

Appendix C.1

Geophysical Survey



Bodelwyddan Solar and Energy Storage

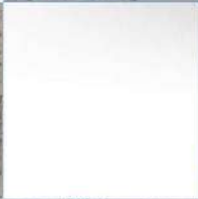
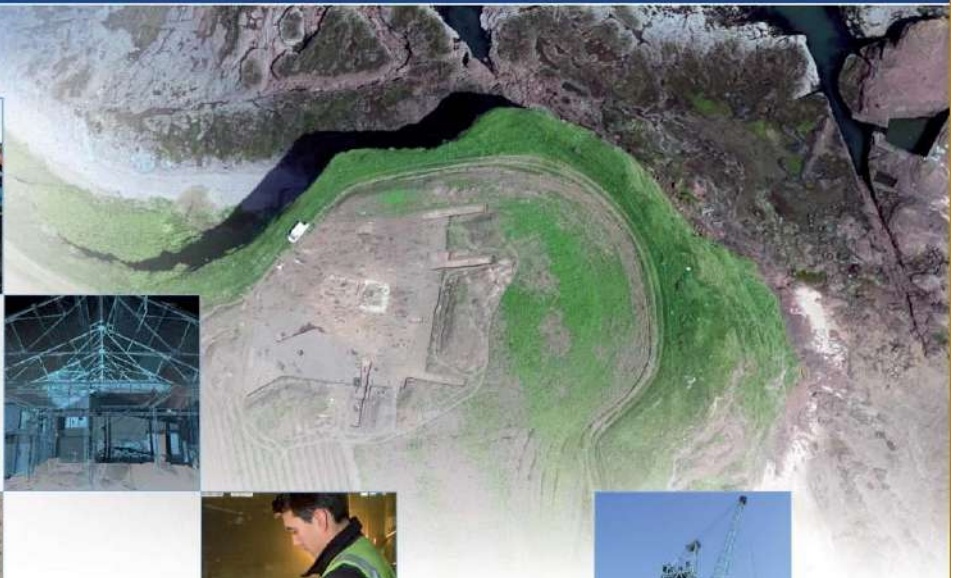
Denbighshire

Archaeological Geophysical Survey

National Grid Reference: SH 98495 7739

AOC Project No: 40766

Date: 05 September 2025



AOC
Archaeology
Group

ARCHAEOLOGY

HERITAGE

CONSERVATION

Bodelwyddan Solar and Energy Storage, Denbighshire

Archaeological Geophysical Survey

On Behalf of: Bodelwyddan Solar and Energy Storage Ltd
Unit 25.7, Coda Studios,
189 Munster Road, London.
SW6 6AW.

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OASIS IC TBC

Prepared by: Robert Legg & Susan Ovenden

Illustrations by: Robert Legg & Susan Ovenden

Date of survey: 5th August 2024 to 15th May 2025

Surveyors: Alastair Galt, Chris Sykes, Kayt Armstrong,
Kinnie Wade, Victoria Huggett, Peter Lee,
Storme Gathercole, Robert Legg, Kieran
Machen, Dan Shiel

This document has been prepared in accordance with AOC standard operating procedures.

Author: Susan Ovenden, Robert Legg

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Quality Checked by: Chris Sykes

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Enquiries to: AOC Archaeology Group
The Lodge
Unit 8, Mortec Park
York Road
Leeds
LS15 4TA

Tel. 01138 232 853
e-mail. leeds@aocarchaeology.com

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Non-Technical Summary

AOC Archaeology Group was commissioned by Bodelwyddan Solar and Energy Storage Ltd to undertake an archaeological geophysical survey using magnetic gradiometry of an area of land at Bodelwyddan, Denbighshire. The survey comprises a Solar Site, BESS Site and an associated cable route.

Survey of the Solar and BESS site was commenced on 5th August 2024 and completed on 2nd April 2025 as part of a wider scheme of archaeological assessment in advance of the proposed development of the site. The planned survey area was 175.49ha across the Solar and BESS sites of which c. 163ha has been completed. Approximately 2ha were unsuitable for survey due to rough or waterlogged ground conditions. An additional 10.25ha is due to be surveyed within the Solar site post-harvest.

Sections of the proposed cable route have been selected for geophysical survey cover a total area of 8.29ha. In May 2025 5ha has been completed, with 3.92ha to be completed post-harvest and 1.5ha being unsuitable for survey.

The magnetic background of the survey data is predominantly quiet with weak to strong natural variation likely to relate to intertidal deposits, identified predominantly in the northern parts of the survey area. Against this background several anomalies have been clearly defined, exhibiting a medium to strong magnetic enhancement. Strong magnetic disturbance due to the presence of services, and above ground and beneath ground electrical infrastructure, was much more likely to have masked potential magnetic anomalies. This is particularly noticeable with the disturbance associated with high voltage underground power cables running through Fields 11, 12, 20, 21, 26 and 27. In the southeast of the proposed BESS site, which is located adjacent to an electrical substation, a modern service runs through the southeastern portion of the survey area. Immediately to the west of this is a broad linear zone of magnetic disturbance. This response is not typical of a service but is thought to have a modern origin; it could indicate a further cable or a former track.

Anomalies of probable and possible archaeological origins have been identified from the survey data, with probable archaeological activity identified in several areas. One grouping consists of conjoining and overlapping ditches, indicative of more than one phase of archaeology, in Field 7 and a rectilinear enclosure in Field 9, with a potential trackway and ring-shaped anomalies of possible archaeological origins positioned between them. Another grouping comprises a rectilinear field system in Fields 13 and 14, within which enclosures and ring-shaped features and pits have been identified. Other anomalies of archaeological origins appear to reflect enclosures and ring-shaped features relating either to houses or barrows within Fields 18 and 19. To the west of these, in Field 15, two parallel linear trends suggesting a possible trackway have been noted as having a possible archaeological origin. It is not possible to say if these anomalies are associated with the responses to the northeast as they may have a more recent origin. Within the sections of the cable route completed to date a rectilinear response has been detected which suggests a possible enclosure which measures approximately 28m by 16m. However interpretation is cautious as additional responses within the area may have modern origins.

Anomalies of possible archaeological origin appear to reflect possible field boundaries not identifiable on historical OS maps, enclosures, and clusters of potential houses and pits. Multiple anomalies of unclear origins have also been identified from the survey data, which may have an archaeological origin.

Anomalies consistent with the presence of ridge and furrow cultivation remains have been interpreted from the survey data of several fields. Several magnetic anomalies highlight the location of former field boundaries, building locations, train lines and ponds identifiable on historical OS maps of the survey area.

Within the sections of the cable route completed to date a rectilinear response has been detected which suggests a possible enclosure which measures approximately 28m by 16m. However interpretation is cautious as additional responses within the area may have modern origins.

1 Introduction

- 1.1 AOC Archaeology Group was commissioned by Bodelwyddan Solar and Energy Storage Ltd to undertake an archaeological geophysical survey using magnetic gradiometry of an area of land at Bodelwyddan, Denbighshire to aid archaeological evaluation prior to the construction, operation and maintenance of a proposed solar photovoltaic electricity generating system and battery energy storage system ('BESS'), associated solar arrays, inverters, transformers, cabling, substations, access tracks, landscaping, ecological enhancement areas and associated ancillary development.
- 1.2 The Site covers a total area of 183.77 Ha comprising:
 - Solar Site RLB: 168.95 Ha
 - BESS Site: 6.52 Ha
 - Cable corridor 8.29 Ha
- 1.3 Survey of the Solar and BESS site was commenced on 5th August 2024 and completed on the second of April as part of a wider scheme of archaeological assessment in advance of the proposed development of the site. The planned survey area was 164ha across the Solar and BESS sites of which c. 162ha has been completed. Approximately 2ha were unsuitable for survey due to rough or waterlogged ground conditions. An additional 10.25ha is due to be surveyed within the Solar site post-harvest. Sections of the proposed cable route have been selected for geophysical survey cover and total area of 8.29ha. As of May 2025 5ha has been completed, with 3.92ha to be completed post-harvest and 1.5ha being unsuitable for survey, and 1ha being removed from scope.
- 1.4 Archaeological geophysical survey uses non-intrusive and non-destructive techniques to determine the presence or absence of anomalies likely to be caused by archaeological features, structures or deposits, as far as is reasonably possible (ClfA 2014, updated 2020). It is therefore a common component of the process of evaluating the impact of development on the historic environment. It is also a key tool in archaeological research as it is non-destructive and able to cover large areas, to allow below ground interventions to be appropriately targeted.
- 1.5 This survey was carried out to provide information on the presence, character and extent of potential buried archaeological remains within the proposed development site. The significance of any such remains can only be determined with reference to further information as such this report may form part of an assessment of significance but cannot stand alone as such.

2 Survey Area Location and Description

- 2.1 The larger parcel of land to the northwest of Bodelwyddan extends to approximately 168.95 ha, comprising land to the north and south of Rhuddlan Road (A547), and to the west of St Asaph Avenue, and hereinafter is referred to as the 'Solar Site'. Towyn and Kinmel Bay are located to the north of the Solar Site and Abergele to the west. The smaller parcel of land to the south east of Bodelwyddan is approximately 6.52 ha. It is broadly rectangular in shape and is positioned south of St Asaph Business Park, directly adjacent and to the west of Bodelwyddan substation. It is referred to as the 'BESS Site'. High voltage overhead lines transect the eastern part of the BESS Site and pylons are located to the east and south of the site. To the east, south and west of the BESS Site lies agricultural land. There are a number of offshore wind farm substations located further to the east. The cable corridor is approximately 8km in length and 10m wide with a total area of 8.29 ha.
- 2.2 The Site comprises pasture and arable farmland (Figure 2). The western and central areas are largely flat and are situated at less than 10m above Ordnance Datum (aOD). The eastern survey parcel is gently sloping and is situated between 40m and 50m aOD

- 2.3 The recorded solid geology underlying the Site consists of mudstone, siltstone and sandstone of the Warwickshire Group. This is overlain in the western and central areas by superficial deposits of clay, silt and sand tidal flat deposits, and diamicton sedimentary deposits of Devensian till in the eastern areas (BGS 2025). The soils within the central and western Site consist of loamy and clayey soils of coastal flats with naturally high groundwater, with slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils to the east (Soilscapes 2025).
- 2.4 Magnetic gradiometry typically provides a variable result over mudstone overlain with tidal flats clay, silt and sand (David *et al.* 2008: 15). Magnetic enhancement over mudstone geologies can often be very weak, while enhancements associated with tidal deposits can be strong, making it possible anomalies of archaeological origin could be masked by background variation due to the superficial deposits. In this instance, the soil and geological environment of the Site did not hinder the survey interpretation with most anomalies exhibiting medium to strong enhancement. Where services and high voltage underground power cables have been present, these have had a much stronger hindrance on survey results and interpretation than the natural background response.

3 Archaeological Background

- 3.1 Below is a summary of the known archaeology supplied by Cotswold Archaeology.
- 3.2 The majority of the HER records within the Site's surrounds are of post-medieval and modern date and include former farmsteads and Second World War features. The Solar Farm and BESS sites appear to have been within agricultural use from at least the mid-19th century, and the only recorded features in these parts of the Site comprise the sites of former boundary stones. The cable route extends through Kinmel Park, a 19th century landscape park which originated as a deer park in the post-medieval period, and there is some potential that buried remains of associated parkland features may be present within this part of the Site.
- 3.3 There is potential for buried archaeological remains within the Solar Site, with evidence within the surrounding area for activity dating from the later prehistoric period onwards. Bronze Age barrows are recorded to the south and east of the Site, along with isolated findspots of this period.
- 3.4 Within the alignment of the expected cable route, the Glascoed Road is thought to broadly follow the route of a Roman road connecting Segontium (Caernarfon) and Deva (Chester). Potential sections of the Roman road have been identified in the vicinity of the present road as earthworks and cropmarks, and as a metalled surface revealed through ploughing.

4 Aims

- 4.1 The aim of the geophysical survey was to identify anomalies that suggest the presence of archaeological remains, in order to enhance the current understanding of the historical environment within the Site.
- 4.2 Specifically, the aims of the gradiometer survey were:
- To locate, record and characterise any potential surviving sub-surface archaeological remains within the Site.
 - To produce a comprehensive site archive (Appendix 1) and report.

5 Methodology

- 5.1 The geophysical survey was undertaken between 05/08/2024 and 11/10/2024, and 31/03/2025 and 02/04/2025, and 13/05/2025 and 15/05/2025.
- 5.2 All geophysical survey work was carried out in accordance with current good practice specified in the EAC guidelines document (Schmidt *et al.* 2015), as recommended by Historic England, and in the Chartered Institute for Archaeologists' *Standard and Guidance for Archaeological Geophysical Survey* (2014, updated 2020).
- 5.3 Parameters and survey methods were selected that were suitable for the prospective aims of the survey and in accordance with recommended professional good practice (Schmidt *et al.* 2015).
- 5.4 Digital photographs of every survey parcel were taken before, during and after geophysical survey to show any changes to field conditions following the programme of works. The photos were downloaded and stored off site, and relevant examples are included as Plates 1 to 17 in this report.
- 5.5 The gradiometer survey was carried out using a Bartington Non-Magnetic Cart. The cart system utilises six Grad-01 fluxgate gradiometer sensors mounted upon a carbon fibre frame, along with data logging equipment and batteries (see Appendix 2). Before each session of use, the cart system was balanced around a single set up point within the Site specifically chosen for being magnetically quiet. Balancing the machine around this point produces a more uniform dataset throughout and allows all data to be plotted with ease on the same palette.
- 5.6 Data was collected using zig-zag traverses alongside a constant stream of GPS data collected through a Trimble R10 GPS, enabling the collected data to be spatially georeferenced without the need for a pre-determined grid system. The data was logged on a laptop mounted to the cart using Geomar MLGrad601 software.
- 5.7 A total of 159ha were surveyed using the Bartington cart.
- 5.8 Small areas, including areas under overhead powerlines and rough ground, were surveyed using handheld Bartington Grad601-2 fluxgate gradiometers (see Appendix 2). The survey was conducted within a grid system, across grids measuring 30m by 30m which were marked out using temporary markers at each grid node.
- 5.9 Grid nodes were set out and recorded using a Trimble R8 / R10 dGPS with an error no greater than +/- 0.05m. The GPS system uses the Trimble "VRS Now" service to provide instant access to real-time kinematic (RTK) corrections enabling an accuracy of < 2cm. It was connected via a SIM card run on the Vodafone network with good cellular signal in the Sites, meaning a repeater was not required.

- 5.10 Data was collected in the field on an east-west alignment using zig-zag traverses, with a sample interval of 0.25m and a traverse interval of 1m.
- 5.11 A total of 8ha were surveyed using the handheld Bartington.
- 5.12 Before each session of use, each gradiometer was balanced around a single set up point within the Site specifically chosen for use by all instruments used in the survey. This point is magnetically quiet and balancing the machine around this point, produces a more uniform dataset throughout and allows all data to be plotted with ease within a standard range as appropriate to the survey environment. Striping of the data may occur due to instrument drift; it is decided in the field if this is within a sensible and acceptable limit; if it is not, the grid(s) in question are re-collected
- 5.13 Care was also taken to attempt to avoid metal obstacles present within the Site, such as metal objects within and adjacent to the Site as gradiometer survey is affected by 'above-ground ferrous disturbance' and avoiding these improves the overall data quality and results obtained.
- 5.14 The data was downloaded from MLGrad601 and converted into a .xyz file in Geomar MultiGrad601 before being processed along with the GPS data in TerraSurveyor v3.0.34.10. The details of these processes can be found in Appendices 2 and 3.
- 5.15 Interpretations of the data were created in ArcGIS Pro and the technical terminology used to describe the identified features can be found in Appendix 4.

6 Summary of Results

- 6.1 Below is a summary of the survey results discussed by interpretation category. The figures listed are the summary greyscale images and interpretation figures, Figures 3.1 – 3.6 and Figures 4.1 – 4.6.

Definite/Probable Archaeology

- 6.2 **Area 7 (Figures 3.1 and 4.1):** Located near the western boundary and centre of the survey area is a complex of several conjoining and overlapping curvilinear anomalies. The magnetic signal of the anomalies is consistent with the presence of infilled cut features such as ditches, which may result from more than one phase of archaeological activity
- 6.3 **Area 9 (Figures 3.1 and 4.1):** In the south of the survey area rectilinear anomalies suggesting an enclosure have been detected. Anomalies demarking the possible enclosure have a much stronger magnetic signal towards the southern end than along its northern perimeter. This may either reflect a concentration of habitation towards the southern end of the enclosure or a differential dissipation of magnetic signal due to flooding between the north and south of the feature. Within the enclosure two circular anomalies suggestive of possible houses have been detected together with additional curvilinear and discrete anomalies indicative of infilled features such as ditches and pits.
- 6.4 **Area 13 (Figures 3.3 and 4.3):** A concentration of linear and rectilinear anomalies indicative of infilled features ditches has been detected across this area. The anomalies are likely to reflect a complex of field systems and trackways. Two groupings of curvilinear and ring-shaped anomalies are located near centre and west of Field 13. These anomalies appear to reflect concentrations of archaeological activity amongst the complex of field systems. In the northeastern corner of survey area further rectilinear anomalies have been detected which appear to overlie the postulated field system. The data suggest a possible rectilinear enclosure, though not fully defined in survey data due to nearby unsurveyable ground. Geophysical survey cannot date features, but the data suggest two possible phases of activity.

- 6.5 **Area 14 (Figures 3.3 and 4.3):** A linear anomaly aligned east to west near the western edge of Field 14 the presumed field system and trackway complex detected in Field 13 to the west, while curvilinear anomalies along the western edge of Field 14 appear to be a continuation of a separate enclosure detected Field 13.
- 6.6 **Area 18 (Figures 3.3 and 4.3):** Located near the centre of Field 18 are two concentric ring-shaped anomalies. The anomalies are consistent with the presence of infilled ditches in a ring shape, which may relate to possible house or barrows.
- 6.7 **Area 19 (Figures 3.3 and 4.3):** In the north of Field 19 is a configuration of linear anomalies, consistent with the presence of infilled features such as ditches suggest possible enclosures. This enclosure appears to straddle a branch of the possible palaeochannel.

Possible Archaeology

- 6.8 **Area 1 (Figures 3.1 and 4.1):** An ephemeral rectilinear anomaly, running west-northwest to east-southeast and northeast to southwest has been detected in the eastern half of survey area. Anomaly could reflect the presence of an infilled ditch. This may indicate an unmapped field boundary or an earlier enclosure.
- 6.9 **Area 5 (Figures 3.1 and 4.1):** Several rectilinear anomalies cross the survey area are indicative of the presence of infilled cut features such as ditches. They are consistent with former field boundaries not identifiable on historical OS maps of the area, but could reflect an earlier enclosure system.
- 6.10 **Area 7 (Figures 3.1 and 4.1):** Running southeast from the complex of probable archaeology are weak parallel linear anomalies suggestive of a possible trackway. Located just north of this feature are several ring-shaped anomalies suggestive of ring ditches.
- 6.11 **Area 8 (Figures 3.1 and 4.1):** The parallel anomalies of detected in Area 7 continue southeast into this survey area, though the anomalies become very ephemeral in the centre and east of the survey area. Near the western edge of the survey area three linear anomalies run southwest to northeast either side of the possible trackway. An ephemeral rectilinear anomaly, running east-west and north-south in the centre and east of the survey area. The anomaly could reflect the presence of an infilled ditch that may relate to an unmapped field boundary with part of the response typical of a drain.
- 6.12 **Area 11 (Figures 3.2 and 4.2):** Near the centre of Field 11 is a configuration of curvilinear anomalies, consistent with the presence of infilled features such as ditches in the form of an enclosure. Two linear anomalies running northeast to southwest and west to east, appear to respectively align with the western and southern edges of the possible enclosure. Anomalies are consistent with the presence of infilled features such as ditches and may reflect field boundaries adjoined to the enclosure.
- 6.13 **Area 14 (Figures 3.3 and 4.3):** An ephemeral curvilinear anomaly, curving predominantly north to south across the survey area. Anomaly could reflect the presence of an infilled ditch which does not relate to mapped features. Part of the northern segment of consists of strong dipolar anomalies consistent with made ground and may reflect a metallised track surface. Along the eastern edge of the survey area are several linear and curvilinear anomalies consistent with the presence of infilled cut features such as ditches which may reflect unmapped former field boundaries
- 6.14 **Area 15 (Figures 3.3 and 4.3):** In the east of the survey area, two parallel linear trends suggesting a possible trackway have been noted as having a possible archaeological origin. These are aligned SW-NE and may be associated with a cluster of ring ditches detected in Field 18 to the east (see para 6.6). However, they may not be contemporary as they appear to terminate at a rectilinear anomaly.

- 6.15 **Area 18 (Figures 3.3 and 4.3):** Concentration of linear, curvilinear and discrete anomalies within an area of enhanced magnetism located just to the east of the ring ditches noted as having a probable archaeological origin. These anomalies could relate to a concentration of archaeological activity with infilled features such as pits and ditches.
- 6.16 **Area 19 (Figures 3.3 and 4.3):** Near the centre of the western boundary a concentration of linear, curvilinear and discrete anomalies within an area of enhanced magnetism appears to be a continuation of the responses detected in Field 18 to the west and suggest possible linear ditches and ring ditches. However, they are fragmentary and could potentially have natural origins hence their classification as possible, rather than probable, archaeology.
- 6.17 **Area 22 (Figures 3.3 and 4.3):** Concentrations of curvilinear and discrete anomalies have been detected in the centre of and southwest of the survey area. The anomalies are consistent with the possible presence of infilled ditches and pits. However, they are fragmentary and could potentially have natural origins hence their classification as possible, rather than probable, archaeology.
- 6.18 **Area 26 (Figures 3.3 and 4.3):** A D shaped anomaly near the centre of the field is consistent with the presence of an infilled features such as a ditch. However its proximity to a high voltage cable makes interpretation cautious.
- 6.19 **CR1_10 (Figures 3.6 and 4.6):** Within the parkland a possible rectilinear enclosure has been detected which measures approximately 28m by 16m. However interpretation is cautious as additional responses within the area may have modern origins.

Unclear Origins

- 6.20 Additional discrete anomalies and linear trends have also been noted within most of the survey area. These anomalies are less diffuse than the magnetic variation associated with natural deposits, but weaker and more fragmentary than those categorised as probable and possible archaeology. Although natural or more recent agricultural origins are likely, an archaeological origin cannot be excluded.

Historic and Agricultural

- 6.21 Several magnetic anomalies highlight the location of former field boundaries, building locations, train lines and ponds identifiable on historical OS maps of the survey area.
- 6.22 Anomalies consistent with remnants of ridge and furrow cultivation have been detected in several fields, together with modern ploughing trends.

Modern

- 6.23 Strong magnetic disturbance due to the presence of services, and above ground and beneath ground electrical infrastructure is evident in many of the survey areas. This is particularly noticeable with the disturbance associated with high voltage underground power cables running through Fields 11, 12, 20, 21, 26 and 27.
- 6.24 In the southeast of the proposed BESS site, which is located adjacent to an electrical substation, a modern service runs through the southeastern portion of the survey area. Immediately to the west of this is a broad linear zone of magnetic disturbance. This response is not typical of a service but is thought to have a modern origin; it could indicate a further cable or a former track.

7 Detailed Results and Interpretation

- 7.1 The results are discussed sequentially by survey area in Table 1.
- 7.2 The table refers to the archive figures:
- Figure 5.1 – 5.25. Processed gradiometer data, 1:1500
 - Figure 6.1 – 6.25 Interpretation of processed data, 1:1500.
 - Figure 7.1 – 7.25: Minimally processed data plotted as XY traces at 50nT/cm at A3.
- 7.3 Appendix 4 contains a guide to the interpretation categories employed and the logic used to assign anomalies to specific classes, as well as a short discussion of how past human activity results in these anomalies, however, some important points are noted below:
- 7.4 The classes have three sub-types (generally): anomalies (typically indicated by a solid colour polygon), spreads (a stippled polygon) and trends (a line with a colour matching the polygon colour). *Anomalies* refer to distinct changes in the survey data which suggest an abrupt boundary between materials below ground, such as a cut feature with a magnetically contrasting fill. *Spreads* of enhanced material refer to diffuse areas of altered magnetic contrast which suggest a localised spread of material with a magnetic contrast within the topsoil or ploughzone. Linear *trends* are less distinct and are typically visible as linear patterning in the overall texture of the data. A common example of these is the striping effect caused by recent ploughing.
- 7.5 Anomalies placed in the '*Uncertain*' class may have an archaeological origin, but other explanations are equally likely. Where any particular interpretation is *more* likely than others, the anomaly is assigned to that class.
- 7.6 The definite '*Archaeology*' class is only used for anomalies with no other possible explanation, either due to their diagnostic characteristics or because they are corroborated by other sources such as previous interventions within the survey area. Anomalies with magnetic characteristics or morphologies that suggest an archaeological origin will generally be assigned to the '*Possible Archaeology*' class.
- 7.7 The anomaly type '*Ferrous Spike*' is assigned to strong dipolar anomalies which cover a small spatial area and have a characteristic appearance in the XY traces of the survey data. These are strongly likely to be of recent origin in the form of magnetic or ferrous debris within the topsoil; 'spikes' of other origin will be assigned to their appropriate classification.
- 7.8 A distinction is made between modern *disturbance* from strongly ferrous materials within or adjacent to the survey area, such as the strong dipolar 'halos' produced by services like gas mains, and spreads of material within the topsoil causing noise that is assumed to have a recent origin. Generally speaking, '*Modern Disturbance*' occurs at a distance from a magnetic source, whereas *modern magnetic spreads/debris* are related to material directly at that location.
- 7.9 Generally, only anomalies (or groups thereof) of a likely archaeological or historical origin have been assigned an anomaly ID on the interpretation figures. However, anomalies interpreted as resulting from other processes that are integral to the discussion of the results have also been assigned anomaly IDs. The anomaly letter is prefixed with the field number.

Table 1: Detailed Survey Results

Area ID	Probable Archaeology	Possible Archaeology	Unclear origin	Historic & Agricultural	Non-Archaeological
1 - Solar Site Figures: 5.1 6.1 7.1	None detected	Ephemeral rectilinear anomaly, running west-northwest to east-southeast and northeast to southwest in the eastern half of survey area [1a]. Anomaly could reflect the presence of an infilled ditch. This may indicate an unmapped field boundary or an earlier enclosure.	None detected	None detected	Broad curvilinear anomalies consistent with intertidal deposits throughout survey area and extending southwards into Area 2. Strong dipolar anomalies consistent with the presence of services run along the northern and western boundaries of the survey area. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing.
2 - Solar Site Figures: 5.2 6.2 7.2	None detected	None detected	Ephemeral curvilinear anomalies and alignments of discrete anomalies in southwest corner of the survey area [2a]. Strong discrete anomalies located near the southern edge of the survey area [2b]. These could be associated with [2a]. A cluster of weaker pit type responses [2c] have also been noted; but these may have a natural origin	None detected	Broad curvilinear anomalies consistent with intertidal deposits extending into the north of the area survey area from Area 1. Area of mottling in the geophysical data near southeast edge of survey area more consistent with till deposits. Strong dipolar anomalies consistent with the presence of services run along the southern and western boundaries of the survey area. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing.
3 - Solar Site Figures: 5.3 6.3 7.3	None detected	None detected	A strong discrete anomaly has been detected near the centre of the survey area [3a]. The origin of this is unclear and may be due to natural material, or modern debris, but an archaeological origin cannot be excluded.	Parallel curvilinear and linear anomalies, consistent with the ridge and furrow cultivation have been detected. Weak linear transecting survey area northeast to southwest, possible drain.	Strong magnetic haloes of three service predominate the magnetic data of the centre and south of the survey area. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing.
4 - Solar Site Figures: 5.3 6.3 7.3	None detected	None detected	None detected	None detected	Strong magnetic haloes of two services predominate the magnetic data of the survey area. Areas of dipolar anomalies consistent with the presence of scatters of modern debris dominate the data set. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing.
5 - Solar Site Figures: 5.3 6.3	None detected	Rectilinear anomalies across the survey area are indicative of the presence of infilled cut features such as ditches [5a]. Consistent with former field boundaries not identifiable on historical OS maps of the area.	Additional linear trends are evident which may have an archaeological origin but could be due to agricultural activity.	Parallel curvilinear and linear anomalies, consistent with the ridge and furrow cultivation have been detected. These are on differing	Services transect the centre of the survey area west-southwest to east-northeast. Dipolar magnetic anomaly of a third service crosses the south of the survey area east to west.

Area ID	Probable Archaeology	Possible Archaeology	Unclear origin	Historic & Agricultural	Non-Archaeological
7.3				alignments and show some correlation with the linear trends [5a].	Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing.
6 - Solar Site Figures: 5.4 6.4 7.4	None detected	None detected	Parallel linear anomalies aligned north-northeast to south-southwest, curving eastwards into north of Area 8 [6a]. These possibly relate to historical drainage features, not mapped.	None detected	Broad curvilinear anomalies consistent with intertidal deposits throughout north of the survey area. Strong dipolar anomalies consistent with the presence of a service run north of the survey area. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing.
7 - Solar Site Figures: 5.5 6.5 7.5	Located near the western boundary and centre of the survey area is a complex of several conjoining and overlapping curvilinear anomalies [7a]. The magnetic signal of the anomalies is consistent with the presence of infilled cut features such as ditches, which may result from more than one phase of archaeological activity	Running southeast from the complex of [7a] are weak parallel linear anomalies suggestive of a possible trackway [7b]. Located just north of this feature are several ring-shaped anomalies [7c].	Additional weak trends of an unclear origin have also been detected. These may have natural or agricultural origins, but an archaeological origin cannot be excluded given the wider context.	Parallel linear anomalies with a strong magnetic signal are consistent with drainage features.	Isolated ferrous / fired responses have been noted and are due to modern debris. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing.
8 - Solar Site Figures: 5.5 6.5 7.5	None detected	The parallel anomalies of [7a] continue southeast into Area 8 [8a], though the anomalies become very ephemeral in the centre and east of the survey area. Near the western edge of the survey area three linear anomalies [8b] run southwest to northeast either side of the possible trackway. Curvilinear and discrete anomalies, and an area of enhanced magnetism also suggest further archaeological activity just north of the possible trackway [8c]. An ephemeral rectilinear anomaly, running east-west and north-south in the centre and east of the survey area [8d]. Anomaly could reflect the presence of an infilled ditch that may relate to an unmapped field boundary with part of the response typical of a drain.	Parallel linear anomalies [8e] orientated west-northwest to east-southeast, aligning with [6a] in Area 6. Possibly relating to historical drainage features, not mapped.	Linear anomalies with strong magnetic signal, consistent with drainage features.	Isolated ferrous / fired responses have been noted and are due to modern debris.
9 - Solar Site Figures: 5.4 - 5.5 6.4 - 6.5	In the south of the survey area rectilinear anomalies suggesting an enclosure [9a] have been detected. Anomalies demarking the possible enclosure have a	Weaker linear trends [9d] have also been noted. These may be associated with [9a] but interpretation is cautious due to their ephemeral nature. An ephemeral sinuous anomaly[9e], running runs WNW-ESSE just to the north of the	An ephemeral linear curving anomaly crosses the survey area southwest to northeast [9f]. The anomaly appears to align with [8e] in Field 8. It may indicate an unmapped field boundary; however, a natural origin is plausible.	Parallel linear anomalies aligned north to south in southern half of Field 9 indicate ridge and furrow cultivation.	Broad curvilinear anomalies consistent with intertidal deposits throughout north of the survey area. Strong dipolar anomalies consistent with the presence of services run along the southern and western boundaries, and west-

Area ID	Probable Archaeology	Possible Archaeology	Unclear origin	Historic & Agricultural	Non-Archaeological
7.4 - 7.5	much stronger magnetic signal towards the southern end than along its northern perimeter. This may either reflect a concentration of habitation towards the southern end of the enclosure or a differential dissipation of magnetic signal due to flooding between the north and south of the feature. Within the enclosure two circular anomalies suggestive of possible houses [9b] have been detected. These are approximately 10m – 12m in diameter. Additional curvilinear and discrete anomalies indicative of infilled features such as ditches and pits [9c] have also been detected.	possible enclosure [9a]. The anomaly could reflect the presence of an infilled ditch that may relate to an unmapped field boundary. However, it may have a natural origin.	A few discrete anomalies have been noted. The origin of these is unclear, but natural origins are most likely.		southwest to east-northeast across the north of the survey area.
10 - Solar Site Figures: 5.6 - 5.7 6.6 - 6.7 7.6 - 7.7	None detected	None detected.	Diffuse linear anomalies in southeast corner of the survey area [10a] are likely to be natural but a modern or archaeological origin cannot be excluded. Several additional linear [10b] trends have been noted. These are likely to be associated with drainage features, but other origins cannot be excluded.	Parallel linear trends indicate ridge and furrow cultivation. Linear anomalies with strong magnetic signal, consistent with drainage features have been detected in the northern corner of the survey area. Concentration of strong dipolar anomalies coinciding with the location of former pond on historical OS mapping [10c]. Anomalies likely to reflect the infilling of the feature with debris	Broad curvilinear anomalies consistent with intertidal deposits are scattered throughout the field. Strong dipolar anomaly consistent with a services run along the southern and eastern boundaries of the, and west-southwest to east-northeast across the centre of the field.
11 - Solar Site Figures: 5.6 - 5.9 6.6 - 6.9 7.6 - 7.9	None detected	Near the centre of Field 11 is a configuration of curvilinear anomalies, consistent with the presence of infilled features such as ditches in the form of an enclosure [11a]. Within the enclosure is a circular anomaly suggestive of a possible house. Two linear anomalies [11b] running northeast to southwest and west to east, appear to respectively align with the western and southern edges of the possible enclosure. Anomalies are consistent with the presence of infilled features such as ditches and may reflect field boundaries adjoined to the enclosure.	Lying immediately north of the eastern end of [11b] is a concentration of increased magnetism and linear anomalies [11c]. Though not distinctly archaeological in form, it is possible that archaeological activity is contributing to this magnetic variation. Additional weak trends and discrete responses have been noted within this survey area. While an archaeological origin for these cannot be excluded, they are likely to have agricultural and natural origins.	Parallel linear trends indicate ridge and furrow cultivation. In south of the survey area is a weak linear anomaly aligned north to south, collocated with a former field boundary identified on historical OS maps.	Broad curvilinear anomalies consistent with intertidal deposits are scattered throughout the field. Strong dipolar anomalies consistent with the presence of services run along the southern and western boundaries, and west-southwest to east-northeast across the north of the survey area. Cutting west-northwest to east-southeast across the north of Field 11 is a band of magnetic disturbance consistent with a high voltage power cable.

Area ID	Probable Archaeology	Possible Archaeology	Unclear origin	Historic & Agricultural	Non-Archaeological
12 - Solar Site Figures: 5.8 - 5.10 6.8 - 6.10 7.8 - 7.10	None detected	None detected	Linear and curvilinear anomalies with a strong magnetic signal located in south of Field 12 [12a] . These have been categorised as unclear in origin due to their ephemeral nature; they may be due to natural variations.	Crossing the south of the field is a band of dipolar anomalies [12b] consistent with made ground, which aligns with the route of a railway identifiable on OS maps from 1937. Concentration of dipolar anomalies consistent with the presence of debris is located near the centre of the western boundary of the field, which coincides with a roofed structure on the 1st ed. OS map [12c]. Several linear anomalies consistent with drains align with former field boundaries on the 1st ed. OS map [12d] Parallel linear anomalies with strong magnetic signal, are consistent with drainage features.	Broad curvilinear anomalies consistent with intertidal deposits are scattered throughout the field. Strong dipolar anomaly consistent with the presence of a service runs west-southwest to east-northeast across the north of the survey area. Band of magnetic disturbance consistent with a high voltage power cable continues from Field 11 across the north of Field 12 before running parallel with the eastern boundary of the field
13 - Solar Site (to be extended) Figures: 5.11 6.11 7.11	A concentration of linear and rectilinear anomalies [13a], indicative of infilled features ditches has been detected across this area. The anomalies are likely to reflect a complex of field systems and trackways. Magnetic anomalies typically exhibit a medium magnetic enhancement, with concentrations of stronger magnetic enhancement located near the southern and western boundaries of the field, and in the northeast corner of the field. In the northeastern corner of survey area rectilinear anomalies [13b] have been detected which appear to overlap the linear anomalies of [13a]. The data suggest a possible rectilinear enclosure, though not fully defined in survey data due to nearby unsurveyable ground. Geophysical survey cannot date features, but the data suggest two possible phases.	Located near to the centre of the southern edge of the survey area is a concentration of strongly magnetic discrete anomalies [13d]. These anomalies are surrounded by area of enhanced magnetism. These anomalies may reflect a concentration of infilled cut features consistent with the presence of infilled features such as pits. Encompassing the anomalies of 13c are several weaker and more diffuse curvilinear anomalies [13e]. Anomalies may reflect the presence of infilled features such as ditches, however, the anomalies are much less distinct against background magnetic variation.	Additional ephemeral trends and pit type anomalies have also been detected but these may have natural or agricultural origins.	Parallel linear trends indicate ridge and furrow cultivation. Modern ploughing trends on a comparable alignment are also evident.	Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing. Isolated ferrous / fired responses have been noted and are due to modern debris.

Area ID	Probable Archaeology	Possible Archaeology	Unclear origin	Historic & Agricultural	Non-Archaeological
	Two groupings of curvilinear and ring-shaped anomalies [13c] are located near centre and west of Field 13. These anomalies are surrounded by discrete anomalies consistent with the presence of infilled features such as pits and areas of enhanced magnetism. These anomalies appear to reflect concentrations of archaeological activity amongst the complex of 13a.				
14 - Solar Site (to be extended) Figures: 5.11 6.11 7.11	Linear anomaly aligned east to west near the western edge of Field 14 [14a], which aligns with field anomalies of field system and trackway complex in Field 13. Curvilinear anomalies along the western edge of Field 14 [14b], which appear to align with anomalies of the possible enclosure of 13b in Field 13.	Located along the western limits of the field is a concentration of strongly magnetic discrete anomalies [14c]. These anomalies may reflect a concentration of infilled cut features consistent with the presence of infilled features such as pits and are a continuation of anomalies detected in Field 13 to the west. An ephemeral curvilinear anomaly, curving predominantly north to south across the survey area [14d]. Anomaly could reflect the presence of an infilled ditch which does not relate to mapped features. Part of the northern segment of consists of strong dipolar anomalies consistent with made ground and may reflect a metalled track surface [14e]. Along the eastern edge of the survey area are several linear and curvilinear anomalies consistent with the presence of infilled cut features such as ditches [14f], which may reflect unmapped former field boundaries	Additional ephemeral trends and pit type anomalies have also been detected but these may have natural or agricultural origins.	Parallel trends reflect agricultural activity.	Strong dipolar anomalies consistent with the presence of services run along the northern and eastern boundaries of the survey area. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing. Isolated ferrous / fired responses have been noted and are due to modern debris.
15 - Solar Site (to be extended) Figures: 5.12 6.12 7.12	None detected.	In the east of the survey area, two parallel linear trends [15a] suggesting a possible trackway have been noted as having a possible archaeological origin. These are aligned SW-NE and may be associated with a cluster of ring ditch detected in Field 18 to the east. However, they may not be contemporary as they appear to terminate at a rectilinear anomaly [15b].	Two areas of enhanced response [15c] have been noted in the vicinity of [15b]. These have been noted as having an unclear origin as it is not clear if they indicate archaeological deposits or are associated with ridge and furrow or natural variations.	Parallel linear trends aligned approximately north-south indicate ridge and furrow cultivation. The zone of disturbance running along the eastern limits of the survey area is likely to be associated with the former railway line.	A response typical of an electrical cable, runs through the east of the survey area. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing. Amorphous areas of ferrous / fired responses have been noted and are likely to be due to modern ferrous or fired material debris.

Area ID	Probable Archaeology	Possible Archaeology	Unclear origin	Historic & Agricultural	Non-Archaeological
16 - Solar Site Figures: 5.13 6.13 7.13	None detected	None detected	A weak linear trend has been detected in the northwest of the area. This is like to have an agricultural origin.	The zone of disturbance running along the eastern limits of the survey area is likely to be associated with the former railway line.	Broad curvilinear anomalies and amorphous areas of elevated response are consistent with intertidal deposits and palaeochannels. Near the southeast corner of the field is a linear anomaly with a strong magnetic signal. This is typical of an electrical cable. A further service runs across the north of the survey area Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing but may also be associated with infrastructure such as services or drains running along the limits of the survey area.
17 - Solar Site Figures: 5.13 6.13 7.13	None detected	None detected	None detected	Crossing the field northeast to southwest is a band of dipolar anomalies consistent with made ground, which aligns with the route of a railway identifiable on OS maps from 1937.	Broad curvilinear anomalies consistent with intertidal deposits and palaeochannels are evident throughout the field. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing and infrastructure.
18 - Solar Site Figures: 5.12 - 5.13 6.12 - 6.13 7.12 - 7.13	Located near the centre of Field 18 are two concentric ring-shaped anomalies [18a]. The anomalies are consistent with the presence of infilled ditches in a ring shape, which may relate to possible house or barrows.	Concentration of linear, curvilinear and discrete anomalies [18b] within an area of enhanced magnetism located just to the east of [18a]. These anomalies could relate to a concentration of archaeological activity with infilled features such as pits and ditches. Near the southwest corner of the field is a sinuous anomaly with a strong magnetic signal [18c] has been noted. This has been noted as having a possible archaeological origin due to its strength, but a natural origin is plausible.	An ephemeral curvilinear anomaly [18d] runs west to east across the south of Field 18. The anomaly could reflect the presence of an infilled ditch that may relate to an unmapped field boundary. However, a natural origin is also possible, hence its classification as unclear in origin. Additional discrete anomalies and linear trends have also been noted; these anomalies are less diffuse than the magnetic variation associated with natural deposits, and they could reflect concentrations of infilled cut features and pit type features, although on balance a natural or modern origin is more likely.	Weak parallel trends reflect modern agricultural activity.	Broad curving anomalies in the north of the field appear to relate to the palaeochannel in Field 19. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing but may also be associated with infrastructure such as services or drains running along the limits of the survey area.
19 - Solar Site Figures: 5.12 - 5.14 6.12 - 6.14 7.12 - 7.14	In the north of Field 19 is a configuration of linear anomalies, consistent with the presence of infilled features such as ditches in the form of an enclosure [19a]. This enclosure appears to straddle a branch of the possible palaeochannel.	Near the centre of the western boundary a concentration of linear, curvilinear and discrete anomalies [19b] within an area of enhanced magnetism appears to be a continuation of the responses detected in Field 18 and suggest possible linear ditches and ring ditches. However, they are fragmentary and could potentially have natural origins hence their classification as possible, rather than probable, archaeology.	Additional discrete anomalies and linear trends have also been noted; these anomalies are less diffuse than the magnetic variation associated with natural deposits, and they could reflect concentrations of infilled cut features and pit type features.	Linear anomaly consistent with the presence of a drain aligns with a former field boundary on the 1st ed. OS map. Parallel trends aligned NE-SW reflect modern ploughing.	Broad y-shaped anomaly with diffuse magnetic signal is consistent with a palaeochannel. Broad curvilinear anomalies consistent with intertidal deposits are also present. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing.

Area ID	Probable Archaeology	Possible Archaeology	Unclear origin	Historic & Agricultural	Non-Archaeological
20 - Solar Site Figures: 5.14 6.14 7.14	None detected	None detected	Linear trends have also been noted; these anomalies are better defined than the magnetic variation associated with natural deposits, and they could have an archaeological origin, although natural or more recent agricultural origins are equally plausible.	None detected	Broad curvilinear anomalies consistent with intertidal deposits and palaeochannels are scattered throughout the field. A band of magnetic disturbance consistent with a high voltage power cable continues from Field 12 across Field 20.
21 - Solar Site Figures: 5.14 6.14 7.14	None detected	None detected	Linear trends have also been noted; these anomalies are better defined than the magnetic variation associated with natural deposits, and they could have an archaeological origin, although natural or more recent agricultural origins are equally plausible.	None detected	Broad curvilinear anomalies consistent with intertidal deposits are present throughout the field. Band of magnetic disturbance consistent with a high voltage power cable continues from Field 20 across Field 21.
22 - Solar Site Figures: 5.12 - 5.15 6.12 - 6.15 7.12 - 7.15	None detected	Concentrations of curvilinear and discrete anomalies have been detected in the centre of and southwest of the survey area [22a, 22b]. The anomalies are consistent with the possible presence of infilled ditches and pits. However, they are fragmentary and could potentially have natural origins hence their classification as possible, rather than probable, archaeology.	Additional discrete anomalies and linear trends have also been noted; these anomalies are less diffuse than the magnetic variation associated with natural deposits. Although natural or more recent agricultural origins are likely, an archaeological one cannot be excluded.	Parallel trends aligned NE-SW reflect modern ploughing.	A broad curving anomaly appears to align with the palaeochannel in Field 19. Broad curvilinear anomalies consistent with intertidal deposits are dispersed across the north and centre of the field.
23 - Solar Site Figures: 5.12 & 5.15 6.12 & 6.15 7.12 & 7.15	None detected	None detected	Several discrete anomalies have been noted. These are likely to have modern or natural origins, although archaeological origin cannot be wholly dismissed.	Parallel trends aligned NW-SE reflect modern ploughing.	Mottling in the geophysical data across the centre and south of the field are consistent with the presence of till deposits
24 - Solar Site Figures: 5.15 - 5.16 6.15 - 6.16 7.15 - 7.16	None detected	None detected	A few discrete anomalies and linear trends have also been noted in the west of the area. Although natural or more recent agricultural origins are likely, an archaeological one cannot be excluded.	None detected	Curving northwards from the southeast corner of Field 24 into Field 25 is a curvilinear anomaly consistent with the presence of a palaeochannel. Broad curvilinear anomalies consistent with intertidal deposits are present throughout the western half of the field.
25 - Solar Site Figures: 5.15 6.15 7.15	None detected	None detected	Located in the south and east of Field 25 are several short linear and discrete anomalies [25a], the exact origins of which are uncertain. Although natural or more recent agricultural origins are likely, an archaeological one cannot be excluded.	Parallel trends aligned NW-SE reflect modern ploughing.	Broad curvilinear anomalies are the continuations of palaeochannels detected in Fields 22 and 24.

Area ID	Probable Archaeology	Possible Archaeology	Unclear origin	Historic & Agricultural	Non-Archaeological
26 - Solar Site Figures: 5.14 - 5.15 6.14 - 6.15 7.14 - 7.15	None detected	A D shaped anomaly near the centre of the field is consistent with the presence of an infilled features such as a ditch [26a]. However its proximity to the cable makes interpretation cautious.	None detected	Parallel trends running north-south through the survey area reflect modern ploughing.	Broad curvilinear anomalies consistent with intertidal deposits are present throughout the field. Band of magnetic disturbance consistent with a high voltage power cable continues from Field 21 across Field 26. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing and infrastructure.
27 - Solar Site Figures: 5.15 - 5.16 6.15 - 6.16 7.15 - 7.16	None detected	None detected	Negative linear trends have been detected the east of the survey area. The origin of these is unclear, but agricultural origins such as field drains is likely.	Linear anomaly consistent with the presence of a drain aligns with a former field boundary on the 1st ed. OS map.	Band of magnetic disturbance consistent with a high voltage power cable continues from Field 26 across Field 27. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing and infrastructure.
28 - BESS Site Figures: 5.17 6.17 7.17	None detected	None detected	Linear anomalies are discernible against the strong magnetic background [28a], however, there true extent or form are difficult to discern and a more precise interpretation is not possible.	None detected	Survey strongly affected by the magnetic disturbance associated with electrical services in the north of the survey area. The magnetic halo of this disturbance covers much of the survey area.
29 - BESS Site Figures: 5.18 6.18 7.18	None detected	None detected	Short linear anomaly north [29a] in north of Field 29, which may relate to [28a]. Additional ephemeral trends [29b] have been noted. While an archaeological origin for these cannot be excluded, natural or agricultural origins are most likely.	None detected	A modern service runs through the eastern half of the survey area. Immediately to the west of this is a broad linear zone of magnetic disturbance [29c]. This response is not typical of a service but is thought to have a modern origin; it could indicate a further cable or a former track. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing and infrastructure.
CR1_1 – Cable Corridor Figures: 5.19 6.19 7.19	Outstanding				
CR1_2 – Cable Corridor Figures: 5.19 6.19	Outstanding				

Area ID	Probable Archaeology	Possible Archaeology	Unclear origin	Historic & Agricultural	Non-Archaeological
7.19					
CR1_3 – Cable Corridor Figures: 5.19 6.19 7.19	Outstanding				
CR1_4 – Cable Corridor Figures: 5.20 6.20 7.20	None detected	None detected	Several weak linear trends have been detected in the north of the survey area. An archaeological origin for the curving trend [CR1_4a] cannot be excluded, but it may simply be due to natural variations or be associated with agricultural activity. The linear trends [CR1_4b] are likely to have agricultural origins, including drainage. A few discrete anomalies [CR1_4c] have been noted. These are likely to have modern or natural origins, although archaeological origins cannot be wholly dismissed.	None detected	Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing and infrastructure.
CR1_5 – Cable Corridor Figures: 5.20 – 5.21 6.20 – 6.21 7.20 – 7.21	None detected	None detected	Two linear trends cross the centre of the survey area. The more amorphous response [CR1_5a] aligned east-west is likely to reflect an undocumented former field division. The negative trend [CR1_5b] may indicate a field drain. A few discrete anomalies and linear trends have also been noted within the survey area. Although natural or more recent agricultural origins are likely, an archaeological one cannot be excluded.	Parallel trends aligned SW-NE in the north of the survey area are consistent with past ridge and furrow cultivation but could be more modern.	Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing and infrastructure.
CR1_6 – Cable Corridor Figures: 5.21 6.21 7.21	None detected	None detected	The amorphous zone of elevated response [CR1_6a] aligned east-west may reflect an undocumented former field division, but could have more recent agricultural origin, or be due to natural variations. The origin of the weak curving trend [CR1_6b] is unclear. An archaeological origin cannot be excluded; however a natural or modern origin is equally plausible. A few discrete anomalies and linear trends have also been noted within the survey area. Although natural or more recent	The linear trend running east west through the survey area corresponds with a former field boundary on the 1st ed. OS map [CR1_6c]. Parallel trends aligned north-south through the survey area reflect modern ploughing.	Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing and infrastructure.

Area ID	Probable Archaeology	Possible Archaeology	Unclear origin	Historic & Agricultural	Non-Archaeological
			agricultural origins are likely, an archaeological one cannot be excluded.		
CR1_7 – Cable Corridor Figures: 5.21 6.21 7.21	Outstanding				
CR1_8 – Cable Corridor Figures: 5.21 – 5.22 6.21 – 6.22 7.21 – 7.22	None detected	None detected	The data are dominated by a large area of elevated response [CR1_8a] in the west of the survey area. This has been noted as having an unclear origin but is most likely to be modern in origin and associated with construction of the A55 immediately to the north and the associated bridge. Additional weak linear trends are likely to have modern agricultural origins.	Parallel trends aligned WNW-ESE through the survey area reflect modern ploughing.	Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing and infrastructure.
CR1_9 – Cable Corridor Figures: 5.22 6.22 7.22	None detected	None detected	A few discrete anomalies and linear trends have also been noted within the survey area. Although natural or more recent agricultural origins are likely, an archaeological one cannot be excluded.	The broad zone of strong response [CR1_9a] running north south through the centre of the survey area coincides with a former field division depicted on historic mapping. The nature of the response suggests the presence of a possible trackway or service running along the line of the former boundary.	A modern service or drain runs through the western half of the survey area Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing and infrastructure.
CR1_10 – Cable Corridor Figures: 5.23 – 5.25 6.23 – 6.25 7.23 – 7.25	None detected	A rectilinear response [CR1_10a] has been detected in the southeast of this section of cable route. The response suggests a possible enclosure which measures approximately 28m by 16m. However interpretation is cautious as additional responses within the area may have modern origins.	In the centre of the survey are several linear anomalies [CR1_10b] have been noted. The origin of these is unclear and they are not obviously associated with the postulated enclosure [CR1_10a]. However, an archaeological origin cannot be excluded, and they could indicate a trackway, although a natural origin for some of the responses cannot be excluded. A few discrete anomalies and linear trends have also been noted within the survey area. Although natural or more recent agricultural origins are likely, an archaeological one cannot be excluded. The negative trend [CR1_10c] may indicate a field drain.	None detected	Broad bands of elevated response reflect natural variations. Zones of magnetic disturbance along the limits of the survey area are due to adjacent fencing.
CR2_1 – Cable Corridor Figures:	Outstanding				

Area ID	Probable Archaeology	Possible Archaeology	Unclear origin	Historic & Agricultural	Non-Archaeological
5.20 6.20 7.20					
CR2_1 – Cable Corridor Figures: 5.20 6.20 7.20	Outstanding				

8 Conclusion

- 8.1 This report covers survey undertaken to date. The planned survey area was 175.47ha across the Solar and BESS Sites and 8.29ha within sections of the cable route. Approximately 162ha has been completed to date at the Solar and BESS site. Approximately 2ha were unsuitable for survey due to rough or waterlogged ground conditions. An additional 10.25ha is due to be surveyed within the Solar site post-harvest. Sections of the proposed cable route have been selected for geophysical survey and cover a total area of 8.29ha. Approximately 5ha has been completed, with 3.92ha to be completed post-harvest.
- 8.2 The magnetic background of the survey data is predominantly quiet with weak to strong natural variation likely to relate to intertidal deposits, identified predominantly in the northern parts of the survey area. Against this background several anomalies have been clearly defined, exhibiting a medium to strong magnetic enhancement. Strong magnetic disturbance due to the presence of services, and above ground and beneath ground electrical infrastructure, was much more likely to have masked potential magnetic anomalies. This is particularly noticeable with the disturbance associated with high voltage underground power cables running through Fields 11, 12, 20, 21, 26 and 27. In the southeast of the proposed BESS site, which is located adjacent to an electrical substation, a modern service runs through the southeastern portion of the survey area. Immediately to the west of this is a broad linear zone of magnetic disturbance. This response is not typical of a service but is thought to have a modern origin; it could indicate a further cable or a former track.
- 8.3 Anomalies of probable and possible archaeological origins have been identified from the survey data, with probable archaeological activity identified in several areas. One grouping consists of conjoining and overlapping ditches, indicative of more than one phase of archaeology, in Field 7 and a rectilinear enclosure in Field 9, with a potential trackway and ring-shaped anomalies of possible archaeological origins positioned between them. Another grouping comprises a rectilinear field system in Fields 13 and 14, within which enclosures and ring-shaped features and pits have been identified. Other anomalies of archaeological origins appear to reflect enclosures and ring-shaped features relating either to houses or barrows within Fields 18 and 19. To the west of these, in Field 15, two parallel linear trends suggesting a possible trackway have been noted as having a possible archaeological origin. It is not possible to say if these anomalies are associated with the responses to the northeast as they may have a more recent origin. Within the sections of the cable route completed to date a rectilinear response has been detected which suggests a possible enclosure which measures approximately 28m by 16m. However interpretation is cautious as additional responses within the area may have modern or natural origins.
- 8.4 Anomalies of possible archaeological origins appear to reflect possible field boundaries not identifiable on historical OS maps, enclosures, and clusters of potential houses and pits. Multiple anomalies of unclear origins have also been identified from the survey data, which may have an archaeological origin.
- 8.5 Anomalies consistent with the presence of ridge and furrow cultivation remains have been interpreted from the survey data of several fields. Several magnetic anomalies highlight the location of former field boundaries, building locations, train lines and ponds identifiable on historical OS maps of the survey area.
- 8.6 In assessing the results of the geophysical survey against the specific aims set out in Section 4:
- The survey succeeded in locating, recording and characterising surviving sub-surface remains within the Site

- The survey will help in determining the next stage of works as it has provided evidence that remains of an uncertain origin are most likely present on site, and has provided a number of targets for further investigation;
- The survey has resulted in a comprehensive report and archive.

9 Statement of Indemnity

- 9.1 Although the results and interpretation detailed in this report have been produced as accurately as possible, it should be noted that the conclusions offered are a subjective assessment of collected datasets.
- 9.2 The success of a geophysical survey in identifying archaeological remains can be heavily influenced by several factors, including geology, seasonality, field conditions and the properties of the features being detected. Therefore, the geophysical interpretation may only reveal certain archaeological features and not produce a complete plan of all the archaeological remains within a survey area.

10 Archive Deposition

- 10.1 In accordance with professional standard practice an online OASIS database record will be completed for submission to the HER and Archaeological Data Service (ADS) (Appendix 2).
- 10.2 One digital and hard copy of the report and data will be submitted to the relevant Historic Environment Record (HER) at the Client's discretion.
- 10.3 A digital copy of the report and data will also be submitted to the ADS at the Client's discretion.

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*denotes a reference that occurs in Appendix 2 rather than the main body of this report.

12 Plates



Plate 1: Field 5 facing northeast across flooding from the western edge of the field.



Plate 2: Field 6 facing southwest from the northeast corner of the field.



Plate 3: Field 7 facing southwest from the eastern boundary of the field.



Plate 4: Field 9 facing southwest from the northern boundary



Plate 5: Facing west-northwest across Field 10.



Plate 6: Facing east across Field 12 from the western boundary.



Plate 7: Facing north along boundary between Fields 13, to the left, and 14, to the right.



Plate 8: Facing southeast across Field 15.



Plate 9: Facing south from the northern corner of Field 16



Plate 10: Field 17 facing southeast from the northwest corner of Field 17.



Plate 11: Field 18 facing southeast from the northern boundary.



Plate 12: Field 19 facing south from the northwest corner of the field.



Plate 13: Field 20 facing east from the southwest corner of the field.



Plate 14: Field 22 facing southeast from the northwest corner.



Plate 15: Field 26 facing southeast from the northwest of the field.



Plate 16: Field 27 facing northeast from the southwest corner of the field.



Plate 17: Field 28 BESS facing north from the southwest corner.



Plate 18: Field 29 BESS facing southeast from the northwest corner.

13 Figures

BODELWYDDAN SOLAR AND ENERGY STORAGE:
ARCHAEOLOGICAL GEOPHYSICAL SURVEY

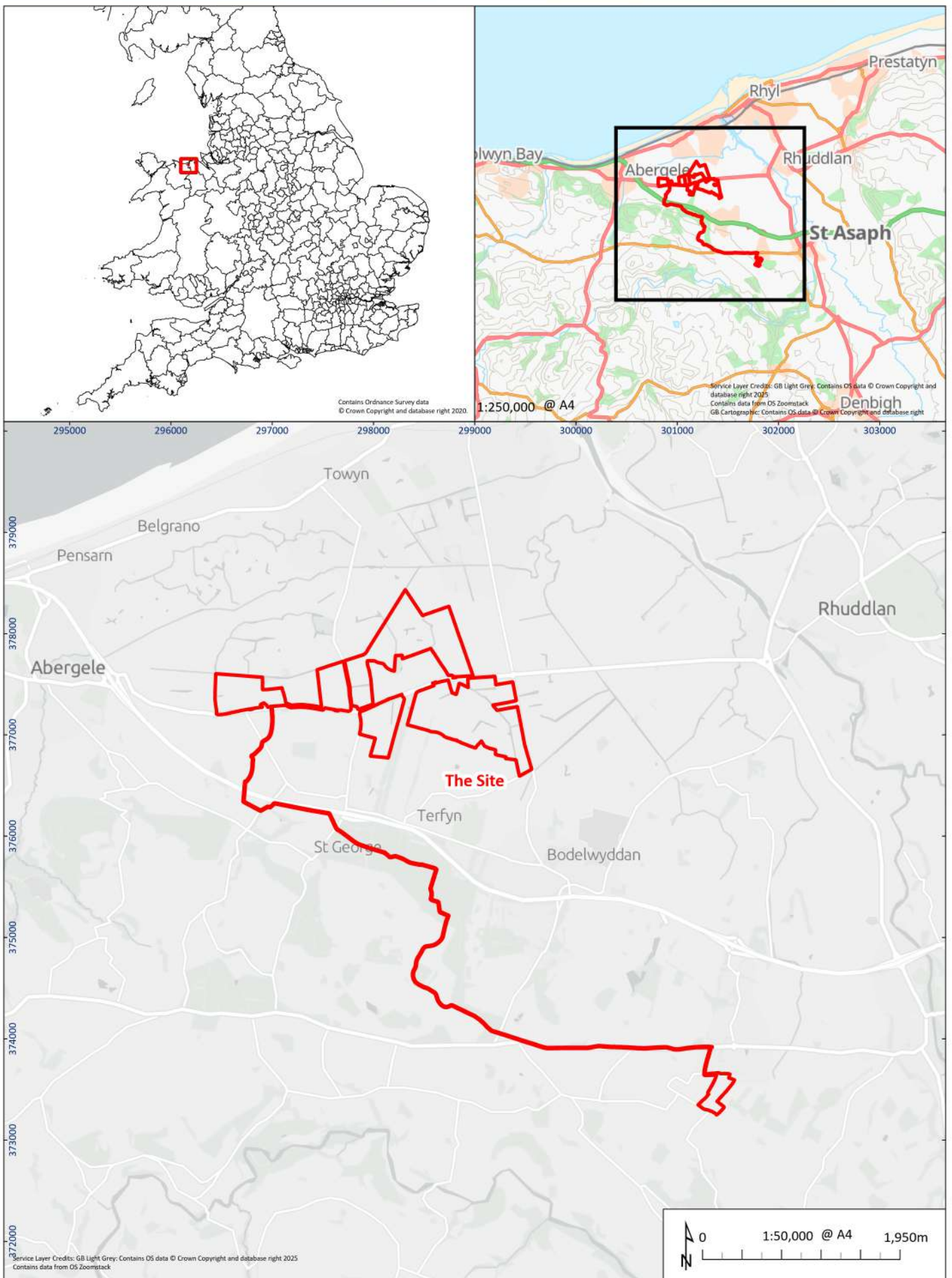


Figure 1: Site Location

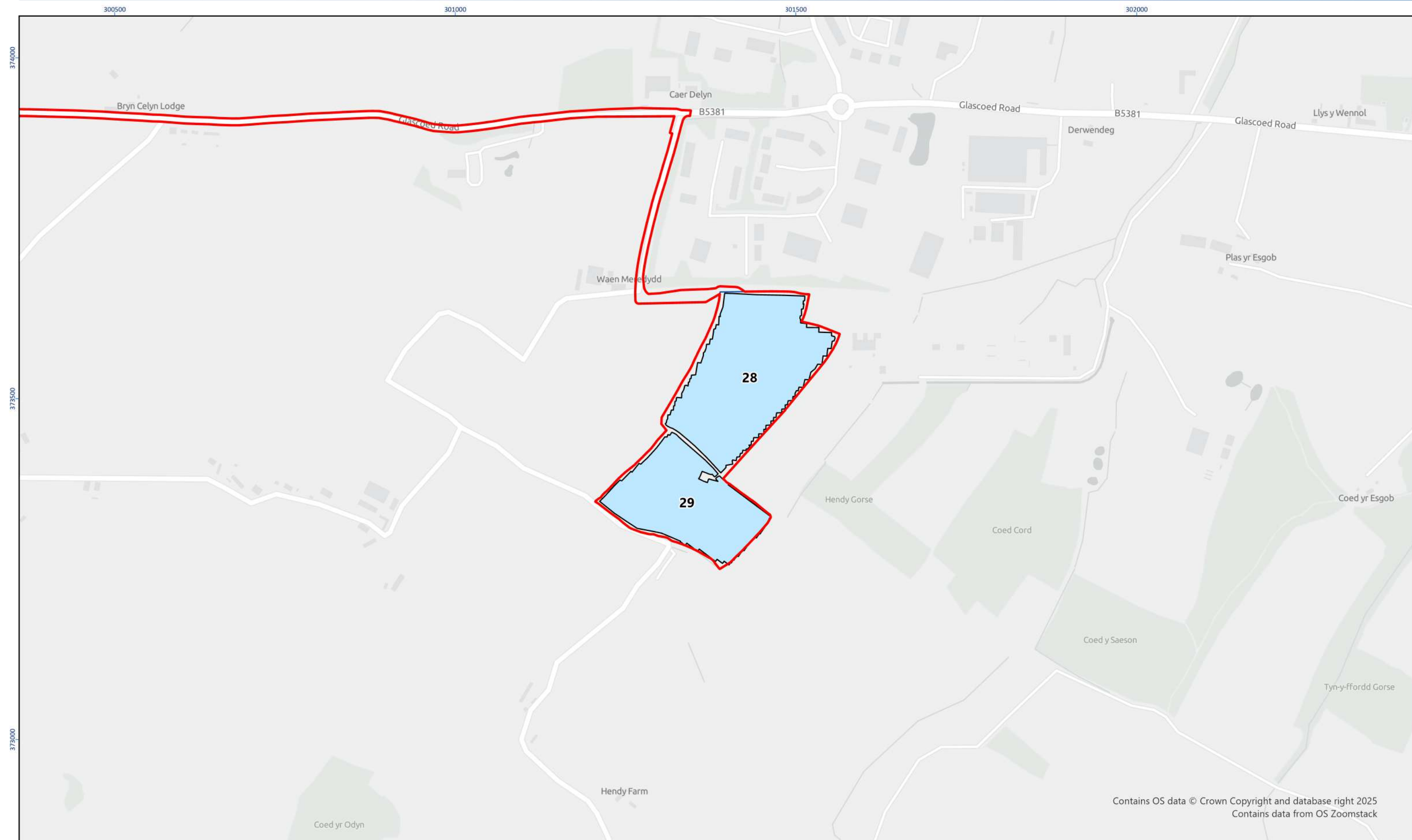
05/40766/GEO/01/01



 Proposed Development Area
  Outstanding

 Gradiometer Survey
  Unsuitable

Drawing Number: 05/40766/GEO/2.1/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

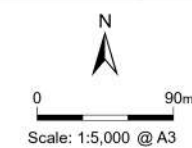


Contains OS data © Crown Copyright and database right 2025
Contains data from OS Zoomstack

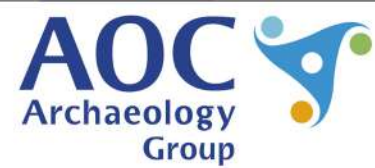
BESS Site Survey Areas

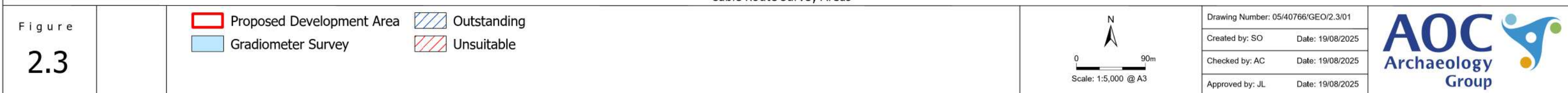
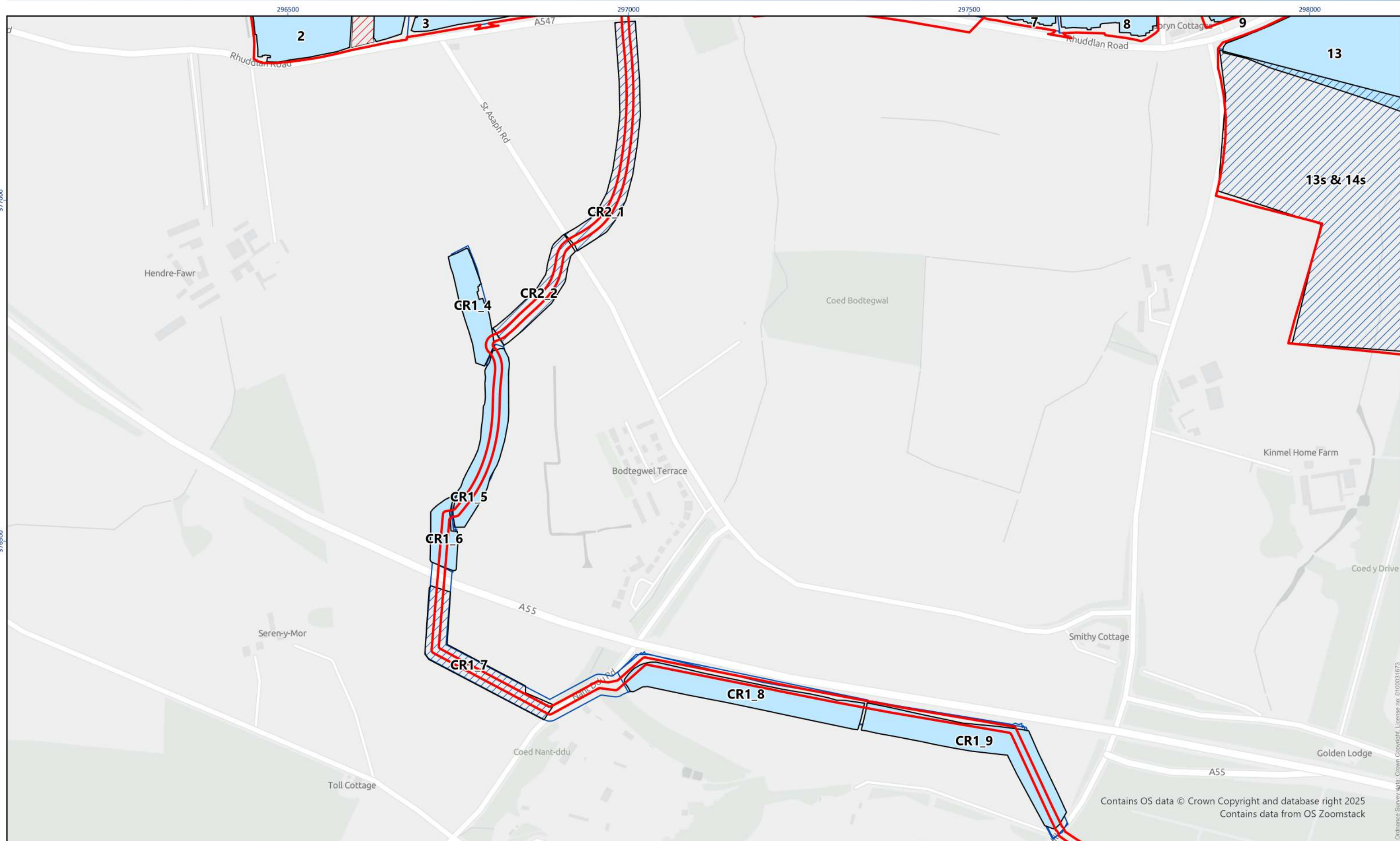
Figure
2.2

- Proposed Development Area
- Gradiometer Survey



Drawing Number: 05/40766/GEO/2.2/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025





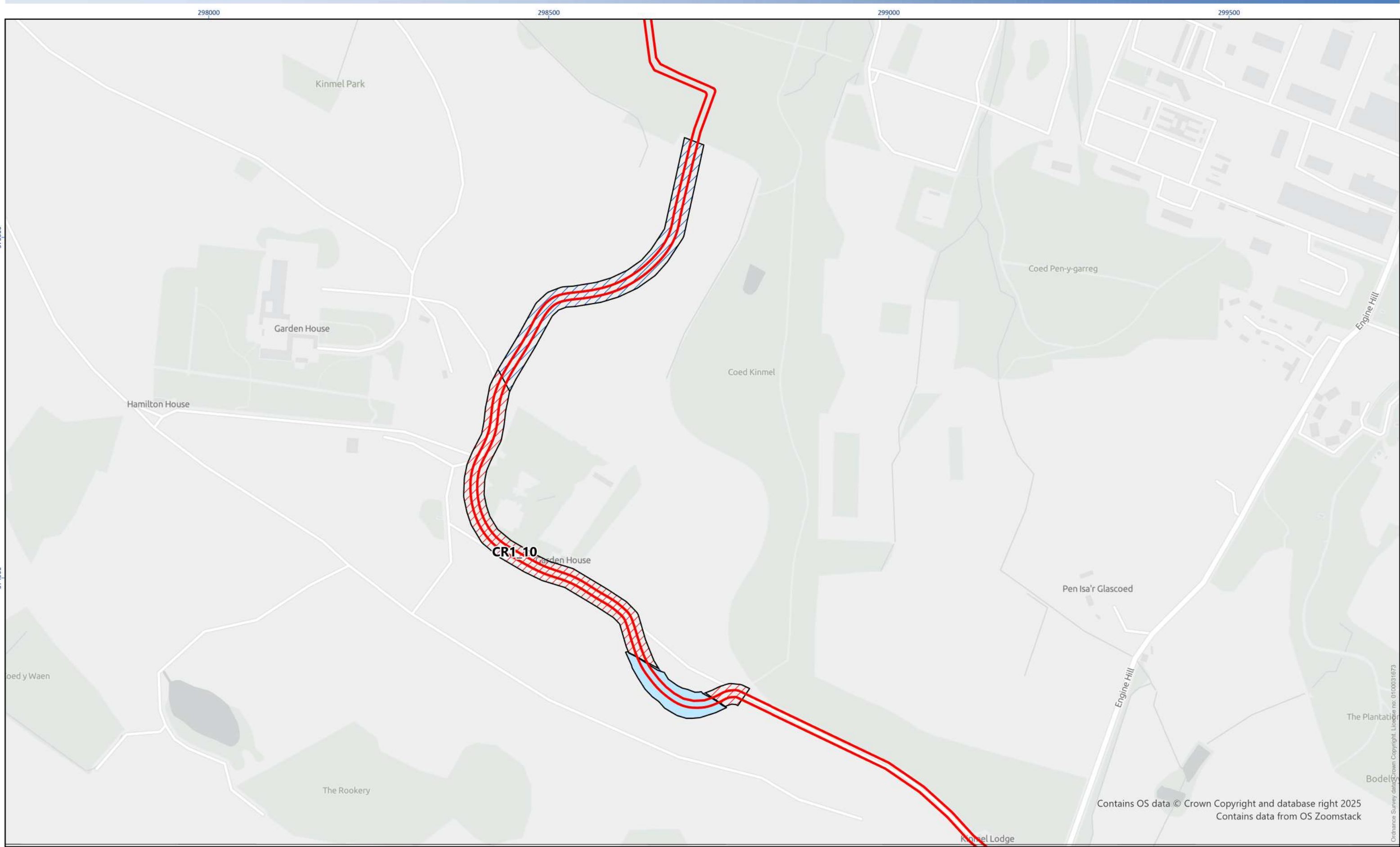
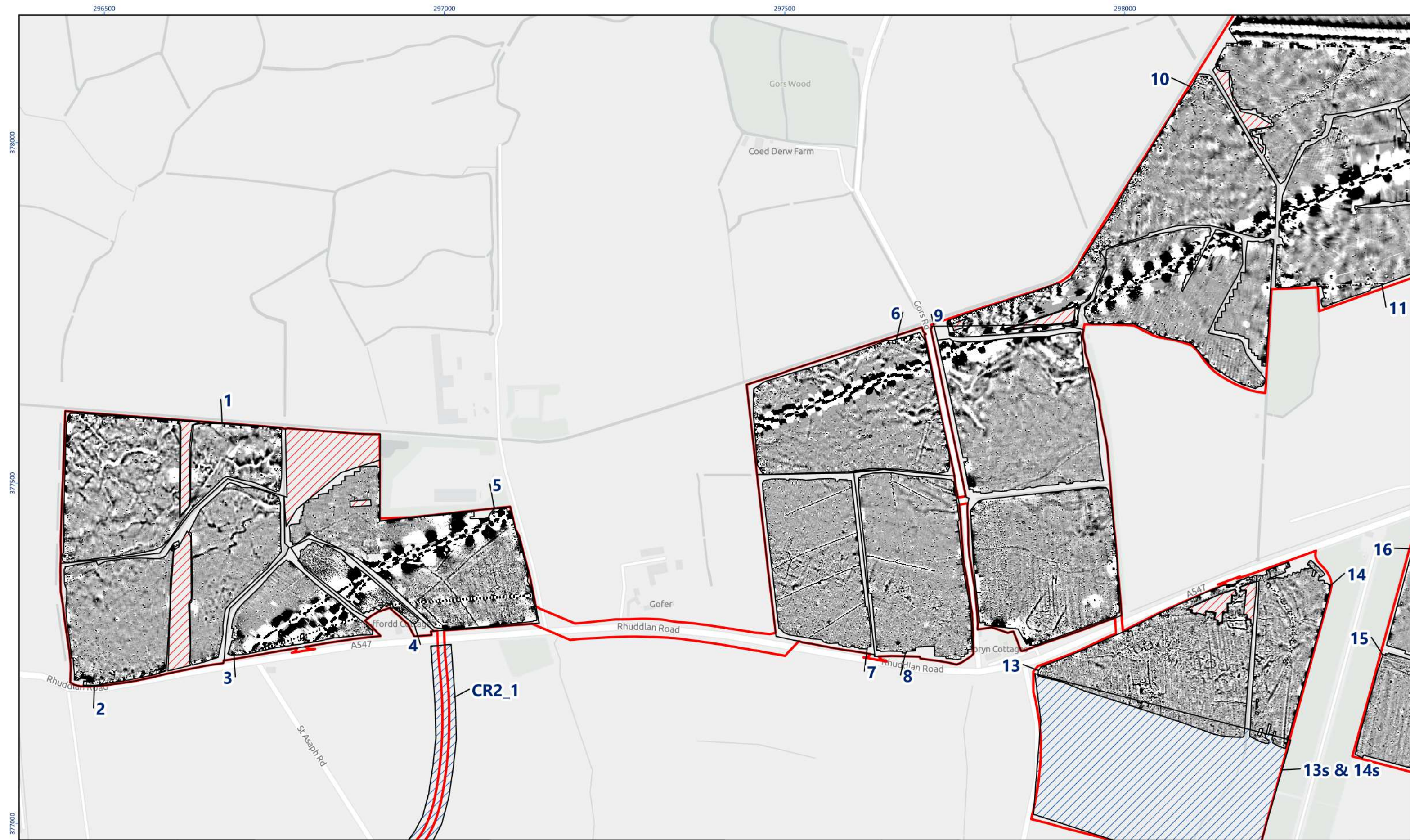
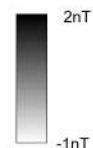


Figure 2.4	Cable Route Survey Areas		 Scale: 1:5,000 @ A3	Drawing Number: 05/40766/GEO/2.4/01		
	Proposed Development Area	Outstanding		Created by: SO	Date: 19/08/2025	
	Gradiometer Survey	Unsuitable		Checked by: AC	Date: 19/08/2025	
				Approved by: JL	Date: 19/08/2025	



Summary Greyscales - Solar Site

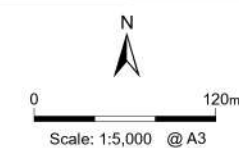
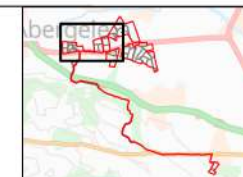
Figure
3.1



Proposed Development Area

Outstanding

Unsuitable for Survey



Drawing Number: 05/40766/GEO/3.1/01
Created by: SO Date: 19/08/2025
Checked by: JL Date: 19/08/2025
Approved by: JL Date: 19/08/2025



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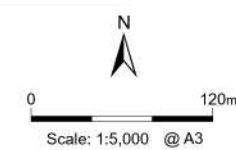
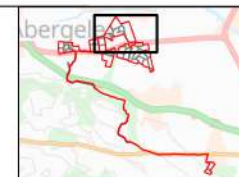
Summary Greyscales - Solar Site

Figure
3.2



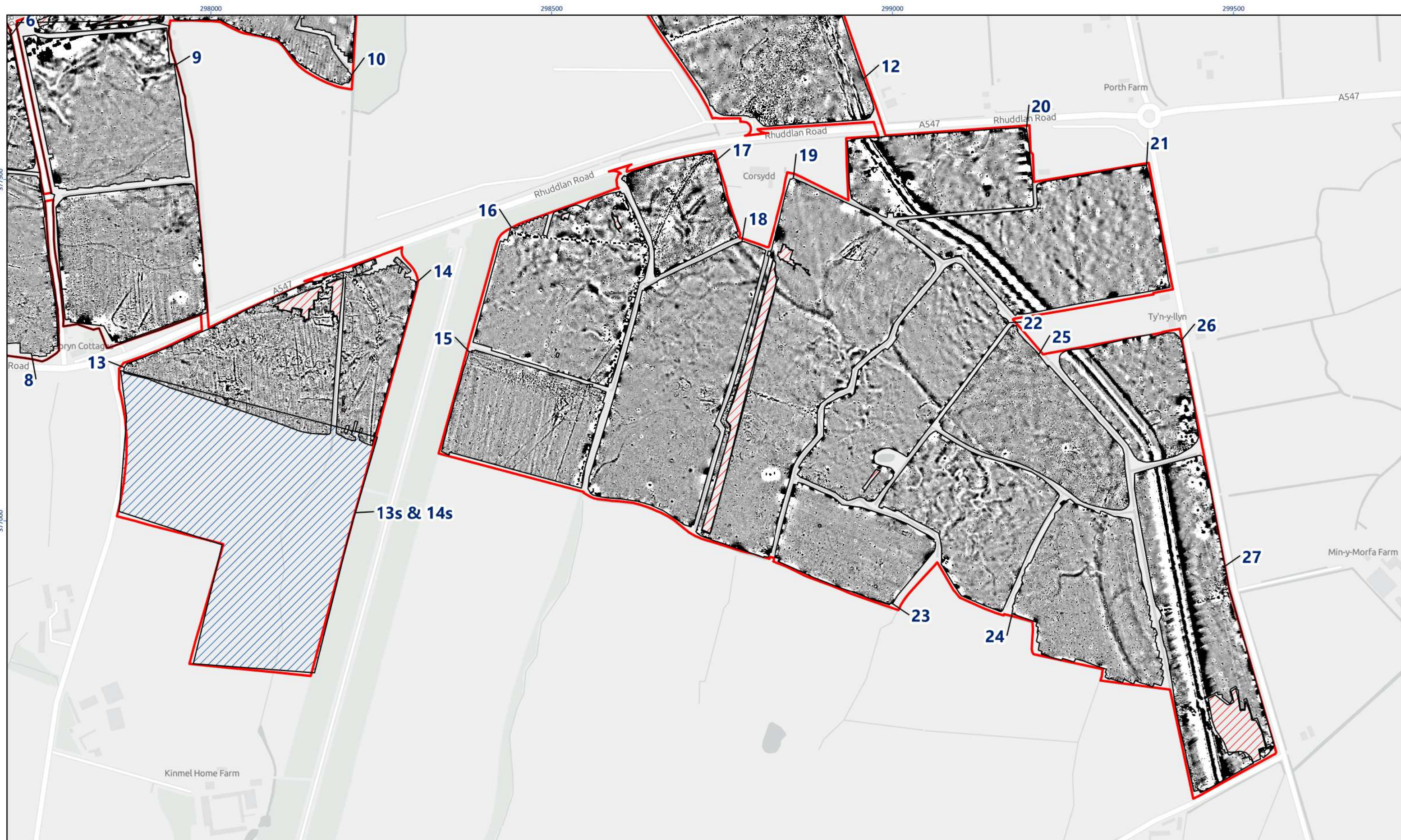
Proposed Development Area

Unsuitable for Survey



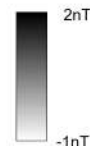
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Approved by: JL Date: 19/08/2025

AOC
Archaeology
Group



Summary Greyscales - Solar Site

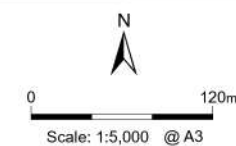
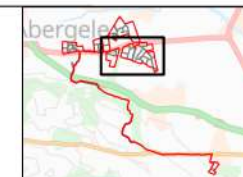
Figure
3.3



Proposed Development Area

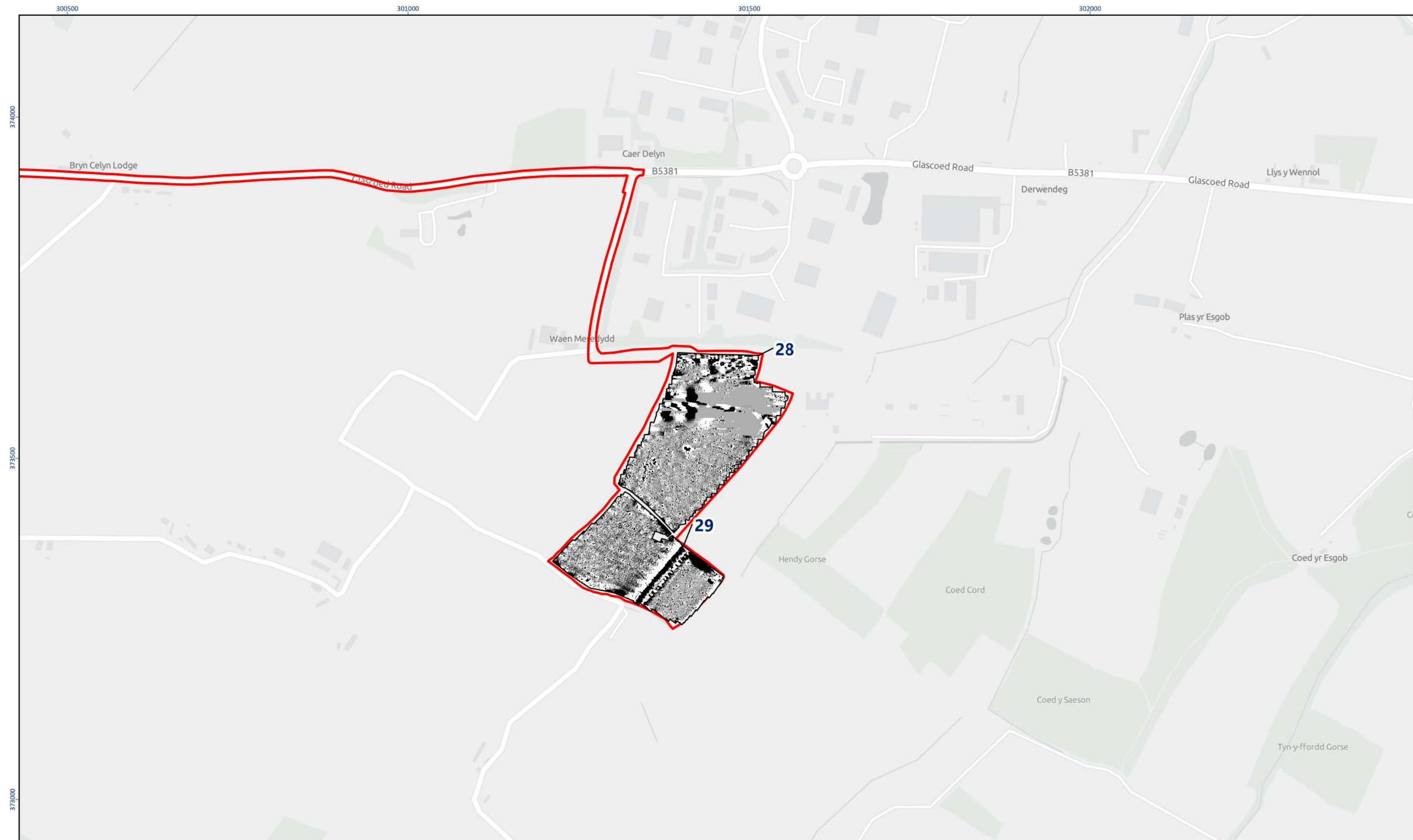
Outstanding

Unsuitable for Survey



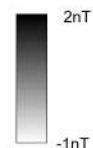
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Approved by: JL	Date: 19/08/2025

AOC
Archaeology
Group

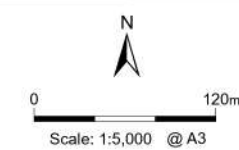


Summary Greyscales - BESS Site

Figure
3.4

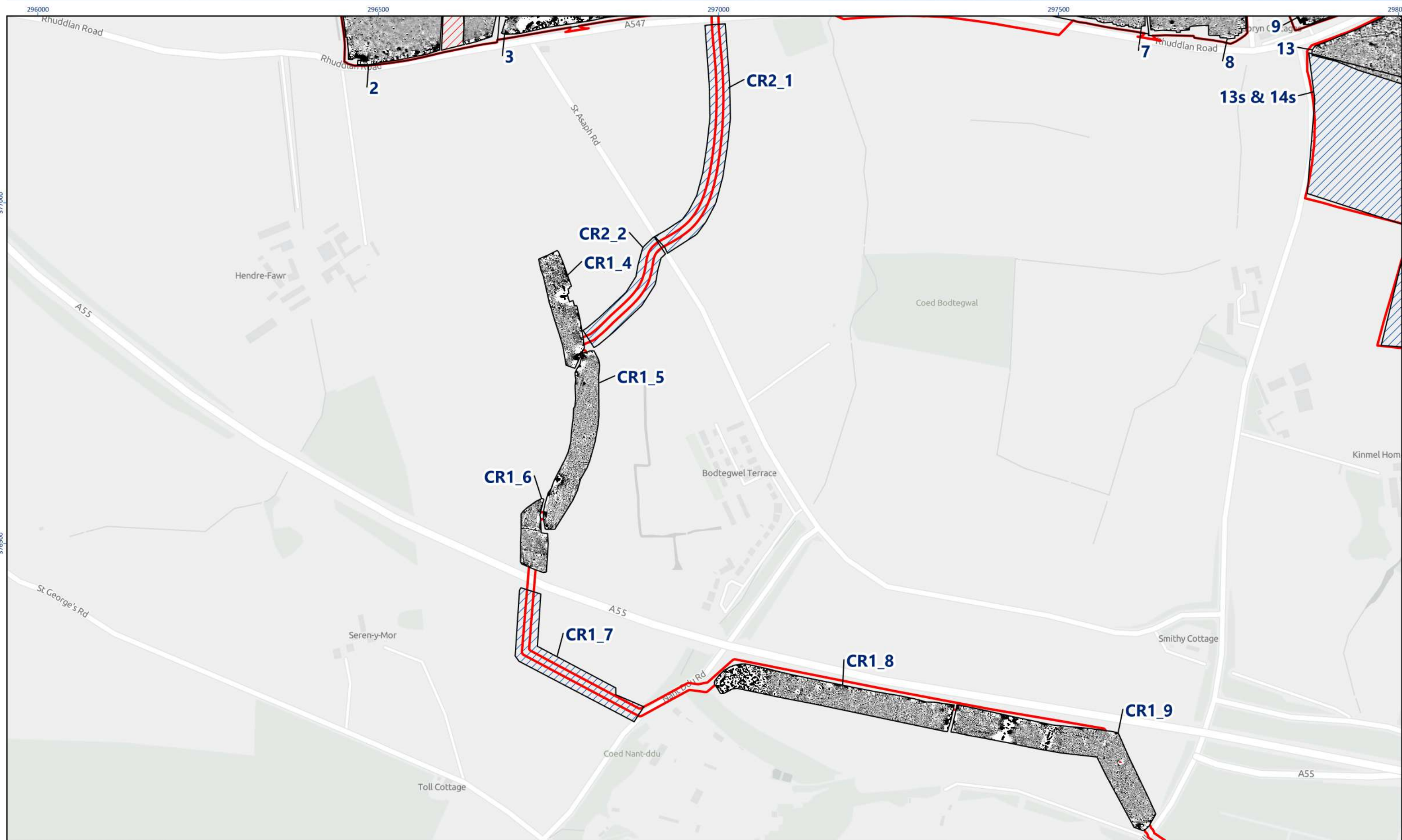


 Proposed Development Area



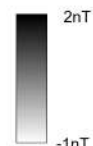
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Approved by: JL	Date: 19/08/2025





Summary Greyscales - Cable Route

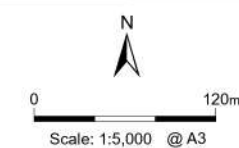
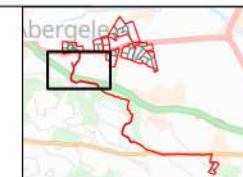
Figure
3.5



Proposed Development Area

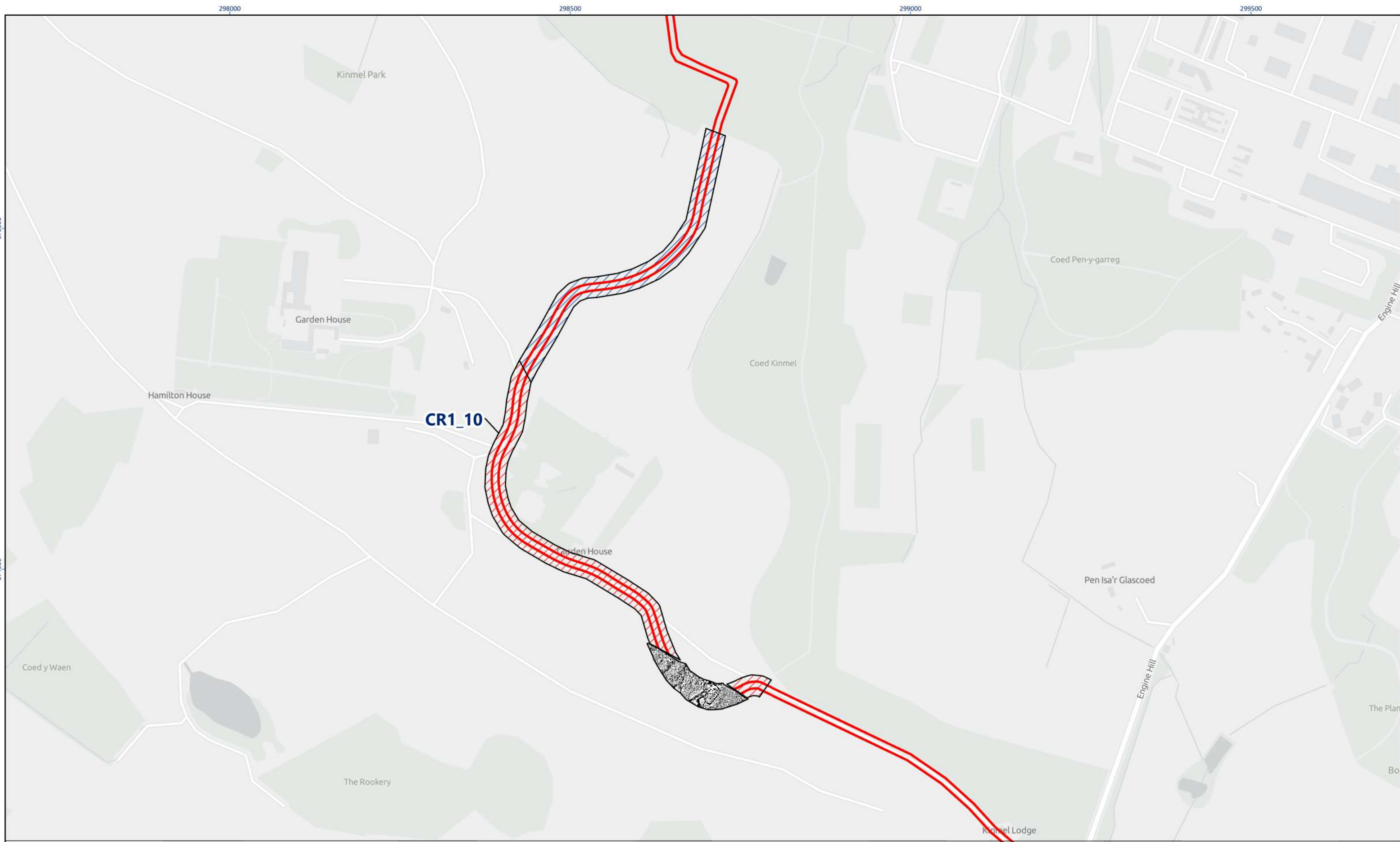
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Unsuitable for Survey



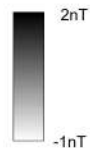
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Approved by: JL Date: 19/08/2025

AOC
Archaeology
Group



Summary Greyscales - Cable Route

Figure
3.6



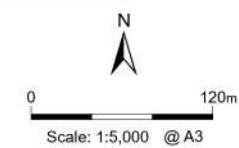
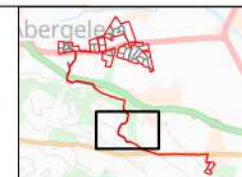
Proposed Development Area



Outstanding

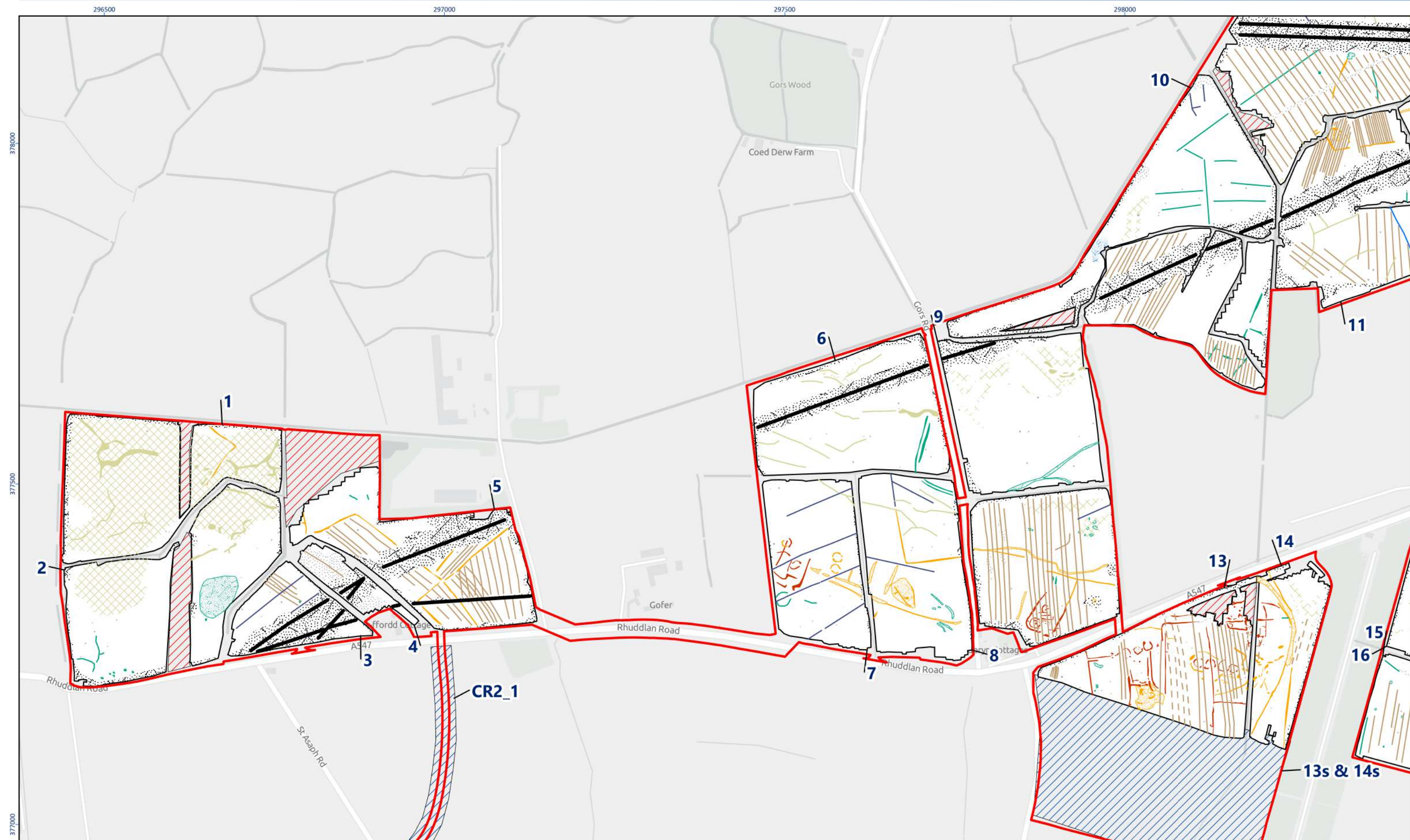


Unsuitable for Survey



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Approved by: JL	Date: 19/08/2025

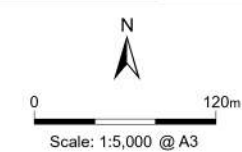
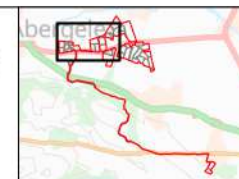




Summary Interpretation - Solar Site

Figure
4.1

Anomaly (Probable Archaeology)	Anomaly (Unclear Origin)	Anomaly (Ferrous/Iron Spike)	Linear Trend (Historic Feature)	Linear Trend (Drainage)
Anomaly (Possible Archaeology)	Spread (Unclear Origin)	Spread (Ferrous/Iron Spike)	Linear Trend (Unclear Origin)	Linear Trend (Geology/Natural)
Spread (Possible Archaeology)	Anomaly (Geology/Natural)	Linear Trend (Probable Archaeology)	Linear Trend (Agricultural, Ploughing)	Linear Trend (Service)
Spread (Historic Feature)	Spread (Geology/Natural)	Linear Trend (Possible Archaeology)	Linear Trend (Agricultural, Ridge and Furrow)	
	Spread (Magnetic Disturbance)			



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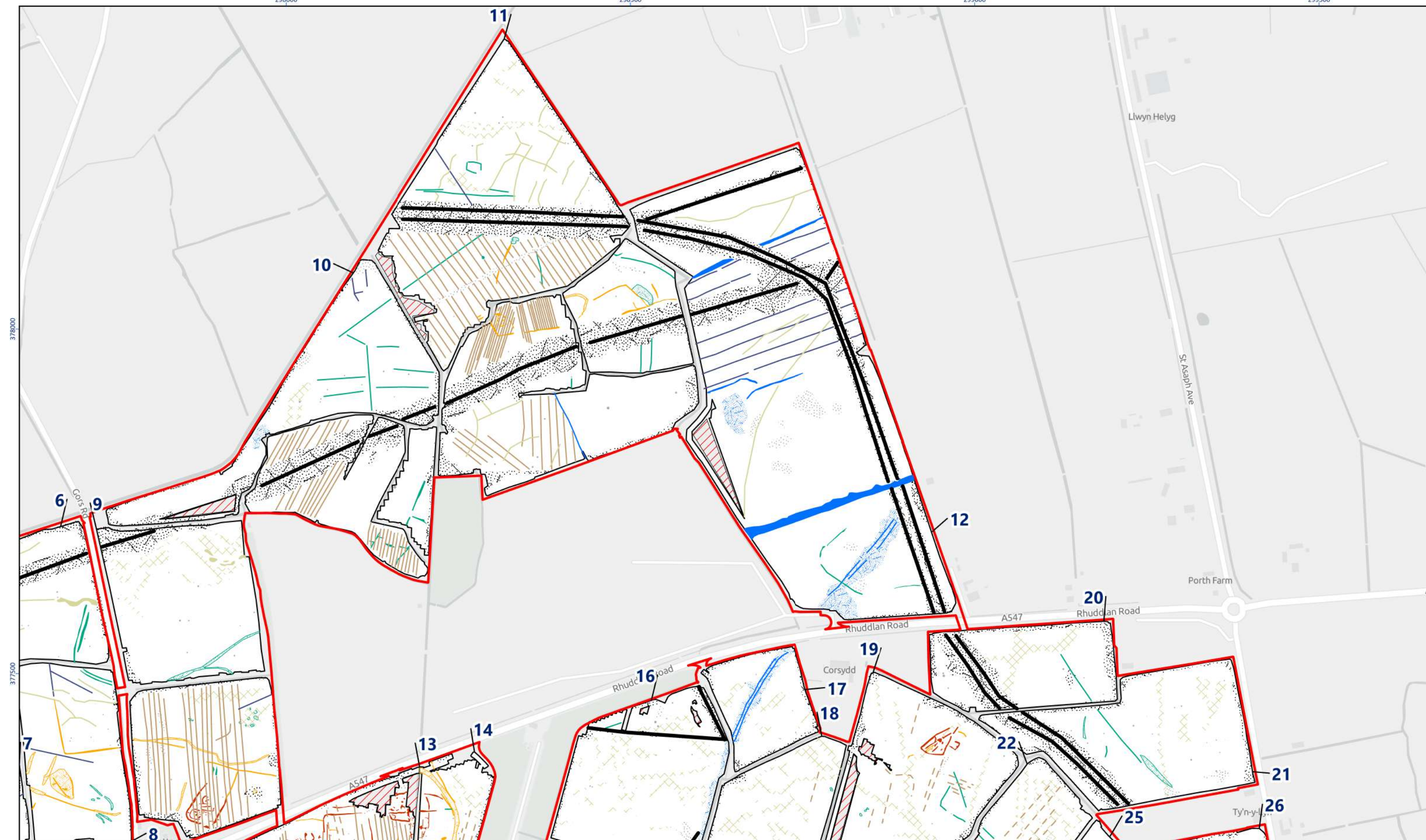
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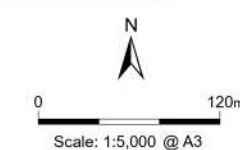
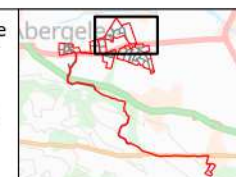
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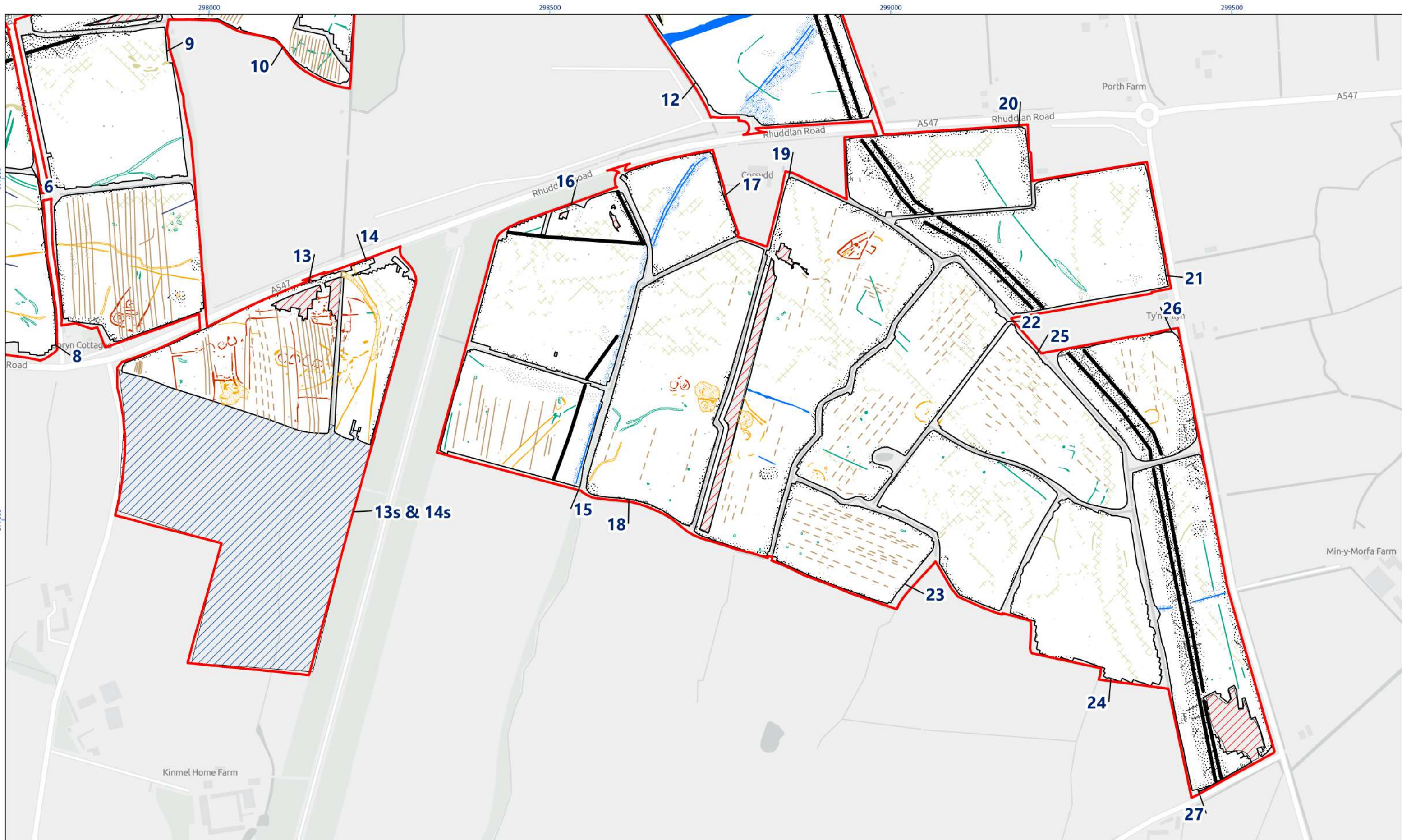
Summary Interpretation - Solar Site

Figure
4.2

Anomaly (Probable Archaeology)	Spread (Historic Feature)	Spread (Magnetic Disturbance)	Linear Trend (Possible Archaeology)	Linear Trend (Agricultural, Ridge and Furrow)
Anomaly (Possible Archaeology)	Anomaly (Unclear Origin)	Anomaly (Ferrous/Iron Spike)	Linear Trend (Historic Feature)	Linear Trend (Drainage)
Spread (Possible Archaeology)	Spread (Unclear Origin)	Spread (Ferrous/Iron Spike)	Linear Trend (Unclear Origin)	Linear Trend (Geology/Natural)
Anomaly (Historic Feature)	Anomaly (Geology/Natural)	Linear Trend (Probable Archaeology)	Linear Trend (Agricultural, Ploughing)	Linear Trend (Service)
	Spread (Geology/Natural)			



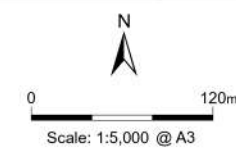
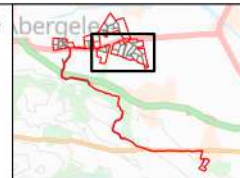
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Summary Interpretation - Solar Site

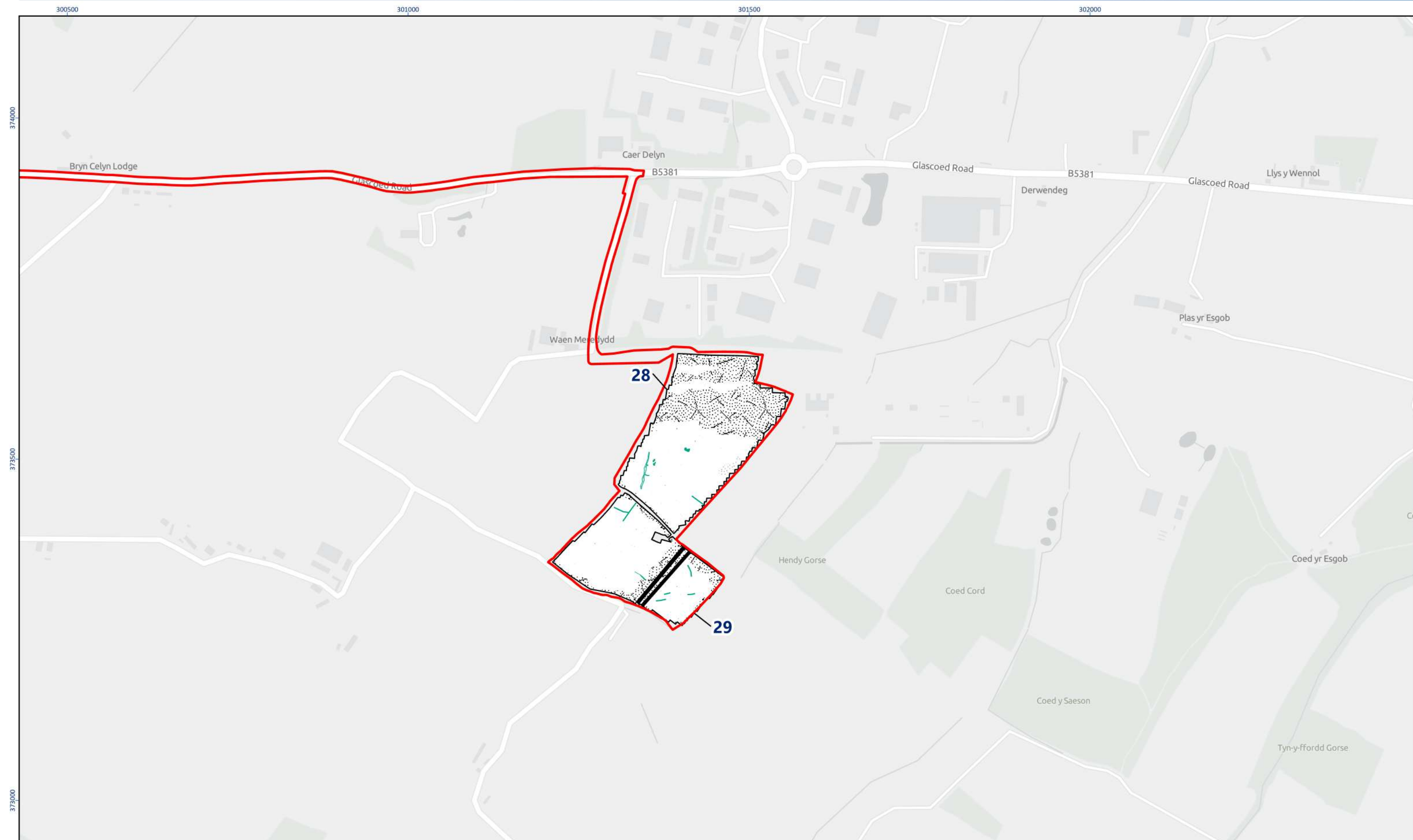
Figure
4.3

Anomaly (Probable Archaeology)	Spread (Historic Feature)	Spread (Magnetic Disturbance)	Linear Trend (Possible Archaeology)	Linear Trend (Agricultural, Ridge and Furrow)
Anomaly (Possible Archaeology)	Anomaly (Unclear Origin)	Anomaly (Ferrous/Iron Spike)	Linear Trend (Historic Feature)	Linear Trend (Drainage)
Spread (Possible Archaeology)	Spread (Unclear Origin)	Spread (Ferrous/Iron Spike)	Linear Trend (Unclear Origin)	Linear Trend (Geology/Natural)
Anomaly (Historic Feature)	Anomaly (Geology/Natural)	Linear Trend (Probable Archaeology)	Linear Trend (Agricultural, Ploughing)	Linear Trend (Service)
	Spread (Geology/Natural)			



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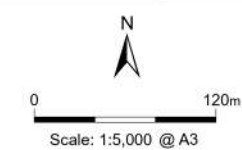




Summary Interpretation - BESS Site

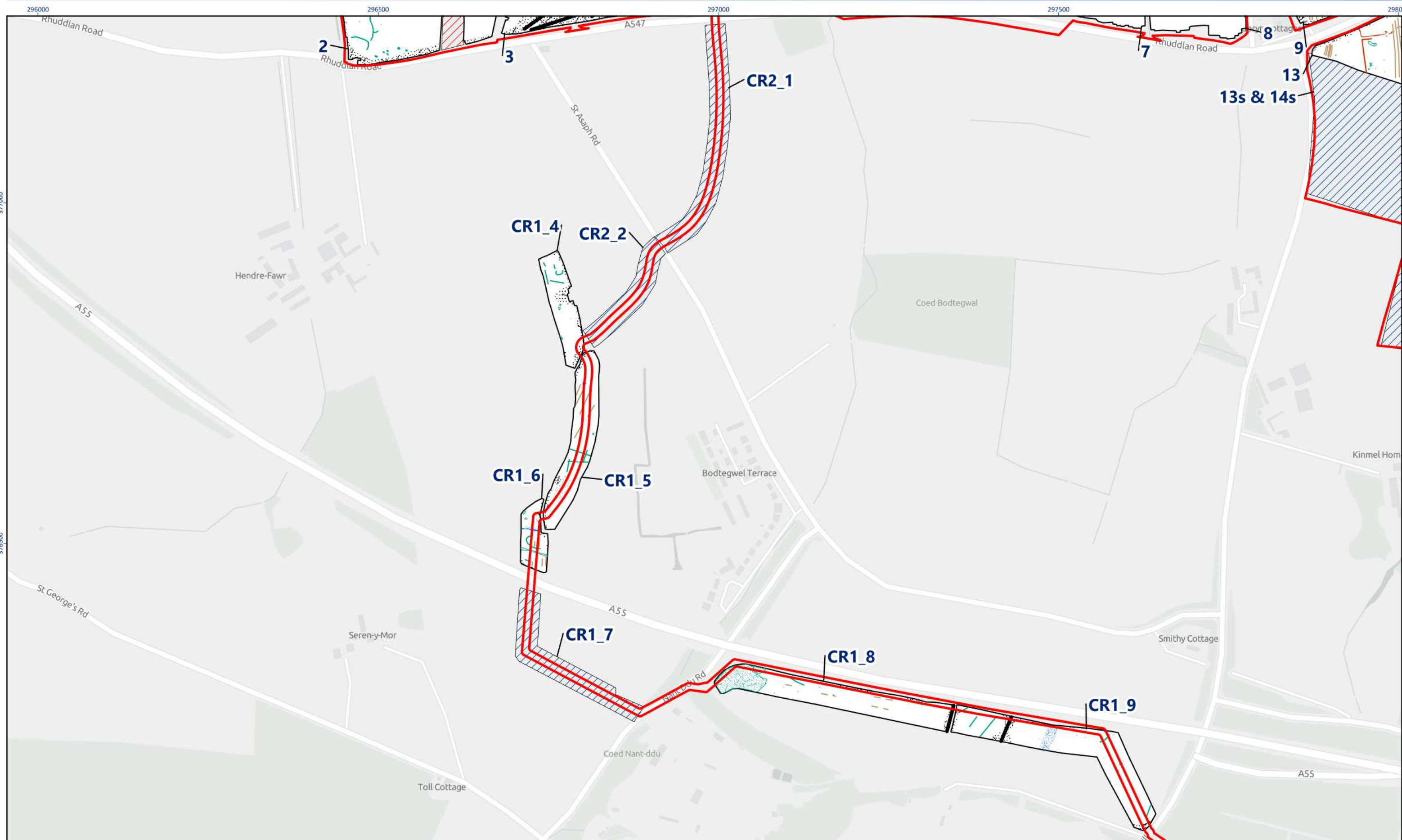
Figure
4.4

- | | | |
|---|---|--|
| ■ Anomaly (Unclear Origin) | ■ Spread (Magnetic Disturbance) | — Linear Trend (Unclear Origin) |
| ■ Spread (Unclear Origin) | ■ Anomaly (Ferrous/Iron Spike) | — Linear Trend (Service) |
| ■ Anomaly (Magnetic Disturbance) | ■ Spread (Ferrous/Iron Spike) | |



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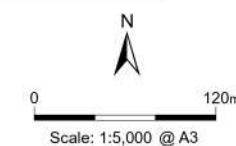
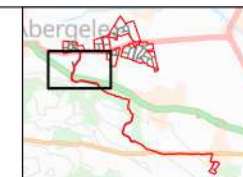




Summary Interpretation - Cable Route

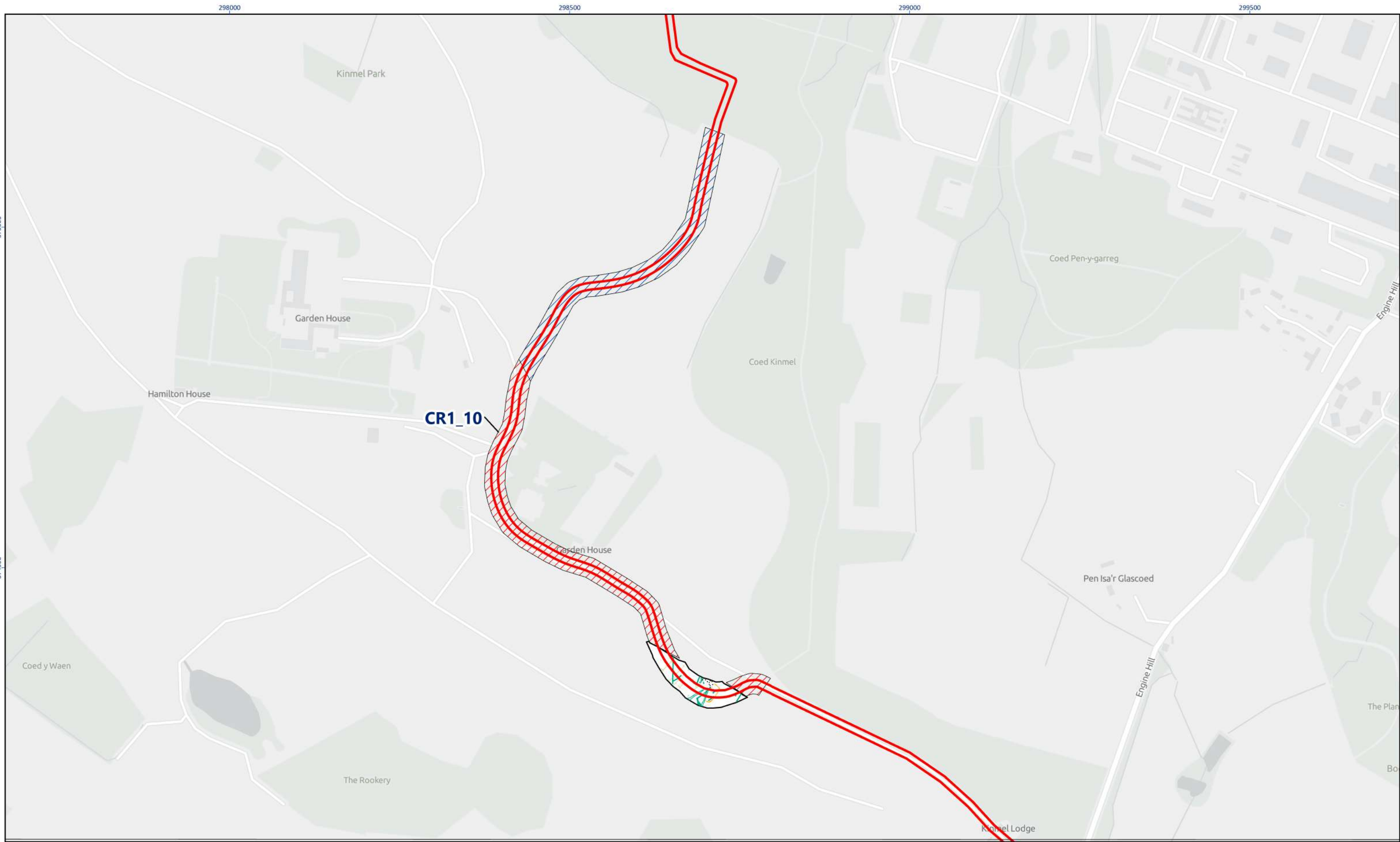
Figure
4.5

Anomaly (Probable Archaeology)	Spread (Unclear Origin)	Linear Trend (Probable Archaeology)	Linear Trend (Agricultural, Ridge and Furrow)
Anomaly (Historic Feature)	Spread (Magnetic Disturbance)	Linear Trend (Unclear Origin)	Linear Trend (Drainage)
Spread (Historic Feature)	Anomaly (Ferrous/Iron Spike)	Linear Trend (Agricultural, Ploughing)	Linear Trend (Service)
Anomaly (Unclear Origin)	Spread (Ferrous/Iron Spike)		



Drawing Number: 05/40766/GEO/4.5/01
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Checked by: AC Date: 19/08/2025
Approved by: JL Date: 19/08/2025





Summary Interpretation - Cable Route

Figure
4.6

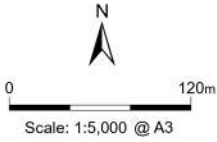
- Anomaly (Possible Archaeology)

Anomaly (Unclear Origin)

Spread (Unclear Origin)
- Spread (Geology/Natural)

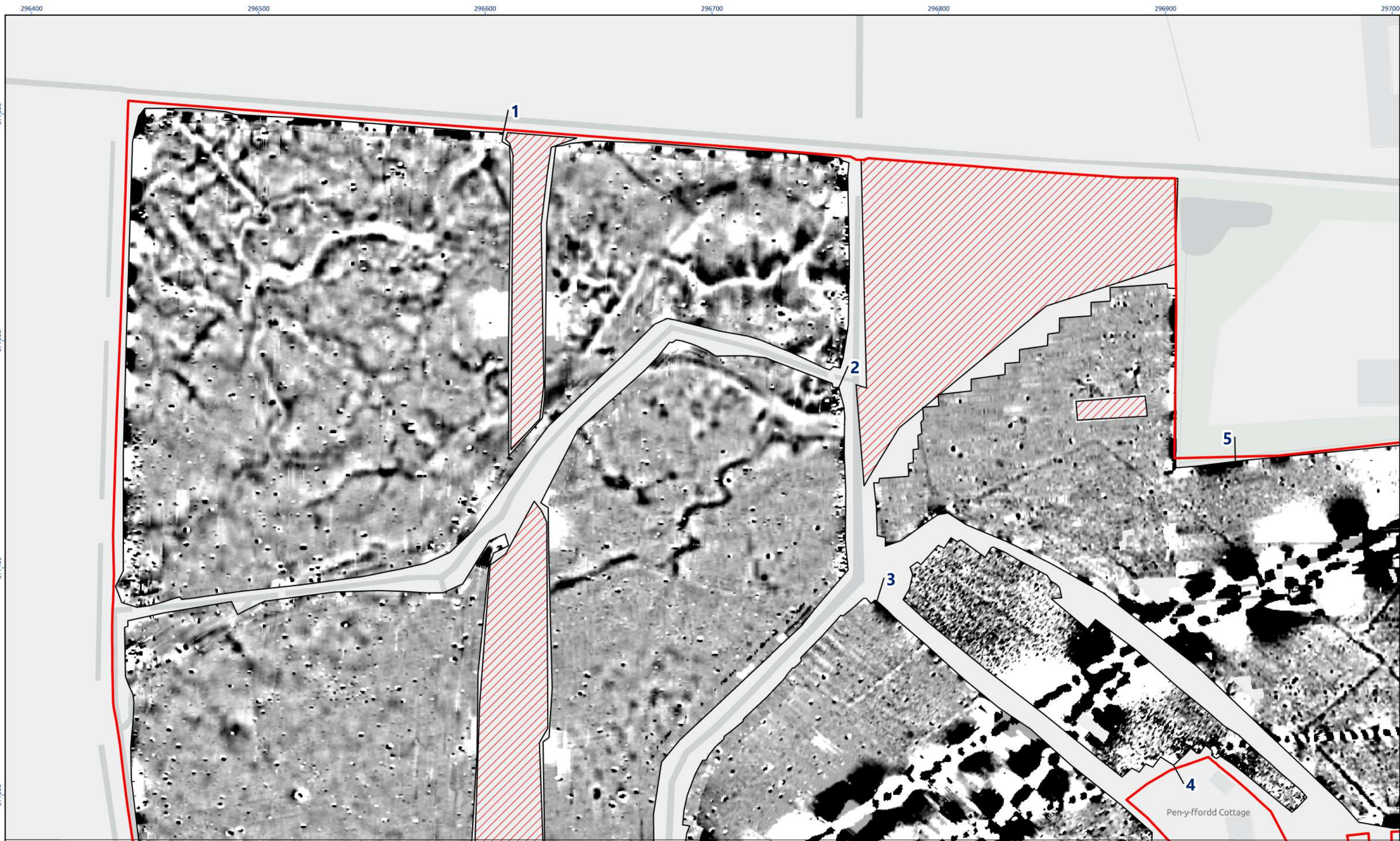
Spread (Magnetic Disturbance)

Anomaly (Ferrous/Iron Spike)
- Linear Trend (Unclear Origin)



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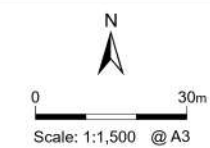


Solar Site: Processed Gradiometer Data - Greyscale Image

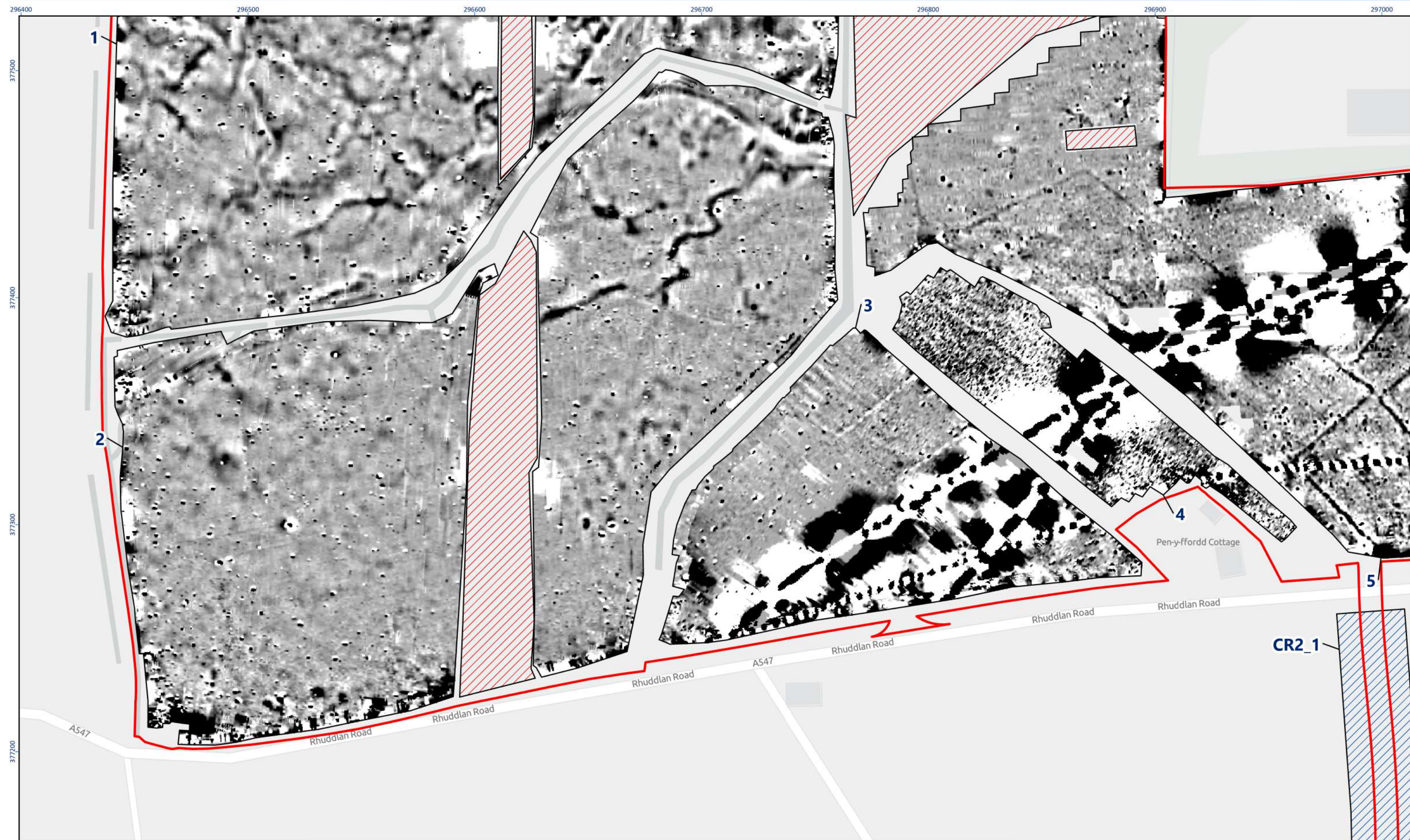
Figure
5.1



 Proposed Development Area  Unsuitable for Survey

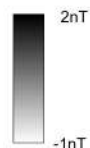


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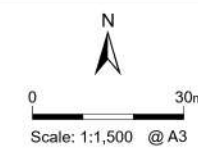


Solar Site: Processed Gradiometer Data - Greyscale Image

Figure
5.2

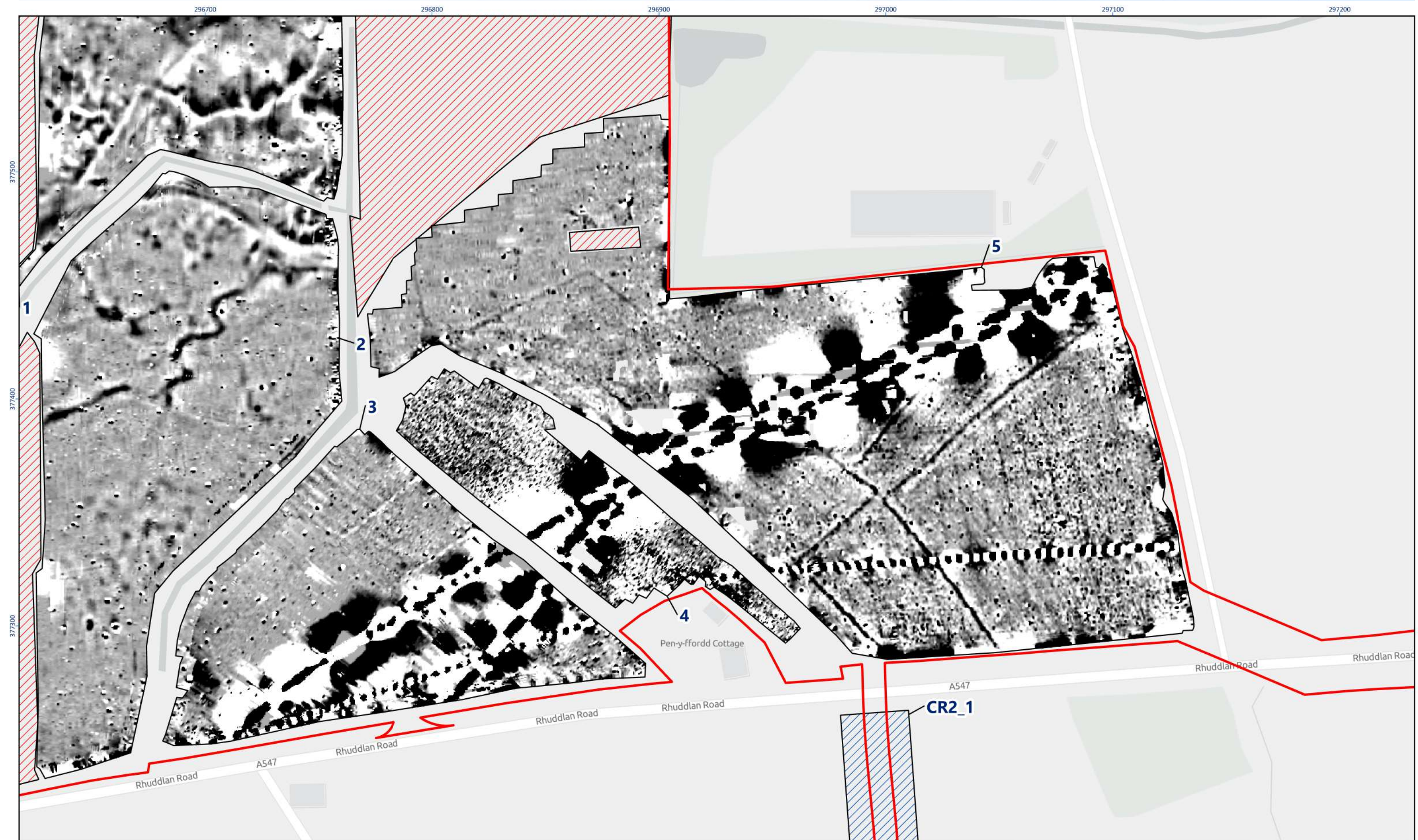


 Proposed Development Area
 Outstanding
 Unsuitable for Survey



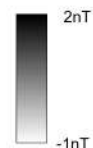
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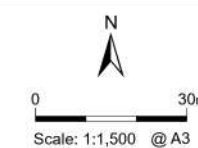
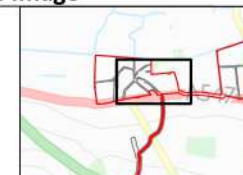


Solar Site: Processed Gradiometer Data - Greyscale Image

Figure
5.3



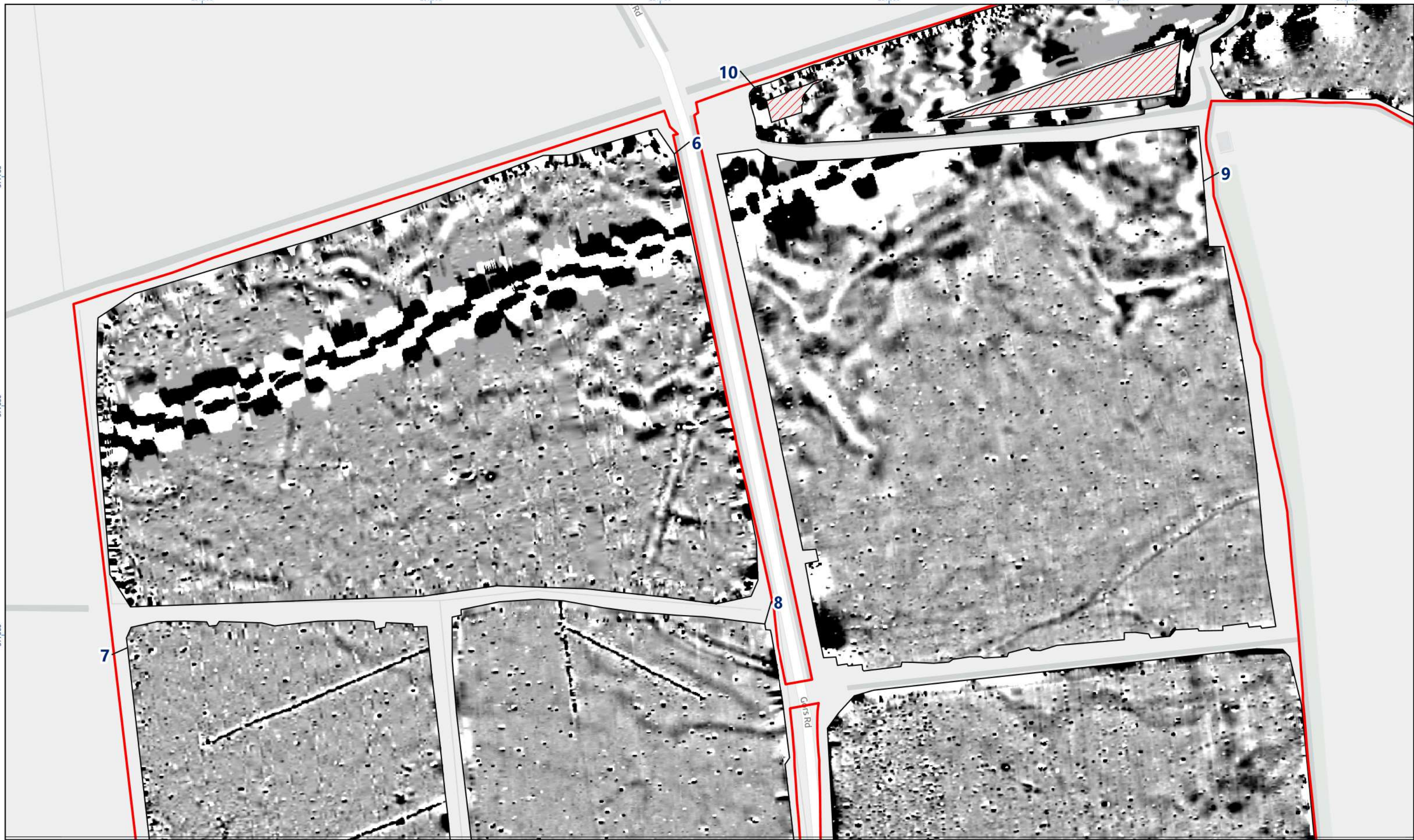
 Proposed Development Area
 Outstanding
 Unsuitable for Survey



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Approved by: JL	Date: 19/08/2025

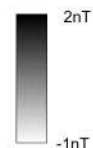


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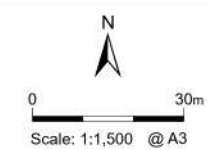


Solar Site: Processed Gradiometer Data - Greyscale Image

Figure
5.4

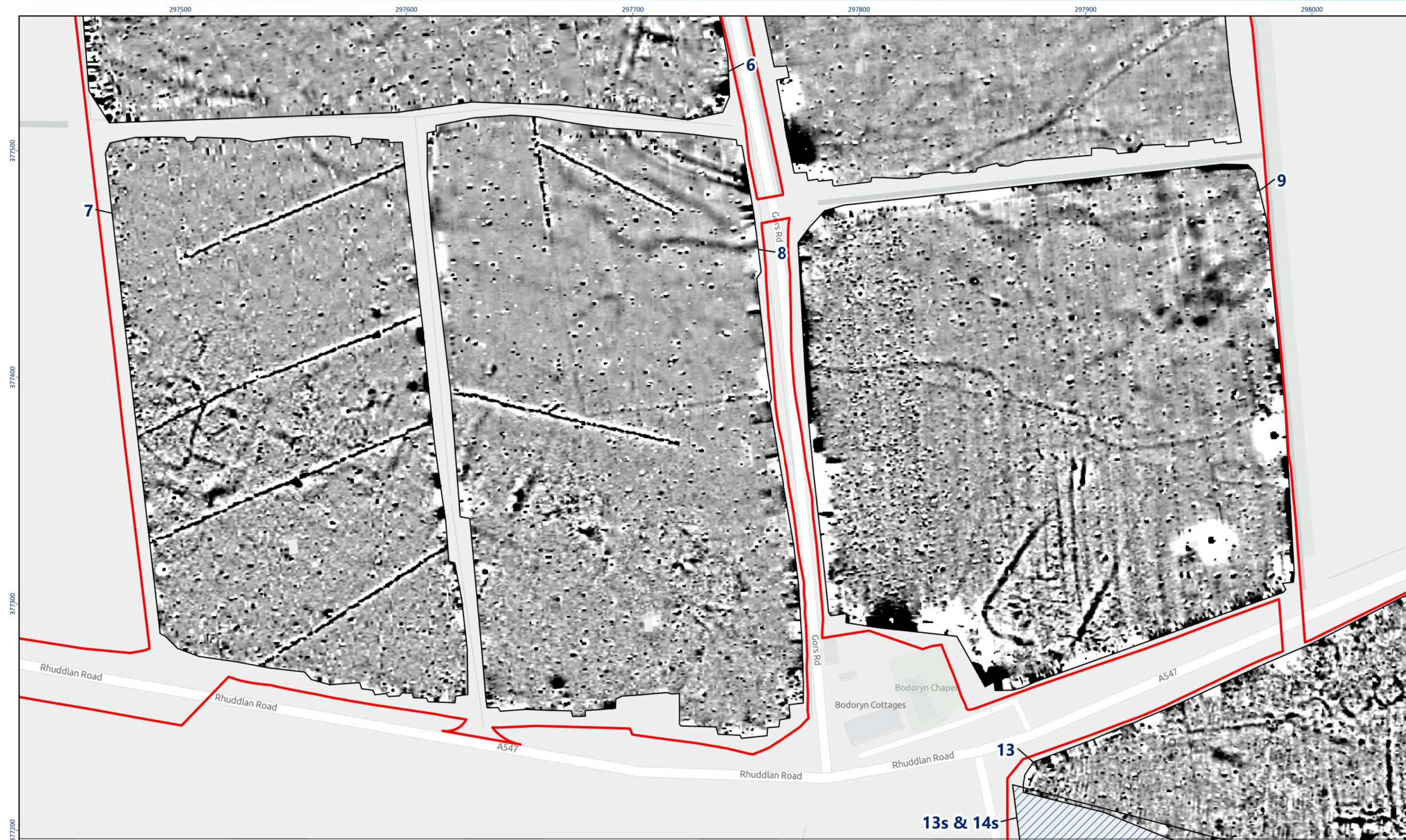


 Proposed Development Area Unsuitable for Survey



Drawing Number: 05/40766/GEO/5.4/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

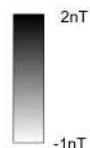




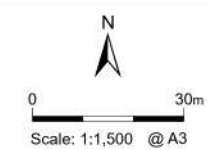
Solar Site: Processed Gradiometer Data - Greyscale Image

Figure

5.5



 Proposed Development Area
 Outstanding



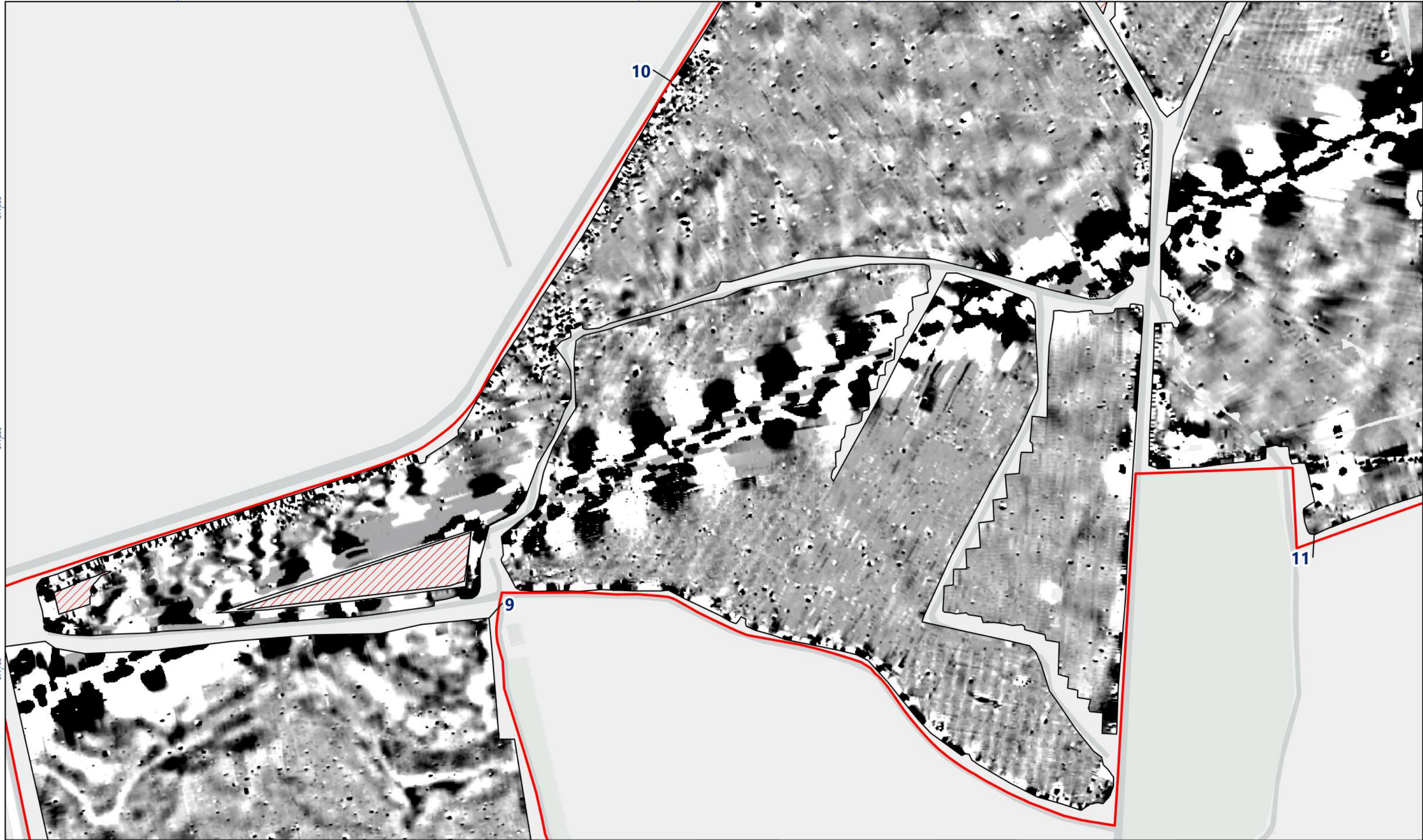
Drawing Number: 05/40766/GEO/5.5/01

Created by: SO Date: 19/08/2025

Checked by: AC Date: 19/08/2025

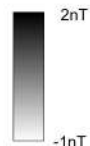
Approved by: JL Date: 19/08/2025

297800 297900 298000 298100 298200 298300

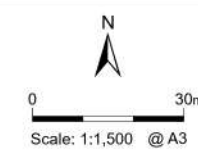


Solar Site: Processed Gradiometer Data - Greyscale Image

Figure
5.6

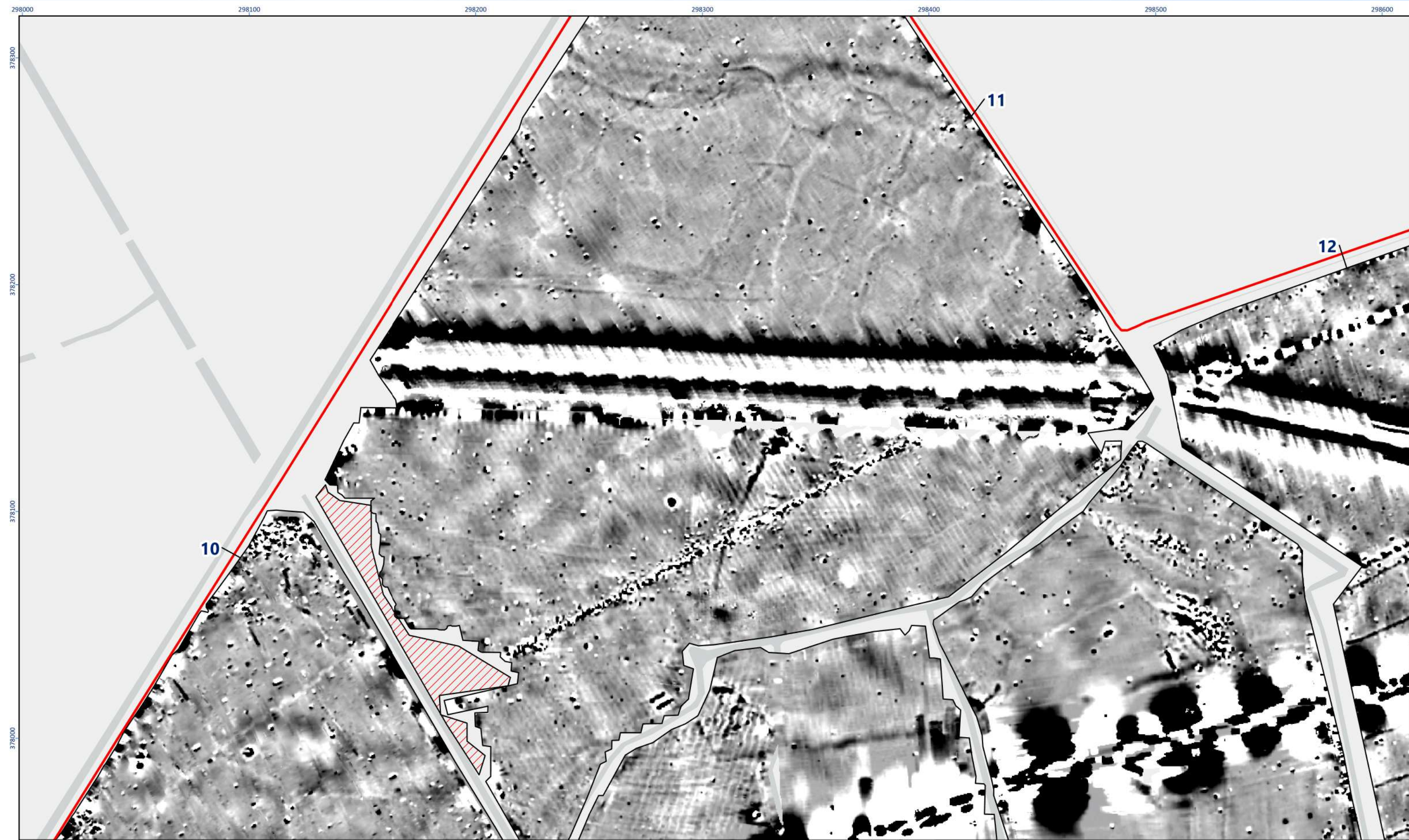


 Proposed Development Area Unsuitable for Survey



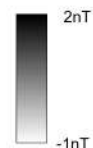
Drawing Number: 05/40766/GEO/5.6/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



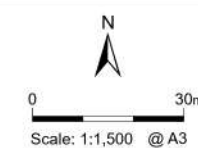
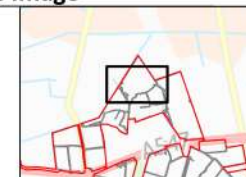


Solar Site: Processed Gradiometer Data - Greyscale Image

Figure
5.7

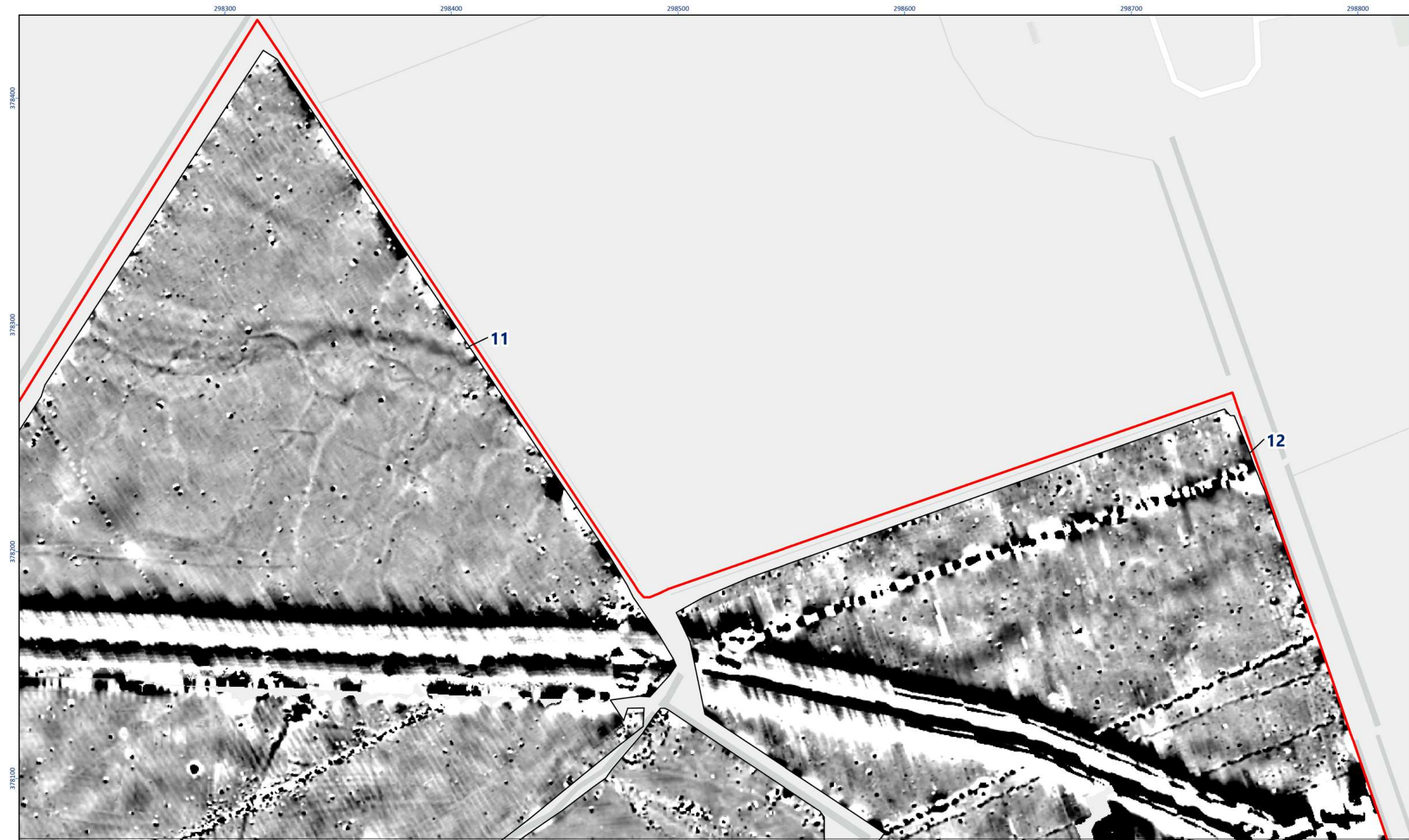


 Proposed Development Area Unsuitable for Survey



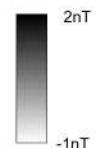
Drawing Number: 05/40766/GEO/5.7/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



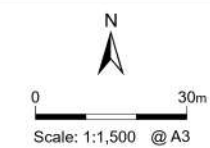
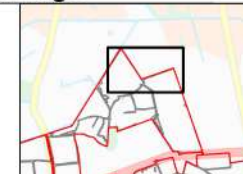


Solar Site: Processed Gradiometer Data - Greyscale Image

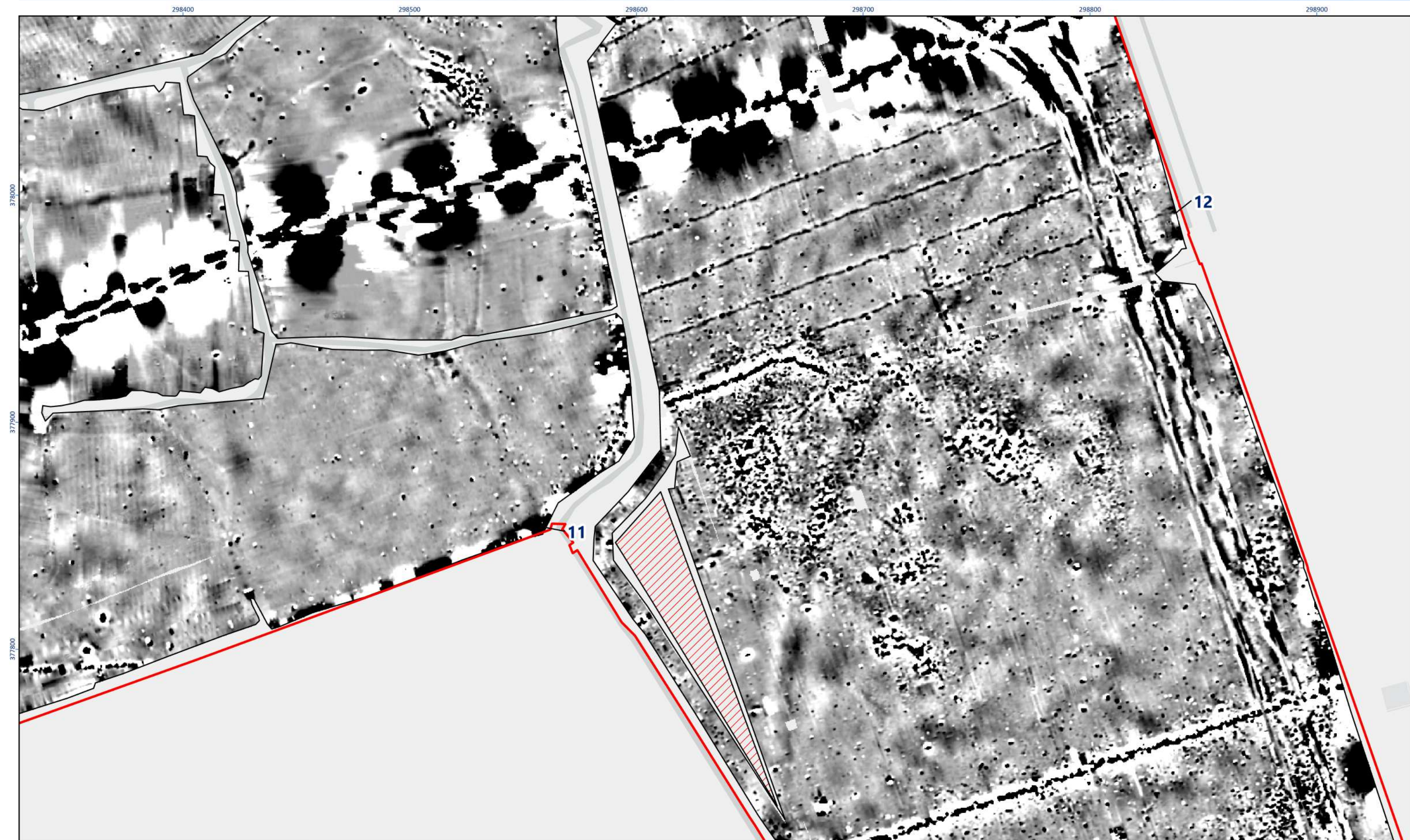
Figure
5.8



 Proposed Development Area

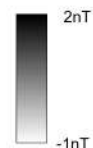


Drawing Number: 05/40766/GEO/5.8/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

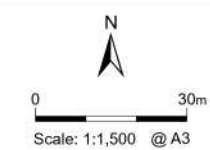


Solar Site: Processed Gradiometer Data - Greyscale Image

Figure
5.9



 Proposed Development Area Unsuitable for Survey

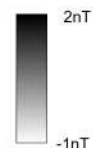


Drawing Number: 05/40766/GEO/5.9/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

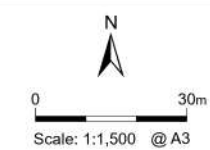
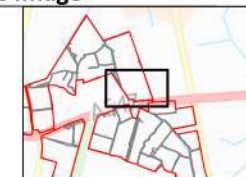




Figure
5.10



Proposed Development Area Unsuitable for Survey



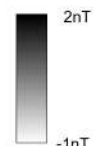
Drawing Number: 05/40766/GEO/5.10/01
Created by: SO Date: 19/08/2025
Checked by: AC Date: 19/08/2025
Approved by: JL Date: 19/08/2025

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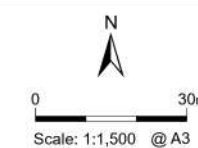


Solar Site: Processed Gradiometer Data - Greyscale Image

Figure
5.11

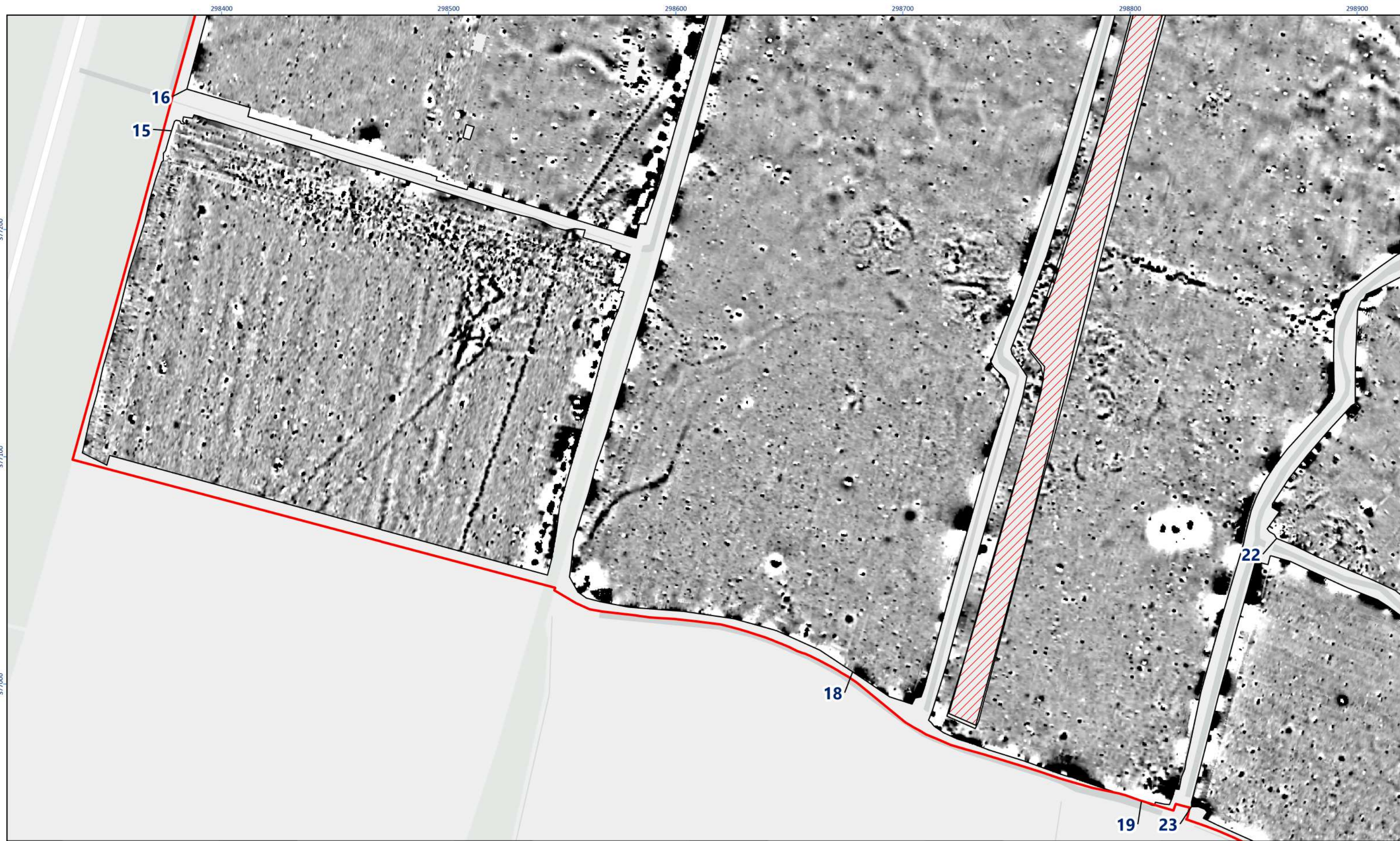


Proposed Development Area Outstanding Unsuitable for Survey



Drawing Number: 05/40766/GEO/5.11/01
Created by: SO Date: 19/08/2025
Checked by: AC Date: 19/08/2025
Approved by: JL Date: 19/08/2025

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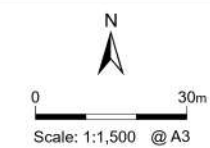


Solar Site: Processed Gradiometer Data - Greyscale Image

Figure
5.12



 Proposed Development Area Unsuitable for Survey



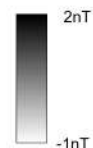
Drawing Number: 05/40766/GEO/5.12/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



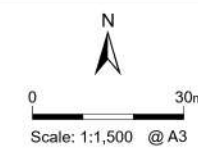


Solar Site: Processed Gradiometer Data - Greyscale Image

Figure
5.13

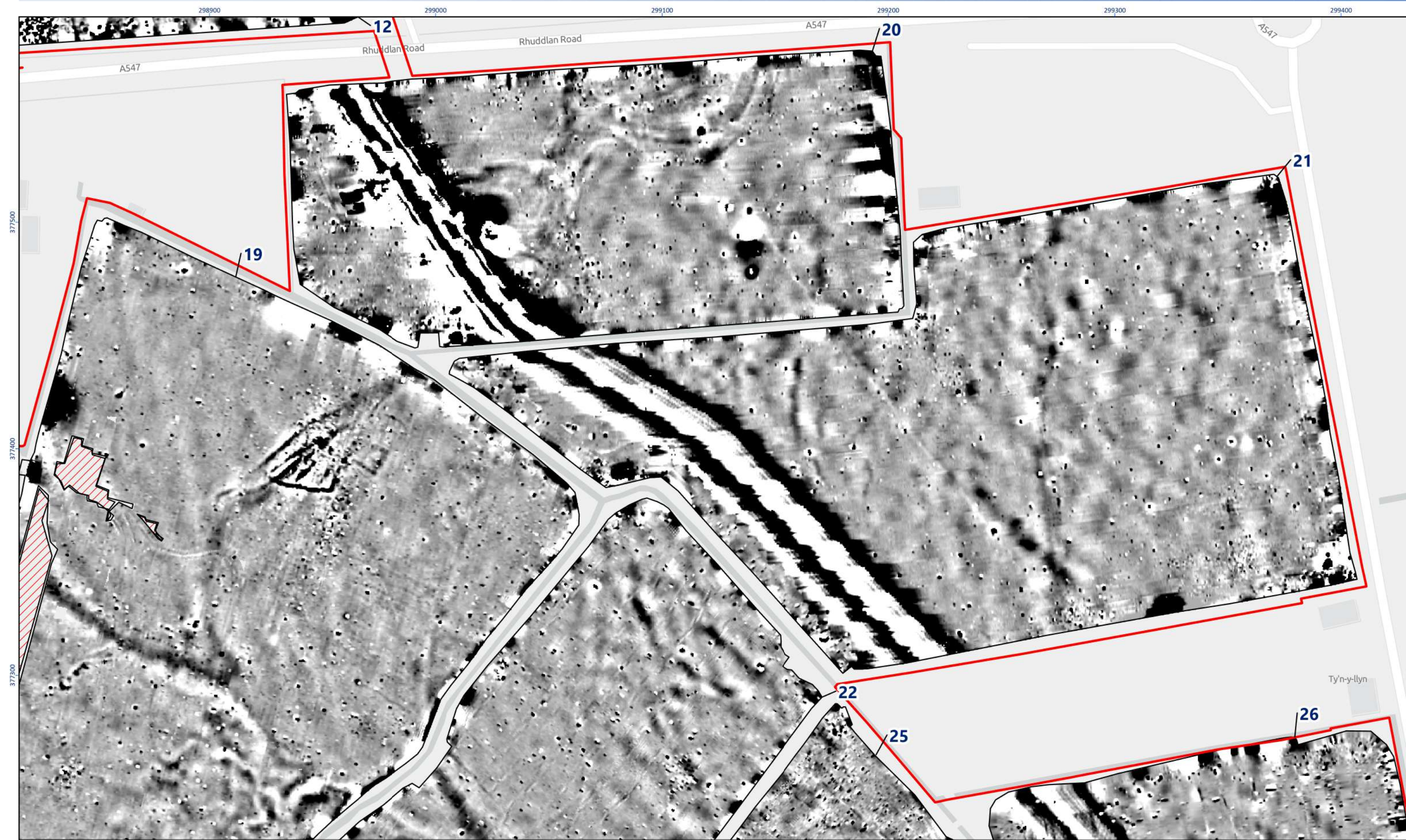


 Proposed Development Area Unsuitable for Survey



Drawing Number: 05/40766/GEO/5.13/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

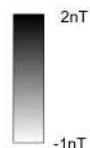




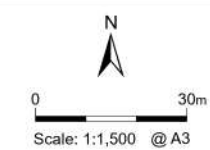
Solar Site: Processed Gradiometer Data - Greyscale Image

Figure

5.14



 Proposed Development Area
 Unsuitable for Survey



Drawing Number: 05/40766/GEO/5.14/01

Created by: SO Date: 19/08/2025

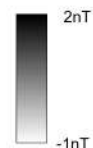
Checked by: AC Date: 19/08/2025

Approved by: JL Date: 19/08/2025

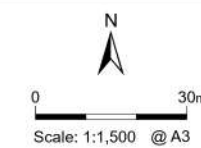


Solar Site: Processed Gradiometer Data - Greyscale Image

Figure
5.15

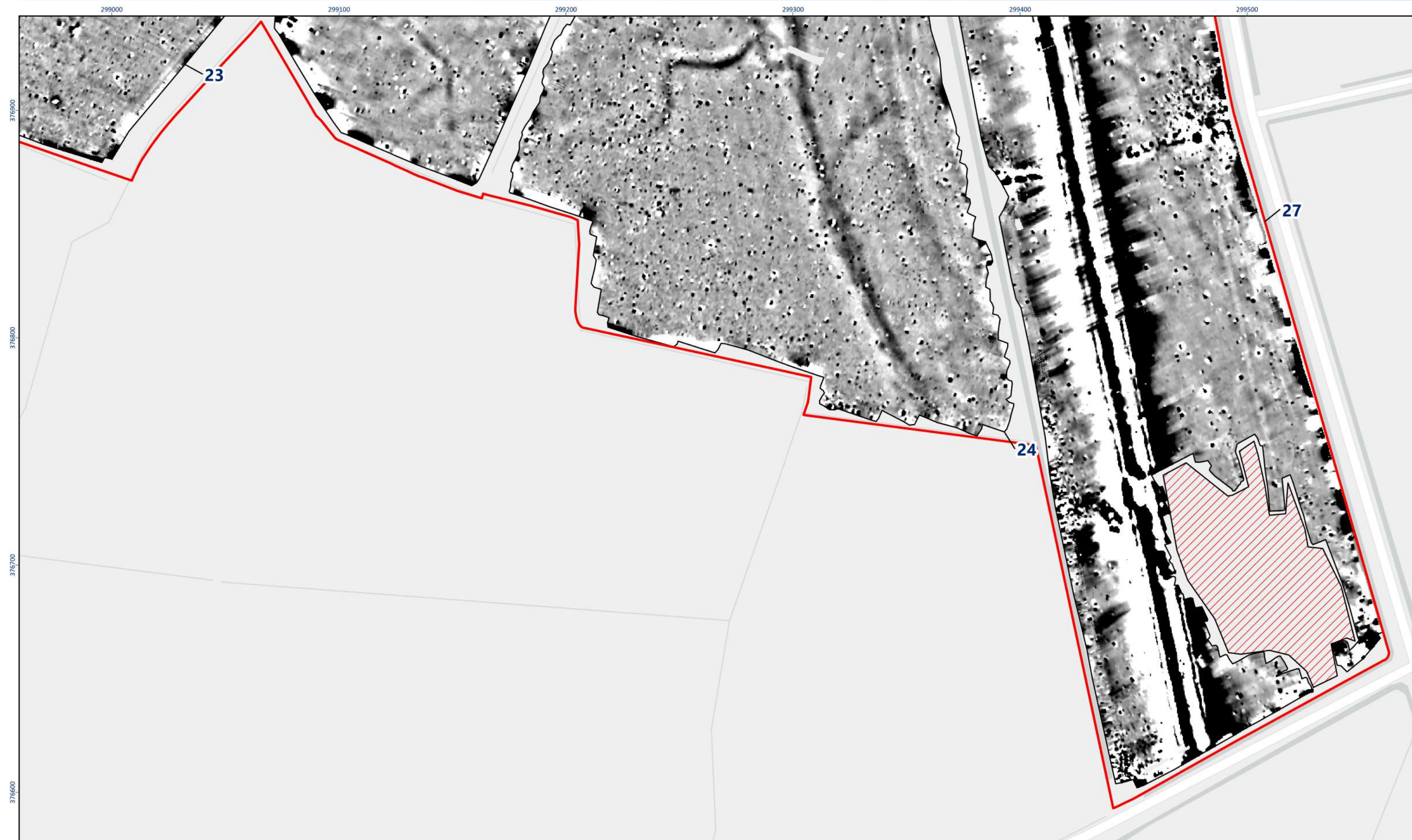


 Proposed Development Area Unsuitable for Survey



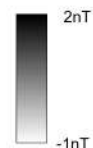
Drawing Number: 05/40766/GEO/5.15/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



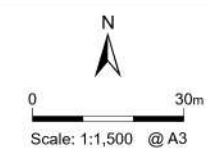


Solar Site: Processed Gradiometer Data - Greyscale Image

Figure
5.16



 Proposed Development Area Unsuitable for Survey



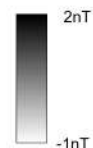
Drawing Number: 05/40766/GEO/5.16/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



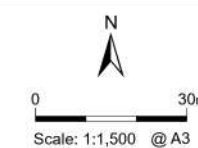
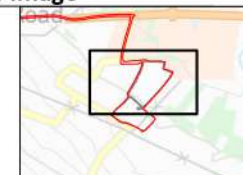


BESS Site: Processed Gradiometer Data - Greyscale Image

Figure
5.17

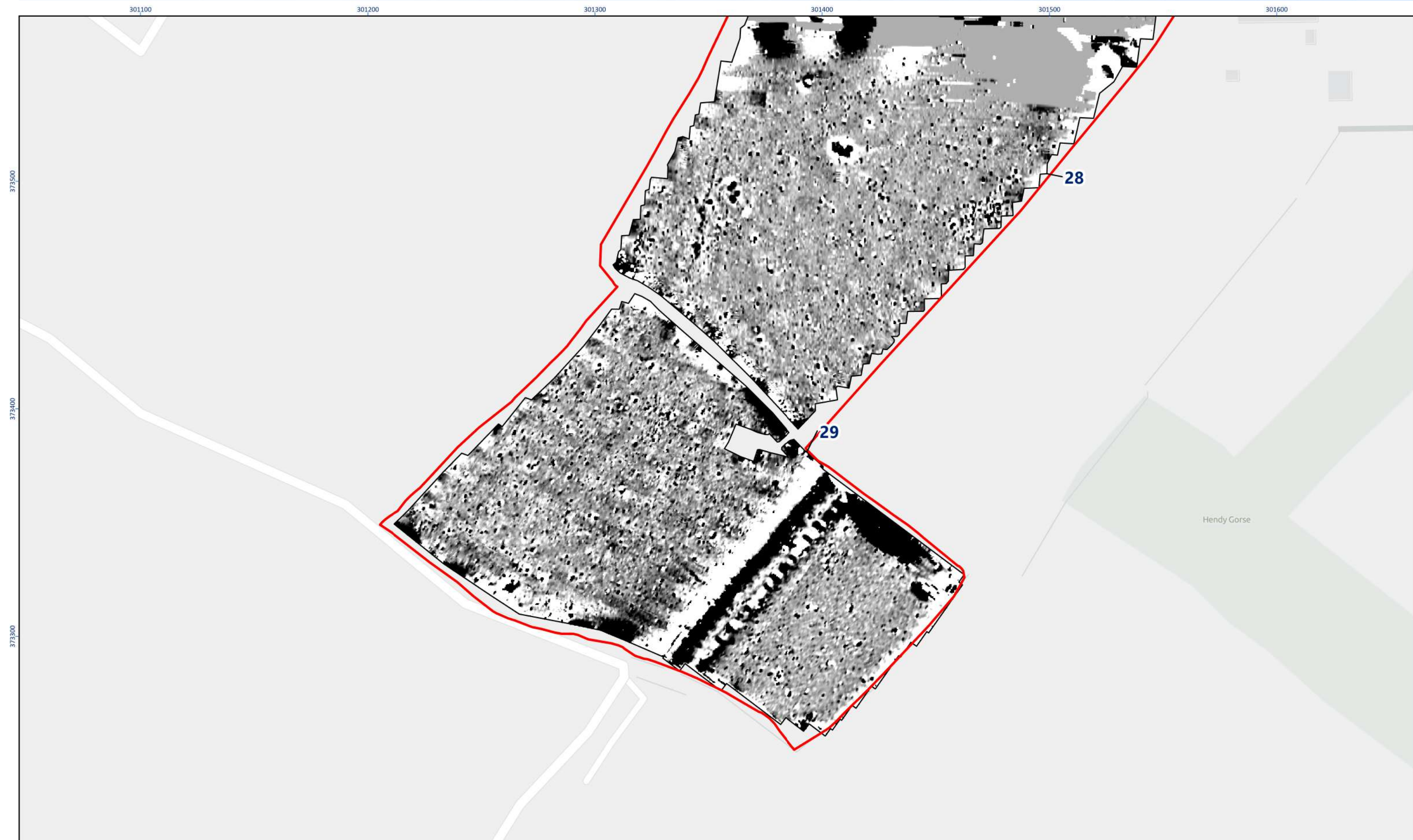


 Proposed Development Area



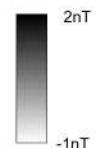
Drawing Number: 05/40766/GEO/5.17/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



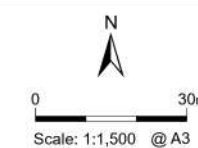
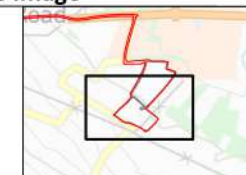


BESS Site: Processed Gradiometer Data - Greyscale Image

Figure
5.18



 Proposed Development Area

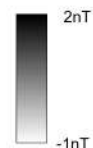


Drawing Number: 05/40766/GEO/5.18/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

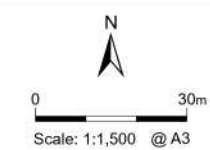
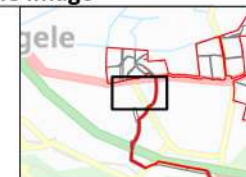


Cable Route: Processed Gradiometer Data - Greyscale Image

Figure
5.19

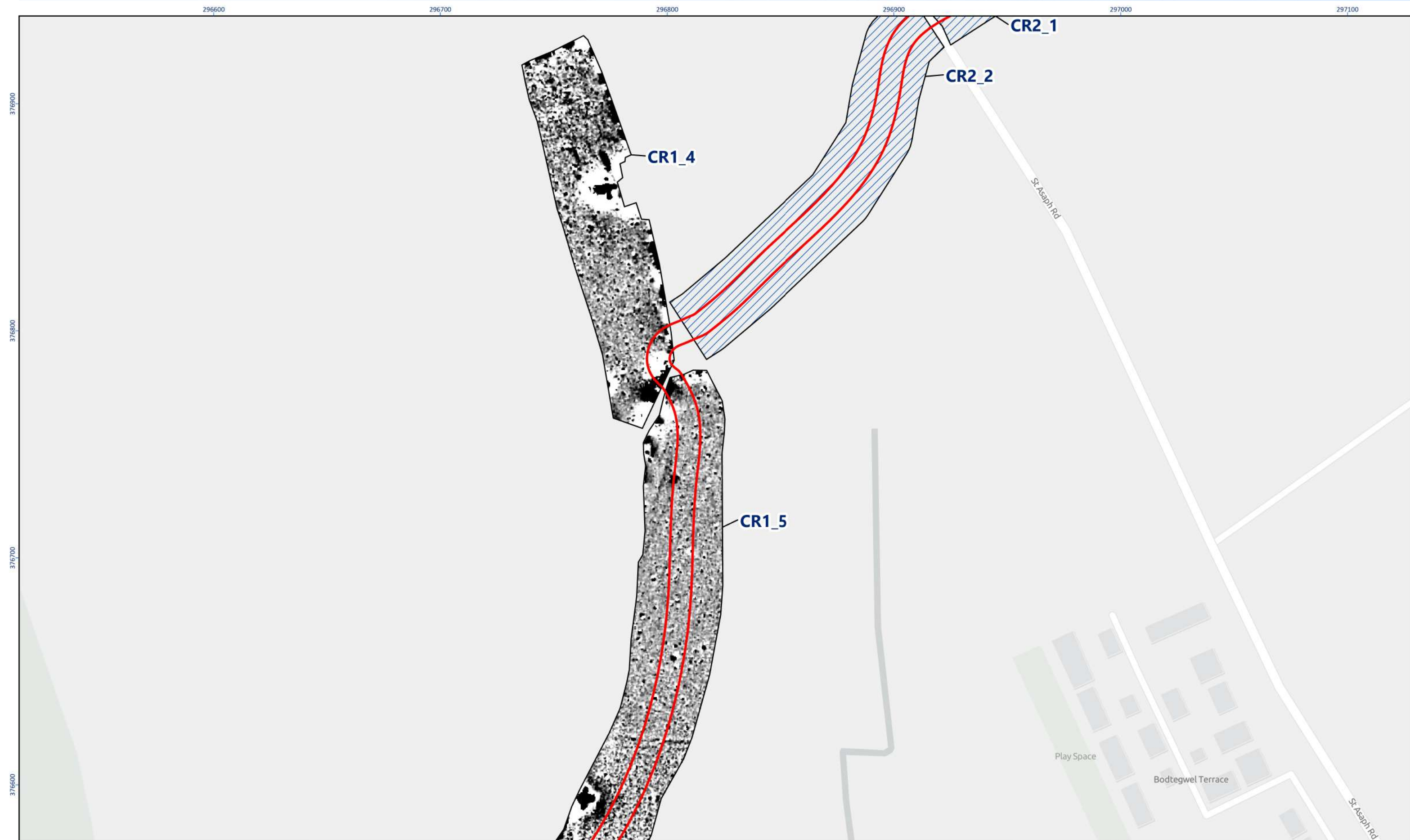


 Proposed Development Area
 Outstanding
 Unsuitable for Survey



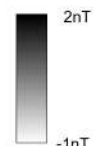
Drawing Number: 05/40766/GEO/5.19/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

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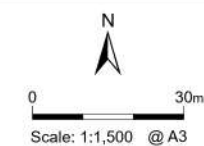


Cable Route: Processed Gradiometer Data - Greyscale Image

Figure
5.20

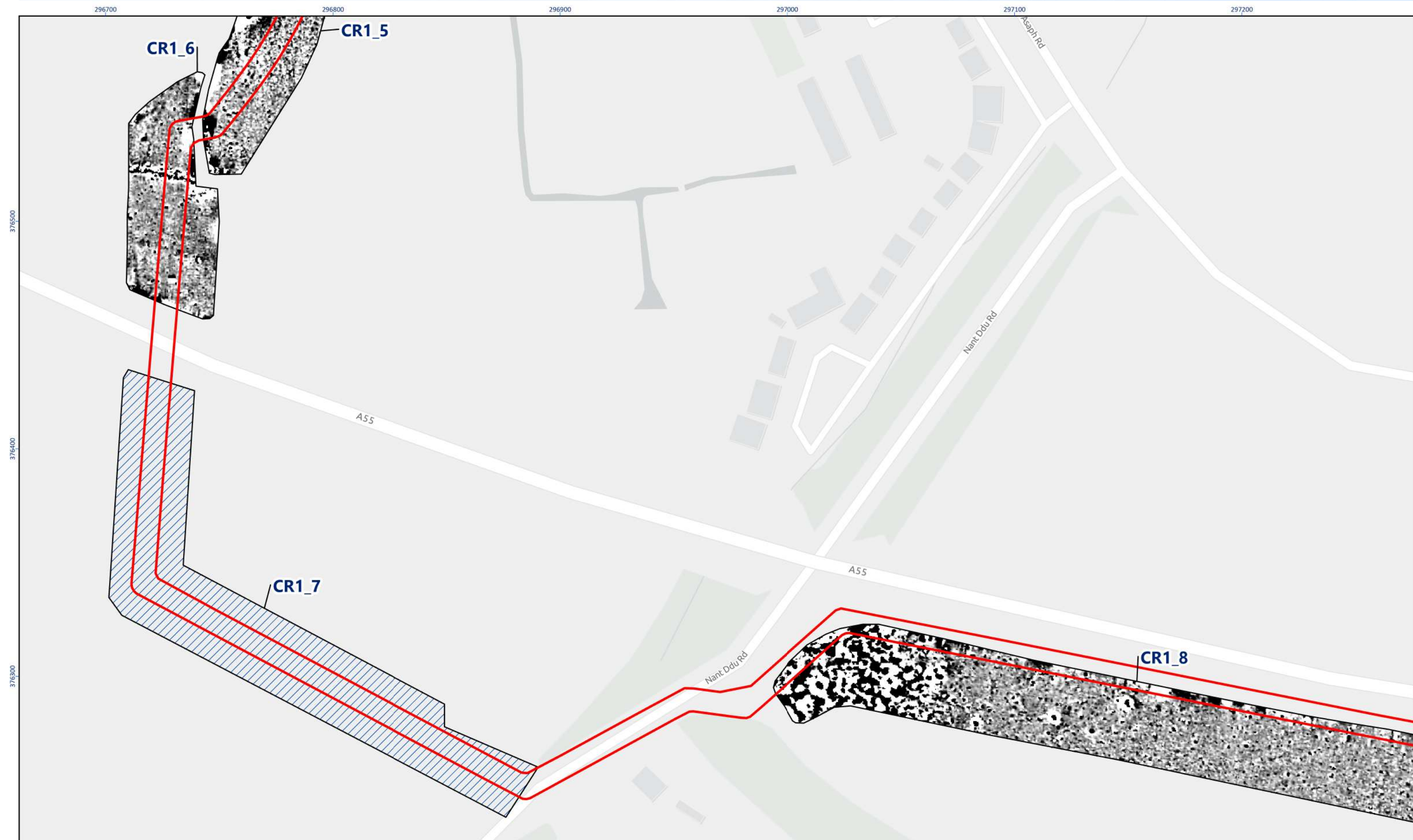


 Proposed Development Area Outstanding



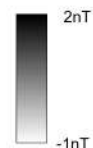
Drawing Number: 05/40766/GEO/5.20/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



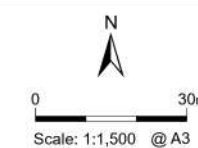
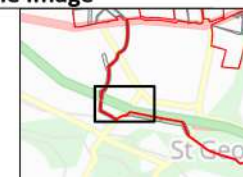


Cable Route: Processed Gradiometer Data - Greyscale Image

Figure
5.21

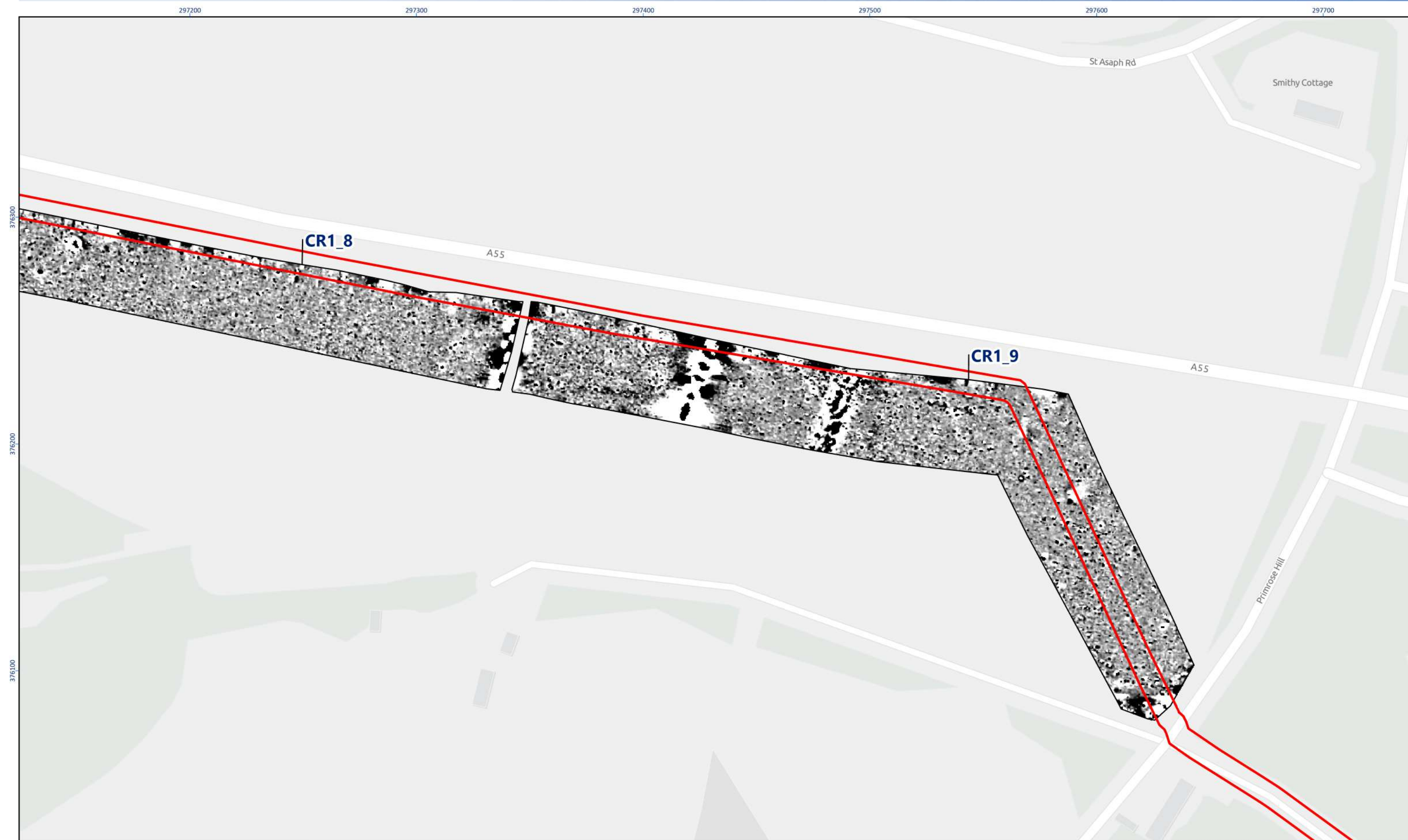


 Proposed Development Area Outstanding



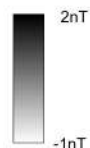
Drawing Number: 05/40766/GEO/5.21/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



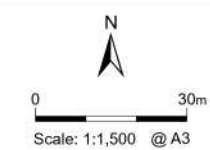


Cable Route: Processed Gradiometer Data - Greyscale Image

Figure
5.22



Proposed Development Area

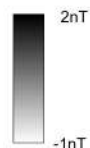


Drawing Number: 05/40766/GEO/5.22/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

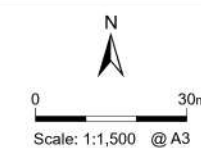
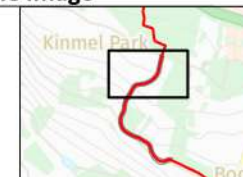


Cable Route: Processed Gradiometer Data - Greyscale Image

Figure
5.23

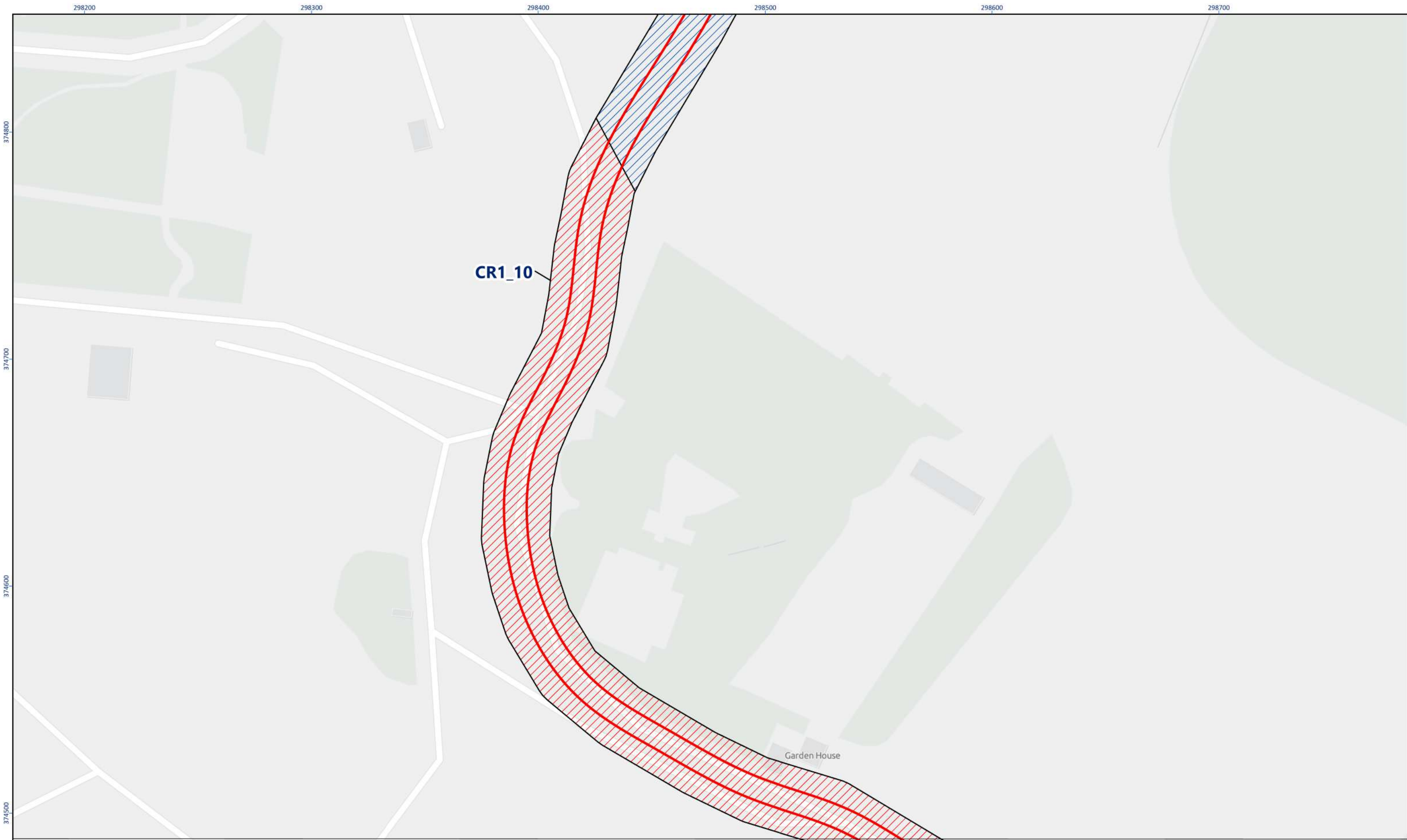


Proposed Development Area Outstanding



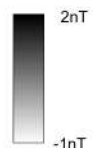
Drawing Number: 05/40766/GEO/5.23/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



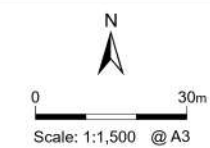
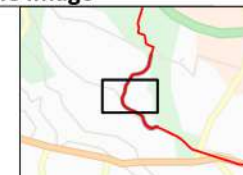


Cable Route: Processed Gradiometer Data - Greyscale Image

Figure
5.24



 Proposed Development Area
 Outstanding
 Unsuitable for Survey



Drawing Number: 05/40766/GEO/5.24/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

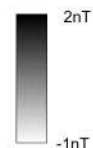




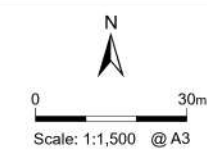
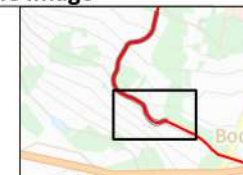
Cable Route: Processed Gradiometer Data - Greyscale Image

Figure

5.25



Proposed Development Area Unsuitable for Survey



Drawing Number: 05/40766/GEO/5.25/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

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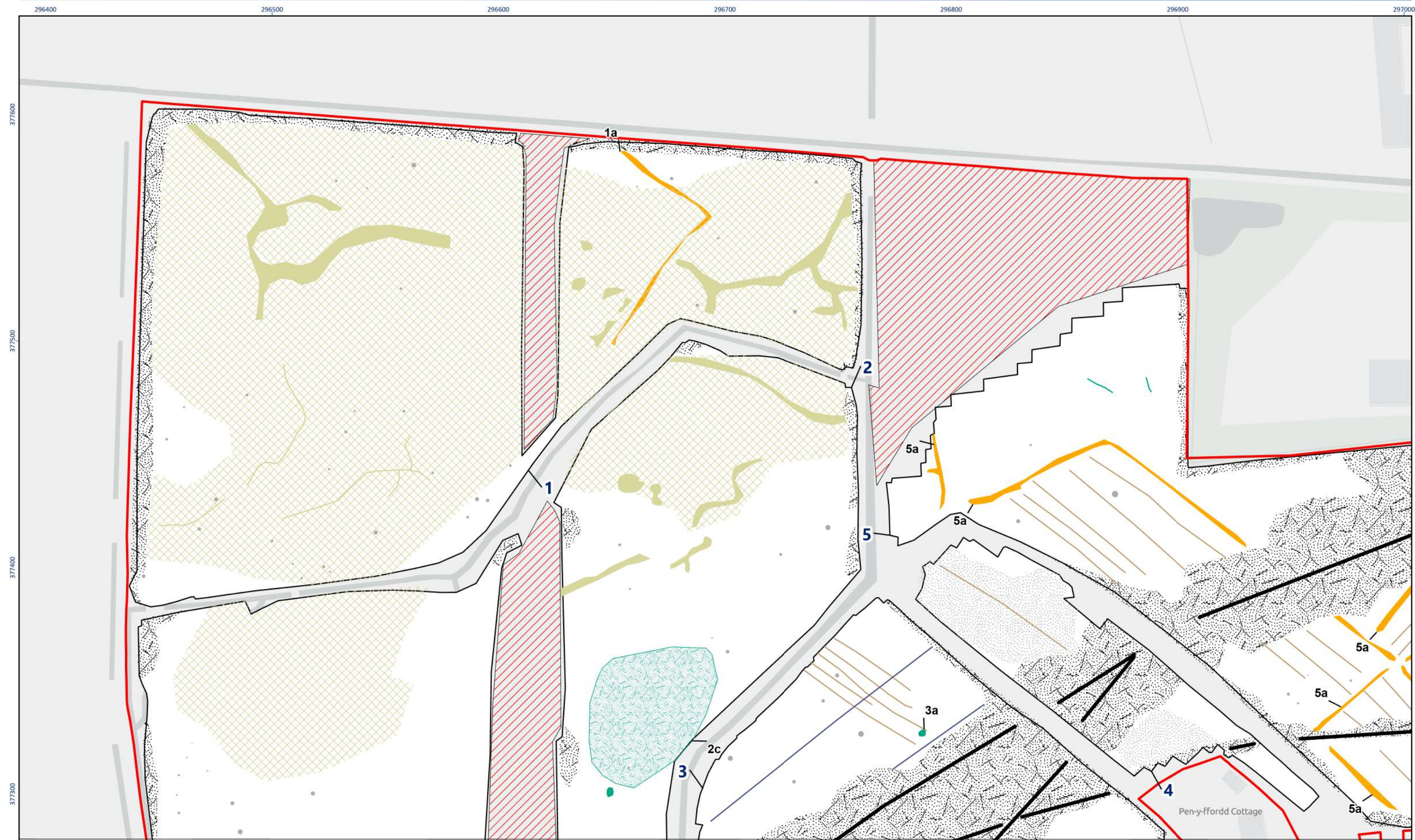
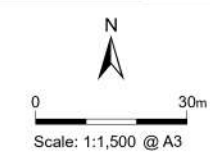
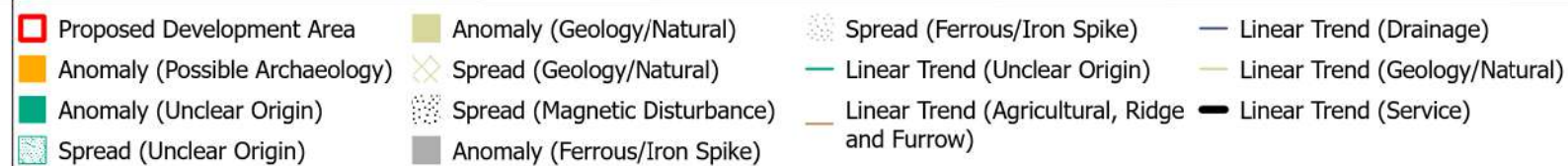


Figure
6.1

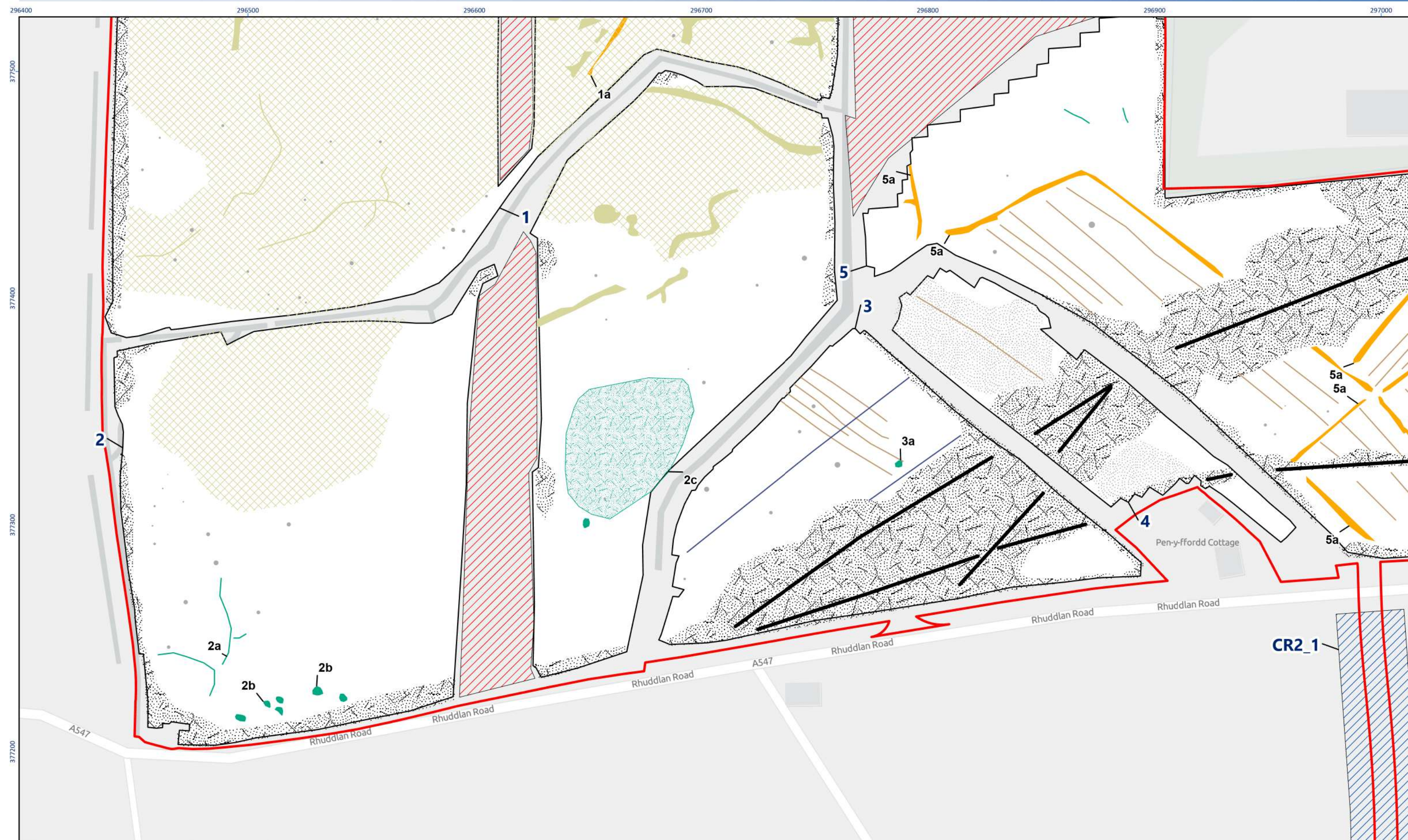


Drawing Number: 05/40766/GEO/6.1/01

Created by: SO Date: 19/08/2025

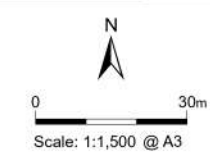
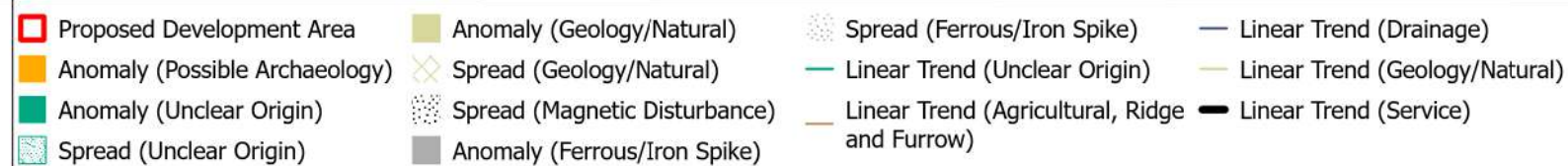
Checked by: AC Date: 19/08/2025

Approved by: JL Date: 19/08/2025



Solar Site: Interpretation of Processed Gradiometer Data

Figure
6.2



Drawing Number: 05/40766/GEO/6.2/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

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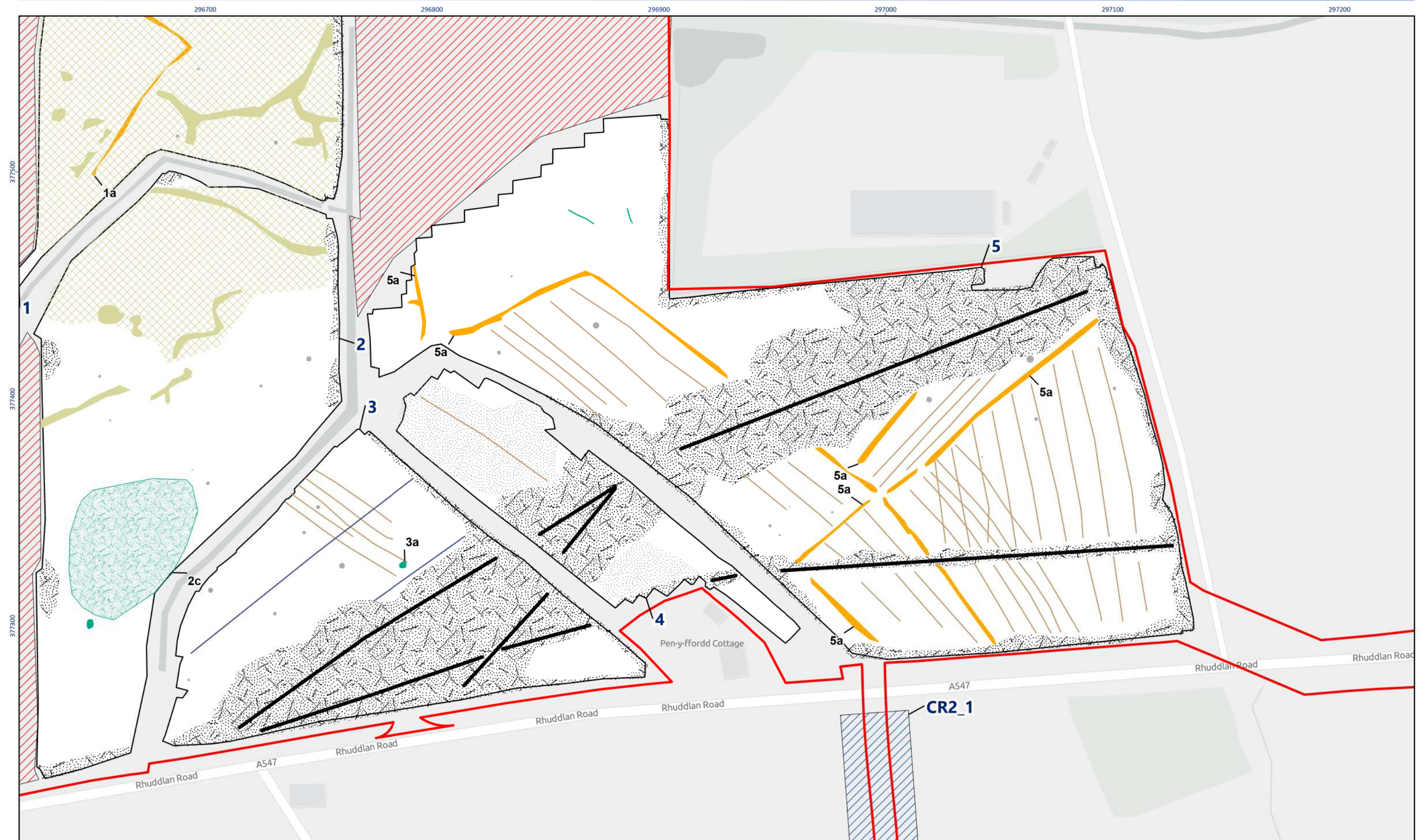
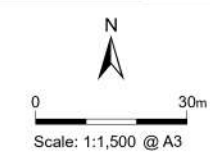


Figure
6.3

- | | | | |
|---|---|---|---|
| Proposed Development Area | Anomaly (Geology/Natural) | Spread (Ferrous/Iron Spike) | — Linear Trend (Drainage) |
| Anomaly (Possible Archaeology) | Spread (Geology/Natural) | — Linear Trend (Unclear Origin) | — Linear Trend (Service) |
| Anomaly (Unclear Origin) | Spread (Magnetic Disturbance) | — Linear Trend (Agricultural, Ridge and Furrow) | |
| Spread (Unclear Origin) | Anomaly (Ferrous/Iron Spike) | | |



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 Created by: SO Date: 19/08/2025
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 Approved by: JL Date: 19/08/2025

297500

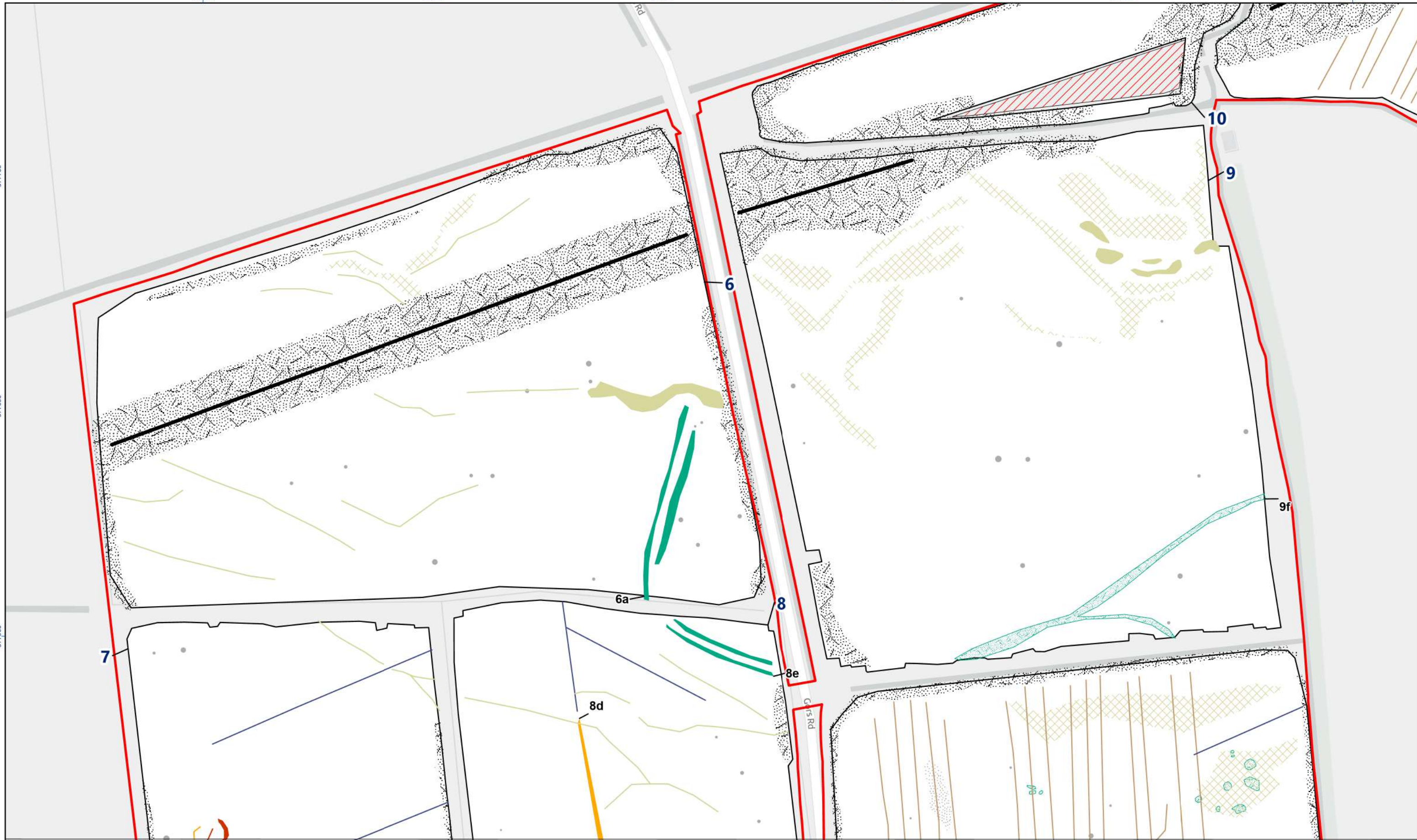
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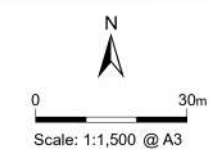
298000



Solar Site: Interpretation of Processed Gradiometer Data

Figure
6.4

- | | | | | |
|---|---|--|--|--|
| <ul style="list-style-type: none"> ■ Proposed Development Area ■ Anomaly (Probable Archaeology) ■ Anomaly (Possible Archaeology) ■ Anomaly (Unclear Origin) | <ul style="list-style-type: none"> ■ Spread (Unclear Origin) ■ Anomaly (Geology/Natural) ■ Spread (Geology/Natural) ■ Spread (Magnetic Disturbance) | <ul style="list-style-type: none"> ■ Anomaly (Ferrous/Iron Spike) ■ Spread (Ferrous/Iron Spike) ■ Linear Trend (Probable Archaeology) | <ul style="list-style-type: none"> — Linear Trend (Possible Archaeology) — Linear Trend (Agricultural, Ridge and Furrow) — Linear Trend (Drainage) | <ul style="list-style-type: none"> — Linear Trend (Geology/Natural) — Linear Trend (Service) |
|---|---|--|--|--|



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Approved by: JL Date: 19/08/2025

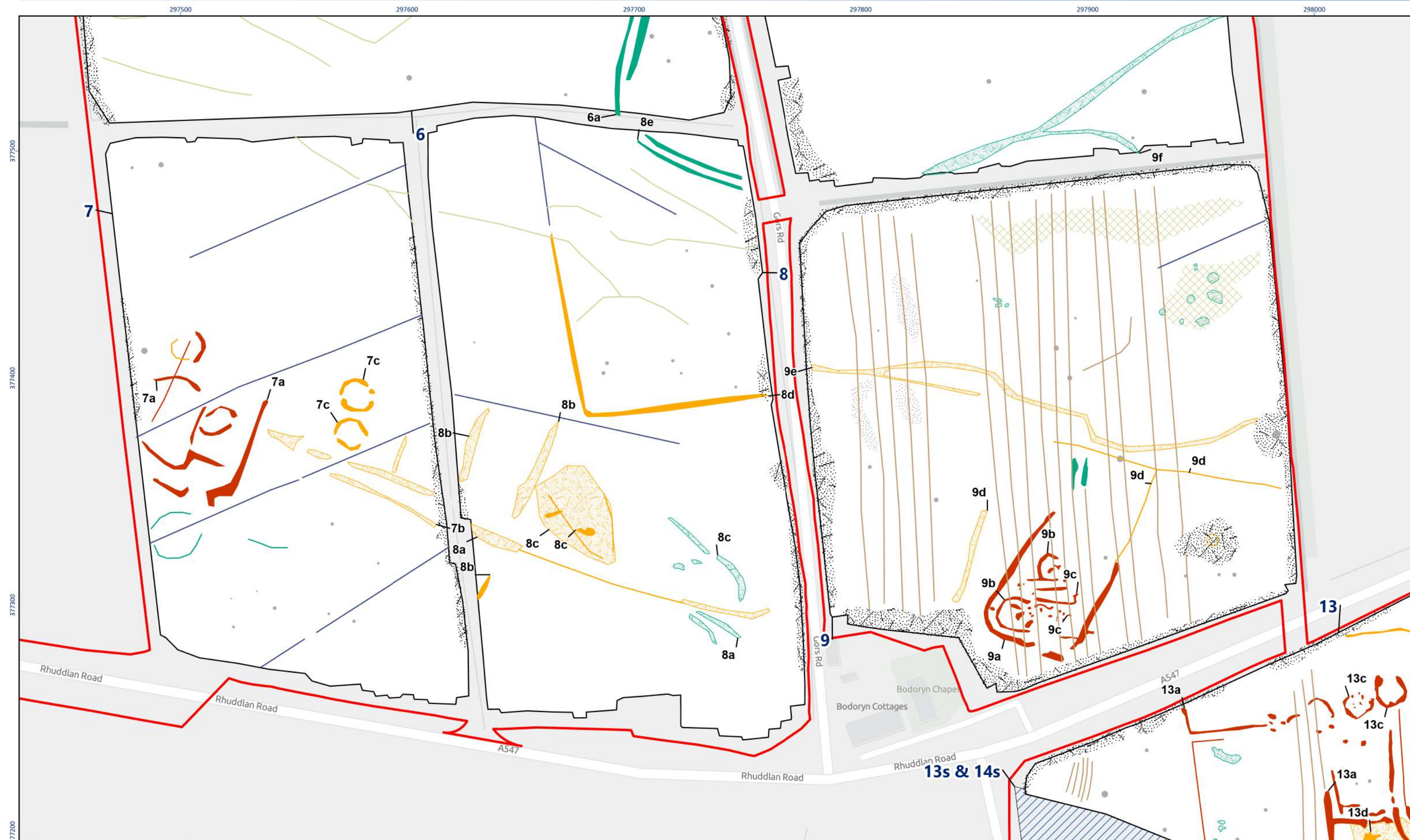
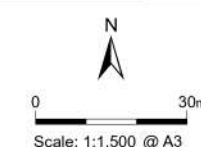


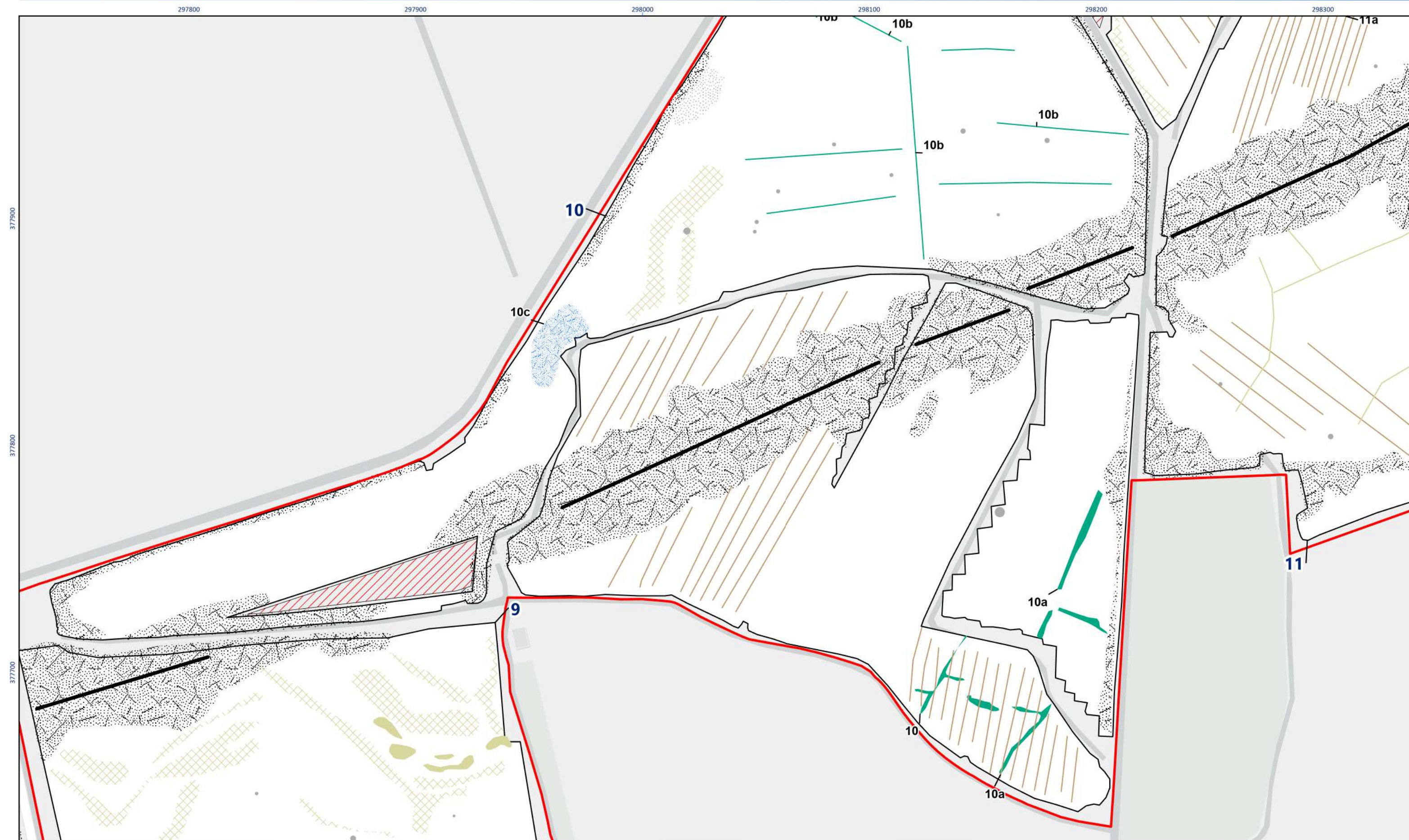
Figure
6.5

- | | | | | |
|---|--|--|---|--|
| <ul style="list-style-type: none"> Proposed Development Area Anomaly (Probable Archaeology) Anomaly (Possible Archaeology) | <ul style="list-style-type: none"> Spread (Possible Archaeology) Anomaly (Unclear Origin) Spread (Unclear Origin) Spread (Geology/Natural) | <ul style="list-style-type: none"> Spread (Magnetic Disturbance) Anomaly (Ferrous/Iron Spike) Spread (Ferrous/Iron Spike) | <ul style="list-style-type: none"> Linear Trend (Probable Archaeology) Linear Trend (Possible Archaeology) Linear Trend (Unclear Origin) | <ul style="list-style-type: none"> Linear Trend (Agricultural, Ridge and Furrow) Linear Trend (Drainage) Linear Trend (Geology/Natural) |
|---|--|--|---|--|



Drawing Number: 05/40766/GEO/6.5/01
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 Approved by: JL Date: 19/08/2025

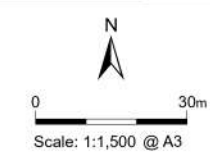
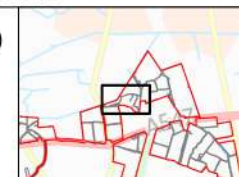




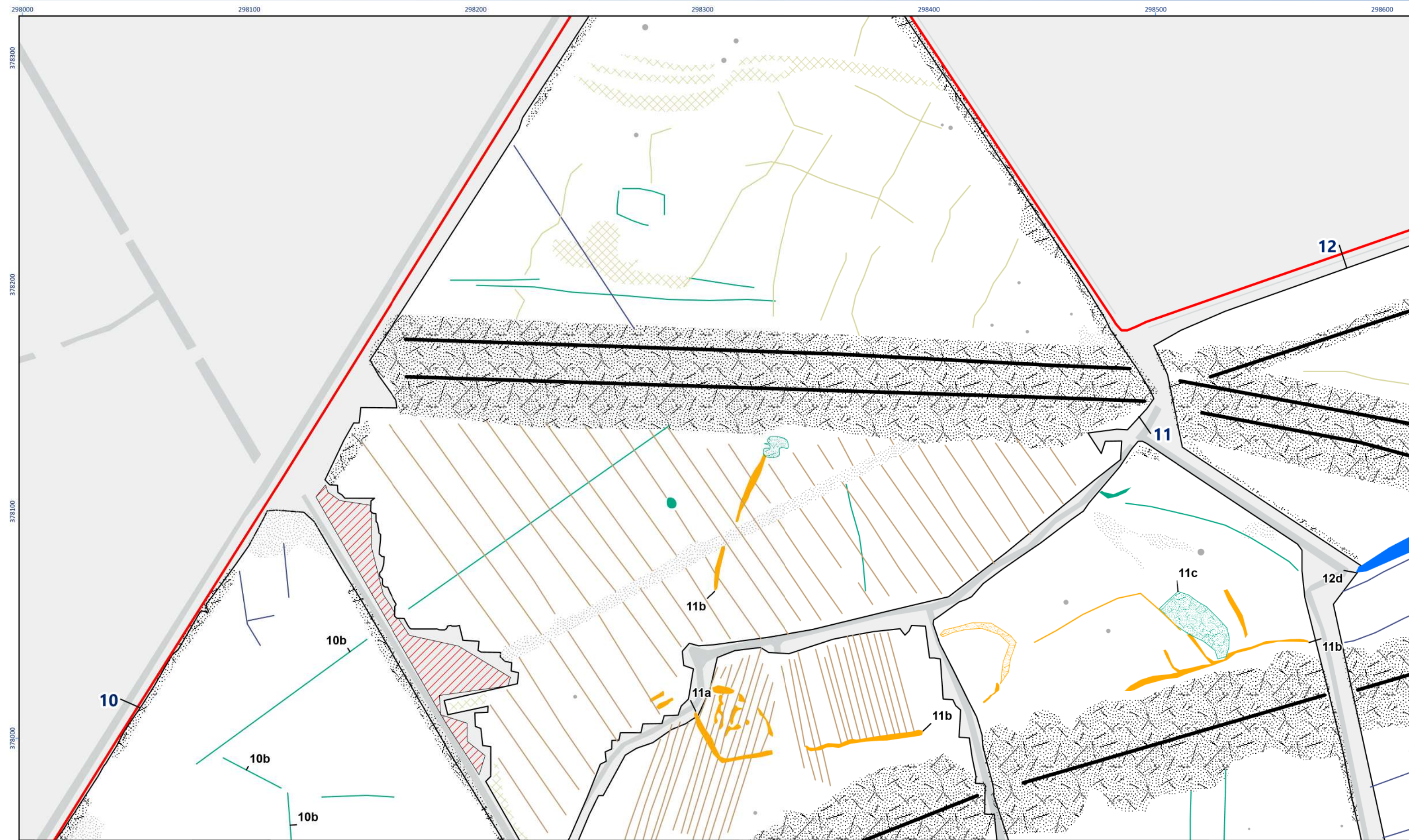
Solar Site: Interpretation of Processed Gradiometer Data

Figure
6.6

- | | | | |
|--|---|---|--|
| Proposed Development Area | Anomaly (Geology/Natural) | Spread (Ferrous/Iron Spike) | Linear Trend (Geology/Natural) |
| Anomaly (Possible Archaeology) | Spread (Geology/Natural) | Linear Trend (Unclear Origin) | Linear Trend (Service) |
| Spread (Historic Feature) | Spread (Magnetic Disturbance) | Linear Trend (Agricultural, Ridge and Furrow) | |
| Anomaly (Unclear Origin) | Anomaly (Ferrous/Iron Spike) | | |



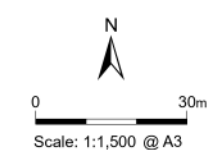
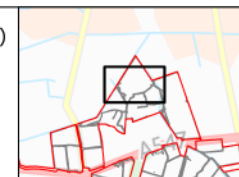
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Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



Solar Site: Interpretation of Processed Gradiometer Data

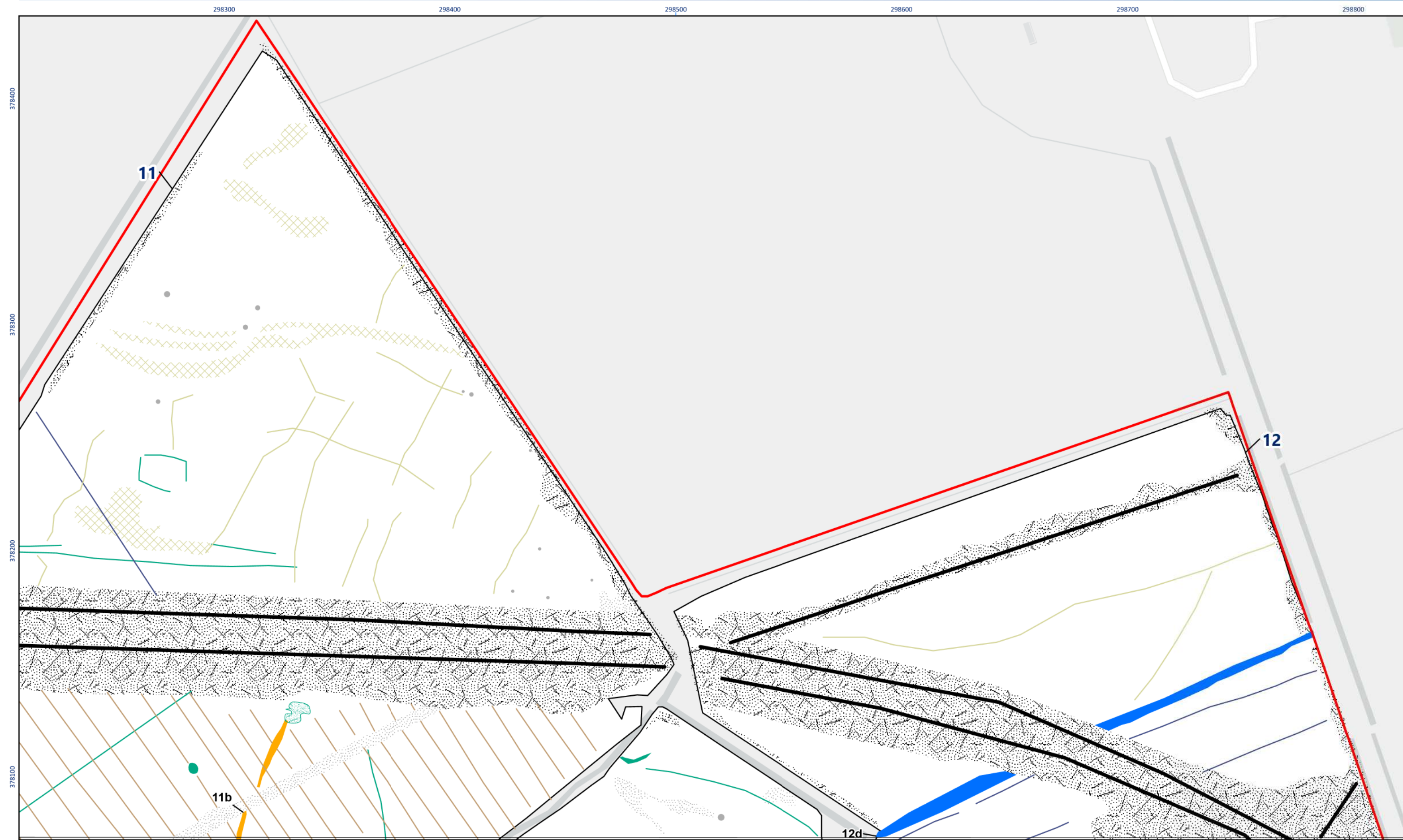
Figure
6.7

- | | | | |
|---|--|---|--|
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|---|--|---|--|



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Approved by: JL	Date: 19/08/2025

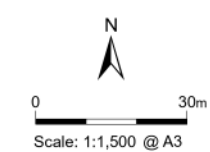
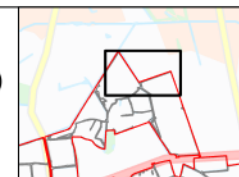




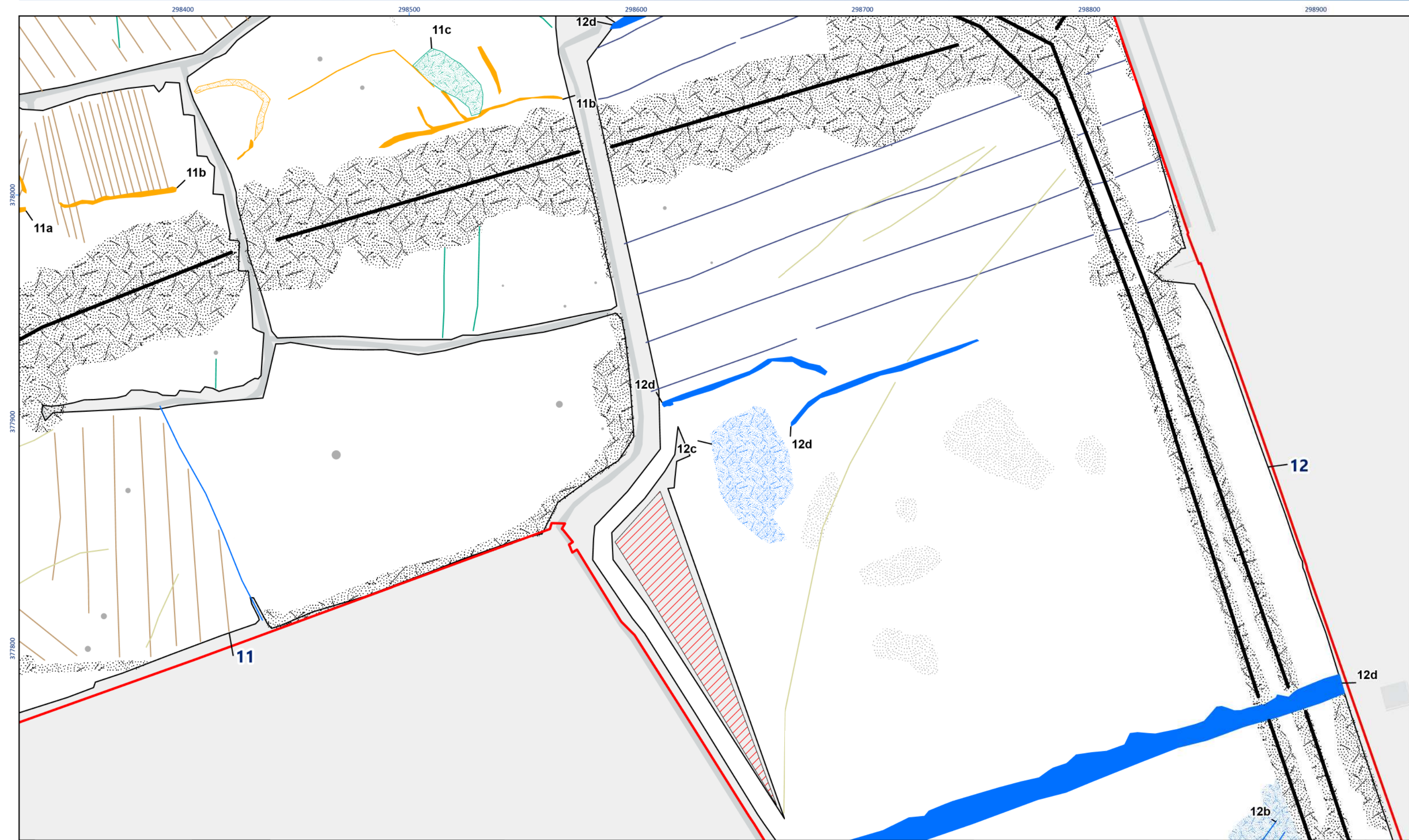
Solar Site: Interpretation of Processed Gradiometer Data

Figure
6.8

- | | | | |
|--|---|---|--|
| □ Proposed Development Area | ▨ Spread (Unclear Origin) | ▨ Spread (Ferroous/Iron Spike) | — Linear Trend (Drainage) |
| — Anomaly (Possible Archaeology) | ▨ Spread (Geology/Natural) | — Linear Trend (Unclear Origin) | — Linear Trend (Geology/Natural) |
| — Anomaly (Historic Feature) | ▨ Spread (Magnetic Disturbance) | — Linear Trend (Agricultural, Ridge and Furrow) | — Linear Trend (Service) |
| ● Anomaly (Unclear Origin) | ▨ Anomaly (Ferroous/Iron Spike) | | |



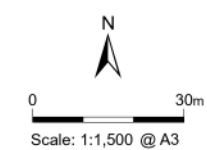
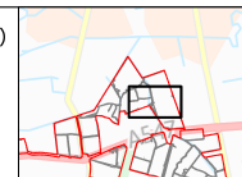
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Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



Solar Site: Interpretation of Processed Gradiometer Data

Figure
6.9

- | | | | | |
|--|---|---|--|--|
| ■ Proposed Development Area | ■ Spread (Historic Feature) | ■ Spread (Ferrous/Iron Spike) | — Linear Trend (Unclear Origin) | — Linear Trend (Geology/Natural) |
| ■ Anomaly (Possible Archaeology) | ■ Spread (Unclear Origin) | — Linear Trend (Possible Archaeology) | — Linear Trend (Agricultural, Ridge and Furrow) | — Linear Trend (Service) |
| ■ Spread (Possible Archaeology) | ■ Spread (Magnetic Disturbance) | — Linear Trend (Historic Feature) | — Linear Trend (Drainage) | |
| ■ Anomaly (Historic Feature) | ■ Anomaly (Ferrous/Iron Spike) | | | |



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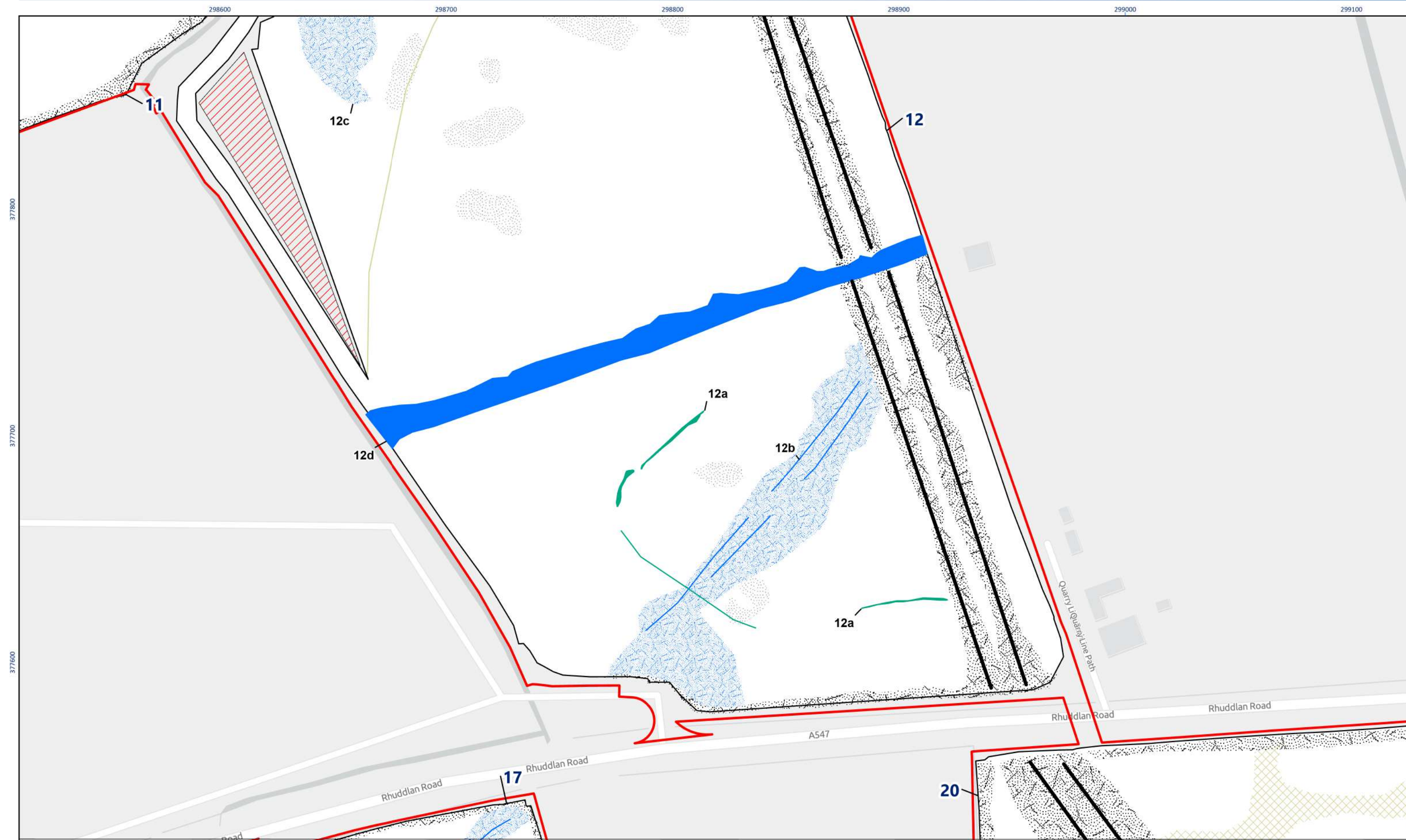
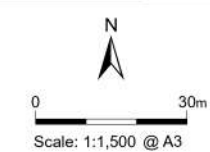
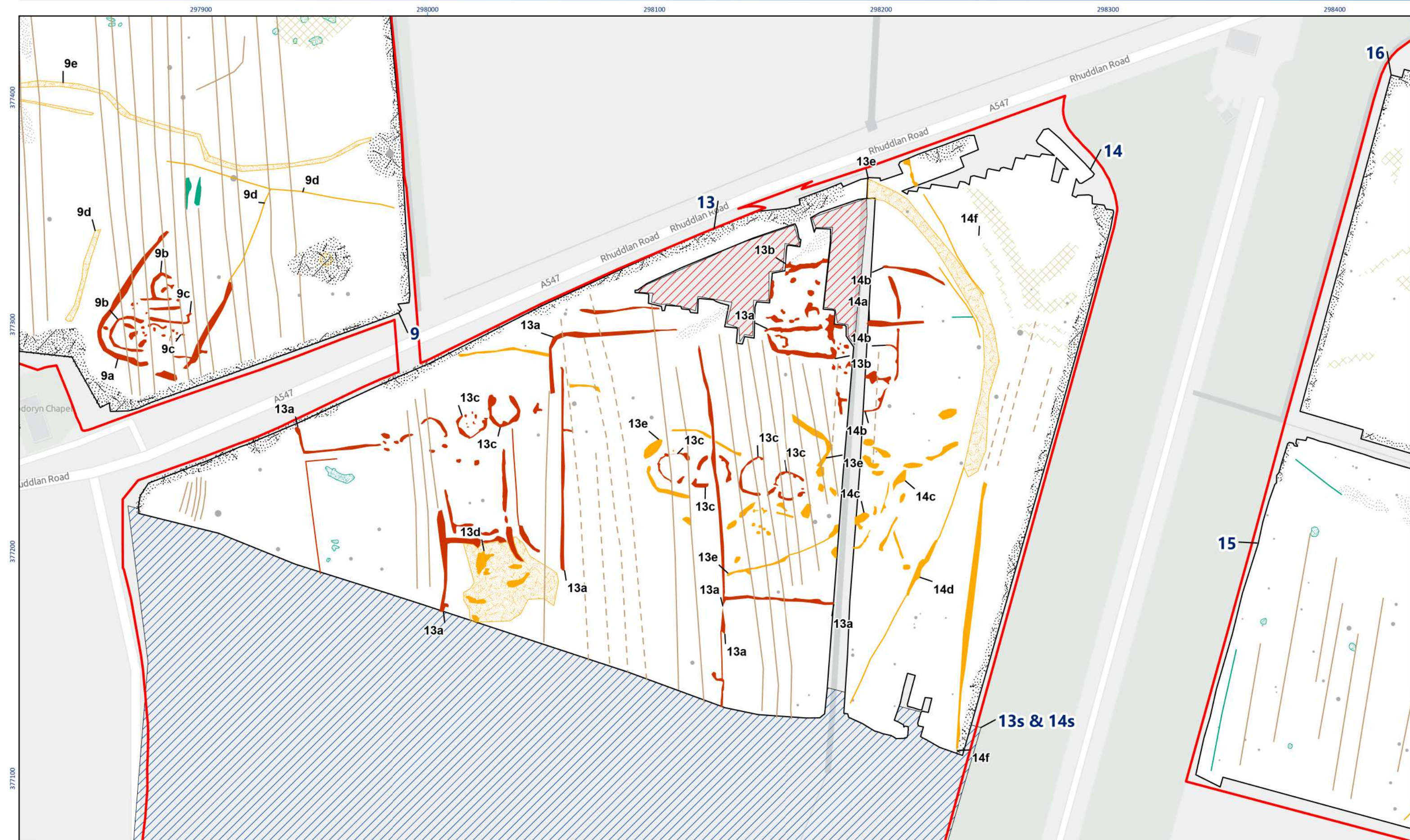


Figure
6.10

- | | | | |
|---|--|---|--|
| Proposed Development Area | Anomaly (Unclear Origin) | Spread (Ferrous/Iron Spike) | Linear Trend (Geology/Natural) |
| Anomaly (Historic Feature) | Spread (Geology/Natural) | Linear Trend (Historic Feature) | Linear Trend (Service) |
| Spread (Historic Feature) | Spread (Magnetic Disturbance) | Linear Trend (Unclear Origin) | |



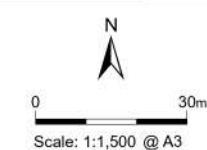
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Approved by: JL	Date: 19/08/2025



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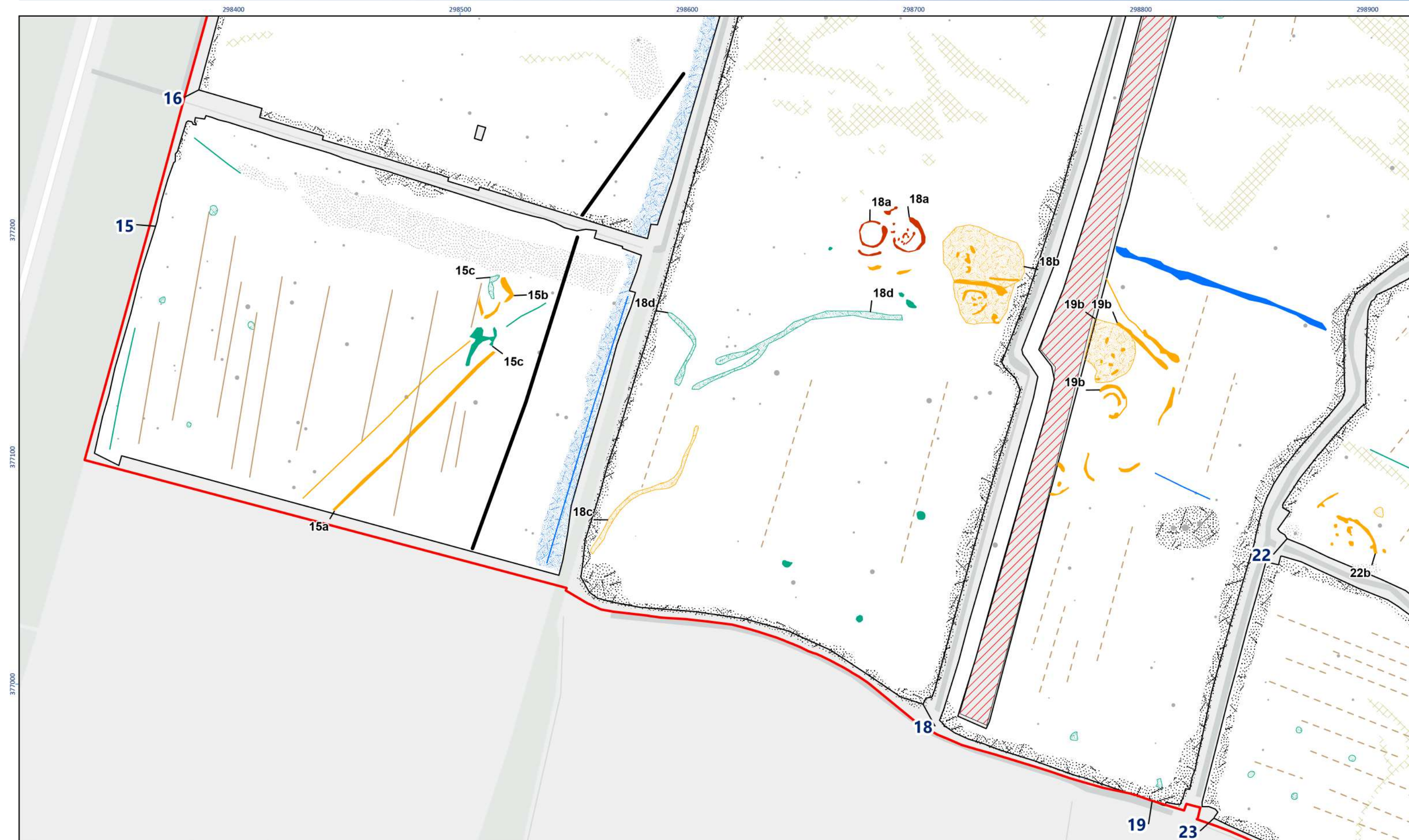
Figure
6.11

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|---|--|--|---|---|
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|---|--|--|---|---|



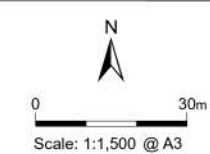
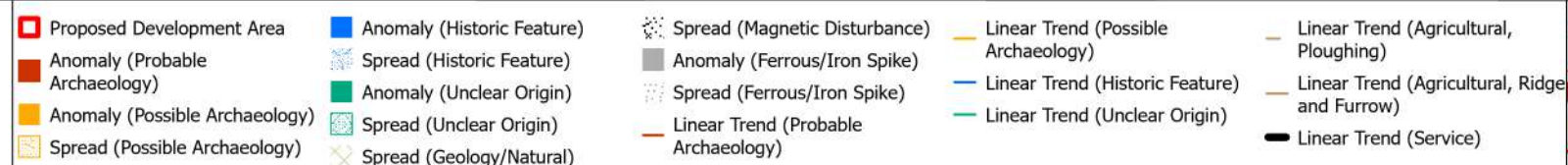
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AOC
 Archaeology
 Group



Solar Site: Interpretation of Processed Gradiometer Data

Figure
6.12



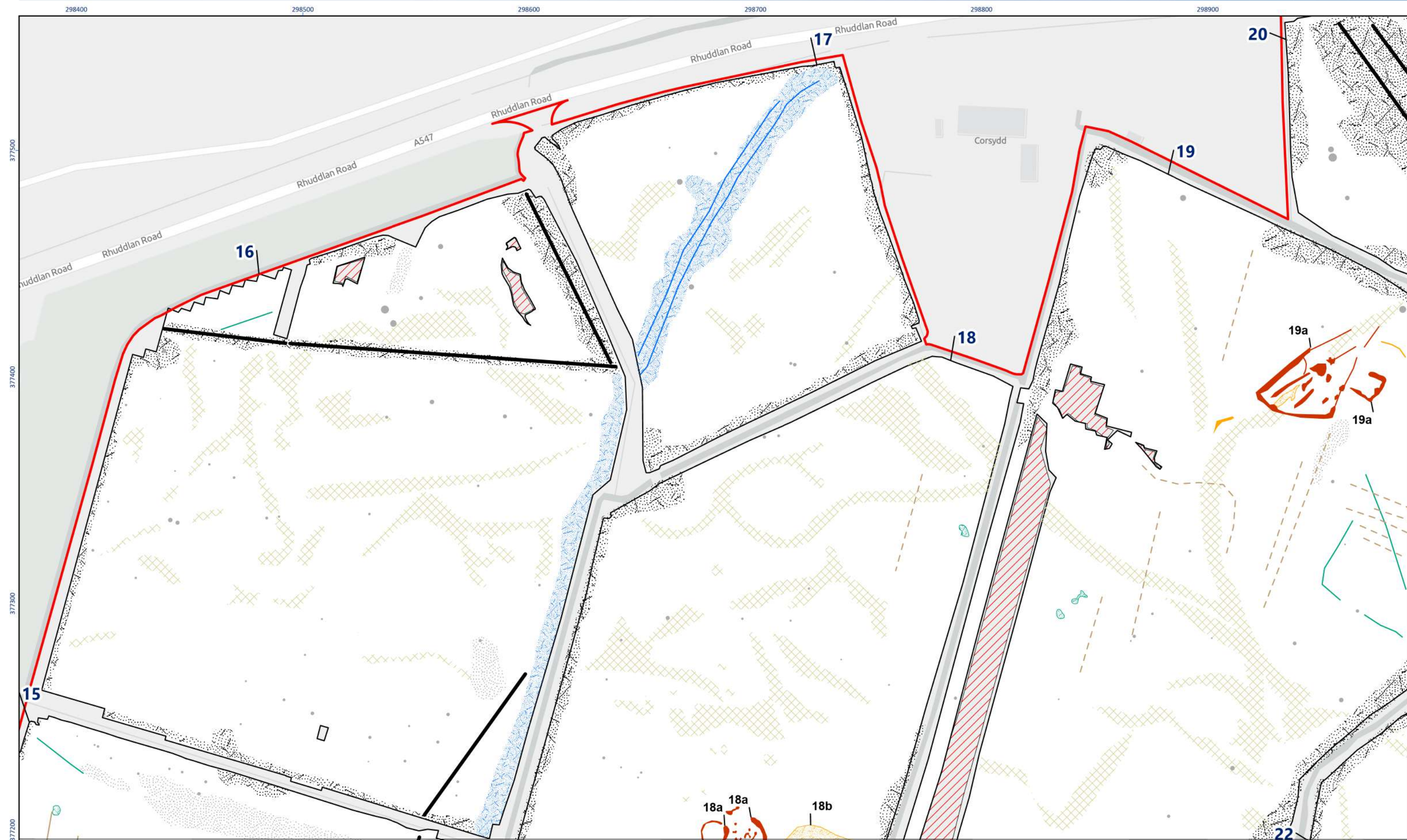
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Approved by: JL Date: 19/08/2025

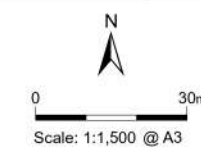
AOC
Archaeology
Group



Solar Site: Interpretation of Processed Gradiometer Data

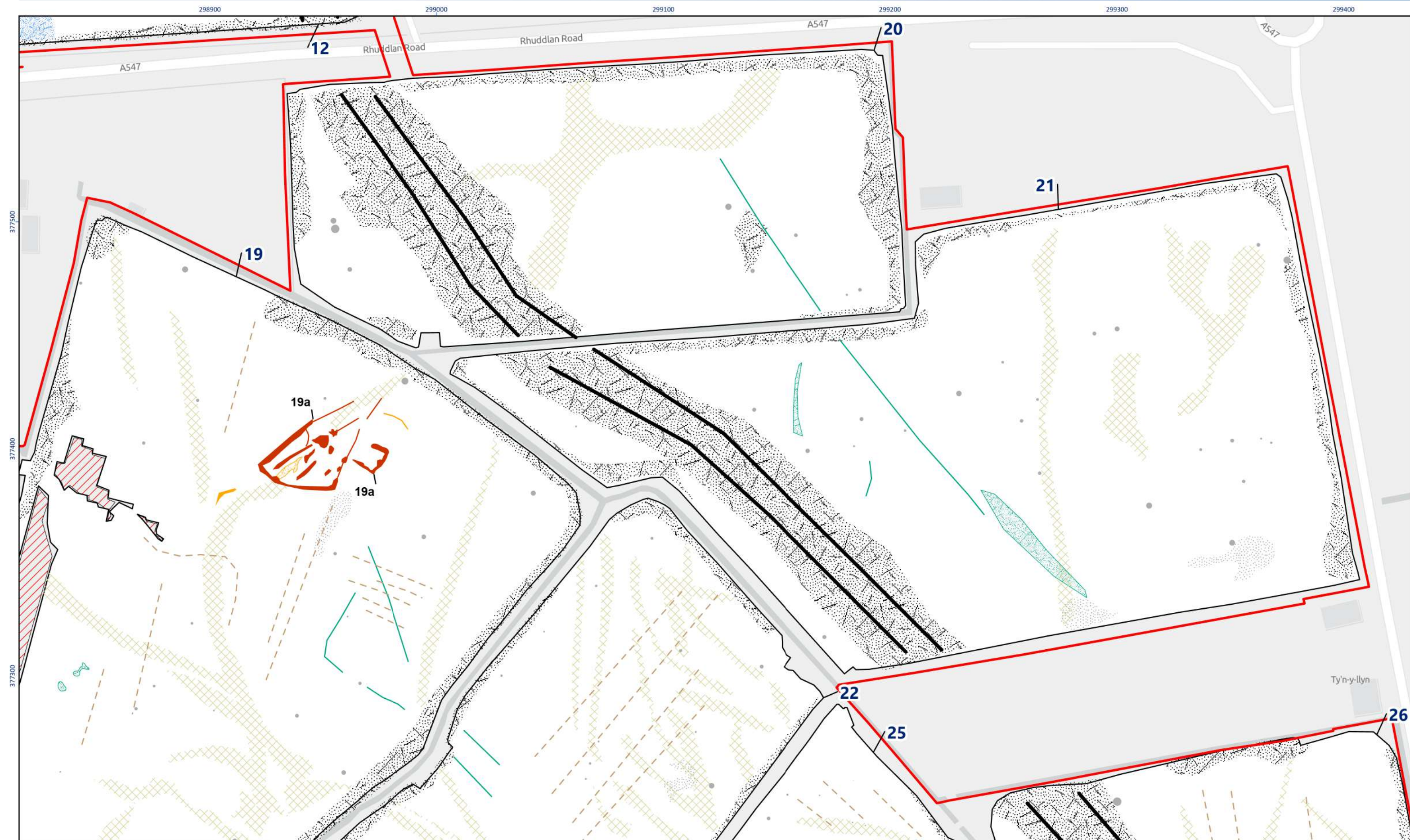
Figure
6.13

- | | | | | |
|--|---|--|---|---|
| <ul style="list-style-type: none"> Proposed Development Area Anomaly (Probable Archaeology) Anomaly (Possible Archaeology) Spread (Possible Archaeology) | <ul style="list-style-type: none"> Spread (Historic Feature) Spread (Unclear Origin) Spread (Geology/Natural) Spread (Magnetic Disturbance) | <ul style="list-style-type: none"> Anomaly (Ferrous/Iron Spike) Spread (Ferrous/Iron Spike) Linear Trend (Probable Archaeology) | <ul style="list-style-type: none"> Linear Trend (Possible Archaeology) Linear Trend (Historic Feature) Linear Trend (Unclear Origin) | <ul style="list-style-type: none"> Linear Trend (Agricultural, Ploughing) Linear Trend (Agricultural, Ridge and Furrow) Linear Trend (Service) |
|--|---|--|---|---|



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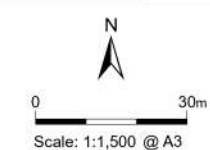




Solar Site: Interpretation of Processed Gradiometer Data

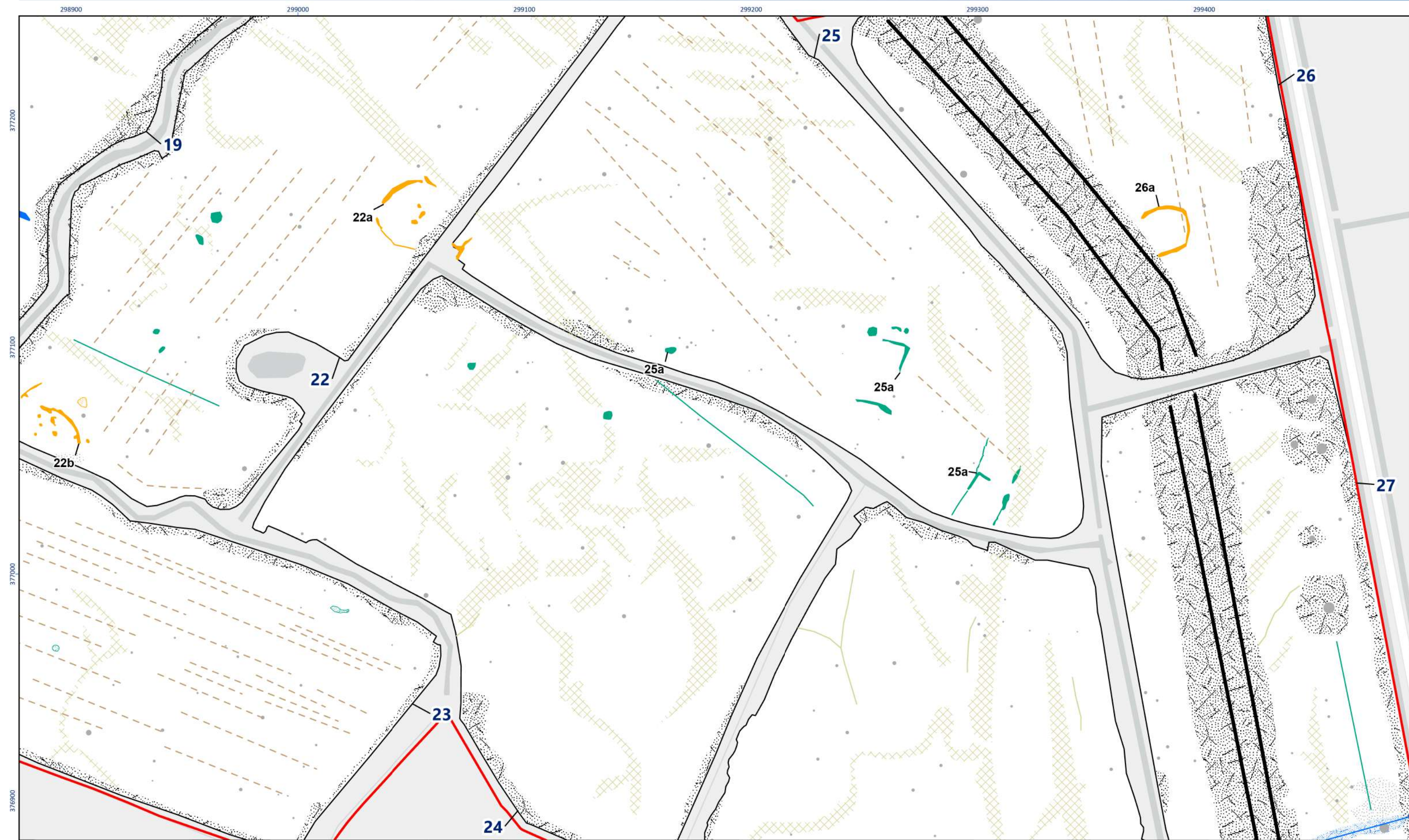
Figure
6.14

- | | | | |
|---|--|--|--|
| <ul style="list-style-type: none"> Proposed Development Area Anomaly (Probable Archaeology) Anomaly (Possible Archaeology) | <ul style="list-style-type: none"> Spread (Possible Archaeology) Spread (Historic Feature) Spread (Unclear Origin) Spread (Geology/Natural) | <ul style="list-style-type: none"> Spread (Magnetic Disturbance) Anomaly (Ferrous/Iron Spike) Spread (Ferrous/Iron Spike) | <ul style="list-style-type: none"> Linear Trend (Probable Archaeology) Linear Trend (Possible Archaeology) Linear Trend (Unclear Origin) Linear Trend (Agricultural, Ploughing) Linear Trend (Service) |
|---|--|--|--|



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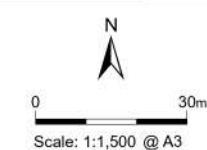




Solar Site: Interpretation of Processed Gradiometer Data

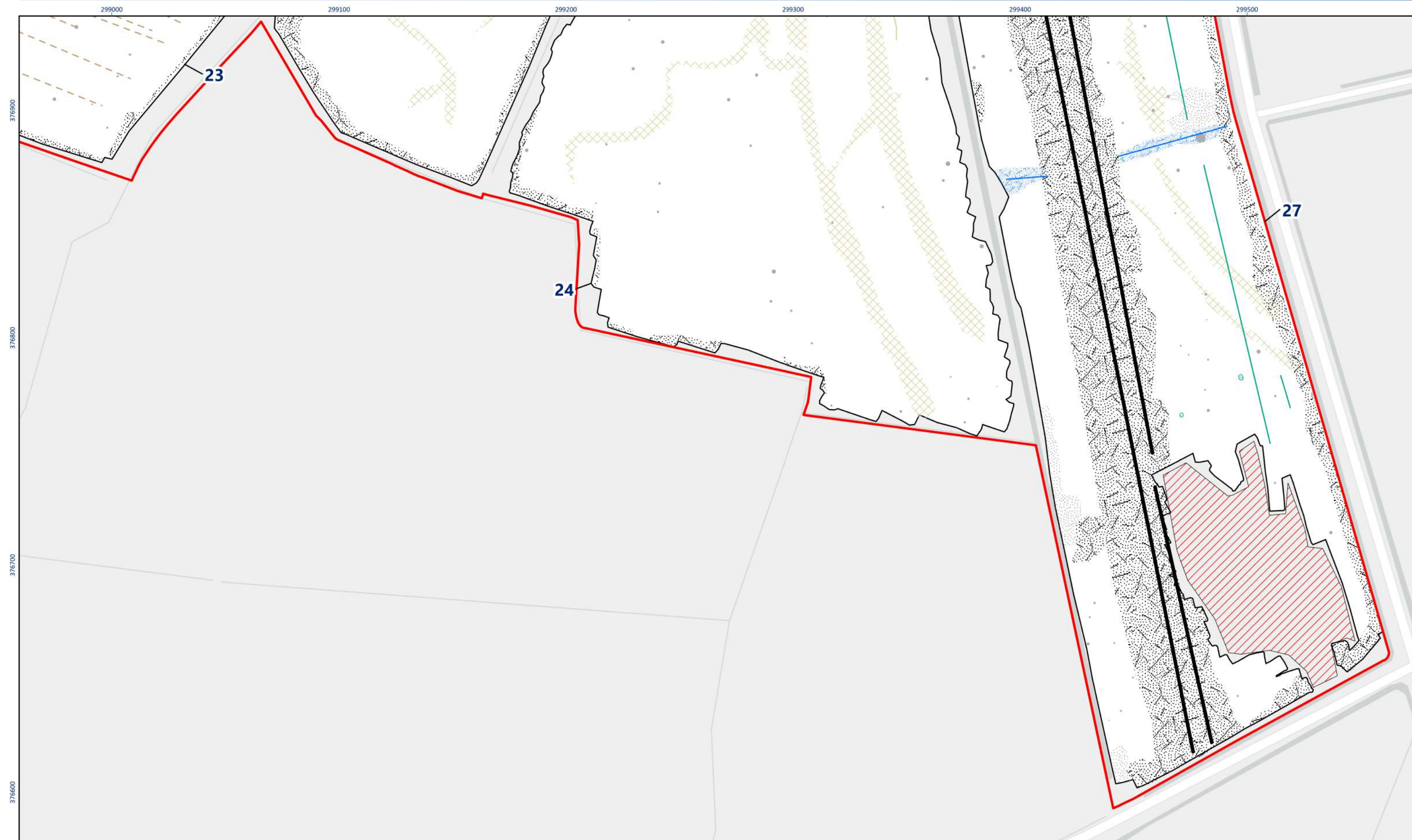
Figure
6.15

- | | | | | |
|--|--|--|---|--|
| <ul style="list-style-type: none"> Proposed Development Area Anomaly (Possible Archaeology) Spread (Possible Archaeology) Anomaly (Historic Feature) | <ul style="list-style-type: none"> Spread (Historic Feature) Anomaly (Unclear Origin) Spread (Unclear Origin) Spread (Geology/Natural) | <ul style="list-style-type: none"> Spread (Magnetic Disturbance) Anomaly (Ferrous/Iron Spike) Spread (Ferrous/Iron Spike) | <ul style="list-style-type: none"> Linear Trend (Possible Archaeology) Linear Trend (Historic Feature) Linear Trend (Unclear Origin) | <ul style="list-style-type: none"> Linear Trend (Agricultural, Ploughing) Linear Trend (Geology/Natural) Linear Trend (Service) |
|--|--|--|---|--|



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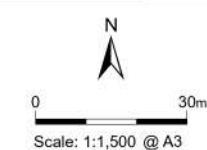
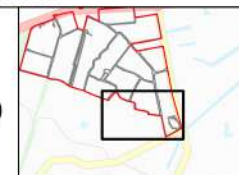




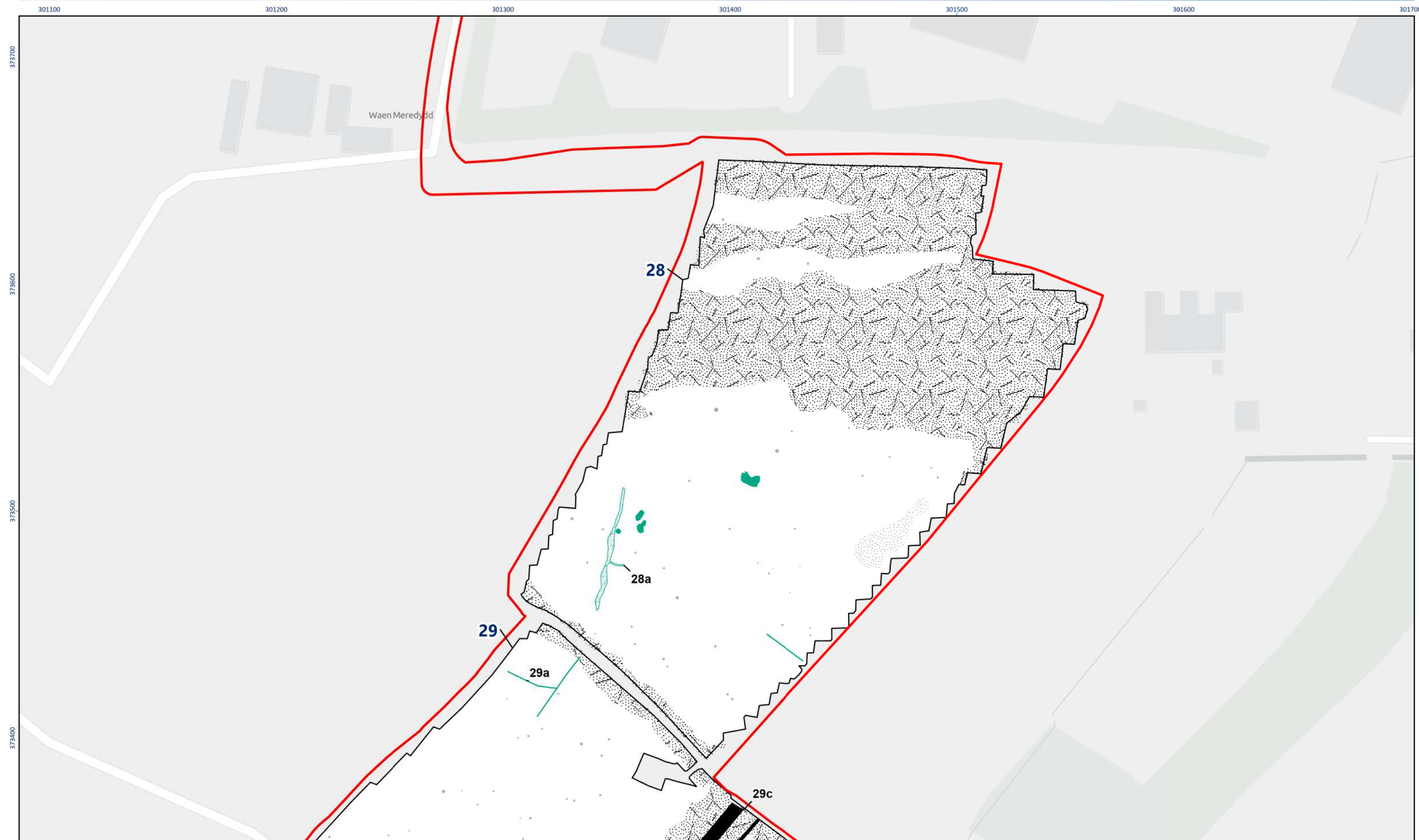
Solar Site: Interpretation of Processed Gradiometer Data

Figure
6.16

- | | | | |
|--|---|--|--|
| Proposed Development Area | Spread (Geology/Natural) | Spread (Ferrous/Iron Spike) | Linear Trend (Agricultural, Ploughing) |
| Spread (Historic Feature) | Spread (Magnetic Disturbance) | Linear Trend (Historic Feature) | Linear Trend (Geology/Natural) |
| Spread (Unclear Origin) | Anomaly (Ferrous/Iron Spike) | Linear Trend (Unclear Origin) | Linear Trend (Service) |



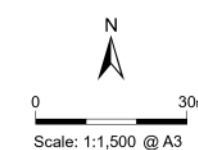
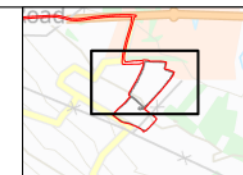
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Created by: SO	Date: 19/08/2025
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BESS Site: Interpretation of Processed Gradiometer Data

Figure
6.17

- | | | |
|--|--|---|
| Proposed Development Area | Anomaly (Magnetic Disturbance) | Spread (Ferrous/Iron Spike) |
| Anomaly (Unclear Origin) | Spread (Magnetic Disturbance) | Linear Trend (Unclear Origin) |
| Spread (Unclear Origin) | Anomaly (Ferrous/Iron Spike) | Linear Trend (Service) |



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301100

301200

301300

301400

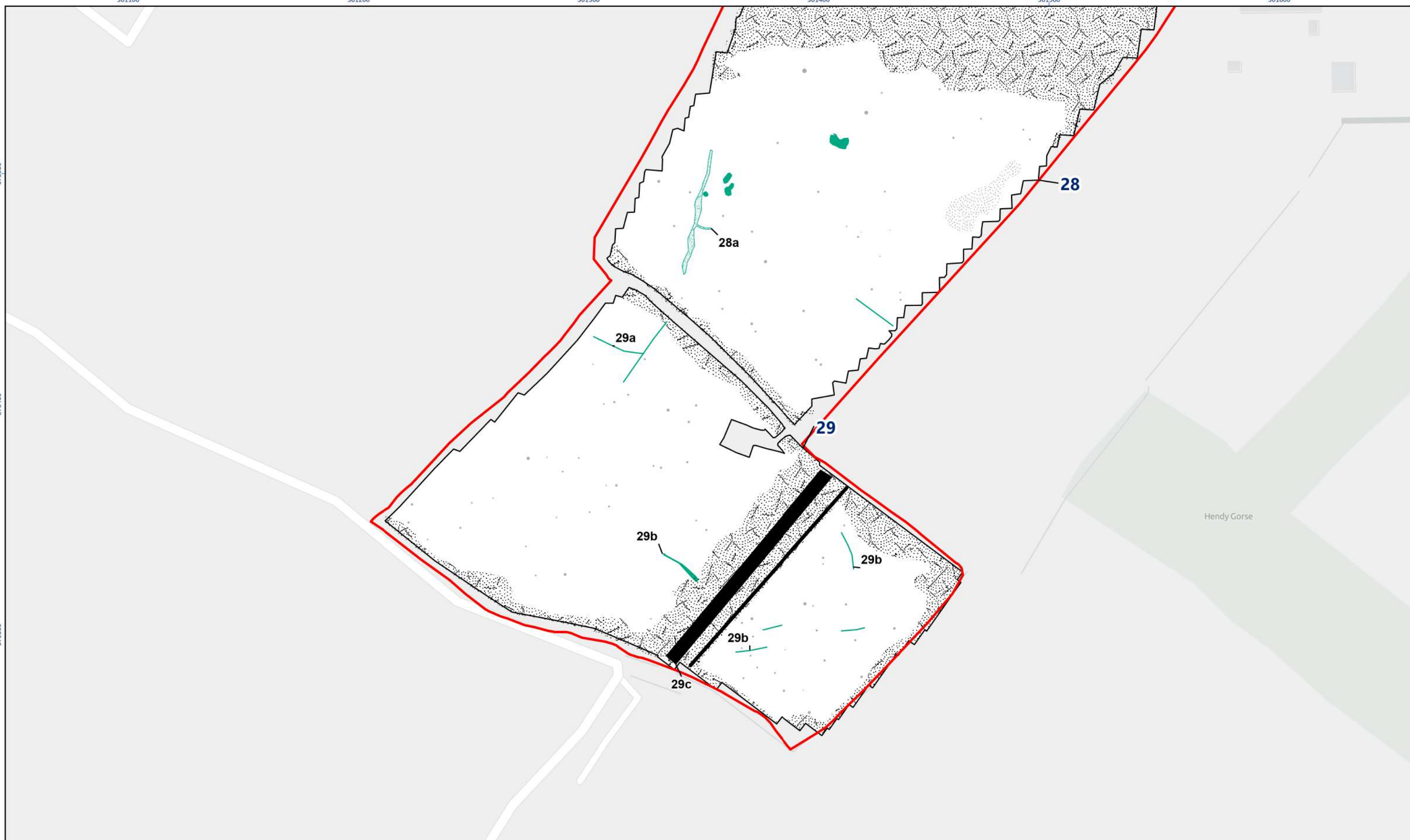
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301600

373500

373400

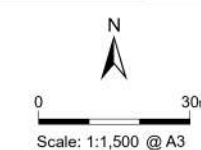
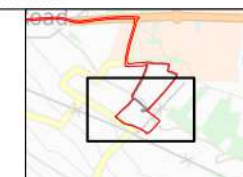
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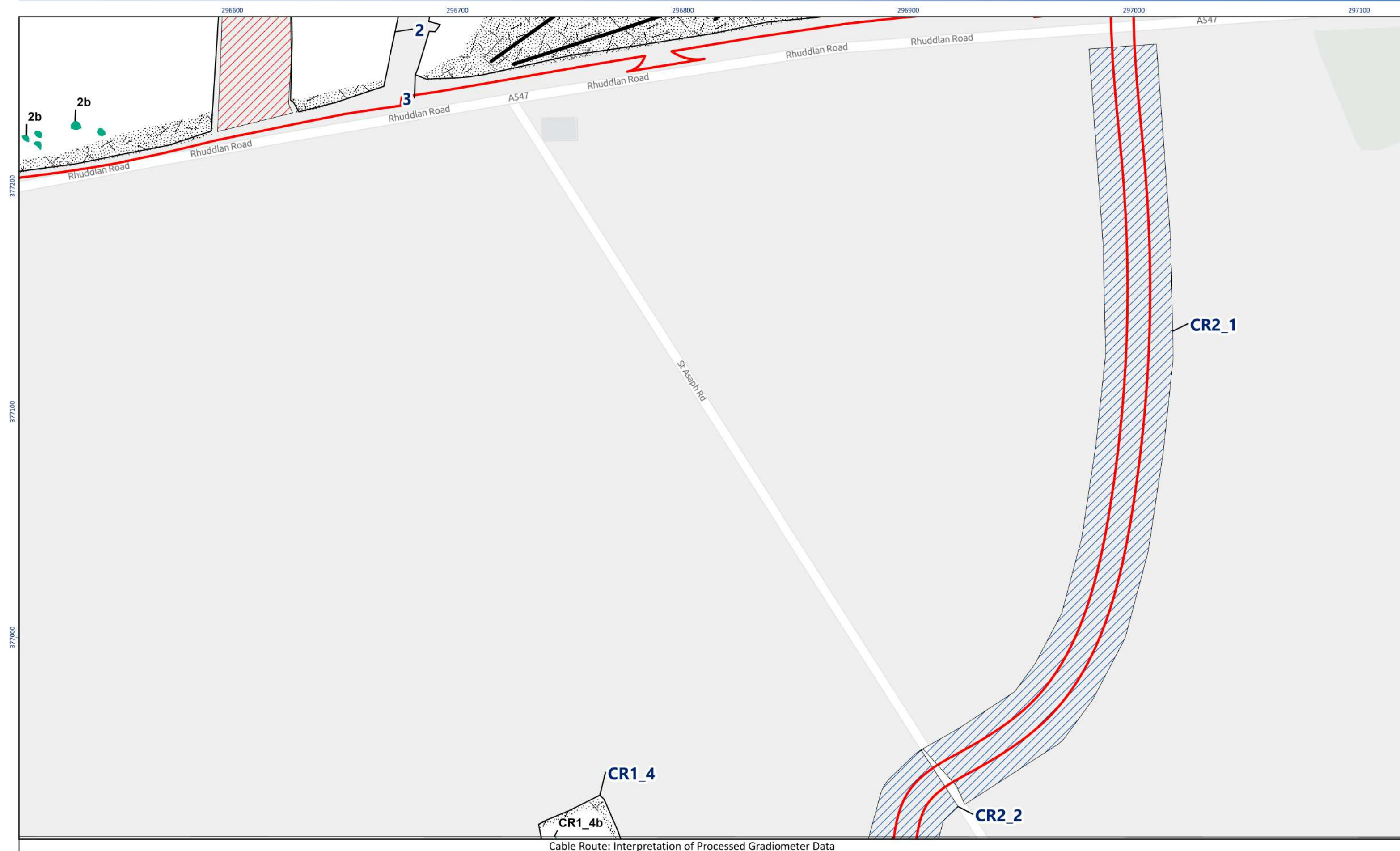
BESS Site: Interpretation of Processed Gradiometer Data

Figure
6.18

- | | | |
|--|--|---|
| Proposed Development Area | Anomaly (Magnetic Disturbance) | Spread (Ferrous/Iron Spike) |
| Anomaly (Unclear Origin) | Spread (Magnetic Disturbance) | Linear Trend (Unclear Origin) |
| Spread (Unclear Origin) | Anomaly (Ferrous/Iron Spike) | Linear Trend (Service) |



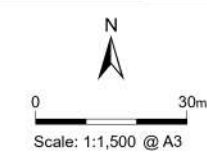
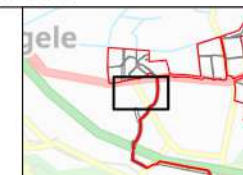
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Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



Cable Route: Interpretation of Processed Gradiometer Data

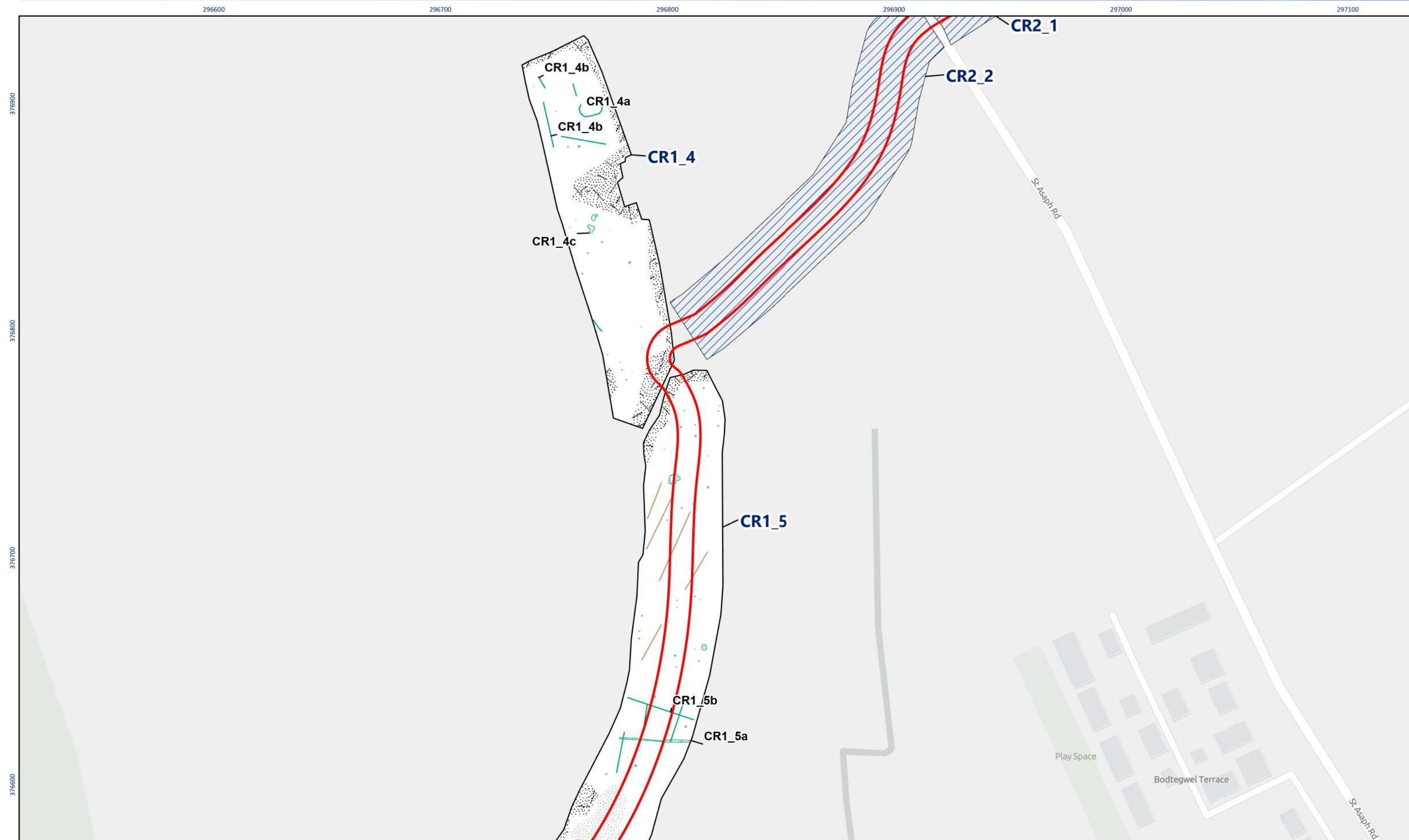
Figure
6.19

- Proposed Development Area
- Linear Trend (Unclear Origin)
- Anomaly (Unclear Origin)
- Linear Trend (Service)
- Spread (Magnetic Disturbance)



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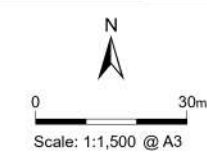
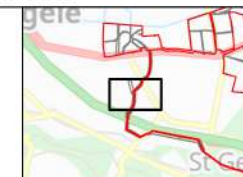
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Group



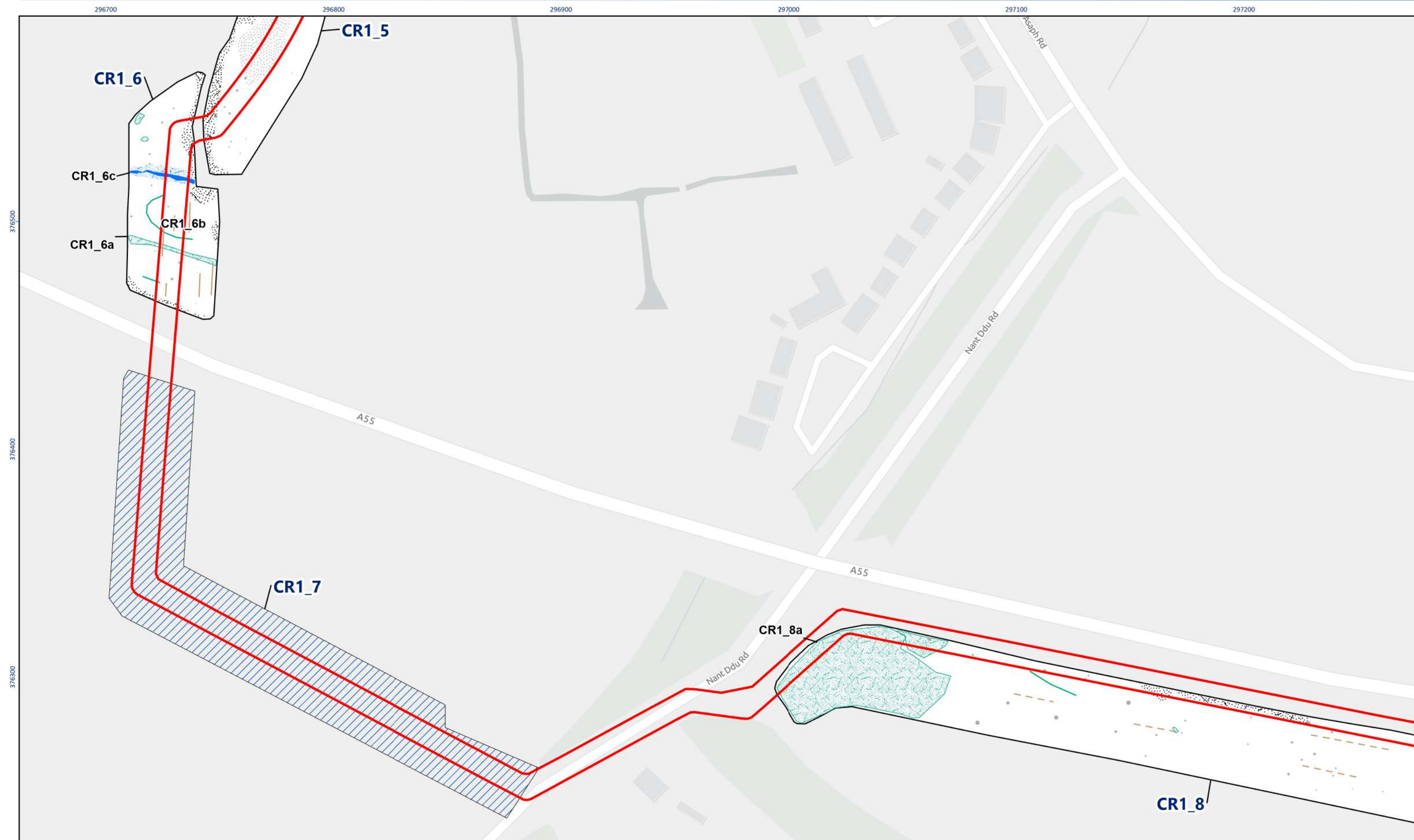
Cable Route: Interpretation of Processed Gradiometer Data

Figure
6.20

- | | | |
|--|--|---|
| Proposed Development Area | Anomaly (Ferrous/Iron Spike) | Linear Trend (Agricultural, Ridge and Furrow) |
| Spread (Unclear Origin) | Spread (Ferrous/Iron Spike) | |
| Spread (Magnetic Disturbance) | Linear Trend (Unclear Origin) | |



Drawing Number: 05/40766/GEO/6.20/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



Cable Route: Interpretation of Processed Gradiometer Data

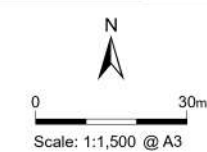
Figure
6.21

- Proposed Development Area
- Anomaly (Historic Feature)
- Spread (Historic Feature)

- Spread (Unclear Origin)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)

- Spread (Ferrous/Iron Spike)
- Linear Trend (Unclear Origin)

- Linear Trend (Agricultural, Ploughing)
- Linear Trend (Agricultural, Ridge and Furrow)



Drawing Number: 05/40766/GEO/6.21/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

297200

297300

297400

297500

297600

297700

St Asaph Rd

Smithy Cottage

CR1_8

A55

CR1_9

A55

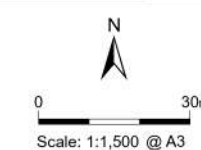
CR1_9a

Primrose Hill

Cable Route: Interpretation of Processed Gradiometer Data

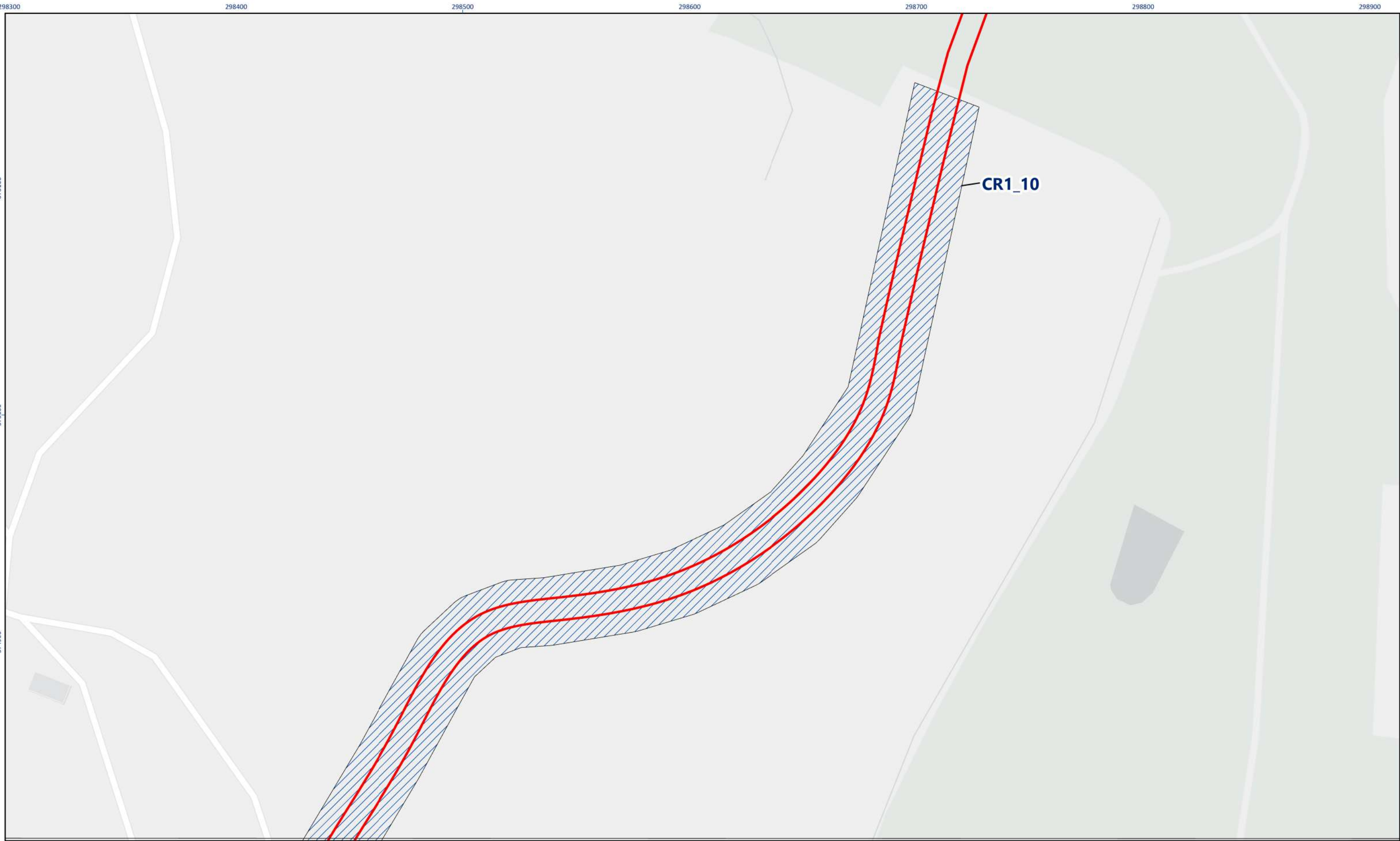
Figure
6.22

- Proposed Development Area
- Spread (Historic Feature)
- Spread (Unclear Origin)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Linear Trend (Service)
- Linear Trend (Agricultural, Ploughing)
- Linear Trend (Unclear Origin)



Drawing Number: 05/40766/GEO/6.22/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

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Cable Route: Interpretation of Processed Gradiometer Data

Figure
6.23

Proposed Development Area

N

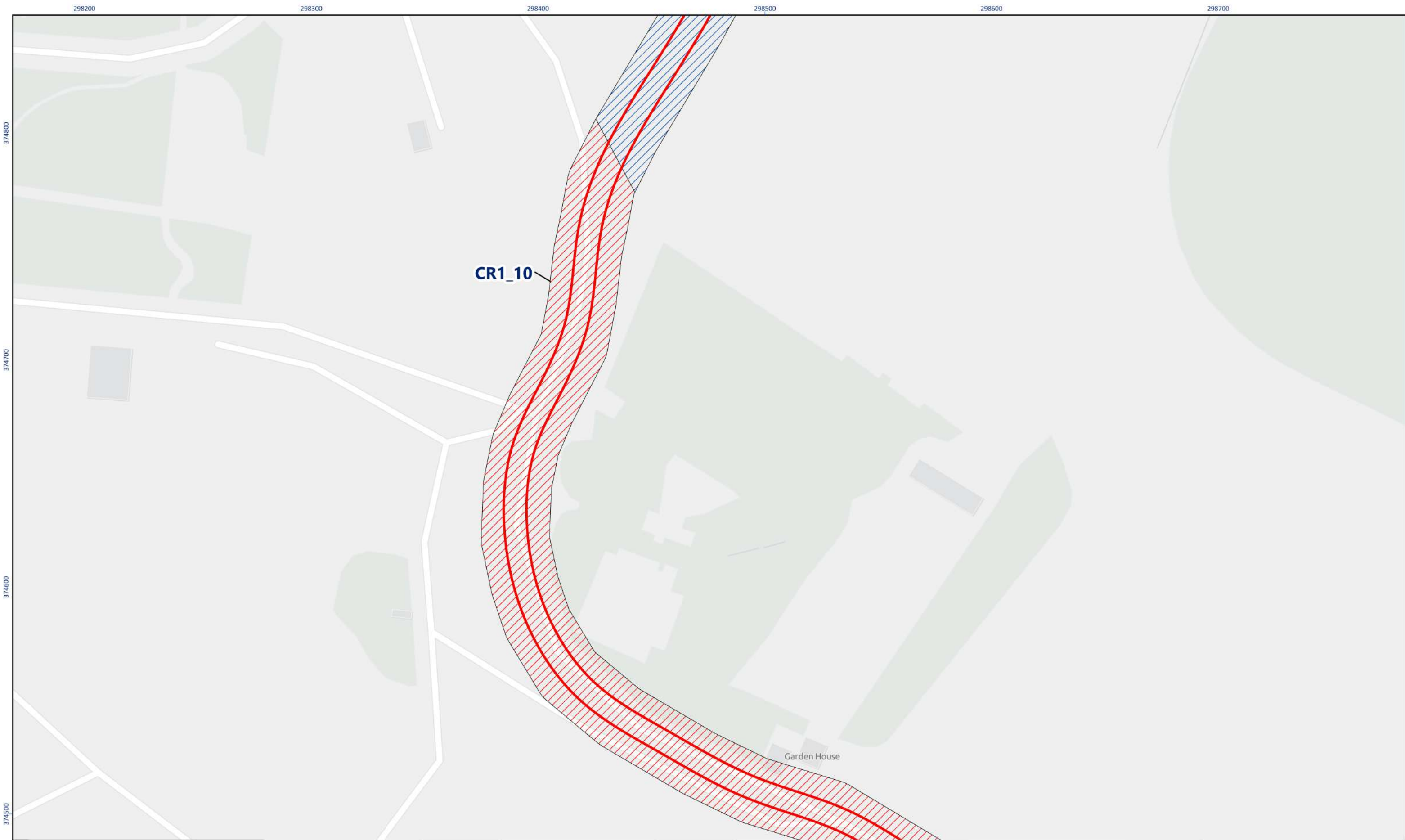
0 30m

Scale: 1:1,500 @ A3

Drawing Number: 05/40766/GEO/6.23/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

AOC

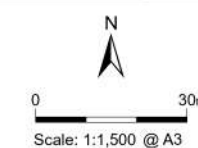
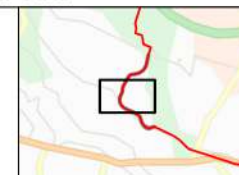
Archaeology Group



Cable Route: Interpretation of Processed Gradiometer Data

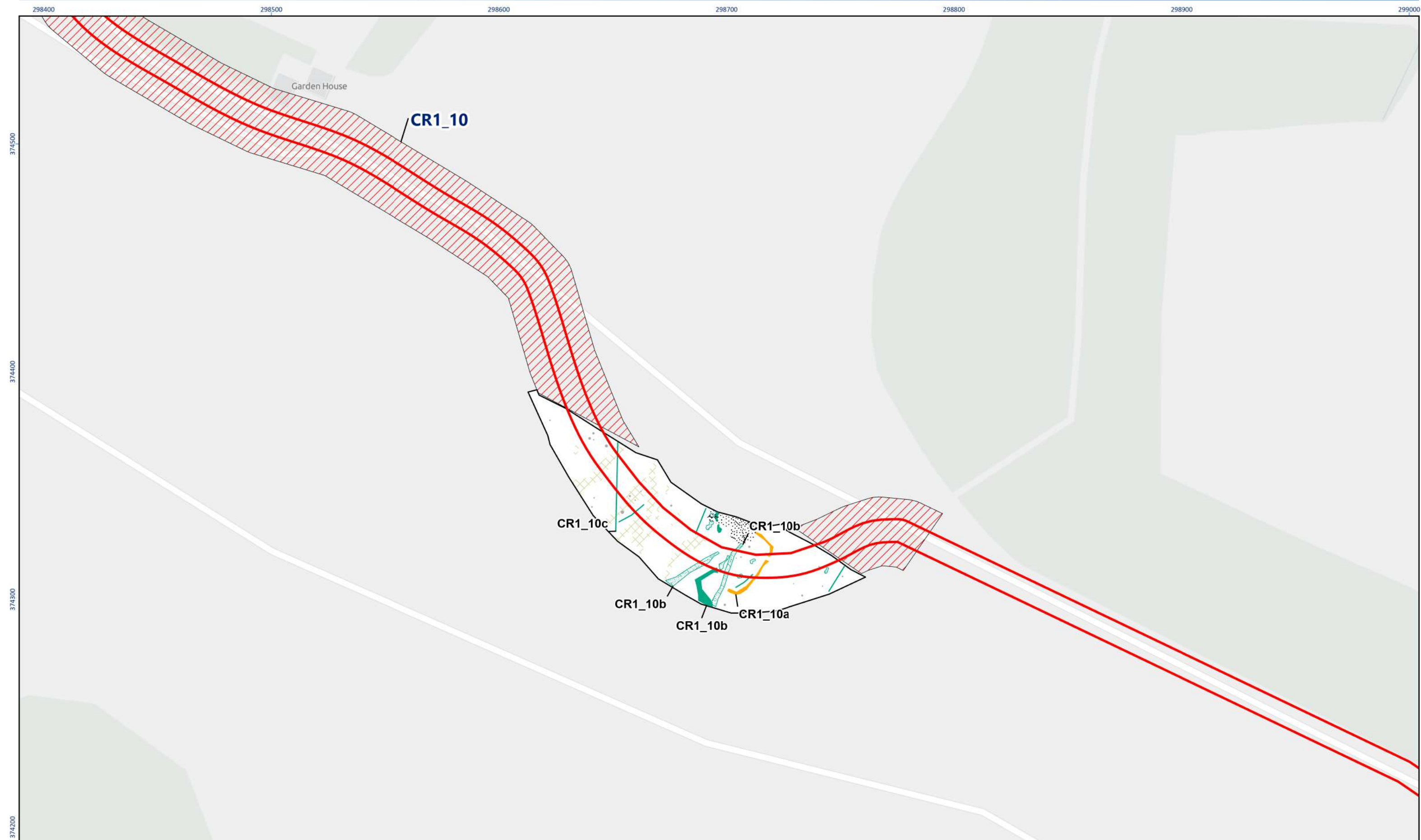
Figure
6.24

Proposed Development Area



Drawing Number: 05/40766/GEO/6.24/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

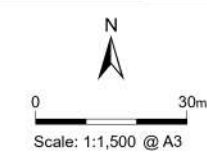
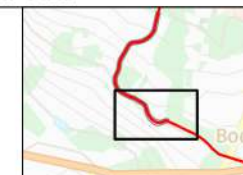




Cable Route: Interpretation of Processed Gradiometer Data

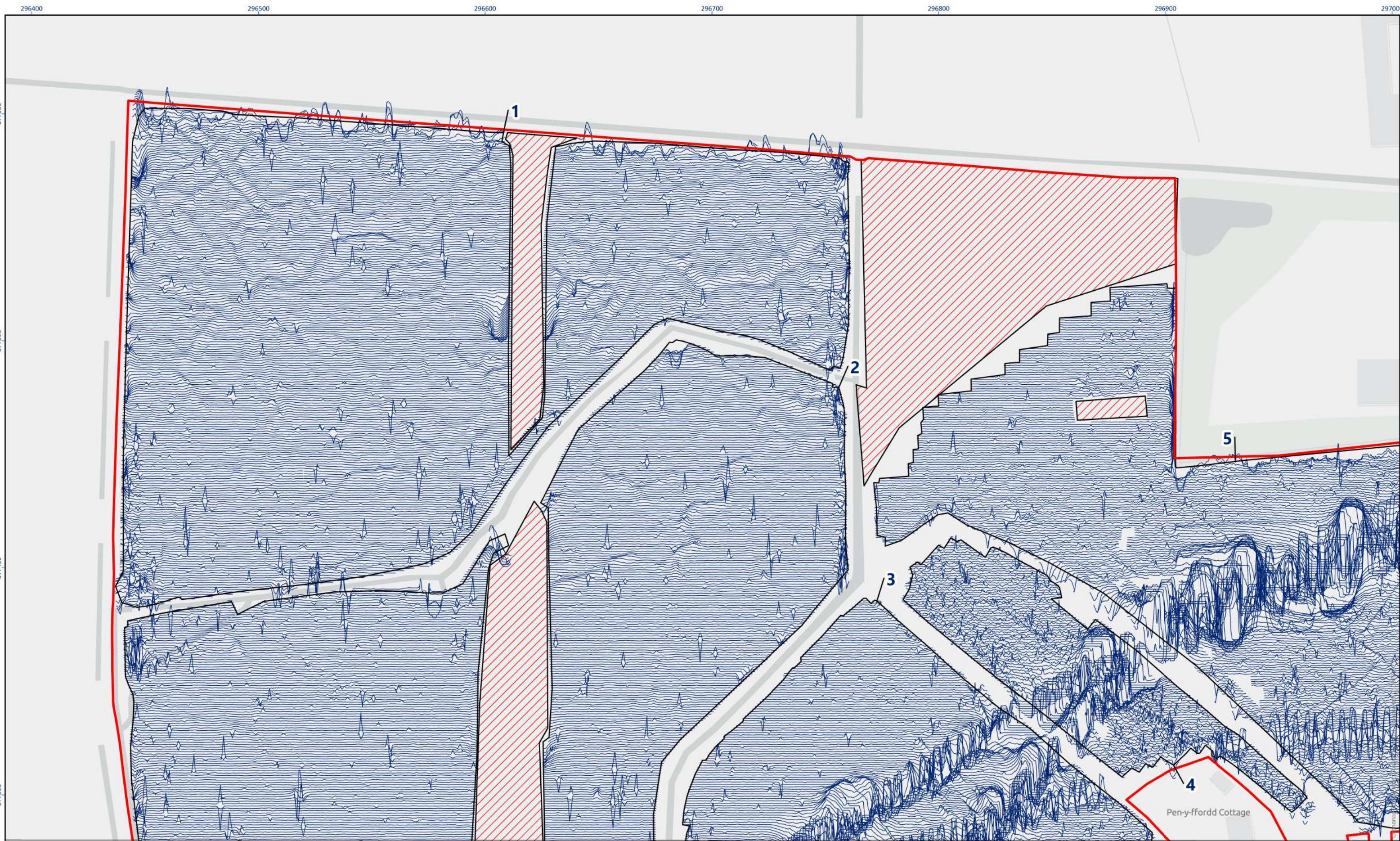
Figure
6.25

- | | | |
|--------------------------------|-------------------------------|-------------------------------|
| Proposed Development Area | Spread (Unclear Origin) | Anomaly (Ferrous/Iron Spike) |
| Anomaly (Possible Archaeology) | Spread (Geology/Natural) | Linear Trend (Unclear Origin) |
| Anomaly (Unclear Origin) | Spread (Magnetic Disturbance) | |



Drawing Number: 05/40766/GEO/6.25/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

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Solar Site: Processed Gradiometer Data - XY Trace

Figure

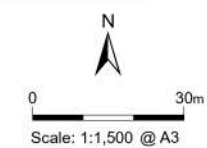
7.1



Proposed Development Area



Unsuitable for Survey



Drawing Number: 05/40766/GEO/7.1/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



Solar Site: Processed Gradiometer Data - XY Trace

Figure
7.2



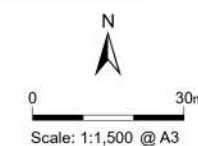
Proposed Development Area



Outstanding



Unsuitable for Survey

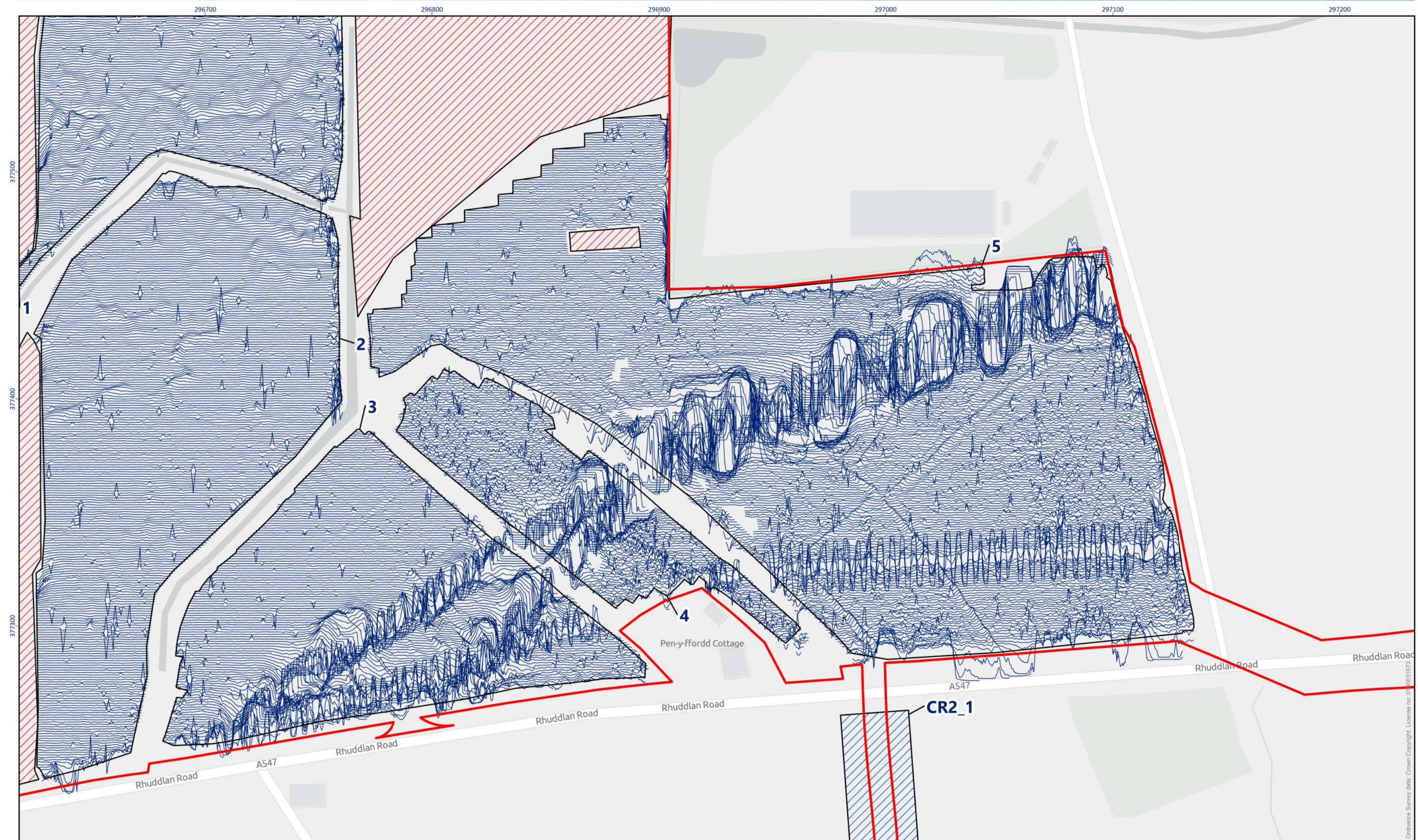


Drawing Number: 05/40766/GEO/7.2/01

Created by: SO Date: 19/08/2025

Checked by: AC Date: 19/08/2025

Approved by: JL Date: 19/08/2025

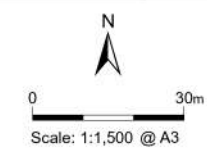


Solar Site: Processed Gradiometer Data - XY Trace

Figure
7.3



 Proposed Development Area
 Outstanding
 Unsuitable for Survey

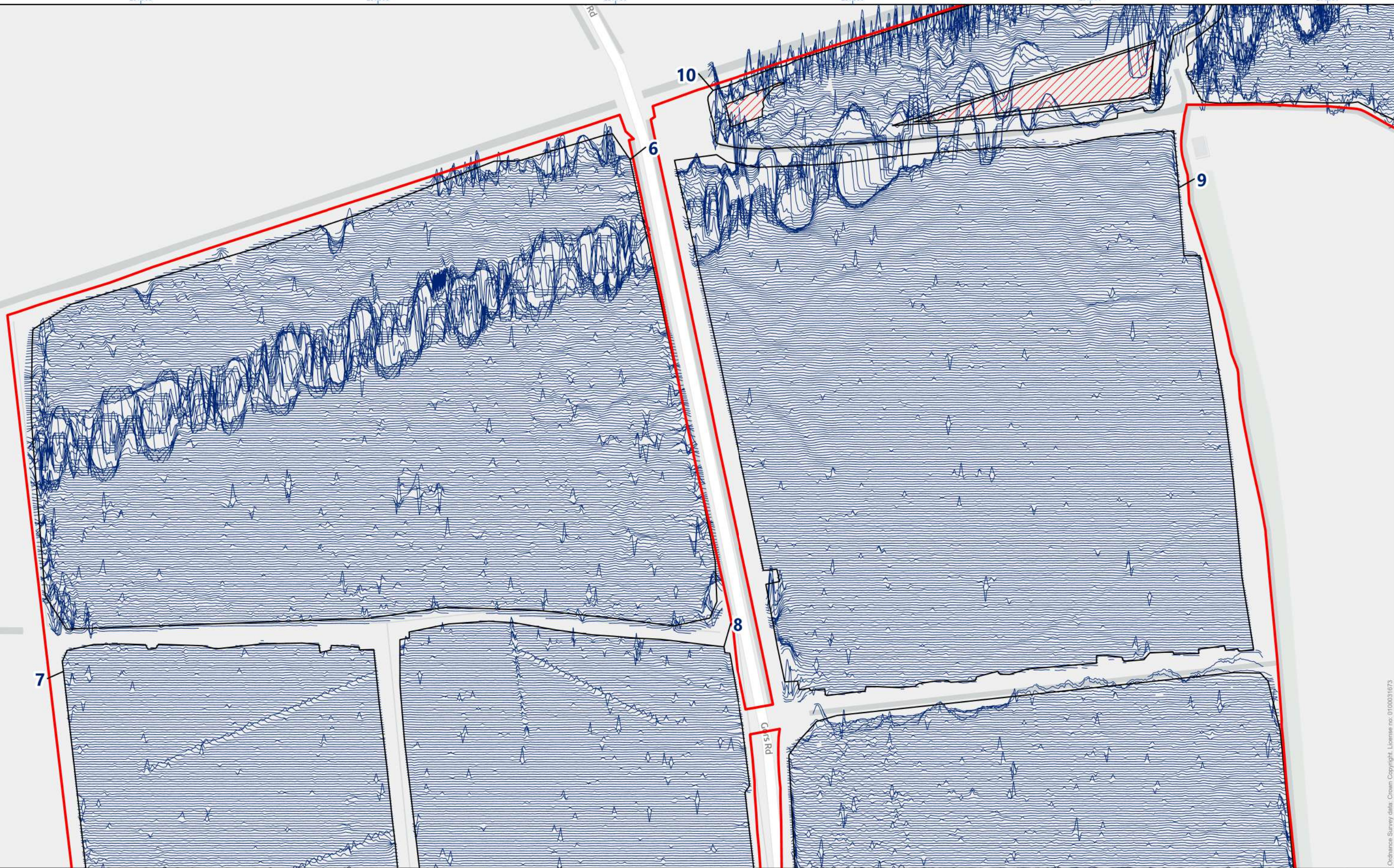


Drawing Number: 05/40766/GEO/7.3/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



297500 297600 297700 297800 297900 298000

377500 377600 377700



Solar Site: Processed Gradiometer Data - XY Trace

Figure

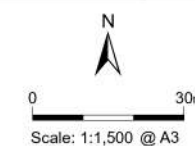
7.4



Proposed Development Area

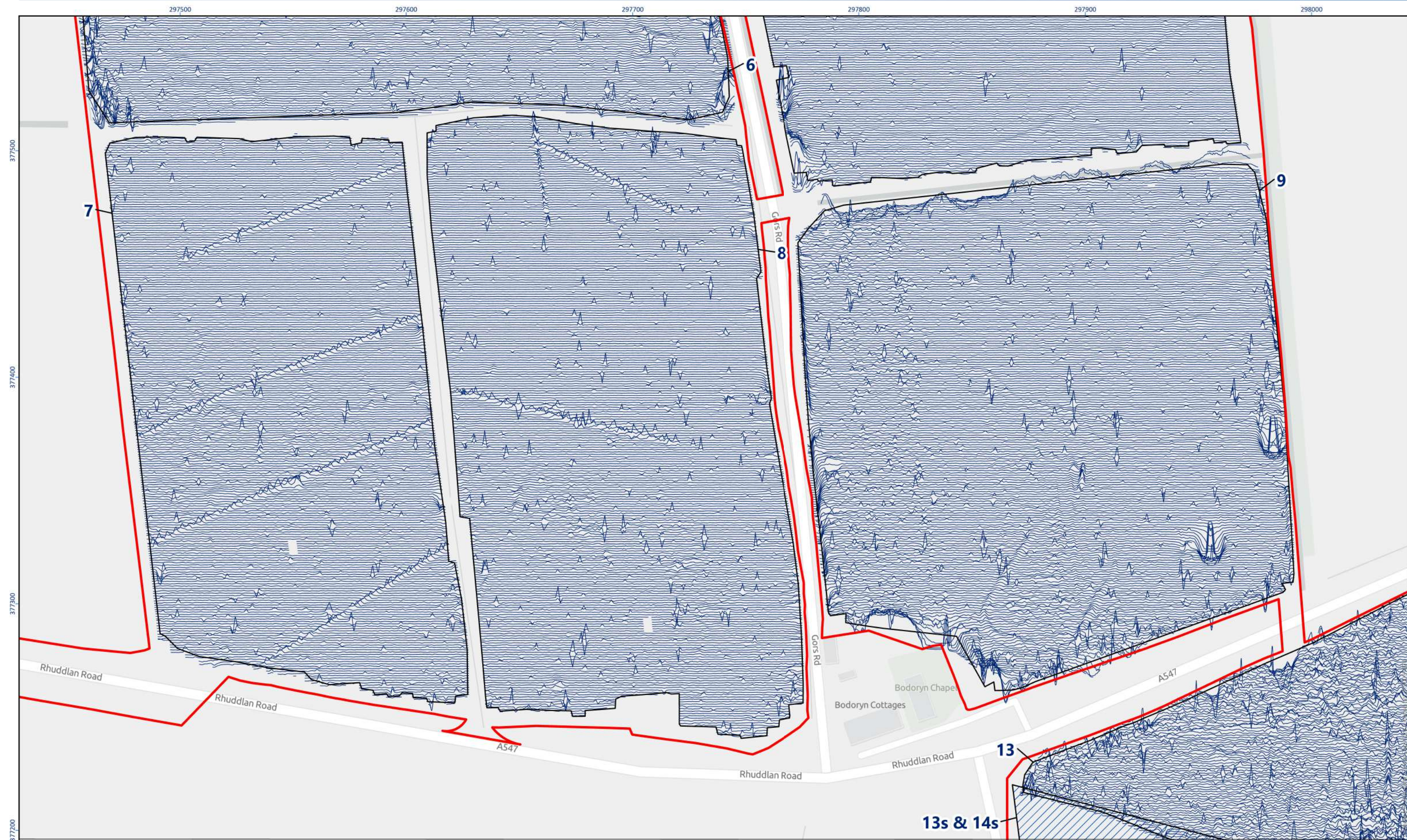


Unsuitable for Survey



Drawing Number: 05/40766/GEO/7.4/01
 Created by: SO Date: 19/08/2025
 Checked by: AC Date: 19/08/2025
 Approved by: JL Date: 19/08/2025





Solar Site: Processed Gradiometer Data - XY Trace

Figure

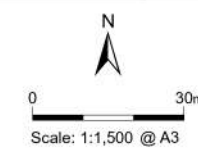
7.5



Proposed Development Area



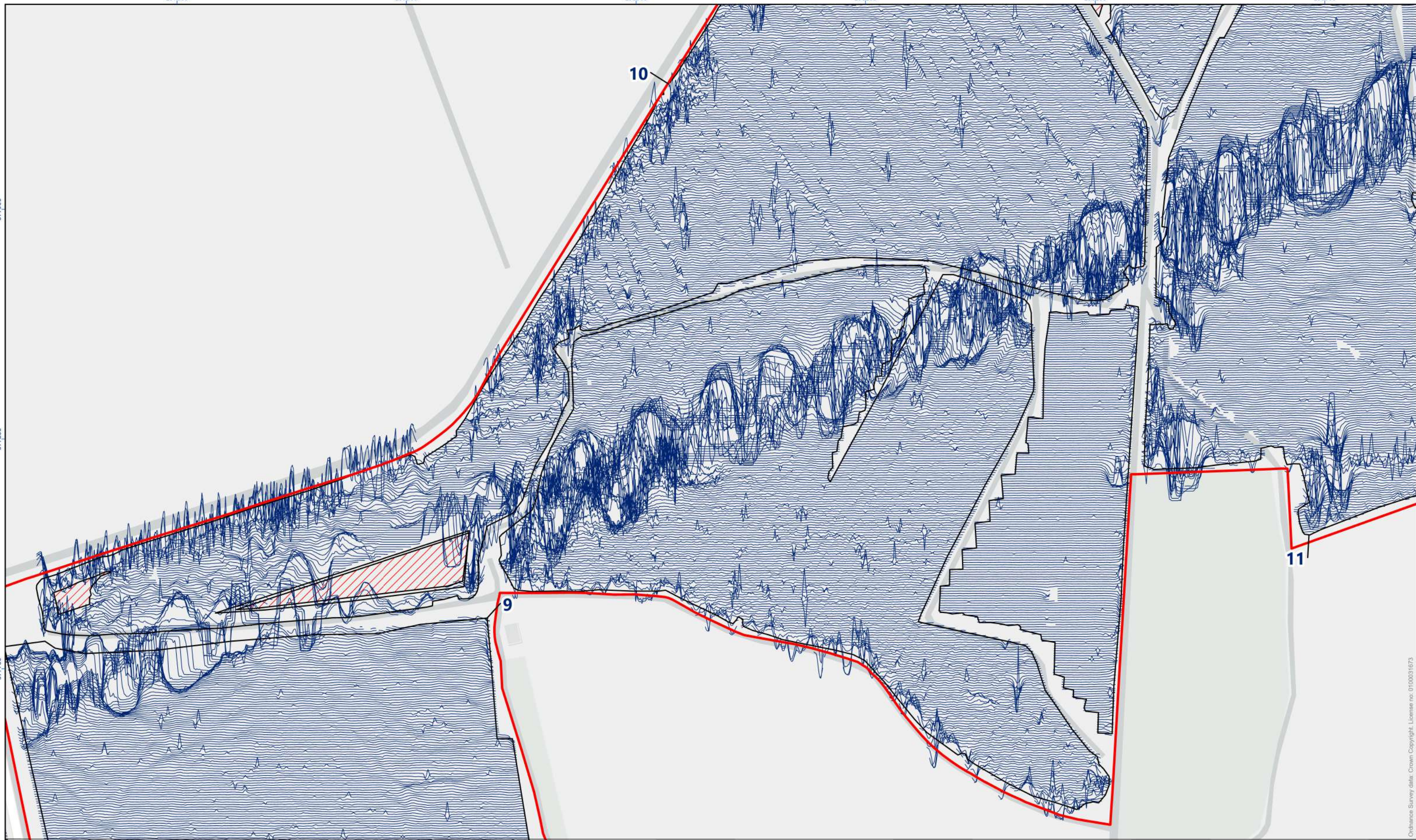
Outstanding



Drawing Number: 05/40766/GEO/7.5/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



297800 297900 298000 298100 298200 298300



Solar Site: Processed Gradiometer Data - XY Trace

Figure

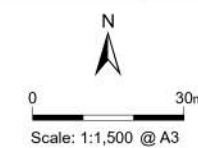
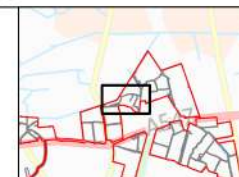
7.6



Proposed Development Area

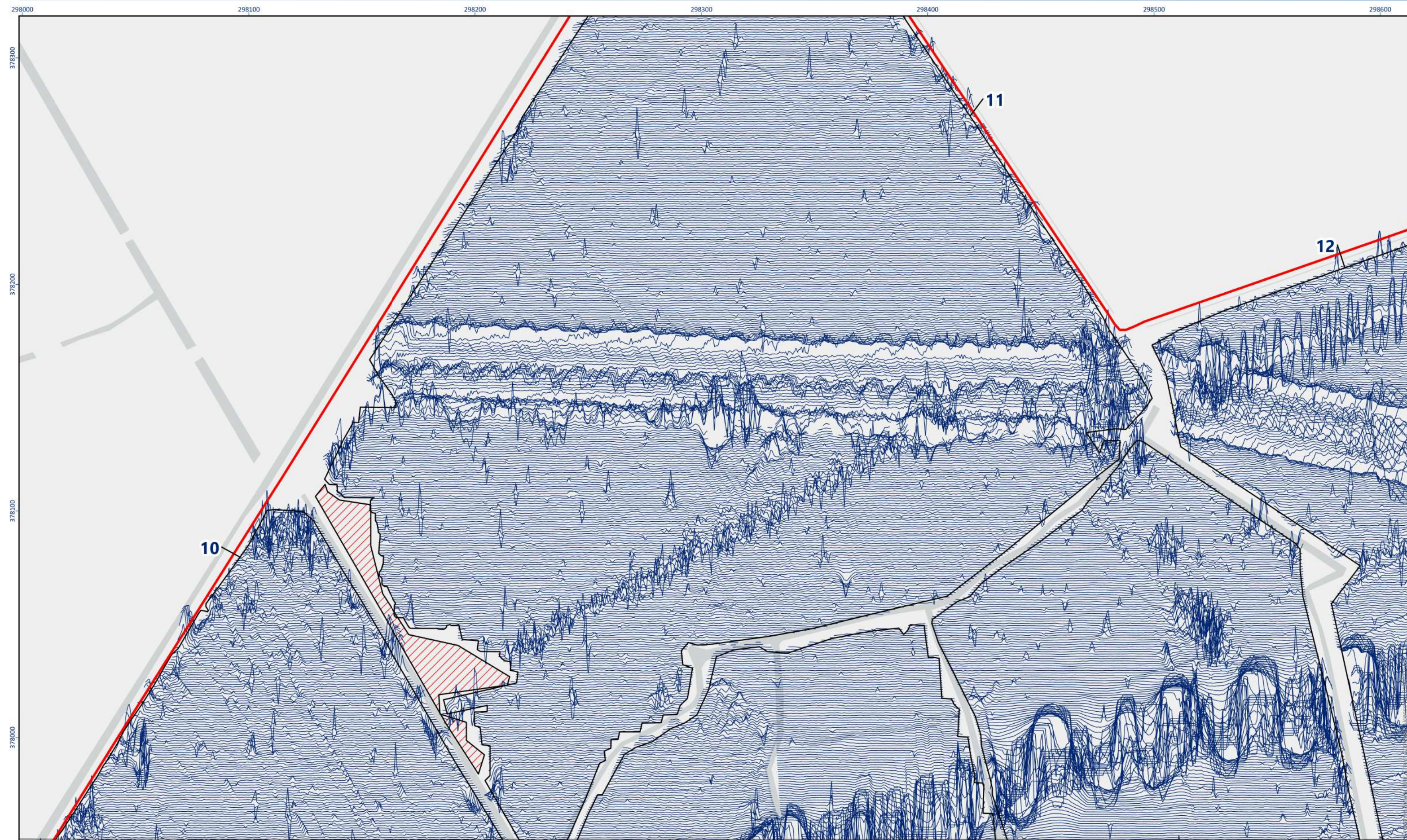


Unsuitable for Survey



Drawing Number: 05/40766/GEO/7.6/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025





Solar Site: Processed Gradiometer Data - XY Trace

Figure

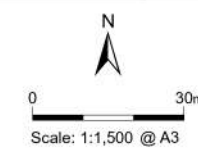
7.7



Proposed Development Area



Unsuitable for Survey



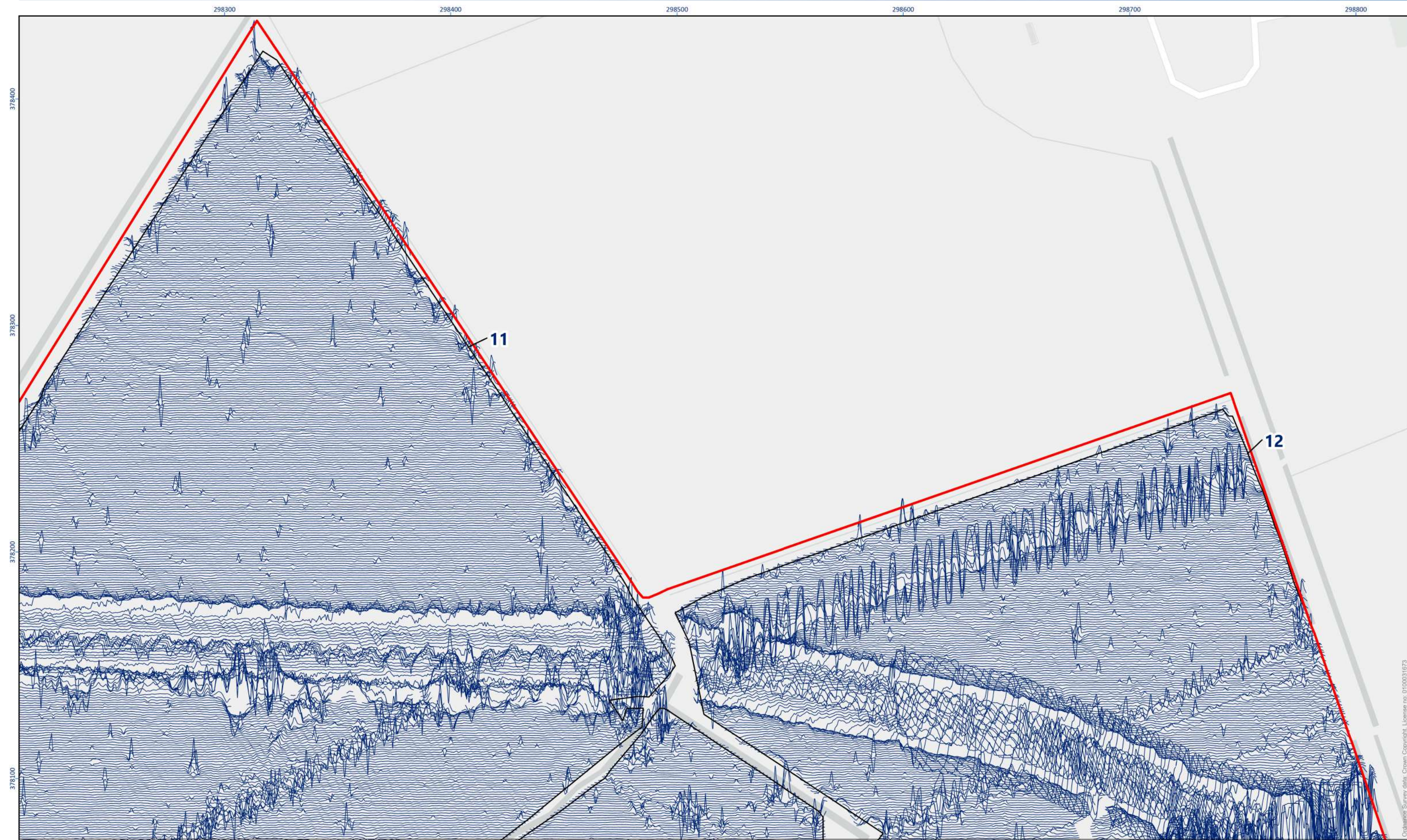
Drawing Number: 05/40766/GEO/7.7/01

Created by: SO Date: 19/08/2025

Checked by: AC Date: 19/08/2025

Approved by: JL Date: 19/08/2025



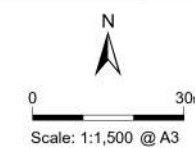
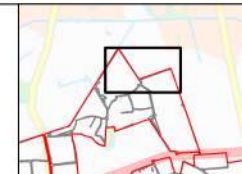


Solar Site: Processed Gradiometer Data - XY Trace

Figure
7.8



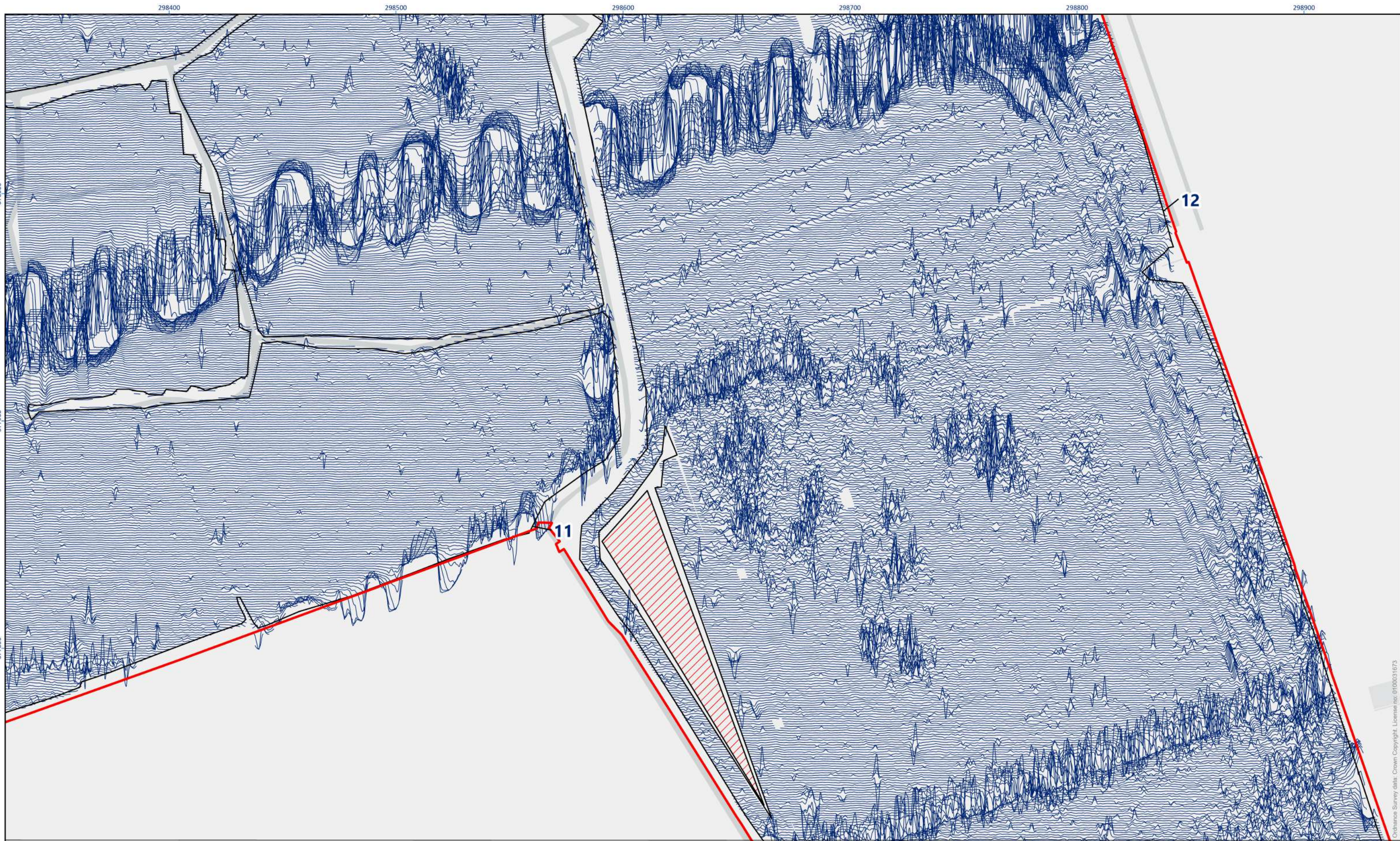
 Proposed Development Area



Drawing Number: 05/40766/GEO/7.8/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

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Solar Site: Processed Gradiometer Data - XY Trace

Figure

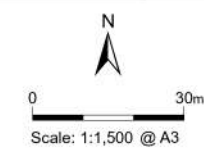
7.9



Proposed Development Area

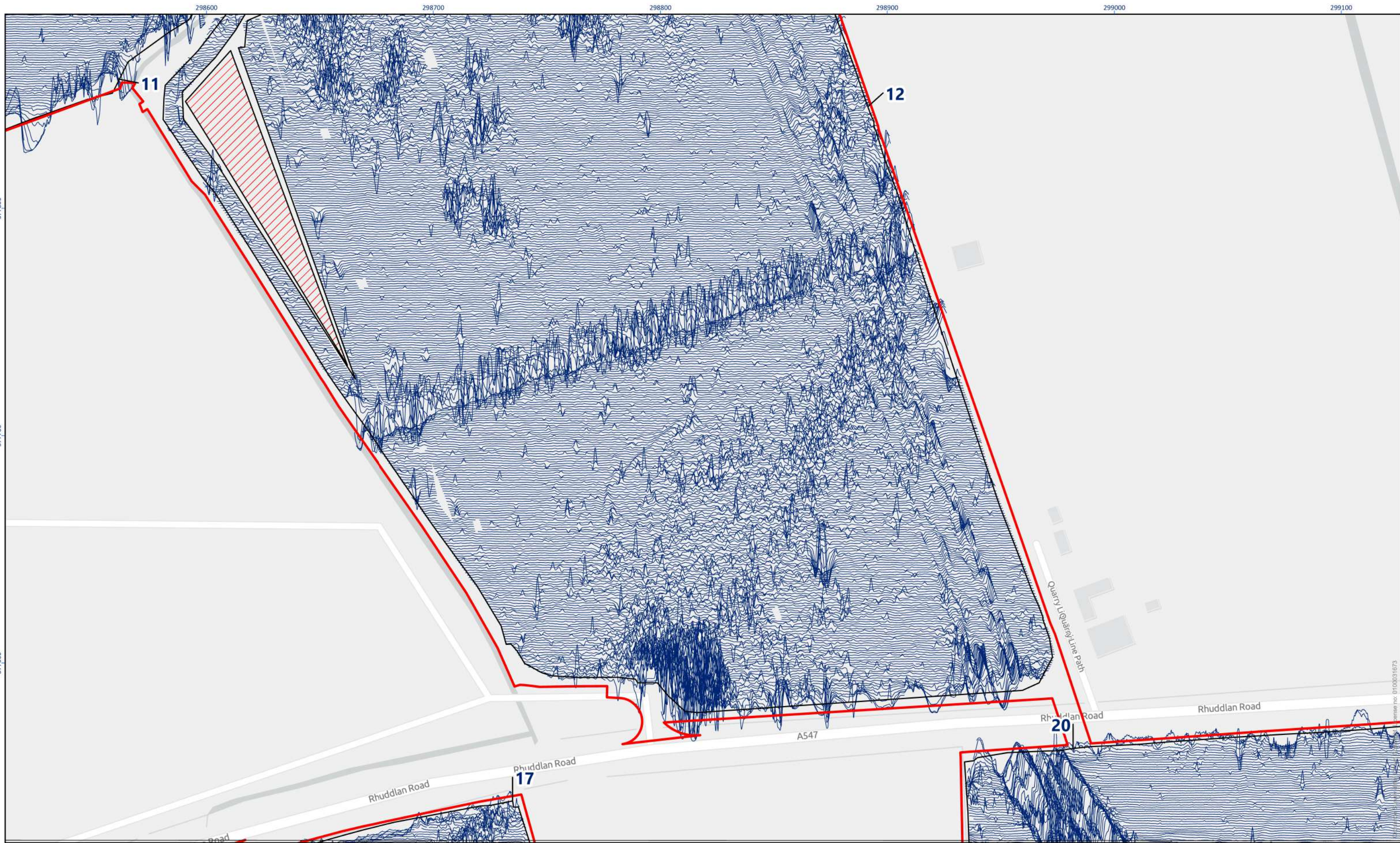


Unsuitable for Survey



Drawing Number: 05/40766/GEO/7.9/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



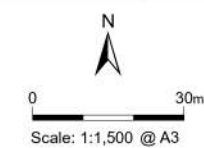


Solar Site: Processed Gradiometer Data - XY Trace

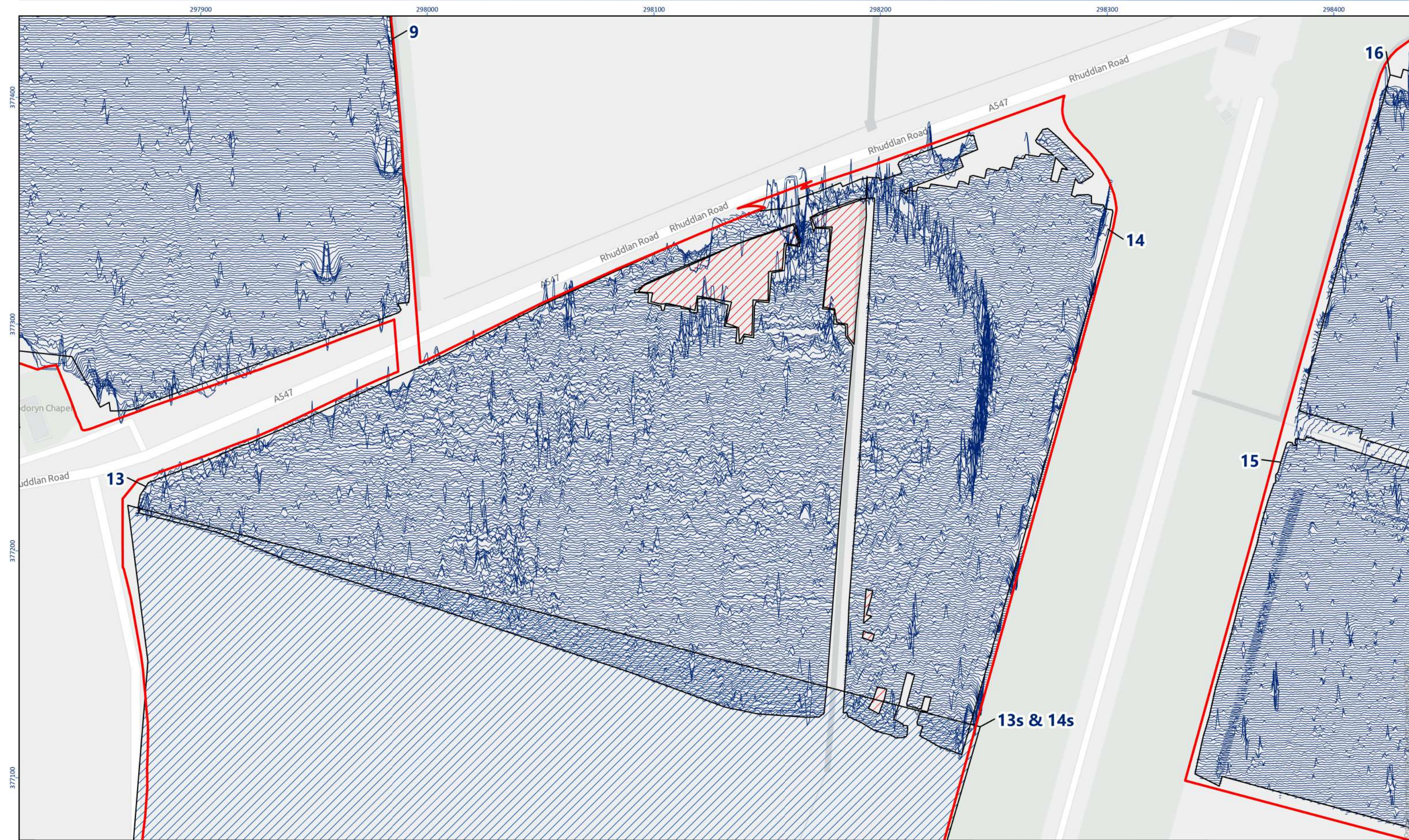
Figure
7.10



 Proposed Development Area Unsuitable for Survey



Drawing Number: 05/40766/GEO/7.10/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



Solar Site: Processed Gradiometer Data - XY Trace

Figure
7.11

50nT
-50nT

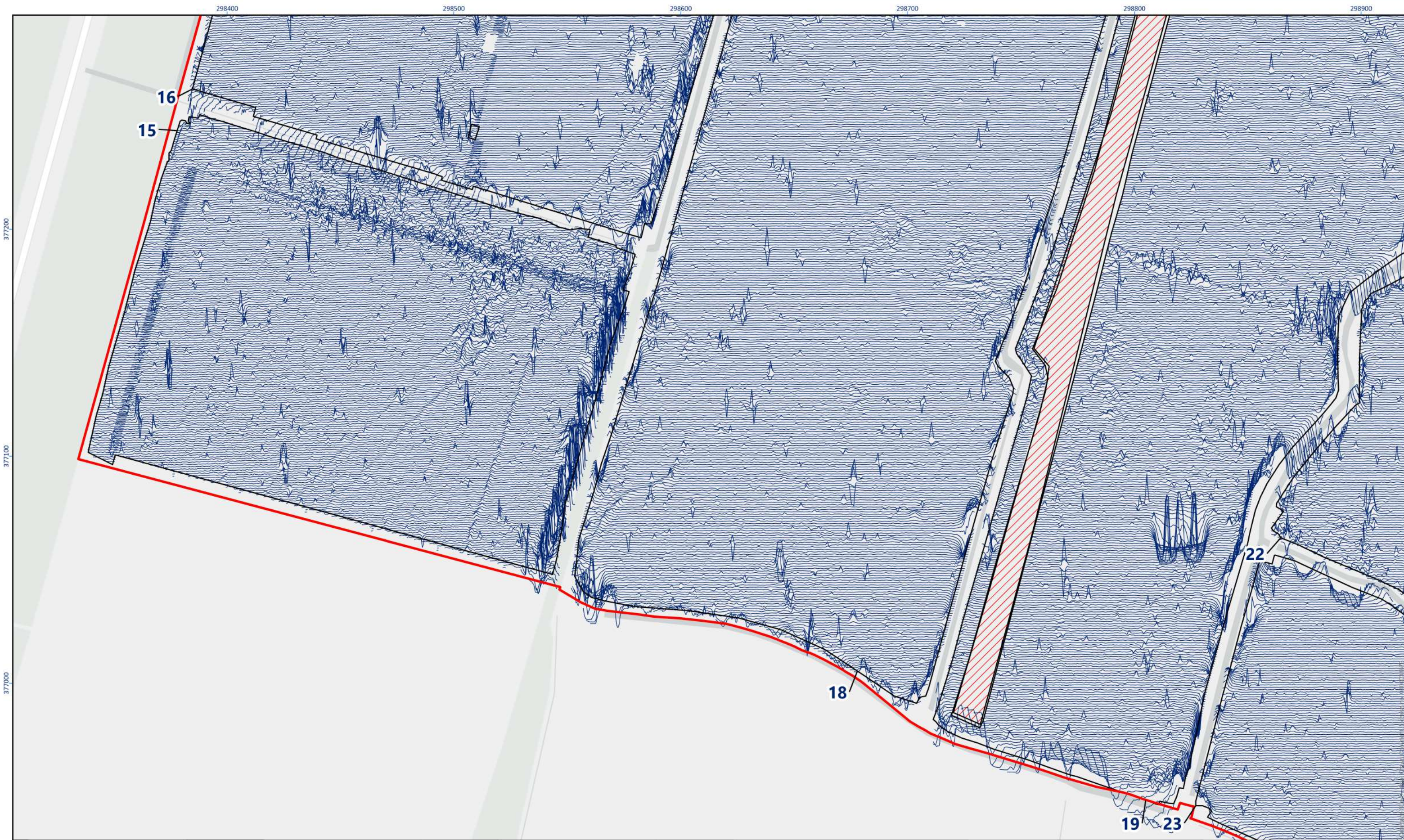
Proposed Development Area Outstanding Unsuitable for Survey



N
0 30m
Scale: 1:1,500 @ A3

Drawing Number: 05/40766/GEO/7.11/01
Created by: SO Date: 19/08/2025
Checked by: AC Date: 19/08/2025
Approved by: JL Date: 19/08/2025

AOC
Archaeology
Group



Solar Site: Processed Gradiometer Data - XY Trace

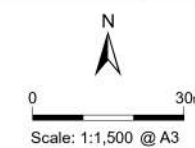
Figure
7.12



Proposed Development Area



Unsuitable for Survey



Drawing Number: 05/40766/GEO/7.12/01

Created by: SO Date: 19/08/2025

Checked by: AC Date: 19/08/2025

Approved by: JL Date: 19/08/2025

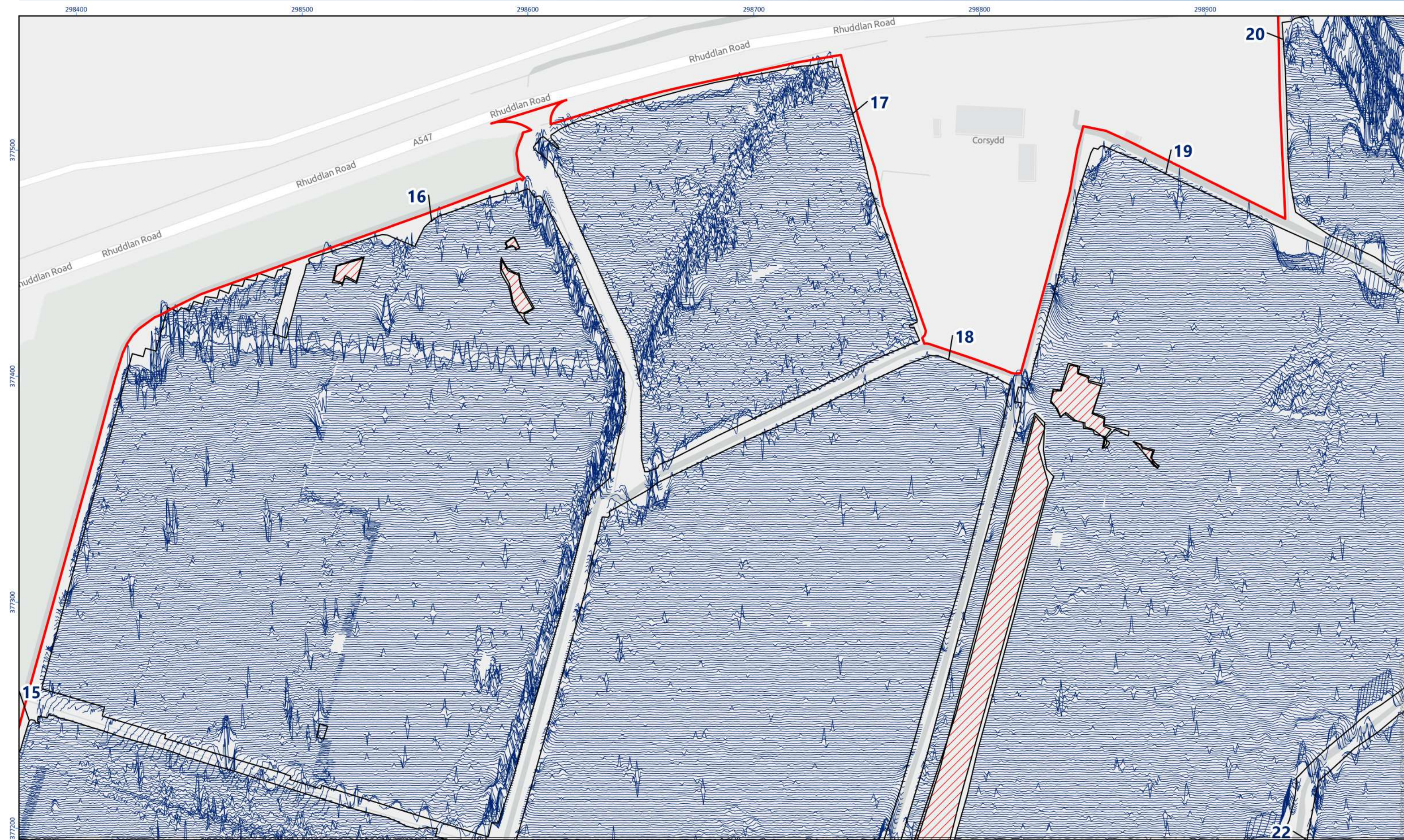


Figure
7.13

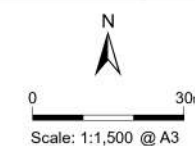
50nT
-50nT



Proposed Development Area

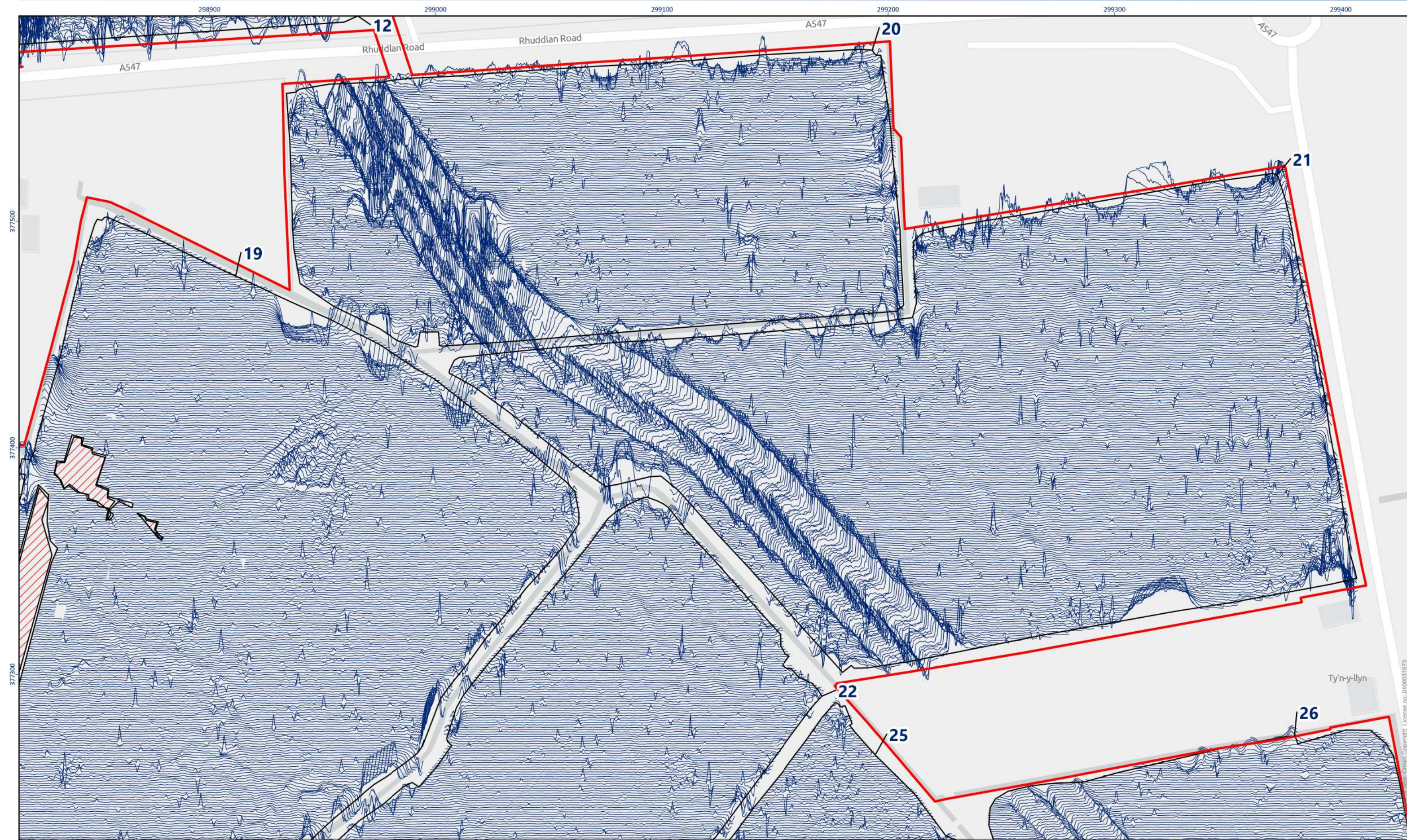


Unsuitable for Survey



Drawing Number: 05/40766/GEO/7.13/01
Created by: SO Date: 19/08/2025
Checked by: AC Date: 19/08/2025
Approved by: JL Date: 19/08/2025





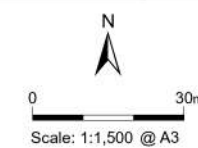
Solar Site: Processed Gradiometer Data - XY Trace

Figure
7.14



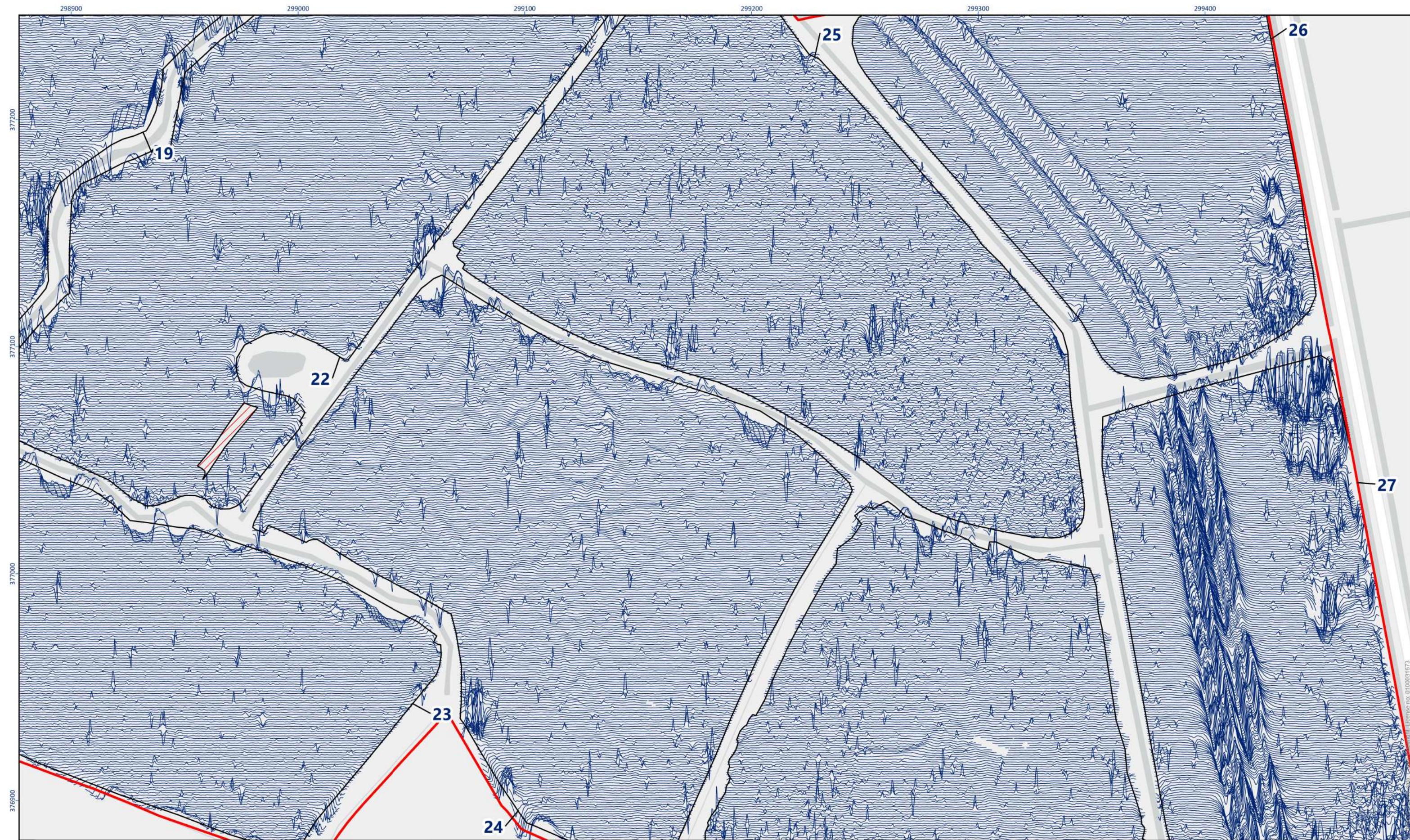
 Proposed Development Area

 Unsuitable for Survey



Drawing Number: 05/40766/GEO/7.14/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

AOC
Archaeology
Group



Solar Site: Processed Gradiometer Data - XY Trace

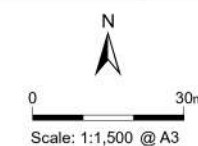
Figure
7.15



Proposed Development Area

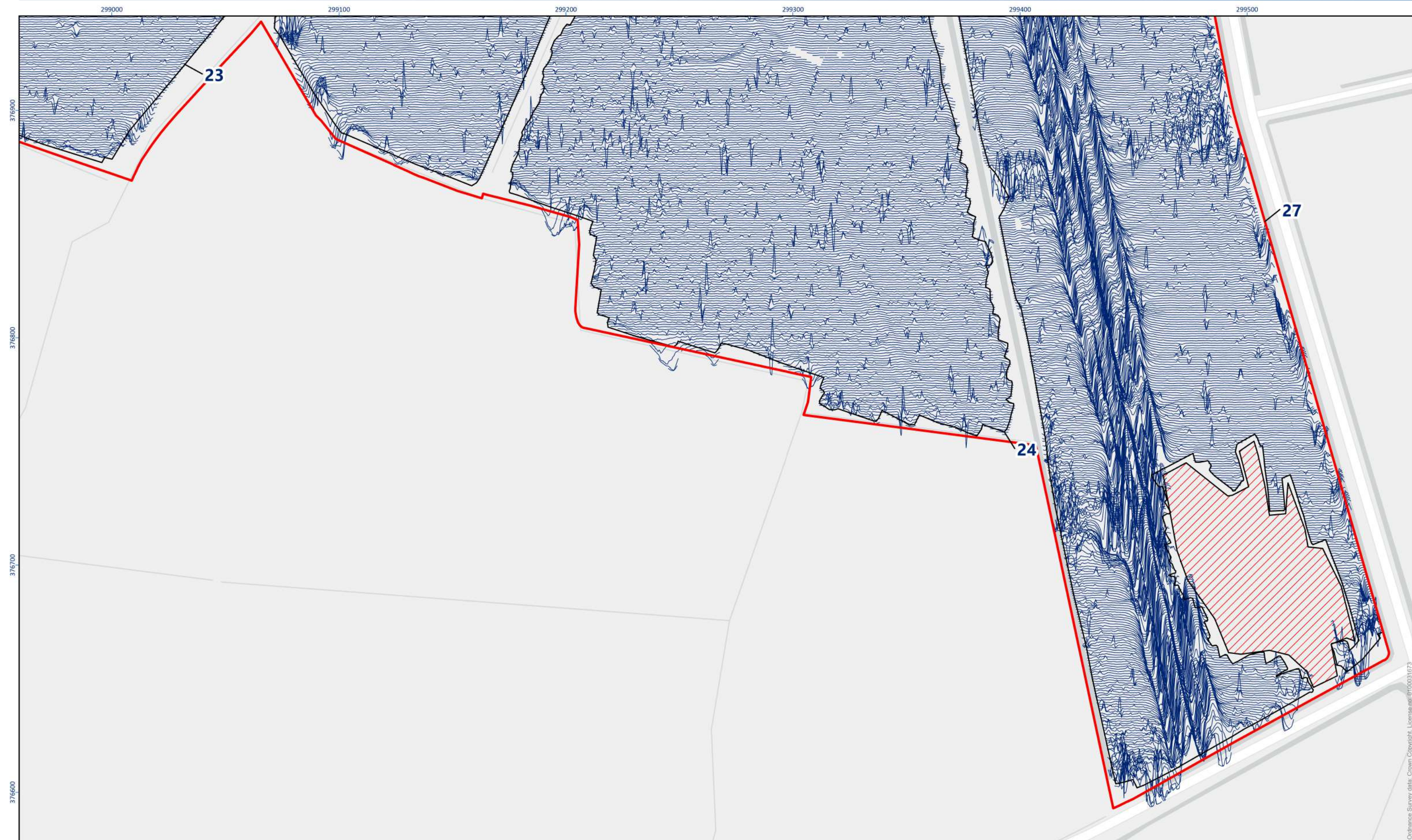


Unsuitable for Survey



Drawing Number: 05/40766/GEO/7.15/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025





Solar Site: Processed Gradiometer Data - XY Trace

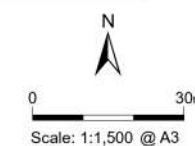
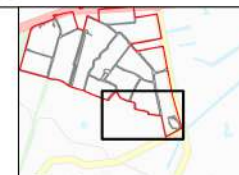
Figure
7.16



Proposed Development Area

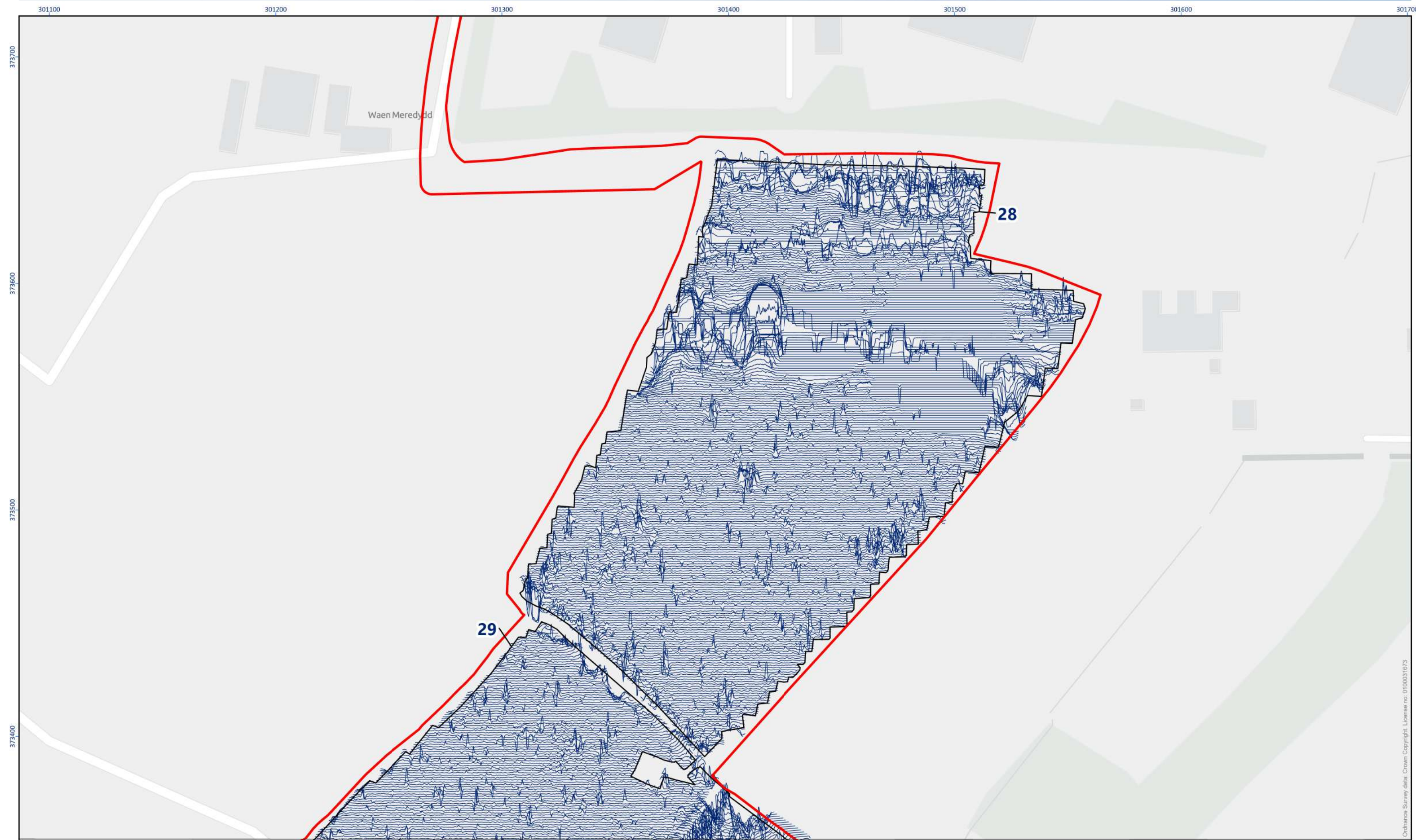


Unsuitable for Survey



Drawing Number: 05/40766/GEO/7.16/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



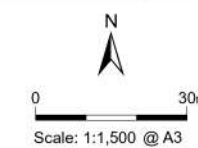


BESS Site: Processed Gradiometer Data - XY Trace

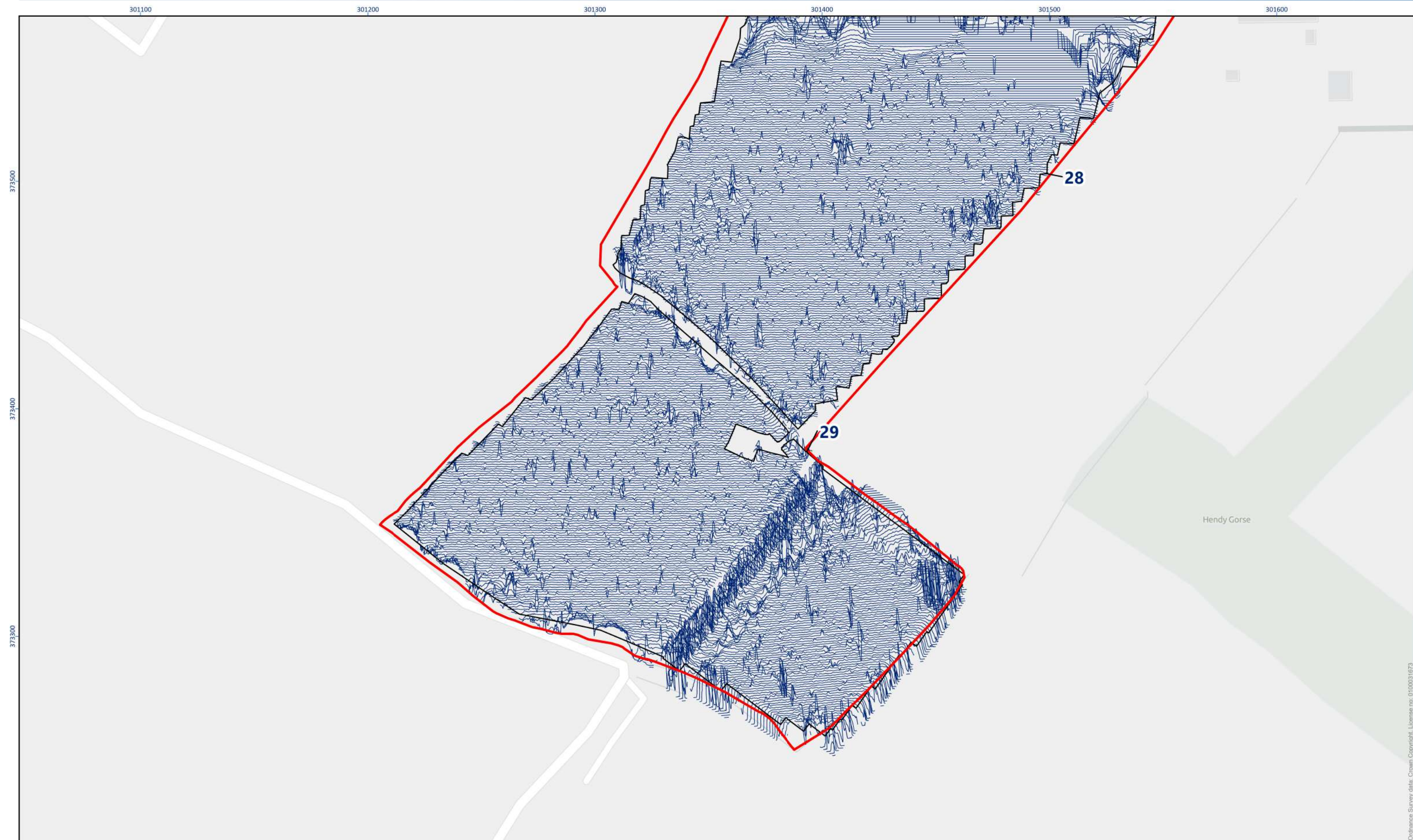
Figure
7.17



 Proposed Development Area



Drawing Number: 05/40766/GEO/7.17/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025

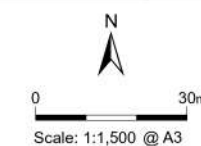
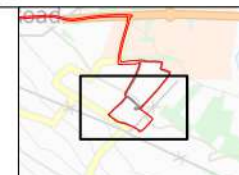


BESS Site: Processed Gradiometer Data - XY Trace

Figure
7.18



 Proposed Development Area



Drawing Number: 05/40766/GEO/7.18/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



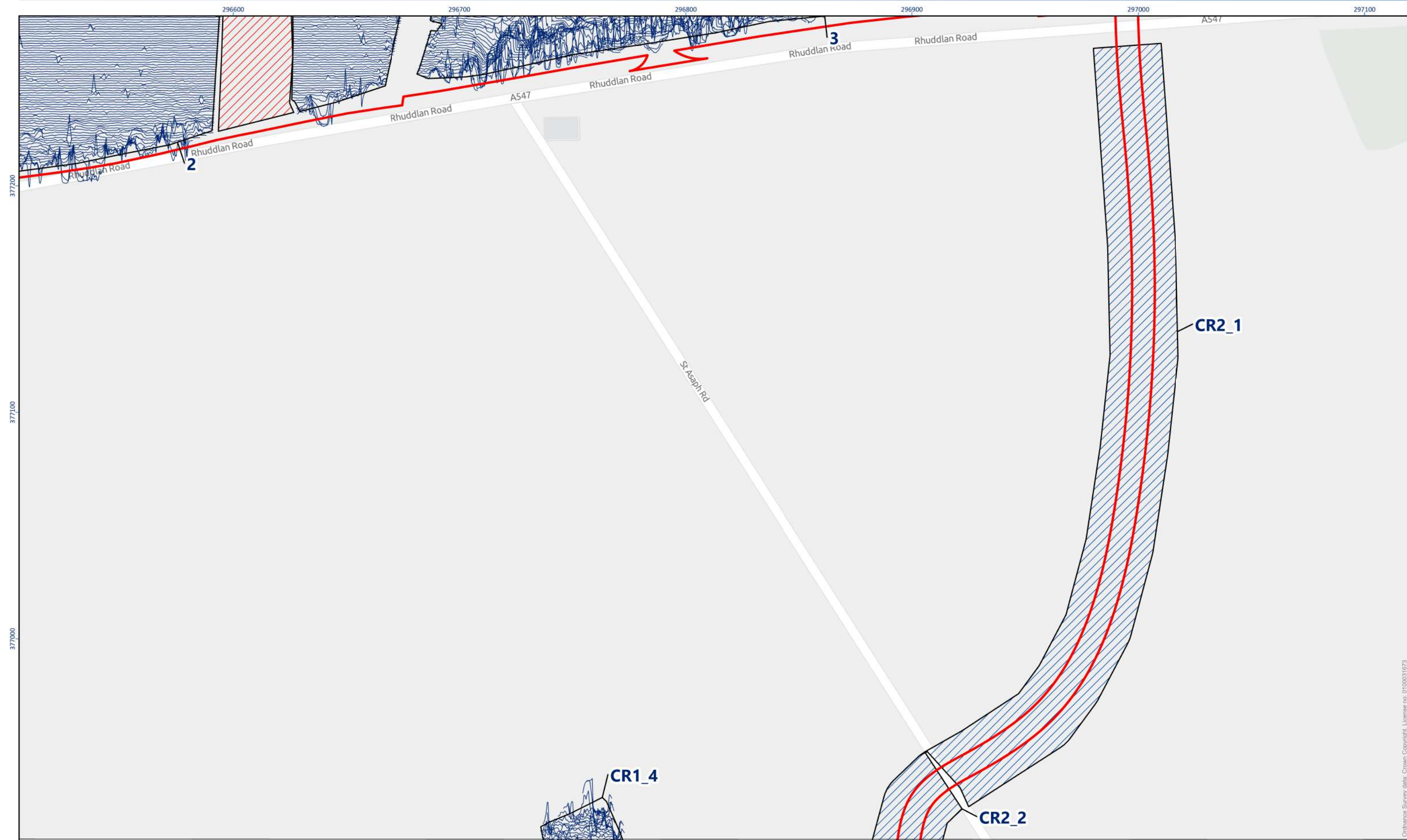
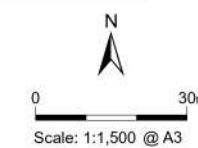
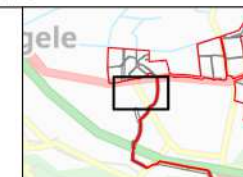


Figure
7.19

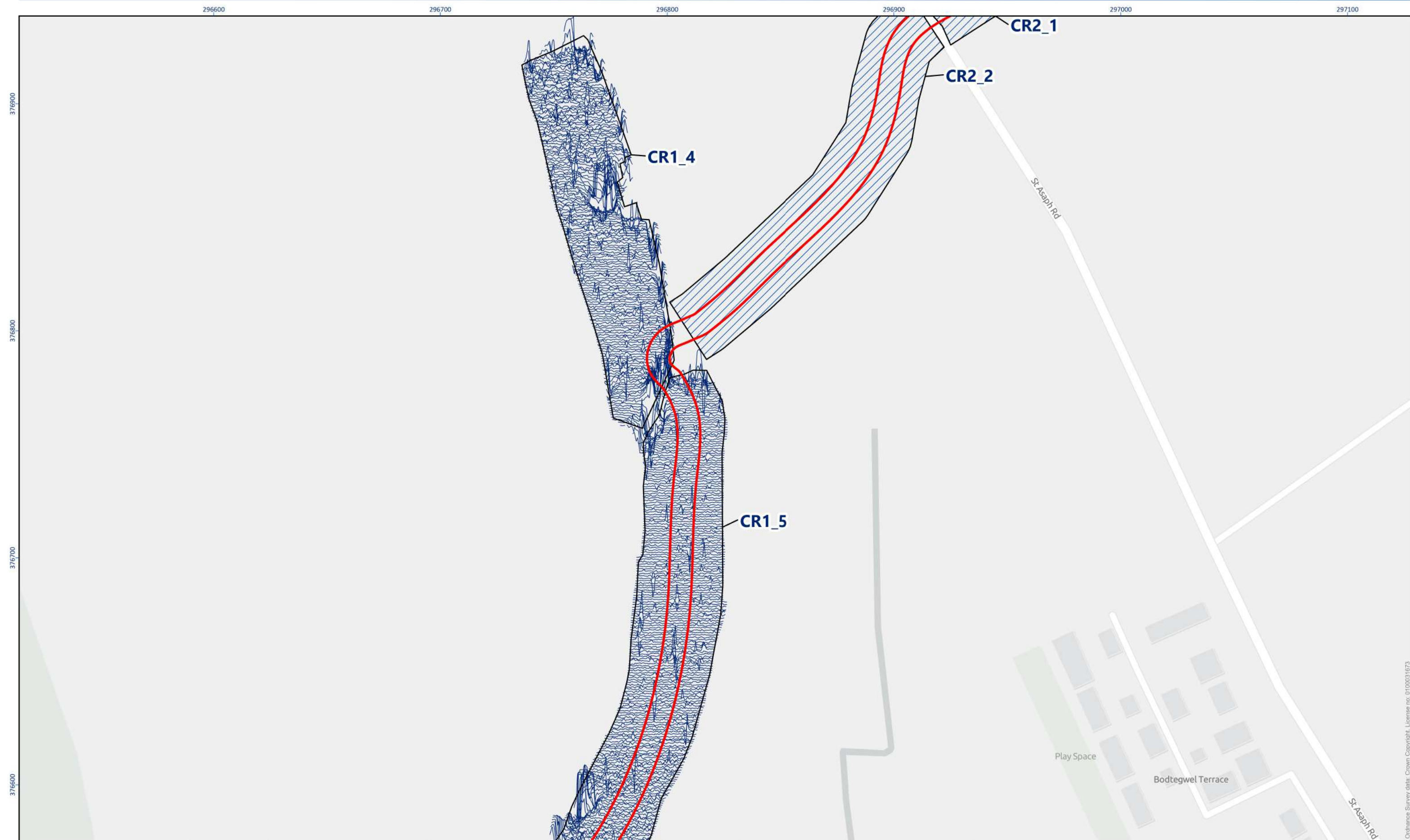


Proposed Development Area
 Outstanding
 Unsuitable for Survey



Drawing Number: 05/40766/GEO/7.19/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025





Cable Route: Processed Gradiometer Data - XY Trace

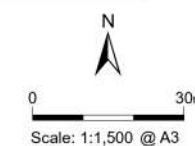
Figure
7.20



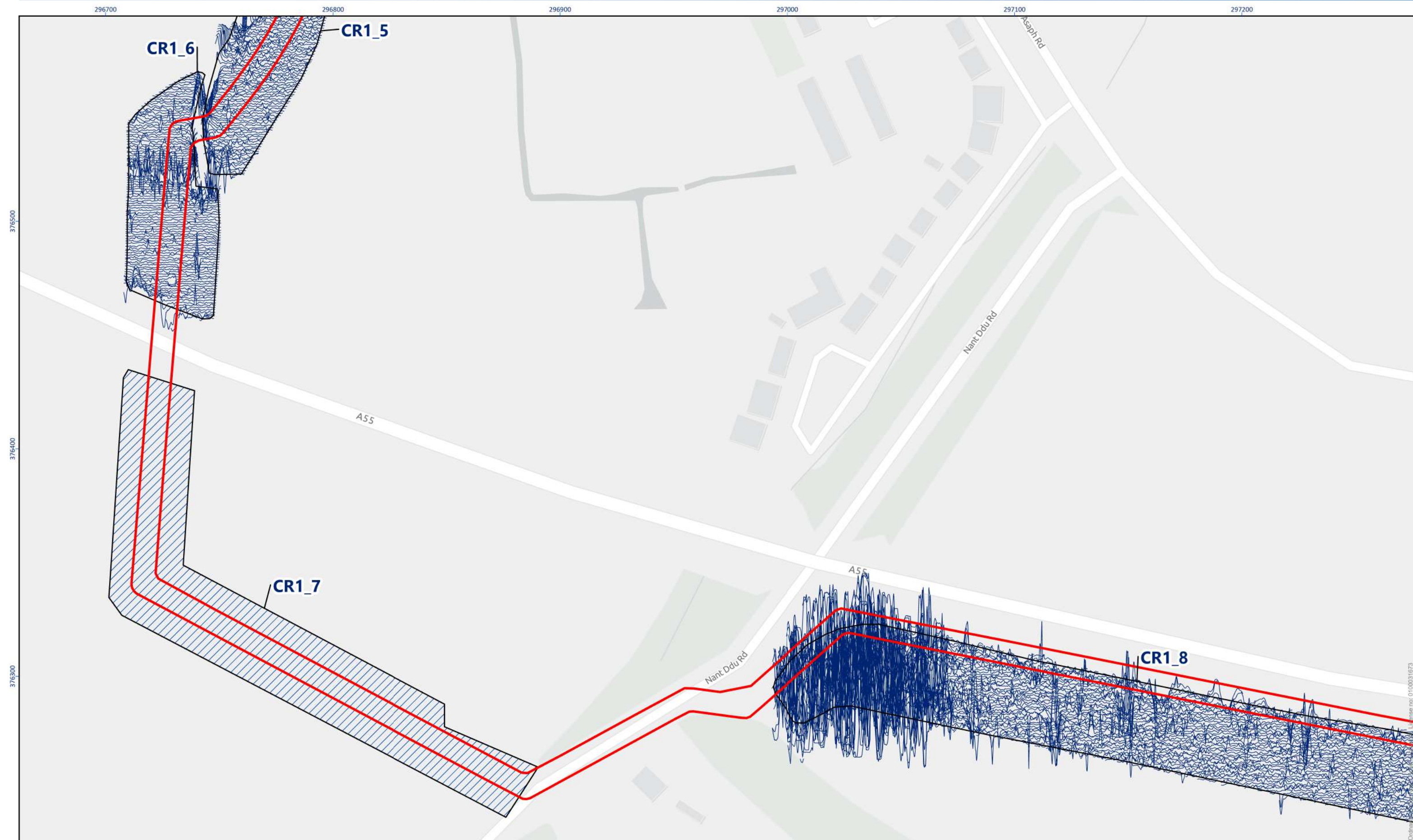
Proposed Development Area



Outstanding



Drawing Number: 05/40766/GEO/7.20/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



Cable Route: Processed Gradiometer Data - XY Trace

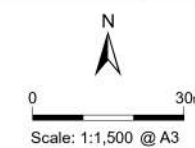
Figure
7.21



Proposed Development Area



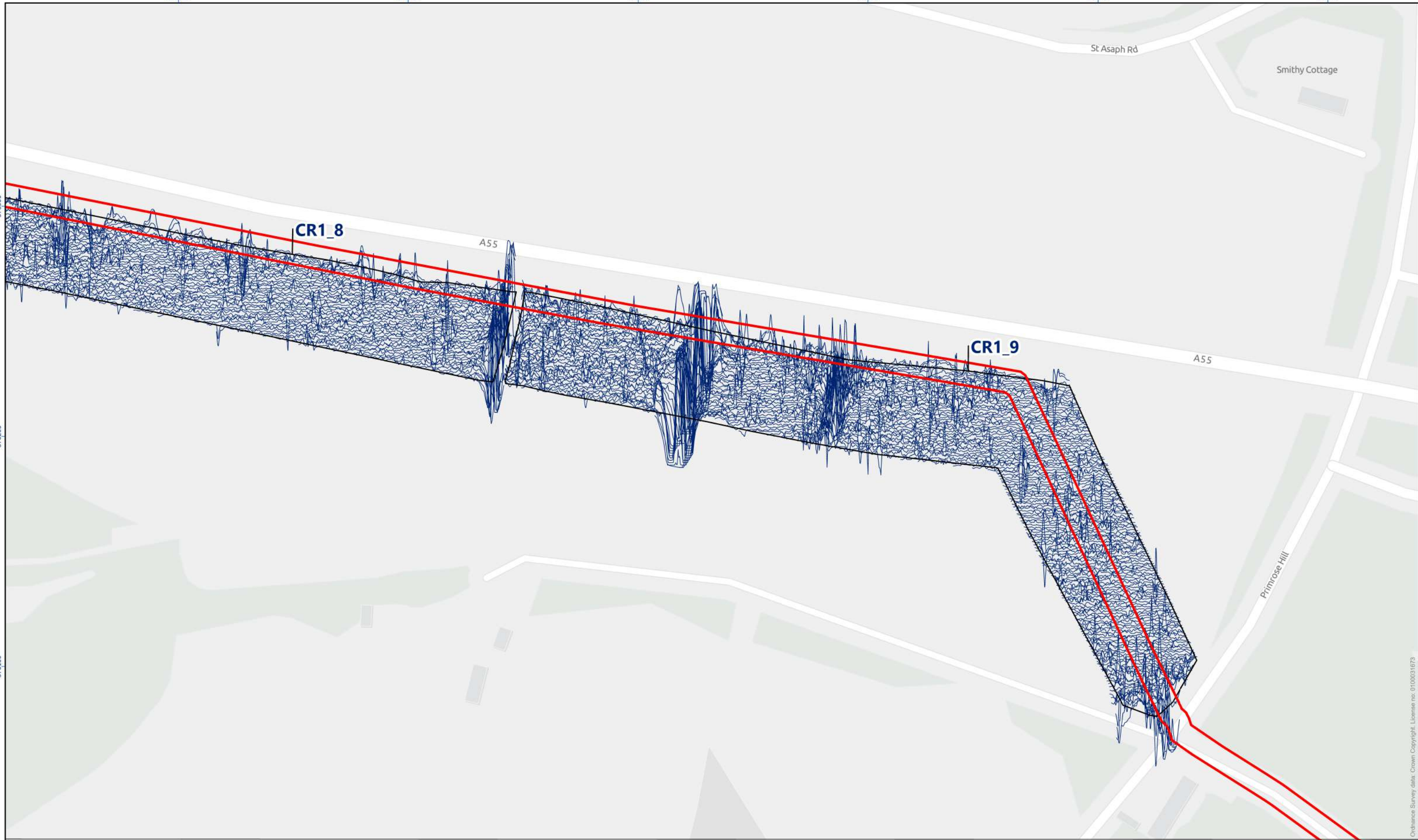
Outstanding



Drawing Number: 05/40766/GEO/7.21/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



297200 297300 297400 297500 297600 297700

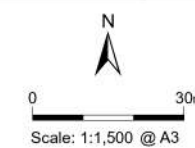


Cable Route: Processed Gradiometer Data - XY Trace

Figure
7.22



Proposed Development Area



Drawing Number: 05/40766/GEO/7.22/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025





Cable Route: Processed Gradiometer Data - XY Trace

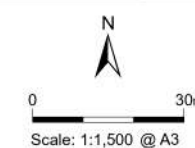
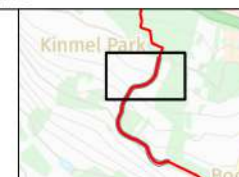
Figure
7.23



Proposed Development Area

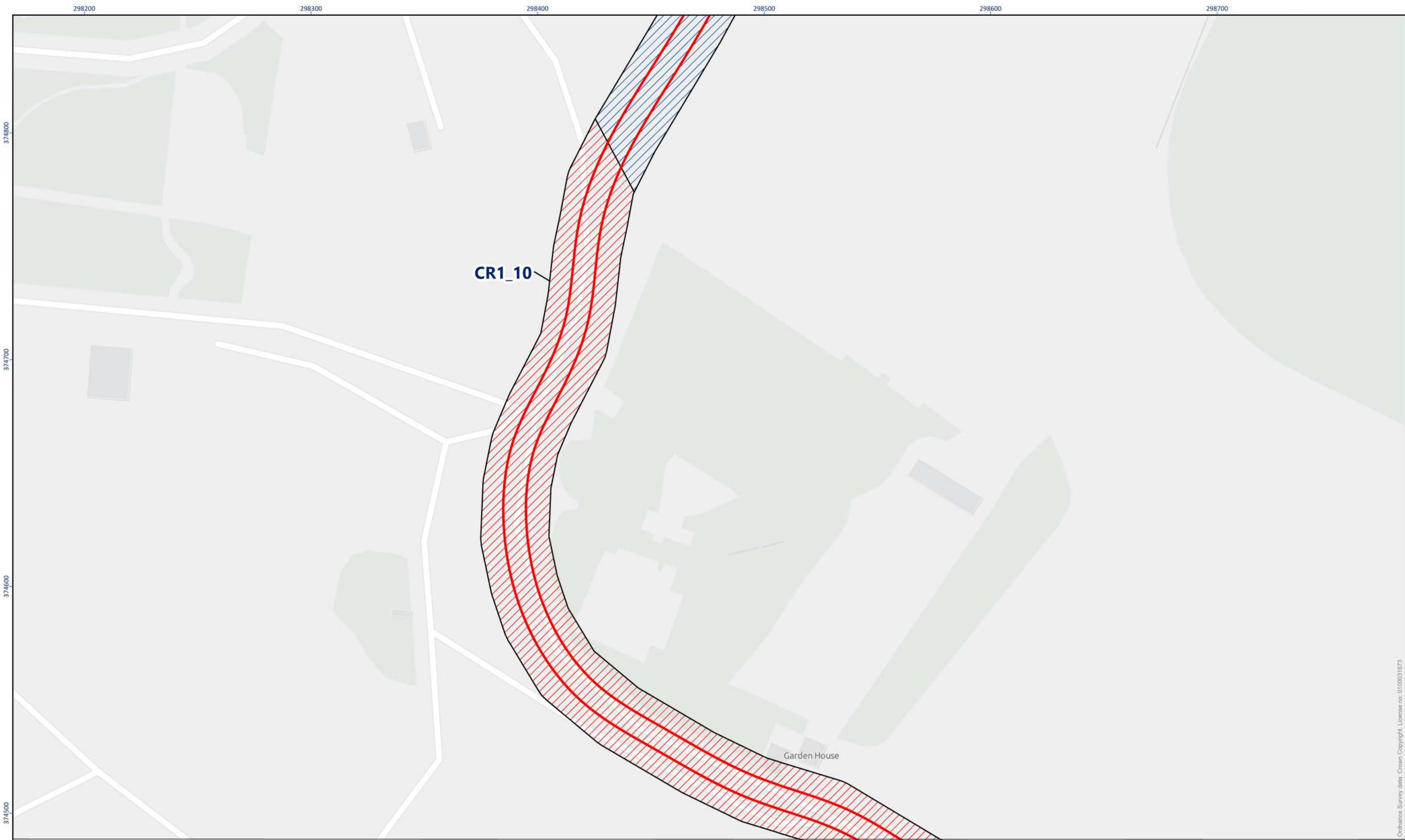


Outstanding



Drawing Number: 05/40766/GEO/7.23/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025





Cable Route: Processed Gradiometer Data - XY Trace

Figure
7.24



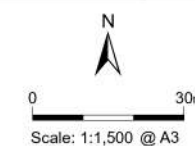
Proposed Development Area



Outstanding

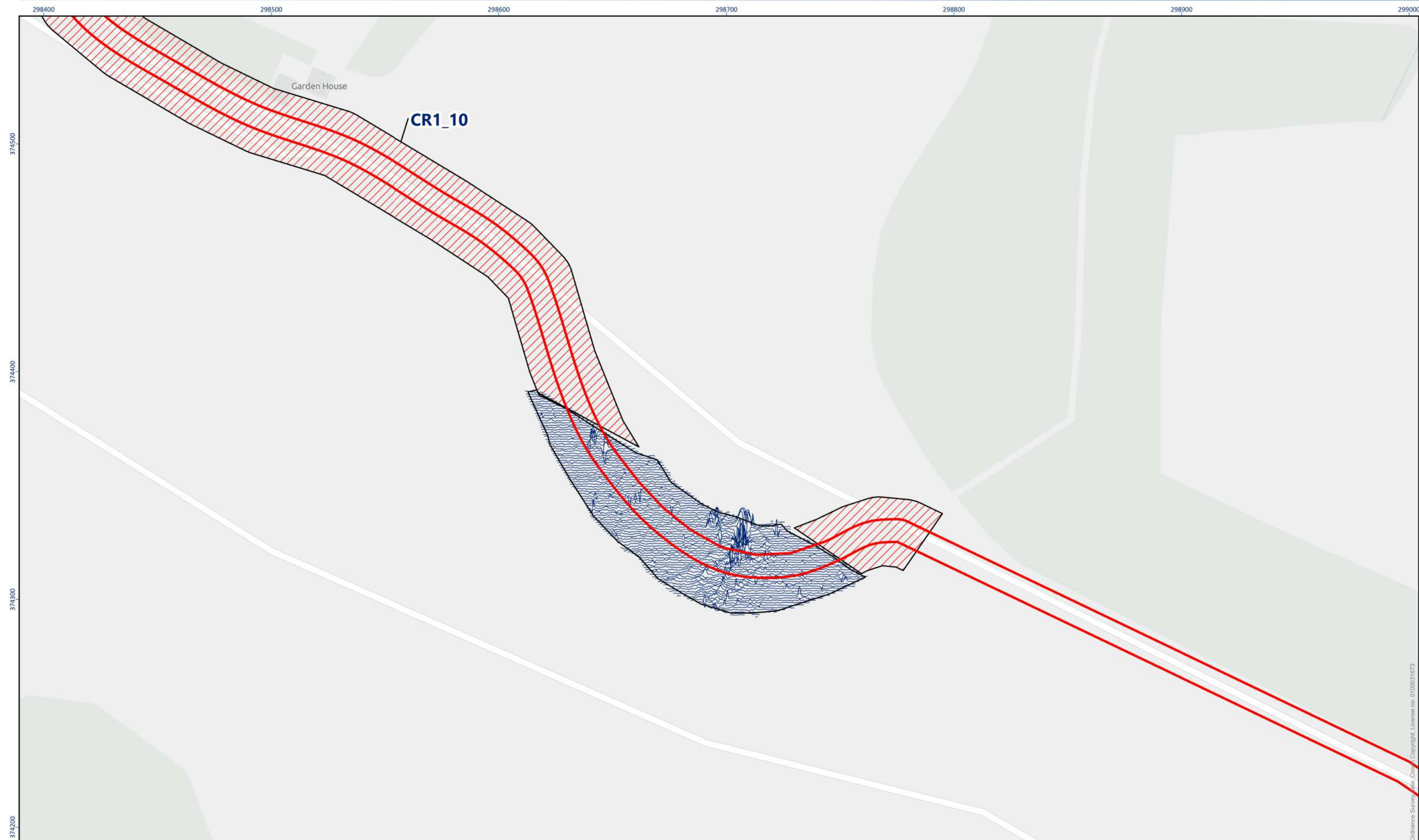


Unsuitable for Survey



Drawing Number: 05/40766/GEO/7.24/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025





Cable Route: Processed Gradiometer Data - XY Trace

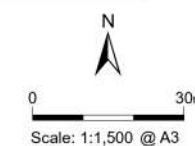
Figure
7.25



Proposed Development Area



Unsuitable for Survey



Drawing Number: 05/40766/GEO/7.25/01	
Created by: SO	Date: 19/08/2025
Checked by: AC	Date: 19/08/2025
Approved by: JL	Date: 19/08/2025



Appendix 1: Survey Metadata

Oasis ID: TBC

Field	Description
Surveying company	AOC Archaeology Group
Data collection staff	Alastair Galt, Chris Sykes, Kayt Armstrong, Kinnie Wade, Victoria Huggett, Peter Lee, Storme Gathercole, Robert Legg, Kieren Machen
Client	Bodelwyddan Solar and Energy Storage Ltd
Site name	Bodelwyddan Solar and Energy Storage
County	Denbighshire
NGR	SH 98495 7739
Land use/field condition	Arable and Pasture
Duration	5 th August to 11 th October 2024
Weather	Mixed
Survey type	Gradiometer Survey
Instrumentation	Bartington cart survey: Bartington Non-Magnetic Cart, two Bartington Grad 601-2, Trimble R10 GNSS System
Area covered	167 ha to date
Download software	MLGrad601
Processing software	Geomar, MultiGrad601 and TerraSurveyor
Visualisation software	ArcGIS Pro
Geology	Solid: mudstone, siltstone and sandstone of the Warwickshire Group Superficial: Clay, silt and sand tidal flat deposits in western and central areas; sedimentary diamicton deposits of Devensian till in eastern areas (BGS, 2025)
Soils	Loamy and clayey soils of coastal flats with naturally high groundwater in central and western survey areas; slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils in the eastern areas (Soilscapes, 2025)
Scheduled Monuments	No
Known archaeology within survey area	-
Historical documentation/ mapping of survey area	-
Report title	Bodelwyddan Solar and Energy Storage, Denbigshire: Archaeological Geophysical Survey
Project number	40766
Report author	Rob Legg and Susan Ovenden
Quality Checked by	Chris Sykes

Appendix 2: Archaeological Prospection Techniques, Instrumentation and Software Utilised

Gradiometer Survey

Gradiometer surveys measure small changes in the earth's magnetic field. Archaeological materials and activity can be detected by identifying changes to the magnetic values caused by the presence of weakly magnetised iron oxides in the soil (Aspinall *et al.* 2008: 23; Sharma 1997: 105). Human habitation often causes alterations to the magnetic properties of the soils and sediments present in the area (Aspinall *et al.* 2008: 21). There are two physical transformations that produce a significant contrast between the magnetic properties of archaeological features and the surrounding soil: the enhancement of magnetic susceptibility and thermoremanent magnetization (Aspinall *et al.* 2008: 21; Heron and Gaffney 1987: 72).

Ditches and pits can often be detected through gradiometer survey as the topsoil within and around settlements typically has a greater magnetisation than the subsoil, due to human activity. This enhanced material accumulates in cut features such as ditches and pits. Areas of burning or materials which have been subjected to heat commonly also have high magnetic signatures, such as hearths, kilns, fired clay and mudbricks (Clark 1996: 65; Lowe and Fogel 2010: 24).

It should be noted that negative anomalies can also be useful for characterising archaeological features. If the buried remains are composed of a material with a lower magnetisation compared to the surrounding soil, the feature in question will display a negative signature. For example, stone-built structures composed of sedimentary rocks that are less magnetic than the surrounding soils can appear as negative features within the dataset if the local soils and sediments are at all magnetised.

Ferrous objects – i.e. iron and its alloys - are strongly magnetic and are typically detected as high-value peaks in gradiometer survey data; small (in spatial terms) spikes are generally assumed to derive from ferrous material of recent origin (e.g. stray bits of farm equipment) in the topsoil, though archaeological sources cannot be ruled out. Broader dipolar anomalies and those with diagnostic characteristics of form will be assigned to other classifications based on their character, which might include archaeology, burning, modern ferrous or uncertain.

Although gradiometer surveys have been successfully carried out in all areas of the United Kingdom, the effectiveness of the technique is lessened in areas with complex geology, particularly where igneous and metamorphic bedrock is present or there are layers of alluvium or till between the surface and the layers of interest. All magnetic geophysical surveys must therefore take the effects of background geological and geomorphological conditions into account.

Bartington Non-Magnetic Cart Instrumentation and Software

AOC Archaeology's cart-based surveys are carried out using a Bartington Non-Magnetic Cart. The cart enables multiple traverses of data to be collected at the same time, increasing the speed at which surveys may be carried out and offers the benefits of reduced random measurement noise and rapid area coverage (Schmidt *et al.* 2015, 60-62; David *et al.* 2008, 21).

The cart uses a configuration of four Grad-01-1000L sensors mounted upon a carbon fibre frame along with two DL601 dataloggers and one BC601 battery cassette. The sensors are normally positioned at 1m intervals on a horizontal bar, with the datalogger taking readings every 12.5cm along each traverse, though this can be altered to increase / reduce resolution if required. The data is georeferenced via a Trimble R10 Real Time Kinematic (RTK) VRS Now GNSS GPS which streams data throughout survey and allows the data to be recorded relative to a WGS1984 UTM coordinate system.

The gradiometer data is collected through Geomar MLGrad601 software on a laptop in real-time during the survey. The data is downloaded and converted into a .xyz file in Geomar MultiGrad601 before being processed along with the GPS data in TerraSurveyor v3.0.34.10 (see Appendix 3 for a summary of the processes used in Geoplot to create final data plots).

Handheld Gradiometer Survey Instrumentation and Software

AOC Archaeology's gradiometer surveys are carried out using Bartington Grad601-2 magnetic gradiometers. The Grad601-2 is a high-stability fluxgate magnetic gradient sensor, which uses a 1m sensor separation. The detection resolution is from 0.03 nT/m to 0.1nT/m, depending on the sensor parameters selected, making the Grad601-2 an ideal instrument for prospective survey of large areas as well as detailed surveys of known archaeology. The instrument stores the data collected on an on-board data-logger, which is then downloaded as a series of survey grids for processing.

Following the survey, gradiometer data is downloaded from the instrument using Grad601 PC Software v313. Survey grids are then assembled into composites and enhanced using a range of processing techniques using Geoscan Geoplot 4.0 and Terrasurveyor 64 (see Appendix 3 for a summary of the processes used in Geoplot to create final data plots).

Appendix 3: Summary of Data Processing

Process	Effect
Clip	Limits data values to within a specified range
De-spike	Removes small spatial scale exceptionally high readings in the data. In resistivity survey, these can be caused by poor contact of the mobile probes with the ground. In gradiometer survey, these can be caused by highly magnetic items such as buried modern ferrous objects.
De-stagger	Corrects a misalignment of data when the survey is conducted in a zig-zag traverse pattern.
Discard Overlap (TerraSurveyor)	Removes datapoints which occur too closely together and can cause digital artefacts in the data which are caused by the overlapping of parallel traverses.
High pass filter	Removes low-frequency, large spatial scale variance in order to remove background trends in the data, such as variations in geology.
Interpolate	Increases the resolution of a survey by interpolating new values between surveyed data points, creating a smoother overall effect.
Low Pass filter	Uses a Gaussian filter to remove high-frequency, small spatial scale variance, typically for smoothing the data.
Remove Turns (TerraSurveyor)	Uses analysis of the direction of travel derived from the GNSS data to break continuous streams of data into individual traverses.
Zero Mean Grid	Resets the mean value of each grid to zero, in order to counteract grid edge discontinuities in composite assemblies.
Zero Mean Traverse	Resets the mean value of each traverse to zero, in order to address the effect of striping in the data and counteract edge effects.

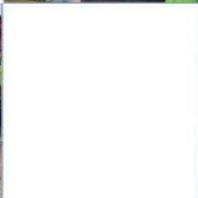
Processing Steps

Bartington Cart survey	
Process	Extent
Base Settings	Interval 0.121m, Track Radius 1.06m
Remove Turns	Threshold Angle 90°, Cut Length 5m
Discard Overlap	Threshold Distance 0.4m, Minimum Track 5, Newest
Despike	Mean Diameter 3 Threshold 12
Destripe	Mean Traverse SD 1.5
High Pass Filter	Uniform (Median) 12
Clip	-30/30

Handheld Bartington Survey	
Process	Extent
Zero Mean Traverse	All LMS =on, threshold -5 to 5
De-spike	X=1 Y=1 Thr = 3 Repl = Mean
De-stagger	All grids dir Shift = 2 Line Pattern 34-78 Dual-DS
Low Pass filter	X=1 Y=1 Wt=G
Interpolate	Y, Expand – Expand –SinX/X x2
Palette Scale	Grey08 Min= -1nT Max= 2nT

Appendix 4: Technical Terminology

Type of Anomaly	Description of Type/Class and rationale for interpretation
Anomaly	Usually linear / curvilinear / rectilinear / discrete anomalies characterised by a sharp-edged increase or decrease in values compared to the magnetic background. Some interpretation classes may have more gradual transitions in magnetic character- this is used as part of the classification process.
Spread	Spreads of enhanced material refer to diffuse areas of altered magnetic character, which suggest a localised spread of material with a magnetic contrast within the topsoil or ploughzone or a generalised enhancement of the magnetic properties over a specific area. These anomalies do not have the high dipolar response characteristic of ferrous material anomaly unless specifically classified as a spread of ferrous debris.
Linear Trend	Linear trends are less distinct and are typically visible as linear patterning in the overall texture of the data. A common example of these is the striping effect caused by recent ploughing.
Class of Anomaly	Description
Probable Archaeology	Interpretation is supported by the presence of known archaeological remains or by other forms of evidence such as HER records, LiDAR data or cropmarks identified through aerial photography. OR the data contains diagnostic anomalies in terms of character or morphology which allow a secure interpretation. Anomalies typically have well defined edges with abrupt transitions indicative of cut features with magnetically enhanced fills, such as ditches. Discrete anomalies will be checked on XY traces for their magnetic character; discrete anomalies in this class likely to be cut features such as pits; anomalies indicating high temperature processes will alternatively classified as 'burned area' - see below. Ferrous material creates distinct 'spikes' and is classified as such.
Possible Archaeology	Anomalies are interpreted as likely to have an archaeological origin, though other explanations are also possible, but less likely. Anomalies typically have well defined edges with abrupt transitions indicative of cut features with magnetically enhanced fills, such as ditches. Discrete anomalies checked on XY traces; discrete anomalies in this class likely to be cut features such as pits; anomalies indicating high temperature processes classified as 'burned area' - see below.
Burned Area	An anomaly with a form on the XY trace plot that is characteristic of high temperature activity such as a kiln or hearth. Should be considered as possible archaeology and should be assigned an anomaly number if a more specific interpretation is possible based on the anomaly characteristics (for example, a clear kiln) so that this can be discussed in text.
Historical Features	Features observed on historical mapping that correspond with anomalies in the data. Linear anomalies caused by removed field boundaries often exhibit distinct characteristics related to the removal process. Areas of enhanced magnetism in this class could relate to former buildings, trackways, quarries or ponds and their nature should be clarified with the use of anomaly numbers and discussion in the results section.
Unclear Origin	These anomalies are (often) magnetically weak and discontinuous or isolated making their context difficult to ascertain. OR they are indistinct for other reasons such as magnetic disturbance in their vicinity. Anomalies in this category have no more likely explanation than another, so whilst an archaeological origin is possible, an agricultural, geological, or modern origin is also equally likely.
Agricultural	Anomalies associated with agricultural activity, either historical (unless shown on a map, then classed as a historical feature) or modern. Usually, this interpretation is arrived at due to on the ground observations of (for example) ploughing, access tracks and the like, or from observation of recent aerial images of the survey area. Recent ploughing is shown as a dashed line and Ridge and Furrow ploughing is shown as a solid line.
Ridge and Furrow / Rig and Furrow	A series of regular linear or slightly curvilinear anomalies which are broad and usually have diffuse edges, either composed of an increased or decreased magnetic response compared to background values. Wide regular spacing between the anomalies is consistent with that of a ridge and furrow / rig and furrow ploughing regime, and the regime may also have a degree of sinuosity characteristic of certain types of ridge and furrow cultivation. Often, multiple directions will be present, with distinct headlands in between. The pattern might follow the general landscape organisation, or it may radically differ from it, depending on the local sequence of inclosure. The anomalies often present as a positive 'ridge' anomaly adjacent to a negative 'furrow' anomaly.
Ploughing Trends	A series of regular linear anomalies or changes in the texture of the survey data, either composed of an increased or decreased magnetic response compared to background values. Anomalies seen parallel to field edges are representative of headlands caused by ploughing.
Drains	A series of magnetic linear anomalies (often with a characteristic alternating positive-negative pattern, which indicates a ceramic drain) of an indeterminate date, usually with a regular dendritic or herringbone patterning which reflects the topography of the survey area.
Geology / Natural	An area of enhanced magnetism that is composed of irregular (usually) weak increases or decreases in magnetic values, frequently with gradual transitions in character, compared with background readings. These are likely to indicate natural variations in soil composition or reflect variations in the bedrock or superficial geology. In areas where former water courses were present, paleochannels may present as distinct curving and banded or braided linear anomalies.
Service	Strong linear anomalies often composed of contrasting high positive and negative dipolar values, with a halo of magnetic disturbance extending from the causative body. Such anomalies are characteristic of below-ground services.
Magnetic Disturbance	A zone of strong magnetic response (usually alternating between positive and negative with abrupt transitions) that has been caused by modern infrastructure or ferrous material within or adjacent to the survey area, such as metallic boundary fencing, gateways. The magnetic haloes around services and changes in the background texture of the data resulting from overhead power lines also fall into this class. These haloes are strong enough to obscure other anomalies (including those of possible archaeological interest) in the area they affect.
Ferrous Anomalies / Ferrous (iron spikes) and ferrous or debris spreads	A response caused by ferrous materials on the ground surface or within the subsoil, which causes a strong but localised dipolar response in the data. These generally represent modern material often re-deposited during manuring, rubbish at field edges and spreads of debris or building material used to surface tracks or left behind following demolition. Distinct from magnetic disturbance, these anomalies relate to material at their spatial location, rather than an effect occurring at a distance from the material responsible.
Free Category for custom use	A category which may be employed to denote specifically identified anomalies related to known past activity within the area, for example those definitely associated with a former airfield, or mapped former mineral extraction.



The Lodge, Unit 8, Mortec Park, Leeds, LS15 4TA
tel: 01138 232 853 | email: leeds@aocarchaeology.com

www.aocarchaeology.com