

# Rosefield Solar Farm

## Environmental Statement

Volume 4  
Appendix 9.4: Aerial Investigation and  
Mapping Report

EN010158/APP/6.4  
August 2025  
Rosefield Energyfarm Ltd

APFP Regulation 5(2)(a)  
Planning Act 2008  
Infrastructure Planning  
(Applications: Prescribed Forms  
and Procedure) Regulations 2009



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# 1. Introduction

## 1.1. Planning background

- 1.1.1. This report was commissioned by Rosefield Energyfarm Limited and presents the results of an Aerial Investigation and Mapping (AIM) report in support of a Development Consent Order (DCO) application for the construction, operation (including maintenance), and decommissioning of Rosefield Solar Farm (hereafter referred to as the 'Proposed Development'). The Proposed Development would be located within the 'Order Limits' (shown in the **Works Plans [EN010158/APP/2.3]**). Land within the Order Limits is known as the 'Site'.
- 1.1.2. The Site totals 675.05 hectares and covers four separate Parcels (Parcel 1, 1a, 2 and 3). The settlements of Calvert, Middle Claydon, Botolph Claydon, East Claydon and Hogshaw lie within 1.5km of parts of the Order Limits. Further afield (within 3km of the Order Limits), lie the settlements of Steeple Claydon, Edgecote, Shipton Lee, Quanton, Gainborough and Winslow. The Site is centred at approximately NGR 473470, 233067 and the nearest postcode is MK18 2NF.
- 1.1.3. This report describes and assesses aerial imagery sources including the Historic England Archive, Google Earth, Bing, Cambridge University Collection of Aerial Photographs and Environment Agency LiDAR data. These data were reviewed for the Order Limits and a 1km buffer, the full gazetteer is provided in **Annex 2**. It provides an assessment of potential archaeological features, in order to identify potential historic environment planning constraints and inform assessment of effects likely to arise from the Proposed Development.
- 1.1.4. This approach is consistent with the requirements of national and local planning policies on the historic environment in the planning process (see **Section 3** for further details).

## 1.2. Proposed Development description

- 1.1.1. The Site lies in the watershed between three river valleys and is situated at the northern edge of a cluster of discrete woodlands within a generally open agricultural landscape. To the west, there are numerous areas of modern industrial development including Calvert Landfill Site, Greatmoor Energy from Waste plant, the HS2 trainline and its associated maintenance depots and infrastructure.
- 1.1.2. The Order Limits are divided into four parcels, numbered west to east (**Figure 1**):
- Parcel 1 is at the western end of the Order Limits.
    - East of the village of Calvert and separated from it by the line of HS2.
    - Made up of 24 arable fields encircling Pond Farm and Shrubs Wood.

- Bounded by School Hill road to the north, Three Points Lane to the east, Sheephouse Wood to the south and Decoypond Wood and arable fields to the west.
- Gently sloping from south-west (115m Above Ordnance Datum (AOD)) to north-east (88m AOD).
- Parcel 1a is at the western side of the central portion of the Order Limits
  - East of the Greatmoor Energy from waste plant and separated from it by the line of HS2.
  - Made up of 3 arable fields.
  - Bounded by agricultural fields and Muxwell Brook to the north, Romer Wood to the east, agricultural fields to the south and Sheephouse Wood and Muxwell Brook to the west.
  - Gently sloping from west (77m AOD) to east (85m AOD).
  - Transected by a Public Right of Way (PRoW) running from north to south.
- Parcel 2 is at the eastern side of the central portion of the Order Limits
  - South of the village of Botolph Claydon and 300m west of Claydon Road.
  - Made up of 34 arable fields.
  - Bounded by Orchard Way and Botolph Claydon to the north, agricultural fields to the east, Finemere Wood to the south, and agricultural fields and Runt's Wood to the west.
  - Has two high points; one to the south of Botolph Claydon which sits at 123m AOD, and one in the southern portion of the Parcel which sits at 137m AOD. The lowest points of the Site sits at 98m AOD.
  - Transected in its southern section by Bernwood Jubilee Way which runs north west to south east through the Site.
- Parcel 3 is at the western end of the Order Limits
  - East of the village of East Claydon and 350m south east of East Claydon Road.
  - Made up of 6 arable fields.
  - Bounded by agricultural fields and National Grid East Claydon Substation to the north, agricultural fields and Claydon Brook to the east and agricultural fields to the south and west.
  - Is generally level at an AOD of 90m



## 1.4. Geology and geomorphology

- 1.4.1. The British Geological Society (BGS)[**Ref. 9-1**] records four underlying solid geologies within the Order Limits (**Figure 2**) which will be discussed in more detail below as appropriate. These include:
- Peterborough Member – a mudstone sedimentary bedrock formed between 166.1 and 163.5 million years ago.
  - Stewartby Member – a mudstone sedimentary bedrock formed between 166.1 and 163.5 million years ago.
  - Weymouth Member - a mudstone sedimentary bedrock formed between 166.1 and 163.5 million years ago.
  - West Walton Formation - a mudstone sedimentary bedrock formed between 166.1 and 163.5 million years ago.
- 1.4.2. The BGS also records four superficial deposits are recorded within the Order Limits (**Figure 3**) including:
- Glaciofluvial Deposits – a sand and gravel sedimentary superficial deposit formed between 860 and 116 thousand years ago.
  - Glacial Deposits – a clay, silt and sand sedimentary deposit formed between 2.588 million and 11.8 thousand years ago.
  - Till – a Diamicton sedimentary superficial deposit formed between 860 and 116 thousand years ago.
  - Alluvium – a clay, silt, sand and gravel sedimentary superficial deposit formed between 11.8 thousand years ago and the present.
- 1.4.3. The National Soils Map, published at 1:250,000 scale, records soils at the Site as belonging to the Denchworth, Evesham 2, Ragdale, Wickham 2, and Fladbury 1 soil associations. These soils are all described as typically slowly permeable and are presented on **ES Volume 3, Figure 12.2: Soil Association Map [EN010158/APP/6.3]**.
- 1.4.4. The soils vary little in characteristics across the Site. Almost all soil profiles are clayey, with gleyed<sup>1</sup> and poorly structured, slowly permeable clayey subsoil recorded within 15-45cm of the soil surface – directly below the topsoil.

## 1.5. Professional standards and acknowledgements

- 1.1.3. Headland Archaeology (UK) is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA), an audited status which

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1 Gleying is a soil colouring indicative of periodic or permanent waterlogging.

confirms that all work is carried out in accordance with the highest standards of the profession.

- 1.1.4. Headland Archaeology (UK), as part of the RSK Group, is recognised by the Institute of Historic Building Conservation (IHBC) under their 'Historic Environment Service Provider Recognition' scheme. This quality assurance standard acknowledges that RSK works to the conservation standards of the IHBC, the UK's lead body for built and historic environment practitioners and specialists.
- 1.1.5. Headland Archaeology (UK) operates a quality management system to help ensure all projects are managed in a professional and transparent manner, which enables it to qualify for ISO 9001 (Quality Management), ISO 45001 (health and safety management) and ISO 14001 (environmental management).
- 1.1.6. Ordnance Survey data is produced under © Crown copyright and database rights Licence AC0000811465.
- 1.1.7. LiDAR data is reproduced under the Open Government Licence.

## 2. Aims and Objectives

- 2.1.1. The aims of this aerial investigation report are to identify, map, record and interpret the form and extent of archaeological features visible as cropmarks, soil marks or earthworks in order to inform the assessment of the historic environment.
- 2.1.2. The objectives are to:
- Collate the available written, graphic, photographic and electronic information relevant to this report;
  - Accurately rectify relevant aerial photographs and georeference them;
  - Transcribe potential archaeological features from georeferenced aerial sources and LiDAR;
  - Describe the layout and extent of identified features;
  - Interpret the possible character of identified features; and
  - Set out the potential limitations and confidence rating of the results.

## 3. Methodology

### 3.1. Identification of heritage assets that may be affected

#### Data sources

- 3.1.1. The assessment has been based on a study of all readily available documentary sources. The following sources of information were referred to:
- All accessible oblique, military oblique and vertical aerial photographs held at the Historic England Archive (images reproduced in this report are detailed in **Table 1**);
  - Cambridge University Collection of Aerial Photographs (CUCAP) online repository [**Ref. 9-2**];
  - Historic England National Mapping Programme Data supplied as a digital data extract;
  - Google Earth (2003-2025) [**Ref. 9-3**] & Bing Aerial (undated) [**Ref. 9-4**] satellite images;
  - Archaeological records and aerial photographs held by Buckinghamshire Historic Environment Record (HER);
  - Historic maps and plans held in the Buckinghamshire archive; and
  - Environment Agency Light Detection and Ranging LiDAR data available for the Order Limits and 1km study area [**Ref. 9-5**];
  - Geological data available online from the BGS [**Ref. 9-1**]<sup>2</sup>.
  - Information on designated heritage assets from the National Heritage List England (NHLE) maintained by Historic England [**Ref. 9-6**].

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<sup>2</sup> <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

Table 1: Aerial Photographs with features identified

Headland ID	Sortie	Date	Frame Numbers
47	RAF/CPE/UK/2139	1947	3243
6	RAF/CPE/UK/2159	1947	3064
7/8	RAF/CPE/UK/2159	1947	3140
16/17	RAF/CPE/UK/2159	1947	3148
88	OS/76044	1976	304
89	OS/76044	1976	305
110	OS/75312	1976	46

- 3.1.2. Any heritage assets newly identified as a result of this investigation are shown in **Illustrations s 4-20** and are detailed in **Annex 1**.
- 3.1.3. Heritage assets recorded by the HER and NHLE within the Order Limits are shown and detailed in descriptions compiled within the Desk Based Assessment (**ES Volume 4, Appendix 9.1: Archaeological Desk-Based Assessment and Setting Assessment [EN010158/APP/6.4]**). All designated and non-designated assets are mapped on **ES Volume 3 [EN010158/APP/6.3] Figure 9.1: Heritage assets within the Order Limits** and **Figure 9.2: Non-designated heritage assets within 1km of the Order Limits overlain on ZTV**.
- 3.1.4. Designated heritage assets are referenced in this report by National Heritage List for England list entry number. Non-designated assets are referenced by HER Preferred Reference or the National Record of the Historic Environment reference. Any newly discovered assets are assigned a number prefixed 'HA' for Heritage Asset. A single asset number can refer to a group of related features, which may be recorded separately in the HER and other data sources.

## LiDAR

- 3.1.5. Light Detection and Ranging (LiDAR) is an airborne mapping technique, which uses a laser to measure the distance between the aircraft and the ground. Up to 500,000 measurements per second are made of the ground, allowing highly detailed terrain models to be generated in which it is possible to identify shallow or otherwise imperceptible topographic features.
- 3.1.6. A composite Digital Terrain Model (DTM) has been produced by removing objects from the Digital Surface Model (DSM) which is available at 1m resolution for the Site. Composite data breaks down by spatial resolution i.e. 2m, 1m, 50cm and 25cm and is made up from a combination of the full

Environment Agency dataset which has been merged and re-sampled to give the best possible coverage. This means that a 1m resolution tile may contain decimated 50cm data as well as native captured 1m data. It is not possible using only the composite to know which part of a given tile was surveyed at which resolution.

- 3.1.7. This assessment has utilised DTM data, as it is necessary to assess the archaeological resource beneath tree and vegetation cover. This assessment has not utilised composite LiDAR data as these data represent blended datasets, this assessment has instead utilised timestamped tiled data which has not been additionally processed.
- 3.1.8. The DTM data were visualised into Hillshade, Multi directional Hillshade, Simple Local Relief Model (SLRM), Slope, Sky View Factor, Anisotropic Sky View Factor, Open Positive and Open Negative using the Relief Visualisation Toolkit (RVT) Version 1.2. These visualisations were chosen as they are of most use for archaeological prospection. The multiple American Standard Code for Information Interchange (ASCII) tiles were merged before being visualised for ease of use in the GIS. The data were analysed alongside satellite imagery to confirm the topography and nature of features interpreted from LiDAR data.
- 3.1.9. This assessment will map in detail archaeological features noted within the Order Limits itself and will illustrate the visible extent of features identified within the 1km study area using extent of area polygons.
- 3.1.10. Analysis was undertaken by a professional archaeologist using QGIS imaging and geo-referencing/mapping software. Detailed methodology for georeferencing of aerial imagery varied by image, with the most appropriate transformation algorithm being selected to give the best fit for that image. Coordinate sources used were the Ordnance Survey open layers data and google orthophotographs, as used in the National Mapping Programme Standards Technical Review [Ref.9-7].

## 3.2. Limitations of baseline data

### Data sources

- 3.2.1. Information held by public data sources is generally considered to be reliable; however, the following general points are noted:
  - HER records can be limited because opportunities for research, fieldwork and discovery depend on the situation of commercial development and occasional research projects, rather than the result of a more structured research framework. A lack of data within the HER records does not necessarily equal an absence of archaeology;
  - Where archaeological sites have been identified solely from aerial imagery without confirmation from archaeological excavation or

supporting evidence in the form of findspots for example, it is possible the interpretation may be revised in the light of further investigation;

- The identification of potential archaeological features from aerial imagery is heavily dependent on the underlying geology, which affects the reliability and interpretation of results;
- Aerial photographic evidence is limited by seasonal, agricultural, meteorological and environmental factors which impact upon the visibility of archaeological features from the air. Therefore, photographs may not indicate the full extent of archaeological features; and
- Aerial imagery assessment is a non-intrusive survey technique and therefore features cannot be securely dated to a particular archaeological period using this method. Assessment of the morphology of features can assist in their identification and interpretation, however secure dating can only be achieved through intrusive survey.

## LiDAR

- LiDAR data show topographic features which survive as earthworks, the resolution of the data, the time of year collected, and vegetation cover of the area surveyed all impact upon the visibility of archaeological features within the data. For these reasons, LiDAR data is best collected in the winter months when vegetation is at its thinnest, giving the laser the best opportunity to reach and return from the ground surface. Similarly, the higher the resolution of the data the more likely archaeological features will be identified, the resolution depicts the frequency at which readings are collected and therefore the more readings that are taken increases the accuracy of the survey. It is generally agreed that a 1m resolution or better is preferred for archaeological survey, however features may still be visible in 2m+ data sets.
- LiDAR assessment will not identify archaeological features beneath the ground surface, nor will it identify cropmarks if these do not also survive as earthworks.

## Potential for unknown heritage assets

- 3.2.2. Archaeological features are often impossible to identify through desk-based assessment. The likelihood that significant undiscovered heritage assets may be present within the Order Limits is referred to as archaeological potential. The following factors are considered in assessing archaeological potential:
- Environmental factors such as geology, topography and soil quality, which would have influenced land-use in the past and can therefore be used to predict the distribution of archaeological remains;

- Land-use factors affecting the survival of archaeological remains, such as ploughing or quarrying; and
- Factors affecting the visibility of archaeological remains, which may relate to both environment and land-use, such as soils and geology (which may be more or less conducive to formation of cropmarks), arable cultivation (which has potential to show cropmarks and create surface artefact scatters), vegetation (which can conceal upstanding features), and superficial deposits such as peat and alluvium which can mask archaeological features.

## 4. Results

### 4.1. Archaeological background

- 4.1.1. An archaeological desk-based assessment (DBA) has been prepared separately to this report which fully details the archaeological and historical background of the Site (**ES Volume 4, Appendix 9.1: Archaeological Desk-Based Assessment and Setting Assessment [EN010158/APP/6.4]**).
- 4.1.2. The HER records eight assets within the Order Limits of relevance to this assessment (**Illustration 4**).
- 5 areas of ridge and furrow cultivation which were surviving in 1995
  - 1 area of ridge and furrow surviving in 2012
  - 1 Roman road (MBC6013)
  - 1 Railway line (MBC4921)

### 4.2. Disturbance

- 4.2.1. The Site is likely to have been subject to substantial ploughing due to its agricultural use from the medieval period onwards. There is potential that this has disrupted any archaeological remains which could survive. It is likely that elements of these assets will remain but in partial form.

### 4.3. Survey results

- 4.3.1. Areas of ridge and furrow cultivation appear to have been historically present across much of the Site. Twenty-four areas of ridge and furrow were identified from LiDAR data in total, six of these areas are also recorded by the HER (**Illustration 4**). Nine of these areas appear to be in a good state of preservation. The LiDAR analysis also shows evidence across the Proposed Development Area of river channels that were once spread over this landscape as well as of field boundaries present today.



- 4.3.2. One further area of ridge and furrow was identified from aerial photography as part of this assessment and this is not recorded by the HER and is not visible in LiDAR. This suggests that no earthwork remains survive above ground today for this feature.
- 4.3.3. Five further heritage assets have been identified from aerial photography as part of this AIM report, two of which are also recorded by the HER (representing a former railway line and potential Roman road). Due to the limited number of heritage assets identified they will be addressed individually within the sections below. These non-designated heritage assets are shown in **Illustrations 7-20** and the results are presented below;

### Parcel 1

- 4.3.4. Five areas of potential ridge and furrow have been identified from LiDAR data within Parcel 1 (**Illustration 7**). None of these have been identified by the HER.
- 4.3.5. Two newly identified features have been identified from historic aerial photography which are assessed below.

### HA1 – Curvilinear cropmark feature

- 4.3.6. The cropmark of a curvilinear cropmark/soilmark feature is visible on aerial photography of 1976 but is not visible on LiDAR, although the LiDAR does indicate that it is raised higher than the surrounding landscape and therefore occupies a hill slope. It is shown as a semi-circular area of dark earth within Field B17 in the west of the Site (**Illustration 9**).
- 4.3.7. In aerial photography from 1947 the feature corresponds to a copse of trees, so it may represent a relic feature from this former post-medieval agricultural use (**Illustration 5**). The ground conditions show that the area lies at the interface between two bedrock geologies, Mudstone of the Weymouth Member on the higher land to the south of the feature and Mudstone of the Stewartby Member to the north (**Illustration 2**). The feature could therefore represent a soilmark of Colluvium deposits around the slope. There is a moderate to strong probability of the geological conditions being the source of this feature.

### HA2 – Square positive feature

- 4.3.8. This feature has been identified from historic aerial photography dating to 1947 (**Illustration 6**). It is also visible on historic mapping between 1888 and 1913 (**Illustration 11**) but is not visible on LiDAR (**Illustration 7**).
- 4.3.9. This feature is shown as a square enclosure on the earliest OS mapping of 1888. By the time of the aerial photograph of 1947 (**Illustration 6** above) the rectangular structure is still present. There is a moderate to strong possibility that this represents a post-medieval/modern structure.

### Parcel 1a and central portion of Site

- 4.3.10. No areas of potential ridge and furrow have been identified from LiDAR data within Parcel 1a (**Illustration 12**).
- 4.3.11. No features have been identified by the HER within Parcel 1a.
- 4.3.12. Eight areas of potential ridge and furrow have been identified in the central portion of the Site between Parcels 1, 1a, and 2. Of these, six are in a good state of preservation. The HER identifies two of these areas abutting the northern Order Limits as areas of ridge and furrow surviving in 1995.
- 4.3.13. No features have been identified on aerial photography in either Parcel 1a or the central portion of the Site.

### Parcel 2

- 4.3.14. Two areas of potential ridge and furrow have been identified from LiDAR data within Parcel 2 (**Illustration 13**).
- 4.3.15. No features have been identified by the HER within Parcel 2.
- 4.3.16. No features have been identified on aerial photography in Parcel 2.

### Parcel 3 and eastern portion of Site

- 4.3.17. Two areas of potential ridge and furrow have been identified from LiDAR data within Parcel 3 (**Illustration 16**).
- 4.3.18. Four areas of ridge and furrow lie to the west of Parcel 3 in the northern portion of the Site. One of these is in a good state of preservation.
- 4.3.19. Three areas of ridge and furrow lie between Parcels 2 and 3 and two of these are in a good state of preservation.
- 4.3.20. Two features have been identified by the HER within Parcel 3 one of which corresponds to a linear cropmark feature identified by aerial photography and one to a linear cropmark feature identified by aerial photography and LiDAR. These are assessed below.

### HA3 – Linear negative cropmark feature

- 4.3.21. This heritage asset has been identified from historic aerial photography of 1947 (**Illustration 14**). It lies just outside the Order Limits to the south of Parcel 3 but may continue within the Site in that Parcel. It is visible as a linear negative feature, oriented north-west to south east (**Illustration 14**).
- 4.3.22. The cropmark is indicative of two negative features diverging from a point parallel with the end of the extant field boundaries. The alignment corresponds to the projected line of the Roman Road (Viatores 162) between Akeman Street and Thornborough identified by Margery, the HER record for this is (MBC6013). Looking further out, the alignment also corresponds to a water course that may be of some antiquity, although it

seems to have a couple of modern drains attached to it, highlighting that the area was wetter in the past. It is noted that the line of the water course is also clearer to the southeast, before it crosses the stream into another geology. The feature is visible on LiDAR but appears to be the point of a level change rather than a raised linear feature. There is a low to moderate possibility that it represents the Roman Road.

#### HA4 – Linear positive cropmark feature

- 4.3.23. The cropmark of another linear positive feature is visible on aerial photography of 1976 and is also visible on LiDAR. It is shown as a linear cropmark feature in the north eastern part of the Site, which curves slightly to the west at its northern extremity (**Illustration 15**).
- 4.3.24. The feature corresponds to the line of the former railway line between Aylesbury and Buckingham identified on the HER (MBC14921). Given the strong correlation between these features it is likely that the cropmark represents this post-medieval use. As the feature is also visible on LiDAR upstanding earthwork remnants survive above ground. Given the strong correlation over its length there is a high possibility that this represents the former railway line.

## 5. Conclusions

- 5.1.1. The results of this aerial investigation and mapping report provides an accurate location for the known below-ground features visible as cropmarks and above-ground remains visible as earthworks.
- 5.1.2. This work allowed several sites already recorded by the HER to be accurately mapped for the first time allowing a better understanding of the landscape of the Proposed Development. Three new features were recorded for the first time, an undated square enclosure and a curvilinear feature in the west of the Site. A newly identified area of ridge and furrow cultivation was also noted in the north east of the Site. The assessment also confirmed the presence on aerial photography of two features identified by the HER; a former railway line and a feature corresponding to the potential alignment of a Roman road.
- 5.1.3. The extensive ploughing that has occurred within the Order Limits has reduced areas of ridge and furrow that were recorded as present in 1995 and 2012. There are other features that may no longer be identifiable as a result of the agricultural activities within the Order Limits.
- 5.1.4. The results of this aerial investigation and mapping represent only a fraction of the archaeological features present. The absence of more cropmarks and earthworks across the area is not an indication of a lack of archaeological remains, but rather a result of the agricultural use of this area.
- 5.1.5. This report has provided an indication of the extent and complexity of the archaeological landscape within the Proposed Development. The results will inform the interpretation of geophysical survey results and the layout of the Proposed Development. Together with **Appendix 9.1: Archaeological Desk-based Assessment and Setting Assessment** and **Appendix 9.2: Geophysical Survey Report**. The results will also inform the scope of further investigation and mitigation proposals as necessary for the EIA.

## 6. References

### 6.1. Bibliographic References

**[Ref.9-1]** British Geological Society WebViewer (Online). Available at <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/> (Accessed 09 July 2025)

**[Ref. 9-2]** Cambridge University Collection of Aerial Photographs. Available at <https://www.cambridgeairphotos.com/> (Accessed 09 July 2025)

**[Ref. 9-3]** Google Earth Satellite Imagery Available at <https://earth.google.com/web/> (Accessed 09 July 2025)

**[Ref. 9-4]** Bing Aerial Maps Available at [www.bing.com/maps/aerial](http://www.bing.com/maps/aerial) (Accessed 09 July 2025)

**[Ref. 9-5]** Environment Agency (2025) National LiDAR Programme Available at [www.data.gov.uk](http://www.data.gov.uk) (Accessed 09 July 2025)

**[Ref. 9-6]** Historic England. (2025). National Heritage List England Available at <https://historicengland.org.uk/listing/the-list> (Accessed 09 July 2025)

**[Ref. 9-7]** Historic England. (2019). Historic England Aerial Investigation & Mapping (formerly National Mapping Programme) Standards Technical Review, Research Report Series. 46/2019. Available at <https://historicengland.org.uk/listing/the-list> (Accessed 09 July 2025)

# **Annex 1:**

## **Features**

### **Discussed in this**

### **Assessment**



## Annex 1: Features discussed in this assessment

Headland Archaeology Asset Ref	HER Number	Name	Description	Easting	Northing
<b>n/a</b>	n/a	Ridge and Furrow	Identified from LiDAR. Areas of ridge and furrow cultivation.	n/a	n/a
<b>HA1</b>	n/a	Square Enclosure	Identified from AP 7 (RAF/CPE/UK/2159/3140). This feature is square in shape and is recorded on historic mapping between 1888 and 1961.	469515	224614
<b>HA2</b>	n/a	Curvilinear Feature	Identified from APs 110 and 111 (OS/75312/46 & 47). This feature could represent an area of trees and hillwash soilmarks from slope	470395	224361
<b>HA3</b>	MBC6013	Linear Feature	Identified from APs 16 and 17 (RAF/CPE/UK/2159/3148). This feature could represent the line of the Roman Road (Margery 162).	475219	224998
<b>HA4</b>	MBC4921	Linear/Curvilinear Feature	Identified from APs 86 and 87 (OS/76044/251 & 252) and LiDAR. This feature is thought to represent the former railway line between Aylesbury and Buckingham.	474870	224893
<b>HA5</b>	n/a	Ridge and Furrow	Identified from AP 46 (RAF/CPE/UK/2139/3235). Area of ridge and furrow cultivation.	474832	225790

# **Annex 2: Gazetteer of Aerial Photographs Examined**





## Annex 2: Gazetteer of aerial photographs examined

Sortie Number	Frame Number
RAF/CPE/UK/1897	3304
RAF/CPE/UK/1897	3305
RAF/CPE/UK/2139	3235
RAF/CPE/UK/2139	3236
RAF/CPE/UK/2139	3243
RAF/CPE/UK/2139	3244
RAF/CPE/UK/2139	3302
RAF/CPE/UK/2139	3303
RAF/CPE/UK/2139	3304
RAF/CPE/UK/2139	4236
RAF/CPE/UK/2139	4237
RAF/CPE/UK/2139	4238
RAF/CPE/UK/2139	4239
RAF/CPE/UK/2139	4240
RAF/CPE/UK/2139	4241
RAF/CPE/UK/2139	4242
RAF/CPE/UK/2139	4243
RAF/CPE/UK/2159	3059
RAF/CPE/UK/2159	3060
RAF/CPE/UK/2159	3061
RAF/CPE/UK/2159	3062
RAF/CPE/UK/2159	3063
RAF/CPE/UK/2159	3064
RAF/CPE/UK/2159	3140
RAF/CPE/UK/2159	3141
RAF/CPE/UK/2159	3142
RAF/CPE/UK/2159	3143
RAF/CPE/UK/2159	3144
RAF/CPE/UK/2159	3145
RAF/CPE/UK/2159	3146
RAF/CPE/UK/2159	3147
RAF/CPE/UK/2159	3148
RAF/CPE/UK/2159	4057
RAF/CPE/UK/2159	4058
RAF/CPE/UK/2159	4059
RAF/CPE/UK/2159	4060
RAF/CPE/UK/2159	4061
RAF/CPE/UK/2159	4062
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RAF/CPE/UK/2159	4142

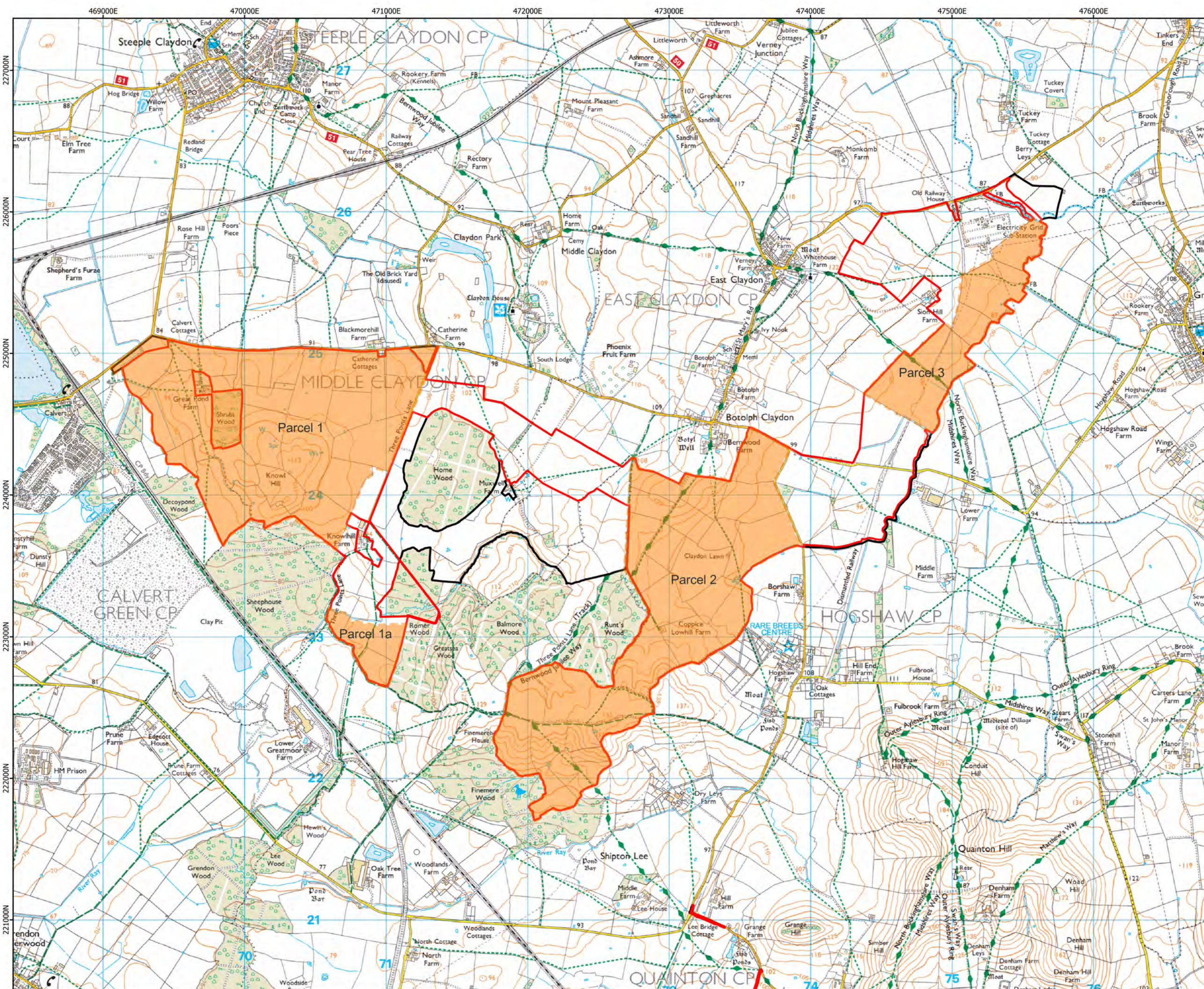
Sortie Number	Frame Number
RAF/CPE/UK/2159	4143
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RAF/CPE/UK/2159	4145
RAF/CPE/UK/2159	4146
RAF/541/143	4233
RAF/541/143	4234
RAF/541/143	4235
RAF/541/143	4236
RAF/541/479	4238
RAF/541/479	4239
RAF/541/479	4240
RAF/541/479	4241
RAF/541/479	4273
RAF/541/479	4274
RAF/541/479	4275
RAF/541/479	4276
RAF/541/479	4277
RAF/541/479	4278
RAF/543/673	25
RAF/543/673	26
RAF/543/673	27
RAF/543/673	26
RAF/543/673	27
RAF/543/673	28
RAF/543/673	29
RAF/543/673	30
RAF/543/673	31
RAF/58/4627	366
RAF/58/4627	367
RAF/58/4627	368
RAF/58/4627	363
RAF/58/4627	364
RAF/58/4627	365
RAF/58/4627	366
RAF/58/4627	367
RAF/58/4627	368
RAF/58/4627	369
RAF/58/4627	370
RAF/58/4627	364
RAF/58/4646	203
RAF/58/4646	204
RAF/58/4646	205
RAF/58/4646	206

Sortie Number	Frame Number
RAF/58/4646	201
RAF/58/4646	202
RAF/58/4646	203
RAF/541/340	3100
RAF/541/340	3101
RAF/541/340	3150
RAF/541/340	3151
RAF/541/340	3152
RAF/541/340	3153
RAF/541/340	3154
RAF/541/340	3159
RAF/541/340	3244
RAF/541/340	3245
RAF/541/340	3246
RAF/541/340	3247
RAF/541/340	3248
RAF/541/340	3249
RAF/541/340	3250
RAF/541/340	3251
RAF/541/340	3252
RAF/541/340	4099
RAF/541/340	4100
RAF/541/340	4101
RAF/541/340	4102
RAF/541/340	4244
RAF/541/340	4245
OS/76043	237
OS/76043	238
OS/76043	239
OS/76044	246
OS/76044	247
OS/76044	248
OS/76044	249
OS/76044	250
OS/76044	251
OS/76044	252
OS/76044	304
OS/76044	305
OS/76044	306
OS/76044	307
OS/76044	308
OS/76044	309
OS/76044	310

Sortie Number	Frame Number
OS/76044	311
OS/76044	312
OS/73252	95
OS/73252	96
OS/73252	97
OS/73252	101
OS/73252	102
OS/73252	103
OS/73252	104
OS/73252	105
OS/73252	106
OS/73252	107
OS/73274	23
OS/73274	24
OS/67277	10
OS/75312	46
OS/75312	47
OS/75312	48
OS/75312	49
OS/75312	50
OS/75312	51
OS/75312	54
OS/75312	55
OS/75312	56
OS/75312	57
OS/75392	206
OS/75392	207
NMR/CAP/ZKNHN	96
NMR/CAP/ZKNHN	97
NMR/CAP/ZKNHN	98
NMR/CAP/ZKNHN	99
NMR/CAP/ZKNHN	100
NMR/CAP/ZKNHN	101
OS/99104	94
OS/99104	95
OS/99104	96
OS/99104	103
OS/99104	104
OS/99104	105
OS/99104	106
OS/04978	3113
OS/04978	3137
OS/04978	3138

Sortie Number	Frame Number
OS/04978	3139
OS/04978	3140
OS/04978	3141
OS/04982	1812
OS/04982	1813
OS/04982	1814
OS/04982	1819
OS/04982	1820
OS/04983	3210
OS/04983	3211
OS/04983	3212
OS/04983	3213
OS/04983	3214
OS/04983	3215
OS/04983	3216
OS/04983	3217
OS/04983	3218
OS/74256	292
OS/74256	293
ADA/617	155
ADA/617	181
ADA/617	182
ADA/617	183
RAF 30268	/ NFFO-0134
RAF 30268	/ NFFO-0135
RAF 30268	/ NFFO-0136
RAF 30268	/ NFFO-0137
RAF 30268	/ NFFO-0138
RAF 30268	/ NFFO-0139
RAF 30268	/ NFFO-0140
RAF 30268	/ NFFO-0141
RAF 30268	/ NFFO-0142
RAF 30268	/ NFFO-0143
RAF 30268	/ NFFO-0144
RAF 30268	/ NFFO-0145
RAF 30268	/ NFFO-0146
RAF 30268	/ NFFO-0147
RAF 30268	/ NFFO-0148
RAF 30268	/ NFFO-0149
RAF 30268	/ NFFO-0150





- LEGEND:
- Order Limits
  - Previous Order Limits
  - Parcels

CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters



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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

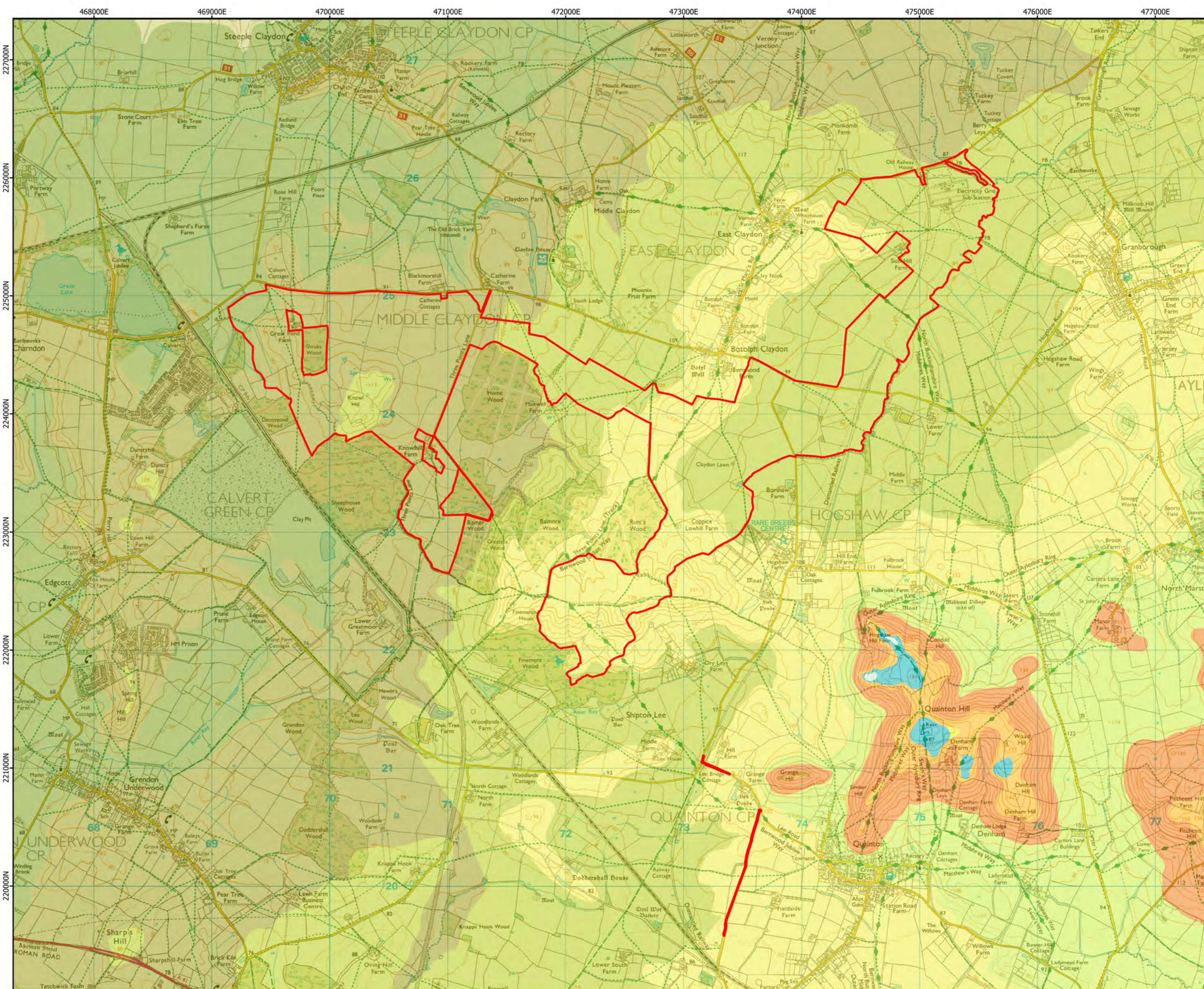
TITLE: Study Area

PINS REFERENCE NUMBER:  
EN010158/APP/6.4

Scale: 1:25000 @A3

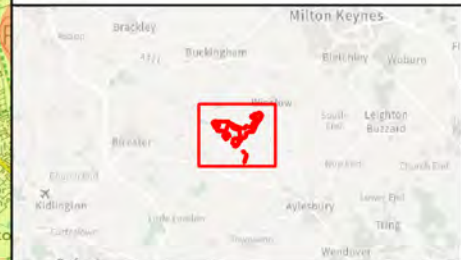
REV 01





- LEGEND:
- Order Limits
  - Sandstone - Lower Greensand Group
  - Sandstone - Whitchurch Formation
  - Mudstone - West Walton Formation
  - Mudstone - Ampthill Clay Formation
  - Mudstone - Kimmeridge Clay Formation
  - Mudstone - Stewartby Member
  - Mudstone - Peterborough Member
  - Limestone - Portland Stone Formation
  - Mudstone - Weymouth Member

Contains British Geological Survey materials @UKRI 2025  
CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters



01	01/08/2025	First Draft	RSK	AA	AA
Rev	Date	Description	Drn	Chk	App

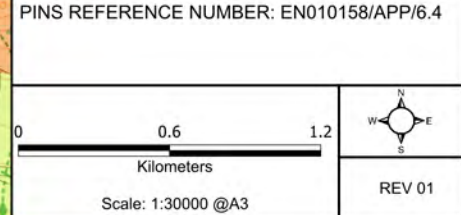
Rosefield Solar Farm



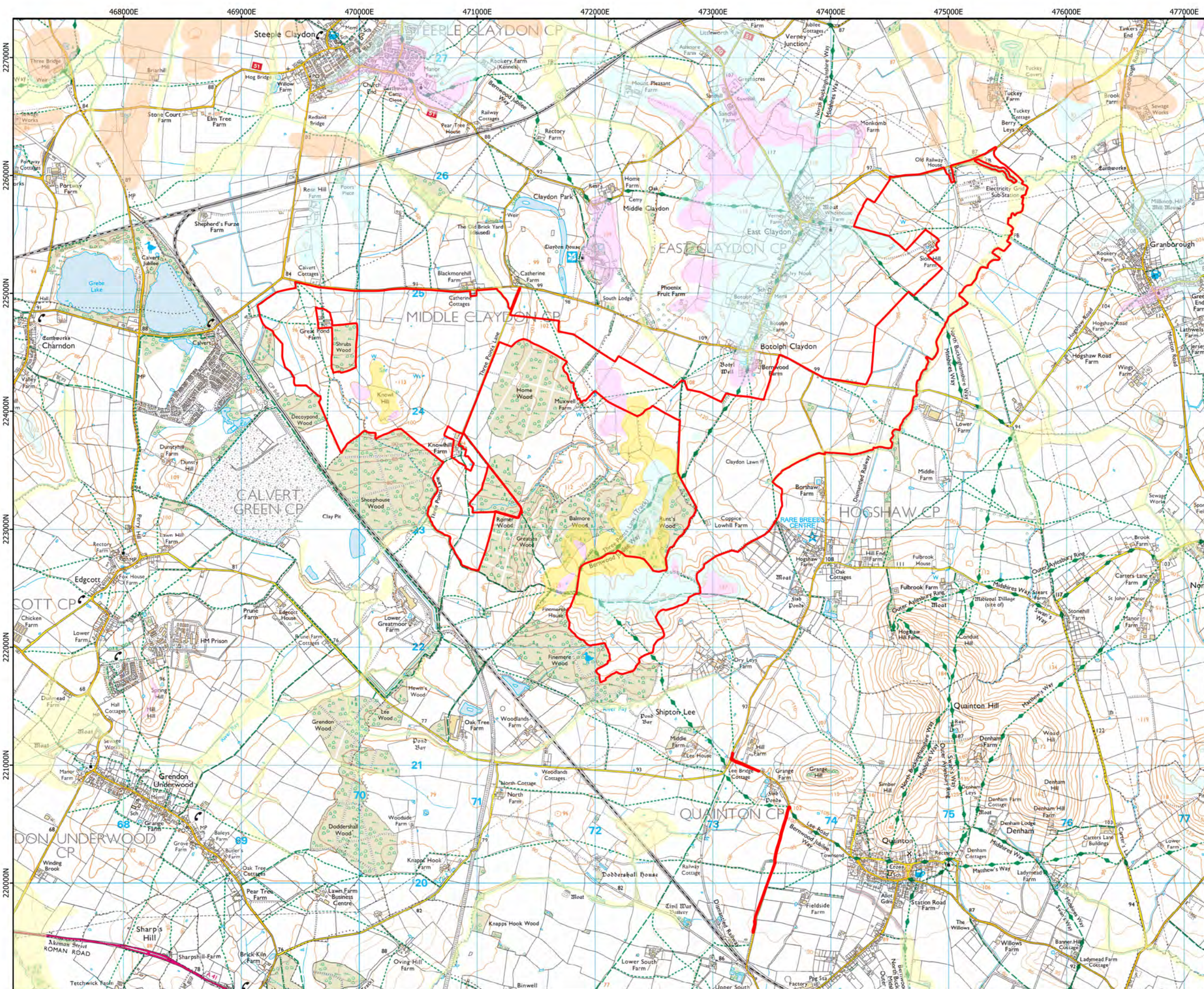
DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.1 5(2)(a)

TITLE: British Geological Survey - solid geology

PINS REFERENCE NUMBER: EN010158/APP/6.4

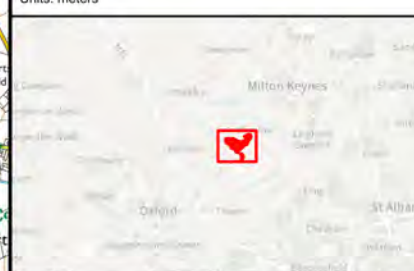






- LEGEND:
- Order Limits
  - Mudstone - Weymouth Member
  - Alluvium - Clay, Silt, Sand & Gravel
  - River Terrace Deposits - Sand & Gravel
  - Glacial Deposits - Clay, Silt & Sand
  - Glaciofluvial Deposits - Sand & Gravel

Contains British Geological Survey materials @UKRI 2025  
CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters



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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.1 5(2)(a)

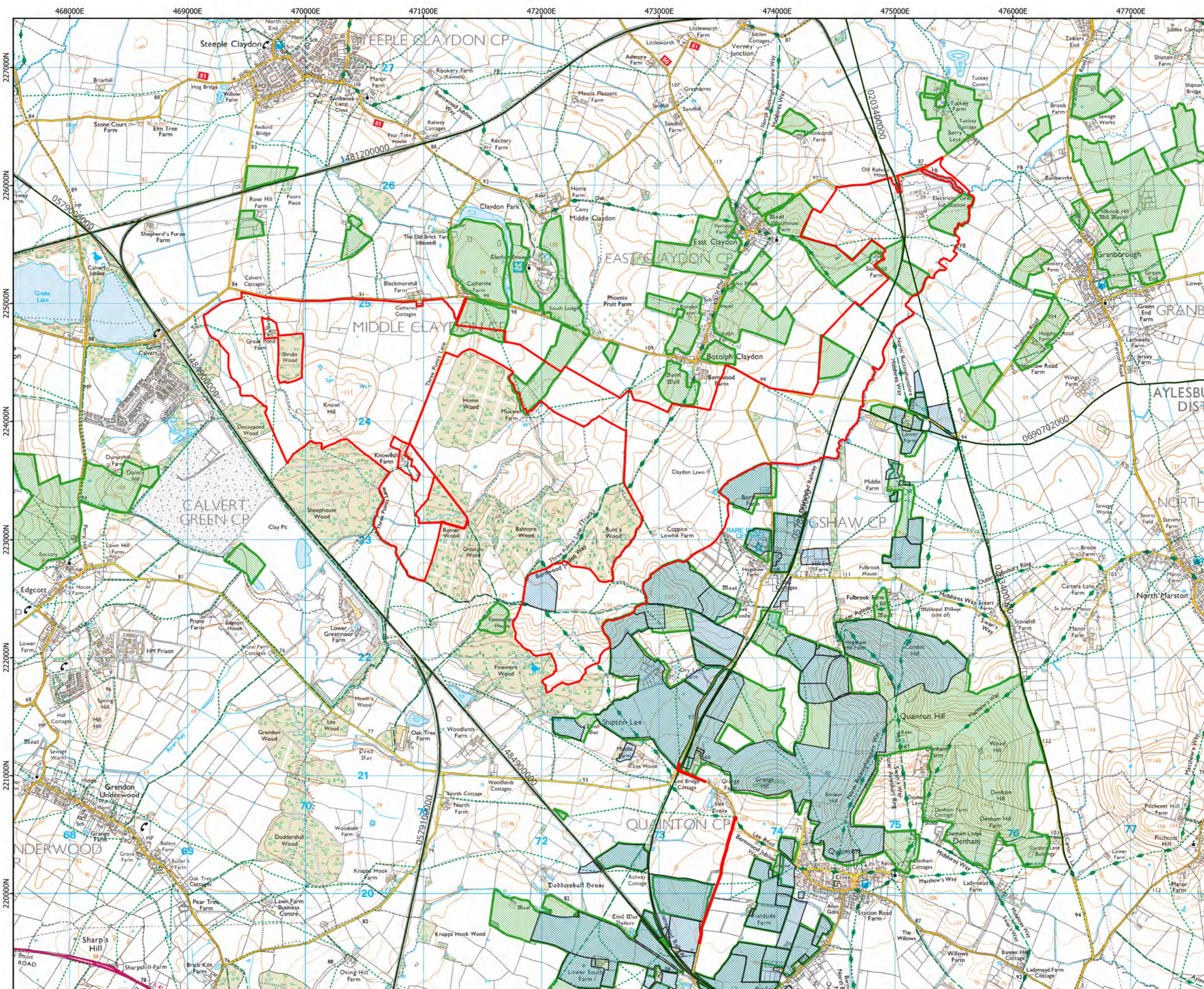
TITLE: British Geological Survey - superficial geology

PINS REFERENCE NUMBER: EN010158/APP/6.4

Scale: 1:30000 @A3

REV 01





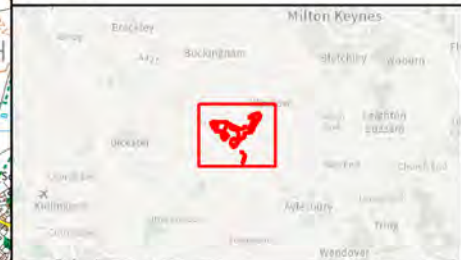
**LEGEND:**

- Order Limits
- Monument Lines
- Ridge & Furrow Surviving in 1922
- Ridge & Furrow Surviving in 1995

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CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters



Rev	Date	Description	Drm	Chk	App
01	01/08/2025	First Draft	RSK	AA	AA

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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Features recorded by HER


PINS REFERENCE NUMBER:  
EN010158/APP/6.4

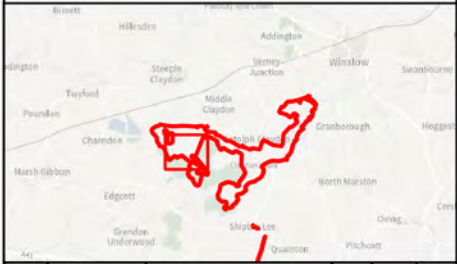
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REV 01





LEGEND:  
 Order Limits



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Rev	Date	Description	Drn	Chk	App

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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Aerial photo: RAF/CPE/UK/2159-3064

PINS REFERENCE NUMBER:  
EN010158/APP/6.4

00.10.2

Kilometers

Scale: 1:5000 @A3

N

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REV 01





LEGEND:

Order Limits

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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Aerial photo:  
RAF/CPE/UK/2159-3140

PINS REFERENCE NUMBER:  
EN010158/APP/6.4

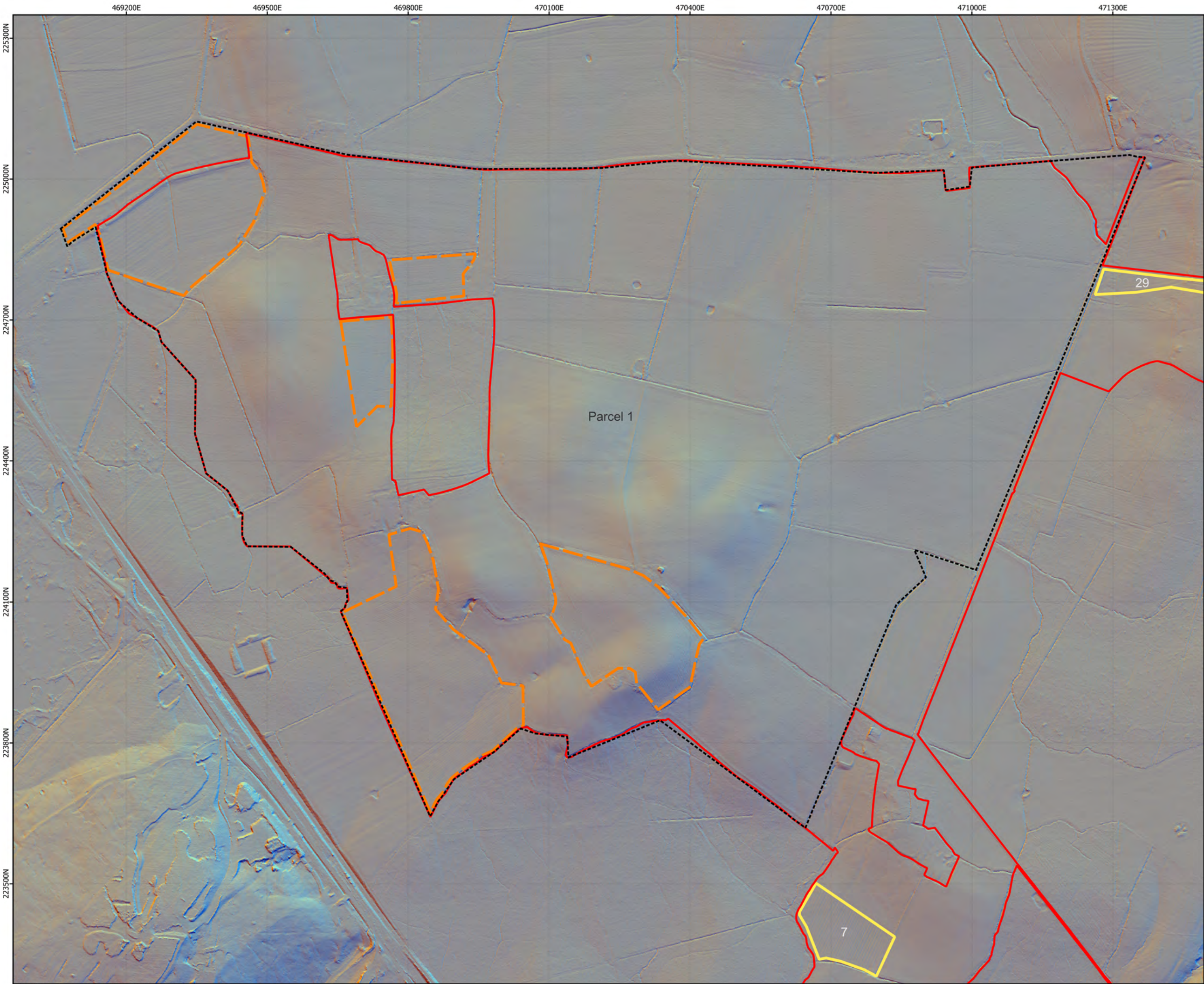
00.050.1

Kilometers

Scale: 1:2500 @A3

REV 01





- LEGEND:
- Order Limits
  - Parcels
  - Potential Ridge and Furrow
  - Ridge and Furrow

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CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters



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Rev	Date	Description	Drn	Chk	App

Rosefield Solar Farm



DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Processed Lidar - parcel 1

PINS REFERENCE NUMBER:  
EN010158/APP/6.4

Scale: 1:7500 @A3

REV 01





LEGEND:

Order Limits

AIM Identified Features

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CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters

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Rev	Date	Description	Drn	Chk	App

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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Features identified on aerial photography - parcel 1

PINS REFERENCE NUMBER:  
EN010158/APP/6.4

00.10.2

Kilometers

Scale: 1:8000 @A3

REV 01





LEGEND:

 Order Limits

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CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters



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Rev	Date	Description	Drn	Chk	App

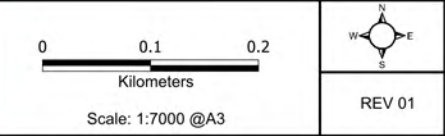
Rosefield Solar Farm



DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Aerial photo: RAF/CPE/UK/2159-3140

PINS REFERENCE NUMBER:  
EN010158/APP/6.4







LEGEND:

Order Limits

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CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters

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Rev	Date	Description	Drn	Chk	App

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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

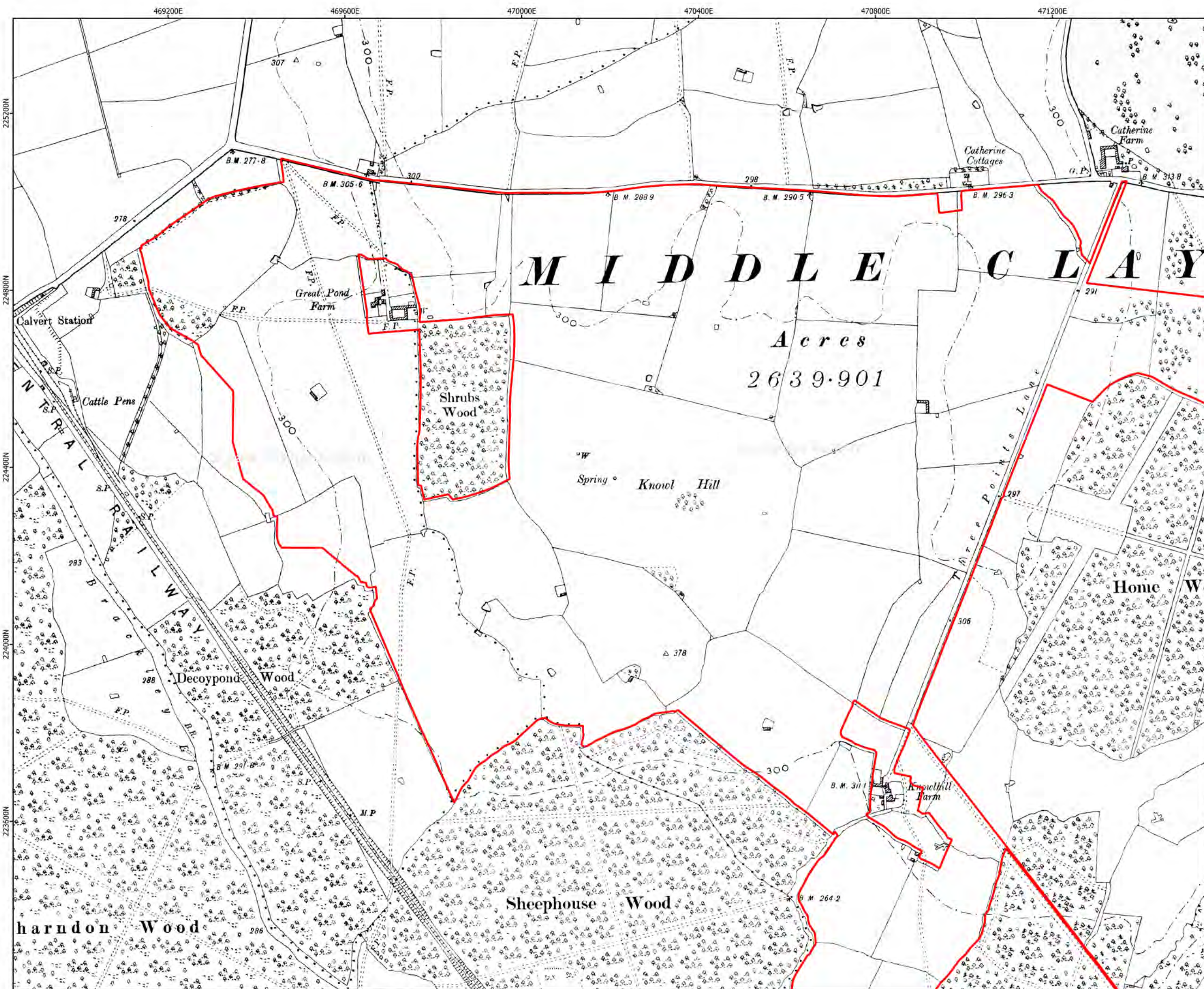
TITLE: Parcel 1 - Aerial photo: CPE/U/2159  
showing square feature

PINS REFERENCE NUMBER:  
EN010158/APP/6.4

0 0.1 0.2  
Kilometers  
Scale: 1:6000 @A3

REV 01





LEGEND:

Order Limits

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CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters

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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Historic mapping showing square feature in Parcel 1

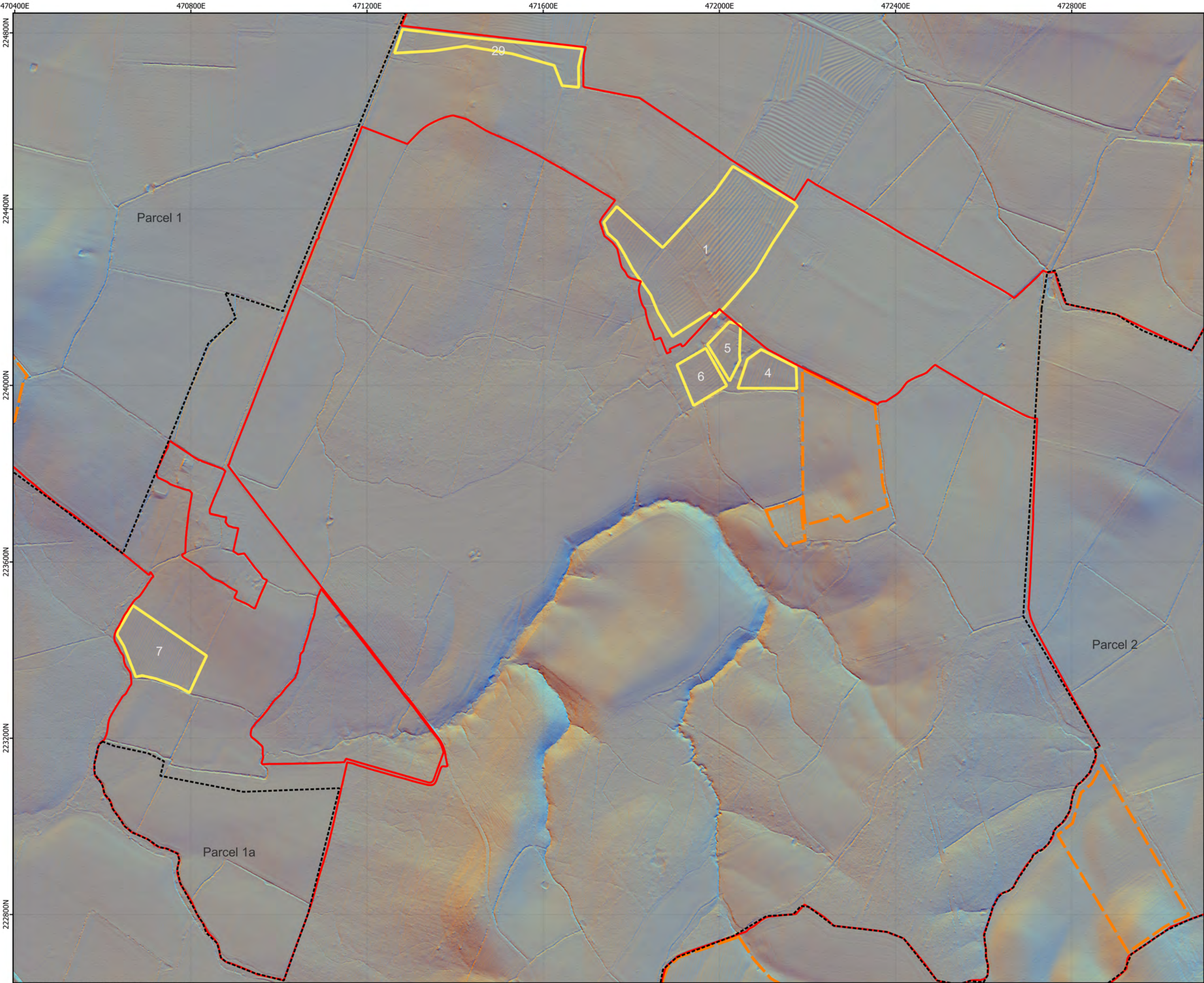
PINS REFERENCE NUMBER:  
EN010158/APP/6.4

0 0.1 0.2  
Kilometers

Scale: 1:8000 @A3

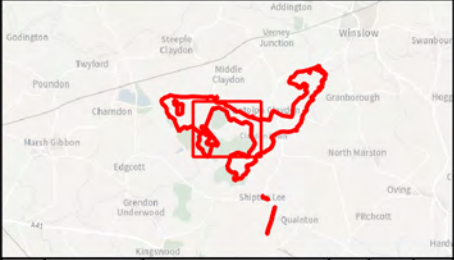
REV 01





- LEGEND:
- Order Limits
  - Parcels
  - Potential Ridge and Furrow
  - Ridge and Furrow

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CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters



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Rev	Date	Description	Drn	Chk	App

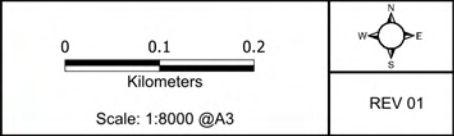
Rosefield Solar Farm



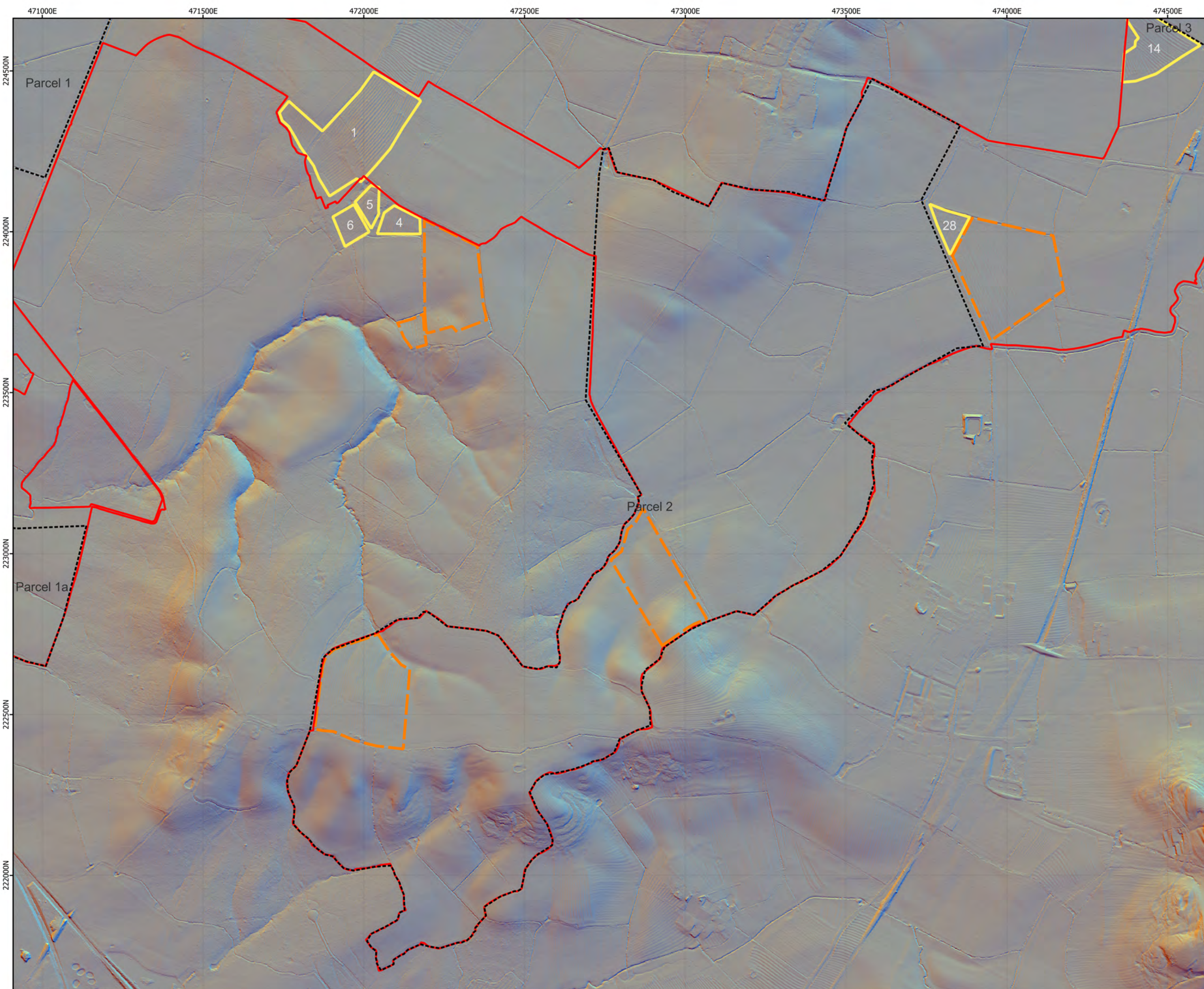
DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Processed Lidar - parcel 1a

PINS REFERENCE NUMBER:  
EN010158/APP/6.4







- LEGEND:
- Order Limits
  - Parcels
  - Potential Ridge and Furrow
  - Ridge and Furrow

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CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters



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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Processed Lidar - parcel 2


PINS REFERENCE NUMBER:  
EN010158/APP/6.4

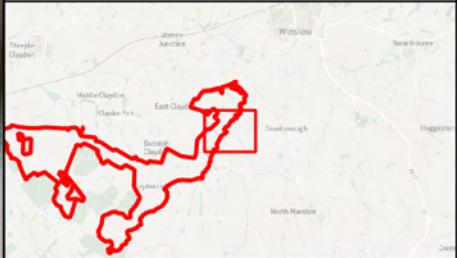
00.20.4  
Kilometers  
Scale: 1:11000 @A3

REV 01





LEGEND:  
 Order Limits



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Rev	Date	Description	Drn	Chk	App

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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Aerial photo: RAF/CPE/2159-3148

PINS REFERENCE NUMBER:  
EN010158/APP/6.4

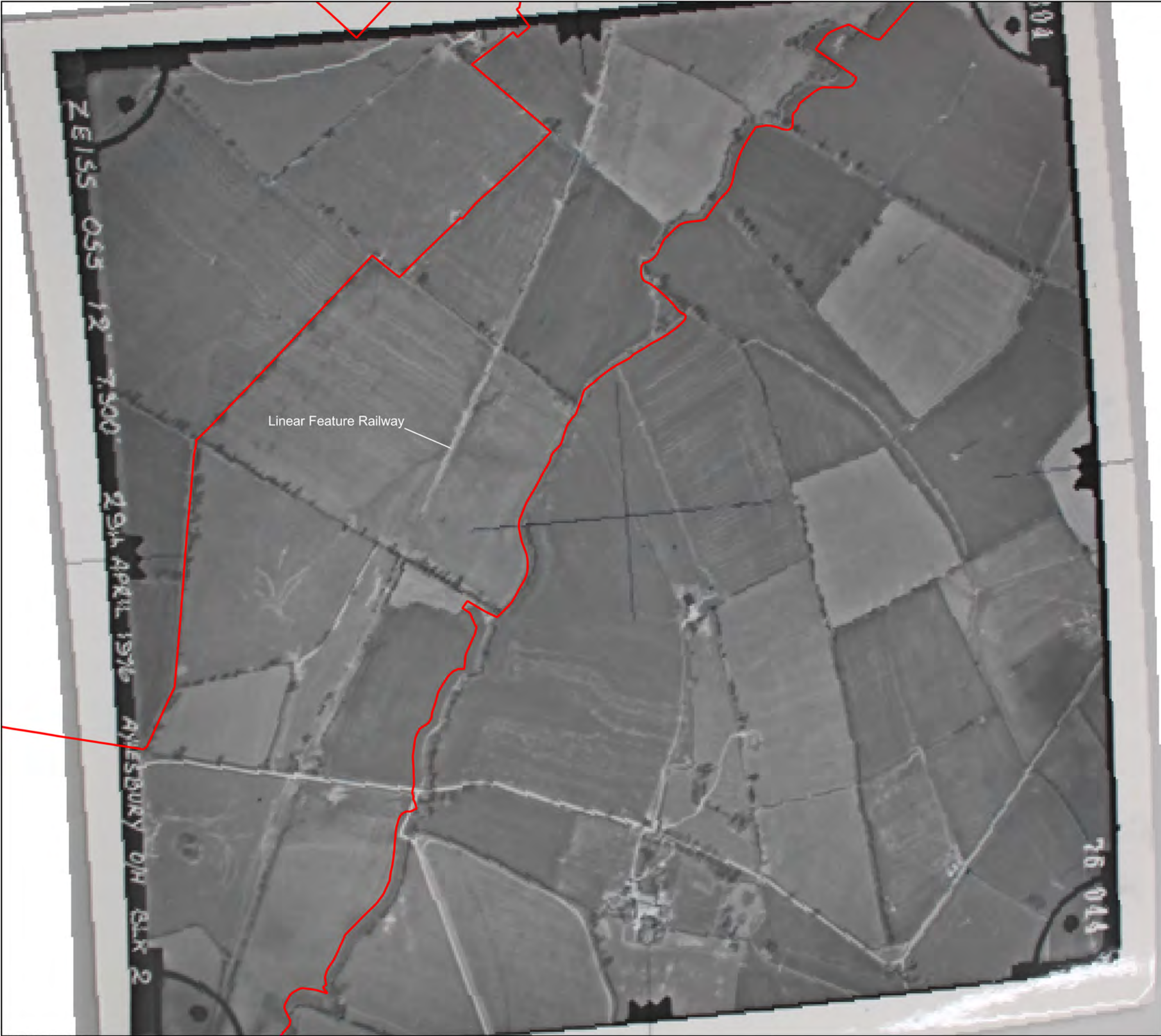
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Kilometers

Scale: 1:4000 @A3

REV 01





LEGEND:  
 Order Limits



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Rev	Date	Description	Drn	Chk	App

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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

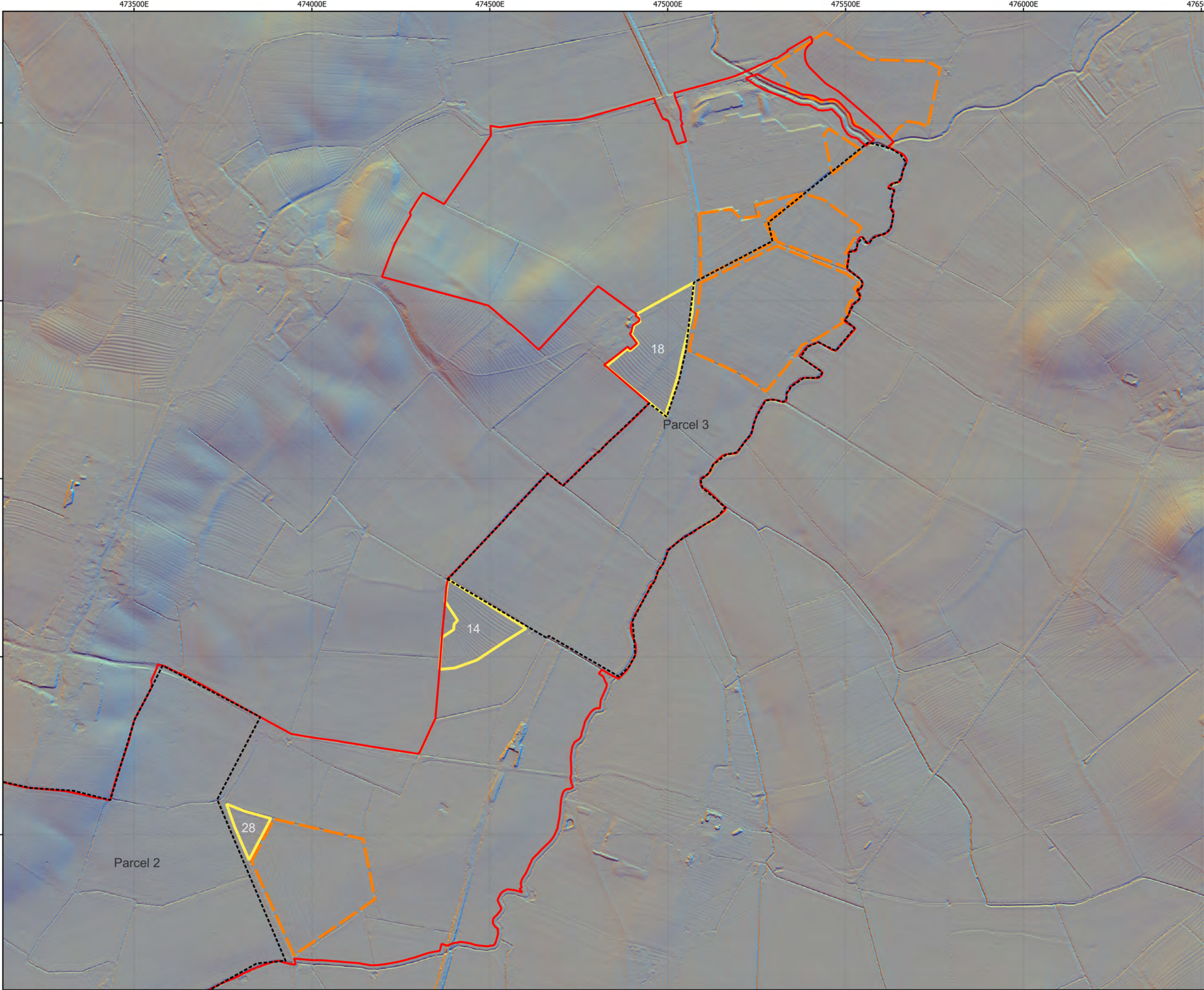
TITLE: Aerial photo: Aerial photo: OS/76044/304

PINS REFERENCE NUMBER:  
EN010158/APP/6.4

Scale: 1:6000 @A3

REV 01

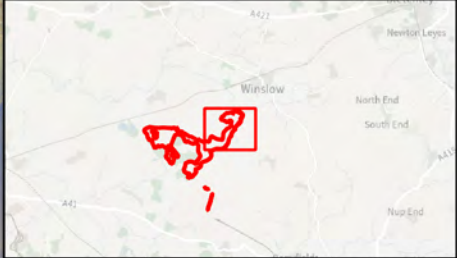




- LEGEND:
- Order Limits
  - Parcels
  - Potential Ridge and Furrow
  - Ridge and Furrow

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CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters



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Rev	Date	Description	Drn	Chk	App

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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Processed Lidar - parcel 3

PINS REFERENCE NUMBER:  
EN010158/APP/6.4

00.20.4

Kilometers

Scale: 1:10000 @A3

N

W

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REV 01





**LEGEND:**

- Order Limits
- AIM Identified Features
- Ridge and Furrow Orientation
- AIM Identified Features

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CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters

01	01/08/2025	First Draft	RSK	AA	AA
Rev	Date	Description	Drn	Chk	App

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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Features identified on aerial photography -  
parcel 3

PINS REFERENCE NUMBER:  
EN010158/APP/6.4

00.20.4


Kilometers

Scale: 1:11000 @A3

REV 01





LEGEND:  
 Order Limits

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CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters



01	01/08/2025	First Draft	RSK	AA	AA
Rev	Date	Description	Drn	Chk	App

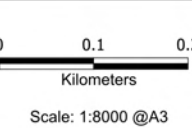
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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Parcel 3 - linear negative feature on aerial  
photograph CPE/UK/2159-3148

PINS REFERENCE NUMBER:  
EN010158/APP/6.4







LEGEND:  
 Order Limits

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CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters



01	01/08/2025	First Draft	RSK	AA	AA
Rev	Date	Description	Drn	Chk	App

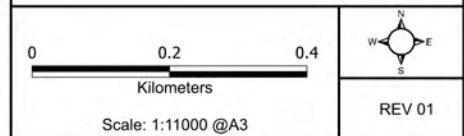
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DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Parcel 3 - ridge and furrow on aerial  
photograph CPE/UK/2139-3243

PINS REFERENCE NUMBER:  
EN010158/APP/6.4







LEGEND:  
 Order Limits

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CRS: EPSG:27700  
Projection: Transverse Mercator  
Ellipsoid: EPSG:7001  
Units: meters



01	01/08/2025	First Draft	RSK	AA	AA
Rev	Date	Description	Drn	Chk	App

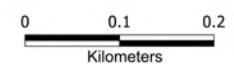
Rosefield Solar Farm



DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 4: APPENDIX 9.5 REGULATION 5(2)(a)

TITLE: Parcel 3 - ridge and furrow on aerial  
photograph CPE/UK/2139-3243

PINS REFERENCE NUMBER:  
EN010158/APP/6.4



Scale: 1:8000 @A3



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