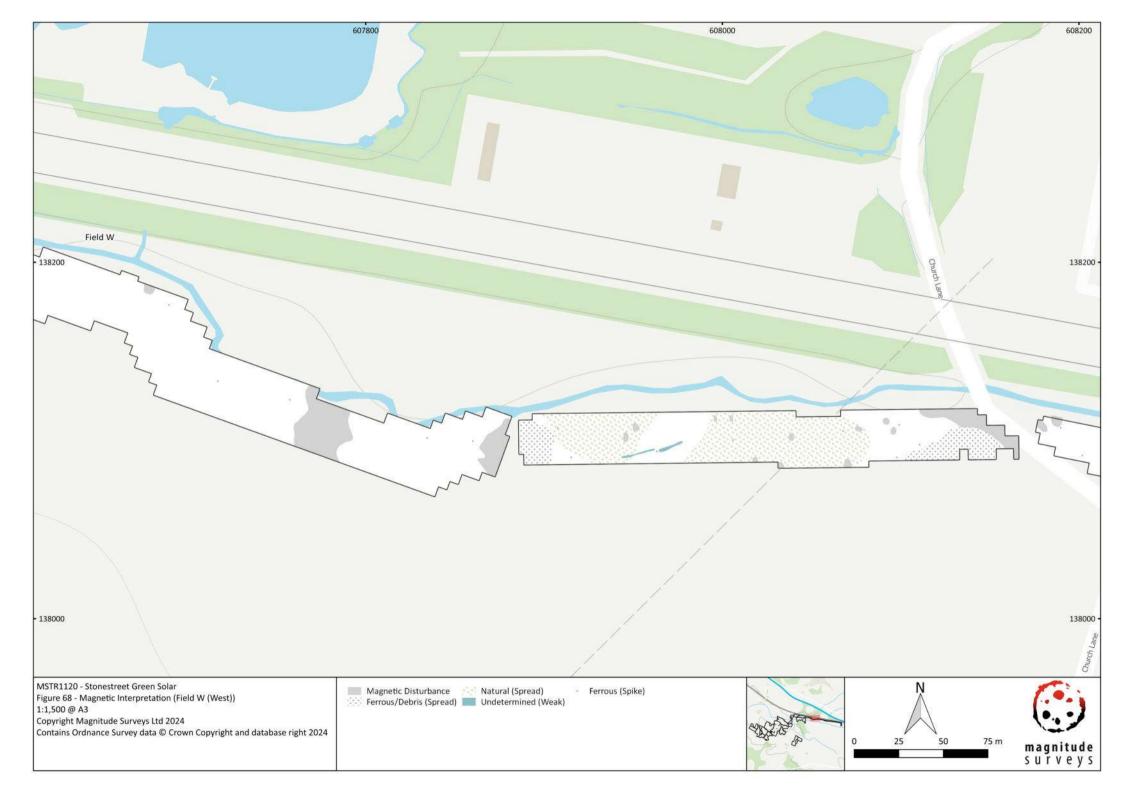


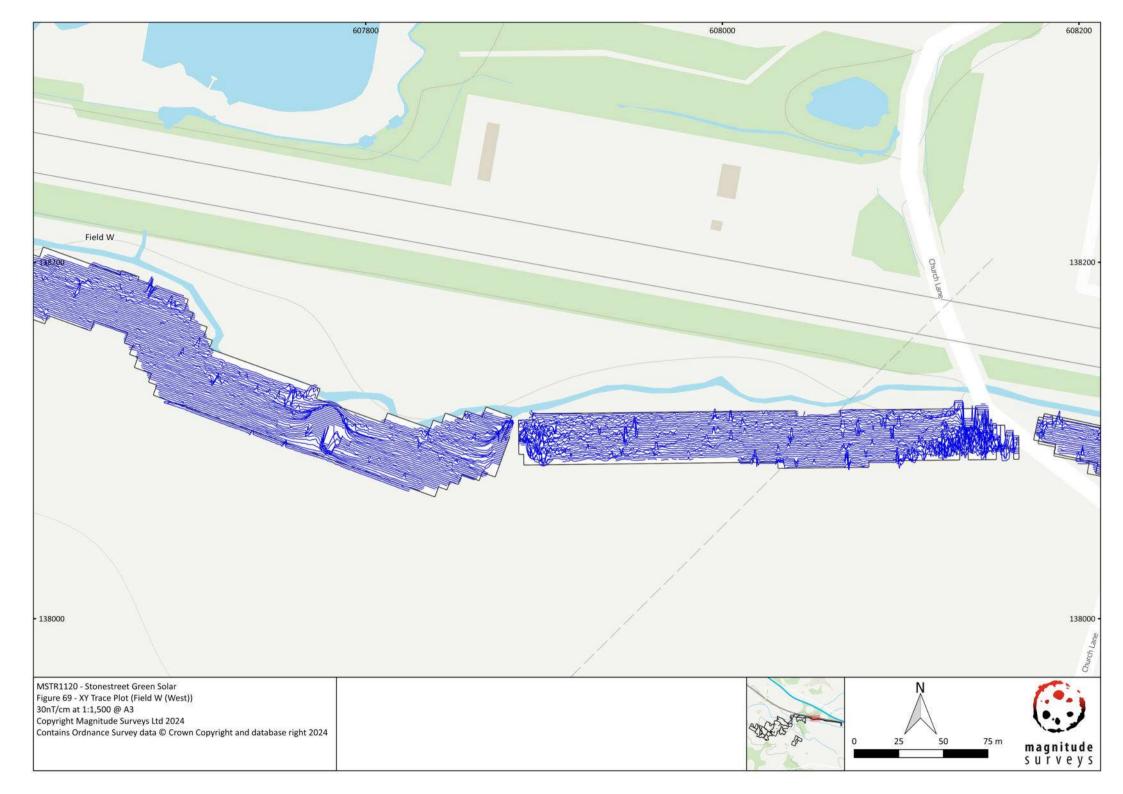


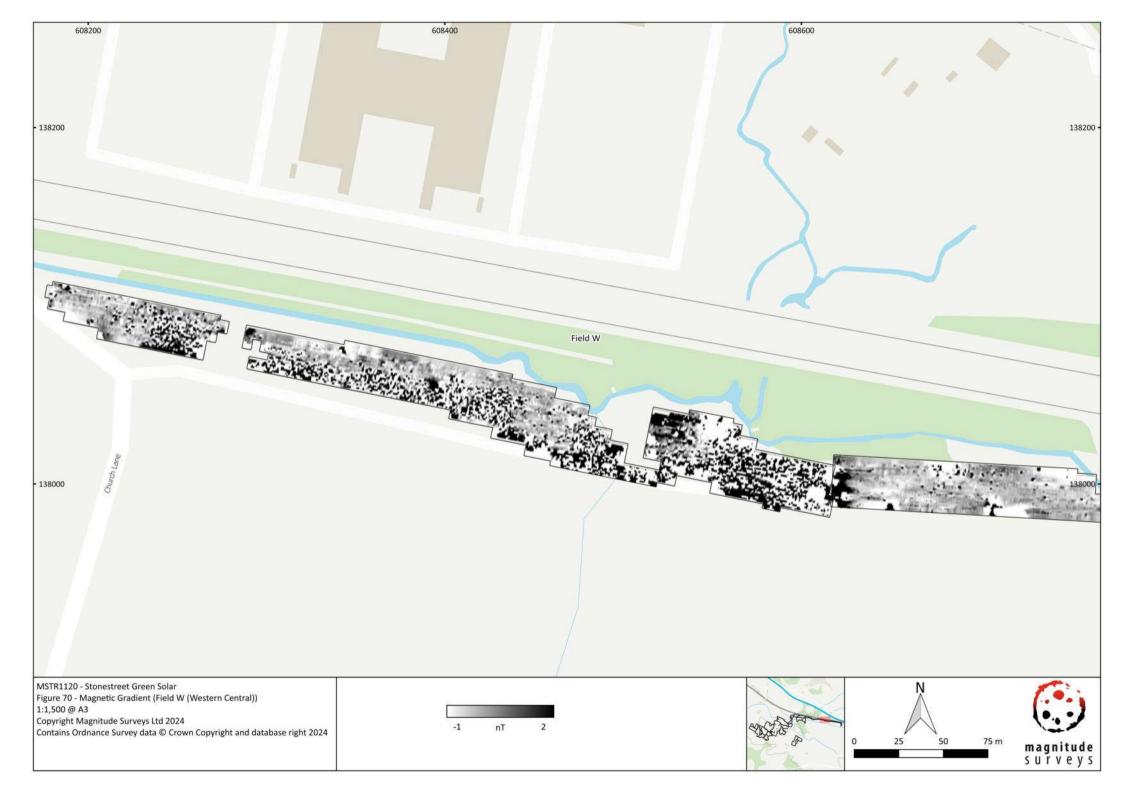


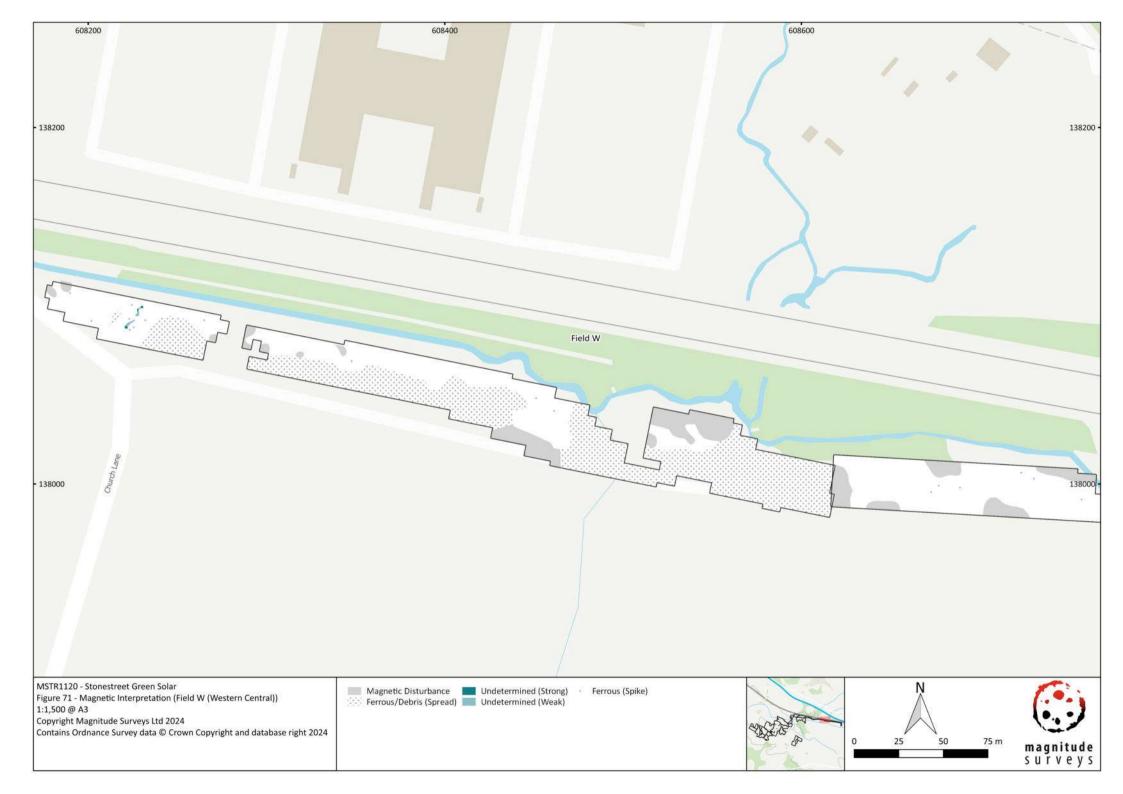




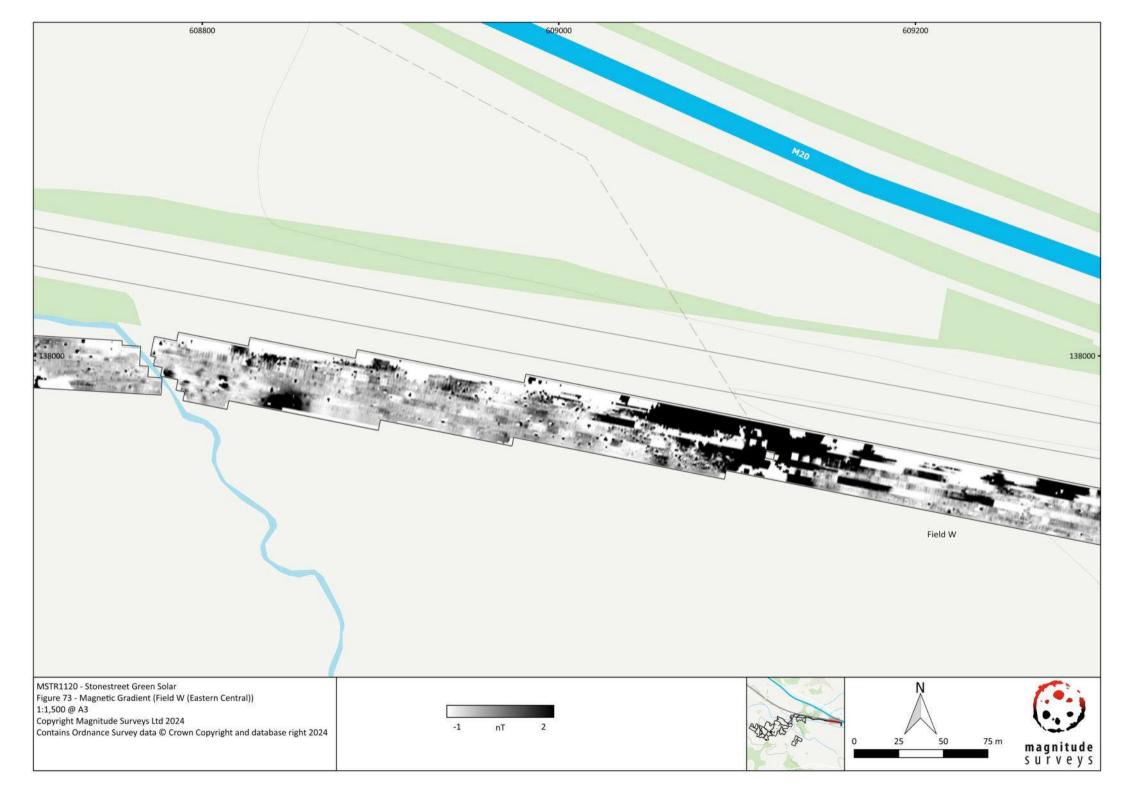


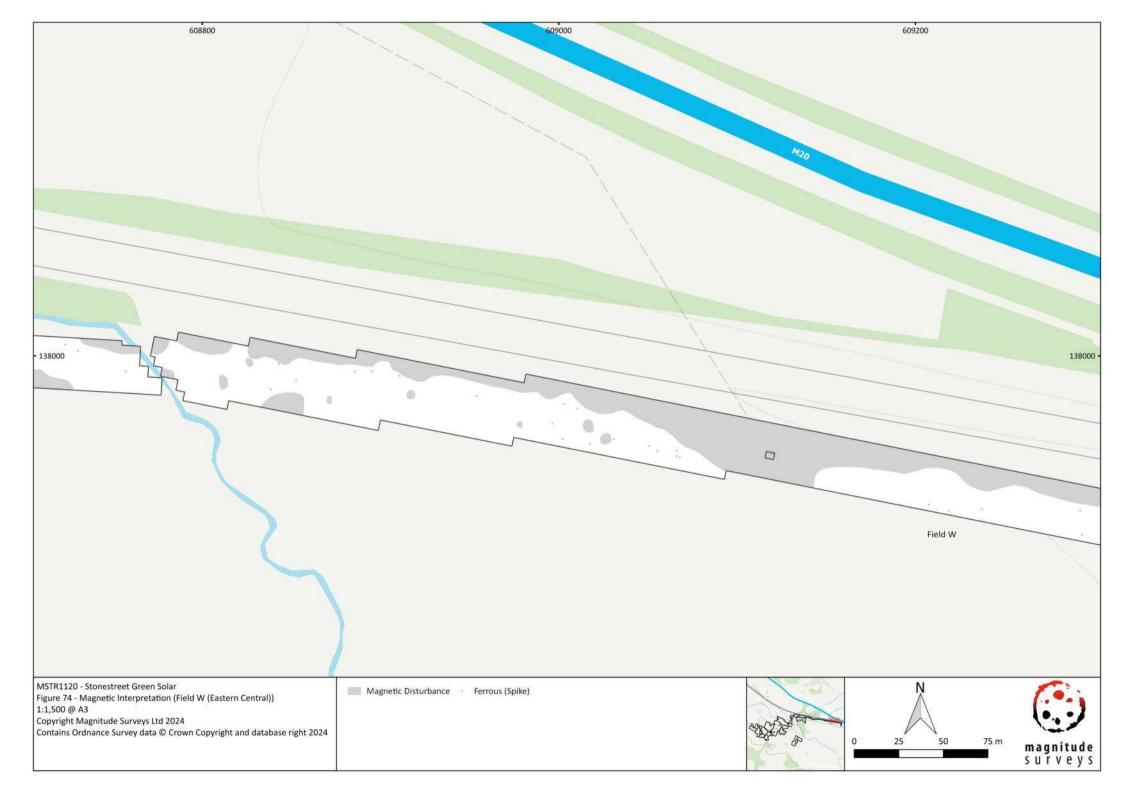


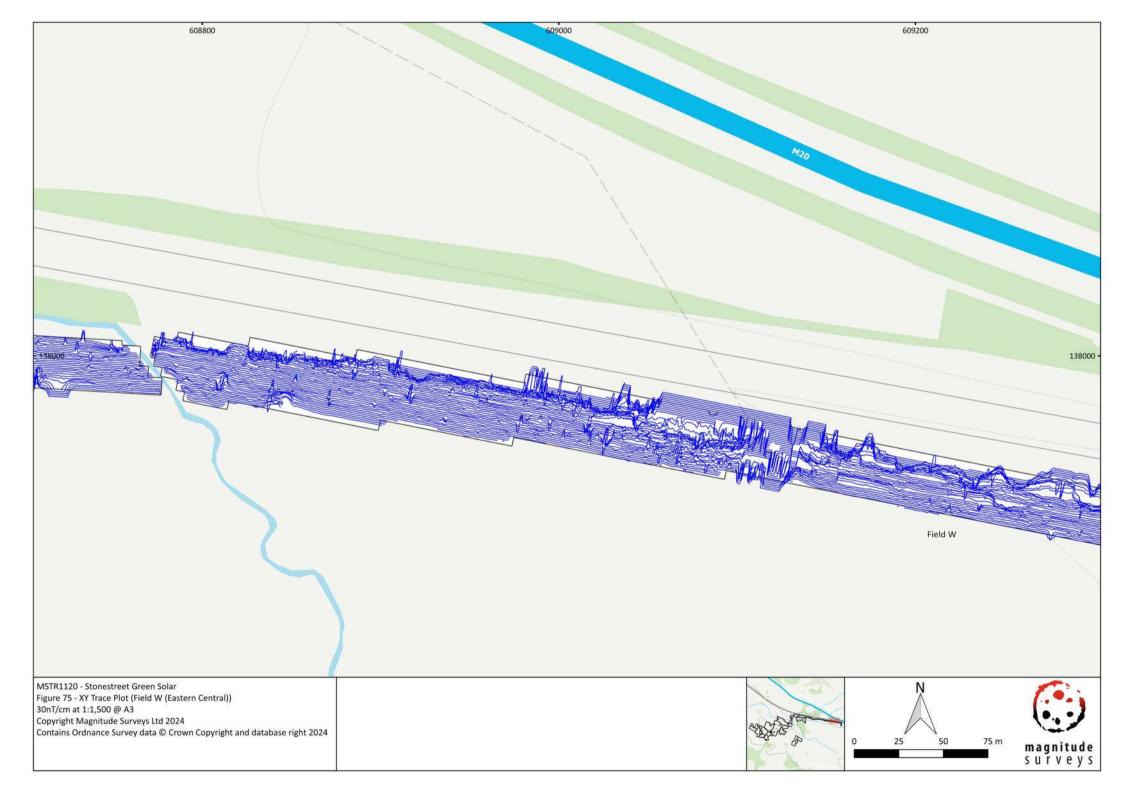


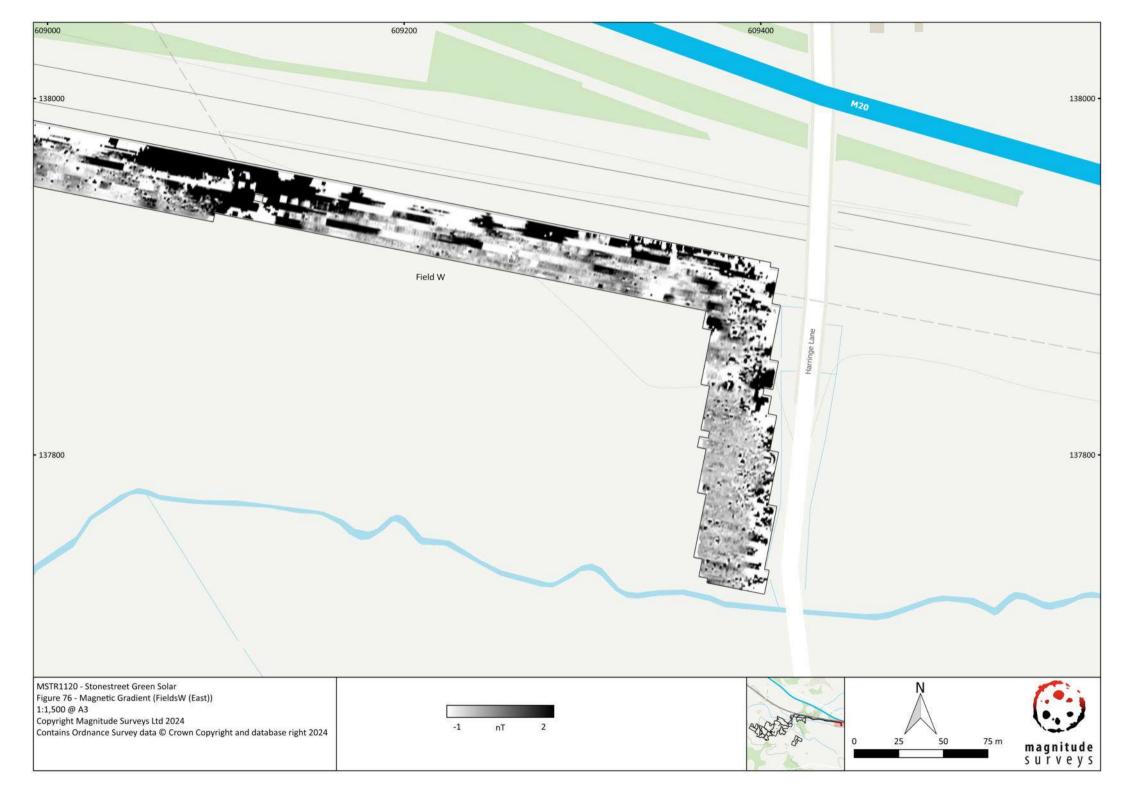


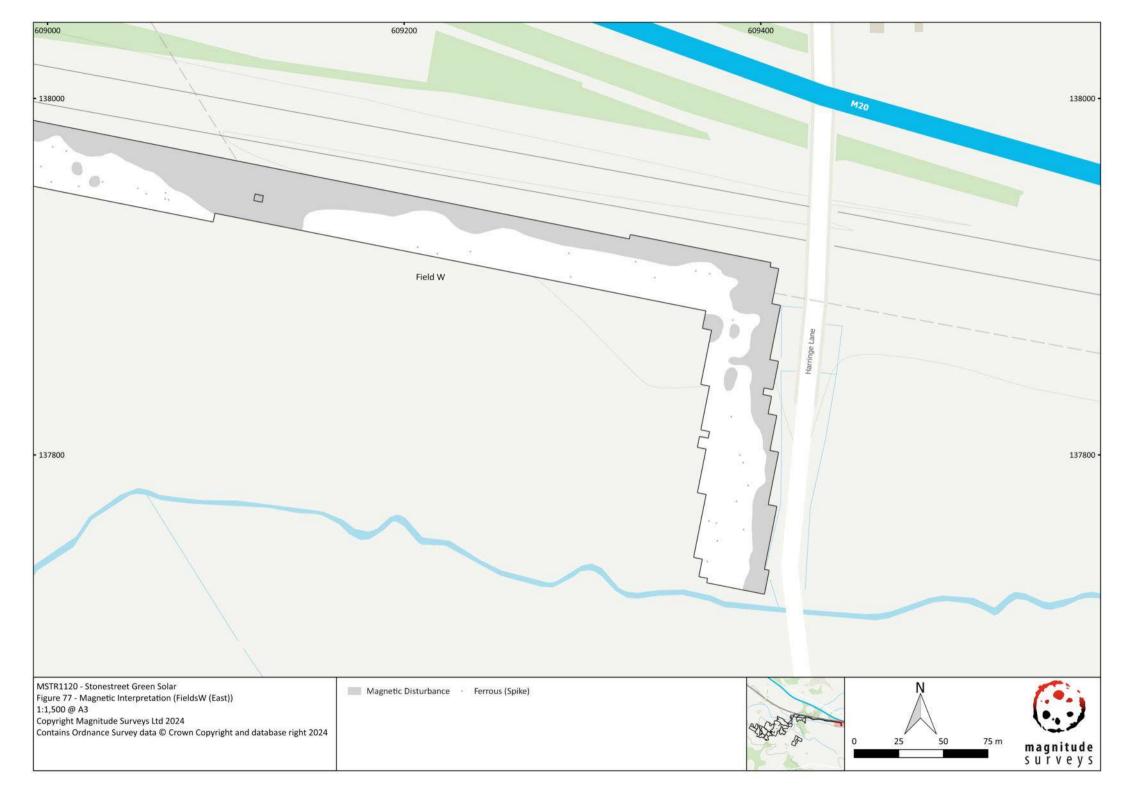




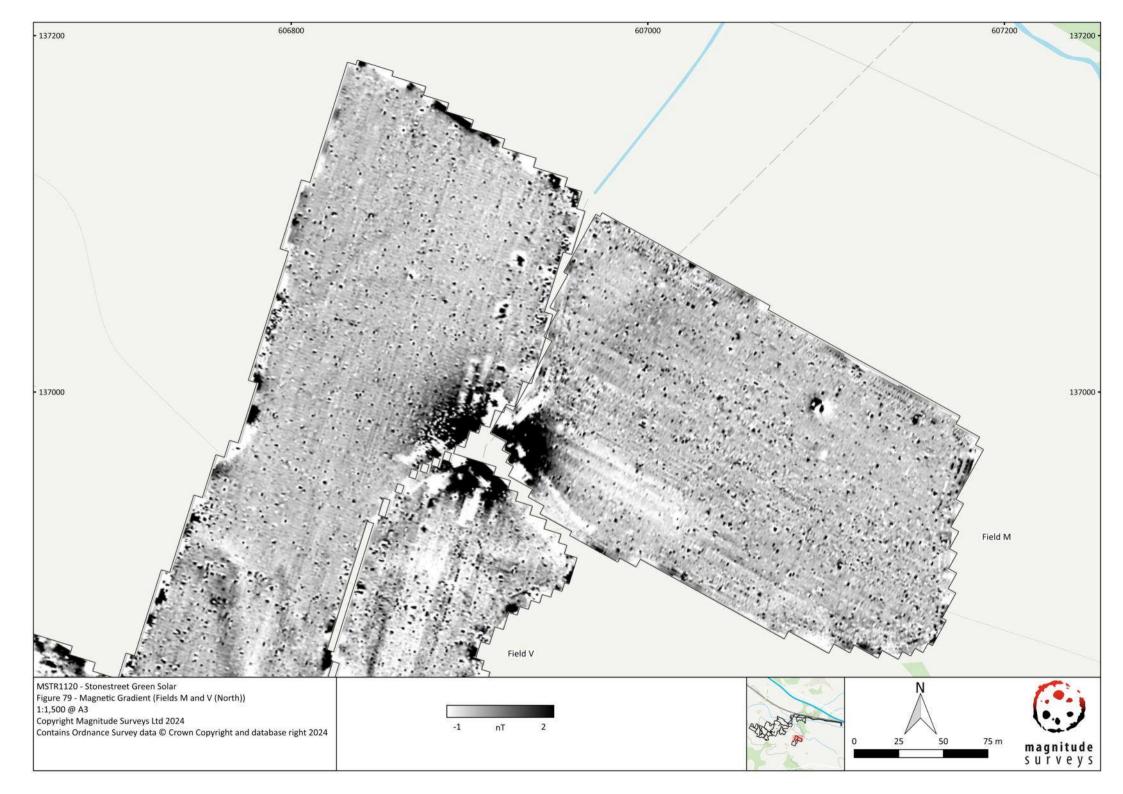


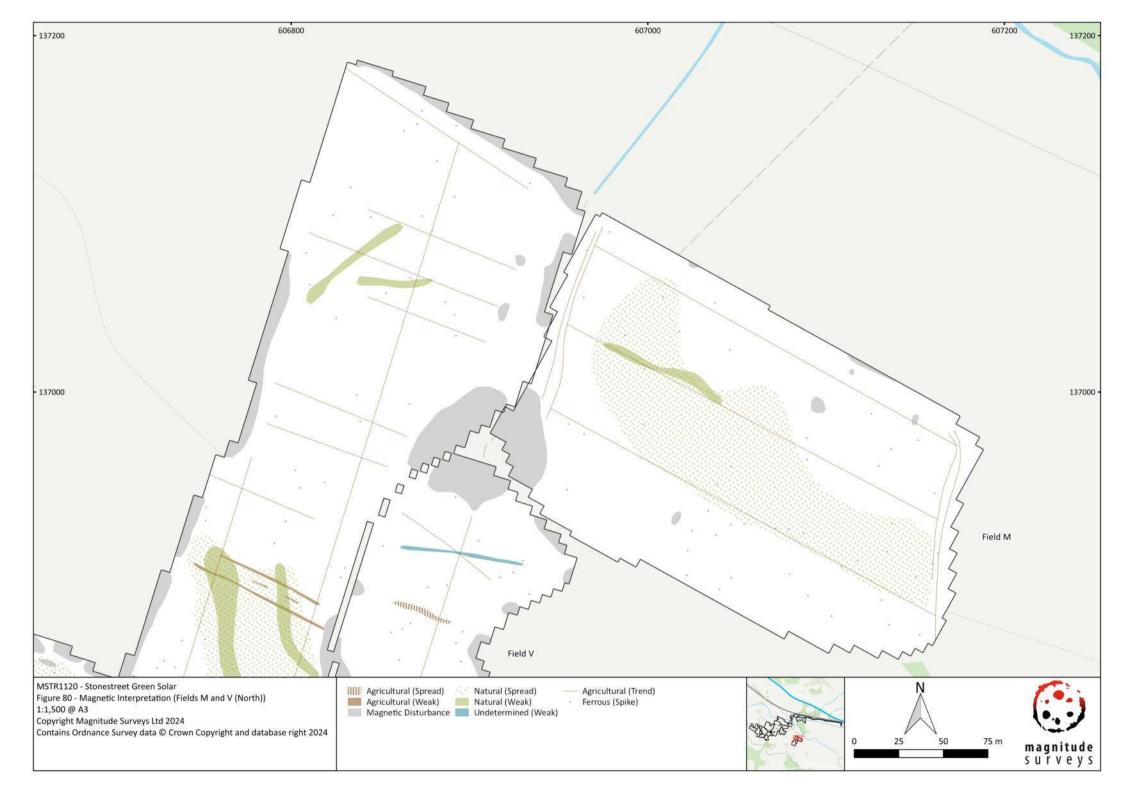


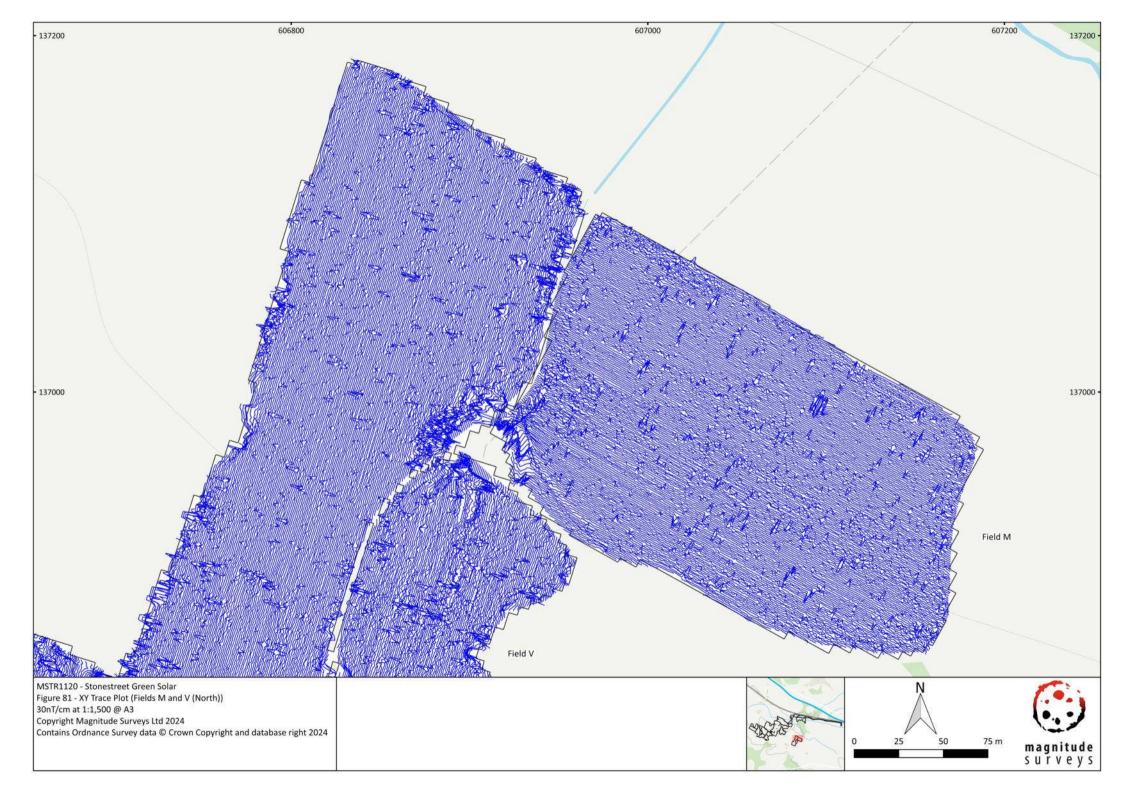


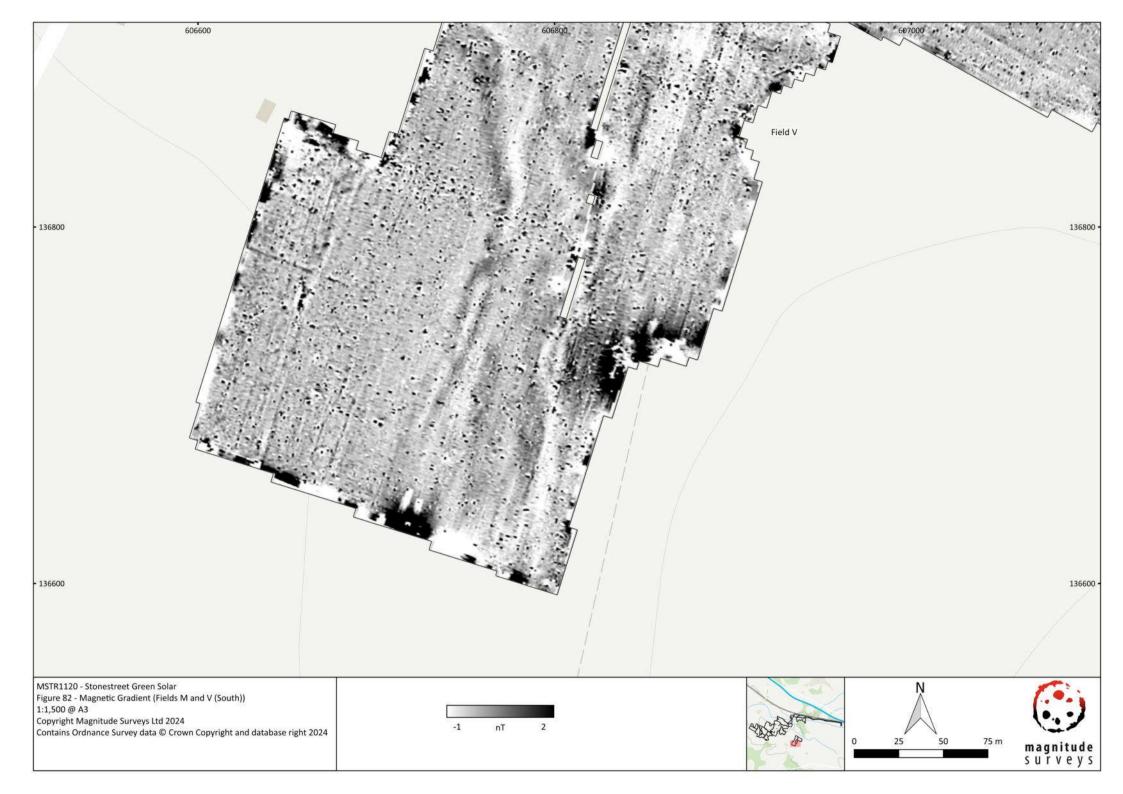


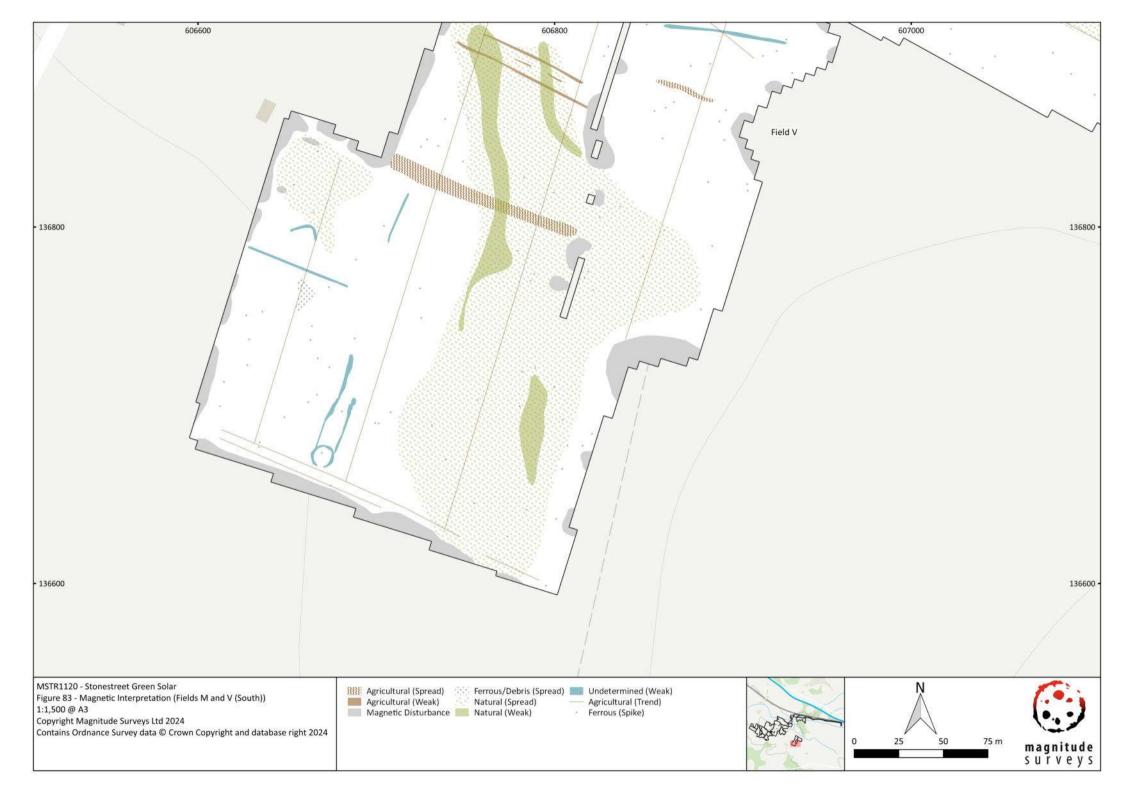


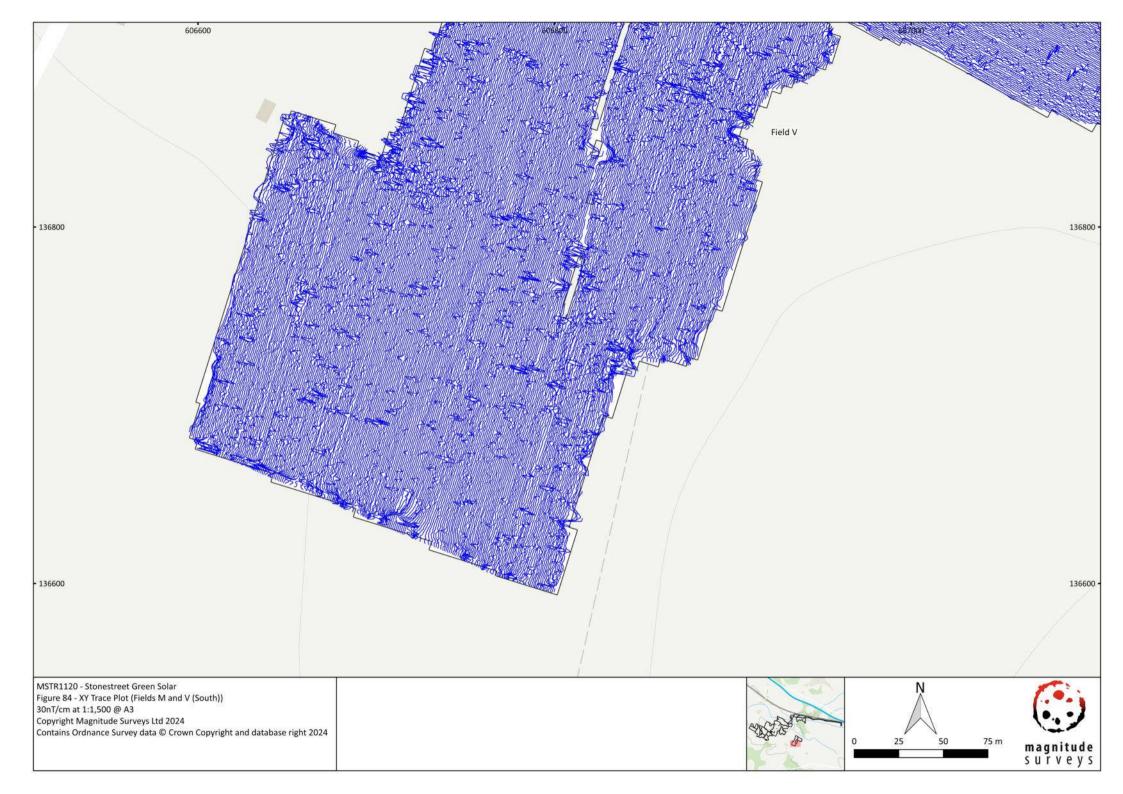












EPL 001 LIMITED STONESTREET GREEN SOLAR ENVIRONMENTAL STATEMENT VOLUME 4 APPENDIX 7.1 ARCHAEOLOGICAL DESK BASED ASSESSMENT



Annex 6 Archaeological Monitoring Report



EVOLUTION POWER LIMITED

STONESTREET GREEN SOLAR

ARCHAEOLOGICAL MONITORING REPORT

MAY 2023



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DATE ISSUED: 1 June 2023 JOB NUMBER: GM12014

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EVOLUTION POWER LIMITED

STONESTREET GREEN SOLAR

ARCHAEOLOGICAL MONITORING REPORT

MAY 2023



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ENERGY AND CLIMATE CHANGE ENVIRONMENT AND SUSTAINABILITY INFRASTRUCTURE AND UTILITIES

LAND AND PROPERTY



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Plate 4; WS08, showing soil sample, no scale10)

APPENDIX 2: DRAWINGS

DRAWING No.	TITLE	SCALE
GM12014-036	Figure 1: Site location	1:25,000
GM12014-037	Figure 2: Location of monitored works	1:15,000



ACKNOWLEDGEMENTS

Wardell Armstrong LLP (WA) tha	nks Evolution Power Limited for commis	sioning the project,
and for all their assistance throug	shout the work. Also, WA thank	of SI Ground
Investigations and	from Man and Machine Hire for their as	ssistance during the
project.		
undertook the	archaeological monitoring and wrote	this report.
, WA Engineering Geol	ogist, was the on-site project lead unde	ertaking the ground
investigation work.	prepared the figures, and the fieldwor	k was managed by
who also edited th	is report with	



1 INTRODUCTION

1.1 Project Background

- 1.1.1 Wardell Armstrong LLP (WA) was commissioned by Evolution Power Limited, hereafter referred to as the 'Client', to undertake archaeological monitoring of ground investigation trial pits and windowless sample boreholes at land at Stonestreet Green, near Aldington, Kent, centred at National Grid Reference (NGR) TR 05834 37447 (GM12014-012). The ground investigation was required to inform upon the ground conditions to support a Development Consent Order (DCO) application.
- 1.1.2 The site is due to be developed to comprise of ground-mounted solar photovoltaic ('PV') arrays and on-Site energy storage, together with associated infrastructure and an underground cable connection to the existing National Grid Substation at Sellindge c.60m north of the site ('the Proposed Development'). The agreed grid connection for the Proposed Development will allow the export and import up to 99.9 Megawatts ('MW') of electricity at any time.
- 1.1.3 Th ground investigation was required in response to scoping received from Kent County Council on the Proposed Development (May 2022) which confirmed that change within the development area has the potential to affect an appreciation or understanding of the significance of heritage assets within the vicinity of the Site (MHCLG 2021). The opportunity to monitor the ground investigation was undertaken by the client.
- 1.1.4 The archaeological monitoring of the ground investigation comprised 3 trial pits and 3 windowless sample boreholes and was undertaken between the 15th and 17th February 2023.
- 1.1.5 The ground investigation was designed to target made ground identified in the Phase 1 Geoenvironmental and Geotechnical Desk Study and assess the geo-environmental condition of the site and identify the presence or absence of contamination and made ground on site, the results of which are presented in a separate Ground Investigation Report (WA 2023).
- 1.1.6 This report outlines the work undertaken on site and the results of this phase of archaeological monitoring.



2 METHODOLOGY

2.1 Standards and Guidance

- 2.1.1 The archaeological monitoring of the ground investigation was undertaken in accordance with the Chartered Institute for Archaeologists *Standard and guidance for an archaeological watching brief* (2020a), and Wardell Armstrong's Technical Manual No.1 Excavation Manual (2020a).
- 2.1.2 The fieldwork programme was followed by an assessment of the data as set out in the Standard and guidance for an archaeological watching brief (CIfA 2020a), the Standard and guidance for the collection, documentation, conservation and research of archaeological materials (CIfA 2020b) and Wardell Armstrong's Technical Manual No.2 Post-Excavation Handbook (2020b).

2.2 Archaeological Monitoring

- 2.2.1 The archaeological monitoring was undertaken to monitor the removal of topsoil and subsoil in trial pits and windowless sample boreholes down to the archaeological horizon or natural geological substrate, whichever was encountered first.
- 2.2.2 The excavation of 3 trial pits and 3 windowless sample boreholes were monitored during the ground investigation under close archaeological supervision. The monitoring was to ascertain if below ground archaeology was present, and if so, to report upon the condition, depth, character and extent of the archaeological deposits within the development area.
- 2.2.3 Prior to the excavation of each trial pit and windowless sample borehole, the ground was CAT scanned to ascertain the presence or absence of any below ground services.

2.3 Site Archive

2.3.1 Wardell Armstrong LLP supports the Online AccesS to the Index of Archaeological InvestigationS (OASIS) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by WA as a part of this national project. The OASIS reference for the project is: wardella2-513328.



3 RESULTS

- 3.1.1 Archaeological monitoring was undertaken on a total of 3 trial pits and 3 windowless sample boreholes during the course of the ground investigation (See Drawing GM12014-038).
- 3.1.2 **Trial Pit 3 (TP03)** was excavated by 3.5tn mechanical excavator with rubber padded tracks using a 0.45m toothless ditching bucket. The trial pit was excavated under close supervision to a maximum depth of 2.20m and a length of 2.90m. The natural geological substrata consisted of 1.40m of firm to stiff mid blue grey fine silt sand clay, this was sealed by 0.60m of mid yellowish brown firm silty sand clay with infrequent angular and subangular small stones. The trench was sealed by 0.27-0.30m of mid orange-brown silty sand topsoil set to grass. No archaeological features or deposits were present.
- 3.1.3 **Trial Pit 4 (TP04)** (Plate 1) was excavated by 3.5tn mechanical excavator with rubber padded tracks using a 0.45m toothless ditching bucket. The trial pit was excavated under close supervision to a depth of 2.30m and a length of 2.30m. The natural substrata consisted of 1.15m of firm to stiff blue grey silt sand clay, this was sealed by 0.60m of pale yellowish brown firm silty sand clay, a mid-brown silty sandy subsoil overlayed this to a depth of 0.35m. The trench was sealed by 0.20m of loose mid brown silty sandy topsoil set to grass. No archaeological features or deposits were present.
- 3.1.4 Trial Pit 5 (TP05) was excavated by tracked borehole drilling machine, to a depth of 4m below ground level. The natural substrata consisted of 3.30m of firm to stiff pale grey to yellow silty clay. At a depth of 1.0m the clay had a slight orangish hue, this continued to a depth of 1.20m where slight iron panning was observed. At a depth of 3.0m the clay became drier and darker to a depth of 4.0m when the borehole excavation ceased. The substrata was overlain by 0.50m of pale yellowish brown fine silty sandy clay with unsorted angular and subangular naturally occurring stones and gravels. The borehole was sealed by 0.26m of loose mid brown silty sandy topsoil set to grass. No archaeological features or deposits were present.
- 3.1.5 Windowless Sample 3 (WS03) was excavated by tracked borehole drilling machine with 80kg drop weight to a maximum depth of 4m. The natural substrate consisted of 1.30m of stiff blue grey clay sealed by 0.70m of loose pale yellowish brown silty sand with frequent angular and subangular grave and flint. This in turn was sealed by 0.30m of soft malleable blue-grey clay, sealed by 0.65m of firm brownish grey silty sandy subsoil with unsorted angular stones and flints. The borehole was sealed by 0.25m of



loose mid brown silty sandy topsoil set to grass. No archaeological features or depsots were present.

- 3.1.6 Windowless Sample 5 (WS05) (Plates 2 and 3) was excavated by tracked borehole drilling machine with 80kg drop weight to a depth of 4.2m. The natural geological substrata consisted of 2.80m of firm to stiff mid blue-grey clay becoming dark to the base. Overlain by 0.40m of loose pale brownish yellow coarse sandy subsoil with frequent unsorted angular and sub-rounded gravel. This was overlain by 0.60m of light to mid brown fine silty sandy clay subsoil with occasional poorly sorted angular and sub-rounded small stones. A modern ridged ceramic land drain was uncounted at a depth of 0.60m. The borehole was sealed by 0.35-0.40m of mid brown silty sandy topsoil set to arable crop. No archaeological features were present.
- 3.1.7 Windowless Sample 8 (WS08) (Plate 4) was excavated by tracked borehole drilling machine with 80kg drop weight to a depth of 3.7m. The natural geological substrata consisted of 2.25m of firm to stiff mid blue-grey clay. At a depth of 1.45m the clay had a yellowish hue this continued to a depth of 1.90m where the clay had a more reddish oxide hue. Towards the base the clay became drier and more friable. The substrata was overlain by 1.15m of orangish grey mottled silty sandy subsoil with rare subangular and sub-rounded gravels. The borehole was sealed by 0.30m of mid brown silty sandy topsoil with infrequent small angular gravels set to grass. No archaeological features or deposits were present.
- 3.1.8 No archaeological finds were encountered, and no environmental samples were retained during the groundworks. All trial pits and windowless sample boreholes were backfilled and/or otherwise reinstated after the ground investigation.



4 **CONCLUSIONS**

- 4.1.1 No archaeological deposits or features were observed during the course of the ground investigation, however, the absence of observed archaeology within the trial pits and windowless borehole samples does not preclude the possibility of the presence of below ground archaeology elsewhere within the wider Proposed Development.
- 4.1.2 Much of the site was set to grass with topsoil to a maximum depth of 0.40m. Below this, alluvium comprising fine silty sandy clays were encountered to a minimum thickness of 0.50m and a maximum thickness of 1.15m to the north, in close proximity to the East Stour River. This also accords with the geophysical survey, which identified possible alluvium to the north of the Proposed Development (Magnitude Surveys 2022). Geologically recent fluvial deposits often mask and preserve in-situ archaeological deposits with exceptionally good preservation due to generally anaerobic conditions (White, et al 2016).



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APPENDICES



APPENDIX 1: PLATES



Plate 1; TP04, post excavation, looking west, no scale.



Plate 2; WS05, working shot of borehole excavation, looking north, no scale.





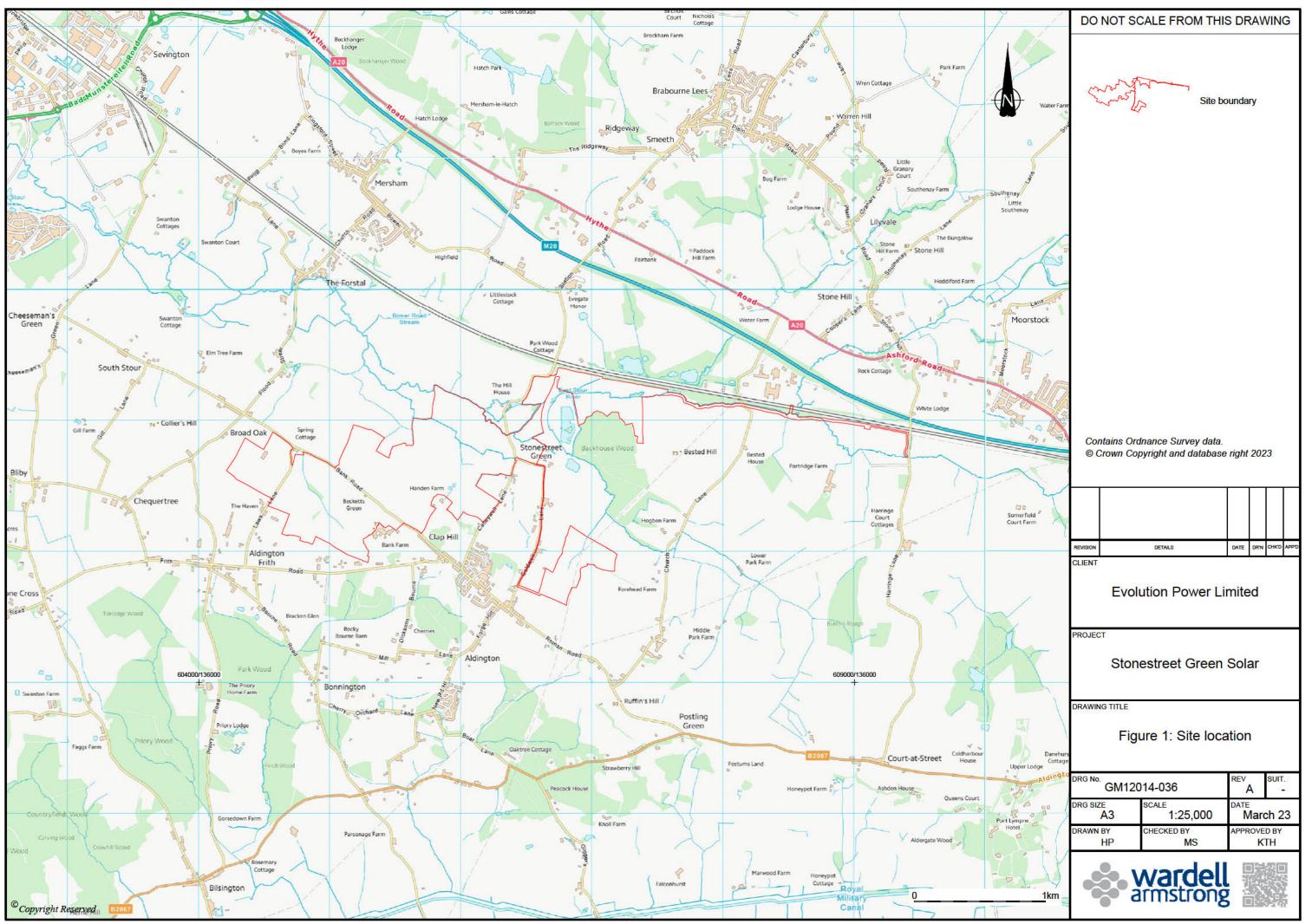
Plate 3; WS05, showing soil sample from borehole with modern land drain, no scale.

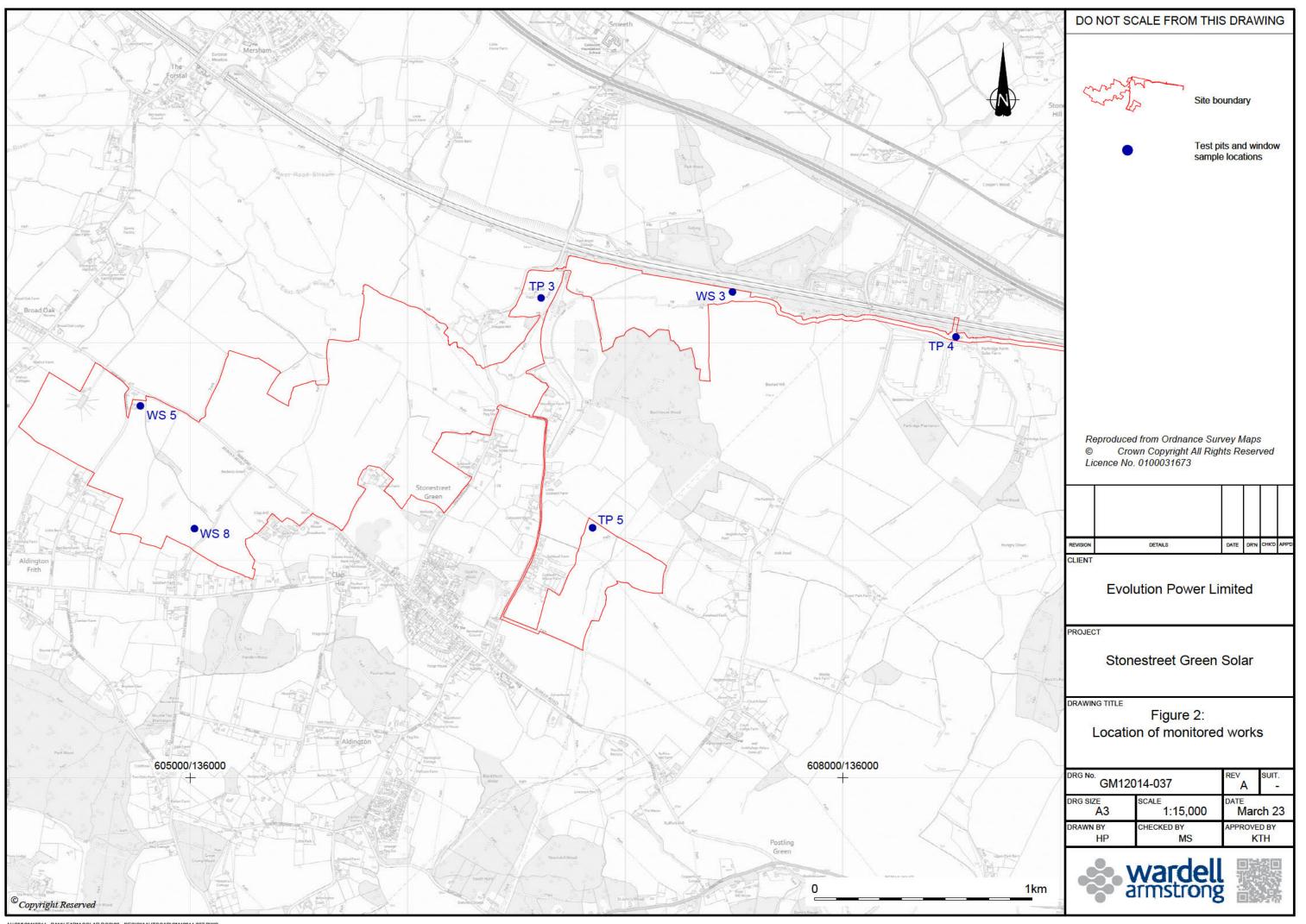


Plate 4; WS08, showing soil sample, no scale.



APPENDIX 1: DRAWINGS





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EPL 001 LIMITED STONESTREET GREEN SOLAR ENVIRONMENTAL STATEMENT VOLUME 4 APPENDIX 7.1 ARCHAEOLOGICAL DESK BASED ASSESSMENT



Annex 7 Trial Trenching Report



EPL 001 LIMITED

STONESTREET GREEN SOLAR

ARCHAEOLOGICAL TRIAL TRENCHING EVALUATION REPORT

JANUARY 2024



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STONESTREET GREEN SOLAR

JANUARY 2024



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ENERGY AND CLIMATE CHANGE ENVIRONMENT AND SUSTAINABILITY INFRASTRUCTURE AND UTILITIES LAND AND PROPERTY MINING AND MINERAL PROCESSING MINERAL ESTATES WASTE RESOURCE MANAGEMENT



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SUMMARY

Wardell Armstrong LLP (WA) was commissioned by EPL 001 Limited (the 'Client'), to undertake an archaeological evaluation by trial trenching at and geoarchaeological test pits at Stonestreet Green, Ashford, Kent, centred at National Grid Reference (NGR): TR 05834 37447 (the 'Site'). The evaluation was required to inform upon the potential impact upon any archaeological resource from the development proposals in relation to the Development Consent Order (DCO) application for Stonestreet Green Solar ('the Project').

The Project comprises the construction, operation, maintenance, and decommissioning of solar photovoltaic ('PV') arrays and energy storage, together with associated infrastructure and an underground cable connection to the existing National Grid Sellindge Substation. The evaluation was undertaken in accordance with a written scheme of investigation (WSI) produced in response to advice from Wendy Rogers, Archaeological Advisor at Kent County Council (KCC).

The archaeological work was undertaken over 11 days between the 19th July and the 2nd August 2023, and comprised the excavation of 13 trenches and 4 test pits. Four of these trenches were placed in Field 26, a sub-rectangular field alongside the Kent Route rail line between Ashford and Westenhanger, where the Project 132KV DNO Substation for the project is proposed to be located. Deeper test pits were also excavated within this Field following consultation with Wendy Rogers of KCC to assess the potential for palaeolithic evidence within the footprint of the substation area. The remaining nine trenches were positioned either side of Roman Road, which bisects land belonging to Bank Farm, maintained by J. Wanstall and Sons in an area of high archaeological potential. Four trenches were placed on the northeastern side; the last five bordered the southwestern side of the road.

The investigation revealed evidence of activity dating to the Bronze Age in Field 26. This activity was represented by struck flint, including a possible 'horned' scraper, recovered in two ditches and small pit in the southern end of Trench 1. Due to the paucity of features revealed within the trenches, it is not possible to definitively state whether this activity relates to settlement, or purely early agricultural land use.

Furthermore, it was established that there is evidence of Roman settlement at Bank Farm. The Roman activity was represented by a series of pits and postholes and two ditches cut into a deposit containing a flint blade in Trench 9. These pits and ditches are all aligned with features indicated on the geophysical survey from 2023, suggesting that there is likely a Roman enclosure within the field Trench 9 was excavated in, on the southwestern side of Roman Road. Roman pottery and iron nails were also recovered from the deposits, suggesting



relatively intensive localised settlement activity. Further Roman activity is indicated by a series of three pits and a large, shallow sub rectangular feature. These features were all observed in Trench 6, which is located on the northeastern side of Roman Road. Roman pottery dating to the 1st Century AD was recovered from the fills of these features. These features, while separated by several fields, suggest that there were settlements along this section of the projected Roman road that may have begun in the Prehistoric period, flourished in the Roman period with the introduction of the road.

Modern deposits relating to the construction of the railway bank were encountered in Trench 4, and a large natural depression was recorded in Trench 10. Undated features were also recorded in Trench 8, but as this trench was opposite the modern farmyard for Bank Farm, it is considered that they could be related to post medieval agricultural activity.



ACKNOWLEDGEMENTS

WA thanks the Client, for commissioning the project, and for all their assistance throughout the work. Also, WA thank , Archaeological Advisor at KCC for her assistance. WA also thanks RTS Tree Specialist Limited, for their help during this project. The archaeological evaluation was supervised by , who also wrote the report, and undertaken by and . The figures were produced by and The finds assessment was undertaken by and and palaeoenvironmental . The project was managed by assessment by



1 INTRODUCTION

1.1 Project Background

- 1.1.1 This report has been prepared on behalf of EPL 001 Limited ('the Applicant') to set out the results of the archaeological evaluation undertaken in relation to the Development Consent Order (DCO) application for Stonestreet Green Solar ('the Project') a large solar farm with an overall area of approximately 189 hectares. Between the 19th July and the 2nd August 2023, Wardell Armstrong LLP (WA) undertook an archaeological evaluation by trial trenching and geoarchaeological test pits at Stonestreet Green, Ashford, Kent, centred at National Grid Reference (NGR): TR 05834 37447 ('the Site').
- 1.1.2 The evaluation was required to inform upon the potential impact upon any archaeological resource from the development proposals in relation to the Project. The Project comprises the construction, operation, maintenance, and decommissioning of solar photovoltaic ('PV') arrays and energy storage, together with associated infrastructure and an underground cable connection to the existing National Grid Sellindge Substation.
- 1.1.3 The Project will include a generating station (incorporating solar arrays) with a total capacity exceeding 50 megawatts ('MW'). The agreed grid connection for the Project will allow the export and import of up to 99.9 MW of electricity to the grid. The Project will connect to the existing National Grid Sellindge Substation via a new 132 kilovolt ('kV') substation constructed as part of the Project and cable connection under the Network Rail and High Speed 1 ('HS1') railway.
- 1.1.4 The location of the Project is shown on ES Volume 3, Figure 1.1: Site Location Plan (Doc Ref. 5.3). The Project will be located within the Order limits (the land shown on the Works Plans (Doc Ref. 2.3) within which the Project can be carried out). The Order limits plan is provided as ES Volume 3, Figure 1.2: Order Limits (Doc Ref. 5.3).
- 1.1.5 Specifically, the evaluation was to inform upon the potential archaeological resource within the area of the Project Substation (Field 26), and a second area focusing on potential road side activity adjacent to the projected Roman Road, which bisects the central and western part of the Site and which is identified on the Kent Historic Environment Record as a projected Romano-British road (HER TR 04 SE 120).
- 1.1.6 The Project falls under the Planning Act 2008ⁱ ('PA 2008') and is classified as a Nationally Significant Infrastructure Project ('NSIP') and requires a DCO. The



application for the DCO is being submitted to the Planning Inspectorate ('PINS'), with the decision on whether to grant a DCO being made by the Secretary of State ('SoS') for Energy Security and Net Zero ('ESNZ') pursuant to the PA 2008.

1.2 **Project Documentation**

- 1.2.1 The project conforms to a brief which was prepared in consultation with Wendy Rogers, Archaeological Advisor at KCC. A WSI (Wardell Armstrong, 2023) was then produced to provide a specific methodology based on the brief for a programme of archaeological trial trench evaluation and palaeoenvironmental test pits (see Annex 5). This was approved by the archaeological planning advisor prior to the fieldwork taking place. This is in line with government advice as set out in Section 16 of the National Planning Policy Framework 2023 (MHCLG, 2023).
- 1.2.2 This report outlines the work undertaken on Site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological evaluation.



2 METHODOLOGY

2.1 Standards and Guidance

- 2.1.1 The archaeological evaluation was undertaken following the Chartered Institute for Archaeologists Standard and guidance for archaeological field evaluation (CIfA, 2021), and in accordance with the WA fieldwork manual (WA, 2020).
- 2.1.2 The fieldwork programme was followed by an assessment of the data as set out in the Standard and guidance for archaeological field evaluation (CIfA, 2021) and the Standard and guidance for the collection, documentation, conservation and research of archaeological materials (CIfA, 2020).

2.2 **Documentary Research**

2.2.1 An initial archaeological desk-based assessment was prepared by WA (2022), which set out the archaeological and historical background of the Site, and provided an assessment of the significance of all known and potential heritage assets up to 5km from the area of investigation. This was followed by an Archaeological Landscape Assessment WA (2023).

2.3 Archaeological Evaluation

- 2.3.1 The evaluation comprised the excavation of 13 trenches measuring 50m in length by 1.8m in width. Four of these trenches were placed in Field 26, a sub-rectangular field alongside the Kent Route rail line between Ashford and Westenhanger. The remaining nine trenches were positioned either side of Roman Road, which bisects land belonging to Bank Farm, maintained by J. Wanstall and Sons. Four trenches were placed on the northeastern side; the last five bordered the southwestern side of the road.
- 2.3.2 The trenches out side of Field 26 were placed to target possible features recorded during the previous geophysical survey (Magnitude Surveys, 2023), particularly Trench 9, which was positioned to investigate a possible enclosure. The general aims of these investigations were:
 - To establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they were observed;
 - To establish the character of those features in terms of cuts, soil matrices and interfaces;
 - To assess the impact of the DCO application on the archaeological site;



- To recover artefactual material, especially that useful for dating purposes;
- To recover palaeoenvironmental material where it survives to understand Site and landscape formation processes.

And specifically, to:

- Confirm the presence of archaeological remains within the area of the Project Substation and around Roman Road;
- To contribute to research questions raised in the South East Regional Research Framework.
- 2.3.3 During the trenching works, deposits considered not to be significant were removed by a 360° tracked mechanical excavator with a toothless ditching bucket, under close archaeological supervision. All possible features or deposits were inspected, and selected deposits were excavated by hand to retrieve artefactual material and environmental samples. Once completed all features were recorded according to the WA standard procedure as set out in the Excavation Manual (WA, 2020).
- 2.3.4 The dry compacted clay in Field 26 was extremely hard, to the point that the mechanical excavator struggled to remove it with a toothless ditching bucket. The decision was made to remove the first 300ml of each trench with a smaller, toothed bucket, and then remove the rest of the overburden with the toothless bucket.
- 2.3.5 A machine excavated test pit, ranging from 3-4m wide, was excavated at a location within Trenches 1, 3 and 4 in accordance with the KCC specification for Preliminary Evaluation of Quaternary Deposits and Palaeolithic Potential (Section 5.6 KCC, 2023). They were excavated by a tracked 360 mechanical excavator with a toothed bucket due to the toughness of the deposits, directed by Martin Bates, a recognised Palaeolithic specialist, who recorded and interpreted all deposits. All four test pits were stepped to ensure his safety.
- 2.3.6 The purpose of the test pits was to inform upon the palaeolithic potential of the Site to understand the broad pattern of behavioural dynamics, and how key elements of the archaeological landscape (sites, activities, deposits and finds) relate to each other spatially, functionally, and chronologically (Bates, 2023).
- 2.3.7 All finds encountered were retained on Site and returned to the Bury St Edmunds office where they were identified, quantified, and dated to period. A terminus post quem was then produced for each stratified context under the supervision of the WA Finds Officer, and the dates were used to help determine the broad date phases for



the Site. On completion of this project, the finds were cleaned and packaged according to standard guidelines (Watkinson & Neal, 1998). Please note, the following categories of material will be discarded after a period of six months following the submission of this report, unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):

- unstratified material;
- modern pottery;
- material that has been assessed as having no obvious grounds for retention.
- 2.3.8 On completion the evaluation trenches were reinstated by replacing the excavated material.

2.4 Site Archive

- 2.4.1 A full professional archive has been compiled in accordance with the project specification, and the Archaeological Archives Forum recommendations (Brown, 2011). The archive will be deposited with Dover Museum and Bronze Age Boat Gallery, with copies of the report sent to the Kent HER, available upon request. The archive can be accessed under the unique project identifier: WA23/GM12014/WMG-D.
- 2.4.2 WA supports the Online Access to the Index of Archaeological Investigations (OASIS) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created because of developer-funded archaeological work. As a result, details of the findings of this project will be made available by WA as a part of this national project. The OASIS reference for the project is: wardella2-518093.



3 BACKGROUND

3.1 Location and Geological Context

- 3.1.1 The Site is located at National Grid Reference (NGR): TR 05834 37447. The Site is located approximately 5 miles southeast of Ashford, Kent and predominantly consists of agricultural land and pasture. The High Speed 1/Channel Tunnel Rail Link (HS1) is located to the north of the Site boundary and is within 100m at its closest point. A railway line operated by Network Rail as part of the Kent Route between Ashford and Westenhanger is located adjacent to the HS1 railway line.
- 3.1.2 The M20 motorway lies approximately 45m further to the north of HS1 at this point but is significantly further north towards the west of the Site. On the opposite side of the HS1 railway line (between HS1 and the M20 motorway), there is a UK Power Networks (UKPN) and National Grid (NG) substation, and a sewage treatment works. Residential dwellings of the village of Aldington are located predominantly to the south and east of the Site and residential dwellings within Stonestreet Green are located to the east. There are several watercourses passing through the Site, the largest of which is the East Stour River which passes through the area in a roughly east to west direction.
- 3.1.3 The underlying geology is mapped as Weald Clay (Mudstone). This is a sedimentary bedrock formed in the Cretaceous period between 133.9 and 126.3 million years ago. Variations of geology on the Site also comprise Atherfield Clay (Sandy Mudstone) and Hythe Formation (interbedded sandstone and limestone), which are both sedimentary bedrocks formed during the Cretaceous Period, between 126.3 and 113 million years ago (BGS, 2023). The majority of the Site has no mapped superficial geology. Those fields which are partially or wholly located near to the East Stour River, largely lie on alluvium (clay, silt, sand and gravel), formed up to two million years ago, and represent a local environment previously dominated by rivers (Ibid.). The natural substrate encountered on Site, which ranged from firm mid orangey brown clay to firm mid blueish grey clay, or mid greenish grey clayey sand, as well as gravels, is consistent with the mapped geologies above.

3.2 Historical and Archaeological Background

3.2.1 An initial desk-based assessment (DBA) was produced to assess the known historical and archaeological background of the Site and the surrounding landscape to a distance of 5km (Wardell Armstrong, 2022). The desk based assessment was



- supported by an Archaeological Landscape Assessment (Wardell Armstrong 2023a). This was undertaken alongside geophysical survey (Magnitude Surveys, 2023) and a site walkover to inform upon the archaeological potential of the Site. It is not intended to repeat that information here and what follows is a brief overview, for further details please refer to the original document.
- 3.2.2 This DBA report identified HER records within the Site; mostly of findspots largely found through metal detecting and are of Roman to post-medieval date. The significance of the projected Roman road was again highlighted by the Archaeological Landscape Assessment. HER records not relating to findspots comprise Bank Road/Roman Road which bisects the central and western part of the Site and follows the alignment of a projected Roman road (HER TR 04 SE 120), and two post-medieval farmsteads (HER MKE88378 and MKE88379). All entries are discussed in more detail in the archaeological desk-based assessment (WA 2023).
- 3.2.3 Also located within the eastern part of the Site is a crash site of a Messerschmitt Bf109E-4 (HER DKE22255), which has been designated as Protected Military Remains (PMR).
- 3.2.4 Within the 5km search area from the Site, designated heritage assets of an archaeological nature include a Scheduled Bronze Age Barrow Cemetery which lies approximately 880m south-east of the Site. Two further Scheduled barrows lie to the east of the cemetery beyond the 5km search area.
- 3.2.5 **Prehistoric (up to AD 43)**: There are several prehistoric assets in the vicinity of the Site. The first is a group of scheduled bowl barrows located at the North Downs, located 4.5km north-east of the Site. The second asset is a barrow cemetery located 2.8km east of the Site and consists of seven barrows on and around the summit of low hill (situated at 80m aOD) to the west of the settlement of Barrowhill. Recent archaeological investigations at the barrows have identified the buried remains of cremation pits and have dated one of these to the Late Bronze Age. These two asset groups are representative of the wider prehistoric funerary landscape in the vicinity.
- 3.2.6 Roman (AD 43 c.410): The projected route of a Roman road (HER TR 04 SE 120), discussed above, bisects the central and western part of the Site. There is also a Romano-British villa 1.7km to the east of Field 22, which is a scheduled monument (NHLE 1004216) and survives as buried remains. This is representative of Roman settlement in the area. It is also part of the wider Roman landscape, with the



- Maidstone to Dover Roman Road being located approximately 550m to the south of the villa.
- 3.2.7 Medieval (AD 1066 c.1540): There are 18 medieval heritage assets in the vicinity of the Site. These consist of Grade I and II farmhouses, churches and priories, such as Bilsington Priory (NHLE 1018877 & 1362769), located 1.5km south-west of the Site. The priory consists of a scheduled monastery, and the Grade I priory, and dates to AD 1253.
- 3.2.8 **Post-medieval (AD c.1540 1901)**: There are nine post medieval heritage assets in the vicinity of the Site, which consist of historic houses, farmhouses and a mill. Assets from this period also include the Adlington Clap Hill Conservation Area, which has the potential for earlier medieval associations, where Adlington was affected by the Black Death.
- 3.2.9 **Modern (AD 1901** *present***):** The Messerschmitt plane crash site is within the Site (HER DKE22255). Although the wreckage is thought to have been removed at the time of the crash, shrapnel may remain.
- 3.3 **Previous Work**
- 3.3.1 No previous archaeological works have been undertaken within the Project Site.



4 ARCHAEOLOGICAL EVALUATION RESULTS

4.1 Introduction

4.1.1 The evaluation was undertaken between the 19th July and 2nd August 2023, with 13 trenches excavated across the Site (Figure 2). The trenches were separated into two areas of Site: The first four were placed in Field 26; the remaining nine were positioned either side of Roman Road, within land belonging to Bank Farm, operated by J Wanstall & Sons.

4.2 Results

Field 26

- 4.2.1 This field contained four trenches. The four trenches were placed over the proposed location of the proposed 132KV DNO substation. They were placed on a random grid array, and the geophysical survey results did not indicate the highlight any anomalies in this area that could indicate the presence of any potential archaeological features.
- 4.2.2 The dry clay encountered in this part of Site was extremely compact, to the point that the mechanical excavator struggled to remove it with a toothless bucket. It was therefore decided that the first 300mm of overburden would be removed by a toothed bucket. Once this was broken up by the toothed bucket, the rest of the overburden was removed with a toothless bucket.

Trenches Containing Archaeology

- 4.2.3 Trench 1 (Figure 3; Plates 1, 2 and 3) was situated in the northwestern end of the Site and orientated northeast-southwest. The trench measured 50m in length and 1.8m in width. It had a minimum depth of 0.34m and maximum depth of 1.02m. The natural substrate (102) consisted of a compact mid brownish yellow mottled clay with common manganese flecks and was overlain by a 0.38m thick deposit of compact mid yellowish grey clay with common manganese flecks subsoil (101). The trench was sealed by a 0.25m thick topsoil (100) comprised of compact dark brownish grey silty clay. Towards the southwestern end of the trench, the topsoil was replaced by (103) a 0.44m deep deposit of firm dark blueish grey silty clay, likely a mixed deposit from modern agricultural activities.
- 4.2.4 The archaeology identified within Trench 1, comprised two linear features and a small pit. Located in the middle of the trench was [104] (Plate 4), a northeastern-southwest orientated linear feature, with a sharp top break of slope and moderate, straight sides



- breaking moderately to concave base. It was 0.21m deep, 0.68m wide and 2m+ long, and filled by **(105)**, a firm mid brownish grey silty clay with rare (<1%) gravel inclusions.
- 4.2.5 Further south was [106] (Plate 5), a circular pit with a sharp top break of slope and steep, concave sides, breaking moderately to a concave base. It was 0.22m deep, 0.67m wide and 0.7m long, and filled by (107), a firm, dark blueish grey silty clay, with approximately 5% charcoal inclusions.
- 4.2.6 Finally, a northeast-southwest orientated linear feature [108] (Plate 6) was located in the southern end of the trench. It had a sharp top break of slope and steep sides, breaking sharply to a u-shaped base. It was 0.56m deep, 0.82m wide and >1.8m long, and was filled by (109), a firm mid greyish brown silty clay with occasional charcoal flecks.
- 4.2.7 Trench 3 (Figure 4; Plates 7, 8 and 9) was aligned northwest-southeast and was 1.8m wide and 50m long, located towards the southwestern corner of the field and was excavated to a maximum depth of 1.05m. The natural geology (302) of Trench 3 was observed to comprise very compact light yellowish grey silty clay. This was overlain by a 0.33m thick deposit of very compact light greyish-yellowish brown silty clay subsoil (301), and the trench was sealed by topsoil (300) consisting of a 0.3m thick layer of compact light brownish grey clayey silt.
- 4.2.8 The archaeology observed within Trench 3 comprised two shallow ditches and one pit. Located within the southeastern end of the trench, [303] (Plate 10) was a northeast-southwest orientated linear feature, with a moderately sharp top break of slope and near vertical, straight sides, breaking sharply to the northwest, and slightly gradually to the southeast to a flat, irregular base. It was 0.17m deep, 0.37m wide and 1.8m+long, filled by (304), a firm mid yellowish brown silty clay.
- 4.2.9 Running parallel to the northwest of [303] was [305] (Plate 11), a northeast-southwest orientated ditch with a moderate top break of slope and moderate concave sides, breaking gently to a concave base. It was 0.11m deep, 0.35m wide and 2.1m+ long, filled by (306), a firm mid yellowish-brownish grey silty clay. Both ditch fills (304 and 306) were sealed beneath the subsoil (301).
- 4.2.10 Further northwest of the ditches was feature [307] (Plate 12), a sub-circular pit with a gradual top break of slope and shallow concave sides, breaking gradually to a flat base. It was 0.05m deep, 0.6m wide and 0.8m long and filled by a single deposit (308), a compact to hard dark blueish black and light brownish grey clay with abundant



- charcoal chunks and flecks. This feature was cut into the subsoil, **(301)**, and as such was at a higher elevation than the ditches.
- 4.2.11 Trench 4 (Figure 2 Plates 13, 14 and 15) was situated in the in the northern end of the field, adjacent to the railway bank, and orientated northeast-southwest. The trench measured 50m in length and 1.8m in width. It had a minimum depth of 0.33m and maximum depth of 0.74m. A test pit was excavated within the middle of this trench to investigate for Pleistocene deposits (Annex 5). This trial hole revealed several layers of natural substrate (Plate 16). The lower most deposit, (407), a 0.24m+ deep firm dark blueish grey clay. It was overlain by (410), a 0.2m deep deposit of firm, mid orangey brown clay. Covering this was (409), a 0.5m deep firm mid blueish grey clay with mid orangey brown mottling, and subrounded stones. Overtop (409) was (411), a 0.33m deep mottled mid blueish grey and mid orangey brown clay. The natural substrate across the rest of the trench (402) consisted of a very compact mid brownish yellow silty clay and was overlain by a 0.28m thick deposit of very compact mid yellowish grey silty clay subsoil (401). The trench was sealed by a 0.29m thick topsoil (400) comprised of compact, mid brownish grey clayey silt.
- 4.2.12 Three modern deposits were identified within Trench 4 and were interpreted as disturbance associated with the construction of the railway bank. To the northeast of the trench was (406), a loose, light brownish yellow gravelly sand; abutting it to the southwest was (404), a friable dark blueish grey sandy clay, with CBM fragments and a ceramic pipe cap within it (Plate 17). Further southwest, observed within the test pit, overlying (411) was (408), a 0.29 deep deposit of firm, mid reddish brown sandy clay with pockets of subrounded limestone cobbles (see Plate 16).

Archaeologically Blank Trenches

4.2.13 Trench 2 (Figure 2 Plates 18, 19 and 20) was situated in the northwestern corner of the Site and orientated northwest-southeast. The trench measured 50m in length and 1.8m in width. It had a minimum depth of 0.4m and maximum depth of 0.8m. The natural substrate (202) consisted of a firm to compact mid brownish-greyish yellow clay with common manganese flecks and moderate subangular flint inclusions and was overlain by a 0.21m thick deposit of compact mid yellowish grey clay with common manganese flecks subsoil (201). The trench was sealed by a 0.27m thick topsoil deposit (200) comprised of compact dark brownish grey silty clay. Trench 2 was devoid of archaeological features.

Bank Farm



4.2.14 This field contained nine trenches. Several were placed on a random grid array, but Trenches 7, 9, 10 and 12 were placed to target possible features observed in the geophysical survey results and test blank areas. The efficacy of the geophysical survey was broadly good. Trench 9 in particular was successfully placed to target a possible enclosure; Trench 6 a series of pits and Trenches 7, 10 and 12 were placed to target linear features.

Trenches Containing Archaeology

- 4.2.15 Trench 6 (Figure 5; Plates 21, 22 and 23) was situated in the middle of the Site, on the southwestern side of Roman Road and orientated northeast-southwest. The trench measured 50m in length and 1.8m in width. It had a minimum depth of 0.4m and maximum depth of 0.53m. The natural substrate (601) consisted of firm mid orangey brown clay. The trench was sealed by a 0.33m topsoil (600) comprised of friable dark orangey brown silty clay.
- 4.2.16 The archaeology identified within Trench 6, comprised three pits and a large, subrectangular feature which may potentially related to a sunken floor building of early medieval date. However this interpretation must be held with caution without further investigation of the feature.
- 4.2.17 Starting in the southwestern end of the trench, [602] (Plate 24) was a sub ovate pit, with a gradual top break of slope and straight, steep sides, gradually breaking to a flat base. It was 0.36m deep, 0.62m+ wide and 1.07m long, and the basal fill was (603), a 0.06m deep, 0.62m+ wide and 1.07m long deposit of compact mid yellowish brown clayey sand. Sealing the feature was (604), a 0.3m deep, 0.62m+ wide and 1.07m long deposit of compact to firm dark greyish brown silty clayey sand with sparse charcoal flecks and moderate small subangular stones, <100m in size.</p>
- 4.2.18 Just north of **[602]** was another similar pit, **[605]** (**Plate 25**), a sub ovate feature with a gradual top break of slope and sloping, straight sides, breaking almost imperceptibly to a flat base. It was 0.2m deep, 0.98m wide and 1.53m long, and its basal fill was **(606)**, a 0.07m deep, 0.98m wide and 1.39m long deposit of firm mid yellowish brown clayey sand. The feature was sealed by **(607)**, a 0.13m deep, 0.98m wide and 1.53m long deposit of firm dark brownish grey sandy silty clay, with moderate charcoal flecks and moderate small subangular stones, <100mm in size.
- 4.2.19 Continuing north was **[608]** (Plate 26), a north-south orientated sub-rectangular feature with rounded corners. It had a gradual top break of slope and straight, sloping



sides, breaking gradually again to a flat base, and measured 0.22m deep, 1.8m+ wide and 3.35m long. It was filled by (609), a compact to firm dark greyish brown clayey sandy silt with moderate charcoal chunks and flecks and moderate small subangular and subrounded stones, <100mm in size. This feature's full shape is unknown as the trench did not reveal its full extent, but its shallow depth, size and shape suggest it could represent part of a sunken floor building.

- 4.2.20 Finally, just north of [608] in the northeastern end of the trench was feature [610] (Plate 27), a sub ovate pit with a gradual top break of slope and shallow concave sides, breaking almost imperceptibly to a flat base. It was 0.18m deep, 0.92m wide and 1.12m long, and was filled by (611), a loose dark brownish grey clayey silty sand with abundant medium subangular stones, <170mm in size and moderate charcoal flecks.</p>
- 4.2.21 Trench 8 (Figure 6; Plates 28, 29 and 30) was aligned east-west and was 50m long and 1.8m wide. Trench 8 was located towards the southwestern end of the Site, on the northeastern side of Roman Road and was excavated to a maximum depth of 0.6m. The natural geology (802) of Trench 8 was observed to comprise compact light orangey yellow clay. This was overlain by a 0.3m thick deposit of moderately compact mid orangey brown silty clay subsoil (801), and the trench was sealed by topsoil (800) consisting of a 0.25m thick deposit of moderately compact dark greyish brown silty clay.
- 4.2.22 The archaeology identified within Trench 8 comprised one ditch and a possible posthole. Located towards the eastern end of the trench, [803] (Plate 31) was a subcircular feature, with a moderate top break of slope and moderately straight sides, breaking gradually to a concave base. It was 0.14m deep, 0.38m wide and 0.36m long, and filled by (804), a firm mid greyish brown silty clay with rare small subangular and subrounded stones, <30mm in size. Just west of this was [805] (Plate 32), a north-south orientated linear feature, with a gradual top break of slope and a sloping, straight side to the west; to the east, it was straight, dropping to a concave side. It broke almost imperceptibly to a concave base, and was 0.31m deep, 0.85m wide and 1.8m+ long. The fill, (806), was a friable to firm mid brownish grey sandy silty clay with moderate small subangular and subrounded stones, <80mm in size.
- 4.2.23 **Trench 9 (Figure 7; Plates 33, 34 and 35)** was situated in the western corner of the Site, on the southwestern side of Roman Road and orientated north-south. The trench measured 50m in length and 1.8m in width. It had a minimum depth of 0.4m and maximum depth of 0.8m. The natural substrate **(902)** consisted of a firm mid orangey



- brown clay. In the southern end of the trench, the natural was overlain by a 0.35m deep, 1.8m+ wide and 25m long deposit (918) of compact light brownish grey silty clay with rare charcoal fragments. This was overlain by a 0.14m thick deposit of firm mid brownish orange subsoil (901). The trench was sealed by a 0.38m thick topsoil (900) comprised of firm mid greyish brown silty clay.
- 4.2.24 The archaeology identified within Trench 9, comprised **{921}**, a group of six pits or postholes, and two ditches. All features appear to be cut into deposit **(918)**.
- 4.2.25 Starting in the southern end of the trench, [919] (Plate 36) was a northwest-southeast orientated linear feature, with a moderate top break of slope and moderately concave sides, breaking gradually to a concave base. It was 0.14m deep, 0.55m wide and 1m+ long, filled by (920), a firm dark brownish grey silty clay with common charcoal flecks.
- 4.2.26 Just north of [919] was [915] (Plate 37), a northeast-southwest orientated linear feature, with a moderate top break of slope and moderately concave sides, breaking gradually to a straight, sloping base that was deepest at its southeastern edge. It was 0.57m deep, 1.65m+ wide and 2m+ long; its basal fill, (917), was a 0.29m deep, 1.65m+ wide and 2m+ long deposit of compact mid blueish grey silty clay with occasional charcoal fragments. The feature was sealed by (916), a 0.28m deep, 1.65m+ wide and 2m+ long deposit of firm dark brownish grey silty clay with common charcoal inclusions.
- 4.2.27 Adjacent to features [915] and [919] was a group of postholes and pits, {921} (Plate 38). They form a rough 'S'-shape, but their alignment is unclear due to the position of the trench. The southernmost feature, [909] (Plate 39) was a subcircular pit, with a sharp top break of slope and moderately sloped sides, breaking gradually to a concave base. It was 0.15m deep, 0.63m wide and 0.5m long, filled by (910), a firm dark blackish brown silty clay with large charcoal flecks. Just northeast was [903] (Plate 40), a subcircular feature, with a gradual top break of slope and gently sloping sides, breaking gradually to a near flat base. It was 0.04m deep and 0.52m wide and 0.43m long, filled by (904), a firm dark blackish brown silty clay with large charcoal flecks throughout.
- 4.2.28 North of [903] was [913] (Plate 41), a sub ovate feature, with a gradual top break of slope and gradual, concave sides, breaking gradually to a concave base. It was 0.13m deep, 0.45m wide and 0.8m long, filled by (914), a firm dark brownish grey silty clay with common charcoal inclusions. Just northwest of [913] was [911] (Plate 42), an ovate feature, with a moderate top break of slope and concave sides, breaking



- gradually to a concave base. It was 0.1m deep, 0.31m wide and 0.42m long, filled by (912), a firm mid brownish grey silty clay, with occasional charcoal fragments.
- 4.2.29 North of [911] was [907] (Plate 43), a circular feature with a gradual top break of slope and gently concave sides, breaking gradually to a concave base. It was 0.07m deep, 0.3m wide and 0.26m long, filled by (908), a firm light brownish grey silty clay with rare charcoal inclusions. The final feature in this group, [905] (Plate 44), was northeast of [907]. It was an ovate feature, with a sharp top break of slope and straight, near vertical sides, breaking sharply to a flat base. It was 0.33m deep, 0.34m wide and 0.32m long, filled by (906), a firm dark brownish grey silty clay with common charcoal flecks and degraded CBM.

Archaeologically Blank Trenches

- 4.2.30 Trench 5 (Figure 2 Plates 48, 49 and 50) was situated in the northwestern end of the Site, on the northeastern side of Roman Road and orientated northeast-southwest. The trench measured 50m in length and 1.8m in width. It had a minimum depth of 0.4m and maximum depth of 0.53m. The natural substrate (502) consisted of firm light orangey brown clay and was overlain by a 0.39m thick deposit of firm mid orangey brown clay subsoil (501). The trench was sealed by a 0.41 topsoil (500) comprised of friable dark orangey brown silty clay. The trench was positioned over a blank area in the geophysics. Trench 5 was devoid of archaeological features.
- 4.2.31 Trench 7 (Figure 2 Plates 51, 52 and 53) was situated in the southeastern end of the Site, on the southwestern side of Roman Road and orientated north-south. The trench measured 50m in length and 1.8m in width. It had a minimum depth of 0.4m and maximum depth of 0.7m. The natural substrate (702) consisted of compact mixed mid reddish brown and blueish grey clay and was overlain by a 0.24m thick deposit of firm mid yellowish grey silty sandy clay subsoil (701). The trench was sealed by a 0.55m deep topsoil (700) comprised of friable dark brownish grey silty clay. The trench was positioned over a series of potential linear features. Trench 7 was devoid of archaeological features.
- 4.2.32 Trench 10 (Figure 2 Plates 43, 46 and 47) was aligned northwest-southeast and was 1.8m wide and 50m long. Trench 10 was located towards the northwestern area of the Site, on the southwestern side of the projected Roman Road and was excavated to a maximum depth of 1.15m. The natural geology (1002) of Trench 10 was observed to comprise firm light orangey brown clay with areas of light greenish grey clay and was overlain by a 0.44m thick deposit of firm dark orangey brown clay subsoil (1001),



- and the trench was sealed by topsoil (1000) consisting of a 0.36m deep deposit of firm mid brown silty clay. On initial observation, a sub-oval feature of possible archaeological interest [1003] was observed at the south-eastern end of the trench, 6.4m in length and at least 1.2m in length (extending beyond the trench limits), but upon investigation, it was ephemeral and interpreted as either a natural depression, perhaps once containing water (the fill (1003) was similar to subsoil (1001).
- 4.2.33 Trench 11 (Figure 2 Plates 54, 55 and 56) was situated in the middle of the Site, on the southwestern side of projected Roman Road and orientated northeast-southwest. The trench measured 50m in length and 1.8m in width. It had a minimum depth of 0.39m and maximum depth of 0.68m. The natural substrate (1102) consisted of firm mid orangey brown clay and was overlain by a 0.2m thick deposit of firm dark orangey brown clay subsoil (1101). The trench was sealed by a 0.3m deep topsoil (1100) comprised of friable dark orangey brown silty clay. Trench 11 was devoid of archaeological features.
- 4.2.34 Trench 12 (Figure 2 Plates 57, 58 and 59) was situated in the southeastern end of the Site, close to the farmyard of Bank Farm, and on the southwestern side of the projected Roman Road and orientated northwest-southeast. The trench measured 50m in length and 1.8m in width. It had a minimum depth of 0.27m and maximum depth of 1.06m. The natural substrate (1202) consisted of compact mid brownish grey sandy silty clay and was overlain by a 0.42m thick deposit of firm light yellowish brown silty clay subsoil (1201). The trench was sealed by a 0.29m deep topsoil (1200) comprised of loose mid greyish brown clayey silt. Trench 12 was devoid of archaeological features.
- 4.2.35 Trench 13 (Figure 2 Plates 59 60 and 61) was situated in the southeastern end of the Site, close to the farmyard of Bank Farm, and on the southwestern side of projected Roman Road and orientated northeast-southwest. The trench measured 50m in length and 1.8m in width. It had a minimum depth of 0.54m and maximum depth of 0.85m. The natural substrate (1302) consisted of compact mid brownish yellow sandy clay with chalk inclusions and patches of mid brown clay and was overlain by a 0.26m thick deposit of firm light brownish-reddish grey silty clay with rare gravel and chalk inclusions subsoil (1301). The trench was sealed by a 0.35m topsoil (1300) comprised of firm mid greyish brown clayey silt. Trench 13 was devoid of archaeological features.



5 FINDS ASSESSMENT

5.1 **Introduction**

- 5.1.1 A total of 314 artefacts, weighing 3819g, were recovered from 20 contexts. Quantification of finds by context is provided in Annex 2. The artefactual remains include assemblages of pottery, animal bone, struck flint, ceramic building material, and small finds. Processing of the finds was carried out by Luke Harris, Fiona Roe and Holly Haryluck. Specialist analysis reports were produced by Andrew Peachey, Ruth Beveridge, Julie Curl and John Sumners.
- 5.1.2 All finds were dealt with according to the recommendations made by Watkinson and Neal (1998) and to the Chartered Institute for Archaeologists (CIfA) Standard and guidance for the collection, documentation, conservation and research of archaeological materials (2020). All artefacts have been boxed according to material type and conforming to the deposition guidelines recommended by Brown (2011). The material archive has been assessed for its local, regional and national potential and for its potential to contribute to the relevant research frameworks.

5.2 **The Roman Pottery** – by Andrew Peachey

5.2.1 The trial-trench evaluation recovered a total of 169 sherds (2579g) of early Roman pottery (Table 5.1) in a moderately fragmented and abraded condition, notably including a group of 105 sherds (1801g) in ditch [915] that includes samian ware from south Gaul, fine ware from the Upchurch industry and a flagon from Verulamium associated with grog-tempered coarse ware jars that indicate a date in the late 1st century AD. The remaining Roman pottery is comprised of a sparse scatter of grog-tempered coarse ware in pits, postholes and a linear that could conceivably have a currency in the late 1st century BC to the 1st century AD, but are likely contemporary with [915], while further fine ware sherds were recovered from the subsoil and as unstratified material.

Fabric Code/Type	Sherd Count	Weight (g)	R.EVE
LGF SA	2	14	-
GRF1	16	52	0.25
OXF1	8	26	0.15
VER WH	2	18	-
SOB GT	141	2469	0.7
Total	169	2579	1.10

Table 5.1: Quantification of Pottery by Fabric (see Table 5.2 for fabric codes)



Methodology

5.2.2 The pottery was quantified by sherd count and weight (g), with fabrics analysed at x20 magnification and all data entered into a Microsoft Excel spreadsheet that forms part of the Site archive; in accordance with the *Standard for Pottery Studies in Archaeology* (Barclay *et al* 2016), which were developed in part from the guidelines of the Study Group for Roman Pottery. Where possible, fabric types have been cross-referenced with the National Roman Fabric Reference Collection (Tomber and Dore 1998), while local or indistinguishable coarse wares were assigned an alpha-numeric code and are fully described in the report, or referenced to major type sites/kiln groups in the area (i.e. Monaghan 1987). Samian ware form types refer to the standardised form types/codes outlined in Webster (1996). The pottery fabrics are described below (Table 5.2) and the fabrics quantified in Table 5.1; with a catalogue of the pottery entered into a Microsoft Excel spreadsheet that forms part of the Site archive.

Fabric Code	Fabric Name/Description
	La Caractera anno acaraign coma (Tarachan & Dana 1000, 20)
LGF SA	La Graufesenque samian ware (Tomber & Dore 1998, 28)
GRF1	Fine grey ware. Mid to dark grey surfaces and core (slightly contrasting); inclusions comprise common fine quartz (<0.1mm, occasionally to 0.25mm), sparse dark grey iron rich grains (grog?) (<0.25mm) and occasional chalk (<0.25mm). A product of the kilns on the Upchurch Marshes (Monaghan 1987, 252: fabric N1/1b)
OXF1	Fine oxidised ware. Mid to pale orange surfaces and core (slightly contrasting); inclusions comprise common fine quartz (<0.1mm, occasionally to 0.25mm), sparse red iron rich grains (<0.25mm) and occasional chalk (<0.25mm).
VER WH	Verulamium region white ware (Tomber & Dore 1998, 154-5)
SOB GT	Southern British (Belgic) grog-tempered ware (Tomber & Dore 1998, 214); either made or finished on a slow wheel.

Table 5.2: Roman fabric codes and descriptions

Discussion

- 5.2.3 Samian ware was limited to two sherds from south Gaul (LGF SA), in ditch [915] (916 & 917) that although not cross-joining are likely derived from a single Dr.27 cup, manufactured in the mid to late 1st century AD.
- 5.2.4 Fine wares in the assemblage appear dominated by the products of the Upchurch kilns in the Thameside area of north-west Kent c.30km to the north-west of Stonestreet Green, including both reduced (GRF1) and oxidised (OXF1) variants. The GRF1 in ditch [915] (917) included the flaring small bead rim of a short-neck flask, of which several types had developed by the late 1st century AD (i.e. Monaghan 1987, 45: type 1B3);



while **(917)** and the un-stratified material (SF12) contained the bases of indeterminate beakers also in GRF1. OXF1 was only present in ditch **[915] (916)** with all sherds derived from a flagon with a ring-neck and slightly cupped bead rim (Monaghan 1987, 50: type 1E2.3), which becomes the dominant type of flagon in the region from c.AD120/130, but was in circulation in the local area in the atter half of the 1st century AD. A flagon produced in the Verulamium region (VER WH) was also present in the same deposit, represented by a section of 2-rib strap handle only.

- 5.2.5 The bulk of the assemblage was accounted for by (slow) wheel-made grog-tempered coarse wares (SOB GT) that have a currency from the late 1st century BC to the late 1st century AD, when they decline rapidly in the face of the innovations of Roman manufacturing, kilns and trade. The SOB GT appears to include sherds from jars, necked bowls and storage jars; however, diagnostic sherds are limited to a limited range of utilitarian jars that have a currency spanning that of the general fabric. Ditch [915] (916) & (917) each contained two SOB GT jars with a plain everted rim above a rounded shoulder (Thompson 1982, 87: type B1-1), while (917) also contained a similar jar with a shouldered or ovoid body with a rilled exterior (Thompson 1982, 273: type C7-1).
- 5.2.6 Assemblages dominated by grog-tempered coarse wares are typical for 'rural' sites in east Kent in the pre-Flavian to early Flavian periods (c.AD43-75) (Pollard 1988, 45), with sand-tempered wares remaining virtually absent until the end of that period, in contrast to urban centres such as Canterbury. The presence of limited quantities of samian ware from south Gaul and a flagon from Verulamium need not contradict this chronology; however the presence of fine wares from the Upchurch industry is more consistent with consumption patterns that develop in the mid Flavian period (c.AD75-100) (Pollard 1988, 59), around which time the grog-tempered coarse wares go into decline to be eclipsed by sand-tempered wares by the end of the century. Therefore, the limited but homogenous group in ditch [915] appears to represent the deposition of rubbish in the late 1st century AD, potentially associated with domestic consumption in the immediate vicinity, with the remaining sparse sherds potentially representing scattered detritus from the same area of occupation.
- 5.3 **The Ceramic Building Materials** by Andrew Peachey
- 5.3.1 The trial trench evaluation recovered a total of 90 fragments (394g) of Roman CBM, including only two small fragments that could be categorised as tile, with the



remainder comprised of highly abraded and rounded small fragments of rubble that could only be identified by fabric (Table 5.3).

CBM type	Fragment Count	Weight (g)
Tile (tegula?)	2	100
Misc. rubble	88	294
Total	90	394

Table 5.3: Quantification of Roman CBM

- 5.3.2 The Roman CBM was manufactured in a mid orange fabric with inclusions of common quartz (<0.25mm), sparse red-brown iron rich grains (0.5-3mm) and occasional chalk/voids (<5mm).
- 5.3.3 Ditch [915] (916) and (917) each contained a single fragment of 30mm thick flat tile, likely derived from the body of a tegula roof tile, and possibly derived from the same tile although they are not cross-joining. The fracture on both fragments appears relatively sharp and fresh, in contrast with the small rubble fragments that are present in a comparable fabric in the same deposit, as well as in ditch [105], layer (408), posthole [905], pit [913] and linear [919]. The limited quantity of Roman CBM present suggests these features were significantly removed from a building with a substantial ceramic roof, although one may have been present in the local landscape, if the CBM was not deposited via fulfilling a secondary function.
- 5.4 **The Struck Flint** by Andrew Peachey
- 5.4.1 The trial trench evaluation recovered a total of nine pieces of struck flint (122g) in a well-preserved sharp and generally un-patinated condition, with slight patination on only one blade. The assemblage exhibits distinctly disparate technological traits (Table 5.4), with the lack of homogeneity likely reflecting broad and differing prehistoric origins, and the residual nature of the struck flint, principally in the topsoil/subsoil.

Period	Flint type	Frequency	Weight (g)
Mesolithic	Blade	2	30
Mesolithic – Early Neolithic	Debitage (blade-like)	2	3
Late Neolithic – Early Bronze Age	End scraper	1	5
	Debitage (broad-squat)	1	66
Late Bronze Age	Horned scraper	1	8
Indeterminate	Debitage? (irregular)	2	10
Total		9	122

Table 5.4: Quantification of struck flint by type



- 5.4.2 The raw material utilized for the struck flint demonstrates considerable variety, potentially reflecting contrasting sources and strategies employed throughout prehistory, and the availability of raw material in local alluvial deposits. The Mesolithic blades vary from mid grey to very dark crimson-black and the late Neolithic to Bronze Age pieces from mid brown grey to dark grey, with cortex, where extant ranging from thin to medium thickness, with a smooth, chalky or abrasive feel.
- 5.4.3 Mesolithic blades were recovered from topsoil (600) and as un-stratified material (Trench 9). The blade in (600) was mid grey with slight patination and was relatively large (25g) with dorsal scars indicative of it being removed from a bi-polar core, although the extent of cortex remaining, and absence of wear/modification, suggests it may constitute debitage trimmed away as the core was prepared. In contrast, a smaller blade (5g) from Trench 9 was in dark crimson-black flint with very regular, narrow proportions and parallel dorsal scars, and the bulb of percussion snapped off to flatten the profile, although there was no evidence of further wear or modification. Evidence for other blade-based technology is comprised of two small debitage flakes from subsoil (901), which are more typical of the single platform blade cored employed in the early Neolithic, but Mesolithic origins cannot be discounted.
- 5.4.4 Subsoil **(901)** also contained a large flake (66g) with dorsal scars suggesting it was removed from a discoidal core, with extant cortex suggesting this was in the early stages of its reduction, consistent with flake production strategies in the late Neolithic to early Bronze Age, and although there is no evidence of use or modification, it would constitute a very serviceable flake blank. Two small un-corticated flakes with broad-squat proportions were contained in ditch **[104]**, however they are relatively irregular, and it must be questioned if they were the product of human agency, therefore they have been assigned an indeterminate date. More typical of late Neolithic to early Bronze Age tools is a small end scraper from subsoil **(1201)**, which has abrupt retouch across its broad distal end and is close to being characterized as a thumbnail scraper, closely associated with the early Bronze Age.
- 5.4.5 A relative anomaly in the small struck flint assemblage is a small, horned scraper in dark grey flint contained in ditch [108]. The distal end of the thick flake had two projecting horns with abrupt retouch across the recess in between, and along both lateral edges. The butt end has a slightly lenticular profile, which may have facilitated hafting, but this is far from conclusive. Horned scrapers typically occur in Bronze Age, especially late Bronze Age groups and while not generally common, appear to occur



more frequently in Sussex and Kent, suggesting they may have had a locally specialized function.

5.5 **The metalwork** – by Dr Ruth Beveridge

Introduction

5.5.1 A total of 19 items (weighing 72.4g) were recovered during the archaeological trial trench evaluation. The assemblage comprises objects solely of iron. The artefacts were collected from four stratified deposits, with a concentration of six items in fill (906) of posthole [905], Trench 9 and seven items from lower fill (916) of ditch [915], Trench 9. The items are listed by chronological period and material in Table 5.5, illustrating that the typologically datable material is of Roman date.

Period	Iron	Total
Roman	6	6
Uncertain	13	13
Total	19	19

Table 5.5: Breakdown of objects by period and material type

- 5.5.2 The artefacts have been catalogued directly onto an MS Excel spreadsheet and recorded in accordance with guidelines set out in the CIfA Toolkit for Specialist Recording (CifA 2021c). They have been examined with the assistance of low powered magnification but without the support of radiography. A summary catalogue listing is provided as Table 5.6.
- 5.5.3 The overall condition of the ironwork is poor; the objects exhibit post-depositional corrosion and fragmentation. The artefacts are packed in perforated bags. They are stored in airtight boxes with humidity control as appropriate.

5.6 The assemblage

Romano-British (43BC-AD410)

5.6.1 Six artefacts were recovered from Trench 9 of Roman date, all are Manning Type 10 iron hobnails with pyramidal or domed heads (Manning 1985, 135): three were collected from fill (906) of posthole [905] and three from lower fill (916) of ditch [915]. Hobnails were used on the soles of Roman boots and sandals and are evidence for the use of such footwear within the vicinity of the Site.



Uncertain date

- 5.6.2 As is typical of many rural sites, much of the metalwork assemblage is comprised of iron fixtures and fittings that can be difficult to date precisely. Eleven nails were collected from Trench 9 with three being retrieved from fill (906) of posthole [905]; three from fill (910) of posthole [909]; four from lower fill (916) of ditch [915] and one from layer (918). Whilst nails are usually difficult to date, having altered little over time, all but the nail from layer (918), are from deposits with associated Roman pottery. If these nails are of a comparable date, they would fall into the category of Manning Type 1 or 1b nails.
- 5.6.3 Fragments of iron sheet object were also collected in fill **(910)** of posthole **[909]**, it may have been part of a larger fitting though the fragments are too small to be certain.

5.7 Discussion

- 5.7.1 This small assemblage of artefacts has limited value in assisting with understanding the function or dating of the features. The hobnails are from features with confirmed Roman pottery and reinforce this dating; these are likely casual losses. The nails from postholes may have been associated with the construction of timber structures. Overall, the nails likely entered the archaeological record as discarded debris.
- 5.7.2 The artefacts have been recorded to an appropriate archive standard with little potential for further study. It is recommended that the objects are retained for deposition with the archive and should further mitigation work be undertaken on the Site the ironwork should be x-rayed to provide a record for the archive. A full catalogue of the items is provided in Annex 3.

Small Finds No.	Sample No.	Feature	Context	Trench	Feature description	Material	Object ID	Object count	Weight (g)	Length (mm)	Width (mm)	Thickness (mm)	Date/Period
	8	905	906	9	Fill of Post Hole	Iron	Hobnail	1	1.5	15.4	11.3	3.2	Roman
	8	905	906	9	Fill of Post Hole	Iron	Hobnail	1	1.5	13.6	11.6	3.3	Roman
	8	905	906	9	Fill of Post Hole	Iron	Hobnail	1	1	10.9	13.5	2.9	Roman
	8	905	906	9	Fill of Post Hole	Iron	Nail	1	5.8	39.4	17.7	6.9	



Small Finds No.	Sample No.	Feature	Context	Trench	Feature description	Material	Object ID	Object	Weight (g)	Length (mm)	Width (mm)	Thickness (mm)	Date/Period
	8	905	906	9	Fill of Post Hole	Iron	Nail	1	7.5	38.8	12.9	7.7	
	8	905	906	9	Fill of Post Hole	Iron	Nail	1	0.9	14.1	6.6	5.2	
2		909	910	9	Fill of posthole	Iron	Nail	1	10.3	47.3	17.9	7.7	
	13	909	910	9	Fill of Post Hole	Iron	Nail	1	6.3	34.2	18.1	6.4	
	13	909	910	9	Fill of Post Hole	Iron	Nail	1	0.4	14.7	3	2.5	
	13	909	910	9	Fill of Post Hole	Iron	Sheet	2	0.7	13.8	6.3	1.8	
7		915	916	9	Lower Fill of Ditch	Iron	Nail	1	8.8	39.4	18	8.1	
8		915	916	9	Lower Fill of Ditch	Iron	Nail	1	4.7	33	15.2	6.7	
9		915	916	9	Lower Fill of Ditch	Iron	Nail	1	3.4	34.8	9	6.8	
10		915	916	9	Lower Fill of Ditch	Iron	Nail	1	7.4	34.6	12.4	9.1	
	16	915	916	9	Lower Fill of Ditch	Iron	Hobnail	1	1.6	13.5	10.4	4.2	Roman
	16	915	916	9	Lower Fill of Ditch	Iron	Hobnail	1	1.6	16.3	10.6	3.2	Roman
	16	915	916	9	Lower Fill of Ditch	Iron	Hobnail	1	1.6	14.2	10.2	3.5	Roman
13		918	918	9	Layer	Iron	Nail	1	7.4	38.4	18.7	8.4	

Table 5.6: Summary of the metalwork catalogue

5.8 The slag – by Andrew A.S. Newton

Introduction

- 5.8.1 Eighteen fragments of slag (646g) were recovered from three contexts during archaeological investigations at Stonestreet Green, Ashford, Kent. The slag was identified on morphological grounds by visual examination.
- 5.8.2 Visual examination of metalworking residues allows them to be categorised according to morphology, colour, density, and vesicularity. It should be noted, however, that not all slags are diagnostic of a particular metalworking process or part of that process. Slags are also particularly susceptible to morphological and composition alteration by secondary corrosion products.
- 5.8.3 Reference was made to the National Slag Reference Collection (Dungworth et al 2009) where appropriate and to the relevant subject-specific (Bayley *et al* 2008) and regional (e.g. the South East Research Framework (SERF) https://www.kent.gov.uk/leisure-



and-community/history-and-heritage/south-east-research-framework) research frameworks.

Context	Feature	Feature	Quantity	Observations	Туре
		type			
901	901	Subsoil	13; 464g	Dark brown to mid orange brown. Very dense	?Tap
				material but with occasional to moderate air	?Furn
				pockets of up to 5mm diam. Surfaces appear	
				to have been degraded. Moderate to strong	
				response to magnet but varies across material.	
				Despite degradation, morphology might	
				indicate a slag cake tapped from the smelting	
				furnace. Fe slag.	
916	915	Ditch	3; 173g	Light grey to mid/bright orange brown. Rough,	Furn
				powdery surfaces. Very dense material. No	
				clear indication of air pockets. Occasional	
				pieces of possible charcoal are present.	
				Material may have been heavily degraded.	
				Moderate response to magnet. Fe slag.	
				Quantity and size of fragments may indicate	
				that this is tap or furnace slag. Morphology is	
				indeterminate.	
1201	-	Subsoil	2; 9g	Dark grey brown with mid to light brown	Unident.
				discolouration. Hard but fairly light material.	
				Occasional small air pockets of less than 1mm	
				diam. No response to magnet. Morphology	
				indicates that this was at one time molten.	
				Appearance is suggestive of iron slag but this	
				cannot be identified to process.	

Table 5.7: Catalogue of slag results.

Key: Tap=tap slag. Furn=furnace slag. Furn.St.=fired clay furnace structure. Ore=iron ore. Fe=iron. Smith=Smithing/refining debris. Unident=unidentified.

5.8.4 The material recovered from this Site constitutes material derived from iron working. The majority of the material appears to have been degraded to some extent although this has not particularly hampered its identification. Much of the material appears to be slag accumulated in the base of the smelting furnace or possibly a cake of material tapped from the smelting furnace. This suggests iron working technology consistent with the dates applied to features recorded at this Site (although not the contexts from which the material was recovered as these are all undated). The quantity present



is insufficient to suggest that iron working was carried out at this Site and may simply have arrived at this location as refuse material.

5.9 **Animal Bone – by Julie Curl**

Methodology

5.9.1 A summary assessment was carried out following a modified version of guidelines by English Heritage (Davis, 1992) and Baker and Worley, 2014. All of the bone was examined to determine range of species and elements present. A record was also made of butchering and any indications of skinning, hornworking and other modifications. When possible ages were estimated along with any other relevant information, such as pathologies. Measurements were considered following Von Den Driesch, 1976, and bones suitable for a tooth record following Hillson, 1996 recorded, but no suitable remains were found. Counts and weights were noted for each context and counts made for each species. Where bone could not be identified to species, they were grouped as, for example, 'large mammal', 'bird' or 'small mammal'. Attempts were made, where possible, to refit possible fragments in the same bag and these were included in NISP counts. As this is a small assemblage, information was recorded directly into the Annex in this report.

The bone assemblage

Quantification, provenance and preservation

- 5.9.2 A total of 6g of bone, consisting of 9 elements, was recovered, with the totals quantified in **Annex** 2. Remains were recovered from one feature in Trench 6, with the bone found in Pit [608], fill (607). No dating was available at the time of writing this report.
- 5.9.3 The bone is in a reasonable condition, although the assemblage is heavily fragmented, which possibly suggests poor soil conditions leaving fragile bone. No burnt bone or gnawed remains were seen and invertebrate (insect, isopod, molluscs) damage is low, all suggesting burial was rapid after disposal of waste.

Context	Feature Type	Trench	Ctxt Qty	Wt (g)	Species	NISP
609	Pit 608	6	9	6g	Pig/Boar	2
					Mammal	7

Table 5.8: Quantification of the faunal remains



- 5.9.4 **Pig/boar** was identified from (609) with two refitting fragments of a tusk.
- 5.9.5 The remaining bone in (609) consisted of seven fragments of **mammal** bone, which was too heavily fragmented and lacking in any diagnostic features for any species identification.

Discussion

- 5.9.6 This is a very small assemblage and quite heavily fragmented, resulting in minimal information obtainable from the remains. The remains of pig/boar may be that of a domestic animal or a young wild boar, with the pieces too fragmented to be certain of origin. The depositing in a pit would suggest these remains were from meat consumption, although no butchering was seen.
 - Recommendations for further work
- 5.9.7 This is a small assemblage that has limited potential for further study and no further work is recommended on this particular assemblage. If further work is carried out at this Site it is recommended that samples are taken for sieving to maximise chances of recovery for small bones. If further work produces bone, then this assemblage can be included in the analysis.



6 PALAEOENVIRONMENTAL ASSESSMENT

6.1 **Ecofactual Macrofossil Remains** – by Dr John Summers

Introduction

6.1.1 During the archaeological evaluation at Bank Farm, twenty bulk samples for environmental archaeological assessment were taken. The aim of the bulk sample programme was to determine the presence, nature of preservation and distribution of ecofactual macrofossil remains within the archaeological deposits on the Site, as well as provide provisional palaeoeconomic and palaeoenvironmental data to contribute to the interpretation of the Site.

Methods

6.1.2 Samples were processed at the WA facilities in Bury St. Edmunds using standard flotation methods. The light fractions were washed onto a mesh of 500µm (microns), while the heavy fractions were sieved to 1mm. The dried light fractions were sorted under a stereomicroscope (x8-x80 magnification). Botanical and molluscan remains were identified and recorded using reference literature (Cappers *et al.* 2006; Jacomet 2006; Kerney and Cameron 1979; Kerney 1999) and a reference collection of modern seeds was available as necessary. Potential contaminants, such as modern roots, seeds and invertebrate fauna were also recorded in order to gain an insight into possible disturbance of the deposits.

6.2 **Results**

- 6.2.1 The data from the bulk sample light fractions are presented in Annex 4. Preservation of plant macrofossils was by carbonisation only, with no evidence for anaerobic waterlogging or mineralisation. Shells of terrestrial molluscs were rare, which is in keeping with the local slightly acid soils and sediments (Soilscapes 2023).
- 6.2.2 Eight of the samples were from deposits with a spot date in the 1st century AD, which accounted for the majority of the identifiable carbonised plant macrofossil remains. The majority of the remains were carbonised cereal grains, predominantly wheat, with a number identifiable as glume wheat (*Triticum dicoccum/ spelta*). This was confirmed by the presence of glume bases in two samples, with a single specimen identified as spelt wheat (*Triticum spelta*) in posthole fill (910)/[909]. Spelt wheat was the dominant wheat crop of the late Iron Age and Roman periods (e.g. Pelling 2008), although this is regionally variable with emmer wheat persisting in some areas (e.g. Lodwick 2017).



- 6.2.3 In posthole fill **(910)/[909]** wheat glume bases outnumbered grains, indicating a contribution to the deposit from crop processing by-products (spelt wheat dehusking/ final sieving). The sample was quite low density and may simply be the result of routine crop processing, although during the Roman period in particular, chaff from the bulk processing of cereals was commonly used as fuel in a range of industrial and agricultural kilns (e.g. van der Veen 1989; Newton *et al.* 2022).
- 6.2.4 A single oat grain (*Avena* sp.) was also present in ditch fill (916)/[915], although without diagnostic chaff elements it is not possible to distinguish between wild oats growing as a weed of other cereals and domesticated oats grown as a crop. At Westhawk Farm, oat remains were only identifiable as wild *A. fatua* and likely present as part of the weed assemblage (Pelling 2008). However, it has been postulated that oat may have replaced barley as the primary fodder grain in some regions during the Roman period, at least in parts of Essex (e.g. Carruthers 2008).
- 6.2.5 Also of interest were single specimens of pea/ bean (large Fabaceae) and flax (*Linum usitatissimum*) in pit fill **(609)/[608]**. These probably reflect part of the broader mixed arable economy beyond the significant focus on spelt wheat cultivation.
- 6.2.6 Seeds of non-cereal taxa were limited but those identified were probably derived from the arable weed communities, including goosefoot family (Amaranthaceae), stinking chamomile (*Anthemis cotula*) and wild grass (Poaceae). Stinking chamomile is most common as a weed of heavy loam and clay soils, and was probably a late Iron Age introduction which likely spread with the expansion of cultivation onto heavier soils (e.g. Lodwick 2017).
- 6.2.7 A single clover type (*Trifolium* sp. type) seed in posthole fill **(906)/[905]** could have originated from grassland habitats, although this is somewhat tentative.
- 6.2.8 Numerous grains of glume wheat and a few seeds of goosefoot (*Chenopodium* sp.) from undated pit fill **(604)/[602]** appears similar to others with a 1st century spot date, suggesting this deposit may also be of a comparable age.
- 6.2.9 Charcoal fragments were present or common in many of the samples of 1st century deposits, with an assessment of vessel patterns indicating the presence of oak (*Quercus* sp.) and non-oak diffuse porous woods. Relatively low densities of mixed charcoal likely indicate domestic fuel residues deposited as hearth rake-out material with other refuse. The carbonised plant macrofossils were probably also burnt in domestic hearths and deposited with hearth ash.



6.2.10 The greatest concentration of carbonised plant macrofossil remains was from 1st century deposits in Trenches 6 and 9, with few remains other than charcoal present elsewhere. Abundant oak (*Quercus* sp.) charcoal was present in undated pit fill (308)/ [307], with tyloses deposits in the vessels indicating heartwood from mature trunks or branches. This could be fuel residue from a specific activity, although there were no associated remains to allow more detailed interpretation.

6.3 Conclusions

6.3.1 The samples from Bank Farm have demonstrated the preservation of carbonised cereal remains in deposits of 1st century date, primarily in Trenches 6 and 9. It is probable that further excavation and sampling in this area of the Site would provide a larger assemblage of carbonised plant macrofossils to better understand the local arable economy during the early Roman period.



7 CONCLUSIONS

7.1 Interpretation

- 7.1.1 During the archaeological evaluation at Stonestreet Green, Ashford, Kent, 13 trenches were excavated over 7 fields, covering 1170m² of the Project area, as agreed with Wendy Rogers, Archaeological Advisor at Kent County Council. Four trenches were excavated within Field 26, the proposed location of the Project Substation. The remaining nine trenches were placed in six fields belonging to J. Wanstall & Sons Bank Farm, positioned either side of Roman Road. The purpose of the evaluation was to establish the nature and extent of below ground archaeological remains within the vicinity, the evaluation trenches being located to target both geophysical anomalies and apparently 'sterile' areas.
- 7.1.2 All trenches were excavated down to the top of the natural substrate except for Trench 9, the southern part of which was located over deposit (918). Several features were observed within this deposit, which will be discussed in more detail below.
- 7.1.3 Archaeological remains were found in 7 trenches overall. The remains in Field 26 (found in Trenches 1, 3 and 4) extended across the field and were not highlighted by the geophysical survey. The failure of the geophysical survey to highlight any of these features may be partially explained by the disturbance caused by the constriction London and South-Eastern Railway in the 19th century which forms the northern boundary of Field 26.
- 7.1.4 The remains found in the trenches in the vicinity of Bank Farm (Trenches 6, 8, 9 and 10) appeared to concentrate in the northwestern end of the Site, on either side of the Roman Road with a clear focus of activity in Trench 9 targeted a possible enclosure highlighted by the geophysical survey. There was a small concentration of activity in Trench 8, which was in the southeastern end of the Site. The data recovered indicated past activity on the Site dating to the Prehistoric and Roman, periods. It has been postulated that a undated shallow rectangular feature within Trench 6 may represent a sunken floor building
- 7.1.5 The earliest evidence of prehistoric activity on the site was characterised by the presence of 4 Mesolithic flints recovered as stray topsoil finds. Later prehistoric evidence was recovered from Field 26. Two ditches and a small pit were recorded in Trench 1; struck flint was recovered from each of these features. In ditch [108],



- located at southeastern end of the trench, a horned scraper, likely dating to the late Bronze Age, was recovered from the fill, (109).
- 7.1.6 It is possible that the features in Trench 1 relate to Prehistoric agricultural activity, perhaps on the very outskirts of a settlement. The two ditches recorded in Trench 3, [303] and [305], did not contain any datable material, but considering their similarity to the ditches in Trench 1, and their proximity, they may also date to the same period and be part of much more extensive field systems.
- 7.1.7 As the pit recorded in Trench 3, [307], was cut into the subsoil deposit in this trench, it is considered that it is likely modern, perhaps a firepit from people using the field as a recreational area. Deposits (404), (406) and (408), recorded in Trench 4, likely relate to construction activity associated with the railway bank, which the northeastern end of the trench is immediately adjacent to.
- 7.1.8 In Trench 9, a flint blade was recovered from **(918)**, a light brownish grey silt layer that covered the southern end of the trench. The features which contained Roman artefacts were cut into this layer. No other activity relating to the Prehistoric period was recovered from the fields in Bank Farm, suggesting that the flint found in Trench 9 may be incidental discard that has travelled down through alluvial activity.
- 7.1.9 Roman activity was represented by a series of six postholes and two ditches found in Trench 9. The six postholes, [903], [905], [907], [909], [911] and [913], form a rudimentary 'S'-shape, but the limited view provided by the position of the trench means that, at present, no real alignment can be suggested. Their proximity to one another, and their position immediately north of two ditches, suggests that they may relate to settlement activity, particularly as several iron nails and hobnails were recovered from ditch fill (916), as well as a large quantity of Roman late 1st century AD grog tempered coarse wares jars alongside the occasional sherd of Samian ware from South Gaul, fine ware from the Upchurch industry and a flagon from Verulamium. Postholes [905] and [909] also contained iron hobnails and nails. These remains all accord with the responses recorded during the geophysical survey which hinted at a possible enclosure. The pits and postholes and particularly ditch [915], seem to be in the exact position indicated by the geophysical survey. It is clear that Trench 9 is within a focus of early Romano-British occupation with pottery and CBM recovered from features within the trench as well as good evidence for cultivation and processing of grain and metal working within the immediate vicinity.



- 7.1.10 Further Roman activity was represented by three pits and a large sub-rectangular feature in Trench 6. Sherds of Roman pottery and animal bone were recovered from the large feature, [608]. The pits appear to be in alignment with one another; all three of the pits, [602], [605] and [610], are of a similar shape and size, suggesting that they were all used for the same purpose. Further Roman pottery was recovered from the fills of pits [605] and [610].
- 7.1.11 This evidence of Roman settlement activity is not unexpected, due to the trenches' proximity to Roman Road, which, as the name suggests, is the projected route of an early road through the area. The lack of background levels of Roman material in the Trenches 5-8 and 10-13 suggest that the focus of Romano-British activity is localised to the enclosure targeted by Trench 9 and represents activity relating to a farmstead rather than a more extensive roadside settlement.
- 7.1.12 The geophysical survey results in this area also support this hypothesis, with no real indication of a more extensive roadside settlement forthcoming in the survey results. The proposed dimension of 70m by 30m for this enclosure taken from the geophysical survey plot is consistent with an enclosed farmstead, which from the finds evidence was occupied in the late fist century, with little current evidence to suggest it continued in use long into the second century. The presence of Romano-British ceramic roof tile hints that there may be more substantial Romano-British structures in the vicinity, however the lack of general Romano-British material as topsoil finds and no traces of any substantial building like geophysical anomalies suggest that this is unlikely to be the case.
- 7.1.13 The features in Trenches 8 and 10 are undated. The large sub ovate feature recorded in Trench 10, [1003] had a very loose fill that was similar to the natural in the northwest of the trench, which suggests it was either a modern feature or a natural depression. The features in Trench 8, which consist of a posthole, [803], and a ditch, [805], are isolated from the rest of the features in the northeast of Site. However, they are relatively close to the farmyard of Bank Farm and may relate to post medieval or modern agricultural activity associated with it.
- 7.1.14 The survival of the archaeological features was moderate. Features had been affected by the desiccation of the clay, which made the deposits extremely compact and hard.



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ANNEXES



ANNEX 1: CONTEXT TABLE

Trench 1

Length: 50m Width: 1.80m Orientation: Northeast-Southwest

Minimum Depth: 0.34m Maximum Depth: 1.02m

Context	Context	Description	Dimensions	Interpretation
Number	Туре	•		- "
(100)	Topsoil	Compact dark brownish grey silty clay.	0.25m in depth	Topsoil.
(101)	Subsoil	Compact mid yellowish grey clay with common manganese flecks subsoil.	0.38m in depth	Subsoil.
(102)	Natural substrate	Compact mid brownish yellow mottled clay with common manganese flecks.	N/A	Natural substrate.
(103)	Deposit	Firm dark blueish grey silty clay.	0.44m in depth	Deposit from modern agricultural activities. Only found to the Southern end of the trench.
[104]	Cut	Cut of linear feature. Northeastern-southwest orientated, with a sharp top break of slope and moderate, straight sides breaking moderately to concave base.	0.21m in depth, 0.68m in width, +2m in length	Ditch.
(105)	Fill	Fill of [104]. Firm mid brownish grey silty clay with rare (<1%) gravel inclusions.	0.21m in depth, 0.68m in width, +2m in length	Single fill of ditch [104], likely the result of natural infilling processes.
[106]	Cut	Cut of circular pit with a sharp top break of slope and steep, concave sides, breaking moderately to a concave base.	0.22m in depth, 0.67m in width, 0.70 in length	Pit located at the Southern end of the trench.
(107)	Fill	Fill of [106]. Firm, dark blueish grey silty clay, with approximately 5% charcoal inclusions.	0.22m in depth, 0.67m in width, 0.70 in length	Single fill of pit [106], probably deliberate backfill.
[108]	Cut	Cut of linear feature. Northeast-southwest orientated, with a sharp top break of slope and steep sides, breaking sharply to a u-shaped base.	0.56m in depth, 0.82m in width, >1.80m in length	Ditch, possibly part of a boundary.
(109)	Fill	Fill of [108]. Firm mid greyish brown silty clay with occasional charcoal flecks.	0.56m in depth, 0.82m in width, >1.80m in length	Single fill of ditch [108], most likely formed through alluvial processes.



Trench 2

Length: 50m Width: 1.80m Orientation: Northwest-Southeast

Minimum Depth: 0.40m Maximum Depth: 0.80m

Context Number	Context Type	Description	Dimensions	Interpretation
(200)	Topsoil	Compact dark brownish grey silty clay.	0.27m in depth	Topsoil.
(201)	Subsoil	Compact mid yellowish grey clay with common manganese flecks subsoil.	0.21m in depth	Subsoil.
(202)	Natural Substrate	Firm to compact mid brownish-greyish yellow clay with common manganese flecks and moderate subangular flint inclusions.	N/A	Natural substrate.

Trench 3

Length: 50m Width: 1.80m Orientation: Northwest-Southeast

Minimum Depth: 0.40m Maximum Depth: 1.05m

Context Number	Context Type	Description	Dimensions	Interpretation
(300)	Topsoil	Compact light brownish grey clayey silt.	0.30m in depth	Topsoil.
(301)	Subsoil	Very compact light greyish-yellowish brown silty clay.	0.33m in depth	Subsoil.
(302)	Natural Substrate	Very compact light yellowish grey silty clay.	N/A	Natural Substrate.
[303]	Cut	Cut of a linear feature, northeast-southwest orientated, with a moderately sharp top break of slope and near vertical, straight sides, breaking sharply to the northwest, and slightly gradually to the southeast to a flat, irregular base.	0.17m in depth, 0.37m in width, +1.80m in length	Ditch. Similar alignment as [305].
(304)	Fill	Fill of [303]. Firm mid yellowish brown silty clay	0.17m in depth, 0.37m in width, +1.80m in length	Single fill of [303], natural infilling.
[305]	Cut	Cut of linear feature northeast-southwest orientated, with a	0.10m in depth, 0.35m in width,	Ditch. Similar alignment as [303].



Context	Context	Description	Dimensions	Interpretation
Number	Туре			
		moderate top break of	+2.10m in	
		slope and moderate	length	
		concave sides, breaking		
		gently to a concave base.		
			0.10m in	Single fill of [305], natural
		Fill of [305].	depth, 0.35m	infilling.
(306)	Fill	Firm mid yellowish-	in width,	
		brownish grey silty clay.	+2.10m in	
			length	
	Cut	Cut of sub-circular pit with	0.05m in	Pit, possibly modern, cut
		a gradual top break of	depth, 0.60m	into the subsoil layer (301).
[307]		slope and shallow concave	in width,	
		sides, breaking gradually	0.80m in	
		to a flat base.	length	
(308)	Fill	Fill of [307].	0.05m in	Single fill of [307].
		Compact to hard dark	depth, 0.60m	
		blueish black and light	in width,	
		brownish grey clay with	0.80m in	
		abundant charcoal chunks	length	
		and flecks.		

Trench 4

Length: 50m Width: 1.80m Orientation: Northeast-Southwest

Minimum Depth: 0.33m Maximum Depth: 0.74m

Context Number	Context Type	Description	Dimensions	Interpretation
(400)	Topsoil	Compact, mid brownish grey clayey silt.	0.29m in depth	Topsoil
(401)	Subsoil	Very compact mid yellowish grey silty clay.	0.28m in depth	Subsoil
(402)	Natural Substrate	Very compact mid brownish yellow silty clay		Natural Substrate within the trench
[403]	Cut	Made ground cut		Modern cut, likely result of activities linked to construction of the railway bank.
(404)	Deposit	Friable dark blueish grey sandy clay, with CBM fragments and a ceramic pipe cap within it.	/	Modern deposit, likely result of activities linked to construction of the railway bank.
(405)	Deposit	Gravel sand deposit		
(406)	Deposit	Loose, light brownish yellow gravelly sand	/	Modern deposit, likely result of activities linked to construction of the railway bank. To the northeast of the trench.
(407)	Deposit	Firm dark blueish grey clay	+0.24m in depth	Lowest natural deposit in test pit. Overlaid by (410).



Context Number	Context Type	Description	Dimensions	Interpretation
(408)	Deposit	Firm, mid reddish brown sandy clay with pockets of subrounded limestone cobbles	0.29m in depth	Natural deposit. Overlying (411) in test pit.
(409)	Deposit	Firm mid blueish grey clay with mid orangey brown mottling, and subrounded stones	0.50m in depth	Natural deposit. Overlaid by (411) in test pit.
(410)	Deposit	Firm, mid orangey brown clay	0.20m in depth	Natural deposit. Overlaid by (409) in test pit.
(411)	Deposit	Mottled mid blueish grey and mid orangey brown clay	0.33m in depth	Natural deposit. Overlying (409) in test pit.

Trench 5

Length: 50m Width: 1.80m Orientation: Northeast-Southwest

Minimum Depth: 0.40m Maximum Depth: 0.53m

Context Number	Context Type	Description	Dimensions	Interpretation
(500)	Topsoil	Friable dark orangey brown silty clay	0.41m in depth	Topsoil
(501)	Subsoil	Firm mid orangey brown clay subsoil	0.39m in depth	Subsoil
(502)	Natural Substrate	Firm light orangey brown clay	N/A	Natural Substrate

Trench 6

Length: 50m Width: 1.80m Orientation: Northeast-Southwest

Minimum Depth: 0.40m Maximum Depth: 0.53m

Context Number	Context Type	Description	Dimensions	Interpretation
(600)	Topsoil	Friable dark orangey brown silty clay.	0.33m in depth	Topsoil
(601)	Natural Substrate	Firm mid orangey brown clay.	N/A	Natural substrate
[602]	Cut	Cut of a sub ovate pit, with a gradual top break of slope and straight, steep sides, gradually breaking to a flat base.	0.36m in depth, +0.62m in width, 1.07m in length.	Pit with two fills (603) and (604).
(603)	Fill	Basal fill of pit [602]. Compact mid yellowish brown clayey sand.	0.06m in depth, +0.62m in width, 1.07m in length.	Basal fill of pit [602].



Context Number	Context	Description	Dimensions	Interpretation
(604)	Fill	Upper fill of pit [602]. Compact to firm dark greyish brown silty clayey sand with sparse charcoal flecks and moderate small subangular stones, <100m in size.	0.30m in depth, +0.62m in depth, 1.07m in length.	Upper fill of pit [602]. Most likely deliberate backfilling.
[605]	Cut	Cut of sub ovate pit feature with a gradual top break of slope and sloping, straight sides, breaking almost imperceptibly to a flat base.	0.20m in depth, 0.98m in width, 1.53m in length.	Pit, similar to [602].
(606)	Fill	Fill of [605]. Firm mid yellowish brown clayey sand.	0.07m in depth, 0.98m in width, 1.39m in length.	Basal fill of [605].
(607)	Fill	Fill of [605]. Firm dark brownish grey sandy silty clay, with moderate charcoal flecks and moderate small subangular stones, <100mm in size.	0.13m in depth, 0.98m in width, 1.53m in length.	Upper fill of [605]. Likely deliberate backfill.
[608]	Cut	Cut of a north-south orientated sub-rectangular feature with rounded corners with a gradual top break of slope and straight, sloping sides, breaking gradually again to a flat base	0.22m in depth, +1.80m in width, 3.35m in length.	Large pit, possible structure. This feature's full shape is unknown as the trench did not reveal its full extent, but its shallow depth, size and shape suggest it could be a sunken floor building
(609)	Fill	Fill of [608]. Compact to firm dark greyish brown clayey sandy silt with moderate charcoal chunks and flecks and moderate small subangular and subrounded stones, <100mm in size.	0.22m in depth, +1.80m in width, 3.35m in length.	Single fill of [608]. Most likely deliberate backfill.
[610]	Cut	Cut of a sub ovate pit with a gradual top break of slope and shallow concave sides, breaking almost imperceptibly to a flat base.	0.18m in depth, 0.92m in width, 1.12m in length.	Pit in the Northeastern end of the Trench.
(611)	Fill	Fill of [610]. Loose dark brownish grey clayey silty sand with	0.18m in depth, 0.92m in width,	Single fill of [610], most likely deliberate backfilling.



Context Number	Context Type	Description	Dimensions	Interpretation
		abundant medium subangular stones, <170mm in size and moderate charcoal flecks.	1.12m in length.	

Length: 50m Width: 1.80m Orientation: North-South

Minimum Depth: 0.40m Maximum Depth: 0.70m

Context Number	Context Type	Description	Dimensions	Interpretation
(700)	Topsoil	Friable dark brownish grey silty clay.	0.55m in depth	Topsoil
(701)	Subsoil	Firm mid yellowish grey silty sandy clay subsoil.	0.24m in depth	Subsoil
(702)	Natural Substrate	Compact mixed mid reddish brown and blueish grey clay.	N/A	Natural Substrate

Trench 8

Length: 50m Width: 1.80m Orientation: East-West

Minimum Depth: 0.40mm Maximum Depth: 0.60m

Context	Context	Description	Dimensions	Interpretation
Number	Туре	•		
(800)	Topsoil	Moderately compact dark	0.25m in	Topsoil
(866)	ropson	greyish brown silty clay.	depth	
		Moderately compact mid	0.30m in	Subsoil
(801)	Subsoil	orangey brown silty clay	depth	
		subsoil.		
(802)	Natural	Compact light orangey	N/A	Natural
(802)	Substrate	yellow clay.		Substrate
		Cut of a subcircular	0.14m in	Posthole.
		feature, with a moderate	depth, 0.38m	
[000]		top break of slope and	in width,	
[803]	Cut	moderately straight sides,	0.36m in	
		breaking gradually to a	length	
		concave base.		
		Fill of [803].	0.14m in	Single fill of [803].
		firm mid greyish brown	depth, 0.38m	Likely natural infilling.
(004)	E:II	silty clay with rare small	in width,	
(804)	Fill	subangular and	0.36m in	
		subrounded stones,	length	
		<30mm in size.		
[005]	Cut	Cut of a north-south	0.31m in	North-south orientated
[805]	Cut	orientated linear feature	depth, 0.85m	ditch.



Context Number	Context Type	Description	Dimensions	Interpretation
		with a gradual top break of slope and a sloping, straight side to the west; to the east, it was straight, dropping to a concave side. It broke almost imperceptibly to a concave base.	in width, +1.80m in length.	
(806)	Fill	Fill of [805]. Friable to firm mid brownish grey sandy silty clay with moderate small subangular and subrounded stones, <80mm in size		Single fill of [805]. Likely natural silting.

Length: 50m Width: 1.80m Orientation: North-South

Minimum Depth: 0.40m Maximum Depth: 0.80m

Context Number	Context Type	Description	Dimensions	Interpretation
(900)	Topsoil	Firm mid greyish brown silty clay	0.38m in depth	Topsoil
(901)	Subsoil	Firm mid brownish orange subsoil	0.14m in depth	Subsoil
(902)	Natural Substrate	Firm mid orangey brown clay	N/A	Natural Substrate
[903]	Cut	Cut of a subcircular feature, with a gradual top break of slope and gently sloping sides, breaking gradually to a near flat base	0.04m in depth, 0.52m in width, 0.43m in length	Posthole/pit cut into layer (918)
(904)	Fill	Fill of [903]. Firm dark blackish brown silty clay with large charcoal flecks throughout	0.04m in depth, 0.52m in width, 0.43m in length	Single fill of [903], likely deliberate backfilling
[905]	Cut	Cut of an ovate feature, with a sharp top break of slope and straight, near vertical sides, breaking sharply to a flat base	0.33m in depth, 0.34m in width, 0.32m in length	Posthole cut into layer (918)
(906)	Fill	Fill of [905], firm dark brownish grey silty clay with common charcoal flecks and degraded CBM	0.33m in depth, 0.34m in width, 0.32m in length	Single fill of [905], likely deliberate backfilling



Context Number	Context Type	Description	Dimensions	Interpretation
[907]	Cut	Cut of a circular feature with a gradual top break of slope and gently concave sides, breaking gradually to a concave base	0.07m in depth, 0.30m in width, 0.26m in length	Possible posthole or natural depression cut into layer (918)
(908)	Fill	Fill of [907], firm light brownish grey silty clay with rare charcoal inclusions	0.07m in depth, 0.30m in width, 0.26m in length	Single fill of [907], natural infilling
[909]	Cut	Cut of subcircular pit, with a sharp top break of slope and moderately sloped sides, breaking gradually to a concave base	0.15m in depth, 0.63m in width, 0.50m in length	Posthole/Pit cut into layer (918)
(910)	Fill	Fill of [909]. Firm dark blackish brown silty clay with large charcoal flecks	0.15m in depth, 0.63m in width, 0.50m in length	Single fill of [909], likely deliberate backfill
[911]	Cut	Cut of an ovate feature, with a moderate top break of slope and concave sides, breaking gradually to a concave base	0.07m in depth, 0.30m in width, 0.26m in length	Posthole cut into layer (918)
(912)	Fill	Fill of [911]. Firm mid brownish grey silty clay, with occasional charcoal fragments	0.07m in depth, 0.30m in width, 0.26m in length	Single fill of [911], likely natural infilling
[913]	Cut	Cut of a sub ovate feature, with a gradual top break of slope and gradual, concave sides, breaking gradually to a concave base	0.13m in depth, 0.45m in width, 0.80m in length	Posthole cut into layer (918)
(914)	Fill	Fill of [913]. Firm dark brownish grey silty clay with common charcoal inclusions	0.13m in depth, 0.45m in width, 0.80m in length	Single fill of [913], possibly deliberate backfill
[915]	Cut	Cut of northeast- southwest orientated linear feature, with a moderate top break of slope and moderately concave sides, breaking gradually to a straight, sloping base that was	0.57m in depth, +1.65m in width, +2m in length	Ditch filled by (916) and (917). Possible boundary ditch.



Context Number	Context Type	Description	Dimensions	Interpretation
		deepest at its southeastern edge		
(916)	Fill	Fill of [915]. Firm dark brownish grey silty clay with common charcoal inclusions	0.28m in depth, +1.65m in width, +2m in length	Upper fill of ditch [915].
(917)	Fill	Fill of [915]. Compact mid blueish grey silty clay with occasional charcoal fragments	0.29m in depth, +1.65m in width, +2m in length	Basal fill of ditch [915].
(918)	Deposit	Compact light brownish grey silty clay with rare charcoal fragments	0.35m in depth, +1.80m in width, 25m in length	Occupational layer
[919]	Cut	Cut of northwest- southeast orientated linear feature, with a moderate top break of slope and moderately concave sides, breaking gradually to a concave base.	0.14m in depth, 0.55m in width, +1m in length	Ditch cut into layer (918).
(920)	Fill	Fill of [919]. Firm dark brownish grey silty clay with common charcoal flecks.	0.14m in depth, 0.55m in width, +1m in length	Single fill of [919], possible deliberate backfilling.
{921}	Group number	Group number of six pits and/or postholes all cut into deposit (918).	N/A	Group including six features: [903], [905], [907], [909], [911], [913]

Length: 50m Width: 1.80m Orientation: Northwest-Southeast

Minimum Depth: 0.30m Maximum Depth: 1.15m

Context Number	Context Type	Description	Dimensions	Interpretation
(1000)	Topsoil	Firm mid brown silty clay	0.36m in depth	Topsoil
(1001)	Subsoil	Firm dark orangey brown clay subsoil	0.44m in depth	Subsoil
(1002)	Natural Substrate	Firm light orangey brown clay with areas of light greenish grey	N/A	Natural Substrate
[1003]	Cut	Cut of a sub ovate feature with a very gradual top break of slope and sloping, straight sides,	0.35m in depth, 1.20m in width,	Natural depression or modern feature



Context Number	Context Type	Description	Dimensions	Interpretation
		gradually breaking to a	6.40m in	
		flat base	length	
		Fill of [1003], very loose	0.35m in	Single fill of [1003], likely
		light greyish brown sandy	depth, 1.20m	natural infilling
(1004)	Fill	silt with common	in width,	
		subangular sandstone	6.40m in	
		cobbles, <100mm in size.	length	

Length: 50m Width: 1.80m Orientation: Northeast-Southwest

Minimum Depth: 0.39m Maximum Depth: 0.68m

Context Number	Context Type	Description	Dimensions	Interpretation
(1100)	Topsoil	Friable dark orangey brown silty clay	0.30m in depth	Topsoil
(1101)	Subsoil	Firm dark orangey brown clay	0.20m in depth	Subsoil
(1102)	Natural Substrate	Firm mid orangey brown clay	N/A	Natural Substrate

Trench 12

Length: 50m Width: 1.80m Orientation: Northwest-Southeast

Minimum Depth: 0.27m Maximum Depth: 1.06m

Context Number	Context Type	Description	Dimensions	Interpretation
(1200)	Topsoil	Loose mid greyish brown clayey silt	0.29m in depth	Topsoil
(1201)	Subsoil	Firm light yellowish brown silty clay subsoil	0.42m in depth	Subsoil
(1202)	Natural Substrate	Compact mid brownish grey sandy silty clay	N/A	Natural Substrate

Trench 13

Length: 50m Width: 1.80m Orientation: Northeast – Southwest

Minimum Depth: 0.54m Maximum Depth: 0.85m

Context	Context	Description	Dimensions	Interpretation
Number	Туре	Description		
(1300)	Topsoil	Firm mid greyish brown clayey silt	0.35m in depth	Topsoil
(1301)	Subsoil	Firm light brownish- reddish grey silty clay	0.26m in depth	Subsoil



Context Number	Context Type	Description	Dimensions	Interpretation
		with rare gravel and chalk inclusions subsoil		
(1302)	Natural Substrate	Compact mid brownish yellow sandy clay with chalk inclusions and patches of mid brown clay	N/A	Natural Substrate



ANNEX 2: CONCORDANCE OF FINDS

Feature	Context	Trench	Description	Spot Date (Pot	Pot	Pottery	СВМ	A.Bone	Other Material	Other	Other (g)
				Only)	Qty	(g)	(g)	(g)		Qty	
104	105	1	Fill of Ditch				22		S.Flint	2	10
106	107	1	Fill of Pit	1st C AD	2	18			B.Flint		13
108	109	1	Fill of Ditch						S.Flint	1	8
201	201	2	Subsoil	1st C AD	1	7					
408	408	4	Layer				17				
600	600	6	Topsoil						S.Flint	1	25
605	607	6	Upper Fill of Pit	1st C AD	16	184					
608	609	6	Fill of Pit	1st C AD	3	10		6			
610	611	6	Fill of Pit	1st C AD	4	396					
701	701	7	Subsoil	Roman	5	12					
901	901	9	Subsoil						S.Flint	3	69
901	901	9	Subsoil						Slag	13	464
903	904	9	Fill of Pit	1st C AD	9	22					
905	906	9	Fill of Post Hole	1st C AD	2	8	140				
909	910	9	Fill of Post Hole	Mid/Late 1st C AD	5	6			Fe Nail (SF2)	2	10
913	914	9	Fill of Pit				4				
915	916	9	Lower Fill of Ditch	Mid/Late 1st C AD	70	1102	97		Pottery (SF6)		
915	916	9	Lower Fill of Ditch						Fe Nail (SF7)	1	9
915	916	9	Lower Fill of Ditch						Fe Nail (SF8)	1	5
915	916	9	Lower Fill of Ditch						Fe Nail (SF9)	1	3
915	916	9	Lower Fill of Ditch						Fe Nail (SF10)	1	7
915	916	9	Lower Fill of Ditch						Slag	2	173
915	917	9	Upper Fill of Ditch	Mid/Late 1st C AD	35	692	78				
918	918	9	Layer						Fe Nail (SF13)	1	7
919	920	9	Fill of Linear	1st C AD	10	62	3				
1201	1201	12	Subsoil	1st C AD	6	30	33		S.Flint	1	5
1201	1201	12	Subsoil						Slag	2	9



U/S	U/S	9	Unstratified - T9					S.Flint (SF1)	1	5
U/S	U/S		Unstratified	Roman	1	23		Pottery (SF12)		

Note: SFs 3, 4, 5, 11 and 14 discarded as natural.

Catalogue of the animal bone recovered from GM12014

Listed in context order.

Key:

NISP = Number of Individual Species elements Present

Measureable following Von Den Driesch, 1976.

Countable following Davis, 1992.

Context	Feature Type	Trench	Ctxt Qty	Wt (g)	Species	NISP	Adult	Juvenile	Neonatal	Element range	Measurable	Countable	Butchering	Gnaw	Burnt	Comments
609	Pit 608	6	9	6g	Pig/Boar Mammal	7	1			Two fragments of tusk Fragments						Older juvenile/young adult animal



ANNEX 3: METALWORK CATALOGUE

Small Finds No.	Sample No.	Feature	Context	Trench	Feature description	Material	Object ID	Functional	Object count	Frag. Count	Weight (g)	Description	Length (mm)	Width (mm)	Thickness (mm)	Period	Extent
	8	905	906	9	Fill of Post Hole	Iron	Hobnail	Personal adornment	1	1	1.5	Pyramidal head with tapering and curved shank, square in section.	15.4	11.3	3.2	Roman	Incomplete
	8	905	906	9	Fill of Post Hole	Iron	Hobnail	Personal adornment	1	1	1.5	Pyramidal head with tapering and truncated shank, square in section.	13.6	11.6	3.3	Roman	Incomplete
	8	905	906	9	Fill of Post Hole	Iron	Hobnail	Personal adornment	1	1	1	Possible pyramidal head and stub of shank, square in section.	10.9	13.5	2.9	Roman	Incomplete
N.	8	905	906	9	Fill of Post Hole	Iron	Nail	Fastenings & fittings	1	2	5.8	Conjoining fragments of nail with flat, sub-square head and tapering and truncated shank, square in section.	39.4	17.7	6.9		Incomplete
	8	905	906	9	Fill of Post Hole	Iron	Nail	Fastenings & fittings	1	1	7.5	Truncated and tapering shank of nail, bent at tip, rectangular in section.	38.8	12.9	7.7		Incomplete
	8	905	906	9	Fill of Post Hole	Iron	Nail	Fastenings & fittings	1	1	0.9	Truncated and tapering shank of nail, bent in centre, rectangular in section.	14.1	6.6	5.2		Incomplete
2		909	910	9	Fill of posthole	Iron	Nail	Fastenings & fittings	1	3	10.3	Conjoining fragments of nail with flat, sub-circular head and truncated shank, square in section.	47.3	17.9	7.7		Incomplete
	13	909	910	9	Fill of Post Hole	Iron	Nail	Fastenings & fittings	1	2	6.3	Conjoining fragments of nail with flat sub-hexagonal head, tapering and truncated shank, square in section.	34.2	18.1	6.4		Incomplete
5	13	909	910	9	Fill of Post Hole	Iron	Nail	Fastenings & fittings	1	1	0.4	Fragment of tapering shank, square in section.	14.7	3	2.5		Incomplete
	13	909	910	9	Fill of Post Hole	Iron	Sheet	Unclassified	2	2	0.7	Fragments of sheet iron, one piece crescent shaped.	13.8	6.3	1.8		Incomplete
×	16	915	916	9	Lower Fill of Ditch	Iron	Hobnail	Personal adornment	1	1	1.6	Pyramidal head with tapering and truncated shank, square in section.	13.5	10.4	4.2	Roman	Incomplete
	16	915	916	9	Lower Fill of Ditch	Iron	Hobnail	Personal adornment	1	1	1.6	Pyramidal head with tapering and truncated shank, square in section.	16.3	10.6	3.2	Roman	Incomplete
	16	915	916	9	Lower Fill of Ditch	Iron	Hobnail	Personal adornment	1	1	1.6	Pyramidal/domed head with tapering and truncated shank, square in section.	14.2	10.2	3.5	Roman	Incomplete



7	915	916	9	Lower Fill of Ditch	Iron	Nail	Fastenings & fittings	1	1	8.8	Flat, sub-oval head with tapering and truncated shank, square in section. Bent towards tip.	39.4	18	8.1	Incomplete
8	915	916	9	Lower Fill of Ditch	Iron	Nail	Fastenings & fittings	1	1	4.7	Flat, sub-oval head with tapering and truncated shank, square in section. Bent in the centre of the shank.	33	15.2	6.7	Incomplete
9	915	916	9	Lower Fill of Ditch	Iron	Nail	Fastenings & fittings	1	1	3.4	Tapering and truncated shank of a nail, rectangular in section.	34.8	9	6.8	Incomplete
10	915	916	9	Lower Fill of Ditch	Iron	Nail	Fastenings & fittings	1	1	7.4	Flat, circular head with tapering and truncated shank, square in section.	34.6	12.4	9.1	Incomplete
13	918	918	9	Layer	Iron	Nail	Fastenings & fittings	1	1	7.4	Flat, circular head with tapering and truncated shank, square in section.	38.4	18.7	8.4	Incomplete



ANNEX 4: PALAEOENVIRONMENTAL DATA

Results from the assessment of bulk sample light fractions from Bank Farm. Abbreviations: E/S = emmer/ spelt wheat (*Triticum dicoccum/ spelta*); Trit = wheat (*Triticum* sp.); Oat (*Avena* sp.); NFI = not formally identified (indeterminate cereal grain); GB = glume base; SF = spikelet fork; RW = small diameter roundwood. X=Present; XX=Common; XXX=Abundant.

								c	arboni	sed cereals	C	arbonised non- cereal taxa	Carb	c	harcoal		Molluscs		Con	tamin	ants		
Sample number	Context	Feature	Description	Trench	Spot date	Volume (litres)	Flot (g)	Cereal grains	Cereal chaff	Notes	Seeds	Notes	Carbonised hazelnut shell	Charcoal>2mm	Notes	Molluscs	Notes	Roots	Molluscs	Modern seeds	Insects	Earthworm capsules	Other remains
1	304	303	Fill of Gully	3	_	10	1	_	_	-	_	-	_	_	_	_	-	XX	_	Х	х	_	_
2	306	305	Fill of Gully	3	-	10	1	-	-	-	-	-	-	-	-	-	-	XX	-	Х	Х	-	-
3	308	307	Fill of Pit	3	-	10	30	-	-	-	-	-	_	xxx	Quercus sp. Incl. tyloses	-	-	XX	-	Х	Х	-	-
4	407	_	Layer in Test Pit	4	-	10	<1	-	_	-	-	-	_	_	-	-	-	Х	-	Х	-	-	-
5	105	104	Fill of Linear	1	-	40	8	-	-	-	-	-	-	Х	-	-	-	XX	-	х	Х	Х	-
6	107	106	Fill of Pit	1	1st C AD	20	3	-	-	-	-	-	-	Х	-	-	-	XX	-	XX	-	-	-
7	109	108	Fill of Ditch	1	-	40	4	_	_	-	_	-	-	Х	-	-	-	XX	-	XX	-	-	-
8	906	905	Fill of Posthole	9	1st C AD	40	5	-	-	-	Х	<i>Trifolium</i> sp. Type (1)	-	XX	Quercus sp.	-	-	Х	-	Х	-	-	-
9	908	907	Fill of Posthole	9	-	5	<1	-	-	-	-	-	-	-	-	-	-	х	-	х	-	-	-
10	912	911	Fill of Pit	9	-	5	1	-	-	-	-	-	-	Х	-	-	-	XX	-	Χ	-	-	-
11	914	913	Fill of Pit	9		20	4	_		_			_	XX	Quercus sp. Incl. RW			xx	_	_	_		
12	904	903	Fill of Pit	9	1st C AD	10	3	-	-	-	-	_	-	X	-	-	-	XX	-	-	-	-	_



010	000	Fill of	0	Mid/late	40		V	VV	Trit (4), NFI (2), Spelt GB (1), E/S GB (6), E/S SF				VV	Quercus sp., Diffuse			Y		v	v		
				ISC C AD			Λ	XX	(2)	-	-	-		porous	-	-		-		۸	-	-
804	803		8	-	10	<1	-	-	-	-	-	-	Х	-	-	-	XX	-	Х	-	-	-
806	805	Fill of Ditch	8	-	40	8	Х	-	NFI (1)	-	-	-	Х	-	-	-	XX	-	Х	Х	-	-
916	915	Fill of Ditch	9	Mid/late 1st C AD	40	12	х	х	E/S (1), Trit (1), Oat (1), E/S GB (1)	х	Amaranthaceae (1)	-	XX	Quercus sp., Diffuse porous	1	-	XX	1	1	1	1	-
604	602	Fill of Pit	6	-	20	2	XX	-	E/S (6), Trit (6), NFI (3)	Х	Chenopodium sp. (3)	-	х	-	-	-	XX		Х	Х		-
607	605	Fill of Pit	6	1st C AD	20	2	XX	-	E/S (3), Trit (7), NFI (6)	х	Large Poaceae (1)	-	Х	-	Х	<i>Vallonia</i> sp.	XX	-	Х	Х	Х	-
609	608			1st C AD	60	6	-	-	-	Х	Large Fabaceae (1), Linum usitatissimum (1), Anthemis cotula (1)	-	xx	Quercus sp., Diffuse porous	Х	Vallonia sp.	XX	Х	Х	х	х	-
	916 604 607	804 803 806 805 916 915 604 602 607 605	910 909 Posthole 804 803 Fill of Pit 806 805 Ditch 916 915 Ditch 604 602 Fill of Pit 607 605 Fill of Pit	910 909 Posthole 9 804 803 Fill of Pit 8 806 805 Ditch 8 916 915 Ditch 9 604 602 Fill of Pit 6 607 605 Fill of Pit 6	910 909 Posthole 9 1st C AD 804 803 Fill of Pit 8 - 806 805 Ditch 8 - 916 915 Ditch 9 Mid/late 916 915 Ditch 9 1st C AD 604 602 Fill of Pit 6 - 607 605 Fill of Pit 6 1st C AD 609 608 Fill of Pit 6 1st C AD	910 909 Posthole 9 1st C AD 40 804 803 Fill of Pit 8 - 10 806 805 Ditch 8 - 40 916 915 Ditch 9 1st C AD 40 604 602 Fill of Pit 6 - 20 607 605 Fill of Pit 6 1st C AD 20 609 608 Fill of Pit 6 1st C AD 60	910 909 Posthole 9 1st C AD 40 6 804 803 Fill of Pit 8 - 10 <1	910 909 Posthole 9 1st C AD 40 6 X 804 803 Fill of Pit 8 - 10 <1	910 909 Posthole 9 1st C AD 40 6 X XX 804 803 Fill of Pit 8 - 10 <1	910 909 Posthole 9 Mid/late 1st C AD 40 6 X XX (2) 804 803 Fill of Pit 8 - 10 - - - 806 805 Ditch 8 - 40 8 X - NFI (1) 916 915 Ditch 9 1st C AD 40 12 X X E/S (1), Trit (1), Oat (1), E/S GB (1) 604 602 Fill of Pit 6 - 20 2 XX - E/S (6), Trit (6), NFI (3) 607 605 Fill of Pit 6 1st C AD 20 2 XX - (7), NFI (6)	910 909 Posthole 9 Mid/late 1st C AD 40 6 X XX (2) - 8804 803 Fill of Pit 8 - 10 <1	Pill of	Second	910 909 Posthole 9 1st C AD 40 6 X XX (2) XX 804 803 Fill of Pit 8 - 10 <1 X 806 805 Ditch 8 - 40 8 X - NFI (1) X 816 Pill of Pit 6 - 20 2 XX - (5), NFI (3) X Sp. (3) - X 817 Pill of Pit 6 1st C AD 20 2 XX - (7), NFI (6) X (1) - X 818 Pill of Pit 6 1st C AD 60 6 X 819 Posthole 9 1st C AD 60 6 X 820 Rill of Pit 6 1st C AD 60 6 X 830 Rill of Pit 6 1st C AD 60 6 6 X 830 Rill of Pit 6 1st C AD 60 6 6 X 830 Rill of Pit 6 1st C AD 60 6 6 X 830 Rill of Pit 6 1st C AD 60 6 6	Sp., Diffuse Sp.,	Sp. Sp. Diffuse Diffuse Sp. Diffuse Diffuse	Fill of Posthole 9	Fill of Fill of Posthole 9	Fill of Posthole Posthole	Fill of Fill of Posthole 9	Second S	Second



ANNEX 5:

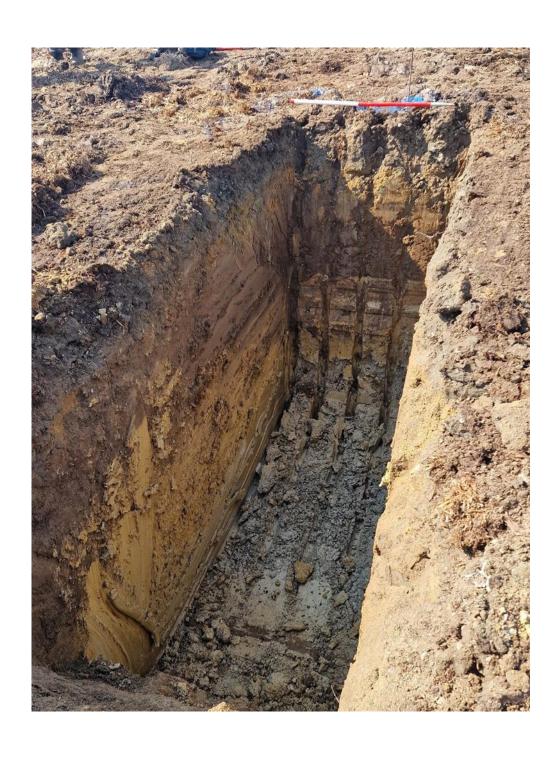
OBSERVATIONS ON A SERIES OF TEST PITS:

Observations on a series of test pits:

Bank Solar Farm (GM 12014)



July 2023



1.0 Background information

The author was requested by of Wardell Armstrong to undertake a Palaeolithic/geoarchaeological test pitting assessment for part of a proposed solar array at Bank Farm, Ashford, Kent (NGR 606848 138275).

This assessment strategy involves a phase of investigation of The Site prior to site development. It follows current best practice and appropriate national guidance including:

- NPPF, National Planning Policy Framework (2023)
- CIfA Standards and Guidance for Archaeological Excavation (2020)
- Management of Research Projects in the Historic Environment (MoRPHE)

2.0 Site location and description

The site lies on the north side of the East Stour River on sloping ground from just above 60m O.D. to less than 50m O.D. close to the river (Figure 1). The site lies immediately south of High Speed One railway (Channel Tunnel Rail Link).

3.0 Topography and geology

The site forms a sloping valley dipping to the southeast from above 60m O.D. to below 50m O.D.

Bedrock consists of Hythe Formation at the top of slope, with Atherfield Clay Formation in mid slope and the base of the slope consisting of Weald Clay (Figure 1). The Hythe Formation in this part of the Weald consists of alternating sandy limestones and mudstones. This contrasts with the Atherfield Clay Formation which is typically a sandy mudstone. Finally, the Weald Clay Formation consists of mudstone and sandstone.

The only superficial deposits mapped in the area consist of alluvium at the base of the slope consisting of clays and silts, with locally sands (Figure 1). Older Pleistocene sediments, River Terrace Deposits 4 are mapped 1.5km to the north of the present site while Head deposits are present about 2km to the east of the site.

4.0 Archaeological Requirement

Based on the information for The Site and its surroundings a program of investigation prior to development of the site was outlined. This represented the first Palaeolithic/Palaeoenvironmental assessment of The Site and test pitting was undertaken in order to better understand nature, age and Palaeolithic archaeological and Pleistocene/Holocene palaeoenvironmental potential of the sediments prior to development.

The purpose of these works were to:

- To determine the extent, depth, condition, quality and character of buried deposits;
- To identify whether or not Palaeolithic archaeological material is present in any deposits;
- To recover samples suitable for palaeoenvironmental reconstruction;
- To recover stratified dating evidence.
- To relate the sediments at the site to the local stratigraphic framework

5.0 Fieldwork methodology

Four test pits were identified for excavation across The Site within the footprint of the trenches excavated for Holocene archaeological assessment (Figures 1-5). Each test pit was dug by a mechanical excavator with a 1-2m wide. Due to the hard nature of the subsoil a toothed bucket was required for excavation. Each test pit was one bucket-width wide, 3–4m long and up to 2m deep. Excavation ceased when it was considered that the sediments were bedrock deposits.

Each test pit was taken down in horizontal spits of 25cm, respecting the interface between sedimentary units when unit changes were encountered. The work was directed by a recognised specialist in Palaeolithic archaeological/Pleistocene geological excavation (the author) with experience of recording and interpreting Pleistocene sediments. Sediments were recorded as excavation progressed following standard descriptive practices. Test pits were only entered to a maximum safe depth (usually c. 1.2m, but less where loose sands/gravel were present) to record the upper stratigraphy. After excavation has progressed beyond this depth, recording took place without entering the trench. Records are presented in Appendix 1.

Provision was made in the procedure to sample spits with 100 litres of deposit. When taken these were to be numbered, their position in the stratigraphic sequence recorded, and set aside at regular 25cm intervals through gravelly deposits as excavation progressed for sieving. Sieving was to be conducted through a 2cm mesh for recovery of lithic artefacts and faunal remains.

The presence/potential for palaeo-environmental micro-biological evidence such as pollen, insects, molluscs and small vertebrates was assessed for each sediment unit by field inspection. Consideration was also given to the suitability of any sediment units encountered for optically stimulated luminescence dating (OSL) or Amino Acid Geochronology.

A representative section from each test pit was photographed (Figures 2-5) once excavation has reached its full depth.

Each test pit was dug in turn, and backfilled level with the pre-existing ground surface as soon as possible following excavation and the completion of recording. No test-pits were left open untended or overnight.

6.0 Results

Test pitting was undertaken on 21/7/23. Four test pits were dug (Figures 1, 2-5; Appendix 1). Full details of all test pits are given in Appendix 1 and a photographic record of each test pit is given in the photographic record.

A profile along a single line of test pits is provided in Figure 6. This is representative of the full set of test pit logs and shows the following main features:

- Bedrock was attained in all test pits.
- Gravels or gravelly sands were only present as very ephemeral layers in test pits 1, 2 and 4.
- Pleistocene sediments, where present were fine grained in the most, thin and probably discontinuous down slope and represent poorly developed Head/Solifluction deposits.
- No substantial body of Pleistocene sediments were encountered.
- A possible palaeosol was encountered in TP 2 beneath the Head/Solifluction deposits.
- No suitable sediments were encountered for sieving.
- No artefacts were recovered.

7.0 Conclusions

The purpose of these works was to:

- To determine the extent, depth, condition, quality and character of buried deposits. Very little material was present in the test pits that were not bedrock. Where present sediments present represent Head deposits of unknown age. A possible palaeosol was present in TP 2.
- To identify whether or not Palaeolithic archaeological material is present in the gravels. No artefacts were recovered during excavation. No suitable sediments were found for sieving.

- *To recover samples suitable for palaeoenvironmental reconstruction.* No sediments suitable for palaeoenvironmental assessment were recovered.
- *To recover stratified dating evidence.* Sediments suitable for dating were not encountered.

Trench/Test pit	TP 1	Date excav	rated	21/7/23
Grid reference	606753/138338	Datum		55.82 m O.D.
Depth below	Lithology		Context	Environment of
ground			Number	deposition
surface (m)				
0.00 - 0.20	Topsoil			
	diffuse contact			
0.20 - 0.50	Brown to grey-brown very	fine sand		Slopewash/Head
	and silt. Structureless and lo	oose.		(Holocene)
	abrupt contact			
0.50 - 0.80	Yellow-brown to reddish-b	rown clay		Slopewash/Head
	silt. Very compact and firm			(Pleistocene)
	of pale yellow silt. Structure	eless.		
	abrupt contact			
0.80 - 0.92	Strong reddish-brown clay			Possible palaeosol
	strong red mottles. Structu	reless and		(Pleistocene)
	very compact.			
	sharp contact			
0.92 -	Grey clay.			Bedrock (Atherfield
				Clay Formation)
	base of test pit 1.80m			

Trench/Test pit	TP 2	Date excav	/ated	21/7/23	
Grid reference	606767/138384	Datum		59.14m O.D.	
Depth below	Lithology		Context	Environment	of
ground			Number	deposition	
surface (m)					
0.00 – 0.30	Green slightly silty very fine and compact.	sand. Firm		Topsoil	
	sharp contact				
0.30 - 0.40	Yellowish-brown mediur	n sand.		Possible	made
	Structureless and unconsolidatedsharp contact	loose,		ground	
0.40 - 1.40	Brown sandy clay. Structu	reless and		Heavily weath	nered
	cohesive. Red-brown throughoutsharp contact	mottling		bedrock	
1.40 -	Pale grey clay with yellow-re	ed mottles.		Unweathered	
	Dense and compact. Struct	ureless.		bedrock (Atl Clay Formation	
	2.20m base of test pit				

Trench/Test pit	Tr 3	Date excav	ated	21/7/23
Grid reference	606921/138325	Datum		48.40m O.D.
Depth below	Lithology		Context	Environment of
ground			Number	deposition
surface (m)				
0.00 - 0.30	Topsoil			
	diffuse contact			
0.30 - 0.78	Pale yellow clay-silt with	some very		Weathered bedrock
	fine sand. Occasional blac	k mottles.		mixed with
	Dense and compact, structu	reless.		Pleistocene Head
	diffuse contact			
0.78 - 1.46	Yellow-brown to grey-br	own clay.		Weathered bedrock
	Dense and compact. Occas	ional black		
	mottles. White precipitate	in places.		
	Structureless and compact.			
	diffuse contact			
1.46 -	Very dark grey clay. Structu	reless and		Bedrock (Weald Clay
	compact.			Formation)
	base of test pit 1.70m			

Trench/Test pit	Tr 4	Date excav	rated	21/7/23	
Grid reference	606786/138294	Datum		50.41m O.D.	
Depth below	Lithology		Context	Environment	of
ground			Number	deposition	
surface (m)					
0.00 – 0.30	Topsoil diffuse contact				
0.30 – 0.47	Pale grey clay-silt. Structu compact. Yellow-brown r placesdiffuse contact			Head	
0.47 – 1.00	Yellow to strong yellow s compact and firm. Str Black manganese or charcos sharp contact	uctureless.		Head	
.00 – 1.07	White sandy clayey gravel. <1cm, sub-angular in shap supported. Compact and firsharp contact	e. Matrix		Solifluction Hea gravel	d
1.07 – 1.21	Dark grey compact clay. Strsharp contact	uctureless.		Head	
1.21 – 1.27	Strong reddish-brown grav <1cm, sub-angular and very sharp contact			Solifluction gravel	Head

1.27 -	Grey-brown clayey silt becoming clay with depth. Colour becoming dark grey with depth.	Bedrock (Atherfield Clay Formation)
	base of test pit 2.00m	

Appendix 1

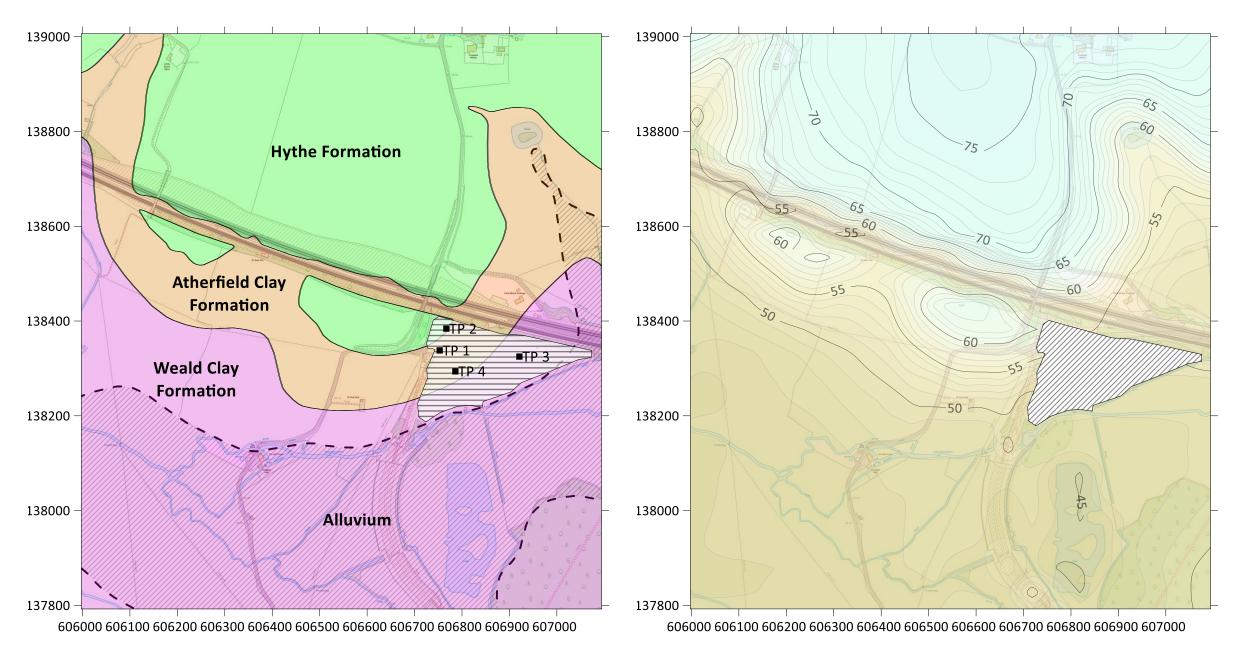


Figure 1. A: Bedrock and superficial sediment maps of site (site hatched area). B: Topography for the site.

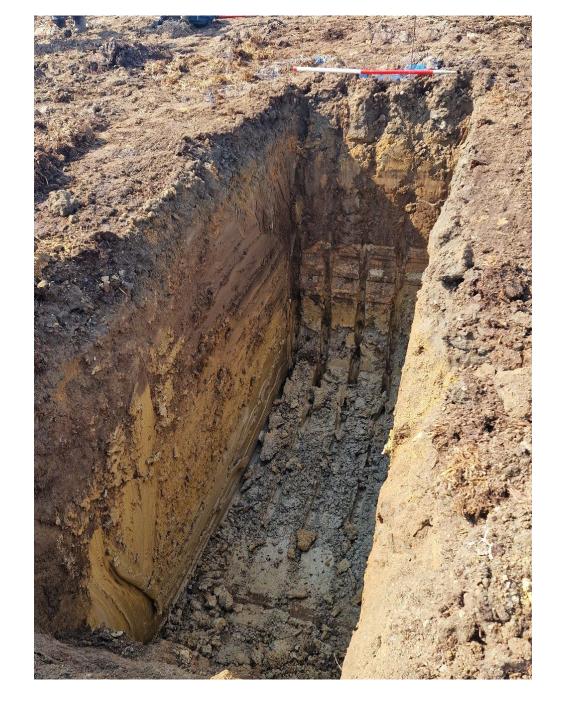


Figure 2. Trench 1 (South).





Figure 3. A: Trench 1 (North), possible palaeosol. B: fully excavated.



Figure 4. Trench 3.

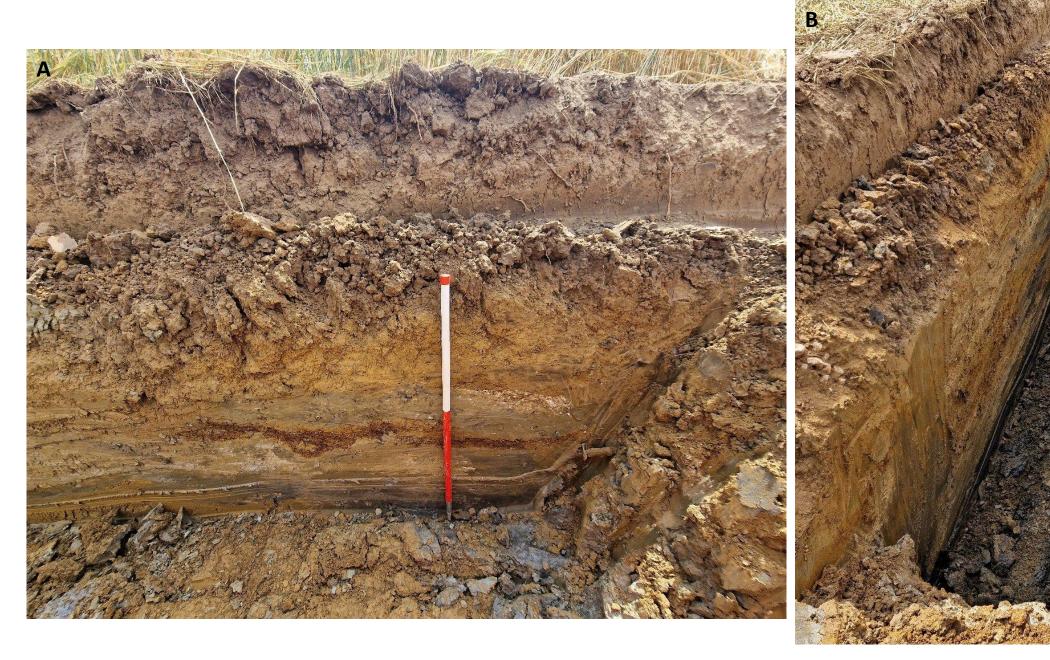


Figure 5. A: Trench 4, possible Head deposits. **B:** fully excavated.

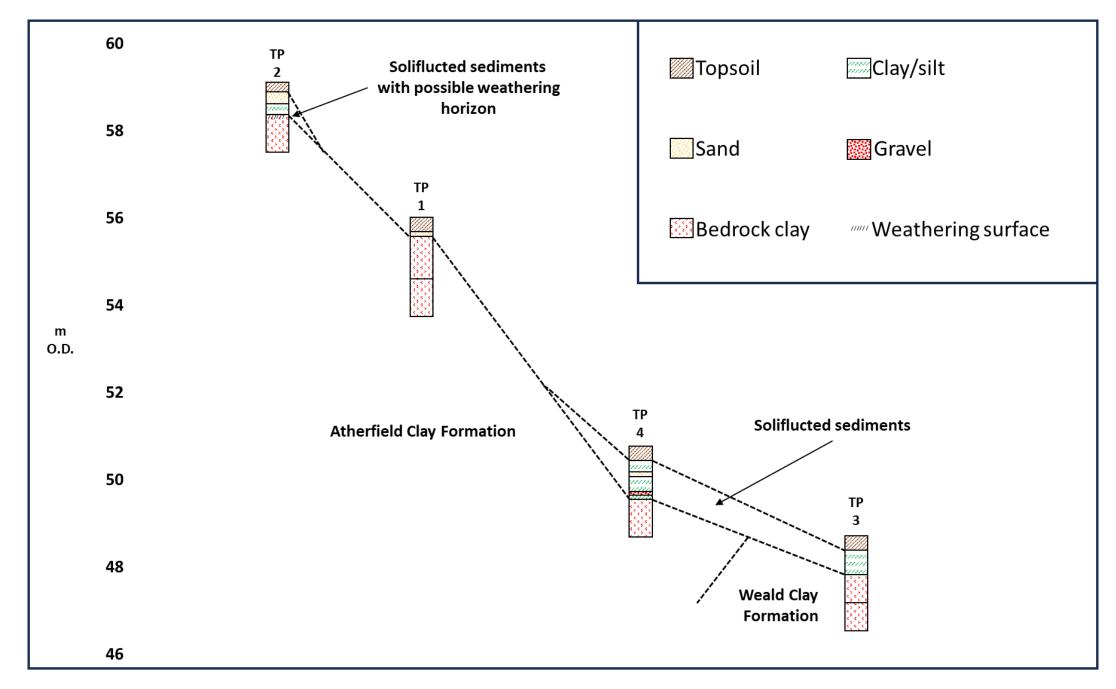


Figure 6. Test pit profile at site.



ANNEX 6:

PLATES



Picture Taken: 24/07/2023

Plate No. 1 Title: Trench 1 overview, looking North. 2x1m scale.



Picture Taken: 24/07/2023

Plate No. 2 Title: West facing representative section of Trench 1, 1m scale.



Client: EPL 001 Limited

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Picture Taken: 24/07/2023

Plate No. 3 Title: Backfilled Trench 1, looking North.



Picture Taken: 24/07/2023

Plate No. 4 Title: East facing section of ditch [104], 0.40m scale.



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Picture Taken: 24/07/2023

Plate No. 5 Title: North facing section of pit [106], 0.40m scale.



Picture Taken: 24/07/2023

Plate No. 6 Title: South west facing section of ditch [108], 0.40m scale.



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