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**ARCHAEOLOGICAL  
DESK-BASED  
ASSESSMENT**

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**MAGNA PARK EXTENSION:  
HYBRID APPLICATION  
LUTTERWORTH  
LEICESTERSHIRE**

**PLANNING APPLICATION REFERENCE:  
15/01531/OUT**

**SEPTEMBER 2015  
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Planning • Heritage

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**Local Planning Authority:  
Harborough District Council**

**Site centred at:  
SP 4998 8606**

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## **Executive Summary**

CgMs Consulting have been commissioned by IDI Gazeley Ltd to prepare an archaeological desk-based assessment in support of an outline planning application for c.227ha of land, proposed for an extension to Magna Park, Lutterworth, Leicestershire (Figure 1).

The assessment provides a description of archaeological assets potentially affected by the development of the study site and addresses the information requirements of Government's National Planning Policy Framework (particularly para 128).

This assessment considers the potential direct impact of the proposed development on below ground archaeology within the development site and the impact of the development on the significance of the Scheduled Monument within the site and Scheduled Monuments in the surrounding area through change within their settings. A separate Built Heritage Assessment has been prepared to accompany the application (CgMs 2015 ref: RU/JCG18281/10) and this should be consulted for a detailed assessment of the potential sensitivity of built heritage assets within the site and wider search area.

There will be no direct impact upon the Scheduled Monument on the study site. Careful consideration has been given within the design of the proposed development to the need to safeguard the setting of the Scheduled Monument and secure its viable long-term preservation and active management.

Geophysical, fieldwalking, trial trenching and metal detecting surveys have been commissioned in support of the current application (Appendices 2, 3, 7, 8 and 9). These surveys, undertaken in advance of the determination of the application between September 2014 and January 2016 have identified 25 hitherto unknown Archaeological Assets (anomalies or groups of anomalies) (Appendices 2, 3, 7, 8 and 9). The trenching has largely confirmed the veracity of the geophysical survey results. The site contains one Iron Age settlement, an Iron Age trackway and ditches, three probable early Roman settlements (one of which may have originated in the Iron Age), early Roman peripheral field systems, undated but probably Roman ditches, post-holes and pits and a Medieval trackway and ditches associated with the deserted Medieval village of Bittesby.

The results of the geophysical survey, fieldwalking and trial trenching have confirmed the presence of a series of archaeological features located on the ridge to the east of the Scheduled Monument (Assets A5, A7, A8 and A9) dating from the early Roman period – no evidence of Medieval features was revealed in this area of the site. These heritage assets are currently threatened by continued arable cultivation. It is proposed to preserve these features within an area given over to Meadowland, which will be a positive impact of the proposed

scheme.

A separate Landscape and Visual Impact Assessment has been prepared in support of the application and this should be consulted for a consideration of the effect of changes to the views from the Scheduled Monument. The magnitude of development impact upon the setting of the Scheduled Monument is assessed as Medium, because of the change to the existing setting of the newly discovered assets on the ridge which demonstrably make a positive contribution to the Monument's setting. The proposed development will not impact upon the key values (aesthetic, illustrative, historical and evidential) that contribute to the significance of the Monument, nor the newly discovered heritage assets on the ridge and therefore, the proposed development clearly does not constitute 'substantial harm' (NPPF para 134). Tim Allen, Inspector of Ancient Monuments for Historic England, in his consultation response to the planning application, has confirmed:

'The proposed outline element of this hybrid application, has through a process of pre-application and discussion and pre-determination archaeological investigation, arrived at a scheme which preserves under grass the rising ground to the east of the medieval village (as visual and archaeological historic landscape setting) and retains views and connectivity along the Claybrook Stream. These measures arguable constrain the harm of the scheme to a level below substantial harm as set out in the National Planning Policy framework (Para 132). However as set out in paragraphs 132 and 134 all harm must be clearly justified and weighed against public benefits.' (23<sup>rd</sup> October 2015).

This assessment has also considered any impact upon the Scheduled Monuments within a surrounding 2.5km radius of the study site. The 'Moat, fishponds and shifted village earthworks at Ullesthorpe' (Reference 1010300) is located c.480m north of the study site and is partially inter-visible with the study site. The magnitude of development impact upon the setting of the Scheduled Monument at Ullesthorpe is assessed as Low. The other Scheduled Monuments within the assessment area are the 'Moated site, enclosure and trackway at Claybrooke Parva' (Reference 1010191), which is screened from the site by the local topography and mature planting and the 'Roman town at High Cross' (Reference 1003566), located c.2.1km north-west of the study site. The distance of these Monuments from the study site means they have no bearing upon an assessment of the site's archaeological potential. There will be no impact upon the heritage significance of these Monuments.

The Principal Archaeologist for Leicestershire County Council has confirmed that the results of the fieldwork surveys will provide sufficient information to allow the Local Planning Authority to make an informed recommendation. It is suggested that this is likely to be a recommendation

that the heritage interest of the site can be safeguarded through an appropriately worded planning condition.

## **1.0 INTRODUCTION AND SCOPE OF STUDY**

1.1 This archaeological desk-based assessment of land at Magna Park, Lutterworth, Leicestershire, has been researched and prepared by CgMs Consulting on behalf of IDI Gazeley. It considers the potential direct and indirect impact that construction and use of the land for distribution warehouses, a logistics academy and associated infrastructure at Magna Park, Leicestershire will have on the significance of designated and non-designated heritage assets within the site and surrounding search area.

1.2 The site, also referred to as the study site, is located along the A5, approximately 3km west of Lutterworth. The site has been separated into two zones. Zone 1 of the proposed development site comprises approximately 227 hectares of land centred at National Grid Reference SP 4998 8606 (Fig 1). This zone is bounded by the A5 to the south-west, by the property boundary of White House Farm to the west, outlying fields to the north and Mere Road and Magna Park Lutterworth distribution centre to the east. Zone 2 is approximately 6.7ha of land, located beyond the existing Magna Park as known as Land at Plot 7300. This land is bounded by the A4303 Coventry Road and Plot 7100 of Magna Park to the north, Plot 7200 to the west and open countryside to the south and east.

1.3 This desk-based assessment deals predominantly with Zone 1. The results of the conditioned phase of trial trenching for Zone 2 (Plot 7300, Magna Park, Lutterworth) have been submitted separately to the Local Planning Authority. There will be no further requirement for any archaeological work within Zone 2.

### **1.4 Scope of Study**

1.4.1 The objectives of the report can be summarised as follows:

- To assess the potential impact of the proposed development on archaeological features within the development site, to assess the potential significance of that archaeology, and to determine whether further measures might be required to safeguard its heritage significance;
- To assess the potential impact of the proposed development on the significance of heritage assets on the site and in the surrounding area due to changes in their settings.

1.4.2 This assessment has been prepared with regard to Government's National Planning Policy Framework, to identify and provide a description of the significance of heritage assets within the site and the likely effects of future development. This study

concentrates on identifying any archaeological interest in the site and assessing the potential impact of development on the archaeological significance of identified assets.

- 1.4.3 The assessment comprises an examination of evidence in the Leicestershire and Rutland Historic Environment Record (LHER), the Warwickshire Historic Environment Record (WHER), Leicestershire and Rutland Archives and online resources. Information regarding Scheduled Monuments, Registered Parks and Gardens, Registered Battlefields and Listed Buildings was obtained from Historic England's *National Heritage List for England* and information on Conservation Areas was sought from Harborough District Council. The assessment incorporates published and unpublished material and charts historic land-use through a map regression exercise. Site inspections were undertaken on 14<sup>th</sup> and 18<sup>th</sup> July 2014, 13<sup>th</sup> and 22<sup>nd</sup> October 2014, the 22<sup>nd</sup> April 2015 and 21<sup>st</sup> July 2015.
- 1.4.4 A detailed assessment of Built Heritage assets including the Listed Buildings, Registered Parks and Gardens and Conservation Areas within the wider study area has been undertaken within a separate report (CgMs 2015; report number RU/JCG18281/10).
- 1.4.5 A site meeting between representatives from English Heritage (now Historic England) (Tim Allen), Leicestershire County Council and Harborough Borough Council (Richard Clark), Gazeley Ltd (Nora Galley), Grant Associates (Danny Nagle) and CgMs Consulting Ltd (Simon Mortimer and Alexandra Thornton) was attended on the 18<sup>th</sup> July 2014 as part of pre-application discussions for the proposed development of the site.
- 1.4.6 A meeting was held with Tim Allen, Richard Clark, Teresa Hawtin, Leicestershire County Council Senior Planning Archaeologist, Adrian Eastwood and Mark Patterson of Harborough District Council and members of the IDI Gazeley development team on 9<sup>th</sup> March 2015.
- 1.4.7 A subsequent meeting was attended by Tim Allen, Richard Clark, Teresa Hawtin, John Sharp, Adrian Eastwood, Nora Galley, Gwyn Stubbings, Danny Nagle, Andy Cooper, Simon Mortimer, Ramona Usher and Alexandra Thornton on the 20<sup>th</sup> July 2015. The revised parameter plan and the extent of the further work required at pre-determination stage was discussed during this meeting.
- 1.4.8 Monitoring meetings during the trial trenching were undertaken on 10<sup>th</sup>, 16<sup>th</sup> and 23<sup>rd</sup> September, 7<sup>th</sup> and 14<sup>th</sup> October and 14<sup>th</sup> and 18<sup>th</sup> January 2016 with Richard Clark, Principal Archaeologist, Leicestershire County Council and/or Teresa Hawtin, Senior Planning Archaeologist.

## **2.0 PROPOSED DEVELOPMENT**

- 2.1 The desk-based assessment is submitted in support of an outline planning application for the erection of distribution warehouses, ancillary offices, incubator space, an estate office, logistics academy, rail freight terminal, HGV parking facility and associated infrastructure.
- 2.2 The application accommodates approximately 5 million square feet of B8 space, an estate office incorporating a public exhibition space for Bittesby Deserted Medieval Village, the history of Magna Park and the archaeology of the site, plus a logistics academy for c.400 students. The density will be significantly lower than the existing Magna Park land to the east of the study site, which accommodates c.8 million square feet on c.200 ha. The need for the application is to meet burgeoning demand within the local area for large scale B8 space.
- 2.3 The planning application 'Land at Mere Lane, Bittesby, Leicestershire' (ref: 15/0153/OUT) was submitted to the Local Planning Authority on the 2<sup>nd</sup> October 2015. Tim Allen, Inspector of Ancient Monuments for Historic England responded to consultation on the application on the 23<sup>rd</sup> October 2015 stating:
- 'The proposed outline element of this hybrid application, has through a process of pre-application and discussion and pre-determination archaeological investigation, arrived at a scheme which preserves under grass the rising ground to the east of the medieval village (as visual and archaeological historic landscape setting) and retains views and connectivity along the Claybrook Stream. These measures arguable constrain the harm of the scheme to a level below substantial harm as set out in the National Planning Policy framework (Para 132). However as set out in paragraphs 132 and 134 all harm must be clearly justified and weighed against public benefits.'
- 2.4 The area allocated for the proposed rail freight terminal (Zone 2) was subject to a previous planning application (Plot 7300, Magna Park, revised scheme reference 11/01757/FUL) for change of use of the land to provide HGV and car parking and associated landscaping.
- 2.5 Geophysical survey was undertaken in association with the planning application in 2012 by ArchaeoPhysica, managed by CgMs Consulting. The site was identified to contain evidence of ridge and furrow, but little or nothing of archaeological significance.
- 2.6 Planning permission for the application was granted by the Local Planning Authority subject to planning conditions. Further to field evaluation by Albion Archaeology and



submission of the report, the archaeological conditions have been discharged and there is no further heritage interest in this site.

### **3.0 PLANNING BACKGROUND AND DEVELOPMENT PLAN FRAMEWORK**

3.1 In considering the outline planning application, the local planning authority will be guided by the policy framework set by government planning policy, by current Development Plan policy and by other material considerations.

#### ***National Planning Policy Framework***

3.2 In March 2012, the Government published the National Planning Policy Framework (NPPF), which replaced previous national policy relating to heritage and archaeology.

3.2.1 Section 12 of the NPPF, entitled *Conserving and enhancing the historic environment* provides guidance for planning authorities, property owners, developers and others on the conservation and investigation of heritage assets. Overall, the objectives of Section 12 of the NPPF can be summarised as seeking the:

- Delivery of sustainable development
- Understanding the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment, and
- Conservation of England's heritage assets in a manner appropriate to their significance.

3.2.2 Section 12 of the NPPF recognises that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. Paragraph 128 states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.

3.2.3 Heritage Assets are defined in Annex 2 of the NPPF as: *a building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest*. They include designated heritage assets (as defined in the NPPF) and assets identified by the local planning authority during the process of decision-making or through the plan-making process.

3.2.4 Annex 2 also defines Archaeological Interest as *a heritage asset which holds, or potentially could 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*.

- 3.2.5 A Designated Heritage Asset comprises a World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area.
- 3.2.6 Significance is defined as: *The value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.*
- 3.2.7 The NPPF requires that when considering the impact effect of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (paragraph 132). Paragraph 133 provides a test for assessing harm in relation to designated heritage assets: "Where the application will lead to substantial harm or total loss of significance, local planning authorities should refuse consent". Paragraph 134 notes that 'where development will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against ...the public benefits of the proposal, including securing its optimum viable use should be weighed against the loss'.
- 3.2.8 The effects of an application on the significance of a non-designated heritage asset should also be taken into account in determining the application, although a balanced judgement will be required having regard to the scale of harm or loss and the significance of the heritage asset (paragraph 135).

### **Development Plan**

- 3.3 The Harborough Local Development Framework Core Strategy was adopted on 14th November 2011. The strategic objectives of the Core Strategy include two which are relevant to the historic environment:
- 3.25: To protect and enhance the District's distinctive rural landscape, settlement pattern, historic assets, natural environment and biodiversity
- 3.26: To safeguard and enhance the character and built heritage of the District's settlements and ensure that residential amenity is protected
- 3.4 The approach to the District's historic environment and individual heritage assets is further addressed in Core Strategy Policy CS11:

### **Policy CS11: Promoting Design and Built Heritage**

In recognition of the importance of good design and the built heritage of the District, the highest standards of design in new development will be sought to create attractive places for people to live, work and visit. This will be achieved in the following way:

- a) Development should be inspired by, respect and enhance local character, building materials and distinctiveness of the area in which it would be situated. Proposals

which are rich in architectural detail, individual, yet sympathetic to the local vernacular will be particularly supported. In areas with particularly high heritage value (such as Conservation Areas), new development should be sympathetic to those characteristics that make these places special.

b) All development should respect the context in which it is taking place and respond to the unique characteristics of the individual site and the wider local environment beyond the site's boundaries to ensure that it is integrated as far as possible into the existing built form of the District. New development should be directed away from undeveloped areas of land which are important to the form and character of a settlement or locality.

c) Development should be well planned to:

- i) Incorporate safe and inclusive design, suitable for all to access;
- ii) Make the most of local built and natural assets;
- iii) Be of a scale, density and design that would not cause damage to the qualities, character and amenity of the areas in which they are situated;
- iv) Ensure that the amenities of existing and future neighbouring occupiers are safeguarded;
- v) Reflect the landscape or streetscape in which it is situated and include an appropriate landscaping scheme where needed;
- vi) Enable adaptation, allowing for mixed uses with the potential to change use where appropriate;
- vii) Enable adaptation, ensuring suitability for today's users and capability for alteration to suit users in a future changing climate;
- viii) Where appropriate, encourage travel by a variety of modes of transport;
- ix) Minimise waste and encourage re-use and recycling wherever possible.

d) Heritage assets within the District, and their setting, will be protected, conserved and enhanced, ensuring that residents and visitors can appreciate and enjoy them through:

- i) Supporting proposals for the statutory listing of buildings where it can be demonstrated that the buildings meet the criteria for designation;
- ii) Realising and actively seeking opportunities within the planning process to secure the viable and sustainable future of heritage assets at risk of neglect or loss, especially where this supports tourism or business development, providing such development is consistent with the significance of the heritage asset;
- iii) Ensuring development in existing Conservation Areas is consistent with the special character as described in the Statement or Appraisal for that Area, keep these Areas under review and work with local communities to appraise other areas of special architectural or historic interest in the towns, suburbs and villages of the District to inform potential designation of additional Conservation Areas;
- iv) Safeguarding Scheduled Monuments and non-scheduled nationally important archaeological remains, and other areas of archaeological potential or importance and areas of historic landscape;
- v) Encouraging improved access to buildings and places of heritage for local people and visitors;
- vi) Identifying heritage assets of local importance;
- vii) Promoting and managing Foxton Locks and the Grand Union Canal as a tourism attraction and key strategic Green Infrastructure corridor in line with the Conservation Plan and Heritage Partnership Agreement.

### ***Local Plan***

- 3.5 The new Local Plan for Harborough District Council is currently undergoing consultation and is intended for submission to the Secretary of State in September 2016.

### ***Planning Policy Guidance***

- 3.6 In March 2014, the Government published Planning Practice Guidance (PPG) website. The PPG is intended to be read alongside the NPPF and relevant guidance set out below.
- 3.7 Paragraph 003 (ID: 18a-003-20140306) states the conservation of heritage assets should be in a manner appropriate to their significance and is a core planning principle. Heritage assets are an irreplaceable resource and effective conservation delivers wider social, cultural, economic and environmental benefits. Where the complete or partial loss of a heritage asset is justified, the aim is to capture and record the evidence of the asset's significance which is to be lost, interpret its contribution and make that information publicly available.
- 3.8 For decision-taking, Paragraph 009 (ID: 18a-009-20140306) identifies why 'significance' is important in decision-taking. Being able to properly assess the nature, extent and importance of a heritage asset, and the contribution of its setting, is very important to understanding the potential impact and acceptability of development proposals. Paragraph 015 states the vast majority of heritage assets are in private hands. Thus, sustaining heritage assets in the long term often requires an incentive for their active conservation. Any use is required to be viable, not only for the owner, but also the future conservation of the asset. If, from a conservation point of view, there is no difference between viable uses, then the choice of use is a decision for the owner.
- 3.9 Paragraph 017 (ID: 18a-017-20140306) identifies how to assess if there is substantial harm. Whether a proposal causes substantial harm will be a judgement for the decision taker, having regard to the circumstances of the case and the policy in National Planning Policy Framework.
- 3.10 Therefore, in considering the archaeological and heritage implications of the proposed planning application for development, the local planning authority will be guided by the policy framework set by government policy, and Policy CS11 of the LDF Core Strategy document.

**Relevant Guidance**

**Scheduled Monuments and other Nationally Important but Non-Scheduled Assets (DCMS October 2013)**

- 3.11 The DCMS policy statement on Scheduled Monument and Nationally Important but Non-Scheduled Monuments (October 2013) sets out current Government policy on the identification, protection, conservation and investigation of nationally important ancient monuments.
- 3.12 Paragraph 9 states that nationally important but non-scheduled monuments can include either those identified by English Heritage (now Historic England) as being capable of being scheduled but which the Secretary of State has chosen not to designate, or those capable of being designated but which have still to be formally assessed. In seeking to make an assessment of national significance, local planning archaeologists are therefore, being asked to make an informed judgement as to whether an asset is subsequently likely to be assessed by English Heritage as nationally important. The DCMS statement sets out principles to aid in assessment of the criteria for scheduling.

**Conservation Principles (English Heritage 2008)**

- 3.13 Conservation Principles outlines Historic England's approach to the sustainable management of the historic environment. While primarily intended to ensure consistency in Historic England's own advice and guidance through the planning process, the document is commended to local authorities to ensure that all decisions about change affecting the historic environment are informed and sustainable.
- 3.14 This document was published in line with the philosophy of PPS5, yet remains relevant with that of the current policy regime in the emphasis placed upon the importance of understanding significance as a means to properly assess the effects of change to heritage assets. The guidance describes a range of heritage values which enable the significance of assets to be established systematically, with the four main 'heritage values' being: evidential, historical, aesthetic and communal. The Principles emphasise that 'considered change offers the potential to enhance and add value to places...it is the means by which each generation aspires to enrich the historic environment' (paragraph 25).

**Good Practice Advice 3 – The Setting of Heritage Assets (English Heritage 2015)**

- 3.15 Historic England has provided guidance on the management of change within the

setting of heritage assets and seeks to provide definition of the aspects of 'setting', as well as a possible approach to allow councils and applicants to assess the impact of developments upon the settings of heritage assets.

3.16 Setting is defined in NPPF and the Good Practice Advice Note 3 as '*the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve.*' Setting is also described as being a separate term to curtilage, character and context. While it is largely a visual term, setting, and thus the way in which an asset is experienced, can also be affected by noise, vibration, odour and other factors. '*Setting is not a heritage asset, nor a heritage designation... Its importance lies in what it contributes to the significance of the heritage asset*' [para. 9]".

3.17 It provides guidance on practical and proportionate decision making with regards to the management of proposed developments and the setting of heritage assets. It is stated that the 'protection of the setting of heritage assets need not prevent change' (Para. 11) and that decisions relating to such issues need to be based on the nature, extent and level of the significance of a heritage asset, further weighing up the potential enhancement or harm of the asset's significance associated with the proposals.

### 3.18 **Impact Assessment Methodology**

3.18.1 The assessment of direct harm or loss to heritage assets has followed the approach described in NPPF (Para. 128) and the Good Practice Advice Note 3 (Step 1). This requires applicants 'to describe the significance of any heritage assets affected, including any contribution made by their setting... Where a site on which development is proposed includes, or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation' (NPPF para 128). The current report provides a desk-based assessment of the site's archaeological potential, based on a consideration of available archaeological and historical information for the site and a c.1km radius search area around the site boundary. It also takes into account the results of the geophysical and fieldwalking surveys undertaken within the application area and c. 120 ha to the west of the site (future Outline application area).

3.18.2 The assessment of indirect harm takes account of the potential impacts of the development on the settings of designated heritage assets (Scheduled Monuments, Registered Battlefields and Registered Historic Parks & Gardens) in the surrounding area. Assets, including heritage assets potentially sensitive to development within the

site were agreed between Nicholas Pearson Associates and Landscape Partnership (acting for the Local Planning Authority).

3.18.3 The setting of heritage assets is defined in the NPPF as *'the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surrounding evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.'* (NPPF Annex 2).

3.18.4 Historic England has also published further guidance concerning the assessment of effects on the setting of heritage assets (English Heritage, 2015; Historic Environment Good Practice Advice in Planning Note 3 – The Setting of Heritage Assets). This guidance proposes a five stage approach to assessment: (1) identifying the assets affected and their settings; (2) assessing whether, how and to what degree these settings make a contribution to the significance of the heritage asset(s); (3) assessing the effect of the proposed development on the significance of the asset(s); (4) maximising enhancement and minimising harm; and (5) making and documenting the decision and monitoring outcomes.

3.18.5 The methodology adopted for the purposes of the current assessment has regard to the 2015 English Heritage guidance above, and consists of a staged process as follows:

**Step 1:** The baseline heritage assets and their settings located within the study area are identified and their heritage significance considered;

**Step 2:** The contribution which setting makes to the heritage significance of the asset(s) (i.e. the sensitivity of the asset to effects as a result of changes within its setting) is then determined. Regard is had at this stage, and where relevant, to the factors identified in the 2015 guidance – summarised in Table 1 below.

**Step 3:** The magnitude of the impact of the proposed development on the heritage significance of each asset is identified. Where the potential impact is on the setting of the heritage asset, only that part of the heritage significance derived from its setting can be affected and assessment of the magnitude of impact is weighted proportionately. Regard is had at this stage, and where relevant, to the factors identified in the 2015 guidance – summarised in Table 2 below. The criteria used in this assessment to establish the sensitivity of an asset to impacts on its setting, and to assign a value to the magnitude of the impact are set out in Tables 3 and 4 below.



3.18.6 Steps 4 and 5 will be undertaken during consultation and review with the local planning authority once the application has been submitted.

**Table 1:** Attributes of a setting that may contribute to significance  
*(non-exhaustive check-list in English Heritage 2015 guidance 'Good Practice Advice in Planning Note 3')*

<p>The asset's physical surroundings</p>	<ul style="list-style-type: none"> <li>• Topography</li> <li>• Other heritage assets (including buildings, structures, landscapes, areas or archaeological remains)</li> <li>• Definition, scale and 'grain' of surrounding streetscape, landscape and spaces</li> <li>• Formal design</li> <li>• Historic materials and surfaces</li> <li>• Land use</li> <li>• Green space, trees and vegetation</li> <li>• Openness, enclosure and boundaries</li> <li>• Functional relationships and communications</li> <li>• History and degree of change over time</li> <li>• Integrity</li> <li>• Issues such as soil chemistry and hydrology</li> </ul>
<p>Experience of the asset</p>	<ul style="list-style-type: none"> <li>• Surrounding landscape or townscape character</li> <li>• Views from, towards, through, across and including the asset</li> <li>• Visual dominance, prominence or role as focal point</li> <li>• Intentional intervisibility with other historic and natural features</li> <li>• Noise, vibration and other pollutants or nuisances</li> <li>• Tranquillity, remoteness, 'wildness'</li> <li>• Sense of enclosure, seclusion, intimacy or privacy</li> <li>• Dynamism and activity</li> <li>• Accessibility, permeability and patterns of movement</li> <li>• Degree of interpretation or promotion to the public</li> <li>• The rarity of comparable survivals of setting</li> <li>• The asset's associative attributes</li> <li>• Associative relationships between heritage assets</li> <li>• Cultural associations</li> <li>• Celebrated artistic representations</li> <li>• Traditions</li> </ul>

**Table 2:** Attributes of development which may be relevant to assessing implications for significance

*(non-exhaustive check-list in English Heritage 2015 guidance 'Good Practice Advice in Planning Note 3': only a limited subset of the attributes are likely to be particularly important in terms of any particular development)*

Location and siting of development	<ul style="list-style-type: none"> <li>• Proximity to asset</li> <li>• Extent</li> <li>• Position in relation to landform</li> <li>• Degree to which location will physically or visually isolate asset</li> <li>• Position in relation to key views</li> </ul>
Form and Appearance	<ul style="list-style-type: none"> <li>• Prominence, dominance or conspicuousness</li> <li>• Competition with or distraction from the asset</li> <li>• Dimensions, scale and massing</li> <li>• Proportions</li> <li>• Visual permeability (extent to which it can be seen through)</li> <li>• Materials (texture, colour, reflectiveness, etc)</li> <li>• Architectural style or design</li> <li>• Introduction of movement or activity</li> <li>• Diurnal or seasonal change</li> </ul>
Other effects of the development	<ul style="list-style-type: none"> <li>• Change to built surroundings and spaces</li> <li>• Change to skyline</li> <li>• Noise, odour, vibration, dust etc</li> <li>• Lighting effects and 'light spill'</li> <li>• Change to general character (e.g. suburbanising or industrialising)</li> <li>• Changes to public access, use or amenity</li> <li>• Changes to land use, land cover, tree cover</li> <li>• Changes to archaeological context, soil chemistry, or hydrology</li> <li>• Changes to communications/accessibility/permeability</li> </ul>
Permanence of development	<ul style="list-style-type: none"> <li>• Anticipated lifetime/temporariness</li> <li>• Recurrence</li> <li>• Reversibility</li> </ul>
Longer term or consequential effects of development	<ul style="list-style-type: none"> <li>• Changes to ownership arrangements</li> <li>• Economic and social viability</li> <li>• Communal use and social viability</li> </ul>

**Table 3:** Criteria for assessment of sensitivity of an asset to impacts on its setting

Sensitivity to impacts	Typical Characteristics may include:
HIGH	<ul style="list-style-type: none"> <li>• A visually prominent asset</li> <li>• Situated in a well-preserved historic landscape</li> <li>• Well known in the locality</li> <li>• Promoted as a visitor attraction with signposts and information</li> </ul>
MEDIUM	<ul style="list-style-type: none"> <li>• Recognisable as a heritage asset by the average visitor</li> <li>• In a setting only partially modified by later land use, and can still be readily appreciated</li> <li>• Mentioned in non-specialist publications</li> </ul>
LOW	<ul style="list-style-type: none"> <li>• Recognised as a heritage asset only by a trained observer</li> <li>• In a setting substantially altered from its original condition, but still can be understood</li> </ul>
NEGLIGIBLE	<ul style="list-style-type: none"> <li>• Imperceptible as a heritage asset</li> </ul>

**Table 4:** Criteria for assessing the magnitude of impact on the significance of heritage assets

Magnitude of Impact	Typical Characteristics may include:
HIGH	<ul style="list-style-type: none"> <li>• Total loss or major alteration of the asset, or change in its setting leading to the total loss or major reduction in the significance</li> <li>• The relationship between the asset and its setting is no longer readily appreciable</li> </ul>
MEDIUM	<ul style="list-style-type: none"> <li>• Partial loss or alteration of the asset, or change in its setting leading to the partial loss or reduction in the significance of the asset</li> <li>• Setting characteristics can still be appreciated, but with the introduction of new, unrelated elements that distract from and compete with the relevant setting elements</li> </ul>
LOW	<ul style="list-style-type: none"> <li>• Slight change from pre-development conditions to the asset, or change in its setting leading to the slight loss or reduction in the significance of the asset</li> <li>• Setting characteristics can still be appreciated, the changes do not conflict with the character of the heritage asset</li> </ul>
NEGLIGIBLE	<ul style="list-style-type: none"> <li>• No change, or very slight change to the asset, or change in its setting resulting in no reduction in the significance of the asset</li> </ul>

3.18.7 These criteria have been applied to the circumstances of the application site and the results are set out below.

## **4.0 GEOLOGY AND TOPOGRAPHY**

### **4.1 Geology**

4.1.1 The British Geological Survey (BGS) 1:50,000 records the geology within the majority of the site as Mudstone belonging to the Penarth Group Formation. Superficial deposits across these areas are Diamicton from the Oadby Member Formation. The geology within the river valley, located through the centre of the site, is Mudstone belonging to the Mercia Mudstone Group Formation with superficial deposits of Sand and Gravel from the Wolston Sand and Gravel Member and Alluvium from the Clay, Silt, Sand and Gravel Member.

([http://maps.bgs.ac.uk/geologyviewer\\_google/googleviewer.html](http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html)).

4.1.2 The overlying soils are recorded as belonging to the Beccles 3 Association (711t), described as slowly permeable, seasonally waterlogged fine and loamy over clayey soils, similar soils with only slight waterlogging and some calcareous clayey soils especially on steeper slopes (Soil Survey of England and Wales, 1983).

### **4.2 Topography**

4.2.1 The study site lies within the Leicestershire Vales Natural England Character Area. The Character Area (NCA) consists of 'an open landscape of gentle clay ridges and valleys (with)...an overall visual uniformity to the landscape and settlement pattern.'

(<http://publications.naturalengland.org.uk/publication/9965009?category=587130>; see Figure 5).

4.2.2 The main watercourse on the study site flows north through the valley in the centre of the study site.

4.2.3 The ground levels of the site fall from the western boundary, which is just under 120m AOD, to the valley, which is c.100m AOD. The ground levels rise again from this point to the south-eastern and north-eastern boundaries, both of which are c.120m AOD.

4.2.4 The embankment of the dismantled railway is aligned north-east to south-west and stretches through the centre of the study site. The southern third of the embankment on the study site was levelled in the late 1970s (see HER MLE1230).

## **5.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND, INCLUDING ASSESSMENT OF SIGNIFICANCE**

5.1 Timescales used in this report are as follows.

<b>Prehistoric</b>			
Palaeolithic	450,000 BC	-	10,001 BC
Mesolithic	10,000 BC	-	4,001 BC
Neolithic	4,000 BC	-	1,801 BC
Bronze Age	1,800 BC	-	601 BC
Iron Age	600 BC	-	AD 42
<b>Historic</b>			
Roman	AD 43	-	409 AD
Saxon/Early Medieval	AD 410	-	1065 AD
Medieval	AD 1066	-	1485 AD
Post Medieval	AD 1486	-	1799 AD
Modern	AD 1800	-	Present

## **5.2 Introduction**

5.2.1 This chapter reviews existing archaeological evidence for the site and the archaeological / historical background of the general area, based on a consideration of evidence in the Leicestershire and Rutland Historic Environment Record and Warwickshire Historic Environment Record for the study site and a surrounding search area of c.2km for the designated heritage assets and approximately 1km surrounding the study site boundary for non-designated heritage assets. Assets, including heritage assets, potentially sensitive to development within the site were agreed between Nicholas Pearson Associates and Landscape Partnership (acting for the Local Planning Authority).

5.2.2 A gazetteer of archaeological Monuments and Designated Heritage Assets is provided in Appendix 1 and the locations of HER entries within the search area are shown on Figures 2, 3, 4 and 5.

5.2.3 This document has been updated further to receipt of the reports on the geophysical survey, fieldwalking, trial trenching and metal detecting (Appendices 2, 3, 6, 7, 8 and 9). It has been prepared in accordance with the NPPF, to consider the potential for as yet undiscovered archaeological assets on the site. The results of the combined geophysical, fieldwalking, trial trenching and metal detecting allow a very confident assessment of the actual archaeological resource within the site.

### 5.3 **Designated Heritage Assets**

- 5.3.1 Data obtained from Historic England and the Local Authority confirms that there is one designated heritage asset (Listed Buildings, Scheduled Monuments, Registered Battlefields, Registered Parks and Gardens or Conservation Areas) within the study site.
- Bittesby Deserted Medieval Village (Reference 1012563)
- 5.3.2 This document takes into consideration all of the Scheduled Monuments which have been identified as potentially sensitive to the proposed development within the Landscape and Visual Impact Assessment/Scoping Agreement (Environmental Statement, Chapter 2, Landscape and Visual).
- 5.3.3 There are three Scheduled Monuments identified within the surrounding landscape discussed in the Landscape and Visual Impact Assessment. The 'Moat, fishponds and shifted village earthworks at Ullesthorpe' (Reference 1010300) is located c.480m north-east of the study site. This Monument is partially inter-visible with the study site and is therefore assessed as potentially sensitive to development impact.
- 5.3.4 The Scheduled Monument of the 'Moated site, enclosure and trackway at Claybrooke Parva (Reference 1010191) is located c.970m north of the study site. This Monument is screened from the site by local topography and mature planting and has therefore been scoped out of this report and the Environment Statement.
- 5.3.5 The other Scheduled Monument is the 'Roman town at High Cross' (Reference 1003566), located c.2.1km north-west of the study site at its closest proximity. The distance of this heritage asset from the study site means that it is not sensitive to development within the site and it has no bearing upon an assessment of the site's archaeological potential. There will be no impact upon the heritage significance of the Monument and it has therefore, also been scoped out of this report and the Environment Statement.
- 5.3.6 A detailed assessment of Built Heritage assets including the Listed Buildings, Registered Park and Garden and Conservation Areas within the wider study area has been undertaken within a separate report (CgMs 2015; report RU/JCG18281/10).
- 5.3.7 The designated heritage assets are included within the Gazetteer in Appendix 1 and their locations are shown in Figure 2.

#### 5.4 **Non-Designated Heritage Assets and other archaeological monuments**

5.4.1 Heritage assets are defined as 'A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing)' (NPPF Annex 2: Glossary).

5.4.2 Prior to the archaeological surveys undertaken in association with the current planning application, there were thirteen non-designated heritage assets identified within the proposed development area in the HERs; the Roman Road of Watling Street, seven entries relate to the area of the deserted Medieval village of Bittesby, two are Post-Medieval/Modern heritage assets and one an undated burial:

- Watling Street Roman Road (MLE1388)
- Flint (MLE16462 & MLE17111), a possible Roman village (MLE1230), Roman pottery and tile (MLE21337 & MLE16461), an Anglo Saxon loomweight (MLE6250) and the deserted medieval settlement at Bittesby (MLE1226) from the area of the DMV and along the ridge to the east
- Railway Underpass (MLE21154) and part of the polygon showing the mapped extents of Bitteswell Airfield (MLE15959)
- an undated skeleton along the road (MLE1225), which may be associated with Iron Age settlement, Archaeological Asset A15

5.4.3 The HER data and results of the geophysical survey and fieldwalking undertaken in support of the current application (Figure 13) established twenty-three areas containing anomalies of archaeological interest within the application area (Archaeological Assets ref. A1 to A23).

5.4.4 The trial trenching evaluation targeted all of the areas of archaeological interest in addition to 'blank' areas identified during the previous surveys. The assessment of the Archaeological Areas has been updated in light of the results of the trial trenching (Table 5). The revised list of Heritage Assets is tabulated below and explains the history of the interpretation of the assets. Where possible, the non-designated heritage assets recorded in the HERs have been linked with the newly discovered Archaeological Assets listed below; HER MLE21337 forms part of Asset A8, MLE1226 is included within Asset A18 and MLE1225 has been linked with Asset A15. This has resulted in 25 Archaeological Assets which have been identified through the fieldwork on site and from HER data, plus the area of the deserted medieval village which includes six additional HER entries, one HER entry relating to Watling Street and two

Post-Medieval/Modern HER entries. The site therefore contains 34 areas of heritage assets on the site.



**Table 5:** Non-designated heritage assets identified by the geophysical and fieldwalking survey

<b>Asset ref.</b>	<b>Concordance with geophysical survey and HER</b>	<b>Description after geophysical survey</b>	<b>Archaeological evidence after trial trenching</b>	<b>Likely date after the trial trenching</b>	<b>Trench numbers</b>	<b>Likely importance</b>
A1	Anomaly 92	Linear anomalies in relatively close proximity to Roman pottery findspots	Field system - ditches corresponding with geophysics	Early Roman	167 and 16	Local
A2	Anomaly 98	Linear anomaly.  No clear dating but association with possible ring gully and flint	Extensive boundary and pit - ditch corresponding with geophysics	Probably Iron Age	172, 17 and 18	Local
A3	Anomaly 99	Possible ring gully and linear anomaly.  May be associated with A2	Ditch - continuation of the ditch identified in A2	Probably Iron Age	18	Local
A4	Anomaly 1	Two parallel linear anomalies likely to be a trackway	Ditch - does not correspond with geophysical anomalies	Undated/Pre-Medieval	5	Local
A5	Anomaly 76	Two parallel linear anomalies likely to be a trackway	Trackway - three ditches, two of which correspond to geophysical anomalies.  Possibly connect with A9	Probably Early Roman	3	Local to regional
A6	Anomaly 73	Linear anomaly	Ditch - corresponds with geophysical anomaly	Possibly Prehistoric	1	Local
A7	Anomalies 83,	Anomalies interpreted as	Settlement - enclosures and	Early Roman	32, 41	Regional

	84 and 85	enclosures and trackways	trackway			
A8	Anomalies 78, 79, 80, 81, and 82  Also HER MLE21337 and ELE8535	Anomalies interpreted as enclosures including ladder-type settlement	Settlement – interlinked system of sub-circular enclosures	Middle/Late Iron Age and Early Roman	28, 29, 30, 31, 36 and 37	Regional
A9	Anomaly 75	Anomalies interpreted as an enclosure. Associated with trackway A5	Peripheral enclosures	Uncertain (Early Roman or Medieval)	26 and 27	Regional
A10	Anomaly 41	Anomalies interpreted as a small settlement / overlapping enclosures	Possible settlement – ditched enclosure system broadly corresponding with geophysics	Early Roman	103, 104 and 105	Local to Regional
A11	Anomaly 40	Linear anomaly likely to relate to a boundary off site to the north-west  No clear dating but alignment may indicate a Post-Medieval date	No sub-surface feature found to explain anomaly  One undated pit found.	Undated	101	None
A12	Anomaly 42	Irregularly shaped and linear anomalies which are possibly natural / geological	Geological variation	N/A	119, 120 and 121	None
A13	Anomaly 46	Anomalies likely to be a Roman settlement or farmstead  No clear dating but association	Settlement – ditched enclosure system corresponding with geophysical anomalies and	Early Roman	110, 111, 112, 113 and 117	Regional

		with Roman pottery and in close proximity to Watling Street Roman road	small pits			
A14	Anomaly 59	Curvilinear anomaly interpreted as a possible ditch  No clear dating but association with Post-Medieval pottery	Palaeochannel – no features of human origin	N/A	125	Local
A15	Anomalies 53 and 54  HER entry MLE1225	Anomalies interpreted as enclosures / possible settlement  No clear dating evidence although may be Late Prehistoric / Roman / Medieval	Settlement – ditched enclosure system with possible roundhouses broadly corresponding with geophysical anomalies	Iron Age	133, 134, 135, 138, 139, 140 and 142	Regional
A16	Anomalies 55, 50, 51 and 52	Two parallel linear anomalies likely to be a trackway leading to the Scheduled Monument  Linear anomalies 50, 51 and 52 are likely to be peripheral ditches associated with the Monument	Trackway – ditches broadly corresponding to geophysical anomalies	Medieval	144 and 145 (west)	Local to Regional
A17	Anomalies 56 and 58	Two linear anomalies and an 'N' shaped feature  No clear dating, although alignment corresponds to	Field boundary - ditch corresponding with anomaly 58.  No sub-surface feature identified	Early Roman or Medieval	145 (east) and 146	Local to regional

		the Medieval settlement evidence	at anomaly 56			
A18	Anomalies 68, 69 and 70  Also HER MLE1226	Anomalies likely representing the non-Scheduled areas of settlement associated with the Bittesby DMV	Settlement – ditches and one hollow-way (which corresponds with Asset 16)	Medieval	147 and 148	Regional
A19	Anomalies 63, 65, 66 and 67	Linear anomalies possibly associated with the non-Scheduled areas of Bittesby DMV	No archaeological features	N/A	152	None
A20	Anomaly 62	Linear anomaly interpreted as a ditch  No clear dating evidence	Ditched boundary – one ditch	Possibly Prehistoric	153	Local
A21	Anomaly 72	Linear anomaly potentially relating to semi-circular earthwork in the woodland to the north  No clear dating evidence	Not excavated – re-evaluated on site as a modern feature	Modern	N/A	None
A22	Anomalies 88 and 89	Two possibly rectangular anomalies interpreted as possible enclosures which may relate to the railway	Quarrying – three ditches and two pits including a large quarry at anomaly 89.  No sub-surface features found at anomaly 88	Possibly Post-Medieval	156 and 157	Local
A23	Anomalies 96 and 97	Two linear anomalies in relatively close proximity to	Field system – two ditches, one corresponds with	Early Roman	168 and 169	Local

		Roman pottery findspots	anomaly 97.  No sub-surface features found at anomaly 96.			
A24	None - identified during trial trenching	N/A	Ditches and pit - two perpendicular ditches and small pit	Undated - possibly Roman	106	Local
A25	None - identified during trial trenching	N/A	Ditches and post-holes - two ditches and three post-holes	Undated - possibly Roman	127	Local
A26	None - identified during trial trenching	N/A	Ditch and pit	Undated - possibly Roman or Medieval	174	Local
A27	None - identified during trial trenching	N/A	Ditches and pit - four ditches and one associated pit	Iron Age	21 and 22	Local
A28	None-identified during the trial trenching	N/A	Ditch	Probably Roman	176	Local

5.4.5 The HER sites or finds within the search area which are relevant to appraisal of the archaeological potential of the site are discussed below.

5.4.6 A gazetteer of the HER records is included as Appendix 1. The locations of monument and buildings recorded in the HER are shown in Figure 4.

## 5.5 **Previous Archaeological Investigations**

5.5.1 Geophysical and fieldwalking surveys were undertaken by ArchaeoPhysica and MoLA Northants in September 2014 and March 2015 and archaeological trial trenching and metal detecting survey was carried out by Albion Archaeology between August and January 2016, in support of the current application.

5.5.2 The geophysical survey was carried out across the accessible areas of the current application area (c.186.5ha) of Zone 1 apart from:

- part of the north-western fields (c.6.1ha) which were too waterlogged to be traversed practically and safely, or are woodland
- part of the northern fields (c.3ha) which are woodland
- the designated and non-designated areas of the Scheduled Monument (c.10ha)
- the land around Bittesby House (c.8.8ha) which was not accessible at the time of the survey
- a triangular plot of woodland north-east of the Scheduled Monument (c.0.5ha)
- the land around a balancing pond in the north-east of the site (c.3.2ha) which is unsuitable for survey
- the centre of the north-eastern field (c.1.3 ha) which was too waterlogged to be surveyable
- the land to the east of Mere Lane (c.3 ha) which is unsuitable for survey

5.5.3 The fieldwalking within the application area comprised a total of 218ha, apart from fields which were too waterlogged to be practically accessible. The survey recovered a Mesolithic flint core, a flint waste blade and twelve flint flakes (undated due to their poor quality), two sherds of Iron Age pottery, 36 sherds of Roman pottery and 126 sherds of Medieval pottery. 179 sherds of Post-Medieval pottery and over 100 pieces of tile and brick were also recovered, likely to represent manuring scatters (Appendix 3).

5.5.4 The trenching evaluation was designed to investigate the geophysical anomalies, blank areas and findspots identified during the fieldwalking. There were originally twenty-three potential areas of heritage assets identified within the site from the fieldwalking and geophysical survey evidence. The trial trenching evaluated the heritage assets and blank areas and hence, identified significant archaeological features within 25 areas of the study site (Table 5).

5.5.5 The results of the surveys that are relevant to an assessment of the site's archaeological potential are summarised in Table 5.

5.5.6 Planning permission for Zone 2 was granted by the Local Planning Authority subject to planning conditions. Further to field evaluation by Albion Archaeology and submission of the report, the archaeological conditions have been discharged and there is no further heritage interest in this site.

5.5.7 Four previous archaeological surveys / investigations have been undertaken on the study site; fieldwalking of approximately 5ha of land north-east of the Scheduled Monument revealed c.300 sherds of Roman pottery (ELE8535). Desk-based

assessment, walkover survey and geophysical survey were undertaken west of the Scheduled Monument and identified the western edge of Bittesby Deserted Medieval Village (ELE4713 and ELE5263). The findings of these surveys and any previously undertaken archaeological investigations in the vicinity of the site which are relevant to the study site are discussed in greater detail below.

5.5.8 The existing Magna Park Lutterworth site was not archaeologically investigated because the site had previously been used as an airfield.

5.5.9 The locations of HER Event records are shown in Figure 3.

## 5.6 **Earlier Prehistoric**

5.6.1 There is very limited evidence of earlier Prehistoric activity within the site. The geophysical survey, fieldwalking and trial trenching revealed only two areas of archaeological anomalies which have been interpreted as possibly early Prehistoric in date (Archaeological Assets A6 and A20), the fieldwalking survey recovered 14 flint tools and the HER contains two records of small-scale earlier Prehistoric activity on the site.

5.6.2 Two linear ditches, probably boundary ditches, located along the northern boundary of the site have been identified during the fieldwork and allocated Archaeological Asset numbers A6 and A20. Neither of the features were associated with finds or were obviously related to the Iron Age, Roman and Medieval activity identified to the south, nor do they align with current field boundaries. A flint core was also recovered in relatively close proximity to A6, and A20 is on a similar alignment to this feature. For these reasons these features have been assessed as potentially early Prehistoric in date.

5.6.3 The fieldwalking undertaken in support of the current application recovered a very small quantity of flint; a burnt flint core, likely to be Mesolithic in date, a flint blade, a flint flake and eleven undated flint flakes.

5.6.4 The HER records a flint core and flake, possibly dating from the Palaeolithic (MLE16462) and an early Mesolithic flint tool and approximately 31 worked flints broadly dating from the Neolithic/Bronze Age (MLE17111) west of the Scheduled area of Bittesby Deserted Medieval Village (ELE4713) on the site.

5.6.5 The results of the fieldwork and artefactual evidence to date confirm that the site contains very limited evidence for features pre-dating the Iron Age. The study site contains no evidence of intensive activity or settlement of earlier Prehistoric date.

## 5.7 **Later Prehistoric**

- 5.7.1 The fieldwork undertaken in association with the planning application has revealed three areas of archaeological anomalies have been interpreted as Late Prehistoric in date (Archaeological Assets A2, A3 and A15). The fieldwalking survey recovered two sherds of Iron Age pottery, in Field 16, north-east of the Scheduled Monument and the HER contains one Later Prehistoric findspot on the site.
- 5.7.2 The combined evidence from the geophysical survey and trial trenching has revealed large rectilinear enclosures, with several post-hoes, curvilinear enclosures and two possible roundhouses to the south-west of the Scheduled Monument (Archaeological Asset A15). These features have been interpreted to be a settlement of approximately 2.5ha, which originated in the Iron Age, and part of which likely continued in use into the Roman period (Albion Archaeology 2016). An undated skeleton which was revealed along the western side of the A5 (Watling Street) in the 1950s (MLE1225) is located within the area of Asset A15 and therefore may be a burial associated with this settlement (Albion Archaeology 2016).
- 5.7.3 Residual Iron Age pottery sherds were recovered within later features associated with an early Roman settlement (Heritage Asset A8, discussed in greater detail below in paragraph 5.7.2). The presence of these pottery sherds indicates that features of the settlement originated in the Iron Age period.
- 5.7.4 The trial trenching identified an extensive boundary ditch, corresponding with the linear anomalies identified within Assets A2 and A3 (Table 5). No dating evidence was recovered from the linear feature, although a small pit that was sealed below the same colluvial layer as the ditch in the trench closest to the A5 was dated to the Iron Age and therefore, the extensive ditch is also thought likely to date to this period. The linear feature at the south-eastern extent of the application area was not dated. No evidence for the possible ring ditch (anomaly 99), identified during the geophysical survey was found.
- 5.7.5 Two additional trenches (21 and 22) were excavated in the location of a concentration of Post-Medieval pottery, close to Bittesby House, found during the fieldwalking survey. The trenches contained four ditches and an associated pit, dated to the Iron Age (Albion Archaeology 2015a). These Heritage Assets have been allocated Asset no. A27 [previously assigned a duplicate Asset no. A10 (new) in DHL application reports].
- 5.7.6 Three chance finds of sherds of Iron Age (or possibly Anglo Saxon) pottery were found in 2001 along the embankment of the dismantled railway line on the site (MLE10324). These sherds may have originated from the stripped land below the railway



embankment, or may be additions to the study site, arriving with the made ground used to create the embankment.

- 5.7.7 The HER data includes two additional records of Prehistoric activity in the surrounding search area; a Late Iron Age coin and copper alloy harness fitting found north-west of Ullesthorpe Lodge, c.180m north of the study site (MLE9236) and two possible Iron Age enclosures and a trackway, recorded on an aerial photograph approximately 230m north-east of the study site (MLE2592).
- 5.7.8 The geophysical survey, fieldwalking and trial trenching has demonstrated that the first settlement of the site began in the Iron Age (Asset A15) and, within certain areas of the site, appears to have continued into the Roman period (Asset A8).

## 5.8 **Roman**

- 5.8.1 The geophysical survey and trial trenching has identified Roman features within 10 areas of the site (Heritage Assets A1, A5, A7, A8, A9, A10, A13, A17, A23 and A28). The fieldwalking survey of the site recovered 36 sherds of Roman pottery and the HER data records four entries of Roman activity on the site.
- 5.8.2 The fieldwork results have identified three zones of Early Roman settlement activity within the site; activity on the ridge which may be associated with the possible Roman villa in the area of the DMV (Assets A5, A7, A8 and A9), activity associated with Watling Street (Assets A13, A1 and A23) and activity within the north-west of the site (Asset A10).
- 5.8.3 A hitherto unknown Roman ladder-type settlement (Heritage Assets A8 and A9), which focused on the ridge to the east of the Scheduled Monument was revealed during the geophysical survey. It was investigated further through trial trenching and metal detecting of the site. The archaeological features were predominantly ditches, with occasional pits and post-holes (Albion Archaeology 2015b). The ditches appear to define sub-circular enclosures which correspond with the geophysical anomalies.
- 5.8.4 A possible Roman villa (MLE1230) was reported to have been found by workmen during construction of the Midlands railway line in c.1838 immediately adjacent to the Scheduled Monument. It is recorded that tessellated pavement and the remains of a bath house were also found in association with the villa (MLE1230). It is also recorded that during the levelling of the railway embankment in 1979, to the south of the Deserted Medieval Village, the stream course was altered and c.8 sherds of Roman pottery were found (MLE1230). Approximately 7 sherds of Roman pottery were also found in this area in 1982 and 2001 (MLE1230) and 18 sherds of Roman pottery were recovered during fieldwalking of the western area of the DMV in 2005 by Lutterworth

Fieldwork Group (MLE16461). These pottery sherds may be associated with the putative Roman villa.

- 5.8.5 The geophysical survey of the Scheduled Area was undertaken in May and June 2015 (ArchaeoPhysica 2015b; Appendix 6). However, no evidence for the possible villa was revealed. The trial trenching identified two possible early Roman trackways at Asset A9. Their alignment suggests that there may have been access between the early Roman settlement on the ridge with the possible Roman villa recorded in the area of the Scheduled Monument (MLE1230).
- 5.8.6 There was only a very limited amount of metalwork recovered during the metal detecting survey across the area of the ridge, but the vast majority of excavated features produced Roman pottery (and smaller quantities of Iron Age pottery). Further, the bulk of the Roman pottery recovered from the fieldwalking undertaken in support of the application area is located within this area (MoLA 2015). In addition to this over 300 sherds of Roman pottery and c.20 fragments of Roman tile, including tegulae and imbrices (roof tile) were recovered during fieldwalking of c.5ha in this area (MLE21337 and ELE8535).
- 5.8.7 The settlement appears to extend down the slope to the south-west and potentially encompass Heritage Asset A7. The evaluation of Asset A7 revealed ditches and two post-holes, suggestive of at least one enclosure and possible trackways (Albion Archaeology 2015b). Only a small finds assemblage was recovered (early Roman pottery), which suggests that these features may represent the periphery of the settlement (Albion Archaeology 2015a).
- 5.8.8 Evaluation of Heritage Asset 13, in close association with Watling Street (the modern A5), the route of a major Roman road (MLE1288 and MWA420), revealed ditches, which generally correspond with the geophysical anomalies and a small number of pits (Albion Archaeology 2016). The features appear to be part of an east-west aligned rectangular enclosure/field system. The small finds assemblage including pottery, animal bone and fired clay, suggests these features form part of an Early Roman settlement covering c.5ha, although there is a possibility that this settlement may have originated in the Late Iron Age (Albion Archaeology 2016).
- 5.8.9 A series of ditches and pits, likely to be part of a peripheral field system dating from the early Roman period corresponding with the geophysical anomalies and probably associated with Heritage Asset 13, were revealed at Heritage Assets A1 and A23.
- 5.8.10 A ditched enclosure site, comprising at least eleven ditches, most of which broadly correspond with the geophysical anomalies (Heritage Asset A10), was identified during

the trial trenching. It has been interpreted as a possible settlement site dating from the Early Roman period which extended over 2.5ha (Albion Archaeology 2016). This settlement site is disconnected from the other settlements on the site.

- 5.8.11 Two ditches were identified as Heritage Asset A17, south-west of the Scheduled Monument. The features contained a small amount of early Roman pottery (Albion Archaeology 2016). From the artefactual evidence, it seems likely that these ditches are early Roman in date, although the ditch in trench 145 may represent the southern boundary of the deserted Medieval village of Bittesby.
- 5.8.12 Two trenches were excavated in the north-west of the site, in an area of proposed planting. Within trench 176, one ditch was revealed, which contained a rim sherd dating from the Roman period (Heritage Asset A28) (Albion Archaeology 2016).
- 5.8.13 The metal detecting undertaken as part of the pre-determination evaluation did not reveal significant quantities of metalwork. The only finds of Roman date found during the survey were two 1<sup>st</sup> century brooches (Albion Archaeology 2015b).
- 5.8.14 Metal detecting of land near Manor Farm, c.260m north-east of the study site, revealed an early Roman trumpet brooch and a possible lead alloy stylus (MLE20939). Given that this area of the search area appears to have been extensively and systematically metal detected in 2005, the fact that only two Roman artefacts were recovered suggests that this part of the search area has little potential to contain significant settlement remains.
- 5.8.15 The fieldwork on the site has demonstrated that the study site contains evidence for three zones of Early Roman activity, focused on the area of the DMV and ridge to the east, Watling Street and an isolated area in the north-west of the site. There is limited evidence of peripheral early Roman activity around the settlements.

## 5.9 **Saxon**

- 5.9.1 None of the geophysical anomalies from within the survey area appear to be indicative, on morphological grounds, of Saxon features. No Saxon finds were identified during the fieldwalking and no features of Saxon origin were revealed during the trial trenching. However, two sherds of late Saxon pottery were recovered within a Medieval ditch and twenty-nine sherds of pottery broadly dating from the late Saxon to late 14<sup>th</sup> century were revealed from features in Asset A18 during the trial trenching (Albion Archaeology 2016).

- 5.9.2 The data obtained from the HER contains two records relating to Saxon sites or findspots on the site; the deserted settlement of Bittesby (MLE1226) and a possible Saxon loomweight (MLE6250).
- 5.9.3 The deserted settlement of Bittesby, located within the centre of the site, is recorded in Domesday Survey (1086) as 'Bichesbie' (MLE1226). This name consists of 'Byttel' and 'Oscan' which combines a Saxon personal name with a Viking word for habitation, suggesting that the Medieval settlement may have been renamed from an existing Saxon settlement (MLE1226).
- 5.9.4 A loomweight was found next to the footpath along the railway embankment to the north of the Deserted Medieval Village of Bittesby (MLE6250). The embankment was presumably constructed from material acquired from outside the study site. It is therefore possible that the loomweight may have been brought onto site during the construction works, or it may have been revealed during the topsoil stripping of the area of the embankment.
- 5.9.5 Within the surrounding search area, the HERs contain three records relating to Saxon activity. The arterial road of Watling Street, which borders the southern boundary of the site, appears to have been a defining boundary to the 9<sup>th</sup>/10<sup>th</sup> century Danelaw area (MLE1388) and a subsequent county boundary.
- 5.9.6 A middle Saxon coin and an early to middle Saxon plate brooch were recovered during metal detecting near Manor Farm, c.460m north-east of the study site (MLE20938). It has been suggested that these finds may represent a Saxon site, however, they were found c.400m apart and may simply represent casual losses.
- 5.9.7 The settlement of Willey, c.400m south-west of the study site (MWA9579) is also recorded in Domesday Survey (1086), which suggests that the village was settled during the Late Saxon period and is contemporary with Bittesby settlement.
- 5.9.8 The deserted settlement of Bittesby may have originated in the Saxon period. However, the paucity of evidence for Saxon activity identified during the geophysics, fieldwalking and trial trenching on the site suggests that the site has a negligible potential for significant evidence of Saxon date.
- 5.10 **Medieval**
- 5.10.1 The Deserted Medieval Village (DMV) of Bittesby (HER MLE1226) is located within the centre of the site. The DMV was designated as a Scheduled Monument in 1954. The extent of the scheduling (c.8.5ha) at this time included the features to the west of the

embankment. An Inspector's report dating from 4<sup>th</sup> November 1991 requests for amendment to the Scheduled Monument description, stating:

'The monument has been altered since it was first scheduled and it is now considered that the protection should be adjusted to exclude the area to the west of the former railway line which has been extensively ploughed, no longer contains earthworks, and is therefore considered not to be of national importance.'

- 5.10.2 On the 18<sup>th</sup> November 1992, the Scheduled Monument description and area was revised in line with the Inspector's comments, resulting in approximately 2.3ha of the DMV being maintained as a designated Scheduled Monument.
- 5.10.3 The history of Bittesby settlement is well documented in the Desk-Based Assessment of Land adjacent to Bittesby House (Archaeological Services and Consultancy, 2008), Bittesby House, Bittesby Cottages and Bittesby Lodge, Lutterworth, Leicestershire (Trigpoint, 2016) and Bittesby: A Parish and its People (Tebby, S., 2015). However, to summarise, Bittesby is referred to in Domesday Survey (1086) and was thought to have had a population of c.50 at this time (ASC 2008; 10). By 1279, it is recorded that 25 families lived in the village (MLE1226; Nichols 1810; Hopkins 1950, 93). Subsequent depopulation of the settlement is recorded in 1488 and 1494. It was stated by the Countess of Shrewsbury, who appeared before the Exchequer regarding the depopulation of the village in 1520, that in 1488 there was only 150 acres of arable land remaining when it was largely inclosed and converted to pasture (Beresford 1987; 210; ASC 2008; 11). According to the Leicestershire Returns to Wolsey's Inquiry of 1517, on the 2<sup>nd</sup> October 1494, the Earl of Shrewsbury evicted 60 people, effectively 'killing off' the settlement and laid down the demesne to pasture, enclosing the land and creating an estate pasture-farm (Goodacre 1994; 80 and 100; ASC 2008; 10). From these records, it seems clear that the land at Bittesby was partially enclosed in 1488, then fully enclosed in 1494. This enclosure likely resulted in the cessation of use of the land as common land for mixed husbandry – effectively eradicating the livelihoods of those originally living in the settlement. The population probably dispersed to local villages/towns where common-field farming was still viable, such as Ullesthorpe and Lutterworth (Goodacre 1994). The tenant farmer, the Salisburys, remained farming at Bittesby during the late 1400s (Goodacre 1994).
- 5.10.4 Detailed geophysical survey (magnetic survey and electrical resistance survey) of the Deserted Medieval Village was commissioned in support of the current planning application and carried out by ArchaeoPhysica in May and June 2015 (ArchaeoPhysica 2015b; Appendix 6). The magnetic survey identified the general extent of the settlement activity on the DMV, whilst the electrical survey provided more detailed

results of below ground features. Settlement activity is concentrated in two discrete locations in the north and south of the Monument on areas of higher ground (ArchaeoPhysica 2015b). The surveys have confirmed the settlement pattern, the location of terraces and enclosures, some with visible structures within, adjacent to hollow-ways and tracks crossing the site (ArchaeoPhysica 2015b). A stone structure in the north-east of the site was also identified.

- 5.10.5 There are two Archaeological Assets which date from the Medieval period within the site (A16 and A18). The geophysical anomalies of Medieval enclosures within the area of Archaeological Asset A18) represent the non-designated parts of the DMV of Bittesby [MLE1226]. Two trenches were excavated in the area of Asset A18. Within trench 148, five ditches and a probable hollow-way (which appears to correspond with the possible trackway in Asset A16) were revealed. Medieval pottery and a brooch were found in association with these features (Albion Archaeology 2016). Within trench 147, three undated ditches were identified, one of which produced nails. Two of these ditches appear to correspond with the layout of the deserted Medieval village to the east, which suggests that these ditches represent an extension of the settlement, or enclosures into open fields (Albion Archaeology 2016).
- 5.10.6 Two recut ditches were found during the trial trenching at Heritage Asset 16. However, no corresponding ditches were found to indicate the northern side of the trackway (Albion Archaeology 2016). A separate ditch, c.12m north of the possible trackway, may have defined the northern side of the trackway (Albion Archaeology 2016).
- 5.10.7 The metal detecting survey revealed a small quantity of finds including spindle whorls (one of which was dated to the Late Saxon/Medieval period) and an undated strap mount (Albion Archaeology 2015b).
- 5.10.8 Lutterworth Fieldwalking Group recovered 249 sherds of pottery, spanning the entire Medieval period, from across the stripped surface of the Deserted Medieval Village (ASC 2008; 10). The fieldwalking survey of the study site undertaken in association with the planning application revealed 126 sherds of Medieval pottery, mainly concentrated in the area of the Deserted Medieval Village (MoLA 2015).
- 5.10.9 The HER includes five records of Medieval activity from the surrounding search area. Outside of the study site, earthwork remains of the shrunken settlement at the northern end of Willey village are visible on aerial photographs, c.330m south-west of the study site (MWA6473). Presumably these earthworks represent the shifting location of the Medieval village of Willey, now recorded approximately 420m south-west of the study site (MWA9579) and centred around the Church of St Leonard, originally built in the Medieval period (MWA1677).

- 5.10.10 The Scheduled site of a moat, fishponds and shifted village earthworks at Ullesthorpe (National Reference 1010300) is approximately 480m north of the study site (MLE2596, MLE2597 and MLE2598) and will be inter-visible with the upper limits of the warehousing located in the west of the site.
- 5.10.11 The Monument consists of a rectangular island, which contains exposed stonework and foundations of a possible manor house [MLE2596] surrounded by a moat [MLE2597]. The moat intersects a fishpond [MLE2598] which curves round to enclose a second island. South of this is another fishpond [MLE2598] which also contains islands and further south of this are several house platforms. The moat and fishponds form part of a Medieval settlement which became deserted when the village shifted focus further north to its present location (Scheduled Monument description 1010300 and MLE2596, 2597 and 2598).
- 5.10.12 The fields surrounding the DMV on the site formed part of the open field system of the settlement in the Medieval period (Figure 6). No upstanding earthworks of ridge and furrow are extant within the study site. Beresford recorded the layout of the ridge and furrow earthworks that were extant at the time to the west of the settlement (Plate 1; after Beresford 1954; Fig 2). Areas of ridge and furrow cropmarks and earthworks are also visible on aerial photographs from the 1960s (Plates 2 and 3). The layout of the former ridge and furrow open field system has been further clarified during the geophysical survey of the site.
- 5.10.13 The study site contains the Scheduled Monument of the Deserted Medieval Village of Bittesby, consisting of terraces, enclosures, former structural evidence, trackways and hollow-ways, the non-designated area of the DMV (consisting of ditches and a possible hollow-way) to the west of the railway (Archaeological Asset A18) and a Medieval trackway (A16).

## 5.11 **Post-Medieval & Modern (including map regression)**

- 5.11.1 In 1524/5, it is recorded that only three taxpayers were left in Bittesby (Pugh 1955; 139; ASC 2008; 11). Then by 1536, the only remaining family were the Salisbury family in the village, who were probably still the tenant farmers of the land (MLE1226). By 1563, there were no households recorded to be wealthy enough to pay any tax (Pugh 1955; 139; ASC 2008; 11).
- 5.11.2 It is noted in The Domesday of Inclosures (1897) that a generation after 1494 (probably between 1536 and 1563), the Salisburys deserted the former village of Bittesby and moved to the manor house at Ullesthorpe (Leadam 1897; Goodacre 1994; 100).

- 5.11.3 Hoskins notes that a fine dating from 1572 records that Bittesby consisted of 3 messuages with a garden and orchards, 40 acres of arable, 60 acres of meadow and 1000 acres of pasture land (1950; 93). This information confirms that the land at Bittesby was, in the majority, used as pasture in the 16<sup>th</sup> century, presumably to capitalise on the increasing profitability of the wool trade in the 16<sup>th</sup> century. In 1588, Thomas Jusly had 280 ewes pastured at Bittesby (Hoskins 1950; 175) and in 1599, Thomas Gore held 247 sheep and 4 bullocks at Bittesby (Goodacre 1994; 102).
- 5.11.4 The Reverend Aulay Macaulay, 1791, summarises William Burton's (1622) account of the historical development of Bittesby. Much of both accounts is taken up with a description of the transfer of ownership of the land and is therefore not relevant to this assessment. Of interest however, is Macaulay's statement that 'The lordship, which Burton tells us was anciently called *Bittelusby*, and which in the endowment of the vicarage in 1260 is spelt *Budesby*, contains only one house. The whole lordship is now almost entirely occupied by one person, and the greatest part of the land has long since been converted into pastures for cattle and sheep, and, to use Burton's words "it is a most fertile and fruitful soil". Bittesby is remarkable for having been the manor of John Talbot, the first and famous earl of Shrewsbury, who distinguished himself so much in France in the reign of Henry VI..' He later proceeds to explain that 'Bittesby lordship seems to have been converted into sheep pastures before Burton's time. It now remains chiefly in that fate, and many people are confident, that if the plough were admitted there, the curiosity of the Antiquary might be richly gratified.'
- 5.11.5 The Will of Thomas Gore (who held sheep on the land in 1599) dates from 1634, and within it states that the senior line of the Gores took up residence in Ullesthorpe as the Lords of the manor there (Goodacre 1994; 108), which suggests that the Salisburys were replaced by the local landed gentry of the Gores in the late 16<sup>th</sup>/early 17<sup>th</sup> century. By 1679, Bittesby had been divided into 6 closes, averaging 45 acres and 6 meadows, 9 acres each [c.130 hectares in total]. The land was possibly subdivided to enable diversification of the land for both pasture and arable, as the corn trade was becoming highly profitable, whilst the wool/mutton trade was lessening (Goodacre 1994; 108-109). For a detailed description of land ownership see 'Bittesby: A Parish and its People' (Tebby, S. 2015) and the Historic Building Survey of Bittesby House (Level 4) (Trigppoint, 2016).
- 5.11.6 In c.1840, the embankment for the railway line was constructed through the earthworks of the Deserted Medieval Village (DMV) of Bittesby, splitting the settlement in two. The mapped area of HER entry MLE1226 for the DMV encompasses an area of approximately 10 hectares.



- 5.11.7 In c.2005, the topsoil and subsoil of approximately 4ha of the western part of the settlement was stripped as part of a program to improve the agricultural value of the land. Imported waste material was subsequently deposited onto the southern third of this area to raise the land, preventing intermittent flooding and improving yields (ASC 2008).
- 5.11.8 One Archaeological Asset likely to date from the Post-Medieval period (Asset A22) and one feature likely to date from the modern period (Asset A21) have been identified within the study site.
- 5.11.9 The trial trenching revealed a large quarry and associated ditches and pits at Asset 22 and although the date of these features is unclear, they are likely to be Post-Medieval in date.
- 5.11.10 Asset A21 was not excavated during the trial trenching as ground observation undertaken at the same time as the trenching confirmed that the curvilinear ditch was modern in date.
- 5.11.11 A field boundary was identified within trenches 158 and 160 (outside of any previously allocated Heritage Assets), which corresponds to a boundary on the 1844 Tithe map and is therefore likely to be Post-Medieval in date. Adjacent to the ditch was a post-hole and pit, also likely to be Post-Medieval in date. This boundary has not been assigned a Heritage Asset number as it has little archaeological significance.
- 5.11.12 The Midlands Counties Leicester to Rugby railway line (MLE16079) originally ran along a north-south aligned embankment through the site. The railway was initially built to supply Leicester with coal from the Nottinghamshire coalfield and opened in 1840. A railway underpass, presumably built in c.1840, is also located to the south of the Scheduled Monument (MLE21154). The railway line closed in 1961. Sections of the embankment were demolished in the late 1970s and 1980s.
- 5.11.13 Bitteswell Airfield, a former training airfield which opened in 1941 and closed in 1987, is located partly within the south-eastern boundary of the site (MLE15959). This land was re-developed to accommodate distribution sheds at Magna Park in the 1990s.
- 5.11.14 Data obtained from the HER contains five records relating to Post-Medieval or Modern period monuments from the search area.
- 5.11.15 The records of Post-Medieval/Modern activity in the search area relate to the remains of 17<sup>th</sup> to 19<sup>th</sup> century farm buildings/structures (MWA8852, 8893, 3742 and 3743) and an underground Monitoring Post (MLE16029). These records have a well-defined

extent and nature that add little to the understanding of the study site's archaeological potential and are therefore not discussed in any detail.

#### Historic Landscape Characterisation

- 5.11.16 Leicestershire, Leicester and Rutland Historic Landscape Characterisation (HLC) project (2010) 'maps and describes the present day landscape of Leicestershire and Rutland and records significant changes that can be observed through the study of historic mapping and aerial photography'. The Historic Landscape Characterisation mapping for the study site is shown in Figure 5.
- 5.11.17 According to the HLC, the western part of the study site is Fields and Enclosed Land, specifically 'Large Irregular Fields' (HLE11733). These fields were formed when changes in agricultural practices began to occur in the late 19<sup>th</sup> century and continued into the 20<sup>th</sup> century (2010; 94). The archaeological potential of this land is identified as 'Medium', although this is dependent upon previous land use and agricultural regimes employed since the enclosure (2010; 94).
- 5.11.18 The land to the east of the Scheduled Monument is recorded as 'Very Large Post-War Fields' (Fields and Enclosed Land) (HLE11675). These fields were created recently after the Second World War when a large number of hedgerows were removed as part of the EU's Common Agricultural Policy financial incentives program (2010; 96). The archaeological potential of these fields is identified as 'Medium/High' depending on previous land use and agricultural regimes (2010; 97).
- 5.11.19 The eastern section of the study site is recorded as Fields and Enclosed Land: Planned Enclosure (HLE11676). These fields were deliberately laid out during the 18<sup>th</sup> and 19<sup>th</sup> centuries and often contained open-field or strip cultivation (ridge and furrow) dating from the early Medieval period (2010; 87). The archaeological potential of these fields is identified as Medium/High.
- 5.11.20 The land around Bittesby House is Settlement: Farm Complex (HLE11681). Most areas falling into this category date from the 18<sup>th</sup> or 19<sup>th</sup> centuries, although some will be Modern (2010; 168). The archaeological potential is assessed to be Medium/High due to the potential for historic farm buildings (2010; 169).
- 5.11.21 Three small areas of Woodland 'Other Plantation' are identified within the site, two along the embankment (HLE11679 and HLE11680) and one in the north-eastern tip of the site (HLE11678). A significant proportion of this woodland was planted after 1995 (2010; 120) and GoogleEarth maps from 1999 show these areas have recently been

planted. According to the HLC, 'Most (areas of) recent plantation... will have little archaeological potential' (2010; 1A).

5.11.22 The evidence from the HLC Project above and the recent geophysical survey of the site has identified that many of the original field boundaries which formed the original Medieval landscape of the study site have been removed to create large open fields. The fields in the eastern third of the study site are the most likely to have retained their original Medieval landscape, however, it is clear from the modern maps (Figures 11 and 12) that many of these field boundaries have also been removed.

#### Historic Map Regression

5.11.23 As discussed in greater detail above, enclosure of the fields around Bittesby is recorded in 1488 and 1494. The settlement became a single family occupation site by 1536 and presumably shortly after this, the site became completely deserted (Scheduled Monument description). There are no contemporary maps showing this part of the settlement's history.

5.11.24 In the 1600s, 'isolated "lodge" farm houses were built even in townships like Bittesby...where throughout the 16<sup>th</sup> century the village had been 'utterly decayed [with] not one house remaining' (Burton 1622)' (Goodacre 1994; 108) and in 1680/1681 it is recorded that the bailiff at Bittesby 'had a good new-built house' (Goodacre 1994; 109-110).

5.11.25 The East Range of Bittesby House (the earliest part of the building) appears to have been constructed in the second half of the 18<sup>th</sup> century (Trigpoint 2016; 43). This part of the building may be illustrated on the 1777 Prior map and 1787 Cary map (see Heritage Assessment; CgMs 2016). However, various timbers incorporated into the roof of the East Range were obtained from an earlier roof structure – potentially from a timber framed building located on or near the same site (Trigpoint 2016). The concentration of 16<sup>th</sup>/17<sup>th</sup> century pottery found during the fieldwalking survey near to Bittesby House is likely to be the result of manuring (Albion Archaeology 2016; 32). It is possible, therefore, that the bailiff who worked the lands at Bittesby, originally lived in a house in the vicinity of the present Bittesby House, although the current evidence does not provide any firm evidence of this theory.

5.11.26 A cluster of three buildings marked as 'Bittesby' are shown on Greenwood's Map of Leicestershire, 1826 (Figure 7), although the site of the original Bittesby settlement (now designated as a Scheduled Monument) is not marked on this map. A path leading from Ullesthorpe to Bittesby House and presumably into the settlement of Willey (in Warwickshire and thus not depicted on Greenwood's map) is shown. Watling

Street forms the south-western boundary of the site and the river is shown through the site.

- 5.11.27 The first map to show the site in detail is the Tithe Map of Bittesby, 1844 (Wigston Magna Reference Ti/36/1; Figure 8). The fields on the western part of the site are large in comparison to those in the south-east of the study site, which are narrower and have a structured rectangular layout. These large fields were likely to have been maintained as pasture land rather than as part of the open field system associated with a nearby settlement. This corresponds to the reported history of Bittesby which states that the land surrounding the settlement was largely pasture by the 16<sup>th</sup> century. The conversion of these fields to pasture has been suggested as the reason for the enforced clearance of the village.
- 5.11.28 Bittesby House is marked on this map and consists of a farmhouse (shown in pink), with farm buildings to the north-east of the main building. Small enclosed fields, marked '27', are depicted around the buildings and a pond. Paths leading from Claybrooke and Ashby Parva towards Bittesby House are shown on this map. A detailed map regression of Bittesby House is provided in the Heritage Statement and Level 4 Building Survey report (CgMs 2015 RU/JCG18281/10 and Trigpoint 2016).
- 5.11.29 The Midland Counties Railway was constructed through the site in c.1840 and is shown on this map. The route of the southern section of the river appears to have been altered when compared with Greenwood's map, presumably during the construction of the railway. A small building is also recorded within Field 3.
- 5.11.30 There have been few changes to the site layout between 1844 and the First Edition Ordnance Survey map, 1886 (Figure 9). Three field boundaries have been removed and a 'Lodge' along Watling Street, two buildings now known as Bittesby Cottages, and two small buildings in the north-west of the site have been constructed. A spring is also marked in the southern field to the south of Bittesby House and a sheepwash is depicted along the river in the area of the Deserted Medieval village, indicating that much of the land was likely to have been pasture land as this time. A footbridge across the river is also shown in the north of the site. The small building marked on the Tithe Map is not depicted on this map.
- 5.11.31 The only change shown on the Second Edition Ordnance Survey map, 1905 (Figure 10) is the construction of Willey Gates along the railway line, along the south-western boundary of the study site.
- 5.11.32 The later 20<sup>th</sup> century maps show that the eastern boundary of the site is formed by Mere Road which separates the site from Bitteswell Airfield (1955; Figure 11). In the

north-east of the site, a sewage farm, consisting of two buildings and a circular tank, are shown on the map. A wind pump is also marked in the centre of the site.

- 5.11.33 By c.1965 (Figure 12), the two small buildings in the north-west of the site have been demolished. The airfield, to the south-east of the site is now marked as Bitteswell Aerodrome. The Midlands Railway closed in 1961 and at some time between this date and 1983, part of the embankment of the railway, to the north of Bittesby DMV was demolished. Between 1983 and 1990, part of the southern section of the embankment has also been demolished. From 1983 onwards, 'Medieval Village of Bittesby (site of)' is shown on the maps. In the early 1990s, the land of the former Bitteswell Aerodrome was developed as Magna Park Lutterworth and the sewage park was remodelled into a balancing pond and nature area.
- 5.11.34 The study site contains the remains of the deserted Medieval settlement of Bittesby village, of which 2.3ha are Scheduled, from which the inhabitants were evicted in the late 15<sup>th</sup> century. The land associated with the former settlement (the parish of Bittesby), which forms the majority of the study site, appears to have remained as agricultural land, farmed by tenant farmers and overseen by a bailiff. There is no firm archaeological or documentary evidence of where the tenant farmers/bailiff lived during the 16<sup>th</sup>, 17<sup>th</sup> and 18<sup>th</sup> century, although it is clear that it was not within the Deserted Medieval Village. The re-used roof timbers revealed in the earliest portion of Bittesby House suggest that an earlier timber framed building stood on the site of, or in close proximity to, Bittesby House. It is possible that the farmers/bailiff occupied this building. The significance of the deserted Medieval village is vested to a large extent in its desertion. It is clear that there was a major break between the settlement of the site and the later establishment of Bittesby House. The date of the first construction of a house on the site, post abandonment of the DMV, and who occupied that house cannot be established with any certainty. No direct connection can be made between the occupants or owners of the DMV and the later construction of Bittesby House, despite significant efforts to determine this one way or the other.
- 5.11.35 The results of the geophysical survey, fieldwalking and trial trenching revealed evidence of large Post-Medieval quarry with associated ditches and pits, a field boundary and a typical assemblage of Post-Medieval/Modern pottery, brick and tile. The majority of the study site has remained farmland though the Post-Medieval and Modern periods.

## 5.12 **Undated**

- 5.12.1 The trial trenching results revealed one ditch which did not correspond with either of the geophysical anomalies (Albion 2015a) at Asset A4. The ditch did not contain any finds and remains undated, although it is considered likely to be pre-Medieval.
- 5.12.2 During excavation of Trench 101 (within the area of Asset A11), one undated pit was revealed.
- 5.12.3 Twelve trenches were excavated outside of the existing Heritage Asset areas which contained undated archaeological features. The majority of the features were ditches located in areas showing little other evidence for past activity. The possible exceptions were the features in trenches 106, 127 and 174. Trench 106 revealed two perpendicular ditches, on the same alignment as the Roman settlement (Asset A10) and a small pit. Trench 127 identified two ditches and three post-holes (assigned Asset A25) adjacent to Watling Street between the Iron Age/Roman enclosures systems of Assets A13 and A15 and Trench 174 revealed a ditch and pit (assigned Asset A26), near the trackway of Asset A16 and settlement of A15 (Albion Archaeology 2016).

## 5.13 **Non-archaeological features**

- 5.13.1 Excavation of Archaeological Asset A14 identified a palaeochannel/former watercourse or stream in Trench 125. No features of human origin were identified within the area of Asset A14. Exploratory augering undertaken by James Rackham on site suggested that there was the potential for palaeoenvironmental remains to survive in the channel (Rackham, J. 2015 (Appendix 10); Albion Archaeology 2016).
- 5.13.2 The trial trenching revealed that the geophysical anomalies associated with the (former) Archaeological Asset A12 are the result of geological variation (Albion Archaeology 2016).

## 5.14 **Assessment of Significance**

5.14.1 Paragraph 128 of the NPPF states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.

### **Archaeological Assets on the site**

#### *Bittesby Deserted Medieval Village (Scheduled Monument 1012563; HER 1226)*

5.14.2 Bittesby Deserted Medieval Village is located within the centre of the study site. The scheduling of the Monument recognises its national importance.

5.14.3 The Scheduled area of the Deserted Medieval Village (DMV) of Bittesby comprises approximately 2.3ha of earthwork remains, including hollow ways, ditches and house platforms, which are clearly visible on aerial photographs and partially visible on the ground. Currently the site is used as pasture land for grazing sheep. It is not particularly well managed, signposted or maintained and therefore, the earthworks are difficult to interpret.

5.14.4 The significance of the Scheduled Monument is predominantly derived from its archaeological interest (evidential value), which lies in the physical earthworks and the below-ground remains and the information that the settlement site contains regarding date and methods of construction and potential to preserve earlier land surfaces, artefacts, environmental evidence and other features. The upstanding earthworks have an aesthetic value and also an illustrative historical value. The communal value of the monument lies in the meaning of the place for people who relate or experience it.

5.14.5 There is detailed documentary evidence of the DMV's history, ownership and depopulation, its representation of the social organisation of Medieval communities and its relationship with surrounding Medieval settlement. The corpus of historical knowledge of the development of the Scheduled Monument is a substantial contributor to its significance.

5.14.6 The previously identified non-designated remains of Bittesby Medieval village, which are located to the west of the embankment, also contribute to its significance and form part of the monument's setting (Plate 12). Those remains were removed from inclusion within the Scheduled area in 1992 because they were ploughed down and no longer exist as upstanding/earthwork features. Therefore, whilst they contribute to the

setting and significance of the Scheduled Monument, their own significance is vested in their evidential value. They contribute to the understanding of the Monument, but have been assessed as being no longer appropriate for Scheduling (following DCMS criteria Scheduled Monuments & nationally important but non-scheduled monuments; Annex 1: Principles of Selection for Scheduled Monuments 2013). These remains have an enhanced significance for their group value, but do not score highly for rarity or survival/condition.

- 5.14.7 The newly discovered geophysical anomalies, located on the north-western side of the ridge and extending to the eastern boundary of the Monument, clearly comprise part of the historic setting of the Scheduled Monument and contribute to its significance. The features are of Iron Age and early Romano-British date and therefore pre-date the Scheduled remains by a millennia. The fact that trackways seem to connect the ladder settlement with the Scheduled Area gives greater weight to the record of there being a villa along the line of the railway embankment. No direct evidence was found for this in the geophysical survey undertaken within the Scheduled Monument (Appendix 6) but it should be considered likely that the remains on the ridge are directly associated with activity in the bottom of the valley, in the area later developed as the Medieval village. The features on the ridge are assessed as contributing to the setting and significance of the Scheduled Monument.
- 5.14.8 Even if the Scheduled Area does not in fact contain a Romano-British phase, it is likely that vestiges of the Roman ladder system would have been extent at the time of the establishment of the DMV, as earthworks for example, and they therefore, contribute directly to its siting and landscape context.
- 5.14.9 The setting of these features comprises the ridge on which they are cut, which creates a natural 'bowl' with the Scheduled Monument located in the bottom. It is the topographic setting that contributes to the understanding of the Monument. The anomalies themselves are imperceptible in the landscape. The significance of the anomalies on the ridge is vested in their evidential value and the contribution that they make to the significance of the Scheduled Monument.
- 5.14.10 Looking east from the Monument, upslope, the view is of large modern enclosed fields. Nothing of the original Medieval landscape survives as positive/upstanding features. An informed understanding of the setting is only obtained from visiting the site with the geophysical survey and trial trenching information and maps of the Medieval fields and ridge and furrow. With this information, the significance of the landform is apparent. The experience of visiting the Monument is however, dominated by the railway embankment, the construction of which resulted in substantial harm to the



physical remains of the Monument and irrevocably impacted its setting. Bittesby DMV originally covered an area of c.10 ha. The effect of the construction of the railway embankment was to divorce the eastern part of the settlement from the remainder to the west of the embankment. Only 2.3ha of the DMV to the east of the railway line is Scheduled, reflecting the preservation of the earthworks, which have been ploughed out across the remainder of the asset (prior to recent unauthorised stripping of an extensive area as part of agricultural improvement works). The geophysical survey and trial trenching identified Medieval ditches within the western extent of the deserted Medieval village (Asset A18) and a trackway to the south-west of the embankment which may also be associated with the Monument.

5.14.11 The embankment dominates the experience of visiting the Monument, especially in views to the west and at all times, it is a significant intrusion. The choice of settlement location was to utilise the lowland location and proximity to the river within a natural, sheltered bowl. Bittesby village was not sited to enjoy expansive views. It bears many similarities to the setting of Ullesthorpe shifted Medieval earthworks to the north, which are also Scheduled. The north-south aligned (although meandering) river corridor is the crucial link between the Medieval settlements of Willey, Bittesby and Ullesthorpe and was clearly an important factor in the settlement locations and provided a connection between them or a 'corridor of local movement' in contrast to the regional corridor/transport link provided by Watling Street, now the A5.

5.14.12 It is clear from the mapping and geophysical survey of the former ridge and furrow within the site (Figure 6 and Appendix 2) that Bittesby DMV was initially located within a typical Medieval landscape with strip fields of ridge and furrow agriculture. It was not set out in relation to specific views – but its landscape context would have made a substantial contribution to its significance, whilst it survived. The consequences of agricultural land inclosure and eviction of the population in the late 15<sup>th</sup> century by the Earl of Shrewsbury, modern agricultural practice and in this specific instance, the substantial harm from the construction of the railway has left only one fifth (c.2.3 ha) of the original asset with a state of preservation warranting recognition for its national importance. Its significance is vested in its earthwork features and the corpus of historical documents detailing the site's development. The setting that makes a positive contribution to its significance falls within the north-western extent of the ridge which has been taken out of development and will be preserved in situ. This setting has been preserved in the current application proposals and will not be impacted. The current agricultural surroundings which fall outside the area of preservation make a neutral contribution to the significance of the Scheduled Monument as they do not add or detract from an understanding of the values that comprise its heritage significance.

5.14.13 The Landscape and Visual Impact assessment prepared in support of the application contains verified montages showing existing views from the Monument and should be consulted for a detailed description of current views (LVIA; Appendix F.1). In summary, a wind turbine is visible to the north-east from the Monument (Plate 5) and Magna Park Lutterworth is visible to the east from the northern boundary of the Monument (Plate 6). The embankment screens views from the monument to the west and prevents inclusive views of the Monument from the east (Plate 7). Views to the south from the Scheduled Monument are screened by mature trees and the local topography (Plate 8). Views to the east are screened by mature trees and topography which rises steeply to the east (Plate 9). To the north, views comprise the immediately surrounding fields and the wind turbine (Plates 5 and 10). When stood on the ridge on the public footpath, which runs immediately to the east of the newly discovered geophysical anomalies, there are views of each of the buildings comprising the western extent of Magna Park, Lutterworth.

5.14.14 There is a permissive access agreement to the Scheduled Monument, although access to the Monument is not easy. There are no signposts to it outside of the site, nor from the embankment and once on site there is a single laminated sign at the north-western corner of the Monument, providing limited historical information and confirming access agreements. Once on site there is significant noise from the A5 which can be heard from all areas of the Scheduled Monument and visual intrusion from the wind turbine and railway embankment. The monument is currently grazed pasture and is little visited.

5.14.15 The Scheduled Monument is a recognisable heritage asset by the average visitor however, the setting has been substantially altered from its original condition. It is therefore assessed as having 'low' sensitivity to impacts on its setting.

#### **Non-designated heritage assets on the site**

5.14.16 The results of the geophysical survey, fieldwalking and subsequent trenching evaluation within the study site in support of the application have allowed the identification and evaluation of twenty-five areas of hitherto unknown non-designated heritage assets. The results are tabulated in Table 5 (Figure 13). and comprise:

- possible Prehistoric ditches (Assets A6 and A20);
- an Iron Age settlement (Heritage Asset A15);
- an Iron Age boundary ditch (Assets A2 and A3), which continued in use through to the Roman period;
- Iron Age ditches and pit (Asset A27);

- three early Roman settlements (Assets A7, A8 and A9, and Asset A10 and A13);
- early Roman field systems, trackways, ditches and field boundaries (Assets A1, A5, A17, A23 and A28);
- Medieval ditches and hollow-way associated with the Scheduled Monument (Asset A18);
- a Medieval trackway (Asset 16);
- a Post-Medieval quarry with associated ditches and pits (Asset 22);
- undated ditches and pits (Assets A4, A11, A24, A25 and A26).

5.14.17 The significance of these features is vested in their evidential values and their potential to provide information about the evolution of the wider landscape surrounding the Scheduled Monument (with reference to the pre-Medieval activity) and potentially about the landscape broadly contemporary with the Monument (with reference to the Medieval feature).

#### ***Iron Age settlement – Asset A15***

5.14.18 Archaeological Asset A15 represents an Iron Age settlement of curvi-linear enclosures and post-holes extending over approximately 2ha. The geophysical survey results, the concentration of post-holes within trench 134 and the ditches in trench 138 are suggestive of at least two roundhouses in this area (Albion Archaeology 2016). The significance of these features is vested in their evidential value, ability to contribute to the understanding of Iron Age settlement in the area and to local/regional research agendas, specifically research objective 5H 'Investigate landscape context of rural settlements' in the East Midlands Research Agenda Strategy. The features are considered to be of regional importance, depending on the quality of assemblages and features revealed during archaeological mitigation.

#### ***Roman settlement – Assets A5, A7, A8 and A9***

5.14.19 Archaeological Assets A5, A7, A8 and A9 are non-designated heritage assets that contribute to the significance of the Scheduled Monument of Bittesby DMV. An area covering approximately 32.8ha which includes the early Roman settlement has been removed from the developable area in order to preserve these heritage assets in situ.

5.14.20 Following the intrusive investigation determination of their significance, date, complexity and state of preservation has been established. The trenching evaluation has demonstrated that Heritage Assets 5, 7, 8 and 9 represent an early Roman settlement (within some Iron Age elements). The trackways identified during the survey date from the early Roman period and appear to lead towards the Scheduled

Monument, potentially linking the settlement to the possible Roman villa (HER 1230), within the Scheduled site. The significance of the settlement is vested in the site's evidential value and contribution to our understanding of early Roman settlements and the historic development and landscape setting of Bittesby Deserted Medieval Village Scheduled Monument.

***Roman settlement – Asset A10***

5.14.21 A small early Roman settlement comprised of rectilinear enclosures was identified during the trial trenching of Archaeological Asset A10. The features extend over an area of 2.5ha and contain evidence of multi-phase activity (Albion Archaeology 2016). The significance of these features is vested in their potential to contribute to understanding of land use during the Roman period.

***Roman settlement – Asset A13***

5.14.22 Archaeological Asset A13 also represents an early Roman settlement comprised of rectangular enclosures, ditches, pits and post-holes covering an area of approximately 4.5ha (Albion Archaeology 2016). Similarly to Assets A5, A7, A8, A9 and A10, the significance of these features is vested in their evidential value and contribution to local to regional research agendas and our understanding of the historic development and land use of Roman settlements.

***Medieval ditches – Asset A18***

5.14.23 The Medieval ditches and possible hollow-way (Asset A18) form part of the Deserted Medieval Village of Bittesby, or associated outlying enclosures and may well have connected to the Medieval trackway (Asset A16). The significance of these features is vested in their evidential value.

***Medieval trackway – Asset A16***

5.14.24 The Medieval trackway (Asset A16) appears to lead towards the Deserted Medieval Village of Bittesby and may well have connected the settlement to Watling Street. The significance of the trackway is vested in its evidential value and ability to contribute to the landform and understanding of the Scheduled Monument and the landforms and communication routes surrounding Medieval villages.

5.14.25 Within the rest of the site, the results of the recent surveys confirm that the current application area contains assets of archaeological interest which are of local importance, comprising the possible Prehistoric boundaries (Assets A6 and A20), probable Iron Age boundaries (Assets A2 and A3), early Roman field system (Assets

A1 and A23), Roman trackway (A17), Roman ditches (A28) and as yet, undated additional ditches, pits and postholes, found during the trial trenching, outside of the Heritage Asset areas. The significance of these features is vested in their evidential value and their contribution to local research agendas.

- 5.14.26 The remaining Archaeological Assets (A4, A11 and A22) are deemed to have very limited evidential value and are considered to be of local archaeological importance, at best.
- 5.14.27 Archaeological Assets A12, A14 and A19 have been re-evaluated as non-archaeological features or blank areas and have no archaeological significance or importance.
- 5.14.28 The land to the east of Mere Lane, within Zone 1, has been largely previously developed and as a consequence is likely to retain little or no potential to contain archaeological deposits. This area is unsuitable for archaeological surveys.
- 5.14.29 The land to the east of Magna Park identified for the proposed rail freight terminal has been archaeological assessed by geophysical survey (ArchaeoPhysica 2012) and trial trenching (Albion Archaeology 2015). This area contains no remains of archaeological interest and no further archaeological work will be required.

### **Designated Heritage Assets within the search area**

#### *Moat, fishponds and shifted village earthworks at Ullesthorpe (Reference 1010300)*

- 5.14.30 The Scheduled Monument is located c.480m north of the study site to the south-west of Ullesthorpe. It consists of a rectangular island, which contains exposed stonework and foundations of a possible manor house surrounded by a moat and two fishponds. The site forms part of the original Medieval settlement which became deserted when the village shifted focus further north to its present location.
- 5.14.31 It is one of around 6,000 moated sites known in England. The peak period for construction of moated sites in the Medieval period was between 1250 and 1350, although they are known to have been built throughout this period (Scheduled Monument Description 1010300). The heritage significance of the Scheduled Monument largely derives from its archaeological interest and historic interest (evidential and historic value). The archaeological interest of the monument lies in the physical monument itself (the moat, islands, manorial evidence and settlement earthworks) and the information that these features contain regarding date and methods of construction and potential to preserve earlier land surfaces, artefacts, environmental evidence and other features. The site's historical interest relates to its

representation of the political and social organisation of this part of Leicestershire in the Medieval period and the village's relationship to other surrounding Medieval settlements.

- 5.14.32 The significance of the Scheduled Monument is also partially derived from its communal and aesthetic value. There is permissive access to the monument and whilst it is poorly interpreted on the ground, the earthworks have greater presence than those at Bittesby DMV. The aesthetic value is comprised of the physical earthworks of the monument and its surrounding setting.
- 5.14.33 The setting of the Monument comprises views from the monument which encompass the modern settlement of Ullesthorpe to the north and north-east and the surrounding enclosed fields. The western part of the study site is partially inter-visible with the highest point of the designated site of the Scheduled Monument (Plate 11; see LVIA Appendix F.1). The earthworks in the southern section of the Scheduled Monument - the closest point to the study site, are screened from the site, in all seasons, by the local topography of the valley.
- 5.14.34 The Scheduled Monument is a recognisable heritage asset by the average visitor, within a setting which has only been partially modified by later land use. It is therefore assessed as having 'medium' sensitivity to impacts on its setting.
- 5.14.35 Built Heritage Assets which may be affected by the development proposals will be dealt with in a separate report (CgMs 2015; report no. RU/JCG18281/10).

## 5.15 **Impact Assessment**

- 5.15.1 NPPF para 132 states that 'When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, battlefields, grade I and II\* listed buildings, grade I and II\* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.'
- 5.15.2 NPPF para 133 proceeds to explain that local planning authorities should refuse consent for development that would lead to substantial harm or total loss of

significance of a designated heritage asset unless that loss is necessary to achieve substantial public benefits that outweigh the harm or loss.

- 5.15.3 NPPF para 134 states 'Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.'
- 5.15.4 NPPF para 135 states 'The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that effect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of harm or loss and the significance of the heritage asset.'
- 5.15.5 The National Planning Practice Guidance (Paragraph: 017 Reference ID: 18a-017-20140306) provides the following guidance on substantial harm:
- 'In general terms, substantial harm is a high test, so it may not arise in many cases. For example, in determining whether works to a listed building constitute substantial harm, an important consideration would be whether the adverse impact seriously affects a key element of its special architectural or historic interest. It is the degree of harm to the asset's significance rather than the scale of the development that is to be assessed. The harm may arise from works to the asset or from development within its setting.
- 5.15.6 While the impact of total destruction is obvious, partial destruction is likely to have a considerable impact but, depending on the circumstances, it may still be less than substantial harm or conceivably not harmful at all, for example, when removing later inappropriate additions to historic buildings which harm their significance. Similarly, works that are moderate or minor in scale are likely to cause less than substantial harm or no harm at all. However, even minor works have the potential to cause substantial harm.'
- 5.15.7 Many of the legal decisions concerning the 'substantial harm' test relate to Built Heritage rather than archaeological assets. However Bedford Borough Council v Secretary of State for Communities and Local Government and NUON UK Ltd [2012] ('Nuon') focused on setting issues. Mr Justice Jay stated (para 24) 'What the inspector was saying was that for harm to be substantial, the impact on significance was required to be serious such that very much, if not all, of the significance was drained away.'

5.15.8 Mr Justice Jay proceeded to state (in para 25) 'that plainly in the context of physical harm, this would apply in the case of demolition or destruction, being a case of total loss. It would also apply to a case of serious damage to the structure of the building. In the context of non-physical or indirect harm, the yardstick was effectively the same. One was looking for an impact which would have such a serious impact on the significance of the asset that its significance was either vitiated altogether or very much reduced.'

5.15.9 Consideration of the impact on the surrounding Built Heritage Assets is dealt with in separate report (CgMS 2015; report no. RU/JCG18281/10).

5.15.10 This desk-based assessment assesses the development impact on the heritage assets within the site and in the surrounding search area. The impacts have been identified from the proposed Parameter Plan (Appendix 5) for the Outline application.

#### *Bittesby Medieval Settlement*

5.15.11 The initial parameter plan contained large-scale development within the land immediately north-east and east of the Scheduled Monument. The results of the geophysical survey have demonstrated that this area contains Archaeological Assets which contribute to the significance of the Scheduled Monument. Subsequently, the Parameter Plan has been redeveloped – this land is now allocated as Meadow. The area of the Scheduled Monument (c.2.3ha), the area of the non-designated heritage assets which contribute to the significance of the Scheduled Monument (c.15.3ha), and a buffer zone (c.15.2ha) will be preserved in situ. This land (other than the Scheduled Monument itself) is currently in cultivation and is located upon a ridge line and is therefore extremely vulnerable to impacts from continued ploughing. These areas will be removed from agricultural impact and retained as meadow land, resulting in preservation of the archaeological assets and their contribution to the significance of the Scheduled Monument. This results in a large benefit to the Scheduled Monument and archaeological heritage of the area. There will be no direct impacts upon the heritage assets located within the Meadow land and Park land depicted on the Parameter Plan (Parcels C and D; Appendix 5).

5.15.12 Tim Allen, Inspector of Ancient Monuments for Historic England, responded to consultation on the planning application for the site on the 23<sup>rd</sup> October 2015 stating:

'The proposed outline element of this hybrid application, has through a process of pre-application and discussion and pre-determination archaeological investigation, arrived at a scheme which preserves under grass the rising ground to the east of the medieval village (as visual and archaeological historic landscape setting) and retains views and



connectivity along the Claybrook Stream. These measures arguable constrain the harm of the scheme to a level below substantial harm as set out in the National Planning Policy framework (Para 132).'

- 5.15.13 The proposed development is an extension to the existing Magna Park, Lutterworth. The impact of the construction of the proposed warehouses on the Scheduled Monument will be to introduce built development to the west of Mere Lane, south and south-east of the Scheduled Monument and west of the railway embankment. This will make the facilities more prominent in views from a small area at the highest point of the Monument than the existing Magna Park in views to the east and south-east from the Monument. The Landscape and Visual Impact Assessment prepared in support of the application contains verified montages showing the change envisaged within the current views from the Monument (LVIA ES Volume 3, Technical Appendix F.1 September 2015; Viewpoint 7). This potential visual intrusion would be mitigated by the use of tapered light coloured cladding to blend the upper parts of buildings with the sky back drop, through the siting of buildings and yards and by proposed planting in the foreground of the buildings, once it matures. Existing woodland vegetation on the edge of the Scheduled Monument would also grow on to further restrict inter-visibility. This assessment is concerned chiefly with the potential for setting impacts that impact upon the significance of heritage assets. Not all changes within the setting of heritage assets, designated or non-designated, will impact upon their heritage significance.
- 5.15.14 The significance of the Monument is established in Section 4.13 above, including an assessment of how the newly discovered geophysical anomalies occupying the ridge east of the Scheduled Monument contribute to that significance. The geophysical survey and fieldwalking surveys within the application boundary have established that the site contains 23 areas of hitherto unknown non-designated assets. The subsequent trenching has re-evaluated these areas and determined that there are 25 areas of the site which contain significant archaeological features.
- 5.15.15 Archaeological Assets A5, A7, A8 and A9 are considered to contribute to the significance of the Scheduled Monument and will therefore be preserved in situ and removed from the areas of development. It is proposed to remove these assets from the current intensive arable regime and instead institute a managed Meadowland habitat. A Method Statement for the construction of the Meadowland, including details of depths of material to be deposited, siting of material and a system to avoid indirect or direct construction impacts will be agreed in advance with the Local Planning Authority.

- 5.15.16 The remaining Archaeological Assets are not of a significance that will prohibit or constrain development. These assets have been evaluated through trial trenching in advance of determination of the planning application and, subsequently there will be a requirement for a conditioned scheme to preserve these assets by record in advance of development, where they cannot be preserved in situ.
- 5.15.17 The key elements of the significance of the Scheduled Monument - its aesthetic and illustrative historical values, derive from its upstanding earthworks and its state of preservation. It is also important for the historical records that relate to it. These values and its evidential value will not be impacted by the proposed development. The setting that makes a positive contribution to its significance is the rising land up to and including the ridge, to the east of the Monument. The features that occupy the ridge, identified during the recent surveys, are significant for their evidential value and for their contribution to the significance of the Scheduled Monument. The land to the east of the Scheduled Monument occupying the ridge has been removed from development, and will be taken out of arable cultivation and preserved as Meadow land. The development proposals will preserve and enhance the Scheduled Monument and its setting and are therefore assessed as having a beneficial impact on the Scheduled Monument and surrounding archaeological assets which contribute to the significance of the Monument.
- 5.15.18 The construction phase will introduce noise, dust, vibration and visual intrusions through cranes etc into views from the north-western part of the Monument. The intervening topography, and distance from the Monument would limit the impacts upon visitors to the Monument and will involve only a low magnitude of change during the construction phase. This will lessen to negligible once the cranes and construction impacts have finished and when planting matures, by year 10 of the development.
- 5.15.19 The current warehouses at Magna Park, located approximately 500m east of the Scheduled Monument, are obviously modern in character, but the lack of detailing prevents them becoming overly conspicuous. The Gazeley graded cladding of what are very large structures also lessens their visual intrusion.
- 5.15.20 The proposed development will discharge surface water into watercourses both upstream and downstream of the Bittesby and upstream of the Claybrooke Mill. However given that run-off rates are to be attenuated to Greenfield rates through the use of above and belowground storage systems there will be no change to the overland flow rates reaching these heritage features. In particular, there will be no change to the flow in the River Soar at Claybrook Mill, as all of the present day catchment draining into this watercourse will continue to be directed into it, at

Greenfield rates via Watercourse 1, post development (Capita 2015; 23). Thus, the development will not involve significant change to run off rates into the river, nor will it create significant changes to soil chemistry.

5.15.21 There will also be no impact on the historical value of the Scheduled Monument. There has been consideration within the design proposals to the historic connections between the Bittesby Medieval settlement and the Medieval settlements at Ullesthorpe, Claybrooke Parva and Willey. Thus, there will be no development impact on the associative values or connections between Bittesby Medieval settlement and the surrounding settlements of Ullesthorpe and Willey. There will be a positive impact on the communal value of the Monument due to the increased use and understanding of the area by the people who work at Magna Park Lutterworth.

5.15.22 To summarise, the Meadow Land Areas (Parcel D; Parameter Plan; Appendix 5) proposed in the east of the site will provide significant benefits to the positive aspects of the setting of the Monument and will end the erosion of the significance of those features by the current intensive agricultural regime. The Parkland to the north of the Monument will preserve the historic connections between the Monument and the Scheduled Monument of the Medieval settlement of Ullesthorpe to the north; and the additional evaluation of the archaeological assets to the west of the embankment and in the areas of proposed development has provided additional archaeological information, furthering our understanding of the Monument.

5.15.23 The upper limits of the proposed warehousing and development within parcels G, H, I and in the Heart Development Parcel E will be visible, in combination, with the Monument from immediately north of the Scheduled Monument. However, with further establishment of existing woodland vegetation, proposed planting belts (including along the edge of parcel I) and the lower density and distribution of land uses within Parcel E, the majority of the modern development in these parcels, which forms a backdrop, would be concealed from the view directly over and beyond the Monument.

5.15.24 This assessment therefore considers the magnitude of impact on the setting of the Scheduled Monument to be moderate. In no sense will the proposed development remove all significance from the Monument, nor will it adversely impact upon key elements of its special interest. There will be no physical impacts upon the Monument, nor will development remove substantial assets which make positive contribution to its significance. The magnitude of impact is moderate, because of the increased modern development in close proximity to non-designated assets that contribute to its significance and setting. This change in proximity to those assets in no way constitutes

'substantial harm' (NPPF para 132 and 134). Tim Allen, Inspector of Ancient Monuments for Historic England, has confirmed that:

'The proposed outline element of this hybrid application, has through a process of pre-application and discussion and pre-determination archaeological investigation, arrived at a scheme which preserves under grass the rising ground to the east of the medieval village (as visual and archaeological historic landscape setting) and retains views and connectivity along the Claybrook Stream. These measures arguable constrain the harm of the scheme to a level below substantial harm as set out in the National Planning Policy framework (Para 132). However as set out in paragraphs 132 and 134 all harm must be clearly justified and weighed against public benefits.' (23<sup>rd</sup> October 2015).

5.15.25 There will be a conditioned requirement to ensure that the proposed development does not have an adverse impact on the state of preservation of deposits within the Scheduled Monument.

**Non-designated heritage assets (Archaeological Assets) identified during the geophysical survey and trial trenching and recorded in the HER on the site**

5.15.26 There are twenty-five non-designated heritage assets on the site identified during the geophysical survey and trial trenching (which are associated with eleven heritage assets recorded on the HER). Two heritage assets (Bitteswell Airfield and the Railway Underpass) are the assets which are recorded on the HER on the site which have not been revealed to be associated with additional archaeological features during the fieldwork.

5.15.27 The initial parameter plan contained large-scale development within the land immediately north-east and east of the Scheduled Monument. The results of the geophysical survey and trial trenching have demonstrated that this area contains an early Roman ladder type settlement. The Parameter Plan has been redeveloped and since, this land is now allocated as Meadow. The area of the Scheduled Monument (c.2.3ha), the area of the early Roman settlement non-designated heritage assets (c.15.3ha), and a buffer zone (c.15.2ha) will be preserved in situ. This land (other than the Scheduled Monument itself) is currently in cultivation and is located upon a ridge line and is therefore extremely vulnerable to erosion by ploughing. These areas will be removed from agricultural impact and retained as meadow land, resulting in preservation of the archaeological assets. This effectively results in a benefit to the Scheduled Monument and archaeological heritage of the area. There will be no direct impacts upon the heritage assets located within the Meadowland and Parkland depicted on the Parameter Plan (Parcels C and D; Appendix 5).

- 5.15.28 There will be no impact upon Archaeological Assets A5, A7, A8 and A9 and HER entries MLE21337, MLE1230, MLE1226, MLE17111, MLE16461, MLE16462, MLE6250 and MLE21154 on the site as these features and findspots fall within the area proposed for preservation in situ, discussed above (Appendix 5). This land is currently cultivated; however, it is intended to transfer this land to meadow which will significantly benefit the preservation of the assets.
- 5.15.29 The proximity of the closest proposed building footprint (c.75m from Parcel E of the parameter plan) to the newly discovered early Roman settlement features increases the potential for setting impacts upon the Monument, because these anomalies demonstrably contribute to its significance. The features themselves are not discernible being buried, but an informed observer with the survey reports can determine how these enclosures relate to the existing landform and positively contribute to an understanding of the monument. The observer would naturally look west towards the Monument, to which the anomalies are associated and existing views east contribute nothing positive towards their significance. The construction of a warehouse facility within c.75m of these assets however would involve a medium magnitude of change – introducing new, unrelated elements that distract from an appreciation of the asset and compete with the setting of the Monument.
- 5.15.30 Any potential impact on the remaining Archaeological Assets and HER entries is discussed below.

#### Watling Street Roman Road

- 5.15.31 The Roman Road Watling Street (HER1388) partly lies within the study site. It is famously known as a communication route used in the Roman period and was one of the arterial roads of the province. Use of the route way also extended into the Saxon period and it likely provided a defining boundary to the 9<sup>th</sup>/10<sup>th</sup> century Danelaw area (MLE1388). The modern surface of the A5 overlies the historic road surface of the Roman road. The construction of the A5 will have either built up the ground level over the original road surface or truncated the archaeological deposits. Therefore, the proposed development will not impact upon the Roman Road of Watling Street and this feature will be scoped out of the Environment Statement.

#### Undated Skeleton

- 5.15.32 The skeletal remains (MLE1225) were recovered during work along Watling Street in the 1950s, along the south-western boundary of the study site. The remains are likely to be associated with the Iron Age settlement revealed during the trial trenching on the site (Heritage Asset A15). Should further evidence of such remains have been

present, it is likely they would have been recovered during the construction of the A5, or during the evaluation of Asset A15. Should any further remains be present on the site, it is likely that these will be identified during mitigation of the site.

#### Bitteswell Airfield

5.15.33 The HER polygon of the modern airfield at Bitteswell (MLE15959) is located partially within the study site, east of Mere Lane. This polygon represents the mapped extent of the airfield, rather than an area of significant archaeology associated with the former use of the land. Any archaeological evidence of the airfield that is located within the site will have already been destroyed during the construction of Magna Park Lutterworth and its associated water purification area. The proposed development will not cause any impact on Bitteswell Airfield. This Airfield will be scoped out of the Environmental Statement due to this reason.

#### Railway Underpass

5.15.34 The railway underpass (MLE21154) is located adjacent to the southern extent of the Scheduled Monument. The underpass will remain extant and preserved on the site - there will be no impact upon this heritage asset.

#### Archaeological Assets

5.15.35 The groundworks for construction of the proposed development including the warehouse units and site infrastructure are anticipated to damage or destroy any surviving below-ground archaeology within the site including the remaining Archaeological Assets identified during the geophysical survey.

5.15.36 The impact of the development proposals on these remains has been assessed through programmes of field evaluation undertaken in support of the proposed development.

5.15.37 None of the Archaeological Assets identified during the geophysical survey and evaluated during the trial trenching are of such significance to require preservation in situ. It is therefore, anticipated that the development impact can be adequately and proportionately managed through programmes of further archaeological investigation and recording, undertaken as part of a conditioned scheme of archaeological mitigation.

*Moat, fishponds and shifted village earthworks at Ullesthorpe, 560m north of the study site*

- 5.15.38 The study site is only partially inter-visible with the highest topographical point of the Scheduled Monument as the surrounding landform conceals the Monument from the vast majority of the study site. Further, the majority of the visible setting around this Scheduled Monument site will remain unaffected. During operation, the upper 6-8 metres of the warehouses in parcel K in the west of the site, would be the most visible in limited views, to the south-east, from the Scheduled Monument. There are also glimpsed views of the upper c.3m of the warehouse in parcel I. However, this is only a small part of the overall southern panorama from the Monument.
- 5.15.39 The surrounding topography and mature tree cover between the Scheduled Monument and the site offer protection to the Scheduled Monument's setting. With normal tree growth in the existing foreground vegetation and with tapered light coloured cladding of the upper sections of the visible parts of buildings to blend them with the sky, the majority of the warehouses would become barely perceptible in winter and would be substantially screened from the Monument in the summer months (see LVIA Visually Verified Montages in ES Volume 3, Technical Appendix F.1, for Viewpoint 5a<sup>ii</sup>). Furthermore, the setting of the Scheduled Monument has already been altered in the late 1960s/early 1970s by the erection of large agricultural buildings at Manor Farm, c.100m east of the Scheduled Monument and the construction of residential properties along Manor Road, c.200m north-east of the Scheduled Monument. The Proposed development also maintains and enhances existing access connections to and from the Ullesthorpe and Bittesby scheduled monument sites. It is therefore, considered that any minor impact to the setting of the Scheduled Monument from the development proposals could be alleviated by the above measures and that the scheme would maintain the connection between the Scheduled Monument and Bittesby DMV.
- 5.15.40 The development proposals will have a low impact on the aesthetic value of the Scheduled Monument and a negligible impact on the evidential, historic or communal value of the Monument.
- 5.15.41 There will be minimal change from pre-development conditions - the setting characteristics will still be appreciable and the significance of the asset will only be minimally affected. Therefore, the magnitude of impact on the significance of the heritage asset is assessed as low.

## **6.0 CONCLUSIONS**

- 6.1 This archaeological desk-based assessment draws together the available archaeological, historic, topographic, land-use, geophysical survey, fieldwalking survey and trial trenching evaluation information in order to clarify the heritage significance and archaeological potential of land proposed for an extension to Magna Park Lutterworth, Leicestershire on behalf of IDI Gazeley.
- 6.2 It addresses the information requirements set out in Government's National Planning Policy Framework (NPPF, para 128).
- 6.3 The assessment considers the potential direct impact of the proposed development on below-ground archaeology during construction, and the impact of the development on the significance of heritage assets on the site and in the surrounding area through change within their settings.
- 6.4 The study site contains archaeological remains of a probable Iron Age settlement (Heritage Asset A15), an Iron Age trackway and boundary (Assets A5 and A17), possible Iron Age boundaries and ditches (Assets A2, A3, A6, A20 and A27), two early Roman settlements (Assets A7, A8 and A9, Asset A10 and Asset 13), a possible early Roman settlement (Asset A10), early Roman field systems (Assets A1 and A23), a probable Roman ditch (A28), Medieval ditches and possible hollow-way associated with the Scheduled Monument (Asset A18), a Medieval trackway (Asset 16), the designated and non-designated remains of Bittesby Deserted Medieval Settlement, a Post-Medieval quarry site (Asset 22) and non-settlement related undated ditches, post-holes and pits (Assets A11, A24, A25 and A26).
- 6.5 No development is proposed in the area of the Deserted Medieval Village or within the area of the non-designated heritage assets to the north-east and east which contribute to the Scheduled Monument's setting. There will be no direct impact on the Scheduled Monument or the non-designated heritage assets along the ridge.
- 6.6 The study site comprises part of the peripheral rural landscape setting of the Scheduled Monument. However, this setting has been heavily altered since the Medieval period and is considered to make little positive contribution to the significance of the Monument. The geophysical survey, metal detecting and trial trenching have identified substantial archaeological remains which positively contribute to the setting of the Scheduled Monument - these areas have been removed from the development proposals and cultivation in order to preserve their significance and contribution to the Scheduled Monument, resulting in significant benefits to the archaeological heritage. A separate Landscape and Visual Impact



Assessment has been prepared in support of the application and this should be consulted for a consideration of the effect of changes to the view from the Scheduled Monument.

- 6.7 This assessment has assessed the Monument's sensitivity to impact on its setting of the Scheduled Monument to be low as the setting of the Monument has been substantially altered. In no sense will the proposed development remove all significance from the Monument, nor will it adversely impact upon key elements of its special interest. There will be no physical impacts upon the Monument itself, nor will development remove substantial assets making positive contributions to its significance. The magnitude of impact is considered to be moderate/minor, because of the increased modern development in distant views from the Monument. This change in proximity to those assets in no way constitutes 'substantial harm' (NPPF para 132 and 134).
- 6.8 Tim Allen, Inspector of Ancient Monuments for Historic England, issued a consultation response to the planning application on the 23<sup>rd</sup> October 2015. Within the email, he stated:
- 'The proposed outline element of this hybrid application, has through a process of pre-application and discussion and pre-determination archaeological investigation, arrived at a scheme which preserves under grass the rising ground to the east of the medieval village (as visual and archaeological historic landscape setting) and retains views and connectivity along the Claybrook Stream. These measures arguable constrain the harm of the scheme to a level below substantial harm as set out in the National Planning Policy framework (Para 132). However as set out in paragraphs 132 and 134 all harm must be clearly justified and weighed against public benefits.'
- 6.9 In terms of the effects on the setting of Scheduled Monuments in the surrounding area, a 2.5km radius study zone has been adopted within which the heritage assets have been appraised and assessed.
- 6.10 The 'Moat, fishponds and shifted village earthworks at Ullesthorpe' (Reference 1010300) is located c.480m north of the study site and is partially inter-visible with the study site. The only other Scheduled Monument within the search area is the 'Moated site, enclosure and trackway at Claybrooke Parva' (Reference 1010191), which is screened from the site by the local topography and mature planting.
- 6.11 Although the study site is partially inter-visible with the Scheduled Monument at Ullesthorpe, the majority of the visible setting around this Monument would remain unaffected. The tapered light coloured cladding to the upper parts of warehouse

buildings to the west of the application site would assist in blending them with the sky backdrop. In addition, the existing vegetation, landform, and Lodge Farm buildings would continue to limit views from the Monument in the foreground, in both summer and winter months. The magnitude of development impact upon the setting of the Scheduled Monument at Ullesthorpe is assessed as Low.

- 6.12 A separate Built Heritage Assessment has been prepared to accompany the application (CgMs 2015; ref RU/JCG18281/10) and this should be consulted for a detailed assessment of the potential sensitivity of built heritage assets within the wider study area.
- 6.13 The Principal Archaeologist for Leicestershire County Council has confirmed that the results of the fieldwork surveys will provide sufficient information to allow the Local Planning Authority to make an informed recommendation. This is likely to be that the heritage interest of the site can be safeguarded through an appropriately worded planning condition.

## **SOURCES**

### **General**

National Planning Policy Framework  
National Planning Practice Guidance  
Historic England National Heritage List for England ([list.english-heritage.org.uk](http://list.english-heritage.org.uk))  
Heritage Gateway ([www.heritagegateway.org.uk](http://www.heritagegateway.org.uk))  
Leicestershire and Rutland Historic Environment Record (HER)  
Harborough District Council  
Rugby Borough Council

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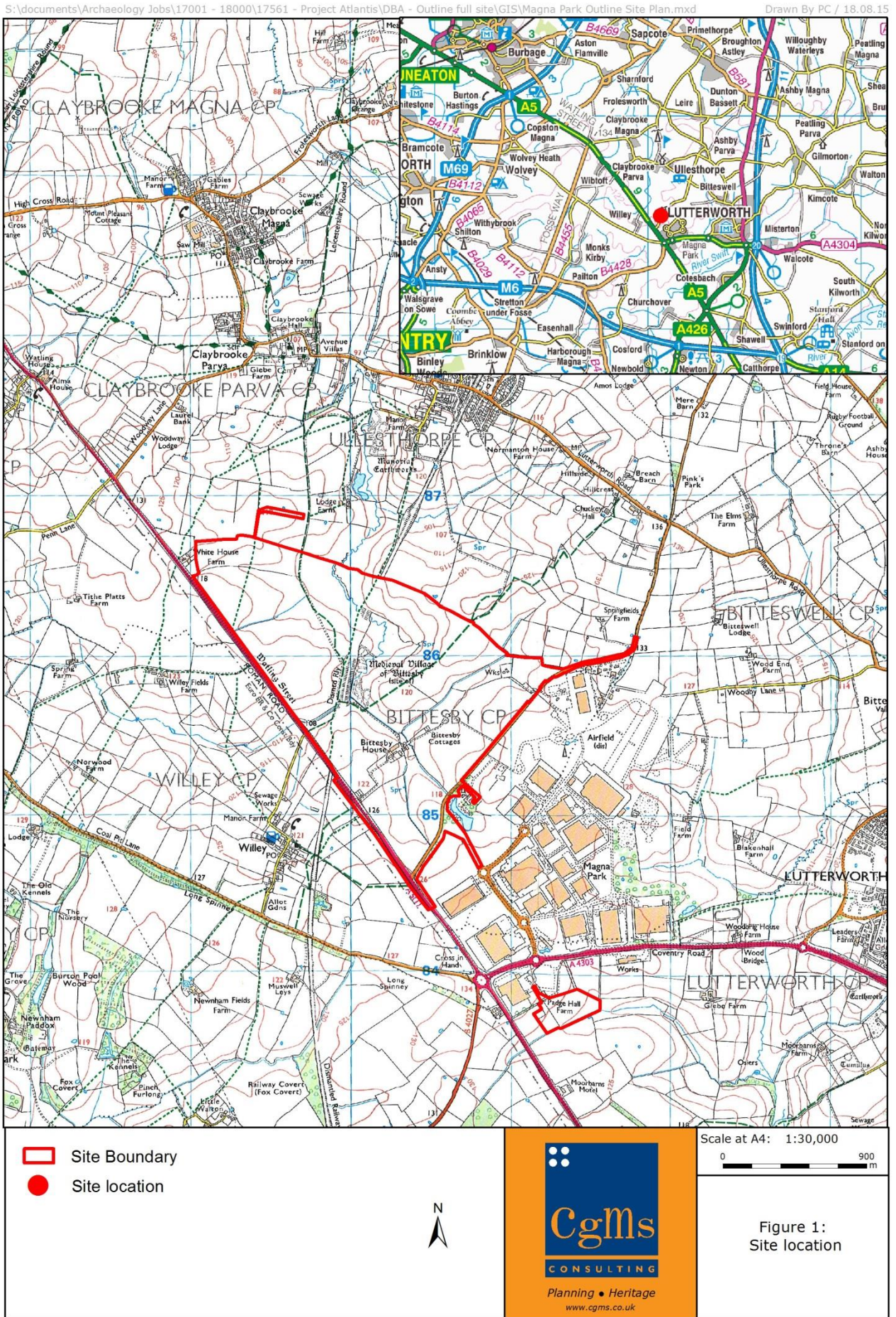
### **Cartographic**

- 1790 Map of the outskirts of Lutterworth (Wigston Magna Record Office Reference Misc 239)
- 1826 Greenwood's Map of Leicestershire (Wigston Magna Record Reference DE2015)
- 1844 Bittesby Tithe Map (Wigston Magna Record Office Reference Ti/36/1)
- 1853 Lutterworth Tithe Map (site not shown) (Wigston Magna Record Office Reference Ti/211/1)

Ordnance Survey 1:2500 editions: 1888, 1903, 1963, 1983, 1994

Ordnance Survey 1:10,000 / 1:10,560 editions: 1886, 1904, 1955, 1965-68, 1983-87, 2006, 2014

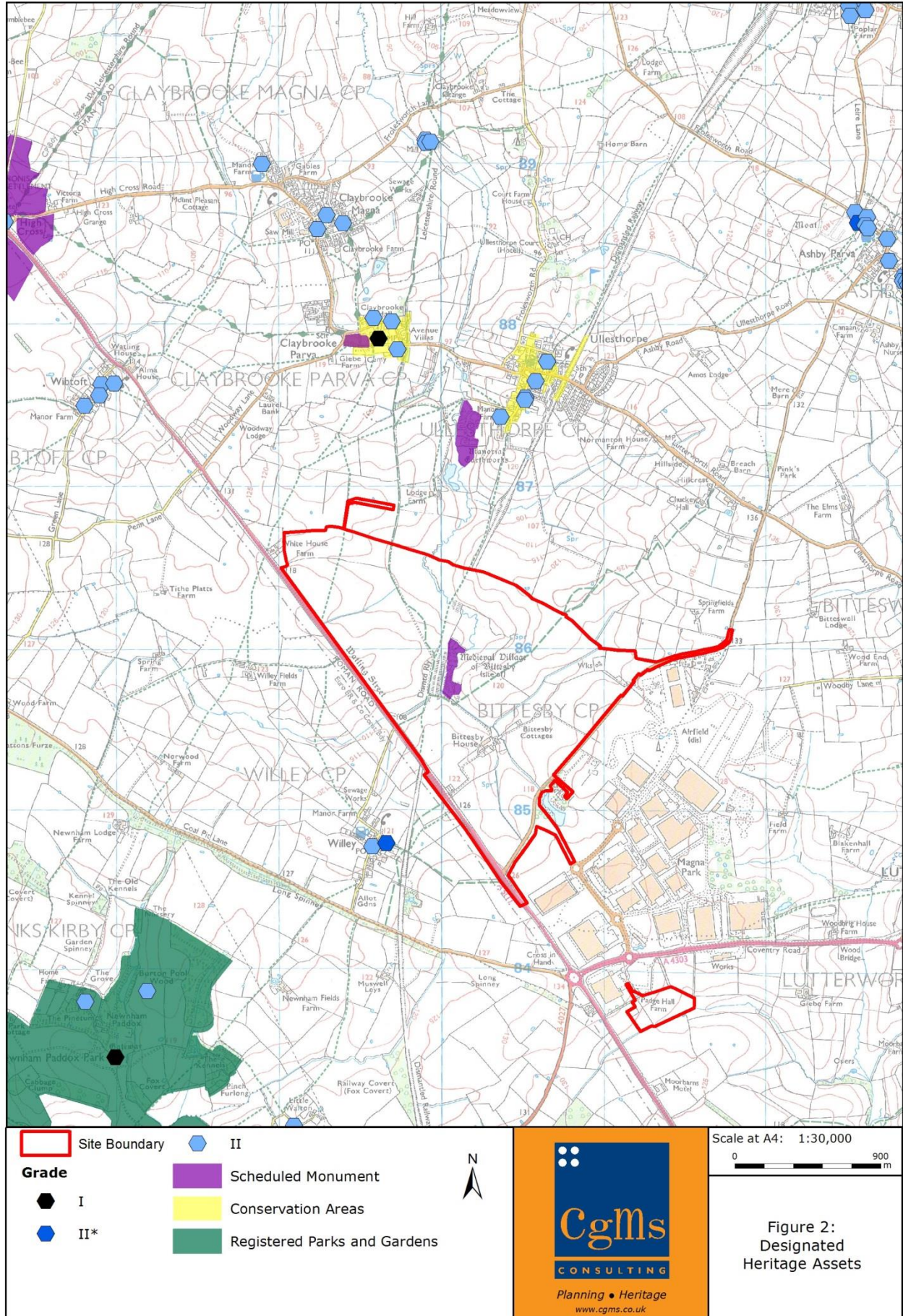






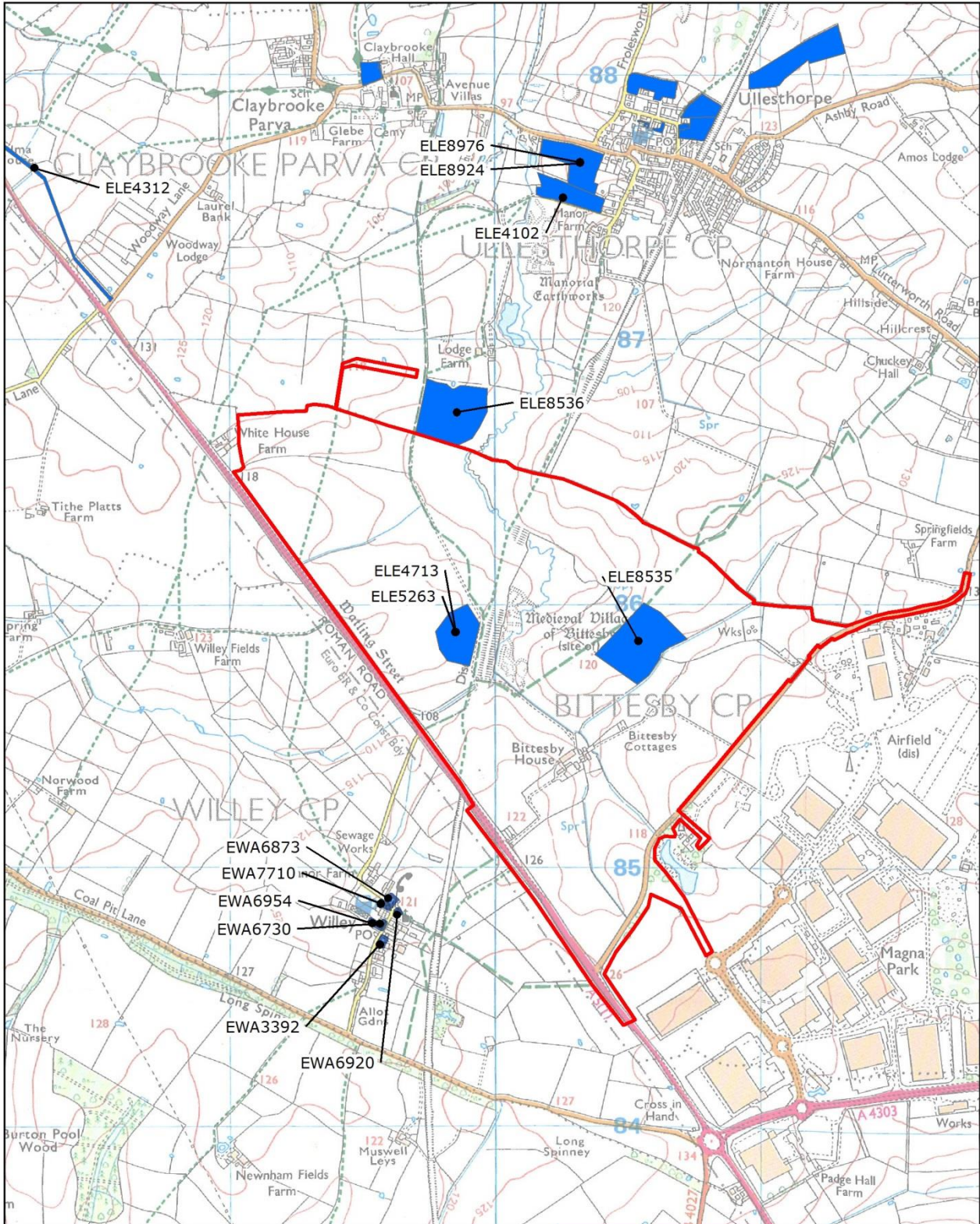
S:\documents\Archaeology Jobs\17001 - 18000\17561 - Project Atlantis\DBA - Outline full site\GIS\GIS\Phase 4 Designs.mxd

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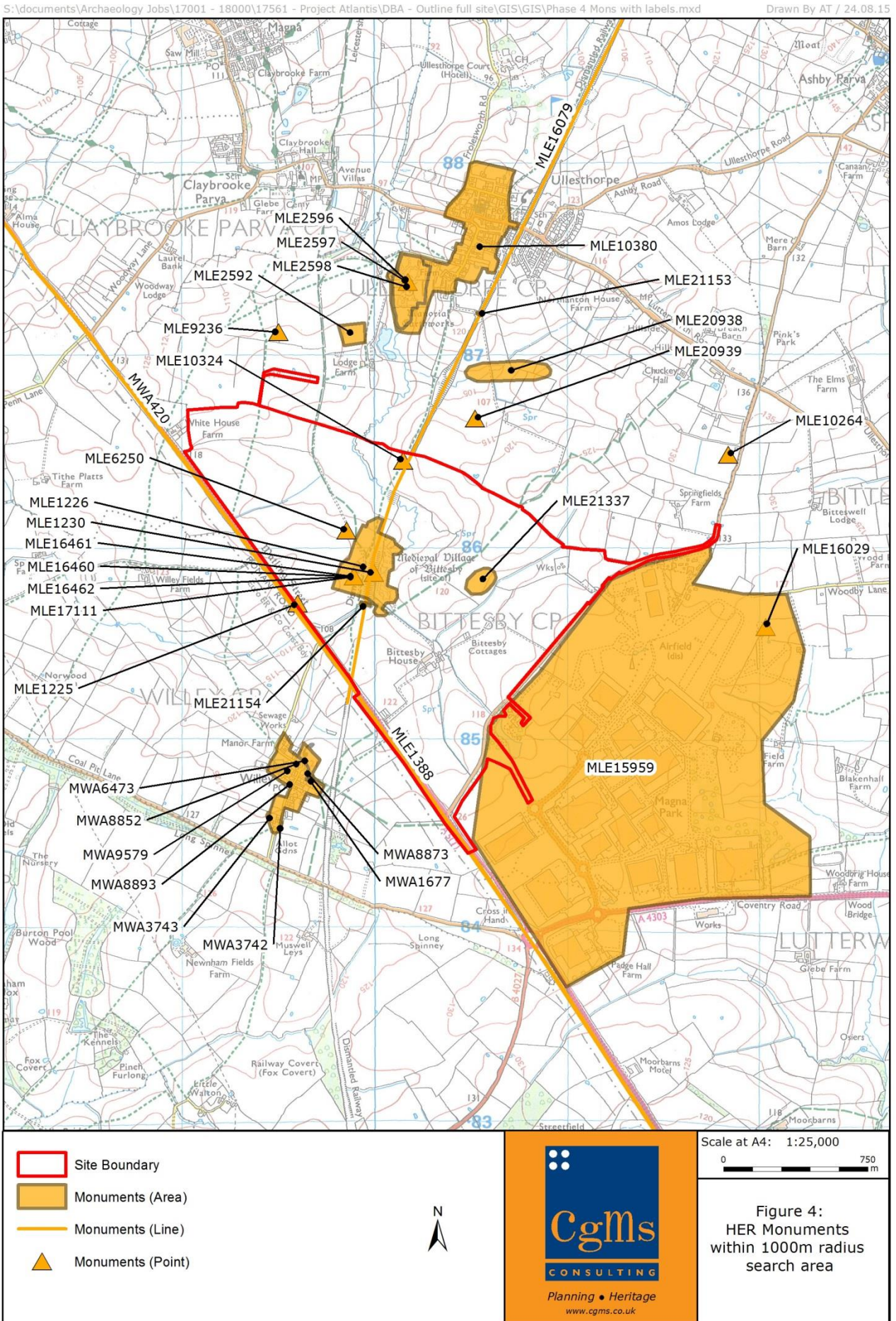
<p> Site Boundaries</p> <p> Events (Area)</p>	<p>N</p> 	 <p>Planning • Heritage www.cgms.co.uk</p>	<p>Scale at A4: 1:20,000</p> 
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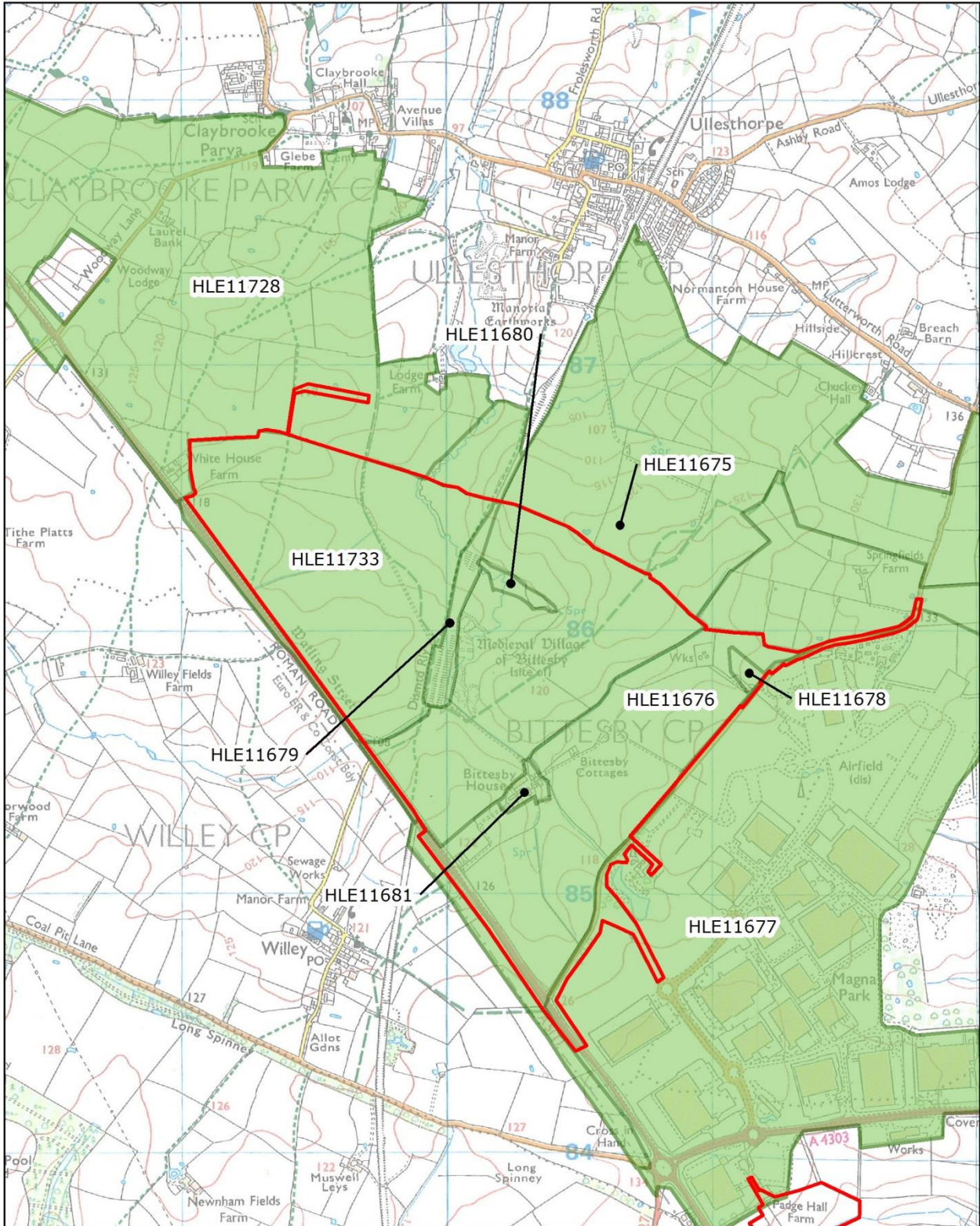
Figure 3:  
HER Event  
Record Data






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<p> Site Boundary</p> <p> Historic Landscape Characterisation</p>	<p>N</p> 	 <p>Planning • Heritage www.cgms.co.uk</p>	<p>Scale at A4: 1:20,000</p> 
			<p>Figure 5: Historic Landscape Characterisation Data</p>

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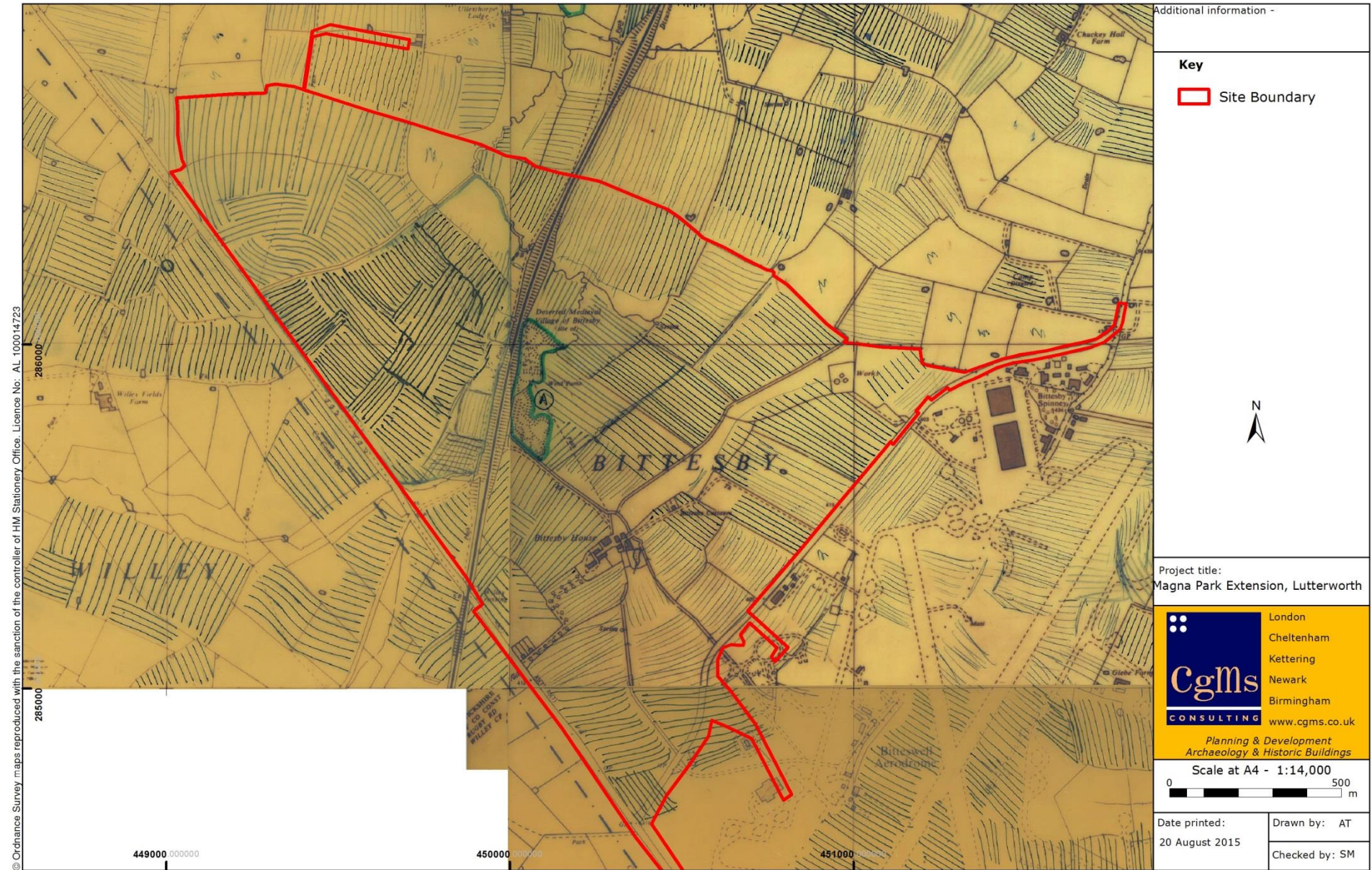


Figure 6: Former ridge and furrow (Leicestershire Historic Environment Record)



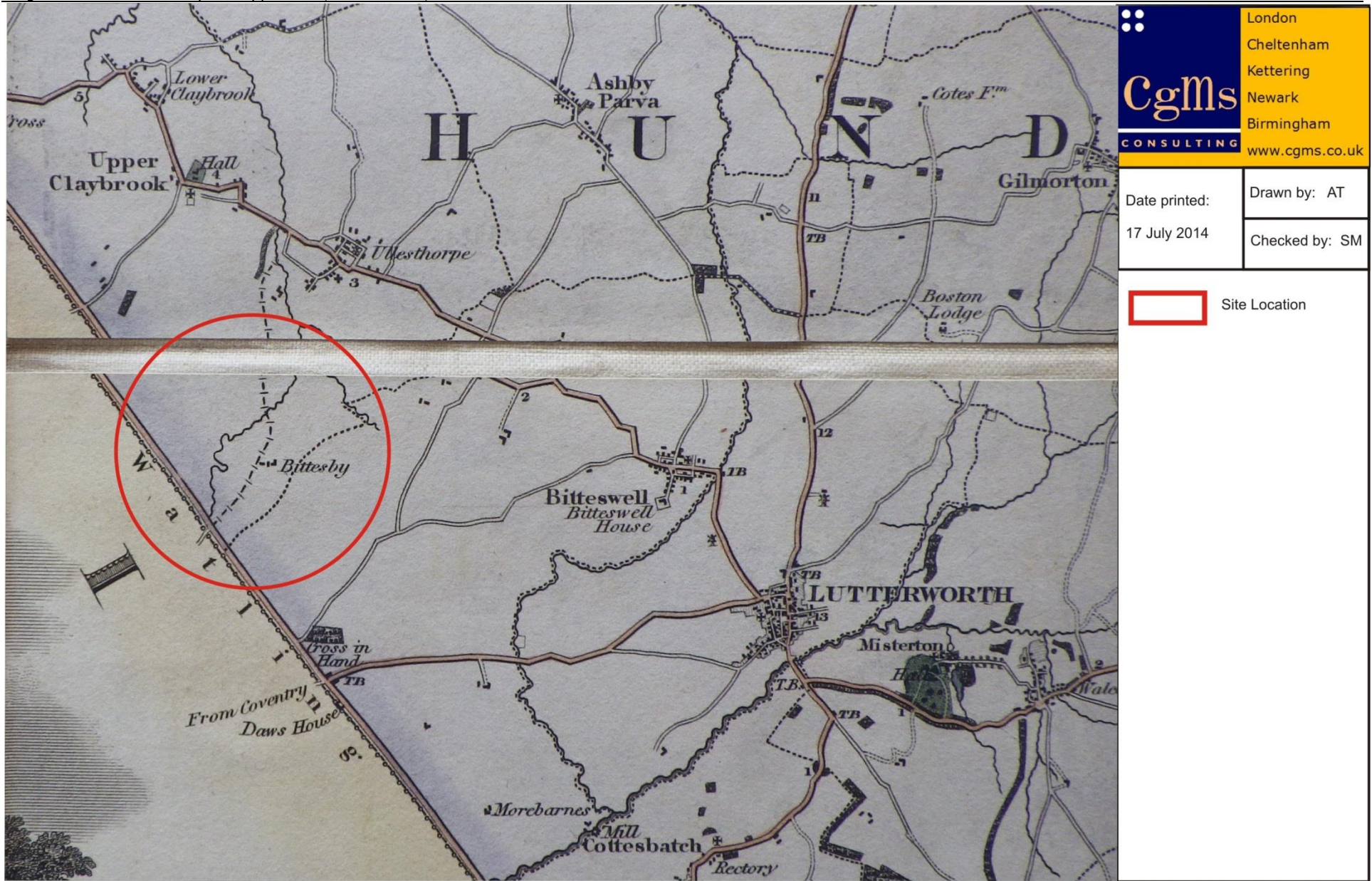


Figure 7: Greenwood's Map of Leicestershire, 1826





Figure 8: Bittesby Tithe Map, 1844 (Leicestershire and Rutland Archives Ref TI/36/1)

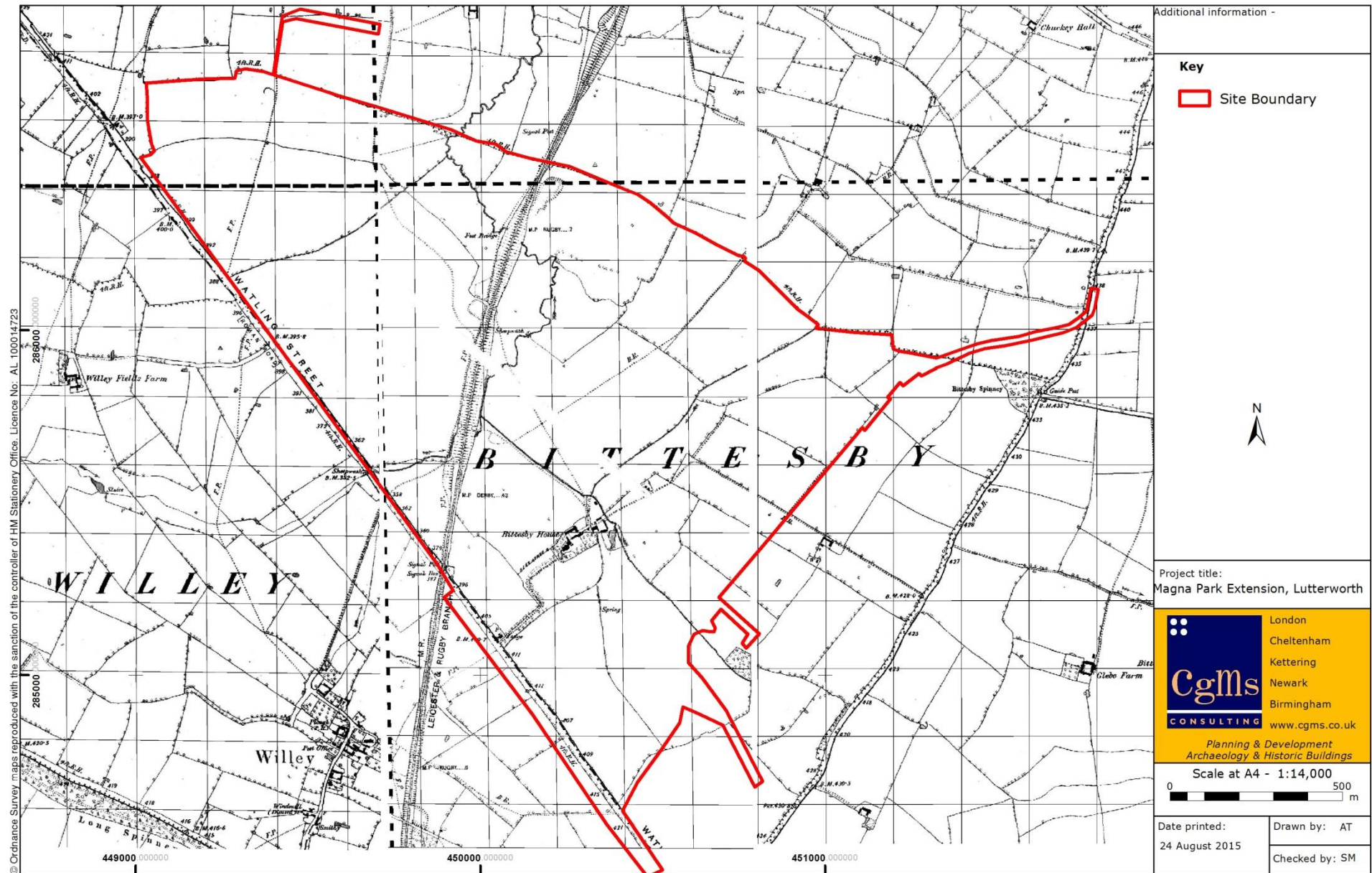


Figure 9: First Edition Ordnance Survey Map, 1886



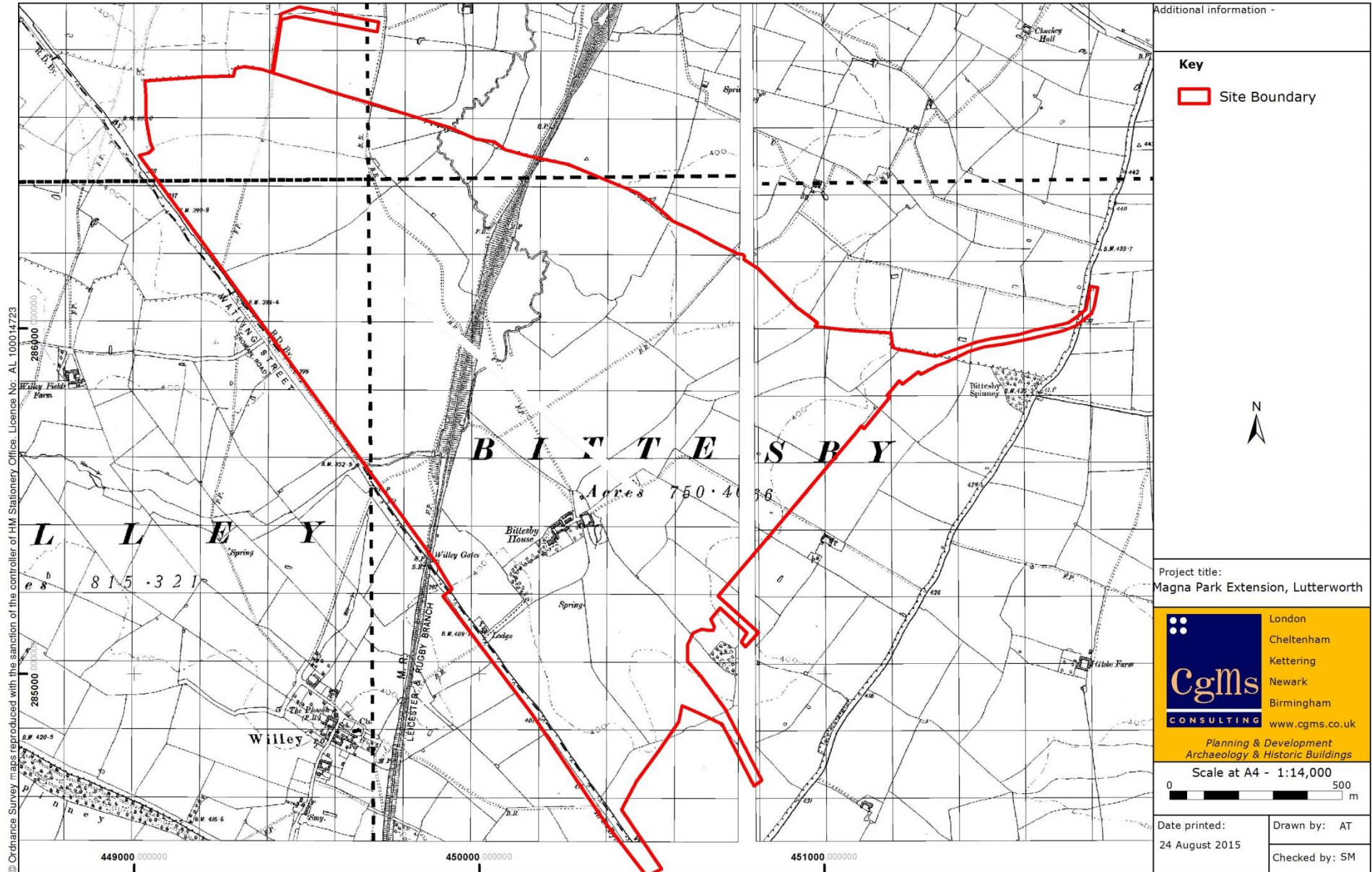


Figure 10: Ordnance Survey Map, 1904

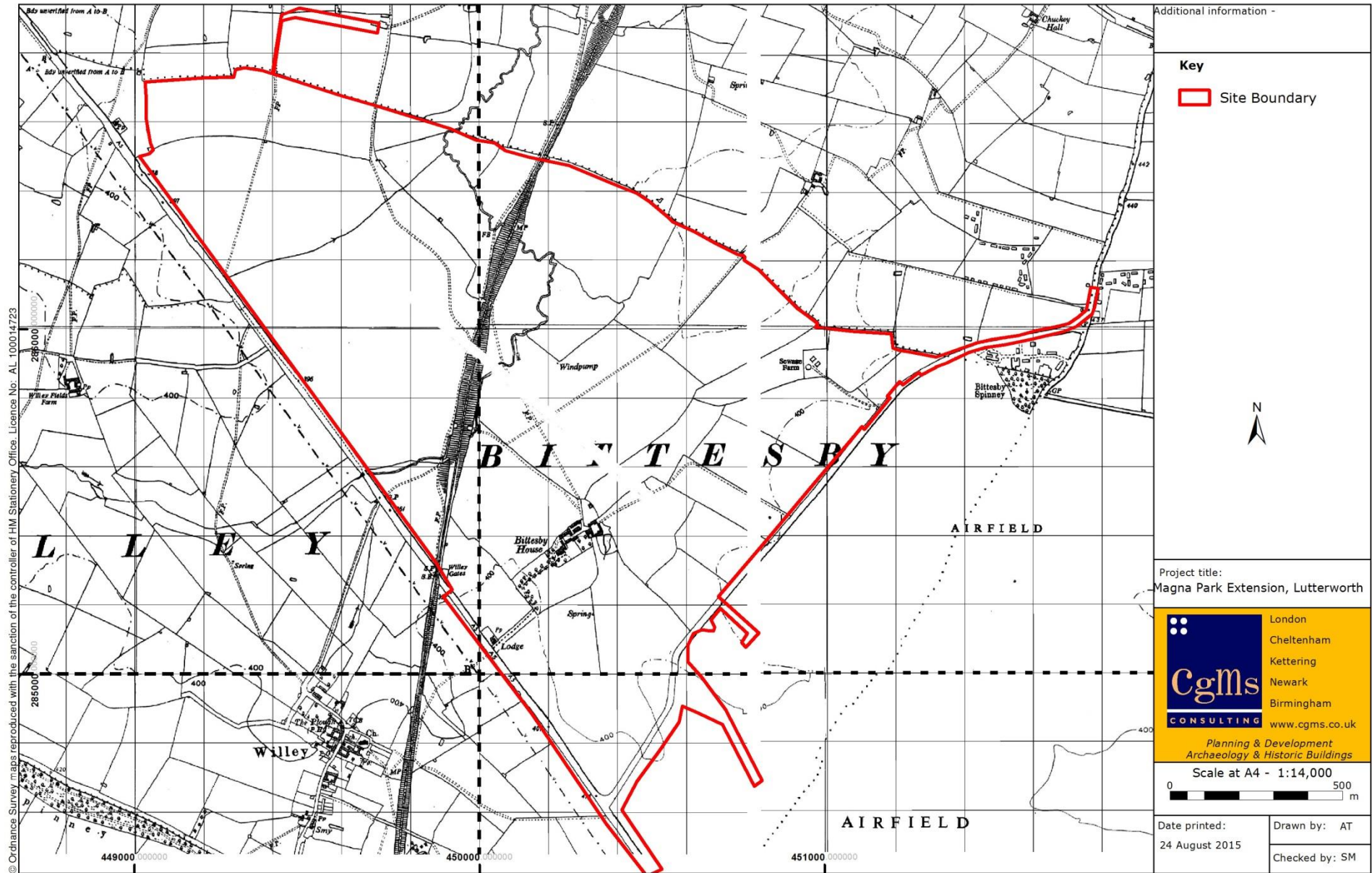


Figure 11: Ordnance Survey Map, 1955



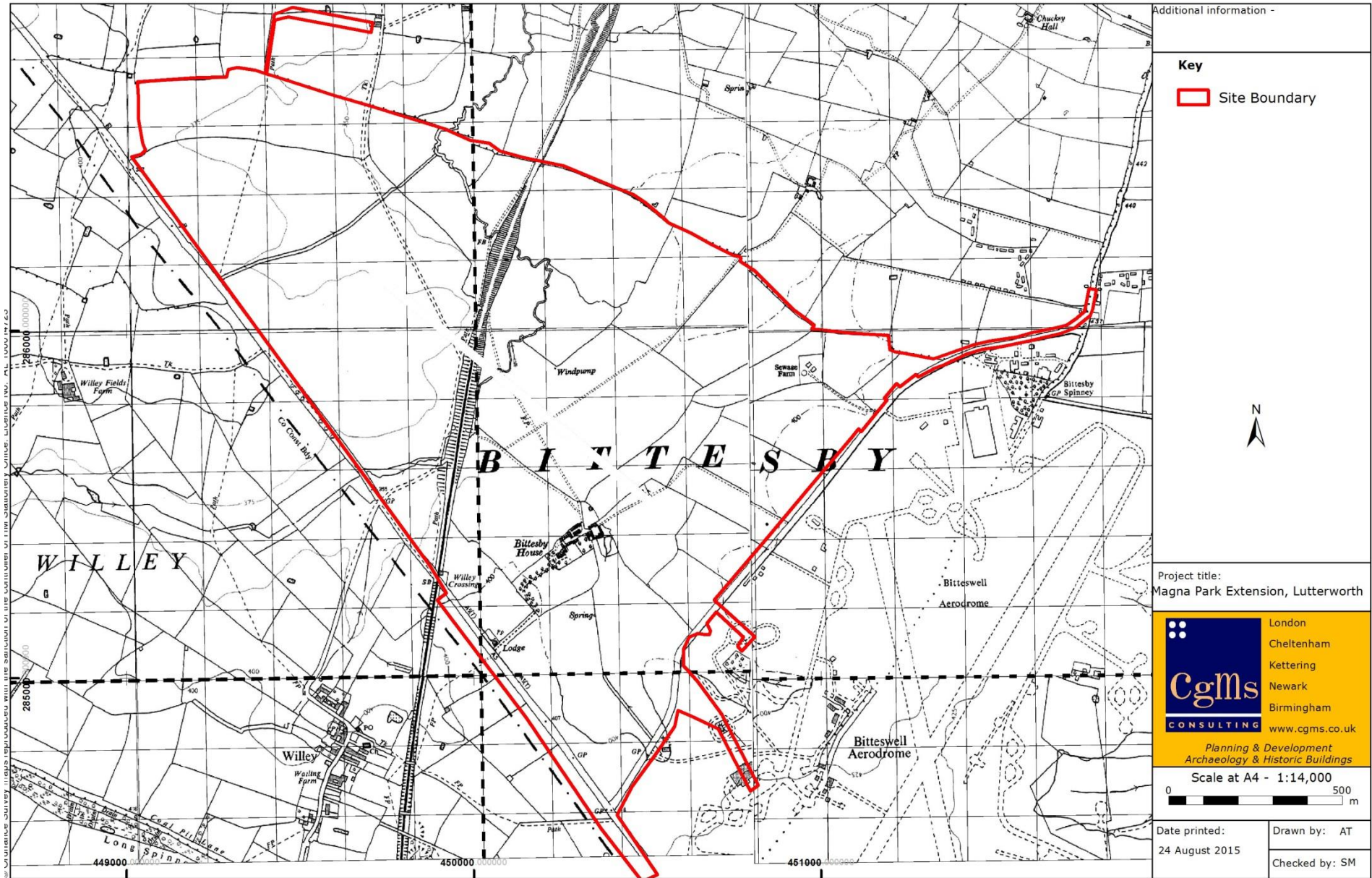


Figure 12: Ordnance Survey Map, 1965-1969



Archaeological Desk-Based Assessment  
 Magna Park Extension: Hybrid Application, Lutterworth, Leicestershire

S:\documents\Archaeology Jobs\17001 - 18000\17561 - Project Atlantis\Trenching Outline Application\GIS\Magna Park Outline Archaeological Assets.mxd

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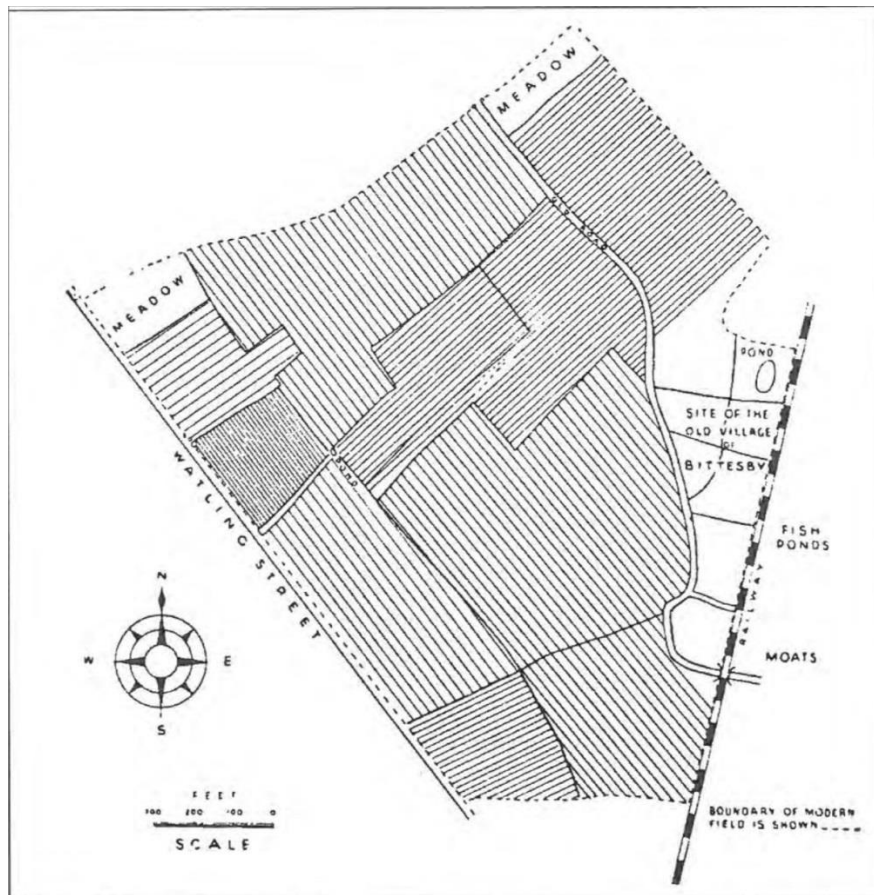


Plate 1: Ridge and furrow earthworks recorded by Beresford in 1954 (After 1954; Fig.2)

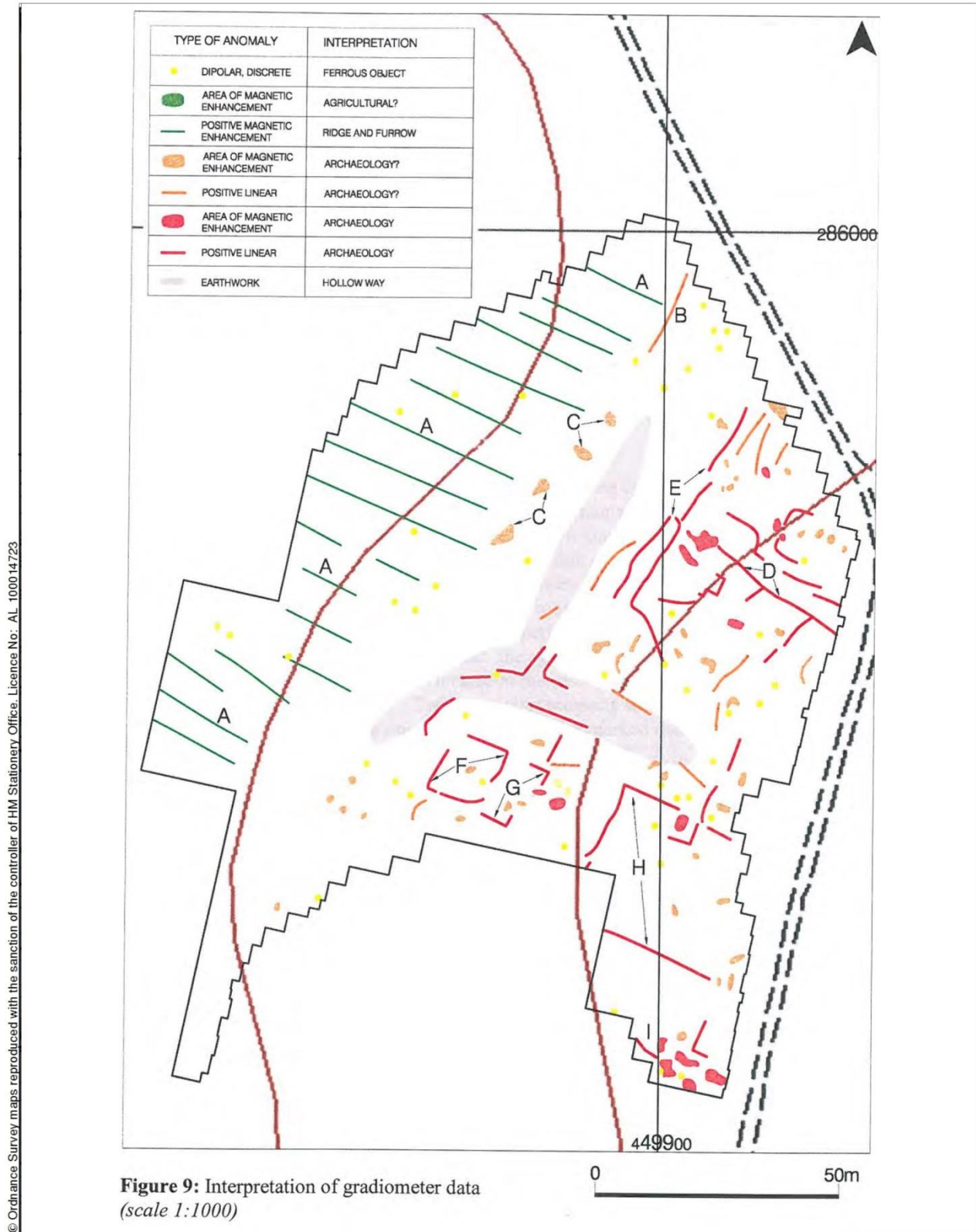


Plate 2: Aerial photograph taken in 1963 of Bittesby deserted Medieval village – cropmark evidence of ploughed out ridge and furrow is visible in the foreground whilst the earthwork ridge and furrow is shown in the distance (NMR copyright: NMRSP5085/1)



Plate 3 Aerial photograph, presumably taken in the 1960s, facing south, showing Bittesby deserted Medieval village and ridge and furrow earthworks (Copyright: Leicestershire HER)





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		Checked by: SM			

Plate 4: Geophysical Survey Data (After Archaeological Services and Consultancy 2008; Fig. 9)





Plate 5: View north-east from the northern edge of the Scheduled Monument of Bittesby DMV



Plate 6: View east from the northern boundary of the Scheduled Monument of Bittesby DMV





Plate 7: View west of the Scheduled Monument of Bittesby DMV



Plate 8: View south of the Scheduled Monument of Bittesby DMV





Plate 9: View east from the eastern edge of the Scheduled Monument of Bittesby DMV



Plate 10: View north including the Scheduled Monument of Bittesby DMV





Plate 11: View south from Ullesthorpe Scheduled Monument



Plate 12: View north-east of the area of made ground overlying the western portion of the Deserted Medieval Village of Bittesby



## APPENDIX 1: GAZETTEER OF HER DATA MONUMENTS

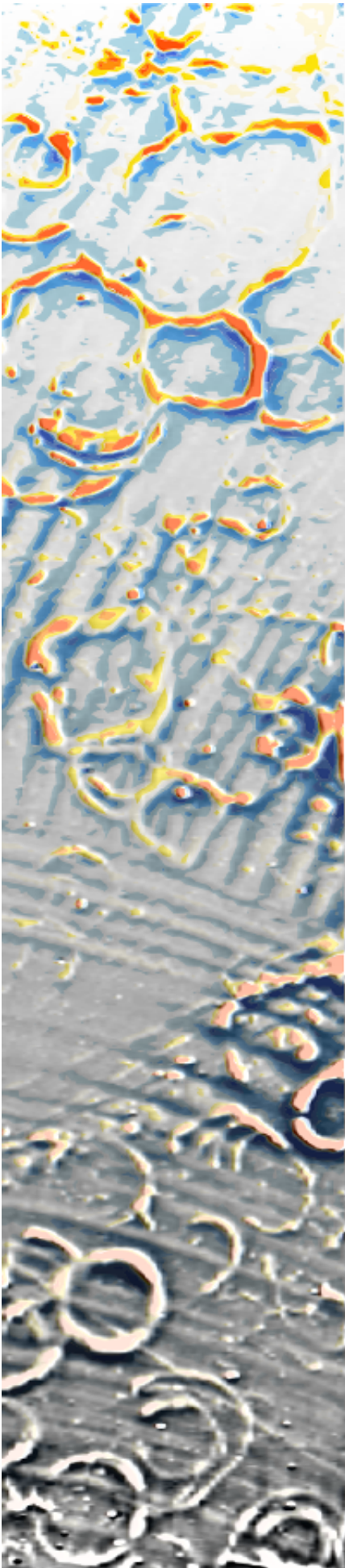
MonUID	SMR_No.	Name	MonType	Period
MWA6473	6473	Shrunken Settlement Earthworks at Willey	SHRUNKEN	Medieval
MWA3743	3743	Site of Windmill at Willey	WINDMILL, POST	Imperial
MWA3742	MWA3742	Site of Smithy at Willey	FORGE	Imperial
MWA8852	8852	Post-medieval farm buildings at Bayhouse Farm, Willey	FARMYARD, FARM BUILDING	Post-medieval
MWA8873	8873	Possible medieval boundary ditch at Church Lane, Willey	BOUNDARY DITCH	Medieval
MWA8893	8893	Little Orchard, Willey	TIMBER FRAMED HOUSE	Post-medieval
MWA9579	9579	Willey Medieval Settlement	SETTLEMENT	Medieval
MWA1677	1677	Church of St Leonard, Willey	CHURCH, BUILDING	Medieval to Imperial
MLE21154		Railway underpass, Bittesby	UNDERPASS	Post-medieval
MLE21153		Railway bridge, south of Ullesthorpe	BRIDGE	Post-medieval
MLE11761		HOME FARM FARMHOUSE, ULLESTHORPE	HOUSE	
MLE1226		Deserted settlement at Bittesby	DESERTED SETTLEMENT	Saxon to Medieval
MLE2592		Possible Iron Age cropmarks near Ullesthorpe Lodge	SUBRECTANGULAR ENCLOSURE, TRACKWAY?	Prehistoric
MLE15959		Bitteswell Airfield	MILITARY AIRFIELD, AIRFIELD	Modern
MLE10380		Historic settlement core of Ullesthorpe	SHRUNKEN VILLAGE	Saxon to Modern
MLE2597		Moat west of Manor Farm	MOAT	
MLE2598		Medieval fishponds west of Manor Farm	FISHPOND	Medieval
MLE20938		Possible Anglo-Saxon site south-east of Manor Farm	SITE?	Saxon
MLE16079		Midland Counties Railway, Leicester to Rugby branch	RAILWAY	Modern
MLE1388		Watling Street Roman Road	ROAD	Roman to Modern
MLE1225		Skeleton, north-west of Willey Crossing on the A5	INHUMATION	Undated
MLE10324		Pottery from Bittesby (dismantled railway line)	FINDSPOT,	
MLE16029		Cold War monitoring post west of Harrier Parkway	UNDERGROUND MONITORING POST	Modern
MLE10264		Medieval coin from south-east of Grey Gables	FINDSPOT	Medieval
MLE1230		Possible Roman villa site, Bittesby	VILLA?, MOSAIC, BATH HOUSE?	Roman
MLE16460		Medieval and post-medieval pottery from Bittesby DMV	FINDSPOT	Medieval to Post-Medieval
MLE16461		Roman pottery from Bittesby DMV	FINDSPOT	Roman
MLE16462		Palaeolithic flint from Bittesby DMV	FINDSPOT	Prehistoric
MLE17111		Flint from Bittesby DMV	FLINT SCATTER	Prehistoric
MLE6250		Anglo-Saxon loomweight from north-west of Bittesby	FINDSPOT	Saxon

MLE2596		Possible manor house site, west of Manor Farm	MANOR HOUSE?	Medieval
MLE9236		Late Iron Age and terret ring from north-west of Ullesthorpe Lodge	FINDSPOT	Prehistoric
MLE20939		Roman finds from south-east of Manor Farm	FINDSPOT	Roman

## DESIGNATED HERITAGE ASSETS

Listed Buildings			
ListEntry	Name	Grade	NGR
1034858	LITTLECROFT	II	SP 47909 87632
1034859	COTTAGE NURSERIES	II	SP 49576 84782
1116323	COTTAGE	II	SP 47896 87563
	FARMHOUSE		
1116337	CHURCH OF ST	II*	SP 49664 84802
	LEONARD		
1116376	CHAPEL OF ST MARY	II	SP 47988 87637
1209152	ASHLEIGH	II	SP 49240 88587
1209153	CHURCH OF ST PETER	I	SP 49614 87913
1209154	CLAYBROOKE HALL	II	SP 49583 88040
1209155	CREAM COTTAGE	II	SP 49697 88020
1209178	CONGREGATIONAL	II	SP 50518 87549
	CHAPEL AND RAILINGS		
	TO WEST		
1211290	HOME FARM HOUSE	II	SP 50366 87430
1211309	THE MANSE	II	SP 50515 87534
1211322	5, STATION ROAD	II	SP 50583 87650
1292776	ULLESTHORPE MILL	II	SP 50652 87772
1292801	VINEYARD HOUSE	II	SP 49294 88675
1292802	DAIRY FARMHOUSE	II	SP 49397 88623
1292803	CLAYBROOKE HOUSE	II	SP 49732 87846
1365108	MANOR FARMHOUSE	II	SP 47803 87498
Scheduled Monuments			
ListEntry	Name		NGR
1010300	Moat, fishponds and shifted village earthworks at Ullesthorpe		SP 50166 87333
1010191	Moated site, enclosure and trackway at Claybrooke Parva		SP 49476 87902
1012563	Bittesby deserted medieval village		SP 50079 85757
Conservation Areas			
	Name		
	Claybrooke Parva		
	Ullesthorpe		

**APPENDIX 2: ARCHAEOPHYSICA, 2015. GEOPHYSICAL SURVEY REPORT: MAGNA  
PARK II – PLOT 2**



**Magna Park II – Plot 2  
Lutterworth, Leicestershire**

**Geophysical Survey Report**

**Produced for CgMs Consulting**

**Project code LTL141**

**14<sup>th</sup> April 2015**

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BA(Hons) MSc PhD**

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## Non-Technical Summary

A magnetic survey was commissioned by CgMs Consulting to prospect land adjacent to Magna Park, Lutterworth, Leicestershire for buried structures of archaeological interest.

The survey has identified several areas of potential archaeological interest within the survey area, especially within fields 1, 2, 4, 5, 9, 16, 17 & 21. Within these fields, linear and curvilinear anomalies of enhanced magnetic field are extensive, especially surrounding the DMV and over higher regions. It seems likely that these anomalies of archaeological interest are either associated with the Romano-British findspots, or the Medieval settlement here.

Throughout the fields (especially field 2, 4 & 5) there is extensive evidence of medieval ridge and furrow cultivation, which in some areas, helps to define the probable field system pattern from this period.

## Digital Data

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# 1 Introduction

Land adjacent to Magna Park, Lutterworth, Leicestershire was surveyed to prospect for buried structures of archaeological interest. Approximately 189.5 hectares was surveyed across multiple agricultural fields.

## 1.1 Location

<b>Country</b>	England
<b>County</b>	Leicestershire
<b>Nearest Settlement</b>	Lutterworth
<b>Central Co-ordinates</b>	450715, 285597

## 1.2 Constraints & variations

Across the site, the survey has been successfully conducted where possible. As mentioned in an earlier report from the same overall survey (Fry & Roseveare, 2015), the centre of field 14 was unable to be surveyed as it was too waterlogged and soft to be traversed practically and safely. Field 22 was also not surveyed due to issues with access and livestock contained within. At the time of writing the report, field 7 (scheduled DMV) has not yet been surveyed. A report on this area will follow separately.

# 2 Context

## 2.1 Archaeology

The survey area has been subject to a desk-based assessment by CgMs Consulting (2014) and is summarised below. The summary of the assessments states that the survey area *".....contains the archaeological remains of a possible Roman villa, an area of Romano-British occupation activity and the Scheduled and non-Scheduled remains of Bittesby Deserted Medieval Settlement, which has Late Saxon origins. Assessment of the study site also indicates it has an unknown potential for significant Prehistoric evidence and a negligible potential for post-medieval/medieval evidence."*

The evidence for prehistoric activity comprises flint find-spots recovered to the west of the medieval settlement of Bittesby by fieldwalking survey. A Palaeolithic flint (MLE 16462) was recovered along with a scatter of later Neolithic and Bronze Age flints (MLE1711).

There is more evidence for Roman activity within the survey area, with a possible villa with tessellated floor and bath (MLE 1230) referred to in antiquarian accounts as being discovered during the railway construction. Roman pottery is recorded in the immediate vicinity of the possible villa (MLE16461). Approximately 400metres to the east of the railway line a large quantity of Roman finds, including building debris, suggests another area of potential settlement activity (MLE21337).

The scheduled (SM17034) and non-scheduled (MLE1226 and MLE1230) medieval settlement of Bittesby occupies the central area of the site. A small area of magnetic survey (ELE 4713) was undertaken on the western side of the railway embankment opposite the scheduled area; the results showing further remains of potential medieval settlement.

The settlement was surrounded by an agricultural landscape and the location of direction of ridge and furrow field systems has been recorded by the Leicestershire HER. OS mapping from 1886-7 onwards shows the removal of a few field boundaries and other changes towards the southern end near Bittesby House as the World War II air base was constructed.



## 2.2 Environment

<b>Soils UKSO</b>	Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils (18)
<b>Superficial 1: 50000 BGS</b>	Oadby Member - Diamicton (ODT) across majority of site. Alluvium - Clay, Silt, Sand And Gravel (ALV) along NW edge of site.
<b>Bedrock 1:50000 BGS</b>	Blue Lias Formation - Mudstone And Limestone (BLI)
<b>Topography</b>	Gently undulating 100-125m OD, multiple local minor high points
<b>Hydrology</b>	Impeded drainage, expected agricultural tile drains, moling & subsoiling
<b>Current Land Use</b>	Mixed agricultural
<b>Historic Land Use</b>	Mixed agricultural, settlement
<b>Vegetation Cover</b>	Stubble, bare soil, grass
<b>Sources of Interference</b>	Potential from services, traffic on A5

The response of magnetic survey is dependent upon the soil's ability to support magnetic susceptibility enhancement and therefore the parent material and land use. The response from soils derived from mudstone is presumed to be muted but satisfactory and will depend upon the overlying superficial cover. Over limestone, the response may be variable, however it is also dependant on the overlying superficial cover.

Diamicton gravels usually provide a smoothly variable background texture associated with relatively non-magnetic soils against which anomalies from archaeological sources tend to be of variable contrast. It is common for magnetic field anomalies associated with linear features such as ridge and furrow cultivation to have irregular magnitudes across an area and therefore the production of a coherent plan of buried structures is sometimes not possible. For this site specifically, the archaeological interpretation is not thought to have been affected.

## 3 Methodology

### 3.1 Survey

#### 3.1.1 Technical equipment

<b>Measured variable</b>	Magnetic flux density / nT
<b>Instrument</b>	Array of Geometrics G858 Magmapper caesium magnetometers
<b>Configuration</b>	Non-gradiometric transverse array (6 sensors, ATV towed)
<b>Sensitivity</b>	0.03 nT @ 10 Hz (manufacturer's specification)
<b>QA Procedure</b>	Continuous observation
<b>Spatial resolution</b>	1.0m between lines, 0.3m mean along line interval

#### 3.1.2 Monitoring & quality assessment

The system continuously displays all incoming data as well as line speed and spatial data resolution per acquisition channel during survey. Rest mode system noise is therefore easy to inspect simply by pausing during survey, and the continuous display makes monitoring for quality intrinsic to the process of undertaking a survey. Rest mode test results (static test) are available from the system.





## 3.2 Data processing

### 3.2.1 Procedure

All data processing is minimised and limited to what is essential for the class of data being collected, e.g. reduction of orientation effects, suppression of single point defects (drop-outs or spikes) etc. The processing stream for this data is as follows:

Process	Software	Parameters
Measurement & GNSS receiver data alignment	Proprietary	
Temporal reduction, regional field suppression	Proprietary	0.3s low pass / 5s high pass filter
Gridding	Surfer	Kriging, 0.25m x 0.25m
Smoothing	Surfer	Gaussian lowpass 3x3 data
Imaging and presentation	Manifold GIS	

The initial processing uses proprietary software developed in conjunction with the multisensor acquisition system. Gridded data is ported as data surfaces (not images) into Manifold GIS for final imaging and detailed analysis. Specialist analysis is undertaken using proprietary software.

General information on processes commonly applied to data can be found in standard text books and also in the 2008 English Heritage Guidelines "Geophysical Survey in Archaeological Field Evaluation" at [http://www.helm.org.uk/upload/pdf/Geophysical\\_LoRes.pdf](http://www.helm.org.uk/upload/pdf/Geophysical_LoRes.pdf).

ArchaeoPhysica uses more advanced processing for magnetic data using potential field techniques standard to near-surface geophysics. Details of these can be found in Blakely, 1996, "Potential Theory in Gravity and Magnetic Applications", Cambridge University Press.

All archived data includes process metadata.

## 3.3 Interpretation resources

Numerous sources are used in the interpretive process which takes into account shallow geological conditions, past and present land use, drainage, weather before and during survey, topography and any previous knowledge about the site and the surrounding area. Old Ordnance Survey mapping is consulted and also older sources if available. Geological information is sourced only from British Geological Survey resources and aerial imagery from online sources. Topographic data is usually sourced from the Environment Agency (LiDAR) unless derived from original ArchaeoPhysica survey.

Information from nearby ArchaeoPhysica surveys is consulted to inform upon local data character, variations across soils and near-surface geological contexts. Published data from other contractors may also be used if accompanied by adequate metadata.

## 3.4 Interpretive classes

### 3.4.1 Introduction

Key to interpretation is separation of each anomaly into broad classes, namely whether caused by agricultural processes (e.g. ploughing, composting, drainage etc.), geological factors or whether a structure of archaeological interest is likely. Within these anomalies are in turn classified by whether they most likely represent a fill or a drain, or a region of differing data texture, etc. More detailed descriptions are included below.

The actual means of classification is based upon geophysical understanding of anomaly formation, the behaviour of soils, landscape context and structural form. For example, to consider just one form of anomaly: weakly dipolar discrete magnetic anomalies of small size are likely to have shallow non-ferrous sources and are therefore likely to be pits. Larger ones of the same class could also be pits or locally-deeper

- magnetics, electromagnetics, electrical resistance, GPR, topography, landscape & GIS -



topsoil but if strongly magnetic could also be hearths. Strongly dipolar discrete anomalies are in all cases likely to be ferrous or similarly magnetic debris, although small repeatedly heated and in-situ hearths can produce similar anomalies.

### **3.4.2 Agriculture – boundaries**

Coherent linear dipolar enhancement of magnetic field strength marking ditch fills, narrow bands of more variable magnetic field or changes in apparent magnetic susceptibility, are all included within this category if they correlate with boundaries depicted on the Tithe Map or early Ordnance Survey maps. If there is no correlation then these anomaly types are not categorised as a field boundaries.

### **3.4.3 Agriculture – cultivation**

Banded variations in apparent magnetic susceptibility caused by a variable thickness of topsoil, depositional remanent magnetisation of sediments in furrows or susceptibility enhancement through heating (a by product of burning organic matter like seaweed) tend to indicate past cultivation, whether ridge-based techniques, medieval ridge and furrow or post medieval 'lazy beds'. Modern cultivation, e.g. recent ploughing, is not included.

### **3.4.4 Agriculture – drains**

In some cases it is possible to identify drainage networks either as ditch-fill type anomalies (typically 'Roman' drains), noisy or repeating dipolar anomalies from terracotta pipes or reduced magnetic field strength anomalies from culverts, plastic or non-reinforced concrete pipes. In all cases identification of a herring bone pattern to these is sufficient for inclusion within this category.

### **3.4.5 Archaeology – fills**

Any linear or discrete enhancement of magnetic field strength, usually with a dipolar character of variable strength, that cannot be categorised as a field boundary, cultivation or as having a geological origin, is classified as a fill potentially being of archaeological interest. Fills are normally earthen and include an often invisible proportion of heated soil or topsoil that augments local magnetic field strength. Inverted anomalies are possible over non-earthen fills, e.g. those that comprise peat, sand or gravel within soil. This category is subject to the 'habitation effect' where, in the absence of other sources of magnetic material, anomaly strength will decrease away from sources of heated soil and sometimes to the extent of non-detectability.

Former enclosure ditches that contained standing water can promote enhanced volumetric magnetic susceptibility through depositional remanence and remain detectable regardless of the presence of other sources of magnetic material.

### **3.4.6 Archaeology – other discrete**

This category is secondary to fills and includes anomalies that by virtue of their character are likely to be of archaeological interest but cannot be adequately described as fills. Examples include strongly magnetic bodies lacking ferrous character that might indicate hearths or kilns. In some cases anomalies of ferrous character may be included.

### **3.4.7 Archaeology – structures**

On some sites the combination of plan form and anomaly character, e.g. rectilinear reduced magnetic field strength anomalies, might indicate the likely presence of masonry, robber trenches or rubble foundations. Other types of structure are only included if the evidence is unequivocal, e.g. small ring ditches with doorways and hearths. In some circumstances a less definite category may be assigned to the individual anomalies instead.



### **3.4.8 Archaeology – zones**

On some sites it is possible to define different areas of activity on the basis of magnetic character, e.g. texture and anomaly strength. These might indicate the presence of middens or foci within larger complexes. This category does not indicate a presence or absence of anomalies possibly of archaeological interest.

### **3.4.9 Geology – discrete**

On some sites, e.g. some gravels and alluvial contexts, there will be anomalies that can obscure those potentially of archaeological interest. They may have a strength equal to or greater than that associated with more relevant sources, e.g. ditch fills, but can normally be differentiated on the basis of anomaly form coupled with geological understanding. Where there is ambiguity, or relevance to the study, these anomalies will be included in this category.

### **3.4.10 Geology – zones**

Not all changes in geology can be detected at the surface, directly or indirectly, but sometimes there will be a difference evident in the geological data that can be attributed to a change, e.g. from alluvium to tidal flat deposits, or bedrock to alluvium. In some cases the geophysical difference will not exactly coincide with the geological contact and this is especially the case across transitions in soil type.

### **3.4.11 Services**

All overhead (OH) and underground (UG) services are depicted where these are detectable in the data or may influence aspects of the interpretation.

### **3.4.12 Texture**

Geophysical data varies in character across areas, due to a range of factors including soil chemistry, near surface geology, hydrology and land use past and present. Where these variations are of interest or relevance to the study they are included in this category.

## **3.5 Standards & guidance**

All work was conducted in accordance with the following standards and guidance:

- David et al, "Geophysical Survey in Archaeological Field Evaluation", English Heritage, 2008.
- "Standard and Guidance for Archaeological Field Evaluation", Institute for Archaeologists, 2008.

In addition, all work is undertaken in accordance with the high professional standards and technical competence expected by the Geological Society of London and the European Association of Geoscientists and Engineers.

All personnel are experienced surveyors trained to use the equipment in accordance with the manufacturer's expectations. All aspects of the work are monitored and directed by fully qualified professional geophysicists.



## **4 Discussion**

### **4.1 Introduction**

The sections below first discuss the geophysical context within which the results need to be considered and then specific features or anomalies of particular interest. Not all will be discussed here and the reader is advised to consult the graphical elements of this report.

### **4.2 Principles**

In general, topsoil is more magnetic than subsoil which can be slightly more magnetic than parent geology, whether sands, gravels or clays, however, there are exceptions to this. The reasons for this are natural and are due to biological processes in the topsoil that change iron between various oxidation states, each differently magnetic. Where there is an accumulation of topsoil or where topsoil has been incorporated into other features, a greater magnetic susceptibility will result.

Within landscapes soil tends to accumulate in negative features like pits and ditches and will include soil particles with thermo-remanent magnetization (TRM) through exposure to heat if there is settlement or industry nearby. In addition, particles slowly settling out of stationary water will attempt to align with the ambient magnetic field at the time, creating a deposit with depositional remanent magnetization (DRM).

As a consequence, magnetic survey is nearly always more a case of mapping accumulated magnetic soils than structures which would not be detected unless magnetic in their own right, e.g. built of brick or tile. As a prospecting tool it is thus indirect. Fortunately, the mechanisms outlined above are commonplace and favoured by human activity and it is nearly always the case that cut features will alter in some way the local magnetic field.

#### **4.2.1 Instrumentation**

The use of the magnetic sensors in non-gradiometric (vertical) configuration avoids measurement sensitisation to the shallowest region of the soil, allowing deeper structures, whether natural or otherwise to be imaged within the sensitivity of the instrumentation. However, this does remove suppression of ambient noise and temporal trends which have to be suppressed later during processing. When compared to vertical gradiometers in archaeological use, there is no significant reduction in lateral resolution when using non-gradiometric sensor arrays and the inability of gradiometers to detect laminar structures is completely avoided.

Caesium instrumentation has a greater sensitivity than fluxgate instruments, however, at the 10 Hz sampling rate used here this increase in sensitivity is limited to about one order of magnitude.

The array system is designed to be non-magnetic and to contribute virtually nothing to the magnetic measurement, whether through direct interference or through motion noise. There is, however, some limited contribution from the towing ATV.

### **4.3 Character & principal results**

The table below is provided as a quick reference to the magnetic field anomalies mentioned within the interpretation. Due to the scale of the site, each field has been discussed individually under the headings of archaeology, land-use and geology. The conclusion summarises the results from the entire survey.



Field Number	Catalogue Numbers	DWG Number (Magnetic Data)	DWG Number (Interpretation Map)
1	[40] - [41], [43] - [44]	DWG 4	DWG 14
2	[42], [45] - [49]	DWG 4	DWG 14
3	[59] - [60]	DWG 4, 8	DWG 14, 18
4	[50] - [58]	DWG 4, 5, 6	DWG 14, 15, 16
5	[64] - [70]	DWG 5, 8	DWG 15, 18
6	[61] - [63]	DWG 8	DWG 18
7	N/A	N/A	N/A
8	[72]	DWG 9	DWG 19
9	[73] - [75], [77]	DWG 8, 9, 11, 12	DWG 18, 19, 21, 22
10	[2]-[3], [6], [21], [25], [32]	DWG 9, 10	DWG 19, 20
11	[7], [15]	DWG 9, 12	DWG 19, 22
12	[1], [29]	DWG 12	DWG 22
13	[5], [8], [9], [13], [16] - [18], [22], [24], [26]	DWG 10	DWG 20
14	[4], [10] - [12], [19], [20], [23], [27], [28], [31]	DWG 9, 10, 12	DWG 19, 20, 22
15	[71]	DWG 8, 9	DWG 18, 19
16	[76], [78] - [80]	DWG 9, 11	DWG 19, 21
17	[81] - [86]	DWG 6, 9	DWG 16, 19
18	[87] - [91]	DWG 6	DWG 16
19	[93] - [94]	DWG 7, 10	DWG 17, 20
20	[95]	DWG 6, 7	DWG 16, 17
21	[92], [96] - [99]	DWG 7	DWG 17
22	N/A	N/A	N/A

#### 4.3.1 Archaeology

**Field 1:** To the west of field 1, a weakly enhanced enhanced magnetic field linear anomaly [40] may represent a ditch-fill and might be of archaeological interest because no field boundary is shown in this location on old OS maps. To the north-east of the field a series of enhanced magnetic field anomalies [41] are likely to indicate a series of ditch-fills which may be of archaeological interest.

**Field 2:** To the west and middle of field 2, a series of enhanced magnetic field anomalies [46] are likely to indicate a series of ditch-fills which are of archaeological interest. These may indicate the existence of former boundaries or traces of settlement but no field boundaries in these locations have been depicted by the OS. To the north-east of the field, further enhanced magnetic field anomalies are present [42] which may be of archaeological interest, however a natural origin is equally likely and their form is indistinct.

**Field 3:** An enhanced magnetic field linear anomaly [59] may be a ditch-fill although it is not definitely so, having a different character to nearby anomalies from features of more obvious archaeological interest. A deeply buried source may possess an anomaly like this and a geological origin is possible.

**Field 4:** Within field 4, a series of enhanced magnetic field linear anomalies are likely to relate to ditch-fills and may relate to a former field system [50], [51], [52] & [58]. Of these, [50] and [51] are clearly associated with the medieval ridge and furrow cultivation, whereas [52] appears to be overlain by it. Towards the south of the field, a series of linear and curvilinear anomalies [53], [54] & [56] may relate to a



former settlement by the Roman road, of which only those parts that seem associated with evidence for settlement are clear. Probable elements of the same complex, but further away, e.g. [56] and [58] are much less magnetic and correspondingly less well understood, a fairly normal response due to decreasing magnetic susceptibility away from sources of heat and biological sources of magnetic enhancement. Two curvilinear parallel enhanced magnetic field anomalies [55] seem to define a former track connecting with the deserted medieval settlement to the north.

**Field 5:** To the south of field 5, a series of enhanced magnetic field curvilinear anomalies have been identified [68], [69] & [70] which may form enclosed boundary ditch-fills. An enhanced magnetic field linear anomaly from field 4 [51] appears to join onto this complex. To the north-east of the field some enhanced magnetic field anomalies and changes in data texture have been identified [65], [66] & [67] which may relate to activity which may also be of interest. [66] appears to be a relatively non-magnetic structure and could be a large drain or culvert whereas area [67] seems to mark disturbed soil or debris within the soil. Both could be the result of railway-era groundworks.

**Field 6:** Two enhanced magnetic field linear anomalies [62] & [63] may be ditch-fills.

**Field 7:** Currently unsurveyed. Scheduled DMV.

**Field 8:** An enhanced magnetic field linear anomaly [72] may be a ditch-fill and could be of archaeological interest, especially as the trajectory of the linear appears to mirror the tree boundary outside the field. It may be that this anomaly represents a continuation of a large sub-circular (or semicircular) feature.

**Field 9:** An enhanced magnetic field linear anomaly [73] may be a ditch-fill and could be of archaeological interest. Within the eastern part of the field, a series of linear and curvilinear anomalies [75], may relate to a former settlement or agriculture and is of archaeological interest. The anomalies appear to spread south-west, into field 16.

**Field 10:** An enhanced magnetic field linear anomaly [2] may be a ditch-fill.

**Field 11:** No anomalies of archaeological interest detected.

**Field 12:** Two parallel enhanced magnetic field linear anomalies [1] may represent ditch-fills and may mark a pathway or field boundaries.

**Field 13:** No anomalies of archaeological interest detected.

**Field 14:** No anomalies of archaeological interest detected.

**Field 15:** No anomalies of archaeological interest detected.

**Field 16:** An extensive network of enhanced magnetic field linear and curvilinear anomalies extends through this field and into field 17 to the south, and field 9 to the north. The anomalies appear to extend through the central ridge of these fields. The central concentration of anomalies is marked at [78], and appears to be connected to anomalies [81], [82], [84] & [85] to the south-west. Linear anomalies [76] & [79] conversely appear to extend north-east through the extant field boundary to feature [75] in field 9, and may relate to path or trackways connecting these likely settlements.

**Field 17:** Likewise, the series of curvilinear enhanced magnetic field anomalies [81] – [85] appear to connect and relate to [78]. The entire complex of anomalies of archaeological interest appear to extend into the DMV in field 7 to the south-west.

**Field 18:** Within field 18, potential anomalies of archaeological interest have been identified at [88]. These may be ditch-fills associated with structures, and may be of archaeological interest.

**Field 19:** No anomalies of archaeological interest detected.

**Field 20:** No anomalies of archaeological interest detected.

**Field 21:** Within field 21, some enhanced magnetic field linear anomalies have been detected which are likely to represent ditch-fills or boundaries and may be of archaeological interest [92]. [96] & [97]. To the southern area within field 21, an enhanced magnetic field linear anomaly [98] is also likely to represent a ditch-fill which may have marked a boundary. Attached to this linear anomaly, are a curvilinear enclosure and



a circular anomaly of archaeological interest [99].

**Field 22:** Not surveyed.

#### 4.3.2 Land use

**Field 1:** Within the west of field 1, many weakly enhanced linear magnetic field anomalies are present, at a diagonal (North-West - South-East) parallel orientation which are likely to represent field drains. Within the remaining area of the field, further weakly enhanced magnetic field linear anomalies are present at a North-South orientation, and mark ridge and furrow ploughing. The anomaly caused by the ridge and furrow is further enhanced at [44], which may indicate a shallower topsoil within this area. This is unlikely to be related to the textural change [43] within the data and an increase of enhanced magnetic field anomalies is thought to be due to a large pit, said locally to have been excavated for sand when the nearby railway was built. This is also identified on the 1887 Ordnance Survey (OS) map of the area.

**Field 2:** At varying orientations, groups of parallel weakly enhanced magnetic field linear anomalies are present within field 2, and mark ridge and furrow cultivation across ancient field systems. Within the northern edge of the field, the data texture changes slightly [45] which may be an indication of a change in the soil depth and may also mark areas of seasonal waterlogging, situated as it is by a stream. Similar textural changes are apparent within the field, highlighted by [47], [48] & [49] which may also be due to the same processes.

**Field 3:** Within field 3, two enhanced magnetic field linear anomalies represent former field boundaries, depicted within the 1886 OS map. An area of textural variation within the data [60] is likely to be associated with seasonal waterlogging.

**Field 4:** Worthy of note within this field are the series of weakly enhanced magnetic field linear anomalies which represent further ridge and furrow cultivation. The change in orientation between these groups of linear anomalies are likely to represent the layout of a historic field system. An area of enhanced magnetic field anomalies to the south-east [57] is likely to represent modern dumping or levelling material.

There is also natural banding in the magnetic field strength, most likely due to natural variations in the clay. Some of these, e.g. north of [54] are strongly magnetic.

**Field 5:** Within this field, the ridge and furrow continues through from field 4. An enhanced curvilinear anomaly running through the field is likely to represent a field drain or old field boundary. Areas of textural variation within the field are indicated at [64], [66], [67] & [69] which may represent changes in soil cover and seasonal waterlogging.

**Field 6:** Contains traces of ridge and furrow and field drains, however the concentration of these features is less than at other fields. Within an area towards the old railway line [61], a series of enhanced magnetic field anomalies are likely to represent disturbance or building material associated with the railway itself.

**Field 7:** Currently unsurveyed.

**Field 8:** A series of weakly enhanced magnetic field linear anomalies extend at a north-east – south-west orientation and represent ridge and furrow cultivation.

**Field 9:** Further traces of ridge and furrow cultivation extent through the field. Field drains are indicated at [77] and [74].

**Field 10:** An area of enhanced magnetic field anomalies [6] are likely to represent ridge and furrow cultivation. Strongly enhanced and reduced magnetic field linear anomalies [21] and [32] are likely to represent modern services.

**Field 11:** An area of weakly enhanced magnetic field anomalies [7] are likely to represent ridge and furrow cultivation. A field drain extends parallel to the northern boundary [15].

**Field 12:** The background texture from the middle to the east of this field is relatively 'flat' and may be affected from the existing warehouses across the road to the south-east. This change may also be indicative of a change in historic agricultural land use within the field.





**Field 13:** Within the field, a group of enhanced magnetic field linear anomalies [16], [17] & [18] represent field boundaries depicted within OS mapping from 1886-1965. A strongly enhanced and reduced linear [22] also extends through the field and may mark a modern service. Similar to the other fields surrounding, weakly enhanced magnetic field linear anomalies exist which are either ridge and furrow cultivation [8], [9], & [24], or field drains [13].

**Field 14:** An area of weakly enhanced magnetic field anomalies [10] & [11], are likely to represent ridge and furrow cultivation. Various field drains extend through the field [12] & [14]. Strongly variable linear magnetic field anomalies [19], [20] & [31] represent underground services.

**Field 15:** An area to the north of field 15 has a variable background data texture, and has been highlighted [71]. This change in data texture is likely to indicate an artificial change in soil depth or be geological in origin.

**Field 16:** Within the field, an enhanced magnetic field linear anomaly extends across the field, and represents a field boundary depicted within OS maps from 1886. A series of strongly enhanced and reduced magnetic field anomalies form a line, which may represent a service or old fence line.

**Field 17:** Within the north west extent of the field, a series of strongly enhanced and reduced magnetic field anomalies form a line, which may represent a service or former fence line. Weakly enhanced magnetic field linear anomalies within this field have been identified as ridge and furrow.

**Field 18:** A series of strongly enhanced and reduced magnetic field anomalies form a line extending eastwards from the extant farm buildings, which may represent a service. To the south of this, a field boundary, depicted on the 1887 OS map can also be seen within the data. A large area of increased magnetic field anomalies can be seen within the data, highlighted at [87]. This marks out the route of the railway embankment which once passed through the field. An area of weakly enhanced magnetic field [91] is presumed to be associated with the railway. An area of strong magnetic disturbance [90] seems to be due to debris spread from the former railway embankment.

**Field 19:** Many weakly enhanced parallel magnetic field linear anomalies represent ridge and furrow cultivation. An area of enhanced magnetic field anomalies [93] & [94] is thought to be modern in origin.

**Field 20:** Many weakly enhanced parallel magnetic field linear anomalies represent ridge and furrow cultivation. An area of enhanced magnetic field anomalies [94] & [95] is thought to be modern in origin.

**Field 21:** An enhanced magnetic field linear anomaly extends through the middle of this field, and is likely to be a former field boundary. Next to the main road to the south-west extent of the field, a number of enhanced magnetic field anomalies can be seen. These are due to passing vehicles from the main road.

**Field 22:** Not surveyed.

### 4.3.3 Geology and data character – overview

The magnetic susceptibility of the site is relatively weak, however it has been suitable for the detection of anomalies which may be of archaeological interest. The data character is varied across the survey area, such variations may be due to changes in soil type, depth or hydrology. Areas indicated at [24], [25], [26] & [27] [45], [47], [48], [49], [60] & [95] highlight textural variations within the data which are likely to relate to natural magnetic enhancement due to natural deposition of soils or seasonal water-logging. The data on the south-east edge of the dataset (closest to the extant warehouses at Magna Park) appears to have a 'flatter' texture, likely to be an effect from the warehouses nearby, approximately bounded by [28], [29] & [30].

## 4.4 Conclusions

The survey has identified several areas of potential archaeological interest within the survey area, especially within fields 1, 2, 4, 5, 9, 16, 17 & 21. Within these fields, linear and curvilinear anomalies of enhanced magnetic field are extensive, especially surrounding the DMV and over higher regions. It seems likely that these anomalies of archaeological interest are either associated with the Romano-British findspots, or the Medieval settlement here.





Throughout the fields (especially field 2, 4 & 5) there is extensive evidence of medieval ridge and furrow cultivation, which in some areas, helps to define the probable field system pattern from this period.

It is apparent that the 'habitation effect', whereby magnetic susceptibility decreases away from cultural sources of magnetic enhancement, is present within these relatively low susceptibility soils. This being the case, there is the likelihood that marginal and non-settlement related features may be less obvious in the data than those connected with settlement and industry.

#### 4.5 Caveats

Geophysical survey is a systematic measurement of some physical property related to the earth. There are numerous sources of disturbance of this property, some due to archaeological features, some due to the measuring method, and others that relate to the environment in which the measurement is made. No disturbance, or 'anomaly', is capable of providing an unambiguous and comprehensive description of a feature, in particular in archaeological contexts where there are a myriad of factors involved.

The measured anomaly is generated by the presence or absence of certain materials within a feature, not by the feature itself. Not all archaeological features produce disturbances that can be detected by a particular instrument or methodology. For this reason, the absence of an anomaly must never be taken to mean the absence of an archaeological feature. The best surveys are those which use a variety of techniques over the same ground at resolutions adequate for the detection of a range of different features.

Where the specification is by a third party ArchaeoPhysica will always endeavour to produce the best possible result within any imposed constraints and any perceived failure of the specification remains the responsibility of that third party.

Where third party sources are used in interpretation or analysis ArchaeoPhysica will endeavour to verify their accuracy within reasonable limits but responsibility for any errors or omissions remains with the originator.

Any recommendations are made based upon the skills and experience of staff at ArchaeoPhysica and the information available to them at the time. ArchaeoPhysica is not responsible for the manner in which these may or may not be carried out, nor for any matters arising from the same.

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## 5 Appendices

### 5.1 Project metadata

<b>Project Name</b>	Magna Park II – Lutterworth, Leicestershire
<b>Project Code</b>	LTL141
<b>Client</b>	CgMs Consulting
<b>Fieldwork Dates</b>	October 2014 – March 2015
<b>Field Personnel</b>	S Purvis, D Rouse, R Fry
<b>Data Processing Personnel</b>	R Fry
<b>Reporting Personnel</b>	R Fry, MJ Roseveare
<b>Draft Report Date</b>	14 <sup>th</sup> April 2015
<b>Final Report Date</b>	29 <sup>th</sup> April 2015

### 5.2 Archiving

ArchaeoPhysica maintains an archive for all its projects, access to which is permitted for research purposes. Copyright and intellectual property rights are retained by ArchaeoPhysica on all material it has produced, the client having full licence to use such material as benefits their project. Access is by appointment only and some content is restricted and not available to third parties

Archive formation is in the spirit of Schmidt, A., 2013, "Geophysical Data in Archaeology: A Guide to Good Practice", ADS.

ArchaeoPhysica has a policy of contributing in time to the ADS Grey Literature library, usually after about six months post-dating release of the report. In addition, extracts of data images may be used, without reference to their source, in marketing and similar material. In these cases anything that might identify the project or client is removed.

### 5.3 ArchaeoPhysica

#### 5.3.1 The company

ArchaeoPhysica has provided geophysical survey to archaeologists since 1998 and is consequently one of the oldest specialist companies in the sector. It has become one of the most capable operations in the UK, undertaking 1000 hectares of magnetic survey per annum. In addition 2D & 3D electrical, low frequency electromagnetic and radar surveys are regularly undertaken across the UK, also overseas. ArchaeoPhysica is the most established provider of caesium vapour magnetic survey in Europe, and holds probably the largest archaeological archive of total field magnetic data in the world. Unusually for the archaeological sector, key staff are acknowledged qualified geophysical specialists in their own right and regularly contribute to in-house and other research projects. For a number of years the company taught applied geophysics to Birkbeck College (London) undergraduate and post-graduate archaeology students, and developed a new and comprehensive course for the College.

All work is undertaken by qualified and experienced geophysicists who have specialised in the detection and mapping of near surface structures in archaeology and other disciplines using a wide variety of techniques. There is always a geophysicist qualified to post-graduate level on site during fieldwork and all processing and interpretation is undertaken under the direct influence of either the same individual or someone of similar qualifications and experience.

ArchaeoPhysica meets with ease the requirements of English Heritage in their 2008 Guidance "Geophysical Survey in Archaeological Field Evaluation" section 2.8 entitled "Competence of survey personnel". The company is one of the most experienced in European archaeological prospection and is a key professional player. It only employs people with recognised geoscience qualifications and capable of becoming Fellows of

- magnetics, electromagnetics, electrical resistance, GPR, topography, landscape & GIS -



the Geological Society of London, the Chartered UK body for geophysicists and geologists.

### **5.3.2 Senior Geophysicist: Martin J Roseveare, MSc BSc(Hons) MEAGE FGS MCIfA**

Martin specialised (MSc) in geophysical prospection for shallow applications at the University of Bradford in 1997 and has worked in commercial geophysics since then. He was elected a Fellow of the Geological Society of London in 2009 and is also a full member of the Institute of Archaeologists. He has taught applied geophysics for Birkbeck College's archaeological degree students for a number of years. Professional interests outside archaeology include the application of geophysics to agriculture, also geohazard monitoring and prediction. He also has considerable practical experience of the improvement and integration of geophysical hardware and software. At ArchaeoPhysica Martin carries overall responsibility for all things geophysical and is often found writing reports or buried in obscure software and circuit diagrams. He was elected onto the EuroGPR and CIfA GeoSIG committees in Autumn 2013.

### **5.3.3 Operations Manager: Anne CK Roseveare, BEng(Hons) DIS MISoSci**

On looking beyond engineering, Anne turned her attention to environmental monitoring and geophysics and has since been applying specialist knowledge of chemistry & fluid flow to soils. She is member of the British Society of Soil Science and is interested in the use of agricultural applications of geophysics. Anne was the founding editor of the International Society for Archaeological Prospection (ISAP) and has spent many years walking fields in parallel lines. Much of her time now is spent managing complicated scheduling and logistics for ArchaeoPhysica, overseeing safety procedures and data handling, while dreaming of interesting places around the world to undertake surveys, including researching the urban archaeology of Asia.

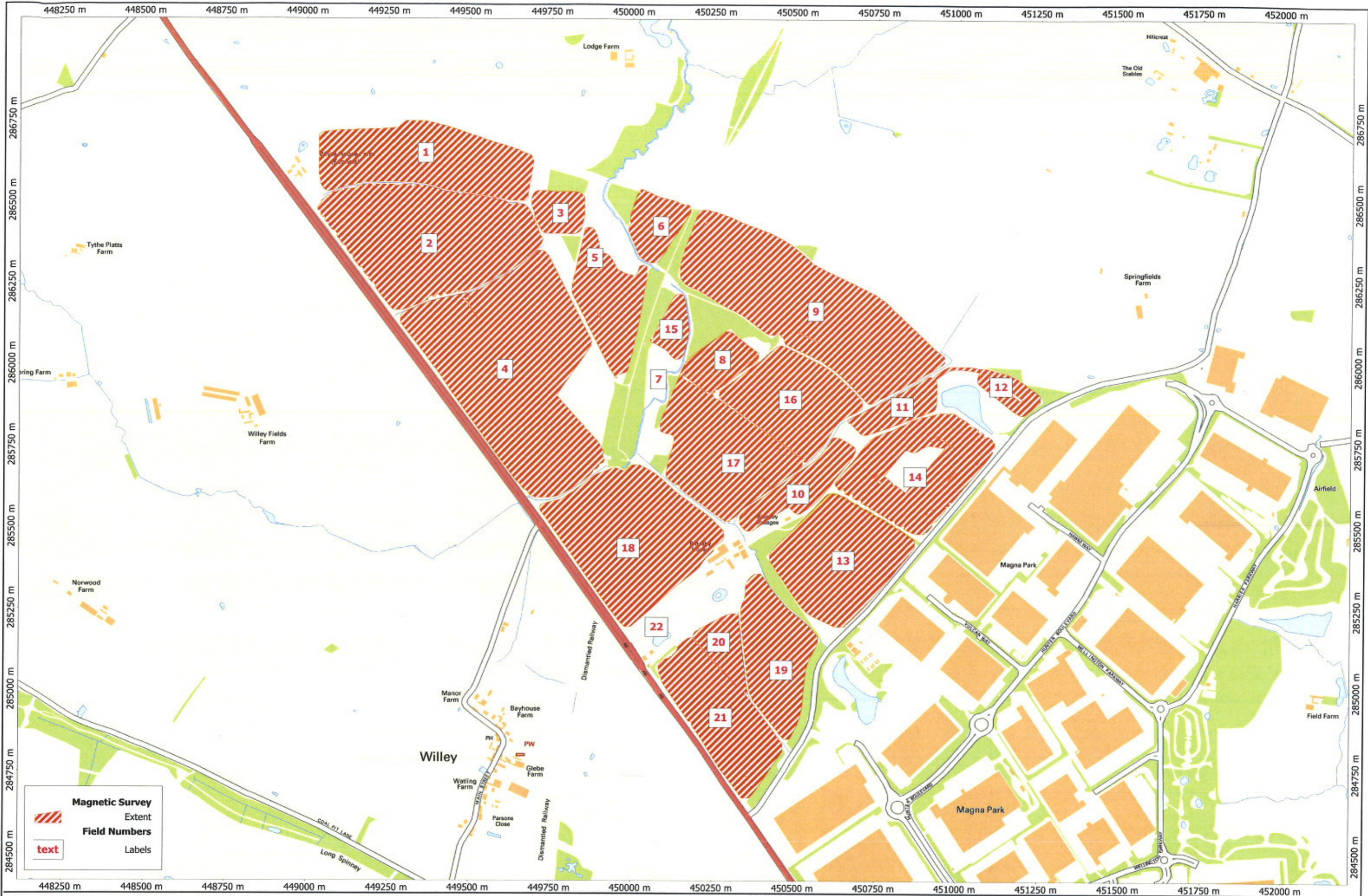
### **5.3.4 Geophysicist: Robert Fry, PhD MSc BA(Hons)**

Rob studied Archaeology B.A.(Hons.) at the University of Reading from 2004-07. His research was heavily influenced by geophysical techniques, and he helped organise and lead the magnetic survey of Silchester Roman Town. Following university, he joined the British School at Rome, conducting surveys in Spain, Italy and Libya. After working briefly as a geophysicist at Wessex Archaeology, Rob became Project Officer of The Silchester Mapping Project at the University of Reading. Since then, he has gained an MSc in Archaeological Prospection from the University of Bradford and recently completed his Doctorate with a thesis titled "Time-lapse geophysical investigations over known archaeological features using electrical resistivity imaging and earth resistance". Rob is currently also the editor of ISAP News. At ArchaeoPhysica Rob is normally found in the field or in the office besieged by colossal quantities of survey data.

### **5.3.5 Geophysicist: Samuel Purvis, MSc BSc(Hons)**

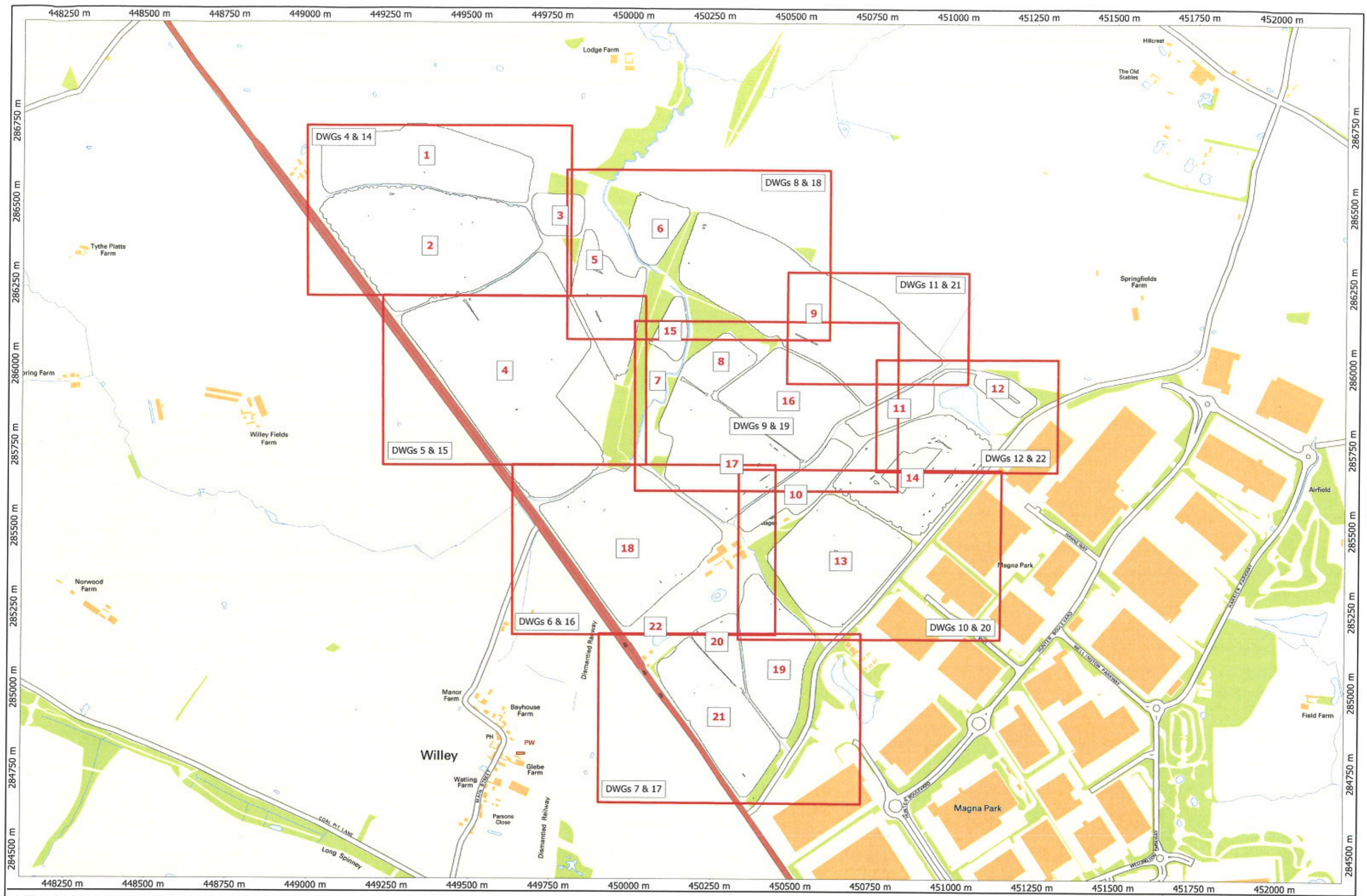
Sam studied Archaeology at The University of Bradford before progressing to a Masters in Archaeological Prospection. His primary research focus is on electromagnetic methods of shallow survey and is an expert with the newest multicoil electromagnetic instrumentation. Sam's main role at ArchaeoPhysica is technical, collecting high quality data, maintaining systems and keeping the show on the road.





LTL141 Lutterworth Magna Park, Leicestershire  
 DWG 01 Location Map

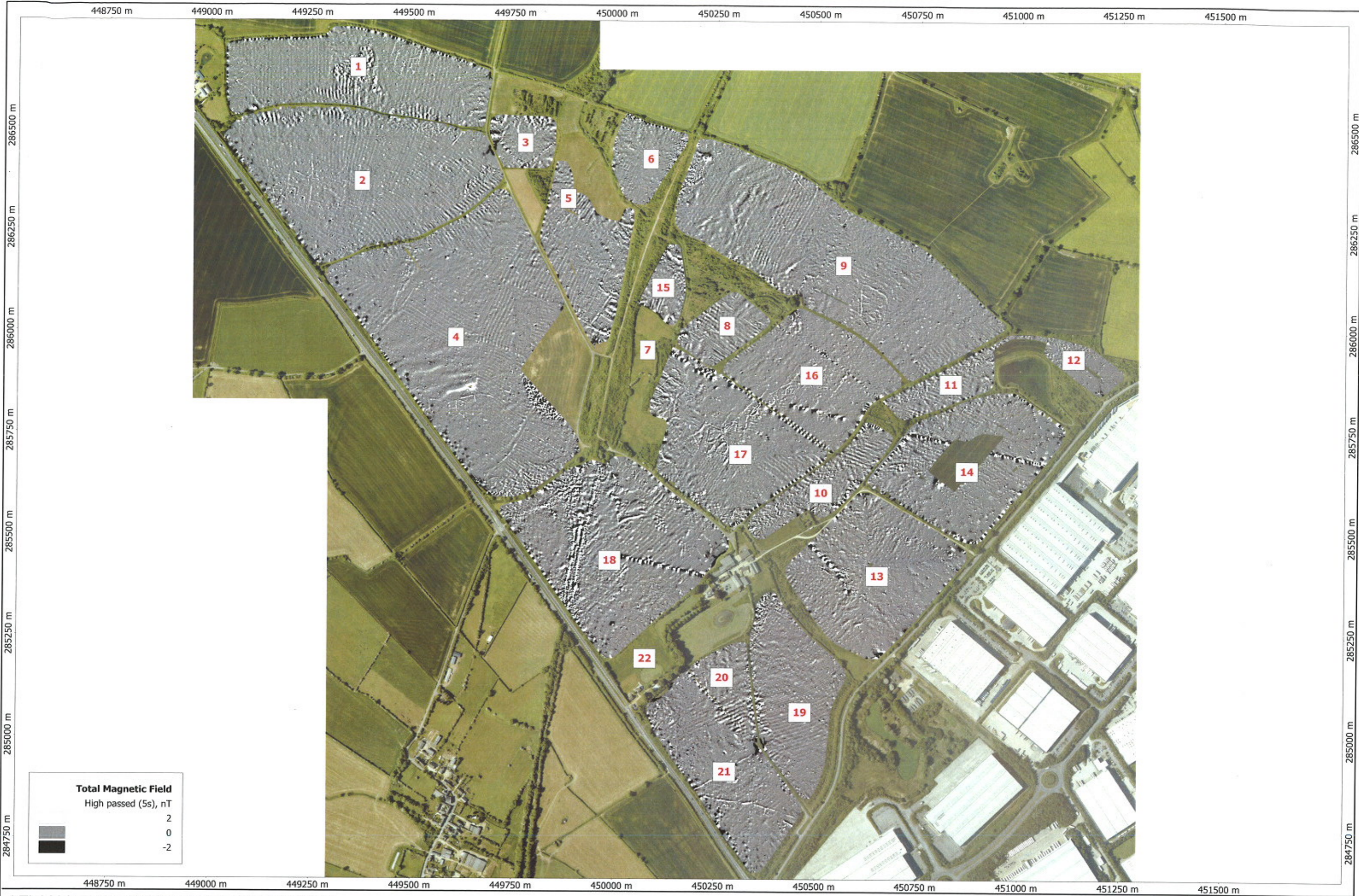




LTL141 Lutterworth Magna Park, Leicestershire  
 DWG 02 Key to DWG locations

Orthographic Centre X: 450161.68 m Centre Y: 285737.50 m Scale: 1:10000 @ A3 Spatial Units: Meter. Do not scale off this drawing  
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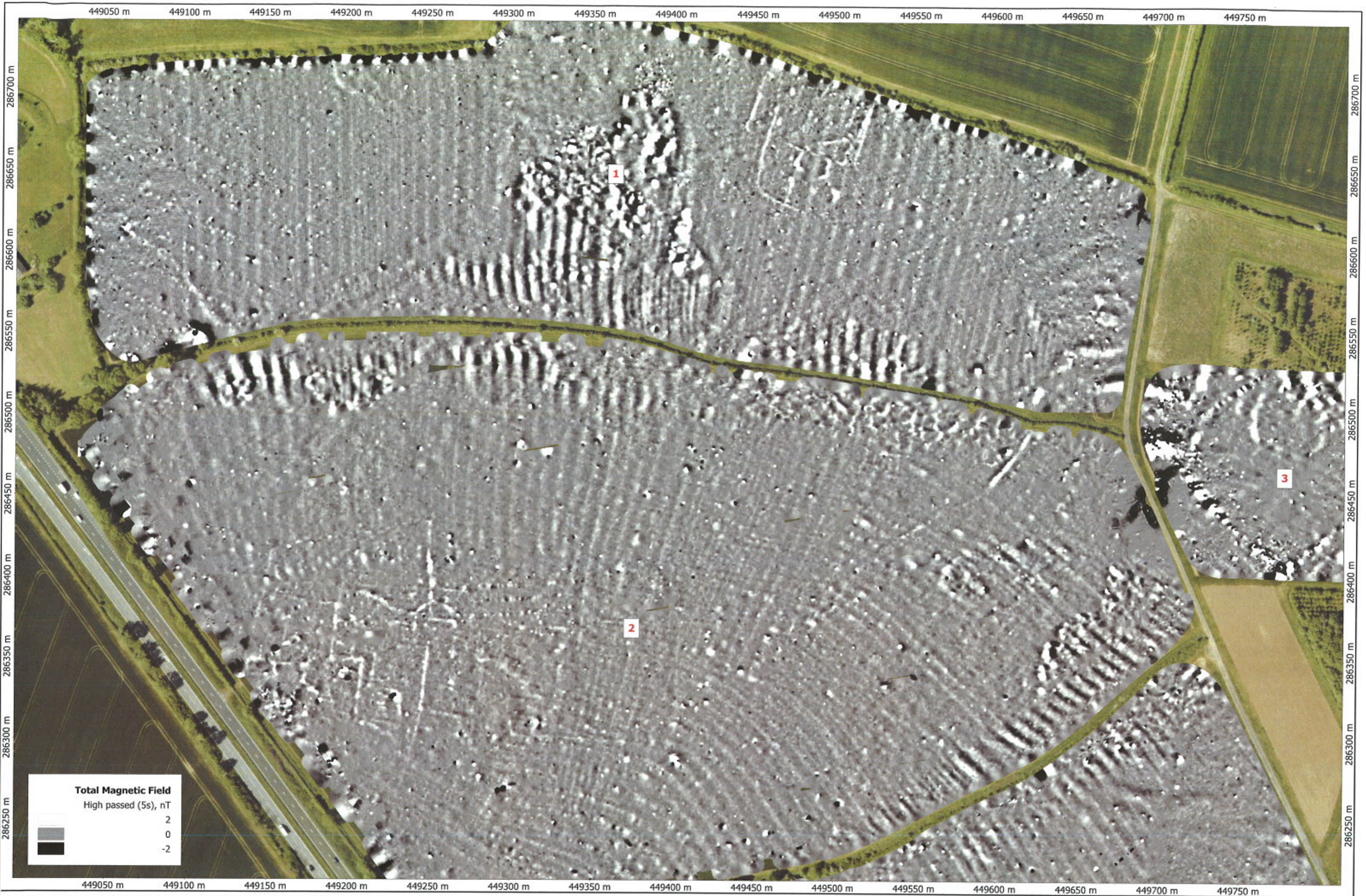




LTL141 Lutterworth Magna Park, Leicestershire  
DWG 03 Magnetic Data Overview

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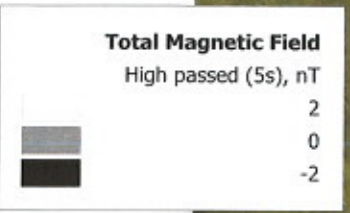
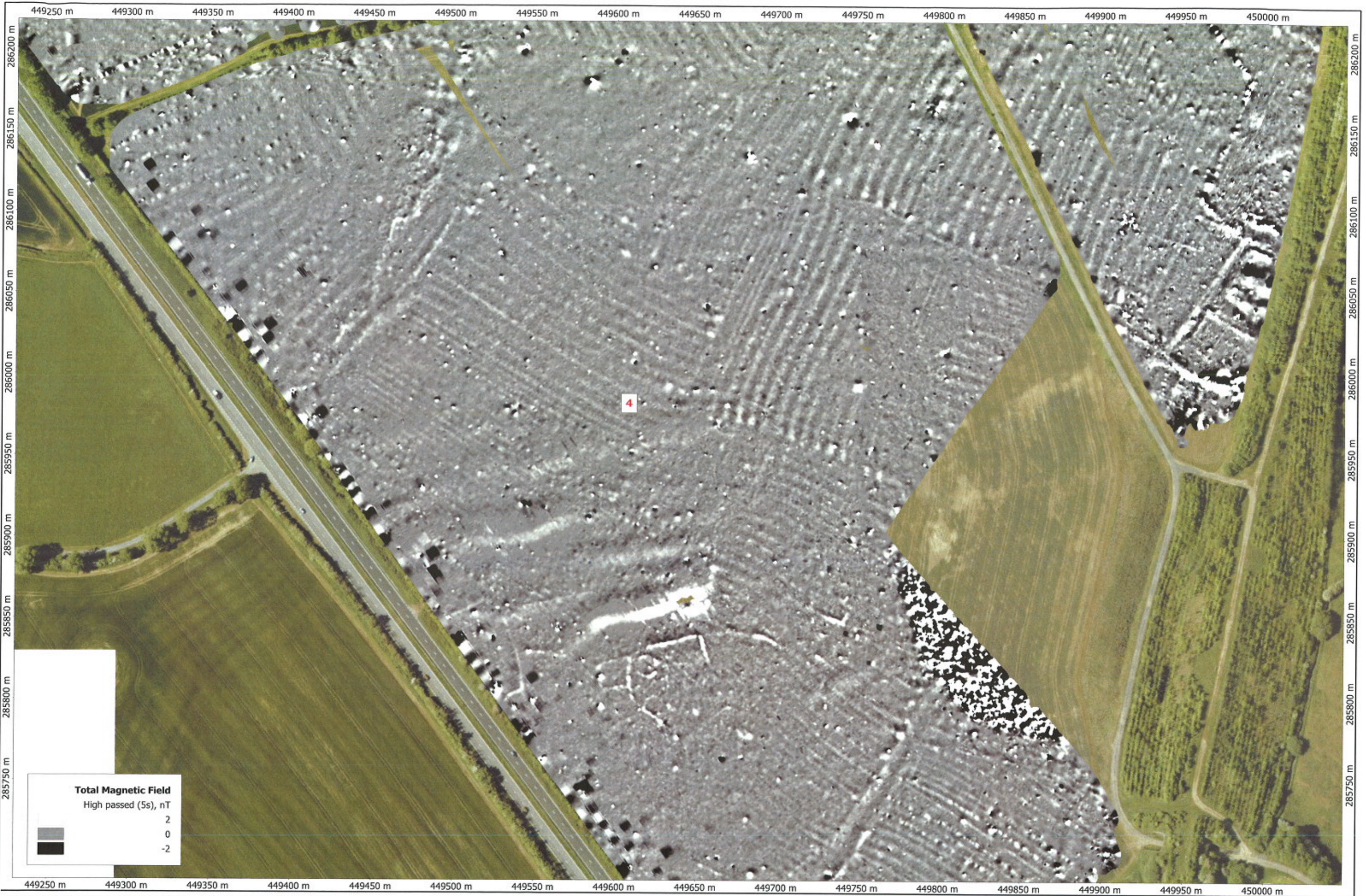




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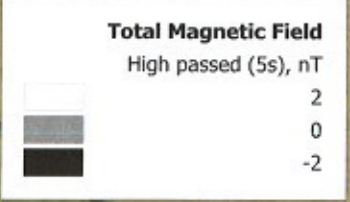


LTL141 Lutterworth Magna Park, Leicestershire  
DWG 05 Magnetic Data (W extent - fields 4 & 5)



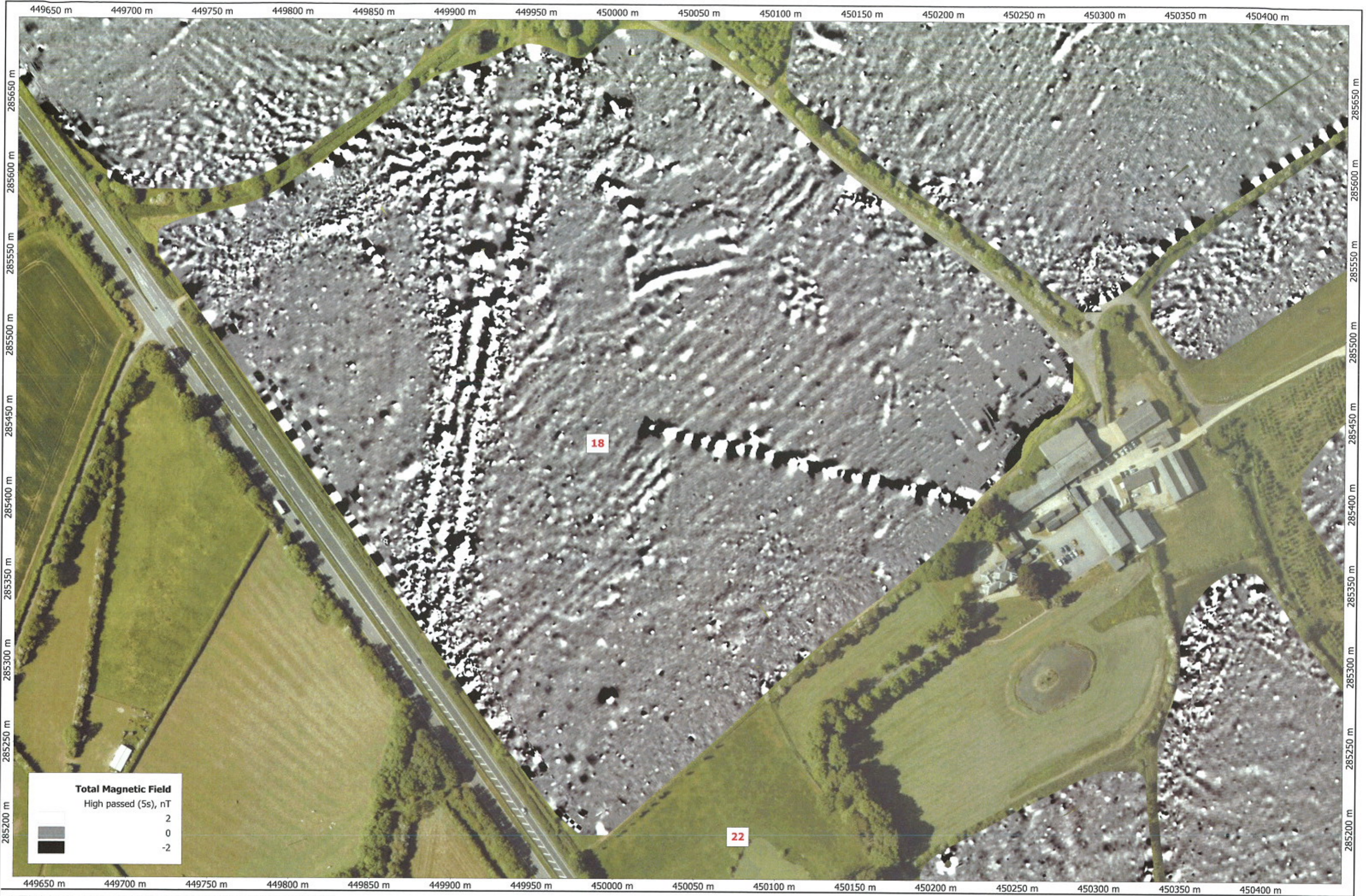
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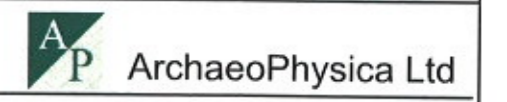


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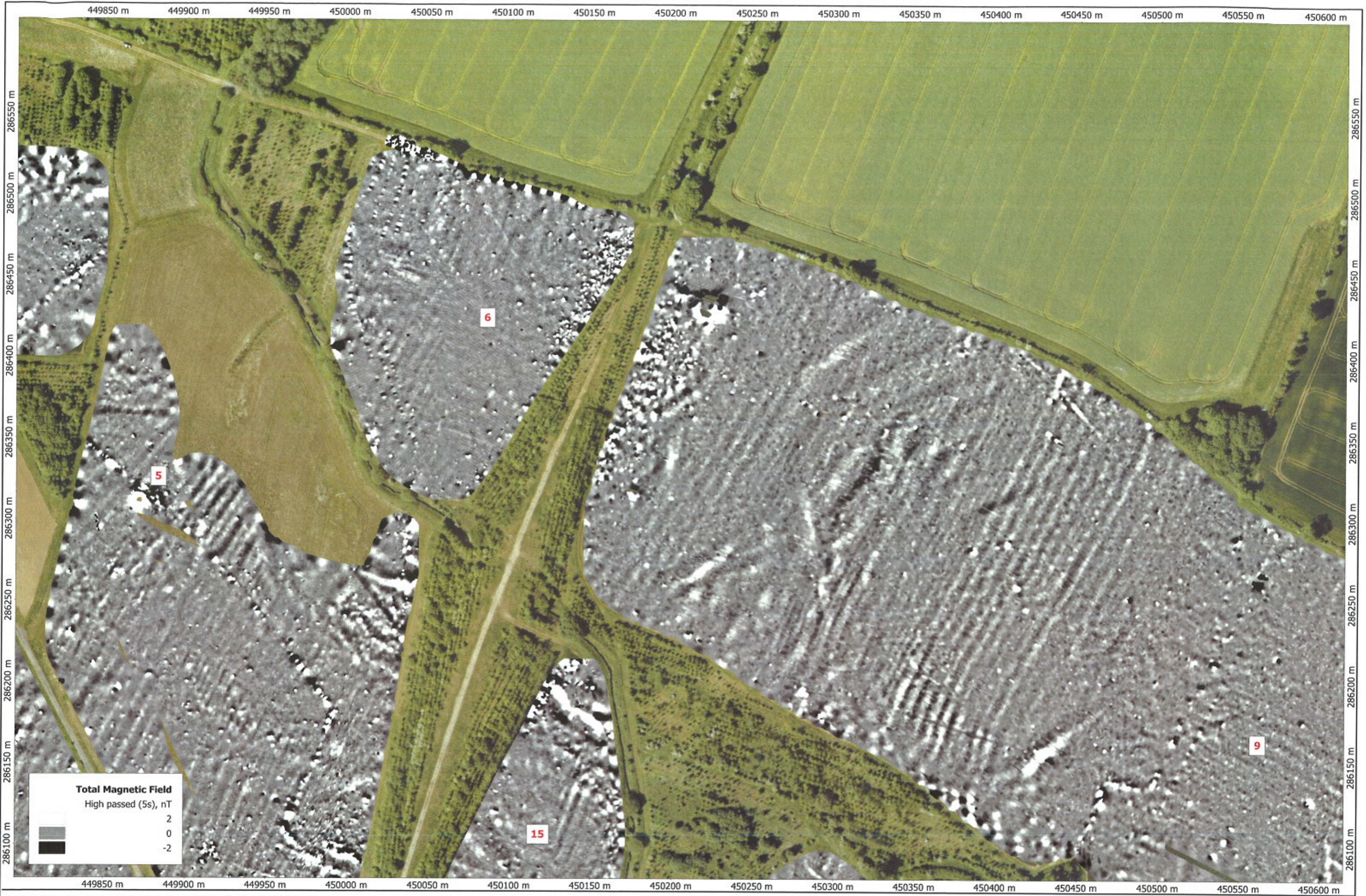


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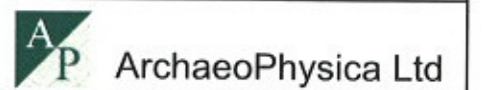


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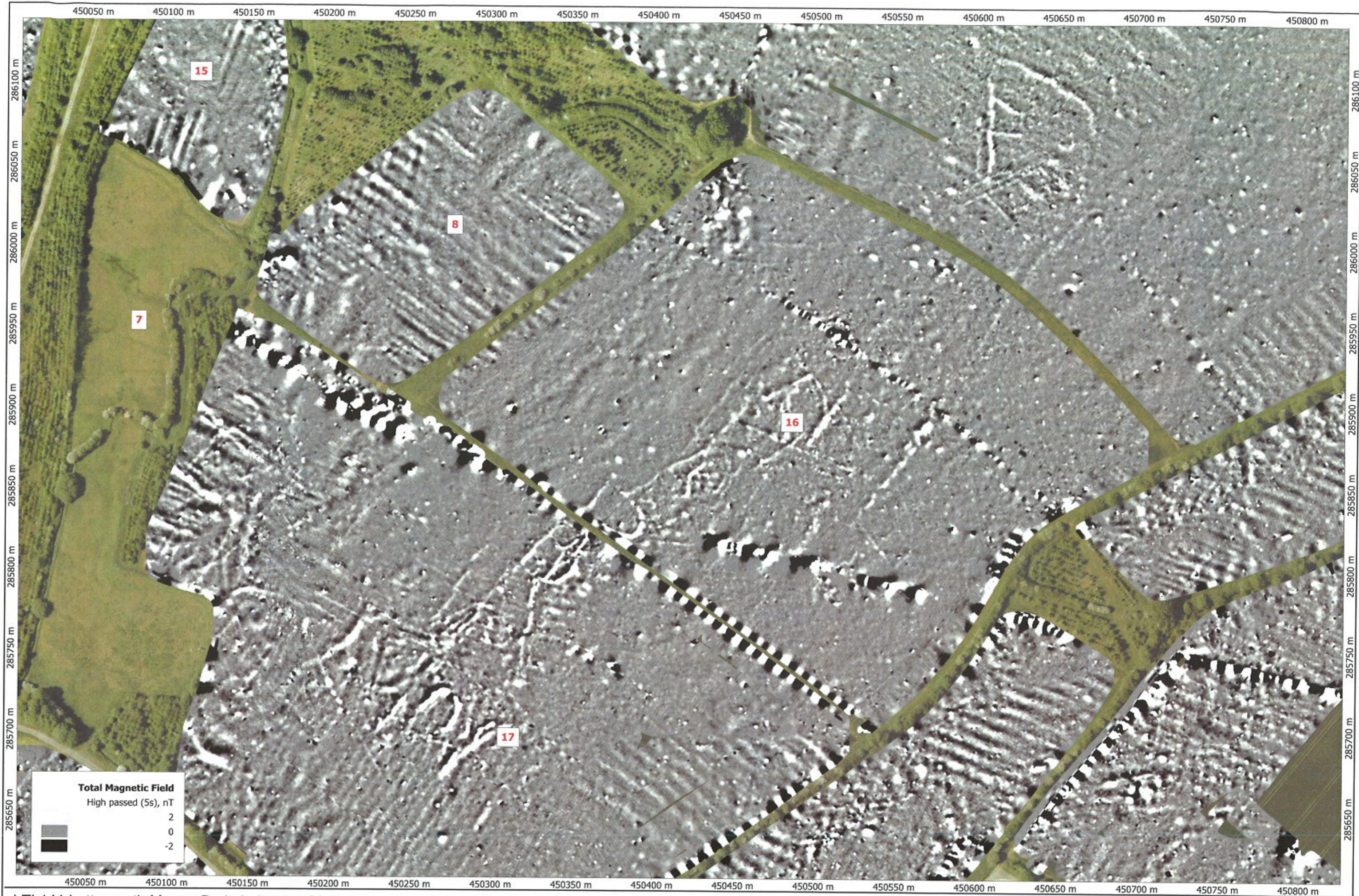


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 DWG 08 Magnetic Data (N extent - fields 5, 6, & 9)



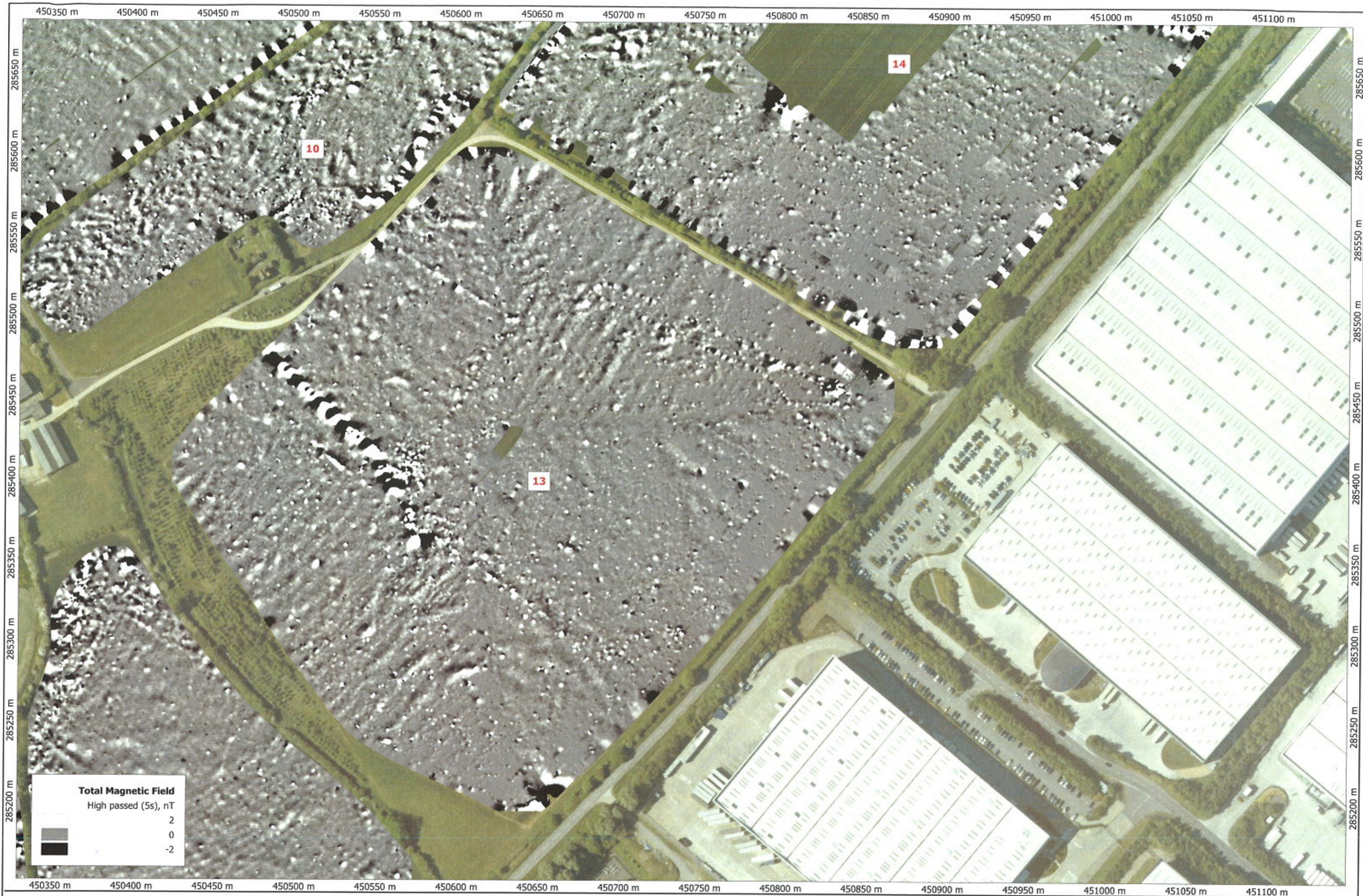
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LTL141 Lutterworth Magna Park, Leicestershire  
 DWG 09 Magnetic Data (Middle - fields 8, 9, 10, 11, 16 & 17)





LTL141 Lutterworth Magna Park, Leicestershire  
 DWG 10 Magnetic Data (S extent - fields 10, 13, 14, & 19)





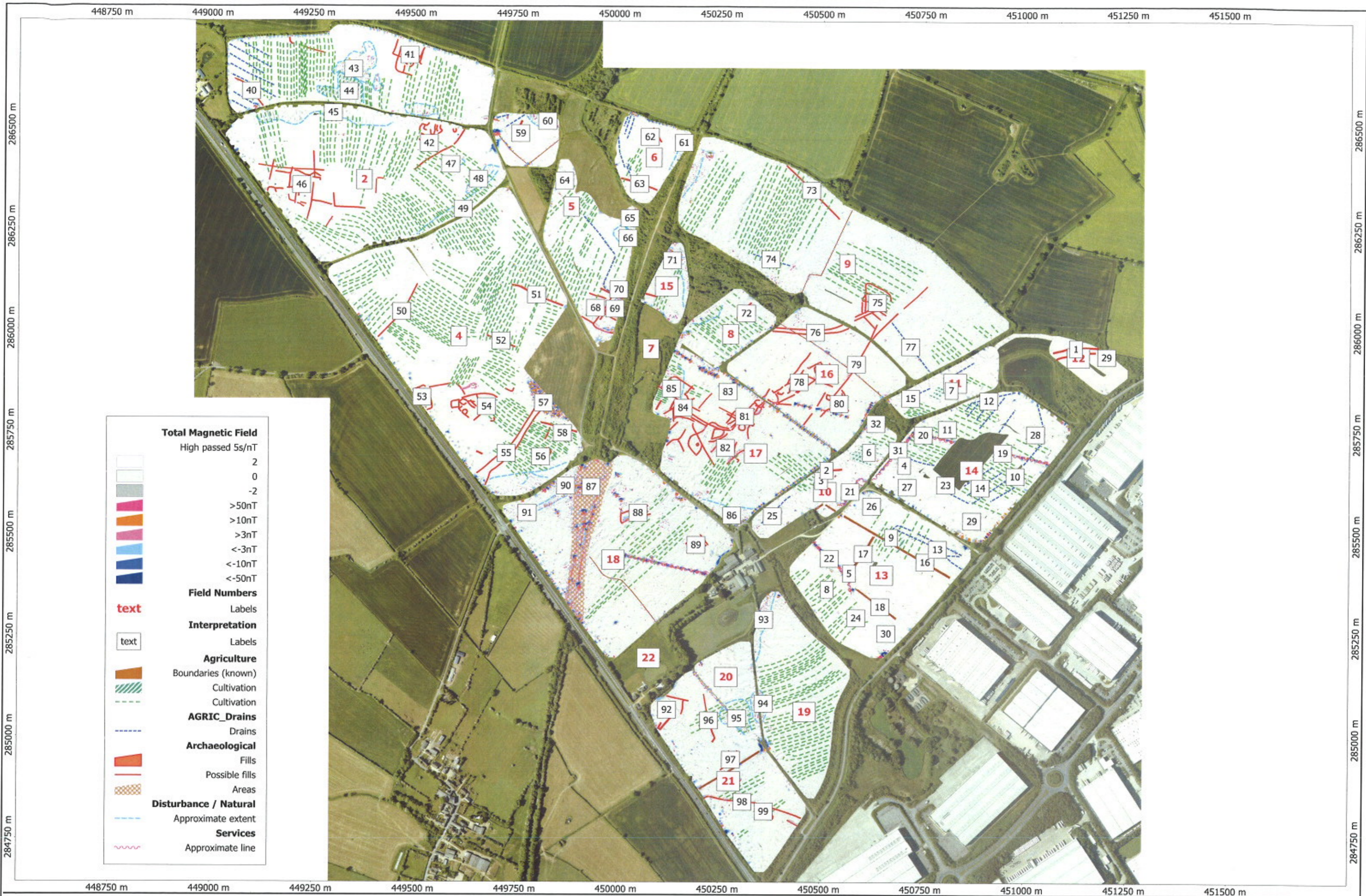
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 DWG 11 Magnetic Data (field 9)





LTL141 Lutterworth Magna Park, Leicestershire  
DWG 12 Magnetic Data (11, 12 & 14)



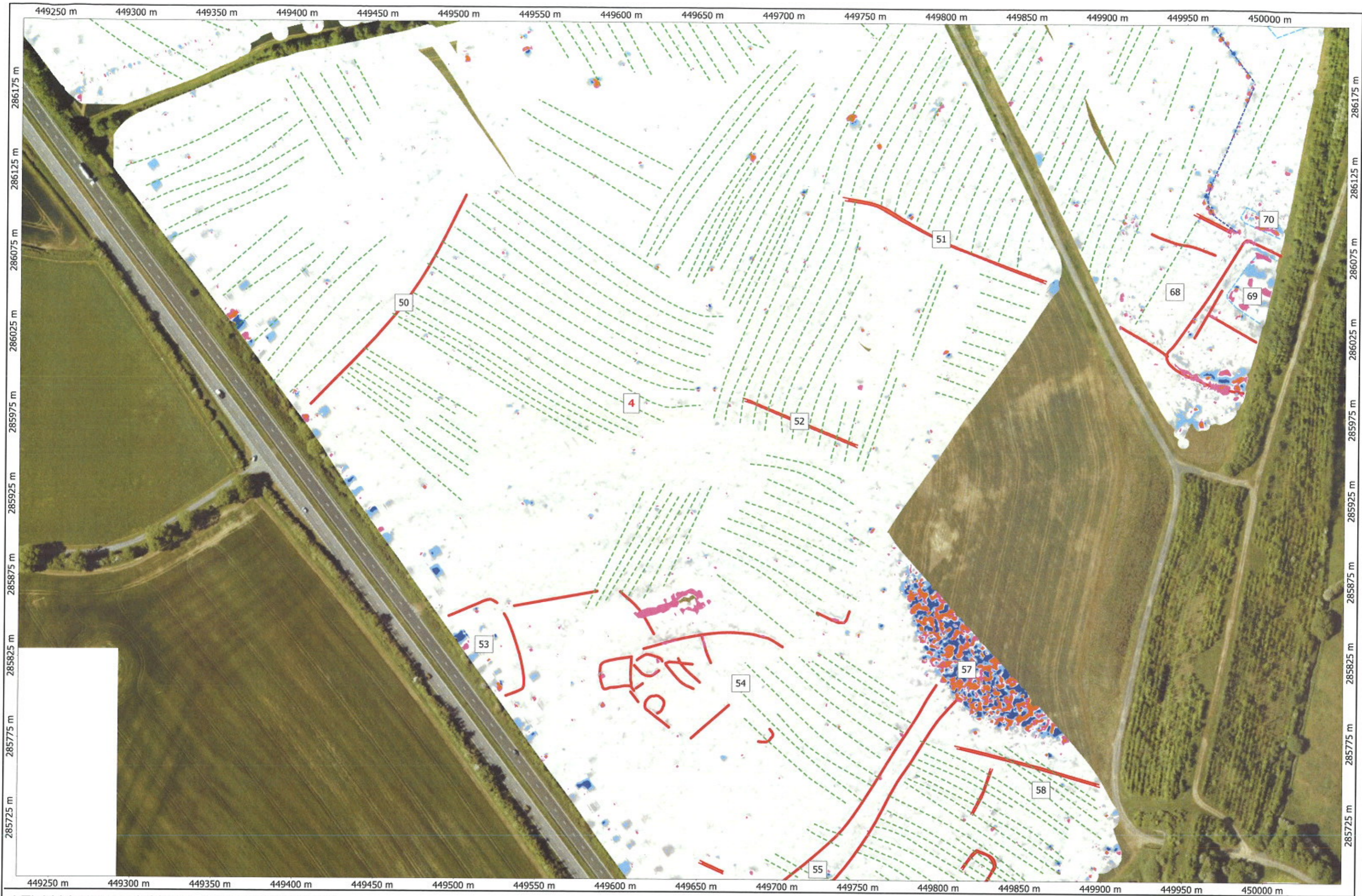


LTL141 Lutterworth Magna Park, Leicestershire  
DWG 13 Interpretation Plot Overview





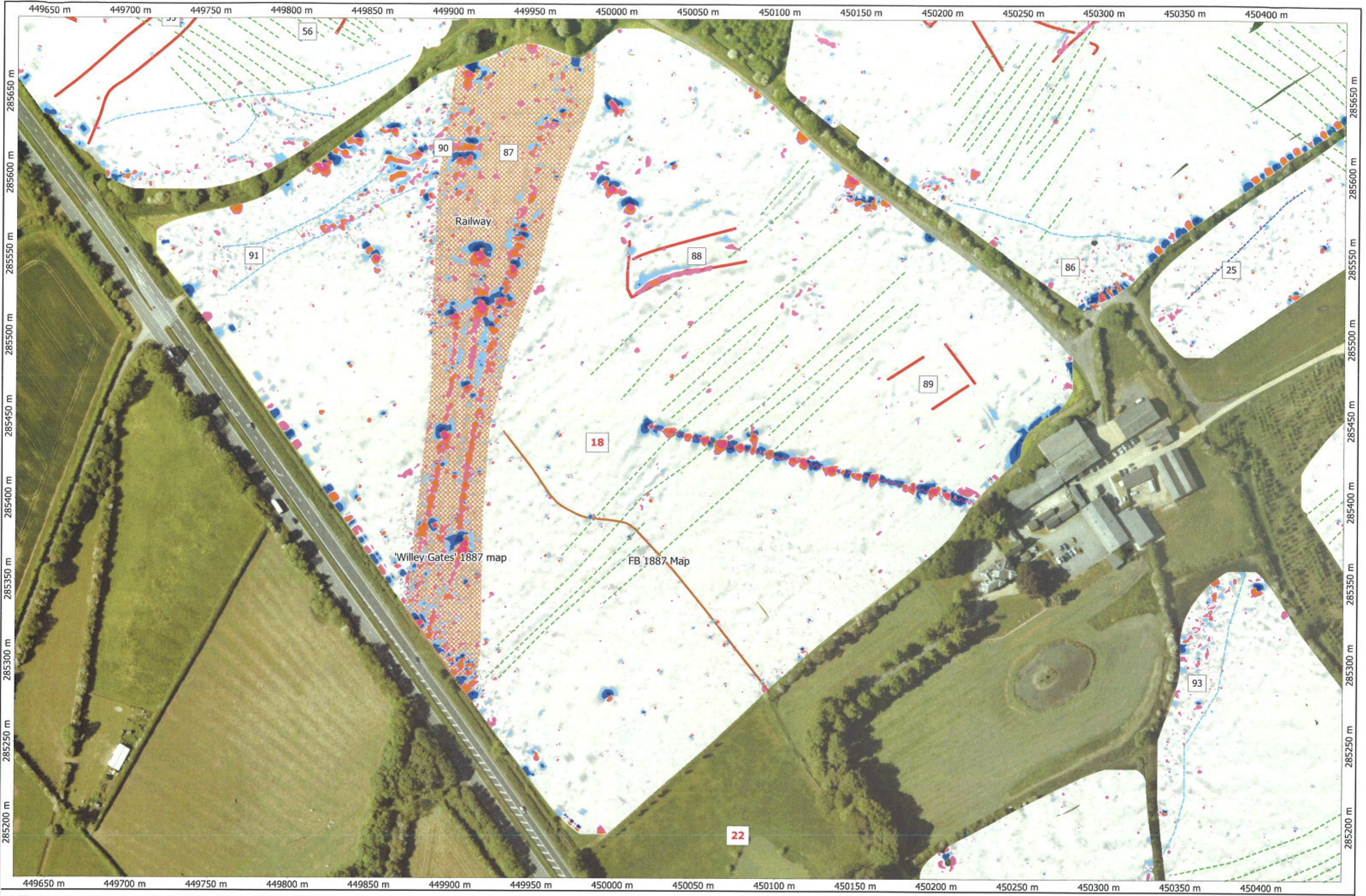




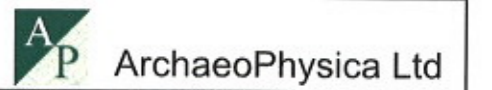
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DWG 15 Interpretation Plot (W extent - fields 4 & 5)

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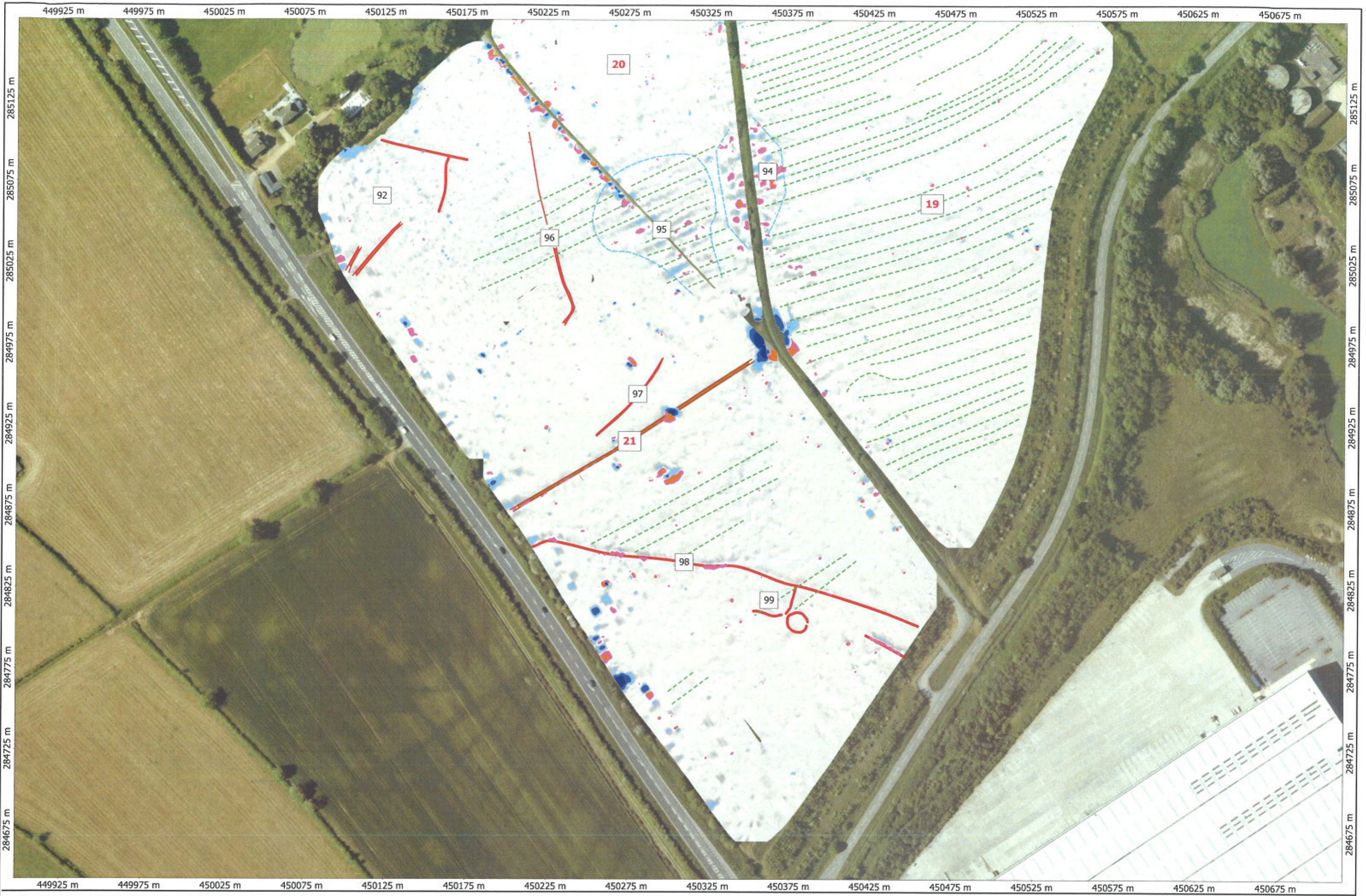


LTL141 Lutterworth Magna Park, Leicestershire  
 DWG 16 Interpretation Plot (W extent - fields 18, 17, & 19)



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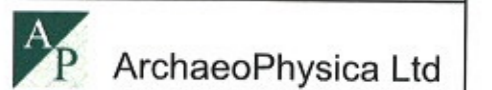
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LTL141 Lutterworth Magna Park, Leicestershire  
 DWG 18 Interpretation Plot (N extent - fields 5, 6 & 9)



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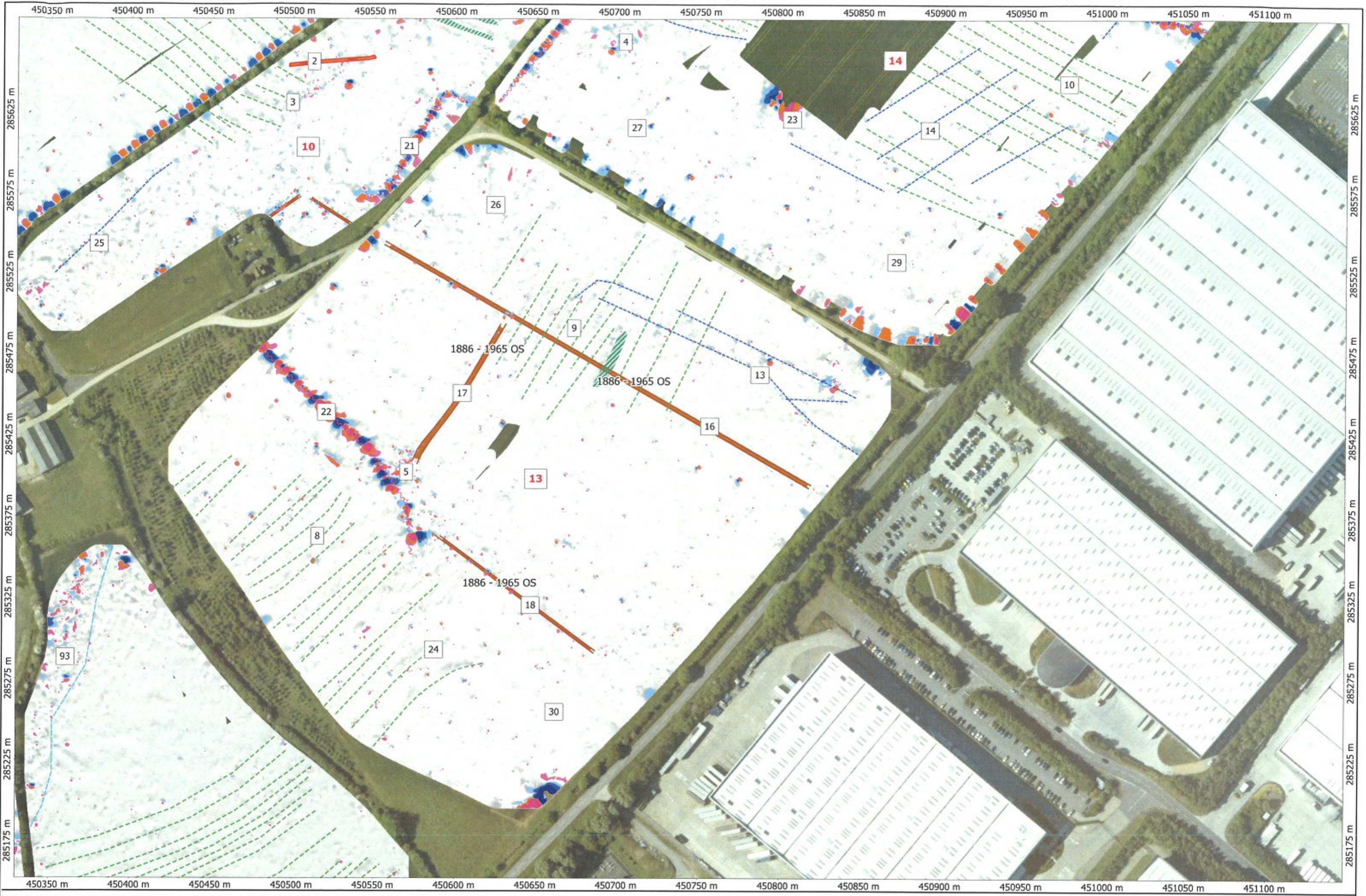


LTL141 Lutterworth Magna Park, Leicestershire  
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LTL141 Lutterworth Magna Park, Leicestershire  
 DWG 21 Interpretation Plot (field 9)





LTL141 Lutterworth Magna Park, Leicestershire  
 DWG 22 Interpretation Plot (fields 11, 12 & 14)

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**APPENDIX 3: MOLA NORTHAMPTONSHIRE, 2015. ARCHAEOLOGICAL FIELDWALKING  
SURVEY OF MAGNA PARK II, LUTTERWORTH, LEICESTERSHIRE**





**Archaeological fieldwalking survey of  
twenty-one fields north-west of Lutterworth  
Leicestershire  
October-November 2014**

Report No. 15/3

Author: Olly Dindol

Illustrator: Olly Dindol



# Archaeological fieldwalking survey of twenty-one fields north-west of Lutterworth, Leicestershire October-November 2014

Report No. 15/3  
Accession No: X.A141.2014

Quality control and sign off:

Issue No.	Date approved:	Checked by:	Verified by:	Approved by:	Reason for Issue:
1	13/1/2015	P Chapman	M Holmes	A Chapman	Client approval

Author: Olly Dindol

Illustrator: Olly Dindol

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Illustrations: Olly Dindol

Worked Flint: Yvonne Wolframm-Murray

Pottery: Tora Hylton

Paul Blinkhorn BTech

Brick and Tile: Pat Chapman BA CMS ACIfA

**OASIS REPORT FORM**

<b>PROJECT DETAILS</b>		<b>Oasis No:</b> molanort1-199795	
Project title	Archaeological Fieldwalking Survey of twenty-one fields north-west of Lutterworth, Leicestershire.		
Short description	MOLA Northampton was commissioned by CgMs Consulting to undertake a fieldwalking survey on land north-west of Lutterworth, Leicestershire. The evaluation area comprised 21 fields north-west of Magna Park totalling c 218ha. The survey recorded 14 pieces of flint, two sherds of Iron Age pottery, 36 sherds of Roman pottery, 126 sherds of medieval pottery and 179 sherds of post-medieval potter. Two areas of interest were noted including a scatter of Roman pottery and a small spread of 16th-17th-century pottery. Overall much of the later pottery was distributed in a random manner and was probably introduced onto the field through manuring.		
Project type	Fieldwalking		
Previous work	None		
Current land use	Arable		
Future work	Trial Trenching		
Monument type and period	None		
Significant finds	None		
<b>PROJECT LOCATION</b>			
County	Leicestershire		
Site address	Lutterworth, Leicestershire		
Easting Northing	SP 5002 8606		
Area (sq m/ha)	c 218ha		
Height aOD	105m – 126m AOD		
<b>PROJECT CREATORS</b>			
Organisation	MOLA Northampton		
Project brief originator	CgMs Consulting		
Project Design originator	MOLA Northampton		
Director/Supervisor	Olly Dindol (MOLA)		
Project Manager	Mark Holmes (MOLA)		
Sponsor or funding body	CgMs Consulting		
<b>PROJECT DATE</b>			
Start date	29/09/14		
End date	28/11/2014		
<b>ARCHIVES</b>	<b>Location (Accession no.)</b>	<b>Contents</b>	
Physical	X.A141.2014		
Paper		Site records (1 archive box)	
Digital		Client report PDF. Survey Data, Photographs	
<b>BIBLIOGRAPHY</b>			
Title	Archaeological Fieldwalking Survey of twenty-one fields north of Lutterworth, Leicestershire, October 2014		
Serial title & volume	MOLA Northampton report 15/3		
Author(s)	Dindol, O		
Page numbers	17		
Date	13/1/15		



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# Archaeological fieldwalking survey on twenty-one fields north-west of Lutterworth, Leicestershire

October-November 2014

## **Abstract**

*MOLA Northampton was commissioned by CgMs Consulting to undertake a fieldwalking survey on land north-west of Lutterworth, Leicestershire. The evaluation area comprised 21 fields north-west of Magna Park totalling c 218ha. The survey recorded 14 pieces of flint, 2 sherds of Iron Age pottery, 36 sherds of Roman pottery, 126 sherds of medieval pottery and 179 sherds of post-medieval pottery. A couple of areas of interest were noted from the data including a scatter of Roman pottery and a small spread of 16th-17th century pottery. Overall much of the later pottery was distributed in a random manner and was probably introduced onto the field through manuring.*

## **1 INTRODUCTION**

MOLA was commissioned by CgMs Consulting to undertake an archaeological evaluation, in the form of fieldwalking, on land north-west of Lutterworth, Leicestershire (NGR SP 5002 8606; Fig 1). This report presents the results of work focused on 21 fields with a combined area of c 218ha north-west of Magna Park (Fig 2).

The fieldwalking survey was undertaken throughout October 2014 following consultation with the Senior Planning Archaeologist for Leicestershire County Council. The survey was carried out in order to inform decisions regarding the potential impact of the proposed development upon the archaeological resource in accordance with the National Planning Policy Framework (NPPF; DCLG 2012). The accession number X.A141.2014 was provided by the Principal Planning Archaeologist for Leicestershire County Council.

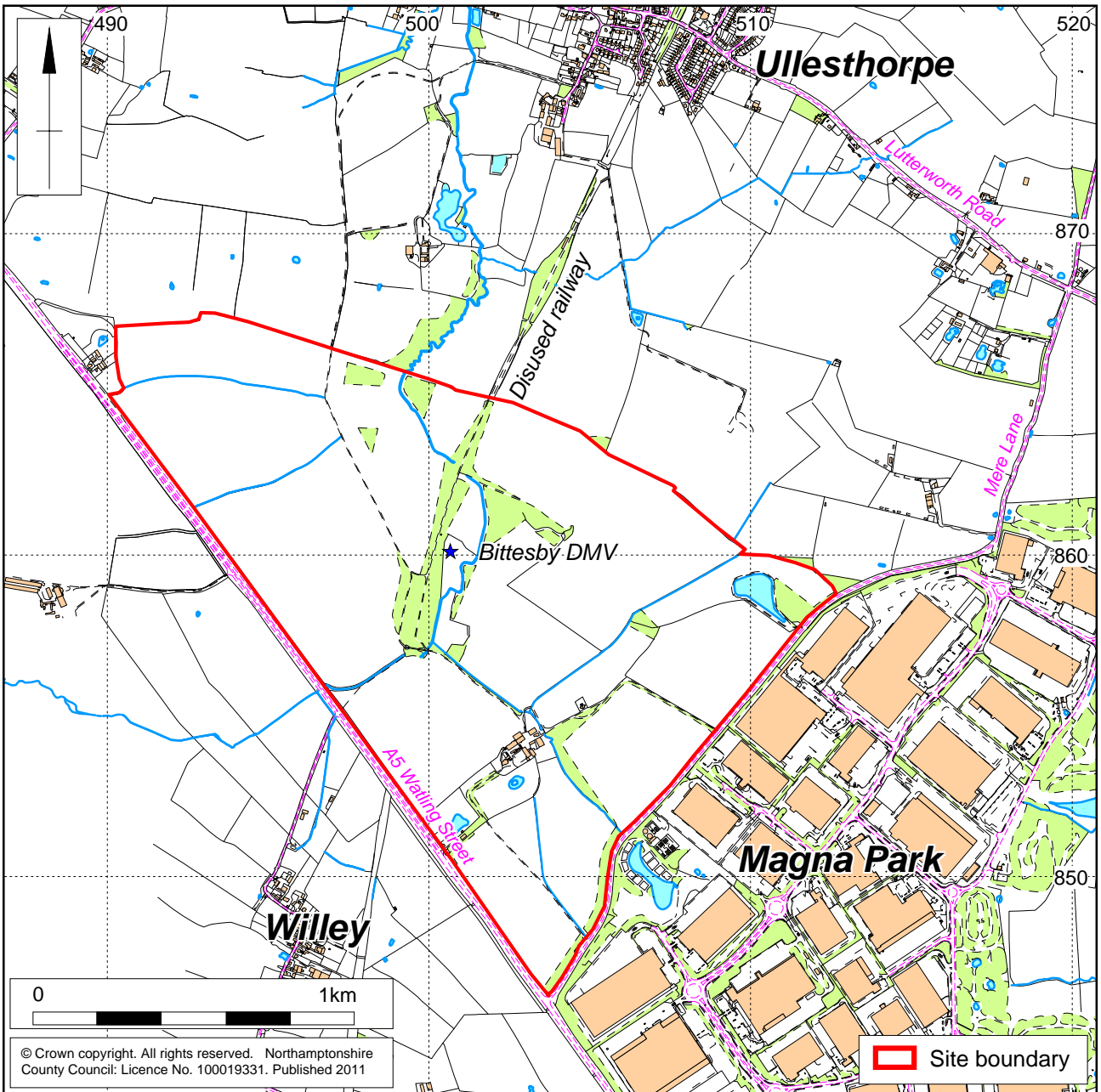
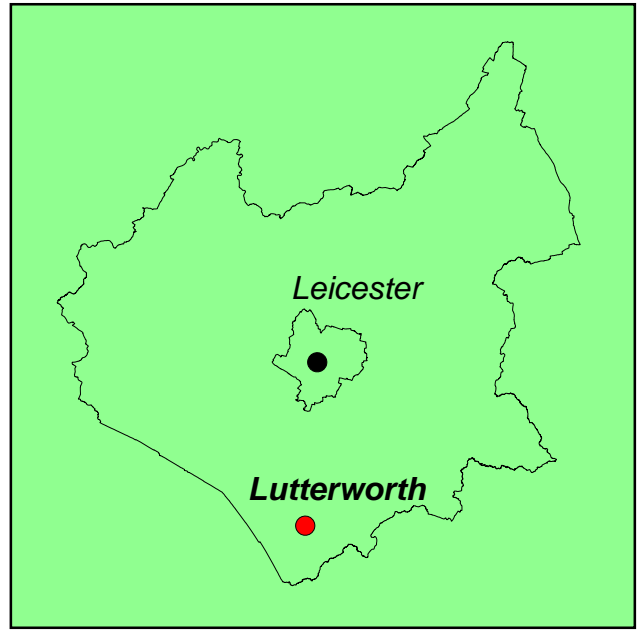
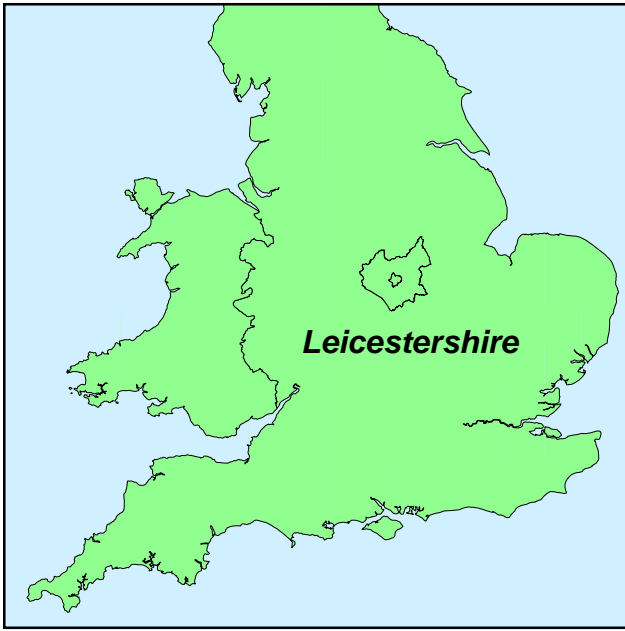
## **2 OBJECTIVES**

The overall aim of the archaeological evaluation was to locate and identify any potential areas of archaeological significance and for the discussion concerning the suitability of the site for development.

The objectives of the evaluation can be summarised as:

- To characterise the artefactual content of the topsoil;
- To determine the period and date of any archaeology present via the use of artefact dating;
- To determine the nature and extent of any archaeology present in the survey area.





Scale 1:20000

Site Location Fig 1

### **3 BACKGROUND**

#### **3.1 Location and geology**

The survey area is located to the north-west of Magna Park and some 4km to the north-west of Lutterworth itself. The area is bounded to the south-east by Mere Lane, which acts as a boundary between Magna Park and Bittesby Farm, furthermore the west of the site is bounded by the A5. The northern and eastern edges of the site are bordered by other arable fields. The height of the site varies from 105m to 126m AOD and slopes from the south-east towards the north-west.

As recorded by the British Geological Survey the survey area is situated across three different types of bedrock. The primary bedrock geology of the area is recorded as consisting of Merica mudstone formations, whilst along the southern edge of the survey area the bedrock is recorded as Lias mudstone and limestone formations. A small band of mudstone belonging to the Penarth formation is situated between the two. The overlying superficial geology is recorded as Oadby member formations, which is comprised of boulder clays. Additionally bands of sands and alluvium are located across the middle of the survey area.

#### **3.2 Historical and archaeological background**

An assessment of the known archaeological resource of the development area was carried out and presented in a desk-based assessment (Thornton 2014); only the elements that are deemed relevant to the current evaluation will be discussed in any depth.

##### ***Prehistoric***

Evidence for prehistoric archaeology within the survey area taken from the Historic Environment Record (HER) primarily consists of a small amount of flint recovered during an earlier phase of fieldwalking which took place to the west of the deserted medieval village of Bittesby. The majority of the flint dated from the Neolithic and Bronze Age periods (MLE17111), although a Paleolithic core and flake and one Mesolithic flint were also recovered (MLE16462). The only other finds dating from the prehistoric period situated within the area are three pottery sherds, possibly dating to the Iron Age, recovered along the northern edge of site next to the abandoned railway (MLE10324).

Prehistoric archaeology situated within the wider area is more limited, being restricted to an Iron Age Terret ring (MLE9236) being recovered just to the North of the survey area and some cropmarks suggesting potential Iron Age activity (MLE2592), also to the north.

##### ***Romano-British***

The HER records a fairly substantial amount evidence for Romano-British activity within the survey area. This primarily consists of over 300 pottery sherds and twenty pieces of tile which were found by fieldwalkers (MLE21337) in the western half of site, as well as a potential Roman villa (MLE1230) which was discovered within the deserted medieval village during the construction of a now defunct rail line.

In addition the A5 which borders the west of site runs along the course of the Roman road of Watling Street (MLE16461). Finds in the wider area are limited to a Roman urn (Pastscape 340316) recovered in the fields on the southern side of the A5, just to the south-west of the site.



### **Anglo-Saxon**

Anglo-Saxon archaeology for the area is very sparse, with the only of evidence for Saxon activity within the area consisting of a Saxon loomweight (MLE6250) 100m north-west of the deserted medieval village of Bittesby. The HER records no further Saxon evidence within the wider area.

However, Bittesby is most likely Saxon in origin. It is recorded in Domesday (1086) as *Bischesbie* which combines the Saxon personal name of *Byttel* with the Viking *Oscan*, a word for habitation.

### **Medieval**

The HER records the deserted medieval village of Bittesby (MLE1226) being situated within the survey area. During the 13th century Bittesby grew in size to about 25 families, then stayed around this size for some 200 years. By the end of the 15th century the population of the village decreased until eventually the village became deserted sometime in the mid-16th century. Other medieval finds within the survey area are limited to a spread of medieval pottery found to the east of the DMV by fieldwalkers in 2005 (MLE16460). Furthermore in the field to the immediate west of the DMV there is evidence for potentially medieval ridge and furrow cultivation (Pastscapes 337760).

Medieval archaeology within the wider area includes the medieval centres of Ullestrope (MLE10380) and Willey (MWA9579). To the east of site a medieval coin was recovered just to the south of Lutterworth road (MLE10264).

### **Post-medieval**

Since the desertion of the village of Bittesby the primary use of the wider survey area as seen in older Ordnance Survey maps, is agricultural. Other uses of the survey area during this period include the construction and subsequent abandonment of the Rugby-Leicester branch of the Midland Counties Railway which was built in the mid-19th century (MLE16079), during which the potential Roman villa (MLE1230) was revealed. The land immediately east is a former WW2 airfield which fell into disuse and was redeveloped into Magna Park in the late 1980s (MLE15959).

## **4 METHODOLOGY**

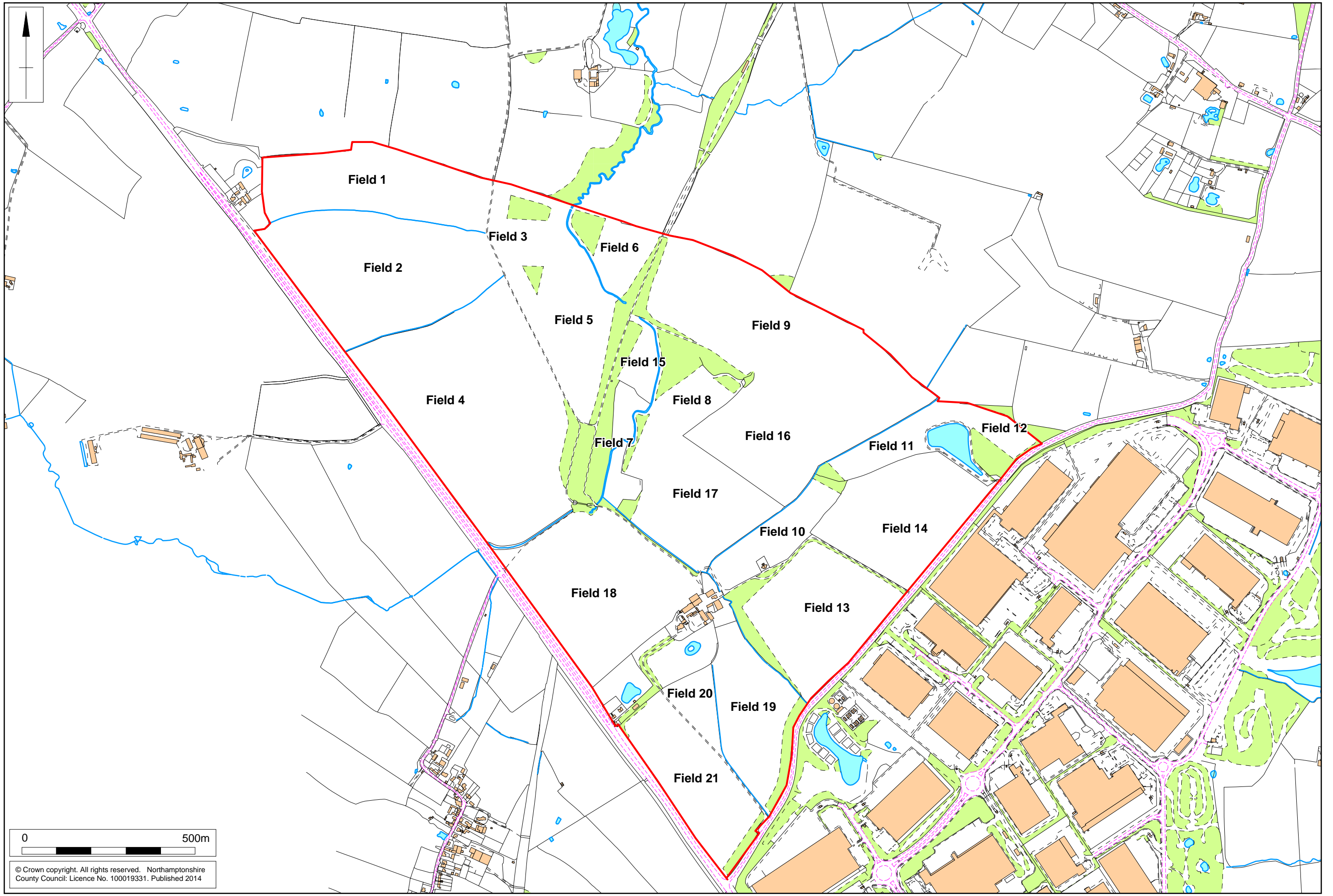
The fieldwalking survey was undertaken by walking along parallel transects spaced 20m apart across the areas of study. Transects were located to Ordnance Survey National Grid using a Leica VIVA Global Positioning System (GPS) using Smartnet real-time corrections.

Each survey area (field) was walked systematically at a slow pace along the parallel transects and surface finds were collected from a corridor extending about 1m to each side of the transect line. The overall sample of the surface area was approximately 10%. Standard MOLA Northampton Fieldwalking Record Sheets were used to record the results, including ground surface visibility and weather conditions.

All artefacts of potential archaeological interest were collected; but indisputably modern materials were left *in situ*. Furthermore, 'toolbox talks' from MOLA Northampton's prehistoric flint specialist were given to ensure maximum retrieval of flint artefacts. Samples of brick, tile and slag were collected, with any concentrations of these materials being noted.

Once assessed, all material was packed and stored in optimum conditions, as described in First Aid for Finds (Wilkinson and Neal 1998).





Scale 1:10000

Field numbers Fig 2

## 5 FIELDWALKING

### 5.1 Ground conditions

The survey was carried out during October 2014 at a time when the fields had recently been ploughed and harrowed prior to surveying. The weather was mostly overcast. A number of fields were unable to be surveyed, in the case of Field 7 this was due to its status as scheduled monument (Fig 2), in the case of the other fields it was due to the presence of crops or grazing animals.

### 5.2 Survey results

A total of 357 individual finds were recovered, with finds ranging from the prehistoric to the post-medieval periods. The finds recovered are summarised in Table 1, the results of which are plotted on Figures 3 – 5.

*Table 1: Fieldwalking artefacts quantification*

Field	Worked Flint	Iron Age	Pottery		
			Romano- British	Medieval	Post-medieval
F1	0	0	1	4	2
F2	0	0	2	3	0
F3	1	0	0	1	4
F4			Not Walked		
F5			Not Walked		
F6			Not Walked		
F7			Not Walked		
F8	1	0	2	8	5
F9	4	0	6	32	3
F10	1	0	2	3	19
F11	0	0	0	1	5
F12	0	0	0	0	3
F13	3	0	0	6	19
F14	1	0	0	3	20
F15			Not Walked		
F16	2	2	13	16	1
F17	0	0	5	21	2
F18	0	0	2	8	73
F19	0	0	0	13	21
F20	0	0	0	4	2
F21	1	0	3	3	0
<b>Total</b>	14	2	36	126	179



### 5.3 Worked flint by Yvonne Wolframm-Murray

In total 14 pieces of worked flint were recovered as surface finds from the fieldwalking survey. The flint comprises one core from Field 13, twelve waste flakes from Fields 3, 8 to 10, 13, 14, 16 and 21, and a waste blade from Field 9 (Table 2).

The condition of the flakes is medium with the flint showing post-depositional edge damage in the shape of frequent nicks and occasional crushing on the edges. Patination is present, displaying a slight milky discolouration of the surface.

The raw material is a vitreous flint, light to dark brown coloured. The raw material was likely to have originated from local gravel deposits.

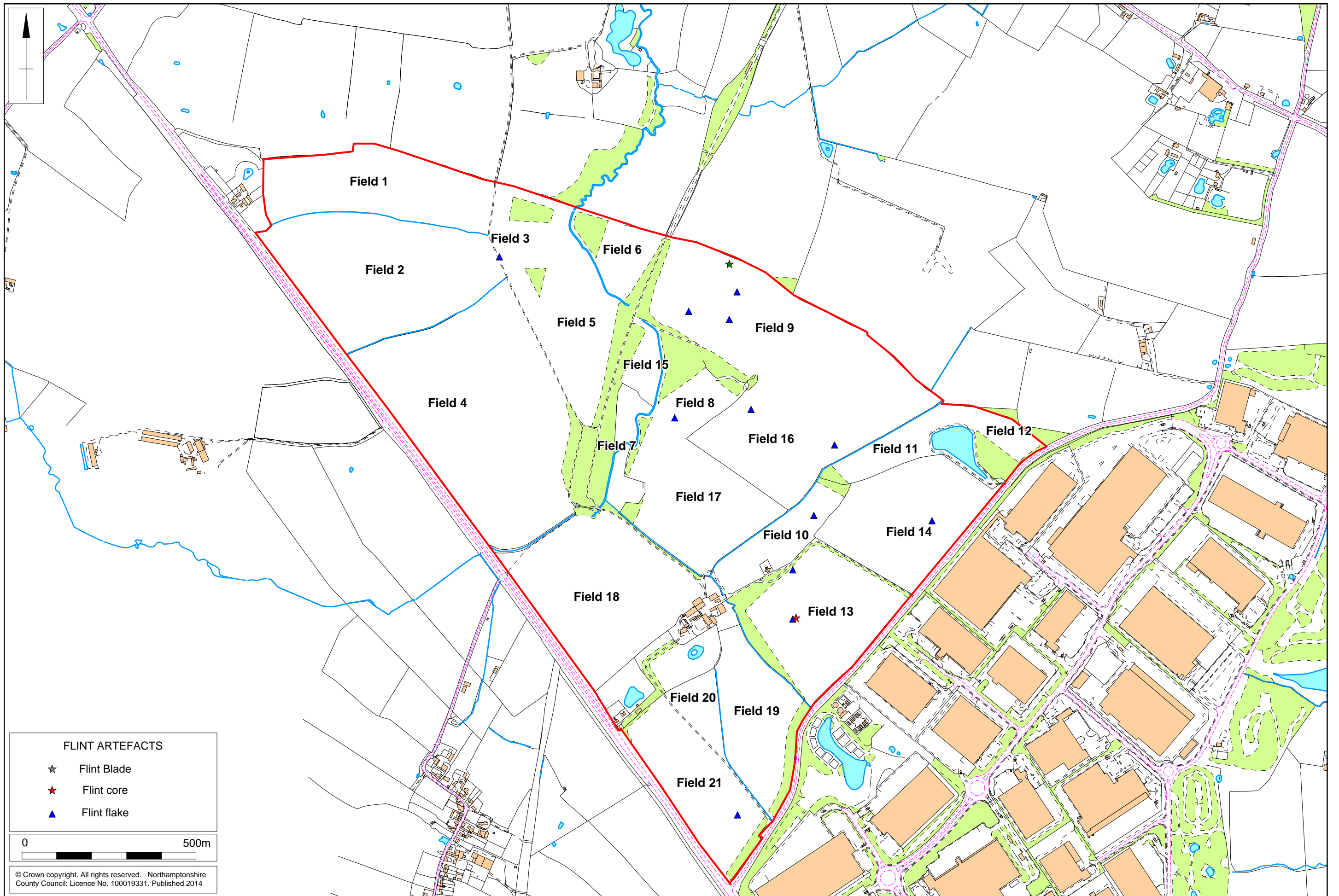
The core had flake removals from multiple directions. It had been exposed to heat, which resulted in a slight reddish discolouration and patination. The assemblage comprises 12 un-retouched waste flakes and one blade.

The core dates probably to the early post glacial period. The technological characteristics of the waste flakes and blade are not directly dateable.

The worked flint had a general background scatter.

*Table 2: Summary of flint*

Field	Core fragment	Flake fragment	Flint blade
<b>F3</b>	0	1	0
<b>F8</b>	0	1	0
<b>F9</b>	0	3	1
<b>F10</b>	0	1	0
<b>F13</b>	1	2	0
<b>F14</b>	0	1	0
<b>F16</b>	0	2	0
<b>F21</b>	0	1	0
<b>Total</b>	1	12	1



Scale 1:10000

Distribution of flint artefacts Fig 3



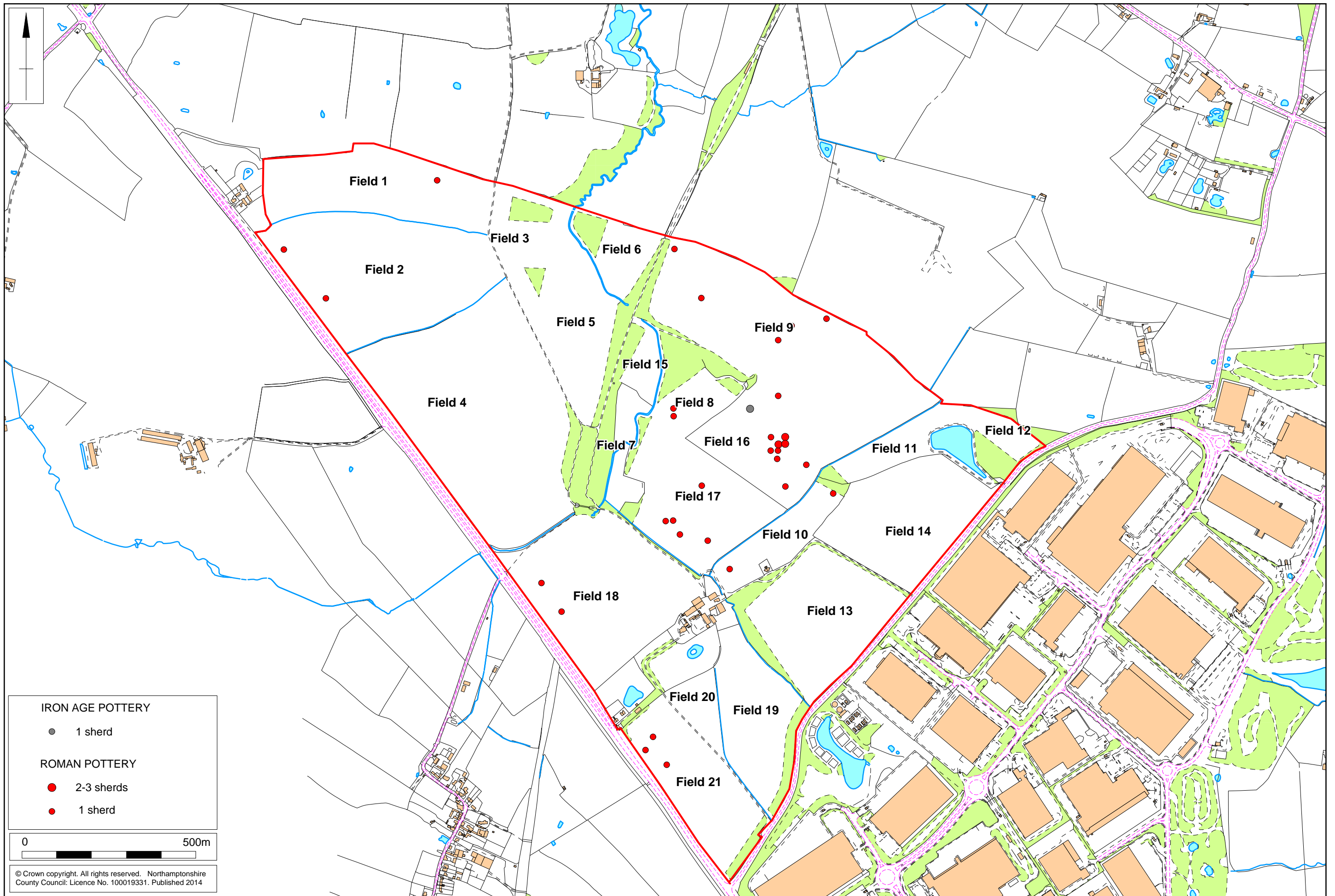
#### 5.4 The pottery by Paul Blinkhorn and Tora Hylton

The distribution of the pottery is plotted in Figures 4, 5 and 6, and the medieval and post-medieval fabrics recorded in Table 3 using the conventions of the Leicestershire County type-series (Sawday 1994), as follows:

*Table 3: Pottery fabric types, with codes, recovered during fieldwalking*

<b>Code:</b>	<b>Pottery type</b>	<b>Date range</b>
<b>CC1</b>	Nuneaton 'A' ware	1200-1400
<b>CC2</b>	Chilvers Coton 'C' ware	1200-1475
<b>EA</b>	Post-medieval red earthenware	Mid-16th century
<b>EA3</b>	Staffordshire Manganese Mottled ware	1680-1750
<b>EA6</b>	Post-medieval Blackwares	late 17th century +
<b>EA10</b>	Modern Earthenwares	1800+
<b>FR</b>	Frechen Stoneware	1550+
<b>LY4</b>	Shelly wares	1100-1400
<b>MB</b>	Midland Blackware	1550-1750
<b>MP1</b>	Midland Purple ware	1370-1550
<b>PM</b>	Potter's Marston ware	1100-1300
<b>SW</b>	Unclassified Stoneware	Modern
<b>IA</b>	All Iron Age	
<b>RB</b>	All Romano-British	

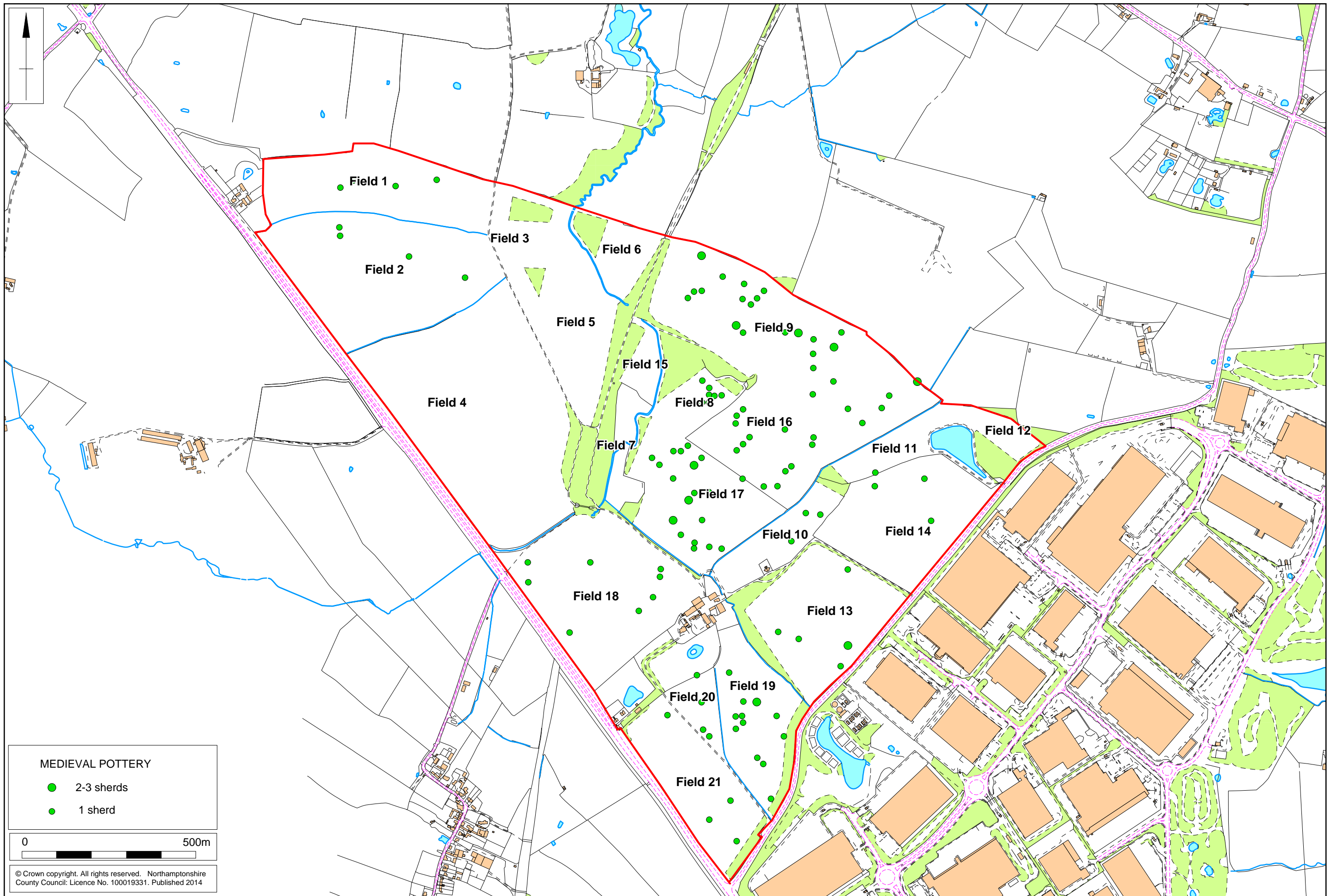
The pottery occurrence by number and weight of sherds per context is shown in the appendices. The range of fabric types is typical of contemporary sites in the region. The Roman and medieval pottery assemblages generally include what appears to be an unusually high proportion of large and fresh sherds, of a size (mean sherd weight c 10 - 12g) more usually observed amongst excavation assemblages rather than field-walking pottery, which usually consists of smaller and more abraded sherds. This suggests that a lot of the material was only recently introduced to the plough-zone. The distribution of the pottery may be indicative of manuring.



Scale 1:10000

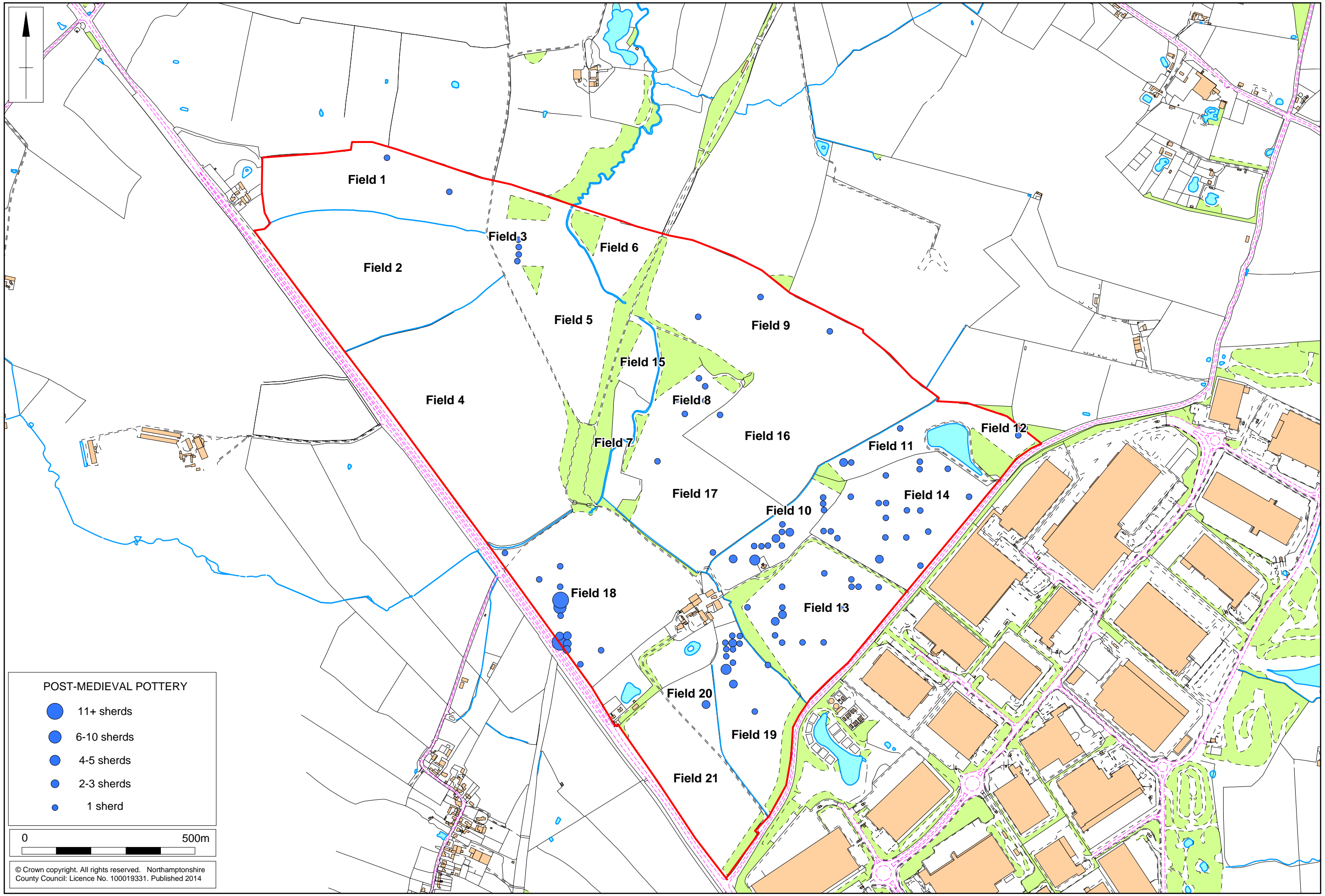
Distribution of Iron Age and Roman pottery Fig 4





Scale 1:10000

Distribution of medieval pottery Fig 5



Scale 1:10000

Distribution of post-medieval pottery Fig 6



## 5.5 **Brick and tile** by Pat Chapman

For purpose of this report the assemblages were scanned during sorting of the collected material and a sub-sample of the brick and tile fragments from each field, if present, was examined.

### ***Brick***

From Field 13 come 37 brick fragments and 29 from Field 14. Fields 3, 9, 16, 18 and 19 have similar numbers of fragments, with very little from the rest.

The main fabrics are orange-brown, bright or dark orange and red-brown sandy clay, occasionally a fine pinkish-brown fabric. The bricks are both mould-made and machine-made and the few measurable fragments are 42-73mm thick.

Two modern fragments from Field 17 comprise a black glazed brick and a rusticated brick. The only stamped frog, a fragment with the letters . . ERW. . surviving, comes from Field 19. Occasional moulded window or door surround fragments come from Fields 14 and 18. A modern perforated ventilation brick also comes from Field 14.

### ***Ceramic tile***

The main fabrics are orange-brown and red-brown sandy clay, occasionally fine silty orange-brown sand or buff-white, while the modern machine-made tiles are buff or mauve with mauve or black surfaces.

There are 35 roof tile sherds from Field 13, mainly flat tiles with two curved pantile sherds and two ridge tile sherds. Fifteen roof tile sherds from Field 14 comprise eight flat tiles and seven probable ridge tiles. Four modern machine-made tiles include one with a nib, and one ridge tile sherd. Similar quantities from both older and modern tiles come from Fields 3, 9, 16-20. These are mainly flat tiles with a few curved fragments from pantiles, but no ridge tiles. The flat tiles and pantiles are all 15mm thick and the ridge tiles 17-19mm thick.

A few floor quarry tile and clay tile sherds and one coping tile come from Field 13.

### ***Stone roof tile***

Three partial limestone roof tiles, 15-35mm thick, each with a perforation 8-10mm in diameter come from one spot in Field 17.

There was one fragment of Welsh slate, still retaining two perforations of 8-10mm diameter, from Field 14.

### ***Drains***

There is a scatter of stone-glazed drainpipe sherds of various diameters, all of 20th century date, in most of the fields. Three modern corrugated cylindrical ceramic sherds from land drains, one with part of a stamp . . PRPES . . comes from Field 14.

### ***Discussion***

#### ***Medieval to post-medieval***

The roof tiles made in the orange clay fabric, as well as the limestone roof tiles from Field 17, could be datable from the late medieval period to the 19th century. Pantiles in the midlands would probably date from the 18th century onwards, however, these are in very small quantities.

Some of the bricks would date to this period, although local mould-made bricks would still be in production into the 20th century.

***Modern***

Machine-made roof tiles, at least half the brick assemblage, the Welsh slate, quarry floor tiles, land drains and a widespread scatter of drainpipes indicates the widespread modern element in the collection.

***Distribution***

No brick or tile comes from Fields 1, 12 and 21, and very little comes from Fields 2, 11 and 12. The majority of the material comes from Fields 3, 9-10, 13-14 and 16-20.



## 6 DISCUSSION

The fieldwalking survey recovered little in the way of flint, with 12 flakes collected from across the survey area as well as one waste blade from Field 9 and a core from Field 13. Moreover only the burnt core, which was Mesolithic in date, could be dated due to the poor quality of the flakes. Such a poor scatter is hardly surprising as previous work in the wider area had only recovered small assemblages. Due to such a small number of finds it is hard to draw any meaningful conclusion from the flint, at best it can be inferred that some light prehistoric activity did occur over the wider area. Other prehistoric finds include two sherds of Iron Age pottery recovered from Field 16. The recovery of these pottery sherds is of some interest as there is very little evidence of Iron Age activity across the wider area.

The Roman finds recovered during the course of the survey consisted of 36 Roman pottery sherds. Considering the proximity of the potential Roman Villa near Bittesby and the large Roman pottery spread it is surprising that the Roman presence of the site is so small. Although the majority of the pottery is scattered across site in an ad-hoc manner there is a small spread of 15 sherds of Roman pottery recovered in the same area as the previously discovered 300 sherd spread. The fact that this survey found a clear pottery concentration in the same area as a previously recovered spread along with the sites proximity to Watling Street would suggest a good chance of some sort of Roman activity within the area

The medieval period is represented by a total of 126 sherds of pottery. The pottery distribution is generally concentrated nearer the centre of site, this was expected due to the location of the DMV in regard to the survey area. A small spread of medieval pottery was located in Field 8, this is likely related to the DMV due its proximity. Apart from this small spread the pottery was not distributed in any sort of discernible pattern, rather it was spread out across the fields. A random scattering of pottery such as this suggests that the spread is the result of manuring, the process of fertilizing by spreading waste over an area.

The post-medieval period is the most well represented with 179 sherds of pottery being recovered from across the survey area. The pottery dated from the 16th - 19th centuries, and was generally distributed across the site in a scattered manner. One area of note is a small spread of 17th and 16th century pottery situated at the northern end of field 19 just south of Bittesby house, which is known to date to at least the early 19th century. Due to the proximity of Bittesby house it can be inferred that this spread was once the farm's dumping/waste area. There are also two large concentrations of 19th century pottery situated within Field 19, over 30 sherds of pottery were recovered from each spread with a total of 68 sherds between them. When looking at the spreads in conjunction with older Ordnance Survey maps it can be seen that the pottery scatters are situated along the old Rugby-Leicester branch of the Midlands Counties Railway, meaning that these high concentrations are simply the result of the importing of soils and subsequent demolishing of the embankments. A considerable amount of brick and tile was recovered from across the survey area much of which could date to the late medieval period or the early post-medieval. The generally scattered distribution of pottery is likely due to manuring, moreover, considering that the majority of the post-medieval pottery is situated within the south-eastern portion of the survey area it can be inferred that the south-eastern fields have been predominantly arable land whilst the other fields have been left as pasture.

To conclude, given the previously known spread of Roman finds and the proximity of the DMV and villa the type and distribution of pottery collected is not surprising. The presence of randomly scattered medieval and post-medieval pottery implies that the land was predominately used for agricultural purposes. Of more interest is the Roman and Iron Age pottery, whilst the Roman spread was only small the fact that it is located in the same area as the previously recovered pottery concentration is of use in supporting the

implication of Roman settlement within the area. The Iron Age pottery is useful for building the archaeological context of the wider area.



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MOLA  
12 January 2015

**APPENDIX: POTTERY OCCURRENCE BY NUMBER AND WEIGHT (IN G) OF  
SHERDS BY FABRIC TYPE PER FIELD**

Field	Tr	Sq	RB		LY4		PM		CC2		MP1		EA6		EA10		
			No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	
1	4	V	-	-	-	-	-	-	-	-	-	-	-	1	4	-	-
1	8	L	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-
1	8	X	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-
1	10	B	-	-	-	-	-	-	1	8	-	-	-	-	-	-	-
1	11	H	1	8	-	-	-	-	-	-	1	39	-	-	-	-	-
1	11	Q	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1

Field	Tr	Sq	RB		CC2		MP1	
			No	Wt	No	Wt	No	Wt
2	16	K	-	-	1	7	-	-
2	26	X	1	13	-	-	-	-
2	42	A	1	25	-	-	-	-
2	46	D	-	-	1	4	-	-
2	30	L	-	-	-	-	1	29

Field	Tr	Sq	MP1		FR		EA3		EA6	
			No	Wt	No	Wt	No	Wt	No	Wt
3	28	P	1	20	-	-	-	-	-	-
3	33	Q	-	-	1	10	-	-	-	-
3	33	R	-	-	-	-	-	-	1	12
3	33	S	-	-	-	-	-	-	1	10
3	33	T	-	-	-	-	1	4	-	-

Field	Tr	Sq	RB		LY4		PM		CC2		MP1		EA10	
			No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt
8	99	F	-	-	-	-	-	-	-	-	-	-	1	1
8	99	V	-	-	-	-	-	-	-	-	1	32	-	-
8	99	Y	-	-	-	-	-	-	1	19	-	-	1	5
8	101	A	-	-	-	-	1	5	1	14	-	-	1	5
8	101	B	-	-	1	3	-	-	-	-	-	-	-	-
8	101	C	-	-	-	-	1	8	-	-	-	-	1	1
8	101	G	-	-	-	-	-	-	1	121	-	-	-	-
8	101	L	-	-	-	-	-	-	1	7	-	-	-	-
8	116	Y	1	6	-	-	-	-	-	-	-	-	-	-
8	116	Z	1	6	-	-	-	-	-	-	-	-	-	-
8	117	N	-	-	-	-	-	-	-	-	-	-	1	4



## LUTTERWORTH

Field	Tr	Sq	RB		PM		CC2		MP1		EA		EA3		EA10	
			No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt
9	38	C	1	6	-	-	-	-	-	-	-	-	-	-	-	-
9	38	W	-	-	2	15	-	-	-	-	-	-	-	-	-	-
9	52	F	-	-	-	-	1	20	-	-	-	-	-	-	-	-
9	52	K	-	-	-	-	-	-	1	15	-	-	-	-	-	-
9	52	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	52	S	-	-	-	-	-	-	1	25	-	-	-	-	-	-
9	52	V	1	3	-	-	-	-	-	-	-	-	-	-	-	-
9	52	W	-	-	-	-	1	17	-	-	-	-	-	-	-	-
9	53	N	-	-	-	-	1	3	-	-	-	-	-	-	-	-
9	54	A	-	-	-	-	1	23	-	-	-	-	-	-	-	-
9	54	C	-	-	-	-	1	32	-	-	-	-	-	-	-	-
9	54	K	-	-	-	-	1	5	-	-	-	-	-	-	-	-
9	54	Q	-	-	-	-	-	-	-	-	-	-	1	27	-	-
9	54	R	-	-	1	17	-	-	-	-	-	-	-	-	-	-
9	67	X	-	-	-	-	-	-	-	-	1	13	-	-	-	-
9	68	W	-	-	-	-	2	13	-	-	-	-	-	-	-	-
9	69	A	-	-	-	-	1	15	-	-	-	-	-	-	-	-
9	69	J	-	-	1	7	-	-	-	-	-	-	-	-	-	-
9	70	B	-	-	-	-	1	12	-	-	-	-	-	-	-	-
9	70	L	1	8	-	-	-	-	-	-	-	-	-	-	-	-
9	70	Q	-	-	-	-	2	14	-	-	-	-	-	-	-	-
9	71	M	1	4	-	-	-	-	-	-	-	-	-	-	-	-
9	71	Q	-	-	-	-	-	-	-	-	-	-	-	-	1	7
9	87	A	-	-	-	-	-	-	1	50	-	-	-	-	-	-
9	87	C	-	-	1	5	-	-	-	-	-	-	-	-	-	-
9	87	E	1	2	-	-	1	5	-	-	-	-	-	-	-	-
9	87	T	-	-	-	-	1	4	1	5	-	-	-	-	-	-
9	104	B	1	24	1	5	-	-	-	-	-	-	-	-	-	-
9	104	T	-	-	1	17	-	-	-	-	-	-	-	-	-	-
9	106	G	-	-	-	-	1	7	-	-	-	-	-	-	-	-
9	107	D	-	-	1	18	1	2	1	2	-	-	-	-	-	-
9	122	E	-	-	-	-	1	22	-	-	-	-	-	-	-	-
9	123	E	-	-	-	-	-	-	1	22	-	-	-	-	-	-
9	123	M	-	-	1	9	-	-	-	-	-	-	-	-	-	-

Field	Tr	Sq	RB		PM		CC2		EA3		EA6		EA10	
			No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt
10	158	G	-	-	-	-	-	-	-	-	-	-	-	-
10	158	K	-	-	-	-	-	-	1	11	-	-	-	-
10	158	L	-	-	-	-	-	-	-	-	-	-	1	1
10	158	S	1	2	-	-	-	-	-	-	-	-	-	-
10	173	A	-	-	-	-	-	-	-	-	-	-	2	6
10	173	G	-	-	-	-	-	-	-	-	-	-	1	2
10	173	H	-	-	-	-	-	-	-	-	-	-	1	1
10	173	K	-	-	1	5	-	-	-	-	-	-	-	-
10	173	L	-	-	-	-	-	-	-	-	1	8	1	1
10	173	Z	-	-	-	-	1	19	-	-	-	-	-	-
10	174	J	-	-	-	-	1	6	-	-	-	-	-	-
10	174	P	-	-	-	-	-	-	-	-	-	-	1	1
10	185	R	1	8	-	-	-	-	-	-	-	-	-	-
10	185	X	-	-	-	-	-	-	-	-	2	14	-	-
10	186	M	-	-	-	-	-	-	-	-	-	-	4	15
10	186	P	-	-	-	-	-	-	-	-	-	-	1	5
10	186	U	-	-	-	-	-	-	-	-	-	-	1	2
10	186	Z	-	-	-	-	-	-	-	-	-	-	1	8
10	187	J	-	-	-	-	-	-	-	-	-	-	1	9

Field	Tr	Sq	MP1		EA10	
			No	Wt	No	Wt
11	123	R	-	-	1	3
11	141	B	-	-	3	34
11	141	G	-	-	1	5
11	141	V	1	24	-	-

Field	Tr	Sq	EA10	
			No	Wt
12	127	A	1	7
12	127	B	1	6
12	127	G	1	2



Field	Tr	Sq	CC2		MP1		EA3		EA10		SW	
			No	Wt	No	Wt	No	Wt	No	Wt	No	Wt
13	188	K	-	-	-	-	-	-	1	3	-	-
13	189	B	1	6	-	-	-	-	-	-	-	-
13	199	F	-	-	-	-	-	-	-	-	1	5
13	199	F	-	-	-	-	-	-	1	1	-	-
13	200	F	-	-	-	-	-	-	-	-	1	27
13	200	I	-	-	-	-	-	-	1	48	-	-
13	202	A	-	-	-	-	-	-	1	3	-	-
13	202	I	-	-	-	-	-	-	1	7	-	-
13	202	J	-	-	-	-	-	-	1	25	-	-
13	202	N	-	-	-	-	-	-	1	3	-	-
13	203	D	-	-	-	-	-	-	1	2	-	-
13	212	B	-	-	-	-	-	-	1	32	-	-
13	212	C	1	11	-	-	-	-	-	-	-	-
13	212	D	-	-	-	-	1	16	-	-	-	-
13	212	D	-	-	-	-	-	-	1	15	-	-
13	212	F	-	-	-	-	-	-	1	3	-	-
13	212	J	-	-	-	-	-	-	2	73	-	-
13	212	P	-	-	-	-	-	-	1	19	-	-
13	212	R	-	-	1	13	-	-	-	-	-	-
13	212	V	-	-	-	-	-	-	1	15	-	-
13	213	K	-	-	-	-	-	-	1	3	-	-
13	214	A	2	17	-	-	-	-	-	-	-	-
13	223	X	1	7	-	-	-	-	-	-	-	-

Field	Tr	Sq	CC2		MP1		EA10		SW	
			No	Wt	No	Wt	No	Wt	No	Wt
14	143	F	-	-	-	-	1	5	-	-
14	143	G	-	-	-	-	1	2	-	-
14	144	A	-	-	-	-	2	7	-	-
14	159	G	-	-	-	-	1	7	-	-
14	159	Y	-	-	1	57	-	-	-	-
14	160	A	-	-	-	-	1	3	-	-
14	160	J	-	-	-	-	1	7	1	7
14	161	J	1	2	-	-	-	-	-	-
14	174	L	-	-	-	-	1	2	-	-
14	174	R	-	-	-	-	1	1	-	-
14	174	V	-	-	-	-	1	3	-	-
14	176	F	-	-	-	-	1	1	-	-
14	176	I	-	-	-	-	1	3	-	-
14	176	V	-	-	-	-	1	4	-	-
14	176	Z	-	-	-	-	-	-	1	11
14	177	J	-	-	-	-	-	-	1	23
14	177	L	-	-	-	-	1	9	-	-
14	177	N	1	4	-	-	-	-	-	-
14	190	C	-	-	-	-	2	11	-	-
14	190	G	-	-	-	-	1	1	-	-

LUTTERWORTH

Field	Tr	Sq	IA		RB		LY4		PM		CC1		CC2		MP1		MB		
			No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	
16	118	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2
16	118	X	-	-	-	-	-	-	-	-	-	-	-	-	1	14	-	-	
16	118	Y	-	-	-	-	-	-	-	-	-	-	-	1	4	-	-		
16	119	E	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-		
16	119	F	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-		
16	119	J	2	6	-	-	-	-	-	-	-	-	-	-	-	-	-		
16	119	V	-	-	1	23	-	-	-	-	-	-	-	-	-	-	-		
16	120	F	-	-	2	31	-	-	-	-	-	-	-	-	-	-	-		
16	120	G	-	-	-	-	-	-	-	-	-	-	-	1	45	-	-		
16	121	A	-	-	-	-	-	-	-	-	1	22	-	-	-	-	-		
16	137	Y	-	-	-	-	-	-	-	-	-	-	-	1	8	-	-		
16	138	E	-	-	-	-	-	-	-	-	-	-	1	4	-	-	-		
16	138	Y	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-		
16	139	C	-	-	1	18	-	-	-	-	-	-	-	-	-	-	-		
16	139	D	-	-	1	7	-	-	-	-	-	-	-	-	-	-	-		
16	139	E	-	-	2	14	-	-	-	-	-	-	-	-	-	-	-		
16	139	F	-	-	-	-	-	-	-	-	-	-	1	5	-	-	-		
16	139	J	-	-	3	44	-	-	-	-	-	-	-	-	-	-	-		
16	139	L	-	-	-	-	-	-	1	6	-	-	1	2	-	-	-		
16	139	W	-	-	1	13	-	-	-	-	-	-	-	-	-	-	-		
16	140	E	-	-	-	-	-	-	1	33	-	-	-	-	-	-	-		
16	156	E	-	-	-	-	-	-	1	6	-	-	-	-	-	-	-		
16	156	T	-	-	-	-	-	-	-	-	-	-	1	4	-	-	-		
16	157	D	-	-	-	-	-	-	-	-	-	-	1	16	-	-	-		
16	157	I	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-		

Field	Tr	Sq	RB		PM		CC1		CC2		MP1		EA6		EA10	
			No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt
17	135	M	-	-	1	8	-	-	-	-	-	-	-	-	-	-
17	135	Q	-	-	-	-	-	-	-	-	-	-	1	35	-	-
17	135	R	-	-	-	-	-	-	1	2	-	-	-	-	-	-
17	136	D	-	-	-	-	-	-	-	-	1	25	-	-	-	-
17	136	H	-	-	-	-	-	-	1	16	-	-	-	-	-	-
17	136	P	-	-	-	-	-	-	-	-	1	19	-	-	-	-
17	136	R	-	-	1	7	1	7	-	-	-	-	-	-	-	-
17	136	X	-	-	1	6	-	-	-	-	-	-	-	-	-	-
17	154	E	-	-	1	6	-	-	-	-	-	-	-	-	-	-
17	154	L	-	-	1	4	1	7	-	-	-	-	-	-	-	-
17	154	S	-	-	1	4	-	-	-	-	-	-	-	-	-	-
17	154	Y	1	16	-	-	-	-	-	-	-	-	-	-	-	-
17	155	C	-	-	-	-	-	-	1	34	-	-	-	-	-	-
17	169	Y	1	11	-	-	-	-	-	-	-	-	-	-	-	-
17	170	D	1	10	2	16	-	-	-	-	-	-	-	-	-	-
17	170	G	1	8	-	-	-	-	1	6	-	-	-	-	-	-
17	170	Q	-	-	-	-	-	-	1	18	-	-	-	-	-	-
17	170	Y	-	-	-	-	-	-	1	6	-	-	-	-	-	-
17	171	A	1	28	-	-	-	-	-	-	-	-	-	-	-	-
17	184	Z	-	-	-	-	-	-	1	4	-	-	-	-	-	-
17	185	E	-	-	1	7	-	-	-	-	-	-	-	-	-	-
17	185	I	-	-	-	-	-	-	-	-	-	-	-	-	1	6
17	185	P	-	-	1	8	-	-	-	-	-	-	-	-	-	-



LUTTERWORTH

Field	Tr	Sq	RB		PM		CC2		MP1		EA		EA6		EA10	
			No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt
18	179	I	-	-	-	-	-	-	-	-	-	-	-	-	1	7
18	179	X	-	-	1	2	-	-	-	-	-	-	-	-	-	-
18	180	W	-	-	-	-	-	-	-	-	-	-	1	29	-	-
18	181	S	-	-	-	-	-	-	1	28	-	-	-	-	-	-
18	183	Q	-	-	1	3	-	-	-	-	-	-	-	-	-	-
18	183	R	-	-	-	-	-	-	1	4	-	-	-	-	-	-
18	192	Z	-	-	1	3	-	-	-	-	-	-	-	-	-	-
18	193	J	1	8	-	-	-	-	-	-	-	-	1	1	-	-
18	193	V	1	3	-	-	-	-	-	-	1	80	-	-	7	37
18	193	W	-	-	-	-	-	-	-	-	-	-	-	-	20	114
18	193	Y	-	-	-	-	-	-	-	-	-	-	-	-	1	35
18	196	A	-	-	-	-	1	3	-	-	-	-	-	-	-	-
18	196	M	-	-	1	34	-	-	-	-	-	-	-	-	-	-
18	205	V	-	-	-	-	-	-	-	-	-	-	-	-	29	190
18	205	W	-	-	-	-	-	-	-	-	-	-	-	-	2	5
18	205	Z	-	-	-	-	-	-	-	-	-	-	-	-	1	12
18	206	A	-	-	-	-	-	-	-	-	-	-	-	-	2	6
18	206	B	-	-	-	-	-	-	-	-	-	-	1	35	1	4
18	206	C	-	-	-	-	1	10	-	-	-	-	-	-	-	-
18	216	E	-	-	-	-	-	-	-	-	-	-	-	-	3	34
18	216	M	-	-	-	-	-	-	-	-	-	-	-	-	1	3
18	217	Z	-	-	-	-	-	-	-	-	-	-	-	-	1	3

LUTTERWORTH

Field	Tr	Sq	LY4		PM		CC1		CC2		MP1		MB		EA6		EA10	
			No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt
19	210	Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	21
19	210	V	-	-	-	-	-	-	-	-	-	-	-	-	2	52	-	-
19	210	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7
19	211	A	-	-	-	-	-	-	-	-	-	1	22	-	-	-	-	-
19	211	B	-	-	-	-	-	-	-	-	-	-	-	1	23	-	-	-
19	220	R	-	-	-	-	-	-	-	1	2	-	-	2	30	2	74	-
19	220	T	-	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-
19	220	U	-	-	-	-	-	-	-	-	-	-	-	-	-	1	34	-
19	220	X	-	-	-	-	-	-	-	-	-	-	-	1	16	-	-	-
19	220	Z	-	-	-	-	-	-	-	-	-	-	-	3	90	-	-	-
19	221	X	-	-	-	-	-	-	-	-	-	-	-	1	24	-	-	-
19	229	V	-	-	1	8	-	-	-	-	-	-	-	-	-	-	-	-
19	229	Z	-	-	-	-	-	-	-	-	-	-	-	2	86	-	-	-
19	230	A	-	-	-	-	1	16	-	-	-	-	-	-	-	-	-	-
19	230	C	-	-	-	-	-	-	-	1	12	-	-	-	-	-	-	-
19	230	K	-	-	-	-	-	-	-	-	-	1	17	-	-	-	-	-
19	230	M	-	-	2	21	-	-	-	-	-	-	-	-	-	-	-	-
19	231	A	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-
19	236	Y	1	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	237	E	-	-	-	-	-	-	-	1	39	-	-	-	-	-	-	-
19	238	H	-	-	1	12	-	-	-	-	-	-	-	-	-	-	-	-
19	242	P	-	-	-	-	-	-	-	1	12	-	-	-	-	-	-	-
19	242	T	-	-	-	-	-	-	1	20	-	-	-	-	-	-	-	-
19	247	Y	-	-	-	-	-	-	1	17	-	-	-	-	-	-	-	-

Field	Tr	Sq	PM		MP1		EA10	
			No	Wt	No	Wt	No	Wt
20	219	R	1	5	-	-	-	-
20	228	X	-	-	1	7	-	-
20	229	B	-	-	-	-	2	48
20	235	Y	-	-	1	27	-	-
20	236	C	1	29	-	-	-	-

Field	Tr	Sq	RB		PM		CC1		CC2	
			No	Wt	No	Wt	No	Wt	No	Wt
21	227	V	-	-	-	-	1	48	-	-
21	234	F	1	46	-	-	-	-	-	-
21	234	M	1	13	-	-	-	-	-	-
21	239	Y	1	10	-	-	-	-	-	-
21	246	A	-	-	-	-	-	-	1	18
21	249	T	-	-	-	-	-	-	1	8
21	249	X	-	-	1	14	-	-	-	-





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## APPENDIX 4: SCHEDULED MONUMENT DESCRIPTIONS

**Name:** Bittesby deserted medieval village

**List entry Number:** 1012563

<b>County</b>	<b>District</b>	<b>District Type</b>	<b>Parish</b>
Leicestershire	Harborough	District Authority	Bittesby

**National Park:** Not applicable to this List entry.

**Grade:** Not applicable to this List entry.

**Date first scheduled:** 07-Oct-1954

**Date of most recent amendment:** 16-Nov-1992

### Legacy System Information

The contents of this record have been generated from a legacy data system.

**Legacy System:** RSM

**UID:** 17034

### Asset Groupings

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

### List entry Description Summary of Monument

Legacy Record - This information may be included in the List Entry Details.

### Reasons for Designation

The village, comprising a small group of houses, gardens, yards, streets, paddocks, often with a green, a manor and a church, and with a community devoted primarily to agriculture, was a significant component of the rural landscape in most areas of medieval England, much as it is today. Villages provided some services to the local community and acted as the main focal point of ecclesiastical, and often of manorial, administration within each parish. Although the sites of many of these villages have been occupied continuously down to the present day, many others declined in size or were abandoned throughout the medieval and post-medieval periods, particularly during the 14th and 15th centuries. As a result over 2000 deserted medieval villages are recorded nationally. The reasons for desertion were varied but often reflected declining economic viability, changes in land use such as enclosure or emparkment, or population fluctuations as a result of widespread epidemics such as the Black Death. As a consequence of their abandonment these villages are frequently undisturbed by later occupation and contain well-preserved archaeological deposits. Because they are a common and long-lived monument type in most parts of England, they provide important information on the diversity of medieval settlement patterns and farming economy between the regions and through time.



Although partly disturbed, the deserted medieval village at Bittesby contains earthworks in good condition and retains high archaeological potential. The village is documented historically and, unusually, the period of desertion is known.

### **History**

Legacy Record - This information may be included in the List Entry Details.

### **Details**

Bittesby deserted village site lies 400m north of the A5 Watling Street and 4km west of Lutterworth and consists of earthworks to the east of a former railway line. The village earthworks comprise hollow ways and house platforms. A ditch up to 1m deep runs along the north of the area, near to which is some faced stonework indicating the site of a chapel known to have existed there. A north-south flowing stream runs on the eastern side of the site, down to which several hollow ways run, the largest of which is 12m wide and up to 2m deep. Bittesby is listed in Domesday Book and in 1279 the village was made up of 25 families. Enclosure and depopulation is recorded in 1488 and 1494, and by 1536 only the Salisbury family was left.

**Book Reference** - *Author:* Hoskins, WG - *Title:* Essays in Leicestershire History - *Date:* 1950 - *Page References:* 93 - *Type:* DESC TEXT

National Grid Reference: SP 50079 85757

**Name:** Moat, fishponds and shifted village earthworks at Ullesthorpe

**List entry Number:** 1010300

**Location**

<b>County</b>	<b>District</b>	<b>District Type</b>	<b>Parish</b>
Leicestershire	Harborough	District Authority	Ullesthorpe

**National Park:** Not applicable to this List entry.

**Grade:** Not applicable to this List entry.

**Date first scheduled:** 25-Feb-1953

**Date of most recent amendment:** 04-Jun-1992

**Legacy System Information**

The contents of this record have been generated from a legacy data system.

**Legacy System:** RSM

**UID:** 17038

**Asset Groupings**

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

**List entry Description**

**Summary of Monument**

Legacy Record - This information may be included in the List Entry Details.

**Reasons for Designation**

Around 6,000 moated sites are known in England. They consist of wide ditches, often or seasonally water-filled, partly or completely enclosing one or more islands of dry ground on which stood domestic or religious buildings. In some cases the islands were used for horticulture. The majority of moated sites served as prestigious aristocratic and seigneurial residences with the provision of a moat intended as a status symbol rather than a practical military defence. The peak period during which moated sites were built was between about 1250 and 1350 and by far the greatest concentration lies in central and eastern parts of England. However, moated sites were built throughout the medieval period, are widely scattered throughout England and exhibit a high level of diversity in their forms and sizes. They form a significant class of medieval monument and are important for the understanding of the distribution of wealth and status in the countryside. Many examples provide conditions favourable to the survival of organic remains.

Ullesthorpe moat and fishponds form part of a wider settlement which was deserted as the village either shrank or shifted its focus further northwards. Although part of this settlement has continued in use to the modern day, with consequent disturbance of the earlier remains, earthworks of the earlier settlement include the various house plots and,



importantly, the location of a prestigious residence surrounded by a moat and fishponds. Together, the remains of the moat and the shrunken village provide important evidence of the changing patterns of agricultural settlement in the Leicestershire medieval landscape.

### **History**

Legacy Record - This information may be included in the List Entry Details.

### **Details**

The site lies south west of the village of Ullesthorpe 4km north west of Lutterworth. The moat comprises a prominent rectangular island measuring approximately 25 x 12m, containing exposed stonework of manorial building foundations, and has a ditch 12-18m wide and 2-2.5m deep on the north, south and east sides. This opens out to form a fishpond 25m wide on the west side, which extends a further 60m to the north and curves around to the east almost enclosing a second island. The whole system is fed by a channel from the north leading to a stream which originally flowed through the site. South of this is a further large fishpond measuring 90 x 55m which contains islands. Below this a channel leads to a prominent water course, 1m deep and 10m wide, which returns to the present stream and has several adjoining house platforms on either side of about 0.5m in height.

National Grid Reference: SP 50166 87333

## List entry Summary

**Name:** Moated site, enclosure and trackway at Claybrooke Parva

**List entry Number:** 1010191

## Location

The monument may lie within the boundary of more than one authority.

<b>County</b>	<b>District</b>	<b>District Type</b>	<b>Parish</b>
Leicestershire	Harborough	District Authority	Claybrooke Parva

**National Park:** Not applicable to this List entry.

**Grade:** Not applicable to this List entry.

**Date first scheduled:** 04-Jun-1992

**Date of most recent amendment:** Not applicable to this List entry.

Legacy System Information

The contents of this record have been generated from a legacy data system.

**Legacy System:** RSM

**UID:** 17049

## Asset Groupings

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

## List entry Description Summary of Monument

Legacy Record - This information may be included in the List Entry Details.

## Reasons for Designation

Around 6,000 moated sites are known in England. They consist of wide ditches, often or seasonally water-filled, partly or completely enclosing one or more islands of dry ground on which stood domestic or religious buildings. In some cases the islands were used for horticulture. The majority of moated sites served as prestigious aristocratic and seigneurial residences with the provision of a moat intended as a status symbol rather than a practical military defence. The peak period during which moated sites were built was between about 1250 and 1350 and by far the greatest concentration lies in central and eastern parts of England. However, moated sites were built throughout the medieval period, are widely scattered throughout England and exhibit a high level of diversity in their forms and sizes. They form a significant class of medieval monument and are important for the understanding of the distribution of wealth and status in the countryside. Many examples provide conditions favourable to the survival of organic remains.

Much of the moated site at Claybrooke Parva survives well. The moat island will retain information on the buildings which formerly occupied it whilst the waterlogged moat will



retain environmental material. Unusually this site has a large attached enclosure linked to the moat by a trackway.

### **History**

Legacy Record - This information may be included in the List Entry Details.

### **Details**

The site at Claybrooke Parva is situated 50m west of the church and includes a moated site with adjoining enclosure and trackway.

Three sides of a square moated area measuring approximately 60m x 60m can be identified at the eastern end of the monument. The northern and western arms of the moat remain water-filled and 12m wide. The western arm extends northwards for a few metres beyond the corner. The eastern arm is almost completely infilled but was of the same width. In the south-east and south-western corners are causewayed entrances damming the flow of water in the moat. Adjoining this, on the south side, is a trackway, now disused, which runs east-west for 150m and adjoins roads at either end. To the west of the moat is a rectangular embanked enclosure measuring 90m x 60m, the banks of which are 6m wide and 0.5m high. The enclosure is bounded by a road on the north and west sides.

The moated site and trackway are included in a conservation area.

### **Selected Sources**

1. **Book Reference** - *Author:* Page, W - *Title:* The Victoria History of the County of Leicestershire: Volume I - *Date:* 1907 - *Volume:* 1 - *Page References:* 263

National Grid Reference: SP 49476 87902

**Name:** Roman town at High Cross Also in WARWICKSHIRE

**List entry Number:** 1003566

Location Not currently available for this entry.

The monument may lie within the boundary of more than one authority.

<b>County</b>	<b>District</b>	<b>District Type</b>	<b>Parish</b>
Leicestershire	Blaby	District Authority	Sharnford
Leicestershire	Blaby	District Authority	Wigston Parva
Leicestershire	Harborough	District Authority	Claybrooke Magna
Leicestershire	Harborough	District Authority	Claybrooke Parva
Warwickshire	Rugby	District Authority	Copston Magna
Warwickshire	Rugby	District Authority	Wibtoft

National Park: Not applicable to this List entry.

**Grade:** Not applicable to this List entry.

This record has been generated from an "old county number" (OCN) scheduling record. As these are some of our oldest designation records they do not have all the information held electronically that our modernised records contain. Therefore, the original date of scheduling is not available electronically. The date of scheduling may be noted in our paper records, please contact us for further information.

**Date first scheduled:**

**Date of most recent amendment:** Not applicable to this List entry.

### **Legacy System Information**

The contents of this record have been generated from a legacy data system.

**Legacy System:** RSM - OCN

**UID:** LE 136

### **Asset Groupings**

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

### **List entry Description**

**Summary** of Monument

Not currently available for this entry.

**Reasons for Designation**

Not currently available for this entry.

**History**

Not currently available for this entry.

**Details**

This record has been generated from an "old county number" (OCN) scheduling record. These are monuments that were not reviewed under the Monuments Protection Programme and are some of our oldest designation records. As such they do not yet have the full descriptions of their modernised counterparts available. Please contact us if you would like further information.

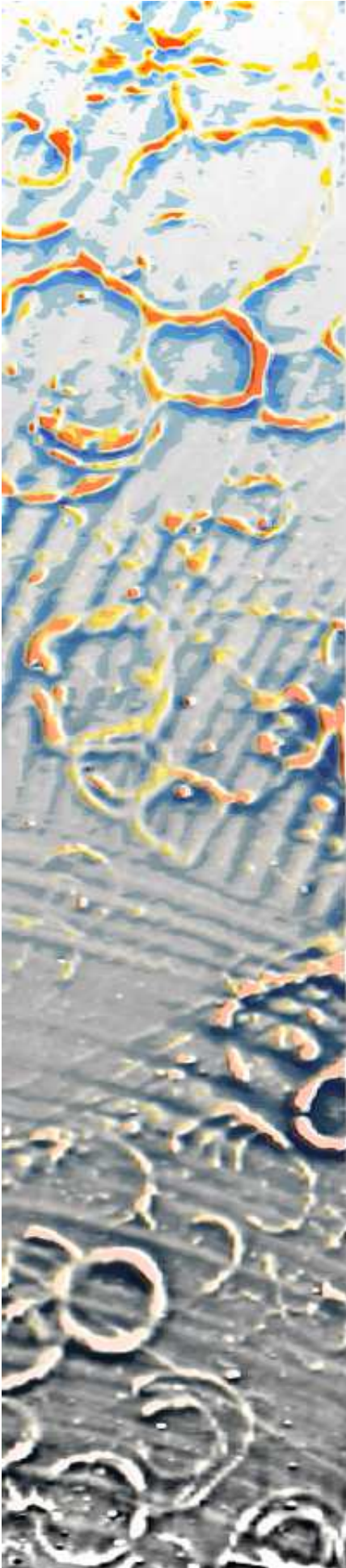


## **APPENDIX 5: PARAMETER PLAN**





**APPENDIX 6: ARCHAEOPHYSICA, 2015. GEOPHYSICAL SURVEY REPORT: BITTESBY  
DESERTED MEDIEVAL VILLAGE, LUTTERWORTH, LEICESTERSHIRE**



**Magna Park II  
Bittesby Deserted Medieval Village  
Lutterworth, Leicestershire**

**Section 42 Licence Case No.: SL00099648**

**Geophysical Survey Report**

**Produced for CgMs Consulting**

**Project code LTL141**

**August 2015**

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## Non-Technical Summary

Magnetic and electrical resistance surveys were commissioned by CgMs Consulting on behalf of Gazeley Ltd to prospect land within the designated area of Bittesby deserted medieval village (Scheduled Monument 1012563).

The surveys have provided detail of the nature of the settlement within the scheduled monument, with settlement activity concentrated in two discrete locations in the north and south of the survey area, on areas of higher and presumably dryer ground.

The survey identified tracks, terraces and structures associated with former settlement and it is likely that a lot of the 'noise' in the survey data is caused by below ground deposits that are difficult to map with geophysical survey techniques. Whilst the magnetic survey mapped the location and extent of topographic features visible on the ground, the limited electrical resistance survey provided greater detail, particular of the rectangular enclosure and likely structure in the southern half of the site.

The surveys have confirmed a settlement pattern within the scheduled monument, with terraces and enclosures, some with visible structures within, adjacent to hollow-ways and tracks running across the site. The survey also identified a stone structure in the north east corner of the site. Located close to the stream the structure, which is cut into the ground, may relate to former agricultural or industrial activity.

## Digital Data

Item	Sent to	Sent date
CAD – Vector Elements	Simon Mortimer	available

## Audit

Version	Author	Checked	Date
Interim			
Draft Final	MJ Roseveare, D Lewis	ACK Roseveare	26.08.2015
Final			
Revision			
OASIS Form Completion			

*In line with Historic England guidance (David et al, 2008) we appreciate feedback from any subsequent work that provides insight into the nature of the ground and which can be used to better understand its geophysical properties. Photographs and reports are welcome and will of course be treated in confidence.*



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## 1 Introduction

The scheduled monument (SM 1012563) known as Bittesby deserted medieval village, Lutterworth, Leicestershire was surveyed to map buried structures of archaeological interest. A licence for geophysical survey (SL00099648) was obtained on 9<sup>th</sup> March 2015. Approximately 2.3 hectares was surveyed across two pastoral fields.

### 1.1 Location

<b>Country</b>	England
<b>County</b>	Leicestershire
<b>Nearest Settlement</b>	Lutterworth
<b>Central Co-ordinates</b>	450060,285880

### 1.2 Limitations to area covered

The magnetic survey was undertaken in May and covered nearly all the area, including some nettle patches, excluding only some wet areas and margins with thick vegetation. The electrical resistance survey was carried out in June. The area coverage was limited due to significant nettle and thistle growth and practical interference from sheep. One small area of data was removed due to quality: sheep chewed the remote probe cable whilst the survey was underway, causing anomalous data that wasn't apparent at the time.

## 2 Context

### 2.1 Archaeology

The list entry for SM1012563 is maintained by Historic England and states that:

*"Although partly disturbed, the deserted medieval village at Bittesby contains earthworks in good condition and retains high archaeological potential. The village is documented historically and, unusually, the period of desertion is known."*

*Bittesby deserted village site lies 400m north of the A5 Watling Street and 4km west of Lutterworth and consists of earthworks to the east of a former railway line. The village earthworks comprise hollow ways and house platforms. A ditch up to 1m deep runs along the north of the area, near to which is some faced stonework indicating the site of a chapel known to have existed there. A north-south flowing stream runs on the eastern side of the site, down to which several hollow ways run, the largest of which is 12m wide and up to 2m deep. Bittesby is listed in Domesday Book and in 1279 the village was made up of 25 families. Enclosure and depopulation is recorded in 1488 and 1494, and by 1536 only the Salisbury family was left."*

### 2.2 Environment

<b>Soilscapes Classification</b>	Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils (18)
<b>Superficial 1: 50000 BGS</b>	Oadby Member - Diamicton (ODT) - high points W of N field and E of S field; Alluvium - Clay, Silt, Sand And Gravel (ALV) - adjacent to stream; Wolston Sand And Gravel - Sand And Gravel (WOSG) adjacent to the Alluvium
<b>Bedrock 1:50000 BGS</b>	Penarth Group - Mudstone (PNG)
<b>Topography</b>	Gently undulating 100-125m OD, multiple local minor high points; earthworks of varying sizes
<b>Hydrology</b>	Impeded drainage, expected wetter conditions adj. stream and in hollows
<b>Current Land Use</b>	Pasture
<b>Historic Land Use</b>	Mixed agricultural, settlement

- magnetics, electromagnetics, electrical resistance, GPR, topography, landscape & GIS -



<b>Soilscapes Classification</b>	Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils (18)
<b>Vegetation Cover</b>	Grass
<b>Sources of Interference</b>	None

The response of magnetic survey is dependent upon the soil's ability to support magnetic susceptibility enhancement and therefore the parent material and land use.

The response from soils derived from mudstone is presumed to be muted but satisfactory and will depend upon the overlying superficial cover. Over limestone, the response may be variable, however it is also dependant on the overlying superficial cover.

Diamicton gravels usually provide a smoothly variable background texture associated with relatively non-magnetic soils against which anomalies from archaeological sources tend to be of variable contrast.

Resistance anomalies are likely to be relatively well defined within the area as free-draining loamy soils should provide a detectable sub-surface moisture contrast between soil variation and cut archaeological features.

### 3 Methodology

#### 3.1 Magnetic Survey

##### 3.1.1 Technical equipment

<b>Measured variable</b>	Magnetic flux density / nT
<b>Instrument</b>	Array of Geometrics G858 Magmapper caesium magnetometers
<b>Configuration</b>	Non-gradiometric transverse array (6 sensors, cart)
<b>Sensitivity</b>	0.03 nT @ 10 Hz (manufacturer's specification)
<b>QA Procedure</b>	Continuous observation
<b>Spatial resolution</b>	0.5m between lines, 0.15m mean along line interval

##### 3.1.2 Monitoring & quality assessment

The system continuously displays all incoming data as well as line speed and spatial data resolution per acquisition channel during survey. Rest mode system noise is therefore easy to inspect simply by pausing during survey, and the continuous display makes monitoring for quality intrinsic to the process of undertaking a survey. Rest mode test results (static test) are available from the system.

##### 3.1.3 Procedure – magnetic survey

All data processing is minimised and limited to what is essential for the class of data being collected, e.g. reduction of orientation effects, suppression of single point defects (drop-outs or spikes) etc. The processing stream for this data is as follows:

<b>Process</b>	<b>Software</b>	<b>Parameters</b>
Measurement & GNSS receiver data alignment	Proprietary	
Temporal reduction, regional field suppression	Proprietary	Bandpassed 0.5 – 7.0s
Gridding	Surfer	Kriging, 0.25m x 0.25m
Smoothing	Surfer	Gaussian lowpass 3x3 data
Imaging and presentation	Manifold GIS	

The initial processing uses proprietary software developed in conjunction with the multisensor acquisition

- **magnetics, electromagnetics, electrical resistance, GPR, topography, landscape & GIS** -





system. Gridded data is ported as data surfaces (not images) into Manifold GIS for final imaging and detailed analysis. Specialist analysis is undertaken using proprietary software.

## 3.2 Electrical Resistance Survey

### 3.2.1 Technical equipment

<b>Measured Variable</b>	Apparent electrical resistance (twin probe)
<b>Instrument</b>	Geoscan Research RM15A with MPX15 & RM85
<b>Configuration</b>	Twin probe array, 0.5m AM spacing, current 1mA, gain x10
<b>QA Procedure</b>	Continuous observation
<b>Resolution</b>	1m x 1m

### 3.2.2 Monitoring & quality assessment

There is no dedicated quality management data available from this instrument but continuous observation throughout survey, examination of the sensitivity of the measurement to frame movement and monitoring of background resistance values between grids and days allows some measure of quality assurance.

A suitably qualified Project Geophysicist was in the field at all times and fieldwork and technical considerations were guided by the Senior Geophysicist.

### 3.2.3 Data Processing

All data processing is minimised and limited to what is essential for the class of data being collected, e.g. suppression of single point defects (drop-outs or spikes) etc. The processing stream for this data is as follows:

Process	Software	Parameters
Spike reduction	Proprietary	5 x 5 datum median thresholding filter with the threshold set to 10 Ohm
Trend reduction	Proprietary	90m highpass filter
Interpolation	Proprietary	Bilinear interpolation (0.5m x 0.5m)
Imaging and presentation	Manifold GIS	Including interpolation to 0.25cm

General information on processes commonly applied to data can be found in standard text books and also in the 2008 English Heritage Guidelines "*Geophysical Survey in Archaeological Field Evaluation*" at [http://www.helm.org.uk/upload/pdf/Geophysical\\_LoRes.pdf](http://www.helm.org.uk/upload/pdf/Geophysical_LoRes.pdf).

All archived data includes process metadata.

## 3.3 Interpretation resources

Numerous sources are used in the interpretive process which takes into account shallow geological conditions, past and present land use, drainage, weather before and during survey, topography and any previous knowledge about the site and the surrounding area. Old Ordnance Survey mapping is consulted and also older sources if available. Geological information is sourced only from British Geological Survey resources and aerial imagery from online sources. Topographic data is usually sourced from the Environment Agency (LiDAR) unless derived from original ArchaeoPhysica survey.

Information from nearby ArchaeoPhysica surveys is consulted to inform upon local data character, variations across soils and near-surface geological contexts. Published data from other contractors may also be used if accompanied by adequate metadata.



## **4 Discussion**

### **4.1 Introduction**

The sections below first discuss the geophysical context within which the results need to be considered and then specific features or anomalies of particular interest. Not all will be discussed here and the reader is advised to consult the graphical elements of this report.

### **4.2 Principles**

#### **4.3 Principles – magnetic survey**

In general, topsoil is more magnetic than subsoil which can be slightly more magnetic than parent geology, whether sands, gravels or clays, however, there are exceptions to this. The reasons for this are natural and are due to biological processes in the topsoil that change iron between various oxidation states, each differently magnetic. Where there is an accumulation of topsoil or where topsoil has been incorporated into other features, a greater magnetic susceptibility will result.

Within landscapes soil tends to accumulate in negative features like pits and ditches and will include soil particles with thermo-remanent magnetization (TRM) through exposure to heat if there is settlement or industry nearby. In addition, particles slowly settling out of stationary water will attempt to align with the ambient magnetic field at the time, creating a deposit with depositional remanent magnetization (DRM).

As a consequence, magnetic survey is nearly always more a case of mapping accumulated magnetic soils than structures which would not be detected unless magnetic in their own right, e.g. built of brick or tile. As a prospecting tool it is thus indirect. Fortunately, the mechanisms outlined above are commonplace and favoured by human activity and it is nearly always the case that cut features will alter in some way the local magnetic field.

##### **4.3.1 Instrumentation**

The use of the magnetic sensors in non-gradiometric (vertical) configuration avoids measurement sensitisation to the shallowest region of the soil, allowing deeper structures, whether natural or otherwise to be imaged within the sensitivity of the instrumentation. However, this does remove suppression of ambient noise and temporal trends which have to be suppressed later during processing. When compared to vertical gradiometers in archaeological use, there is no significant reduction in lateral resolution when using non-gradiometric sensor arrays and the inability of gradiometers to detect laminar structures is completely avoided.

Caesium instrumentation has a greater sensitivity than fluxgate instruments, however, at the 10 Hz sampling rate used here this increase in sensitivity is limited to about one order of magnitude.

The array system is designed to be non-magnetic and to contribute virtually nothing to the magnetic measurement, whether through direct interference or through motion noise.

#### **4.4 Principles – electrical resistance survey**

Electrical resistance within soil is generally a measure of pore size and water content, large-pored materials having different dynamics than those with small pores. In addition, clays contribute significant electro-chemical effects through ion exchange at the surface of soil particles and tend to be significantly more conductive than silts and sands. The constant hydraulic cycle imposed by rainfall and drainage into deeper strata ensures that there is a significant temporal aspect to any survey of electrical resistance.

In general, significantly reduced electrical resistance can be associated with fills and wetter ground, although there are exceptions to this. Enhanced resistance is in general terms the converse situation, i.e. drier





materials. These, however, are both relative terms and within small areas or complex archaeology the definition of 'background' may not be possible. In addition, the presence of shallow but variable geology can impart strong trends of equal or greater anomaly strength and a linear feature can produce an anomaly with strongly variable character along its length.

Detection of buried structures is seasonally dependent with the anomalies from structures changing and quite frequently disappearing as the seasons rotate. Anomaly polarity will often change alongside strength. A good season for detection of one class of structure may not be the best for another.

In addition to this, paradoxes are possible because the technique is dependent upon the strength and location of current flow in the ground, not the physical layout of structures. A very high resistance material close to the surface will force the majority of current to flow between it and the surface which produces, paradoxically, a low resistance anomaly. Similar effects can be observed where impervious materials retard the flow of soil moisture, thus the anomaly caused by a high resistance wall may be dwarfed by lower resistance next to it.

Finally, the temporal character of moisture flow in the ground has a huge effect upon electrical resistance. Surveys conducted after heavy rain will not produce the same results as ones conducted in dry weather.

#### **4.4.1 Instrumentation**

The measurement is called apparent electrical resistance because the numerical value and the shape of anomalies are dependent upon the configuration of probes in the array used. The technique, at least in this form, does not measure resistivity which is a volume and material specific measure not directly available from most planar surveys.

The twin probe array used for this survey is the archaeological norm, however, other arrays have their advantages and disadvantages. For all arrays, the relative separation of the different probes determines anomaly form. For the twin probe, increasing the separation of the mobile pair of probes increases the nominal depth of investigation by sensitising the measurement to deeper current flow.

### **4.5 Character & principal results**

The following paragraphs represent an interpretive summary of the survey. The numbers in square brackets refer to individual anomalies described in detail in the table below and depicted on DWG 04 onwards.

#### **4.5.1 Data**

The magnetic and electrical surveys have provided complimentary datasets. Whilst the magnetic data has confirmed the location of topographic features on the ground with some additions, the electrical resistance data has provided detail of possible structures only partially visible in the magnetic data.

#### **4.5.2 Geology**

The survey area is too small for comments on the wider geology but susceptibility is generally low. Magnetic responses in the north and south are largely dominated by human activity while the central area is generally less magnetic and dominated by wet ground either side of the stream.

#### **4.5.3 Land use**

The site contains former settlement and both the magnetic and electrical resistance surveys define tracks, boundaries, terraces/platforms and structures that represent settlement activity. In the northern part of the site masonry is visible in the ground, possibly relating to the site of a former chapel, although an agricultural or industrial activity should not be ruled out.

The central area of the site lies adjacent to the existing stream and presumably has been historically wet and unsuitable for settlement activity. Across the wider surveyed area, settlement activity appears to be concentrated along 'bands' of higher ground and it would appear that this is also true within the scheduled



monument.

#### 4.5.4 Archaeology

Some of the features identified are difficult to interpret such as [1] but its character suggests a discrete area of altered ground such as a dry earthen fill or make up of a terrace structure. This is located immediately south of a pair of linear structures [2] and [3] running across the site and presumably defining a trackway through the settlement.

Immediately to the north an enclosure is generally defined by amorphous anomalies [4] and [5] and probably represent the remains of surfaces of spreads of rubble. There are also possible structural elements with a roughly rectangular shaped feature [6] in the centre of the enclosure and a possible wall or dry ditch [7] defining its western boundary. An apparent gap in the track [8] south of the enclosure may represent an entrance and, although the two linear anomalies define the track [2] and [3] appear to dissipate further east, a band of magnetic variation [9] between them appears to continue towards the eastern edge.

To the south east of the enclosure are a series of possible enclosure or drainage ditches [10] and [11]. These run parallel with the large hollow-way [12] that remains as a distinct topographic feature within the site. Its alignment is roughly east-west although it dog-legs northwards through the site [17] and [18]. An amorphous anomaly to the north may be natural and further drainage ditches cross the track [14] and run parallel within it, [15] and [16], following its northern dog-leg.

The central area of the site appears devoid of settlement features and is probably the result of topography and ground conditions in this area being undesirable for settlement activity. The wet nature of this area of the site is reinforced by drainage features [19], [20], [21] and [22] that run roughly east-west across it that may be contemporary with the construction of the railway line.

Ground conditions improve again to the north and beyond [23] and [24], which run along the edge of a hollow associated with a spring, are defined terraces and possible structures. A linear anomaly [25] appears to separate two terraces, the higher of the two being to the north and defined as [26]. A reduced amorphous anomaly in the terrace to the east may be structural [27] while a magnetic anomaly immediately to the north [28] may represent more ephemeral structural remains such as timber buildings etc.

The northeast edge of the area is bounded by a hollow-way [30] and [31], with a possible further one roughly perpendicular [29] leading towards the spring hollow. Where the extant hollow-way peters out at the eastern end there is a clearly defined rectangular area of high resistance [32] likely here to mark buried rubble. It is adjacent to an extant stonework structure [33] with both electrical resistance and magnetic data suggesting overall interpretation as a sunken area filled with magnetic debris. The presence of this adjacent to the stream might suggest an origin as a sheepwash or perhaps a small mill or similar industrial complex. The structure is unlikely to have had a domestic or religious function i.e. the site of the former chapel discussed in the SM text (see section 2.1 Archaeology above) as the data suggests the structure extends into the ground. A small domestic building or chapel is unlikely to have been cellared or have a crypt, especially adjacent to a stream.

#### 4.6 Conclusions

The two complimentary survey techniques employed have identified varying classes of anomalies, with the magnetic survey identifying the general extent of settlement activity and the electrical resistance survey providing greater detail of potential below ground structures. The two surveys have provided detail of the nature of the settlement within the scheduled monument, with settlement activity concentrated in two discrete locations in the north and south, on areas of higher and presumably dryer ground.

The survey identified tracks, terraces and structures associated with former settlement and it is likely that a lot of the 'noise' in the survey data is caused by below ground deposits that are difficult to map with geophysical survey techniques. Whilst the magnetic survey mapped the location and extent of topographic features visible on the ground, the limited electrical resistance survey provided greater detail, particular of the rectangular enclosure and likely structure in the southern half of the site.





The surveys have confirmed a settlement pattern within the scheduled monument, with terraces and enclosures, some with visible structures within, adjacent to hollow-ways and tracks running across the site. The survey also identified a stone structure in the north east corner of the site. Located close to the steam the structure, which is cut into the ground, may relate to former agricultural or industrial activity.

Label	Electrical Resistance	Total Mag. Intensity	Comments
1	Raised - amorphous	Enhanced	Lacks definition but unlikely to be natural. Raised resistance implies dry soil or stony material but neither would themselves give rise to enhanced magnetic field unless the feature is a dry earthen fill containing heated soil etc.
2	Raised - structural	Variable	With [3] 5-6m to the north these define what appears to be a track running across the site, perhaps structures or a dry ditch fills to each side
3	Raised - structural	Enhanced	See [2]. The magnetic character is difficult to explain but could be due to materials between [2] and [3] rather than [3] itself
4	Reduced - amorphous	-	Anomalously low, could be a damp fill or moisture trapped above a relatively impervious surface and in the context of a complex of structures either are possible
5	Raised - structural	-	Likely masonry or rubble from masonry, alternatively a floor surface? Amorphous areas of raised resistance surround this and could be the remains of surfaces or spreads of rubble
6	Raised - structural	-	East corner of complex of structures, apparently bounded by a resistive structure (or dry ditch fill). Immediately within the complex from this is a band of raised magnetic intensity that corresponds with a linear area of low resistance, perhaps a magnetic fill?
7	Raised - structural	-	Northwest edge of complex, apparently bounded by a resistive structure (or dry ditch fill)
8	Reduced - structural	-	The linear structures defined by [2], [3] and [9] appear broken by a gap although whether this is an entrance into the complex or due to something else crossing this is uncertain
9	Raised - amorphous	Variable, dipolar	A band of magnetic variation corresponds to a band of raised resistance contained between [2] and [3] and continues the line of this southeast beyond the electrical resistance survey. It seems likely to be the surface of a former road or track
10	Reduced - structural	-	Ditch fill? Perhaps a drain or a former enclosure boundary?
11	Reduced - structural	-	See [10] which appears to connect with this. [11] appears to mark the southern edge of a former track or road that crosses the field westwards before turning north and passing beneath the railway embankment. [15] may be a continuation of the same ditch fill although unlike [16] this doesn't bound the track
12	-	Enhanced	Along much of the length of the former track defined by [11], [16] and [17] there are areas of enhanced magnetic intensity that reveal that the disparate elements apparent in the electrical resistance data are in fact parts of the same feature
13	Reduced - amorphous	-	Natural? The apparently straight southern edge of this area may be deceptive, however, within the context of a DMV it is possible that



			this marks an area of different soil, e.g. regularly cultivated or a thin fill over something else
14	Reduced - structural	-	See [10] which is a near identical set of anomalies
15	Reduced - structural	Partly enhanced	See [11] which might, with probable ditch fill [15], define a set of enclosures within the DMV
16	Reduced - structural	-	Probable ditch fill, likely bounding the western edge of a former track defined by this, [11], [12], [17] and [18]
17	Raised - amorphous	-	This band of raised electrical resistance seems to help define the course of the track, perhaps (along with [12] and [18]) being remnants of a surface
18	-	Enhanced	See [11] which is a southern section of the same feature
19	-	Enhanced	Natural drainage feature or perhaps a former alignment of the field boundary
20	-	Enhanced	Ditch or channel fill, drainage related
21	-	Enhanced	Ditch or channel fill, drainage related
22	-	Enhanced	Ditch or channel fill, drainage related
23	-	Enhanced	This runs along the edge of a hollow associated with a spring and may mark magnetic soils along the margin of this and also possibly be partly an artefact of survey due to the steep slope
24	-	Enhanced	See [23] which runs along the opposite side of the same hollow
25	-	Enhanced	This linear anomaly appears to coincide with the edge of a low terrace and might be partly due to the steep slope or soil accumulated against the base of this
26	Raised - amorphous	Various	Both this and the lower terrace to the southwest have more resistive soils along their southeastern edges compared to northwestern parts which might reflect the nature of their construction with these higher regions of the site perhaps better drained than elsewhere
27	Raised - structural	-	Two weakly enhanced linear resistive anomalies suggest that there might be a small structure here, against the foot of the slight rise to the higher terrace. The structure, if that is what it is, measures approximately 5.5 x 10.0m and seems to have a slightly less resistive interior, perhaps due to trapped moisture over a surface or by wall footings
28	Reduced - amorphous	Enhanced	Possible fill? The shape of the magnetic anomaly suggests that this is associated with a large rectangular area measuring about 14m x 10m and occupying much of the northern part of the terrace. This could be caused by a number of things including modified soils associated with the sites of non-masonry structures, e.g. timber framed buildings or industrial processes
29	Reduced - structural	-	A band of markedly lower resistance up to 5m wide passes roughly southwest from the extant holloway to the north and might mark the site of a second holloway or a track as although a damp fill is likely to be the cause it seems unlikely to be a ditch fill. See also [30]
30	Reduced - amorphous	-	The base of the extant holloway is associated with wetter ground and this is evident in the electrical resistance data as a band of lower resistance. This is partly the basis for interpreting [29] as the site of a branch off this northern holloway, neither feature being associated with anything more distinctive or with evidence of





			bounding structures
31	-	Enhanced	This is possibly an artefact caused by the steep slope bounding the southern edge of the holloway
32	Raised - structural	-	A clearly defined rectangular area of high resistance is likely here to mark buried rubble or perhaps a surface measuring at least 5x7m. It may be associated with extant sandstone masonry outcropping immediately to the south which is however at a slightly different angle. This area is bounded to the northeast by the holloway and by apparently open ground to the west, although it is possible this latter was occupied by lightweight structures that have not left significant anomalies
33	Raised - structural	Enhanced	Sandstone walls several metres long and fairly thick outcrop through the turf in this area and seem indirectly associated with an area of strongly raised electrical resistance. This area correlates almost exactly with very strong magnetic anomalies typical of ferrous debris. Overall, interpretation as a sunken area filled with magnetic debris seems most likely and would fit the appearance of the ground. The presence of this adjacent to the stream might suggest an origin as a sheepwash or perhaps a small mill or similar industrial complex. The structure extends into the ground and unlikely to have had a domestic or religious function i.e. the site of the former chapel mentioned in the SM text.

#### 4.7 Caveats

Geophysical survey is a systematic measurement of some physical property related to the earth. There are numerous sources of disturbance of this property, some due to archaeological features, some due to the measuring method, and others that relate to the environment in which the measurement is made. No disturbance, or 'anomaly', is capable of providing an unambiguous and comprehensive description of a feature, in particular in archaeological contexts where there are a myriad of factors involved.

The measured anomaly is generated by the presence or absence of certain materials within a feature, not by the feature itself. Not all archaeological features produce disturbances that can be detected by a particular instrument or methodology. For this reason, the absence of an anomaly must never be taken to mean the absence of an archaeological feature. The best surveys are those which use a variety of techniques over the same ground at resolutions adequate for the detection of a range of different features.

Where the specification is by a third party ArchaeoPhysica will always endeavour to produce the best possible result within any imposed constraints and any perceived failure of the specification remains the responsibility of that third party.

Where third party sources are used in interpretation or analysis ArchaeoPhysica will endeavour to verify their accuracy within reasonable limits but responsibility for any errors or omissions remains with the originator.

Any recommendations are made based upon the skills and experience of staff at ArchaeoPhysica and the information available to them at the time. ArchaeoPhysica is not responsible for the manner in which these may or may not be carried out, nor for any matters arising from the same.

#### 4.8 Standards & guidance

All work was conducted in accordance with the following standards and guidance:

- David et al, "Geophysical Survey in Archaeological Field Evaluation", English Heritage, 2008.
- "Standard and Guidance for Archaeological Field Evaluation", Institute for Archaeologists, 2008.

- **magnetics, electromagnetics, electrical resistance, GPR, topography, landscape & GIS** -



In addition, all work is undertaken in accordance with the high professional standards and technical competence expected by the Geological Society of London and the European Association of Geoscientists and Engineers.

All personnel are experienced surveyors trained to use the equipment in accordance with the manufacturer's expectations. All aspects of the work are monitored and directed by fully qualified professional geophysicists.

#### **4.9 Bibliography & selected reference**

David *et al*, 2008, "Geophysical Survey in Archaeological Field Evaluation", English Heritage

Gaffney *et al*, 2002, "Technical Note 6: The use of geophysical techniques in archaeological evaluations", Institute for Archaeologists

Milsom, 2003, "Field Geophysics", 3<sup>rd</sup> edition, The Geological Field Guide Series, Wiley

Rawlins, *et al*, 2012, "The advanced soil geochemical atlas of England and Wales", British Geological Survey, Keyworth

Roseveare, A., 2014, "Specification for Geophysical Survey of Scheduled Monument 17034 Bittesby Deserted Medieval Village", Unpublished, ArchaeoPhysica, Project code LTL141

Schmidt, A., 2013, "Geophysical Data in Archaeology: A Guide to Good Practice", ADS

Scollar, 1990, "Archaeological Prospecting and Remote Sensing", Topics in Remote Sensing 2, Cambridge University Press

Telford *et al*, 1990, "Applied Geophysics", 2<sup>nd</sup> Edition, Cambridge University Press

#### **4.10 Archiving and dissemination**

ArchaeoPhysica maintains an archive for all its projects, access to which is permitted for research purposes. Copyright and intellectual property rights are retained by ArchaeoPhysica on all material it has produced, the client having full licence to use such material as benefits their project.

Project reports are usually submitted to the OASIS Grey Literature library as long a client confidentiality permits this. Where required, digital data and a copy of the report can be archived in a suitable repository, e.g. the Archaeology Data Service, in addition to our own archive.

The archive contains all survey and project data, communications, field notes, reports and other related material including copies of third party data (e.g. CAD mapping, etc.) in digital form. Many are in proprietary formats while report components are available in PDF format. In addition, there are paper elements to some project archives, usually provided by the client. Nearly all elements of the archive that are generated by ArchaeoPhysica are digital.

It is the client's responsibility to ensure that reports are distributed to all parties with a necessary interest in the project, e.g. local government offices, including the HER where present. ArchaeoPhysica reserves the right to display data rendered anonymous and un-locatable on its website and in other marketing or research publications.

#### **4.11 Acknowledgements**

Acknowledgements are due to Colin, the site contact; Simon Mortimer & Alex Thornton at CgMs.





## 5 Appendices

### 5.1 Project metadata

<b>Project Name</b>	Magna Park II – Bittesby Deserted medieval Village, Lutterworth, Leicestershire
<b>Project Code</b>	LTL141
<b>Client</b>	CgMs Consulting
<b>Fieldwork Dates</b>	12 <sup>th</sup> May & 2 <sup>nd</sup> -4 <sup>th</sup> June 2015
<b>Field Personnel</b>	ACK Roseveare, S Purvis, K Cunningham, L Bromage
<b>Data Processing Personnel</b>	ACK Roseveare
<b>Reporting Personnel</b>	MJ Roseveare, D Lewis
<b>Draft Report Date</b>	26 <sup>th</sup> August 2015
<b>Final Report Date</b>	



## 6 Supporting information

### 6.1 Standards

ArchaeoPhysica meets with ease the requirements of English Heritage in their 2008 Guidance "Geophysical Survey in Archaeological Field Evaluation" section 2.8 entitled "Competence of survey personnel". The company is one of the most experienced in European archaeological prospection and is a key professional player. It only employs people in geophysical positions with recognised geoscience qualifications and capable of becoming Fellows of the Geological Society of London, the Chartered UK body for geophysicists and geologists.

All specification, data processing, interpretation and analysis work is undertaken by qualified and experienced geophysicists who have specialised in the detection and mapping of near surface structures in archaeology and other disciplines using a wide variety of techniques, usually to post-graduate level.

All field personnel are trained to use the equipment in accordance with the manufacturer's expectations and internal procedures, to collect good quality data. All aspects of the fieldwork are monitored and directed by geophysicists.

All work is conducted in accordance with the following standards and guidance:

- David et al, "Geophysical Survey in Archaeological Field Evaluation", English Heritage, 2008;
- "Standard and guidance for Archaeological Geophysical survey", Chartered Institute for Archaeologists, 2014;

and undertaken in accordance with the high professional standards and technical competence expected by the Geological Society of London and the European Association of Geoscientists and Engineers.

### 6.2 Who we are

#### 6.2.1 ArchaeoPhysica

ArchaeoPhysica has provided geophysical survey to archaeologists since 1998 and is consequently one of the oldest specialist companies in the sector. It has become one of the most capable operations in the UK, undertaking 1000 hectares of magnetic survey per annum. In addition 2D & 3D electrical, low frequency electromagnetic and radar surveys are regularly undertaken across the UK, also overseas. ArchaeoPhysica is the most established provider of caesium vapour magnetic survey in Europe, and holds probably the largest archaeological archive of total field magnetic data in the world. Unusually for the archaeological sector, key staff are acknowledged qualified geophysical specialists in their own right and regularly contribute to in-house and other research projects. For a number of years the company taught applied geophysics to Birkbeck College (London) undergraduate and post-graduate archaeology students, and developed a new and comprehensive course for the College. For a number of years ArchaeoPhysica has assisted the development of new high performance multisensor arrays which have been deployed across the UK.

#### 6.2.2 Senior Geophysicist: Martin J Roseveare, MSc BSc(Hons) MEAGE FGS MCIfA

Martin specialised (MSc) in geophysical prospection for shallow applications at the University of Bradford in 1997 and has worked in commercial geophysics since then. He was elected a Fellow of the Geological Society of London in 2009 and is also a full member of the Chartered Institute for Archaeologists. He has taught applied geophysics for Birkbeck College's archaeological degree students for a number of years. Professional interests outside archaeology include the application of geophysics to agriculture, also geohazard monitoring and prediction. He also has considerable practical experience of the improvement and integration of geophysical hardware and software. At ArchaeoPhysica Martin carries overall responsibility for all things geophysical and is often found writing reports or buried in obscure software and circuit diagrams.

- magnetics, electromagnetics, electrical resistance, GPR, topography, landscape & GIS -





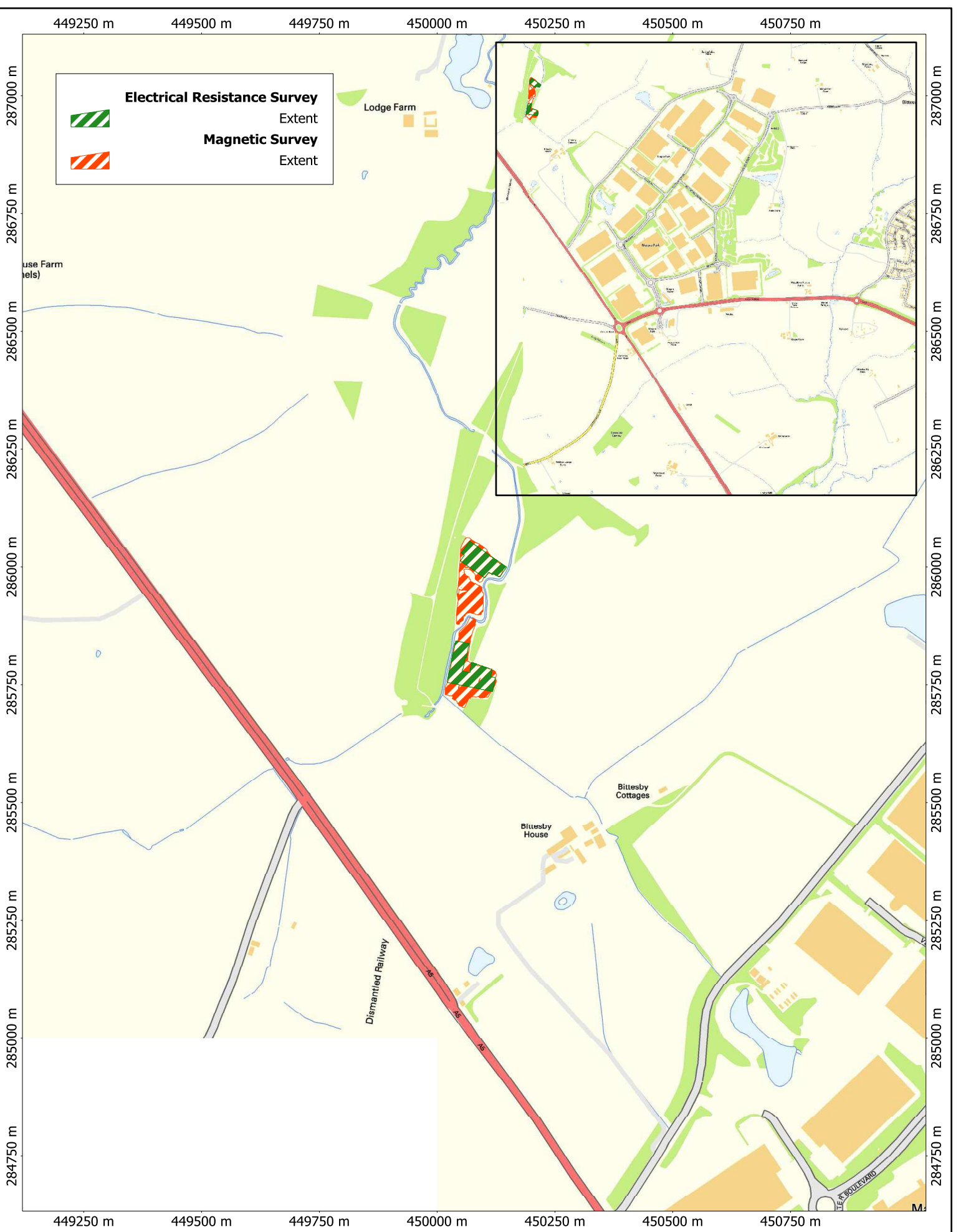
He was elected onto the EuroGPR and CIfA GeoSIG committees in Autumn 2013.

### **6.2.3 Operations Manager: Anne CK Roseveare, BEng(Hons) DIS MISoilSci**

On looking beyond engineering, Anne turned her attention to environmental monitoring and geophysics and has since been applying specialist knowledge of chemistry & fluid flow to soils. She is a member of the British Society of Soil Science (BSSS) and is interested in the use of agricultural applications of geophysics, also co-opted onto the CIfA GeoSIG committee in 2014 as liaison for soil science with BSSS. Anne was the founding Editor of the International Society for Archaeological Prospection (ISAP) and previously spent many years walking fields in parallel lines & analysing data. Much of her time now is spent managing complicated scheduling and logistics for ArchaeoPhysica, overseeing safety procedures and data handling.

### **6.2.4 Principal Archaeologist: Daniel Lewis, MA BA(Hons) ACIfA**

Daniel studied archaeology at the University of Nottingham and worked in field archaeology for many years, managing urban and rural fieldwork projects in and around Herefordshire. When the desk became more appealing Dan jumped into the world of consulting, working on small and large multi-discipline projects throughout England and Wales. At the same time, he returned to University, studying a part time MA in Historic Environment Conservation. With over 15 years experience in the heritage sector, Daniel has a diverse portfolio of skills. At ArchaeoPhysica he ensures that our geophysical work is well grounded in the archaeology, honing our specifications and reports and ensuring everything makes sense!



LTL141 Lutterworth - DMV, Leicestershire  
 DWG 01 Site Location







LTL141 Lutterworth - DMV, Leicestershire  
DWG 02 Magnetic Data

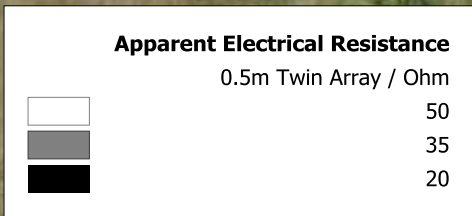




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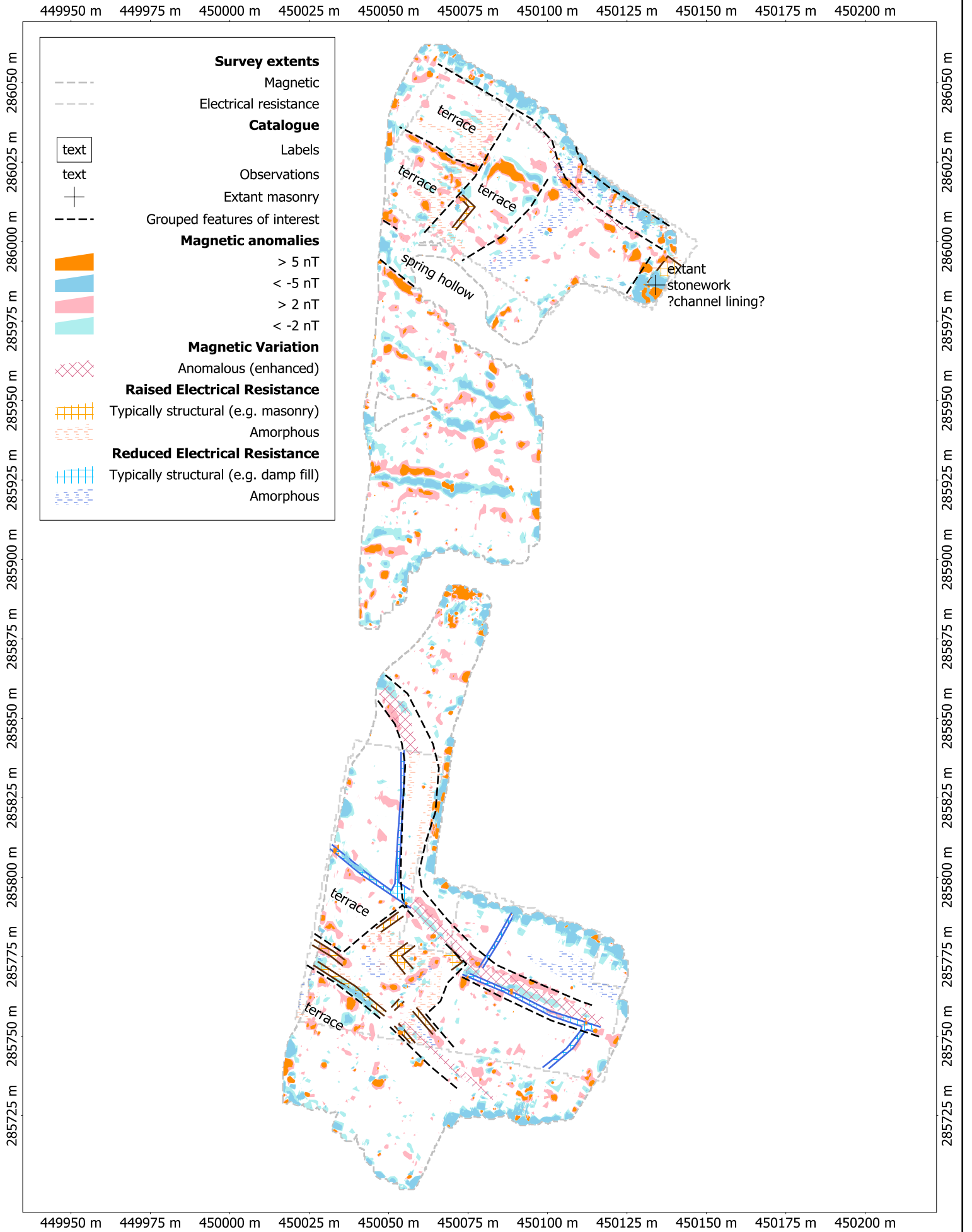
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LTL141 Lutterworth - DMV, Leicestershire  
DWG 03 Electrical Resistance Data



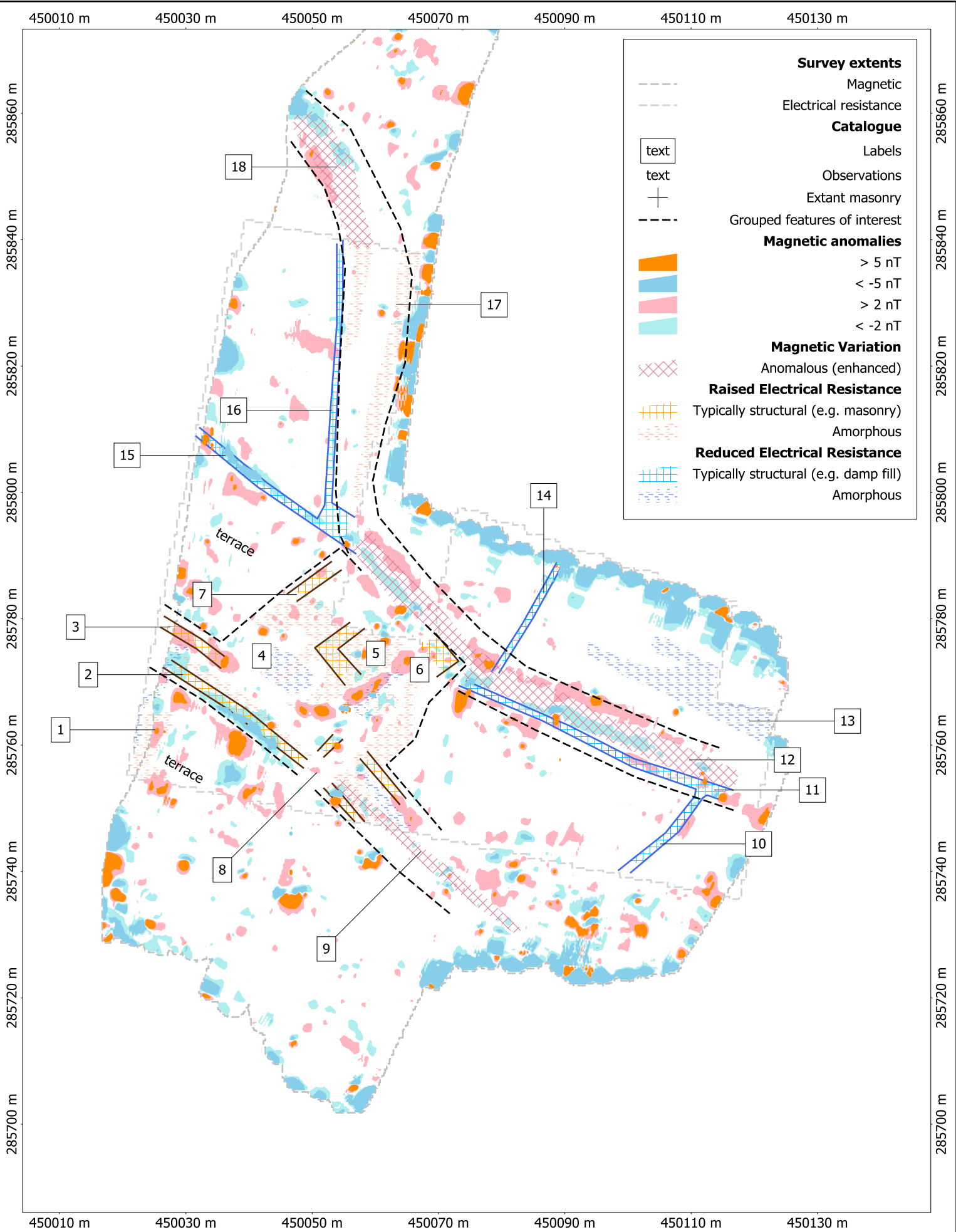
ArchaeoPhysica Ltd





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 DWG 04a Interpretation - Overview

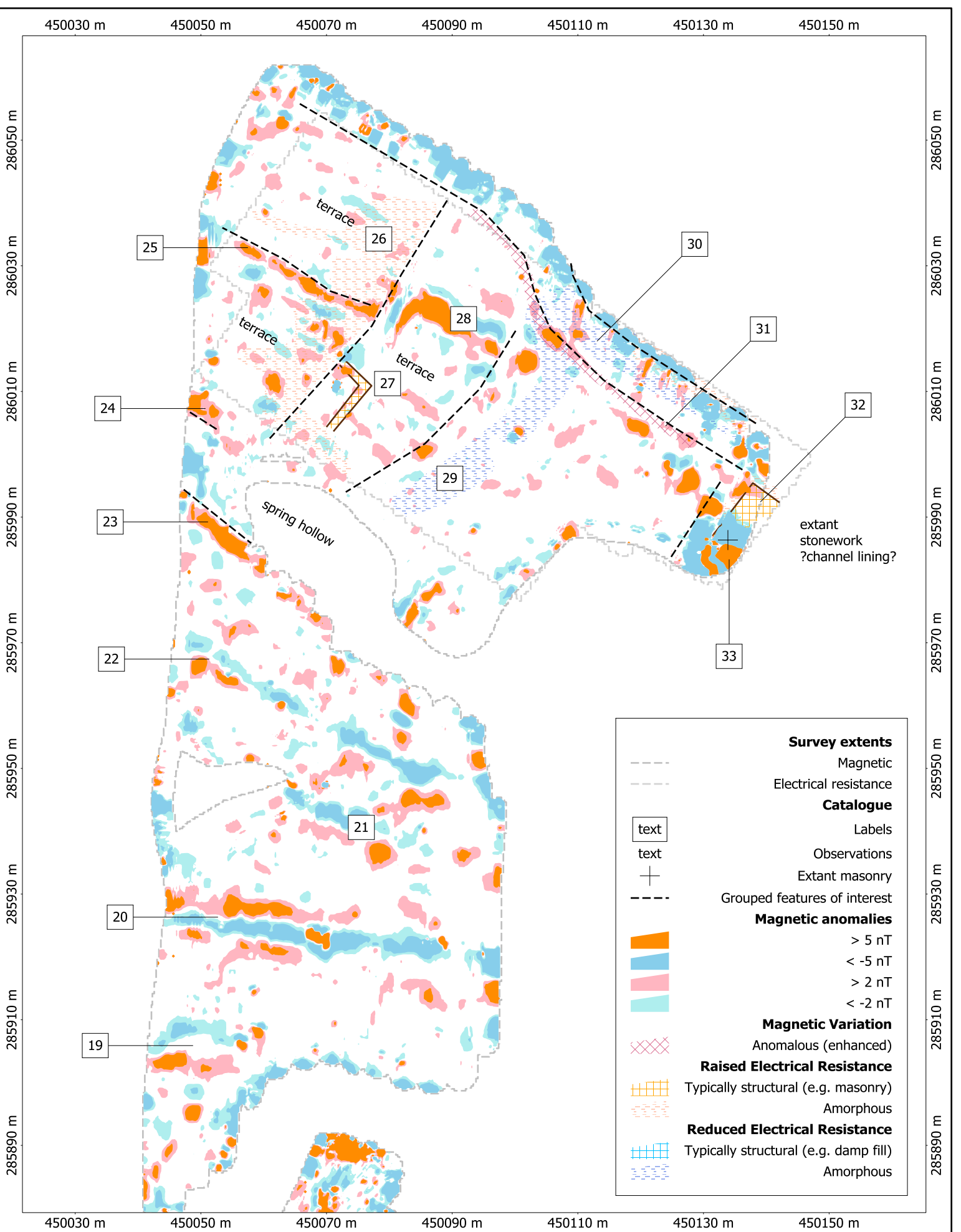




LTL141 Lutterworth - DMV, Leicestershire  
 DWG 04b Interpretation - South







LTL141 Lutterworth - DMV, Leicestershire  
 DWG 04c Interpretation - North



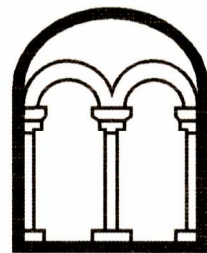
**APPENDIX 7: ALBION ARCHAEOLOGY, 2016. MAGNA PARK EXTENSION: HYBRID APPLICATION, LUTTERWORTH, LEICESTERSHIRE ARCHAEOLOGICAL EVALUATION**



**MAGNA PARK EXTENSION: HYBRID APPLICATION  
LUTTERWORTH  
LEICESTERSHIRE**

**ARCHAEOLOGICAL EVALUATION**

**Albion**  
archaeology



**MAGNA PARK EXTENSION: HYBRID APPLICATION  
LUTTERWORTH  
LEICESTERSHIRE**

**ARCHAEOLOGICAL EVALUATION**

Project: MP2717  
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Version 1.1

4th February 2016

Compiled by	Edited by	Approved by
Iain Leslie	Mike Luke	Drew Shotliff

Produced for:  
CgMs Consulting Ltd

On behalf of:  
IDI Gazeley





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## Preface

*Every effort has been made in the preparation of this document to provide as complete a summary as possible within the terms of the method statement. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.*

## Acknowledgements

*The project was commissioned by Simon Mortimer and Alexandra Thornton of CgMs Consulting Ltd, on behalf of IDI Gazeley. It was monitored on behalf of the Local Planning Authority by Richard Clark (Principal Archaeologist) and Teresa Hawtin (Senior Planning Archaeologist), Leicestershire County Council.*

*This report has been prepared by Mike Luke (Project Manager) and Iain Leslie (Project Officer). Non-metallic finds from the trial trenches are reported on by Jackie Wells (Finds Officer); the metalwork from the trial trenches and metal detecting surveys by Holly Duncan (Artefacts Manager). The environmental samples are reported on by John Giorgi (external specialist).*

*The fieldwork was undertaken by Ben Barker, Iain Leslie (Project Officers), Slawomir Utrata, Adam Williams (Archaeological supervisors), Matt Billings, Hanno Conring, Mike Emra, Alan King, Gary Manning, Anna Orłowska-Synus, Gareth Shane, Marcin Synus, Heather White and Adrian Woolmer (Archaeological technicians). Metal detecting was undertaken by Archie Gillespie, assisted by Peter Corbett and Mike Head. Surveying was undertaken by Mercedes Planas.*

*Digitisation of site records and all illustrations in this report were prepared by Joan Lightning (CAD Supervisor). The project was managed by Mike Luke of Albion Archaeology. All Albion Archaeology projects are under the overall management of Drew Shotliff (Operations Manager).*

## Version History

Version	Issue date	Reason for re-issue
1.0	27/01/2016	n/a
1.1	04/02/2016	Address comments from consultants

## Key Terms

Throughout this report the following terms or abbreviations are used:

CIfA	Chartered Institute <i>for</i> Archaeologists
DMV	Deserted medieval village
HER	Historic Environment Record
LPA	Local Planning Authority (Harborough District Council)
PDA	Proposed development area
SA	Study Area
SPA	Senior Planning Archaeologist of Leicestershire County Council





## **Non-Technical Summary**

*A hybrid planning application for the construction of an extension to Magna Park Lutterworth, Leicestershire is currently being prepared for submission by IDI Gazeley to Harborough District Council.*

*The archaeological potential of the proposed development area was initially examined by desk-based assessment (CgMs 2015a), geophysical survey (ArchaeoPhysica 2015) and fieldwalking (MoLA 2015). Leicestershire County Council's Senior Planning Archaeologist advised that further archaeological investigation work, comprising trial trench evaluation and metal detector surveys, would be required before any decision on the planning application was taken. Albion Archaeology was commissioned by CgMs Consulting Ltd, on behalf of IDI Gazeley, to undertake this work. This report excludes the 'DHL' and 'Ridge' trenches which have already been reported elsewhere (Albion 2015a and b).*

*This report utilises the Heritage Assets identified by CgMs (2015a) to provide a framework within which to describe the results of the trench evaluation. The Heritage Assets reported on elsewhere comprise: A1-A6 (Albion 2015a); and A7-A9 (Albion 2015b). The evaluation within the Study Area has enhanced the information already available on Heritage Assets, identified a small number of features within trenches outside the Heritage Assets, and confirmed the location of furrows and post-medieval field boundaries.*

*Four settlements are known to be located within the Study Area: three Iron Age and/or Roman and one medieval (Bittesby). The former can be summarised as follows:*

- *Heritage Asset A10 extended over c. 2.5ha and appeared to be early Roman in date.*
- *Heritage Asset A13 extended over c. 5ha; it probably originated in the Iron Age and continued in use into the early Roman period.*
- *Heritage Asset A15 extended over c. 2.5ha; originated in the Iron Age and part of it may have continued in use into the Roman period.*

*The Deserted Medieval Village of Bittesby is situated within the centre of the proposed development area and is bisected by the former Leicester-Rugby railway line. The evaluation confirmed the extent and layout of the settlement to the west of the former railway line where it is assigned to Heritage Asset A18 and includes an area partially investigated in 2007. The evaluation has assisted in determining the former extent of the settlement which was likely to have been in the region of 10ha.*

*Isolated ditches were found within the study area and, largely on the basis of the results of the geophysical survey, represent either field systems or singular extensive boundary ditches. Two of the latter are believed to be prehistoric in date: Heritage Asset A20 which extends for 40m and Heritage Asset A2 which extends for 240m and is likely to be pre-'Belgic' Iron Age in date (based on results within the DHL area (Albion 2015a)). To the south adjacent to Watling Street the ditches within Heritage Assets A1 and A23 are probably early Roman in date and appear to form part of field systems, as is possibly the case for one of the ditches within Heritage Asset A17 further north. Isolated features in the landscape which have been given Heritage Asset numbers include medieval trackway A16 which is known to continue as a hollow-way to the west*



*of Bittesby Deserted Medieval Village. An area of quarrying was identified in Heritage Asset A22 but this is likely to be post-medieval in date and associated with the construction of the railway.*

*Heritage Asset A14 was shown to be of geological origin and no evidence was found for human activity within Heritage Asset A11. The presence of deposits associated with a former watercourse in Trench 125 (Heritage Asset A14) indicates the potential for the recovery of paleo-environmental data closer to the current course of the stream to the east.*

*Several trenches contained undated ditches in areas which had not been identified as Heritage Assets because they exhibited little other evidence of activity. They are likely to represent singular field boundaries. The possible exceptions to this were in Trenches 106 (near A10), 127, 128 and 129 (situated between A13 and A14) and 174 (located between A15 and A16).*





## 1. INTRODUCTION

---

### 1.1 *Planning background*

A planning application for the construction of an extension to Magna Park Lutterworth, Leicestershire is currently being prepared for submission by IDI Gazeley to Harborough District Council. A description of the development is provided below:

- Warehouses
- A logistics academy, including playing fields/pitches for dual use with the community
- A public park
- A new services (foul water) management facility
- Water attenuation lagoons

The archaeological potential of the site was initially evaluated by desk-based assessment (CgMs 2015a), geophysical survey (ArchaeoPhysica 2015) and fieldwalking (MoLA 2015) undertaken in support of the planning application.

In light of this evidence, Leicestershire County Council's Senior Planning Archaeologist (SPA) advised during discussions with CgMs that further archaeological trial trench evaluation of the proposed development area (PDA) would be required before any decision on the planning application was taken, so that an informed decision could be made.

Accordingly, Albion Archaeology was commissioned by CgMs to undertake the trial trench evaluation and metal detector surveys. This was carried out in accordance with a Specification (CgMs 2015b), submitted to and approved by the Local Planning Authority, in line with the guidance contained in the National Planning Policy Framework (DCLG 2012).

This report presents the results of trial trenching within the Hybrid planning application area, excluding the 'DHL' and 'Ridge' areas which have already been reported elsewhere (Albion 2015a and b). To avoid confusion in this report the whole area of the Hybrid planning application is referred to as the proposed development area (PDA), whilst the area of trenching described in this report is referred to as the study area (SA). This report also presents the results of the metal detector surveys undertaken within the PDA.

### 1.2 *Site location, topography and geology*

The study area (SA) is located to the west of Lutterworth and comprises *c.* 143ha of land centred on National Grid Reference SP 4951 8563. Leicester is situated 20km to the north and Rugby is 9km to the south.

The SA is bordered by Mere Road and Magna Park to the south-east, Watling Street (A5) to the south-west and field boundaries and outlying fields to the north-west and north-east (Fig. 1).



The bedrock geology comprises mudstone belonging to the Penarth Group Formation. The solid geology is overlain by diamiction (formerly known as boulder clay)<sup>1</sup>.

The ground levels of the site rise from the eastern boundary (c. 110m OD) towards the south-western boundary, which is just above 120m OD.

### 1.3 **Archaeological background**

The following represent the major Heritage Assets within the PDA recorded within the Historic Environment Record prior to the evaluation work:

- The route of Roman Watling Street (MLE1388 / MWA420), followed by the modern A5, is located south-west of the SA.
- Bittesby Deserted Medieval Village (DMV) part of which is a Scheduled Ancient Monument (SAM1012563 / MLE1226) is located centrally within the PDA.
- A possible Roman villa (MLE1230) was reported to have been found by workmen during construction of a railway line in c. 1838 through Bittesby DMV.
- Running across the SA is the extant former embankment of The Midlands Counties Leicester to Rugby railway line (MLE16079). The railway line closed in 1961 and sections of the embankment were demolished in the late 1970s and 1980s.

The archaeological potential of the PDA has been considered through a desk-based assessment (CgMs 2015a), geophysical survey (ArchaeoPhysica 2015) and fieldwalking (MOLA 2015). Prior to this work, a desk-based assessment and geophysical survey were undertaken within a part of the PDA where ground raising was to take place (ASC 2008). All four reports should be consulted for more detailed information.

Within the desk-based assessment CgMs defined twenty-three Heritage Assets within the PDA. Those within the SA are summarised below in Table 1. Those outside the SA but within the PDA have already been evaluated and reported in two separate reports: 'DHL' (Albion 2015a); and 'Ridge' (Albion 2015b).

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<sup>1</sup> (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>)





<b>Asset ref.</b>	<b>Description</b>	<b>Concordance with geophysical survey report and HER</b>	<b>Likely date</b>	<b>Likely importance</b>
A1	Linear anomalies in relatively close proximity to Roman pottery findspots	Anomaly 92	Roman	Local
A2	Linear anomaly, same feature as A3. No clear dating evidence but association with possible ring gully and flint	Anomaly 98	Prehistoric	Local
A10	Anomalies interpreted as a small settlement/overlapping enclosures	Anomaly 41	Roman/medieval	Local to regional
A11	Linear anomaly likely to relate to a boundary off site to the NW. No clear dating but alignment may indicate post-medieval date	Anomaly 40	Unclear, possibly post-medieval	Local
A12	Irregularly shaped and linear anomalies which are possibly natural/geological	Anomaly 42	Unclear	Local to regional
A13	Anomalies likely to be a Roman settlement or farmstead. No clear dating but association with Roman pottery and in the close proximity to Watling Street Roman road	Anomaly 46	Roman	Local to regional
A14	Curvilinear anomaly interpreted as a possible ditch. No clear dating but association with post-medieval pottery	Anomalies 59 and 60	Late prehistoric/ Roman/ Medieval	Regional
A15	Anomalies interpreted as enclosures/possible settlement. No clear dating evidence although may be late prehistoric/Roman/medieval	Anomalies 53 and 54	Late prehistoric/ Roman/ Medieval	Regional



Asset ref.	Description	Concordance with geophysical survey report and HER	Likely date	Likely importance
A16	Two parallel linear anomalies likely to be a trackway leading to the SAM. Linear anomalies 50, 51 and 52 are likely to be peripheral ditches associated with the monument	Anomalies 55, 50, 51 and 52	Medieval	Local to regional
A17	Two linear anomalies and an 'N' shaped feature. No clear dating, although alignment corresponds to the Medieval settlement evidence	Anomalies 56 and 58	Unclear, possibly medieval	Local
A18	Anomalies likely representing the non-Scheduled areas of settlement associated with the Bittesby DMV	Anomalies 68, 69 and 70. Also HER MLE1226	Medieval	Regional
A19	Linear anomalies possibly associated with the non-Scheduled areas of Bittesby DMV	Anomalies 63, 65, 66 and 67	Medieval	Local to regional
A20	Linear anomaly interpreted as a ditch. No clear dating evidence	Anomaly 62	Unclear, possibly prehistoric	Local
A22	Two possibly rectangular anomalies interpreted as possible enclosures which may relate to the railway	Anomalies 88 and 89	Post-medieval	Local
A23	Two linear anomalies in relatively close proximity to Roman pottery findspots	Anomalies 96 and 97	Roman	Local

**Table 1: Summary of possible Heritage Assets identified by CgMs within the SA prior to the trench evaluation (CgMs 2015a, table 5 and fig. 10)**

Note. Heritage Assets A3–9 and A21 are situated outside the SA and are, therefore, described in a separate report (Albion 2015a and b)



## 2. METHODOLOGY

### 2.1 Introduction

The methodological approach to the project was detailed in the Specification for Archaeological Evaluation (CgMs 2015b) which was approved by the SPA. The archaeological investigation was conducted in accordance with appropriate national and regional standards and guidelines including:

• Albion Archaeology	<i>Procedures Manual: Volume 1 Fieldwork</i> (2nd edn, 2001)
• Archaeological Archive Forum	<i>Archaeological Archives: A Guide to best practice in creation, compilation, transfer and curation</i> (2007)
• CfA	<i>Charter and By-law; Code of conduct</i> (2014)
	<i>Standard and guidance for archaeological field evaluation</i> (2014)
• Historic England	<i>Management of Research Projects in the Historic Environment</i> (2015)

### 2.2 Aims and objectives

The aims and objectives of the evaluation were described in the Specification (CgMs 2015) and are summarised here:

- To determine the location, extent, date, character, condition, significance and quality of any archaeological remains within the development site
- To assess the character, condition, significance, quality of each area of the Heritage Assets
- To assess the artefactual and environmental potential of the archaeological deposits encountered
- To assess the relationship between the Heritage Assets and the Scheduled Monument of Bittesby Deserted Settlement
- To inform formulation of further measures to mitigate impacts of the proposed development on surviving archaeological remains
- To produce a site archive for deposition with an appropriate museum and to provide information for accession to the Leicestershire HER.

### 2.3 Implementation

The fieldwork was undertaken between 21st August and 20th October 2015 and between 14th and 19th January 2016. A total of seventy-seven 50m x 2m trenches were opened within the SA (Fig. 1) and four areas were the subject of metal detector surveys.

The trench layout was designed to test geophysical anomalies and apparently “blank” areas, i.e. those that were devoid of geophysical anomalies. The





trenches were opened by a mechanical excavator fitted with a flat-edged 1.8m-wide ditching bucket, operated by an experienced driver, under close archaeological supervision. The overburden was removed down to the top of undisturbed geological or archaeological deposits, whichever was encountered first. The spoil heaps were scanned for artefacts by eye and metal detector. All deposits were recorded in a unique number sequence, using Albion Archaeology's *pro forma* sheets. The trenches were subsequently drawn and photographed as appropriate.

Metal detecting was undertaken by highly experienced metal detectorists within the four areas required (CgMs 2015b). It was undertaken along transects 20m apart (Fig. 17) and finds were plotted by differential GPS.

#### **2.4 Monitoring**

The SPA monitored the work on 24th September 2015, 7th October 2015, 14th October 2015, 14th January 2016 and 18th January 2016. Summaries and action points were circulated after each meeting.

#### **2.5 Archiving**

All finds and records generated during the project will be archived to the standards outlined in Appendix 3 of Historic England's *MoRPHE Project Planning Note 2: Archaeological Excavation* (2015). Details of the project and its findings have been submitted to the OASIS database (reference albionar1-220845) in accordance with the guidelines issued by Historic England and the Archaeology Data Service.

On approval of this report the integrated project archive, including artefacts (subject to landowners' permission), ecofacts and project documentation, will be prepared for deposition in the county stores (Accession Number X.A86.2015).



### 3. RESULTS OF THE TRENCH EVALUATION

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#### 3.1 Introduction

The results are presented below under the following sections: features/deposits, finds and ecofacts. Where site recording numbers have been used they are distinguished by different bracket styles to indicate whether they are a feature number = [\*\*\*], fill number = (\*\*\*) or geophysical anomaly number {\*} (based on the numbers used in ArchaeoPhysica 2015). Context numbers reflect the trench number, e.g. [104] is a feature within Trench 1 and, therefore, the trench number is only given where necessary. Where a ditch has been recut its original feature number is used in general discussions.

#### 3.2 Feature/deposits

The following section summarises the results and is divided into sections based upon the relevant Heritage Assets identified by CgMs in the desk-based assessment (CgMs 2015a, table 5). Further sections describe Heritage Assets not previously identified, medieval furrows, post-medieval/modern features, overburden and natural geology. Trenches devoid of features/deposits of human origin are not discussed.

Detailed descriptions of every individual context are provided in Appendix 1 and this should be consulted for information such as alignment, nature of fills, dimensions etc. Archaeological features are illustrated on Figs 3–16 with selected section drawings and photographs.

##### 3.2.1 Heritage Asset A1 (Fig. 3)

Ditches [16704], [16707] and [16709] were identified within Trench 167. They correspond with linear geophysical anomalies {92}. The ditches form a T-shape arrangement, suggesting that they are contemporary; they probably represent field boundaries. All three ditches contained small amounts of early Roman pottery and animal bone. They may be associated with the ditches found in Trench 16 during the evaluation of the adjacent DHL application area (Albion 2015a).

##### 3.2.2 Heritage Asset A2 (Fig. 3)

Heritage Asset A2 refers to ESE-WNW linear geophysical anomaly {98} traversing for at least 200m across the PDA. Ditch [17204] corresponds with this anomaly. Although no dating evidence was recovered from this ditch, the anomaly was also investigated within Trenches 17 and 18 during the evaluation of the adjacent DHL application area (Albion 2015a). Within DHL trench 17 an adjacent pit contained a single sherd of pre-‘Belgic’ Iron Age pottery. The boundary is on a different alignment to that of both Roman Watling Street and the medieval furrows which, in addition to the possible Iron Age pit, suggests it is likely to be of prehistoric origin.

##### 3.2.3 Heritage Asset A10 (Fig. 4)

Ditches [10303], [10305], [10404], [10412], [10504], [10506] and [10508] appear to correspond with geophysical anomalies {41}; additional ditches [10404], [10406], [10414] and [10511] were also identified. The layout of the



ditches suggests that they define a series of rectangular enclosures/fields on an approximate NW-SE alignment. A number of the ditches, e.g. [10308] and [10414], are significantly larger than others, e.g. [10412] and [10504]. It is possible that the smaller ditches represent internal division within larger enclosures. Ditches [10404] and [10406] are clearly not contemporary, indicating that more than one phase of enclosures is present as suggested by the “overlapping” geophysical anomalies. No isolated features such as pits or post-holes were present and only a small quantity of early Roman pottery, fired clay and animal bone was recovered. Although uncertain this area probably represents an early Roman settlement.

### 3.2.4 Heritage Asset A11 (no figure)

Heritage Asset A11 was identified on the basis of a single geophysical linear anomaly {40}. No corresponding sub-surface feature was found within Trench 101, although a small undated pit [10106] was present.

### 3.2.5 Heritage Asset A12 (no figure)

Heritage Asset A12 was identified on the basis of an area of irregularly shaped geophysical anomalies {42}. These were investigated within Trenches 119, 120 and 121 which proved them to be variations within the natural geology.

### 3.2.6 Heritage Asset A13 (Fig. 5)

Ditches [11004], [11006], [11010], [11014], [11110], [11206], [11210], [11212] and [11308] appear to correspond with geophysical anomalies {46} whilst additional ditches [11012], [11106], [11113], [11214] and [11216] were also identified. Trench 117 has been included in this area as it contained two ditches, [11704] and [11706], which are on a similar alignment to those within Trenches 110, 112 and 113 to the west. These features appear to be part of an east-west aligned rectangular enclosure/field system. Several of the ditches, e.g. [11004] (Fig. 5, section 1), [11204], [11210], had been recut suggesting that these boundaries were maintained over time. Some of the ditches were noticeably larger than others, e.g. [11010] was over 1.45m wide and 0.65m deep. A number of the geophysical anomalies interpreted as archaeological features were not represented by sub-surface features, e.g. those targeted by Trenches 109 and 114.

The area also included a small number of small pits, e.g. [11016], [11204], [11208] and post-holes, e.g. [11304], [11306].

A modest finds assemblage was recovered, including pottery, animal bone and fired clay; it was sufficient to indicate that this area contained a settlement. The pottery was predominantly early Roman in date, but small amounts of Iron Age pottery were also recovered, suggesting that activity may have originated in this period. This appears a reasonable assumption, especially given that the east-west alignment of the enclosures is at odds with the NW-SE alignment of Roman Watling Street, c. 30m to the west.

### 3.2.7 Heritage Asset A14 (no figure)

This Heritage Asset was defined on the basis of curvilinear geophysical anomaly {59} and adjacent blob-type anomaly {60}, which were targeted by Trench 125.





However, no features of human origin were identified. The trench did contain a dark humic deposit (12503) that covered much of its length. It was examined by a palaeo-environmentalist who interpreted it as being associated with a former water course or stream. The current stream runs roughly NW-SE, *c.* 120m to the east. The deposit suggests that this area has palaeo-environmental potential, if deposits can be dated. See Rackham (2015) for a more detailed discussion.

### 3.2.8 Heritage Asset A15 (Fig. 6)

Ditch [13414] corresponds with geophysical anomaly {53} whilst ditches [13904], [13911], [13913], [13915], [13917], [14004], [14007] and [14010] correspond with anomalies {54}. Ditches [13907], [13909], [13911] and [13919] were also identified. Whilst Trench 142 was not originally within the area defined as Heritage Asset A15, it has been included here as it contained ditches [14204], [14210], [14215] and [14217] which were on a similar alignment to those within the main area and was only *c.* 65m to the east. Trench 133 has also been included due to its proximity; however, the features were not necessarily contemporary. Some ditches were recut, e.g. [14007] (Fig. 6, section 5), and others were truncated, e.g. [13917], suggesting more than one phase of activity. No features of human origin were found to explain the geophysical anomalies targeted by Trench 141.

Post-holes were found in three trenches: two within Trench 133, five within Trench 134 (Fig. 6, section 1) and one within Trench 138. Anomalies {54} include two smaller circular components which may indicate the location of roundhouses. To the north, features [13915] and [13921] broadly coincide with a circular anomaly and to the south ditch [13913] may coincide with a circular anomaly. Ditches [14004]/[14007] are probably the continuation of [13921] and appear to terminate, suggesting an east-facing entrance for the northern roundhouse.

The combined evidence from the geophysical survey and trial trenches suggests this area contains large rectilinear enclosures to the west, with several post-holes suggestive of structures within Trench 134, and a group of more curvilinear enclosures to the east which include two possible roundhouses within Trench 139. Although finds including pottery, fired clay and animal bone were recovered, the quantities were quite small and restricted to Trenches 139, 140 and 142. However, the enclosure system and presence of possible buildings suggests that this area contained a settlement. The only dating evidence was the Iron Age pottery from Trench 142, *c.* 65m to the east.

### 3.2.9 Heritage Asset A16 (Fig. 7)

Heritage Asset A16 was defined on the basis of two parallel geophysical anomalies {55} assumed to be contemporary with Bittesby DMV (CgMs 2015a, table 5).

Parallel geophysical anomalies {55} (*c.* 19m apart) were investigated within Trenches 144 and 145. A recut ditch, [14409/14411] (Fig. 7, section 2) and [14504/14506], was found in both trenches, roughly corresponding to the southern of the two anomalies. No feature of human origin was found in the position of the northern anomaly. However, ditch [14404] *c.* 12m to the north of



ditch [14409] appeared to be parallel and may have defined the north side of the possible trackway. If this is the case, the absence of a parallel ditch in Trench 145 is problematic, although it is possible that in this area the NW side of the trackway was not demarcated by a ditch.

The possible trackway appears to be respected by the furrows identified by the geophysical survey and its alignment corresponds with the hollow way identified within both Trench 148 and an earlier geophysical survey (ASC 2008) to the north-east. The trackway was, therefore, probably contemporary with the Bittesby DMV. This is supported by the recovery of a single sherd of abraded medieval pottery from ditch [14404].

### 3.2.10 Heritage Asset A17 (Fig. 7)

Heritage Asset A17 was identified on the basis of geophysical anomalies {56} and {58}. NW-SE ditch [14510] coincided with anomaly {58} but no subsurface equivalents of anomalies {56} were found in Trench 146. Adjacent, N-S aligned ditch [14508] contained a very similar fill to that within [14510] and, therefore, may be contemporary.

Anomaly {58} could be medieval in date because it is roughly perpendicular to trackway A16 and due to its proximity to Bittesby DMV (CgMs 2015a, table 5). However, the fill of excavated ditch [14510] produced a small amount of early Roman pottery and the anomaly appears to be on a slightly different alignment to the medieval furrows.

### 3.2.11 Heritage Asset A18 (Fig. 8)

Heritage Asset A18 was defined on the basis of linear geophysical anomalies {68}, {69} and {70} that were thought to represent part of the Bittesby DMV and this has been proved to be the case by Trenches 147 and 148.

Ditches [14804], [14807], [14810], [14813] and [14816] coincide with geophysical anomalies that appear to form a number of NE-SW rectilinear enclosures. Ditches [14804], [14807] and [14816] represent NW-SE internal divisions. Ditch [14807] may be a recut of [14804] suggesting more than one phase of activity (Fig. 8, section 4).

Although not on exactly the same alignments, ditches [14810] and [14813] coincide with the anomalies that appear to form the outer boundary of the settlement. Sandwiched in between them was a probable hollow-way, *c.* 6.25m wide and 0.42m deep, presumably created by the movement of traffic along the outer edge of the settlement. It is possible that the ditches originally defined the routeway, although on the north side at least the hollow-way eventually partly truncated ditch [14813] (Fig. 8, section 6).

Other than the ditches no settlement-type features such as pits or post-holes were found in the trenches. The finds assemblage from these features comprised medieval pottery, a medieval brooch and animal bone.

Ditches [14706] and [14708] correspond with two NW-SE aligned geophysical anomalies to the N of Trench 148. Ditch [14703] is located *c.* 3m from [14708]



on approximately the same alignment so presumed to be part of the same boundary. The only finds present were iron nails which can only be broadly dated. However, given the ditches' alignment and apparent association with the settlement enclosures to the SE, they are likely to be medieval in date. Although no furrows were found within the trench, NE-SW aligned probable furrows were hinted in the vicinity by the geophysical survey and therefore it is possible that the ditches represent an extension of enclosures onto land previously used for open fields.

### 3.2.12 Heritage Asset A19 (no figure)

Heritage Asset A19 was identified on the basis of linear geophysical anomalies {63}, {65}, {66} and {67} which were considered to be possibly associated with Bittesby DMV (CgMs 2015a, table 5). Due to land-use issues it was only possible to open Trench 152 in this area. The trench was located just north of anomaly {63} and contained no archaeological features or finds. It is, therefore, likely that the DMV did not extend to the north of the stream which is presently located *c.* 50m south of Trench 152. It is also possible that some of the anomalies identified in this area are actually associated with former courses of this stream.

### 3.2.13 Heritage Asset A20 (Fig. 9)

Heritage Asset A20 was defined on the basis of a single linear geophysical anomaly {62} which was *c.* 50m long. NW-SE aligned ditch [15304] coincided with the anomaly but produced no finds. However, on the geophysical survey it appears to be on a different alignment to the furrows; it may predate the medieval period and could be prehistoric.

### 3.2.14 Heritage Asset A22 (Fig. 10)

Heritage Asset A22 was defined on the basis of geophysical anomalies {88} and {89}, which were suggestive of at least one enclosure. Trench 156, targeted on anomalies {88}, contained a number of archaeological features, although these did not indicate the presence of an enclosure. Trench 157, targeted on anomalies {89}, did not contain any archaeological features except for furrows.

Ditch [15606] broadly corresponded with a geophysical anomaly, although it did appear to have a slightly different alignment. A large area of presumed quarrying [15614], 0.8m deep and over 12m in diameter (Fig. 10, section 1), was found at the north end of the trench and extended beyond its limits. Additional features found within this trench were ditches [15604] and [15612], and rectangular pit [15609]. Ditch [15604] was parallel to ditch [15606] and ditch [15612] appeared to be perpendicular.

No datable evidence was recovered from any of these features, although fairly large quantities of animal bone were recovered from ditch [15612] and quarry [15614]. The latter is believed to have been dug during the construction of the railway to the north and it is possible that the other features in this trench have a similar date.





### 3.2.15 Heritage Asset A23 (Fig. 3)

Heritage Asset A23 was defined on the basis of two linear geophysical anomalies {96} and {97}, which were targeted by Trenches 168 and 169. A large ditch [16904], 2.35m wide and over 0.66m deep, corresponds with geophysical anomaly {97}. No corresponding ditch was identified for anomaly {96} within Trench 168. Another ditch [16804] at right angles to the expected ditch was present within Trench 168. It contained a few sherds of early Roman pottery, whilst [16904] contained no finds. These features may be part of the field system identified to the west (Heritage Asset A1).

### 3.2.16 Archaeological features outside Heritage Assets

This section describes archaeological features found in trenches outside Heritage Asset areas.

Trench 106 contained two perpendicular ditches [10604] and [10608] and a small pit [10606] (Fig. 11). These produced no finds, making dating problematic. However, the ditches are on a similar alignment to Roman enclosure system A10, *c.* 100m to the west.

Trench 107 contained two adjacent small ditches [10704] and [10706] (Fig. 11). They produced no finds but were truncated by modern drains. Little can be said about the ditches other than they are in a trench situated adjacent to Watling Street so may be Roman or later in date.

Trench 124 contained a single undated ditch [12406] aligned NW-SE and an adjacent small undated pit [12404] (Fig. 11). Although the ditch was shallow, it was not interpreted as a furrow because there were no corresponding parallel features which could be furrows in the trench.

Trench 127 contained ditch [12704], curvilinear ditch [12711], and three post-holes [12709], [12711] and [12713], *c.* 7m apart (Fig. 11). It is just possible that curvilinear ditch [12711] may have defined a roundhouse, although no return was found on the south side; perhaps this was truncated by the furrow in this area. None of the features produced finds, so they cannot be firmly dated. However, a Roman date is possible as this trench is located adjacent to Watling Street and between Iron Age/Roman enclosure systems A13 and A15.

Trench 128 contained a ditch [12804] and adjacent pit [12806] (Fig. 12). Neither produced any finds. Although the ditch was on the same alignment as the furrows and, therefore, might be contemporary, its juxtaposition and the presence of an adjacent pit suggest that it is unrelated. A Roman date is possible, given that the adjacent Trenches 127 and 128 also contained possible Roman features.

Trench 129 contained a small slightly curvilinear ditch [12904] (Fig. 12). Although it contained no finds, it was stratigraphically earlier than one of the furrows so predates the medieval period.

Trenches 132 and 137 contained ditches that corresponded with geophysical anomalies {51} and {52} and a small number of additional features (Fig. 13).



Ditches [13206] and [13208] were parallel and aligned NW-SE. A third ditch [13204] was found *c.* 25m to the south, on a different alignment. An irregular-shaped feature [13210] may represent another ditch and adjacent pit but the situation was confused by a furrow. The feature contained an undatable sherd of pottery. In addition to ditch [13706] which coincided with geophysical anomaly {52}, Trench 137 also contained a pit [13704]. No dating evidence was recovered from any of these features. Although anomalies {51} and {52} appear to originate within the Bittesby DMV, the corresponding ditch in Trench 137 would ‘overlap’ geophysical anomalies suggestive of furrows which are on a different alignment. Therefore, the dating of the ditches is uncertain but they may be medieval.

The ditch found in Trenches 158 and 160 is part of a post-medieval boundary and is described below.

The majority of the trenches near Bittesby House were devoid of archaeological features. Trench 162 contained a single undated N-S ditch [16205] and Trench 166 contained two undated ditches [16606] and [16604] (Fig. 12). The latter was curvilinear and was truncated by a furrow. Little can be said about these features, although [16606] would appear to be pre-medieval in date.

Trench 174 was located between Heritage Assets 15 and 16 (Fig. 7). It contained a NW-SE ditch [17406] and a small pit [17404]. The ditch contained a fragment of fired clay but no datable finds were recovered from either feature.

Trenches 176 and 177 were outside of the area subjected to geophysical survey (Fig. 14). Trench 176 contained a single N-S ditch [17604] which produced a single sherd of Roman pottery. Trench 177 contained ditch [17704] which produced no finds. However, it was on a slightly different alignment to the furrows and may therefore pre-date them.

### 3.2.17 Medieval cultivation

Evidence, in the form of furrows, for medieval strip cultivation was present in 28 trenches (Fig. 15). The furrows were generally spaced *c.* 8m apart, although occasionally a closer spacing of 4m was encountered. They were shallow in profile with diffuse edges and generally no more than 0.2m deep.

### 3.2.18 Post-medieval features

A field boundary was identified in Trenches 158 and 160 where it was recorded as ditches [15806] and [16006] (Fig. 16). This boundary corresponds to that shown first on the Tithe Map of 1844 (CgMs 2015a, fig. 8). Adjacent to the ditch was a post-hole [15808] and a pit [16004].

Two parallel NE-SW ditches, [17504] and [17510], contained ceramic drains, indicating that they are modern in date.

### 3.2.19 Modern overburden

Modern overburden generally comprised dark brown-grey clay silt topsoil, which was 0.1–0.4m thick. It typically overlay mid brown subsoils, which were 0.05–0.6m thick. The variability in soil thickness generally corresponds to the



undulating nature of the SA. One exception was Trench 162 where landscaping associated with the adjacent recently excavated pond had produced made ground up to 0.65m thick.

### 3.2.20 Natural geology

The natural geology was fairly consistent across the site and comprised mainly firm yellow and orange clays, which sometimes contained lenses of silt or gravel. Where observed, firm blue-grey clays often underlay the yellow and orange clays.

## 3.3 Finds

### 3.3.1 Introduction

Seventeen trenches associated with nine Heritage Assets yielded an assemblage comprising pottery, ceramic roof tile, fired clay, metalwork and animal bone (Table 2). Three trenches outside the Heritage Assets produced finds, only one of which could be dated.

HA	Tr.	Feature	Type	Fill	Date range	Finds summary
A1	167	16704	Ditch	16705	Early Roman	Pottery (5g)
		16707	Ditch	16708	Early Roman	Pottery (1g); animal bone (1g)
		16709	Ditch	16710	Early Roman	Pottery (18g); animal bone (11g)
A10	103	10303	Ditch	10304	Undated	Animal bone (202g)
		104	10404	Ditch	10405	Early Roman
	105	10406	Ditch	10407	Early Roman	Pottery (6g)
		10504	Ditch	10505	Early Roman	Pottery (9g)
		10508	Ditch	10509	Undated	Fired clay (2g); animal bone (6g)
		10511	Ditch	10512	Early Roman	Pottery (105g); animal bone (18g)
A13	110	11004	Ditch	11005	Iron Age	Pottery (8g); animal bone (5g)
		11006	Ditch	11007	Early Roman	Pottery (17g); animal bone (2g)
		11010	Ditch	11011	Early Roman	Pottery (34g)
	111	11108	Ditch	11109	Undated	Fired clay (4g)
		11110	Ditch	11112	Iron Age	Pottery (85g); animal bone (24g)
		11113	Ditch	11114	Early Roman	Pottery (25g); animal bone (6g)
	112	11216	Ditch	11217	Early Roman	Pottery (24g); animal bone (278g)
		11216	Ditch	11218	Early Roman	Pottery (154g)
	113	11308	Ditch	11309	Early Roman	Pottery (14g)
	A15	139	13904	Ditch	13905	Undated
140			14004	Ditch	14006	Undated
142		14007	Ditch	14009	Undated	Fired clay (101g)
		14204	Ditch	14206	Iron Age	Pottery (67g)
		14211	Ditch	14212	Undated	Animal bone (16g)
		14215	Ditch	14216	Iron Age	Pottery (127g)
		14217	Ditch	14218	Iron Age	Pottery (5g)
A16	144	14404	Ditch	14405	Undated	Pottery (1g)
		14409	Ditch	14410	Undated	Fired clay (3g)
	145	14506	Ditch	14507	Medieval	Pottery (15g)
A17	145	14510	Ditch	14511	Early Roman	Pottery (8g)
A18	147	14703	Ditch	14704	Undated	Iron nails (x4)
		148	14801	Ploughsoil	14801	Post-medieval
	14804	Ditch	14806	Undated	Animal bone (26g)	
	14807	Ditch	14809	Medieval	Pottery (458g); animal bone (106g)	
	14813	Ditch	14814	Medieval	Pottery (3g); animal bone (89g)	
14815	Hollow way	14815	Medieval	Pottery (66g); copper alloy brooch; animal bone (343g)		





HA	Tr.	Feature	Type	Fill	Date range	Finds summary
		14816	Ditch	14817	Medieval	Pottery (43g); animal bone (4g)
A22	156	15612	Ditch	15613	Undated	Animal bone (132g)
		15614	Pit	15615	Undated	Animal bone (639g)
A23	168	16804	Ditch	16805	Early Roman	Pottery (6g)
-	132	13210	Ditch	13211	Undated	Pottery (2g)
-	174	17406	Ditch	17407	Undated	Fired clay (17g)
-	176	17604	Ditch	17605	Roman	Pottery (14g)

**Table 2: Finds summary by Heritage Asset, trench and feature**

### 3.3.2 Pottery

Ninety-nine pottery sherds (1.4kg) were recovered from Heritage Assets A1, A10, A13, A15, A16, A17, A18 and A23, the majority from features associated with A13. Sherds have a mean weight of 14g, and are generally abraded. Fabrics are listed below (Table 3:) in accordance with the Leicestershire Ceramic Type Series (Marsden 2000; Pollard 1994; Davies and Sawday 1999).

Wares and Fabric Groups	Sherd No.	Wt (g)	Heritage Asset	
<b>Iron Age</b>				
Q1	Quartz sand	4	15	A10; A13
Q4	Sandy fabric with quartz	3	67	A15
R2	Sandy fabric with granitic rock	4	127	A15
S2	Sandy fabric with shell	2	5	A15
G2	Grog in sandy fabric	5	96	A13; A23
<b>Roman</b>				
C	Colour-coated ware	5	7	A1
GW3, 6	Grey wares: fine and coarse sandy	30	378	A1; A10; A13; A16; Tr. 176
OW2, 3	Oxidised wares: fine and coarse sandy	13	120	A1; A10; A23
Samian	Samian ware	1	1	A1
<b>Medieval</b>				
SN	St Neots-type ware	2	12	A18
CG	Calcite-gritted ware	3	13	A18
PM	Potters Marston ware	2	21	A16; A18
CC	Chilvers Coton ware	1	58	A18
MS	Medieval sandy ware	8	215	A18
RS	Reduced sandy ware	2	3	A18
OS	Oxidised sandy ware	10	260	A18
UNID	Misc. undatable	3	5	A16; A23; Tr. 132; Tr. 174

**Table 3: Pottery Type Series**

#### **Iron Age**

Iron Age pottery totals 18 predominantly sand-tempered sherds (310g), representing eight vessels. Three sherds are residual finds in Roman features, and the remainder derive from Iron Age ditches in A13 and A15. No diagnostic forms or feature sherds occur, although scoring on five body sherds suggests a pre-‘Belgic’ Iron Age date.

#### **Roman**

The Roman assemblage comprises 49 sherds (506g), representing approximately 24 vessels. Sandy grey wares in a range of fine to coarse fabrics are most numerous, followed by oxidised sandy wares. All coarse wares are likely to originate from local sources. Forms are undecorated jars (with rims ranging in diameter from 180–220mm), a storage vessel (rim diameter 320mm) and a



flanged bowl (rim diameter 240mm). Five abraded sherds from an unsourced colour-coated beaker with rouletted decoration (7g), and a single crumb of Gaulish samian ware (1g) are also present. Roman pottery derives from features in A1, A10, A13, A16, A23 and Tr. 176. Although smaller, the assemblage is comparable with Roman pottery recovered from the 'Ridge trenches' (Albion Archaeology 2015b) and a similar 2nd-century date is suggested.

### **Medieval**

Twenty-nine sherds (583g) ranging in date from the late Saxon period to the c. late 14th century constitute the post-Roman assemblage. All derive from features in A18, apart from a single sherd (13g) recovered from ditch [14404] (A16). Two abraded sherds of late Saxon St Neots type ware (12g) occurred as residual finds in medieval ditch [14807]. Medieval pottery mainly comprises sand-tempered fabrics, including Potters Marston ware (c. 1100–1300). Oxidised and reduced sandy wares are of uncertain origin, and may derive from local or regional (Northants/Beds/Oxon) sources (Davies and Sawday 1999, 177). Three unsourced early medieval calcite-gritted sherds (13g) are probably of local origin. Vessel forms are poorly represented and comprise a sizeable sandy bowl with a post-firing repair hole drilled through the body, and a glazed Chilvers Coton ware strap handle from a jug (c. 1200–1400).

### **3.3.3 Metalwork**

Finds of metalwork were restricted to two trenches within Heritage Asset A18. Remains of up to four iron nails were found in Trench 147, within the fills of ditch [14703]; none was complete. One example retained a small, flat oval head and two pieces comprised lengths of nail shank. The fourth nail may be an example of a headless nail or lath nail; at 112mm it is, however, longer than the usually encountered range of 40–99mm (Thompson 2007, 181).

Hollow-way [14815] in Trench 148 yielded a flat annular copper alloy brooch with constriction for the *in situ* pin. The pin has a transverse ridge and the brooch frame has what appears to be engraved false lettering, set within incised marginal grooves. The brooch can be paralleled by an example found in London within deposits dated to 1270–1350 (Egan and Pritchard 1991, fig. 160 no.1313). It also shares many characteristics with a brooch from Dryslwyn Castle, deposited in the early to mid-14th century (Goodall 2007, 257), including the marginal grooves and the method of manufacture (cut from a sheet). The latter brooch has a crudely incised inscription reading 'X IHESVS NAZARENUS' with bands of rocked tracer zig-zag between the letters. Just visible on the brooch from Magna Park is an X between two vertical grooves, situated to the right of the pin; the same positioning as the X of the inscription on the Dryslwyn Castle brooch (Goodall 2007, 257 and fig.9.13 no. A3). The Magna Park brooch frame is too worn to be certain if the remainder of the inscription follows; it is hoped that radiography will be able to reveal more detail. A silver gilt annular brooch from Amesbury (Wiltshire) (Goodall 2009, 257) and a silver brooch from London dated to the second half of the 14th century (Egan and Pritchard 1991, 255 and fig. 164 no. 1337) have similar inscriptions; it has been suggested that the inscription was a prophylactic, offering protection against sudden death (Evans 1970, 47).



### 3.3.4 Fired clay and ceramic roof tile

Fourteen fired clay fragments (138g) were collected from Heritage Assets A10, A13, A15, A16, and Trench 174. All occur in a coarse sandy fabric; most are amorphous, although three pieces retain a surface. An unstratified piece of post-medieval ceramic roof tile (53g) derived from topsoil (14801), A18.

### 3.3.5 Animal bone

Animal bone (301 fragments: 2.1kg) derived from Heritage Assets A1, A10, A13, A15, A18 and A22, the largest quantity (639g) from undated quarry pit [15614] (A22). Individual pieces are highly fragmented, with a mean weight of 6g, and survive in moderate condition. Fragments identified to species include the remains of horse, cattle and sheep/goat. Anatomical elements are limb bones, pelvis, rib, vertebra, and skull fragments, the latter including a partial mandible, abraded horn core and a number of fragmentary teeth.

## 3.4 Charred plant remains

### 3.4.1 Introduction

Environmental bulk soil samples were collected for the potential recovery of charred plant remains which may provide information on crop-husbandry, processing and food consumption and evidence for other human activities in the area.

Approximately 10 litres of soil was processed from each sample by flotation onto a 0.3mm sieve followed by wet-sieving of the residues through a 1mm mesh. Both flots and residues were dried and the latter sorted for biological remains and artefacts. The dried flots were divided into fractions using a stack of sieves and charred plant remains sorted, identified and quantified (except for very fragmented grain less than 2mm) using a stereo-binocular microscope (with a magnification of up to x40) together with seed reference material and manuals. The frequency of charcoal fragments larger and smaller than 2mm was also recorded, the larger pieces being potentially identifiable and thus suitable for analysis.

### 3.4.2 Results

The majority of the samples were sterile with only nine samples producing identifiable charred plant remains, albeit in small quantities. The results are described below within the relevant Heritage Asset. More detailed quantification is shown in Table 4, in which nomenclature for the wild plants follows Stace (2005).

#### *A10 (Early Roman)*

The sample from ditch fill (10405) from this area produced only a few indeterminate charred cereal grains and occasional identifiable charcoal fragments.

#### *A13 (Iron Age/early Roman)*

Samples from the fills of two separate ditches produced a small quantity of charred remains. Fill (11013) produced a charred hulled wheat glume base, a few charred tuber/root fragments and occasional identifiable charcoal fragments.





Fill (11114) contained no charred plant remains and only traces of identifiable charcoal.

#### ***A15 (Iron Age)***

Samples from the fills of two separate ditches produced a small quantity of cereal debris from the final stages of crop-cleaning and food preparation. Both samples contained a few charred grains, including *Triticum dicoccum* (emmer wheat) and *Triticum aestivum* (free-threshing type wheat) in ditch fill (13910). The other ditch fill (14004) also produced a small number of charred hulled wheat chaff fragments including evidence for *Triticum spelta* (spelt wheat) and several charred weed seeds, for example *Bromus* (brome) and a charred *Poaceae/Cerealia* (grass/cereal) culm node fragment. Potentially identifiable charcoal fragments were found in both samples with a relatively large amount in fill (14004).

#### ***A16 (Medieval)***

Two samples from features in this area contained small quantities of charred remains. Pit fill (12807) produced no identifiable charred plant remains but a large amount of identifiable charcoal including a number of fragments greater than 4mm. The other sample, from ditch fill (14410), contained a small number of charred cereal grains including a few tentatively identified as wheat. A charred weed seed of *Rumex* (dock) and several identifiable charcoal fragments were also found in this flot.

#### ***A18 (Medieval)***

Samples from ditch fill (14705) and (14806) were devoid of charred plant remains.

#### ***A23 (Early Roman)***

A sample from ditch fill (16705) contained just a few grains, one of which was identified as *Triticum dicoccum/spelta* (emmer/spelt wheat). There were also several potentially identifiable charcoal fragments.

#### ***Non-Heritage Asset sample (undated)***

A sample from undated ditch fill (13211) contained a few charred cereal grains, including one belonging to free-threshing wheat. There were also several charred small rounded legume seeds and occasional identifiable charcoal fragments in this sample.

### **3.4.3 Summary**

The composition of the charred plant assemblages suggests that the remains derive from the final stages of crop processing and food preparation, although the paucity and low density of charred remains suggest that such activities were taking place some distance from the sampled features, possibly outside or on the edge of the main settlement areas. The small amounts of botanical material did not allow any detailed examination of crop husbandry or processing activities, other than the range of cereals that may have been cultivated and used in this area, notably during the Iron Age and early Roman periods.



	Period	IA		IA/ER		ER		?MED	MED	UND
	Area	15		13		23	10	16		N/A
	Trench	139	140	110	111	167	104	128	144	132
	feature type	DITCH	DITCH	DITCH	DITCH	DITCH	DITCH	PIT	DITCH	DITCH
	feature number	13909	14004	11012	11113	16704	10404	12806	14409	13210
	context type	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL
	fill number	13910	14006	11013	11114	16705	10405	12807	14410	13211
	sample number	15	12	10	11	2	9	13	14	16
	vol sample (l)	10	10	10	10	10	10	10	10	10
	vol flot (ml)	<1	10	<1	<1	<1	<1	8	2	3
	%sorted/scanned									
LATIN_NAME	ENGLISH									
<b>Cereal grains</b>										
<i>Triticum dicoccum</i> Schubl.	emmer wheat	1								
<i>T. dicoccum/spelta</i>	emmer/spelt wheat					1				
<i>T. aestivum</i> type	free-threshing wheat	1								1
<i>Triticum</i> sp.	wheat									1
cf. <i>Triticum</i> sp(p).	?wheat								2	
Cerealia	indet. cereal grain (estimate)		1			2	2		6	1
Cerealia	indet cereal grain fragments <2mm		+				+		+	+
<b>Cereal chaff</b>										
<i>Triticum spelta</i> L.	spelt glume bases		1							
<i>T. spelta</i> L.	spelt spikelet forks/bases		1							
<i>Triticum</i> sp(p).	wheat glume bases		3	1						
<i>Triticum</i> sp.	wheat spikelet forks/bases		1							
<b>Other plant/weed seeds</b>										
<i>Ranunculus</i> sp.	buttercups									
<i>Rumex</i> sp.	dock								1	
<i>Vicia/Lathyrus</i> sp.	vetch/tare/vetchling (small)		1							
Fabaceae indet.	pea family (small round cotyledons)									3
<i>Bromus</i> sp.	brome		1							
Poaceae indet.	grasses (large seeds)									
Poaceae indet.	grasses (small seeds)									
Poaceae indet.	culm node		1							
indeterminate	tuber/root fragments			2						
indeterminate	wood charcoal fragments >2mm	+	+++	+		+	+	++++	+	+
indeterminate	wood charcoal fragments.<2mm	++	+++++	+++	+	++	+++	+++++	+++	++++
<b>total</b>		<b>2</b>	<b>10</b>	<b>3</b>	<b>-</b>	<b>3</b>	<b>2</b>	<b>-</b>	<b>9</b>	<b>6</b>
<i>density of charred plant items (per litre of processed soil)</i>		<i>0.2</i>	<i>1</i>	<i>0.3</i>	<i>-</i>	<i>0.3</i>	<i>0.2</i>	<i>-</i>	<i>0.9</i>	<i>0.6</i>

key: item frequency: + =1-10 items; ++ =11-50 items; +++ = 51-100; ++++ = 101-250; +++++=>250 items

IA=Iron Age; ER=early Roman; MED=medieval; PREH=prehistoric; UND=undated

**Table 4: Summary of charred plant remains**



## 4. RESULTS OF THE METAL DETECTOR SURVEYS

### 4.1 Quantification

A total of twenty-one objects were recovered from the four metal detecting survey areas (Fig. 17). Their find number reflects the area that they were found in. Quantities by material type and area are presented in Table 5.

Material	Area A	Area B	Area C	Area D	Total
Aluminium	3	-	-	-	3
Copper alloy	6	1	1	1	9
Lead alloy	3	2	2	-	7
Silver	-	-	-	2	2
<b>Total</b>	<b>12</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>21</b>

**Table 5: Metal detecting survey finds by material and area**

### 4.2 Date range

Typological dating of the assemblage indicates three periods are represented.

The earliest period is the 1st century AD, represented by two copper alloy brooches, one a ‘Birdlip’ type brooch (Mackreth’s Birdlip type 4.1b; Mackreth 2011, 12) and the second part of a Colchester brooch. The Birdlip brooch is thought to date to AD 1–50, while the Colchester, which due to its incomplete survival cannot be certainly ascribed to a specific form but does appear to fall within Mackreth’s Colchester standard British form (2011, 37-8), is generally dated to the 1st century AD.

Medieval activity is denoted by a lead alloy spindle whorl with one large and one small flat face (Walton Rogers’ form A2; Walton Rogers 1997, 1736–7 and fig. 806) and a central perforation of 10mm diameter. It is likely to date between the late Saxon period and the earlier medieval period (Walton Rogers 1997, 1731). Later medieval activity is attested by the presence of two silver long cross pennies, one possibly Edward II (1307–27) and the second possibly Edward III (1327–77). Part of a 13th- to 14th-century lead alloy pilgrim’s ampulla was also found, comprising the edge of a flask-shaped ampulla with scallop shell motif. The remains of two cast copper alloy vessels (a leg and a foot) are likely to date from the later 14th into the 16th century.

The modern period is represented by a watch fob seal matrix, a securing buckle from a shoe buckle, two lead alloy small bore shot and three pieces of aluminium.

### 4.3 Provenance

#### 4.3.1 Area A (Fig. 18)

Area A yielded the most finds and the greatest range of datable objects. Brooches A5 and A6 (Birdlip and Colchester respectively) attest to some form of activity in the 1st century AD and support the dating evidence for Heritage Assets A8 and A9, which were reported on in the “Ridge” report (Albion 2015b). It is possible that copper alloy coin A11 could be of Roman date (*dupondius*, *as* or *follis*) but it is equally plausible that it could be a post-





medieval half-penny (George II or III, William IV or Victoria). Lead alloy spindle whorl A2, as noted above, is likely to date to the late Saxon to early medieval period.

Find A9 resembles a spindle whorl in form but its irregular outline and central perforation suggest it may have been a weight, perhaps for fishing or alternatively measurement. If the latter, it is closest in weight to 16 scruples (Roman). Strap mount A10 consists of a gilded hollow domed circular mount with integral rivet; this form of mount had a long life with examples known from Roman to post-medieval periods. The gilding present on A10, however, may well suggest a medieval or later date. Copper alloy sheet fragment A8 cannot be closely dated, nor can lead alloy fragment A12. The latter, however, does have some cast feather or leaf-like decoration, not dissimilar to motifs found on medieval pilgrim or secular badges of the 13th to 15th century (Spencer 1998, fig. 54A and 117). It could be suggested that the spindle whorl, strap mount and possible pilgrim's/secular badge may have derived from the deserted medieval village of Bittesby (HER MLE1226) situated to the north of Area A.

<b>RA no</b>	<b>Material</b>	<b>Description</b>
A1	Aluminium	Heat-effected fragment
A2	Lead alloy	Spindle whorl
A3	Aluminium	Fragment
A4	Aluminium	Joint/junction
A5	Copper alloy	Brooch
A6	Copper alloy	Brooch
A7	Copper alloy	Watch fob seal matrix
A8	Copper alloy	Sheet fragment
A9	Lead alloy	Weight or spindle whorl
A10	Copper alloy	Strap mount
A11	Copper alloy	Coin (illegible)
A12	Lead alloy	Fragment (cast)

**Table 6: Finds from Area A**

Watch fob with seal matrix A7 probably dates to the 19th to early 20th century and was presumably a chance loss. In contrast, the three pieces of aluminium (A1, A3, A4) are likely to have derived from aircraft and might relate to the Second World War Airfield of Bittewell (HER MLE15959) located 1km south of Area A.

#### 4.3.2 Area B (Fig. 20)

Find B3, the part of a hollow flask-shaped ampulla with scallop-shell decoration is likely to belong to the second half of the 14th century, when ampulla were mainly a flattened flask shape with slightly convex obverse and a flattish reverse (Spencer 1998, 203). This item may have originated from the deserted medieval village of Bittesby (HER MLE1226). Buckle B1 is a securing buckle from a shoe buckle and can be dated to the 18th century. Lead alloy shot B2 is small bore shot; the dents in its surface suggest it was fired, and dates from the later post-medieval to modern period.

<b>RA no</b>	<b>Material</b>	<b>Description</b>
B1	Copper alloy	Buckle
B2	Lead alloy	Shot
B3	Lead alloy	Ampulla



**Table 7: Finds from Area B**

#### 4.3.3 Area C (Fig. 19)

The small assemblage from Area C could date to the late medieval to earlier post-medieval period. The cast copper alloy vessel leg C2 may have originated from a cauldron or skillet. These are frequent finds on contemporary sites due to the increasing amounts of lead used in the casting of late medieval vessels. The vessel repair or plug C1 could date to the Roman period and was found in the area of Heritage Asset A1 (see below), but it is equally likely to be medieval in date. The cast shot C3 appears to have been fired (one flattened side), its diameter again suggesting use with a small bored barrel, which could be 17th century or later in date.

RA no	Material	Description
C1	Lead alloy	Vessel repair
C2	Copper alloy	Vessel leg
C3	Lead alloy	Shot

**Table 8: Finds from Area C**

#### 4.3.4 Area D (Fig. 20)

Of the two silver long cross pennies D1 was minted in London and is likely to be Edward II, while D2 may be Edward III (?York mint). Cast vessel foot D3 is slightly splayed and the lower leg has a central rib; the form suggests that it belonged to a vessel of later 14th- to 17th-century date (Butler, Green and Payne 2009, 4).

RA no	Material	Description
D1	Silver	Coin
D2	Silver	Coin
D3	Copper alloy	Vessel foot

**Table 9: Finds from Area D**

#### 4.4 Summary

The metal-detected artefacts dated to the late Iron Age/early Roman, medieval/post-medieval and modern periods. The only artefacts that were firmly dated and definitely corresponded with underlying archaeological remains in the evaluation trenches were brooches A5 and A6. They were found within the areas of Heritage Assets A8 and A9 (Albion 2015b). Other possible Roman artefacts include coin A11 and possible lead weight A9 (both within Heritage Asset A8) and vessel plug C1 (within Heritage Asset A1). However, the small number of objects and dispersed distribution means they do not contribute significantly to an understanding of the nature of the Heritage Assets.

Little can also be said about the range and distribution of the medieval and post-medieval objects recovered. While some of the former may have derived from the deserted medieval village of Bittesby, it is equally likely that all these objects represent random losses within arable fields adjacent to Watling Street.



## 5. SUMMARY OF RESULTS

### 5.1 Overview

The evaluation within the SA has enhanced the information already available on Heritage Assets (Fig. 21) and identified a small number of features within trenches outside the Heritage Assets (Fig. 21). In addition, it has confirmed the location of furrows (Fig. 15) and of post-medieval field boundaries (Fig. 16).

### 5.2 Previously identified Heritage Assets

The previously identified Heritage Assets (CgMs 2015a, table 5) are discussed below under appropriate headings and summarised in Table 10.

Asset ref.	Description	Date
A1	Field system	Early Roman
A2	Extensive ditched boundary	Iron Age
A10	Settlement	Early Roman
A11	No archaeological features/deposits present (and no explanation for geophysical anomaly {40})	n/a
A12	No archaeological features/deposits present (geological variation probably created geophysical anomalies)	n/a
A13	Settlement	Early Roman (with some evidence for Iron Age origins)
A14	Deposits associated with former watercourse	n/a
A15	Settlement	Iron Age
A16	Trackway	?Medieval
A17	Ditched boundary	Roman or medieval
A18	Settlement	Medieval
A19	Uncertain (partially examined in trench evaluation)	-
A20	Ditched boundary	?Prehistoric
A22	Quarrying and boundaries possibly associated with railway construction	Post-medieval
A23	Field system (possibly continuation of A1)	Early Roman

**Table 10:** Summary of Heritage Assets within the SA based on the results of the trench evaluation

Note. Heritage Assets A3–9 and A21 are situated outside of the SA and are, therefore, not described in this report.

#### 5.2.1 Iron Age – Roman settlements

The trench evaluation has identified three areas of Iron Age – Roman settlement. All were unknown until the geophysical survey was undertaken (ArchaeoPhysica 2015) and none could have been predicted on the basis of the Iron Age and Roman pottery recovered during fieldwalking (MOLA 2015). On current evidence the settlements can be summarised as follows:





- A10 represents an early Roman settlement comprised of rectilinear enclosures (Fig. 4). These extend over at least 1ha and possibly 2.5ha, if the two ditches found in Trench 106 (*c.* 100m to the east) are included. There is sufficient evidence from the ditches within the trenches and the geophysical anomalies to suggest that more than one phase of enclosure system is present.
- A13 also represents a large early Roman settlement comprised of rectangular enclosures (Fig. 5). These are adjacent to, but not parallel or perpendicular to, Watling Street. If the ditches within Trench 117 are included, the enclosures would appear to extend over 5ha. None of the ditches within the trenches intercut in a way to prove multi-phase development of the system but several have been recut, demonstrating that the boundaries were maintained over time. The trenches contained a small number of pits and post-holes but the distribution of these does not support an identification of a domestic focus. Based on the quantity of pottery, the settlement appears to have been predominantly early Roman in date. However, the presence of small amounts of Iron Age pottery and the E-W alignment of the enclosures, which is at odds with Roman Watling Street, suggests it originated prior to the Roman Conquest.
- A15 represents a mainly Iron Age settlement with generally curvilinear enclosures, extending over *c.* 2.5ha (if the ditches within Trench 142 are included). This area contains an undated, but possibly Roman, rectangular enclosure adjacent to Watling Street and a larger more pre-‘Belgic’ Iron Age oval enclosure arrangement to the east (Fig. 6). A concentration of post-holes within Trench 134 may indicate the location of a building. Ditches within Trench 139, when combined with the geophysical anomalies, are suggestive of at least two roundhouses. It is possible that the undated skeleton found adjacent to Watling Street in this area as recorded in the HER (MLE1225) is a burial associated with this settlement.

The settlements are best characterised as farmsteads; in the Roman period they were located near, but not specifically adjacent to, Watling Street. The nearest significant Roman settlement was at High Cross, *c.* 2.5km to the north at the intersection of Watling Street and the Fosse Way (Smith 1987, 224).

Possibly comparable late Iron Age/early Roman and Roman enclosure systems to those within the PDA have been identified at Leaders Farm, Lutterworth *c.* 4km to the south-east (Morris 2014, 176-8). There, the late Iron Age/early Roman enclosures tended to be more polygonal in plan than the Roman enclosures/fields which were rectangular in plan. The former were associated with at least four roundhouses, pits and post-holes.



### 5.2.2 Bittesby Deserted Medieval Village

The history of the Bittesby settlement is documented in two desk-based assessments (ASC 2008 and CgMs 2015a) and is, therefore, only summarised here. Bittesby is referred to in Domesday Book (1086) and will have existed as a late Saxon settlement. This is supported by the recovery of two residual sherds of late Saxon pottery found in association with medieval pottery within a ditch in Trench 148. The settlement is known to have been thriving in the 13th century but depopulation during the late medieval period resulted in just one family remaining in the village in 1536.

The settlement is situated within the centre of the PDA and is bisected by the former Leicester-Rugby railway line (Fig. 22). The part to the east of the former railway line is designated as a Scheduled Monument. A18 represents the part of the settlement to the west of the former railway line and includes the area partially investigated in 2007 (ASC 2008). It is characterised by a series of ditched enclosures which survive as plough-truncated features dug into the natural geology; in contrast, earthworks survive in the scheduled area to the east. Although no features such as post-holes or pits were present within the evaluation trenches, the quantity and nature of finds within Trench 148 and the work by The Lutterworth Fieldwalking Group (ASC 2008, 24) suggest that the area west of the former railway line probably contains evidence for domestic activity.

The evaluation has assisted in determining the form extent of the settlement which was likely to have been in the region of 10ha (Fig. 22). To the west the limit of the settlement is defined by boundary ditches and a hollow-way beyond which are furrows indicating the open fields. To the north, the geophysical anomalies identified as A19 (bisected by the modern stream) were originally thought to be associated with the settlement (CgMs 2015a, table 5). However, it now seems likely that the settlement did not extend as far as the stream in this direction. The presence of furrow-type geophysical anomalies in the field west of the stream may suggest that some of this land was used as open fields and that some of the anomalies represent former stream channels (Fig. 22). To the south, while it was not possible to prove for certain that the boundary ditch assigned to A17 was medieval, it seems likely that it was and that it represents the southern extent of the settlement. The trenches to the east have been reported on separately but they contained no features, other than furrows, which could be assigned with confidence to the medieval period (Albion 2015b).

As mentioned above a hollow-way was identified within Trench 148; it followed the probable western boundary of the settlement. This hollow-way follows the same alignment as one found *c.* 100m to the south within an earlier investigation (ASC 2008) and would correspond with trackway A16 further south (Fig. 22).

Extensive evidence was found within the PDA for the open field system associated with the Bittesby settlement (see below). The layout may not



have been static, especially on land adjacent to the settlement, for the duration of the settlement's life. This is hinted at by the possibility that the ditches within Trench 148 represent an extension of enclosures onto land previously used for agriculture (Fig. 22).

### 5.2.3 Extensive boundaries

Two possible prehistoric ditched boundaries were identified:

- A2 extended for at least 200m near the southern extent of the SA and continued into the adjacent DHL application area (Albion 2015a). It is likely to be pre-'Belgic' Iron Age in date.
- A20 extended for at least 50m on the northern limit of the SA. It was undated.

Where extensive boundaries have been found elsewhere in Leicestershire they often have Iron Age origins, e.g. Seagrave Road, Sileby (Luke and Barker 2014, 34) and Normanton le Heath (Thorpe and Sharman 1994).

### 5.2.4 Field systems and trackway

Roman ditches within A1 and A23 are probably part of field systems located close to Watling Street. A1 was also examined as part of an evaluation associated with a separate planning application (Albion 2015a). A Roman date is possible for the two ditches within A17 and one contained early Roman pottery. However, based on its position and alignment in relation to Bittesby DMV, it is perhaps more likely, as suggested above, that one of the ditches within A17 is medieval in date and may form the southern boundary of the settlement.

Extensive arrangements of furrows were detected by the geophysical survey and the bases of furrows were found *c.* 8m apart in 33 trenches. This land was clearly part of the open field system associated with Bittesby medieval settlement and the layout of former ridge and furrow is well known (CgMs 2015a, fig. 6). Manuring of the fields probably explains the quantity of medieval and post-medieval pottery found during fieldwalking to the south and east of Bittesby House (MOLA 2015, fig. 5). Although the furrows were on a similar alignment to some of the late Iron Age/early Roman ditches in A10, this is not the case with A13 and A15. Therefore, the layout is considered to be new and to not respect pre-existing boundaries (should any have survived).

Trackway A16 is likely to be medieval in date and represents the continuation of the hollow-way located to the west of Bittesby DMV (see above).

### 5.2.5 Former watercourse or stream

Deposits associated with a former watercourse or stream were identified in Trench 125 (A14). Although these lacked organic material and were therefore unsuitable for further study, there is potential for the survival of palaeo-environmental remains closer to the current course of the stream to the east (Rackham 2015). Potential former channels of the stream were also visible on the geophysical greyscale adjacent to its present course to





the north of Bittesby DMV (Fig. 22). It should be noted that no evidence was found for the linear geophysical anomalies targeted by Trench 125 but the Asset number has been retained to represent the palaeo-environmental potential of this area.

### 5.3 Features outside Heritage Asset areas

Excluding furrows and the post-medieval boundaries, thirteen trenches outside of the Heritage Asset areas contained a small number of largely undated archaeological features (Table 11). The majority of these were ditches located in areas with little other evidence for past activity. They are therefore likely to represent isolated field boundaries. The possible exceptions were those in Trenches 106, 127 and 174 which also contained a pit or post-hole. Trenches 106 and 127 may represent more focussed activity, although dating is still an issue, whilst Trench 174 contained features probably associated with the adjacent medieval trackway A16 or Roman settlement A15.

Trench No	Description	Possible date
106	Two perpendicular ditches on similar alignments to those within the Roman settlement A10, and a small pit.	? Roman
107	Two small and short ditches, adjacent to Watling Street.	? Roman or later
124	Ditch and small pit.	Unknown
127	Two ditches and three post-holes adjacent to Watling Street and in-between Iron Age/Roman enclosure systems A13 and A15	? Roman
128	Ditch and pit	? Roman
129	Small curvilinear ditch truncated by furrows	?Pre-medieval
132	Three ditches, on different alignment to the furrows although one appears to originate within Bittesby DMV, and pit	?Pre-medieval and medieval
137	Ditch, on different alignment to the furrows but appears to originate within Bittesby DMV, and pit	? medieval
162	Ditch	Unknown
166	Two ditches one of which was curvilinear and truncated by a furrow	?Pre-medieval
174	Ditch and pit, near trackway A16 and settlement A15	?Roman or medieval
176	Ditch	Roman
177	Ditch, on slightly different alignment to the furrows	?Pre-medieval

**Table 11:** Summary of undated features found outside of Heritage Asset areas based on the results of the trench evaluation



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## 7. APPENDIX 1: TRENCH SUMMARY

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**Trench: 101**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.45 m. Max: 0.55 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49071: Northing: 86000)

**OS Grid Ref.: SP** (Easting: 49121: Northing: 86599)

**Reason: To evaluate geophysical anomalies within Heritage Asset 11**

Context:	Type:	Description:	Excavated:	Finds Present:
10101	Topsoil	Friable dark brown silty clay 0.23 - 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10102	Subsoil	Firm mid yellow brown silty clay 0.22m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10103	Natural	Firm mid grey brown clay	<input type="checkbox"/>	<input type="checkbox"/>
10104	Furrow	Linear N-S sides: concave base: flat dimensions: max breadth 1.m, max depth 0.2m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10105	Fill	Firm mid grey brown clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10106	Pit	Oval E-W sides: near vertical base: concave dimensions: max depth 0.28m, max diameter 0.6m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10107	Fill	Firm dark brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 102

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.41 m. Max: 0.44 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49271: Northing: 86690)

OS Grid Ref.: SP (Easting: 49230: Northing: 86662)

**Reason:** To evaluate the area in-between geophysical anomalies within Heritage Assets 10 and 11

Context:	Type:	Description:	Excavated:	Finds Present:
10201	Topsoil	Firm mid green brown silty clay 0.24 - 0.26m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10202	Subsoil	Firm mid yellow brown silty clay 0.15 - 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10203	Natural	Firm mid blue grey clay	<input type="checkbox"/>	<input type="checkbox"/>





**Trench: 103**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.32 m. Max: 0.39 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49429; Northing: 86678)

**OS Grid Ref.: SP** (Easting: 49479; Northing: 86677)

**Reason: To evaluate geophysical anomalies within Heritage Asset 10**

Context:	Type:	Description:	Excavated:	Finds Present:
10301	Topsoil	Friable mid brown grey silty clay 0.32 - 0.39m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10302	Natural	Firm mid grey brown silty clay Contained occasional stony patches	<input type="checkbox"/>	<input type="checkbox"/>
10303	Ditch	Linear N-S sides: concave base: concave dimensions: max breadth 1.41m, max depth 0.44m, min length 0.95m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10304	Fill	Firm mid blue grey silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10305	Ditch	Linear N-S sides: concave base: v-shaped dimensions: max breadth 0.8m, max depth 0.54m, min length 1.82m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10306	Fill	Friable mid brown silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10307	Pit	Circular sides: concave base: concave dimensions: max depth 0.1m, max diameter 0.4m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10308	Fill	Friable dark black silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 104**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.46 m. Max: 0.64 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49477: Northing: 86671)

**OS Grid Ref.: SP** (Easting: 49477: Northing: 86621)

**Reason: To evaluate geophysical anomalies within Heritage Asset 10**

Context:	Type:	Description:	Excavated:	Finds Present:
10401	Topsoil	Friable dark brown silty clay 0.12 - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10402	Subsoil	Firm mid red brown silty clay 0.34m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10403	Natural	Friable dark red brown silty clay	<input type="checkbox"/>	<input type="checkbox"/>
10404	Ditch	Linear NW-SE sides: asymmetrical base: flat dimensions: max breadth 0.55m, max depth 0.34m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10405	Fill	Friable dark grey brown silty clay occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10406	Ditch	Linear NE-SW sides: asymmetrical base: concave dimensions: max breadth 0.69m, max depth 0.15m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10407	Fill	Friable dark grey brown silty clay occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10408	Ditch	Curving linear NW-SE sides: asymmetrical base: concave dimensions: max breadth 0.7m, max depth 0.22m, min length 0.83m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10409	Fill	Friable dark grey brown silty clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10412	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 0.45m, max depth 0.05m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10413	Fill	Friable mid grey clay silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10414	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 1.7m, max depth 0.05m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10415	Fill	Friable mid grey brown clay silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 105**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.52 m. Max: 0.54 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49488: Northing: 86656)

**OS Grid Ref.: SP** (Easting: 49538: Northing: 86656)

**Reason: To evaluate geophysical anomalies within Heritage Asset 10**

Context:	Type:	Description:	Excavated:	Finds Present:
10501	Topsoil	Firm dark brown grey silty clay 0.25 - 0.34m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10502	Subsoil	Firm mid orange grey silty clay moderate medium-large stones 0.2 - 0.27m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10503	Natural	Firm mid brown grey moderate medium-large stones	<input type="checkbox"/>	<input type="checkbox"/>
10504	Ditch	Linear NE-SW base: concave dimensions: max breadth 0.43m, max depth 0.04m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10505	Fill	Firm dark blue grey silty clay occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10506	Ditch	Linear NE-SW sides: steep base: concave dimensions: max breadth 0.67m, max depth 0.13m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10507	Fill	Firm mid grey silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10508	Ditch	Linear N-S sides: asymmetrical base: concave dimensions: max breadth 1.57m, max depth 0.5m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10509	Primary fill	Firm mid brown grey clay occasional small stones 0.25m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10510	Secondary fill	Firm dark blue grey clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10511	Ditch	Linear NW-SE sides: steep base: concave dimensions: max breadth 0.58m, max depth 0.18m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10512	Fill	Firm mid grey silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10513	Furrow	Linear NE-SW	<input type="checkbox"/>	<input type="checkbox"/>
10514	Fill	Friable light brown yellow sandy silt	<input type="checkbox"/>	<input type="checkbox"/>





**Trench: 106**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.7 m. Max: 0.95 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49635: Northing: 86599)

**OS Grid Ref.: SP** (Easting: 49676: Northing: 86627)

**Reason: To evaluate the archaeological potential of a 'blank' area**

Context:	Type:	Description:	Excavated:	Finds Present:
10601	Topsoil	Friable dark red brown sandy clay 0.33 - 0.4m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10602	Subsoil	Firm dark yellow brown sandy clay 0.25 - 0.6m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10603	Natural	Friable mid yellow brown sandy clay	<input type="checkbox"/>	<input type="checkbox"/>
10604	Ditch	Linear N-S sides: concave base: v-shaped dimensions: max breadth 0.64m, max depth 0.8m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10605	Fill	Friable mid brown sandy clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10606	Pit	Linear N-S sides: concave base: flat dimensions: max breadth 0.2m, max depth 0.1m, min length 0.75m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10607	Fill	Friable mid brown sandy clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10608	Ditch	Linear E-W sides: concave base: concave dimensions: max breadth 0.45m, max depth 0.1m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10609	Fill	Friable mid brown sandy clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 107

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.5 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49061: Northing: 86460)

OS Grid Ref.: SP (Easting: 49090: Northing: 86419)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
10701	Topsoil	Friable mid brown silty clay occasional small stones 0.28 - 0.34m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10702	Subsoil	Friable mid orange brown sandy silt occasional small stones 0.12 - 0.16m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10703	Natural	Loose mid orange yellow sandy gravel	<input type="checkbox"/>	<input type="checkbox"/>
10704	Ditch	Linear ENE-WSW sides: concave base: concave dimensions: max breadth 0.28m, max depth 0.11m, min length 1.75m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10705	Fill	Friable mid grey brown silty sand occasional flecks charcoal, occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10706	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 0.38m, max depth 0.18m, min length 1.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10707	Fill	Friable mid grey brown silty sand occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 108**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.4 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49162: Northing: 86456)

**OS Grid Ref.: SP** (Easting: 49114: Northing: 86443)

**Reason: To evaluate the archaeological potential of a 'blank' area**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
10801	Topsoil	Friable mid brown silty clay occasional small stones 0.27 - 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10802	Subsoil	Friable mid orange brown sandy silt moderate small stones 0.11 - 0.12m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10803	Natural	Loose mid brown yellow clay sand frequent small sand, frequent small stones	<input type="checkbox"/>	<input type="checkbox"/>
10804	Furrow	Linear NNE-SSW sides: concave base: flat dimensions: max breadth 0.92m, max depth 0.06m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10805	Fill	Friable light brown yellow sandy silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>





**Trench: 109**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.28 m. Max: 0.32 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49122: Northing: 86400)

**OS Grid Ref.: SP** (Easting: 49172: Northing: 86400)

**Reason: To evaluate geophysical anomalies within Heritage Asset 13**

Context:	Type:	Description:	Excavated:	Finds Present:
10901	Topsoil	Friable mid brown silty clay occasional small stones 0.25m - 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10902	Subsoil	Friable mid orange brown silty clay occasional small stones 0.07m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10903	Natural	Firm mid green brown clay	<input type="checkbox"/>	<input type="checkbox"/>
10904	Furrow	Linear NNE-SSW sides: concave base: flat dimensions: max breadth 0.72m, max depth 0.05m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10905	Fill	Friable light yellow sand	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 110**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.35 m. Max: 0.36 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49170: Northing: 86392)

**OS Grid Ref.: SP** (Easting: 49170: Northing: 86342)

**Reason: To evaluate geophysical anomalies within Heritage Asset 13**

Context:	Type:	Description:	Excavated:	Finds Present:
11001	Topsoil	Friable dark brown silty clay occasional small stones 0.35 - 0.38m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11002	Subsoil	Firm dark yellow brown sandy clay occasional small stones 0.06 - 0.09m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11003	Natural	Friable mid brown yellow sandy clay	<input type="checkbox"/>	<input type="checkbox"/>
11004	Ditch	Linear NE-SW sides: concave base: concave dimensions: min breadth 0.5m, max depth 0.4m, min length 0.25m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11005	Fill	Friable mid grey brown clay sand occasional flecks charcoal, moderate small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11006	Ditch	Linear E-W sides: convex base: flat dimensions: max breadth 1.05m, max depth 0.56m, min length 1.95m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11007	Primary fill	Friable mid grey brown clay silt occasional flecks charcoal, occasional small stones 0.32m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11008	Secondary fill	Friable dark grey brown silty clay occasional small stones 0.11m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11009	Tertiary fill	Loose dark grey clay silt occasional flecks charcoal, occasional small stones 0.12m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11010	Ditch	Linear NW-SE sides: convex base: flat dimensions: max breadth 1.45m, max depth 0.63m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11011	Fill	Friable dark green silty clay occasional flecks charcoal, frequent small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11012	Ditch	Linear NW-SE sides: near vertical base: flat dimensions: max breadth 1.18m, max depth 0.48m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11013	Fill	Friable dark green silty clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11014	Ditch	Linear NW-SE sides: V-shaped base: v-shaped dimensions: max breadth 0.43m, max depth 0.13m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11015	Fill	Friable dark grey silty clay occasional flecks charcoal, occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11016	Pit	Sub-circular sides: assymetrical base: concave dimensions: max depth 0.15m, max diameter 0.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11017	Fill	Friable dark grey brown silty sand occasional flecks charcoal, frequent small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11018	Furrow	Linear NE-SW sides: concave base: flat dimensions: max breadth 0.8m, max depth 0.05m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11019	Fill		<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 111**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.44 m. Max: 0.46 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49184; Northing: 86332)

**OS Grid Ref.: SP** (Easting: 49234; Northing: 86332)

**Reason: To evaluate geophysical anomalies within Heritage Asset 13**

Context:	Type:	Description:	Excavated:	Finds Present:
11101	Topsoil	Friable dark brown silty clay occasional small stones 0.35 - 0.38m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11102	Subsoil	Firm dark yellow brown clay sand occasional small stones 0.06 - 0.09m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11103	Natural	Firm mid brown yellow sandy clay	<input type="checkbox"/>	<input type="checkbox"/>
11104	Posthole	Circular sides: asymmetrical base: concave dimensions: max depth 0.2m, max diameter 0.25m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11105	Fill	Friable dark grey black silty clay moderate flecks charcoal, moderate small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11106	Ditch	Linear NNE-SSW sides: concave base: concave dimensions: max breadth 0.5m, max depth 0.13m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11107	Fill	Friable dark brown grey silty clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11108	Treethrow	Irregular E-W sides: asymmetrical base: uneven dimensions: min breadth 0.68m, max depth 0.14m, min length 1.1m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11109	Fill	Friable dark brown grey occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11110	Ditch	Linear N-S sides: concave base: concave dimensions: max breadth 1.7m, max depth 0.48m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11111	Primary fill	Friable dark grey brown silty clay occasional small stones 0.04m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11112	Secondary fill	Friable dark brown grey silty clay occasional small stones 0.44m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11113	Ditch	Linear NW-SE sides: near vertical base: flat dimensions: max breadth 1.04m, max depth 0.34m, min length 3.75m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11114	Fill	Friable dark grey silty clay moderate small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11115	Furrow	Linear E-W	<input type="checkbox"/>	<input type="checkbox"/>
11116	Fill	Friable light yellow brown sandy silt	<input type="checkbox"/>	<input type="checkbox"/>





**Trench: 112**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.32 m. Max: 0.44 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49258: Northing: 86399)

**OS Grid Ref.: SP** (Easting: 46258: Northing: 86349)

**Reason: To evaluate geophysical anomalies within Heritage Asset 13**

Context:	Type:	Description:	Excavated:	Finds Present:
11201	Topsoil	Firm dark brown grey silty clay 0.28 - 0.32m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11202	Subsoil	Firm mid orange brown silty clay 0.16m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11203	Natural	Firm mid blue grey silty clay Contained occasional stony patches	<input type="checkbox"/>	<input type="checkbox"/>
11204	Pit	Sub-oval E-W sides: concave base: concave dimensions: max breadth 0.6m, max depth 0.12m, max length 1.3m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11205	Fill	Firm mid blue grey silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11206	Ditch	Linear E-W sides: concave base: concave dimensions: max breadth 0.14m, max depth 0.14m, min length 0.7m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11207	Fill	Firm mid blue grey silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11208	Pit	Sub-oval E-W sides: steep base: concave dimensions: max depth 0.28m, max length 1.4m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11209	Fill	Firm mid blue grey silty clay moderate small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11210	Ditch	Linear E-W sides: steep base: concave dimensions: max breadth 0.95m, max depth 0.19m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11211	Fill	Firm mid blue grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11212	Ditch	Linear E-W sides: steep base: concave dimensions: max breadth 1.06m, max depth 0.19m, min length 2.1m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11213	Fill	Firm mid blue grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11214	Ditch	Linear E-W sides: steep base: concave dimensions: max breadth 0.21m, max depth 0.26m, min length 0.95m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11215	Fill	Firm mid blue grey silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11216	Ditch	Linear E-W sides: concave base: concave dimensions: max breadth 1.35m, max depth 0.65m, min length 0.95m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11217	Primary fill	Firm mid blue grey silty clay 0.57m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11218	Secondary fill	Firm mid blue grey silty clay 0.34m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11219	Furrow	Linear E-W sides: steep base: uneven dimensions: max breadth 1.9m, max depth 0.28m, min length 0.95m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11220	Fill	Firm mid blue grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 113**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.42 m. Max: 0.5 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49312: Northing: 86328)

**OS Grid Ref.: SP** (Easting: 49271: Northing: 86299)

**Reason: To evaluate geophysical anomalies within Heritage Asset 13**

Context:	Type:	Description:	Excavated:	Finds Present:
11301	Topsoil	Friable mid grey brown silty clay 0.3 - 0.32m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11302	Subsoil	Firm mid orange grey silty clay 0.12 - 0.18m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11303	Natural	Firm mid brown orange clay	<input type="checkbox"/>	<input type="checkbox"/>
11304	Posthole	Circular sides: near vertical base: concave dimensions: max depth 0.27m, max diameter 0.35m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11305	Fill	Firm mid blue brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11306	Posthole	Circular sides: near vertical base: concave dimensions: max depth 0.31m, max diameter 0.35m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11307	Fill	Firm dark blue grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11308	Ditch	Linear N-S sides: 45 degrees base: concave dimensions: max breadth 0.35m, max depth 0.1m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11309	Fill	Firm dark brown grey silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



**Trench: 114**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.46 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49273; Northing: 86263)

**OS Grid Ref.: SP** (Easting: 49323; Northing: 86263)

**Reason: To evaluate geophysical anomalies within Heritage Asset 13**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
11401	Topsoil	Friable mid grey brown silty clay 0.27 - 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11402	Subsoil	Firm mid orange grey sandy clay 0.13 - 0.18m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11403	Natural	Firm mid brown orange clay sand	<input type="checkbox"/>	<input type="checkbox"/>
11404	Furrow	Linear NW-SE	<input type="checkbox"/>	<input type="checkbox"/>
11405	Fill	Friable light yellow brown sandy silt	<input type="checkbox"/>	<input type="checkbox"/>





**Trench:** 115

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: m. Max: 0.26 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49216: Northing: 86250)

OS Grid Ref.: SP (Easting: 49244: Northing: 86208)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
11501	Topsoil	Friable mid grey brown silty clay 0.26m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11502	Subsoil	Friable mid orange grey silty clay 0.14m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11503	Natural	Firm mid grey orange clay sand	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 116

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.43 m. Max: 0.6 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49279; Northing: 86185)

OS Grid Ref.: SP (Easting: 49320; Northing: 86213)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
11601	Topsoil	Friable mid grey brown silty clay 0.3 - 0.37m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11602	Subsoil	Firm mid orange grey silty clay 0.13 - 0.23m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11603	Natural	Firm mid orange brown clay sand	<input type="checkbox"/>	<input type="checkbox"/>



**Trench: 117**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.42 m. Max: 0.47 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49428: Northing: 86379)

**OS Grid Ref.: SP** (Easting: 49394: Northing: 86343)

**Reason: To evaluate geophysical anomalies in between Heritage Assets 12 and 13**

Context:	Type:	Description:	Excavated:	Finds Present:
11701	Topsoil	Friable dark brown silty clay moderate small stones 0.34m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11702	Subsoil	Firm dark orange brown silty sand moderate small stones 0.13m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11703	Natural	Firm mid brown red sandy clay moderate small stones	<input type="checkbox"/>	<input type="checkbox"/>
11704	Ditch	Linear N-S sides: steep base: flat dimensions: max breadth 0.56m, max depth 0.13m, min length 3.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11705	Fill	Firm dark grey brown silty silt moderate small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11706	Ditch	Linear NE-SW sides: steep base: concave dimensions: max breadth 0.57m, max depth 0.18m, min length 2.6m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11707	Fill	Firm dark grey brown silty silt moderate small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11708	Furrow	Linear E-W	<input type="checkbox"/>	<input type="checkbox"/>
11709	Fill	Friable light yellow brown sandy silt	<input type="checkbox"/>	<input type="checkbox"/>





**Trench:** 118

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.52 m. Max: 0.53 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49485: Northing: 86304)

OS Grid Ref.: SP (Easting: 49444: Northing: 86276)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
11801	Topsoil	Friable dark brown silty clay moderate small stones 0.26 - 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11802	Subsoil	Firm dark orange brown silty sand occasional small stones 0.25 - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11803	Natural	Firm mid brown red clay silt moderate small stones	<input type="checkbox"/>	<input type="checkbox"/>
11804	Treethrow	Curving linear NW-SE sides: steep base: v-shaped dimensions: max breadth 0.4m, max depth 0.21m, max length 1.65m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11805	Fill	Firm dark grey silty clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 119

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.46 m. Max: 0.66 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49489; Northing: 86499)

OS Grid Ref.: SP (Easting: 49539; Northing: 86499)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 12

Context:	Type:	Description:	Excavated:	Finds Present:
11901	Topsoil	Friable dark brown silty sand occasional small stones 0.26 - 0.32m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11902	Subsoil	Firm dark orange brown sandy silt 0.2 - 0.4m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11903	Natural	Friable mid orange red sandy gravel	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 120

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.38 m. Max: 0.48 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49540: Northing: 86491)

OS Grid Ref.: SP (Easting: 49540: Northing: 86441)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 12

Context:	Type:	Description:	Excavated:	Finds Present:
12001	Topsoil	Friable dark brown silty sand occasional small stones 0.26 - 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12002	Subsoil	Firm dark orange brown sandy silt 0.1 - 0.22m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12003	Natural	Friable mid blue green clay sand moderate small stones	<input type="checkbox"/>	<input type="checkbox"/>





**Trench:** 121

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.51 m. Max: 0.55 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49549; Northing: 86490)

OS Grid Ref.: SP (Easting: 49599; Northing: 86490)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 12

Context:	Type:	Description:	Excavated:	Finds Present:
12101	Topsoil	Friable dark brown silty sand 0.26m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12102	Subsoil	Firm dark orange brown sandy silt 0.30m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12103	Natural	Friable mid blue green clay sand moderate small stones	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 122

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.5 m. Max: 0.53 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49498: Northing: 86409)

OS Grid Ref.: SP (Easting: 49548: Northing: 86409)

**Reason:** To evaluate geophysical anomalies south of Heritage Asset 12

Context:	Type:	Description:	Excavated:	Finds Present:
12201	Topsoil	Friable dark brown silty sand occasional small stones 0.2 - 0.33m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12202	Subsoil	Firm dark brown yellow sandy silt occasional small stones 0.18 - 0.32m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12203	Natural	Loose mid brown yellow sandy gravel	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 123

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.55 m. Max: 0.85 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49655: Northing: 86394)

OS Grid Ref.: SP (Easting: 49696: Northing: 86423)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
12301	Topsoil	Firm dark brown sandy clay 0.35 - 0.36m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12302	Subsoil	Firm mid red brown sandy clay 0.19 - 0.5m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12303	Natural	Firm mid brown red sandy clay	<input type="checkbox"/>	<input type="checkbox"/>





**Trench:** 124

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.51 m. Max: 0.7 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49707; Northing: 86453)

OS Grid Ref.: SP (Easting: 49735; Northing: 86412)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
12401	Topsoil	Firm dark brown sandy clay 0.29 - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12402	Subsoil	Firm mid red brown sandy clay 0.22 - 0.4m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12403	Natural	Firm mid brown red sandy clay	<input type="checkbox"/>	<input type="checkbox"/>
12404	Pit	Oval E-W sides: concave base: concave dimensions: max breadth 0.5m, max depth 0.17m, max length 0.84m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12405	Fill	Loose mid red brown sandy silt frequent flecks charcoal	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12406	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 0.83m, max depth 0.12m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12407	Fill	Friable mid grey brown sandy silt 0.12m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 125

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.6 m. Max: 0.8 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49743; Northing: 86496)

OS Grid Ref.: SP (Easting: 49793; Northing: 86496)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 14

Context:	Type:	Description:	Excavated:	Finds Present:
12501	Topsoil	Firm dark brown sandy clay 0.4m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12502	Subsoil	Firm mid red brown sandy clay 0.56m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12503	Alluvium	Firm dark grey clay 0.4m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12504	Natural	Firm mid brown red sandy clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 126

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.34 m. Max: 0.46 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49295: Northing: 86135)

OS Grid Ref.: SP (Easting: 49324: Northing: 86094)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
12601	Topsoil	Friable dark brown silty clay occasional small stones 0.24 - 0.34m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12602	Subsoil	Friable dark yellow brown silty clay occasional small stones 0.22m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12603	Natural	Friable dark yellow clay occasional small stones	<input type="checkbox"/>	<input type="checkbox"/>





**Trench: 127**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.38 m. Max: 0.39 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49352: Northing: 86066)

**OS Grid Ref.: SP** (Easting: 49380: Northing: 86024)

**Reason: To evaluate the archaeological potential of a 'blank' area**

Context:	Type:	Description:	Excavated:	Finds Present:
12701	Topsoil	Dark brown silty clay occasional small stones 0.2 - 0.29m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12702	Subsoil	Friable dark yellow brown silty clay occasional small stones 0.1 - 0.18m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12703	Natural	Dark yellow clay	<input type="checkbox"/>	<input type="checkbox"/>
12704	Ditch	Linear NE-SW sides: near vertical base: v-shaped dimensions: max breadth 0.4m, max depth 0.44m, min length 1.65m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12705	Primary fill	Friable dark grey clay silt moderate small stones 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12706	Secondary fill	Dark yellow grey silty clay occasional small stones 0.16m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12707	Posthole	Circular sides: near vertical base: flat dimensions: max depth 0.06m, max diameter 0.2m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12708	Fill	Dark grey silty clay moderate small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12709	Posthole	Sub-circular sides: steep base: concave dimensions: max depth 0.09m, max diameter 0.29m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12710	Fill	Friable dark grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12711	Ditch	Linear NE-SW sides: steep base: v-shaped dimensions: max breadth 0.2m, max depth 0.04m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12712	Fill	Friable mid grey brown clay sand occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12713	Posthole	Sub-circular sides: asymmetrical base: v-shaped dimensions: max depth 0.34m, max diameter 0.57m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12714	Primary fill	Friable dark grey clay silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12715	Secondary fill	Firm dark grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12716	Furrow	Linear NE-SW	<input type="checkbox"/>	<input type="checkbox"/>
12717	Fill	Friable light yellow brown sandy silt	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 128

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.42 m. Max: 0.53 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49489; Northing: 86155)

OS Grid Ref.: SP (Easting: 49448; Northing: 86126)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
12801	Topsoil	Friable dark brown silty clay 0.2 - 0.33m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12802	Subsoil	Friable mid red brown sandy clay 0.17 - 0.18m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12803	Natural	Friable dark yellow sandy clay	<input type="checkbox"/>	<input type="checkbox"/>
12804	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 0.85m, max depth 0.23m, min length 0.75m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12805	Fill	Friable mid brown silty clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12806	Pit	Circular sides: concave base: flat dimensions: max depth 0.13m, max diameter 0.9m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12807	Fill	Light brown sandy clay occasional flecks charcoal	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12808	Furrow	Linear NW-SE sides: concave base: flat dimensions: max breadth 1.15m, max depth 0.23m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12809	Fill	Friable light brown sandy clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 129**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.49 m. Max: 0.53 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49656: Northing: 86239)

**OS Grid Ref.: SP** (Easting: 49615: Northing: 86211)

**Reason: To evaluate the archaeological potential of a 'blank' area**

Context:	Type:	Description:	Excavated:	Finds Present:
12901	Topsoil	Friable dark brown silty clay 0.3 - 0.31m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12902	Subsoil	Compact light yellow brown silty clay 0.19 - 0.22m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12903	Natural	Compact mid grey red silty clay	<input type="checkbox"/>	<input type="checkbox"/>
12904	Ditch	Curving linear N-S sides: concave base: concave dimensions: max breadth 0.42m, max depth 0.16m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12905	Primary fill	Friable mid red brown sandy clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12906	Secondary fill	Friable mid red brown sandy clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12907	Furrow	Linear NW-SE	<input type="checkbox"/>	<input type="checkbox"/>
12908	Fill	Friable light yellow brown sandy silt	<input type="checkbox"/>	<input type="checkbox"/>





**Trench:** 130

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.44 m. Max: 0.51 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49442: Northing: 86035)

OS Grid Ref.: SP (Easting: 49422: Northing: 85985)

**Reason:** To evaluate geophysical anomaly north of Heritage Asset 15

Context:	Type:	Description:	Excavated:	Finds Present:
13001	Topsoil	Friable dark brown silty clay occasional small stones 0.29 - 0.36m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13002	Subsoil	Friable dark yellow brown silty clay occasional small stones 0.08 - 0.23m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13003	Natural	Friable dark yellow clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench: 131**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.51 m. Max: 0.53 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49587: Northing: 86065)

**OS Grid Ref.: SP** (Easting: 49561: Northing: 86023)

**Reason: To evaluate the archaeological potential of a 'blank' area**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
13101	Topsoil	Dark brown silty clay occasional small stones 0.3 - 0.35m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13102	Subsoil	Friable dark yellow brown silty clay occasional small stones 0.18 - 0.21m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13103	Natural	Dark yellow clay gravel	<input type="checkbox"/>	<input type="checkbox"/>
13104	Furrow	Linear NW-SE sides: 45 degrees base: flat dimensions: max breadth 1.2m, max depth 0.05m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13105	Fill	Friable dark yellow brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 132**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.33 m. Max: 0.4 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49768: Northing: 86119)

**OS Grid Ref.: SP** (Easting: 49768: Northing: 86069)

**Reason: To evaluate geophysical anomalies within Heritage Asset 16**

Context:	Type:	Description:	Excavated:	Finds Present:
13201	Topsoil	Friable dark grey brown silty clay occasional small stones 0.18 - 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13202	Subsoil	Firm mid orange brown silty clay occasional small stones 0.15m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13203	Natural	Firm mid orange grey clay	<input type="checkbox"/>	<input type="checkbox"/>
13204	Ditch	Linear E-W sides: concave base: concave dimensions: max breadth 0.85m, max depth 0.12m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13205	Fill	Firm mid grey brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13206	Ditch	Linear NW-SE sides: 45 degrees base: concave dimensions: max breadth 0.27m, max depth 0.09m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13207	Fill	Firm mid blue grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13208	Ditch	Linear NW-SE sides: asymmetrical base: concave dimensions: max breadth 0.8m, max depth 0.22m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13209	Fill	Firm mid grey brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13210	Ditch	Linear NE-SW sides: asymmetrical base: concave dimensions: max breadth 1.m, max depth 0.34m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13211	Fill	Firm mid grey brown silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13212	Furrow	Linear NE-SW	<input type="checkbox"/>	<input type="checkbox"/>
13213	Fill	Friable light yellow brown sandy silt	<input type="checkbox"/>	<input type="checkbox"/>





**Trench: 133**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.46 m. Max: 0.49 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49455: Northing: 85919)

**OS Grid Ref.: SP** (Easting: 49483: Northing: 85878)

**Reason: To evaluate the archaeological potential of a 'blank' area**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
13301	Topsoil	Friable dark brown silty clay 0.34 - 0.36m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13302	Subsoil	Friable dark yellow sandy clay 0.1 - 0.15m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13303	Pit	Circular sides: concave base: concave dimensions: max depth 0.1m, max diameter 0.3m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13304	Fill	Friable dark black sandy clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13305	Pit	Circular sides: concave base: concave dimensions: max depth 0.1m, max diameter 0.45m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13306	Fill	Friable dark black sandy clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13307	Ditch	Linear sides: steep base: flat dimensions: max breadth 0.35m, max depth 0.13m, min length 0.8m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13308	Fill	Friable mid blue grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13309	Natural	Compact mid blue grey silty clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench: 134**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.54 m. Max: 0.54 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49511: Northing: 85863)

**OS Grid Ref.: SP** (Easting: 49542: Northing: 85824)

**Reason: To evaluate geophysical anomalies within Heritage Asset 15**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
13401	Topsoil	Friable dark brown silty clay 0.25 - 0.27m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13402	Subsoil	Friable mid brown silty clay 0.27 - 0.29m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13403	Natural	Compact mid blue grey silty clay	<input type="checkbox"/>	<input type="checkbox"/>
13404	Posthole	Circular sides: concave base: concave dimensions: max depth 0.1m, max diameter 0.45m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13405	Fill	Compact dark green grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13406	Pit	Circular sides: steep base: concave dimensions: max depth 0.36m, max diameter 0.6m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13407	Fill	Compact mid orange brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13408	Posthole	Circular sides: concave base: concave dimensions: max depth 0.13m, max diameter 0.4m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13409	Fill	Compact mid green grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13410	Pit	Oval N-S sides: concave base: concave dimensions: max breadth 0.55m, max depth 0.19m, max length 0.85m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13411	Fill	Compact mid green grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13412	Posthole	Circular sides: concave base: concave dimensions: max depth 0.14m, max diameter 0.64m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13413	Fill	Compact mid grey brown sandy clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13414	Ditch	Linear N-S sides: U-shaped base: concave dimensions: max breadth 1.m, max depth 0.39m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13415	Primary fill	Compact light green brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13416	Secondary fill	Compact mid grey brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 135

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.43 m. Max: 0.46 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49561: Northing: 85901)

OS Grid Ref.: SP (Easting: 49611: Northing: 85901)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 15

Context:	Type:	Description:	Excavated:	Finds Present:
13501	Topsoil	Friable dark brown sandy clay moderate small-medium stones 0.26 - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13502	Subsoil	Firm light yellow brown silty clay moderate small-medium stones 0.16 - 0.17m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13503	Natural	Compact mid blue grey silty clay	<input type="checkbox"/>	<input type="checkbox"/>





**Trench:** 136

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.47 m. Max: 0.52 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49647; Northing: 85997)

OS Grid Ref.: SP (Easting: 49628; Northing: 85951)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
13601	Topsoil	Friable dark brown sandy clay moderate small-medium stones 0.25 - 0.27m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13602	Subsoil	Firm light orange brown silty clay moderate small-medium stones 0.22 - 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13603	Natural	Compact mid blue grey silty clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 137

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.47 m. Max: 0.51 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49736: Northing: 85975)

OS Grid Ref.: SP (Easting: 49710: Northing: 85932)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 16

Context:	Type:	Description:	Excavated:	Finds Present:
13701	Topsoil	Friable dark brown sandy clay moderate small-medium stones 0.27 - 0.29m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13702	Subsoil	Firm light yellow brown silty clay moderate small-medium stones 0.24 - 0.26m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13703	Natural	Firm mid blue brown clay sand	<input type="checkbox"/>	<input type="checkbox"/>
13704	Pit	Sub-circular sides: steep base: flat dimensions: max depth 0.3m, max diameter 1.25m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13705	Fill	Firm light brown blue silty clay moderate small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13706	Ditch	Linear NW-SE sides: steep base: flat dimensions: max breadth 1.m, max depth 0.46m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13707	Fill	Firm light grey brown silty clay moderate small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 138

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.45 m. Max: 0.54 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49652: Northing: 85889)

OS Grid Ref.: SP (Easting: 49684: Northing: 85850)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 15

Context:	Type:	Description:	Excavated:	Finds Present:
13801	Topsoil	Friable mid brown silty clay 0.27m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13802	Subsoil	Friable dark yellow sandy clay 0.14 - 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13803	Natural	Friable mid grey blue silty clay	<input type="checkbox"/>	<input type="checkbox"/>
13804	Posthole	Circular sides: vertical base: flat dimensions: max depth 0.13m, max diameter 0.3m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13805	Fill	Friable dark yellow sandy clay Burnt deposit	<input checked="" type="checkbox"/>	<input type="checkbox"/>





**Trench: 139**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.48 m. Max: 0.51 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49620: Northing: 85837)

**OS Grid Ref.: SP** (Easting: 49620: Northing: 85787)

**Reason: To evaluate geophysical anomalies within Heritage Asset 15**

Context:	Type:	Description:	Excavated:	Finds Present:
13901	Topsoil	Friable dark brown clay silt occasional small stones 0.11 - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13902	Subsoil	Friable dark yellow brown silty clay occasional small stones 0.1 - 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13903	Natural	Plastic mid green blue clay	<input type="checkbox"/>	<input type="checkbox"/>
13904	Ditch	Linear NW-SE sides: asymmetrical base: concave dimensions: max breadth 1.m, max depth 0.36m, min length 2.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13905	Fill	Friable mid brown grey silty clay occasional small burnt stones, occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13907	Ditch	Curving linear NE-SW sides: concave base: concave dimensions: max breadth 0.7m, max depth 0.25m, min length 1.65m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13908	Fill	Friable mid brown grey silty clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13909	Ditch	Linear NW-SE sides: 45 degrees base: v-shaped dimensions: max breadth 0.59m, max depth 0.26m, min length 2.75m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13910	Fill	Friable mid blue grey silty clay occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13911	Ditch	Linear N-S sides: asymmetrical base: flat dimensions: max breadth 0.25m, max depth 0.12m, min length 4.1m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13912	Fill	Friable mid blue grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13913	Ditch	Curving linear E-W sides: concave base: uneven dimensions: max breadth 0.32m, max depth 0.1m, min length 2.73m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13914	Fill	Friable mid blue grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13915	Ditch	Linear NW-SE sides: asymmetrical base: concave dimensions: max breadth 0.66m, max depth 0.37m, min length 2.15m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13916	Fill	Friable mid blue grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13917	Ditch	Linear NE-SW dimensions: max breadth 0.6m, min length 1.5m	<input type="checkbox"/>	<input type="checkbox"/>
13918	Fill	Friable dark grey brown silty clay	<input type="checkbox"/>	<input type="checkbox"/>
13919	Ditch	Linear NW-SE dimensions: max breadth 0.52m, min length 2.5m	<input type="checkbox"/>	<input type="checkbox"/>
13920	Fill	Friable mid brown yellow silty clay	<input type="checkbox"/>	<input type="checkbox"/>
13921	Ditch	Linear ESE-WNW dimensions: max breadth 0.6m, min length 2.m	<input type="checkbox"/>	<input type="checkbox"/>
13922	Fill	Friable dark grey silty clay occasional small stones	<input type="checkbox"/>	<input type="checkbox"/>



**Trench: 140**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.49 m. Max: 0.5 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49621: Northing: 85817)

**OS Grid Ref.: SP** (Easting: 49670: Northing: 85818)

**Reason: To evaluate geophysical anomalies within Heritage Asset 15**

Context:	Type:	Description:	Excavated:	Finds Present:
14001	Topsoil	Friable dark brown silty clay occasional small stones 0.09 - 0.31m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14002	Subsoil	Dark yellow brown clay sand occasional small stones 0.14 - 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14003	Natural	Friable light yellow clay sand occasional small stones Contained occasional stony patches	<input type="checkbox"/>	<input type="checkbox"/>
14004	Ditch	Linear NE-SW sides: asymmetrical base: flat dimensions: max breadth 0.63m, max depth 0.35m, min length 1.45m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14005	Primary fill	Friable dark blue grey silty clay occasional small stones 0.06m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14006	Secondary fill	Friable dark blue grey silty clay occasional small stones 0.29m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14007	Ditch	Linear NW-SE sides: steep base: flat dimensions: min breadth 0.48m, max depth 0.26m, min length 1.2m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14008	Primary fill	Friable dark blue grey silty clay frequent medium stones 0.16m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14009	Secondary fill	Friable dark blue grey silty clay frequent medium stones 0.1m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14010	Ditch	Linear N-S sides: steep base: v-shaped dimensions: max breadth 0.7m, max depth 0.25m, min length 2.15m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14011	Fill	Light yellow brown silty clay moderate medium stones, occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14012	Furrow	Linear NW-SE	<input type="checkbox"/>	<input type="checkbox"/>
14013	Fill	Friable light yellow brown sandy silt	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 141

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.42 m. Max: 0.5 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49657; Northing: 85793)

OS Grid Ref.: SP (Easting: 49703; Northing: 85773)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 15

Context:	Type:	Description:	Excavated:	Finds Present:
14101	Topsoil	Friable dark brown sandy clay moderate small-medium stones 0.23 - 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14102	Subsoil	Firm light yellow brown silty clay moderate small-medium stones 0.19 - 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14103	Natural	Light yellow sandy clay	<input type="checkbox"/>	<input type="checkbox"/>





**Trench: 142**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.43 m. Max: 0.52 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49748: Northing: 85864)

**OS Grid Ref.: SP** (Easting: 49721: Northing: 85821)

**Reason: To evaluate the archaeological potential of a 'blank' area**

Context:	Type:	Description:	Excavated:	Finds Present:
14201	Topsoil	Friable dark brown sandy silt 0.24 - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14202	Subsoil	Firm mid red brown sandy clay 0.13 - 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14203	Natural	Firm light yellow brown clay	<input type="checkbox"/>	<input type="checkbox"/>
14204	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 1.m, max depth 0.58m, min length 1.8m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14205	Primary fill	Firm light brown grey silty clay 0.18m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14206	Secondary fill	Firm dark orange grey silty clay 0.15m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14207	Tertiary fill	Friable mid red grey silty clay 0.15m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14208	Furrow	Linear NW-SE sides: 45 degrees base: concave dimensions: max breadth 1.m, max depth 0.12m, min length 1.05m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14209	Fill	Friable mid red brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14210	Ditch	Linear NW-SE sides: asymmetrical base: concave dimensions: max breadth 1.m, max depth 0.56m, min length 2.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14211	Primary fill	Firm mid grey brown silty clay 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14212	Secondary fill	Firm mid red orange silty clay 0.25m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14213	Furrow	Linear NW-SE sides: concave base: flat dimensions: max breadth 0.8m, max depth 0.14m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14214	Fill	Firm mid grey brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14215	Ditch	Linear N-S sides: concave base: concave dimensions: max breadth 0.76m, max depth 0.42m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14216	Fill	Friable mid red grey silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14217	Ditch	Linear N-S sides: concave base: flat dimensions: max breadth 0.5m, max depth 0.34m, min length 0.6m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14218	Fill	Friable mid red grey silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



**Trench:** 143

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.48 m. Max: 0.57 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49589; Northing: 85745)

OS Grid Ref.: SP (Easting: 49617; Northing: 85703)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
14301	Topsoil	Friable dark brown silty clay 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14302	Subsoil	Friable mid brown silty clay 0.27m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14303	Natural	Compact mid red brown silty clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench: 144**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.45 m. Max: 0.6 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49686: Northing: 85687)

**OS Grid Ref.: SP** (Easting: 49686: Northing: 85637)

**Reason: To evaluate geophysical anomalies within Heritage Asset 16**

Context:	Type:	Description:	Excavated:	Finds Present:
14401	Topsoil	Firm mid grey brown silty clay moderate small-medium stones 0.3 - 0.34m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14402	Subsoil	Firm mid orange brown silty clay occasional small stones 0.15 - 0.26m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14403	Natural	Firm mid orange brown clay moderate medium stones	<input type="checkbox"/>	<input type="checkbox"/>
14404	Ditch	Linear NW-SE sides: convex base: concave dimensions: max breadth 2.7m, max depth 0.67m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14405	Secondary fill	Firm mid orange grey silty clay occasional medium stones 0.38m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14406	Primary fill	Firm mid grey brown silty clay 0.41m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14409	Ditch	Linear NE-SW sides: U-shaped base: concave dimensions: max breadth 1.5m, max depth 0.52m, min length 0.85m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14410	Fill	Firm mid brown grey silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14411	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 1.8m, max depth 0.4m, min length 0.85m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14412	Fill	Firm mid brown grey silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>





**Trench: 145**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.55 m. Max: 0.65 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49766: Northing: 85771)

**OS Grid Ref.: SP** (Easting: 49816: Northing: 85771)

**Reason: To evaluate geophysical anomalies within Heritage Asset 16 and 17**

Context:	Type:	Description:	Excavated:	Finds Present:
14501	Topsoil	Mid brown silty clay 0.29 - 0.36m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14502	Subsoil	Mid red brown silty clay 0.22 - 0.24m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14503	Natural	Light yellow sandy clay	<input type="checkbox"/>	<input type="checkbox"/>
14504	Ditch	Linear N-S sides: concave base: flat dimensions: max breadth 2.39m, max depth 0.4m, min length 0.8m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14505	Fill	Friable mid red brown sandy clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14506	Ditch	Linear N-S sides: concave base: flat dimensions: max breadth 0.8m, max depth 0.66m, min length 2.8m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14507	Fill	Mid red brown sandy clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14508	Ditch	Linear N-S sides: concave base: flat dimensions: max breadth 0.95m, max depth 0.24m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14509	Fill	Dark yellow sandy clay occasional small-large stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14510	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 1.m, max depth 0.27m, min length 3.6m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14511	Fill	Friable dark yellow sandy clay occasional small-large stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



**Trench:** 146

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.56 m. Max: 0.6 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49824: Northing: 85747)

OS Grid Ref.: SP (Easting: 49824: Northing: 85697)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 17

Context:	Type:	Description:	Excavated:	Finds Present:
14601	Topsoil	Friable dark brown sandy clay moderate small-medium stones 0.24 - 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14602	Subsoil	Firm light yellow brown silty clay moderate small-medium stones 0.28 - 0.36m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14603	Natural	Firm mid yellow brown clay silt	<input type="checkbox"/>	<input type="checkbox"/>



**Trench: 147**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.25 m. Max: 0.3 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49976: Northing: 86108)

**OS Grid Ref.: SP** (Easting: 49948: Northing: 86066)

**Reason: To evaluate geophysical anomalies within Heritage Asset 18**

Context:	Type:	Description:	Excavated:	Finds Present:
14701	Topsoil	Firm dark brown grey silty clay 0.30-0.25m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14702	Natural	Plastic mid blue brown clay	<input type="checkbox"/>	<input type="checkbox"/>
14703	Ditch	Linear NW-SE sides: steep base: concave dimensions: max breadth 1.m, max depth 0.77m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14704	Secondary fill	Firm mid grey brown silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14705	Tertiary fill	Firm dark brown grey clay silt occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14706	Ditch	Linear E-W sides: steep base: flat dimensions: max breadth 0.72m, max depth 0.41m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14707	Fill	Loose mid grey silty clay occasional small-large stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14708	Ditch	Linear NW-SE sides: steep dimensions: max breadth 2.07m, min depth 1.13m, min length 1.8m Full profile not excavated - base below 1.2m from top of baulk.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14709	Primary fill	Firm mid orange brown silty clay occasional flecks charcoal, occasional small-large stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14710	Secondary fill	Firm mid brown grey silty clay occasional flecks charcoal, occasional small-large stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14711	Tertiary fill	Firm light grey brown silty clay occasional flecks charcoal, occasional small-large stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>





**Trench: 148**

**Max Dimensions: Length: 55.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.51 m. Max: 0.63 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49964: Northing: 86062)

**OS Grid Ref.: SP** (Easting: 49964: Northing: 86007)

**Reason: To evaluate geophysical anomalies within Heritage Asset 18. Trench was extended by 5m to NE.**

Context:	Type:	Description:	Excavated:	Finds Present:
14801	Topsoil	Friable dark brown grey silty clay occasional small stones 0.22-0.27m thick..	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14802	Subsoil	Friable mid grey brown silty clay occasional small stones 0.22-0.27m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14803	Natural	Firm light yellow grey silty clay moderate small chalk, occasional small-medium stones .	<input type="checkbox"/>	<input type="checkbox"/>
14804	Ditch	Linear NE-SW sides: stepped base: flat dimensions: max breadth 0.61m, max depth 0.22m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14805	Fill	Friable mid grey brown silty clay occasional small chalk, occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14806	Fill	Friable mid grey brown silty clay occasional flecks charcoal, moderate small-medium stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14807	Ditch	Curving linear NE-SW sides: stepped base: flat dimensions: max breadth 1.73m, max depth 0.46m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14808	Fill	Friable light yellow brown silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14809	Fill	Friable mid grey brown silty clay moderate flecks charcoal, moderate small-medium stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14810	Ditch	Linear ESE-WNW sides: convex base: concave dimensions: max breadth 0.7m, max depth 0.4m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14811	Fill	Friable dark grey brown clay silt occasional flecks chalk, occasional flecks charcoal, occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14812	Fill	Friable mid brown yellow clay silt occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14813	Ditch	Linear ESE-WNW sides: concave base: uneven dimensions: max breadth 2.24m, max depth 0.41m, min length 2.2m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14814	Fill	Firm light brown yellow clay silt occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14815	Hollow way	Friable mid grey brown silty clay occasional flecks charcoal, occasional small stones Layer aligned WNW-ESE. Shallow U-shaped profile.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14816	Ditch	Linear NW-SE sides: U-shaped base: concave dimensions: max breadth 0.7m, max depth 0.35m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14817	Fill	Friable mid brown grey clay moderate small-medium stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



**Trench: 152**

**Max Dimensions: Length: 40.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.48 m. Max: 0.52 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50066: Northing: 86391)

**OS Grid Ref.: SP** (Easting: 50066: Northing: 86352)

**Reason: To evaluate geophysical anomalies within Heritage Asset 19**

Context:	Type:	Description:	Excavated:	Finds Present:
15201	Topsoil	Loose mid grey brown silty clay 0.35 - 0.4m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15202	Subsoil	Friable mid orange brown silty clay 0.12 - 0.13m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15203	Natural	Firm light yellow orange sandy clay occasional medium stones	<input type="checkbox"/>	<input type="checkbox"/>
15208	Furrow	Linear NW-SE dimensions: max breadth 3.5m, max depth 0.2m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15209	Fill	Firm mid blue brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 153**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.48 m. Max: 0.58 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50066: Northing: 86474)

**OS Grid Ref.: SP** (Easting: 50116: Northing: 86474)

**Reason: To evaluate geophysical anomalies within Heritage Asset 20**

Context:	Type:	Description:	Excavated:	Finds Present:
15301	Topsoil	Friable mid grey brown silty sand 0.25 - 0.38m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15302	Subsoil	Friable mid orange brown silty sand 0.13 - 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15303	Natural	Firm light yellow orange sandy clay occasional medium stones	<input type="checkbox"/>	<input type="checkbox"/>
15304	Ditch	Linear NW-SE sides: steep base: concave dimensions: max breadth 0.5m, max depth 0.21m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15305	Fill	Firm mid grey brown sandy silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>





**Trench: 154**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.5 m. Max: 0.55 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50234: Northing: 86276)

**OS Grid Ref.: SP** (Easting: 50281: Northing: 86260)

**Reason: To evaluate the archaeological potential of a 'blank' area**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
15401	Topsoil	Loose dark orange brown silty clay frequent small-medium stones 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15402	Subsoil	Mid orange brown silty clay occasional small-medium stones 0.2 - 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15403	Natural	Firm light yellow brown clay occasional small-medium stones	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 155

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.55 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50382; Northing: 86332)

OS Grid Ref.: SP (Easting: 50423; Northing: 86303)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
15501	Topsoil	Loose dark orange brown silty clay frequent small-medium stones 0.3 - 0.35m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15502	Subsoil	Firm mid orange brown silty clay occasional small-medium stones 0.1 - 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15503	Natural	Firm light yellow brown clay occasional small-medium stones	<input type="checkbox"/>	<input type="checkbox"/>
15504	Furrow	Linear NE-SW sides: 45 degrees base: flat dimensions: max breadth 1.m, max depth 0.05m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15505	Fill	Firm mid orange brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 156**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.35 m. Max: 0.45 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50033: Northing: 85565)

**OS Grid Ref.: SP** (Easting: 50033: Northing: 85515)

**Reason: To evaluate geophysical anomalies within Heritage Asset 22**

Context:	Type:	Description:	Excavated:	Finds Present:
15601	Topsoil	Friable mid brown grey silty clay occasional small stones 0.2 - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15602	Subsoil	Friable mid orange brown silty clay occasional small stones 0.15m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15603	Natural	Firm mid orange brown clay gravel frequent small stones	<input type="checkbox"/>	<input type="checkbox"/>
15604	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 0.66m, max depth 0.3m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15605	Fill	Firm mid red grey clay silt occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15606	Ditch	Linear NE-SW sides: asymmetrical base: concave dimensions: max breadth 2.m, max depth 0.48m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15607	Secondary fill	Firm mid orange brown silty clay occasional medium stones 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15608	Primary fill	Firm mid grey brown silty clay occasional medium stones 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15609	Pit	Rectangular sides: near vertical base: concave dimensions: max breadth 0.95m, max depth 0.48m, min length 0.85m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15610	Secondary fill	Firm mid green brown silty clay occasional medium stones 0.35m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15611	Primary fill	Firm mid brown grey silty clay occasional small stones 0.38m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15612	Ditch	Linear NW-SE sides: 45 degrees base: concave dimensions: max breadth 1.m, max depth 0.32m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15613	Fill	Firm dark red brown silty clay occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
15614	Quarry	sides: asymmetrical dimensions: min breadth 2.m, min depth 0.8m, min length 12.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15615	Fill	Firm dark grey brown silty clay occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>





**Trench: 157**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.46 m. Max: 0.48 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50178: Northing: 85500)

**OS Grid Ref.: SP** (Easting: 50209: Northing: 85461)

**Reason: To evaluate geophysical anomalies within Heritage Asset 22**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
15616	Buried topsoil	Firm mid grey brown clay silt 0.46m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15701	Topsoil	Loose dark brown silty silt 0.26m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15702	Subsoil	Loose mid red brown silty sand 0.22m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15703	Natural	Firm mid yellow grey silty sand	<input type="checkbox"/>	<input type="checkbox"/>
15704	Furrow	Linear NW-SE sides: 45 degrees base: flat dimensions: max breadth 1.m, max depth 0.2m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15705	Fill	Loose dark brown silty sand	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 158**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.5 m. Max: 0.6 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49991: Northing: 85399)

**OS Grid Ref.: SP** (Easting: 49991: Northing: 85349)

**Reason: To investigate geophysical anomaly associated with historic field boundary**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
15801	Topsoil	Friable dark grey silty clay 0.35 - 0.4m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15802	Subsoil	Loose mid orange sandy silt 0.25 - 0.1m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15803	Natural	Compact mid orange brown sand	<input type="checkbox"/>	<input type="checkbox"/>
15804	Furrow	Linear NE-SW sides: 45 degrees base: flat dimensions: max breadth 1.7m, max depth 0.2m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15805	Fill	Loose mid orange sandy silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15806	Ditch	Linear E-W dimensions: min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15807	Fill	Loose mid orange sandy silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15808	Posthole	Circular dimensions: max diameter 0.3m Modern - contained modern wooden posts	<input type="checkbox"/>	<input type="checkbox"/>
15809	Fill	Loose mid orange sandy silt	<input type="checkbox"/>	<input type="checkbox"/>



**Trench: 159**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.4 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50006: Northing: 85317)

**OS Grid Ref.: SP** (Easting: 49968: Northing: 85285)

**Reason: To evaluate the archaeological potential of a 'blank' area**

Context:	Type:	Description:	Excavated:	Finds Present:
15901	Topsoil	Friable dark grey brown sandy silt 0.25 - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15902	Subsoil	Friable mid yellow brown clay silt 0.1 - 0.15m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15903	Natural	Friable mid orange silty sand moderate small-medium stones	<input type="checkbox"/>	<input type="checkbox"/>
15904	Furrow	Linear NW-SE sides: 45 degrees base: flat dimensions: max breadth 2.5m, max depth 0.25m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15905	Fill	Friable mid yellow brown silty sand	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15906	Treethrow	Irregular NE-SW sides: assymetrical base: uneven dimensions: min breadth 0.65m, min depth 0.2m, min length 0.85m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15907	Fill	Friable mid yellow brown silty sand	<input checked="" type="checkbox"/>	<input type="checkbox"/>





**Trench: 160**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.46 m. Max: 0.48 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50091: Northing: 85328)

**OS Grid Ref.: SP** (Easting: 50053: Northing: 85295)

**Reason: To investigate geophysical anomaly associated with historic field boundary**

Context:	Type:	Description:	Excavated:	Finds Present:
16001	Topsoil		<input checked="" type="checkbox"/>	<input type="checkbox"/>
16002	Subsoil		<input checked="" type="checkbox"/>	<input type="checkbox"/>
16003	Natural		<input type="checkbox"/>	<input type="checkbox"/>
16004	Treethrow	Oval sides: asymmetrical base: concave dimensions: max breadth 0.8m, max depth 0.2m, max length 1.33m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16005	Fill	Firm mid grey brown silty sand occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16006	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 1.16m, max depth 0.54m, min length 2.1m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16007	Fill	Loose dark brown silty sand Contained fragments of broken land drain, a sherd of glass and metal likely to be barbed wire.	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 161

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.45 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50039; Northing: 85201)

OS Grid Ref.: SP (Easting: 50077; Northing: 85233)

**Reason:** To investigate potential of area

Context:	Type:	Description:	Excavated:	Finds Present:
16101	Topsoil	Firm mid grey brown silty clay moderate small stones 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16102	Subsoil	Firm mid brown yellow silty clay moderate small stones 0.1m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16103	Natural	Firm mid yellow orange clay moderate medium stones	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 162

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.45 m. Max: 1.1 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50100: Northing: 85228)

OS Grid Ref.: SP (Easting: 50132: Northing: 85190)

**Reason:** To investigate potential of area

Context:	Type:	Description:	Excavated:	Finds Present:
16201	Topsoil	Friable mid grey brown silty sand occasional small stones 0.3m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16202	Make up layer	Firm mid yellow orange clay moderate small stones <0.65m thick. Upcast from adjacent modern pond.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16203	Buried topsoil	Firm dark grey brown silty sand occasional small stones 0.1m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16204	Natural	Firm mid yellow orange clay sand moderate small stones	<input type="checkbox"/>	<input type="checkbox"/>
16205	Ditch	Linear N-S sides: 45 degrees base: concave dimensions: max breadth 0.94m, max depth 0.32m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16206	Fill	Friable mid brown grey clay sand moderate small stones 0.32m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 164**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.36 m. Max: 0.39 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50183; Northing: 85261)

**OS Grid Ref.: SP** (Easting: 50211; Northing: 85220)

**Reason: To investigate potential of area**

Context:	Type:	Description:	Excavated:	Finds Present:
16401	Topsoil	Friable mid grey brown silty clay occasional small stones 0.15m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16402	Subsoil	Firm mid yellow brown silty clay moderate small stones 0.2m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16403	Natural	Firm mid orange yellow clay moderate medium stones	<input type="checkbox"/>	<input type="checkbox"/>
16404	Furrow	Linear NE-SW	<input type="checkbox"/>	<input type="checkbox"/>
16405	Fill	Friable light yellow brown sandy silt	<input type="checkbox"/>	<input type="checkbox"/>





**Trench:** 165

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.34 m. Max: 0.45 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50311; Northing: 85272)

OS Grid Ref.: SP (Easting: 50267; Northing: 85247)

**Reason:** To investigate potential of area

Context:	Type:	Description:	Excavated:	Finds Present:
16501	Topsoil	Friable mid grey brown silty clay occasional small stones 0.2m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16502	Subsoil	Firm mid orange brown silty clay occasional small stones 0.2m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16503	Natural	Firm mid yellow orange clay moderate medium stones	<input type="checkbox"/>	<input type="checkbox"/>
16504	Furrow	Linear NE-SW	<input type="checkbox"/>	<input type="checkbox"/>
16505	Fill	Friable light yellow brown sandy silt	<input type="checkbox"/>	<input type="checkbox"/>



**Trench: 166**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.46 m. Max: 0.55 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50293: Northing: 85335)

**OS Grid Ref.: SP** (Easting: 45032: Northing: 85295)

**Reason: To investigate potential of area**

Context:	Type:	Description:	Excavated:	Finds Present:
16601	Topsoil	Friable mid grey brown silty clay occasional small stones 0.25m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16602	Subsoil	Firm mid orange grey silty clay moderate small stones 0.25m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16603	Natural	Firm mid yellow orange clay moderate medium stones	<input type="checkbox"/>	<input type="checkbox"/>
16604	Ditch	Linear NE-SW sides: 45 degrees base: concave dimensions: max breadth 0.75m, max depth 0.31m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16605	Fill	Firm mid blue grey silty clay 0.31m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16606	Ditch	Curving linear N-S sides: U-shaped base: concave dimensions: max breadth 0.42m, max depth 0.19m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16607	Fill	Firm mid grey brown silty clay 0.19m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16608	Furrow	Linear NE-SW	<input type="checkbox"/>	<input type="checkbox"/>
16609	Fill	Friable light yellow brown sandy silt	<input type="checkbox"/>	<input type="checkbox"/>



**Trench: 167**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.47 m. Max: 0.55 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50150: Northing: 85107)

**OS Grid Ref.: SP** (Easting: 50176: Northing: 85065)

**Reason: To evaluate geophysical anomalies within Heritage Asset 1**

Context:	Type:	Description:	Excavated:	Finds Present:
16701	Topsoil	Friable dark brown silty clay 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16702	Subsoil	Firm mid red brown silty clay 0.23m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16703	Natural	Firm light brown yellow clay	<input type="checkbox"/>	<input type="checkbox"/>
16704	Ditch	Curving linear sides: concave base: concave dimensions: max breadth 1.4m, max depth 0.38m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16705	Primary fill	Compact mid red grey clay silt 0.15m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
16706	Secondary fill	Compact mid brown silty clay 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16707	Ditch	Curving linear sides: concave base: concave dimensions: max breadth 0.9m, max depth 0.18m, min length 0.6m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16708	Fill	Compact mid brown silty clay occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
16709	Ditch	Curving linear sides: concave base: concave dimensions: max breadth 0.8m, max depth 0.18m, min length 0.93m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16710	Fill	Compact mid brown silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
16711	Land drain	Linear N-S dimensions: max breadth 0.3m, min length 2.m	<input type="checkbox"/>	<input type="checkbox"/>
16712	Fill	Firm mid grey brown silty clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench: 168**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.45 m. Max: 0.5 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50206: Northing: 85068)

**OS Grid Ref.: SP** (Easting: 50237: Northing: 85029)

**Reason: To evaluate geophysical anomalies within Heritage Asset 23**

Context:	Type:	Description:	Excavated:	Finds Present:
16801	Topsoil	Friable dark brown grey clay silt 0.3 - 0.35m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16802	Subsoil	Firm mid red brown silty clay 0.15m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16803	Natural	Firm light brown yellow silty clay	<input type="checkbox"/>	<input type="checkbox"/>
16804	Ditch	Linear E-W sides: steep dimensions: max breadth 2.34m, min depth 0.66m, min length 1.m Not bottomed due to flooding	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16805	Fill	Firm mid brown grey silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
16806	Furrow	Linear NE-SW dimensions: max breadth 1.m, min length 2.m	<input type="checkbox"/>	<input type="checkbox"/>
16807	Fill	Firm mid brown silty clay	<input type="checkbox"/>	<input type="checkbox"/>





**Trench: 169**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.49 m. Max: 0.5 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50272: Northing: 84970)

**OS Grid Ref.: SP** (Easting: 50275: Northing: 84920)

**Reason: To evaluate geophysical anomalies within Heritage Asset 23**

Context:	Type:	Description:	Excavated:	Finds Present:
16901	Topsoil	Friable dark brown silty sand moderate small stones 0.26m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16902	Subsoil	Firm mid yellow brown sandy clay 0.23m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16903	Natural	Friable dark brown red clay sand	<input type="checkbox"/>	<input type="checkbox"/>
16904	Ditch	Linear NE-SW sides: concave base: flat dimensions: max breadth 0.86m, max depth 0.1m, min length 3.1m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16905	Fill	Firm mid brown orange sandy silt occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 170

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.48 m. Max: 0.56 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50413: Northing: 85117)

OS Grid Ref.: SP (Easting: 50413: Northing: 85067)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
17001	Topsoil	Friable dark brown silty clay 0.2m - 0.26m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17002	Subsoil	Firm mid red brown silty clay 0.28m - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17003	Natural	Firm mid brown sandy clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 171

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.48 m. Max: 0.55 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50448; Northing: 84988)

OS Grid Ref.: SP (Easting: 50483; Northing: 84953)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
17101	Topsoil	Friable dark brown silty clay 0.28m - 0.31m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17102	Subsoil	Firm mid red brown silty clay 0.16m - 0.22m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17103	Natural	Firm mid brown sandy clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 172

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.43 m. Max: 0.45 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50312; Northing: 84853)

OS Grid Ref.: SP (Easting: 50311; Northing: 84803)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 2

Context:	Type:	Description:	Excavated:	Finds Present:
17201	Topsoil	Friable dark brown silty clay occasional small stones 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17202	Subsoil	Friable dark yellow brown clay sand occasional small stones 0.15m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17203	Natural	Friable mid green brown clay sand	<input type="checkbox"/>	<input type="checkbox"/>
17204	Ditch	Linear ENE-WSW sides: steep base: concave dimensions: max breadth 1.5m, max depth 0.6m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17205	Primary fill	Plastic dark grey clay sand occasional small stones 0.08m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17206	Secondary fill	Friable dark brown grey sandy clay occasional flecks charcoal, occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17207	Furrow	Linear NW-SE	<input type="checkbox"/>	<input type="checkbox"/>
17208	Fill	Friable light yellow brown sandy silt	<input type="checkbox"/>	<input type="checkbox"/>





**Trench:** 173

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.6 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49802: Northing: 85448)

OS Grid Ref.: SP (Easting: 49829: Northing: 85406)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
17301	Topsoil	Friable dark brown grey clay silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17302	Subsoil	Firm mid orange brown clay silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17303	Natural	Firm mid orange blue clay silt	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 174

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.45 m. Max: 0.57 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49661: Northing: 85714)

OS Grid Ref.: SP (Easting: 49635: Northing: 85672)

**Reason:** To evaluate geophysical anomaly between Heritage Assets 15 and 16

Context:	Type:	Description:	Excavated:	Finds Present:
17401	Topsoil	Friable dark brown silty clay 0.2 - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17402	Subsoil	Friable dark red brown sandy clay 0.12 - 0.19m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17403	Natural	Friable mid brown sandy clay	<input type="checkbox"/>	<input type="checkbox"/>
17404	Pit	Circular sides: concave base: flat dimensions: max depth 0.12m, max diameter 0.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17405	Fill	Friable mid brown sandy clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17406	Ditch	Linear N-S sides: concave base: flat dimensions: max breadth 1.9m, max depth 0.1m, min length 0.9m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17407	Fill	Friable mid brown sandy clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



**Trench: 175**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.53 m. Max: 0.55 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 49795: Northing: 85576)

**OS Grid Ref.: SP** (Easting: 49795: Northing: 85526)

**Reason: To evaluate the archaeological potential of a 'blank' area**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
17501	Topsoil	Firm mid grey brown silty clay 0.24 - 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17502	Subsoil	Firm mid orange brown silty clay occasional small stones 0.2 - 0.26m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17503	Natural	Firm mid orange brown clay moderate medium stones	<input type="checkbox"/>	<input type="checkbox"/>
17504	Ditch	Linear E-W sides: concave base: flat dimensions: max breadth 0.9m, max depth 0.23m, min length 1.2m Contained a ceramic land drain at the base	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17505	Primary fill	Firm mid yellow silty clay occasional small stones 0.23m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17506	Secondary fill	Firm mid grey silty clay 0.1m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17508	Land drain	Linear E-W dimensions: max breadth 0.2m, min length 2.m	<input type="checkbox"/>	<input type="checkbox"/>
17509	Fill	A ceramic land drain pipe	<input type="checkbox"/>	<input type="checkbox"/>
17510	Ditch	Linear E-W sides: concave base: uneven dimensions: max breadth 1.m, max depth 0.2m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17511	Fill	Firm yellow silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17512	Land drain	Linear NE-SW sides: vertical dimensions: max breadth 0.1m, max depth 0.15m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17507	Fill	Firm mid grey silty clay A ceramic land drain pipe	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 176

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.46 m. Max: 0.51 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49504: Northing: 86907)

OS Grid Ref.: SP (Easting: 49553: Northing: 86898)

**Reason:** To evaluate the archaeological potential of a 'blank' area.

Context:	Type:	Description:	Excavated:	Finds Present:
17601	Topsoil	Friable dark grey clay silt occasional small-medium stones 0.27-0.25m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17602	Subsoil	Friable mid grey brown silty clay occasional small-medium stones 0.19m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17603	Natural	Firm light yellow grey clay occasional medium sand, moderate small-large stones	<input type="checkbox"/>	<input type="checkbox"/>
17604	Ditch	Linear N-S sides: concave base: concave dimensions: max breadth 1.18m, max depth 0.47m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17605	Fill	Loose mid brown grey silty clay occasional flecks charcoal, occasional small-medium stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
17606	Furrow	Linear N-S	<input type="checkbox"/>	<input type="checkbox"/>
17607	Fill	Firm mid brown silty clay	<input type="checkbox"/>	<input type="checkbox"/>





**Trench:** 177

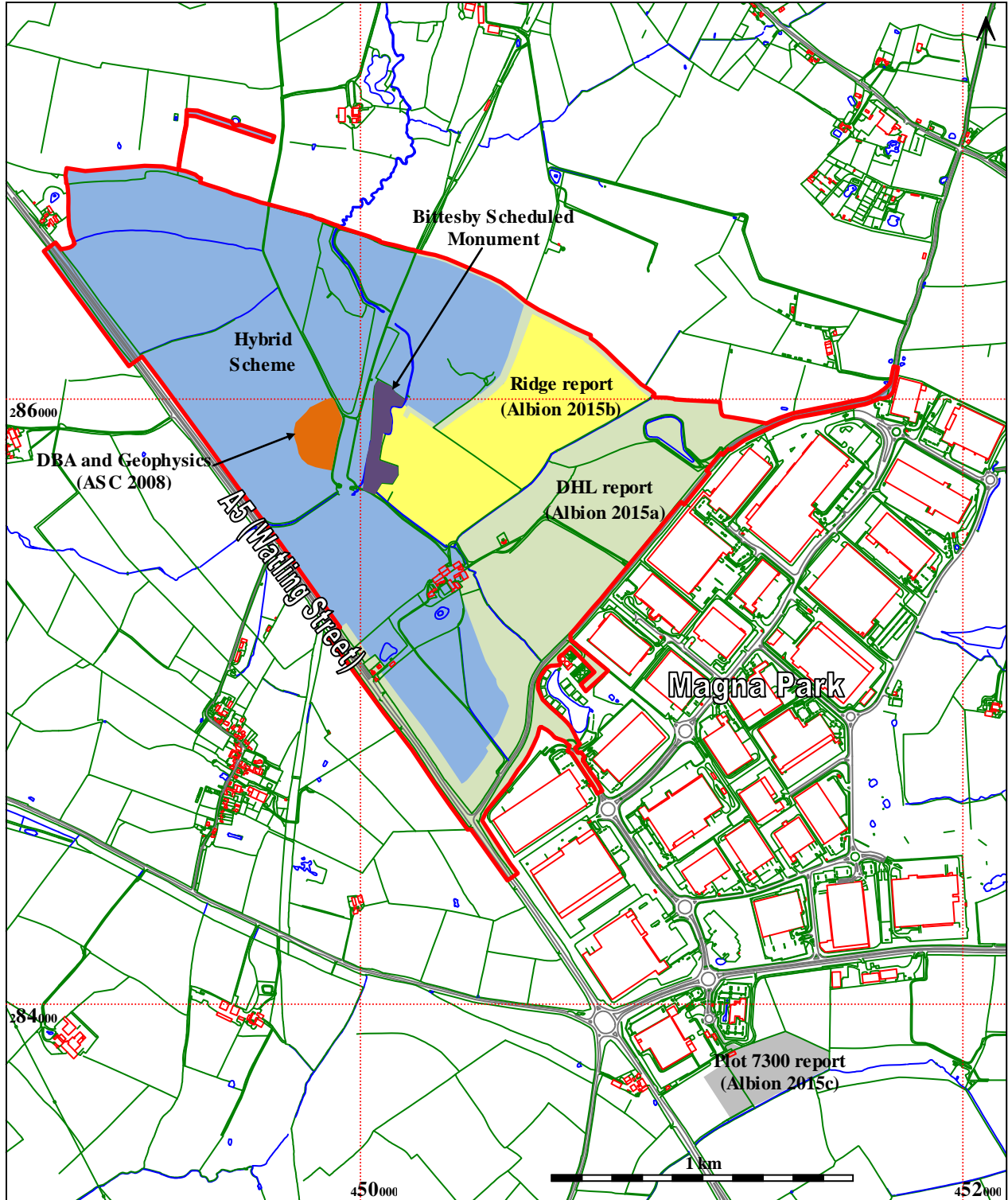
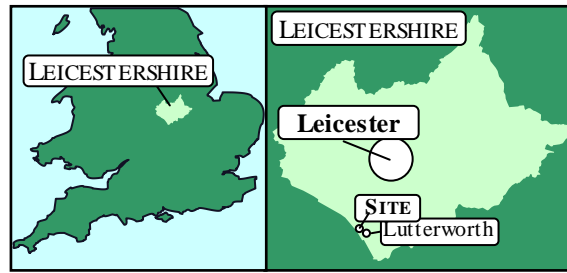
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**Co-ordinates:** OS Grid Ref.: SP (Easting: 49626: Northing: 86882)

OS Grid Ref.: SP (Easting: 49675: Northing: 86873)

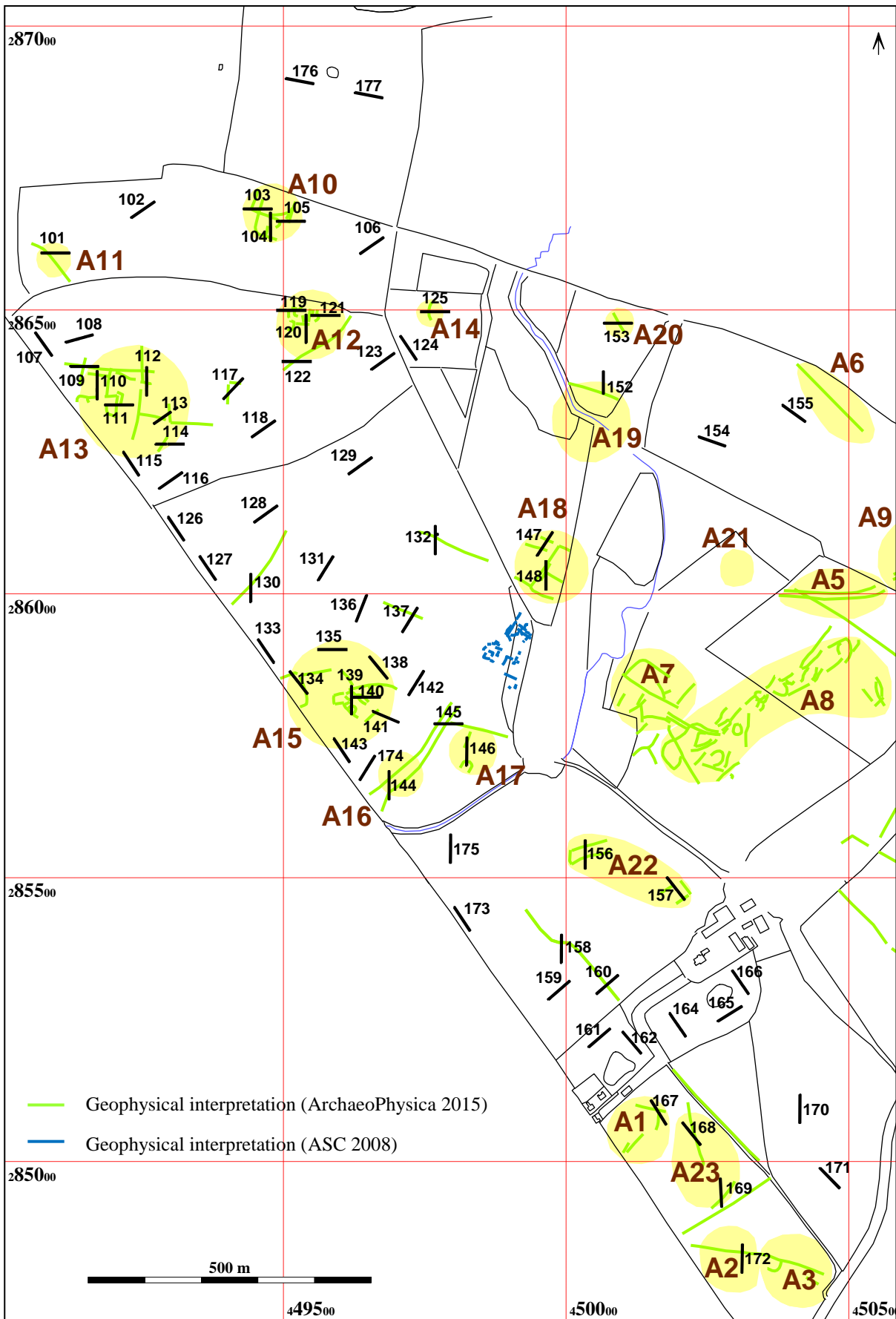
**Reason:** To evaluate the archaeological potential of a 'blank' area.

Context:	Type:	Description:	Excavated:	Finds Present:
17701	Topsoil	Friable dark grey silty clay occasional small-large stones 0.27-0.25m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17702	Subsoil	Friable mid grey brown clay silt occasional small-medium stones 0.18m thick.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17703	Natural	Firm light yellow grey clay moderate small-large stones	<input type="checkbox"/>	<input type="checkbox"/>
17704	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 0.55m, max depth 0.24m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17705	Fill	Firm mid brown grey silty clay occasional flecks charcoal, occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17706	Furrow	Linear N-S sides: U-shaped base: concave dimensions: max breadth 1.95m, max depth 0.06m, min length 1.9m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17707	Fill	Friable mid grey brown clay silt occasional small-medium stones General number for sole fill of two furrows.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

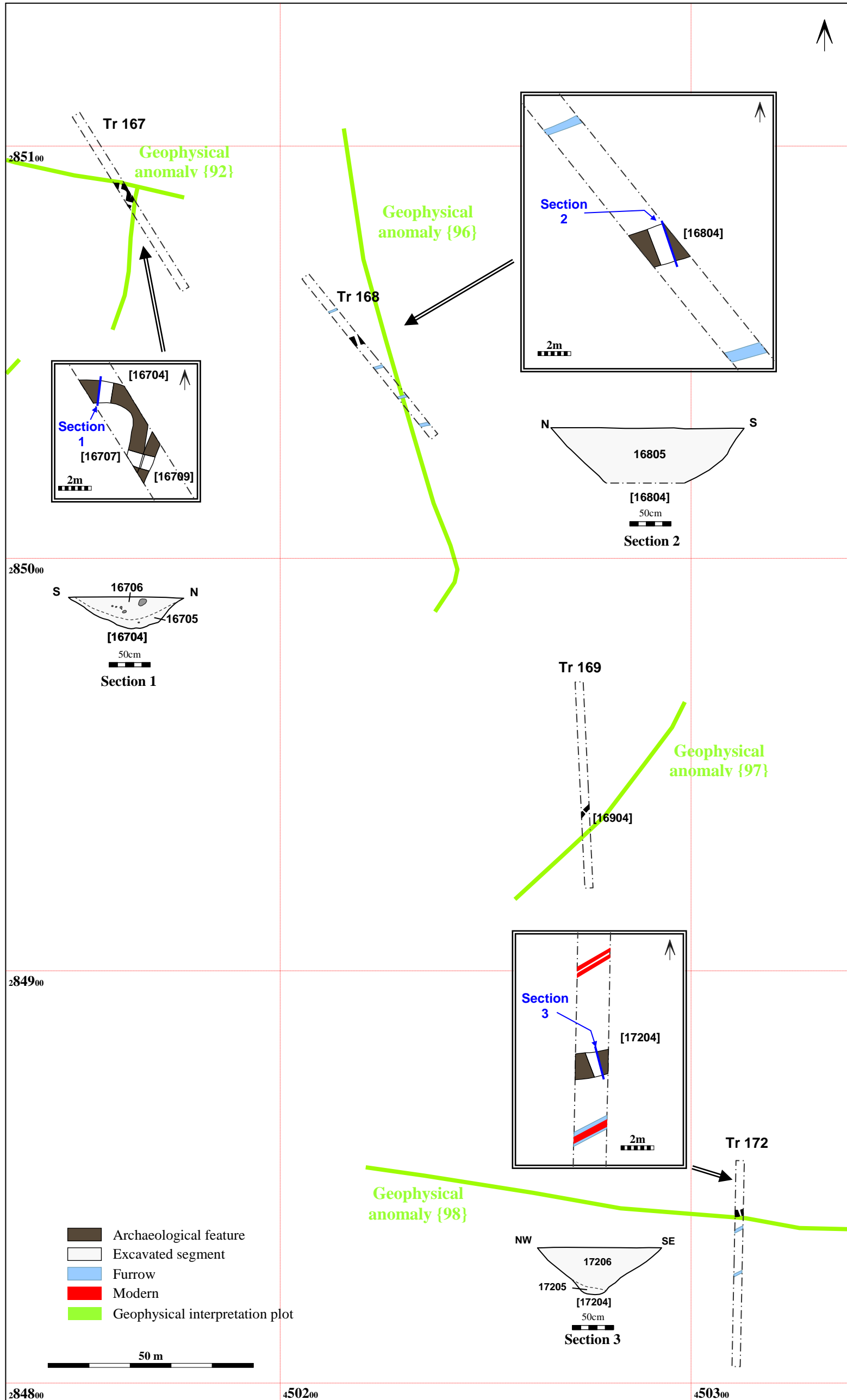


**Figure 1: Site location and areas of associated reports**

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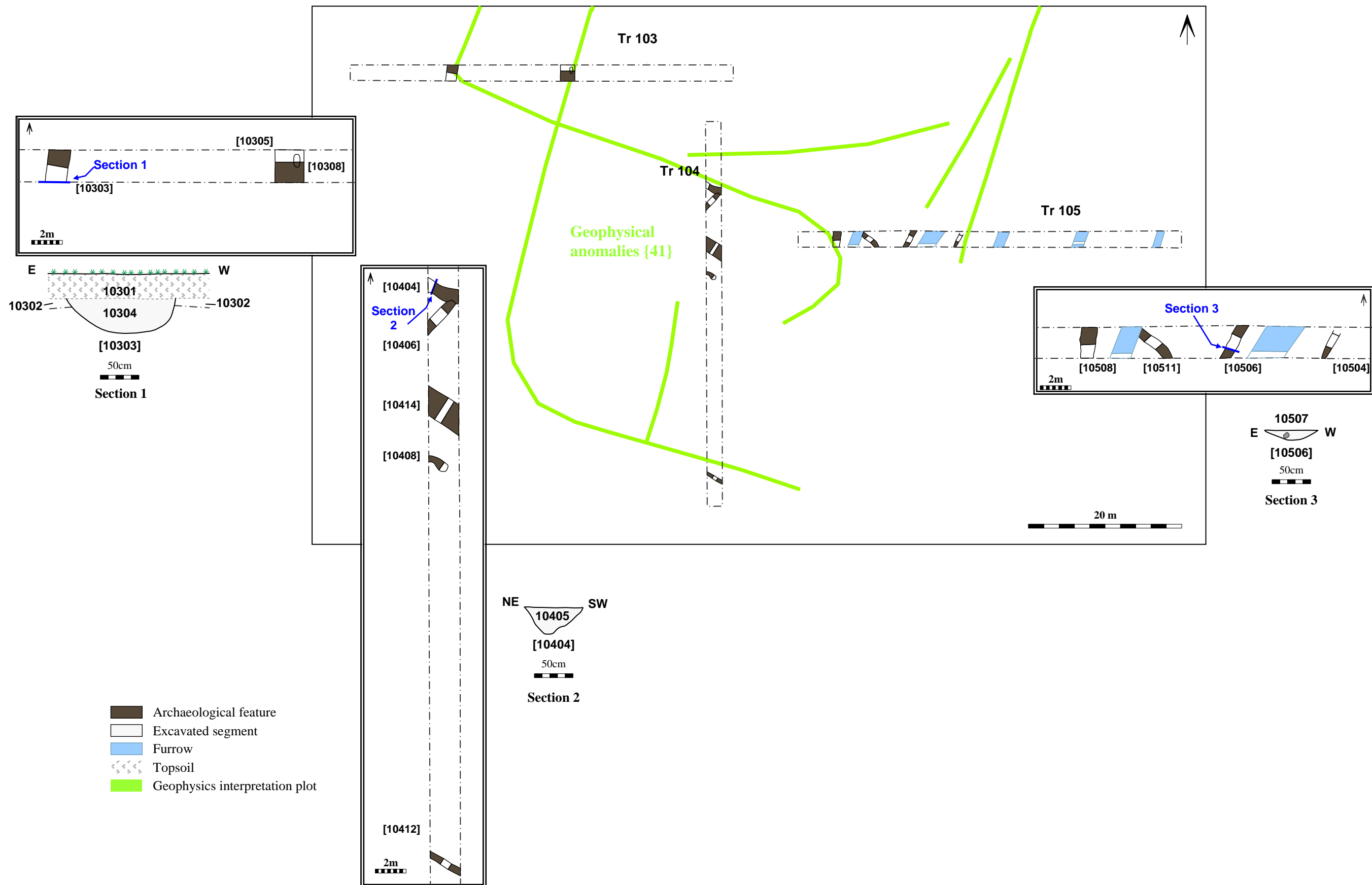


**Figure 2:** Trench layout with geophysical interpretation (ArchaeoPhysica 2015, fig. 13, ASC 2008, Fig. 9) and Heritage Assets (CgMs 2015, fig. 13)

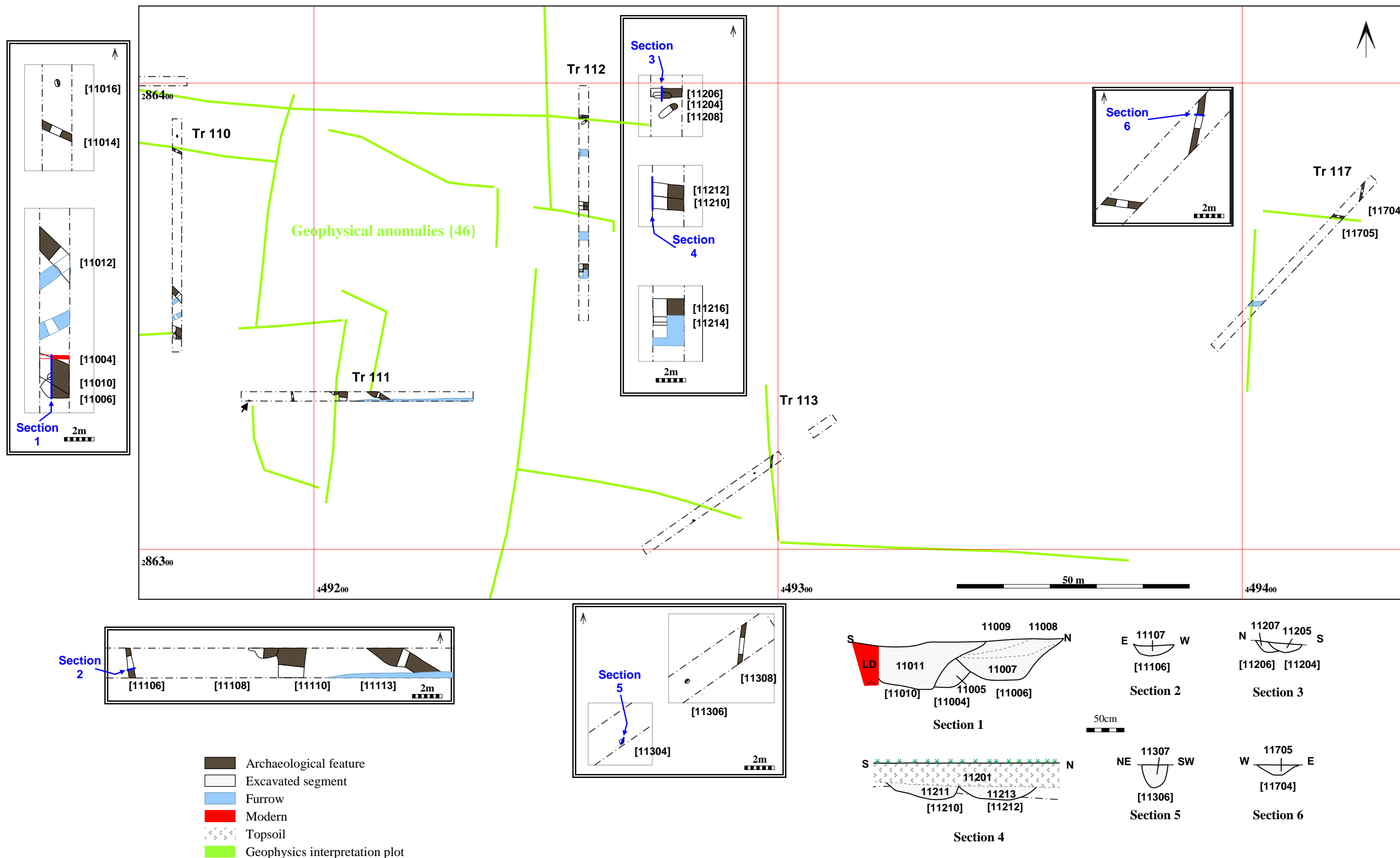


**Figure 3:** Heritage Assets 1, 2 and 3: close-up plan and selected sections for Trenches 167, 168 and 172, with geophysical interpretation (ArchaeoPhysica 2015, fig. 13)

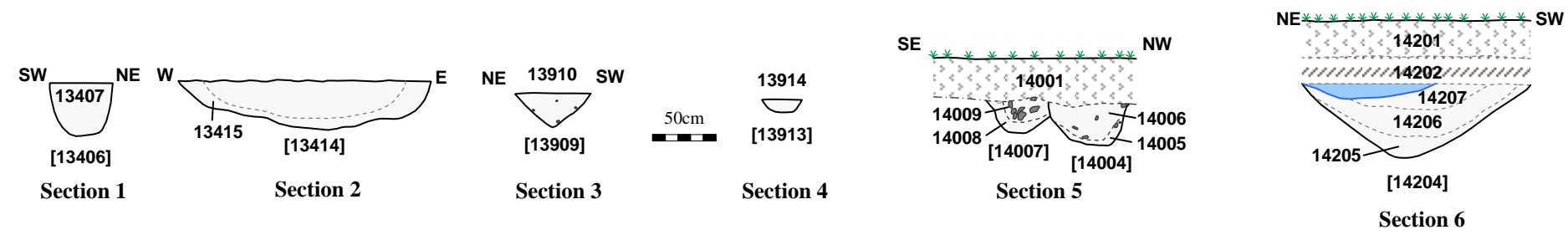
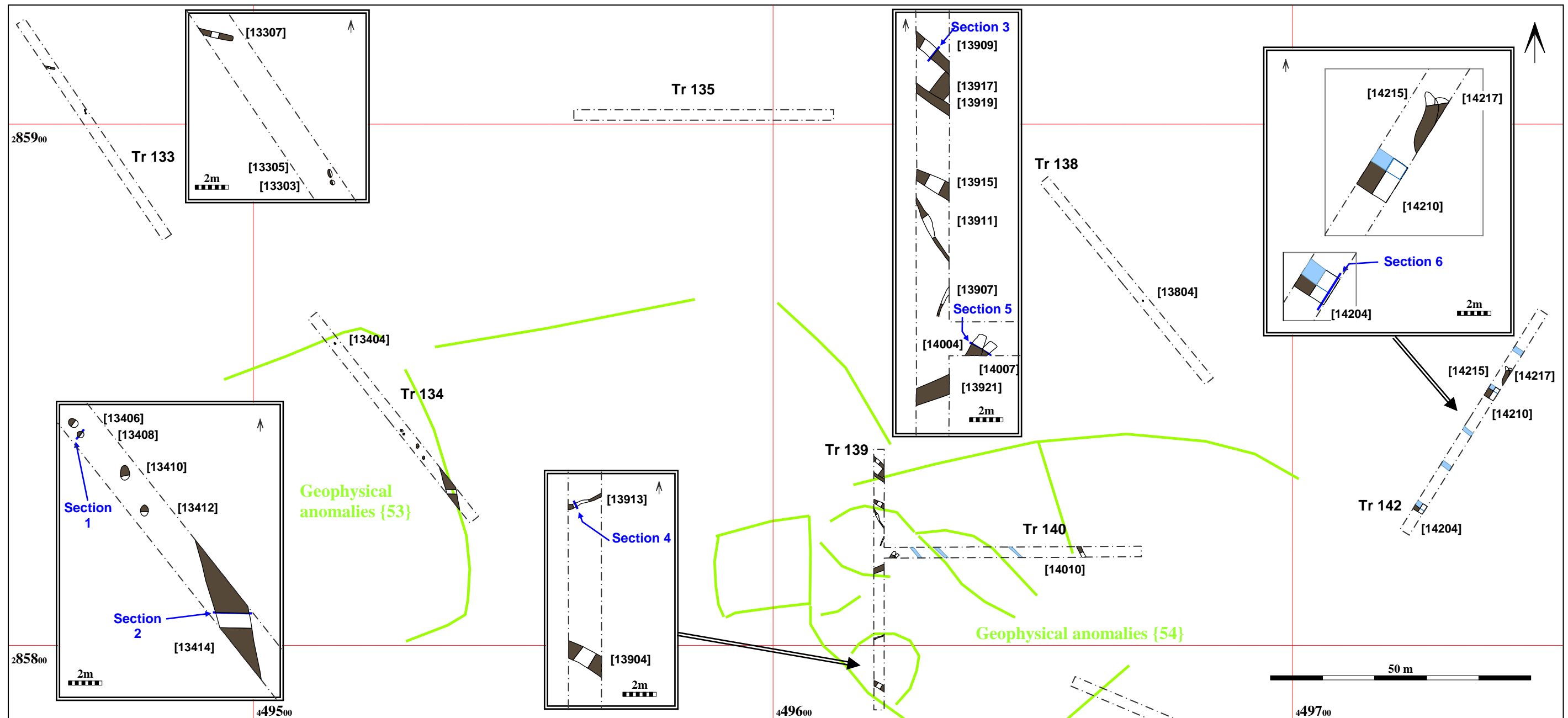




**Figure 4:** Heritage Asset 10: close-up plan and selected sections for Trenches 103, 104 and 105, with geophysical interpretation (ArchaeoPhysica 2015, fig. 13)

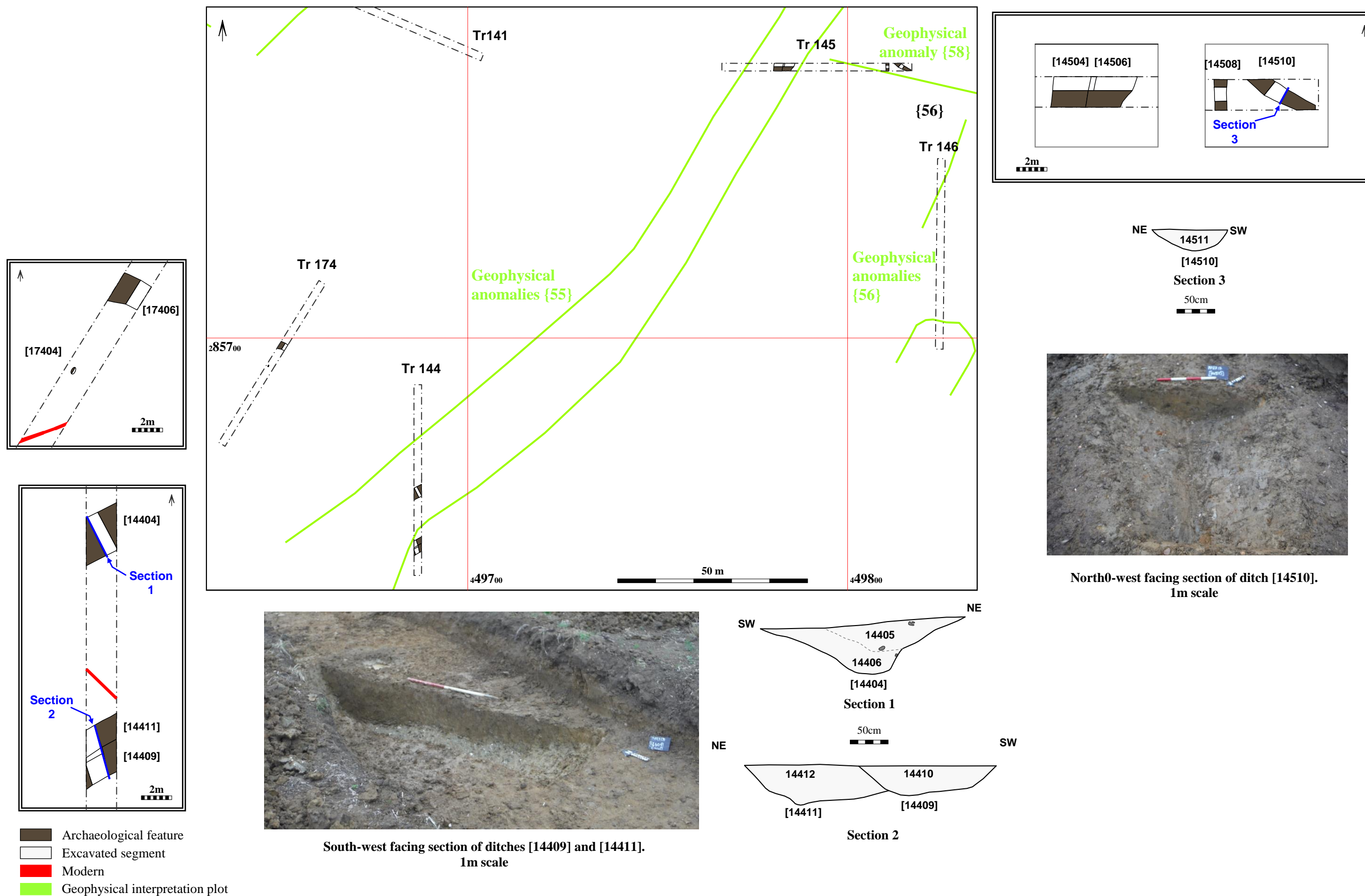


**Figure 5:** Heritage Asset 13: close-up plan and selected sections for Trenches 110, 111, 112, 113 and 117, with geophysical interpretation (ArchaeoPhysica 2015, fig. 13)



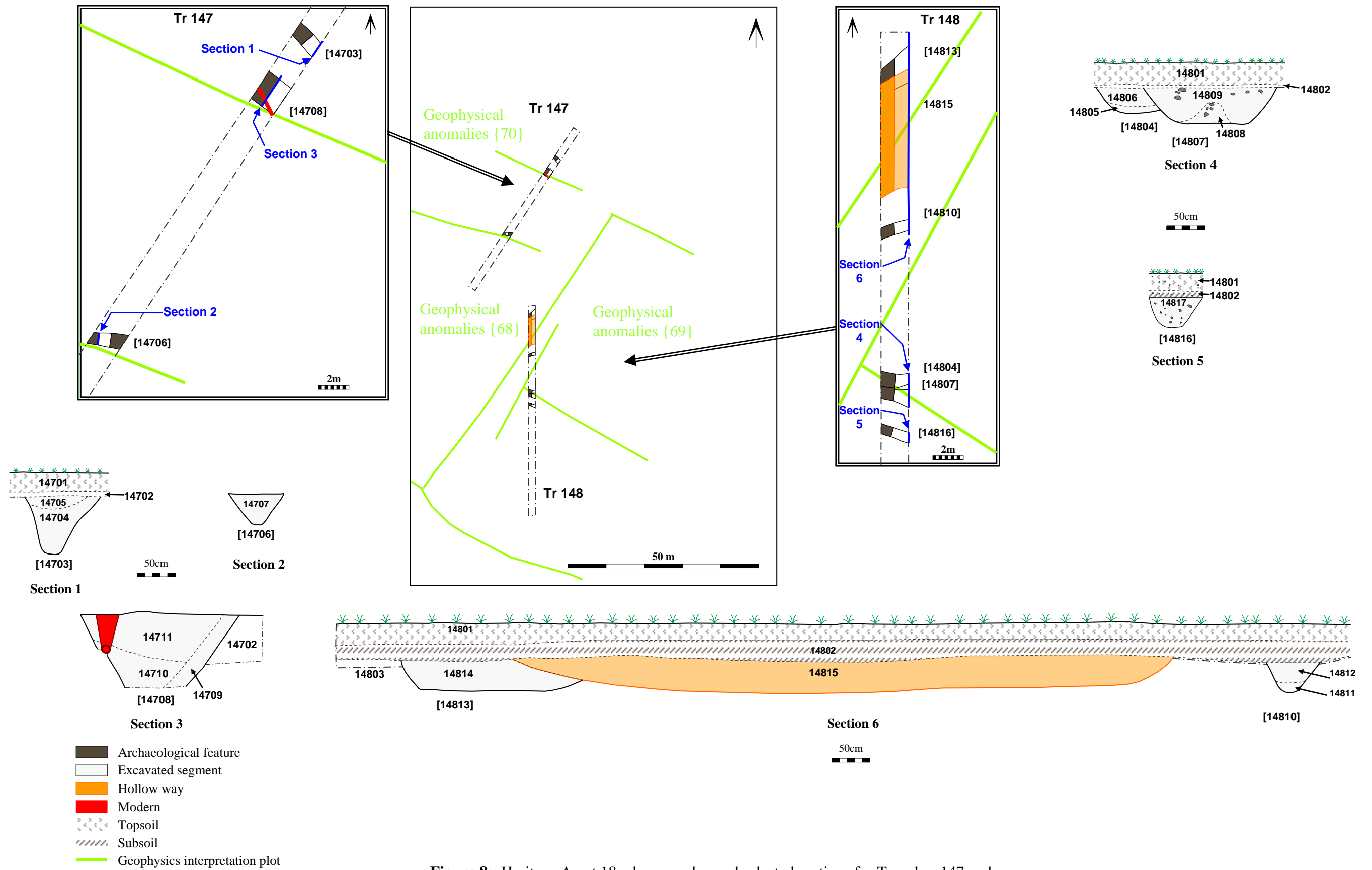
- Archaeological feature
- Excavated segment
- Furrow
- Topsoil
- Subsoil
- Geophysics interpretation plot

**Figure 6:** Heritage Asset 15: close-up plan and selected sections for Trenches 133, 134, 138, 139 and 142, with geophysical interpretation (ArchaeoPhysica 2015, fig. 13)

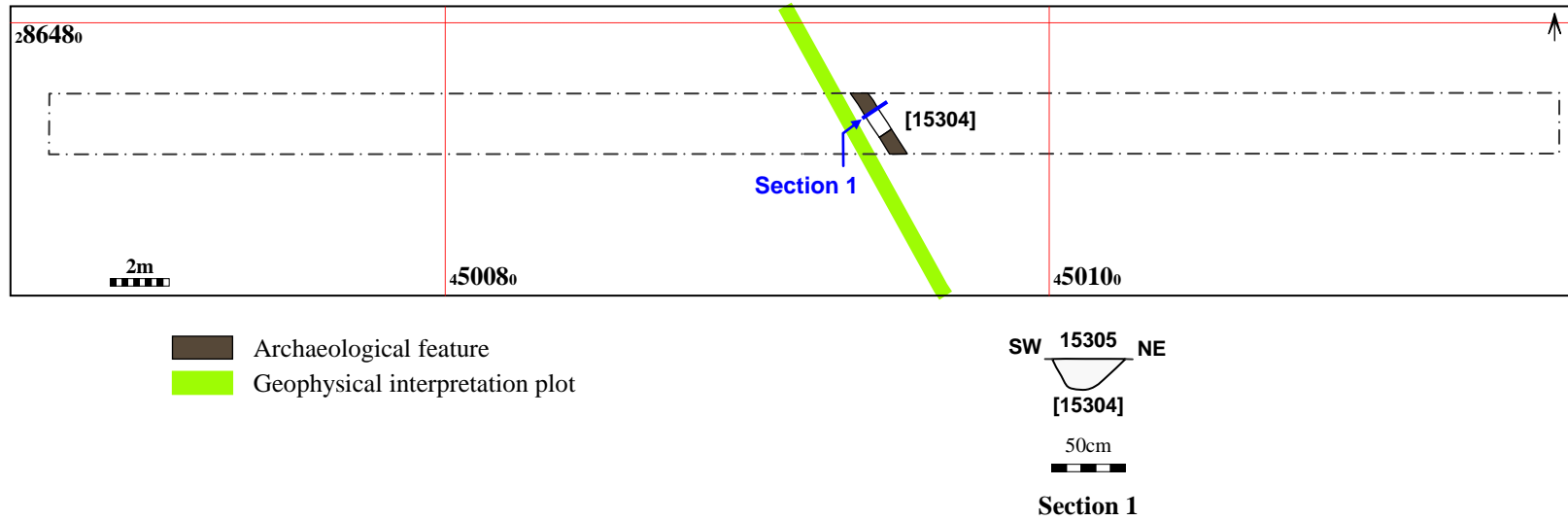


**Figure 7:** Heritage Asset 16 and 17: close-up plan and selected sections for Trenches 144, 145 and 174, with geophysical interpretation (ArchaeoPhysica 2015, fig. 13)

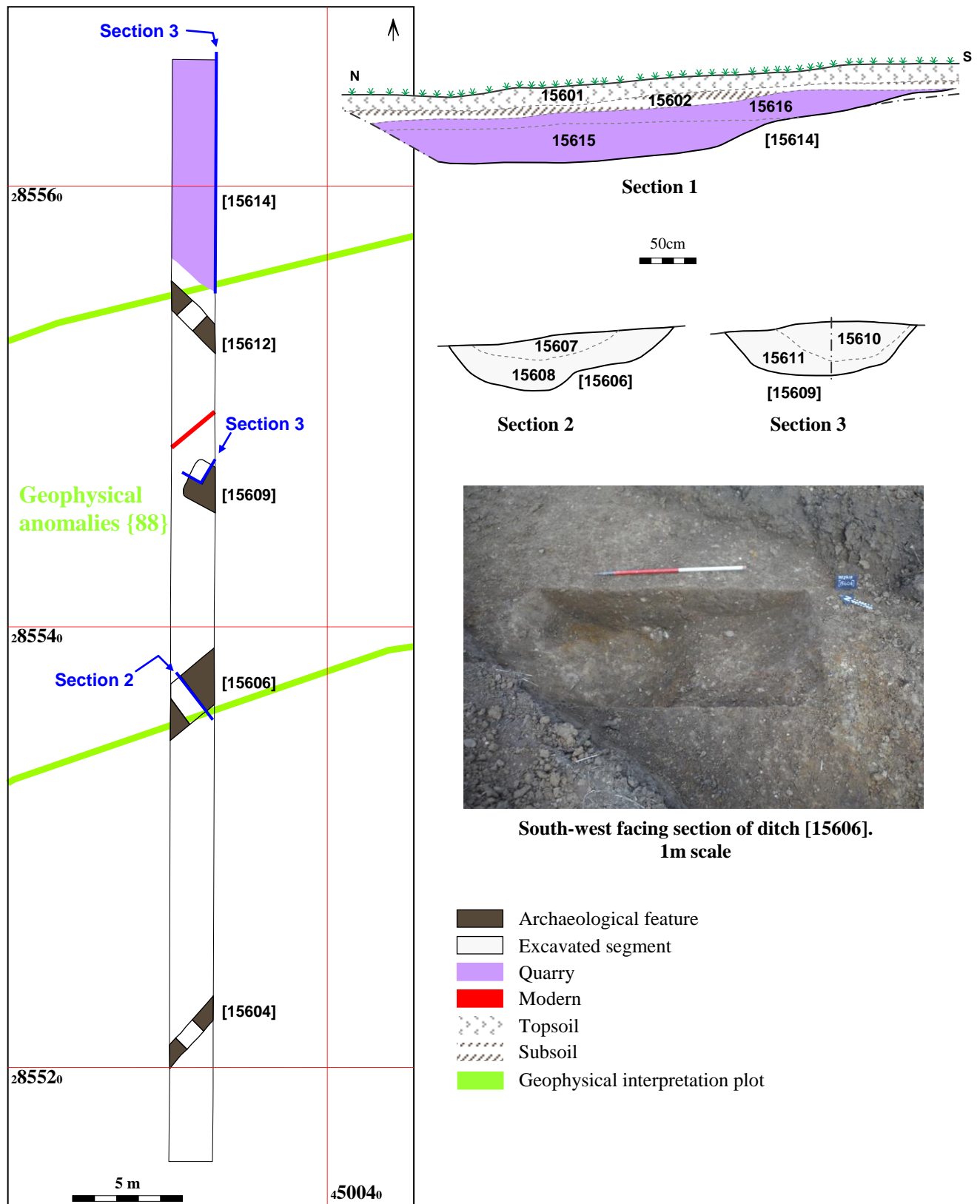




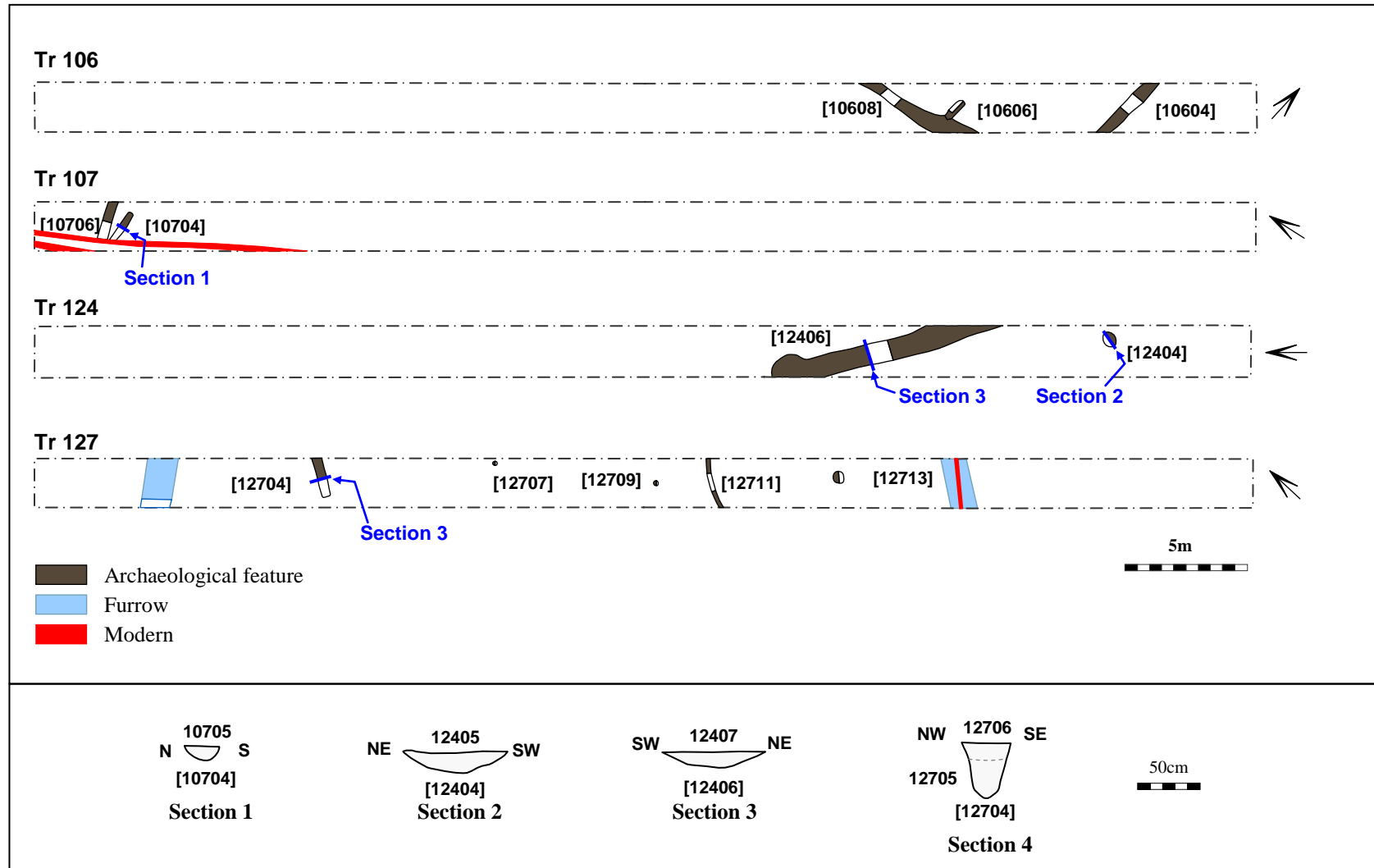
**Figure 8:** Heritage Asset 18: close-up plan and selected sections for Trenches 147 and 148, with geophysical interpretation (ArchaeoPhysica 2015, fig. 13)



**Figure 9:** Heritage Asset 20: close-up plan and selected sections for Trench 153, with geophysical interpretation (ArchaeoPhysica 2015, fig. 13)

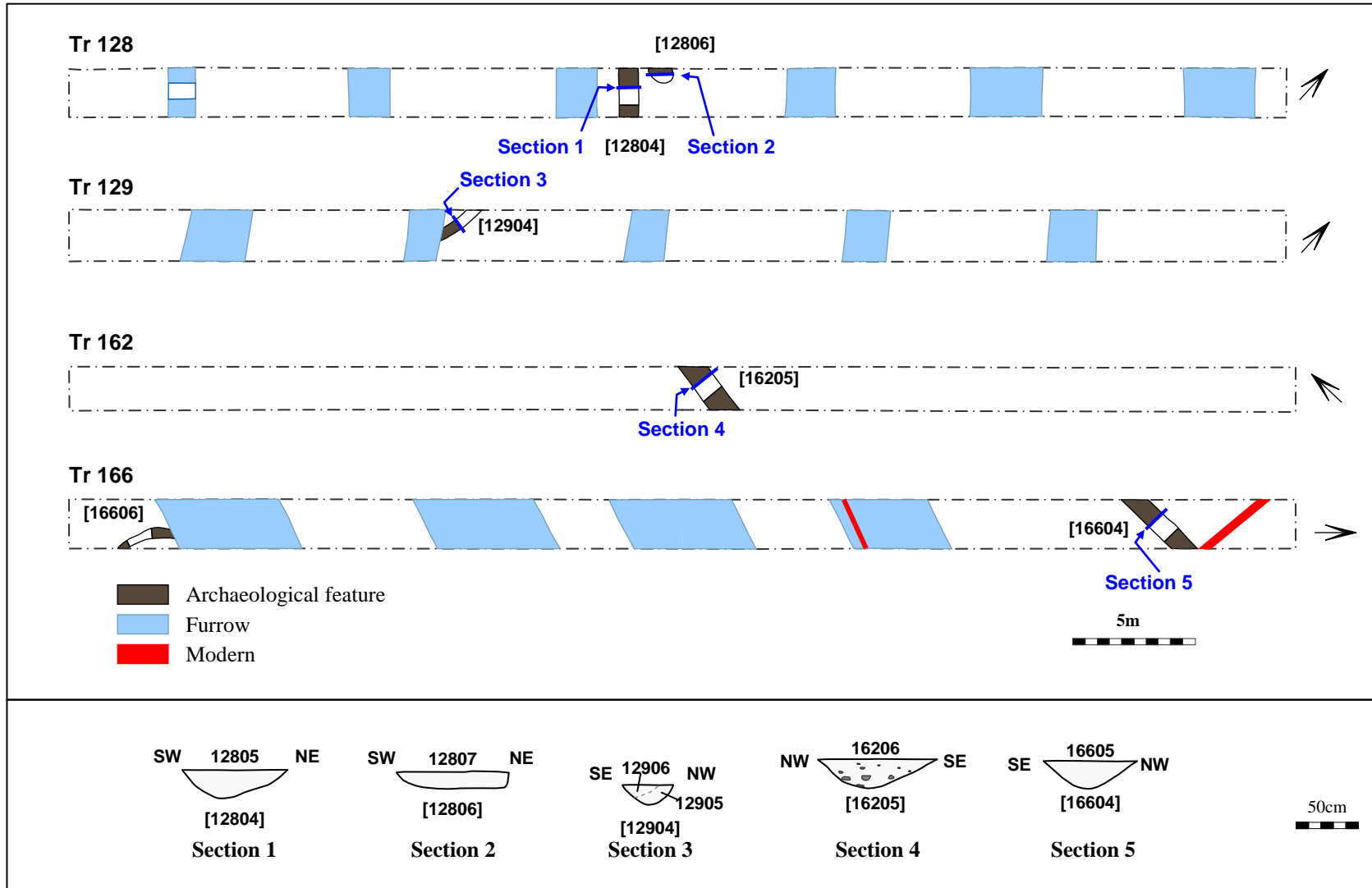


**Figure 10:** Heritage Asset 22: close-up plan and selected sections for Trench 156, with geophysical interpretation (ArchaeoPhysica 2015, fig. 13)



**Figure 11:** Close-up plans and selected sections for Trenches 106, 107, 124 and 127

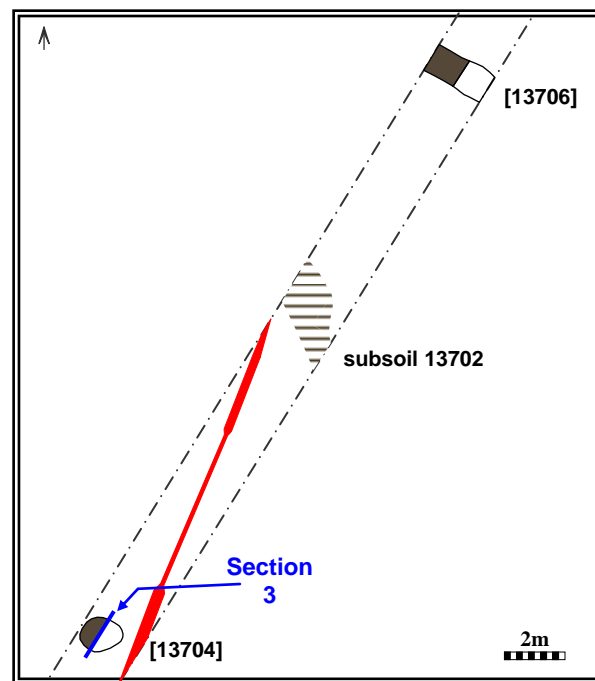
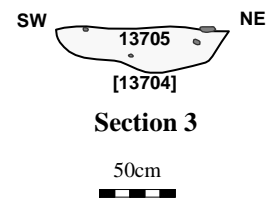




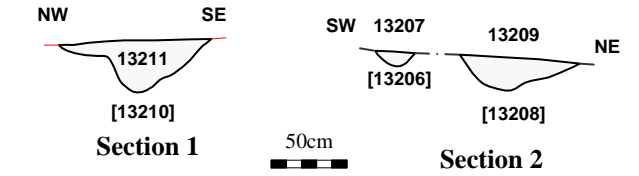
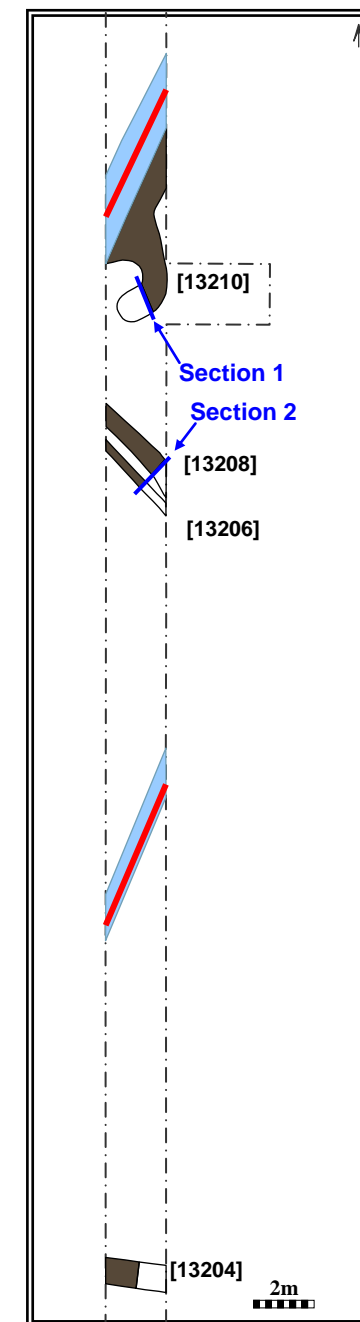
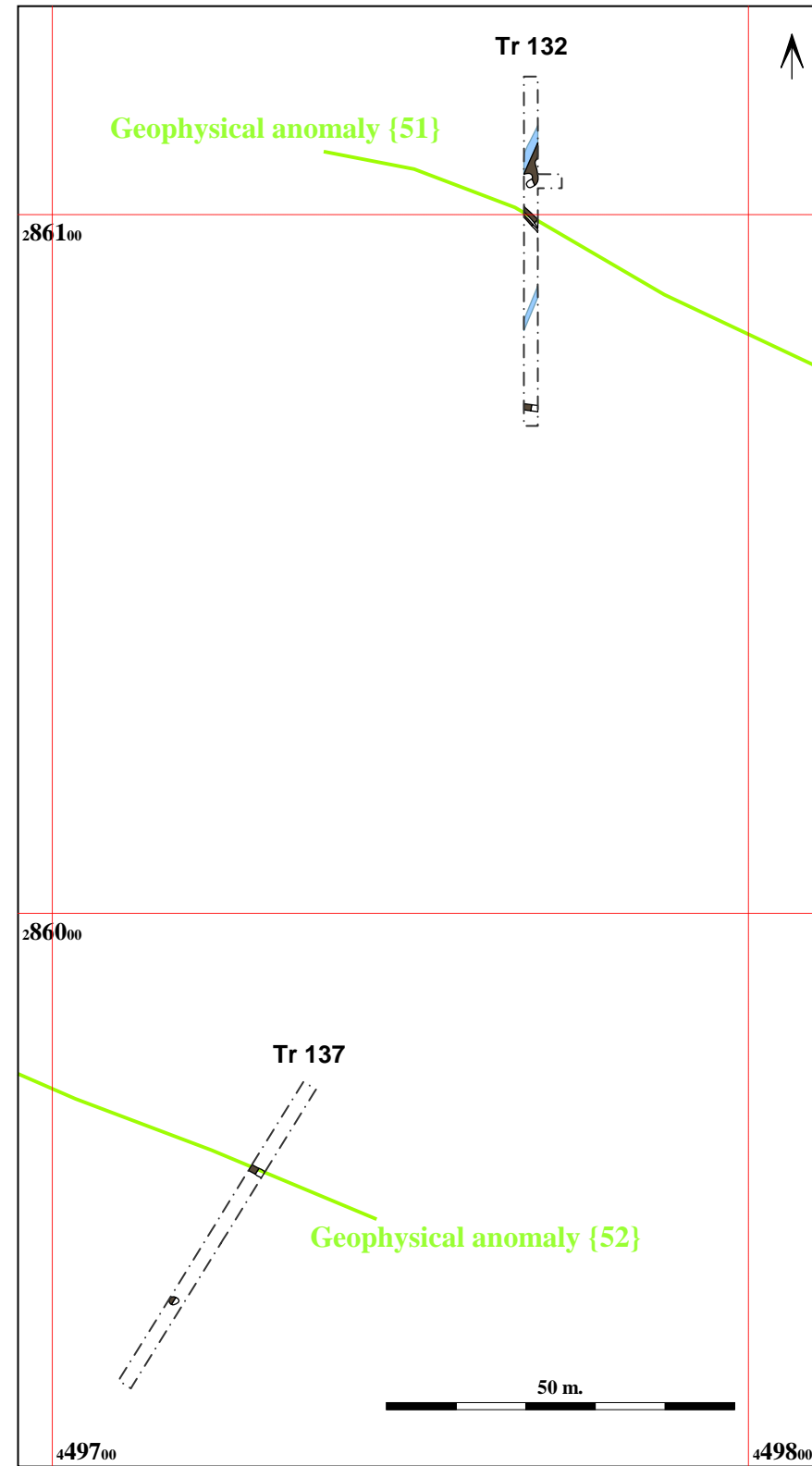
**Figure 12:** Close-up plans and selected sections for Trenches 128, 129, 162 and 166



South-east facing section of ditch [13706].  
1m scale

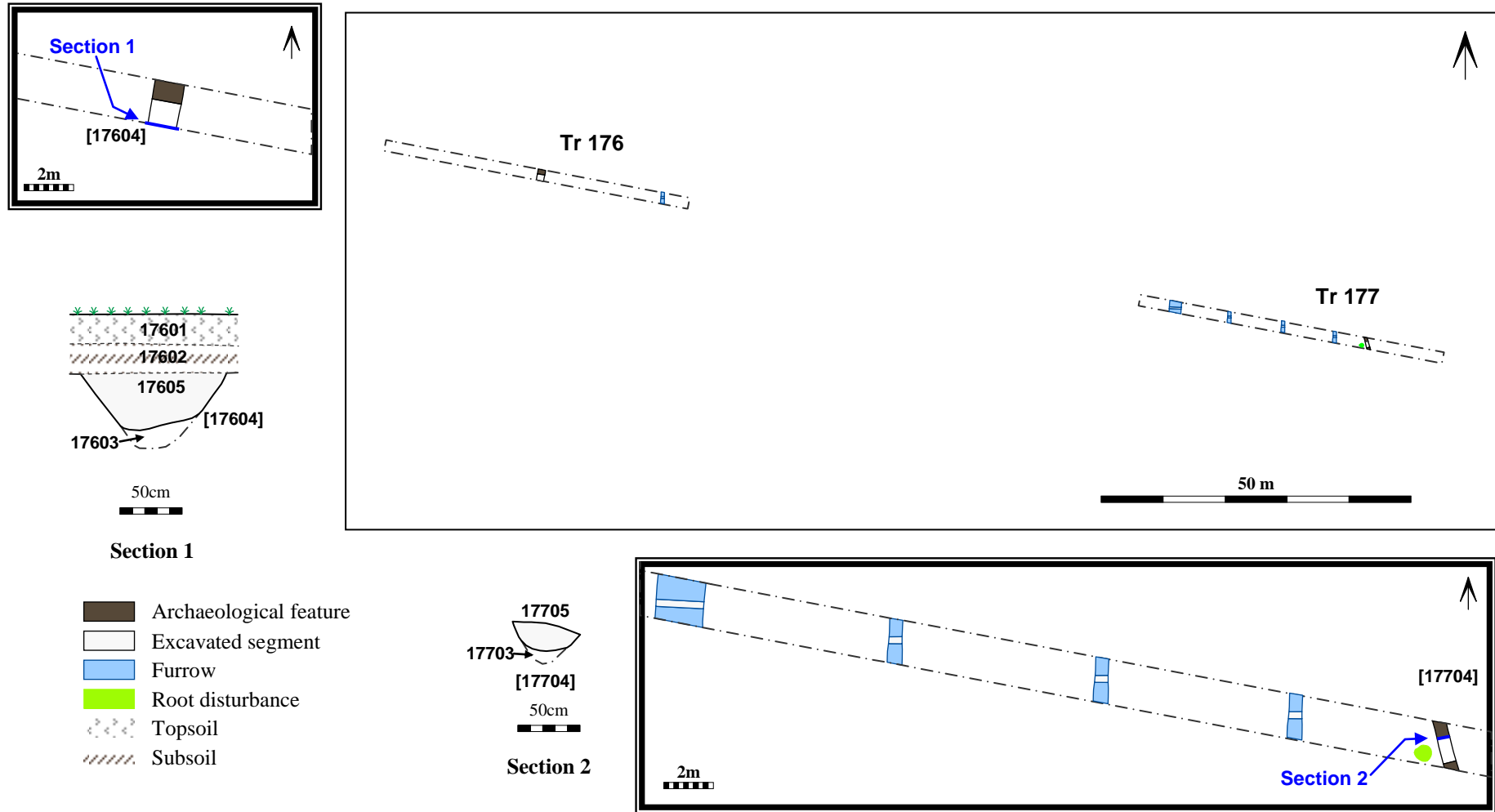


- Archaeological feature
- Excavated segment
- Furrow
- Modern
- Geophysical interpretation plot



South-west facing section of ditch [13210].  
1m scale

**Figure 13:** Close-up plan and selected sections for Trenches 132 and 137, with geophysical interpretation (ArchaeoPhysica 2015, fig. 13)



**Figure 14:** Close-up plans and selected sections for Trenches 176 and 177

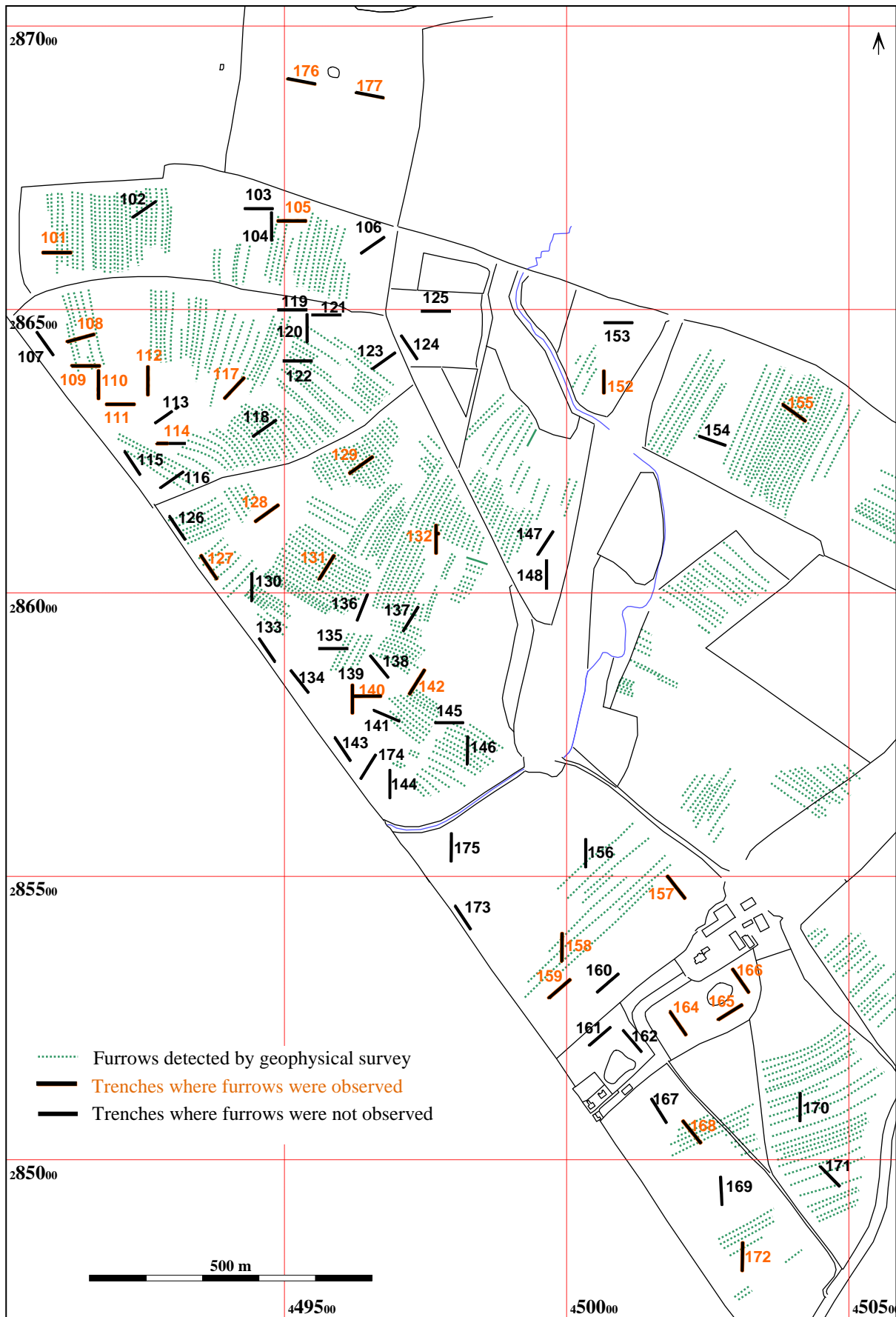
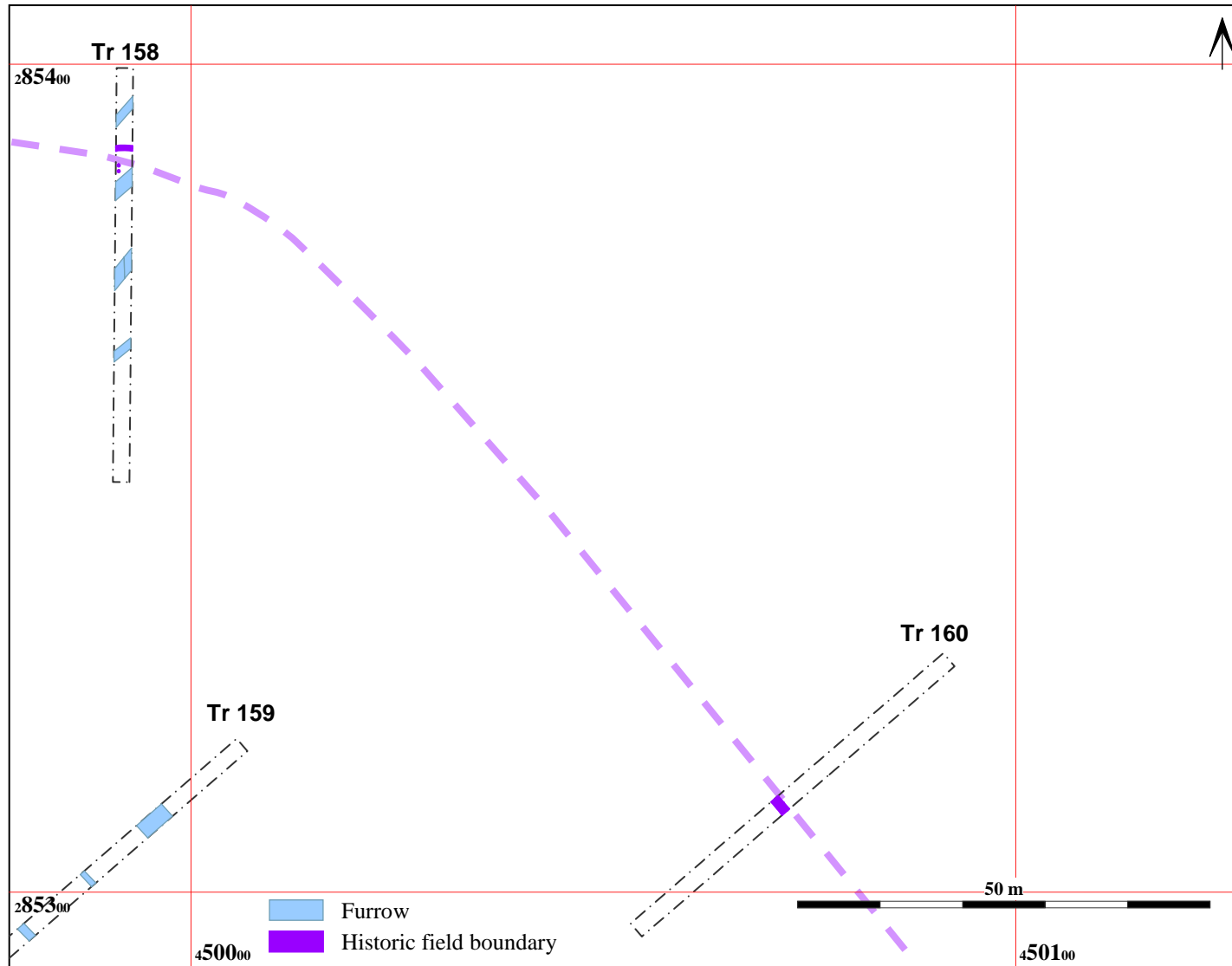
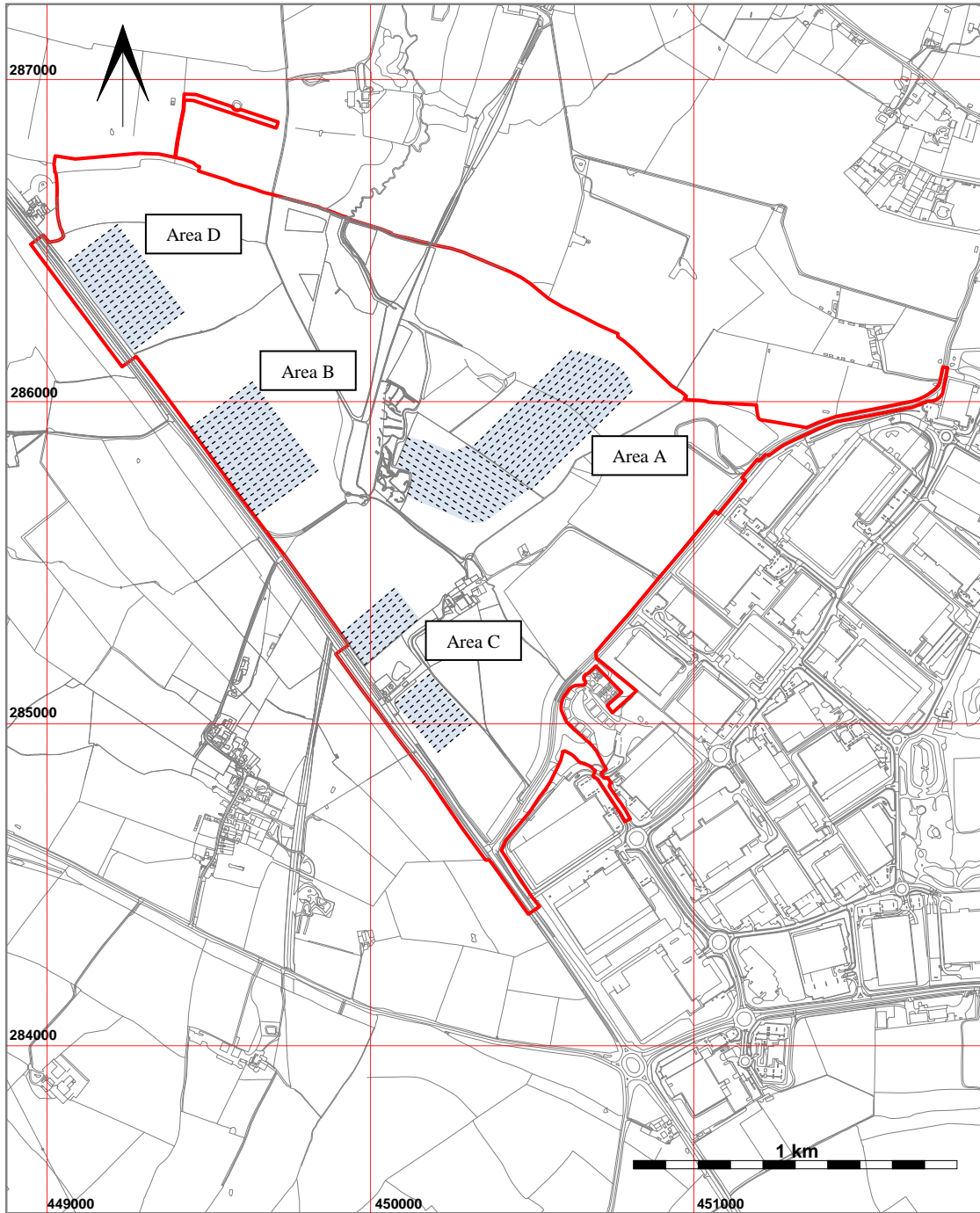


Figure 15: Overall plan of medieval furrows

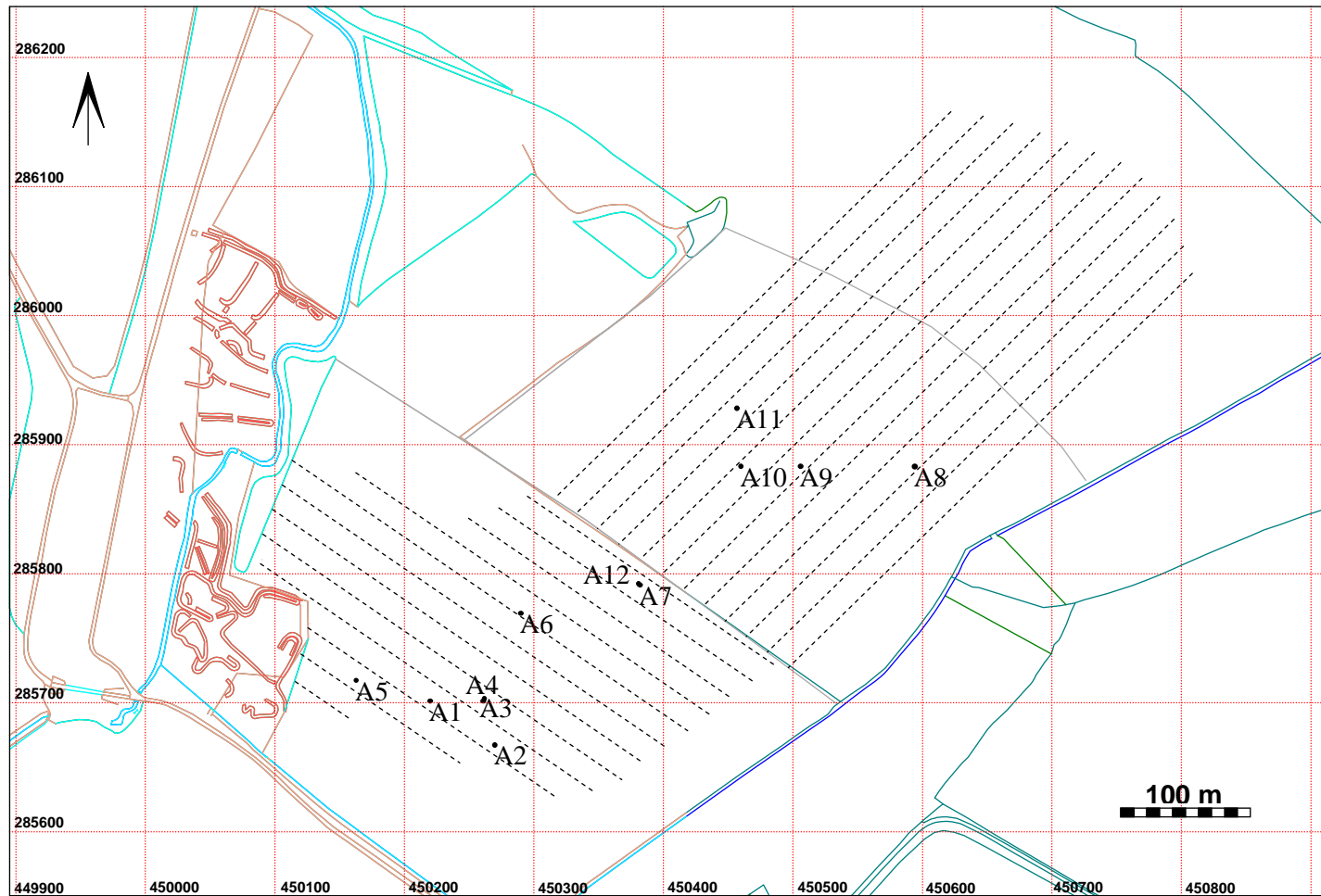




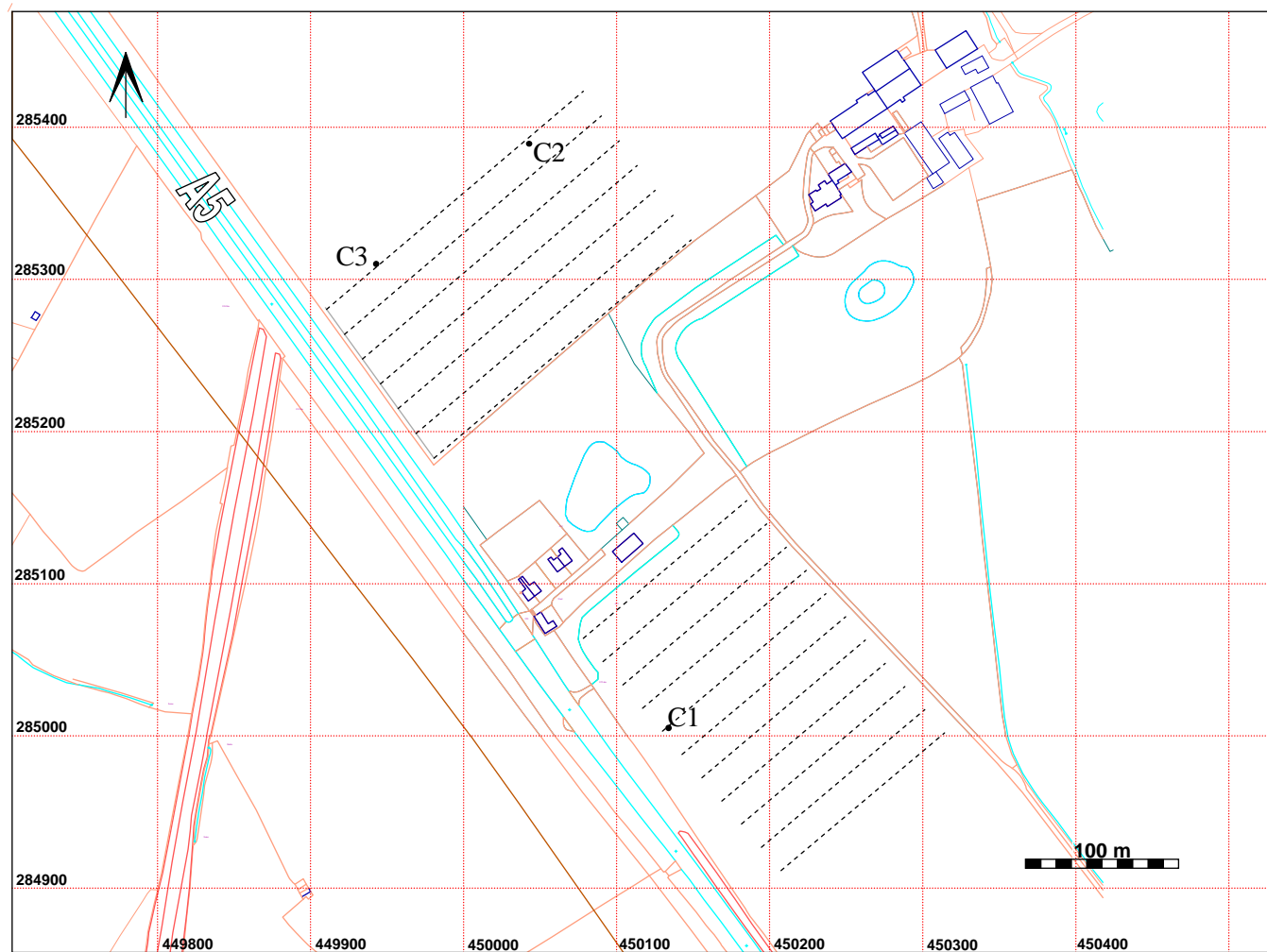
**Figure 16:** Close-up plan for Trenches 158 and 160 with projected alignment of post-medieval boundary



**Figure 17:** Metal-detecting survey areas

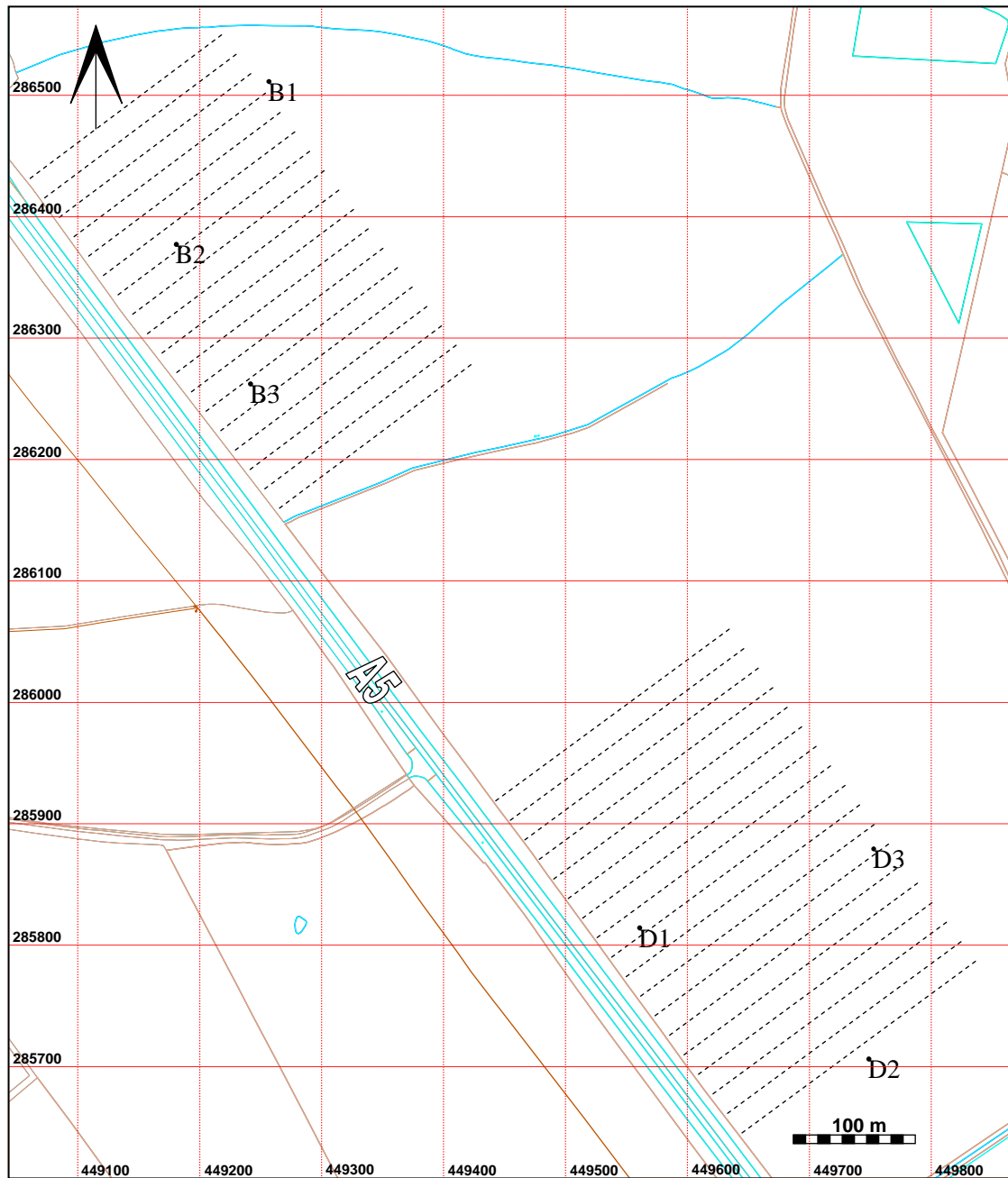


**Figure 18:** Metal-detecting survey finds. Area A

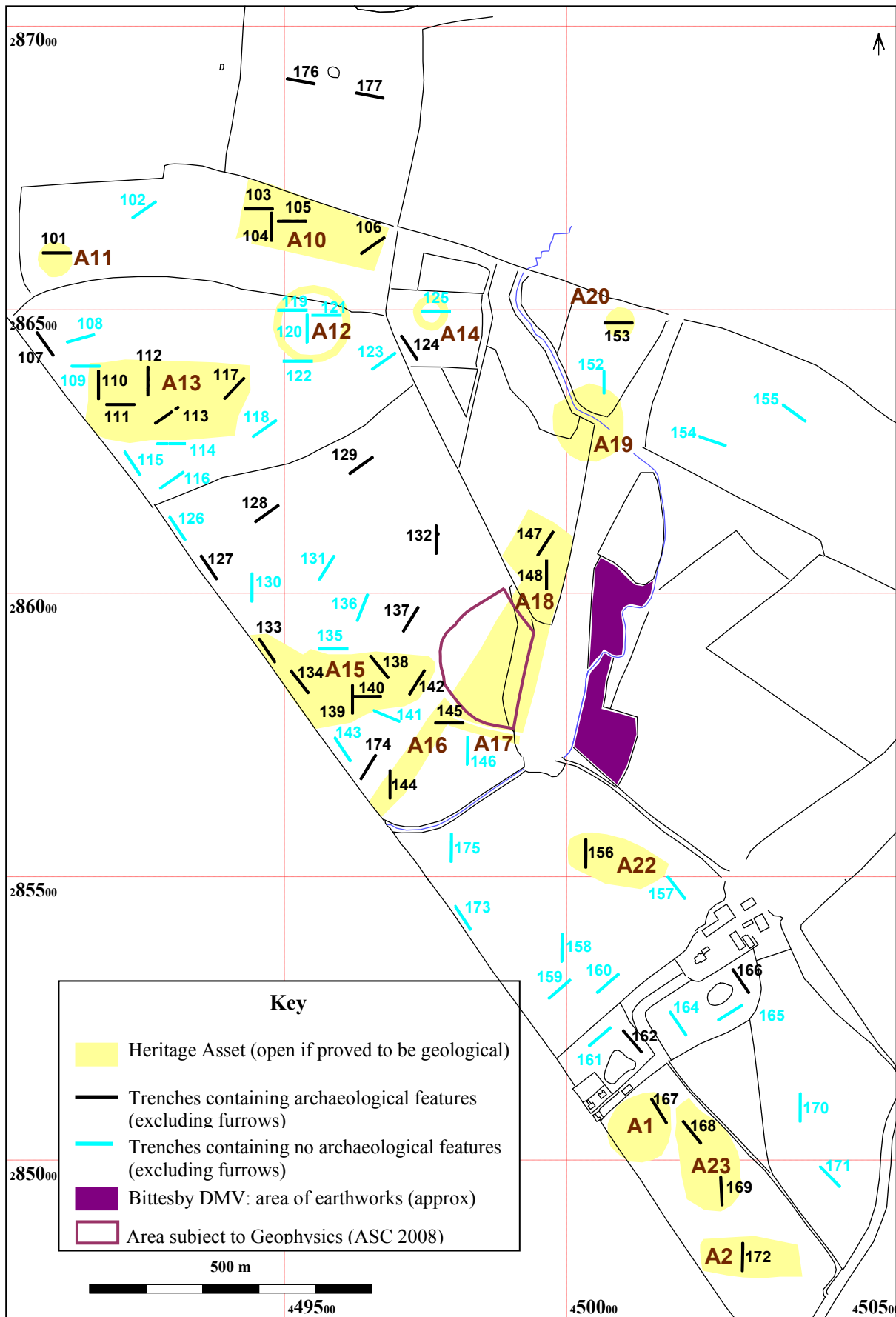


**Figure 19:** Metal-detecting survey finds. Area C

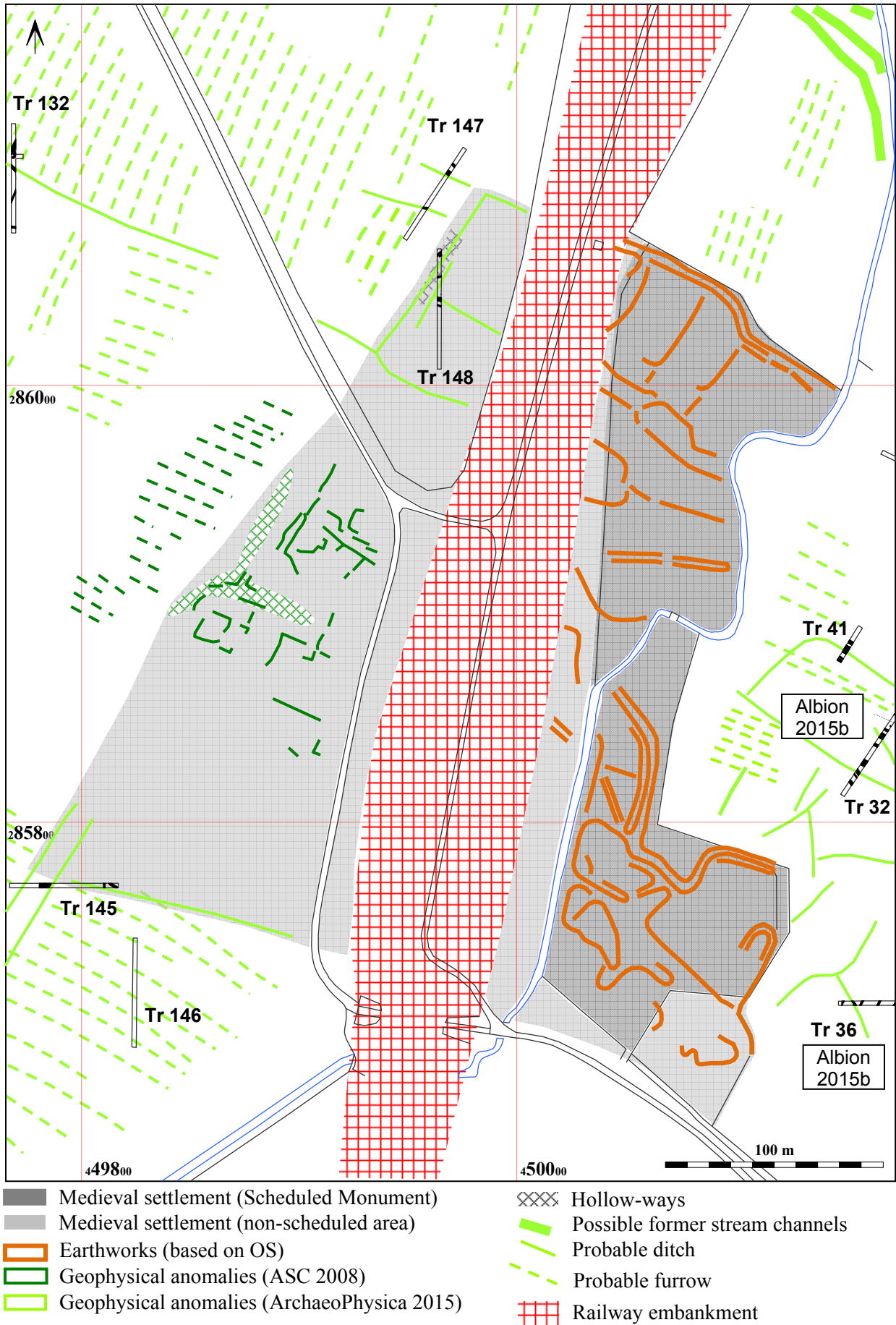




**Figure 20:** Metal-detecting survey finds. Areas B and D



**Figure 21:** Trenches containing archaeological features, with redefined areas of Heritage Assets



**Figure 22:** Updated plan of Bittesby Deserted Medieval Village and its environs

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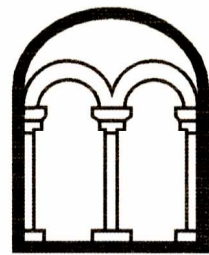


**APPENDIX 8: ALBION ARCHAEOLOGY, 2015. MAGNA PARK EXTENSION: "RIDGE  
TRENCHES" HYBRID APPLICATION, LUTTERWORTH, LEICESTERSHIRE  
ARCHAEOLOGICAL EVALUATION**

**MAGNA PARK EXTENSION: "RIDGE TRENCHES"  
LUTTERWORTH  
LEICESTERSHIRE**

**ARCHAEOLOGICAL EVALUATION**

**Albion**  
archaeology



**MAGNA PARK EXTENSION: “RIDGE” TRENCHES  
LUTTERWORTH  
LEICESTERSHIRE  
  
ARCHAEOLOGICAL EVALUATION**

Project: MP2717  
Accession number X.A86.2015  
OASIS reference: albionar1-220845

Document: 2015/153  
Version 1.1

20th October 2015

Compiled by	Edited by	Approved by
Jo Barker and Ian Leslie	Mike Luke	Drew Shotliff

Produced for:  
CgMs Consulting Ltd

On behalf of:  
IDI Gazeley



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## Preface

*Every effort has been made in the preparation of this document to provide as complete a summary as possible within the terms of the method statement. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.*

## Acknowledgements

*The project was commissioned by Simon Mortimer of CgMs Consulting Ltd, on behalf of IDI Gazeley. It was monitored on behalf of the Local Planning Authority by Teresa Hawtin (Senior Planning Archaeologist) and Richard Clark (Principal Archaeologist), Leicestershire County Council.*

*This report has been prepared by Jo Barker, Iain Leslie (Supervisors), Mike Luke (Project Manager) and Jackie Wells (Finds Officer). The fieldwork was undertaken by Ben Barker (Project Officer), Ben Carroll, Iain Leslie, Slawomir Utrata and Adam Williams (Archaeological supervisors), Hanno Conring, Matt Edgeworth, Mike Emra, Gary Manning, Gareth Shane, Marcin Synus, Heather White and Adrian Woolmer (Archaeological Technicians). Metal detecting was undertaken by Archie Gillespie.*

*Digitisation of site drawings and illustrations in this report were prepared by Joan Lightning (CAD Supervisor). The project was managed by Mike Luke of Albion Archaeology. All Albion Archaeology projects are under the overall management of Drew Shotliff (Operations Manager).*

## Version History

Version	Issue date	Reason for re-issue
1.1	20/10/2015	Address comments from consultant
1.0	14/10/2015	n/a

## Key Terms

Throughout this report the following terms or abbreviations are used:

CI/A	Chartered Institute <i>for</i> Archaeologists
HER	Historic Environment Record
LPA	Local Planning Authority (Harborough District Council)
SA	Study Area
SPA	Senior Planning Archaeologist of Leicestershire County Council



## **Non-Technical Summary**

*A planning application for the construction of an extension to Magna Park Lutterworth, Leicestershire, by IDI Gazeley has been submitted to Harborough District Council (planning application ref. 15/00919/FUL). The archaeological potential of the site was preliminarily evaluated by desk-based assessment (CgMs 2015a), geophysical survey (ArchaeoPhysica 2015) and fieldwalking (MoLA 2015).*

*As a consequence of the discovery of geophysical anomalies suggestive of a system of enclosures within land referred to here as “the ridge”, this area was taken out of the proposed development. However, it was agreed that trenching would still be undertaken in this area. Albion Archaeology was commissioned by CgMs Consulting Ltd, on behalf of IDI Gazeley, to undertake the trial trenching. This report presents the results of the investigation of these eleven trenches.*

*The trench layout was designed to investigate geophysical anomalies and fieldwork was undertaken, in conjunction with trenching of adjacent land (which is on-going), between 21st August and 7th October 2015. The work was monitored on behalf of the Local Planning Authority by the Senior Planning Archaeologist of Leicestershire County Council.*

*The trench evaluation has enhanced the information already available on Heritage Assets 7–9 (identified by CgMs Consulting Ltd on the basis of previous non-intrusive surveys). The results confirm the presence of sub-surface features which coincide with identified geophysical anomalies, although a larger number and greater range were found to be present.*

*An early Roman settlement clustered along the crest of the ridge (Heritage Assets 8 and 9) and possibly continued down slope to the NW (Heritage Asset 7). Heritage Asset 8 represents a series of probably interlinked sub-circular enclosures. Although contemporary, it is uncertain on the basis of the geophysical survey as to whether or not Asset 9 (enclosures and trackway) was connected to Asset 8; however, this would seem likely. Only a small quantity of early Roman pottery was recovered from Heritage Asset 7, so it is uncertain if this provides an accurate date for the activity in this area.*



## 1. INTRODUCTION

### 1.1 *Planning background*

A planning application for the construction of an extension to Magna Park Lutterworth, Leicestershire has been submitted by IDI Gazeley to Harborough District Council (planning application ref. 15/00919/FUL).

CgMs Consulting Ltd and the Leicestershire County Council Senior Planning Archaeologist (SPA) agreed (email dated 12.08.15) that trenches would be dug on the “ridge” between Bittesby deserted medieval village (DMV) and the DHL application area (Albion 2015). It was also agreed that the “ridge” trenches would be reported on separately. This document represents that report.

### 1.2 *Site location, topography and geology*

The study area (SA) is located to the west of Lutterworth and comprises *c.* 28 hectares of land centred at National Grid Reference SP 5045 8585. Leicester is situated 20km to the north and Rugby is 9km to the south.

The bedrock geology comprises mudstone belonging to the Penarth Group Formation. The solid geology is overlain by diamicton (formerly known as boulder clay)<sup>1</sup>.

### 1.3 *Archaeological background*

The archaeological potential of the wider development area has been considered through a desk-based assessment (CgMs 2015a), geophysical survey (ArchaeoPhysica 2015) and fieldwalking (MOLA 2015). All three reports should be consulted for more detailed information but the following represents a summary relevant to the SA based upon information obtained from these reports:

- Sherds of Roman pottery and fragments of Roman tile were recovered during fieldwalking *c.* 480m east of Bittesby DMV (see below)
- The Scheduled Monument of Bittesby Deserted Medieval Village (SAM1012563 / MLE1226) is located to the west of the SA.

On the basis of this information, three areas representing Heritage Assets were defined by CgMs Consulting Ltd within the SA; they are summarised below in Table 1.

Asset ref.	Description	Concordance with geophysical survey report and HER	Likely date	Likely importance
A7	Anomalies interpreted as enclosures and trackways	Anomalies 83–85	Medieval	Regional

<sup>1</sup> (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>)





Asset ref.	Description	Concordance with geophysical survey report and HER	Likely date	Likely importance
A8	Anomalies interpreted as enclosures including ladder-type settlement	Anomalies 78–82 Also HER MLE 21337	Roman	Regional
A9	Anomalies interpreted as enclosure. Associated with trackway A5	Anomaly 76	Medieval	Regional

**Table 1:** Summary of possible Heritage Assets identified by CgMs within the SA prior to the trench evaluation (CgMs 2015a, table 5 and fig. 10)

Note. Heritage Assets A1–A6 are within the DHL application area and have, therefore, been reported on separately (Albion 2015).

#### 1.4 Aims and objectives

The aims and objectives of the evaluation were described in the Specification (CgMs 2015b, 7) and are summarised here:

- To determine the location, extent, date, character, condition, significance and quality of any archaeological remains within the development site
- To assess the character, condition, significance, quality of Heritage Assets (7–9)
- To assess the artefactual and environmental potential of the archaeological deposits encountered
- To inform formulation of further measures to mitigate impacts of the proposed development on surviving archaeological remains
- To produce a site archive for deposition with an appropriate museum and to provide information for accession to the Leicestershire HER.

#### 1.5 Implementation

The archaeological fieldwork was undertaken between 21st August and 7th October 2015. Eleven trenches were opened (Fig. 1). Trench numbering used in the Specification (CgMs 2015b) was retained.

#### 1.6 Monitoring

The SPA monitored the work on 27th August, 10th September and 7th October 2015 with summaries and action points circulated after each meeting.

#### 1.7 Archiving

All finds and records generated during the project will be archived to the standards outlined in Appendix 3 of Historic England's *MoRPHE Project Planning Note 2: Archaeological Excavation* (2015). Details of the project and



its findings have been submitted to the OASIS database (reference albionar1-220845) in accordance with the guidelines issued by Historic England and the Archaeology Data Service.

On approval of this report the integrated project archive, including artefacts (subject to landowners' permission), ecofacts and project documentation, will be prepared for deposition in the county stores (Accession Number X.A86.2015).



## 2. RESULTS

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### 2.1 Introduction

The results are presented below under the following sections: features/deposits, finds, ecofacts and metal detecting transects. Where site recording numbers have been used they are distinguished by different bracket styles to indicate feature number = [\*\*\*], fill number = (\*\*\*) and geophysical anomaly {\*} (based on the numbers used in ArchaeoPhysica 2015). Context numbers reflect the trench number, e.g. [2707] is a feature within Trench 27 and, therefore, the trench number is only given where necessary. Where a ditch has been recut its original feature number is used in general discussions.

### 2.2 Feature/deposits

The enclosures and trackways are summarised below within their assigned Heritage Asset areas (CgMs 2015a) as these provide useful spatial divisions. In addition, medieval furrows, post-medieval features and overburden are briefly mentioned. Trenches devoid of features of likely human origin are not discussed.

Detailed descriptions of every individual context are provided in Appendix 1 and this should be consulted for information such as alignment, nature of fills, dimensions etc. Archaeological features are illustrated on Figs 3–6 with selected section drawings.

#### 2.2.1 Enclosures and trackway to the north-east (Heritage Asset 9)

This area was targeted by Trenches 26 and 27. Trench 3 was within the DHL application area and has, therefore, already been reported on (Albion 2015) but is referenced here because it targeted the trackway. Archaeological features found included ditches, post-holes and a possible stone surface. Sufficient features contained early Roman pottery to suggest that this is the most likely date for this activity. Based on the geophysical survey the area contained a large D-shaped enclosure, adjacent smaller enclosures and a trackway. These were identified as anomalies {75} in the geophysical survey.

N-S ditch [2604] would appear to represent the western side of the D-shaped enclosure. Four post-holes and stone surface [2618] were found within the interior of the enclosure, which (along with the finds assemblage recovered from the ditch) suggests a domestic function for the enclosure. Another ditch [2610] was found within this trench but was orientated NW-SE. Although it also contained early Roman pottery, it is on a different alignment to the D-shaped enclosure, suggesting that it may not be contemporary.

Two parallel NW-SE boundaries are represented by ditches and their recuts [2703]/[2707] and [2711]/[2714]. Based on the geophysical anomalies, these may be part of a series of enclosures to the south of a trackway. The two ditched boundaries roughly coincide with linear geophysical anomalies, although no trace of a third such anomaly was found to the SW of Trench 27. Additional ditches [2709], [2718] and [2720] appeared to be on a different alignment and were not identified as geophysical anomalies.



The possible trackway identified by the geophysical survey as anomalies {76} was investigated within the DHL application area (Albion 2015). The ditches defining the trackway were located but no dating evidence was recovered. However, the arrangement of the geophysical anomalies suggests that the trackway is contemporary with the D-shaped enclosure and others in the vicinity that contained early Roman pottery.

### 2.2.2 Enclosures to the south-west (Heritage Asset 8)

This area was targeted by Trenches 28–31, 36 and 37. The revealed archaeological features were predominantly ditches, with occasional pits and post-holes. Based on the geophysical survey, some of the ditches defined sub-circular enclosures corresponding with geophysical anomalies {78}, {81} and {82}. The vast majority of dating evidence is early Roman in date. Trenches 31 and 37 contained a larger finds assemblage than other trenches, possibly suggesting two domestic foci were located in the vicinity of these trenches. A small amount of middle-late Iron Age pottery was recovered, but in features which also contained early Roman sherds. It may be significant that sherds were found within the primary fills of ditch [3111] and [3120] — it is, therefore, possible that some of the ditches originated in the Iron Age.

A series of linear anomalies aligned broadly SW-NE was observed in the geophysical survey. Excavated ditches which correspond to these include [2908], [2910], [2918], [2920], [3003], [3104]/[3106], [3703], [3111]/[3117]/[3119] and [3719]. Ditches were also found perpendicular to this alignment, e.g. [3011], [3018], [3109], [3604]/[3606] and [3707]. None of these were identified in the geophysical survey; they were generally fairly shallow and it is, therefore, possible that there exists a more regular enclosure system, which was not entirely picked up by the geophysical survey.

The number and arrangement of ditches suggest the presence of a series of enclosures, possibly even forming a ladder-type system. However, the number of ditches makes it difficult to identify individual enclosures, except where there is supporting evidence from the geophysical survey, e.g. [3111]/[3117]/[3119], [3703] and [3719].

Only two ditches were found within Trench 36 to the west. This fact, together with the absence of finds, suggests that the ditches may be located on the periphery of the enclosure system. Trench 28 may also be located on the periphery because, although four ditches were excavated, the finds assemblage recovered from them was tiny.

Only a small number of discrete features were found and most were within Trench 29 (six pits and two post-holes). Single post-holes were also found in Trench 30 and 31, and a single pit in Trench 37.

### 2.2.3 Enclosures to the north-west (Heritage Asset 7)

This area, adjacent to the Bittesby DMV, was targeted by Trenches 32 and 41. The latter was dug at the request of the SPA and Trench 32 was extended for the same reason. Archaeological features comprised a large number of ditches and





two postholes. Some of the ditches correspond with geophysical anomalies {85} and are suggestive of at least one enclosure. In contrast to the enclosures described above, this would appear to be rectangular in plan and aligned NW-SE. Only a small finds assemblage was recovered; the only datable artefacts was a small quantity of early Roman pottery.

Ditches [3226] and [4106] appeared to coincide with the NE side of the possible enclosure and it is possible that ditch [3216], although not precisely aligned with the geophysical anomaly, may represent the SW side of the possible enclosure. Ditch [3210] is on the same alignment as these ditches and would be within the interior of the enclosure. However, the number of ditches and furrows found within Trenches 32 and 42 casts some doubt on the enclosure interpretation. A number of other ditches were found on different alignments, e.g. [3220], [3204] and [3224] suggesting that not all activity in this area was contemporary.

The only isolated features found within these trenches were two shallow post-holes [3206] and [3208] found *c.* 6m apart. Neither contained any finds.

#### **2.2.4 Medieval furrows**

Evidence for medieval strip field cultivation in the form of furrows was present in five trenches, generally corresponding to geophysical anomalies. These survived better on the slopes, as opposed to the crest of the ridge, presumably due to differential truncation by modern ploughing. They were *c.* 6–8m apart and up to 0.2m deep. They were usually distinguishable from earlier features, although this was less clear-cut in Trench 32.

#### **2.2.5 Modern overburden**

Modern overburden generally consisted of dark brown-grey silty clay topsoil (0.2–0.35m thick), overlying mid orange-brown silty clay subsoil (0.1–0.45m thick). The variability in subsoil thickness generally corresponds to the undulating nature of the PDA

#### **2.2.6 Natural geology**

The natural geology was fairly consistent across the site and comprised mainly firm yellow and orange clays, which sometimes contained lenses of silt or gravel. Where observed, firm blue-grey clays often underlay the yellow and orange clays.



## 2.3 Artefacts

### 2.3.1 Introduction

Nine trenches, the majority within Heritage Asset 8, yielded an assemblage mainly comprising pottery and animal bone, with smaller quantities of ceramic building material, fuel ash and ferrous slag (Table 2).

Heritage Asset	Tr.	Feature	Description	Fill	Date	Finds Summary		
9	26	2604	Ditch	2605	Early Roman	Pottery (142g)		
		2604	Ditch	2606	Early Roman	Pottery (9g)		
		2604	Ditch	2607	Early Roman	Pottery (164g)		
		2610	Ditch	2611	Early Roman	Pottery (16g); fired clay (9g); animal bone (94g)		
		2618	Stone layer	2618	Early Roman	Pottery (77g)		
		2706	Ditch	2707	Undated	Fired clay (57g); fuel ash (5g); animal bone (2g)		
	27	2711	Ditch	2713	Early Roman	Pottery (62g); animal bone (58g)		
		2714	Ditch	2715	Early Roman	Pottery (9g); animal bone (2g)		
		2720	Ditch	2721	Early Roman	Pottery (67g); animal bone (19g)		
		2720	Ditch	2722	Early Roman	Pottery (128g); fired clay (9g); animal bone (16g)		
		8	28	2805	Ditch	2806	Undated	Animal bone (19g)
				2807	Furrow	2808	Early Roman	Pottery (2g)
29	2906		Pit	2907	Undated	Animal bone (7g)		
	2908		Ditch	2909	Undated	Animal bone (1g)		
	2910		Ditch	2911	Undated	Animal bone (41g)		
	2914		Pit	2915	Iron Age	Pottery (2g)		
	2918		Ditch	2919	Undated	Animal bone (15g)		
	2922		Ditch	2923	Early Roman	Pottery (47g); fired clay (43g)		
30	3001		Subsoil	3001	Early Roman	Pottery (261g)		
	3003		Ditch	3004	Early Roman	Pottery (7g); animal bone (6g)		
	3007		Ditch	3008	Undated	Animal bone (4g)		
	3011		Ditch	3013	Undated	Animal bone (5g)		
	3014		Ditch	3016	Undated	Animal bone (43g)		
	31		3104	Ditch	3105	Early Roman	Pottery (4g); animal bone (55g)	
3109			Ditch	3110	Early Roman	Pottery (52g); ferrous slag (145g)		
3111			Ditch	3112	Iron Age	Pottery (288g); fired clay (26g); animal bone (262g)		
3111			Ditch	3114	Undated	Animal bone (270g)		
3111			Ditch	3116	Undated	Animal bone (102g)		
3119		Ditch	3125	Undated	Animal bone (412g)			
37	3705	3120	Ditch	3121	Early Roman	Pottery (335g); ceramic roof tile (211g); animal bone (51g)		
		3701	Subsoil	3701	Early Roman	Pottery (98g)		
		3703	Ditch	3704	Early Roman	Pottery (4g); animal bone (43g)		
		3705	Ditch	3706	Early Roman	Pottery (208g); ceramic roof tile (220g); fired clay (31g); animal bone (53g)		
	3707	Ditch	3708	Early Roman	Pottery (416g); ceramic roof tile (15g); fired clay (8g); animal bone (652g)			
	3709	Ditch	3710	Early Roman	Pottery (58g); ceramic roof tile (17g); animal bone (57g)			
	3719	Ditch	3720	Early Roman	Pottery (5g); ceramic roof tile (134g)			
7	32	3719	Ditch	3721	Early Roman	Pottery (25g); ceramic roof tile (259g)		
		3216	Ditch	3218	Early Roman	Pottery (19g)		
	41	3224	Ditch	3225	Early Roman	Pottery (6g)		
		4106	Ditch	4108	Undated	Animal bone (9g)		
		4106	Ditch	4109	Early Roman	Pottery (4g); animal bone (9g)		

**Table 2:** Artefact Summary by trench and feature



### 2.3.2 Pottery

A total of 280 pottery sherds (2.5kg) was collected, the majority from features in Heritage Asset 8. Sherds are well fragmented, with a mean weight of 8g, and uniformly abraded. Fabrics are listed below (Table 3) in accordance with the Leicestershire Ceramic Type Series (Marsden 2000: Pollard 1994).

Wares and fabric groups	Sherd No.	Wt (g)	Sherd:Wt (g)		
			Heritage Asset 9	Heritage Asset 8	Heritage Asset 7
<b>Iron Age</b>					
Q1	Quartz sand	26	135		
Q4	Sandy fabric with quartz	2	288		
<b>Roman</b>					
BB1	Black-Burnished ware (or imitation)	8	111	8:111	
CG	Calcite gritted ware	15	75	12:51	3:24
GW3, 5, 6	Grey wares: fine, medium and coarse sandy	168	1,432	49:365	116:1,057
OW2, 3	Oxidised wares: fine and coarse sandy	43	346	8:84	34:250
Samian	Samian ware	7	9		7:9
SW4	Coarse sandy wares	2	10	1:3	
WW2	White wares: fine sandy	9	109	7:62	2:47
<b>Total</b>		<b>280</b>	<b>2,515</b>	<b>85:676</b>	<b>190:1,810</b>

**Table 3:** Pottery Type Series

#### 2.3.2.1 Iron Age

Iron Age pottery derives entirely from Heritage Asset 8 and comprises 28 predominantly sand-tempered sherds (423g), representing five vessels. Most sherds occur as residual finds in the primary fills of Roman ditch [3111] and [3120]. The latter included sherds from an ovoid or globular vessel with a slightly bevelled rounded rim and a second vessel with a flat base. Several sherds have faint vertical brushing or light scoring, suggestive of a middle to later Iron Age date.

#### 2.3.2.2 Roman

The Roman assemblage comprises 252 sherds (2kg), representing approximately 82 vessels. The pottery is dominated by wheel-thrown grey wares in a range of fine to coarse sandy fabrics mainly datable from the 2nd century (168 sherds: 1.4kg). These are of uncertain, but probably local, sources. The vessel repertoire comprises mainly jars with simple everted rims, ranging in diameter from 150–200mm. Three straight-sided bowls or ‘dog dishes’, and a flat-rimmed bowl, the latter a possible Black-Burnished ware imitation also occur. Decoration comprises wavy incised motifs and single cordoned and burnished vessels. Fifteen calcite-gritted sherds, demonstrating links with the south Midlands shelly wares of Northamptonshire, Bedfordshire, and Lincolnshire, were also recovered, although no diagnostic forms survive. Unprovenanced Midlands oxidised wares in fine and coarse sandy fabrics total 43 sherds. Although not closely datable, they are most likely to be of 2nd-century origin. White wares, some likely to derive from Northamptonshire, include an everted rim jar and a worn mortarium sherd.

Continental imports are seven Gaulish samian sherds (9g), recovered from Heritage Asset 8. All are highly abraded and undiagnostic of form.



### 2.3.3 Ceramic building material and fired clay

Seven pieces of coarse sand-tempered Roman roof tile and one grog-tempered example (total weight 856g) were collected from Heritage Asset 8 (ditches [3120], [3705], [3707], [3709] and [3719]). Most derive from tegulae, and range in thickness from 22–28mm. No flanges or other diagnostic features survive. Two joining fragments derive from an imbrex (thickness 20mm).

Eleven fired clay fragments (183g) were collected from ditches in Heritage Asset 8 ([2922], [3111], [3705], [3707]) and 9 ([2610], [2706], [2720]). All occur in a coarse sandy fabric similar to the roof tile. Most retain surfaces, and three have wattle impressions of approximately 15mm diameter.

### 2.3.4 Other finds

Non-ceramic artefacts are poorly represented in the assemblage. Ditches [2706] (Heritage Asset 9) and [3109] (Heritage Asset 8) respectively yielded small quantities of fuel ash (5g) and ferrous smithing slag (145g). The product of any high temperature fire in which alkalis and silicates are mixed, the former is not indicative of a metallurgical process.

## 2.4 Ecofacts

### 2.4.1 Animal bone

Animal bone (309 fragments: 2.3kg), derived from all Heritage Assets, the majority (2.1kg) associated with ditches in Asset 8 (principally [3111] and [3707]). Individual pieces are small, with a mean weight of 7g and are generally abraded.

Fragments identified to species include the remains of cattle, sheep/goat, horse and pig. Diagnostic bone elements are mainly limb bones and rib fragments. The presence of a number of foot bones and skull elements, the latter represented by loose teeth and mandible fragments, may suggest butchery, although no cut or chop marks were noted on the remains. None of the better preserved bones appear to have been gnawed, although the fragmentary state and poor preservation of most of the assemblage may have resulted in the loss of gnawing and butchery data.

### 2.4.2 Environmental samples

Although none of the features had visually obvious palaeoenvironmental potential, a number of soil samples were taken. None of those processed to date contained significant charred plant remains or other ecofactual evidence.

## 2.5 Metal detecting transects

These were undertaken as per the Specification (CgMs 2015b section 3.2 and fig. 2) and will be reported on in detail with the other metal detected areas in the Outline Report (Albion in prep.). In summary a small number of metallic finds were recovered including spindle whorls (one dated to the late Saxon-medieval period), two brooches (both 1<sup>st</sup> century AD) and a strap mount (uncertain date).





### 3. SUMMARY OF RESULTS

#### 3.1 Overview

The trench evaluation within the SA has enhanced the information already available on Heritage Assets 7–9 (Fig. 7). The results confirm the presence of sub-surface features which coincide with identified geophysical anomalies (ArchaeoPhysica 2015, fig. 13), although a larger number and greater range were found to be present.

#### 3.2 Heritage Assets

The trial trench evaluation identified an early Roman settlement clustered along the crest of the ridge (Heritage Assets 8 and 9), which possibly continued down slope to the NW (Heritage Asset 7). The latter produced very few finds and may represent activity on the periphery of a settlement.

Heritage Asset 8 represents a series of probably interlinked sub-circular enclosures. Although contemporary, it is uncertain on the basis of the geophysical survey as to whether Heritage Asset 9 (enclosures and trackway) was connected to Heritage Asset 8; however, this would seem likely.

Only a small quantity of early Roman pottery was recovered from Heritage Asset 7, so it is uncertain if this provides an accurate date for the activity in this area. In contrast to the enclosures within Heritage Assets 8 and 9 (which were sub-circular), those within Heritage Asset 7 appeared to be rectangular based on the geophysical survey. If this is the case and the pottery is residual, then some kind of association with Bittesby DMV is possible. However, based on the presence of furrows within Trenches 32 and 41 this area was clearly part of the open field system during part of the medieval period.

The Heritage Assets are summarised below in Table 4.

Asset ref.	Description	Dating evidence
A7	Settlement comprised of enclosures including a D-shaped one connected to a trackway	Early Roman
A8	Settlement comprised of interlinked system of sub-circular enclosures	Early Roman (evidence for some activity in the middle-late Iron Age)
A9	Peripheral enclosures	Uncertain (early Roman or medieval)

**Table 4:** Summary of Heritage Assets within the SA after the completion of the trench evaluation

Note. Heritage Assets A1 to A6 are situated within the DHL application area and are, therefore, not described in this report.



#### 4. REFERENCES

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## 5. APPENDIX 1: TRENCH SUMMARY

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**Trench:** 25

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.55 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50847; Northing: 86010)

OS Grid Ref.: SP (Easting: 50811; Northing: 85975)

**Reason:** To evaluate the archaeological potential of a 'blank' area

Context:	Type:	Description:	Excavated:	Finds Present:
2501	Topsoil	Friable dark grey brown silty clay 0.2m - 0.35m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2502	Subsoil	Friable light grey brown sandy silt 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2503	Natural	Friable light orange brown silt	<input type="checkbox"/>	<input type="checkbox"/>





**Trench: 26**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.5 m. Max: 0.6 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50638: Northing: 86084)

**OS Grid Ref.: SP** (Easting: 50591: Northing: 86084)

**Reason: To evaluate geophysical anomalies within Heritage Asset 9**

Context:	Type:	Description:	Excavated:	Finds Present:
2601	Topsoil	Loose dark grey brown silty clay occasional small-medium stones 0.2m - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2602	Subsoil	Friable mid orange brown silty clay 0.2m -0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2603	Natural	Friable light orange brown clay	<input type="checkbox"/>	<input type="checkbox"/>
2604	Ditch	Linear NNW-SSE sides: 45 degrees base: concave dimensions: max breadth 1.5m, max depth 0.5m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2605	Primary fill	Compact dark grey brown silty clay occasional small-medium stones 0.2m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2606	Secondary fill	Compact mid orange brown silty clay occasional small-medium stones 0.2m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2607	Tertiary fill	Compact dark grey brown silty clay occasional small-medium stones 0.2m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2608	Posthole	Sub-circular sides: near vertical base: flat dimensions: max depth 0.11m, max diameter 0.32m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2609	Fill	Compact mid orange brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2610	Ditch	Linear NW-SE sides: near vertical base: flat dimensions: max breadth 0.9m, max depth 0.5m, min length 1.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2611	Fill	Compact dark green brown silty clay occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2612	Posthole	Sub-circular sides: steep base: concave dimensions: max depth 0.4m, max diameter 0.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2613	Fill	Compact mid grey brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2614	Posthole	Sub-circular sides: near vertical base: flat dimensions: max depth 0.15m, max diameter 0.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2615	Fill	Compact mid green brown silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2616	Posthole	Sub-circular sides: near vertical base: flat dimensions: max depth 0.13m, max diameter 0.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2617	Fill	Compact mid grey brown silty clay occasional medium chalk, occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2618	External surface	Frequent medium stones 5m x 2m and 0.1m - 0.2m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



**Trench:** 27

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.35 m. Max: 0.4 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50649; Northing: 86047)

OS Grid Ref.: SP (Easting: 50604; Northing: 86023)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 9

Context:	Type:	Description:	Excavated:	Finds Present:
2700	Topsoil	Friable dark green sandy clay 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2701	Subsoil	Friable mid brown grey clay silt 0.35m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2702	Natural	Firm mid brown yellow chalky clay	<input type="checkbox"/>	<input type="checkbox"/>
2703	Ditch	Linear E-W sides: asymmetrical base: concave dimensions: max breadth 0.83m, max depth 0.59m, min length 1.m Truncated by ditch [2706]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2704	Primary fill	Firm mid grey silty clay occasional flecks chalk, occasional small stones 0.37m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2705	Secondary fill	Firm mid grey clay occasional medium stones 0.22m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2706	Ditch	Linear E-W sides: vertical base: flat dimensions: max breadth 1.3m, max depth 0.56m, min length 1.m Recut of ditch [2703]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2707	Primary fill	Firm mid grey silty clay occasional medium-large stones, occasional small stones 0.19m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2708	Secondary fill	Firm mid grey clay occasional flecks chalk, occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2709	Ditch	Linear NW-SE sides: steep base: concave dimensions: max breadth 0.4m, max depth 0.3m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2710	Fill	Friable dark grey silty clay occasional large burnt stones, occasional flecks chalk, occasional flecks fired clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2711	Ditch	Linear E-W sides: concave base: flat dimensions: max breadth 1.28m, max depth 0.41m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2712	Primary fill	Firm mid brown grey clay 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2713	Secondary fill	Firm dark grey clay 0.21m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2714	Ditch	Linear E-W sides: asymmetrical base: concave dimensions: max breadth 0.55m, max depth 0.35m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2715	Fill	Firm mid grey brown clay occasional medium stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2716	Furrow	Linear NE-SW dimensions: max breadth 3.m, min depth 0.2m, min length 2.m Investigated by hand excavation and all below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2717	Fill	Firm mid brown grey clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2718	Ditch	Linear NE-SW sides: 45 degrees base: flat dimensions: max breadth 0.6m, max depth 0.09m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2719	Fill	Firm mid red grey clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2720	Ditch	Linear ESE-WNW sides: steep base: flat dimensions: max breadth 1.65m, max depth 1.03m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2721	Primary fill	Firm mid blue brown clay 0.38m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2722	Secondary fill	Firm mid blue brown clay 0.83m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



**Trench: 28**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.48 m. Max: 0.8 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50517; Northing: 85807)

**OS Grid Ref.: SP** (Easting: 50568; Northing: 85807)

**Reason: To evaluate geophysical anomalies within Heritage Asset 8**

Context:	Type:	Description:	Excavated:	Finds Present:
2801	Topsoil	Friable dark grey clay silt 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2802	Subsoil	Friable mid brown grey clay silt 0.18m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2803	Colluvium	Friable mid orange brown sandy silt 0.26m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2804	Natural	Firm mid brown yellow chalky clay	<input type="checkbox"/>	<input type="checkbox"/>
2805	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 1.46m, max depth 0.34m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2806	Fill	Firm mid brown grey silty clay occasional large stones, occasional small-medium stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2807	Furrow	Linear NW-SE sides: concave base: uneven dimensions: max breadth 0.56m, max depth 0.09m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2808	Fill	Firm mid brown grey silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2809	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 0.58m, max depth 0.41m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2810	Fill	Firm mid brown grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2811	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 0.63m, max depth 0.14m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2812	Fill	Firm mid brown grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2813	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 0.81m, max depth 0.21m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2814	Fill	Firm mid brown grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2815	Furrow	Linear NW-SE dimensions: max breadth 1.05m, min depth 0.2m, min length 1.m Investigated by hand excavation and found to be below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2816	Fill	Firm mid brown grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 29**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.45 m. Max: 0.7 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50404; Northing: 85867)

**OS Grid Ref.: SP** (Easting: 50453; Northing: 85851)

**Reason: To evaluate geophysical anomalies within Heritage Asset 8. A box (4 x 7.5m) was dug on one side of the trench at the request of LCC and CgMs**

Context:	Type:	Description:	Excavated:	Finds Present:
2901	Topsoil	Friable dark grey silty clay 0.22 - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2902	Subsoil	Friable mid brown grey clay silt 0.23 - 0.44m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2903	Natural	Firm mid brown yellow chalky clay	<input type="checkbox"/>	<input type="checkbox"/>
2904	Ditch	Linear N-S sides: concave base: concave dimensions: max breadth 0.7m, max depth 0.25m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2905	Fill	Firm mid red brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2906	Pit	Circular sides: near vertical base: concave dimensions: max depth 0.25m, max diameter 0.7m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2907	Fill	Firm mid brown silty clay frequent flecks charcoal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2908	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 0.75m, max depth 0.45m, min length 1.2m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2909	Fill	Firm dark brown silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2910	Ditch	Linear NE-SW sides: asymmetrical base: concave dimensions: max breadth 1.m, max depth 0.48m, min length 1.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2911	Fill	Firm dark brown silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2912	Pit	Circular sides: near vertical base: concave dimensions: max depth 0.24m, max diameter 0.48m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2913	Fill	Firm dark brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2914	Pit	Oval E-W sides: near vertical base: concave dimensions: max breadth 1.m, max depth 0.72m, max length 1.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2915	Fill	Firm dark brown silty clay occasional flecks charcoal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2916	Posthole	Oval sides: near vertical base: concave dimensions: max depth 0.1m, max diameter 0.32m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2917	Fill	Firm dark brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2918	Ditch	Linear NE-SW sides: concave base: flat dimensions: min breadth 0.65m, max depth 0.24m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2919	Fill	Firm dark brown silty clay occasional flecks charcoal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2920	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 0.55m, max depth 0.19m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2921	Fill	Firm mid brown grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2922	Ditch	Curving linear NW-SE sides: concave base: concave dimensions: max breadth 0.85m, max depth 0.22m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2923	Fill	Friable dark brown grey sandy clay frequent large stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2924	Pit	Oval E-W sides: near vertical base: concave dimensions: max breadth 0.7m, max depth 0.24m, max length 1.2m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2925	Fill	Friable dark grey sandy clay moderate large stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2926	Posthole	Circular sides: concave base: concave dimensions: max depth 0.08m, max diameter 0.4m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2927	Fill	Firm mid brown grey sandy clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>





**Trench:** 29

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.45 m. Max: 0.7 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50404; Northing: 85867)

OS Grid Ref.: SP (Easting: 50453; Northing: 85851)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 8. A box (4 x 7.5m) was dug on one side of the trench at the request of LCC and CgMs

Context:	Type:	Description:	Excavated:	Finds Present:
2928	Pit	Circular dimensions: max diameter 0.4m	<input type="checkbox"/>	<input type="checkbox"/>
2929	Fill	Firm mid brown grey sandy clay occasional small-medium stones	<input type="checkbox"/>	<input type="checkbox"/>
2930	Pit	Sub-circular dimensions: max diameter 0.8m	<input type="checkbox"/>	<input type="checkbox"/>
2931	Fill	Firm mid brown grey sandy clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench: 30**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.5 m. Max: 0.5 m.**

**Co-ordinates: OS Grid Ref.: SP (Easting: 50351: Northing: 85783)**

**OS Grid Ref.: SP (Easting: 50304: Northing: 85769)**

**Reason: To evaluate geophysical anomalies within Heritage Asset 8**

Context:	Type:	Description:	Excavated:	Finds Present:
3000	Topsoil	Friable dark grey clay silt 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3001	Subsoil	Friable mid brown grey clay silt 0.2m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3002	Natural	Firm mid brown yellow chalky clay	<input type="checkbox"/>	<input type="checkbox"/>
3003	Ditch	Linear N-S sides: assymetrical base: concave dimensions: max breadth 0.8m, max depth 0.25m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3004	Fill	Firm dark blue grey silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3005	Ditch	Linear NW-SE sides: U-shaped base: concave dimensions: max breadth 0.36m, max depth 0.07m, min length 0.4m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3006	Fill	Firm mid blue grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3007	Ditch	Curving linear sides: concave base: concave dimensions: max breadth 0.6m, max depth 0.26m, min length 1.m Truncates posthole [3009]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3008	Primary fill	Firm mid orange grey silty sand 0.26m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3022	Secondary fill	Firm mid blue grey silty clay occasional flecks charcoal 0.22m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3009	Posthole	Circular sides: steep base: flat dimensions: max depth 0.17m, max diameter 0.3m Truncated by ditch [3007]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3010	Fill	Firm mid orange grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3011	Ditch	Linear E-W sides: concave base: concave dimensions: max breadth 1.13m, max depth 0.39m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3012	Primary fill	Firm mid brown grey clay occasional flecks charcoal 0.12m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3013	Secondary fill	Firm mid blue grey silty clay 0.28m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3014	Ditch	Linear N-S sides: steep base: flat dimensions: max breadth 0.62m, max depth 0.28m, min length 0.6m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3016	Fill	Firm mid blue grey clay occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3015	Ditch	Linear N-S dimensions: max breadth 3.m, min length 2.m Truncated by four land-drains	<input type="checkbox"/>	<input type="checkbox"/>
3017	Fill	Firm mid blue grey clay occasional small stones	<input type="checkbox"/>	<input type="checkbox"/>
3018	Ditch	Linear NW-SE sides: assymetrical base: concave dimensions: max breadth 0.77m, max depth 0.08m, min length 0.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3019	Fill	Firm mid brown grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3020	Ditch	Linear N-S dimensions: max breadth 0.5m, min length 2.m	<input type="checkbox"/>	<input type="checkbox"/>
3021	Fill	Firm dark blue grey silty clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench: 31**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.44 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50262: Northing: 85762)

**OS Grid Ref.: SP** (Easting: 50261: Northing: 85712)

**Reason: To evaluate geophysical anomalies within Heritage Asset 8**

Context:	Type:	Description:	Excavated:	Finds Present:
3101	Topsoil	Friable dark brown silty clay 0.34m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3102	Subsoil	Firm mid brown silty clay 0.1m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3103	Natural	Firm light orange brown clay	<input type="checkbox"/>	<input type="checkbox"/>
3104	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 0.32m, max depth 0.21m, min length 2.m Recut of ditch [3106]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3105	Fill	Friable mid brown silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3106	Ditch	Linear NE-SW sides: steep base: concave dimensions: max breadth 0.32m, max depth 0.25m, min length 1.m Truncated by ditch [3104]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3107	Primary fill	Firm mid brown silty clay 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3108	Secondary fill	Friable mid grey brown silty clay 0.23m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3109	Ditch	Linear NW-SE sides: steep base: concave dimensions: max breadth 0.5m, max depth 0.17m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3110	Fill	Friable mid yellow brown silty clay occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3111	Ditch	Linear NE-SW sides: steep dimensions: max breadth 5.5m, max depth 0.57m, min length 0.8m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3112	Tertiary fill	Firm mid blue green clay occasional flecks charcoal 0.22m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3113	Primary fill	Firm mid blue grey clay >0.29m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3114	Secondary fill	Firm blue grey clay 0.22m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3115	Tertiary fill	Firm mid grey clay 0.37m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3116	Upper fill	Firm dark grey silty clay 0.37m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3117	Ditch	Linear NE-SW sides: steep base: uneven dimensions: max breadth 0.84m, max depth 0.24m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3118	Fill	Friable dark grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3119	Ditch	Linear NE-SW sides: concave base: flat dimensions: max breadth 1.3m, max depth 0.47m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3125	Fill	Firm mid blue grey silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3120	Ditch	Linear E-W sides: concave base: concave dimensions: max breadth 2.9m, max depth 0.65m, min length 0.7m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3121	Primary fill	Compact mid yellow grey clay 0.33m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3122	Secondary fill	Firm mid blue grey clay occasional large stones 0.56m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3123	Ditch	Linear E-W sides: concave base: concave dimensions: max breadth 0.39m, max depth 0.15m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3124	Fill	Firm mid brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3126	Posthole	Circular sides: vertical base: flat dimensions: max depth 0.29m, max diameter 0.37m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3127	Fill	Firm mid blue grey clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3128	Ditch	Linear NE-SW dimensions: max breadth 1.m, min length 2.m	<input type="checkbox"/>	<input type="checkbox"/>
3129	Fill	Firm mid blue grey sandy clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench: 31**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.44 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50262: Northing: 85762)

**OS Grid Ref.: SP** (Easting: 50261: Northing: 85712)

**Reason: To evaluate geophysical anomalies within Heritage Asset 8**

Context:	Type:	Description:	Excavated:	Finds Present:
3130	Ditch	Linear E-W dimensions: max breadth 2.95m, min length 2.m	<input type="checkbox"/>	<input type="checkbox"/>
3131	Fill	Firm dark grey brown silty clay	<input type="checkbox"/>	<input type="checkbox"/>





**Trench:** 32

**Max Dimensions:** Length: 70.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.48 m. Max: 0.6 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50177; Northing: 85853)

OS Grid Ref.: SP (Easting: 50149; Northing: 85812)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 7. Trench extended at request of LCC and CgMs

Context:	Type:	Description:	Excavated:	Finds Present:
3201	Topsoil	Friable dark brown clay silt occasional small stones 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3202	Subsoil	Friable dark brown yellow sandy silt occasional small stones 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3203	Natural	Loose dark orange sand occasional small stones	<input type="checkbox"/>	<input type="checkbox"/>
3204	Ditch	Linear NE-SW sides: concave base: flat dimensions: max breadth 0.68m, max depth 0.42m, min length 3.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3205	Fill	Friable dark grey brown sandy silt occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3206	Posthole	Circular sides: assymetrical base: flat dimensions: max depth 0.16m, max diameter 0.38m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3207	Fill	Loose dark grey brown silty sand occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3208	Posthole	Sub-circular sides: concave base: flat dimensions: max depth 0.08m, max diameter 0.34m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3209	Fill	Loose dark grey brown silty sand occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3210	Ditch	Linear NW-SE sides: 45 degrees base: uneven dimensions: max breadth 0.93m, max depth 0.24m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3211	Fill	Loose dark grey brown silty sand occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3212	Furrow	Linear ESE-WNW sides: concave base: flat dimensions: max breadth 0.95m, max depth 0.09m, min length 2.1m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3213	Fill	Loose dark brown yellow sandy silt occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3214	Furrow	Linear ESE-WNW sides: concave base: flat dimensions: max breadth 1.14m, max depth 0.13m, min length 2.1m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3215	Fill	Loose dark brown yellow sandy silt occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3216	Ditch	NW-SE sides: concave base: uneven dimensions: max breadth 2.95m, max depth 0.51m, min length 2.05m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3217	Primary fill	Cemented dark brown sandy silt occasional small stones 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3218	Secondary fill	Loose dark yellow brown sandy silt occasional small stones 0.23m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3219	Tertiary fill	Loose dark grey silty sand occasional small stones 0.37m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3220	Ditch	Linear NNW-SSE sides: concave base: concave dimensions: max breadth 0.38m, max depth 0.14m, min length 2.25m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3221	Fill	Loose dark orange brown silty sand	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3222	Ditch	Linear ESE-WNW sides: 45 degrees base: flat dimensions: max breadth 1.3m, max depth 0.38m, min length 2.25m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3223	Fill	Loose mid grey silty silt occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3224	Ditch	Linear E-W sides: concave base: concave dimensions: max breadth 1.m, max depth 0.44m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3225	Fill	Firm mid blue grey silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3226	Ditch	Linear NW-SE sides: steep base: concave dimensions: max breadth 1.m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3227	Primary fill	Loose dark grey brown sandy silt 0.21m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3228	Secondary fill	Compact mid red brown sandy clay 0.68m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 32

**Max Dimensions:** Length: 70.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.48 m. Max: 0.6 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50177: Northing: 85853)

OS Grid Ref.: SP (Easting: 50149: Northing: 85812)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 7. Trench extended at request of LCC and CgMs

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
3229	Tertiary fill	Friable mid brown grey silty silt 0.68m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



**Trench: 36**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.46 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50147: Northing: 85717)

**OS Grid Ref.: SP** (Easting: 50197: Northing: 85717)

**Reason: To evaluate geophysical anomalies within Heritage Asset 8**

Context:	Type:	Description:	Excavated:	Finds Present:
3601	Topsoil	Friable dark grey sandy clay 0.3 - 0.34m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3602	Subsoil	Friable mid brown grey clay silt 0.08 - 0.11m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3603	Natural	Firm mid brown yellow chalky clay	<input type="checkbox"/>	<input type="checkbox"/>
3604	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 0.92m, max depth 0.17m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3605	Fill	Firm mid brown yellow sandy clay moderate small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3606	Ditch	Linear NW-SE sides: concave base: v-shaped dimensions: max breadth 0.92m, max depth 0.11m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3607	Fill	Firm mid brown yellow sandy clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3608	Ditch	Linear NE-SW sides: concave base: uneven dimensions: max breadth 0.9m, max depth 0.25m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3609	Fill	Firm mid brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3610	Furrow	Linear NE-SW sides: 45 degrees base: flat dimensions: min breadth 1.m, max depth 0.2m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3611	Fill	Firm mid brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 37**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.36 m. Max: 0.4 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50481: Northing: 85921)

**OS Grid Ref.: SP** (Easting: 50515: Northing: 85884)

**Reason: To evaluate geophysical anomalies within Heritage Asset 8**

Context:	Type:	Description:	Excavated:	Finds Present:
3700	Topsoil	Friable dark grey silty clay 0.2 - 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3701	Subsoil	Friable mid brown grey clay silt 0.07 - 0.18m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3702	Natural	Firm mid brown yellow chalky clay	<input type="checkbox"/>	<input type="checkbox"/>
3703	Ditch	Linear NE-SW sides: concave base: flat dimensions: max breadth 1.m, max depth 0.27m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3704	Fill	Firm dark brown silty clay moderate small-large stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3705	Ditch	Linear NE-SW sides: concave base: uneven dimensions: max breadth 0.27m, max depth 0.11m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3706	Fill	Firm mid brown silty clay moderate small-large stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3707	Ditch	Linear NW-SE sides: concave base: v-shaped dimensions: max breadth 0.9m, max depth 0.31m, min length 1.36m Truncated ditch [3709]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3708	Fill	Friable mid brown silty clay moderate small-large stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3709	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 0.34m, max depth 0.07m, min length 0.6m Truncated by ditch [3707]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3710	Fill	Friable light brown silty clay moderate small-large stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3713	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 0.5m, max depth 0.12m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3714	Fill	Firm mid brown silty clay moderate small-large stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3715	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 0.65m, max depth 0.16m, min length 1.1m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3716	Fill	Firm dark brown silty clay moderate small-large stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3717	Pit	Circular sides: concave base: flat dimensions: max depth 0.13m, max diameter 0.83m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3718	Fill	Firm dark yellow sandy clay moderate small-large stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3719	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 4.36m, max depth 0.59m, min length 0.45m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3720	Primary fill	Firm mid brown grey silty clay occasional small-medium stones 0.27m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3721	Secondary fill	Firm mid blue brown silty clay occasional small-medium stones 0.57m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>





**Trench:** 41

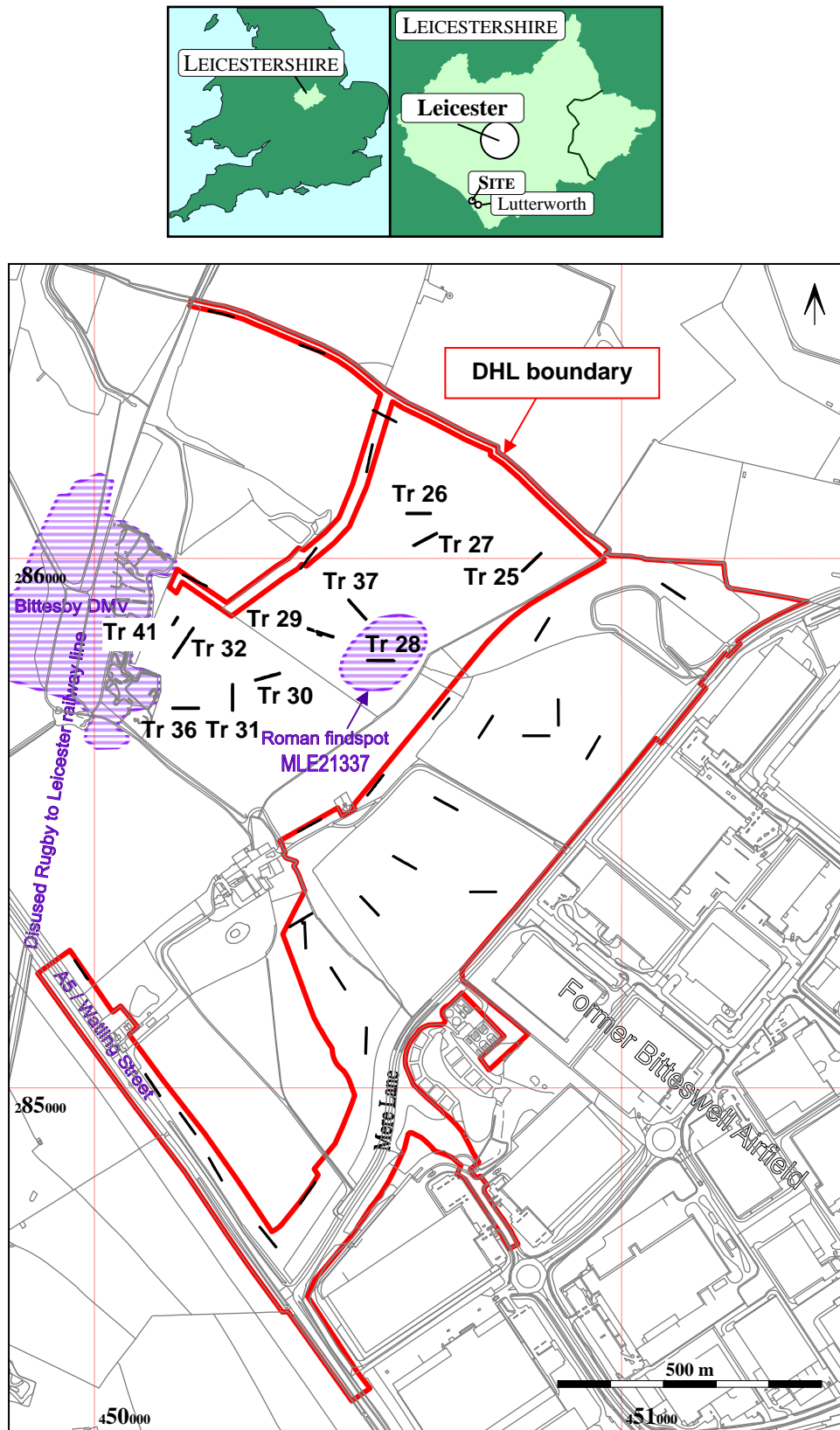
**Max Dimensions:** Length: 18.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.48 m. Max: 0.52 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50157; Northing: 85889)

OS Grid Ref.: SP (Easting: 50148; Northing: 85873)

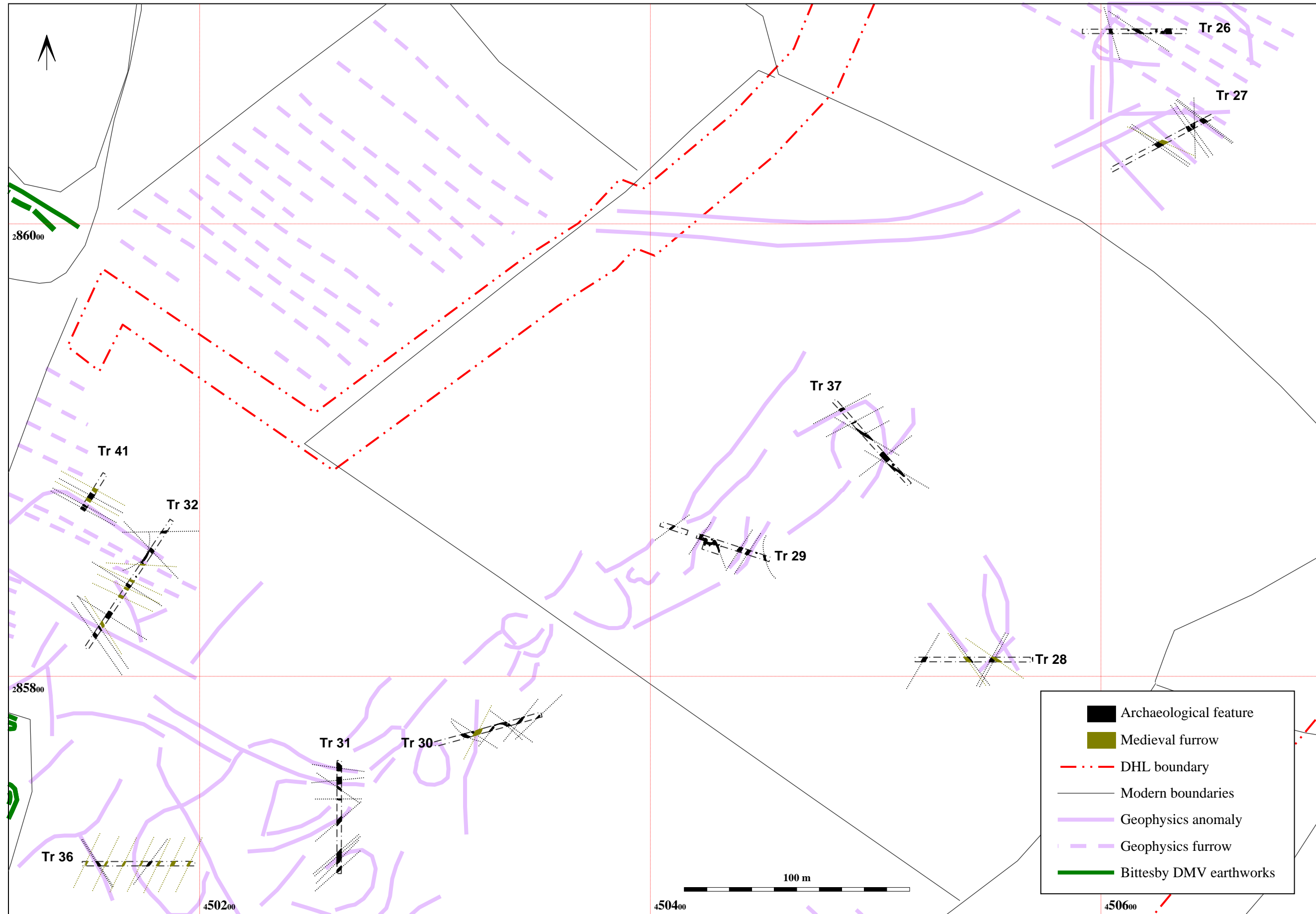
**Reason:** Contingency trench undertaken at request of LCC and CgMs, to evaluate geophysical anomalies within Heritage Asset 7

Context:	Type:	Description:	Excavated:	Finds Present:
4101	Topsoil	Firm mid brown grey silty clay 0.32m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4102	Subsoil	Friable mid brown grey sandy silt 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4103	Natural	Friable mid orange brown sandy silt	<input type="checkbox"/>	<input type="checkbox"/>
4104	Furrow	Linear E-W sides: concave base: flat dimensions: max breadth 1.45m, max depth 0.24m, min length 0.9m Truncated ditch [4106]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4105	Fill	Friable mid brown grey sandy clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4106	Ditch	Linear E-W sides: concave base: concave dimensions: max breadth 2.73m, max depth 1.02m, min length 0.9m Truncated by furrow [4104]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4107	Primary fill	Friable mid brown grey sandy clay occasional small-medium stones 0.12m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4108	Secondary fill	Firm mid brown grey sandy clay occasional small-medium stones 0.45m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4109	Upper fill	Firm mid brown grey silty clay occasional small-large stones 0.46m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4110	Ditch	Linear E-W dimensions: max breadth 0.55m, min length 2.1m	<input type="checkbox"/>	<input type="checkbox"/>
4111	Fill	Friable mid brown grey sandy silt	<input type="checkbox"/>	<input type="checkbox"/>
4112	Ditch	Linear E-W dimensions: max breadth 0.85m, min length 2.1m	<input type="checkbox"/>	<input type="checkbox"/>
4113	Fill	Friable mid brown grey sandy clay	<input type="checkbox"/>	<input type="checkbox"/>



**Figure 1: Site location and trench layout**

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**Figure 2:** Overall plan of trenches, with geophysical interpretation (ArchaeoloPhysica 2015, fig. 13)

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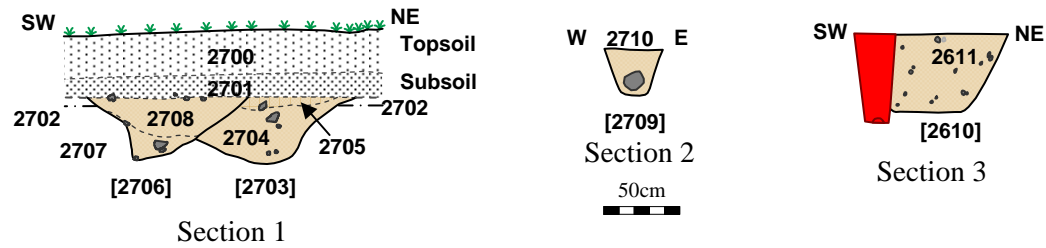
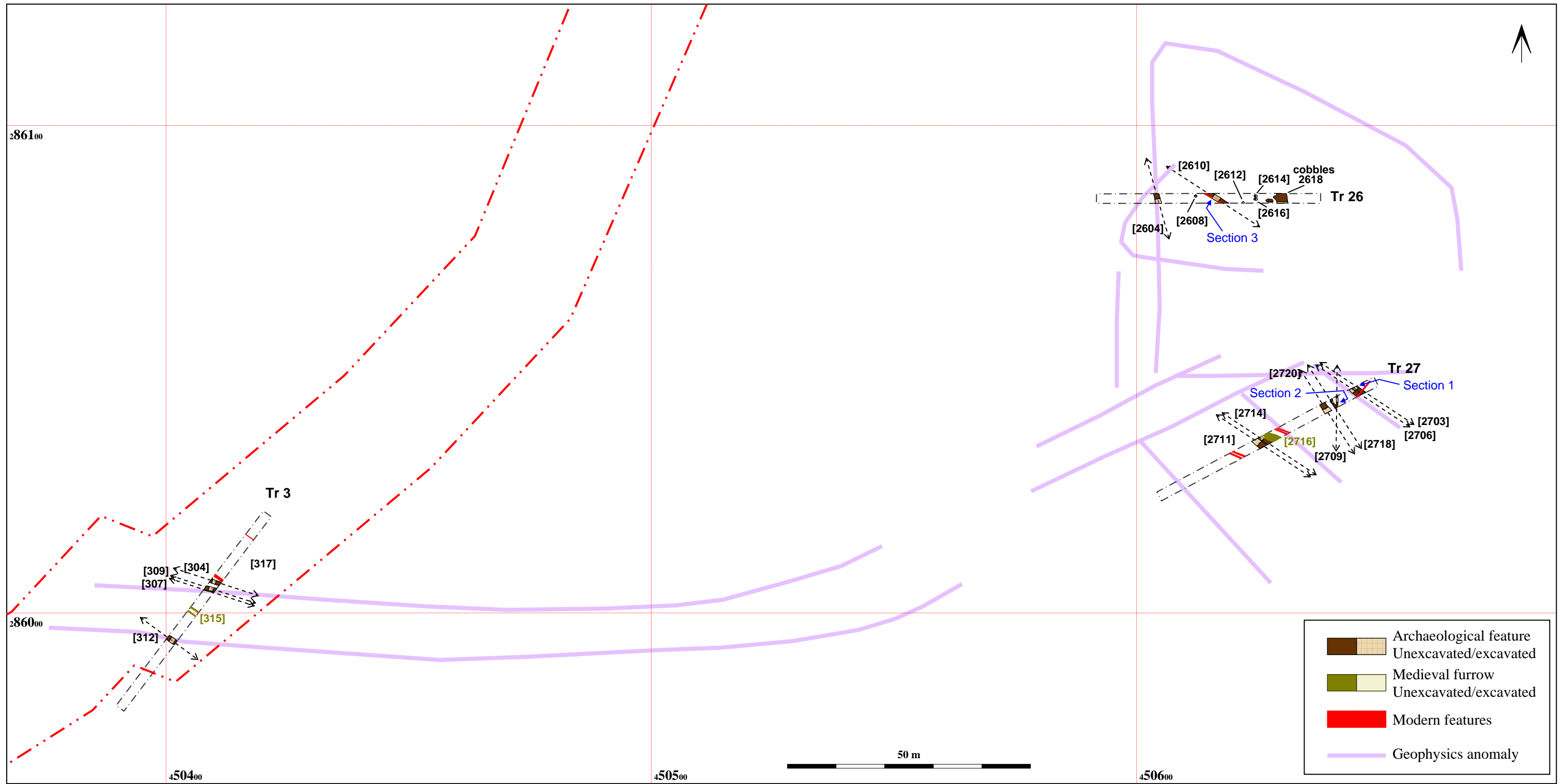
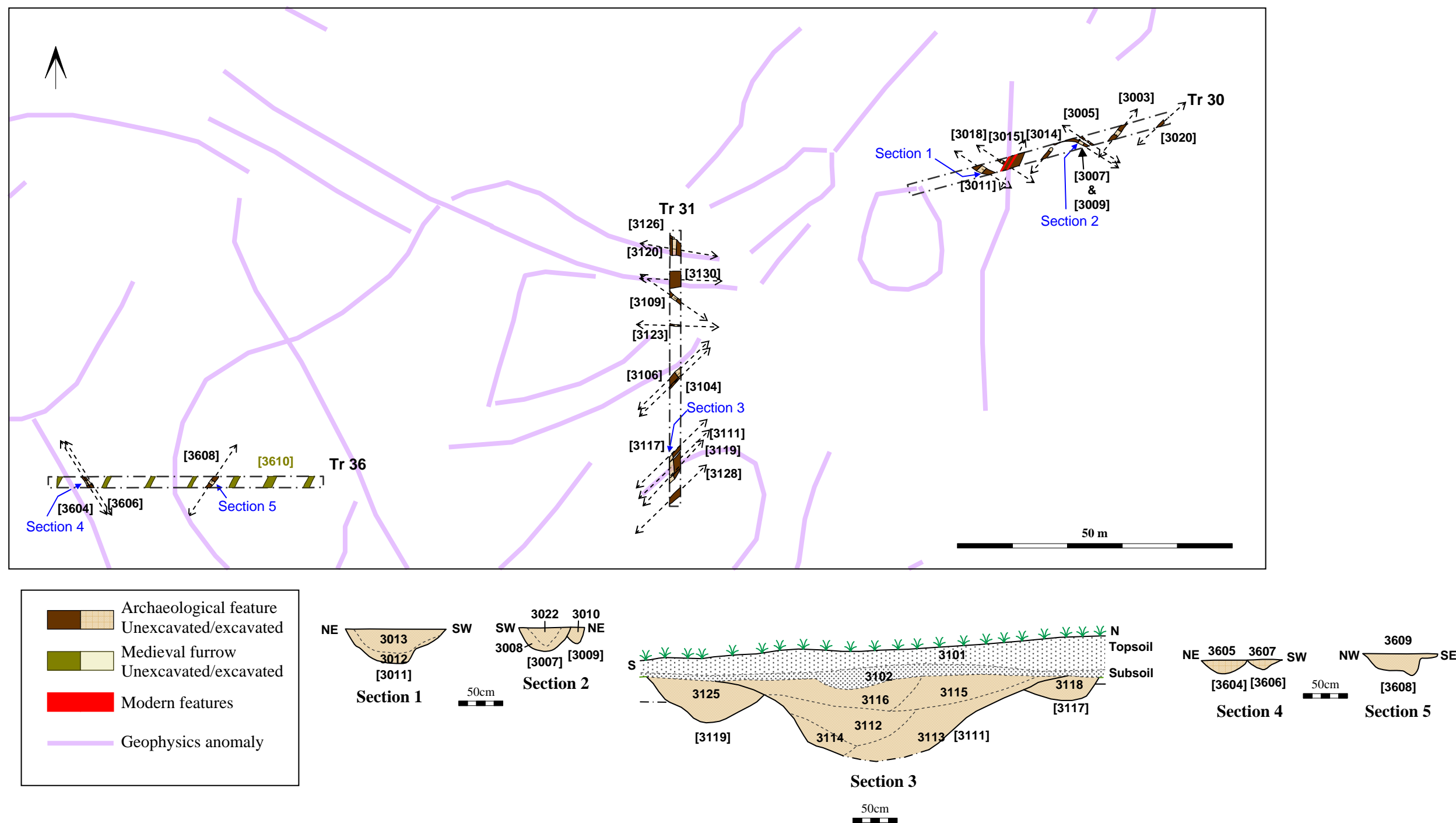
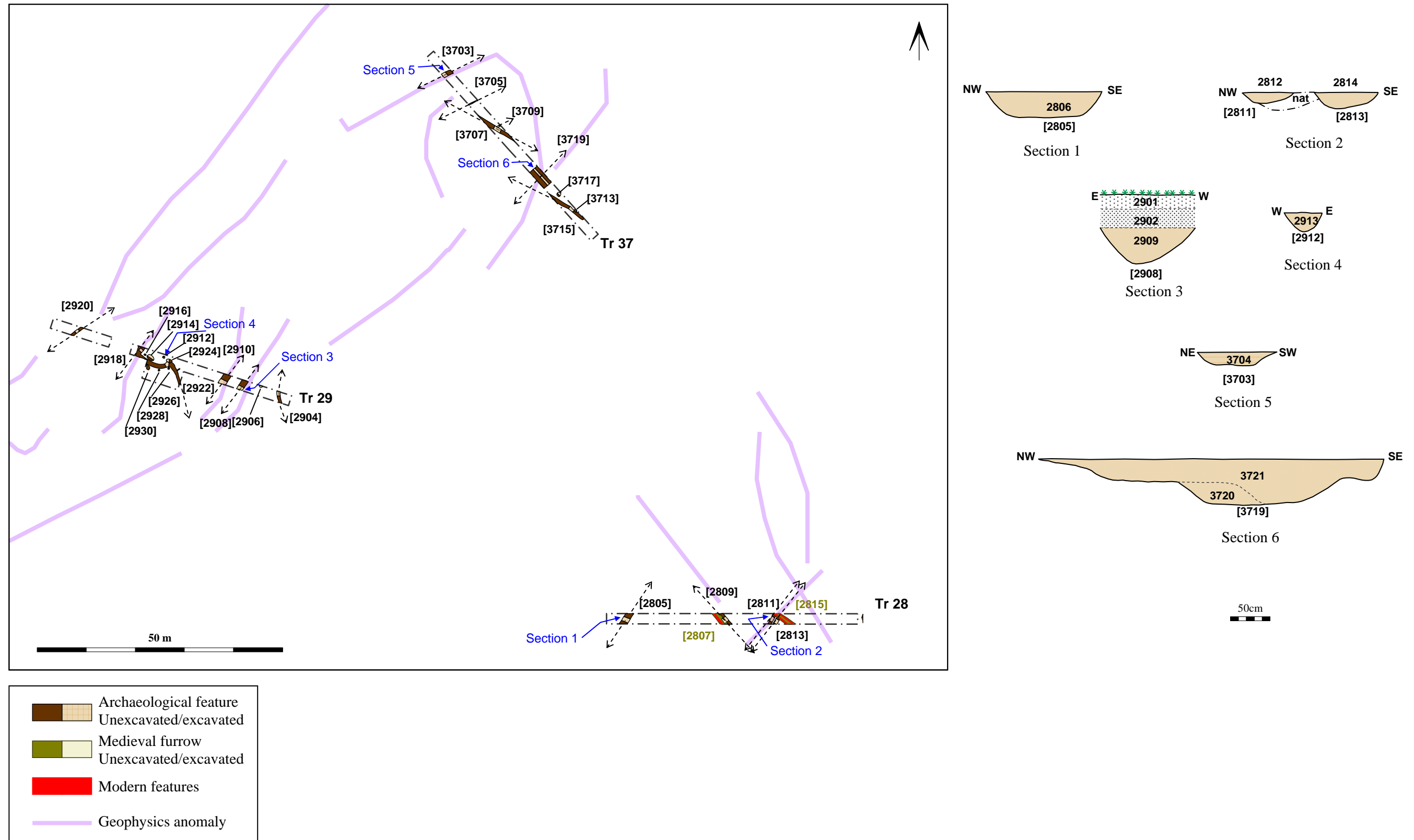


Figure 3: Plan of trenches 3 (DHL), 26, and 27, with geophysical interpretation (ArchaeoPhysica 2015, fig. 13) and selected sections

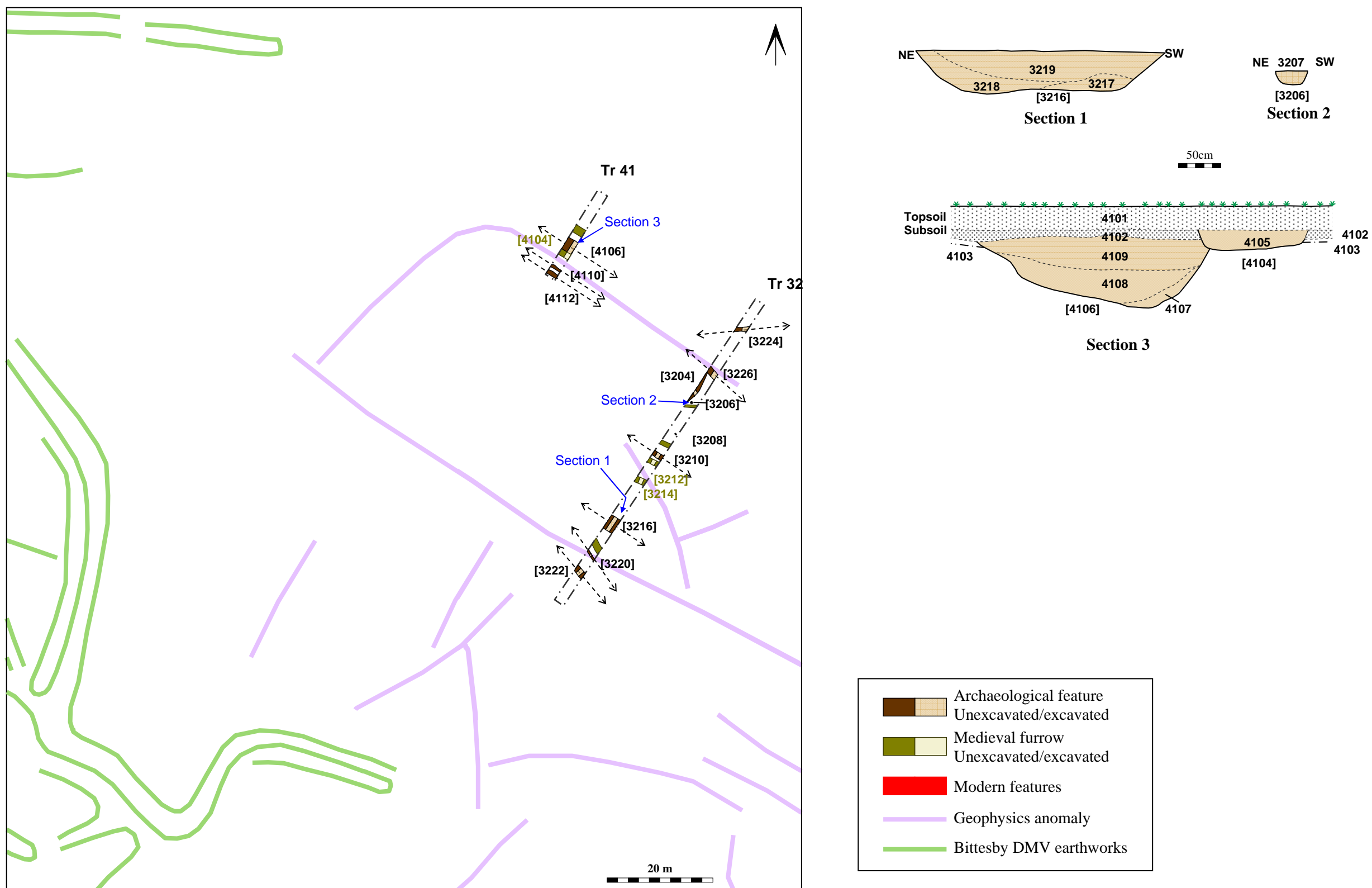




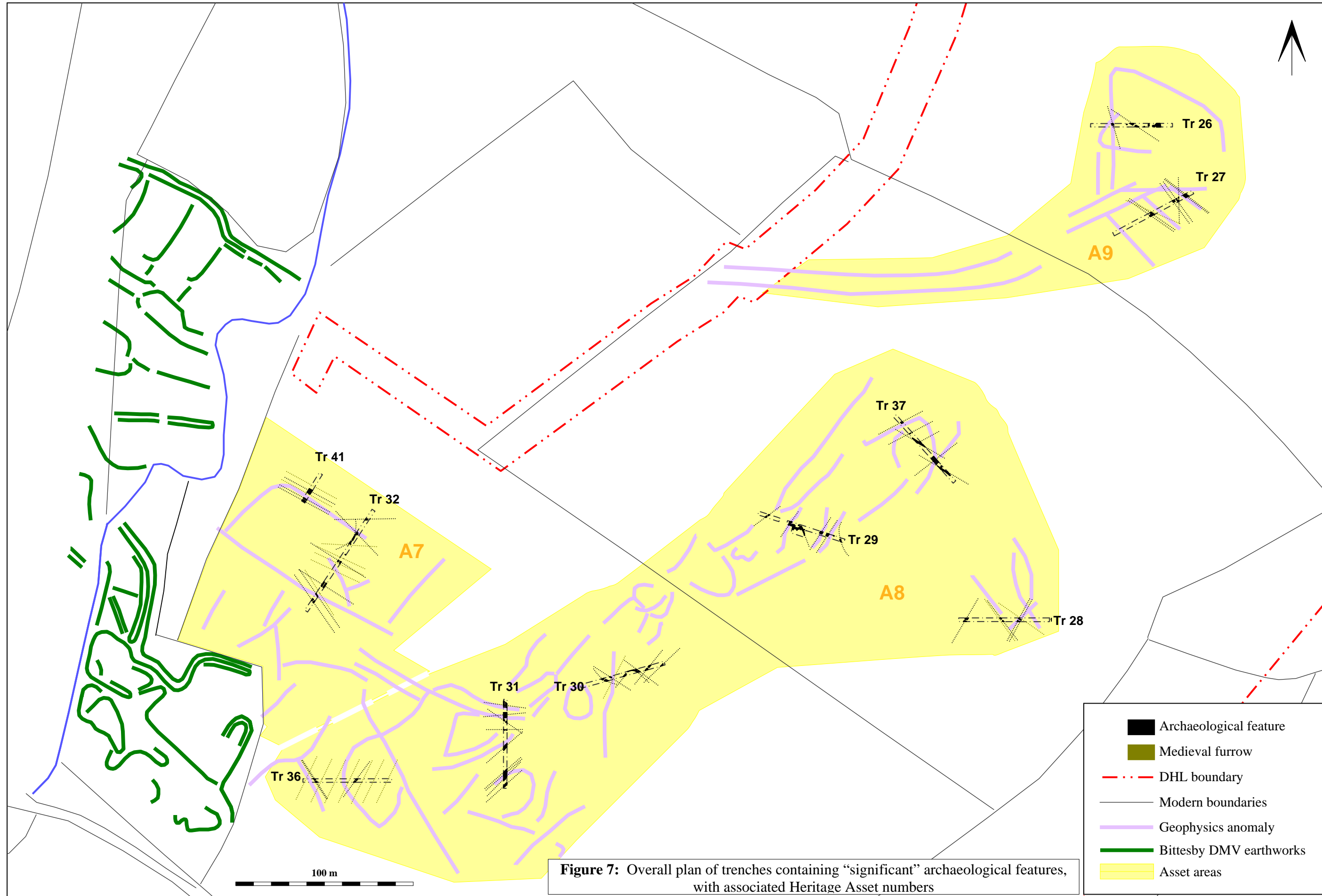
**Figure 4:** Plan of trenches 30, 31, and 36, with geophysical interpretation (ArchaeoPhysica 2015, fig. 13) and selected sections



**Figure 5:** Plan of trenches 28, 29, and 37, with geophysical interpretation (ArchaeoPhysica 2015, fig. 13) and selected sections



**Figure 6:** Plan of trenches 32 and 41, with geophysical interpretation (ArchaeoPhysica 2015, fig. 13) and selected sections





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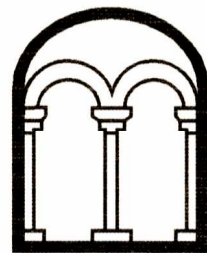


**APPENDIX 9: ALBION ARCHAEOLOGY, DHL SUPPLY CHAIN, LUTTERWORTH,  
LEICESTERSHIRE ARCHAEOLOGICAL EVALUATION**

**MAGNA PARK EXTENSION: DHL SUPPLY CHAIN  
LUTTERWORTH  
LEICESTERSHIRE**

**ARCHAEOLOGICAL EVALUATION**

**Albion**  
archaeology



**MAGNA PARK EXTENSION: DHL SUPPLY CHAIN  
LUTTERWORTH  
LEICESTERSHIRE  
  
ARCHAEOLOGICAL EVALUATION**

Project: MP2717  
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Compiled by	Edited by	Approved by
Jo Barker and Ian Leslie	Mike Luke	Drew Shotliff

Produced for:  
CgMs Consulting Ltd

On behalf of:  
IDI Gazeley





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## Preface

*Every effort has been made in the preparation of this document to provide as complete a summary as possible within the terms of the method statement. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.*

## Acknowledgements

*The project was commissioned by Simon Mortimer of CgMs Consulting Ltd, on behalf of IDI Gazeley. It was monitored on behalf of the Local Planning Authority by Teresa Hawtin (Senior Planning Archaeologist), Leicestershire County Council.*

*This report has been prepared by Jo Barker, Iain Leslie (Supervisors), Mike Luke (Project Manager) and Jackie Wells (Finds Officer). The fieldwork was undertaken by Ben Barker (Project Officer), Ben Carroll, Iain Leslie, Slawomir Utrata and Adam Williams (Archaeological supervisors), Hanno Conring, Matt Edgeworth, Mike Emra, Gary Manning, Gareth Shane, Marcin Synus, Heather White and Adrian Woolmer (Archaeological technicians). Metal detecting undertaken by Archie Gillespie.*

*Digitisation of site records and all illustrations in this report were prepared by Joan Lightning (CAD Supervisor). The project was managed by Mike Luke of Albion Archaeology. All Albion Archaeology projects are under the overall management of Drew Shotliff (Operations Manager).*

## Version History

Version	Issue date	Reason for re-issue
1.0	21/09/2015	n/a
1.1	21/09/2015	Comments from Consultant

## Key Terms

Throughout this report the following terms or abbreviations are used:

CI/A	Chartered Institute <i>for</i> Archaeologists
HER	Historic Environment Record
LPA	Local Planning Authority (Harborough District Council)
PDA	Proposed development area
SPA	Senior Planning Archaeologist of Leicestershire County Council



## **Non-Technical Summary**

*A planning application for the construction of an extension to Magna Park Lutterworth, Leicestershire, comprising a warehouse distribution facility, has been submitted by IDI Gazeley for submission to Harborough District Council (Planning application ref. 15/00919/FUL).*

*The archaeological potential of the site was preliminarily evaluated during desk-based assessment (CgMs 2015a), geophysical survey (ArchaeoPhysica 2015) and fieldwalking (MoLA 2015). Leicestershire County Council's Senior Planning Archaeologist advised that further archaeological investigation work, comprising trial trench evaluation, would be required before any decision on the planning application was taken. Albion Archaeology was commissioned by CgMs Consulting Ltd, on behalf of IDI Gazeley, to undertake the trial trenching. It comprised the opening and investigation of twenty-nine 50m-long trial trenches. The trench layout was designed to investigate both geophysical anomalies and "blank" areas that were devoid of geophysical anomalies. Fieldwork was undertaken, in conjunction with trenching of adjacent land (which is ongoing) between 21st August and 15th September. This report presents the results of the trenching.*

*The trench evaluation has enhanced the information already available on Heritage Assets 1–6 (identified by CgMs Consulting on the basis of previous non-intrusive surveys). It has also located and provided information on a new Heritage Asset (number 10). The location and distribution of furrows and post-medieval field boundaries has been confirmed.*

*The nature of the archaeological features within the Heritage Assets (1-6 and 10) and the small quantity of finds recovered from them suggests that the Heritage Assets represent boundaries of fields and trackways, located away from settlements. This is consistent with the results of the geophysical survey (ArchaeoPhysica 2015) and fieldwalking (MOLA 2015). Although not firmly dated all the Heritage Assets appear to be pre-medieval in origin and are, therefore, not associated with Bittesby Deserted Medieval Village. Where dating evidence is available, the Heritage Assets appear to be pre- 'Belgic' Iron Age in date (A2, A3 and A10) or probably Roman in the case of A1 (adjacent to Watling Street) and A5 (c. 850m from it). A4 and A6 are undated but comprise single ditches.*





## 1. INTRODUCTION

---

### 1.1 **Planning background**

A planning application for the construction of an extension to Magna Park Lutterworth, Leicestershire has been submitted by IDI Gazeley to Harborough District Council (Planning application ref. 15/00919/FUL). The development will comprise:

*“Demolition of the Emmanuel and Lodge cottages and the construction of a 100,844 sq m warehouse distribution facility with ancillary B1 office space, gatehouse, associated vehicle fuelling and washing facilities, HGV, car and cycle facilities, fencing and security infrastructure, structural landscaping and associated highway layout within and around the site, including alterations to existing vehicular and pedestrian access, creation of a new access to Bittesby Farm and Bittesby Barn Buildings, creation of a new A5/Mere Lane roundabout and partial dualling of the A5 and development of public transport infrastructure including bus stop and lay-by, together with drainage and water management infrastructure including attenuation ponds and water treatment facility, waste management facilities, rooftop solar photovoltaic panels, and necessary enabling works all in accordance on land immediately adjacent and linked to Magna Park, Lutterworth.” (CgMs 2015b).*

The archaeological potential of the site was preliminarily evaluated by desk-based assessment (CgMs 2015a), geophysical survey (ArchaeoPhysica 2015) and fieldwalking (MoLA 2015) undertaken in support of the planning application.

In light of this evidence, Leicestershire County Council’s Senior Planning Archaeologist (SPA) advised during discussions with CgMs that further archaeological trial trench evaluation of the proposed development area (PDA) would be required before any decision on the planning application was taken, so that an informed decision could be made.

Accordingly, Albion Archaeology was commissioned by CgMs to undertake the trial trench evaluation. This was carried out in accordance with the Specification (CgMs 2015b), submitted to and approved by the Local Planning Authority, in line with the guidance contained in the National Planning Policy Framework (DCLG 2012).

This report presents the results of trial trenching within the DHL planning application area.

### 1.2 **Site location, topography and geology**

The proposed development area (PDA) is located to the west of Lutterworth and comprises c. 55.4 hectares of land centred at National Grid Reference SP 5076 8550. Leicester is situated 20km to the north and Rugby is 9km to the south.

The PDA is bordered by Mere Road and Magna Park to the south-east, Watling Street (A5) to the south-west and field boundaries and outlying fields to the



north-west and north-east (Fig. 1). It lies within Leicestershire Vales Natural England Character Area, which consists of ‘an open landscape of gentle clay ridges and valleys (with)...an overall visual uniformity to the landscape and settlement pattern’ (CgMs 2015a).

The bedrock geology comprises mudstone belonging to the Penarth Group Formation. The solid geology is overlain by diamiction (formerly known as boulder clay)<sup>1</sup>.

The ground levels of the site rise from the north-western boundary (*c.* 110m OD) towards the south-eastern boundary, which is just above 125m OD.

### 1.3 **Archaeological background**

The archaeological potential of the PDA has been considered through a desk-based assessment (CgMs 2015a), geophysical survey (ArchaeoPhysica 2015) and fieldwalking (MOLA 2015). The latter two reports covered the area of the PDA and a wider study area to the west which is associated with a separate planning application by IDI Gazeley. All three reports should be consulted for more detailed information but the following represents a summary based upon information obtained from these reports:

- The route of Roman Watling Street (MLE1388 / MWA420), followed by the modern A5, is located south-west of the PDA.
- A possible Roman villa (MLE1230) was reported to have been found by workmen during construction of a railway line in *c.* 1838 through Bittesby Deserted Medieval Village, west of the PDA.
- Sherds of Roman pottery and fragments of Roman tile were recovered during fieldwalking between Bittesby DMV and the PDA (MLE21337). This general area contained anomalies identified during the recent geophysical survey (ArchaeoPhysica 2015)
- The Scheduled Monument of Bittesby Deserted Medieval Village (SAM1012563 / MLE1226) is located west of the PDA.
- Immediately to the west of the PDA is the extant former embankment of The Midlands Counties Leicester to Rugby railway line (MLE16079). The railway line closed in 1961 and sections of the embankment were demolished in the late 1970s and 1980s.
- Bitteswell Airfield, a former training airfield which opened in 1941 and closed in 1987, is located immediately adjacent to the south-eastern boundary of the PDA (MLE15959). This land was redeveloped to accommodate distribution sheds at Magna Park in the 1990s.

---

<sup>1</sup> (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>)



On the basis of this information, six areas representing Heritage Assets were defined by CgMs within the desk-based assessment; they are summarised below in Table 1.

<b>Asset ref.</b>	<b>Description</b>	<b>Concordance with geophysical survey report and HER</b>	<b>Likely date</b>	<b>Likely importance</b>
A1	Linear anomalies in relatively close proximity to Roman pottery findspots	Anomaly 92	Roman	Local
A2	Linear anomaly, same feature as A3. No clear dating evidence but association with possible ring gulley and flint	Anomaly 98	Prehistoric	Local
A3	Two linear anomalies, one of which is the same as A2. No clear dating evidence but association with possible ring gulley and flint	Anomaly 98	Prehistoric	Local
A4	Two parallel linear anomalies likely to be a trackway	Anomaly 1	Post-medieval/modern	Local
A5	Two parallel linear geophysical anomalies likely to be a trackway	Anomaly 76	Medieval	Local to regional
A6	Linear anomaly	Anomaly 73	Unclear, possibly Prehistoric	Local

**Table 1: Summary of possible Heritage Assets identified by CgMs within the PDA prior to the trench evaluation (CgMs 2015a, table 5 and fig. 10)**

Note. Heritage Assets A7, A8 and A9 are situated outside of the PDA and therefore not described in this report



## 2. METHODOLOGY

### 2.1 Introduction

The methodological approach to the project was detailed in the Specification for Archaeological Evaluation (CgMs 2015b) which was approved by the SPA. The archaeological investigation was conducted in accordance with appropriate national and regional standards and guidelines including:

• Albion Archaeology	<i>Procedures Manual: Volume 1 Fieldwork</i> (2nd edn, 2001)
• Archaeological Archive Forum	<i>Archaeological Archives: A Guide to best practice in creation, compilation, transfer and curation</i> (2007)
• CfA	<i>By-law and Code of conduct</i> (2014) <i>Standard and guidance for archaeological field evaluation</i> (2014)
• Historic England	<i>Management of Research Projects in the Historic Environment</i> (2015)

### 2.2 Aims and objectives

The aims and objectives were described in the Specification (CgMs 2015b, 7) and are summarised here:

- To determine the location, extent, date, character, condition, significance and quality of any archaeological remains within the development site
- To assess the character, condition, significance, quality of each area of the Heritage Assets (1-6)
- To assess the artefactual and environmental potential of the archaeological deposits encountered
- To inform formulation of further measures to mitigate impacts of the proposed development on surviving archaeological remains
- To produce a site archive for deposition with an appropriate museum and to provide information for accession to the Leicestershire HER.

As agreed by e-mail (CgMs and the SPA dated 12.08.15) the trenches dug between the current PDA and the Bittesby Monument will be formally reported as part of the Outline application works, within which they fall. A short interim statement on these works will be provided to LCC and Historic England.

### 2.3 Implementation

The archaeological fieldwork was undertaken between 21st August and 15th September 2015. A total of twenty-nine 50m x 2m trenches were opened (Fig. 1). Trench numbering used in the Specification (CgMs 2015b) was retained. Additional trenches and metal detecting surveys are being undertaken outside of the PDA and will be reported on separately.





The trench layout was designed to test geophysical anomalies and apparently “blank” areas that were devoid of geophysical anomalies. The trenches were opened by a mechanical excavator fitted with a flat-edged 1.8m-wide ditching bucket, operated by an experienced driver, under close archaeological supervision. The overburden was removed down to the top of undisturbed geological or archaeological deposits, whichever was encountered first. The spoil heaps were scanned for artefacts by eye and metal detector. All deposits were recorded in a unique number sequence, using Albion Archaeology’s *pro forma* sheets. The trenches were subsequently drawn and photographed as appropriate.

#### **2.4 Monitoring**

The SPA monitored the work on 27th August and 10th September 2015 with summaries and action points circulated after each meeting.

#### **2.5 Archiving**

All finds and records generated during the project will be archived to the standards outlined in Appendix 3 of Historic England’s *MoRPHE Project Planning Note 2: Archaeological Excavation* (2015). Details of the project and its findings have been submitted to the OASIS database (reference albionar1-220845) in accordance with the guidelines issued by Historic England and the Archaeology Data Service.

On approval of this report the integrated project archive, including artefacts (subject to landowners’ permission), ecofacts and project documentation, will be prepared for deposition in the county stores (Accession Number X.A86.2015).



### 3. RESULTS

---

#### 3.1 Introduction

The results are presented below under the following sections: features/deposits, finds and ecofacts. Where site recording numbers have been used they are distinguished by different bracket styles to indicate feature number = [\*\*\*], fill number = (\*\*\*) and geophysical anomaly {\*} (based on the numbers used in ArchaeoPhysica 2015). Context numbers reflect the trench number, e.g. [104] is a feature within Trench 1 and, therefore, the trench number is only given where necessary. Where a ditch has been recut its original feature number is used in general discussions

#### 3.2 Feature/deposits

The following section summarises the results and is divided into sections on pre-‘Belgic’ Iron Age features, medieval furrows, post-medieval features and features with no firm dating evidence. Trenches devoid of features of likely human origin are not discussed.

Detailed descriptions of every individual context are provided in Appendix 1 and this should be consulted for information such as alignment, nature of fills, dimensions etc. Archaeological features are illustrated on Figs 2-7 with selected section drawings.

##### 3.2.1 Probable pre-‘Belgic’ Iron Age features

A small pit [1705] within Trench 17 contained a single sherd of pre-‘Belgic’ Iron Age pottery. The pit was located *c.* 5m to the north of ditch [1707] (Fig. 2). The continuation of the same ditch was identified within Trench 18 to the east (Fig. 2). This corresponds to geophysical anomaly {98}. Although the ditch did not produce any dating evidence where examined in both trenches, it is orientated differently to both the medieval furrows and Roman Watling Street to the west, which suggests that it may pre-date both of these landscape elements.

An area of pre-‘Belgic’ Iron Age activity was identified in Trenches 21 and 22 (Fig. 3). This comprised four small to medium-sized ditches and a small pit. Two of the ditches [2104] and [2107] were parallel, *c.* 6m apart, aligned NW-SE and may have defined a trackway. The two other ditches [2111] and [2204] were on slightly different alignments but joined; they are clearly contemporary and part of the same boundary system. A total of 25g of pottery and 27g of fired clay, restricted to ditches [2111] and [2204], was recovered from this area.

##### 3.2.2 Medieval furrows

Evidence for medieval strip field cultivation survived within ten trenches. The furrows were generally spaced *c.* 6–8m apart and were up to 0.2m deep. They corresponded with the anomalies identified by the geophysical survey (Fig. 4).

A single linear [3404] in Trench 34 contained no datable finds. However, it was orientated NE-SW, parallel with furrows identified in the geophysical survey in that area and, therefore, may be of medieval or later date.



### 3.2.3 Post-medieval features

Post-medieval field boundaries were identified in six trenches. They were identified on the basis of artefactual evidence (e.g. [204] contained plastic bags; [906] contained modern wood) and correspondence with field boundaries shown on historic maps (CgMs 2015a) (e.g. [317], [2306] and [3504] (Fig. 5)). Many of these features also corresponded with linear geophysical anomalies, e.g. [2306] with anomalies {16}. There was no evidence to suggest that any of the ditches followed earlier ditched boundaries. The ditches in Trench 23 were unusual in that many of them appeared to have been recut. All contained deposits consistent with features that had been relatively recently infilled.

### 3.2.4 Features without firm dating evidence

Several features that did not contain datable artefacts were identified. They were scattered across the PDA and are described in trench number order.

In Trench 1 a linear ditch [104] was identified which corresponds with geophysical anomaly {73}. The anomaly appeared to head in the direction of Trench 35, although no corresponding feature was found. The ditch is orientated differently to the furrows, which may suggest a pre-medieval origin.

Trench 3 contained three parallel E-W ditches, two of which broadly correspond with the possible trackway identified as geophysical anomaly {76} (Fig. 6). One of northern ditches [309] had been recut on a similar alignment. Although the southern ditch within the trench appears to be on a slightly different alignment to the southern geophysical anomaly, this is presumed to be a localised deviation. Preliminary investigations of geophysical anomalies outside the PDA to the east, on which the trackway appears to be aligned, indicate that they represent an area of early Roman enclosures — therefore, the trackway may be of a similar date.

Trench 5 was positioned to test geophysical anomaly {1}, a possible trackway. Although ditch [503] was found, it did not correspond with the geophysical anomalies; therefore, the trench evidence suggests the existence of a trackway is doubtful. The ditch was earlier than a furrow (Fig. 7) so may be pre-medieval in origin.

Trench 10 contained a single small ditch [1003] orientated NW-SE. This did not correspond with any anomalies identified in the geophysical survey and was on a different alignment to furrows identified in this trench.

Trench 16 contained two ditches, *c.* 5m apart, both orientated broadly NE-SW (Fig. 2). Ditch [1603], which was quite small, had been recut as a larger ditch [1607]. These ditches correspond with geophysical anomalies {92}, the alignment of which outside the DHL boundary indicates that they are not parallel. Animal bone was recovered from [1603] but no dating evidence. The ditches are not aligned on the medieval furrows or post-medieval boundaries, suggesting they are pre-medieval in date. They are broadly perpendicular to Watling Street, so may date to the Roman period.



### 3.2.5 Modern overburden

Modern overburden generally comprised dark brown-grey clay silt topsoil, which was 0.25–0.45m thick. It typically overlay mid brown subsoils, which were 0.1–0.45m thick. The variability in subsoil thickness generally corresponds to the undulating nature of the PDA.

### 3.2.6 Natural geology

The natural geology was fairly consistent across site and comprised mainly firm yellow and orange clays, which sometimes contained lenses of silt or gravel. Where observed, firm blue-grey clays often underlay the yellow and orange clays.

## 3.3 Finds

### 3.3.1 Introduction

Six trenches yielded a small finds assemblage comprising pottery, fired clay and animal bone (Table 2).

Tr.	Feature	Description	Fill	Date	Finds Summary
16	1603	Ditch	1604	Undated	Animal bone (50g)
17	1705	Pit	1706	Iron Age	Pottery (8g)
18	1804	Ditch	1805	Undated	Pottery (3g); animal bone (17g)
21	2111	Ditch	2112	Iron Age	Pottery (22g)
22	2204	Ditch	2205	Iron Age	Pottery (3g); fired clay (27g)
23	2324	Ditch	2328	Undated	Animal bone (16g)

**Table 2: Artefact Summary by trench and feature**

### 3.3.2 Pottery

Six pottery sherds (36g) were collected from four features (Trenches 17, 18, 21 and 22). Sherds are well fragmented, with a mean weight of 6g, and uniformly abraded, with a single shell-tempered example displaying extensive leaching. Fabrics are listed below (Table 3:) in accordance with the Leicestershire Ceramic Type Series

Common name	CTS Code	Sherd No.	Wt (g)	Fill / Sherd No.
<i>Iron Age</i> (Marsden 2000) Coarse mixed Quartz	RQ1	1	22	(2112):1
	Q1	2	11	(1706):1; (2205):1
UNID	Undatable	2	3	(1805):2

**Table 3: Pottery Type Series**

Three predominantly sand-tempered sherds (33g), derived from the fills of ditches [2111], [2204] and pit [1705]. They comprise a simple rounded rim and two scored body sherds, the latter suggestive of pre-‘Belgic’ Iron Age date. Two miscellaneous sand-tempered crumbs (3g) collected from ditch [1804] may also be Iron Age in date.

### 3.3.3 Other finds

Ditch [2204] contained an amorphous sand-tempered piece of fired clay (27g).





### **3.4 Ecofacts**

#### **3.4.1 Animal bone**

Twelve animal bone fragments (83g) were collected from three features (Trenches 16, 18 and 23), the largest quantity (50g) from undated ditch [1603]. Individual pieces are highly fragmented, with a mean weight of 5g. They survive in poor condition and cannot be identified to species. Anatomical elements are limb bones and fragmentary teeth.

#### **3.4.2 Environmental samples**

Although all the features were poorly dated (and, therefore, of low palaeoenvironmental potential), a number of soil samples were taken. None contained significant charred plant remains or other ecofactual evidence



## 4. SUMMARY OF RESULTS

### 4.1 Overview

The trench evaluation within the PDA has enhanced the information already available on Heritage Assets; identified one new Heritage Asset; and confirmed the location and distribution of furrows (Fig. 4) and post-medieval field boundaries (Fig. 5).

### 4.2 Heritage Assets

The nature of the features within the Heritage Assets and the small quantity of finds recovered from them suggests that, within the PDA (Fig. 8), the Heritage Assets represent boundaries of fields and trackways located away from settlements. This is consistent with the results of the geophysical survey (ArchaeoPhysica 2015) and fieldwalking (MOLA 2015). Where dating evidence is available, it typically comprises a small quantity of pottery recovered from the excavated features or from fieldwalking. The Heritage Assets are summarised below in Table 4.

Asset ref.	Description	Dating evidence
A1	Two ditches (one recut) within Trench 16 coincide with linear geophysical anomalies broadly perpendicular to Watling Street.	Undated but probably Roman (pottery of this period found in vicinity during fieldwalking).
A2	One ditch and one small pit within Trench 17. The ditch is visible as a more extensive geophysical anomaly and continues into A3 but is not perpendicular to Watling Street.	Probably pre-‘Belgic’ Iron Age (based on alignment and pottery sherd with the pit).
A3	One ditch within Trench 18 which based on the geophysical survey is the continuation of the ditch in A2, c. 190m to the west.	Probably pre-‘Belgic’ Iron Age (as above).
A4	One ditch within Trench 5 which does not correspond to linear geophysical anomalies suspected of indicating a trackway.	Undated but pre-medieval (truncated by a furrow).
A5	Three ditches (one recut) within Trench 3. These correspond to more extensive linear geophysical anomalies and are, therefore, part of a trackway.	Probably early Roman (as appears to connect with A9 (outside the PDA) which has been dated to this period).
A6	One ditch within Trench 1 which coincides with a more extensive geophysical anomaly.	Undated but probably pre-medieval.
A10 (new)	Four ditches and a small pit within Trenches 21 and 22. These were not located by geophysical survey.	Pre-‘Belgic’ Iron Age.

**Table 4: Summary of Heritage Assets within the PDA after the completion of the trench evaluation**

Note. Heritage Assets A7, A8 and A9 are situated outside of the PDA and are, therefore, not described in this report.

The revealed archaeological features have been effectively characterised by the evaluation work to date. They appear to be of no more than local significance and do not have further potential to address regional research objectives.



## 5. REFERENCES

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## 6. APPENDIX 1: TRENCH SUMMARY

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**Trench: 1**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.5 m. Max: 0.6 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50389: Northing: 86403)

**OS Grid Ref.: SP** (Easting: 50436: Northing: 86386)

**Reason: To evaluate geophysical anomaly within Heritage Asset 6**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
101	Topsoil	Loose dark orange brown silty clay 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
102	Subsoil	Loose mid orange brown silty clay occasional small-medium stones 0.25m - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
103	Natural	Friable light orange brown silty clay	<input type="checkbox"/>	<input type="checkbox"/>
104	Ditch	Linear NW-SE sides concave base: concave dimensions: max breadth 0.7m, max depth 0.2m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
105	Fill	Compact mid orange brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 2

**Max Dimensions:** Length: 54.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.55 m. Max: 0.7 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50527; Northing: 86215)

OS Grid Ref.: SP (Easting: 50515; Northing: 86162)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
201	Topsoil	Friable dark brown grey clay silt 0.45m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
202	Subsoil	Firm mid brown orange silty clay 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
203	Natural	Firm mid orange blue clay	<input type="checkbox"/>	<input type="checkbox"/>
204	Ditch	Linear NE-SW dimensions: max breadth 0.15m, min length 1.m	<input type="checkbox"/>	<input type="checkbox"/>
205	Fill	Friable dark grey clay silt Contained plastic bags	<input type="checkbox"/>	<input type="checkbox"/>
206	Layer	Firm mid brown clay silt frequent large stones A patch of stony natural	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 3**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.8 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50420: Northing: 86020)

**OS Grid Ref.: SP** (Easting: 50390: Northing: 85980)

**Reason: To evaluate geophysical anomalies within Heritage Asset 5**

Context:	Type:	Description:	Excavated:	Finds Present:
300	Topsoil	Friable dark grey black silty clay moderate small-medium stones 0.4m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
301	Subsoil	Firm mid orange brown clay occasional small stones 0.44m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
302	Natural	Firm light red brown silty clay occasional small stones	<input type="checkbox"/>	<input type="checkbox"/>
303	Natural	Firm light yellow brown clay	<input type="checkbox"/>	<input type="checkbox"/>
304	Ditch	Linear NE-SW sides: U-shaped base: concave dimensions: max breadth 0.85m, max depth 0.51m, min length 1.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
305	Primary fill	Firm light blue grey clay occasional medium stones 0.18m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
306	Secondary fill	Firm mid brown clay occasional small-medium stones 0.32m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
307	Ditch	Linear NE-SW sides: U-shaped base: concave dimensions: max breadth 0.2m, max depth 0.46m, min length 1.m Truncated by ditch [309].	<input checked="" type="checkbox"/>	<input type="checkbox"/>
308	Fill	Friable dark red brown silty clay moderate small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
309	Ditch	Linear NE-SW sides: U-shaped base: concave dimensions: max breadth 0.8m, max depth 0.56m, min length 1.m Recut of 307	<input checked="" type="checkbox"/>	<input type="checkbox"/>
310	Primary fill	Firm light blue grey clay occasional medium stones 0.17m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
311	Secondary fill	Firm mid brown clay occasional small-medium stones 0.38m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
312	Ditch	Linear NW-SE sides: U-shaped base: concave dimensions: max breadth 1.1m, max depth 0.54m, min length 1.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
313	Primary fill	Friable dark red brown silty clay moderate small stones 0.17m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
314	Secondary fill	Firm mid brown clay occasional small-medium stones 0.34m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
315	Furrow	Linear NW-SE sides: concave base: flat dimensions: min breadth 0.3m, min depth 0.2m, min length 2.m Investigated by hand excavation and all below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
316	Fill	Friable light grey clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
317	Ditch	Linear NW-SE dimensions: min breadth 0.6m, min length 2.m Co-incides with ditch on historic map	<input type="checkbox"/>	<input type="checkbox"/>
318	Fill	Friable dark grey blue silty clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 4

**Max Dimensions:** Length: 50.00 m. Width: 2.30 m. Depth to Archaeology Min: 0.5 m. Max: 0.75 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50862: Northing: 85887)

OS Grid Ref.: SP (Easting: 50836: Northing: 85844)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
401	Topsoil	Friable dark grey brown silty clay 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
402	Subsoil	Friable light grey brown sandy silt 0.45m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
403	Natural	Friable light orange brown clay silt	<input type="checkbox"/>	<input type="checkbox"/>





**Trench:** 5

**Max Dimensions:** Length: 50.00 m. Width: 2.20 m. Depth to Archaeology Min: 0.65 m. Max: 0.75 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 51076: Northing: 85952)

OS Grid Ref.: SP (Easting: 51119: Northing: 85923)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 4

Context:	Type:	Description:	Excavated:	Finds Present:
500	Topsoil	Friable dark grey brown silty clay 0.35m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
501	Subsoil	Firm mid orange grey silty clay 0.40m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
502	Natural	Firm light orange grey silty clay	<input type="checkbox"/>	<input type="checkbox"/>
503	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 0.56m, max depth 0.12m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
504	Fill	Friable light grey brown clay silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>
505	Natural	Loose mid grey brown sandy silt Band of stones in the centre of the trench. 0.2m thick and at least 2m wide	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 6**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.35 m. Max: 0.45 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50672: Northing: 85736)

**OS Grid Ref.: SP** (Easting: 50641: Northing: 85697)

**Reason: To evaluate the archaeological potential of this area**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
601	Topsoil	Friable dark brown grey clay silt 0.25m - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
602	Subsoil	Firm mid brown clay silt 0.15m - 0.1m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
603	Natural	Firm mid orange clay	<input type="checkbox"/>	<input type="checkbox"/>
604	Furrow	Linear NW-SE sides: concave base: flat dimensions: max breadth 4.m, min depth 0.2m, min length 2.m Investigated by hand excavation and all below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
605	Fill	Friable mid brown clay silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 7

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.35 m. Max: 0.35 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50728; Northing: 85661)

OS Grid Ref.: SP (Easting: 50755; Northing: 85703)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
701	Topsoil	Friable dark brown grey clay silt 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
702	Subsoil	Firm mid brown clay silt 0.05m - 0.1m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
703	Natural	Friable mid orange silty clay	<input type="checkbox"/>	<input type="checkbox"/>
704	Furrow	Linear NW-SE sides: concave base: flat dimensions: max breadth 4.m, min depth 0.2m, min length 2.m Investigated by hand excavation and all below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
705	Fill	Firm mid brown clay silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 8**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.43 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50863: Northing: 85664)

**OS Grid Ref.: SP** (Easting: 50812: Northing: 85664)

**Reason: To evaluate the archaeological potential of this area**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
801	Topsoil	Friable dark brown grey clay silt 0.3m - 0.38m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
802	Subsoil	Firm mid brown clay silt 0.05m - 0.1m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
803	Natural	Firm mid orange clay	<input type="checkbox"/>	<input type="checkbox"/>
804	Furrow	Linear NW-SE sides: concave base: flat dimensions: max breadth 4.m, min depth 0.2m, min length 2.m Investigated by hand excavation and all below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
805	Fill	Firm mid brown clay silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>





**Trench: 9**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.35 m. Max: 0.4 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50958: Northing: 85664)

**OS Grid Ref.: SP** (Easting: 50932: Northing: 85621)

**Reason: To evaluate the archaeological potential of this area**

Context:	Type:	Description:	Excavated:	Finds Present:
901	Topsoil	Friable dark brown grey clay silt 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
902	Subsoil	Firm mid brown clay silt 0.1m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
903	Natural	Firm mid orange clay	<input type="checkbox"/>	<input type="checkbox"/>
904	Furrow	Linear NW-SE sides: concave base: flat dimensions: min depth 0.2m, min length 2.m Investigated by hand excavation and all below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
905	Fill	Firm mid brown clay silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>
906	Ditch	Linear NW-SE sides: U-shaped base: flat dimensions: max breadth 1.1m, max depth 0.56m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
907	Primary fill	Friable mid brown clay silt Contained bits of modern wood and roots	<input checked="" type="checkbox"/>	<input type="checkbox"/>
908	Secondary fill	Friable dark brown grey clay silt Contained bits of modern wood and roots	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 10**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.5 m. Max: 0.5 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50644: Northing: 85548)

**OS Grid Ref.: SP** (Easting: 50688: Northing: 85524)

**Reason: To evaluate the archaeological potential of this area**

Context:	Type:	Description:	Excavated:	Finds Present:
1001	Topsoil	Friable dark brown grey clay silt 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1002	Subsoil	Firm mid brown silty clay 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1003	Natural	Firm mid orange clay	<input type="checkbox"/>	<input type="checkbox"/>
1004	Furrow	Linear NE-SW sides: concave base: flat dimensions: min breadth 2.m, min depth 0.2m, min length 2.m Investigated by hand excavation and all below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1005	Fill	Firm mid brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1006	Ditch	Linear N-S sides: U-shaped base: concave dimensions: max breadth 0.75m, max depth 0.17m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1007	Fill	Friable mid brown silty clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 11

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.35 m. Max: 0.5 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50566: Northing: 85437)

OS Grid Ref.: SP (Easting: 50610: Northing: 85413)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
1101	Topsoil	Friable dark brown grey clay silt 0.25m - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1102	Subsoil	Firm mid brown silty clay 0.15m - 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1103	Natural	Firm mid orange clay	<input type="checkbox"/>	<input type="checkbox"/>
1104	Furrow	Linear NE-SW sides: concave base: flat dimensions: min depth 0.2m, min length 2.m Investigated by hand excavation and all below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1105	Fill	Firm mid brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1106	Ditch	Linear NE-SW sides: steep dimensions: max breadth 1.m, min length 2.m A land drain was found at the base of this ditch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1107	Fill	Friable dark grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 12

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.35 m. Max: 0.4 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50761: Northing: 85370)

OS Grid Ref.: SP (Easting: 50711: Northing: 85370)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
1201	Topsoil	Friable dark brown grey clay silt 0.25m - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1202	Subsoil	Firm mid brown silty clay 0.1m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1203	Natural	Firm mid orange clay	<input type="checkbox"/>	<input type="checkbox"/>
1204	Furrow	Linear NE-SW sides: concave base: flat dimensions: min depth 0.2m, min length 2.m Investigated by hand excavation and all below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1205	Fill	Firm mid brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>





**Trench:** 13

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.55 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50538; Northing: 85325)

OS Grid Ref.: SP (Easting: 50504; Northing: 85362)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
1301	Topsoil	Friable dark brown grey clay silt 0.3m - 0.35m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1302	Subsoil	Firm mid brown silty clay 0.1m - 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1303	Natural	Firm mid orange clay	<input type="checkbox"/>	<input type="checkbox"/>
1304	Furrow	Linear NW-SE sides: concave base: flat dimensions: min depth 0.2m, min length 2.m Investigated by hand excavation and all below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1305	Fill	Firm mid brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 14

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.45 m. Max: 0.45 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50448: Northing: 85227)

OS Grid Ref.: SP (Easting: 50475: Northing: 85185)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
1401	Topsoil	Friable dark grey brown sandy silt 0.2m - 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1402	Subsoil	Friable mid orange brown sandy silt 0.2m - 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1403	Natural	Firm mid red brown sandy clay	<input type="checkbox"/>	<input type="checkbox"/>
1404	Furrow	Linear NE-SW dimensions: max breadth 0.57m, min depth 0.2m, min length 2.m Investigated by hand excavation and all below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1405	Fill	Friable mid orange grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 15

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.44 m. Max: 0.6 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50515: Northing: 85114)

OS Grid Ref.: SP (Easting: 50514: Northing: 85064)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
1501	Topsoil	Friable dark grey brown sandy silt 0.27m - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1502	Subsoil	Firm mid red brown silty clay 0.17m - 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1503	Natural	Firm mid red brown silty clay	<input type="checkbox"/>	<input type="checkbox"/>
1504	Land drain	Linear NE-SW dimensions: min breadth 0.3m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1505	Fill	Friable mid orange grey silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 16**

**Max Dimensions: Length: 50.00 m. Width: 2.20 m. Depth to Archaeology Min: 0.5 m. Max: 0.6 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50096: Northing: 85026)

**OS Grid Ref.: SP** (Easting: 50124: Northing: 84984)

**Reason: To evaluate geophysical anomalies within Heritage Asset 1**

Context:	Type:	Description:	Excavated:	Finds Present:
1600	Topsoil	Friable dark grey black silty clay moderate small-medium stones 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1601	Subsoil	Friable light brown grey clay occasional small-medium stones 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1602	Natural	Firm mid red brown clay	<input type="checkbox"/>	<input type="checkbox"/>
1603	Ditch	Linear N-S sides: U-shaped base: concave dimensions: max breadth 0.8m, max depth 0.46m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1604	Fill	Firm mid brown grey clay moderate small-medium stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1605	Ditch	Linear N-S sides: U-shaped base: concave dimensions: max breadth 0.3m, max depth 0.18m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1606	Fill	Firm dark red brown clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1607	Ditch	Linear N-S sides: U-shaped base: concave dimensions: max breadth 0.9m, max depth 0.47m, min length 2.m Possible recut of 1603	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1608	Fill	Firm dark red brown clay occasional small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 17**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.65 m. Max: 1.2 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50216: Northing: 84868)

**OS Grid Ref.: SP** (Easting: 50241: Northing: 84824)

**Reason: To evaluate geophysical anomalies within Heritage Asset 2**

Context:	Type:	Description:	Excavated:	Finds Present:
1701	Topsoil	Friable dark grey brown silty clay 0.25m - 0.31m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1702	Subsoil	Friable mid orange yellow sandy clay 0.18m - 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1703	Subsoil	Firm mid grey brown silty clay 0.17m - 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1704	Natural	Friable mid orange grey sandy clay occasional small stones	<input type="checkbox"/>	<input type="checkbox"/>
1705	Pit	Circular sides: concave base: flat dimensions: max depth 0.1m, max diameter 0.6m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1706	Fill	Firm mid grey brown silty clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1707	Ditch	Linear sides: steep base: flat dimensions: max depth 0.46m, max diameter 1.6m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1708	Secondary fill	Firm mid grey brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1709	Primary fill	Firm mid green brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>





**Trench: 18**

**Max Dimensions: Length: 50.00 m. Width: 2.10 m. Depth to Archaeology Min: 0.4 m. Max: 0.45 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50418: Northing: 84822)

**OS Grid Ref.: SP** (Easting: 50389: Northing: 84781)

**Reason: To evaluate geophysical anomalies within Heritage Asset 3**

Context:	Type:	Description:	Excavated:	Finds Present:
1801	Topsoil	Friable dark brown grey clay silt 0.2m - 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1802	Subsoil	Firm mid yellow brown silty clay 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1803	Natural	Firm light brown yellow clay	<input type="checkbox"/>	<input type="checkbox"/>
1804	Ditch	Linear E-W sides: V-shaped base: concave dimensions: max breadth 0.5m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1805	Primary fill	Firm mid grey blue clay	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1806	Secondary fill	Firm mid yellow blue clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench: 19**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.67 m. Max: 0.69 m.**

**Co-ordinates: OS Grid Ref.: SP** (Easting: 50313: Northing: 84737)

**OS Grid Ref.: SP** (Easting: 50344: Northing: 84698)

**Reason: To evaluate the archaeological potential of this area**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
1901	Topsoil	Friable dark grey brown silty sand moderate small stones 0.29m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1902	Subsoil	Compact light yellow brown sandy clay 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1903	Natural	Firm mid yellow brown clay sand occasional small stones	<input type="checkbox"/>	<input type="checkbox"/>
1904	Natural	Linear N-S sides: asymmetrical base: concave dimensions: max breadth 0.76m, max depth 0.23m, min length 2.75m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1905	Fill	Compact mid yellow brown sandy clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1906	Natural	Linear N-S sides: asymmetrical base: uneven dimensions: max breadth 1.48m, max depth 0.26m, min length 2.85m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1907	Fill	Compact mid yellow brown sandy clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 21

**Max Dimensions:** Length: 50.00 m. Width: 2.10 m. Depth to Archaeology Min: 0.5 m. Max: 1.1 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50413; Northing: 85330)

OS Grid Ref.: SP (Easting: 50369; Northing: 85303)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
2101	Topsoil	Friable dark green silty clay 0.36m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2102	Subsoil	Friable mid orange brown silty clay 0.28m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2103	Natural	Firm mid orange grey clay	<input type="checkbox"/>	<input type="checkbox"/>
2104	Ditch	Linear E-W sides: concave base: concave dimensions: max breadth 0.59m, max depth 0.27m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2105	Primary fill	Firm mid grey clay occasional medium stones 0.13m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2106	Secondary fill	Friable dark grey sandy clay occasional flecks charcoal, occasional small stones 0.14m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2107	Ditch	Linear E-W sides: concave base: concave dimensions: max breadth 1.02m, max depth 0.48m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2108	Fill	Firm mid grey orange silty clay frequent flecks manganese staining	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2109	Pit	Oval sides: steep base: flat dimensions: max depth 0.21m, max diameter 0.45m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2110	Fill	Firm dark grey silty clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2111	Ditch	Linear N-S sides: steep base: concave dimensions: max breadth 0.83m, max depth 0.35m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2112	Fill	Firm mid brown grey silty clay occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



**Trench:** 22

**Max Dimensions:** Length: 50.00 m. Width: 2.10 m. Depth to Archaeology Min: 0.5 m. Max: 0.6 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50398: Northing: 85313)

OS Grid Ref.: SP (Easting: 50400: Northing: 85263)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
2201	Topsoil	Friable dark grey silty clay 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2202	Subsoil	Friable mid orange brown silty clay 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2203	Natural	Firm mid orange grey clay	<input type="checkbox"/>	<input type="checkbox"/>
2204	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 1.4m, max depth 0.41m, min length 2.m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2205	Fill	Firm mid orange grey silty clay frequent flecks manganese staining, occasional medium stones, occasional small stones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



**Trench: 23**

**Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.38 m. Max: 0.42 m.**

**Co-ordinates: OS Grid Ref.: SP (Easting: 50547; Northing: 85591)**

**OS Grid Ref.: SP (Easting: 50517; Northing: 85552)**

**Reason: To evaluate the archaeological potential of this area**

Context:	Type:	Description:	Excavated:	Finds Present:
2301	Topsoil	Friable mid grey brown sandy clay occasional small stones 0.3m - 0.38m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2302	Subsoil	Friable mid grey brown sandy clay occasional small stones 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2303	Natural	Firm mid yellow grey sandy clay occasional small stones	<input type="checkbox"/>	<input type="checkbox"/>
2304	Furrow	Linear NW-SE sides: concave base: concave dimensions: max breadth 0.55m, max depth 0.13m, min length 1.m Investigated by hand excavation and all below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2305	Fill	Friable mid yellow brown sandy clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2306	Ditch	Linear NW-SE sides: asymmetrical base: v-shaped dimensions: max breadth 2.2m, max depth 1.15m, min length 0.5m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2307	Primary fill	Friable mid brown grey silty sand occasional small stones 0.08m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2308	Secondary fill	Friable mid grey brown silty clay occasional small stones 0.4m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2309	Tertiary fill	Friable mid yellow brown sandy clay occasional small stones 0.23m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2310	Upper fill	Friable mid orange brown silty sand occasional small stones 0.23m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2311	Upper fill	Friable mid grey brown sandy clay occasional small stones 0.26m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2312	Ditch		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2313	Fill	Friable mid brown grey sandy clay occasional small stones 0.17m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2314	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 0.58m, max depth 1.04m, min length 0.8m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2315	Primary fill	Friable mid yellow grey silty clay occasional small stones 0.31m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2316	Secondary fill	Friable mid grey brown sandy clay occasional small stones 0.23m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2317	Ditch	Linear NW-SE sides: concave dimensions: max breadth 0.6m, max diameter 1.27m, min length 0.8m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2318	Primary fill	Friable mid blue grey silty clay moderate small stones 0.35m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2319	Secondary fill	Friable mid grey brown sandy clay occasional small stones 0.06m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2320	Ditch	Linear NW-SE sides: asymmetrical base: concave dimensions: max breadth 0.3m, max diameter 0.97m, min length 0.8m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2321	Fill	Friable mid brown grey silty clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2322	Ditch	Linear NW-SE sides: concave base: v-shaped dimensions: max breadth 0.56m, max depth 1.17m, min length 0.8m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2323	Fill	Friable dark brown grey silty clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2324	Ditch	Linear NW-SE sides: asymmetrical dimensions: max breadth 1.14m, max diameter 1.2m, min length 0.8m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2325	Primary fill	Friable mid grey brown sandy clay moderate small stones 0.06m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2326	Secondary fill	Friable mid grey brown sandy clay occasional small stones 0.06m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2327	Tertiary fill	Friable light yellow orange silty sand occasional small stones 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2328	Upper fill	Friable mid brown grey silty clay occasional small stones Contained occasional fragments of animal bone 0.38m thick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>





**Trench:** 23

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.38 m. Max: 0.42 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50547: Northing: 85591)

OS Grid Ref.: SP (Easting: 50517: Northing: 85552)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
2329	Ditch	Linear NW-SE sides: concave base: concave dimensions: max breadth 0.47m, max depth 1.08m, min length 0.8m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2330	Fill	Friable mid brown grey silty clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2331	Ditch	Linear NW-SE sides: concave base: uneven dimensions: max breadth 0.88m, max diameter 0.76m, min length 0.8m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2332	Fill	Friable mid yellow grey sandy clay occasional small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2333	Layer	Friable mid blue grey silty clay occasional small stones 0.38m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2334	Layer	Friable mid orange brown sandy clay occasional small stones 0.17m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2335	Ditch	Linear NW-SE dimensions: min breadth 2.m, min length 3.03m	<input type="checkbox"/>	<input type="checkbox"/>
2336	Fill	Friable mid brown grey sandy clay occasional small stones	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 24

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.35 m. Max: 0.43 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50879; Northing: 85734)

OS Grid Ref.: SP (Easting: 50879; Northing: 85684)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
2401	Topsoil	Friable dark brown grey clay silt 0.25-0.33m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2402	Subsoil	Firm mid brown clay silt 0.1m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2403	Natural	Firm mid orange clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 33

**Max Dimensions:** Length: 50.00 m. Width: 2.30 m. Depth to Archaeology Min: 0.43 m. Max: 0.53 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50212; Northing: 85947)

OS Grid Ref.: SP (Easting: 50167; Northing: 85969)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
3300	Topsoil	Friable dark brown silty clay 0.22m - 0.35m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3301	Subsoil	Friable mid red brown silty clay 0.18m - 0.21m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3302	Natural	Firm mid red brown sandy clay	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 34

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: m. Max: m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50215: Northing: 86468)

OS Grid Ref.: SP (Easting: 50264: Northing: 86455)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
3401	Topsoil	Loose dark orange brown silty clay frequent small-medium stones 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3402	Subsoil	Compact mid orange brown silty clay occasional small stones 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3403	Natural	Firm light yellow brown clay occasional small-medium stones	<input type="checkbox"/>	<input type="checkbox"/>
3404	Ditch	Linear NE-SW sides: concave base: concave dimensions: max breadth 2m, max depth 0.5m, min length 1m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3405	Primary fill	Compact mid orange brown silty clay 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3406	Secondary fill	Compact mid orange silty clay occasional small stones 0.35m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 35

**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.65 m. Max: 0.7 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50572; Northing: 86257)

OS Grid Ref.: SP (Easting: 50528; Northing: 86280)

**Reason:** To evaluate geophysical anomalies within Heritage Asset 6

Context:	Type:	Description:	Excavated:	Finds Present:
3501	Topsoil	Loose dark orange brown silty clay 0.3m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3502	Subsoil	Compact mid orange brown silty clay 0.3m - 0.35m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3503	Natural	Friable light yellow brown silty clay	<input type="checkbox"/>	<input type="checkbox"/>
3504	Ditch	Linear NE-SW dimensions: max breadth 1.5m, min length 2.m	<input type="checkbox"/>	<input type="checkbox"/>
3505	Fill	Friable dark grey brown silty clay	<input type="checkbox"/>	<input type="checkbox"/>
3506	Ditch	Linear NE-SW sides: near vertical dimensions: max breadth 0.6m, min diameter 0.3m, min length 2.m Contained a concrete pipe	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3507	Fill		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3508	Furrow	Linear NNE-SSW sides: concave base: flat dimensions: max breadth 0.8m, min depth 0.2m, min length 2.m Investigated by hand excavation and below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3509	Fill	Firm mid brown clay silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>





**Trench:** 38

**Max Dimensions:** Length: 45.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.45 m. Max: 0.45 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 49962: Northing: 85241)

OS Grid Ref.: SP (Easting: 49987: Northing: 85204)

**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
3801	Topsoil	Friable dark green sandy silt occasional small stones 0.25m - 0.29m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3802	Subsoil	Friable mid grey brown sandy silt occasional small stones 0.14m - 0.2m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3803	Natural	Firm mid orange red sandy clay frequent small stones	<input type="checkbox"/>	<input type="checkbox"/>



**Trench:** 39

**Max Dimensions:** Length: 50.00 m. Width: 2.10 m. Depth to Archaeology Min: 0.4 m. Max: 0.47 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50162: Northing: 84952)

OS Grid Ref.: SP (Easting: 50191: Northing: 84912)

**Reason:** To evaluate the area in-between geophysical anomalies within Heritage Assets 1 and 2

Context:	Type:	Description:	Excavated:	Finds Present:
3901	Topsoil	Firm dark brown grey clay silt 0.25m - 0.32m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3902	Subsoil	Firm mid brown clay silt 0.15m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3903	Natural	Firm mid orange brown silty clay frequent small stones, moderate small-medium stones	<input type="checkbox"/>	<input type="checkbox"/>
3904	Furrow	Investigated by hand excavation and all below 0.2m deep	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3905	Fill	Firm light grey brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Trench:** 40

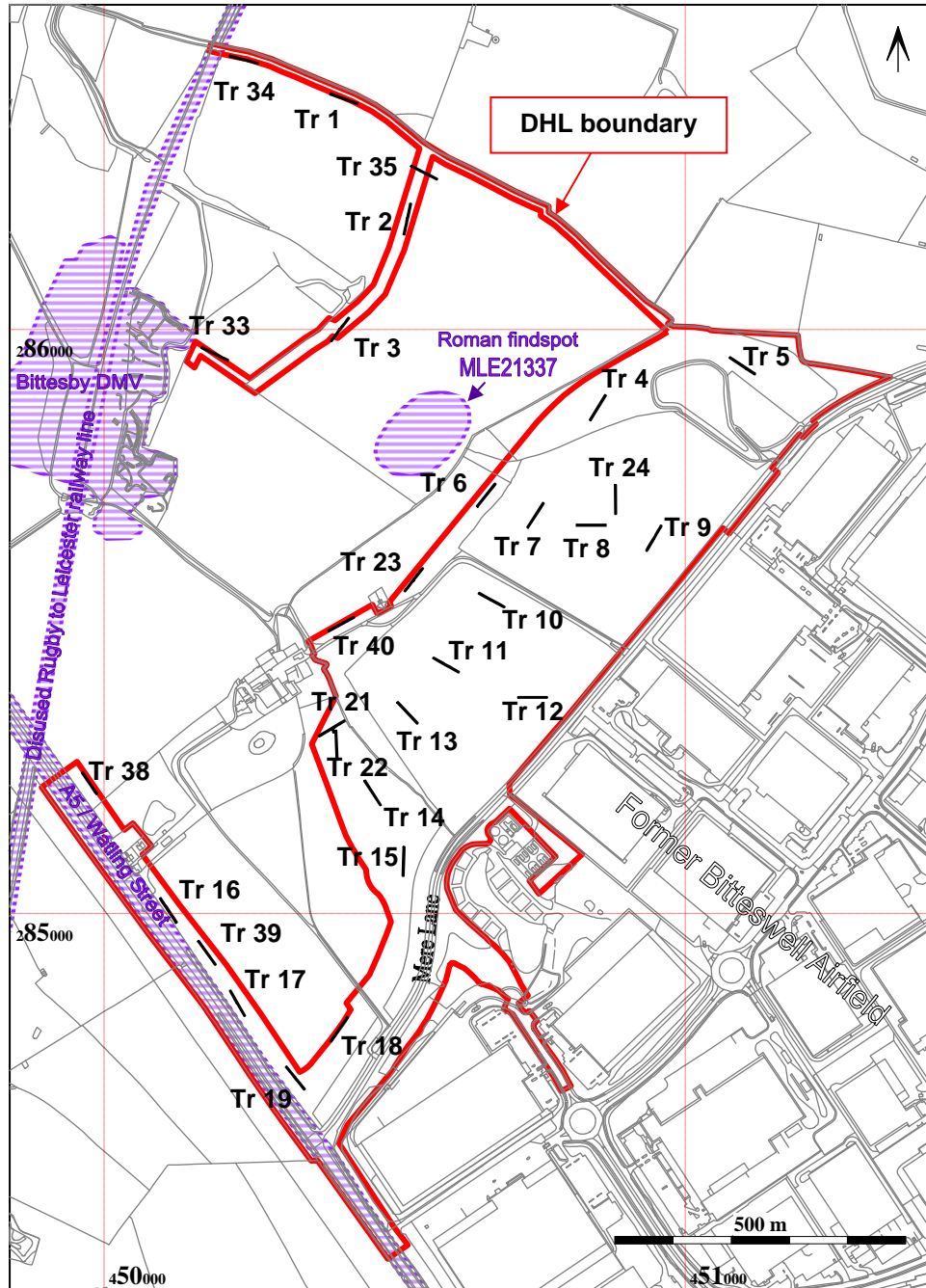
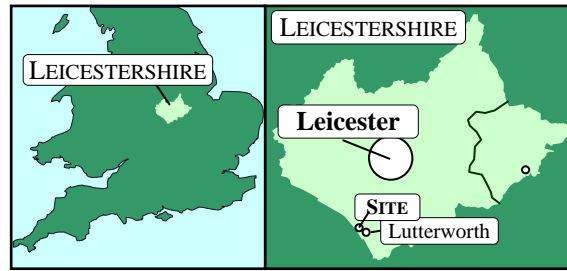
**Max Dimensions:** Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.5 m. Max: 0.7 m.

**Co-ordinates:** OS Grid Ref.: SP (Easting: 50385: Northing: 85483)

OS Grid Ref.: SP (Easting: 50429: Northing: 85507)

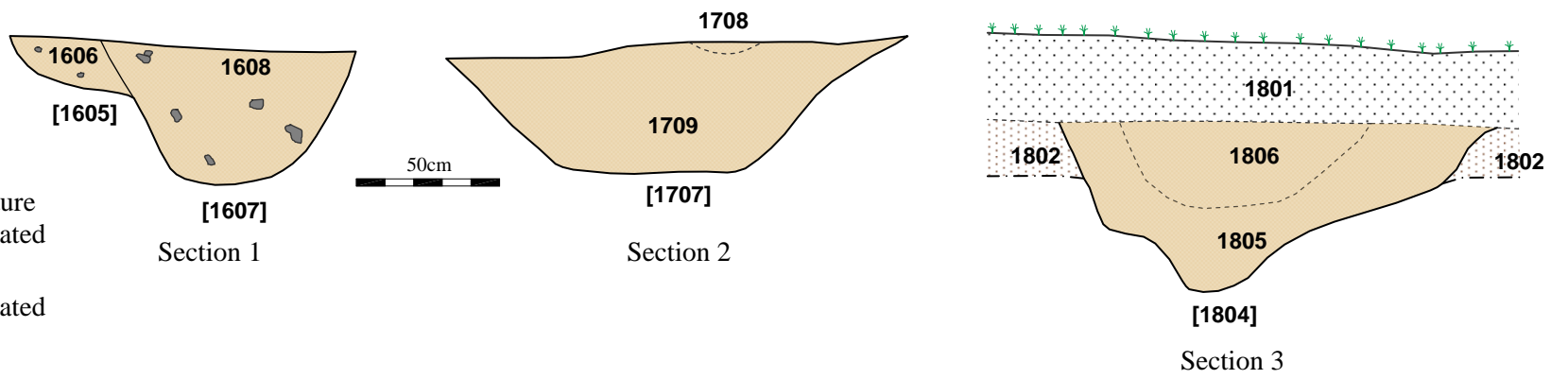
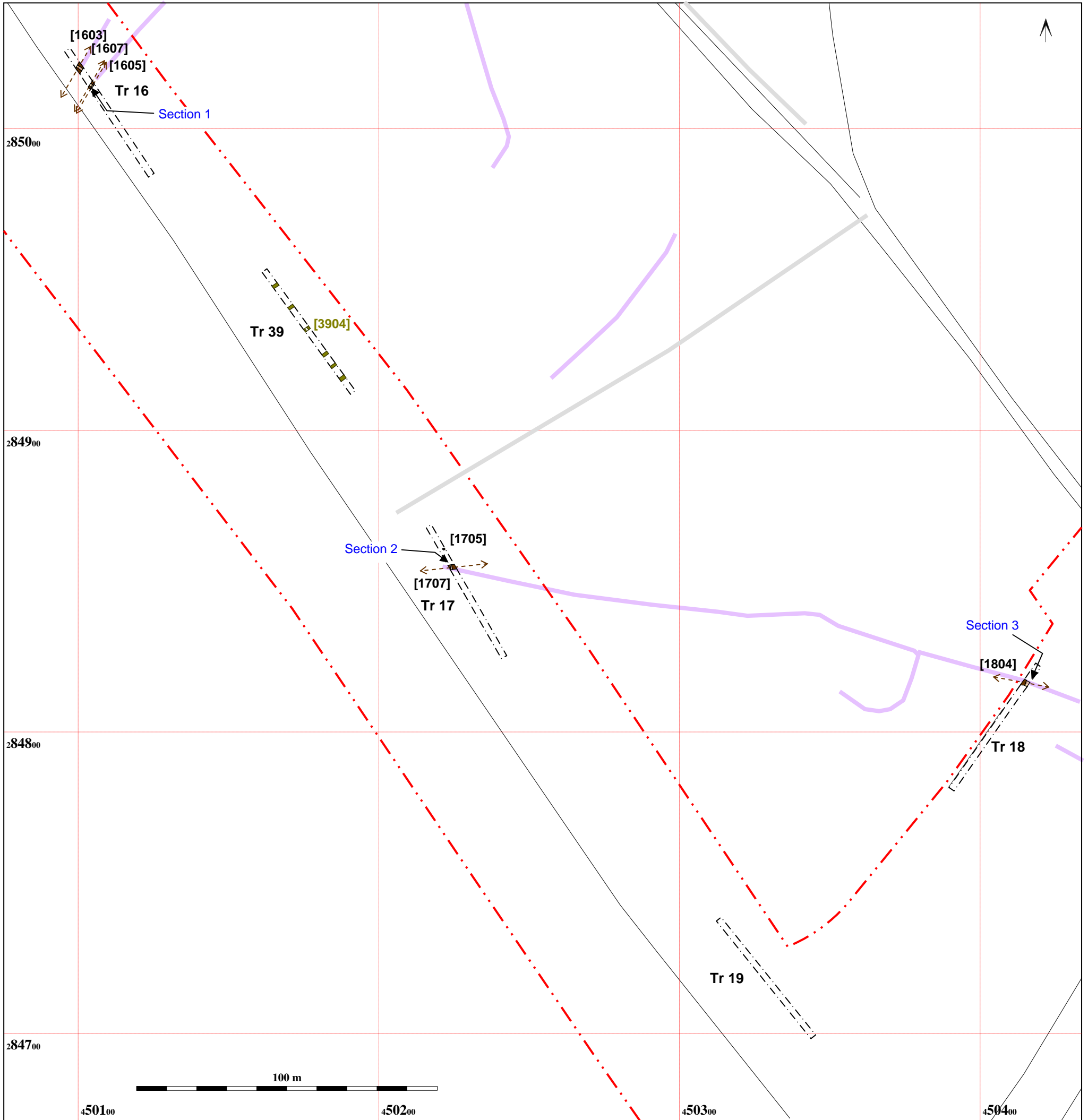
**Reason:** To evaluate the archaeological potential of this area

Context:	Type:	Description:	Excavated:	Finds Present:
4001	Topsoil	Friable dark grey clay silt 0.25m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4002	Subsoil	Firm mid brown clay silt 0.2m - 0.4m thick	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4003	Natural	Firm light yellow brown clay	<input type="checkbox"/>	<input type="checkbox"/>



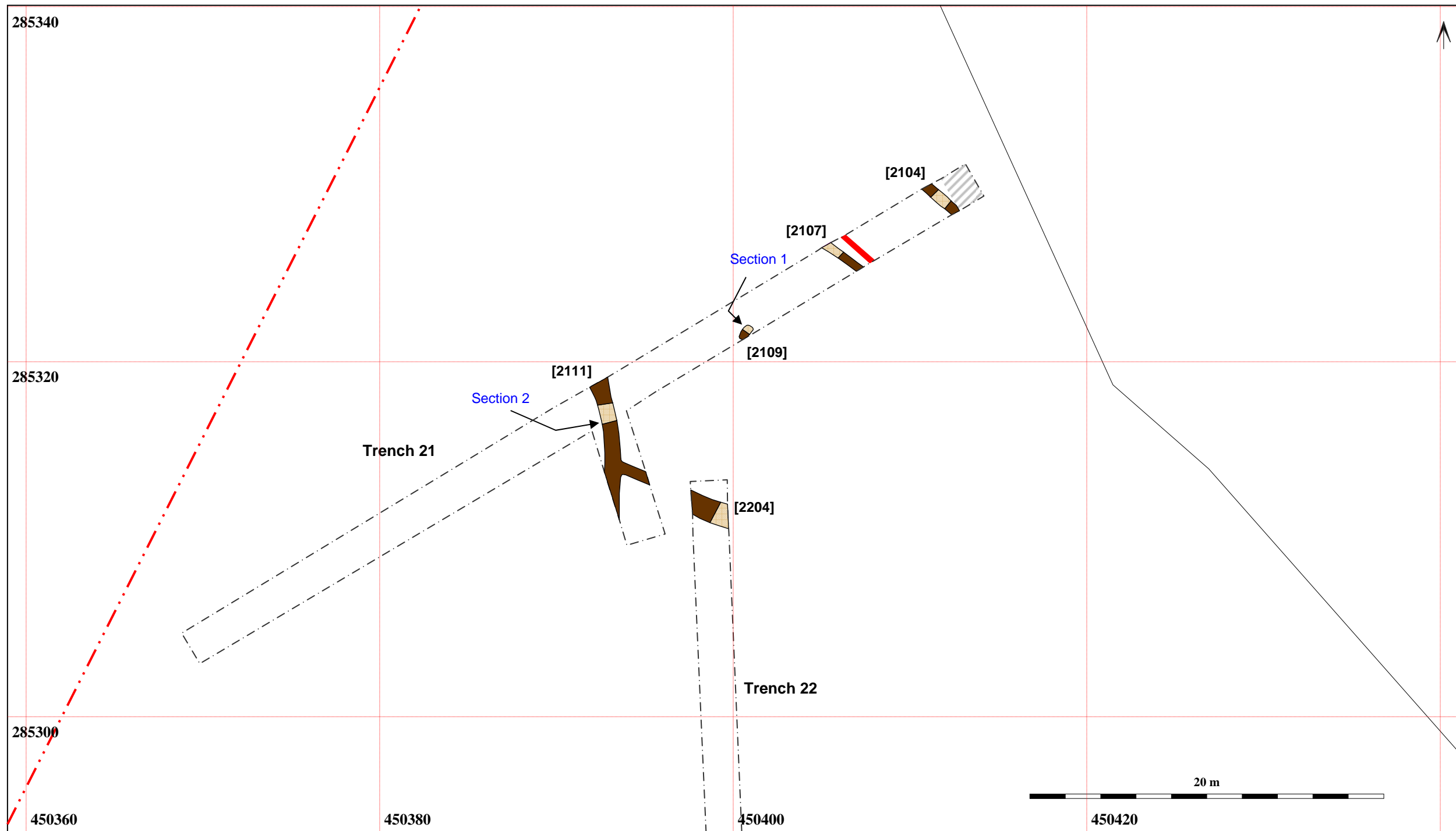
**Figure 1: Site location and trench layout**

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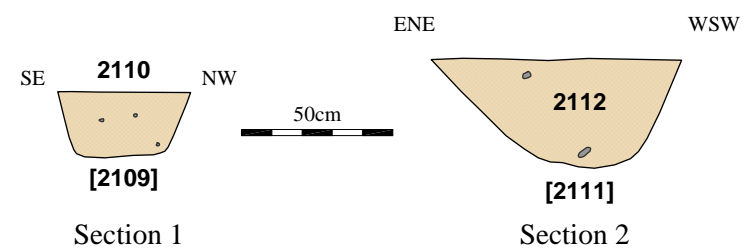


**Figure 2:** Close-up plan and selected sections for Trenches 16-19 and 39

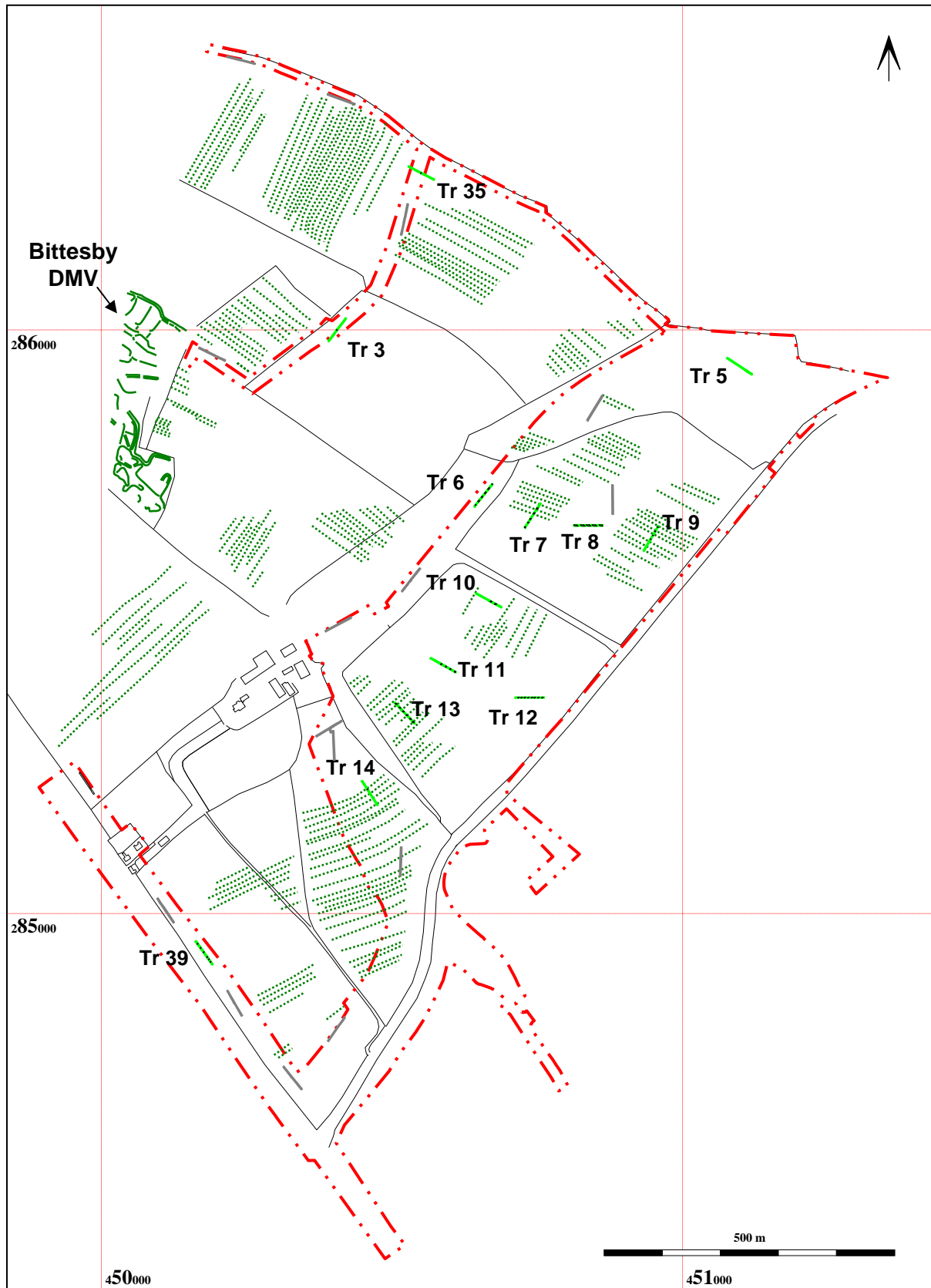




- Archaeological feature  
Unexcavated/excavated
- Medieval furrow  
Unexcavated/excavated
- Modern feature
- DHL boundary
- Modern boundaries
- Geophysics anomaly
- Historic map boundary



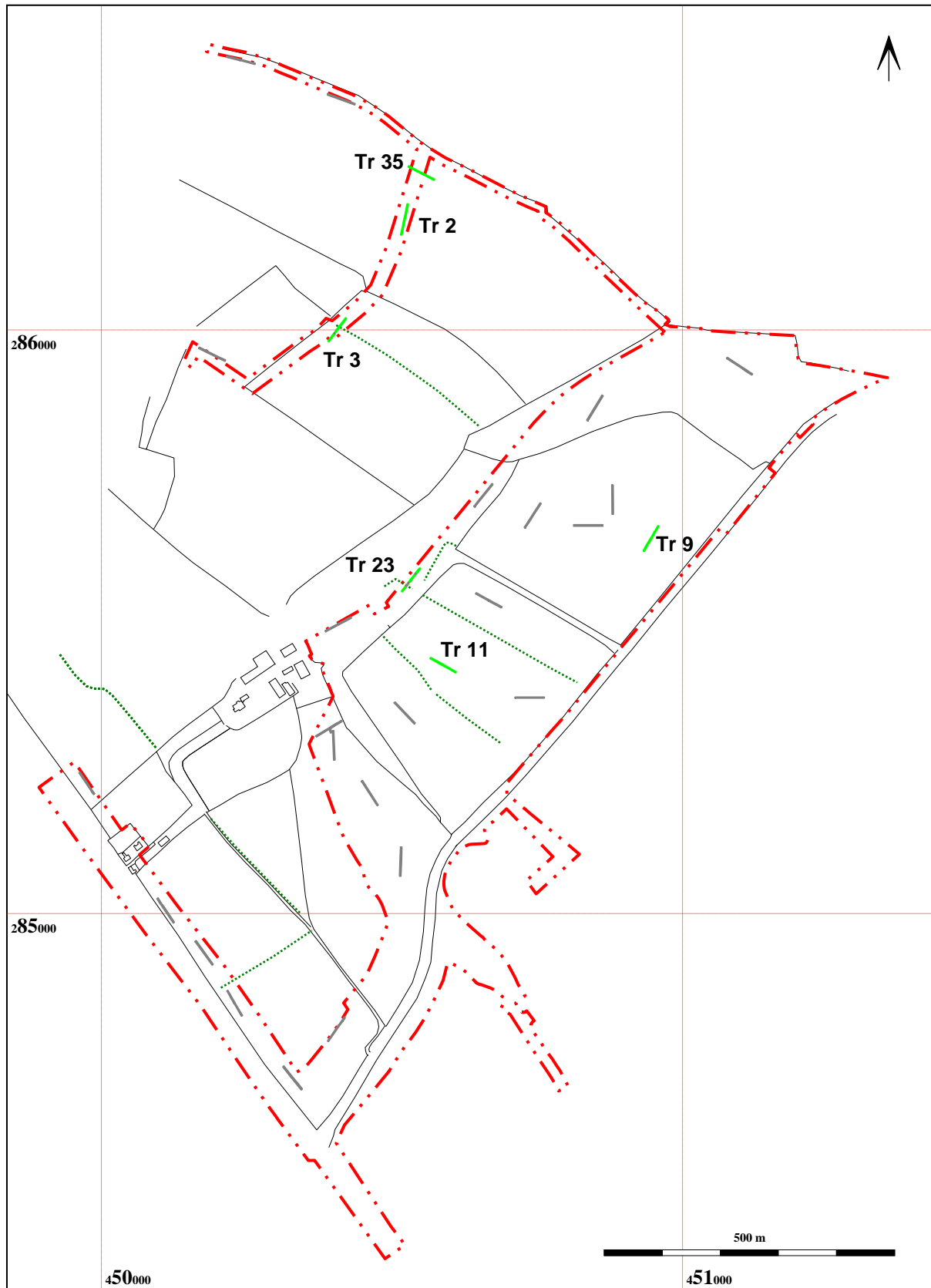
**Figure 3:** Close-up plan and selected sections for Trenches 21-22



- . . . - DHL boundary
- . . . . - Furrows detected by geophysics survey
- Modern boundaries
- Trenches with no furrows
- Trenches with furrows

**Figure 4:** Overall plan of medieval furrows

Magna Park Extension: DHL Supply Chain, Lutterworth, Leicestershire:  
Archaeological Evaluation



- · - · - DHL boundary
- Boundaries detected by geophysics survey
- Modern boundaries
- - - - - Trenches without post-medieval boundaries
- Trenches with post-medieval boundaries

**Figure 5:** Overall plan of post-medieval boundaries

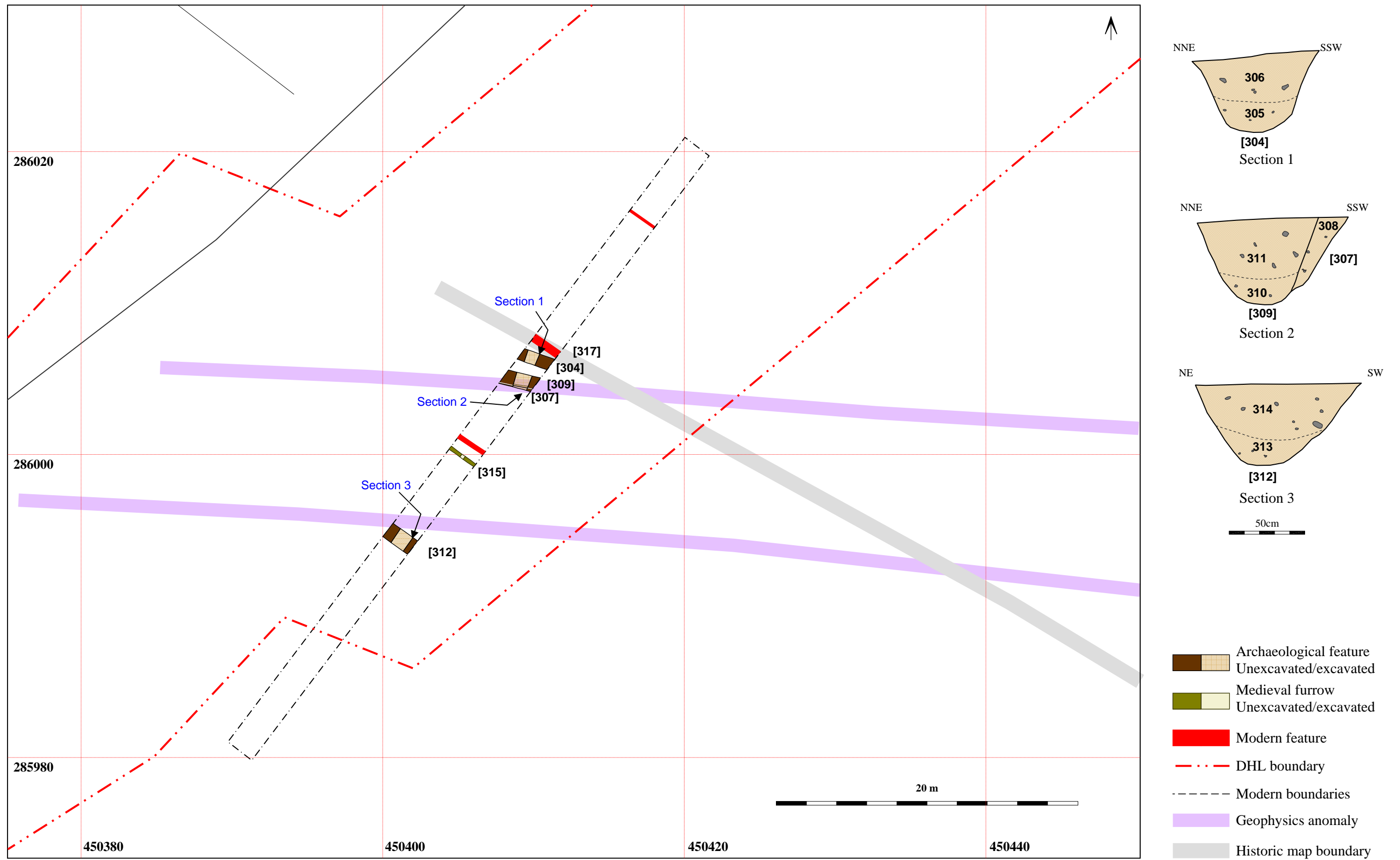
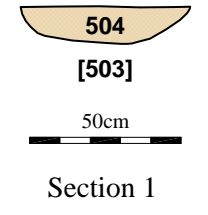
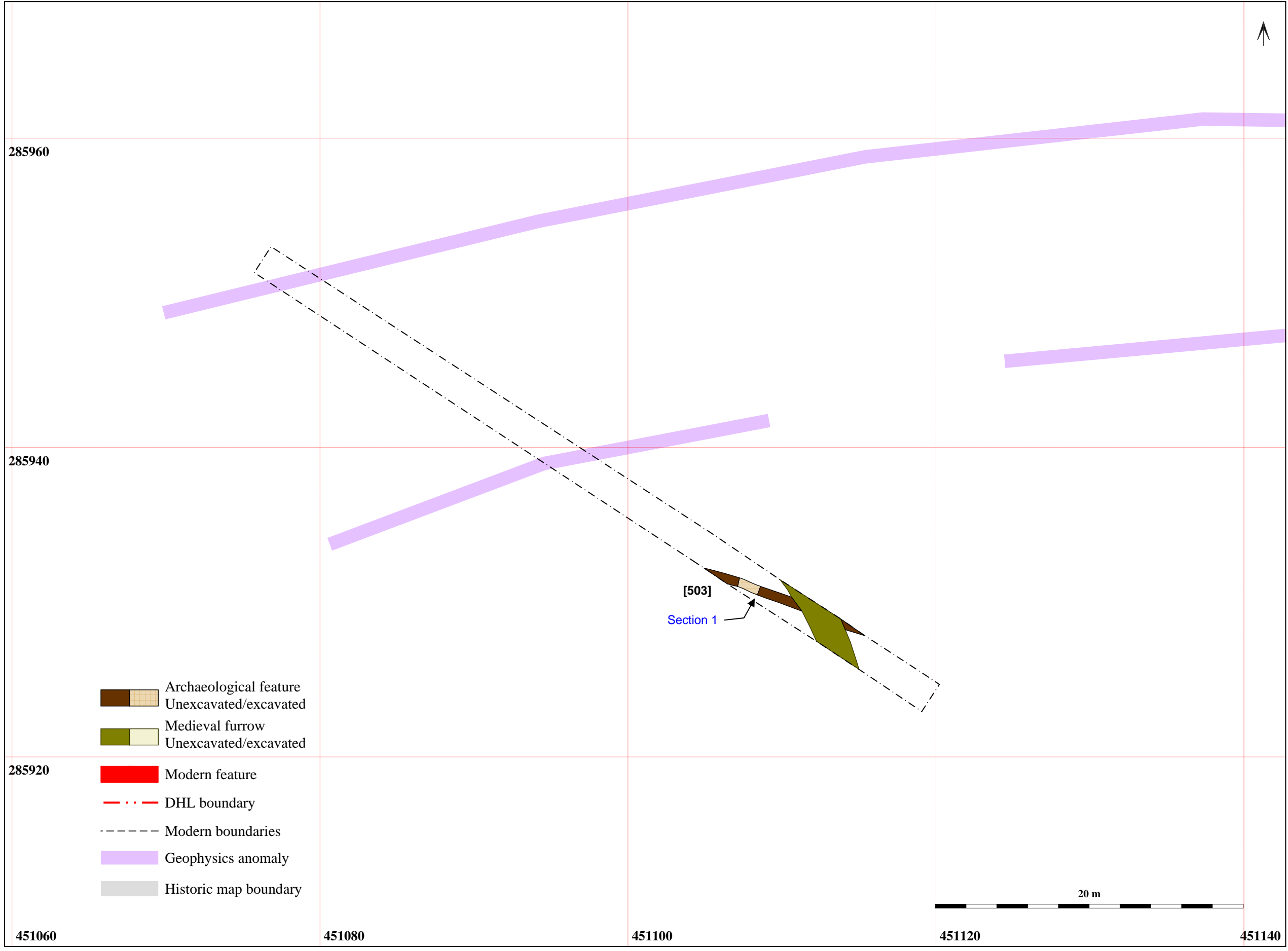


Figure 6: Close-up plan and selected sections for Trench 3







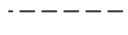


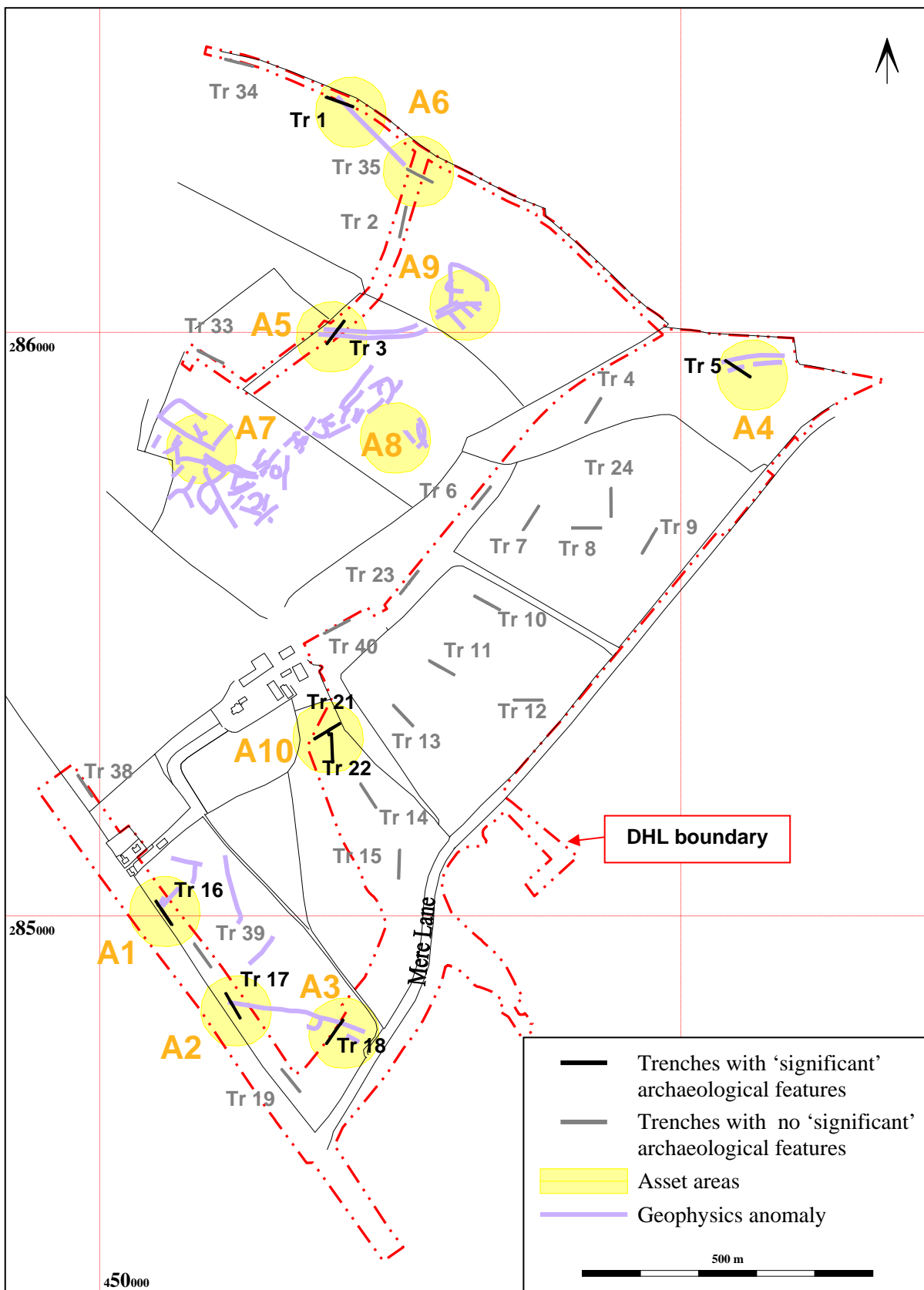
-  Archaeological feature  
Unexcavated/excavated
-  Medieval furrow  
Unexcavated/excavated
-  Modern feature
-  DHL boundary
-  Modern boundaries
-  Geophysics anomaly
-  Historic map boundary

Figure 7: Close-up plan and selected section for Trench 5





**Figure 8:** Trenches containing ‘significant’ archaeological features, with associated Heritage Asset numbers assigned by CgMs.

Note. Assets A7, A8, and A9, are shown for reference purposes on this figure but are not within the proposed DHL development area

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**APPENDIX 10: RACKHAM, J. 2015. MAGNA PARK, LUTTERWORTH: SITE VISIT**

## Magna Park, Lutterworth – Site visit

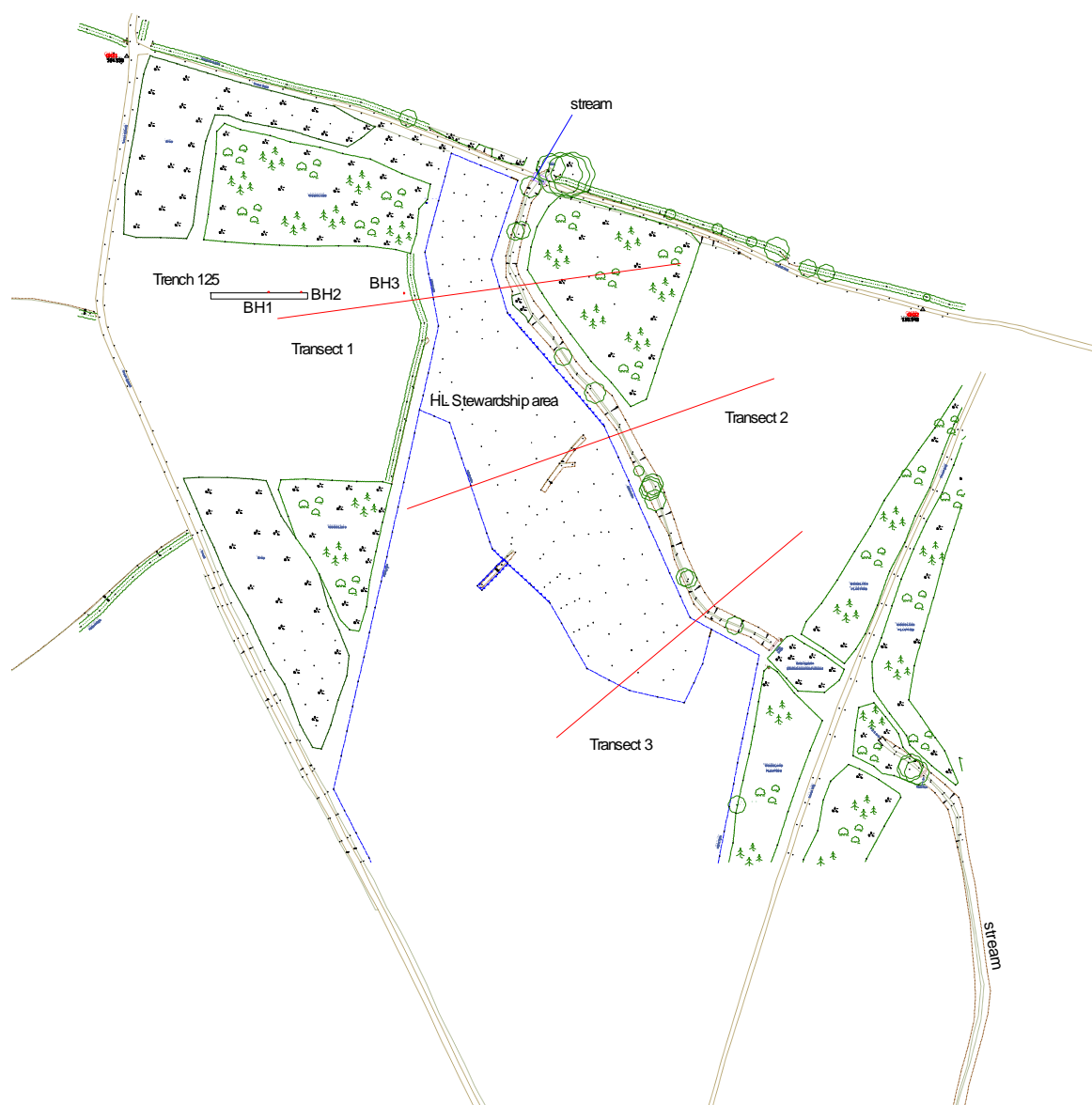
The author was asked to visit the evaluation excavations at Magna Park, Lutterworth being conducted by Albion Archaeology with the specific request to consider deposits in Trench 125 where a feature had been exposed (Fig. 1) with possible organic fills to advise on the character of the feature and the potential sampling that should be undertaken..

**Fig. 1.** South facing section of Trench 125 showing the grey sediments infilling a feature across the trench. (Photograph courtesy of Albion Archaeology)



The deposits, some 30-40cm thick, were observed in section and cored with a hand auger (BH1 – Fig. 2). The sediments were dark grey slightly sandy silts and clayey silts with no surviving visible organic remains. They occupied a shallow depression in the evaluation trench several metres wide (Fig. 1) and clearly represent a former water course or stream. The ‘channel’ deposits are overlain by silty clays of alluvial and possible colluvial origin. The feature lies on the western edge of the floodplain (Figs. 2 and 3) of an upper tributary of the River Soar. The deposits were deemed in the field to be unsuitable for sampling because of the lack of preserved waterlogged remains, the lack of any dating evidence and the probable poor condition of any pollen in the deposits. Trench 125 spans the edge of the floodplain with gravels beneath the ploughsoil at the western end and alluvial silty clays at the east end (See Fig. 3 – gravels show in the foreground but disappear perhaps a third of the way down the trench. The ‘stream’ channel in Fig. 1 lies where the water occurs in Fig. 3).

**Fig. 2.** Map of the valley floor with Trench 125 and the boreholes marked, and the proposed auger survey transects. The area outlined in blue is under HL Stewardship.



Nevertheless the feature indicated the existence of a former stream channel in the valley, and since this feature lay at the western limits of the floodplain, and slightly above the present valley floor it was clear that much better preserved deposits might survive to the east towards the modern stream course. To this end the auger was sunk at the eastern end of evaluation Trench 125 (BH2, Fig. 2) and again at the edge of the field where it bordered an area under Higher Level Stewardship (BH3, Fig. 2). At the eastern end of Trench 125 the alluvial sediments were in excess of 1.4m deep and showed waterlain sediments at their base but still no evidence for well preserved organic remains. The borehole adjacent to the Stewardship area (BH3) was sunk to the maximum 2m depth of the hand auger through alluvial silty clays onto a brown humified organic silt deposit at 1.7-2.0m depth. These deposits may have continued but the author lacked an extension rod that would have allowed further augering.



These basal deposits in contrast to those within Trench 125 have significant palaeoenvironmental potential and a very good chance of producing material suitable for radiocarbon dating. The sediments almost certainly reflected a palaeochannel fill.

**Fig. 3.** Looking east down Trench 125 with the valley floodplain and modern course of the stream just this side of the woodland in the distance.



While the deposits in the evaluation trench are not deserving of any further study it is clear that the floodplain of this small stream has a considerable depth of alluvial sediments and at least one buried palaeochannel with organic silt fills. It is probable that the valley floor may hold several former stream channels.

The modern stream through this area has been straightened in the last century (see Figs 5 and 6) and the valley floor has undergone changes. On the first edition OS map the landscape is marked as a field with no evidence for marshy ground on either side of the stream or woodland nearby. The valley floor was probably meadowland with arable and pasture on the valley sides, but in the 1990's the land was arable (Fig. 6) and remained under cultivation until small plantations and the Stewardship scheme were established. Under the Stewardship scheme the valley floor was fenced off and numerous scrapes machined to create seasonal pools for overwintering waterfowl and biodiversity (Fig. 7). The fact that some 1.7m of alluvial silty clays were recorded at BH3 does however indicate that in the past the valley was subject to repeated

flooding, presumably seasonal, even if this has not been seen often in the last century or during the period it has been used as arable land.

The results from BH3 clearly indicate that the valley has the potential to include well preserved waterlogged palaeochannel fills beneath the alluvium. The bulk of the area in which such channels may occur currently lies within the Stewardship scheme and access to auger this area would have required permission from Natural England and could not be done within the timescale of the archaeological evaluation.

**Fig. 4.** The east end of Trench 125. The second borehole was sunk at the end of this trench just this side of the trench marker, and the third at the edge of the field in line with the trench. The rough grass and shrubs in the centre of the picture represent an area under Higher Level Stewardship.



After discussion on site with Simon Mortimer (CGMS) and Richard Clark (Leicestershire County Council Historic and Natural Environment Team) it was agreed that a proposal should be put forward in the archaeological evaluation report for a more detailed auger survey targetted at assessing the palaeoenvironmental potential of the valley and identifying any palaeochannels and marsh deposits on the valley floor and establishing their date and suitability for detailed study of the palaeoenvironmental history of the valley.

#### **Auger Survey proposal**

It is evident from the survival of organic silts at the base of the 2m core taken at BH3 that deposits suitable for palaeoenvironmental study survive in the valley, although these are likely to occur at depths below about 1.5m where they may have remained largely saturated since their deposition. Above this depth field drains and land drains will have drained the ground and led to the oxidation and breakdown of organic

remains in the sediments as was the case in the channel in Trench 125. These deposits have the potential for giving a landscape and vegetational context for the archaeology on the development site which is very unlikely to be acquired during any of the potential archaeological field investigations that may be conducted. The only way to assess the potential of these deposits is to conduct an auger survey of the valley floor with the purpose of identifying surviving organic sediments that contain biological remains that would allow the reconstruction of the local landscape and yield material suitable for radiocarbon dating the sediments. It is understood that although no building development is planned for much of this valley floor area, landscaping, amenity and possible flood relief schemes may be undertaken with a potential threat to any surviving palaeoenvironmental deposits. Any information gained from organic sediments on the valley floor is likely to be directly relevant to the archaeology being investigated across the remainder of the site. Deposits of this character are relatively rare in the agricultural landscapes of the midlands and the palaeoenvironmental context for much of the archaeology in this area is poor.

To address the question three transects have been laid across the valley floor (Fig. 2). In this area of the site the valley floor lies between the 105 and 100m OD contours with the widest part of the valley floor at the northern end of the development zone. The eastern edge of the floodplain zone is marked by the disused railway embankment.

Each transect should be augered at 15m intervals towards the valley sides, and at 10m intervals across the central area of the valley on either side of the modern stream channel, approximately 18 boreholes in Transect 1, 18 in Transect 2 and 15 in Transect 3. It may not be necessary to auger along the whole length of each transect if it is found that the underlying gravels approach the modern surface and the alluvial deposits thin towards the valley sides. Augering should establish the depth to gravels and describe the deposits overlying these gravels in each borehole. Each borehole will need to be surveyed to establish its 3D coordinates and the field and survey data can be used to reconstruct diagrammatic sections of the deposits on the valley floor and identify where former stream channels or areas of marsh deposit with waterlogged remains survive in the sequence. With the boreholes 10m apart it is possible that individual palaeochannels could be missed since the present stream channel is less than 10m wide. If any boreholes suggest the edge of a possible palaeochannel then additional boreholes should be sunk 3-4m either side to test for the palaeochannel. The results should be reported with recommendations for sampling and core recovery, radiocarbon dating and assessment of the quality of the surviving environmental remains in the deposits.

Having established the location of any deposits suitable for palaeoenvironmental study the appropriate locations should be cored. With suitable deposits likely to be in excess of 1.5m deep coring should be undertaken using a small mechanical rig (such as a Dando Terrier or Premier rig) which can recover continuous cores of the deposits in sleeves of approximately 96-104mm diameter. This allows the recovery of sufficient material for several lines of analysis such as pollen, plant and insect macrofossils, snails and radiocarbon dating. A piston corer or small hand operated mechanical corer would recover perhaps a tenth by volume in comparison to the mechanical rig and would produce insufficient sample material for the macrofossil analyses.

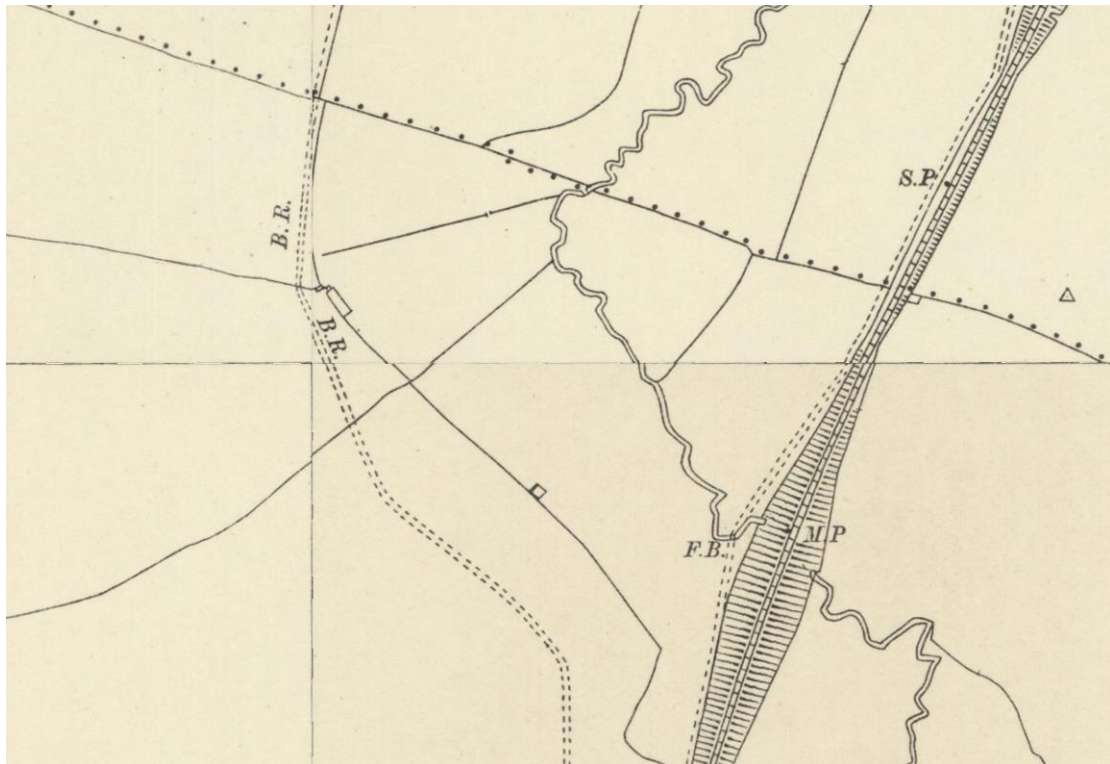
The cores should be split, cleaned, photographed and logged and material selected for radiocarbon dating any deposits with good palaeoenvironmental potential and sub-sampling for the assessment of micro and macrofossil remains. Since the same stream channel could potentially be sampled more than once this stage allows, with the radiocarbon dating, the selection of any cores for detailed post-excavation analysis ensuring that sequences are not duplicated. A priority could be given to sequences that are shown to be contemporary with known periods of activity across the remainder of the development site, such as the medieval village of Bittesby (Fig. 6).

The author believes that the HLS scheme operating on this part of Lodge Farm runs out in 2017. If the fieldwork is to be undertaken before this date then permission would need to be obtained from Natural England/Defra for both the auger survey and any subsequent coring using a mechanical rig.

James Rackham  
November 2015

Environmental Archaeology Consultancy

**Fig. 5.** 1888 OS 6 inch map of the stream valley, showing fields and drains but no woodland or marsh





**Fig. 6.** Google earth image of the valley in 1999 before the establishment of the plantations and HLS scheme (courtesy Google Earth). All the land is under arable cultivation



**Fig. 7.** Google earth image of the valley in 2015 with plantations established and the valley floor under an HLS scheme with scrapes dug to hold seasonal water.

