Meridian Solar Farm

EN010169

Volume 6

Environmental Statement

6.3 ES Appendix 8-2: Historic Environment Desk Based Assessment - Appendix C

APFP Regulation 5(2)(a)

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

March 2026

C Aerial Photograph and LiDAR Assessments

C.1 Aerial photography and LiDAR assessment of the Solar Development Areas

Air photo and LiDAR mapping and interpretation:

Meridian Solar Farm Project

Lincolnshire

November 2024

Project number 2425001

Undertaken by Alison Deegan BSc MCIfA

Commissioned by

JBA Consulting

AIR PHOTO SERVICES

Archaeology • Research • Law • Environment • Planning

Meridian Solar Farm

Inter-Array Areas and Grid Connection

VOLUME 1

Assessment of aerial photographs, satellite imagery and LiDAR data for archaeology

August 2025

APS report 225 01 01_01

Figures 1 – 14 supplied in this volume (1)

Figures 15 and 16, the Grid Connection mapbook, supplied in Volume 2

Meridian Solar Farm, Inter-Array Areas and Grid Connection

VOLUME 1 – Report

Volume 2 (separate document 225 01 01_02), Figures 15 and 16

Client	Jeremy Benn Associates Limited on behalf of Meridian Solar Farm Ltd
Air Photo Services Document Number	225 01 01_01
Air Photo Services Project Number	225 01 01

Report Status	Rev 1
Issue date	4th August 2025
Report and interpretation	Chris Cox MA MCIfA FSA
Figures, mapbooks, LiDAR visualisations and GIS management	Adam Jarvis, ACIfA
Data and report QA	David Lang BA PCIfA

Disclaimer

Contents

Figures

1 Summary

1. This report details the remit, methodology, data sources and results of the interpretation and mapping from aerial photographs, satellite imagery and Airborne Laser Scan (also known as LiDAR) data. The survey areas are shown on **Figure 1**. They cover the proposed footprints of the Grid Connection, with a 100m buffer area, and the Inter-Array Areas for the Meridian Solar Farm Project ('the Scheme').
2. The assessment complements Deegan's recent mapping in nearby areas (2024) and builds upon previous work in this region (Riley 1945, Hallam 1970, Hayes and Lane 1992 and Hall and Coles 1994).
3. Within the southern part of the Grid Connection, and in Inter-Arrays 2-5, a complex Roman settlement and farming landscape, with some areas of contemporary salt production, was identified predominantly as cropmarks and soil marks over buried eroded features. Some of these sites have associated indications from surface artefact scatters, and from their shapes when seen as cropmarks suggest that there may have been a transition from late Iron Age to the Roman period, when the land was dry in parts rather than inundated. From the Roman period, the marine alluvial areas became habitable land and were intensively occupied whilst the adjoining areas of the fenland and marsh were exploited by the dry-land settlers for their abundant natural food and material resources.
4. A series of underlying natural creeks (roddons) and palaeochannels are still visible as crop and soil marks and microtopographic areas.
5. Post Roman features include areas of drains or silt-fen type medieval ridge and furrow known locally as dylings. Some of these features were extant, near Goll Grange in the Grid Connection and within Inter-Array Area 2 near Whaplode Drove, in the 1940s. These earthworks were visible on aerial photos taken up to the 1980s. In common with some areas of earthworks over Roman settlement sites which were not protected by Scheduling, these features have been eroded by intensive modern ploughing. LiDAR data reveals limited microtopography, with the exception of one site, IA2_18, to the north east of Whaplode Drove.

6. Features associated with Goll Grange have been identified, alongside Medieval and Post Medieval ditches at Wool Hall Farm and Post Enclosure field boundaries. The site of the former Post-Medieval Fleet Decoy overlies part of an extensive Roman farming and salt-making landscape to the south of Holland Drain in Inter-Array Area 5.
7. The northern part of the Grid Connection shows fewer cropmarks than the remainder of the survey areas, despite specialist reconnaissance. There are however 'windows' into an underlying likely Roman and later landscape which may be masked by more complex soil differences, depths and environmental variables in this area.
8. No archaeological features have as yet been identified within Inter-Array Area 1.
9. **Appendix 1** contains the gazetteers of all sites recorded during this assessment.

1.1 Caveat

10. Interpretation of airborne and spaceborne imagery and data is a non-intrusive investigation technique. The visibility of marks in crops and soils over buried features relies on a number of environmental variables, and some sites are not at all visible on many occasions of observation.
11. Buried features are also likely to be more extensive and complex than they appear from above.

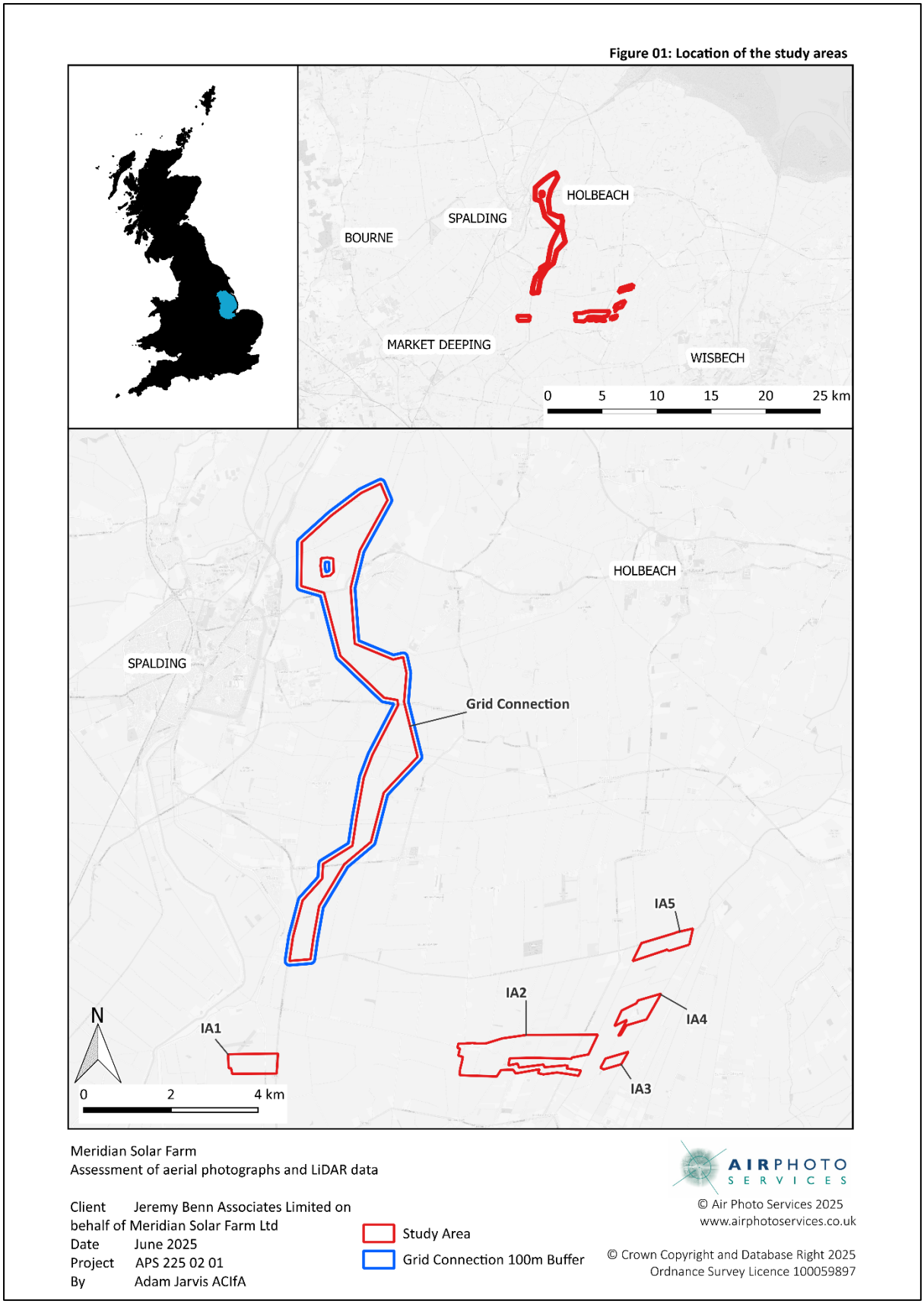

Figure 1 Location of the Inter-Array Areas (IAs) and Grid Connection

2 Introduction

2.1 Background

12. This report details the remit, methodology and results of interpretation and mapping from historical and modern aerial photographs, satellite imagery and visualised Airborne Laser Scan (ALS) which is also known as Light Detection and Ranging (LiDAR) data.
13. It was prepared by Chris Cox at Air Photo Services in July 2025 for Jeremy Benn Associates Ltd on behalf of the Applicant, Meridian Solar Farm Ltd.
14. The survey areas cover the proposed footprints of the Grid Connection and Inter-Array Areas for the Meridian Solar Farm Project ('the Scheme').

2.2 Remit of the assessment

15. The remit of this study is to provide information on the location and nature of any buried and upstanding archaeological features which are visible on historic aerial photographs, modern aerial and satellite imagery and LiDAR data. This is undertaken to assess the visible presence, extent and condition of buried, topographic and any microtopographic features within and immediately adjacent to the Grid Connection and Inter-Array areas.
16. This assessment considers the effect of the natural environment in this area when examining airborne remote sensing and satellite imagery data.
17. Mapping is provided in a Geographic Information System (GIS) format which comprises geometric, numeric and text attributes concorded where applicable to the currently available (2025) Lincolnshire Historic Environment Record (LHER) data.
18. The assessment considers and is informed by previous archaeological work in this area, particularly the recent assessment of aerial photography and LiDAR data undertaken by Deegan (2024) over adjacent areas, and earlier work undertaken by Hallam (in Phillips (ed) 1970), Hayes and Lane (1992), Hall and Coles (1994) and Riley (1945 and 1946a).
19. The assessment is undertaken in accordance with standards and guidance listed in **Appendix 6**.

2.3 Location of the survey areas

20. The survey areas are shown on **Figure 1.** They form parts of the total land area ('the Site') required for the Scheme outside of the PV Area. These survey areas comprise the Grid

Connection (GC) and the Inter-Array Areas (IAs). The Grid Connection and IAs 1-5 lie on level predominately agricultural land to the north east of Market Deeping, west and south of Holbeach and to the east of Spalding within a 'silt-fen' environment in Lincolnshire. These areas are divided for recording purposes into land parcels which largely correspond with the modern field boundaries.

2.3.1 The Grid Connection

21. The Grid Connection has a 100m exterior buffer for purposes of this assessment. It lies within a rural arable agricultural area covered by Ordnance Survey (OS) 25km2 'quarter sheets' TF21NE, 22SE and 22NE. It extends through The Moultons and Weston parishes, and a Lincolnshire County non-Civil Parish area. It is situated to the east of the modern A16 road at Peak Hill and Cowbit, Moulton Chapel to Weston Hills and Claylake, and east of Lower Fulney towards Weston, where it terminates to the south of Wragg Marsh.

2.3.2 Inter-Array Areas 1 - 5 (IA1-IA5)

22. The Inter-Array Areas are not buffered and are designated for the purposes of this assessment as IA_1 to IA_5 for recording purposes.
23. Inter-Array Area 1 lies within arable agricultural land covered by the OS quarter sheet TF21SE. It is situated to the west of the A16 and is traversed by Barrier Bank, to the northeast of the modern settlement at Crowland.
24. Inter-Array Area 2 lies within Crowland, Whaplode and Holbeach parishes, within arable and pastoral land to the west, north and east of the modern settlement at Whaplode Drove. It is covered by OS quarter sheet TF31SW.
25. Inter-Array Areas 3, 4 and 5 lie within arable agricultural land to the north east of modern settlements at Whaplode Drove and Holbeach Drove, to the east of Holbeach Drove Gate and Holland Drain. They lie on land areas covered by OS quarter sheets TF31SW, 31NW and 31NE within Fleet parish.

3 Sources of baseline and new data

26. The assessment considers a range of data sources which are listed in detail with their metadata in **Appendices 3 and 5**.
27. In summary, these include the following sources:

3.1.1 Historic England Archive

28. All historic and modern vertical and oblique aerial photographs held as prints for consultation at the Historic England (HE) Archive (HEA) in Swindon were consulted in-person in the HE Public Search Room. It is noted that some sources are held as negatives only and are no longer accessible for general viewing in the HEA Public Search Room. The central OS National Grid Reference (NGR) points for each image are shown on **Figure 2.** Figures 2 – 16 are presented in Volume 2.
29. Aerial photographs held at the HEA were used as the basis for the detailed and comparative interpretations for this project. The earlier Royal Air Force (RAF) vertical aerial photographs which were taken at c. 1:10000 contact scale during 1946, 1947 and 1948 provided a very detailed view into the predominately eroded and buried Roman landscape as it appeared as marks in crops, soils and some areas of then-upstanding earthworks, over 80 years prior to the date of this assessment.
30. Vertical runs of aerial photos taken in May 1946, in particular, provided extremely detailed views into the extensive buried archaeological landscape.
31. The oblique aerial photographs taken after the 1940s and held in the HEA also reflect detailed cropmarked buried sites, over a landscape of fields and intensifying agricultural land management over the latter 20th and early 21st centuries.
32. Multiple timelines of ortho photographs and satellite images, captured between 1999 and 2025, were accessed at www.google.com/earth (Google Earth Pro) and www.bing.com/maps/satellite.

3.1.2 Cambridge University Collection of Aerial Photography

33. The Cambridge University Collection of Aerial Photography (CUCAP) archive is closed long-term to consultation but the locations of the aerial photos held at CUCAP are downloaded as a Comma Separated Value (CSV) file from https://www.cambridgeairphotos.com/ . The locations of their central NGRs are shown

on **Figure 3**. Selected, but by no means all, CUCAP obliques, but no verticals in this area, are held at the HEA where they were noted and consulted as prints from earlier (1950s) sorties by Dr St. Joseph. Post-1999 open-source digital mosaics of aerial photographs and satellite imagery were also assessed.

3.1.3 Lincolnshire Historic Environment Record

34. The LHER in this area reflects the meticulous previous work undertaken by Hallam (1970) within the Inter-Array Areas and the southern part of the Grid Connection. Data has been accessioned to the LHER as polygons which indicate the extent of known largely Iron Age to Roman rural settlement, salt-making industrial and agricultural areas which once extended over this fertile agricultural area of silt Fenland. The LHER records were uploaded to the project GIS system and used to inform and concord with the data from aerial and satellite imagery. The LHER refers to the majority of dated settlement and salt-making sites as 'Roman', whilst a transition between Iron Age and Roman periods is likely in some areas.

3.1.4 Ordnance Survey

35. 1887 6 inch scale geo rectified map sheets were provided by JBA Consulting.

3.1.5 Previous mapping in other parts of this site

36. Alison Deegan (2024) has undertaken a detailed study of adjacent parts of this Site and this is referenced in the current assessment. Hallam (1970) mapped parts of the Site from aerial photographs.

4 Data processing and mapping

37. Visualisations were made from the Environment Agency National LiDAR Programme (NLP) 1m resolution data to enable mapping of any archaeological earthworks, and slightly upstanding areas over silted creeks known as roddons and old water channels. Three visualisations were created: 16-direction hillshaded visualisations from the Digital Surface models (DSM) and Digital Terrain Models (DTM) and a Simple Local Relief Model, all processed in the Relief Visualisation Toolbox (RVT) 2.2.1. These visualisations were used to assess archaeological earthworks, microtopography and roddons in conjunction with aerial and satellite imagery.

38. Aerial photo prints were examined in the HEA using 2x magnification as necessary and a stereoscope where possible. As the HEA does not permit detailed scanning, photographs were captured with a hand-held digital camera for interpretation and mapping. Digital HEA photographs were examined on-screen.
39. Captures from the HEA prints and high-resolution screen captures from online sources were rectified to ground control points derived from OS Mastermap data using Aerial 3.56 and the QGIS georeferencing tool in this flat environment. The majority of control point error values fell within +/-3m. However, as Deegan (2024) has also found, changes to the width and configuration of field boundaries and the depth and layout of drainage ditches over decades have affected the comparison of intersections and corners and thus the accuracy of control point information in this environment.
40. Many of the specialist oblique aerial photos are also taken at low altitude and do not provide a sufficient spread of control points to accurately map their contents. Thus, the accuracy in places may exceed +/- 3m. Accuracy was checked in detail visually by importing the georectified control points to QGIS 3.40.
41. Features which were visible on all sources were digitised in QGIS with reference back to the original source material as necessary. Mapping was undertaken to a nominal 1:2500 scale and the attribute data for each feature or group of features was recorded in QGIS. The structure and content of the digital dataset is set out in **Appendix 7.**
42. For mapping purposes, many of the features within the survey areas are extensive and usually contiguous over larger areas of land. This has been noted where applicable, and each survey area divided into numbered 'sub-parcels', based on the modern land divisions within, to facilitate recording and identification.

5 Environment within and around the survey areas

43. The survey areas lie on the East Anglian Silt Fenland, which is a low-lying level area around The Wash within the counties of Lincolnshire, Norfolk and Cambridgeshire, as detailed by Deegan (2024). As Deegan has described in overview for other survey areas within this Site, this Fenland environment is formed by 'territorial battles between the freshwater and marine dominated environments' (Hayes and Lane, 1992, 1) and is

characterised by periods of hydrological dynamism and stasis, with the alternating formation of peats, river alluvium and marine deposits intercut by creeks and rivers.

44. As detailed by Deegan, (2024, para. 1.2.6) the natural environments in this area changed between the Neolithic and Medieval periods, and then again with the inception of large-scale Fenland drainage schemes between the Late Medieval, Post-Medieval and Modern periods. Organised drainage of the peat and silt Fenlands changed the natural areas of complex marsh, fen and creeks which were interspersed with marginally higher and drier ground on old river terraces, former creek beds (known locally as 'roddons') and marine alluvial deposits. The environment is further complicated by shrinkage of buried peat horizons due to drainage. Subsequent aeolian erosion of exposed peats which now leave the silted creeks standing slightly proud of the surrounding land surfaces. The detailed nature of the Fenland 'roddons' is debated in detail by Smith et al (2010) and described as fossilised silt and sand-filled tidal creek systems of mid-to late Holocene age, incised into contemporary clay deposits.
45. The geological substrate in the Site is Marine Alluvium. This substrate gives rise to seasonally wet deep stoneless clayey soils of the WALLASEA2 soil association and deep stoneless calcareous coarse silty soils of the WISBECH soil association (Cranfield 2025 and BGS 2025). These soils are shown on **Figure 4**. The substrates, whilst deep, facilitate the visibility of marks in crops during times of Soil Moisture Deficit (Jones and Evans, 1985).
46. Some of the areas within the Grid Connection and Inter-Array areas had not been ploughed until or after the 1940s. Aerial photographs taken in this decade and through the mid to late 20th century show some areas of preserved earthworks, within a landscape which had then been largely ploughed and used for intense arable food production during and since World War II (1939-1945). Field boundaries resulting from the Parliamentary Enclosure Acts between the 17th and early 20th centuries were changed or removed in places to facilitate mechanised modern agriculture.
47. The majority of the features recorded for this assessment derive from the extensive and complex crop and soil-marked record which is largely informed by the 1940s vertical sorties, augmented by the later multiple timelines of detailed digital mosaics of aerial and satellite imagery shown at www.google.com/earth (Google Earth) and www.bing.com/maps/satellite.

48. The complexity of the substrates and palaeohydrology in this area and the detailed and extensive buried anthropogenic landscape are variably but clearly apparent as crop and soil marks in the southern parts of the Site over the Inter-Array Areas between Crowland, Whaplode Drove and the South Holland Drain. This proliferation of cropmarked detail over contiguous fields and areas of land was particularly notable in and around the Inter-Array areas to the south of the Grid Connection. Within the Grid Connection and its buffer, however, the crop and soilmarked evidence is clear in the south near the site of Goll Grange, but much more sporadic, less well defined and fragmentary, and indicates the presence of very detailed and complex soil differences which were not consistently visible on aerial imagery. This may suggest a slight change in the 'intensity' of the past land use, or most likely some environmental differences which affect the visibility of marks in crops and soils in the northern reaches of the Grid Connection.
49. The use of Digital Terrain Model (DTM) visualised LiDAR data can reveal areas of 'microtopography' and more substantial earthworks and the residual remains of slightly elevated roddons (creeks or palaeochannels) and areas of marine deposits.
50. **Appendices 2 and 4** provide an overview of the use of aerial photographs, satellite imagery and LiDAR data for archaeological survey.

6 Previous archaeological work in the Site

51. In line with Deegan's 2024 survey over other parts of this Site, the present assessment is informed by Sylvia Hallam's combined evidence from aerial photographs (in Phillips (ed) 1970), and the work of The Fenland Project (Hayes and Lane, 1992, to the west of the Grid Connection and Inter-Array areas), Hall and Coles (1994). These studies discuss and present a complex and extensive environmental model and Iron Age-Roman and later archaeological landscape in this area.
52. As Deegan has stated, Hallam's report and gazetteers based on her interpretation of aerial photographs and field survey are particularly useful alongside the accompanying period-based parish plans. Hallam's mapping, which records the largely buried 'Roman' and later landscape, and the Fenland Project's data form the sources of many of the LHER records in this area. Hallam's records extend over the majority of the Site, excluding the northern parts of the Grid Connection.

53. The LHER also records data which are derived from online open-source aerial and satellite imagery, particularly over areas outside of Hallam's remit.

Hallam (1953) also comments on features at Goll Grange to the west of and partly within the south sector of the Grid Connection. Very few archaeological evaluation works have been undertaken within the Grid Connection, likely due to the lack of development within this broadly rural environment. Within the Grid Connection, archaeological features were described in advance of the development of the Weston High Road during a field visit for a desk-based assessment (land parcel GC_22, LHER ELI3133, Albone, 2000), which notes undated cropmarked evidence for the droveways and enclosures near the modern settlement at Weston. A detailed magnetic gradiometry survey undertaken over a very small area at nearby Wool Hall Farm within GC_31 identified only natural geological features (Smalley 2007).

54. Archaeological fluxgate gradiometer and resistivity surveys were undertaken during the A1073 (A16) Peterborough to Spalding Improvement Scheme. This project covered the western part of the buffer area to the Grid Connection to the north of Peak Hill, Cowbit, and west of Wheat Mere Drain.

55. These surveys (LHER ELI3258, Bunn and Palmer-Brown 2002) flanked and traversed an area of complex Iron Age-Roman cropmarked settlement, salt-making and agricultural sites within the west of and outside the buffer area, and traversed part of the area of Goll Grange. Anomalies indicated these settlement and industrial features alongside likely areas of stone building foundations at Goll Grange.

56. Immediately adjacent to parts of IA2, archaeological watching briefs at Chapel Gate, Whaplode Drove (LHER ELI2967, Rayner 2002, and LHER ELI4005, Thomson, 2002) identified Roman briquetage and some ditches and pits, indicative of likely salt-making activity peripheral to an area of Roman settlement remains at MLI22169, where substantial artefactual evidence indicates 'important, probably public' Roman buildings west and north of Whaplode Drove Church.

57. Site IA2_18 lies adjacent to an area which lies outside the Site boundary and was subject to trial trenching at Holbeach Drove Gate, Holbeach Drove (LHER ELI6772) in advance of construction of a wildlife area and lake (Clay, 2006). No archaeological features were identified in either of two evaluation trenches at this location which were placed to cover

the area of a new pond to the east of a location where Hallam (1970) identified cropmarks indicative of likely Roman settlement to the south of IA2_18 (Clay, 2006, Figure 2).

7 Discussion of results

7.1 Introduction

58. The results for the Inter-Array (IA) Areas 1-5 and Grid Connection (GC) are presented with reference to numbered modern land parcels within each area. The archaeological features often traverse or are continuous within large areas of land, and each parcel is indicated and numbered to facilitate description and identification.
59. Results are presented as follows:
    - A summary for the IA Areas and the GC;
    - A gazetteer for the Grid Connection and the IA Areas listing the archaeological features identified (**Appendix 1**); and
    - A map or maps for each area with features indicated according to their form and the broad period which may be assigned without intrusive evaluation (**Figures 5 to 16**)

7.2 Date evidence for assigned periods and features

60. The previously recorded buried archaeological landscape is largely dated to the Roman (previously known as 'Romano-British' or Iron Age-Roman) and later periods on the basis of archaeological field survey, finds and hydrological and environmental evidence and interpretations by Hallam and others (Hallam 1970, Hayes and Lane 1992). Whilst some newly mapped sites may be attributed to the Roman period *via* nearby discoveries, any which remain 'undated' are described as 'uncertain' for their period values in this assessment. It is noted that Iron Age settlements and salterns are recorded within the LHER to the west and outside of the Grid Connection near the modern A16 road to the north of Cowbit, and in the western part of IA2 near Whaplode Drove.
61. This assessment concurs with Deegan's (2024) paragraphs 3.1.2 and 3.1.3 regarding the dating of features which are attributed to the Roman period. This states that there is a small but recurring presence of possible Iron Age material which has been found on the areas of the cropmark and soilmark complexes. A broad period classification of Romano-British was used historically and is now referred as Iron Age-Roman to attribute dates to

sites which date from the Roman period or transition to the Roman occupation in this area. The majority are recorded as Roman within the LHER, but this dating range must be considered when modelling the process of settlement in this area.

62. Later sites which are particular to this environment include multiple areas of broad linear ditches, with flat areas between, some of which were upstanding during the 1940s until c. the 1980s. Previously upstanding areas of these ditches are recorded by this assessment. They may have been areas of Medieval or Post-Medieval fields and drains, known as 'dylings'. This type of field management and drainage was prevalent in and around the Site and is now usually visible as cropmarks, soilmarks and microtopography revealed by visualised LiDAR data. Dylings or drains were recorded as upstanding features in the 1940s to the west and south of Whaplode Drove within Inter-Array Area 2 where they are mapped in addition to the underlying Roman settlement and rural landscapes in that area. Similar features are recorded over cropmarked ditches which are visible in the area around Goll Grange in the southern part of the Grid Connection. Further areas of drains and residual possible dylings are mapped where they may contribute to the interpretation of contemporary and earlier features, and all are now heavily eroded by modern ploughing.
63. Some specific area of small circular ditched features, often described as 'ring ditches' are visible as cropmarks at two specific locations, within the buffer to GC_08 and to the west of Whaplode Drove within IA2_02. These features are likely to be fen circles, possibly caused by haystacking or similar agricultural activity in the Medieval or Post-Medieval periods and are particular to the silt Fenland (Riley 1946a).
64. Some post-Enclosure field boundaries have been removed, are mapped by the OS on its 1st Editions and later. These are mapped where they have been recorded as crop or soil marks over their previous locations.

7.3 Summary of results in the Inter-Array Areas

7.3.1 Scheduled Monuments

65. The Inter-Array Areas do not contain any Scheduled Monuments. However, an Iron Age – Roman settlement west of Cates Corner in Crowland parish is scheduled as NHLE 1004979 (LHER MLI22043). This area lies c.65m to the west of the boundary of IA2 to the south of Queen's Bank near Whaplode Drove. NHLE 109980 protects Scheduled

Medieval boundary earthworks at Queen's Bank, c. 575m to the west of the boundary of IA2.

66. A further Scheduled Monument, NHLE 1004982 (LHER MLI20238), again an area of 'Romano-British cropmarks', lies c.330m to the west and outside of the boundary at IA5, near IA5-01, on the south flank of South Holland Drain near Shell Bridge at Holbeach St Johns.
67. Both these monument records are generated from an 'old county number' (OCN) and further details are unavailable. Their legacy numbers respectively are LI 225 and LI 168.

7.3.2 Inter-Array Areas 1 to 5 assessment summary

68. The Inter-Array Areas lie proximate to the areas assessed by Deegan, 2024, and IAs 2-5 contain similarly complex and contiguous buried archaeological and natural features as recorded by this complementary assessment.

7.3.3 Inter-Array Area 1, Figures 5 and 6

69. Inter-Array Area 1 lies to the east of Cloot Drove and west of the A16 in Crowland parish and is traversed by Barrier Bank. Only roddons and palaeochannels are visible in IA1. Given the proximity of the area to 20th and 21st century specialist aerial surveys, and coverage by the 1940s verticals, this area may not contain any archaeological horizons, but this cannot be guaranteed.

7.3.3.1 Inter-Array Area 2, Figures 7.1, 7.2, 8.1 and 8.2

70. Inter-Array Area 2 centres on the modern settlement at Whaplode Drove and extends across Holbeach Drove Gate to the east. It lies within Crowland, Whaplode and Holbeach parishes and covers mainly arable agricultural land which is very responsive on occasions to the formation of detailed and clear crop and soilmarks under suitable environmental conditions. Hallam (1970) used the 1946 RAF vertical aerial photographs among others to map the area in detail, and this assessment has in places been able to supplement and re-map from subsequent air and spaceborne remote sensing data. The archaeological landscape in this entire environment, as demonstrated by Hallam and Deegan, is detailed, contiguous and now heavily ploughed and eroded.
71. The land parcels IA2_01 to 04 contain complex buried droveways, enclosures and associated trackways which indicate a focus of Iron Age-Roman and Roman settlement

features. LHER MLI122043 indicates a ‘Romano-British complex’. The LHER monument polygon extends over the north part of IA2-01 and into IA2 and IA3. A further LHER record includes similar cropmarks which extend outside of the boundary of IA2 to its south and west. Salt making debris is also recorded at LHER ML20245 and indicates a mixed domestic and industrial landscape at this location. A palaeochannel or roddon loops through IA02, where ditched sub-rectangular enclosures and fields indicate a likely rural farming and settlement area. In addition to data gathered from the 1940s verticals, which provide clear evidence for past settlement in this area, later specialist obliques and timelines at Google Earth indicate the presence of multiple circular enclosures. These may be fen circles (Riley 1946a) as they are all a homogenous size, c. 12m diameter, with very thin ‘ditches and overlapping extents’. Linear ditches which are likely to have been drains or dylings are residual as microtopography over IA2_01, 02, 03 and 04.

72. An extant ditch, which may be a garden boundary or earlier feature, is aligned west to east across a grassed area at IA2-03 to the south of Eaugate Road. Whilst this feature is unidentified and undated, it may be associated with Scheduled Medieval boundaries outside IA2 at NHLE100980.
73. Fragmentary cropmarked evidence is recorded to the north of Eaugate Road and Aswick grange at IA2-05 and 06, within wider areas of Romano-British (Iron Age-Roman) settlement and droves at LHERs MLI20388. These features were again recorded from 1940s verticals and many subsequent specialist obliques and online sources. This crop and soil marked landscape continues through central Whaplode Drove where it is visible within smaller areas as marks in grass and dated by finds of Romano-British pottery over IA2_06, 07, 08, 13, 14 15 and 16. The LHER records these areas of extensive cropmarks which indicate buried settlement as MLI20424 and MLI20236. As described on page 11, archaeological watching briefs at Chapel Gate, Whaplode Drove (LHER ELI2967, Rayner 2002, and LHER ELI4005, Thomson, 2002) identified Roman briquetage and some ditches and pits, indicative of likely salt-making activity. This activity was peripheral to an area of Roman settlement remains at MLI22169, where substantial artefactual evidence indicates ‘important, probably public' Roman buildings to the west and north of Whaplode Drove Church.

74. This complex and intense landscape continues to the north east of Whaplode Drove, under fields at Chapel Hill Farm (IA2-17, LHER MLI20425) where undated cropmarks are recorded.
75. Further elements of this rural landscape are visible in 'windows' into the substrate via cropmarked evidence at IA2_10, 11 to 23 in an area traversed by Division drain, Dog Drove North, Tinsley's Drain and Holbeach Drove Gate. Full LHER concordances are provided in the Gazetteer at Appendix 2, section 9.2.
76. An enclosure and associated ditches and slight banks at IA2_18 survive as slight microtopography, otherwise LiDAR data indicate that these areas are all very heavily eroded by ploughing.

7.3.4 Inter-Array Area 3, Figures 9 and 10

77. The single field which comprises Inter-Array 3 lies within Fleet parish. This area indicates part of a wider network of ditches and a drove road between Langary Gate Road and Fleet Drain within an area recorded by LHER as MLH22296 near Ashtree House.

7.3.5 Inter-Array Area 4, Figures 11 and 12

78. Inter-Array Area 4 lies within Fleet parish. It extends between Lambert Drain, Langary Gate Road and Fleet Drain at Langary Farm, in an area where Hallam (1970) and Deegan (2024, Area D, to the east of IA2) have previously mapped continuations and further elements of this complex archaeological landscape.
79. Roman cropmarks are indicated by the LHER in its western extent at IA4-03, where a double ditched sub rectangular enclosure and double ditched likely boundary or track are recorded as LHER MLI20444. Features extend across IA4 to the east of Langary Gate Road to LHERs MLI20442 and MLI20453, which are recorded as undated cropmarks.
80. The straight ditches in this area may be post enclosure boundaries and drains as recorded by the OS first edition mapping, but elements in the southwest of IA4 are likely pre-medieval, possibly Roman. Elements of a drove road associated with LHER MLI22263 are visible as cropmarks in the southwest of IA4 and again these deposits possibly date to the Roman period. IA4 also contains undated hydrological features which link to an undated long straight buried linear feature in the north of the area, which is likely hydrological and of uncertain date.

81. Archaeological monitoring and trenching at LHER ELI11396, was undertaken to the east of Fleet Drain within LHER MLI20519, just outside and east of IA4. Murray (2011) records no features or finds within the area which was investigated in advance of construction of a lake.

7.3.6 Inter-Array Area 5, Figures 13 and 14

82. Inter-Array 5 lies directly to the south of South Holland Drain, is flanked by Lambert and Fleet Drains and bisected by Langary Gate Road. The area comprises 2 modern field units, IA5_01 and 02.
83. IA5_01 and 02 indicate detailed cropmarks over buried ditched tracks, likely droveways and other ditches, over underlying roddons and channels.
84. The features are also visible to the south of both IA05_01 and 02. Where Roman and Romano-British settlement cropmarks are recorded by Deegan (2024 Area D) and Hallam (1970) and noted in the LHER as MLI20443 and MLI22251.
85. Roman briquetage, the discard sherds of pottery basins used in salt making evaporation processes, burnt stone and Roman cropmarks are also recorded within the western part of IA05_01 and to its west at LHER MLI20238. Further adjacent settlement and salt-making sites are recorded in the immediate vicinity. A Scheduled Roman settlement site, NHLE1004982, lies outside and to the west of IA5_01 at Shell Bridge.
86. IA5_02 also contains the remains of Fleet Decoy and its former land boundary near Coy Bridge at LHER MLI23224. Fleet Decoy was a post medieval duck hunting Decoy pond which was destroyed by the cutting of South Holland Drain in 1783 (Roebuck, 1935). Its outline is shown on the Ordnance Survey 1824-5 1 inch map and the later 1st Edition map. 1946 vertical aerial photos taken by the RAF show the very basic outline of the decoy as slight earthworks where the feature was levelled and infilled. Multi-hillshade visualised LiDAR data show a slightly raised area in the middle of this now-residual feature. More modern aerial and satellite images indicate the continuation of some of the Roman buried ditches into the area around the decoy, and the basic outlines of the ponds can just be discerned. Decoy house was demolished, and its former area is visible to the west of the site of the former decoy.

7.4 Summary of results in the Grid Connection

7.4.1 Scheduled Monuments

87. The Grid Connection buffer area contains one statutorily protected Scheduled Monument, which is referenced on the National Heritage List for England as NHLE1004963. This record, at https://historicengland.org.uk/listing/the-list/list-entry/1004963 was generated from an old county number (OCN) scheduling record and was thus not reviewed under the Monuments Protection Programme and no details are available on the published listing. Its legacy number is LI 231. It is a cropmarked Roman settlement (LHER MLI20010) which lies between Broadgate Fen and Lower Delgate Lane in parcel GC_02.
88. Two further Scheduled Monuments lie outside of but proximate to the GC buffer. NHLE 1002945 is a further cropmarked Roman settlement, 1950m to the east of the buffer area. Wykeham Chapel, a moated monastic grange and retreat house, is listed on the NHLE as entry 1019096 c. 90m at its closest point to the west of the northern part of the GC buffer at Wykeham Lane.

7.4.2 Grid Connection assessment summary from south to north Figures 15.1 – 15.8 and 16.1 – 16.8

89. The Grid Connection lies to the east of the River Welland and north of Cowbit, where it traverses west of an area of known Roman salt making remains at LHER MLI20334. Silt mounds and likely foci of further industrial areas and possible ditches are recorded within and to the immediate east of the buffer at GC_004 and 05 alongside roddons and palaeochannels.
90. Drains and possible dylings overlay the area to the east of the site of Medieval Goll Grange at GC_01. These features were visible as extant earthworks on vertical aerial photographs taken in 1946 and obliques taken in 1980. The area has since been heavily plough-eroded. This assessment, and Hallam (1970) also recorded underlying ditched features beneath and around the linear drain or dyling ditches which are likely to be associated either with Goll Grange, LHER MLI22093 or undesignated and Scheduled areas of Roman settlement between Broadgate Fen and Lower Delgate at GC02 within the buffer area and the GC boundary.

91. The area to the northeast of Cowbit and east of the A1073, GC_03, contains cropmarked likely droveways to the north of Goll Grange, again indicated by Hallam (1970) and as 'undated cropmarks by LHER record MLI20338. Areas of cropmarked salt making sites and Iron Age-Roman settlements are recorded in the LHER to the west of the A1073 and outside the GC boundary and buffer at this location.
92. Sites GC_01 to 05 form part of a cohesive and clear cropmarked landscape which was visible on vertical aerial photographs taken by the RAF in 1946, but not with the strength and clarity which was marked in areas to the south near Whaplode Drove. Interpretation was supplemented and extended by use of open-source imagery at Google Earth and Bing.com within this area and the reliance on this later aerial and satellite imagery became heavier as the assessment progressed to the north of Moulton Chapel Road towards Weston.
93. Recorded features at GC_06, GC_10 (LHER MLI20541), GC_ 07 (LHER MLI20341) and 20541) are largely recorded as undated cropmarks and include a double ditched drove or trackway at GC_09 and GC_11 (LHER MLI20343).
94. Site GC_08 lies beneath arable fields within the GC to the north of Moulton Chapel Road and south east of Elmtree Farmhouse. Undated cropmarks are recorded here in LHER MLI20342 and cropmarked 'ring ditches' partially within then to the east of the GC buffer at LHER MLI16037. This area, GC_08, and the southern part of GC_09 to its east are likely to contain multi-period buried remains which are quote fragmentary in their appearance within the GC boundary. The buried features seem to include some potential small quarries in GC_09, alongside fragmentary ditches in GC_08 with a series of strongly defined wider ditches and larger boundaries within and adjacent to the buffer area directly south of Elmtree Farmhouse.
95. The majority of the 'ring ditches' in this area are probably fen circles, but two within the buffer at TF275182 are less well defined and may contain inner features which are not perfectly circular. A further sub-circular enclosure lies outside the buffer at TF276182.
96. An area of deeper soil may conceal further archaeological deposits to the west of Moulton Mere Drain, proximate to a recorded area of prehistoric or Romano-British settlement, LHER MLI90792 at GC_13. Some features have been mapped within the buffer area here and are overlain by drains or dylings. The features are assigned an

uncertain date within the buffer and are coincident with palaeochannels, as in areas to their west and southeast.

97. To the south of Delgate Bank and Fengate Drove, GC_15 and 16 contain buried ditches and trackways indicative of undated but likely pre-modern and eroded elements of this former landscape.
98. The cropmarked record is less visible and extensive to the north of GC_15 in the area to the south of Austen Dyke and the modern B1165 road.
99. In common with most of the Site, the fields here are heavily ploughed and some sites have been recorded to the west as cropmarks, but significantly fewer than in areas to the south.
100. Hints at a more complex buried landscape are revealed among complex meandering small palaeochannels and cropmarked undated possible stock management or settlement enclosures such as those visible in the north part of GC_21 at TF293225 to the east of New England Farm. These features are not yet recorded on the LHER and are as yet undated by any artefact scatters or other evidence beyond their morphology. This may indicate an earlier or Iron Age-Roman date.
101. This mapping was again derived from the 1946 verticals supplemented by specialist obliques taken in 1980 and later images displayed on the 2020 timeline at Google Earth. Specialist reconnaissance has been undertaken in this area of the GC but the fragmentary appearance and identification of windows of small areas of cropmarked remains may indicate unsuitable environmental factors rather than a genuine dearth of past settlement features.
102. An area of slightly sub circular ditched enclosures is also visible as marks in crops at TF290221 within GC_21 in an area which also shows a complex network of small palaeochannels and long linear ditches and possibly later drains. The origin of the curvilinear enclosures is uncertain. An area of deeper soil, hydrological features and diffuse features to the west of the area within the GC boundary is likely to contain further sub surface archaeological deposits.
103. The area between New England Farm and Wool Hall Contains more of this fragmentary evidence for buried tracks, fields and likely settlement enclosures at GC_22 – GC_28. These features reveal glimpses of what is likely to be a much more ‘concealed’ buried landscape which is not fully visible as crop or soilmarks. It is very heavily ploughed and

there is minimal microtopography indicated by the visualised LiDAR data. Some of the recorded features at GC_22 are now overbuilt and some of this area was observed and walked over during archaeological investigations over the area of the Weston Bypass (LHER ELI3133, Albone 2000). Ditches, enclosures, tracks, palaeochannels and parts of likely roddons form a complex buried palimpsest of features at GC_23 between Wool Hall Farm and the A151 High Road. LHER MLI89822 records an undated cropmarked droveway within adjacent GC_34. Further buried trackways are recorded at GC_25 to the southwest of Wool Hall Farm, and to its north west at LHER MLI189824. These tracks and boundaries are undated and may provide a glimpse into a residual Post Medieval landscape over earlier features. It is noted that a Post Medieval ditch is also recorded at the Farm as LHER MLI86089. Undated features which indicate a faintly cropmarked enclosure, boundaries and smaller buried features lie to the southwest of Wool Hall Farm and west of Beggars Bush Lane. They are recorded both by this assessment as GC_27 and the LHER as MLI16097.

104. This area between Rood's Lane, Weston and the western edge of the GC buffer near Wool Hall Farm is, in common with all other areas in this sector of the GC, likely to contain a more complex series of multi-period buried archaeological horizons than is presently visible *via* the crop marked record.

105. Similar areas of undated ditched boundaries, drains and enclosures are fragmentarily visible as cropmarks to the east of Wykeham Lane at GC_29 and Rood's Lane at GC_31 (LHER MLI187291) and GC_32 where buried ditches lie within a wider area of diffuse features. Further buried ditches are visible at the northeastern tip of the Grid Connection, north of Stone Gate, where well defined palaeochannels are also visible.

106. The route of the Spalding Emergency Gas Pipeline is also visible from above and is mapped by the OS.

107. The difference in the frequency of appearance as cropmarks and some of the shapes of the archaeological features within this northern area of the Grid Connection may be governed by differing environmental factors in this area, or a genuinely different date range either side of the Roman occupation period.

108. The potential for further buried features is illustrated by these 'windows' into a buried landscape. Whilst this contrasts with the contiguous cropmarked evidence which is visible further to the south and within the Inter-Array Areas, the nature of the

archaeological landscape in this northern area of the GC remains somewhat uncertain based on presently historic and modern air and spaceborne remote sensing data.

8 Concluding comments

109. This assessment has considered all reasonably available data sources and previous mapping covering the Grid Connection and Inter-Array Areas 1 to 5.
110. It has delineated visible roddons and palaeochannels.
111. Cropmarks and soilmarks reveal settlements, industrial salt production sites, tracks, droveways, boundaries, field systems and later fen circles and drains or dylings across all areas except IA1.
112. The cropmarked record is less extensive in the northern part of the Grid Connection which may be due to environmental factors in this area.
113. This assessment concurs with Deegan (2024, 4.13 and 4.14) and the Fenland Project that the main phase of occupation is likely to be Roman, with some possible Iron Age components. The land surface from earlier Neolithic and Bronze Age periods is likely to be buried by later marine alluvial deposits.

8.1 Caveat

114. Most of the features are now levelled or truncated by modern mechanised ploughing in this predominantly intensive rural area. Soilmarks and persistent appearance of marks in crops indicates that features will still be residually present below the ground surface.
115. It is likely that the mapped features will be more extensive both in area and depth, and possibly more stratified, than may be recorded from air and spaceborne remote sensing sources.

9 References and resources

9.1 Reference material

Albone J 2000. *Desk Based Assessment at Land North of High Road, Weston Lincolnshire (HRW00).* Archaeological Project Services Report 033/00.

Bennett R and Cowley D 2025. *Guidelines on the Use of Airborne Laser Scanning (Lidar) in Archaeology.* European Archaeological Council (EAC).

Bennett R, Welham K, Hill R A and Ford A 2012. 'A comparison of visualisation techniques for models created from airborne laser scanned data.' *Archaeological Prospection* 19: 41–48.

Bunn D and Palmer-Brown C 2002. *A1073 Peterborough to Spalding Improvement Scheme. Fluxgate Gradiometer and Resistance Surveys. Volumes 1 and 2.* Pre-Construct Geophysics for the Babtie Group.

CIfA 2022. *Chartered Institute for Archaeologists Code of Conduct: Professional Ethics in Archaeology.*

Clay C 2006. *Archaeological Evaluation Report: Land off Holbeach Drove Gate, Holbeach Drove, Lincolnshire.* Pre-Construct Archaeology Job Number 231, prepared for Mr C Willey.

Deegan A 2024. *Air Photo and LiDAR Mapping and Interpretation: Meridian Solar Farm Project, Lincolnshire.* Alison Deegan BSc MCIfA, Project Number 2425001 for JBA Consulting.

Evans S 2019. *Historic England Aerial Investigation and Mapping (formerly National Mapping Programme) Standards Technical Review.*

Hall D and Coles J 1994. *Fenland Survey: An Essay in Landscape and Persistence.* English Heritage.

Hallam S 1953. 'Goll Grange: A Grange of Spalding Priory.' *Lincolnshire Architectural and Archaeological Society Reports and Papers* 5: 1–18.

Hallam S 1970. 'Settlement Around The Wash.' In: Phillips C W (ed.) *The Fenland in Roman Times: Studies of a Major Area of Peasant Colonisation, with a Gazetteer Covering All Known Sites and Finds.* Royal Geographic Society Research Series 5: 22–106.

Hayes P and Lane T W 1992. *The Fenland Project Number 5: Lincolnshire Survey, The South West Fens.* East Anglian Archaeology 55.

Hesse R 2010. 'LiDAR-Derived Local Relief Models – A New Tool for Archaeological Prospection.' *Archaeological Prospection* 2.

Historic England 2018. *Using Airborne LiDAR in Archaeological Survey: The Light Fantastic.*

Jones R J A and Evans R 1975. 'Soil and Crop Marks in the Recognition of Archaeological Sites by Air Photography.' In: Wilson D R (ed.) *Aerial Reconnaissance for Archaeology.* Council for British Archaeology Research Report 12: 1–11.

Murray A 2011. *Archaeological Monitoring and Recording on Land at North Road, Gedney Hill, Lincolnshire (GHNC10).* Archaeological Project Services Report 143/11 for Deljon Properties.

Rayner T 2002. *Archaeological Watching Brief at Chapel Gate, Whaplode Drove, Lincolnshire (WDC02).* Archaeological Project Services Report Number 59/02, prepared for Mr J Atkins.

Riley D N 1945. 'Aerial Reconnaissance of the Fen Basin.' *Antiquity* 20: 50–53.

Riley D N 1946a. 'Groups of Circles in the Silt Fens.' *Antiquity* 19: 145–153.

Riley D N 1946b. 'The Technique of Air Archaeology.' *Archaeological Journal* 101: 1–16.

Riley D N 1983. 'The Frequency of Occurrence of Cropmarks in Relation to Soils.' In: Maxwell G (ed.) *The Impact of Aerial Reconnaissance on Archaeology.* CBA Research Report 49: 59–73.

Riley D N 1987. *Air Photography and Archaeology.* London and Philadelphia.

Roebuck A 1935. *Lincolnshire Magazine* 2(5): 136.

Smalley R A J 2000. *Geophysical Survey Report, Wykeham, Spalding.* Stratascan Job Number J2307 for Archaeological Project Services.

Smith D M, Zalasiewicz J A, Williams M, Wilkinson I P, Redding M and Begg C 2010. 'Holocene Drainage Systems of the English Fenland: Roddons and Their Environmental Significance.' *Proceedings of the Geologists' Association* 121(3): 256–259.

Štular B, Kokalj Ž, Oštir K and Nuninger L 2012. 'Visualisation of LiDAR-Derived Relief Models for Detection of Archaeological Features.' *Journal of Archaeological Science* 39: 3354–3360.

Thomson S 2002. *Archaeological Watching Brief at Chapel Gate, Whaplode Drove, Lincolnshire (WDCB02).* Archaeological Project Services Report Number 204/02, prepared for Mr A Bean.

Wilson D R 2000. *Air Photo Interpretation for Archaeologists.* 2nd Edition, The History Press.

Digital resources (Accessed April – July 2025)

Cranfield, 2025 https://www.landis.org.uk/soilscapes/ developed by Cranfield University and sponsored by DEFRA. Accessed April 2025.

Geology of Britain Viewer https://geologyviewer.bgs.ac.uk

10 APPENDIX 1 GAZETTEERS 1 and 2, Inter-Array Areas 1-5 and Grid Connection

10.1 Gazetteer 1, Inter-Array Areas 1 - 5

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
Inter-Array Area 1						
IA1_01	RODDONS	NATURAL	MICRO-TOPOGRAPHY	NA	Roddons.	5 and 6
IA1_01	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Palaeochannels.	5 and 6
IA1_02	RODDONS	NATURAL	MICRO-TOPOGRAPHY / CROPMARK	NA	Roddons.	5 and 6
Inter-Array Area 2						
IA2_01	SETTLEMENT	ROMAN	CROPMARK	MLI22043	Roman complex of settlement and agricultural enclosures fields and tracks at Moulton, visible as cropmarks.	7.1 (features) 8.1 (periods)
IA2_01	CULTIVATION MARKS		CROPMARK	MLI22043	Silt-Fenland type of eroded ridge and furrow, known as 'dylings'. Seen as parallel and perpendicular linear buried ditches which are residual over previously cultivated areas.	7.1 (features) 8.1 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA2_02	TRACKWAY	ROMAN	CROPMARK	MLI22043	Trackways associated with Roman complex of settlement and agricultural enclosures fields and tracks at Moulton, visible as cropmarks.	7.1 (features) 8.1 (periods)
IA2_02	SETTLEMENT, ENCLOSURES, DITCHES	LHER states IRON AGE / ROMAN	CROPMARK	MLI22043	Roman (LHER indicates IA/ Roman) complex of settlement and agricultural enclosures fields and tracks, east of Cate's Corner and near Moulton visible as cropmarks.	7.1 (features) 8.1 (periods)
IA2_02	CIRCULAR ENCLOSURE		CROPMARK	NA	Part of a group of thin-ditched small (c. 12m diameter) circular crop marked features, all same size, which are likely to be fen circles.	7.1 (features) 8.1 (periods)
IA2_02	UNCERTAIN	ROMAN	CROPMARK	MLI22043	Likely part of a buried area of Roman settlement features, uncertain type ditched feature, possibly part of a buried eroded enclosure.	7.1 (features) 8.1 (periods)
IA2_02	SETTLEMENT ENCLOSURES	ROMAN	CROPMARK	MLI22043	Buried Roman ditched enclosures, part of a wider area of former Roman settlement.	7.1 (features) 8.1 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA2_02	CIRCULAR ENCLOSURE		CROPMARK	MLI22043	Part of a group of thin-ditched small (c. 12m diameter) circular crop marked features, all same size, which are likely to be fen circles.	7.1 (features) 8.1 (periods)
IA2_02	CIRCULAR ENCLOSURE		CROPMARK	MLI22043	Part of a group of thin-ditched small (c. 12m diameter) circular crop marked features, all same size, which are likely to be fen circles.	7.1 (features) 8.1 (periods)
IA2_02	UNCERTAIN, POSSIBLE DITCH	UNCERTAIN	CROPMARK	MLI22043	Possible ditch. A diffuse mark in crops which may be part of a Roman settlement enclosure.	7.1 (features) 8.1 (periods)
IA2_02	RODDON	NATURAL	CROPMARK	NA	Roddon.	7.1 (features) 8.1 (periods)
IA2_02	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Roddon.	7.1 (features) 8.1 (periods)
IA2_02	UNCERTAIN	UNCERTAIN	CROPMARK	MLI22043	Sub-ovoid shaped small 'enclosure' which is ditched, but of uncertain type and date. Could possibly be a natural feature.	7.1 (features) 8.1 (periods)
IA2_03	TRACKWAY	ROMAN	GRASSMARK	MLI22043	Buried ditched trackway, part of the wider buried Roman rural settlement and farming landscape in this area.	7.1 (features) 8.1 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA2_03	BOUNDARY OR DRAIN	UNCERTAIN	EXTANT FEATURE	MLI22043	Linear ditch which is an extant feature across a modern garden area, of uncertain type. Could be a garden boundary or drain.	7.1 (features) 8.1 (periods)
IA2_03	TRACKWAY	ROMAN	CROPMARK	MLI22043	Buried ditched trackway, part of the wider buried Roman rural settlement and farming landscape in this area.	7.1 (features) 8.1 (periods)
IA2_03	ENCLOSURE	ROMAN	CROPMARK	MLI22043	Buried ditched enclosure, part of the Roman settlement and farming landscape in this area.	7.1 (features) 8.1 (periods)
IA2_03	CULTIVATION MARKS		CROPMARK	NA	Silt-Fenland type of eroded 'ridge and furrow', known as 'dylings'. These features were long wide ditches with level platforms defining cultivable land parcels.	7.1 (features) 8.1 (periods)
IA2_04	ENCLOSURE	UNCERTAIN	CROPMARK	MLI22044, 120246	Rectilinear buried enclosure with attached ditch. This may be part of the Roman settlement features in this area, but its relationship to the Medieval fields and underlying features is uncertain.	7.1 (features) 8.1 (periods)
IA2_04	TRACKWAY	ROMAN	CROPMARK	MLI22044, 120246	Buried ditched trackway, part of the wider buried Roman rural settlement and farming landscape in this area.	7.1 (features) 8.1 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA2_04	BOUNDARY	ROMAN	CROPMARK	MLI22044, 120246	Buried ditched likely field or other land boundaries, part of the wider buried Roman rural landscape in this area.	7.1 (features) 8.1 (periods)
IA2_04	SETTLEMENT, ENCLOSURES	ROMAN	CROPMARK	MLI22044, 120246	Buried ditched remains of Roman settlement enclosures and associated ditches.	7.1 (features) 8.1 (periods)
IA2_04	BOUNDARY	ROMAN	CROPMARK	MLI22044, 120246	Curvilinear land boundary, likely associate with adjacent area of complex Roman settlement, fields and tracks.	7.1 (features) 8.1 (periods)
IA2_04	DRAIN, BOUNDARY	UNCERTAIN	CROPMARK	NA	Straight ditches which may have been Roman or later land drains. Uncertain date, but possibly part of the buried Roman landscape.	7.1 (features) 8.1 (periods)
IA2_04	ENCLOSURE	ROMAN	CROPMARK	MLI22044, 120246	Part of an area of buried Roman settlement and rural land use remains.	7.1 (features) 8.1 (periods)
IA2_04	TRACKWAY, BOUNDARY	ROMAN	CROPMARK	MLI22044, 120246	Double ditched trackway and boundary associated with adjacent Roman settlement and stock penning enclosures. Part of a larger area of buried Roman settlement and field systems.	7.1 (features) 8.1 (periods)
IA2_04	BOUNDARY, ENCLOSURE, SETTLEMENT, TRACKWAY	ROMAN	CROPMARK	MLI22044, 120246	Complex area of extensive buried Roman trackways and field systems with attached rectilinear ditched enclosures.	7.1 (features) 8.1 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA2_04	BOUNDARY	ROMAN	CROPMARK	NA	Linear boundaries with attached ditches, likely part of the Roman rural landscape which underlies linear cropmarked remains of Medieval cultivation known as 'dylings'.	7.1 (features) 8.1 (periods)
IA2_04	SETTLEMENT, ENCLOSURES, DITCHES	ROMAN	CROPMARK	MLI22044, 120246	Roman ditches, enclosures and tracks, in addition to the surrounding Roman buried landscape.	7.1 (features) 8.1 (periods)
IA2_04	SUB CIRCULAR ENCLOSURE	ROMAN	CROPMARK	MLI22044, 120246	Sub circular buried ditched enclosure which may possibly be penannular, but the northern part may be obscured by overlying features - this is not clear. Uncertain use, could be a Roman settlement feature.	7.1 (features) 8.1 (periods)
IA2_04	PIT	ROMAN	CROPMARK	MLI22044, 120246	Area of crop marked small cut features which may be pits associated with a wider area of Roman settlement and agricultural land use.	7.1 (features) 8.1 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA2_04	CULTIVATION MARKS		CROPMARK	NA	Silt-Fenland type of eroded ridge and furrow, known as 'dylings'. Seen as parallel and perpendicular linear buried ditches in previously cultivated areas.	7.1 (features) 8.1 (periods)
IA2_05	BOUNDARY	ROMAN	CROPMARK	MLI22043	Buried ditched boundaries which lie to the immediate south and east of further complex cropmarked Roman settlement remains just outside and adjacent to the northern boundary of IA2.	7.1 (features) 8.1 (periods)
IA2_05	UNCERTAIN	UNCERTAIN/ROMAN	CROPMARK	MLI22043	An area of darker toned mottled crop which may indicate deeper soil or diffuse buried features.	7.1 (features) 8.1 (periods)
IA2_06	ENCLOSURE, DITCHES	UNCERTAIN/ROMAN	CROPMARK	MLI20388	Buried ditched enclosures, possibly agricultural or settlement site. This site is only slightly visible and is likely more extensive than indicated by the crop marked evidence.	7.1 (features) 8.1 (periods)
IA2_06	UNCERTAIN	UNCERTAIN/ROMAN	CROPMARK	MLI20388	Area of faint and sinuous crop marked features which may be archaeological rather than natural.	7.1 (features) 8.1 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA2_06	CULTIVATION MARKS		CROPMARK	MLI20388	Silt-Fenland type of eroded ridge and furrow, known as 'dylings'. Seen as parallel and perpendicular linear buried ditches in previously cultivated areas.	7.1 (features) 8.1 (periods)
IA2_07	FIELD BOUNDARIES, ENCLOSURES	ROMAN	CROPMARK	MLI20424	Boundary ditches and enclosures, part of a likely Roman field system and settlement area. Some of these features lie on an earlier natural roddon.	7.1 (features) 8.1 (periods)
IA2_07	RODDON	NATURAL	CROPMARK	NA	Roddon.	7.1 (features) 8.1 (periods)
IA2_07	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Sinuous former natural water channel visible as a crop mark over the course of an earlier roddon.	7.1 (features) 8.1 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA2_08	DITCH	UNCERTAIN	CROPMARK	MLI20424, MLI22169	Buried ditches of uncertain type or period. IA2_08 and IA2_13 lies near to a modern settlement area which has been subject to some intrusive archaeological investigations. Watching briefs at Chapel Gate, Whaplode Drove (LHER ELI2967, Rayner 2002, and LHER ELI4005, Thomson, 2002) identified Roman briquetage and some ditches and pits, indicative of likely salt-making activity peripheral to an area of Roman settlement remains at MLI22169, where substantial artefactual evidence indicates 'important, probably public' Roman buildings west and north of Whaplode Drove Church (https://heritage-explorer.lincolnshire.gov.uk/Monument/MLI22169).	7.1 (features) 8.1 (periods)
IA2_08	CULTIVATION MARKS		CROPMARK	MLI20424	Silt-Fenland type of eroded ridge and furrow, known as 'dylings'. Seen as parallel and perpendicular linear buried ditches in previously cultivated areas.	7.1 (features) 8.1 (periods)
IA2_08	PALAEOCHANNEL	NATURAL	SOILMARK	NA	Palaeochannel.	7.1 (features) 8.1 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA2_08	RODDON AND WATERCOURSES	NATURAL	SOILMARK	NA	Widespread evidence for former smaller rivers (roddons) and some later palaeochannels. Their presence and visibility vary over land parcel IA2_08 which was likely variably waterlogged during Roman and pre Roman times.	7.1 (features) 8.1 (periods)
IA2_09	PALAEOCHANNEL	NATURAL	SOILMARK	NA	Palaeochannel.	7.2 (features) 8.2 (periods)
IA2_10	SETTLEMENT	ROMAN	CROPMARK	MLI22213	Buried ditches, field boundaries, trackways and enclosures. LHER indicates a 'Romano-British settlement' at this site. All eroded and now under crop and grass to the south.	7.2 (features) 8.2 (periods)
IA2_10	SETTLEMENT	ROMAN	CROPMARK	MLI22213	Buried ditch.	7.2 (features) 8.2 (periods)
IA2_10	SETTLEMENT	ROMAN	CROPMARK	MLI22213	Features identified as buried Roman settlement and rural Roman land use.	7.2 (features) 8.2 (periods)
IA2_10	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Small narrow sinuous feature which may be part of a buried palaeochannel.	7.2 (features) 8.2 (periods)
IA2_10	SETTLEMENT	ROMAN	CROPMARK	MLI22213	Features identified as buried Roman settlement and rural Roman land use.	7.2 (features) 8.2 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA2_10	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Small narrow sinuous feature which may be part of a buried palaeochannel.	7.2 (features) 8.2 (periods)
IA2_10	SETTLEMENT	ROMAN	CROPMARK	MLI22213	Features identified as buried Roman settlement and rural Roman land use.	7.2 (features) 8.2 (periods)
IA2_10	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Small narrow sinuous feature which may be part of a buried palaeochannel.	7.2 (features) 8.2 (periods)
IA2_10	SETTLEMENT	ROMAN	CROPMARK	MLI22213	Features identified as buried Roman settlement and rural Roman land use.	7.2 (features) 8.2 (periods)
IA2_10	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Small narrow sinuous feature which may be part of a buried palaeochannel.	7.2 (features) 8.2 (periods)
IA2_11 &12	SETTLEMENT	ROMAN	GRASSMARK	MLI22213	Features identified as buried Roman settlement and rural Roman land use.	7.2 (features) 8.2 (periods)
IA2_13	BOUNDARY	ROMAN	CROPMARK	NA	Buried ditches which are likely to be part of an area of eroded Roman settlement and fields.	7.2 (features) 8.2 (periods)
IA2_13	PALAEOCHANNEL		CROPMARK	NA	A likely small palaeochannel.	7.2 (features) 8.2 (periods)
IA2_14	SETTLEMENT	ROMAN	CROPMARK	MLI20236	Features identified as buried Roman settlement and rural Roman land use.	7.2 (features) 8.2 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
	UNCERTAIN	ROMAN	CROPMARK	MLI20236	Buried ditch, likely dating to the Roman period.	7.2 (features) 8.2 (periods)
IA2_14	POSSIBLE TRACKWAY OR ACCESS	ROMAN / UNCERTAIN	CROPMARK	MLI20236	Parallel ditches which may be part of the Roman buried landscape. This photo has some damage lines to the print, but this is likely a crop marked feature rather than an 'artefact' on the print. Extends into IA2_15.	7.2 (features) 8.2 (periods)
IA2_15	UNCERTAIN	ROMAN	CROPMARK	MLI20236	Buried ditch, likely dating to the Roman period.	7.2 (features) 8.2 (periods)
IA2_15	POSSIBLE TRACKWAY OR ACCESS	ROMAN / UNCERTAIN	CROPMARK	MLI20236	Parallel ditches which may be part of the Roman buried landscape. This photo has some damage lines to the print, but this is likely a crop marked feature rather than an 'artefact on the print'.	7.2 (features) 8.2 (periods)
IA2_15	SETTLEMENT	ROMAN	CROPMARK	MLI20236	Linear ditches which extend into IA2_15 from the south and may form part of a series of partially visible ditched 'ladder' enclosures.	7.2 (features) 8.2 (periods)
IA2_16	TRACKWAY	ROMAN	BUILT OVER / CROPMARK	NA	Buried ditched trackway, now built over by modern infrastructure.	7.2 (features) 8.2 (periods)
IA2_17	PALAEOCHANNEL		CROPMARK	NA	Diffuse wide dark toned cropmarks indicating a likely Roddon or later palaeochannel.	7.2 (features) 8.2 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA2_17	RODDON / PALAEOCHANNEL	NATURAL	CROPMARK	NA	Diffuse areas of sinuous complex cropmarks which indicate past hydrological activity. May mask under or overlying archaeological features.	7.2 (features) 8.2 (periods)
IA2_18	SETTLEMENT AND FIELDS	ROMAN	CROPMARK / MICRO-TOPOGRAPHY	NA	Sub rectangular ditched and very slightly embanked enclosure with internal features and visible entrance, with attached ditched field boundaries. Still visible as very slight earthworks, and as marks in growing crops over buried ditches. IA2_18 lies adjacent to an area which was subject to trial trenching at Holbeach Drove Gate, Holbeach Drove (ELI6772) in advance of construction of a wildlife area and lake (Clay, 2006). No archaeological features were identified in either of two evaluation trenches. Hallam (Phillips (ed.) 1970) has identified cropmarks indicative of likely Roman settlement south of IA2_18 (Clay, ibid. Figure 2).	7.2 (features) 8.2 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA2_19	SETTLEMENT		CROPMARK	MLI22262	Ditched enclosures, boundaries and a double ditched trackway within a wider area of complex Roman settlement and co-axial field systems which are variably visible as marks in crops and soils.	7.2 (features) 8.2 (periods)
IA2_19	CULTIVATION MARKS		CROPMARK	NA	Long parallel linear ditches which overlie the visible Roman enclosure ditches to the south of the boundary of IA2. These are likely to be Medieval or Post Medieval ridge and furrow remains ('dylings').	7.2 (features) 8.2 (periods)
IA2_20	TRACKWAY	ROMAN	CROPMARK	MLI22262	Very faint crop marked double ditched buried trackway. LHER describes Romano-British cropmarks at this location.	7.2 (features) 8.2 (periods)
IA2_20	BOUNDARY	ROMAN	CROPMARK	MLI22262	Cropmarked ditch which may be a Roman field boundary. Part of the wider landscape which is visible as cropmark in adjacent land parcels.	7.2 (features) 8.2 (periods)
IA2_21	BOUNDARY	ROMAN	CROPMARK	MLI22262	Crop marked ditches which may form part of the wider buried Roman rural landscape in this area of IA2. IA2-22 also contains linear features which may be modern drains and are not mapped.	7.2 (features) 8.2 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA2_22	BOUNDARY	ROMAN	CROPMARK	MLI22213	Cropmarked ditch which may be a Roman field boundary. Part of the wider landscape which is visible as cropmark in adjacent land parcels.	7.2 (features) 8.2 (periods)
IA2_23	BOUNDARY	ROMAN	CROPMARK	NA	Cropmarked ditch which may be a Roman field boundary. Part of the wider landscape which is visible as cropmarks in adjacent land parcels.	7.2 (features) 8.2 (periods)
Inter-Array Area 3						
IA3_01	SETTLEMENT, ENCLOSURE, DROVE ROAD, TRACKWAY, DITCHES	ROMAN	CROPMARK	MLI22296	Cropmarked remains of enclosures and ditches which may be a buried Roman settlement or farming area.	9 (features) and 10 (periods)
Inter-Array Area 4						
IA4_01	PALAEOCHANNEL, CANAL, DITCHES	UNCERTAIN	CROPMARK	MLI20453, 120442	Likely hydrological features, possible former waterway and associated sinuous channels.	11 (features) and 12 (periods)
IA4_01	FIELD BOUNDARY	POST MEDIEVAL	CROPMARK	MLI20442	Extensive buried ditches, enclosures and boundaries indicative of Roman settlement remains.	11 (features) and 12 (periods)
IA4_01	DITCH	UNCERTAIN	CROPMARK	MLI20453	Buried cropmarked ditches, uncertain type and date.	11 (features) and 12 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA4_02	STREAMBED	UNCERTAIN	CROPMARK	NA	Residual streambed, associated with adjoining drains and a Post Medieval field boundary which has been removed.	11 (features) and 12 (periods)
IA4_02	FIELD BOUNDARY, DRAINS	POST MEDIEVAL	CROPMARK	NA	Field boundary depicted as an extant feature on 1st ED OS mapping, with attached perpendicular drains associated with a former streambed to the east within IA-4_02. The long boundary may have been a former dyling, part of a system of Medieval ridge and furrow specific to the silt fenland in this region.	11 (features) and 12 (periods)
IA4_02	TRACKWAY	UNCERTAIN	CROPMARK	NA	Ditched features which align with the Roman landscape to the immediate west. Date is uncertain.	11 (features) and 12 (periods)
IA4_02	FOUNDATION	UNCERTAIN, POSSIBLY MODERN	CROPMARK	NA	Buried linear feature, possibly a bank or compacted foundation, could be modern, but date uncertain.	11 (features) and 12 (periods)
IA4_02	SETTLEMENT	ROMAN	CROPMARK	MLI20444	Extensive buried ditches, enclosures and boundaries indicative of Roman settlement remains.	11 (features) and 12 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA4_03	DROVEWAY	ROMAN	CROPMARK	MLI20444	Paralell buried ditches which are likely the remains of a trackway associated with a wider area of Roman settlement.	11 (features) and 12 (periods)
IA4_03	ENCLOSURE, SETTLEMENT	ROMAN	CROPMARK	MLI20444	Double ditched enclosure, likely settlement area.	11 (features) and 12 (periods)
IA4_03	DROVEWAY	ROMAN	CROPMARK	MLI20444	Double ditched linear feature, likely a drove or trackway, part of a wider area of settlement and rural features.	11 (features) and 12 (periods)
IA4_03	BOUNDARY	ROMAN	CROPMARK	MLI20444	Pre-modern buried boundary ditches.	11 (features) and 12 (periods)
IA4_03	PALAEOCHANNEL		CROPMARK		Palaeochannel.	11 (features) and 12 (periods)
Inter-Array Area 5						
IA5_01	RODDON	NATURAL	SOILMARK	NA	Roddon.	13 (features) and 14 (periods)
IA5_02	RODDON	NATURAL	CROPMARK	NA	Roddon.	13 (features) and 14 (periods)
IA5_02	BOUNDARY	POST MEDIEVAL	CROPMARK	MLI23224	Boundary to the former site of Fleet duck decoy and Fleet Decoy House which were removed in 1793 to make way for the construction of Holland Drain.	13 (features) and 14 (periods)

Parcel	Type	Period	Present Condition	LHER	Comment	Figure(s)
IA5_02	DECOY	POST MEDIEVAL	CROPMARK	MLI23224	Remains of the Fleet Fen duck decoy which was removed in 1793 to make way for the construction of the Holland Drain. Internal waterways, drains and some of the water ponds were vestigial in 1946, and are now totally ploughed out. Very little microtopography.	13 (features) and 14 (periods)
IA5_02	FOUNDATION	POST MEDIEVAL	FOUNDATION	NA	Possible remains of foundations at Decoy House and parts of the levelled decoy recorded by LHER as ML123224 at Fleet Fen Decoy	13 (features) and 14 (periods)
IA5_02	BOUNDARY, TRACKWAY, SETTLEMENT FEATURES	POSSIBLE ROMAN	CROPMARK	NA	Ditched features which lie beneath the decoy in IA5. These are contiguously aligned with parts of the Roman rural landscape to the immediate north and south at ML122251 and ML120446 which are mapped by Deegan (2024, Figure 11).	13 (features) and 14 (periods)

10.2 Gazetteer 2, Grid Connection

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_01	CULTIVATION MARKS, DYLINGS	MEDIEVAL / POST MEDIEVAL	LEVELLED, SOILMARK	MLI22093	Wide and narrow linear drainage ditches, possibly dylings (silt Fenland 'ridge and furrow') or more modern land drains at the site of Goll Grange which is now heavily plough eroded. Some ditches may be associated with the former grange site.	15.1 (features) and 16.1 (periods)
GC_01	POSSIBLE DROVEWAY	UNCERTAIN	LEVELLED	MLI22093	Linear narrow ditches which likely underlie the linear drains. Uncertain type and period, not visible following heavy ploughing after 1980.	15.1 (features) and 16.1 (periods)
GC_01	PARTS OF POSSIBLE GRANGE, CUT FEATURES	UNCERTAIN	LEVELLED	MLI22093	Narrow ditches which in 1980 survived as very slight earthworks and are now levelled. Likely part of a pre-modern field system, possibly associated with the former site of Goll Grange. Site shows a lot of sinuous varied marks in grass in 1980.	15.1 (features) and 16.1 (periods)
GC_01	BOUNDARY	POST MEDIEVAL/ MODERN	CROPMARK	MLI20010	Continuation of drains and Post Medieval boundaries, extant boundary in 1946.	15.1 (features) and 16.1 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_02	SETTLEMENT, ENCLOSURES, TRACKS	ROMAN	CROPMARK	MLI20010 Scheduled NHLE 1004963	Fragmentary cropmarked ditches which indicate buried droveways and likely enclosures within an area of Roman settlement between Broadgate and Delgate Fens. This landscape continues outside of the Site and buffer and the site is Scheduled.	15.1 (features) and 16.1 (periods)
GC_03	TRACKWAY, DITCHES	UNCERTAIN	CROPMARK	MLI22093	Parallel buried ditches, recorded by LHER as undated cropmarks, indicative of a likely trackway, possibly part of the wider Roman landscape in this area.	15.1 (features) and 16.1 (periods)
GC_03	POSSIBLE BURIED DITCHES	UNCERTAIN/ POSSIBLE ROMAN	CROPMARK	MLI20338	Area of very faint and diffuse buried features which may be associated with nearby Roman settlement remains.	15.1 (features) and 16.1 (periods)
GC_04	DRAIN, BOUNDARY	POST MEDIEVAL/ MODERN	SOILMARK	MLI20333	Light toned soil mark over the line of a former drain which acted as a field boundary and is now infilled. Within area of cropmarked settlement remains, and LHER recorded salt-making debris.	15.1 (features) and 16.1 (periods)
GC_04	RODDON	NATURAL	CROPMARK	MLI20338	Extensive roddons and palaeochannels, some with apparent 'side ditches' which are likely to be natural edges, which show as marks in crops in 1947.	15.1 (features) and 16.1 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_04	POSSIBLE SALTERN	ROMAN	CROPMARK	MLI20333	Light toned area of crop which may have been a former silt mound to the west of a Roman salt-making site and occupation debris recorded by LHER in a smaller area.	15.1 (features) and 16.1 (periods)
GC_04	DRAIN	UNCERTAIN	LEVELLED	NA	Silted ditches which show as very slight earthworks with lighter toned vegetation over the fill, which are likely to have been drains. Period and type uncertain.	15.1 (features) and 16.1 (periods)
GC_04	TRACKWAY, SETTLEMENT, SALTERNS	ROMAN	SOILMARK	MLI22105	Sinuous complex ditch-defined access ways, ditches, enclosures on natural roddons. part of a wider domestic and industrial Roman salt-making landscape outside the Site to the east and within to the west.	15.1 (features) and 16.1 (periods)
GC_04	POSSIBLE MOUNDS, POSSIBLE SALT-MAKING AREA	ROMAN	SOILMARK	MLI20333	Possible mounds which may be associated with nearby recorded salt-making debris.	15.1 (features) and 16.1 (periods)
GC_05	RODDON	NATURAL	SOILMARK	NA	A very varied and diffuse area of extensive roddons now visible as faint soil marks. These features also show on 1947 vertical APs, as very complex,	15.1 (features) and 16.1 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
					sometimes 'edged' features, which may be overlain by Roman settlement features.	
GC_05	PALAEOCHANNEL	NATURAL	SOILMARK	NA	Palaeochannel.	15.1 (features) and 16.1 (periods)
GC_05	POSSIBLE BURIED DITCHES	ROMAN	ERODED EARTHWORK	MLI22110, 20332	Area of dense and dark toned soil marks which may indicate possible buried cut features, within two areas recorded by the LHER as Roman occupation (MLI22032) and Roman salt-making debris (MLI22110).	15.1 (features) and 16.1 (periods)
GC_05	UNCERTAIN FEATURE, POSSIBLE DITCH	UNCERTAIN	CROPMARK	MLI22110, 20332	A wide cut feature which may be a ditch, of uncertain type and date.	15.1 (features) and 16.1 (periods)
GC_05	POSSIBLE BURIED ARCHAEOLOGICAL FEATURES	UNCERTAIN/ POSSIBLE ROMAN	CROPMARK	MLI22110, 20332	Variably visible diffuse buried features over the majority of GC_05, archaeological potential (undated) and natural roddons and palaeochannels. Complex area with potential for Roman settlement remains and possible salterns.	15.1 (features) and 16.1 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_05	UNCERTAIN, POSSIBLE TRACKWAY OR NATURAL FEATURE	UNCERTAIN	CROPMARK	MLI22110, 20332	This feature is visible as a cropmark which indicates a buried cut area, but of uncertain origin.	15.1 (features) and 16.1 (periods)
GC_05	TRACKWAY, SETTLEMENT, SALTERNS	ROMAN	SOILMARK	MLI22105	Sinuous complex ditch-defined access ways, ditches, enclosures on natural roddons. Part of a wider domestic and industrial Roman salt-making landscape outside the Site to the east and within to the west.	15.1 (features) and 16.1 (periods)
GC_06	PALAEOCHANNELS	NATURAL	CROPMARK	MLI20339	Network of palaeochannels	15.2 (features) and 16.2 (periods)
GC_06	UNCERTAIN	UNCERTAIN	SOILMARK	MLI20339	Possible archaeological buried ditches in an area where the LHER records undated cropmarks.	15.2 (features) and 16.2 (periods)
GC_07	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Palaeochannel.	15.2 (features) and 16.2 (periods)
GC_07	DITCH	UNCERTAIN	CROPMARK	NA	Buried linear ditch.	15.2 (features) and 16.2 (periods)
GC_08	PALAEOCHANNELS	NATURAL	SOILMARK	MLI20342	Palaeochannels.	15.2 (features) and 16.2 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_08	DITCH	UNCERTAIN	CROPMARK	MLI20342	Linear ditches which may be associated with adjacent areas of known Roman settlement, but as yet undated.	15.2 (features) and 16.2 (periods)
GC_08	SETTLEMENT, ENCLOSURES, PITS, DROVEWAYS	UNCERTAIN	CROPMARK	MLI20342	Area of complex buried cropmarked ditches, pits enclosures and droveways which is likely to form part of a wider Roman archaeological rural landscape. As yet undated.	15.2 (features) and 16.2 (periods)
GC_08	CIRCULAR ENCLOSURES, LIKELY TO BE FEN CIRCLES	POST MEDIEVAL	CROPMARK	MLI116037	Multiple regular thin ditched buried enclosures which may be silt-Fenland circles. Within an area recorded in LHER as 'ring ditches south east of Elmtree Farm in Weston'.	15.2 (features) and 16.2 (periods)
GC_08	PENANNULAR ENCLOSURE	UNCERTAIN	CROPMARK	MLI116037	Buried cropmarked small curvilinear penannular enclosure with likely terminal-defined entrance. Ditch is wider and less regular than the surrounding and abundant 'fen circles' in this location. Cut by a likely later drain or dyling.	15.2 (features) and 16.2 (periods)
GC_08	CURVILINEAR ENCLOSURE	UNCERTAIN	CROPMARK	MLI116037	Curvilinear ditched buried enclosure with internal ditch, cut by a drain or dyling, within the buffer area. Different appearance to the nearby fen circles, possibly different type and period of land use.	15.2 (features) and 16.2 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_08	CURVILINEAR ENCLOSURE	UNCERTAIN	CROPMARK	MLI116037	Internal ditch or separate enclosure within a curvilinear ditched enclosure.	15.2 (features) and 16.2 (periods)
GC_08	POSSIBLE QUARRIES	UNCERTAIN	CROPMARK	MLI116037	Cropmarked cut features with straight edges which may be infilled hand-dug quarries or other pits.	15.2 (features) and 16.2 (periods)
GC_08	UNCERTAIN, POSSIBLE MODERN SERVICE	UNCERTAIN	CROPMARK	MLI116037	Buried linear cut feature, may be a modern service or an undated archaeological feature.	15.2 (features) and 16.2 (periods)
GC_09	SETTLEMENT, DOUBLE DITCHED FEATURE	UNCERTAIN	CROPMARK	MLI20341, 20343	Buried ditches and wide double ditched linear feature.	15.2 (features) and 16.2 (periods)
GC_09	PALAEOCHANNEL	NATURAL		ML120341, 20343	Palaeochannel.	15.2 (features) and 16.2 (periods)
GC_10	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Palaeochannel	15.2 (features) and 16.2 (periods)
GC_10	BOUNDARY	ROMAN	CROPMARK	MLI20546	Linear buried ditch which forms part of a system of likely field boundaries to the south and outside of the buffer area where other feature indicate settlement remains. LHER records Roman remains at this location.	15.2 (features) and 16.2 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_11	DOUBLE DITCHED LINEAR FEATURE	UNCERTAIN	CROPMARK	MLI2343	Double ditched linear feature which may be a wide track or droveway, associated with and part of the features which are recorded to the south at GC_09.	15.3 (features) and 16.3 (periods)
GC_11	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Palaeochannel.	15.3 (features) and 16.3 (periods)
GC_11	POSSIBLE DITCH OR PALAEOCHANNEL	UNCERTAIN	CROPMARK	NA	Possible buried ditch but could equally be a palaeochannel.	15.3 (features) and 16.3 (periods)
GC_11	CIRCULAR ENCLOSURE, FEN CIRCLE	POST MEDIEVAL	CROPMARK	NA	Circular ditched enclosure which is likely to be a fen circle. Other similarly sized fen circles are present outside and to the east of the Grid Connection and buffer.	15.3 (features) and 16.3 (periods)
GC_11	BOUNDARY	POST MEDIEVAL	CROPMARK	NA	Post-Enclosure boundary which will have been removed in the 20th century.	15.3 (features) and 16.3 (periods)
GC_12	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Large wide and well defined buried palaeochannel.	15.3 (features) and 16.3 (periods)
GC_12	CULTIVATION MARKS	MEDIEVAL / POST MEDIEVAL	CROPMARK	NA	Possible ridge and furrow, known as 'dylings' on the silt fen.	15.3 (features) and 16.3 (periods)
GC_12	CIRCULAR ENCLOSURE	UNCERTAIN	CROPMARK	NA	A cropmarked circular enclosure. This lies within an area which contains 'fen circles'. However, the cropmarked ditch is slightly more defined, wider and	15.3 (features) and 16.3 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
					likely deeper, than the appearance of the cropmarked fen circles.	
GC_12	CIRCULAR ENCLOSURE	POST MEDIEVAL	CROPMARK	NA	Circular ditched enclosure which could be a fen circle. Other similarly sized fen circles are present outside and to the east of the Site and buffer.	15.3 (features) and 16.3 (periods)
GC_12	CIRCULAR ENCLOSURE	POST MEDIEVAL	CROPMARK	NA	Circular ditched enclosure which could be a fen circle. Other similarly sized fen circles are present outside and to the east of the Site and buffer.	15.3 (features) and 16.3 (periods)
GC_12	CURVILINEAR DITCH	UNCERTAIN	CROPMARK	NA	Small fragment of a visible curvilinear buried ditch, may be part of an undated circular enclosure.	15.3 (features) and 16.3 (periods)
GC_12	PENANNULAR ENCLOSURE	UNCERTAIN	CROPMARK	NA	Penannular ditched enclosure with terminal-defined entrance. Same size and ditch width as the adjacent fen circles.	15.3 (features) and 16.3 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_13	DITCH	UNCERTAIN	CROPMARK	MLI90792	Possible buried ditch within an area recorded by LHER as a Prehistoric/Roman settlement. Adjacent to an area of cropmarked drainage, possible dylings, and, to the east and away from the buffer area, numerous cropmarked fen circles and palaeochannels.	15.3 (features) and 16.3 (periods)
GC_13	CURVILINEAR DITCH	UNCERTAIN	CROPMARK	MLI90792	Faintly visible cropmarked curvilinear ditch, uncertain origin and type.	15.3 (features) and 16.3 (periods)
GC_13	DIFFUSE FEATURES	UNCERTAIN	CROPMARK	MLI90792	Darker toned mark in crops which may indicate an area of buried features.	15.3 (features) and 16.3 (periods)
GC_13	UNCERTAIN, DRAIN	UNCERTAIN	CROPMARK	NA	Wide linear ditch which generally aligns with a system of cropmarked drainage or dylings. Coincident with a further cut feature.	15.3 (features) and 16.3 (periods)
GC_13	DRAINS, POSSIBLE DYLINGS	UNCERTAIN	CROPMARK	MLI90792	Wide linear ditch, likely a drain or possible dyling.	15.3 (features) and 16.3 (periods)
GC_13	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Palaeochannel.	15.3 (features) and 16.3 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_14	DITCHES, ENCLOSURES, POSSIBLE TRACKS	UNCERTAIN	CROPMARK	NA	Area of faint cropmarks, indicative of likely buried ditched enclosures, tracks or similar. Likely linked to, and a continuation of Roman, settlement to the east and south.	15.3 (features) and 16.3 (periods)
GC_14	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Palaeochannel.	15.3 (features) and 16.3 (periods)
GC_15	TRACKWAY, BOUNDARY	UNCERTAIN	CROPMARK	NA	Buried ditches which indicate a pre-modern trackway and likely boundary ditches. Likely be part of the buried Roman landscape which is present in the wider area.	15.3 (features) and 16.3 (periods)
GC_16	DROVEWAY, TRACKWAY	UNCERTAIN	CROPMARK	NA	Buried double ditched likely trackway, possibly part of the Roman rural landscape in this area.	15.3 (features) and 16.3 (periods)
GC_17	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Palaeochannel.	15.3 (features) and 16.3 (periods)
GC_17	DITCH	UNCERTAIN	CROPMARK	NA	A possible buried ditch, but origin and type uncertain.	15.3 (features) and 16.3 (periods)
GC_17	PALAEOCHANNEL	NATURAL	CROPMARK	NA	An area of roddons and palaeochannels.	15.3 (features) and 16.3 (periods)
GC_18	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Palaeochannels.	15.4 (features) and 16.4 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_18	POSSIBLE DITCHES	UNCERTAIN	CROPMARK	NA	Parts of a possible narrow ring ditch, or uncertain type and origin. A circular feature may be perceptible here, but its veracity is not confirmed.	15.4 (features) and 16.4 (periods)
GC_18	RODDON	NATURAL	CROPMARK	NA	An area of roddons and palaeochannels.	15.4 (features) and 16.4 (periods)
GC_19	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Palaeochannel.	15.4 (features) and 16.4 (periods)
GC_20	DITCH	UNCERTAIN	CROPMARK	NA	Possible buried ditch and possible pits. Very faint cropmarks, interpretation in this area is uncertain.	15.4 (features) and 16.4 (periods)
GC_20	POSSIBLE DITCHES/ PALAEOCHANNELS	UNCERTAIN	CROPMARK, SOILMARK	NA	Very faint marks in soil and crop which may indicate archaeological features or small palaeochannels.	15.4 (features) and 16.4 (periods)
GC_20	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Palaeochannels.	15.4 (features) and 16.4 (periods)
GC_21	ENCLOSURE, DITCHES, POSSIBLE SETTLEMENT	UNCERTAIN	CROPMARK	NA	Buried ditched enclosure, linear ditches, area of likely former settlement. This area contains many palaeochannels and later drains, possible dylings. Some of the straight buried ditches may be more modern field boundaries.	15.5 (features) and 16.5 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_21	POSSIBLE ARCHAEOLOGICAL DITCH	UNCERTAIN	CROPMARK	NA	Possible curvilinear 'ditches', which may be palaeochannels.	15.5 (features) and 16.5 (periods)
GC_21	CURVILINEAR ENCLOSURES	UNCERTAIN	CROPMARK	NA	Sub circular ditched enclosures, uncertain origin and date.	15.5 (features) and 16.5 (periods)
GC_21	DEEPER SOILS	NATURAL	CROPMARK	NA	Area of disturbed, complex substrate and deeper soils, which likely conceal and mask potential archaeological deposits.	15.5 (features) and 16.5 (periods)
GC_21	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Palaeochannel.	15.5 (features) and 16.5 (periods)
GC_22	DROVEWAY	UNCERTAIN	CROPMARK	MLI89823, ELI3133, ELI1880	Multi-ditched buried feature which was likely to have been a pre-modern droveway and part of a wider landscape of cropmarked features. Now partially overbuilt by the modern Weston High Road, may survive below ground in open space to the east of the road. Archaeological activity was identified in advance of the development of the Weston High Road during a field visit for a Desk Based Assessment (ELI3133, Albone, 2000, which tabulates undated cropmarked evidence for the droveways and enclosures in the area, citing Hallam 1970.	15.7 (features) and 16.7 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_22	POSSIBLE DITCH	UNCERTAIN	CROPMARK	MLI89823	Ditched cropmarked buried features.	15.7 (features) and 16.7 (periods)
GC_23	POSSIBLE DITCH	UNCERTAIN	CROPMARK	MLI89823	Possible buried ditch or hydrological feature.	15.6 (features) and 16.6 (periods)
GC_23	POSSIBLE ENCLOSURE	UNCERTAIN	CROPMARK	NA	Possible buried ditched enclosure.	15.6 (features) and 16.6 (periods)
GC_23	SERVICE	MODERN	CROPMARK	NA	Possible line of buried modern service trench.	15.6 (features) and 16.6 (periods)
GC_23	RODDON	NATURAL	CROPMARK	NA	Narrow likely roddon.	15.6 (features) and 16.6 (periods)
GC_23	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Area of complex palaeochannels over roddons.	15.6 (features) and 16.6 (periods)
GC_23	DIFFUSE FEATURES	UNCERTAIN	CROPMARK	NA	Complex cropmarked features which likely include drains, possible ditches, hydrological features and areas of soil depth variations over palaeochannels.	15.6 (features) and 16.6 (periods)
GC_24	POSSIBLE DITCH	UNCERTAIN	CROPMARK	NA	Possible buried ditch.	15.6 (features) and 16.6 (periods)
GC_24	TRACKWAY, DROVEWAY	UNCERTAIN	CROPMARK	NA	Likely a buried ditched track or droveway.	15.6 (features) and 16.6 (periods)
GC_25	TRACKWAY	UNCERTAIN	CROPMARK	NA	A likely buried trackway.	15.6 (features) and 16.6 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_25	POSSIBLE BOUNDARY	UNCERTAIN/ POST MEDIEVAL	CROPMARK	NA	Possible former boundary, aligns with the cropmarked ditch in GC_24 to the east.	15.6 (features) and 16.6 (periods)
GC_25	POSSIBLE TRACKWAY, POSSIBLE BOUNDARIES	UNCERTAIN	CROPMARK	NA	Possible buried ditch-defined track and boundaries, uncertain origin and date.	15.6 (features) and 16.6 (periods)
GC_26	DIFFUSE FEATURES	UNCERTAIN	CROPMARK	NA	Area of dark-toned complex marks in crops which may indicate a buried focus of past settlement or other archaeological deposits.	15.6 (features) and 16.6 (periods)
GC_26	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Palaeochannel.	15.6 (features) and 16.6 (periods)
GC_26	DITCH	UNCERTAIN	CROPMARK	NA	Possible buried ditch - inconclusive interpretation from faint marks in crop.	15.6 (features) and 16.6 (periods)
GC_27	POSSIBLE ENCLOSURE, TRACKWAY	UNCERTAIN	CROPMARK	MLI116097	Likely buried ditched enclosure and possible trackways, boundaries, uncertain date and type.	15.6 (features) and 16.6 (periods)
GC_27	UNCERTAIN	UNCERTAIN	CROPMARK	MLI116097	Buried pit or other type of cut feature.	15.6 (features) and 16.6 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_28	BOUNDARY, FIELD SYSTEM, POSSIBLE TRACK	UNCERTAIN/ POST MEDIEVAL	SOILMARK	MLI89824	Linear and curvilinear features in a large ploughed agricultural field may be the remains of former post enclosure boundaries, removed to facilitate mechanised agriculture.	15.7 (features) and 16.7 (periods)
GC_29	BOUNDARY, DRAIN, UNCERTAIN	UNCERTAIN	CROPMARK	NA	Buried ditches, of uncertain, maybe recent, origin. Smaller ditches of uncertain origin and type.	15.7 (features) and 16.7 (periods)
GC_30	UNCERTAIN, CUT FEATURES	UNCERTAIN	CROPMARK	MLI87292	LHER details an enclosure here. The area contains diffuse crop and soil marked features, hints at buried features. An area of likely archaeological potential.	15.7 (features) and 16.7 (periods)
GC_31	DITCH, UNCERTAIN, BOUNDARY	UNCERTAIN	CROPMARK	MLI87291	Complex cropmarks over a variety of ditched buried features. Likely a pre-modern possibly Roman area of settlement and fields.	15.7 (features) and 16.7 (periods)
GC_31	UNCERTAIN, DITCH, PALAEOCHANNEL	UNCERTAIN	CROPMARK	MLI87291	Very complex area of curvilinear and sinuous ditches and likely hydrological features.	15.7 (features) and 16.7 (periods)

Parcel	Type	Period	Present condition	LHER	Comment	Figure(s)
GC_31	DITCHES, PALAEOCHANNLES, SETTLEMENT, ENCLOSURES, PITS	UNCERTAIN	CROPMARK	MLI87291	Very complex diffuse cut features, visible in one area only but likely to be much more extensive. Possible area of Roman settlement but dating evidence is uncertain.	15.7 (features) and 16.7 (periods)
GC_32	DITCH	UNCERTAIN	CROPMARK	NA	Buried ditches of uncertain, likely archaeological, origin.	15.7 (features) and 16.7 (periods)
GC_33	PALAEOCHANNEL	NATURAL	CROPMARK	NA	Palaeochannel.	15.8 (features) and 16.8 (periods)
GC_33	BOUNDARY	UNCERTAIN	CROPMARK	NA	Buried ditches, likely to be recent field boundaries.	15.8 (features) and 16.8 (periods)
GC_34	DITCH, POSSIBLE ENCLOSURE, POSSIBLE TRACKWAY	UNCERTAIN	GRASSMARK	MLI89822	Linear ditches, uncertain origin, buried in grassland at Wool Hall Farm.	15.7 (features) and 16.7 (periods)
GC-34	POSSIBLE FORMER QUARRY	UNCERTAIN	GRASSMARK	MLI89822	Possible former quarry or other cut feature.	15.7 (features) and 16.7 (periods)
GC_34	DRAIN OR DYLING	UNCERTAIN/ POST MEDIEVAL	GRASSMARK	MLI89822	Likely former land drains or dylings, visible now as positive marks in grass at Wool Hall Farm	15.7 (features) and 16.7 (periods)

11 APPENDIX 2 Archaeology from aerial photographs and satellite imagery

11.1 Black and white and colour aerial photographs

116. Two types of aerial photograph are used for archaeological interpretation.

11.1.1 Vertical aerial photographs

117. Vertical aerial photographs are taken for general-purpose, and sometimes archaeological, survey using a camera mounted inside a modified aircraft. The aircraft is flown on a pre-planned set of overlapping flight-lines which cover the survey area completely. The camera points straight towards the ground. The vertical viewpoint provides aerial photographic coverage from a fixed scale and constant 180° angles at the centre of each frame. The overlap between the areas covered by each consecutive frame is usually 60%. This overlap between frames enables the photo interpreter to study each pair of vertical photos under a stereoscope.

118. The stereoscope combines the two images to allow the interpreter to see one three-dimensional image of the ground surface. Vertical aerial photographs carry inherent distortions introduced by variations in perspective away from the central 'nadir' point of each frame and ground height causes differences in scale. However, they are essentially 'map-like' in appearance. They are generally taken for non-archaeological, civil and military purposes and form the basic data from which most modern maps are compiled.

119. In this Site and area, the historic vertical aerial photographs are a very useful source of archaeological data. Some particular sorties, such as some of those taken by the RAF in the 1940s over the Site and environs, show detailed cropmark and soilmark data over a complex and widespread predominately Roman buried landscape.

11.1.2 Specialist oblique aerial photographs

120. Specialist archaeological oblique aerial photographs are taken using a hand held camera to portray features which have been identified during specialist aerial survey. These photos are extremely useful, but contain inherent perspective distortions, which must be accounted for in rectification and mapping procedures. They often show great detail, but sometimes, due to flying height or other constraints, do not contain sufficient ground control points to allow accurate mapping. This is often the case in and around

this Site and its environs, where the fields are large and the buried features produce very detailed cropmarks.

11.2 Interpretation and how we see archaeological features from above

121. Interpretation of air and spaceborne remote sensing data allows the definition, and in some cases the accurate mapping, of archaeological sites or natural features recorded as crop, grass or vegetation marks (caused by the differential growth of plants over buried features); soil marks (caused by differences in soil colour over ploughed buried features) and shadows cast by upstanding earthworks and features seen in relief. Differential weather conditions such as frost, snow and flooding may also enhance the appearance of archaeological features when seen from above.

122. Cropmarks are visible via the differences in tone, height, volume and colour which are caused by differential crop growth over anomalies in the soil and subsoil horizons. The anomalies may be caused by eroded buried ditches, pits, foundations, the compacted remains of residual banks, and natural features such as palaeochannels or geomorphological frost cracking (Riley, 1946b, 1983, 1987; Wilson, 2000). Deficits in nutrients and soil moisture cause the formation of cropmarks when transpiration from leaves and vegetation exceeds rainfall and availability of nutrients and water to facilitate even crop growth. The underlying features affect the growth of the crops by acceleration or impediment. Periods of drought thus cause Soil Moisture Deficit (SMD) when cropmarks, and indeed marks in grass and other vegetation, may develop (Jones and Evans 1975). Cropmarks are very variable in their appearance, and local, seasonal and longer-term environmental factors often interplay in their development. This variability introduces some uncertainty and limitations to the prediction and development of cropmarks over buried features.

123. Soilmarks (Riley 1946b, Wilson 2000) are differences in tone, colour and reflectivity in the surface of bare soils, in places where buried features are actively brought to the surface by the plough. The humic fills of ditches and differently toned composition of banks and foundations may show at the surface as they are actively eroded.

124. Earthworks are visible from the air via the shadows they may cast in times of low sunlight, frost, snow or water retention during ground saturation or flooding. They can

also be seen on the ground. Differential surface vegetation may also be observed from the air within their banks and ditches.

125. Stereoscopic viewing of both vertical and suitable overlapping oblique images may assist to interpret ground height differences over upstanding and eroded earthworks and residual foundations.

11.3 Limitations of the Data

126. Aerial photographic and satellite imagery evidence is limited by seasonal, agricultural, meteorological and environmental factors which affect the extent to which either buried or upstanding archaeological features can be detected. It is thus advantageous to examine a range of images taken under a variety of environmental conditions in order to build up a comprehensive interpretation of the archaeological landscape, and to see all archived aerial photographs which are available. The visibility of archaeological features may differ from year to year and be obscured by differential depths of soil or differing types of vegetation. Individual photographs may often record only a small percentage of the actual extent of buried or upstanding features.

11.3.1 Aerial Photographs

127. The assumption that aerial photographic survey and vertical and oblique aerial photographs show all features and will reveal a complete archaeological record in any given area is erroneous. This is due to many interactive and variable survey biases, seasonal, environmental, meteorological and perception and interpretation issues.

128. Interpretation of aerial photographs relies on visual identification of the effect heritage assets have on crops and other vegetation, marks in soils or visible features or earthworks which are more visible at times of clear low-angled light.

129. It is important to note that aerial photographs usually only show part of the horizontal and vertical extent of buried and upstanding features. Their capacity to reveal features as cropmarks, vegetation marks, soil marks or as the shadows cast by banks, ditches and walls, depends upon several environmental and agricultural factors prevalent at the time of the photographic survey. It is possible for many years' photography over one site to show nothing at all, and then during one instance of survey to reveal complex buried cropmark features. The direction of light at the time of photography, with reference to

shadows cast and crop or soil marked features highlighted, can also affect the visibility of features on aerial photographs. Unlike digitally processed LiDAR and other data, the azimuth of the sun cannot be changed on a conventional aerial photograph.

130. Past and present land use also presents limitations to visibility of features. A cropped arable regime of cereals often allows the formation of cropmarks, whereas grassland, unless seen in times of extreme moisture stress, can mask the appearance of buried features. The time of year is thus important in gaining maximum benefit from aerial photographic sorties. In winter, the low leaf index and lower light angle assist visibility of topographic and earthwork features. In summer, ripening crops, often from April through to harvest in July or August, may show differential marks over buried features. Dry conditions will often cause parching in grass, which will then reveal areas of former foundations as the grass dies over the harder, less moisture-retentive buried features.

131. Following harvest, weathering and ploughing, marks in soil often show where buried archaeological deposits are being actively ploughed and brought to the surface.

132. In this region the arable areas are intensively eroded by ploughing. The areas of lighter shallow soils over well drained substrates are conducive to the formation of cropmarks over both buried heritage assets and complex and extensive geological anomalies in the substrates.

133. In constructing a comprehensive interpretation of the archaeological landscape, it is essential to examine a range of photographs, taken under a variety of environmental conditions, as has been done in this case.

134. Aerial photographs taken in the 1940s often recorded extant landscapes which have been altered or carry evidence for pre-modern fields and extant military features, particularly in coastal areas. These historic photos provide a starting point for the assessment of landscape change, in conjunction with the study of historic maps and modern aerial and satellite-derived imagery.

135. The remit of past oblique aerial surveys, the survey areas chosen and the visibility of sites to the aerial archaeologist can often determine the content and coverage of oblique aerial photography. Observer-led flights may be biased and may miss features which were present but were not seen or recorded.

11.3.2 Online Aerial Photographs and Satellite Images

136. Google Earth regularly uploads new images and attributes some images with the name of the provider and a date of capture. These dates are not verified, but for archaeological survey this is not a legally essential element of the metadata. The issue with data derived from geoportals such as Google Earth is that it changes and is added to; it is a dynamic collection of varied mosaiced dated images and varied resolutions of data derived from aerial photography and satellite imagery. During 2017-2018, Google began to capture its own data, and these layers are largely 'unattributed' in terms of provider. The main UK providers to Google Earth include Getmapping, Infoterra and Bluesky, The GeoInformation Group (Cities Revealed), Maxar and CNES/Airbus. The mosaic 'cuts' where images have been blended and captured in different seasons are readily apparent, often within the same 'timeline' data.

12 APPENDIX 3 Aerial Photos and Satellite Images Used for this Assessment

12.1 Historic England Archive summary

Area	HE Enquiry reference	Details
Grid Connection	148499	34 specialist obliques taken between 1951 (Cambridge University Collection of Aerial Photography (CUCAP) copies) and 2011. 158 verticals available as prints taken between 1946 and 1995.
Inter_Array 1	148504	No specialist obliques. 14 verticals available as prints taken in 1946, 1947 and 1972.
Inter_Array 2	148500	81 specialist obliques taken between 1956 (Cambridge University Collection of Aerial Photography (CUCAP) copies) and 2012. 33 verticals available as prints taken in 1946, 1948, 1972 and 1975.
Inter_Array 3	148501	5 specialist obliques taken in 1981 and 2008. 8 verticals available as prints taken in 1946, 1948 and 1975.
Inter_Array 4	148502	57 specialist obliques taken in 1976, 1977, 1979, 1981, 2009 and 2011. 7 verticals taken in 1946, 1972 and 1975.
Inter_Array 5	148503	21 specialist obliques taken in 1976, 1977, 1979, 1982 and 2009. 10 verticals available as prints taken in 1946 and 1972.

137. All aerial photographs are searched and listed by Historic England on their individual area enquiries. Only those held as paper based prints are available for viewing. Some vertical aerial photos are held as negatives only, which are not available for general viewing and are struck through to indicate that they are not available for consultation.

138. Digital images are available for viewing on screen in the archive but cannot be copied or downloaded.

139. Some obliques are diapositive slides, which are also not available for viewing unless printed on paper.

140. Many of the verticals are taken in overlapping runs and are available for viewing using a stereoscope to provide 3D information from the paper prints.

12.2 Grid Connection HE enquiry number 148499

12.2.1 Obliques, HEA 148499, Grid Connection

Photo reference	Film and frame number		Date	Film type		NGR
TF 2616 / 3	NMR 1124	/ 227-228	13 APR 1977	Black & white	70mm,120,220	TF 267160
TF 2715 / 5	NMR 1973	/ 230	28 JUL 1981	Black & white	70mm,120,220	TF 273159
TF 2715 / 10	NMR 1973	/ 231	28 JUL 1981	Black & white	70mm,120,220	TF 273159
TF 2715 / 11	NMR 1973	/ 232	28 JUL 1981	Black & white	70mm,120,220	TF 273159
TF 2715 / 12	NMR 1973	/ 233	28 JUL 1981	Black & white	70mm,120,220	TF 273159
TF 2716 / 1	NMR 932	/ 43-44	14 MAY 1976	Black & white	70mm,120,220	TF 272164
TF 2716 / 5	CAP 8029	/ 38	17 JUN 1951	Black & white	Unknown	TF 274163
TF 2716 / 17	NMR 1733	/ 440-442	03 MAR 1980	Black & white	70mm,120,220	TF 271167
TF 2716 / 18	NMR 1733	/ 443-446	03 MAR 1980	Black & white	70mm,120,220	TF 273169
TF 2716 / 27	NMR 1973	/ 245	28 JUL 1981	Black & white	70mm,120,220	TF 271168
TF 2717 / 1	NMR 932	/ 65-68	14 MAY 1976	Black & white	70mm,120,220	TF 274170
TF 2717 / 2	NMR 968	/ 280-281	20 JUL 1976	Black & white	70mm,120,220	TF 273176
TF 2717 / 3	NMR 1733	/ 437-439	03 MAR 1980	Black & white	70mm,120,220	TF 273173
TF 2717 / 4	NMR 1736	/ 126-132	13 MAR 1980	Black & white	70mm,120,220	TF 274175
TF 2717 / 5	NMR 1736	/ 133-138	13 MAR 1980	Black & white	70mm,120,220	TF 273171
TF 2717 / 6	NMR 1810	/ 415-418	30 JUN 1980	Black & white	70mm,120,220	TF 272172
TF 2717 / 7	NMR 1973	/ 238	28 JUL 1981	Black & white	70mm,120,220	TF 273172
TF 2717 / 11	NMR 1973	/ 239	28 JUL 1981	Black & white	70mm,120,220	TF 273172
TF 2718 / 1	NMR 932	/ 30-31	14 MAY 1976	Black & white	70mm,120,220	TF 275180
TF 2818 / 5	NMR 2165	/ 055	05 JUL 1984	Black & white	70mm,120,220	TF 282181
TF 2818 / 8	NMR 2165	/ 056	05 JUL 1984	Black & white	70mm,120,220	TF 282181
TF 2818 / 9	NMR 2165	/ 057	05 JUL 1984	Black & white	70mm,120,220	TF 282181
TF 2818 / 10	NMR 2165	/ 058	05 JUL 1984	Black & white	70mm,120,220	TF 282181
TF 2819 / 4	NMR 1530	/ 395-399	27 JUN 1979	Black & white	70mm,120,220	TF 288194
TF 2820 / 2	NMR 1736	/ 301-303	13 MAR 1980	Black & white	70mm,120,220	TF 285204
TF 2820 / 3	NMR 28154	/ 47	14 JUN 2011	Digital colour	35 mm	TF 284200
TF 2822 / 1	NMR 1530	/ 370-374	27 JUN 1979	Black & white	70mm,120,220	TF 286225
TF 2922 / 2	NMR 1764	/ 419	03 JUN 1980	Black & white	70mm,120,220	TF 293222
~~TF 2922 / 3~~	~~NMR 11115~~	~~/ 86-94~~	~~03 JUN 1980~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 291224~~
~~TF 2922 / 4~~	~~NMR 11115~~	~~/ 95-103~~	~~03 JUN 1980~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 294226~~
TF 2922 / 5	NMR 1764	/ 420	03 JUN 1980	Black & white	70mm,120,220	TF 293222
TF 2922 / 6	NMR 1764	/ 421	03 JUN 1980	Black & white	70mm,120,220	TF 293222
TF 2922 / 7	NMR 1764	/ 422	03 JUN 1980	Black & white	70mm,120,220	TF 293222
TF 2922 / 8	NMR 1764	/ 423	03 JUN 1980	Black & white	70mm,120,220	TF 293222

12.2.2 Verticals, HEA 148499, Grid Connection

Sortie number	Frame number	Held	Centre point	Run	Date	Sortie quality	Scale 1:
RAF/106G/UK/1489	3040	P	TF 289 253	1	09 MAY 1946	AB	9800
RAF/106G/UK/1489	3041	P	TF 282 253	1	09 MAY 1946	AB	9800
RAF/106G/UK/1489	3042	P	TF 274 253	1	09 MAY 1946	AB	9800
RAF/106G/UK/1489	3077	P	TF 286 221	2	09 MAY 1946	AB	9800
RAF/106G/UK/1489	3078	P	TF 292 221	2	09 MAY 1946	AB	9800
RAF/106G/UK/1489	3186	P	TF 267 166	4	09 MAY 1946	AB	9800
RAF/106G/UK/1489	3187	P	TF 273 166	4	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4040	P	TF 288 274	6	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4041	P	TF 280 274	6	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4077	P	TF 285 199	7	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4078	P	TF 292 199	7	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4274	P	TF 284 183	9	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4275	P	TF 277 183	9	09 MAY 1946	AB	9800
RAF/106G/UK/1431	7288	P	TF 282 268	7	16 APR 1946	AC	10000
RAF/106G/UK/1431	7289	P	TF 288 267	7	16 APR 1946	AC	10000
RAF/106G/UK/1431	5372	P	TF 293 231	5	16 APR 1946	AC	10000
RAF/106G/UK/1431	5373	P	TF 286 231	5	16 APR 1946	AC	10000
RAF/106G/UK/1431	5374	P	TF 280 230	5	16 APR 1946	AC	10000
RAF/106G/UK/1717	3075	P	TF 286 249	3	06 SEP 1946	AB	9800
RAF/106G/UK/1717	3076	P	TF 279 248	3	06 SEP 1946	AB	9800
RAF/106G/UK/1717	3077	P	TF 272 248	3	06 SEP 1946	AB	9800
RAF/106G/UK/1717	3113	P	TF 287 224	4	06 SEP 1946	AB	9800
RAF/106G/UK/1717	3114	P	TF 280 223	4	06 SEP 1946	AB	9800
RAF/106G/UK/1717	3158	P	TF 295 198	5	06 SEP 1946	AB	9800
RAF/106G/UK/1717	3159	P	TF 288 198	5	06 SEP 1946	AB	9800
RAF/106G/UK/1717	4075	P	TF 283 265	12	06 SEP 1946	AB	9800
RAF/106G/UK/1717	4076	P	TF 277 264	12	06 SEP 1946	AB	9800
RAF/106G/UK/1717	4113	P	TF 284 241	13	06 SEP 1946	AB	9800
RAF/106G/UK/1717	4114	P	TF 277 241	13	06 SEP 1946	AB	9800
RAF/106G/UK/1717	4158	P	TF 292 214	14	06 SEP 1946	AB	9800
RAF/106G/UK/1717	4159	P	TF 285 214	14	06 SEP 1946	AB	9800
RAF/CPE/UK/2005	3001	P	TF 265 244	1	15 APR 1947	A	10000
RAF/CPE/UK/2005	3016	P	TF 273 259	2	15 APR 1947	A	10000
RAF/CPE/UK/2005	3017	P	TF 280 259	2	15 APR 1947	A	10000
RAF/CPE/UK/2005	4001	P	TF 274 260	6	15 APR 1947	A	10000
RAF/CPE/UK/2005	4016	P	TF 275 237	7	15 APR 1947	A	10000
RAF/CPE/UK/2005	4017	P	TF 282 237	7	15 APR 1947	A	10000
RAF/CPE/UK/2054	1167	P	TF 296 224	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1168	P	TF 295 222	3	08 MAY 1947	A	6000

Sortie number	Frame number	Held	Centre point	Run	Date	Sortie quality	Scale 1:
RAF/CPE/UK/2054	1169	P	TF 295 219	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1170	P	TF 294 217	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1171	P	TF 294 215	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1172	P	TF 294 213	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1173	P	TF 293 210	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1174	P	TF 293 208	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1175	P	TF 293 206	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1176	P	TF 292 204	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1177	P	TF 292 201	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1178	P	TF 292 199	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1179	P	TF 291 197	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1180	P	TF 291 195	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1181	P	TF 291 192	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1182	P	TF 290 190	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	1183	P	TF 290 188	3	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3167	P	TF 285 225	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3168	P	TF 285 223	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3169	P	TF 284 221	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3170	P	TF 284 219	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3171	P	TF 284 216	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3172	P	TF 283 214	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3173	P	TF 283 212	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3174	P	TF 283 210	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3175	P	TF 283 207	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3176	P	TF 282 205	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3177	P	TF 282 203	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3178	P	TF 282 201	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3179	P	TF 281 198	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3180	P	TF 281 196	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3181	P	TF 281 194	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3182	P	TF 280 192	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3183	P	TF 280 190	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3184	P	TF 279 187	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3185	P	TF 279 185	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3186	P	TF 278 183	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3187	P	TF 278 181	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3188	P	TF 277 179	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3189	P	TF 277 177	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3190	P	TF 276 174	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3191	P	TF 276 172	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3192	P	TF 275 170	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3193	P	TF 275 168	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3194	P	TF 274 166	11	08 MAY 1947	A	6000

Sortie number	Frame number	Held	Centre point	Run	Date	Sortie quality	Scale 1:
RAF/CPE/UK/2054	3195	P	TF 274 163	11	08 MAY 1947	A	6000
RAF/CPE/UK/2054	3196	P	TF 274 161	11	08 MAY 1947	A	6000
RAF/541/205	4038	P	TF 278 172	13	20 NOV 1948	A	10000
RAF/541/205	4039	P	TF 271 171	13	20 NOV 1948	A	10000
OS/66253	51	P	TF 296 221	2	19 SEP 1966	A	7500
OS/66253	52	P	TF 291 220	2	19 SEP 1966	A	7500
OS/66253	53	P	TF 292 212	3	19 SEP 1966	A	7500
OS/66253	54	P	TF 297 212	3	19 SEP 1966	A	7500
OS/66253	93	P	TF 296 204	4	19 SEP 1966	A	7500
OS/66253	99	P	TF 290 198	5	19 SEP 1966	A	7500
OS/66253	100	P	TF 284 198	5	19 SEP 1966	A	7500
OS/66253	131	P	TF 276 185	6	19 SEP 1966	A	7500
OS/66253	132	P	TF 282 186	6	19 SEP 1966	A	7500
OS/66253	133	P	TF 288 186	6	19 SEP 1966	A	7500
OS/65097	5	P	TF 283 249	1	04 JUN 1965	A	7500
OS/65097	6	P	TF 277 248	1	04 JUN 1965	A	7500
OS/65097	31	P	TF 279 238	2	04 JUN 1965	A	7500
OS/65097	32	P	TF 285 238	2	04 JUN 1965	A	7500
OS/65097	65	P	TF 280 225	5	04 JUN 1965	A	7500
OS/65097	66	P	TF 286 225	5	04 JUN 1965	A	7500
OS/65097	67	P	TF 293 225	5	04 JUN 1965	A	7500
OS/65172	3	P	TF 293 215	3	12 AUG 1965	A	7500
OS/65172	4	P	TF 287 215	3	12 AUG 1965	A	7500
OS/65172	34	P	TF 288 201	4	12 AUG 1965	A	7500
OS/65172	35	P	TF 294 201	4	12 AUG 1965	A	7500
OS/66249	47	P	TF 287 260	2	16 SEP 1966	A	7500
OS/66249	48	P	TF 281 260	2	16 SEP 1966	A	7500
OS/66249	49	P	TF 275 260	2	16 SEP 1966	A	7500
OS/66249	70	P	TF 273 246	5	16 SEP 1966	A	7500
OS/66249	71	P	TF 280 247	5	16 SEP 1966	A	7500
OS/66254	154	P	TF 284 239	1	19 JUN 1966	A	7500
OS/66254	155	P	TF 282 238	1	19 JUN 1966	A	7500
OS/66254	174	P	TF 280 247	2	19 JUN 1966	A	7500
OS/66254	175	P	TF 273 247	2	19 JUN 1966	A	7500
OS/66246	15	P	TF 274 175	2	07 SEP 1966	A	7500
OS/66246	16	P	TF 280 175	2	07 SEP 1966	A	7500
OS/66246	20	P	TF 286 186	3	07 SEP 1966	A	7500
OS/66246	21	P	TF 281 186	3	07 SEP 1966	A	7500
OS/71186	165	P	TF 269 259	7	13 MAY 1971	A	7500
OS/71186	166	P	TF 276 261	8	13 MAY 1971	A	7500
OS/71186	209	P	TF 292 263	9	13 MAY 1971	A	7500
OS/72351	31	P	TF 296 205	1	23 AUG 1972	A	7500
OS/72351	32	P	TF 289 205	1	23 AUG 1972	A	7500

Sortie number	Frame number	Held	Centre point	Run	Date	Sortie quality	Scale 1:
OS/72351	44	P	TF 280 191	3	23 AUG 1972	A	7500
OS/72351	45	P	TF 286 191	3	23 AUG 1972	A	7500
OS/72351	113	P	TF 280 181	4	23 AUG 1972	A	7500
OS/72351	114	P	TF 274 181	4	23 AUG 1972	A	7500
OS/72351	141	P	TF 270 168	5	23 AUG 1972	A	7500
OS/72351	142	P	TF 276 168	5	23 AUG 1972	A	7500
OS/72352	211	P	TF 276 157	1	23 AUG 1972	A	7500
OS/72352	212	P	TF 269 157	1	23 AUG 1972	A	7500
OS/85231	4624	P	TF 274 174	1	24 OCT 1985	A	7500
OS/85231	4625	P	TF 274 181	1	24 OCT 1985	A	7500
OS/85231	4632	P	TF 274 232	1	24 OCT 1985	A	7500
OS/85231	4633	P	TF 274 240	1	24 OCT 1985	A	7500
OS/85231	4634	P	TF 274 247	1	24 OCT 1985	A	7500
OS/85231	4635	P	TF 274 254	1	24 OCT 1985	A	7500
OS/85231	4636	P	TF 274 261	1	24 OCT 1985	A	7500
OS/85231	4652	P	TF 286 266	2	24 OCT 1985	A	7500
OS/85231	4653	P	TF 285 259	2	24 OCT 1985	A	7500
OS/85231	4654	P	TF 285 251	2	24 OCT 1985	A	7500
OS/85231	4655	P	TF 285 244	2	24 OCT 1985	A	7500
OS/85231	4656	P	TF 285 237	2	24 OCT 1985	A	7500
OS/85231	4657	P	TF 285 230	2	24 OCT 1985	A	7500
OS/85231	4658	P	TF 285 223	2	24 OCT 1985	A	7500
OS/85231	4659	P	TF 285 215	2	24 OCT 1985	A	7500
OS/85231	4660	P	TF 285 208	2	24 OCT 1985	A	7500
OS/85231	4661	P	TF 285 202	2	24 OCT 1985	A	7500
OS/85231	4662	P	TF 285 195	2	24 OCT 1985	A	7500
OS/85231	4663	P	TF 286 184	2	24 OCT 1985	A	7500
OS/85231	4667	P	TF 298 200	3	24 OCT 1985	A	7500
OS/85231	4668	P	TF 298 207	3	24 OCT 1985	A	7500
OS/85231	4669	P	TF 298 215	3	24 OCT 1985	A	7500
OS/85231	4670	P	TF 298 222	3	24 OCT 1985	A	7500
OS/95669	25	P	TF 268 248	2	03 AUG 1995	A	7500
OS/95669	26	P	TF 270 254	2	03 AUG 1995	A	7500
OS/95669	27	P	TF 272 261	2	03 AUG 1995	A	7500
OS/62063	4	N	TF 269 255	1	09 JUL 1962	A	7500
OS/62063	5	N	TF 269 253	1	09 JUL 1962	A	7500
OS/62063	6	N	TF 268 249	1	09 JUL 1962	A	7500
MAL/54114	14486	N	TF 288 193	4	29 DEC 1954	A	11500
MAL/54114	14487	N	TF 277 193	4	29 DEC 1954	A	11500
OS/98075	26	N	TF 289 195	1	19 MAY 1998	A	6500
OS/98075	27	N	TF 284 195	1	19 MAY 1998	A	6500
OS/98075	59	N	TF 270 174	2	19 MAY 1998	A	6500
OS/98075	60	N	TF 275 174	2	19 MAY 1998	A	6500

Sortie number	Frame number	Held	Centre point	Run	Date	Sortie quality	Scale 1:
OS/98075	111	N	TF 274 155	3	19 MAY 1998	A	6500
OS/98075	112	N	TF 269 154	3	19 MAY 1998	A	6500
OS/98077	31	N	TF 274 164	1	19 MAY 1998	A	6500
OS/98077	32	N	TF 269 164	1	19 MAY 1998	A	6500
OS/98077	62	N	TF 275 185	2	19 MAY 1998	A	6500
OS/98077	63	N	TF 280 185	2	19 MAY 1998	A	6500
OS/98077	64	N	TF 285 185	2	19 MAY 1998	A	6500
OS/98153	149	N	TF 289 264	4	19 AUG 1998	A	6500
OS/98153	150	N	TF 284 264	4	19 AUG 1998	A	6500
OS/98153	151	N	TF 279 264	4	19 AUG 1998	A	6500
OS/98153	152	N	TF 274 264	4	19 AUG 1998	A	6500
OS/98153	185	N	TF 285 204	5	19 AUG 1998	A	6500
OS/98153	186	N	TF 290 204	5	19 AUG 1998	A	6500
OS/98153	187	N	TF 295 204	5	19 AUG 1998	A	6500
OS/98154	238	N	TF 284 254	1	11 AUG 1998	A	6500
OS/98154	239	N	TF 279 254	1	11 AUG 1998	A	6500
OS/98154	240	N	TF 274 254	1	11 AUG 1998	A	6500
OS/98154	271	N	TF 275 244	2	11 AUG 1998	A	6500
OS/98154	272	N	TF 280 244	2	11 AUG 1998	A	6500
OS/98154	318	N	TF 294 214	3	11 AUG 1998	A	6500
OS/98154	319	N	TF 289 214	3	11 AUG 1998	A	6500
OS/98154	354	N	TF 280 235	4	11 AUG 1998	A	6500
OS/98154	355	N	TF 285 235	4	11 AUG 1998	A	6500
OS/98155	22	N	TF 280 225	1	19 AUG 1998	A	6500
OS/98155	23	N	TF 285 225	1	19 AUG 1998	A	6500
OS/98155	24	N	TF 290 225	1	19 AUG 1998	A	6500
OS/01535	17	N	TF 274 259	1	11 MAY 2001	A	5000
OS/01535	18	N	TF 278 260	1	11 MAY 2001	A	5000
OS/01535	19	N	TF 283 260	1	11 MAY 2001	A	5000
OS/01535	146	N	TF 270 253	8	11 MAY 2001	A	5000
OS/01535	147	N	TF 269 249	8	11 MAY 2001	A	5000
OS/02013	7	N	TF 275 250	1	24 MAR 2002	A	7600
OS/02013	8	N	TF 282 249	1	24 MAR 2002	A	7600
OS/02041	143	N	TF 269 249	7	06 APR 2002	A	5000
OS/02041	144	N	TF 269 253	7	06 APR 2002	A	5000
OS/02041	149	N	TF 283 261	8	06 APR 2002	A	5000
OS/02041	150	N	TF 278 261	8	06 APR 2002	A	5000
OS/02041	151	N	TF 274 260	8	06 APR 2002	A	5000
OS/02927A	938	N	TF 276 190	7	16 AUG 2002	A	10000
OS/02927A	939	N	TF 286 190	7	16 AUG 2002	A	10000
OS/02927A	1009	N	TF 277 174	8	16 AUG 2002	A	10000
OS/02927A	1010	N	TF 267 174	8	16 AUG 2002	A	10000
OS/02927B(Y)	1030	N	TF 267 157	1	16 AUG 2002	A	10000
OS/02927B(Y)	1031	N	TF 276 157	1	16 AUG 2002	A	10000

Sortie number	Frame number	Held	Centre point	Run	Date	Sortie quality	Scale 1:
OS/02927B(Z)	1214	N	TF 296 207	3	17 OCT 2002	A	10000
OS/02927B(Z)	1215	N	TF 286 207	3	17 OCT 2002	A	10000
OS/02927B(Z)	1236	N	TF 286 224	4	17 OCT 2002	A	10000
OS/02927B(Z)	1237	N	TF 295 224	4	17 OCT 2002	A	10000
OS/02928	1324	N	TF 286 240	2	17 AUG 2002	A	10000
OS/02928	1325	N	TF 276 240	2	17 AUG 2002	A	10000
OS/02928	1344	N	TF 276 257	3	17 AUG 2002	A	10000
OS/02928	1345	N	TF 286 257	3	17 AUG 2002	A	10000
ADA/219	112	N	TF 288 264	3	29 JUL 1984	A	5000
ADA/219	113	N	TF 282 265	3	29 JUL 1984	A	5000
ADA/219	122	N	TF 276 261	4	29 JUL 1984	A	5000
ADA/219	123	N	TF 274 258	4	29 JUL 1984	A	5000
ADA/219	124	N	TF 272 254	4	29 JUL 1984	A	5000
ADA/219	125	N	TF 269 250	4	29 JUL 1984	A	5000
ADA/261(Y)	217	N	TF 271 161	6	17 JUL 1985	A	7000
ADA/261(Y)	218	N	TF 271 166	6	17 JUL 1985	A	7000
ADA/261(Y)	219	N	TF 272 172	6	17 JUL 1985	A	7000
ADA/261(Y)	220	N	TF 272 179	6	17 JUL 1985	A	7000
ADA/316(Z)	133	N	TF 283 243	1	12 NOV 1986	A	3000
ADA/316(Z)	134	N	TF 283 245	1	12 NOV 1986	A	3000
ADA/316(Z)	135	N	TF 282 246	1	12 NOV 1986	A	3000
ADA/316(Z)	136	N	TF 281 248	1	12 NOV 1986	A	3000
ADA/316(Z)	138	N	TF 280 245	2	12 NOV 1986	A	3000
ADA/316(Z)	139	N	TF 281 245	2	12 NOV 1986	A	3000
ADA/343(Z)	207	N	TF 297 225	3	06 AUG 1987	A	5000
ADA/343(Z)	208	N	TF 296 222	3	06 AUG 1987	A	5000
ADA/343(Z)	209	N	TF 296 219	3	06 AUG 1987	A	5000
ADA/343(Z)	210	N	TF 296 216	3	06 AUG 1987	A	5000
ADA/343(Z)	211	N	TF 297 213	3	06 AUG 1987	A	5000
ADA/343(Z)	212	N	TF 297 209	3	06 AUG 1987	A	5000
ADA/343(Z)	213	N	TF 297 206	3	06 AUG 1987	A	5000
ADA/392(Y)	66	N	TF 271 247	2	07 JUL 1988	A	10000
ADA/392(Y)	67	N	TF 276 239	2	07 JUL 1988	A	10000
ADA/392(Y)	68	N	TF 282 232	2	07 JUL 1988	A	10000
ADA/392(Y)	69	N	TF 289 224	2	07 JUL 1988	A	10000
ADA/392(Y)	70	N	TF 294 219	2	07 JUL 1988	A	10000
ADA/392(Y)	78	N	TF 284 184	3	07 JUL 1988	A	10000
ADA/392(Y)	79	N	TF 277 191	3	07 JUL 1988	A	10000
ADA/392(Y)	140	N	TF 266 164	7	07 JUL 1988	A	10000
ADA/392(Y)	141	N	TF 272 155	7	07 JUL 1988	A	10000
ADA/392(Z)	248	N	TF 280 262	12	09 JUL 1988	A	10000
ADA/392(Z)	249	N	TF 285 257	12	09 JUL 1988	A	10000

12.3 Inter-Array Area 1, HEA Enquiry 148504

12.3.1 Verticals (no obliques), HEA 148504, Inter-Array Area 1

Sortie number	Frame number	Held	Centre point	Run	Date	Sortie quality	Scale 1:
RAF/106G/UK/1489	4184	P	TF 254 144	8	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4185	P	TF 260 144	8	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4186	P	TF 267 144	8	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4302	P	TF 251 125	10	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4303	P	TF 258 125	10	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4304	P	TF 264 125	10	09 MAY 1946	AB	9800
RAF/106G/UK/1704	3057	P	TF 266 123	5	28 AUG 1946	A	9800
RAF/106G/UK/1704	4057	P	TF 267 142	2	28 AUG 1946	A	9800
RAF/CPE/UK/2054	2207	P	TF 260 136	7	08 MAY 1947	A	6000
RAF/CPE/UK/2054	2208	P	TF 260 134	7	08 MAY 1947	A	6000
RAF/CPE/UK/2054	4209	P	TF 249 134	15	08 MAY 1947	A	6000
RAF/CPE/UK/2054	4210	P	TF 249 131	15	08 MAY 1947	A	6000
OS/72352	279	P	TF 264 133	3	23 AUG 1972	A	7500
OS/72352	280	P	TF 257 132	3	23 AUG 1972	A	7500
OS/72352	281	P	TF 250 132	3	23 AUG 1972	A	7500
OS/98075	138	N	TF 255 134	4	19 MAY 1998	A	6500
OS/98075	139	N	TF 260 134	4	19 MAY 1998	A	6500
OS/98075	140	N	TF 265 134	4	19 MAY 1998	A	6500
OS/02927B(Y)	1082	N	TF 267 140	2	16 AUG 2002	A	10000
OS/02927B(Y)	1083	N	TF 257 141	2	16 AUG 2002	A	10000
OS/02927B(Y)	1084	N	TF 248 141	2	16 AUG 2002	A	10000
ADA/261(Y)	205	N	TF 257 136	5	17 JUL 1985	A	7000
ADA/261(Y)	206	N	TF 256 131	5	17 JUL 1985	A	7000
ADA/261(Y)	212	N	TF 268 133	6	17 JUL 1985	A	7000
ADA/261(Y)	213	N	TF 268 138	6	17 JUL 1985	A	7000
ADA/392(Z)	222	N	TF 255 131	7	09 JUL 1988	A	10000
ADA/392(Z)	223	N	TF 263 130	7	09 JUL 1988	A	10000

12.4 Inter-Array Area 2, HEA Enquiry 148500

12.4.1 Obliques, HEA 148500, Inter-Array Area 2

Photo reference	Film and frame number		Date	Film type		NGR
TF 3013 / 1	NMR 930	/ 395-399	13 MAY 1976	Black & white	70mm,120,220	TF 307134
TF 3013 / 14	NMR 1973	/ 173	28 JUL 1981	Black & white	70mm,120,220	TF 306133
TF 3013 / 17	CAP 8323	/ 26	22 MAR 1956	Black & white	Unknown	TF 309138
TF 3013 / 35	NMR 1973	/ 174	28 JUL 1981	Black & white	70mm,120,220	TF 306133
TF 3013 / 36	NMR 21371	/ 33	17 AUG 2001	Colour neg	35 mm	TF 306132
TF 3013 / 37	NMR 21371	/ 34	17 AUG 2001	Colour neg	35 mm	TF 306132
TF 3013 / 38	NMR 21371	/ 35	17 AUG 2001	Colour neg	35 mm	TF 307132
TF 3013 / 39	NMR 21371	/ 36	17 AUG 2001	Colour neg	35 mm	TF 307132
TF 3013 / 40	NMR 17855	/ 16	25 JUN 2003	Black & white	70mm,120,220	TF 309136
TF 3013 / 41	NMR 17855	/ 17	25 JUN 2003	Black & white	70mm,120,220	TF 309136
TF 3013 / 43	NMR 17835	/ 16	25 JUN 2003	Colour neg	35 mm	TF 309135
TF 3013 / 44	NMR 17835	/ 17	25 JUN 2003	Colour neg	35 mm	TF 309134
TF 3013 / 45	NMR 17835	/ 18	25 JUN 2003	Colour neg	35 mm	TF 309136
TF 3013 / 46	NMR 26090	/ 35	15 AUG 2008	Digital colour	35 mm	TF 307137
TF 3013 / 47	NMR 26090	/ 36	15 AUG 2008	Digital colour	35 mm	TF 308136
TF 3013 / 48	NMR 26090	/ 37	15 AUG 2008	Digital colour	35 mm	TF 307138
TF 3013 / 49	NMR 26090	/ 38	15 AUG 2008	Digital colour	35 mm	TF 307138
TF 3013 / 50	NMR 20889	/ 01	25 JUN 2009	Digital colour	35 mm	TF 309136
TF 3013 / 51	NMR 20889	/ 02	25 JUN 2009	Digital colour	35 mm	TF 309136
TF 3013 / 52	NMR 20889	/ 03	25 JUN 2009	Digital colour	35 mm	TF 309136
TF 3013 / 53	NMR 20889	/ 04	25 JUN 2009	Digital colour	35 mm	TF 309137
TF 3013 / 54	NMR 20889	/ 05	25 JUN 2009	Digital colour	35 mm	TF 309137
TF 3013 / 55	NMR 20889	/ 06	25 JUN 2009	Digital colour	35 mm	TF 309137
TF 3013 / 56	NMR 20889	/ 07	25 JUN 2009	Digital colour	35 mm	TF 309137
TF 3013 / 57	NMR 20889	/ 08	25 JUN 2009	Digital colour	35 mm	TF 308136
TF 3013 / 58	NMR 20889	/ 09	25 JUN 2009	Digital colour	35 mm	TF 308136
TF 3113 / 1	NMR 930	/ 400-401	13 MAY 1976	Black & white	70mm,120,220	TF 315136
TF 3113 / 2	NMR 930	/ 402-403	13 MAY 1976	Black & white	70mm,120,220	TF 313136
TF 3113 / 3	NMR 972	/ 441-442	22 JUL 1976	Black & white	70mm,120,220	TF 313138
TF 3113 / 4	CAP 8323	/ 27	22 MAR 1956	Black & white	Unknown	TF 314137
TF 3113 / 5	NMR 2111	/ 1150	15 APR 1982	Black & white	70mm,120,220	TF 310137
TF 3113 / 7	CAP 8323	/ 28	22 MAR 1956	Black & white	Unknown	TF 314136
TF 3113 / 8	CCC 11761	/ 8262	Unknown	Black & white	Unknown	TF 310135
TF 3113 / 9	NMR 4398	/ 09	20 JUL 1989	Black & white	35 mm	TF 315136
TF 3113 / 10	NMR 4398	/ 10	20 JUL 1989	Black & white	35 mm	TF 315136
TF 3113 / 11	NMR 4398	/ 11	20 JUL 1989	Black & white	35 mm	TF 315136
TF 3113 / 12	NMR 4398	/ 12	20 JUL 1989	Black & white	35 mm	TF 315136
TF 3113 / 13	NMR 4398	/ 13	20 JUL 1989	Black & white	35 mm	TF 315136
TF 3113 / 14	NMR 4398	/ 14	20 JUL 1989	Black & white	35 mm	TF 315136

Photo reference	Film and frame number		Date	Film type		NGR
TF 3113 / 15	NMR 2111	/ 1151	15 APR 1982	Black & white	70mm,120,220	TF 310137
TF 3113 / 16	NMR 2111	/ 1152	15 APR 1982	Black & white	70mm,120,220	TF 310137
TF 3113 / 17	NMR 5669	/ 18	20 JUL 1989	FCIR slide	35 mm	TF 313136
TF 3113 / 18	NMR 5669	/ 19	20 JUL 1989	FCIR slide	35 mm	TF 314135
TF 3113 / 19	NMR 5669	/ 20	20 JUL 1989	FCIR slide	35 mm	TF 314135
TF 3113 / 20	NMR 26090	/ 39	15 AUG 2008	Digital colour	35 mm	TF 313137
TF 3113 / 21	NMR 26090	/ 40	15 AUG 2008	Digital colour	35 mm	TF 313136
TF 3113 / 22	NMR 26090	/ 41	15 AUG 2008	Digital colour	35 mm	TF 310136
TF 3113 / 23	NMR 26090	/ 42	15 AUG 2008	Digital colour	35 mm	TF 310136
TF 3113 / 24	NMR 26090	/ 43	15 AUG 2008	Digital colour	35 mm	TF 314137
TF 3113 / 25	NMR 26090	/ 44	15 AUG 2008	Digital colour	35 mm	TF 314137
TF 3113 / 26	NMR 26090	/ 45	15 AUG 2008	Digital colour	35 mm	TF 315137
TF 3113 / 27	NMR 26090	/ 46	15 AUG 2008	Digital colour	35 mm	TF 315137
TF 3113 / 28	NMR 27512	/ 21	10 AUG 2012	Digital colour	35 mm	TF 314135
TF 3113 / 29	NMR 27512	/ 22	10 AUG 2012	Digital colour	35 mm	TF 314134
TF 3113 / 30	NMR 27512	/ 23	10 AUG 2012	Digital colour	35 mm	TF 310136
TF 3113 / 31	NMR 27512	/ 24	10 AUG 2012	Digital colour	35 mm	TF 310136
TF 3113 / 32	NMR 27512	/ 25	10 AUG 2012	Digital colour	35 mm	TF 310136
TF 3113 / 33	NMR 27512	/ 26	10 AUG 2012	Digital colour	35 mm	TF 310137
TF 3113 / 34	NMR 27512	/ 27	10 AUG 2012	Digital colour	35 mm	TF 310136
TF 3113 / 35	NMR 27512	/ 28	10 AUG 2012	Digital colour	35 mm	TF 310137
TF 3113 / 36	NMR 27512	/ 29	10 AUG 2012	Digital colour	35 mm	TF 313133
TF 3113 / 37	NMR 27512	/ 30	10 AUG 2012	Digital colour	35 mm	TF 313133
TF 3213 / 2	NMR 1123	/ 168-169	19 MAR 1977	Black & white	70mm,120,220	TF 324139
TF 3213 / 3	NMR 1521	/ 331-332	18 MAY 1979	Black & white	70mm,120,220	TF 326135
TF 3213 / 6	NMR 26083	/ 54	30 JUL 2008	Digital colour	35 mm	TF 324133
TF 3213 / 7	NMR 26083	/ 55	30 JUL 2008	Digital colour	35 mm	TF 324133
TF 3213 / 8	NMR 26083	/ 56	30 JUL 2008	Digital colour	35 mm	TF 325133
TF 3313 / 5	NMR 17855	/ 21	25 JUN 2003	Black & white	70mm,120,220	TF 334136
TF 3313 / 11	NMR 17836	/ 32	25 JUN 2003	Colour neg	35 mm	TF 334136
TF 3313 / 12	NMR 17836	/ 33	25 JUN 2003	Colour neg	35 mm	TF 334136
TF 3313 / 13	NMR 20888	/ 44	25 JUN 2009	Digital colour	35 mm	TF 335134
TF 3313 / 14	NMR 20888	/ 45	25 JUN 2009	Digital colour	35 mm	TF 335134
TF 3313 / 15	NMR 20888	/ 46	25 JUN 2009	Digital colour	35 mm	TF 334134
TF 3313 / 16	NMR 20888	/ 47	25 JUN 2009	Digital colour	35 mm	TF 334134
TF 3313 / 17	NMR 20888	/ 48	25 JUN 2009	Digital colour	35 mm	TF 334134
TF 3314 / 8	NMR 21402	/ 08	17 AUG 2001	Black & white	70mm,120,220	TF 330141
TF 3314 / 9	NMR 21402	/ 09	17 AUG 2001	Black & white	70mm,120,220	TF 330141
TF 3314 / 10	NMR 21402	/ 10	17 AUG 2001	Black & white	70mm,120,220	TF 331141
TF 3314 / 11	NMR 21402	/ 11	17 AUG 2001	Black & white	70mm,120,220	TF 331141
TF 3314 / 12	NMR 21372	/ 08	17 AUG 2001	Colour neg	35 mm	TF 330141
TF 3314 / 13	NMR 21372	/ 09	17 AUG 2001	Colour neg	35 mm	TF 330141

12.4.2 Verticals, HEA , Inter-Array Area 2

Sortie number	Frame number	Held	Centre point	Run	Date	Sortie quality	Scale 1:
RAF/106G/UK/1489	4192	P	TF 307 145	8	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4193	P	TF 313 145	8	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4194	P	TF 320 146	8	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4195	P	TF 327 146	8	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4196	P	TF 333 146	8	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4311	P	TF 310 125	10	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4312	P	TF 317 125	10	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4313	P	TF 323 125	10	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4314	P	TF 330 125	10	09 MAY 1946	AB	9800
RAF/106G/UK/1704	4047	P	TF 324 125	2	28 AUG 1946	A	9800
RAF/106G/UK/1704	4048	P	TF 319 126	2	28 AUG 1946	A	9800
RAF/106G/UK/1704	4049	P	TF 313 128	2	28 AUG 1946	A	9800
RAF/106G/UK/1704	4050	P	TF 307 130	2	28 AUG 1946	A	9800
RAF/541/205	4010	P	TF 336 144	12	20 NOV 1948	A	10000
RAF/541/205	4011	P	TF 329 142	12	20 NOV 1948	A	10000
RAF/541/205	4012	P	TF 321 140	12	20 NOV 1948	A	10000
RAF/541/205	4013	P	TF 314 138	12	20 NOV 1948	A	10000
RAF/541/205	4014	P	TF 307 136	12	20 NOV 1948	A	10000
OS/75192	21	P	TF 337 132	1	08 JUN 1975	A	7500
OS/75192	22	P	TF 329 131	1	08 JUN 1975	A	7500
OS/75192	23	P	TF 321 131	1	08 JUN 1975	A	7500
OS/75192	24	P	TF 315 131	1	08 JUN 1975	A	7500
OS/75192	25	P	TF 308 132	1	08 JUN 1975	A	7500
OS/75193	199	P	TF 308 146	1	08 JUN 1975	A	7500
OS/75193	200	P	TF 314 145	1	08 JUN 1975	A	7500
OS/75193	201	P	TF 320 145	1	08 JUN 1975	A	7500
OS/75193	202	P	TF 326 144	1	08 JUN 1975	A	7500
OS/75193	203	P	TF 332 144	1	08 JUN 1975	A	7500
OS/72352	242	P	TF 312 144	2	23 AUG 1972	A	7500
OS/72352	243	P	TF 319 144	2	23 AUG 1972	A	7500
OS/72352	244	P	TF 325 144	2	23 AUG 1972	A	7500
OS/72352	245	P	TF 332 144	2	23 AUG 1972	A	7500
OS/72352	272	P	TF 314 134	3	23 AUG 1972	A	7500
OS/72352	273	P	TF 307 134	3	23 AUG 1972	A	7500
~~OS/98075~~	~~149~~	~~N~~	~~TF 310 134~~	~~4~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98075~~	~~150~~	~~N~~	~~TF 315 134~~	~~4~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98075~~	~~151~~	~~N~~	~~TF 320 134~~	~~4~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98075~~	~~152~~	~~N~~	~~TF 325 134~~	~~4~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98075~~	~~153~~	~~N~~	~~TF 330 134~~	~~4~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98075~~	~~154~~	~~N~~	~~TF 335 134~~	~~4~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98076~~	~~318~~	~~N~~	~~TF 310 144~~	~~3~~	~~19 MAY 1998~~	~~A~~	~~6500~~

Sortie number	Frame number	Held	Centre point	Run	Date	Sortie quality	Scale 1:
~~OS/98076~~	~~319~~	~~N~~	~~TF 315 144~~	~~3~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98076~~	~~320~~	~~N~~	~~TF 320 144~~	~~3~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98076~~	~~321~~	~~N~~	~~TF 325 144~~	~~3~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98076~~	~~322~~	~~N~~	~~TF 330 144~~	~~3~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98076~~	~~323~~	~~N~~	~~TF 335 144~~	~~3~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/02927B(Y)~~	~~1075~~	~~N~~	~~TF 334 141~~	~~2~~	~~16 AUG 2002~~	~~A~~	~~10000~~
~~OS/02927B(Y)~~	~~1076~~	~~N~~	~~TF 324 141~~	~~2~~	~~16 AUG 2002~~	~~A~~	~~10000~~
~~OS/02927B(Y)~~	~~1077~~	~~N~~	~~TF 315 141~~	~~2~~	~~16 AUG 2002~~	~~A~~	~~10000~~
~~OS/02927B(Z)~~	~~1170~~	~~N~~	~~TF 315 124~~	~~2~~	~~17 OCT 2002~~	~~A~~	~~10000~~
~~OS/02927B(Z)~~	~~1171~~	~~N~~	~~TF 324 124~~	~~2~~	~~17 OCT 2002~~	~~A~~	~~10000~~

12.5 Inter-Array Area 3, HE Enquiry 148501

12.5.1 Obliques, HEA 148501, Inter-Array Area 3

Photo reference	Film and frame number		Date	Film type		NGR
TF 3413 / 8	NMR 1952	/ 370	29 JUN 1981	Black & white	70mm,120,220	TF 344136
TF 3413 / 22	NMR 1952	/ 371	29 JUN 1981	Black & white	70mm,120,220	TF 344136
TF 3413 / 23	NMR 1952	/ 372	29 JUN 1981	Black & white	70mm,120,220	TF 344136
TF 3413 / 31	NMR 26091	/ 14	15 AUG 2008	Digital colour	35 mm	TF 341134
TF 3413 / 32	NMR 26091	/ 15	15 AUG 2008	Digital colour	35 mm	TF 342134

12.5.2 Verticals, HEA 148501, Inter-Array Area 3

Sortie number	Frame number	Held	Centre point	Run	Date	Sortie quality	Scale 1:
RAF/106G/UK/1489	4197	P	TF 340 146	8	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4198	P	TF 347 146	8	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4315	P	TF 336 125	10	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4316	P	TF 343 125	10	09 MAY 1946	AB	9800
RAF/541/205	3010	P	TF 337 124	7	20 NOV 1948	A	10000
RAF/541/205	4010	P	TF 336 144	12	20 NOV 1948	A	10000
OS/75192	20	P	TF 346 132	1	08 JUN 1975	A	7500
OS/75192	21	P	TF 337 132	1	08 JUN 1975	A	7500
~~OS/98075~~	~~155~~	~~N~~	~~TF 340 134~~	~~4~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98075~~	~~156~~	~~N~~	~~TF 345 134~~	4	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/02927B(Y)~~	~~1074~~	~~N~~	~~TF 343 141~~	~~2~~	~~16 AUG 2002~~	~~A~~	~~10000~~

12.6 Inter-Array Area 4, HEA Enquiry 148502

12.6.1 Obliques, HEA 148502, Inter-Array Area 4

Photo reference	Film and frame number		Date	Film type		NGR
TF 3414 / 2	NMR 931	/ 219-224	13 MAY 1976	Black & white	70mm,120,220	TF 344147
TF 3414 / 3	NMR 965	/ 261-264	11 JUL 1976	Black & white	70mm,120,220	TF 345144
TF 3414 / 4	NMR 1139	/ 289-295	06 JUL 1977	Black & white	70mm,120,220	TF 347144
TF 3414 / 5	NMR 1146	/ 296-297	04 AUG 1977	Black & white	70mm,120,220	TF 344146
TF 3414 / 6	NMR 1146	/ 299-301	04 AUG 1977	Black & white	70mm,120,220	TF 345147
TF 3414 / 8	NMR 1663	/ 121-131	23 JUL 1979	Black & white	70mm,120,220	TF 345145
TF 3414 / 10	NMR 1952	/ 375	29 JUN 1981	Black & white	70mm,120,220	TF 343145
TF 3414 / 12	NMR 1952	/ 380	29 JUN 1981	Black & white	70mm,120,220	TF 343144
TF 3414 / 14	NMR 1952	/ 385	29 JUN 1981	Black & white	70mm,120,220	TF 343145
TF 3414 / 17	NMR 1952	/ 407	29 JUN 1981	Black & white	70mm,120,220	TF 349145
TF 3414 / 18	NMR 1952	/ 408	29 JUN 1981	Black & white	70mm,120,220	TF 348147
TF 3414 / 19	NMR 1988	/ 313	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 20	NMR 1988	/ 320	11 AUG 1981	Black & white	70mm,120,220	TF 346146
TF 3414 / 21	NMR 1988	/ 327	11 AUG 1981	Black & white	70mm,120,220	TF 347147
TF 3414 / 22	NMR 1988	/ 334	11 AUG 1981	Black & white	70mm,120,220	TF 344146
TF 3414 / 23	NMR 1988	/ 336	11 AUG 1981	Black & white	70mm,120,220	TF 344147
~~TF 3414 / 24~~	~~NMR 11135~~	~~/ 122-127~~	~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 345148~~
~~TF 3414 / 25~~	~~NMR 11135~~	~~/ 148~~	~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 343144~~
TF 3414 / 27	NMR 1952	/ 376	29 JUN 1981	Black & white	70mm,120,220	TF 343145
TF 3414 / 30	NMR 1952	/ 381	29 JUN 1981	Black & white	70mm,120,220	TF 343144
TF 3414 / 32	NMR 1952	/ 386	29 JUN 1981	Black & white	70mm,120,220	TF 343145
TF 3414 / 33	NMR 1952	/ 387	29 JUN 1981	Black & white	70mm,120,220	TF 343145
TF 3414 / 34	NMR 1952	/ 388	29 JUN 1981	Black & white	70mm,120,220	TF 343145
TF 3414 / 37	NMR 1988	/ 314	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 38	NMR 1988	/ 315	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 39	NMR 1988	/ 316	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 40	NMR 1988	/ 317	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 41	NMR 1988	/ 318	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 42	NMR 1988	/ 319	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 43	NMR 1988	/ 321	11 AUG 1981	Black & white	70mm,120,220	TF 346146
TF 3414 / 44	NMR 1988	/ 328	11 AUG 1981	Black & white	70mm,120,220	TF 347147
TF 3414 / 45	NMR 1988	/ 335	11 AUG 1981	Black & white	70mm,120,220	TF 344146
TF 3414 / 46	NMR 1988	/ 337	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 49	NMR 20888	/ 33	25 JUN 2009	Digital colour	35 mm	TF 344148
TF 3414 / 50	NMR 20888	/ 34	25 JUN 2009	Digital colour	35 mm	TF 344148
TF 3414 / 51	NMR 20888	/ 35	25 JUN 2009	Digital colour	35 mm	TF 344147
TF 3414 / 52	NMR 20888	/ 36	25 JUN 2009	Digital colour	35 mm	TF 344147
TF 3414 / 54	NMR 20888	/ 39	25 JUN 2009	Digital colour	35 mm	TF 347149
TF 3414 / 56	NMR 20888	/ 41	25 JUN 2009	Digital colour	35 mm	TF 347143

Photo reference	Film and frame number		Date	Film type		NGR
TF 3414 / 63	NMR 28156	/ 45	14 JUN 2011	Digital colour	35 mm	TF 349148
TF 3414 / 64	NMR 28156	/ 46	14 JUN 2011	Digital colour	35 mm	TF 349148
TF 3414 / 65	NMR 28156	/ 59	14 JUN 2011	Digital colour	35 mm	TF 346149
TF 3414 / 66	NMR 28156	/ 60	14 JUN 2011	Digital colour	35 mm	TF 346149
TF 3414 / 67	NMR 28156	/ 61	14 JUN 2011	Digital colour	35 mm	TF 346149
TF 3414 / 68	NMR 28156	/ 62	14 JUN 2011	Digital colour	35 mm	TF 346149
~~TF 3415 / 20~~	~~NMR 11135~~	~~/ 134 137~~	~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 348150~~
TF 3415 / 79	NMR 20888	/ 38	25 JUN 2009	Digital colour	35 mm	TF 347150
TF 3514 / 2	NMR 1952	/ 303	29 JUN 1981	Black & white	70mm,120,220	TF 350148
TF 3514 / 10	NMR 1952	/ 304	29 JUN 1981	Black & white	70mm,120,220	TF 350148
TF 3514 / 11	NMR 1952	/ 305	29 JUN 1981	Black & white	70mm,120,220	TF 350148
TF 3514 / 36	NMR 28156	/ 57	14 JUN 2011	Digital colour	35 mm	TF 350149
TF 3514 / 37	NMR 28156	/ 58	14 JUN 2011	Digital colour	35 mm	TF 350149
TF 3515 / 2	NMR 1146	/ 298	04 AUG 1977	Black & white	70mm,120,220	TF 350150
TF 3515 / 5	NMR 1952	/ 312	29 JUN 1981	Black & white	70mm,120,220	TF 353152
TF 3515 / 12	NMR 1952	/ 313	29 JUN 1981	Black & white	70mm,120,220	TF 353152
TF 3515 / 32	NMR 28156	/ 47	14 JUN 2011	Digital colour	35 mm	TF 353150
TF 3515 / 33	NMR 28156	/ 48	14 JUN 2011	Digital colour	35 mm	TF 353150

12.6.2 Verticals, HEA 148502, Inter-Array Area 4

Sortie number	Frame number	Held	Centre point	Run	Date	Sortie quality	Scale 1:
RAF/106G/UK/1489	4197	P	TF 340 146	8	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4198	P	TF 347 146	8	09 MAY 1946	AB	9800
RAF/106G/UK/1489	4199	P	TF 353 146	8	09 MAY 1946	AB	9800
OS/75193	205	P	TF 345 143	1	08 JUN 1975	A	7500
OS/75193	206	P	TF 351 143	1	08 JUN 1975	A	7500
OS/72352	247	P	TF 346 144	2	23 AUG 1972	A	7500
OS/72352	248	P	TF 353 144	2	23 AUG 1972	A	7500
~~OS/98075~~	~~95~~	~~N~~	~~TF 354 154~~	~~3~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98075~~	~~96~~	~~N~~	~~TF 349 154~~	~~3~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98075~~	~~97~~	~~N~~	~~TF 344 154~~	~~3~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98076~~	~~325~~	~~N~~	~~TF 345 144~~	~~3~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98076~~	~~326~~	~~N~~	~~TF 350 144~~	~~3~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/02927B(Y)~~	~~1038~~	~~N~~	~~TF 343 157~~	~~1~~	~~16 AUG 2002~~	~~A~~	~~10000~~
~~OS/02927B(Y)~~	~~1039~~	~~N~~	~~TF 353 157~~	~~1~~	~~16 AUG 2002~~	~~A~~	~~10000~~
~~OS/02927B(Y)~~	~~1073~~	~~N~~	~~TF 353 141~~	~~2~~	~~16 AUG 2002~~	~~A~~	~~10000~~
~~OS/02927B(Y)~~	~~1074~~	~~N~~	~~TF 343 141~~	~~2~~	~~16 AUG 2002~~	~~A~~	~~10000~~

12.7 Inter-Array Area 5 HEA Enquiry 148503

12.7.1 Obliques, HEA 148503, Inter-Array 5

Photo reference	Film and frame number		Date	NGR
TF 3416 / 6	NMR 931	/ 214-215	13 MAY 1976	TF 348160
TF 3516 / 1	NMR 931	/ 229-230	13 MAY 1976	TF 353164
TF 3516 / 4	NMR 1574	/ 368-376	04 JUL 1979	TF 353164
TF 3516 / 5	NMR 1574	/ 377-380	04 JUL 1979	TF 352162
TF 3516 / 7	NMR 1663	/ 331-335	23 JUL 1979	TF 355164
TF 3516 / 9	NMR 11135	/ 105-111	29 JUN 1981	TF 352161
TF 3516 / 10	NMR 11135	/ 112-113	29 JUN 1981	TF 354164
TF 3516 / 11	NMR 11135	/ 114-115	29 JUN 1981	TF 354161
TF 3516 / 30	NMR 20899	/ 55	01 JUL 2009	TF 359164
TF 3516 / 31	NMR 20899	/ 56	01 JUL 2009	TF 358164
TF 3516 / 32	NMR 20899	/ 57	01 JUL 2009	TF 358164
TF 3516 / 33	NMR 20899	/ 58	01 JUL 2009	TF 359164
TF 3516 / 34	NMR 20899	/ 59	01 JUL 2009	TF 359164
TF 3516 / 35	NMR 20899	/ 60	01 JUL 2009	TF 359164
TF 3516 / 36	NMR 20899	/ 61	01 JUL 2009	TF 358164
TF 3516 / 37	NMR 20899	/ 62	01 JUL 2009	TF 357163
TF 3516 / 40	NMR 20899	/ 70	01 JUL 2009	TF 357160
TF 3516 / 41	NMR 20899	/ 71	01 JUL 2009	TF 357161
TF 3516 / 42	NMR 20899	/ 72	01 JUL 2009	TF 356161
TF 3516 / 43	NMR 20899	/ 73	01 JUL 2009	TF 356161
TF 3516 / 44	NMR 20899	/ 74	01 JUL 2009	TF 357161
TF 3616 / 2	NMR 1146	/ 282-284	04 AUG 1977	TF 360165
TF 3616 / 20	NMR 2111	/ 1199	15 APR 1982	TF 360165
TF 3616 / 21	NMR 2111	/ 1200	15 APR 1982	TF 360163

12.7.2 Verticals, HEA 148503, Inter-Array 5

Sortie number	Frame number	Held	Centre point	Run	Date	Sortie quality	Scale 1:
RAF/106G/UK/1489	3264	P	TF 361 162	5	09 MAY 1946	AB	9800
RAF/106G/UK/1489	3265	P	TF 353 162	5	09 MAY 1946	AB	9800
RAF/106G/UK/1489	3266	P	TF 346 162	5	09 MAY 1946	AB	9800
OS/72351	152	P	TF 344 169	5	23 AUG 1972	A	7500
OS/72351	153	P	TF 351 169	5	23 AUG 1972	A	7500
OS/72351	154	P	TF 358 169	5	23 AUG 1972	A	7500
OS/72351	155	P	TF 364 169	5	23 AUG 1972	A	7500
OS/72352	199	P	TF 359 157	1	23 AUG 1972	A	7500
OS/72352	200	P	TF 352 157	1	23 AUG 1972	A	7500
OS/72352	201	P	TF 345 157	1	23 AUG 1972	A	7500
~~OS/98077~~	~~14~~	~~N~~	~~TF 359 165~~	~~1~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98077~~	~~15~~	~~N~~	~~TF 354 164~~	~~1~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/98077~~	~~16~~	~~N~~	~~TF 349 164~~	~~1~~	~~19 MAY 1998~~	~~A~~	~~6500~~
~~OS/02927B(Y)~~	~~1038~~	~~N~~	~~TF 343 157~~	~~1~~	~~16 AUG 2002~~	~~A~~	~~10000~~
~~OS/02927B(Y)~~	~~1039~~	~~N~~	~~TF 353 157~~	~~1~~	~~16 AUG 2002~~	~~A~~	~~10000~~
~~OS/02927B(Y)~~	~~1040~~	~~N~~	~~TF 362 157~~	~~1~~	~~16 AUG 2002~~	~~A~~	~~10000~~

12.8 Open-source online imagery summary: Google Earth timelines as of July 2025

Given date	Provider	Comment
1999	Infoterra_Bluesky	Adequate resolution and varied information and archaeological content (25cm res)
2004	Maxar Technologies Satellite	Good resolution and variety of archaeological and natural features visible as soil and cropmarks, very few but some earthworks which are especially noted as more rare areas of above-ground preservation
2005 04 17	Infoterra_Bluesky	Likely captured March – May as germination marks in crops and very early flowering oilseed rape. Good resolution and variety of archaeological and natural features visible as soil and cropmarks
2007	Getmapping plc	Likely captured in April – May as flowering oilseed rape present in places. Good resolution and variety of archaeological and natural features visible as soil and cropmarks.
2014 04 16	Maxar Technologies Satellite	Good resolution and variety of archaeological and natural features visible as soil and cropmarks.

Given date	Provider	Comment
2016 07 18	Maxar Technologies Satellite	Good resolution and variety of archaeological and natural features visible as soil and cropmarks.
2016 08 30	Unattributed	Good resolution, very ripe cereals, some detailed cropmarks.
2018 09 24	Unattributed	Good resolution, majority bare soil, some green areas, soil and cropmarks visible.
2019 09 14	CNES/ Airbus	Good resolution in south and over Inter-Arrays, , varied land use and bare soil, some crop and soilmarks visible. Haze over northern part of the Grid Connection.
2020 05 20	CNES/Airbus	Good resolution, some cropmarks over some natural roddons in particular and some but not detailed buried archaeological features. Mix of bare fields and early crop.
2020 07 31	Unattributed	Good resolution and cropmarks visible.
2020 11 23	Maxar Technologies Satellite	Good resolution. A look into the land in the winter months. Predominately bare soil.
2021 09 22	Maxar Technologies/CNES Airbus	Good resolution, ripe crops, Grid Connection area only, except northern part which 2020 07 31 Maxar Technologies.
2023 11 03	CNES/Airbus	Good resolution. Variety of winter cereals and bare soil. Soilmarks over palaeo hydrological features.
2024 10 05	CNES/Airbus	Good resolution. Bare soil in parts and soilmarks over palaeo hydrological features. South part of Grid Connection only.
2024 12 19	CNES/Airbus	Good resolution, bare soil, soilmarks over palaeo-hydrological features. Grid Connection only.
2025 03 18	Airbus	Good resolution, variety of crops and bare soil, central and eastern part of Grid Connection only.

13 APPENDIX 4: Use of LiDAR Data for archaeological survey

13.1 LiDAR survey

141. Airborne Laser Scan, (ALS) is otherwise known as Light Detection and Ranging (LiDAR) survey. LiDAR data are used for multiple environmental and engineering survey purposes. They are best captured from a stable and height-controlled airborne platform,

usually an adapted aeroplane. For archaeological survey, the laser scan measures the distance between the survey aeroplane and the ground or vegetation surface, generating detailed models of the ground at spatial resolutions between 25cm and 2m. For archaeological earthwork survey, resolutions of 1m or finer (which contain more points per square metre on the ground) are recommended to investigate earthworks or smaller eroded features known as 'microtopography'.

142. LiDAR data for this study are provided as open source data by the Environment Agency National LiDAR Programme (NLP), as OS tile downloads at 1m resolution. The LiDAR data were used to supplement the interpretation of the aerial photographs and satellite images, and to assess the level of erosion and presence of any microtopographic features or earthworks in the study areas.

143. LiDAR data are best interpreted and used in conjunction with modern and historic aerial photographs and maps to provide ground truth information, and this was achieved for this assessment.

13.2 LiDAR data Processing and visualisation

144. LiDAR survey produces a dataset of points with their return time from the ground, known as a 'point cloud'. This dataset, a Digital Elevation Model (DEM), is filtered to remove measurements from surface-based features such as buildings, thick vegetation and trees (the Digital Surface Model – a DSM) to leave a 'bare earth' Digital Terrain Model' (DTM).

145. The LiDAR DTM is most important for archaeological survey as it demonstrates the actual shape and height differences in the land surface without the vegetation cover, thus penetrating trees and thick bushes where the laser light reaches the ground between them.

146. LiDAR data were processed in accordance with guidance and information provided by Bennett and Cowley (2025), Historic England (2018), Bennett *et al* (2012), Štular *et al* (2012) and Hesse (2010).

147. The multiple visualisations now applied to DSM and DTM data via the Relief Visualisation Toolbox (RVT 2.2.1) used for this survey are effective in heritage interpretation. The two visualisations used in this area are the multi-direction (usually 16 directions of light) red-green-blue (RGB) coloured hillshade (16 bit) and the enhanced

Simple Local Relief Model (SLRM) with max and min black to white colour gradient display properties set to -1 to 1 for maximum contrast in the visualised dataset**. Plates 1 and 2** show examples of these visualisations.

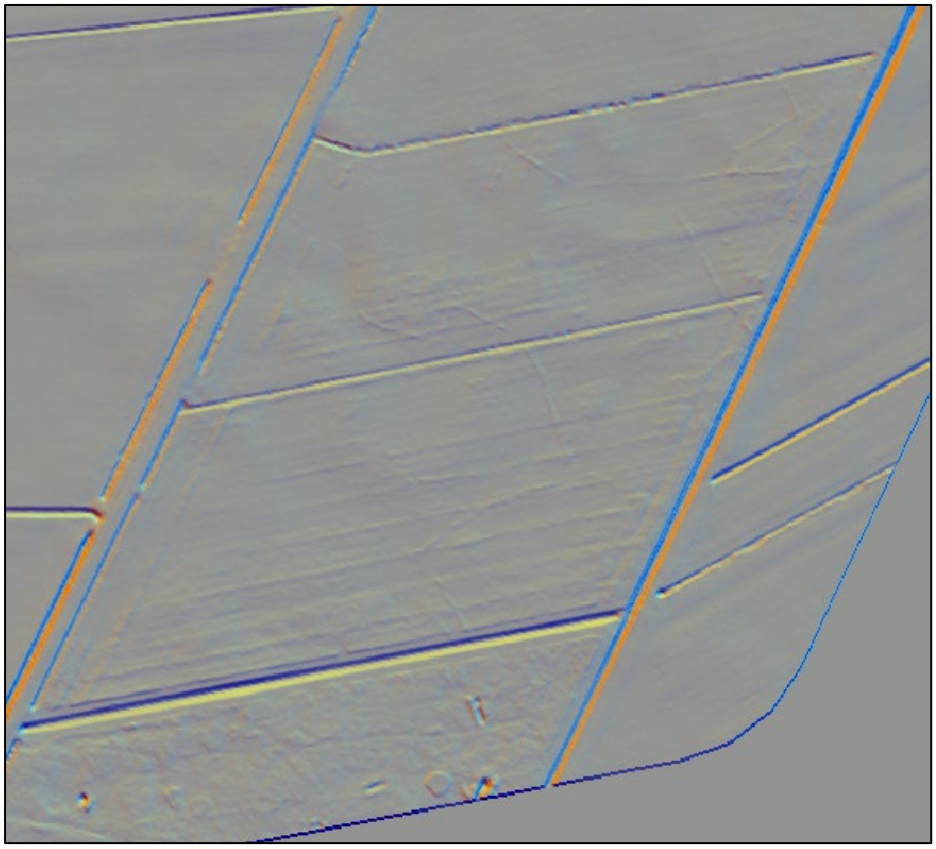

Plate 1 Multi-directional hillshade visualisation of 1m resolution LiDAR DTM which shows microtopographic banks in area IA2_18 using 16 varied directions of light to model the ground surface. 2020 1m NLP DTM Multi-HS D16 H35 RGB.

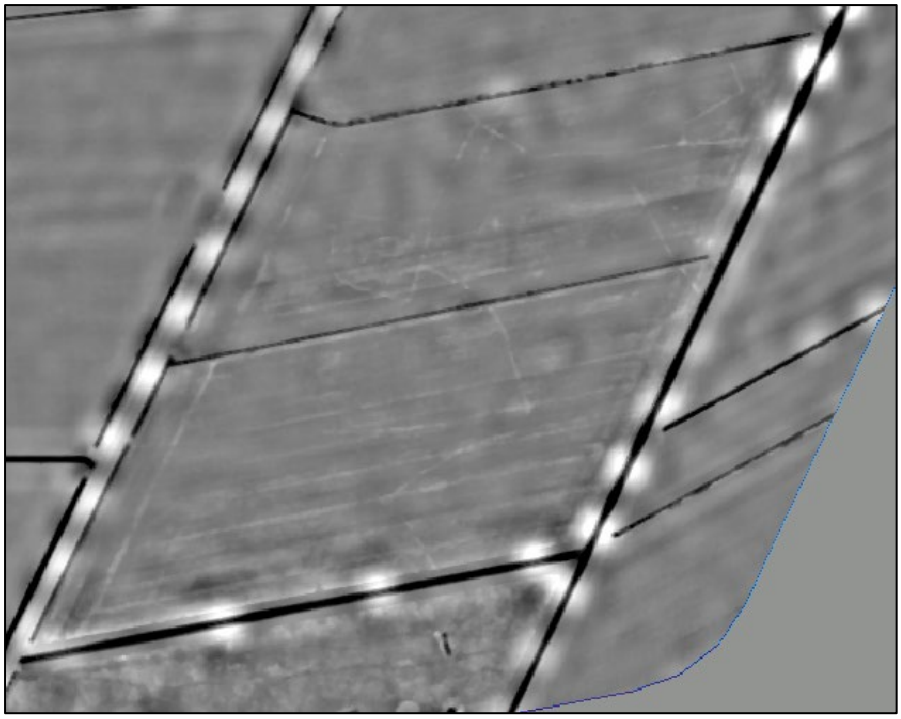

Plate 2 SLRM model over the same area from the same DTM, showing higher areas as light tones, lower as darker tones. Using a black to white colour gradient constraint of min -1 to max 1 to enhance smaller topographic differences. This visualisation is useful for evaluation of condition and presence of any upstanding features on the ground surface especially in heavily ploughed areas.. 2020 1m NLP DTM SLRM.

148. The Meridian Grid Connection and Inter-Array Areas lie within open arable land and are optimally responsive for the accurate recording of topographic features without interference from extensive tree or heavy vegetation cover.

149. Over the majority of the Grid Connection and Inter-Array Areas, visualised LiDAR data indicate a very heavy level of plough erosion over pre-Medieval buried sites and landscapes and also indicate the presence of slight topographic variations over former creeks and watercourses.

150. It is important to note that LiDAR visualisation techniques are continually developing and advancing to optimise their effectiveness in detection and measuring of microtopographic features.

14 APPENDIX 5 LiDAR metadata

14.1.1 Grid Connection

GridConnection

tilename	sd_flown	ed_flown	resolution (m)	year	dsm_fn	dtm_fn
TF2525	10/11/2020	22/11/2020	1	2020	DSM_TF2525_P_10774_20201110_20201122.tif	DTM_TF2525_P_10774_20201110_20201122.tif
TF2520	19/11/2020	22/11/2020	1	2020	DSM_TF2520_P_10773_20201119_20201122.tif	DTM_TF2520_P_10773_20201119_20201122.tif
TF2515	19/11/2020	22/11/2020	1	2020	DSM_TF2515_P_10773_20201119_20201122.tif	DTM_TF2515_P_10773_20201119_20201122.tif

14.1.2 Inter-Array Areas 1-5

InterArray_1

tilename	sd_flown	ed_flown	resolution (m)	year	dsm_fn	dtm_fn
TF2510	19/11/2020	22/11/2020	1	2020	DSM_TF2510_P_10773_20201119_20201122.tif	DTM_TF2510_P_10773_20201119_20201122.tif
TF3010	19/11/2020	22/11/2020	1	2020	DSM_TF3010_P_10773_20201119_20201122.tif	DTM_TF3010_P_10773_20201119_20201122.tif

InterArray_3

tilename	sd_flown	ed_flown	resolution (m)	year	dsm_fn	dtm_fn
TF3010	19/11/2020	22/11/2020	1	2020	DSM_TF3010_P_10773_20201119_20201122.tif	DTM_TF3010_P_10773_20201119_20201122.tif

InterArray_4

tilename	sd_flown	ed_flown	resolution (m)	year	dsm_fn	dtm_fn
TF3010	19/11/2020	22/11/2020	1	2020	DSM_TF3010_P_10773_20201119_20201122.tif	DTM_TF3010_P_10773_20201119_20201122.tif
TF3015	19/11/2020	22/11/2020	1	2020	DSM_TF3015_P_10773_20201119_20201122.tif	DTM_TF3015_P_10773_20201119_20201122.tif
TF3510	19/11/2020	22/11/2020	1	2020	DSM_TF3510_P_10773_20201119_20201122.tif	DTM_TF3510_P_10773_20201119_20201122.tif
TF3515	19/11/2020	22/11/2020	1	2020	DSM_TF3515_P_10773_20201119_20201122.tif	DTM_TF3515_P_10773_20201119_20201122.tif

InterArray_5						
tilename	**sd_flown**	**ed_flown**	**resolution (m)**	**year**	**dsm_fn**	**dtm_fn**
TF3515	19/11/2020	22/11/2020	1	2020	DSM_TF3515_P_10773_20201119_20201122.tif	DTM_TF3515_P_10773_20201119_20201122.tif
TF3015	19/11/2020	22/11/2020	1	2020	DSM_TF3015_P_10773_20201119_20201122.tif	DTM_TF3015_P_10773_20201119_20201122.tif

15 APPENDIX 6 The digital dataset

151. The structure of the detailed mapping dataset, which supplied as ESRI-compatible shapefiles for GIS. It was generated in QGIS 4.0 is:

15.1 Shapefile 225 01 01 Grid Connection Corridor land Parcels and File 225 01 01 Inter-Array Areas land parcels

152. Single field attribute table with mapping land areas defined by their location.
153. GC= Grid Connection plus parcel number, for example GC_01.
154. IA= Inter-Array Area, for example IA2_01, IA2_01
155. Two shapefiles contain he detailed mapping attributes.
156. 225 01 01 Grid Connection detail mapping and 225 01 01 Inter-Array Areas detail mapping.
157. The structure of the detail mapping attribute tables is:

Attribute	Purpose
PARCEL	Designates the location – either in the grid Connection (GC) or specific Inter-Array Area.
SUBPARCEL	Particular area within the parcel, for example IA_02, or within the GC, GC_01.
LAYER	Broad type in accordance with Forum on Information Standards in Heritage (FISH) recording conventions.
TYPE	Specific type of feature, broadly in accordance with FISH descriptive terms.
PERIOD	Attributed time period if given or proven, or uncertain if not assigned or a newly recorded site of uncertain type and date.
SOURCES	Three columns with space for specific data source reference.

EVIDENCE	Three columns to allow recording of the evidence types against each specific data source, for example CROPMARK, SOILMARK or EARTHWORK.
HER	Historic Environment record concordance. NA if none yet available.
COMMENT	Brief interpretative comment.
CONDITION	Latest recorded condition form data sources used by this assessment.
PARISH	Civil Parish (CP) if given.

16 APPENDIX 7 Standards and guidance

158. This project is undertaken in accordance with:

- Historic England Aerial Investigation and Mapping (formerly National Mapping Programme) Standards Technical Review, (Evans 2019);
- Guidelines for the use of Airborne Laser Scanning (Lidar) in Archaeology (EAC GUIDELINES 10). European Archaeological Council. Bennett and Cowley (eds. 2025);
- Using Airborne LiDAR in Archaeological Survey: The Light Fantastic. Historic England (2018); and
- Chartered Institute for Archaeologists Code of Conduct: Professional Ethics in Archaeology, (CIfA 2022).

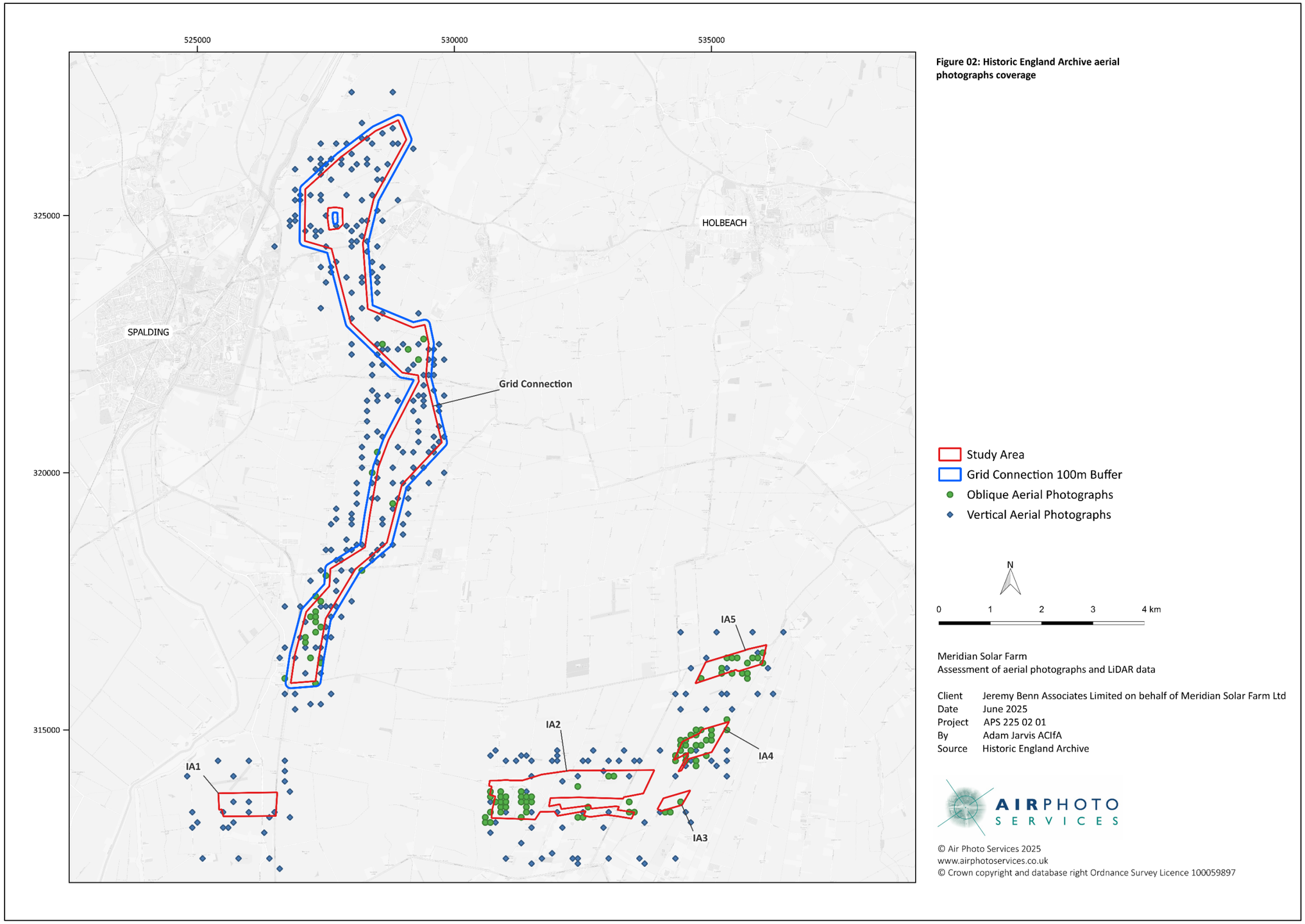

Figure 02: Historic England Archive aerial photographs coverage

Figure 2 Distribution of aerial photographs within the Site which are held by the Historic England Archive

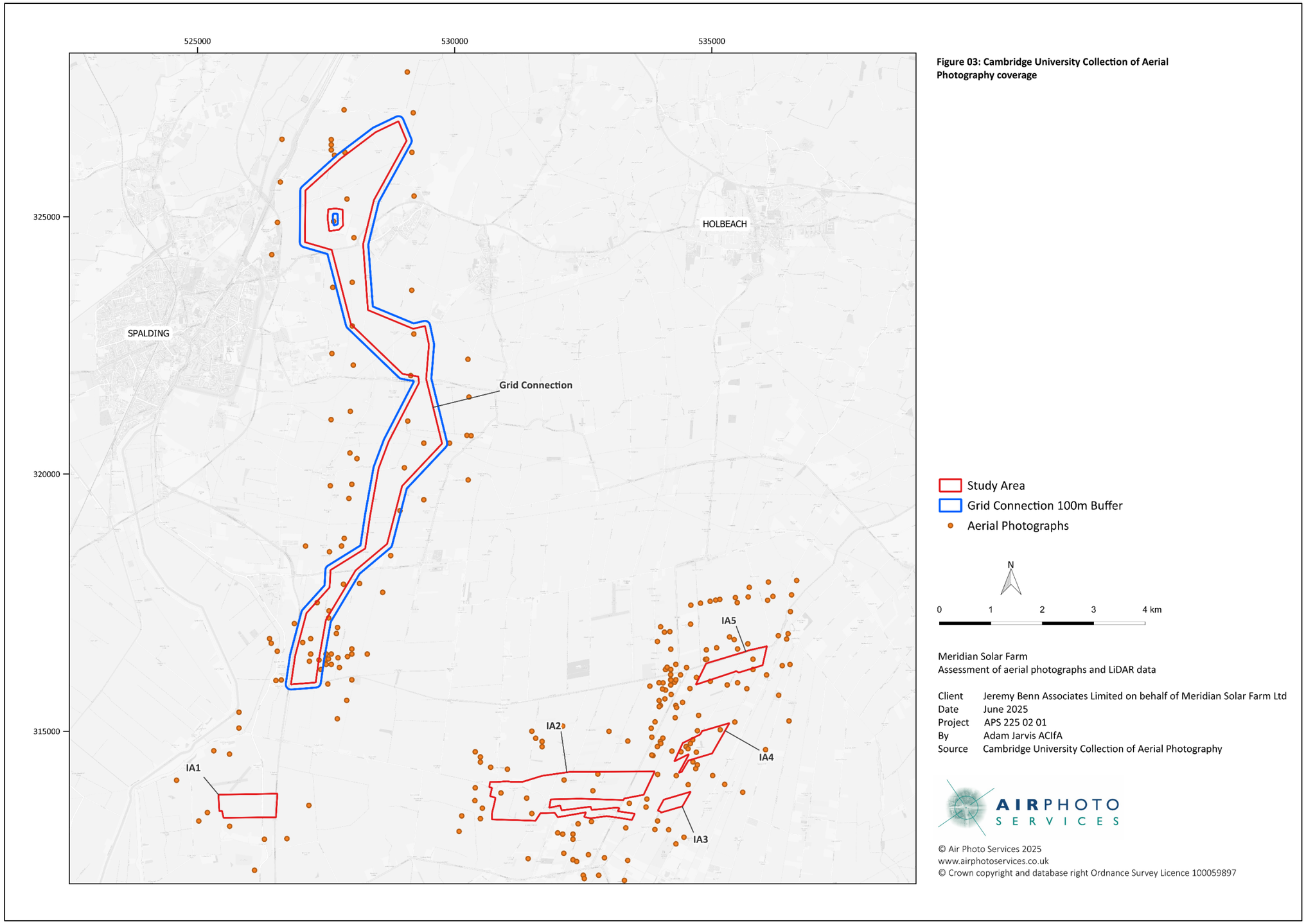

Figure 03: Cambridge University Collection of Aerial Photography coverage

Figure 3 Distribution of aerial photographs within the Site which h are held within the Cambridge University Collection of Aerial Photography (not presently available for consultation)

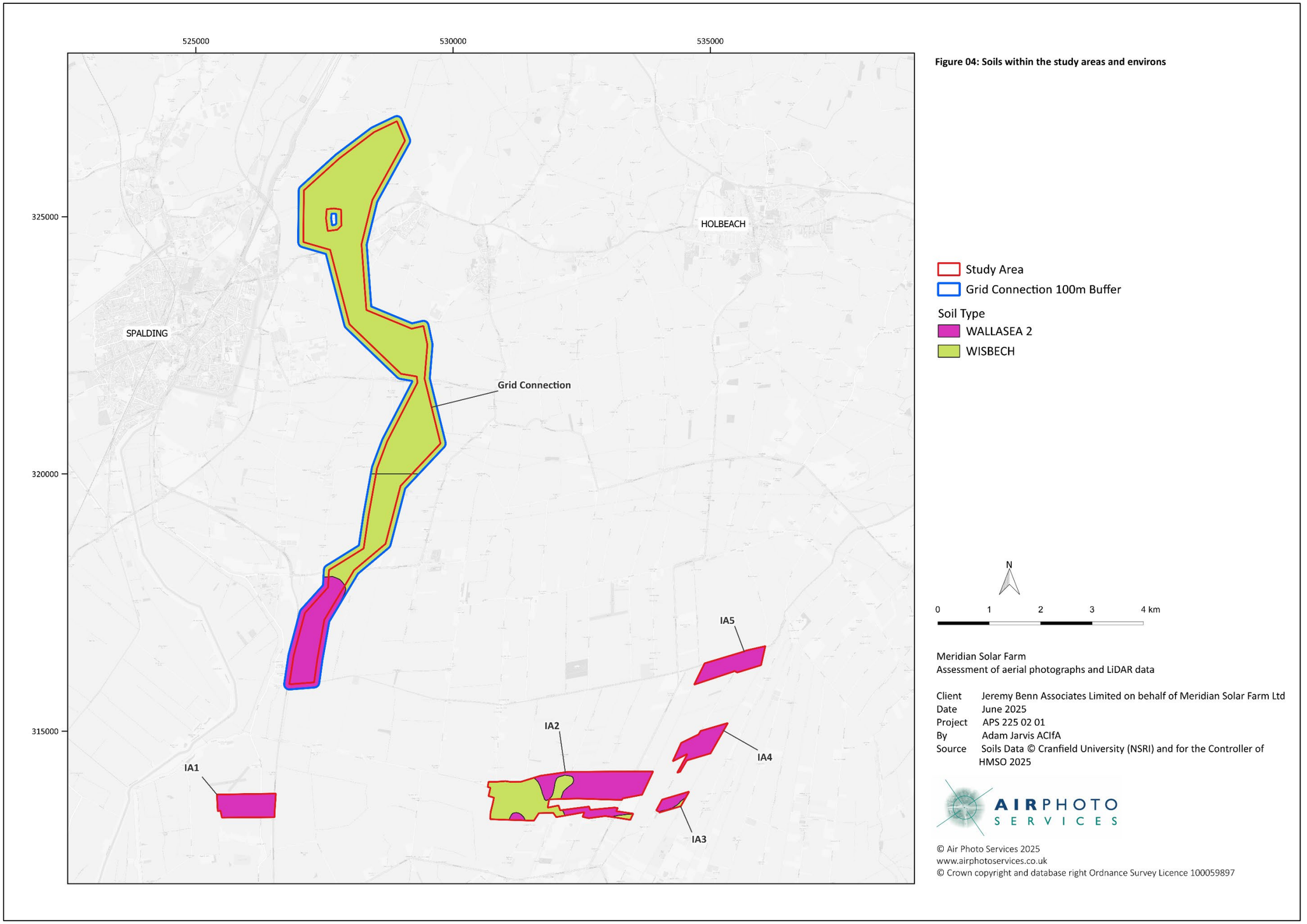

Figure 04: Soils within the study areas and environs

Figure 4 Soils within the Inter-Array Areas and Grid Connection

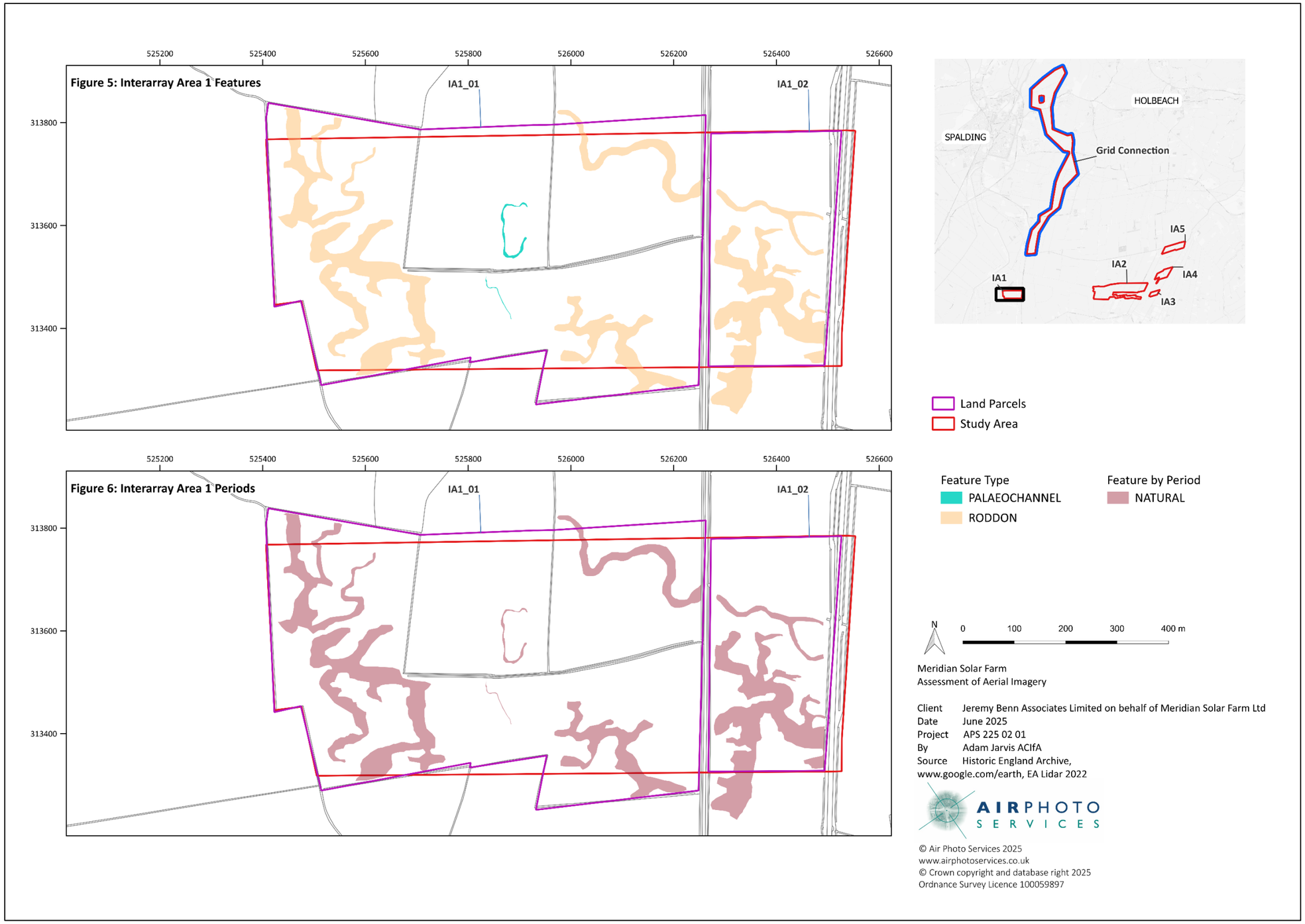

Figure 5 Features recorded in Inter-Array Area 1

Figure 6 Periods assigned to the features recorded in Inter-Array Area 1

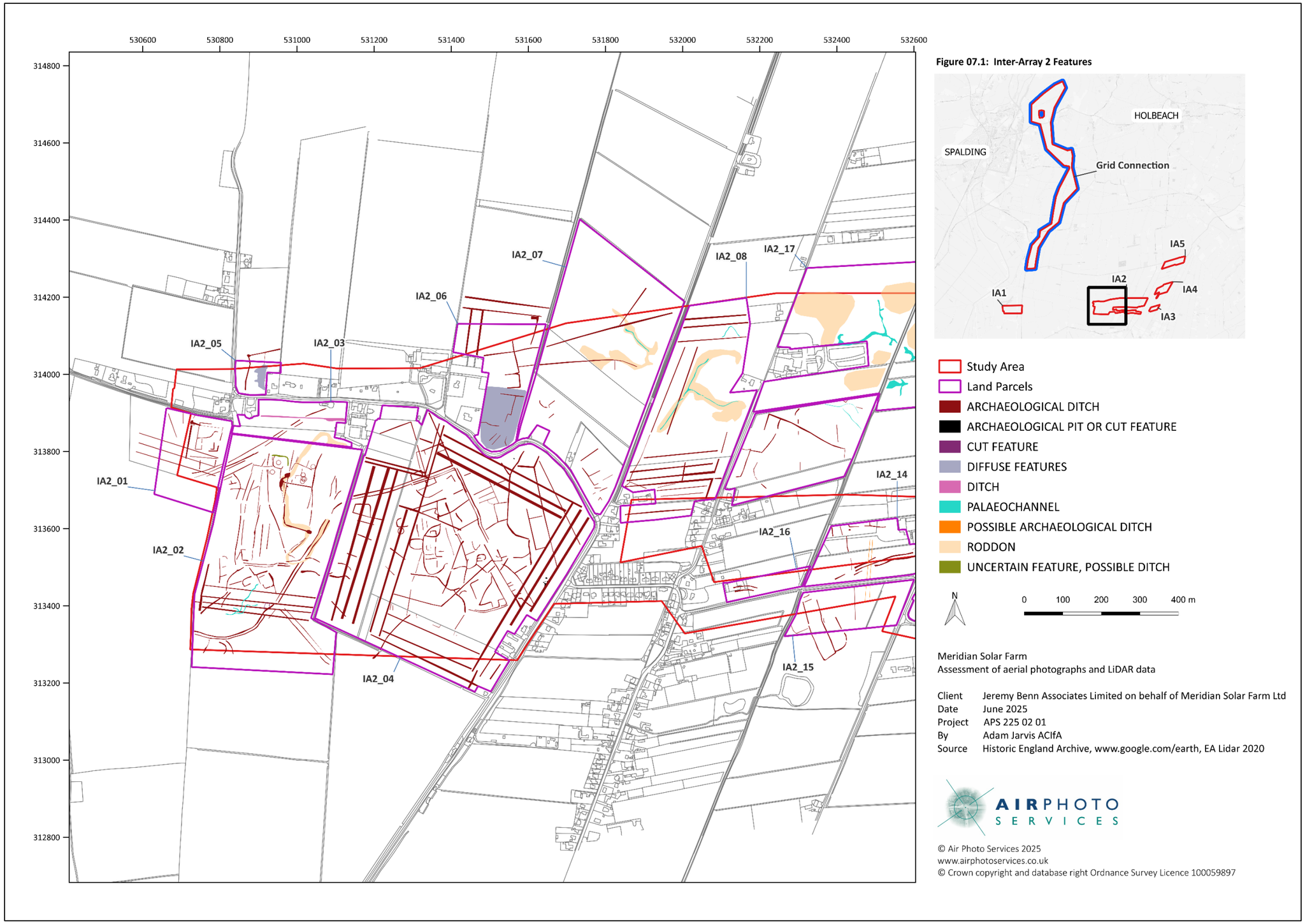

Figure 7 1 Features recorded in Inter-Array Area 2, IA2_01 to IA2_08

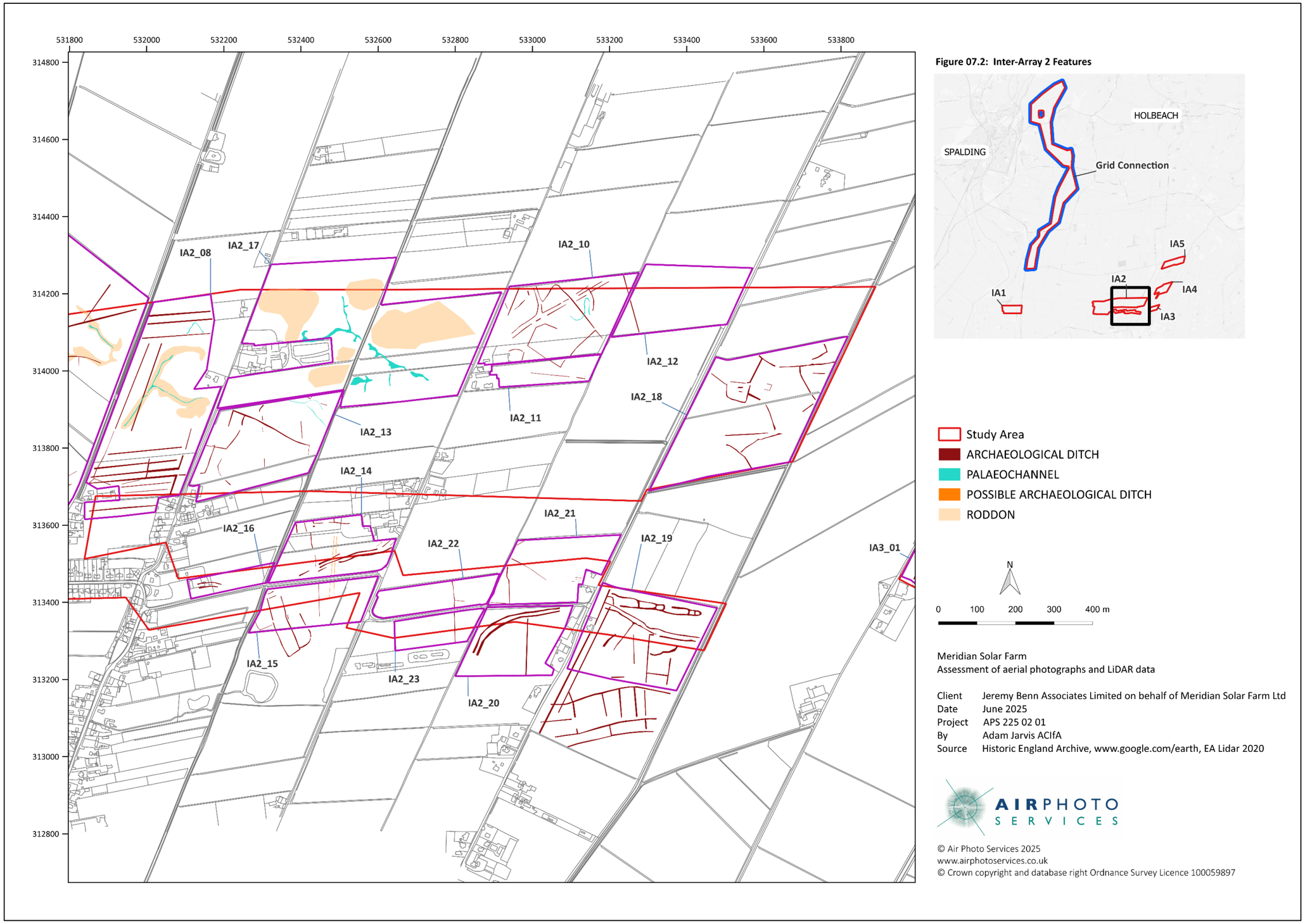

Figure 7 2 Features recorded in Inter-Array Area 2, IA2_09 to IA2_23

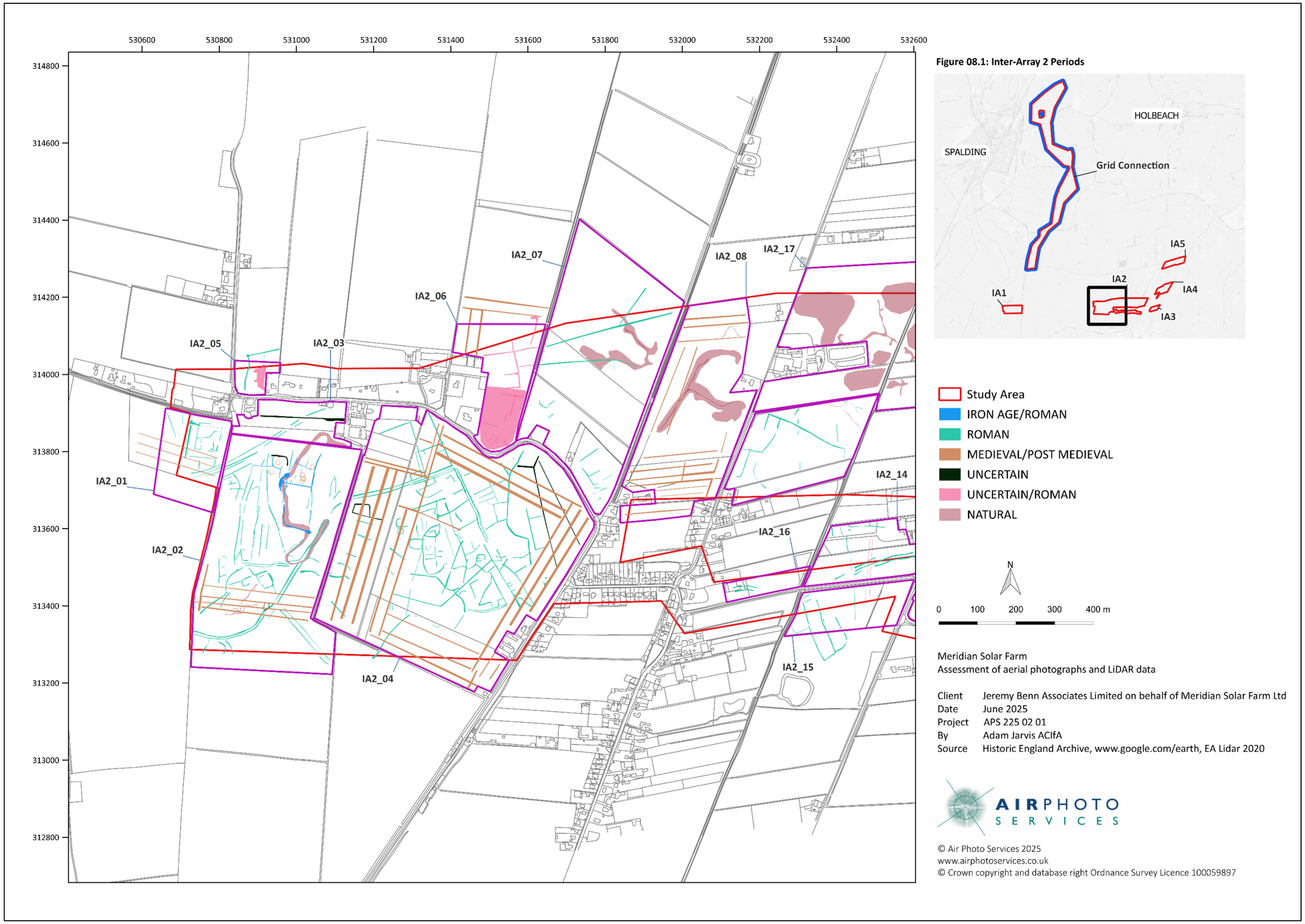

Figure 8 1 Periods assigned to features recorded in Inter-Array Area 2, IA2_01 to IA2_08

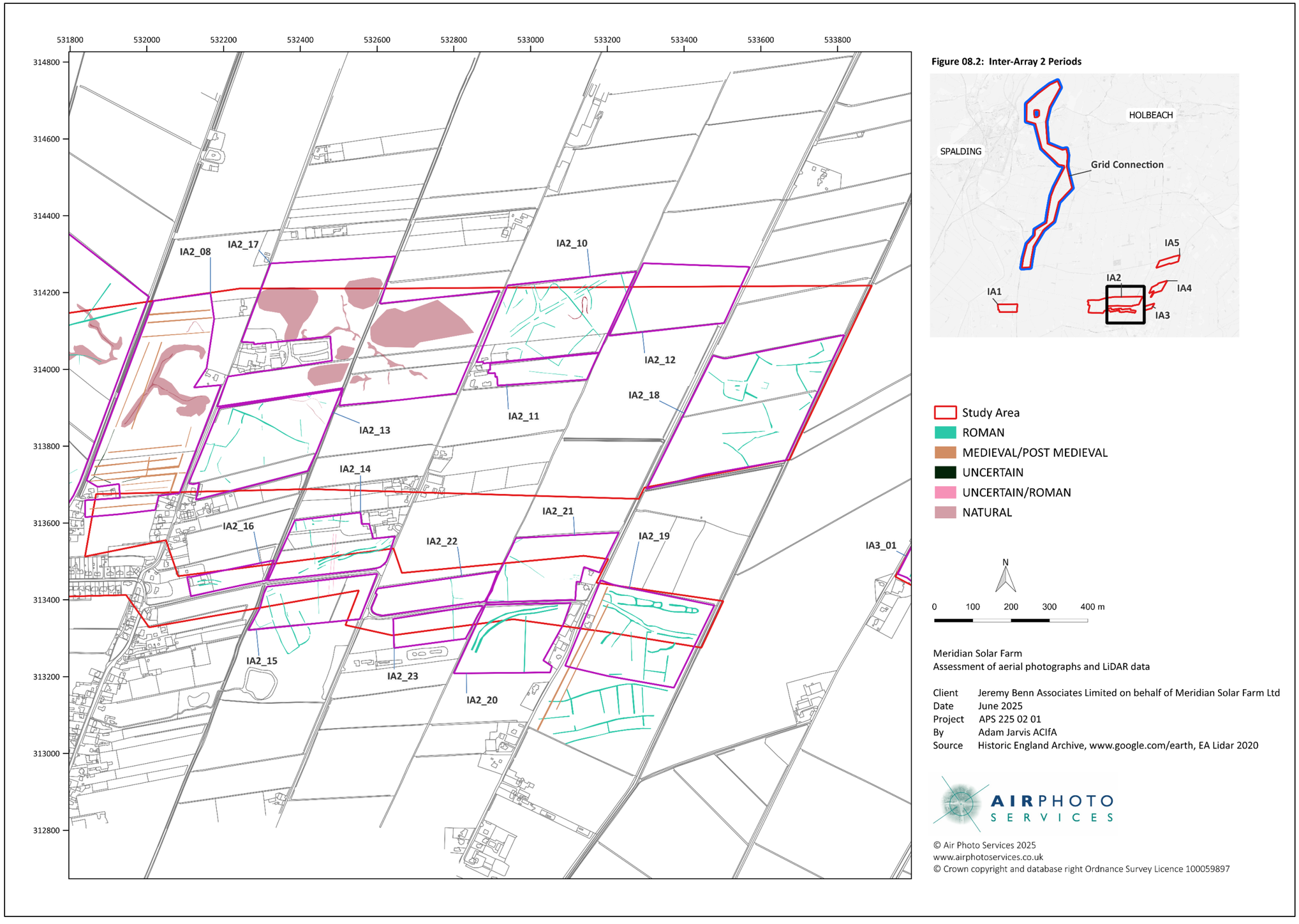

Figure 8 2Periods assigned to features recorded in Inter-Array Area 2, IA2_09 to IA2_23

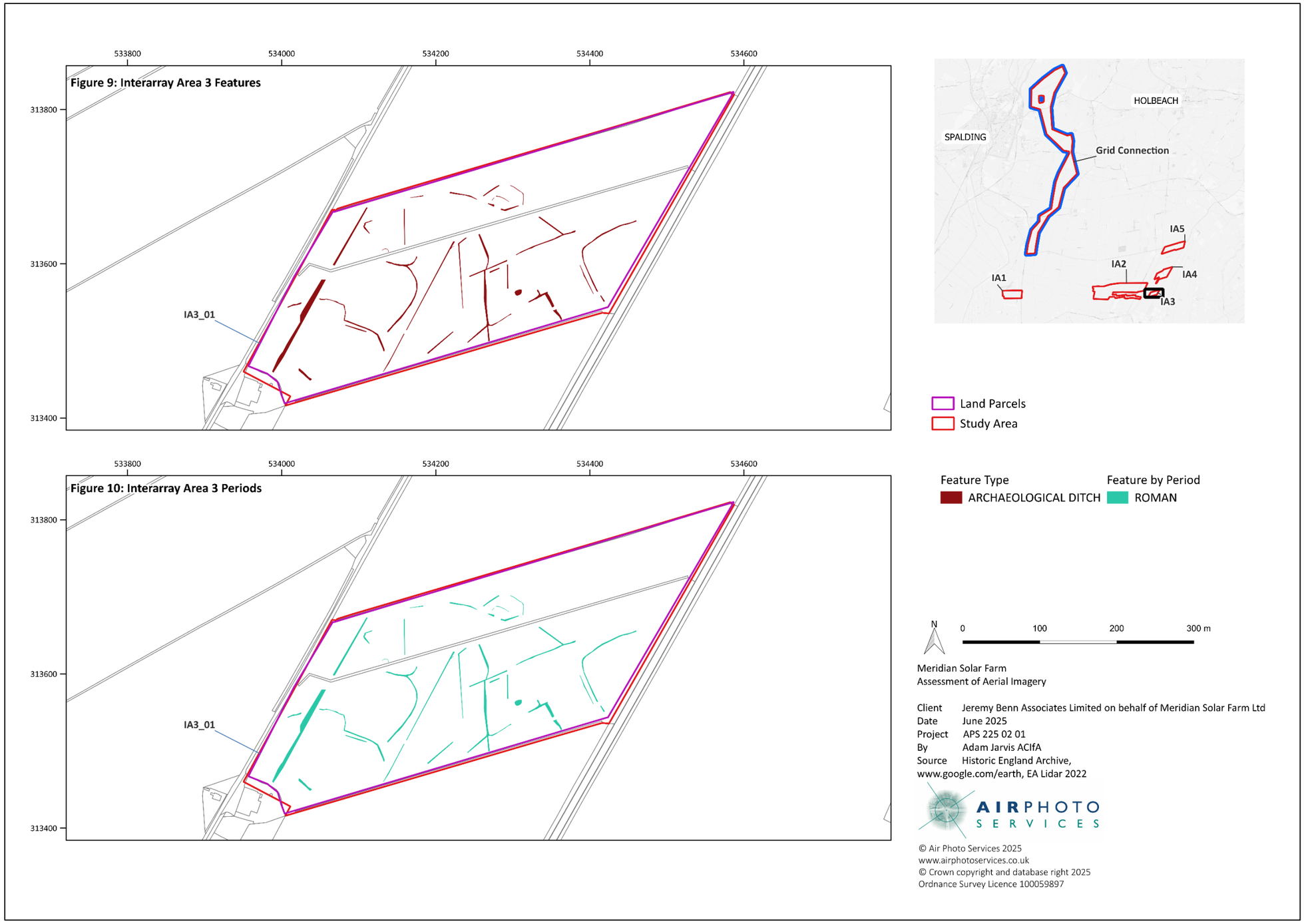

Figure 7 Features recorded in Inter-Array Area 3, IA3_01

Figure 8 Periods Assigned to the features recorded in Inter-Array Area 3, IA3_01

Figure 9 Features recorded in Inter-Array Area 4, IA4_01 to IA4_03

Figure 10 Periods assigned to features recorded in Inter-Array Area 4, IA4_01 to IA4_03

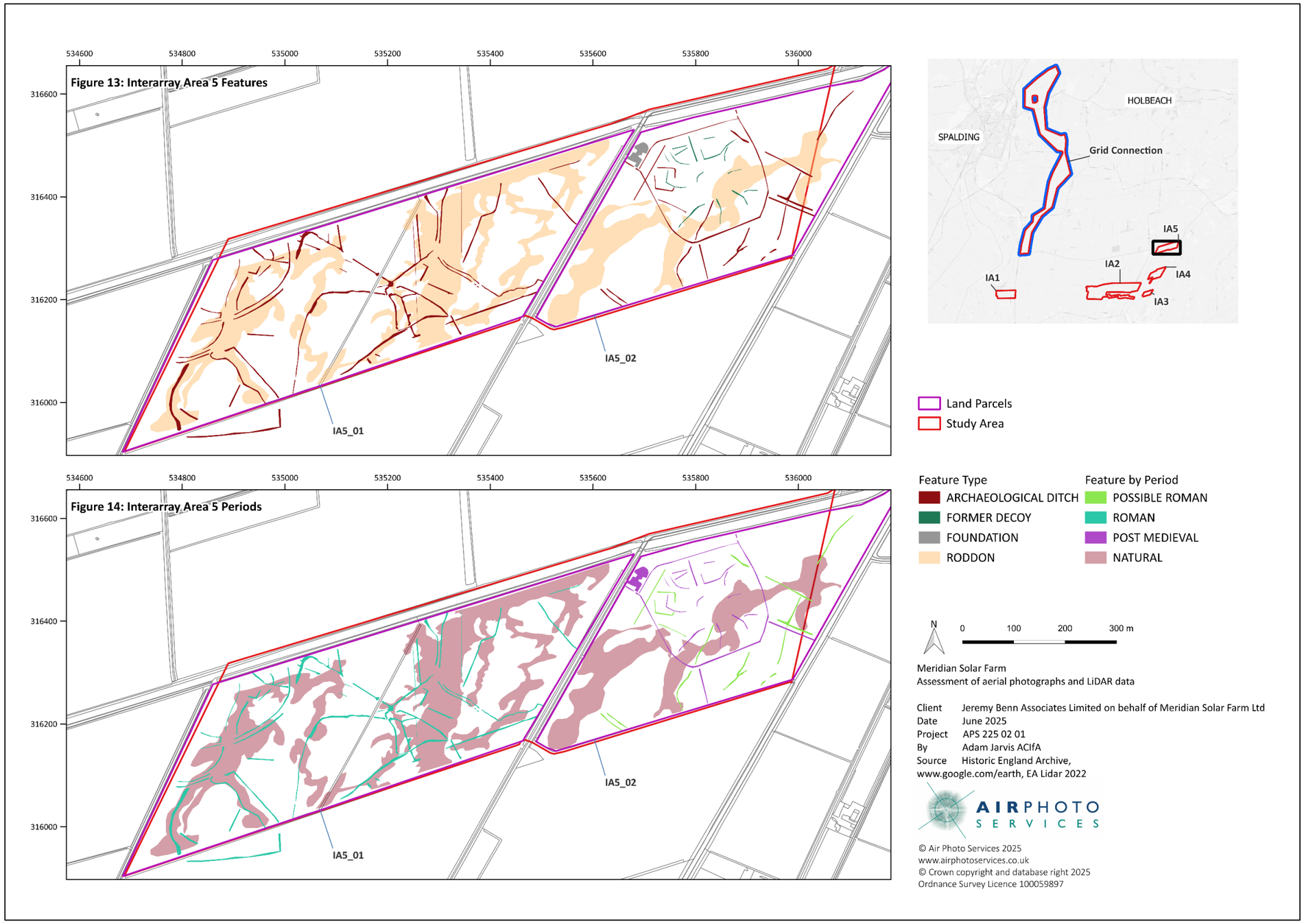

Figure 11 Features recorded in Inter-Array Area 5, IA5_01 and IA5_02

Figure 12 Periods assigned to features recorded in Inter-Array Area 5, IA5_01 and IA5_02

AIR PHOTO SERVICES

Archaeology • Research • Law • Environment • Planning

Air Photo Services Ltd
The Shaftesbury Centre
Percy Street Swindon SN2 2AZ
www.airphotoservices.co.uk
[redacted]@airphotoservices.co.uk

Director Chris Cox MA MCIFA FSA
Associate Director David Lang BA PCIFA

Summary

This report concerns the results of interpretation and mapping of archaeological features from air photos and LiDAR imagery for the Meridian Solar Farm Project, Lincolnshire.

This survey has recorded diverse features in a Fenland environment. It has identified prehistoric roddons and palaeochannel, extensive settlement remains, salt production sites and trackways or droveways of possible Iron Age and likely Roman date. Later features include medieval or early post medieval strip fields and a drove road. There is also evidence of post medieval drainage ditches and fields boundaries. Most features are visible as cropmarks or soilmarks, through some do survive as low earthworks.

CONTENTS

TABLE OF FIGURES (All at rear of report)

1 INTRODUCTION

1.1 BACKGROUND TO THE SURVEY

1.1.1 Alison Deegan was commissioned by JBA Consulting (the Consultant) on behalf of Meridian Solar Farm Ltd (the Applicant) to undertake air photo and LiDAR analysis and mapping for land within the proposed footprint of the photovoltaic array for the Meridian Solar Farm Project. The purpose being to identify and record archaeological earthworks, cropmarks and soilmarks of all periods.

1.2 OVERVIEW OF THE SURVEY AREAS (SEE FIGURES 1 AND 2)

1.2.1 Meridian Solar Farm Project proposes photovoltaic arrays on four parcels of land : A, B, C and D. This survey is concerned with these four parcels, which lie close to the southern boundary of the county of Lincolnshire.

1.2.2 Parcels A and C lie in the parish of Crowland and Parcel D lies in Fleet. Most of Parcel B lies in Crowland but sub-parcel B-5 is detached and lies partly in Cowbit and partly in Weston.

1.2.3 The parcels are divided into sub-parcels, which mostly coincide with modern field units. Properties and some fields that lie within the general outline of the parcels are not included in the project, and so are excluded from this survey.

1.2.4 These parcels lie on the Fenland, the large expanse of low flat land that flanks The Wash in the counties of Lincolnshire, Cambridgeshire and Norfolk.

1.2.5 The Fenland environment is the consequence of 'the territorial battles between the freshwater and marine dominated environments' (Hayes and Lane 1992, 1). It is characterised by periods of dynamism and stasis, the alternating formation of peats, river alluvium and marine deposits complicated by intercutting creeks and rivers.

1.2.6 For the purposes of this survey it is sufficient to understand that the environments encountered at this location changed dramatically from the Neolithic through the early medieval period and then again with the introduction of large-scale drainage schemes. At any one time local environments were complex mosaics of marsh, fen and creek, interspersed with the marginally higher and dryer ground afforded by old river terraces, former creek beds (the roddons) and the marine deposits. This is further complicated by the shrinkage of buried peat and erosion of exposed peat, which now leaves other deposits, such as the creek silts, sitting slightly proud of the surrounding land surface.

1.2.7 Some sub-parcels had not yet been ploughed when the earliest air photos were taken in the 1930s and 1940s and in these there were archaeological earthworks. However, most of the evidence for archaeological features comes from cropmarks and soilmarks in arable and other crop fields. The humic fills of ditches and pits contrast markedly with the roddons and marine deposits and produce well-defined cropmarks and clear soilmarks.

1.2.8 The LiDAR imagery can reveal denuded archaeological earthworks as subtle variations in topography as well as the pattern of elevated creek and marine deposits.

1.2.9 A brief overview of the uses of air photos and LiDAR for archaeological remote sensing is provided in Appendices 1 & 2.

1.3 PREVIOUS ARCHAEOLOGICAL WORK IN THIS AREA

1.3.1 This survey is informed by the work of Sylvia Hallam, who combined evidence from air photos with surface finds recovered from field walking, and the fieldwork of The Fenland Project (Hallam 1970, Hayes and Lane 1992, Hall and Coles 1994).

1.3.2 Hallam's maps and gazetteer of cropmarks and earthworks (published in Philips (ed) 1970) and the period-based parish plans and gazetteers for Cowbit and Crowland in the Fenland Project report have been particularly useful, not least because these are the sources for many of the Historic Environment Record (HER) monument records in this area.

1.3.3 There are two scheduled monuments within the survey area and a third covers a short section of a long linear feature that continues into the survey area: NHLE1004978, NHLE1004979 and NHLE1009980 (see Fig. 2). Whilst a full description is available for the latter the other two are both 'old county number' listings and their monument descriptions are not available online.

1.3.4 Being a sparsely populated area, there have been, until now, few archaeological interventions prompted by development projects. Two exceptions are the scheme of archaeological works instigated ahead of construction of the A16, known as the A1073 Spalding to Eye Improvement Scheme, and archaeological evaluation trenching at Holbeach Drove (Failes and Peachey 2013, Pre-construct Archaeology Ltd 2023).

2 SOURCES AND METHODOLOGY

2.1 DATA SOURCES

2.1.1 The following resources were consulted for this survey.

SOURCE AND TYPE	NOTES
Environment Agency LiDAR data	Digital Terrain Model and Digital Surface Model. 1m resolution tiff files.
Google Earth orthophotography	Imagery captured by various organisations between 1999 and 2023.
Bing orthophotography	A single layer of recent but undated imagery.
Historic England Archive: vertical air photos	Vertical air photos taken for non-archaeological purposes. 166 prints from 10 different sorties, flown on several occasions in the 1940s, two occasions in the 1970s and one in 1988. These prints were examined in the Archive between 23/04/24 and 16/05/24.
Historic England Archive: specialist air photos	Mostly taken specifically for archaeological purposes. 575 prints and digital images. A small number were taken in the 1930s and 1950s, but most were taken in the 1970s and later. The prints were examined at the Archive between 23/04/24 and 16/05/24, the digital images were examined online in the same period.
CUCAP low resolutions scans	A small number of oblique photos were available and examined online. A few vertical photographs were also available but these were of too low resolution to be useful for this survey.
Lincolnshire HER	Monument records
Ordnance Survey 1887 6 inch maps (provided by JBA Consulting)	Geo-rectified map sheets.

2.2 PROCESSING AND MAPPING

2.2.1 Visualisations were generated from the Environment Agency 1m resolution LiDAR data to facilitate the identification and mapping of archaeological earthworks, the silted creeks known as roddons and old water channels.

2.2.2 For the archaeology three visualisations were created: 16-direction hill-shaded

visualisations from the Digital Surface Models (DSM) and Digital Terrain Models (DTM) and a Simple Local Relief Model. These were processed in the Relief Visualisation Toolbox 2.2.1.

2.2.3 For the roddons a composite visualisation was generated in QGIS. This combined a colour relief model carefully tailored to the very low and subtle variation in surface topography with 16-direction hill-shading (see Figure 2).

2.2.4 The various sources of orthophotography: Bing and Google Earth imagery were examined on a high resolution screen on a field by field basis.

2.2.5 The air photo prints held by the Historic England Archive (HEA) were examined systematically, using x2 magnification where necessary and stereoscopically where possible. Selected prints were then photographed with a hand-held digital camera to capture digital images for the subsequent processes (the HEA does not permit users to scan photographs). The HEA digital air photos were examined on screen.

2.2.6 Captures from the HEA prints and online sources were rectified to ground control points derived from OS Mastermap data using Aerial5.36. Aerial5.36 gives error readings for each control point, where 5 or more control points are used. In all cases errors of within ±3m were achieved for the control points. However, it should be noted that overall accuracy had been impacted by two factors. Firstly, in recent decades there has been considerable widening and rearrangement of boundary and drainage ditches so intersections and corners that offer precise control points on the air photos do not always correlate exactly with those depicted on the current large-scale maps. Secondly, many of the specialist air photos were taken from a low altitude and do not include enough of the surrounding field boundaries to provide a sufficient spread of control points. Consequently, the on-the-ground positional errors of the features mapped by this survey may exceed ±3m in some places.

2.2.7 Archaeological features that are visible on the LiDAR visualisations, orthophotography and rectified image captures were digitised in the GIS (MAPInfo Professional 21) and with reference back to the original source material. Archaeological features were mapped to a nominal scale 1:2500 in terms of detail and accuracy. Data pertaining to each feature was recorded in the GIS. The structure and content of the digital map dataset is described in Appendix 5.

3 RESULTS

3.1.1 The results for each parcel are presented as follows

- A brief summary of the results (see below)
- A gazetteer for each parcel listing the sub-parcels and descriptions divided into broad periods. (see Appendix 3)
- A map for each parcel with features coloured according to form eg archaeological bank, archaeological ditch etc (See Figs 3, 5, 7, 9 and 11)
- A map for each parcel with features coloured according to broad period type (See Figs 4, 6, 8, 10 and 12)

3.1.2 In the absence of intrusive archaeological interventions in this area, the dates cautiously attributed to the features recorded by this survey are informed by surface finds reported in the Lincolnshire HER and by Fenland Project, the prevailing environmental conditions, as indicated by the Fenland Project maps (available for Cowbit and Crowland only) and previous interpretations by Hallam and others (Hayes and Lane 1992, Philips 1970).

3.1.3 With regards to dating features in the Fenland landscape, Hallam stated 'We can easily strip off this medieval to modern pattern and consider those parts of the lay-out which do not conform to it as almost certainly Romano-British' (1970, 22). Whilst the Fenland Project environmental reconstructions concur that Crowland, for example, was more amenable to settlement in the Roman period than in the Iron Age there is a small but recurring presence of possible Iron Age material on the cropmark and soilmarks complexes. For this reason the broad date range of 'Iron Age/Roman' is used for the likely settlements and salt production sites identified by this current survey.

3.2 SUMMARY OF RESULTS IN PARCEL A (SEE APPENDIX 3: PARCEL A, FIG. 3 AND FIG. 4)

3.2.1 This area lies in the parish of Crowland, east of the River Welland. It is separated from the river by the Crowland Fodder Lots, the Wash Bank and the New River.

3.2.2 Lesser roddons run south-west to north-east across the more westerly sub-parcels before joining the broad roddon that heads northwards towards the old courses of River Welland.

3.2.3 The HEA specialist collection contains only a handful of air photos of this parcel. These were taken in 1947, and focus on a breach of the Wash Bank and the resulting flooding near Lodge Farm.

3.2.4 Given that Parcels B and C, just 3-5km to the east, have repeat specialist coverage from

the 1970s onwards it is reasonable to infer that the absence of specialist coverage reflects a lack of notable cropmarks or soilmarks, rather than an lack of aerial reconnaissance. This is borne about by the low incidence of cropmarks and soilmarks on the Google Earth imagery of this parcel.

3.2.5 The Fenland Project indicates that this parcel was under fen in the Iron Age and Roman periods (Hayes and Lane Figs 119 and 120). There are, however, ditches and a small enclosure on the broad roddon in A-1-11 that do not appear to fit with the post medieval landscape.

3.2.6 Most of the features recorded in this parcel fall into three groups: remnants of medieval or post medieval strip fields; possible ridge and furrow and late post medieval field boundaries that were removed in the 20th century.

3.3 SUMMARY OF RESULTS IN PARCEL B (SEE APPENDIX 3: PARCEL B, FIG. 5 AND FIG. 6)

3.3.1 Parcel B lies in the parish of Crowland, south of Queen's Bank and mostly between the recently-constructed A16 Crowland By-pass and the now-disused railway line. In the mid-20th century there were two farms or properties within this area: Whipchicken and Whitebread Hall, both have now been removed.

3.3.2 Since the 1940s there has been a trend towards larger fields in this parcel, actioned by the removal of field boundaries, which subsequently appear as cropmarks and soilmarks. Some of these have been mapped to distinguish them from the cropmarks and soilmarks of earlier features.

3.3.3 Most of the images in the HEA specialist collection of Parcel B target cropmarks and soilmarks in the eastern-most sub-parcels. Those further to the west target cropmarks and soilmarks that are probably of post medieval or 20th century origin, such as the former field boundaries in B-1-10.

3.3.4 A sinuous and dendritic roddon meanders west to east across Parcel B and converges with another from the south near Whitebread Hall.

3.3.5 The Fenland Project determined that most of Parcel B was under fen in the Iron Age and Roman period, which to some extents is borne out by the aerial evidence (Hayes and Lane 1992, Figs 119 and 120). Certainly there is a notable dearth of archaeological cropmark and soilmarks in the more westerly sub-parcels: B-1-01 to B-1-08. However, Iron Age or Roman trackways and possible enclosures and fields are present in B-1-09, B-1-10 and B-

13. The westward limits of these features coincides with a substantial linear feature that runs near north to south through B-1-09, B-1-10 and B-1-11. This is a broad bank flanked by ditches and characterised by some abrupt changes in direction. This may have a boundary between the fen and settled areas and possibly a route along the fen edge. A similar feature runs south-west to north-east across B-1-09, B-1-12, B-2 and C-2-01.

3.4 SUMMARY OF RESULTS IN PARCEL B-5 (SEE APPENDIX 3: PARCEL B-5, FIG.7 AND FIG.8)

3.4.1 This parcel lies straddles the boundary between the parishes of Cowbit and Weston. It lies to the west of the small village of Peak Hill and the western boundary is formed by the recently-constructed A16 Crowland By-pass.

3.4.2 The HEA specialist collection contains a small number of air photos that cover this parcel. Many of these were targeted on earthworks that are centred further to the north and north-east but include parts of this parcel.

3.4.3 This parcel is divided by the South Holland Main Drain with approximately one third of the parcel to the north and two-thirds to the south.

3.4.4 Two narrow and sinuous roddons meander across the parcel south of the South Holland Main Drain. One continues northwards into an area of slightly higher ground, which coincides with patches of lighter-toned soils that are visible on the air photos.

3.4.5 The cropmark and soilmark evidence for likely Iron Age and/or Roman settlement is concentrated north of South Holland Main Drain. This comprises possible enclosures, trackways and arrangements of ditches that may be associated with salt production. This is corroborated by finds recovered in this area and the field to the east (MLI20332 & MLI22093, Hayes and Lane 1992, Fig. 106)

3.4.6 The medieval Goll Grange lay to the immediate north of this parcel (MLI22093). It was encircled by an arrangement of strip fields that survived as earthworks into the second half the twentieth century. Some of the field ditches cut across earlier remains along the northern edge of this parcel.

3.4.7 This parcel intercepts a short section of a long linear feature that runs near parallel to Queens Bank. This feature is identified as an undated drove road in the HER monument record (MLI20346). However, further to the east, a section of what appears to be the same feature is scheduled and described as the northern boundary of the monastic lands of Crowland Abbey (NHLE1009980).

3.5 SUMMARY OF RESULTS IN PARCEL C (SEE APPENDIX 3: PARCEL C, FIG. 9 AND FIG. 10)

3.5.1 Parcel C lies in the parish of Crowland, south of Queen's Bank and between the now-disused railway line and Cate's Cove Corner. A single farm still stands in this area, Martins Farm, the curtilage of which is excluded from this parcel and this survey.

3.5.2 The HEA Specialist Collection holds a large number of images that cover this parcel. Some sub-parcels have been photographed on several different occasions. Some sub-parcels have been photographed both when the soil is bare and under crop.

3.5.3 There are two scheduled monuments within this parcel: Settlement NE of Whitebread Farm (NHLE1004978) in C-2-01 and C-2-03 and Settlement W of Cate's Cove Corner (NHLE1004979) in C-1-01, C-1-03 and C-1-08.

3.5.4 A broad roddon runs first south-west to north-east to Queens Bank and then curves gently southward. Along the eastern edge of Parcel C it is subsumed by a much wider and slightly higher ridge of silts, which heads northwards towards the Wash.

3.5.5 Short, sinuous and narrower roddons run perpendicular to the broad roddon.

3.5.6 A swathe of Iron Age or Roman settlements flank a trackway that runs along the middle of the broad roddon through C-1-01, C-1-03, C-2-01, C-2-02, C-2-03. There are multi-foci settlement, trackways and other features on the western flank of the wide silt ridge in C-1-06, C-1-07, C-1-08. There is an enclosure complex on one of the lesser roddons in C-2-01.

3.5.7 Surface finds recovered at several locations in C-2-01 and C-2-03 indicate Iron Age as well as Roman occupation and salt-making activity (MLI23189, MLI23191 & MLI23196). Salt production is also in evidence in C-1-07 and C-1-08 (MLI23177 & MLI20245)

3.5.8 Sub-parcels C-1-06 and C-1-08 are traversed by a triple ditch linear feature that continues beyond the area of survey to the southern end of Martin's Road. Here it aligns with an extant section of Hull's Drove. HER record MLI22262 suggests a medieval iteration of Hull's Drove on a similar trajectory to these cropmarks. Interestingly, medieval and post medieval pottery have been recovered to the north of Shepherd's House at the point where the trio of ditches are cut by a more recent field drain (MLI23186 & MLI23187). This triple-ditched linear feature may be the remains of a medieval drove road.

3.5.9 Other long, straight ditches, such as those in C-1-02 and B-1-13, which are seemingly anomalous to the Iron Age/Roman landscape, run parallel to the putative medieval drove road. These may boundaries or drains of a field system of similar date to the drove road.

3.5.10 A large-scale, grid-like arrangement of long ditches, some single and some double, runs parallel to Queens Bank through the C-1 sub-parcels. These are likely to be the remains of a post medieval drainage scheme. Numerous former post medieval field boundaries are visible as cropmarks and soilmarks on the air photos and these have been mapped and record to distinguish them from early features.

3.6 SUMMARY OF RESULTS IN PARCEL D (SEE APPENDIX 3: PARCEL D, FIG. 11 AND FIG. 12)

3.6.1 Parcel D lies in the long narrow parish of Fleet. This parish is bisected east to west by the South Holland Main Drain, and north to south by Langary Gate Road. A large part of Parcel D lies between South Holland Main Drain and Waltons Farm, some fields in this area are excluded from this parcel.

3.6.2 Here the parish and Parcel D are just two fields wide. A strip of fields north of South Holland Main Drain, where the parish widens slightly, are also included in Parcel D.

3.6.3 The small village of Fleet lies nearly 8km north of Parcel D. There is very sparse settlement south of the South Holland Main Drain, mostly farms or properties strung along Langary Road and, further to the south, some expansion from Holbeach Drove. All such properties are excluded from Parcel D.

3.6.4 Parcel D is traversed east to west by two broad roddons, one between Waltons Farm and Cheviot House, the other loops across the fields south of the South Holland Main Drain. Between these two there are much narrower, highly sinuous roddons.

3.6.5 There are concentrations of features likely to be Iron Age or Roman settlements in D-1-01, D-1-02, D-2-01, D-6 and more fragmentary evidence in D-5-01.

3.6.6 Evidence for salt production has been recorded from the area of settlement in D-1-02 (MLI22250). Excavations 1.5km to the west of Parcel D at Shell Bridge, Holbeach St Johns demonstrated that, in the Roman period at least, salt making was carried out amongst areas of occupation (Bell et al 1999, 68).

3.6.7 The arrangement of ditches in the western half of D-3-04 appears to lack a settlement nucleus. The pair of enclosures actual encircle the lower ground between roddons are so are unlikely to have been domestic spaces. Instead, it is suggested that this arrangement of ditches and other features is associated with salt production and the bringing of salt water to the processing site.

3.6.8 Most other sub-parcels contain evidence of field boundaries, boundaries and trackways

that may be of Iron Age or Roman date. The exception is D-2-03, which did not produce evidence of any features on any of the imagery consulted.

3.6.9 Sub-parcels D-6, D-3-06 and D-3-06 contain remnants of medieval or post medieval strip fields known as dylings.

3.6.10 Cropmarks or soilmarks of former post medieval fields boundaries and ponds are present in many sub-parcels. Notable are those features in D-2-01 where a field boundary that is depicted on the OS map of 1887 follows the line of a likely Iron Age or Roman trackway and a small post medieval enclosure, also on that map, sits neatly within a large curvilinear enclosure. This suggests that the older features survived as earthworks into the 19th century.

3.6.11 All of the features observed in Parcel D have now been levelled by ploughing. Some fields within and immediately adjacent to Parcel D had not been ploughed in the late 1940s: D-1-01, D-3-01, the eastern half of D-3-01, the site of Fleet Decoy (MLI23224) and the field to the east of D-3-05. However all of the earthworks in these fields had been truncated by the 1970s.

4 CONCLUDING REMARKS

4.1.1 This survey has delineated the main roddons and palaeochannels that are visible on the available air photos and LiDAR imagery.

4.1.2 Cropmarks, soilmarks and former earthworks, have revealed settlements, salt production sites, boundaries, trackways, drove roads and fields systems across all parcels, but the evidence is far sparser in Parcel A.

4.1.3 There may be a Iron Age component at some of the settlement and salt production sites but on the whole these revealed landscapes are Roman in date, overlain with medieval or early post medieval fields and drove roads, which in turn are overlain with later post medieval drainage systems, field boundaries and dispersed farms.

4.1.4 The Neolithic and Bronze Age appear to be absent from this landscape. The land surface from these periods is likely buried by later deposits. Furthermore, the Fenland Project indicates that monument-building activity in these periods was confined to a gravel ridge south of Parcel A (Hayes and Lane, Fig 117).

REFERENCES AND RESOURCES CITED

Bell, A, Gurney, D and Healey, H 1999. *Lincolnshire Salterns: Excavations at Helpringham, Holbeach St Johns and Bicker Haven*. East Anglian Archaeology 89.

Crutchley, S and Crow, P 2009. *The Light Fantastic: Using Airborne Laser Scanning in Archaeological Surveys*. English Heritage. Swindon.

Failes, A & Peachey, M 2013. Archaeological Investigations along the Route of the A1073, Spalding-Eye Improvement Scheme. *Lincolnshire History and Archaeology* No. 48 p21-38.

Hall, D and Coles, J 1994 *Fenland Survey. An essay in landscape and persistence*. English Heritage Archaeological Report 1.

Hallam, S 1953. 'Goll Grange. A Grange of Spalding Priory.' *Lincolnshire Architectural and Archaeological Society Reports and Papers*. Vol 5 Pages 1-18.

Hallam, S 1970. 'Settlement around the Wash' In Philips (ed) *The Fenland in Roman times: studies of a major area of peasant colonisation, with a gazetteer covering all known sites and finds.* Roy Geog Soc Res Ser, 5 22-106.

Hayes, P, P and Lane, T, W 1992. The Fenland Project Number 5: Lincolnshire Survey, The South-West Fens. East Anglian Archaeology 55.

Jones, R, J, A and Evans, R 1975. 'Soil and crop marks in the recognition of archaeological site by air photography' in Wilson, D (ed) Aerial Reconnaissance for Archaeology. CBA Research Report 12. 1-11.

Kokalj, Z and Hesse, R. 2017. Airborne laser scanning raster data visualisation: A guide to good practice. Založba ZRC, Ljubljana.

Phillips, C W (ed) 1970 The Fenland in Roman times: studies of a major area of peasant colonisation, with a gazetteer covering all known sites and finds., Geog Soc Res Ser, 5.

Pre-construct Archaeology Ltd 2023 Land off Holbeach Drove Gate, Holbeach Drove, Lincolnshire: An Archaeological Avaluation. PCA Report Number: R15420

DIGITAL SOURCES (all accessed in April and May 2024)

Geology of Britain Viewer. Viewed online at https://geologyviewer.bgs.ac.uk

APPENDIX 1 ARCHAEOLOGY FROM BLACK AND WHITE AND COLOUR AIR PHOTOGRAPHS

Air photographs and aerial imagery taken in appropriate conditions can record crop marks, soilmarks and earthworks of archaeological origin.

Crop marks result from variations in leaf and stalk colour and plant height and vigour. Crop marks occur where there are anomalies below the ground: in-filled hollows, palaeochannels, frost cracks, archaeological pits, ditches, surfaces and banks or modern disturbances such as land drains. Crop marks can also be created by variations in the treatment of the topsoil and ground cover, for example the uneven application of fertilizers, pesticides and herbicides or damage.

Crop marks that delineate buried and levelled archaeological features are the effect of differential growth and ripening between the vegetation on the archaeological deposits and that on surrounding undisturbed ground. Variations in growth and ripening are most visible when there is a significant difference in the water and nutrient availability between the archaeological and natural deposits. Crop marks can form at any stage from germination to ripening but the optimal conditions are during periods when precipitation is exceeded by transpiration. This results in potential soil moisture deficit (SMD) and water-stressed plants (Jones and Evans 1975). Prolonged periods of SMD halt plant growth and then cause wilting of the plant leaves, stem and finally root. Water-stress is exacerbated by free-draining sub-surface deposits such as archaeological walls or road surfaces but mitigated by rich and humic ditch and pit deposits. Even after ripening, differences in crop height and bulk can indicate the presence of buried features where there are no tonal differences. Crop marks can be seen most clearly in large areas of homogenous, fast-growing plants such as cereal crops and, less frequently, in root crops and grass. Crop marks produced in arable and grass at times of significant moisture stress, usually over buried structures or other highly permeable archaeological deposits, are often referred to as parchmarks.

Soilmarks are the colour and tonal differences between archaeological deposits and the plough or subsoil. The action of ploughing, which can penetrate the ground to a depth of 45cm, brings to the surface previously buried material. The rotation of the plough exposes the cut surface uppermost. Where the plough cuts buried and infilled archaeological features such as banks and ditches it brings to the surface slices of these deposits. If these slices are sufficiently differentiated from the natural plough or subsoil they can be visible from the air.

Archaeological earthworks that are visible on the ground can also be seen from the air. Detection and recording of earthworks from the air is determined by their survival and visibility. The survival of earthworks depends on past and present land use; natural erosion processes, deliberate destruction and ploughing can all reduce upstanding features to ground level. Earthworks can be revealed by the pattern of sunlight and shadow, differential frost or snow cover or the distribution of standing and flood water. Large and subtle variations in ground relief are further accentuated when viewed stereoscopically. Most stereo images are vertical photographs taken in long, regular sorties but stereo-overlapping can also be achieved from correctly set-up oblique views.

APPENDIX 2 ARCHAEOLOGY FROM LIDAR SURVEY DATA

Airborne Light Detection and Ranging (LiDAR) is a data collection technique that uses a laser to measure certain variables. For archaeological purposes it is the distance between the aircraft and the ground that provides particular interest. During LiDAR flights up to 100,000 measurements per second are made of the ground, allowing highly detailed models of the ground surface, including the details of surviving archaeological earthworks, to be generated at spatial resolutions of between 25cm and 2 metres.

The resulting dataset is a grid of height points called a Digital Elevation Surface Model, these points can be filtered to remove those measurements that were read from trees, buildings and other supra-surface features, the result is a Digital Terrain Model, sometimes called a 'Bare Earth' model. The latter is particular useful for the identification of archaeological earthworks where they are obscured on conventional air photos by tree and shrub cover. The DSM and DTM need to be transformed into a visualisations for analysis and interpretation. For this survey two different visualisations were employed for the identification of archaeological earthworks: multi-direction hill-shaded model and simple local relief model.

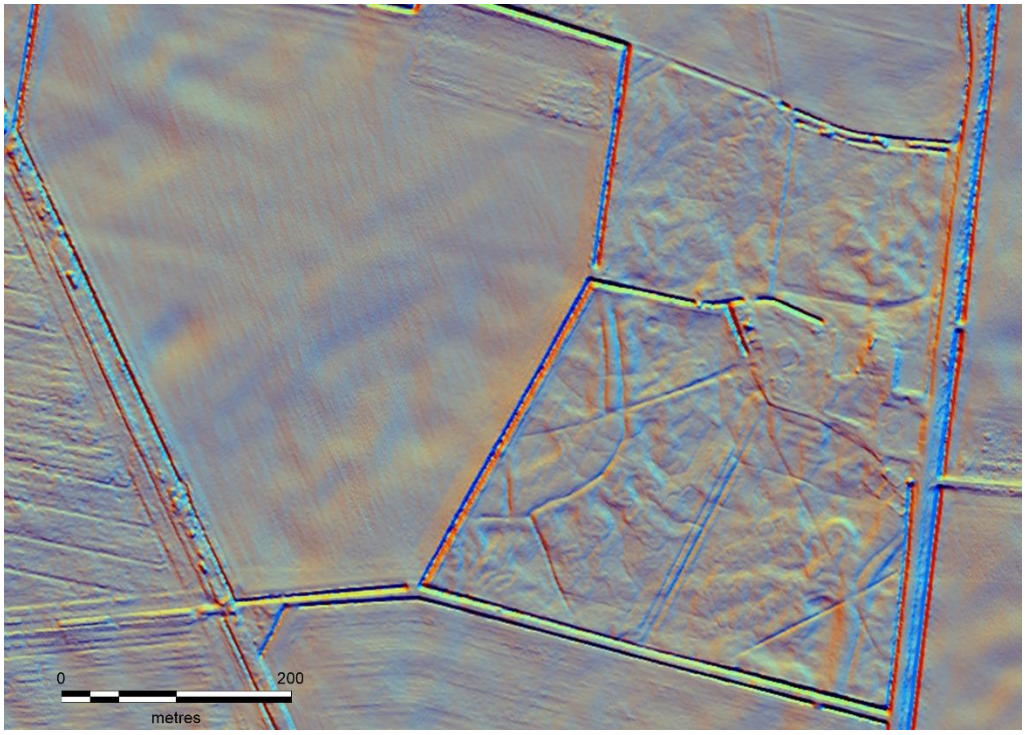

Figure A. A 16-Direction Hill-shaded model of DTM showing sub-parcels C-2-02, C-2-04 and C-2-05. Hill-shading casts an artificial light source across a landscape to reveal surface irregularities. Hill-shading from a single direction of light will not reveal those features that are in alignment with the light source. This visualisation combines the light and shade of 16 different directions of light. The visualisation can be further enhanced by exaggerating the vertical elevation and lowering the angle of the light source.

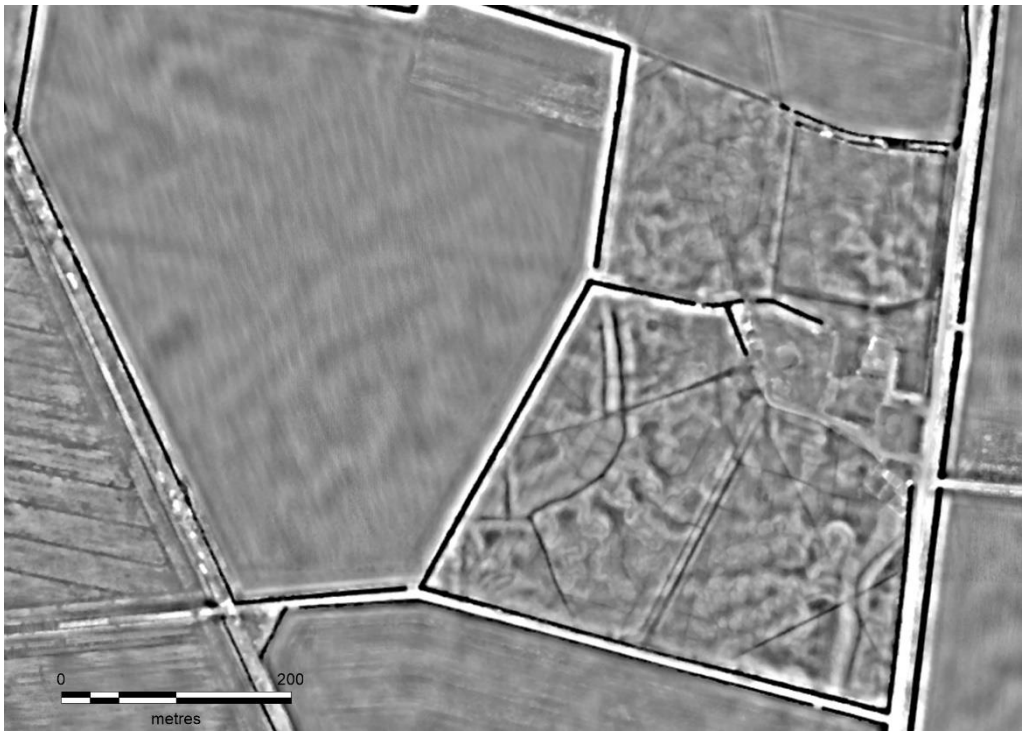

Figure B. Simple Local Relief Model (of DTM) showing sub-parcels C-2-02, C-2-04 and C-2-05. General relief models convey landscape scale topography at the expense of smaller scale features, including archaeological earthworks. This visualisation removes the general trend, eg hills and valleys to accentuate the appearance of the smaller scale features. In this visualisation the lighter tones represent banks and mounds, the darker, ditches and pits. This visualisation is particularly effective at revealing very low earthworks.

Further information and guidance on the use of LiDAR for archaeological prospection and the creation of visualisation from LiDAR data can be found in Crutchley and Crow (2009) and Kokalj and Hesse (2017).

APPENDIX 3: PARCEL A

Sub-parcel	Description of features recorded in this sub-parcel	
A-1-01	RODDONS & PALAEOCHANNELS	Three roddons run west to east across this narrow sub-parcel.
	POST MEDIEVAL	A short section of possible field boundary
	UNCERTAIN	Short sections of curving ditch, possibly waterchannels run along edge and middle of roddons.
A-1-02	RODDONS & PALAEOCHANNELS	Roddon with small tributaries runs south-west to north-east across this sub-parcel. An arc of possible palaeochannel is visible within the roddon.
	POST MEDIEVAL	A small pond stood in the far north-west corner of this sub-parcel, now filled in.
A-1-03	RODDONS & PALAEOCHANNELS	A roddon runs across the north-west corner of this sub-parcel and another two converge within this sub-parcel.
	MEDIEVAL/POST MEDIEVAL	Possible ridge and furrow runs near east to west across the converging roddons
	UNCERTAIN	Two short ditches, possible water channels, flank one of the roddons.
A-1-04	RODDONS & PALAEOCHANNELS	A narrow roddon curves south-west to north-east across this sub-parcel.
	POST MEDIEVAL	A possible field boundary.
A-1-05	RODDONS & PALAEOCHANNELS	Three narrow roddons run west to east across this sub-parcel. Palaeochannels meander along the more northerly example.
	POST MEDIEVAL	Small circular hollow visible on the LiDAR data
	UNCERTAIN	Narrow water channels run along the outer edges of two of the roddons.
A-1-06	RODDONS &	A narrow roddon meanders across the north-west corner of this sub-
	POST MEDIEVAL	Perpendicular arrangement of possible drainage ditches
A-1-07	RODDONS & PALAEOCHANNELS	Roddons run south-west to north-east across this sub-parcel.
	UNCERTAIN	A possible water channel runs along the edge of one of the roddons.
A-1-08	RODDONS & PALAEOCHANNELS	A lesser roddon and meandering palaeochannel.
A-1-09	RODDENS & PALAEOCHANNELS	A roddon runs east to west across the southern part of this sub-parcel.
	POST MEDIEVAL	A short section of sinuous field boundary is visible as cropmark.
	UNCERTAIN	There are sections of water channels and other ditches on and off the roddons.
A-1-10	RODDONS & PALAEOCHANNELS	A roddon runs across the north-west corner of this sub-parcel.
A-1-11	RODDENS & PALAEOCHANNELS	A broad roddon runs south to north through this sub-parcel.
	IRON AGE/ROMAN	A small enclosure and field boundaries lie on the roddon in the far south-west corner of this sub-parcel,
	MEDIEVAL/POST MEDIEVAL	A parallel arrangement of ditches to the south of Cloot House may be the remains of strip fields. These features survive as very shallow earthworks.
	POST MEDIEVAL	Cropmarks and shallow earthworks indicate the position of post medieval field boundaries, some of which were still extant in the 1940s but subsequently removed.
	UNCERTAIN	Possible water channels meander along the roddon

APPENDIX 3: PARCEL A

A-1-12	RODDONS & PALAEOCHANNELS	Sections of narrow roddon run south to north through this sub-parcel, as do short stretches of palaeochannel.
	POST MEDIEVAL	Two short field boundaries and a pond. The later survived as an earthwork in the 1940s but has now been filled in.
	UNCERTAIN	A curving ditch crosses a roddon.

APPENDIX 3: PARCEL B

Sub-parcel	Description of features recorded in this sub-parcel	
B-1-01	RODDONS & PALAEOCHANNELS	Narrow roddons and palaeochannels meander west to east across this sub-parcel.
	POST MEDIEVAL	Field boundaries and/or drainage ditches.
B-1-02	RODDONS & PALAEOCHANNELS	Narrow roddons and palaeochannels meander west to east across this sub-parcel.
	POST MEDIEVAL	Field boundaries and/or drainage ditches.
B-1-03	RODDONS & PALAEOCHANNELS	Narrow roddons and palaeochannels run west to east across this sub-parcel.
	POST MEDIEVAL	A post medieval field boundary.
	UNCERTAIN	A short L-shaped ditch of unknown origin lies on one of the roddons.
B-1-04	IRON AGE/ROMAN	A section of possible trackway curves through this sub-parcel.
B-1-05	RODDONS & PALAEOCHANNELS	A narrow roddon and palaeochannel run west to east through this sub-parcel
B-1-06	RODDONS & PALAEOCHANNELS	Roddons and palaeochannels meander through this sub-parcel.
	UNCERTAIN	A short L-shaped ditch of unknown origin.
B-1-07	RODDONS & PALAEOCHANNELS	Roddons and palaeochannels meander through this sub-parcel.
	IRON AGE/ROMAN	A section of possible trackway curves through this sub-parcel.
B-1-08	RODDONS & PALAEOCHANNELS	Roddons and palaeochannels meander through this sub-parcel and converge along its eastern edge.
	POST MEDIEVAL	Possible field boundary.
	UNCERTAIN	A possible enclosure and ditches are visible to the west of Whipchicken Farm.
B-1-09	RODDONS & PALAEOCHANNELS	Several small roddons converge with a more substantial roddon along the southern edge of this sub-parcel. Palaeochannels meander along the roddons.
	IRON AGE/ROMAN	Three substantial linear features run through this sub-parcel. The first (MLI20252) extends into B-1-10 and B-1-11. It is oriented north-west to south-east but with some deviations. In this sub-parcel, this feature comprises a broad flat-topped bank flanked by narrow ditches. The second feature runs south-west to north-east and on into B-1-12, B-2 and C-2-01, it is also erratic in parts. In this sub-parcel this feature is visible only as narrow ditches but an inner bank is present in the others. The third linear is a curving swathe of three or more ditches running along the roddon. The first two examples may be drove roads or boundary banks, the latter may be a trackway. Other more fragmentary ditched may be of similar date.
	POST MEDIEVAL	Field boundaries
	UNCERTAIN	Short ditches of uncertain origin.

APPENDIX 3: PARCEL B

B-1-10	RODDONS & PALAEOCHANNELS	A broad roddon and palaeochannel meander south-west to north-east through this sub-parcel.
	IRON AGE/ROMAN	The drove road or boundary ditch described in B-1-09 continues through this sub-parcel (MLI20252). Along the eastern edge of this sub-parcel there are fragments of field boundaries and possible enclosures that hint at an area of settlement or other activity (MLI22032).
	POST MEDIEVAL	Whipchicken Farm was extant in the 1940s but later demolished and levelled (MLI23861). Cropmarks indicate where it stood. The remains of former post medieval field boundaries north-east of the farm are also visible.
	UNCERTAIN	There are numerous ditches of uncertain origin along the eastern edge of this sub-parcel.
B-1-11	RODDONS & PALAEOCHANNELS	A broad roddon runs along the western edge of this sub-parcel.
	IRON AGE/ROMAN	The drove road or boundary ditch described in B-1-09 continues through this sub-parcel (MLI20252).
	UNCERTAIN	There are several discrete ditches and banks of uncertain origin.
B-1-12	IRON AGE/ROMAN	The drove road or boundary ditch described in B-1-09 continues through this sub-parcel.
	POST MEDIEVAL	Field boundaries.
B-1-13	RODDONS & PALAEOCHANNELS	A broad roddon runs south-west to north-east through this sub-parcel.
	IRON AGE/ROMAN	Two possible trackways converge in this sub-parcel, one continues from B-1-09.
	MEDIEVAL/POST MEDIEVAL	There is a perpendicular arrangement of very straight ditches in the northern half of this sub-parcel, which continue into C-2-02. Some sections are on the broad roddon but they extend onto the lower ground too. These may be boundaries or drains associated with a field system.
	POST MEDIEVAL	Whitebread Hall stood in the south-west corner of this sub-parcel (MLI22032). It was extant in the 1940s but was later demolished and cropmarks indicate where it stood. A slightly sinuous curving ditch, although at odds with the current field system, is consistent with the location of a former post medieval field boundary depicted on the 1887 OS map.
	UNCERTAIN	A rectangular cropmark, possible a large pit but may not be of archaeological origin.
B-1-14	RODDONS & PALAEOCHANNELS	A broad roddon and a short section of palaeochannel run south to north through this sub-parcel.
	IRON AGE/ROMAN	A small poygonal enclosure, with a large internal pit or hollow, lies on the eastern flank of the roddon and may be flanked by rectangular fields (MLI22032). One of the trackways described in B-1-13 may continue into this sub-parcel.
	POST MEDIEVAL	Field boundary.
	UNCERTAIN	Several ditches of uncertain origin.

APPENDIX 3: PARCEL B

B-2	RODDONS & PALAEOCHANNELS	A narrow roddon and palaeochannel meander north-west to south-east through this sub-parcel
	IRON AGE/ROMAN	The drove road/boundary ditch described in B-1-09 continues through this sub-parcel. Here it appears as a broad bank flanked by ditches (MLI20004).

APPENDIX 3: PARCEL B-5

Sub-parcel	Description of features recorded in this sub-parcel	
B-5 (south of South Holland Main Drain)	RODDONS & PALAEOCHANNELS	Two roddons meander west to east across this area. There are numerous short sections of palaochannel on and off of the roddons.
	IRON AGE/ROMAN	A possible rectilinear enclosure south of Holland Main Drain.
	MEDIEVAL	A short section of a linear feature that is near parallel to Queens Bank passes through this parcel. It comprises a bank, flanked by ditches. This feature can be traced (with gaps) from this parcel to the east side of Providence House, where a well preserved section has been scheduled. Although it is described as a drove in MLI20346 the schedule details describe this feature as the medieval boundary of the monastic lands of Crowland Abbey (NHLE1009980).
	POST MEDIEVAL	Various field boundaries and drainage ditches, mostly oriented north to south of east to west. Some of these features are depicted on the 1887 OS map or were still extant in the 1940s.
	UNCERTAIN	Water channels run along the roddons and other short ditches. There are also three possible mounds, these appear as light soilmarks but they may not be of archaeological origin.
B-5 (north of South Holland Main Drain)	RODDONS & PALAEOCHANNELS	Distinct roddons run along the northern and eastern edge of this parcel but there is also an amorphous area of slightly higher ground between the two roddons.
	IRON AGE/ROMAN	There are complex features on the higher ground in this parcel and extending into some of the lower areas. These include the erratic path of a raised drove road or boundary ditch; sinous ditches running along the the roddons that may be waterchannels or trackways; a large curvilinear enclosure and a possible salt production site. Roman occupation and salting making debris has been recoved from this area (MLI20332 & MLI22093).
	MEDIEVAL	Four parallel ditches running along the northern edge of this parcel are part of an open field system that was centred around Goll Grange (MLI22093) to the north of this parcel. The fields survived as earthworks into the 1940s.
	MEDIEVAL/POST MEDIEVAL	A fragment of ridge and furrow near South Holland Main Drain.
	POST MEDIEVAL	A perpendicular arrangement of field boundaries and drainage ditches and a small oval pond.
	UNCERTAIN	Several short ditches of uncertain origin.

APPENDIX 3: PARCEL C

Sub-parcel	Description of features recorded in this sub-parcel	
C-1-01	RODDONS & PALAEOCHANNELS	A broad roddon runs west to east across the northern half of this sub-parcel. Smaller roddons, and some palaeochannels converge with this large roddon from the south.
	IRON AGE/ROMAN	The most complex cropmarks are concentrated on the rodden and in the north-east corner of this sub-parcel. These comprise two ditch-defined trackways flanked by rectilinear enclosures and larger enclosures or fields. One of the trackways may continue further west and there are possible water channels running along the less roddens. These features correlate with MLI20005.
	POST MEDIEVAL	Field boundaries and drainage ditches. The latter include a pair of parallel ditches, set approximately 30m apart. These continue eastward through C-1-03 and C-1-08.
	UNCERTAIN	There are some ditches and hollows that do not appear to be part of the Iron Age/Roman landscape.
C-1-02	RODDONS & PALAEOCHANNELS	Lesser roddons and palaeochannels runs south to north through this sub-parcel.
	MEDIEVAL/POST MEDIEVAL	A long ditch runs from the south-west to north-east corners of this sub-parcel. It appears to be part of a perpendicular arrangement of ditches that continues into C-1-03 and C-1-04. These ditches may be boundaries or drains associated with a field system.
	POST MEDIEVAL	Field boundary
	UNCERTAIN	Several ditches of uncertain origin.
C-1-03	RODDONS & PALAEOCHANNELS	A broad roddon runs west to east across most of this sub-parcel, a smaller roddons joins it from the south.
	IRON AGE/ROMAN	The two trackways described in C-1-01 converge just inside the western edge of this sub-parcel, it then curves gently northward. It is flanked by various enclosures and enclosed areas. These features correlate with MLI20005. There are hints of other enclosures further south in this sub-parcel, where Romano-British artefacts have been recovered (MLI23199).
	MEDIEVAL/POST MEDIEVAL	A small area of ridge and furrow. There is a perpendicular arrangement of ditches in the south-east corner of this sub-parcel. These features continue into C-1-02 and C-1-04. These ditches may be boundaries or drains associated with a field system.
	POST MEDIEVAL	Field boundaries and drainage ditches. The pair of drainage ditches observed in C-1-01 continue through this sub-parcel. A similar pair runs north to south through this sub-parcel and into C-1-04 and C-1-05.
	UNCERTAIN	Numerous short ditches of unknown origin.
C-1-04	RODDONS & PALAEOCHANNELS	A lesser roddon runs along the eastern edge of this sub-parcel.
	MEDIEVAL/POST MEDIEVAL	A perpendicular arrangement of ditches, which continues into C-1-02 and C-1-03 and may be boundaries or drains associated with a field system.
	POST MEDIEVAL	Pair of drainage ditches, continue northward and southward into C-1-03 and C-1-05.
	UNCERTAIN	A short ditch.

APPENDIX 3: PARCEL C

C-1-05	RODDONS & PALAEOCHANNELS	A narrow roddon runs south to north.
	POST MEDIEVAL	The pair of parallel drainage ditches observed in C-1-04 continue into this sub-parcel
	UNCERTAIN	A ditch of uncertain origin.
C-1-06	RODDONS & PALAEOCHANNELS	This sub-parcel straddles ground between a narrow roddon and a low silt ridge that runs south to north.
	IRON AGE/ROMAN	A rectilinear enclosure lies on the western edge of the silt ridge. A pair of ditches to the south may be part of a trackway.
	MEDIEVAL/POST MEDIEVAL	Three parallel ditches traverse the south-east corner of this sub-parcel. The gap between the more northerly two ditches is approximately 18m and between the southerly two, 30m. These features continue eastward into C-1-08 and westward through C-1-07 and beyond the survey area to TF291 125 where the northerly pair align with the ditches that flank an extant section of Hull's Drove. MLI22262 records a medieval iteration of Hull's Drove on a similar trajectory to this cropmark. It is possible that these ditches are the remains of this drove road and verge.
	UNCERTAIN	Several ditches of uncertain origin.
C-1-07	RODDONS & PALAEOCHANNELS	This sub-parcel lies on the edge of a low silt ridge.
	IRON AGE/ROMAN	A ditch running from the north-east corner of this sub-parcel may be the continuation of a trackway that runs through C-1-08. A series of elongated enclosures linked by irregular ditches. These features correlate with MLI20245. Roman, medieval and post medieval finds have been recovered from the vicinity of one of these enclosures, the Roman finds indicate the presence of a settlement and salt production site (MLI23177, MLI23178 and MLI23179).
	MEDIEVAL/POST MEDIEVAL	The possible remains of an iteration of Hull's Drove, as described in C-1-06, crosses the north-west corner of this sub-parcel.
	POST MEDIEVAL	A pair of ditches run near north to south through this sub-parcel. Both sets are likely to be drainage ditches. There is also a pond.
C-1-08	IRON AGE/ROMAN	There are complex cropmarks in the north-west corner of this sub-parcel and in the southern third of this sub-parcel. The north-west corner contains a T junction of trackways flanked by enclosures and fields, which correlate with MLI20005. The group to the south contains a forking trackway, a large curvilinear enclosure and several groups of enclosures. This group correlates with MLI20246.
	MEDIEVAL/POST MEDIEVAL	The possible remains of an iteration of Hull's Drove, as described in C-1-06, crosses south-west to north-east across the middle of this sub-parcel.
	POST MEDIEVAL	Shepherd's House (MLI23881) was extant in the 1940s but later demolished and the ground converted to cultivation. It now produces cropmarks. The parallel ditches observed in C-1-02 and others continue eastward and there are field boundaries.
	UNCERTAIN	Numerous ditches of unknown origin.

APPENDIX 3: PARCEL C

C-2-01	RODDONS & PALAEOCHANNELS	A narrow roddon runs north-west to south-east through this sub-parcel.
	IRON AGE/ROMAN	The drove road/boundary ditch described in B-1-09 continues through this sub-parcel. Here it is defined by a broad bank flanked by narrow ditches. It takes an irregular path across the roddon. A substantial curvilinear enclosure straddles the roddon. It has and outer ditch and is flanked by small rectilinear enclosures. Trackways, field boundaries and other ditches radiate out from this enclosure. These features correlate with MLI20004.
	UNCERTAIN	A pale soilmark visible on 1940s air photos has the appearance of a levelled mound. However this feature is not apparent on later imagery, therefore its origin is not certain.
C-2-02	RODDONS & PALAEOCHANNELS	A broad roddon runs south-west to north-east through this sub-parcel and is joined by smaller examples.
	IRON AGE/ROMAN	A trackway comprising multiple sections of short ditches runs south-west to north-east along the broad roddon. It is a continuation of the feature visible in B-1-13 and continues north-eastward into C-2-03. In this sub-parcel this trackway is flanked by three clusters of rectilinear enclosures, each with smaller internal and external enclosures. Other possible trackways link the enclosure to others further north in C-2-01 and C-2-03 and a substantial water channel on the south-east corner of this sub-parcel. These features correlate with MLI20004.
	MEDIEVAL/POST MEDIEVAL	There is a perpendicular arrangement of very straight ditches in the north-west quadrant of this sub-parcel, some suggest a large rectilinear enclosure cut by the disused railway line. These features continue into B-1-13. Some sections are on the broad roddon but they continue across the lower ground too. These may be boundaries or drains associated with a field system.
	POST MEDIEVAL	Several field boundaries.
	UNCERTAIN	Several ditches of uncertain origin.
C-2-03	RODDONS & PALAEOCHANNELS	A broad roddon runs south-west to north-east through this sub-parcel.
	IRON AGE/ROMAN	A trackway runs along the centre of the roddon, continuing from C-2-02. Here it is visible as two well-defined ditches, with central bank or metalling in some parts. Off-set from this north-side of this trackway is a series of fragmentary enclosures that extend from the large enclosure described in C-2-01 to the northern edge of this sub-parcel. Iron Age pottery and evidence of Roman salterns have been found in this area (MLI22036, MLI23189, MLI23191 and MLI23196). These enclosures run along the northern edge of the broad roddon. The land between the enclosures and trackway is divided by occasional field boundaries. These features correlate with MLI20004.
	POST MEDIEVAL	Several field boundaries.
	UNCERTAIN	A pale soilmark, which may be the remains of a levelled mound.

APPENDIX 3: PARCEL C

C-2-04	RODDONS & PALAEOCHANNELS	Roddons converge in the north-west corner of this sub-parcel. It appears that this sub-parcel has not been ploughed in modern times and the LiDAR reveals some of the finer details of the structure of the roddons.
	IRON AGE/ROMAN	The trackway described in C-2-02 and C-2-03 passes briefly through the north-east corner of this sub-parcel. The short section in this sub-parcel survives as a low earthwork. Two ditches, running north-west to south-east, may be part of the field system observed in those sub-parcels to the north and west. These also survive as shallow earthworks.
	POST MEDIEVAL	Field boundaries.
C-2-05	RODDONS & PALAEOCHANNELS	Roddons converge in to the north-west corner of this sub-parcel. It appears that this sub-parcel has not been ploughed in modern times and the LiDAR reveals some of the finer details of the structure of the roddons.
	IRON AGE/ROMAN	An arrangement of ditches that are likely to be the continuation of the field system observed in C-2-02. These features correlate with MLI20004.
	POST MEDIEVAL	Field boundaries and a pond.
	UNCERTAIN	Several ditches of uncertain origin.

APPENDIX 3: PARCEL D

Sub-parcel	Description of features recorded in this sub-parcel	
D-1-01	RODDONS & PALAEOCHANNELS	A broad roddon runs south to north along the western edge of this sub-parcel. There are lesser roddons meandering north to south in the eastern half of this sub-parcel.
	IRON AGE/ROMAN	A rectilinear enclosure lies east of the of the broad roddon. Possible trackways lead to the north and west from the enclosure and there are smaller enclosures to the south-east.
	POST MEDIEVAL	Field boundaries and drainage ditches, mostly oriented north to south.
	UNCERTAIN	Several long ditches of unknown origin.
D-1-02	RODDONS & PALAEOCHANNELS	A series of sinuous, lesser roddons run north to south, converging along the line now taken by the South Holland Main Drain.
	IRON AGE/ROMAN	A rectilinear enclosure straddles the edge of one of the lesser roddons and is flanked to the north and south by smaller enclosures. These features coincide with the settlement and salt making site described in MLI22250. To the immediate west runs a north to south aligned trackway, which appears to widen around a long pit or pond. There are field boundaries to the west, on land between the roddons.
	POST MEDIEVAL	Several of north to south aligned linear features, these likely to be drainage ditches.
	UNCERTAIN	Several ditches of unknown function, some run along the lesser roddons, others across the land between the roddons.
D-1-03	RODDONS & PALAEOCHANNELS	A narrow roddon meanders north to south across this sub-parcel.
	UNCERTAIN	Several ditches of unknown origin.
D-2-01	RODDONS & PALAEOCHANNELS	Several lesser roddons converge into one, which continues eastward and joins a broader roddon.
	IRON AGE/ROMAN	A large curvilinear enclosure straddles an area of roddon. It appears to lie between two trackways and there are fragments of of small rectilinear enclosure and fields to the east and the west. These features correlate those described in MLI22251.
	POST MEDIEVAL	Several of the cropmark and soilmark features observed in this sub-parcel coincide with features depicted on the 1887 OS map. This includes a small rectilinear enclosure within the circuit of the large curvilinear enclosure and a short section of one of the trackway ditches. A pond and other field boundaries were also recorded.
	UNCERTAIN	Ditches of uncertain origin.
D-2-02	RODDONS & PALAEOCHANNELS	Most of the sub-parcel lies on a broad roddon that runs east to west.
	IRON AGE/ROMAN	A trackway runs east to west along the northern edge of this sub-parcel and into D-3-02. Here it is defined by two or three ditches. Ditches extending northwards from this trackway are associated with the fields described in D-2-01. This feature correlates with MLI22251.
D-2-03	RODDONS & PALAEOCHANNELS	All of this sub-parcel lies on a broad roddon that curves north-east to the north-west.

APPENDIX 3: PARCEL D

D-2-04	RODDONS & PALAEOCHANNELS	The southern edge of a broad roddon runs along the northern edge of this sub-parcel, a lesser roddon meanders across its south-west corner.
	IRON AGE/ROMAN	Some of the linear features suggest a deep curve of trackway flanked to the north by fields. Some of these feature correlate with MLI20442.
	POST MEDIEVAL	Several of the cromark and soilmarks features in this field coincide with drains and fields boundaries depicted on the 1887 OS map. An L-shaped feature, formed of low banks and a narrow ditch may be the remains of a drainage channel. Some of these feature correlate with MLI20442.
	UNCERTAIN	Several short ditches of uncertain origin, some correlate with MLI20442.
D-3-01	RODDONS & PALAEOCHANNELS	A broad roddon runs south to north across the western half of this sub-parcel, there are narrow roddons in the eastern half. A network of narrow sinuous palaeochannels cut across the broad roddon.
	IRON AGE/ROMAN	A trackway runs east to west across the south-west corner of this sub-parcel, it continues eastward through D-3-02 and D-2-02. North of the trackway an irregular arrangement of ditches suggests a field system, possibly a continuation of the fields observed near the enclosure in D-2-01. Some of these features correlate with some of the features descrived in MLI20443.
	UNCERTAIN	There are several ditches of unknown origin in this sub-parcel.
D-3-02	RODDONS & PALAEOCHANNELS	A broad roddon runs south to north through the middle of this sub-parcel. A lesser roddon merges with it from the east. A palaeochannel meanders along the course of the lesser roddon in tight loops.
	IRON AGE/ROMAN	A drove road or boundary bank runs east to west along the northern edge of this sub-parcel, it continues westward through D-3-02 and eastward through D-2-02. An erratic drove road or boundary bank runs approximately north to south through this sub-parcel, and continues through D-3-03 and D-3-04. In this sub-parcel it is defined by two ditches. These features correlate with some features described in ML20444.
	POST MEDIEVAL	There is a network of straight drainage ditches across this sub-parcel, one of which is depicted on the late 19th century OS map. A possible drainage ditch that runs north-west to south-east across this sub-parcel, D-3-03 and D-3-04 may also be of post medieval date.
	UNCERTAIN	There are several ditches of unknown origin in this sub-parcel.

APPENDIX 3: PARCEL D

D-3-03	RODDONS & PALAEOCHANNELS	A broad roddon runs across the north-east corner of this sub-parcel. A lesser roddons runs northwest to south-east across the middle and south-west corner of this sub-parcel.
	IRON AGE/ROMAN	The drove road or boundary bank described in D-3-02 continues across this sub-parcel. Here is defined by a broad bank flanked by narrow ditches and its path is sinuous. A ditch to the east of the boundary is probably associated with the putative field system in D-2-04 and an irregular ditch to the west may be of similar origin. Possible water channels run along the edges of the lesser roddons. These features correlate with some features described in ML20444.
	POST MEDIEVAL	There is a network of straight drainage ditches across this sub-parcel, one of which is depicted on the late 19th century OS map. The possible drainage ditch described in D-3-02 continues through this sub-parcel.
	UNCERTAIN	There are several ditches of unknown origin in this sub-parcel.
D-3-04	RODDONS & PALAEOCHANNELS	Narrow roddons meander across this sub-parcel in deep loops.
	IRON AGE/ROMAN	A drove road or trackway runs across the south-west corner of this sub-parcel and perhaps along the western edge. There is a unusual arrangement of ditches around and across one of the narrow roddons. Ditches appear to run around the higher ground of the roddons, creating erratic shapes and the pair of 'enclosures'. WIthin this bound land short ditches run across the width of the roddon and seeming stop short of the bounding ditch, perhaps indicating the former presence of banks. Features resembling a raised trackway leading to a cluster of embanked pits on the lower ground inside one of the 'enclosures' may be the remains of salt making processes. These features are contiguous with complex cropmarks to the south-east, which outside of the area of this survey. These features correlate with some features described in ML20444.
	POST MEDIEVAL	There is a network of straight drainage ditches across this sub-parcel, one of which is depicted on the late 19th century OS map. The possible drainage ditch described in D-3-02 continues through this sub-parcel. Another drainage ditch, flanked by upcast, runs east to west across this sub-parcel.
	UNCERTAIN	There are several ditches of unknown origin in this sub-parcel.

APPENDIX 3: PARCEL D

D-3-05	RODDONS & PALAEOCHANNELS	A narrow roddon meanders across this sub-parcel.
	IRON AGE/ROMAN	A drove road or trackway runs across the north-north-west to south-south-east across this sub-parcel and continues southward into D-4-06 and northward into D-4-03. In this sub-parcel it is defined by a broad bank flanked by ditches. At one point it widens around an elongated pit or hollow. To the east the is flanked by fields which run into an area of complex cropmarks, which is not included in this survey. These features correlate with some features described in ML20444.
	POST MEDIEVAL	This sub-parcel is crossed by several drainage ditches
D-3-06	IRON AGE/ROMAN	The drove road or trackway descrived in D-3-05 continues southward. Here is defined by intermittant banks and ditches. Ditches to the east may be part of the field system also described in D-3-05 and to the east there is a pair of ditches that may be either a trackway or waterchannels. These features correlate those described in ML20444.
	MEDIEVAL/POST MEDIEVAL	A bundle of straight parallel ditches running in the same orientation as the current field boundaries, may be the remains of strip fields.
	UNCERTAIN	Ditches of uncertain origin.
D-4	RODDONS & PALAEOCHANNELS	Narrow roddons meander across the south-west and north-east corners of this sub-parcel.
	IRON AGE/ROMAN	Short sections of possible trackways are aligned north to south and near east to west. Fine cropmarks in the south-east corner suggest a small rectilinear enclosure.
	MEDIEVAL/POST MEDIEVAL	A bundle of straight parallel ditches running in the same orientation as the current field boundaries, may be the remains of strip fields.
	POST MEDIEVAL	Drainage ditches or field boundaries.
	UNCERTAIN	Several ditches of unknown origin.
D-5-01	RODDONS & PALAEOCHANNELS	A broad roddon runs east to west through this sub-parcel.
	IRON AGE/ROMAN	A trackway runs east to west across along the broad roddon and continues into D-6. To the north there are fragmentary cropmarks that suggest small enclosure and field boundaries. Short ditches to the south of the trackway may also be field boundaries. These features correlate those described in ML22296.
	POST MEDIEVAL	Several field boundaries or drainage ditches, some were extant on air photos taken the 1940s.
	UNCERTAIN	Ditches of uncertain origin.
D-5-02	RODDONS & PALAEOCHANNELS	A narrow roddon runs south-west to north-east across this sub-parcel.
	IRON AGE/ROMAN	An L-shaped double-ditched feature may be a trackway. It is abutted by several irregular ditches, some of which appear to demarcated the limits of the narrow roddon. This may be a salt production site.
	UNCERTAIN	A ditch of uncertain origin.

APPENDIX 3: PARCEL D

D-6	RODDONS & PALAEOCHANNELS	A broad roddon runs east to west across a large part of this sub-parcel.
	IRON AGE/ROMAN	A section of trackway oriented north-east to south-west is probably a continuation of the trackway described in D-5-01. To the south-west are a series of small fields and rectilinear enclosures arranged across the width of the roddon. These features correlate with those described in ML22262.
	MEDIEVAL/POST MEDIEVAL	Bundles of straight parallel ditches running in the same orientation as the current field boundaries, may be the remains of strip fields.
	POST MEDIEVAL	A short section of field boundary.
	UNCERTAIN	Short ditches of uncertain origin.

APPENDIX 4: HISTORIC ENGLAND ARCHIVE COVERSEARCHES

The documents below are the Historic England Archive air photo coversearches commissioned for this survey.
These coversearches list all of the prints and negatives held by the collection for the survey area. However, not all of the images on these lists are available as prints or digital images. Those for which only the negatives were held at the time of survey are not available to view and have not been examined. These are marked by a strikethrough.
Occasionally, some prints have previously been mis-laid or mis-filed and are not available at the time of survey. These are also marked by a strikethrough.
Any notes or remarks within the body of these documents refer to HEA collection itself and not this report, specifically 'SEE PRINTS' against some of the specialist air photos.
Some columns from the coversearches are omitted here to save space (from the vertical coversearch columns headed: run, sortie quality, focal length, film details (in inches) and film held by; from the specialist coversearch column headed: what can you order?)

HISTORIC ENGLAND
Air Photographs

Historic England

Full single listing - Verticals, Standard order
Customer enquiry reference: 144141

Sortie number	Library number	Camera position	Frame number	Held	Centre point	Date	Scale 1:
RAF/106G/UK/1489	254	RP	3264	P	TF 361 162	09 MAY 1946	9800
RAF/106G/UK/1489	254	RP	3265	P	TF 353 162	09 MAY 1946	9800
RAF/106G/UK/1489	254	RP	3276	P	TF 271 161	09 MAY 1946	9800
RAF/106G/UK/1489	254	RP	3277	P	TF 264 161	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4183	P	TF 247 144	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4184	P	TF 254 144	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4185	P	TF 260 144	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4186	P	TF 267 144	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4187	P	TF 274 144	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4188	P	TF 280 145	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4189	P	TF 287 145	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4190	P	TF 294 145	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4196	P	TF 333 146	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4197	P	TF 340 146	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4198	P	TF 347 146	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4301	P	TF 245 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4302	P	TF 251 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4303	P	TF 258 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4304	P	TF 264 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4305	P	TF 271 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4306	P	TF 277 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4307	P	TF 284 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4308	P	TF 291 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4309	P	TF 297 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4310	P	TF 304 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4311	P	TF 310 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4312	P	TF 317 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4313	P	TF 323 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4314	P	TF 330 125	09 MAY 1946	9800
RAF/106G/UK/1489	254	RS	4315	P	TF 336 125	09 MAY 1946	9800
RAF/106G/UK/1704	450	RP	3056	P	TF 272 121	28 AUG 1946	9800
RAF/106G/UK/1704	450	RP	3057	P	TF 266 123	28 AUG 1946	9800
RAF/106G/UK/1704	450	RS	4046	P	TF 329 123	28 AUG 1946	9800
RAF/106G/UK/1704	450	RS	4047	P	TF 324 125	28 AUG 1946	9800
RAF/106G/UK/1704	450	RS	4048	P	TF 319 126	28 AUG 1946	9800

APPENDIX 4: HISTORIC ENGLAND ARCHIVE COVERSEARCHES

Sortie number	Library number	Camera position	Frame number	Held	Centre point	Date	Scale 1:
RAF/106G/UK/1704	450	RS	4049	P	TF 313 128	28 AUG 1946	9800
RAF/106G/UK/1704	450	RS	4050	P	TF 307 130	28 AUG 1946	9800
RAF/106G/UK/1704	450	RS	4051	P	TF 302 131	28 AUG 1946	9800
RAF/106G/UK/1704	450	RS	4052	P	TF 296 133	28 AUG 1946	9800
RAF/106G/UK/1704	450	RS	4053	P	TF 290 135	28 AUG 1946	9800
RAF/106G/UK/1704	450	RS	4054	P	TF 284 137	28 AUG 1946	9800
RAF/106G/UK/1704	450	RS	4055	P	TF 279 138	28 AUG 1946	9800
RAF/106G/UK/1704	450	RS	4056	P	TF 273 140	28 AUG 1946	9800
RAF/106G/UK/1704	450	RS	4057	P	TF 267 142	28 AUG 1946	9800
RAF/CPE/UK/2054	637	FP	1204	P	TF 281 140	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FP	1205	P	TF 280 138	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FP	1206	P	TF 280 135	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FP	1207	P	TF 280 133	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FP	1208	P	TF 279 130	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FP	1209	P	TF 279 128	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FP	1210	P	TF 279 126	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FS	2199	P	TF 263 156	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FS	2200	P	TF 262 153	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FS	2201	P	TF 262 151	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FS	2202	P	TF 262 148	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FS	2203	P	TF 262 146	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FS	2204	P	TF 261 144	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FS	2205	P	TF 261 141	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FS	2206	P	TF 261 139	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FS	2207	P	TF 260 136	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FS	2208	P	TF 260 134	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FS	2209	P	TF 260 132	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FS	2210	P	TF 260 129	08 MAY 1947	6000
RAF/CPE/UK/2054	637	FS	2211	P	TF 260 127	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3196	P	TF 274 161	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3197	P	TF 273 158	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3198	P	TF 273 156	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3199	P	TF 273 154	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3200	P	TF 273 151	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3201	P	TF 272 149	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3202	P	TF 272 146	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3203	P	TF 272 144	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3204	P	TF 271 142	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3205	P	TF 271 139	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3206	P	TF 271 137	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3207	P	TF 270 134	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3208	P	TF 270 132	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3209	P	TF 270 130	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3210	P	TF 270 127	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RP	3211	P	TF 270 125	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RS	4204	P	TF 250 146	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RS	4205	P	TF 250 143	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RS	4206	P	TF 250 141	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RS	4207	P	TF 249 139	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RS	4208	P	TF 249 136	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RS	4209	P	TF 249 134	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RS	4210	P	TF 249 131	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RS	4211	P	TF 249 129	08 MAY 1947	6000

APPENDIX 4: HISTORIC ENGLAND ARCHIVE COVERSEARCHES

Sortie number	Library number	Camera position	Frame number	Held	Centre point	Date	Scale 1:
RAF/CPE/UK/2054	637	RS	4212	P	TF 250 127	08 MAY 1947	6000
RAF/CPE/UK/2054	637	RS	4213	P	TF 250 124	08 MAY 1947	6000
RAF/CPE/UK/2077	743	FP	1026	P	TF 251 144	18 MAY 1947	5880
RAF/CPE/UK/2077	743	FP	1027	P	TF 250 141	18 MAY 1947	5880
RAF/CPE/UK/2077	743	FP	1028	P	TF 250 137	18 MAY 1947	5880
RAF/CPE/UK/2077	743	FP	1029	P	TF 250 133	18 MAY 1947	5880
RAF/CPE/UK/2077	743	FP	1030	P	TF 250 130	18 MAY 1947	5880
RAF/CPE/UK/2077	743	FP	1031	P	TF 249 126	18 MAY 1947	5880
RAF/CPE/UK/2077	743	RP	3028	P	TF 240 139	18 MAY 1947	5880
RAF/CPE/UK/2077	743	RP	3029	P	TF 240 135	18 MAY 1947	5880
RAF/CPE/UK/2077	743	RP	3030	P	TF 240 131	18 MAY 1947	5880
RAF/CPE/UK/2077	743	RP	3031	P	TF 240 127	18 MAY 1947	5880
RAF/541/205	983	RP	3010	P	TF 337 124	20 NOV 1948	10000
RAF/541/205	983	RP	3011	P	TF 330 122	20 NOV 1948	10000
RAF/541/205	983	RP	3012	P	TF 323 120	20 NOV 1948	10000
RAF/541/205	983	RP	3039	P	TF 274 151	20 NOV 1948	10000
RAF/541/205	983	RP	3040	P	TF 267 150	20 NOV 1948	10000
RAF/541/205	983	RP	3041	P	TF 260 149	20 NOV 1948	10000
RAF/541/205	983	RP	3042	P	TF 253 147	20 NOV 1948	10000
RAF/541/205	983	RP	3043	P	TF 247 146	20 NOV 1948	10000
RAF/541/205	983	RP	3044	P	TF 240 144	20 NOV 1948	10000
RAF/541/205	983	RS	4010	P	TF 336 144	20 NOV 1948	10000
RAF/541/205	983	RS	4011	P	TF 329 142	20 NOV 1948	10000
RAF/541/205	983	RS	4012	P	TF 321 140	20 NOV 1948	10000
RAF/541/205	983	RS	4013	P	TF 314 138	20 NOV 1948	10000
RAF/541/205	983	RS	4014	P	TF 307 136	20 NOV 1948	10000
RAF/541/205	983	RS	4015	P	TF 300 134	20 NOV 1948	10000
RAF/541/205	983	RS	4016	P	TF 292 132	20 NOV 1948	10000
RAF/541/205	983	RS	4017	P	TF 285 130	20 NOV 1948	10000
RAF/541/205	983	RS	4018	P	TF 278 128	20 NOV 1948	10000
RAF/541/205	983	RS	4019	P	TF 271 126	20 NOV 1948	10000
RAF/541/205	983	RS	4020	P	TF 263 124	20 NOV 1948	10000
RAF/541/205	983	RS	4021	P	TF 256 122	20 NOV 1948	10000
RAF/541/205	983	RS	4039	P	TF 271 171	20 NOV 1948	10000
RAF/541/205	983	RS	4040	P	TF 264 169	20 NOV 1948	10000
OS/75192	9859	V	21	P	TF 337 132	08 JUN 1975	7500
OS/75192	9859	V	22	P	TF 329 131	08 JUN 1975	7500
OS/75192	9859	V	23	P	TF 321 131	08 JUN 1975	7500
OS/75192	9859	V	24	P	TF 315 131	08 JUN 1975	7500
OS/75192	9859	V	25	P	TF 308 132	08 JUN 1975	7500
OS/75192	9859	V	26	P	TF 302 132	08 JUN 1975	7500
OS/75192	9859	V	27	P	TF 296 132	08 JUN 1975	7500
OS/75192	9859	V	28	P	TF 290 133	08 JUN 1975	7500
OS/75193	9860	V	204	P	TF 339 144	08 JUN 1975	7500
OS/75193	9860	V	205	P	TF 345 143	08 JUN 1975	7500
OS/72351	10295	V	153	P	TF 351 169	23 AUG 1972	7500
OS/72351	10295	V	154	P	TF 358 169	23 AUG 1972	7500
OS/72352	10296	V	200	P	TF 352 157	23 AUG 1972	7500
OS/72352	10296	V	201	P	TF 345 157	23 AUG 1972	7500
OS/72352	10296	V	212	P	TF 269 157	23 AUG 1972	7500
OS/72352	10296	V	232	P	TF 243 144	23 AUG 1972	7500
OS/72352	10296	V	233	P	TF 250 144	23 AUG 1972	7500
OS/72352	10296	V	234	P	TF 257 144	23 AUG 1972	7500

APPENDIX 4: HISTORIC ENGLAND ARCHIVE COVERSEARCHES

Sortie number	Library number	Camera position	Frame number	Held	Centre point	Date	Scale 1:
OS/72352	10296	V	235	P	TF 264 145	23 AUG 1972	7500
OS/72352	10296	V	236	P	TF 271 145	23 AUG 1972	7500
OS/72352	10296	V	237	P	TF 278 145	23 AUG 1972	7500
OS/72352	10296	V	238	P	TF 284 144	23 AUG 1972	7500
OS/72352	10296	V	239	P	TF 291 144	23 AUG 1972	7500
OS/72352	10296	V	240	P	TF 298 144	23 AUG 1972	7500
OS/72352	10296	V	241	P	TF 305 144	23 AUG 1972	7500
OS/72352	10296	V	242	P	TF 312 144	23 AUG 1972	7500
OS/72352	10296	V	243	P	TF 319 144	23 AUG 1972	7500
OS/72352	10296	V	244	P	TF 325 144	23 AUG 1972	7500
OS/72352	10296	V	245	P	TF 332 144	23 AUG 1972	7500
OS/72352	10296	V	246	P	TF 339 144	23 AUG 1972	7500
OS/72352	10296	V	247	P	TF 346 144	23 AUG 1972	7500
OS/72352	10296	V	272	P	TF 314 134	23 AUG 1972	7500
OS/72352	10296	V	273	P	TF 307 134	23 AUG 1972	7500
OS/72352	10296	V	274	P	TF 300 134	23 AUG 1972	7500
OS/72352	10296	V	275	P	TF 292 134	23 AUG 1972	7500
OS/72352	10296	V	276	P	TF 285 133	23 AUG 1972	7500
OS/72352	10296	V	277	P	TF 278 133	23 AUG 1972	7500
OS/72352	10296	V	278	P	TF 271 133	23 AUG 1972	7500
OS/72352	10296	V	279	P	TF 264 133	23 AUG 1972	7500
OS/72352	10296	V	280	P	TF 257 132	23 AUG 1972	7500
OS/72352	10296	V	281	P	TF 250 132	23 AUG 1972	7500
OS/72352	10296	V	282	P	TF 243 132	23 AUG 1972	7500
OS/88231	13341	V	103	P	TF 358 172	13 AUG 1988	7600
~~OS/98075~~	~~22584~~	~~V~~	~~96~~	~~N~~	~~TF 349 154~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~97~~	~~N~~	~~TF 344 154~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~112~~	~~N~~	~~TF 269 154~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~113~~	~~N~~	~~TF 264 154~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~114~~	~~N~~	~~TF 259 154~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~136~~	~~N~~	~~TF 245 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~137~~	~~N~~	~~TF 250 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~138~~	~~N~~	~~TF 255 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~139~~	~~N~~	~~TF 260 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~140~~	~~N~~	~~TF 265 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~141~~	~~N~~	~~TF 270 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~142~~	~~N~~	~~TF 275 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~143~~	~~N~~	~~TF 280 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~144~~	~~N~~	~~TF 285 135~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~145~~	~~N~~	~~TF 290 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~146~~	~~N~~	~~TF 295 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~147~~	~~N~~	~~TF 300 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~148~~	~~N~~	~~TF 305 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~149~~	~~N~~	~~TF 310 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~150~~	~~N~~	~~TF 315 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~151~~	~~N~~	~~TF 320 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~152~~	~~N~~	~~TF 325 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~153~~	~~N~~	~~TF 330 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~154~~	~~N~~	~~TF 335 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98075~~	~~22584~~	~~V~~	~~155~~	~~N~~	~~TF 340 134~~	~~19 MAY 1998~~	~~6500~~
~~OS/98076~~	~~22585~~	~~V~~	~~268~~	~~N~~	~~TF 334 124~~	~~19 MAY 1998~~	~~6500~~
~~OS/98076~~	~~22585~~	~~V~~	~~269~~	~~N~~	~~TF 329 124~~	~~19 MAY 1998~~	~~6500~~
~~OS/98076~~	~~22585~~	~~V~~	~~270~~	~~N~~	~~TF 324 124~~	~~19 MAY 1998~~	~~6500~~

APPENDIX 4: HISTORIC ENGLAND ARCHIVE COVERSEARCHES

Sortie number	Library number	Camera position	Frame number	Held	Centre point	Date	Scale 1:
OS/98076	22585	V	271	N	TF 319 124	19 MAY 1998	6500
OS/98076	22585	V	272	N	TF 314 124	19 MAY 1998	6500
OS/98076	22585	V	273	N	TF 309 124	19 MAY 1998	6500
OS/98076	22585	V	274	N	TF 304 124	19 MAY 1998	6500
OS/98076	22585	V	275	N	TF 299 124	19 MAY 1998	6500
OS/98076	22585	V	276	N	TF 294 124	19 MAY 1998	6500
OS/98076	22585	V	277	N	TF 289 123	19 MAY 1998	6500
OS/98076	22585	V	278	N	TF 284 123	19 MAY 1998	6500
OS/98076	22585	V	279	N	TF 279 123	19 MAY 1998	6500
OS/98076	22585	V	280	N	TF 274 123	19 MAY 1998	6500
OS/98076	22585	V	281	N	TF 269 124	19 MAY 1998	6500
OS/98076	22585	V	282	N	TF 264 124	19 MAY 1998	6500
OS/98076	22585	V	283	N	TF 259 124	19 MAY 1998	6500
OS/98076	22585	V	284	N	TF 254 124	19 MAY 1998	6500
OS/98076	22585	V	285	N	TF 249 124	19 MAY 1998	6500
OS/98076	22585	V	286	N	TF 244 125	19 MAY 1998	6500
OS/98076	22585	V	305	N	TF 245 144	19 MAY 1998	6500
OS/98076	22585	V	306	N	TF 250 144	19 MAY 1998	6500
OS/98076	22585	V	307	N	TF 255 144	19 MAY 1998	6500
OS/98076	22585	V	308	N	TF 260 144	19 MAY 1998	6500
OS/98076	22585	V	309	N	TF 265 144	19 MAY 1998	6500
OS/98076	22585	V	310	N	TF 270 144	19 MAY 1998	6500
OS/98076	22585	V	311	N	TF 275 144	19 MAY 1998	6500
OS/98076	22585	V	312	N	TF 280 144	19 MAY 1998	6500
OS/98076	22585	V	313	N	TF 285 144	19 MAY 1998	6500
OS/98076	22585	V	314	N	TF 290 144	19 MAY 1998	6500
OS/98076	22585	V	315	N	TF 295 144	19 MAY 1998	6500
OS/98076	22585	V	324	N	TF 340 144	19 MAY 1998	6500
OS/98076	22585	V	325	N	TF 345 144	19 MAY 1998	6500
OS/98076	22585	V	326	N	TF 350 144	19 MAY 1998	6500
OS/98077	22586	V	14	N	TF 359 165	19 MAY 1998	6500
OS/98077	22586	V	15	N	TF 354 164	19 MAY 1998	6500
OS/98077	22586	V	16	N	TF 349 164	19 MAY 1998	6500
OS/98077	22586	V	32	N	TF 269 164	19 MAY 1998	6500
OS/02927B(Y)	24025	V	1030	N	TF 267 157	16 AUG 2002	10000
OS/02927B(Y)	24025	V	1039	N	TF 353 157	16 AUG 2002	10000
OS/02927B(Y)	24025	V	1074	N	TF 343 141	16 AUG 2002	10000
OS/02927B(Y)	24025	V	1075	N	TF 334 141	16 AUG 2002	10000
OS/02927B(Y)	24025	V	1076	N	TF 324 141	16 AUG 2002	10000
OS/02927B(Y)	24025	V	1077	N	TF 315 141	16 AUG 2002	10000
OS/02927B(Y)	24025	V	1078	N	TF 305 141	16 AUG 2002	10000
OS/02927B(Y)	24025	V	1079	N	TF 295 141	16 AUG 2002	10000
OS/02927B(Y)	24025	V	1080	N	TF 286 141	16 AUG 2002	10000
OS/02927B(Y)	24025	V	1081	N	TF 276 141	16 AUG 2002	10000
OS/02927B(Y)	24025	V	1082	N	TF 267 140	16 AUG 2002	10000
OS/02927B(Y)	24025	V	1083	N	TF 257 141	16 AUG 2002	10000
OS/02927B(Y)	24025	V	1084	N	TF 248 141	16 AUG 2002	10000
OS/02927B(Y)	24025	V	1099	N	TF 247 124	16 AUG 2002	10000
OS/02927B(Z)	24026	V	1164	N	TF 257 124	17 OCT 2002	10000
OS/02927B(Z)	24026	V	1165	N	TF 267 124	17 OCT 2002	10000
OS/02927B(Z)	24026	V	1166	N	TF 276 124	17 OCT 2002	10000
OS/02927B(Z)	24026	V	1167	N	TF 286 124	17 OCT 2002	10000
OS/02927B(Z)	24026	V	1168	N	TF 295 124	17 OCT 2002	10000

APPENDIX 4: HISTORIC ENGLAND ARCHIVE COVERSEARCHES

Sortie number	Library number	Camera position	Frame number	Held	Centre point	Date	Scale 1:
OS/02927B(Z)	24026	V	1169	N	TF 305 124	17 OCT 2002	10000
OS/02927B(Z)	24026	V	1170	N	TF 315 124	17 OCT 2002	10000
OS/02927B(Z)	24026	V	1171	N	TF 324 124	17 OCT 2002	10000
OS/02927B(Z)	24026	V	1172	N	TF 334 124	17 OCT 2002	10000
ADA/261(Y)	26409	V	202	N	TF 260 153	17 JUL 1985	7000
ADA/261(Y)	26409	V	203	N	TF 259 147	17 JUL 1985	7000
ADA/261(Y)	26409	V	204	N	TF 258 143	17 JUL 1985	7000
ADA/261(Y)	26409	V	205	N	TF 257 136	17 JUL 1985	7000
ADA/261(Y)	26409	V	206	N	TF 256 131	17 JUL 1985	7000
ADA/261(Y)	26409	V	211	N	TF 269 127	17 JUL 1985	7000
ADA/261(Y)	26409	V	212	N	TF 268 133	17 JUL 1985	7000
ADA/261(Y)	26409	V	213	N	TF 268 138	17 JUL 1985	7000
ADA/261(Y)	26409	V	214	N	TF 268 144	17 JUL 1985	7000
ADA/261(Y)	26409	V	215	N	TF 268 150	17 JUL 1985	7000
ADA/261(Y)	26409	V	216	N	TF 269 155	17 JUL 1985	7000
ADA/261(Y)	26409	V	217	N	TF 271 161	17 JUL 1985	7000
ADA/261(Y)	26409	V	223	N	TF 283 141	17 JUL 1985	7000
ADA/261(Y)	26409	V	224	N	TF 281 136	17 JUL 1985	7000
ADA/261(Y)	26409	V	225	N	TF 281 129	17 JUL 1985	7000
ADA/392(Y)	27095	V	120	N	TF 274 148	07 JUL 1988	10000
ADA/392(Y)	27095	V	121	N	TF 266 152	07 JUL 1988	10000
ADA/392(Y)	27095	V	141	N	TF 272 155	07 JUL 1988	10000
ADA/392(Z)	27096	V	221	N	TF 247 131	09 JUL 1988	10000
ADA/392(Z)	27096	V	222	N	TF 255 131	09 JUL 1988	10000
ADA/392(Z)	27096	V	223	N	TF 263 130	09 JUL 1988	10000

HISTORIC ENGLAND
Air Photographs

Historic England

Customer oblique listing - Obliques, Standard Order
Customer enquiry reference number: 144141

Photo reference (NGR and Index number)	Film and frame number		Original number	Date	Film type		Map Reference
TF 2312 / 1	AFL 61435	/ EAW004473		16 APR 1947	BW Cut Roll Film	5½ "	TF 239124
TF 2312 / 2	AFL 61435	/ EAW004471		16 APR 1947	BW Cut Roll Film	5½ "	TF 239123
TF 2312 / 3	AFL 61435	/ EAW004469		16 APR 1947	BW Cut Roll Film	5½ "	TF 237124
TF 2412 / 1	AFL 61435	/ EAW004470		16 APR 1947	BW Cut Roll Film	5½ "	TF 243129
TF 2615 / 1	NMR 1973	/ 236		28 JUL 1981	Black & white	70mm,120,220	TF 269150
TF 2615 / 2	NMR 1973	/ 237		28 JUL 1981	Black & white	70mm,120,220	TF 269150
TF 2616 / 3	NMR 1124	/ 227-228		13 APR 1977	Black & white	70mm,120,220	TF 267160
TF 2712 / 1	NMR 1973	/ 207		28 JUL 1981	Black & white	70mm,120,220	TF 279127
TF 2712 / 2	NMR 1973	/ 225		28 JUL 1981	Black & white	70mm,120,220	TF 273126
TF 2712 / 3	NMR 1973	/ 208		28 JUL 1981	Black & white	70mm,120,220	TF 279127
TF 2712 / 4	NMR 1973	/ 209		28 JUL 1981	Black & white	70mm,120,220	TF 279127
TF 2712 / 5	NMR 1973	/ 226		28 JUL 1981	Black & white	70mm,120,220	TF 273126
TF 2713 / 1	NMR 1530	/ 154-155		26 JUN 1979	Black & white	70mm,120,220	TF 278134
TF 2713 / 2	NMR 1530	/ 156-159		26 JUN 1979	Black & white	70mm,120,220	TF 279133
TF 2713 / 3	NMR 1530	/ 160-161		26 JUN 1979	Black & white	70mm,120,220	TF 277132
TF 2713 / 4	NMR 1973	/ 202		28 JUL 1981	Black & white	70mm,120,220	TF 279135
TF 2713 / 5	NMR 1973	/ 218		28 JUL 1981	Black & white	70mm,120,220	TF 277133
TF 2713 / 6	NMR 1973	/ 224		28 JUL 1981	Black & white	70mm,120,220	TF 272130
TF 2713 / 7	NMR 1973	/ 203		28 JUL 1981	Black & white	70mm,120,220	TF 279135
TF 2713 / 8	NMR 1973	/ 204		28 JUL 1981	Black & white	70mm,120,220	TF 279135
TF 2713 / 9	NMR 1973	/ 205		28 JUL 1981	Black & white	70mm,120,220	TF 279135
TF 2713 / 10	NMR 1973	/ 206		28 JUL 1981	Black & white	70mm,120,220	TF 279135
TF 2713 / 11	NMR 1973	/ 219		28 JUL 1981	Black & white	70mm,120,220	TF 277133
TF 2713 / 12	NMR 1973	/ 220		28 JUL 1981	Black & white	70mm,120,220	TF 277133
TF 2713 / 13	NMR 1973	/ 221		28 JUL 1981	Black & white	70mm,120,220	TF 277133
TF 2713 / 14	NMR 1973	/ 222		28 JUL 1981	Black & white	70mm,120,220	TF 277133
TF 2713 / 15	NMR 1973	/ 223		28 JUL 1981	Black & white	70mm,120,220	TF 277133
TF 2714 / 1	NMR 1736	/ 313-314		13 MAR 1980	Black & white	70mm,120,220	TF 271140
TF 2714 / 2	NMR 1973	/ 200		28 JUL 1981	Black & white	70mm,120,220	TF 276144
TF 2714 / 3	NMR 1973	/ 234		28 JUL 1981	Black & white	70mm,120,220	TF 272149
TF 2714 / 4	NMR 1973	/ 201		28 JUL 1981	Black & white	70mm,120,220	TF 276144
TF 2714 / 5	NMR 1973	/ 235		28 JUL 1981	Black & white	70mm,120,220	TF 272149
TF 2715 / 4	NMR 1973	/ 227		28 JUL 1981	Black & white	70mm,120,220	TF 274157
TF 2715 / 5	NMR 1973	/ 230		28 JUL 1981	Black & white	70mm,120,220	TF 273159
TF 2715 / 8	NMR 1973	/ 228		28 JUL 1981	Black & white	70mm,120,220	TF 274157
TF 2715 / 9	NMR 1973	/ 229		28 JUL 1981	Black & white	70mm,120,220	TF 274157
TF 2715 / 10	NMR 1973	/ 231		28 JUL 1981	Black & white	70mm,120,220	TF 273159
TF 2715 / 11	NMR 1973	/ 232		28 JUL 1981	Black & white	70mm,120,220	TF 273159
TF 2715 / 12	NMR 1973	/ 233		28 JUL 1981	Black & white	70mm,120,220	TF 273159
TF 2716 / 1	NMR 932	/ 43-44		14 MAY 1976	Black & white	70mm,120,220	TF 272164
TF 2716 / 2	NMR 932	/ 55-62		14 MAY 1976	Black & white	70mm,120,220	TF 275165
TF 2716 / 4	CAP 8093	/ 90	JZ	15 JUL 1952	Black & white	Unknown	TF 275163
TF 2716 / 5	CAP 8029	/ 38	FV	17 JUN 1951	Black & white	Unknown	TF 274163
TF 2716 / 6	CAP 8093	/ 89	JZ	15 JUL 1952	Black & white	Unknown	TF 275163
TF 2716 / 8	CAP 8093	/ 91	JZ	15 JUL 1952	Black & white	Unknown	TF 275163
TF 2716 / 9	CAP 8093	/ 92	JZ	15 JUL 1952	Black & white	Unknown	TF 275163
TF 2716 / 10	CAP 8093	/ 93	JZ	15 JUL 1952	Black & white	Unknown	TF 274162
TF 2716 / 19	NMR 1733	/ 447-448		03 MAR 1980	Black & white	70mm,120,220	TF 274162
TF 2716 / 20	NMR 1736	/ 117-125		13 MAR 1980	Black & white	70mm,120,220	TF 275166
TF 2716 / 23	NMR 1810	/ 424-426		30 JUN 1980	Black & white	70mm,120,220	TF 275164
TF 2716 / 24	NMR 1810	/ 427-428		30 JUN 1980	Black & white	70mm,120,220	TF 275164
TF 2812 / 1	NMR 968	/ 268-269		20 JUL 1976	Black & white	70mm,120,220	TF 285123
TF 2812 / 2	NMR 1521	/ 379-384		18 MAY 1979	Black & white	70mm,120,220	TF 284123
TF 2812 / 4	NMR 1736	/ 406-415 (~~409~~)		13 MAR 1980	Black & white	70mm,120,220	TF 281124
TF 2812 / 6	NMR 1973	/ 185		28 JUL 1981	Black & white	70mm,120,220	TF 285129
TF 2812 / 7	NMR 1973	/ 186		28 JUL 1981	Black & white	70mm,120,220	TF 285129

Photo reference (NGR and Index number)	Film and frame number		Original number	Date	Film type		Map Reference
TF 2812 / 8	NMR 1973	/ 187		28 JUL 1981	Black & white	70mm,120,220	TF 285129
TF 2812 / 9	NMR 1973	/ 188		28 JUL 1981	Black & white	70mm,120,220	TF 285129
TF 2812 / 10	NMR 1973	/ 189		28 JUL 1981	Black & white	70mm,120,220	TF 285129
TF 2812 / 11	NMR 1973	/ 190		28 JUL 1981	Black & white	70mm,120,220	TF 285129
TF 2813 / 1	NMR 953	/ 253-257		16 MAY 1976	Black & white	70mm,120,220	TF 288135
TF 2813 / 2	NMR 931	/ 149-152		13 MAY 1976	Black & white	70mm,120,220	TF 285139
TF 2813 / 3	NMR 968	/ 270-271		20 JUL 1976	Black & white	70mm,120,220	TF 287130
TF 2813 / 4	NMR 968	/ 272-273		20 JUL 1976	Black & white	70mm,120,220	TF 285135
TF 2813 / 5	NMR 968	/ 274-275		20 JUL 1976	Black & white	70mm,120,220	TF 287133
TF 2813 / 6	NMR 1736	/ 318-328		13 MAR 1980	Black & white	70mm,120,220	TF 286137
TF 2813 / 7	NMR 1736	/ 329-332		13 MAR 1980	Black & white	70mm,120,220	TF 285132
TF 2813 / 8	NMR 1812	/ 382-383	APR1557	11 JUL 1980	Black & white	70mm,120,220	TF 289139
TF 2813 / 9	NMR 1812	/ 384-386	APR1557	11 JUL 1980	Black & white	70mm,120,220	TF 286132
TF 2813 / 10	NMR 1812	/ 387-390	APR1557	11 JUL 1980	Black & white	70mm,120,220	TF 284137
TF 2813 / 11	NMR 1812	/ 394-395	APR1557	11 JUL 1980	Black & white	70mm,120,220	TF 288138
TF 2813 / 12	NMR 1973	/ 181		28 JUL 1981	Black & white	70mm,120,220	TF 283137
TF 2813 / 13	NMR 1973	/ 193		28 JUL 1981	Black & white	70mm,120,220	TF 284138
TF 2813 / 14	NMR 1973	/ 210		28 JUL 1981	Black & white	70mm,120,220	TF 284136
TF 2813 / 15	NMR 4438	/ 02		12 JUL 1989	Colour slide	35 mm	TF 288135
TF 2813 / 16	NMR 4438	/ 03		12 JUL 1989	Colour slide	35 mm	TF 288135
TF 2813 / 17	NMR 4524	/ 20		12 JUL 1989	Black & white	35 mm	TF 288135
TF 2813 / 18	NMR 4524	/ 21		12 JUL 1989	Black & white	35 mm	TF 288135
TF 2813 / 19	NMR 4524	/ 22		12 JUL 1989	Black & white	35 mm	TF 288135
TF 2813 / 20	NMR 4524	/ 23		12 JUL 1989	Black & white	35 mm	TF 288135
TF 2813 / 21	NMR 4524	/ 24		12 JUL 1989	Black & white	35 mm	TF 288135
TF 2813 / 22	NMR 4524	/ 25		12 JUL 1989	Black & white	35 mm	TF 288135
~~TF 2813 / 23~~	~~NMR 4397~~	~~/ 32~~		~~20 JUL 1989~~	~~Black & white~~	~~35 mm~~	~~TF 285130~~
~~TF 2813 / 24~~	~~NMR 4397~~	~~/ 33~~		~~20 JUL 1989~~	~~Black & white~~	~~35 mm~~	~~TF 285130~~
~~TF 2813 / 25~~	~~NMR 4397~~	~~/ 34~~		~~20 JUL 1989~~	~~Black & white~~	~~35 mm~~	~~TF 285130~~
TF 2813 / 26	NMR 4398	/ 00		20 JUL 1989	Black & white	35 mm	TF 288139
TF 2813 / 27	NMR 4398	/ 01		20 JUL 1989	Black & white	35 mm	TF 288139
TF 2813 / 28	NMR 4398	/ 02		20 JUL 1989	Black & white	35 mm	TF 288139
TF 2813 / 29	NMR 4465	/ 30		29 MAR 1989	Colour slide	35 mm	TF 288138
TF 2813 / 30	NMR 4465	/ 32		29 MAR 1989	Colour slide	35 mm	TF 288138
TF 2813 / 31	NMR 1973	/ 182		28 JUL 1981	Black & white	70mm,120,220	TF 283137
TF 2813 / 32	NMR 1973	/ 183		28 JUL 1981	Black & white	70mm,120,220	TF 283137
TF 2813 / 33	NMR 1973	/ 184		28 JUL 1981	Black & white	70mm,120,220	TF 283137
TF 2813 / 34	NMR 1973	/ 194		28 JUL 1981	Black & white	70mm,120,220	TF 284138
TF 2813 / 35	NMR 1973	/ 195		28 JUL 1981	Black & white	70mm,120,220	TF 284138
TF 2813 / 36	NMR 1973	/ 196		28 JUL 1981	Black & white	70mm,120,220	TF 284138
TF 2813 / 37	NMR 1973	/ 211		28 JUL 1981	Black & white	70mm,120,220	TF 284136
TF 2813 / 38	NMR 1973	/ 212		28 JUL 1981	Black & white	70mm,120,220	TF 284136
TF 2813 / 39	NMR 1973	/ 213		28 JUL 1981	Black & white	70mm,120,220	TF 284136
TF 2813 / 40	NMR 1973	/ 214		28 JUL 1981	Black & white	70mm,120,220	TF 284136
TF 2813 / 41	NMR 1973	/ 215		28 JUL 1981	Black & white	70mm,120,220	TF 284136
TF 2813 / 42	NMR 1973	/ 216		28 JUL 1981	Black & white	70mm,120,220	TF 284136
TF 2813 / 43	NMR 1973	/ 217		28 JUL 1981	Black & white	70mm,120,220	TF 284136
TF 2813 / 44	NMR 2111	/ 1049	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 289138
TF 2813 / 45	NMR 2111	/ 1050	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 288137
TF 2813 / 46	NMR 2111	/ 1051	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 287137
TF 2813 / 47	NMR 2111	/ 1052	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 286137
TF 2813 / 48	NMR 2111	/ 1053	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 285136
TF 2813 / 49	NMR 2111	/ 1054	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 283135
TF 2813 / 50	NMR 2111	/ 1055	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 282134
TF 2813 / 51	NMR 27513	/ 47		10 AUG 2012	Digital colour	35 mm	TF 288138
TF 2813 / 52	NMR 27513	/ 48		10 AUG 2012	Digital colour	35 mm	TF 287138
TF 2813 / 53	NMR 27513	/ 49		10 AUG 2012	Digital colour	35 mm	TF 288139
TF 2813 / 54	NMR 27513	/ 50		10 AUG 2012	Digital colour	35 mm	TF 288138
TF 2813 / 55	NMR 27513	/ 51		10 AUG 2012	Digital colour	35 mm	TF 287138
TF 2813 / 56	NMR 27513	/ 52		10 AUG 2012	Digital colour	35 mm	TF 288138
TF 2813 / 57	NMR 27513	/ 53		10 AUG 2012	Digital colour	35 mm	TF 288138
TF 2814 / 3	NMR 1736	/ 315-317		13 MAR 1980	Black & white	70mm,120,220	TF 285143
TF 2814 / 4	NMR 1812	/ 391-393	APR1557	11 JUL 1980	Black & white	70mm,120,220	TF 287140

Photo reference (NGR and Index number)	Film and frame number		Original number	Date	Film type		Map Reference
TF 2814 / 5	NMR 1812	/ 403	APR1557	11 JUL 1980	Black & white	70mm,120,220	TF 288142
TF 2814 / 6	NMR 1952	/ 173		29 JUN 1981	Black & white	70mm,120,220	TF 282143
TF 2814 / 7	NMR 1952	/ 175		29 JUN 1981	Black & white	70mm,120,220	TF 283144
TF 2814 / 8	NMR 1952	/ 176		29 JUN 1981	Black & white	70mm,120,220	TF 284144
TF 2814 / 9	NMR 1952	/ 177		29 JUN 1981	Black & white	70mm,120,220	TF 285145
TF 2814 / 15	NMR 1952	/ 189		29 JUN 1981	Black & white	70mm,120,220	TF 285145
TF 2814 / 16	NMR 1973	/ 197		28 JUL 1981	Black & white	70mm,120,220	TF 281141
TF 2814 / 19	NMR 4294	/ 77		29 MAR 1989	Black & white	70mm,120,220	TF 287143
TF 2814 / 20	NMR 4294	/ 78		29 MAR 1989	Black & white	70mm,120,220	TF 287143
TF 2814 / 21	NMR 4294	/ 79		29 MAR 1989	Black & white	70mm,120,220	TF 287143
TF 2814 / 22	NMR 4294	/ 80		29 MAR 1989	Black & white	70mm,120,220	TF 287143
TF 2814 / 23	NMR 4294	/ 81		29 MAR 1989	Black & white	70mm,120,220	TF 287143
TF 2814 / 24	NMR 4294	/ 82		29 MAR 1989	Black & white	70mm,120,220	TF 287143
TF 2814 / 25	NMR 4294	/ 83		29 MAR 1989	Black & white	70mm,120,220	TF 287143
TF 2814 / 26	NMR 4294	/ 84		29 MAR 1989	Black & white	70mm,120,220	TF 287141
TF 2814 / 27	NMR 4465	/ 29		29 MAR 1989	Colour slide	35 mm	TF 287142
TF 2814 / 28	NMR 1952	/ 174		29 JUN 1981	Black & white	70mm,120,220	TF 282143
TF 2814 / 29	NMR 1952	/ 178		29 JUN 1981	Black & white	70mm,120,220	TF 285145
TF 2814 / 31	NMR 1952	/ 190		29 JUN 1981	Black & white	70mm,120,220	TF 285145
TF 2814 / 32	NMR 1952	/ 191		29 JUN 1981	Black & white	70mm,120,220	TF 285145
TF 2814 / 33	NMR 1973	/ 198		28 JUL 1981	Black & white	70mm,120,220	TF 281141
TF 2814 / 34	NMR 1973	/ 199		28 JUL 1981	Black & white	70mm,120,220	TF 281141
TF 2814 / 35	NMR 28413	/ 14		25 JUN 2013	Digital colour	35 mm	TF 289140
TF 2814 / 36	NMR 28413	/ 15		25 JUN 2013	Digital colour	35 mm	TF 288141
TF 2814 / 37	NMR 28413	/ 16		25 JUN 2013	Digital colour	35 mm	TF 288141
TF 2814 / 38	NMR 28413	/ 17		25 JUN 2013	Digital colour	35 mm	TF 289141
TF 2912 / 1	NMR 930	/ 359-363		13 MAY 1976	Black & white	70mm,120,220	TF 290123
TF 2912 / 2	NMR 930	/ 364-365		13 MAY 1976	Black & white	70mm,120,220	TF 296126
TF 2912 / 3	NMR 930	/ 366-372		13 MAY 1976	Black & white	70mm,120,220	TF 299125
TF 2912 / 4	NMR 930	/ 386-394		13 MAY 1976	Black & white	70mm,120,220	TF 293125
TF 2912 / 5	NMR 931	/ 147-148		13 MAY 1976	Black & white	70mm,120,220	TF 298125
~~TF 2912 / 6~~	~~NMR 10623~~	~~/ 47-48~~	~~SEE PRINTS~~	~~16 MAY 1976~~	~~Colour slide~~	~~70mm,120,220~~	~~TF 299124~~
TF 2912 / 7	NMR 1521	/ 291-300		18 MAY 1979	Black & white	70mm,120,220	TF 292123
TF 2912 / 8	NMR 1530	/ 142		26 JUN 1979	Black & white	70mm,120,220	TF 298123
TF 2912 / 9	NMR 1530	/ 152-153		26 JUN 1979	Black & white	70mm,120,220	TF 299123
TF 2912 / 11	NMR 1572	/ 119-120		27 JUN 1979	Black & white	70mm,120,220	TF 299123
TF 2912 / 12	NMR 1736	/ 348-361		13 MAR 1980	Black & white	70mm,120,220	TF 292124
TF 2912 / 13	NMR 1736	/ 385-388		13 MAR 1980	Black & white	70mm,120,220	TF 299128
TF 2912 / 14	NMR 1973	/ 124		28 JUL 1981	Black & white	70mm,120,220	TF 290123
TF 2912 / 15	NMR 1973	/ 144		28 JUL 1981	Black & white	70mm,120,220	TF 298123
TF 2912 / 16	NMR 2111	/ 1044	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 299123
TF 2912 / 17	NMR 2111	/ 1045	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 299123
~~TF 2912 / 18~~	~~NMR 10713~~	~~/ 6~~		~~18 MAY 1979~~	~~Colour slide~~	~~70mm,120,220~~	~~TF 298123~~
TF 2912 / 19	CCC 5229	/ 8340	APR768	1930s	Black & white	SF or I Neg	TF 297125
TF 2912 / 20	NMR 1973	/ 125		28 JUL 1981	Black & white	70mm,120,220	TF 290123
TF 2912 / 21	NMR 1973	/ 126		28 JUL 1981	Black & white	70mm,120,220	TF 290123
TF 2912 / 22	NMR 1973	/ 145		28 JUL 1981	Black & white	70mm,120,220	TF 298123
TF 2912 / 23	NMR 27512	/ 08		10 AUG 2012	Digital colour	35 mm	TF 298123
TF 2912 / 24	NMR 27512	/ 09		10 AUG 2012	Digital colour	35 mm	TF 298122
TF 2912 / 26	NMR 27512	/ 12		10 AUG 2012	Digital colour	35 mm	TF 293125
TF 2912 / 27	NMR 27512	/ 13		10 AUG 2012	Digital colour	35 mm	TF 293126
TF 2912 / 29	NMR 27512	/ 15		10 AUG 2012	Digital colour	35 mm	TF 299123
TF 2912 / 32	NMR 27512	/ 19		10 AUG 2012	Digital colour	35 mm	TF 298124
TF 2912 / 33	NMR 27512	/ 20		10 AUG 2012	Digital colour	35 mm	TF 298124
TF 2912 / 37	NMR 28413	/ 26		25 JUN 2013	Digital colour	35 mm	TF 294123
TF 2912 / 38	NMR 28413	/ 27		25 JUN 2013	Digital colour	35 mm	TF 294123
TF 2912 / 39	NMR 28413	/ 28		25 JUN 2013	Digital colour	35 mm	TF 294126
TF 2912 / 40	NMR 28413	/ 29		25 JUN 2013	Digital colour	35 mm	TF 295126
TF 2913 / 1	NMR 1812	/ 398-402	APR1557	11 JUL 1980	Black & white	70mm,120,220	TF 291137
TF 2913 / 2	NMR 1973	/ 191		28 JUL 1981	Black & white	70mm,120,220	TF 292135
TF 2913 / 3	CCC 5200	/ 8252	APR768	1930s	Black & white	SF or I Neg	TF 297131
TF 2913 / 4	NMR 4465	/ 33		29 MAR 1989	Colour slide	35 mm	TF 290137
TF 2913 / 5	NMR 1973	/ 192		28 JUL 1981	Black & white	70mm,120,220	TF 292135

Photo reference (NGR and Index number)	Film and frame number		Original number	Date	Film type		Map Reference
TF 2913 / 6	NMR 2111	/ 1048	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 290139
TF 2913 / 7	NMR 26091	/ 19		15 AUG 2008	Digital colour	35 mm	TF 291136
TF 2913 / 8	NMR 26091	/ 20		15 AUG 2008	Digital colour	35 mm	TF 291136
TF 2913 / 9	NMR 26091	/ 21		15 AUG 2008	Digital colour	35 mm	TF 291136
TF 2913 / 10	NMR 26091	/ 22		15 AUG 2008	Digital colour	35 mm	TF 291138
TF 2913 / 11	NMR 26091	/ 23		15 AUG 2008	Digital colour	35 mm	TF 291137
TF 2913 / 12	NMR 27513	/ 43		10 AUG 2012	Digital colour	35 mm	TF 291136
TF 2913 / 13	NMR 27513	/ 44		10 AUG 2012	Digital colour	35 mm	TF 291135
TF 2913 / 14	NMR 27513	/ 45		10 AUG 2012	Digital colour	35 mm	TF 291137
TF 2913 / 15	NMR 27513	/ 46		10 AUG 2012	Digital colour	35 mm	TF 291137
TF 2913 / 16	NMR 28413	/ 09		25 JUN 2013	Digital colour	35 mm	TF 299139
TF 2913 / 17	NMR 28413	/ 10		25 JUN 2013	Digital colour	35 mm	TF 299139
TF 2914 / 1	ACA 7275	/ ORACLEC1	SEE PRINTS	1930s	Black & white	Unknown	TF 298140
TF 2914 / 6	NMR 1572	/ 42-45		27 JUN 1979	Black & white	70mm,120,220	TF 291144
TF 2914 / 7	NMR 1572	/ 46-48		27 JUN 1979	Black & white	70mm,120,220	TF 292143
TF 2914 / 8	NMR 1736	/ 334-346		13 MAR 1980	Black & white	70mm,120,220	TF 292141
TF 2914 / 9	NMR 1812	/ 396-397	APR1557	11 JUL 1980	Black & white	70mm,120,220	TF 292142
TF 2914 / 10	NMR 1952	/ 161		29 JUN 1981	Black & white	70mm,120,220	TF 295143
~~TF 2914 / 13~~	~~CCC 5200~~	~~/ 8245~~	~~APR768~~	~~1930s~~	~~Black & white~~	~~SF or I Neg~~	~~TF 290140~~
TF 2914 / 14	NMR 4465	/ 31		29 MAR 1989	Colour slide	35 mm	TF 290140
TF 2914 / 20	NMR 2111	/ 1046	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 291140
TF 2914 / 21	NMR 2111	/ 1047	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 290140
TF 2914 / 23	NMR 17835	/ 13		25 JUN 2003	Colour neg	35 mm	TF 290141
TF 2914 / 29	NMR 27514	/ 07		10 AUG 2012	Digital colour	35 mm	TF 299141
TF 2914 / 30	NMR 27514	/ 08		10 AUG 2012	Digital colour	35 mm	TF 299141
TF 2914 / 31	NMR 28413	/ 05		25 JUN 2013	Digital colour	35 mm	TF 299141
TF 2914 / 32	NMR 28413	/ 06		25 JUN 2013	Digital colour	35 mm	TF 298141
TF 2914 / 33	NMR 28413	/ 07		25 JUN 2013	Digital colour	35 mm	TF 292140
TF 2914 / 34	NMR 28413	/ 08		25 JUN 2013	Digital colour	35 mm	TF 292140
TF 2914 / 35	NMR 28413	/ 13		25 JUN 2013	Digital colour	35 mm	TF 290141
TF 2914 / 36	NMR 28413	/ 18		25 JUN 2013	Digital colour	35 mm	TF 290140
TF 3012 / 1	NMR 930	/ 373-374		13 MAY 1976	Black & white	70mm,120,220	TF 309124
TF 3012 / 2	NMR 930	/ 375		13 MAY 1976	Black & white	70mm,120,220	TF 308126
TF 3012 / 3	NMR 930	/ 376-385		13 MAY 1976	Black & white	70mm,120,220	TF 308125
TF 3012 / 4	NMR 972	/ 459-461		22 JUL 1976	Black & white	70mm,120,220	TF 300123
TF 3012 / 7	NMR 1572	/ 53-65		27 JUN 1979	Black & white	70mm,120,220	TF 306128
TF 3012 / 8	NMR 1572	/ 67-68		27 JUN 1979	Black & white	70mm,120,220	TF 303127
TF 3012 / 9	NMR 1572	/ 69		27 JUN 1979	Black & white	70mm,120,220	TF 305125
TF 3012 / 10	NMR 1572	/ 71-84		27 JUN 1979	Black & white	70mm,120,220	TF 306128
TF 3012 / 11	NMR 1572	/ 85-88		27 JUN 1979	Black & white	70mm,120,220	TF 302125
TF 3012 / 12	NMR 1572	/ 89-90		27 JUN 1979	Black & white	70mm,120,220	TF 300124
TF 3012 / 14	NMR 1736	/ 371-373		13 MAR 1980	Black & white	70mm,120,220	TF 301125
TF 3012 / 15	NMR 1736	/ 374-377		13 MAR 1980	Black & white	70mm,120,220	TF 303126
TF 3012 / 16	NMR 1952	/ 136		29 JUN 1981	Black & white	70mm,120,220	TF 308124
TF 3012 / 17	NMR 1973	/ 146		28 JUL 1981	Black & white	70mm,120,220	TF 301127
TF 3012 / 18	NMR 1973	/ 152		28 JUL 1981	Black & white	70mm,120,220	TF 302127
TF 3012 / 19	NMR 1973	/ 154		28 JUL 1981	Black & white	70mm,120,220	TF 302124
TF 3012 / 22	NMR 1973	/ 168		28 JUL 1981	Black & white	70mm,120,220	TF 308124
TF 3012 / 23	NMR 1973	/ 175		28 JUL 1981	Black & white	70mm,120,220	TF 305126
~~TF 3012 / 26~~	~~NMR 10713~~	~~/ 5~~		~~18 MAY 1979~~	~~Colour slide~~	~~70mm,120,220~~	~~TF 304123~~
~~TF 3012 / 27~~	~~NMR 10713~~	~~/ 7~~		~~18 MAY 1979~~	~~Colour slide~~	~~70mm,120,220~~	~~TF 303127~~
~~TF 3012 / 28~~	~~NMR 10713~~	~~/ 8~~		~~18 MAY 1979~~	~~Colour slide~~	~~70mm,120,220~~	~~TF 305129~~
TF 3012 / 29	NMR 4423	/ 11		18 JUL 1989	Black & white	35 mm	TF 305123
TF 3012 / 30	NMR 4423	/ 12		18 JUL 1989	Black & white	35 mm	TF 305123
TF 3012 / 31	NMR 4423	/ 13		18 JUL 1989	Black & white	35 mm	TF 305123
TF 3012 / 32	NMR 4398	/ 03		20 JUL 1989	Black & white	35 mm	TF 304129
TF 3012 / 33	NMR 4398	/ 04		20 JUL 1989	Black & white	35 mm	TF 304129
TF 3012 / 34	NMR 4398	/ 05		20 JUL 1989	Black & white	35 mm	TF 304129
TF 3012 / 35	NMR 4398	/ 06		20 JUL 1989	Black & white	35 mm	TF 304129
TF 3012 / 36	NMR 4398	/ 07		20 JUL 1989	Black & white	35 mm	TF 304129
TF 3012 / 37	NMR 4398	/ 08		20 JUL 1989	Black & white	35 mm	TF 304129
TF 3012 / 38	NMR 1952	/ 137		29 JUN 1981	Black & white	70mm,120,220	TF 308124
TF 3012 / 39	NMR 1973	/ 147		28 JUL 1981	Black & white	70mm,120,220	TF 301127

Photo reference (NGR and Index number)	Film and frame number		Original number	Date	Film type		Map Reference
TF 3012 / 40	NMR 1973	/ 153		28 JUL 1981	Black & white	70mm,120,220	TF 302127
TF 3012 / 46	NMR 1973	/ 169		28 JUL 1981	Black & white	70mm,120,220	TF 308124
TF 3012 / 47	NMR 1973	/ 170		28 JUL 1981	Black & white	70mm,120,220	TF 308124
TF 3012 / 48	NMR 1973	/ 171		28 JUL 1981	Black & white	70mm,120,220	TF 308124
TF 3012 / 49	NMR 1973	/ 172		28 JUL 1981	Black & white	70mm,120,220	TF 308124
TF 3012 / 50	NMR 1973	/ 176		28 JUL 1981	Black & white	70mm,120,220	TF 305126
TF 3012 / 51	NMR 1973	/ 177		28 JUL 1981	Black & white	70mm,120,220	TF 305126
TF 3012 / 59	NMR 21371	/ 30		17 AUG 2001	Colour neg	35 mm	TF 302123
TF 3012 / 66	NMR 26090	/ 09		15 AUG 2008	Digital colour	35 mm	TF 300128
TF 3012 / 67	NMR 26090	/ 10		15 AUG 2008	Digital colour	35 mm	TF 300128
TF 3012 / 68	NMR 26090	/ 11		15 AUG 2008	Digital colour	35 mm	TF 301127
TF 3012 / 69	NMR 26090	/ 12		15 AUG 2008	Digital colour	35 mm	TF 301128
TF 3012 / 70	NMR 26090	/ 13		15 AUG 2008	Digital colour	35 mm	TF 300128
TF 3012 / 71	NMR 26090	/ 14		15 AUG 2008	Digital colour	35 mm	TF 300127
TF 3012 / 72	NMR 26090	/ 15		15 AUG 2008	Digital colour	35 mm	TF 305125
TF 3012 / 73	NMR 26090	/ 16		15 AUG 2008	Digital colour	35 mm	TF 305124
TF 3012 / 74	NMR 26090	/ 17		15 AUG 2008	Digital colour	35 mm	TF 305124
TF 3012 / 75	NMR 26090	/ 18		15 AUG 2008	Digital colour	35 mm	TF 303128
TF 3012 / 76	NMR 26090	/ 19		15 AUG 2008	Digital colour	35 mm	TF 304127
TF 3012 / 77	NMR 26090	/ 20		15 AUG 2008	Digital colour	35 mm	TF 304129
TF 3012 / 78	NMR 26090	/ 21		15 AUG 2008	Digital colour	35 mm	TF 304129
TF 3012 / 79	NMR 26090	/ 22		15 AUG 2008	Digital colour	35 mm	TF 309127
TF 3012 / 80	NMR 26090	/ 23		15 AUG 2008	Digital colour	35 mm	TF 309127
TF 3012 / 81	NMR 26090	/ 24		15 AUG 2008	Digital colour	35 mm	TF 309127
TF 3012 / 82	NMR 26090	/ 25		15 AUG 2008	Digital colour	35 mm	TF 309127
TF 3012 / 83	NMR 26090	/ 27		15 AUG 2008	Digital colour	35 mm	TF 309127
TF 3012 / 84	NMR 26090	/ 28		15 AUG 2008	Digital colour	35 mm	TF 308128
TF 3012 / 85	NMR 26090	/ 29		15 AUG 2008	Digital colour	35 mm	TF 309128
TF 3012 / 86	NMR 26090	/ 30		15 AUG 2008	Digital colour	35 mm	TF 309129
TF 3012 / 87	NMR 26090	/ 31		15 AUG 2008	Digital colour	35 mm	TF 309127
TF 3012 / 88	NMR 26090	/ 32		15 AUG 2008	Digital colour	35 mm	TF 309127
TF 3012 / 89	NMR 26090	/ 33		15 AUG 2008	Digital colour	35 mm	TF 309127
TF 3012 / 90	NMR 26090	/ 34		15 AUG 2008	Digital colour	35 mm	TF 309127
TF 3012 / 93	NMR 28413	/ 38		25 JUN 2013	Digital colour	35 mm	TF 307124
TF 3012 / 94	NMR 28413	/ 39		25 JUN 2013	Digital colour	35 mm	TF 307126
TF 3012 / 95	NMR 28413	/ 40		25 JUN 2013	Digital colour	35 mm	TF 308124
TF 3012 / 96	NMR 28413	/ 41		25 JUN 2013	Digital colour	35 mm	TF 307124
TF 3012 / 97	NMR 28413	/ 42		25 JUN 2013	Digital colour	35 mm	TF 308125
TF 3012 / 98	NMR 28413	/ 43		25 JUN 2013	Digital colour	35 mm	TF 307124
TF 3013 / 1	NMR 930	/ 395-399		13 MAY 1976	Black & white	70mm,120,220	TF 307134
TF 3013 / 2	NMR 930	/ 404-413		13 MAY 1976	Black & white	70mm,120,220	TF 305135
TF 3013 / 3	NMR 972	/ 438-440		22 JUL 1976	Black & white	70mm,120,220	TF 304132
TF 3013 / 4	NMR 972	/ 452-453		22 JUL 1976	Black & white	70mm,120,220	TF 305137
TF 3013 / 5	NMR 972	/ 454-456		22 JUL 1976	Black & white	70mm,120,220	TF 304135
TF 3013 / 6	NMR 972	/ 457-458		22 JUL 1976	Black & white	70mm,120,220	TF 304135
TF 3013 / 7	NMR 1521	/ 312-321		18 MAY 1979	Black & white	70mm,120,220	TF 302134
TF 3013 / 8	NMR 1572	/ 49-52		27 JUN 1979	Black & white	70mm,120,220	TF 303134
TF 3013 / 9	NMR 1736	/ 365-370		13 MAR 1980	Black & white	70mm,120,220	TF 302130
TF 3013 / 10	NMR 1736	/ 378-381		13 MAR 1980	Black & white	70mm,120,220	TF 303132
TF 3013 / 11	NMR 1736	/ 382-384		13 MAR 1980	Black & white	70mm,120,220	TF 305134
TF 3013 / 12	NMR 1973	/ 148		28 JUL 1981	Black & white	70mm,120,220	TF 304134
TF 3013 / 13	NMR 1973	/ 150		28 JUL 1981	Black & white	70mm,120,220	TF 300133
TF 3013 / 14	NMR 1973	/ 173		28 JUL 1981	Black & white	70mm,120,220	TF 306133
TF 3013 / 15	CAP 8323	/ 24	SEE PRINTS	22 MAR 1956	Black & white	Unknown	TF 304139
TF 3013 / 16	CAP 8323	/ 25	SEE PRINTS	22 MAR 1956	Black & white	Unknown	TF 304139
TF 3013 / 17	CAP 8323	/ 26	SEE PRINTS	22 MAR 1956	Black & white	Unknown	TF 309138
TF 3013 / 18	CCC 11761	/ 8257		Unknown	Black & white	Unknown	TF 302138
TF 3013 / 19	CCC 11761	/ 8258		Unknown	Black & white	Unknown	TF 302133
TF 3013 / 20	NMR 4294	/ 85		29 MAR 1989	Black & white	70mm,120,220	TF 303139
TF 3013 / 21	NMR 4294	/ 86		29 MAR 1989	Black & white	70mm,120,220	TF 303139
TF 3013 / 22	NMR 4294	/ 87		29 MAR 1989	Black & white	70mm,120,220	TF 303139
TF 3013 / 23	NMR 4294	/ 88		29 MAR 1989	Black & white	70mm,120,220	TF 303139
TF 3013 / 24	NMR 4294	/ 89		29 MAR 1989	Black & white	70mm,120,220	TF 303139

Photo reference (NGR and Index number)	Film and frame number		Original number	Date	Film type		Map Reference
TF 3013 / 25	NMR 4438	/ 04		12 JUL 1989	Colour slide	35 mm	TF 300139
TF 3013 / 26	NMR 4438	/ 05		12 JUL 1989	Colour slide	35 mm	TF 303138
TF 3013 / 27	NMR 4423	/ 14		18 JUL 1989	Black & white	35 mm	TF 305131
TF 3013 / 28	NMR 4423	/ 15		18 JUL 1989	Black & white	35 mm	TF 305131
TF 3013 / 29	NMR 4423	/ 16		18 JUL 1989	Black & white	35 mm	TF 305131
TF 3013 / 30	NMR 4423	/ 17		18 JUL 1989	Black & white	35 mm	TF 305131
TF 3013 / 31	NMR 4465	/ 34		29 MAR 1989	Colour slide	35 mm	TF 300139
TF 3013 / 32	NMR 4465	/ 36		29 MAR 1989	Colour slide	35 mm	TF 300139
TF 3013 / 33	NMR 1973	/ 149		28 JUL 1981	Black & white	70mm,120,220	TF 304134
TF 3013 / 34	NMR 1973	/ 151		28 JUL 1981	Black & white	70mm,120,220	TF 300133
TF 3013 / 35	NMR 1973	/ 174		28 JUL 1981	Black & white	70mm,120,220	TF 306133
TF 3013 / 36	NMR 21371	/ 33		17 AUG 2001	Colour neg	35 mm	TF 306132
TF 3013 / 37	NMR 21371	/ 34		17 AUG 2001	Colour neg	35 mm	TF 306132
TF 3013 / 38	NMR 21371	/ 35		17 AUG 2001	Colour neg	35 mm	TF 307132
TF 3013 / 39	NMR 21371	/ 36		17 AUG 2001	Colour neg	35 mm	TF 307132
TF 3013 / 40	NMR 17855	/ 16		25 JUN 2003	Black & white	70mm,120,220	TF 309136
TF 3013 / 41	NMR 17855	/ 17		25 JUN 2003	Black & white	70mm,120,220	TF 309136
TF 3013 / 42	NMR 17835	/ 14		25 JUN 2003	Colour neg	35 mm	TF 301138
TF 3013 / 43	NMR 17835	/ 16		25 JUN 2003	Colour neg	35 mm	TF 309135
TF 3013 / 44	NMR 17835	/ 17		25 JUN 2003	Colour neg	35 mm	TF 309134
TF 3013 / 45	NMR 17835	/ 18		25 JUN 2003	Colour neg	35 mm	TF 309136
TF 3013 / 46	NMR 26090	/ 35		15 AUG 2008	Digital colour	35 mm	TF 307137
TF 3013 / 47	NMR 26090	/ 36		15 AUG 2008	Digital colour	35 mm	TF 308136
TF 3013 / 48	NMR 26090	/ 37		15 AUG 2008	Digital colour	35 mm	TF 307138
TF 3013 / 49	NMR 26090	/ 38		15 AUG 2008	Digital colour	35 mm	TF 307138
TF 3013 / 50	NMR 20889	/ 01		25 JUN 2009	Digital colour	35 mm	TF 309136
TF 3013 / 51	NMR 20889	/ 02		25 JUN 2009	Digital colour	35 mm	TF 309136
TF 3013 / 52	NMR 20889	/ 03		25 JUN 2009	Digital colour	35 mm	TF 309136
TF 3013 / 53	NMR 20889	/ 04		25 JUN 2009	Digital colour	35 mm	TF 309137
TF 3013 / 54	NMR 20889	/ 05		25 JUN 2009	Digital colour	35 mm	TF 309137
TF 3013 / 55	NMR 20889	/ 06		25 JUN 2009	Digital colour	35 mm	TF 309137
TF 3013 / 56	NMR 20889	/ 07		25 JUN 2009	Digital colour	35 mm	TF 309137
TF 3013 / 57	NMR 20889	/ 08		25 JUN 2009	Digital colour	35 mm	TF 308136
TF 3013 / 58	NMR 20889	/ 09		25 JUN 2009	Digital colour	35 mm	TF 308136
TF 3013 / 59	NMR 27514	/ 09		10 AUG 2012	Digital colour	35 mm	TF 301139
TF 3013 / 60	NMR 27514	/ 10		10 AUG 2012	Digital colour	35 mm	TF 301139
TF 3013 / 61	NMR 27514	/ 11		10 AUG 2012	Digital colour	35 mm	TF 301139
TF 3013 / 62	NMR 28413	/ 01		25 JUN 2013	Digital colour	35 mm	TF 304138
TF 3013 / 63	NMR 28413	/ 02		25 JUN 2013	Digital colour	35 mm	TF 302138
TF 3013 / 64	NMR 28413	/ 03		25 JUN 2013	Digital colour	35 mm	TF 300139
TF 3013 / 65	NMR 28413	/ 04		25 JUN 2013	Digital colour	35 mm	TF 300139
TF 3014 / 10	NMR 17835	/ 15		25 JUN 2003	Colour neg	35 mm	TF 300142
TF 3014 / 11	NMR 27514	/ 12		10 AUG 2012	Digital colour	35 mm	TF 301140
TF 3112 / 1	NMR 1952	/ 138		29 JUN 1981	Black & white	70mm,120,220	TF 312123
TF 3112 / 2	NMR 1952	/ 139		29 JUN 1981	Black & white	70mm,120,220	TF 312124
TF 3112 / 3	NMR 1952	/ 140		29 JUN 1981	Black & white	70mm,120,220	TF 312124
TF 3112 / 4	NMR 1952	/ 141		29 JUN 1981	Black & white	70mm,120,220	TF 312124
TF 3112 / 5	NMR 26090	/ 26		15 AUG 2008	Digital colour	35 mm	TF 310127
TF 3112 / 6	NMR 20888	/ 53		25 JUN 2009	Digital colour	35 mm	TF 318128
TF 3112 / 7	NMR 20888	/ 54		25 JUN 2009	Digital colour	35 mm	TF 318128
TF 3112 / 8	NMR 20888	/ 55		25 JUN 2009	Digital colour	35 mm	TF 318128
TF 3112 / 9	NMR 20888	/ 56		25 JUN 2009	Digital colour	35 mm	TF 318128
TF 3113 / 1	NMR 930	/ 400-401		13 MAY 1976	Black & white	70mm,120,220	TF 315136
TF 3113 / 2	NMR 930	/ 402-403		13 MAY 1976	Black & white	70mm,120,220	TF 313136
TF 3113 / 3	NMR 972	/ 441-442		22 JUL 1976	Black & white	70mm,120,220	TF 313138
TF 3113 / 4	CAP 8323	/ 27	SEE PRINTS	22 MAR 1956	Black & white	Unknown	TF 314137
TF 3113 / 5	NMR 2111	/ 1150	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 310137
TF 3113 / 7	CAP 8323	/ 28	SEE PRINTS	22 MAR 1956	Black & white	Unknown	TF 314136
TF 3113 / 8	CCC 11761	/ 8262		Unknown	Black & white	Unknown	TF 310135
TF 3113 / 9	NMR 4398	/ 09		20 JUL 1989	Black & white	35 mm	TF 315136
TF 3113 / 10	NMR 4398	/ 10		20 JUL 1989	Black & white	35 mm	TF 315136
TF 3113 / 11	NMR 4398	/ 11		20 JUL 1989	Black & white	35 mm	TF 315136
TF 3113 / 12	NMR 4398	/ 12		20 JUL 1989	Black & white	35 mm	TF 315136

Photo reference (NGR and Index number)	Film and frame number		Original number	Date	Film type		Map Reference
TF 3113 / 13	NMR 4398	/ 13		20 JUL 1989	Black & white	35 mm	TF 315136
TF 3113 / 14	NMR 4398	/ 14		20 JUL 1989	Black & white	35 mm	TF 315136
TF 3113 / 15	NMR 2111	/ 1151	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 310137
TF 3113 / 16	NMR 2111	/ 1152	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 310137
TF 3113 / 17	NMR 5669	/ 18		20 JUL 1989	FCIR slide	35 mm	TF 313136
TF 3113 / 18	NMR 5669	/ 19		20 JUL 1989	FCIR slide	35 mm	TF 314135
TF 3113 / 19	NMR 5669	/ 20		20 JUL 1989	FCIR slide	35 mm	TF 314135
TF 3113 / 20	NMR 26090	/ 39		15 AUG 2008	Digital colour	35 mm	TF 313137
TF 3113 / 21	NMR 26090	/ 40		15 AUG 2008	Digital colour	35 mm	TF 313136
TF 3113 / 22	NMR 26090	/ 41		15 AUG 2008	Digital colour	35 mm	TF 310136
TF 3113 / 23	NMR 26090	/ 42		15 AUG 2008	Digital colour	35 mm	TF 310136
TF 3113 / 24	NMR 26090	/ 43		15 AUG 2008	Digital colour	35 mm	TF 314137
TF 3113 / 25	NMR 26090	/ 44		15 AUG 2008	Digital colour	35 mm	TF 314137
TF 3113 / 26	NMR 26090	/ 45		15 AUG 2008	Digital colour	35 mm	TF 315137
TF 3113 / 27	NMR 26090	/ 46		15 AUG 2008	Digital colour	35 mm	TF 315137
TF 3113 / 28	NMR 27512	/ 21		10 AUG 2012	Digital colour	35 mm	TF 314135
TF 3113 / 29	NMR 27512	/ 22		10 AUG 2012	Digital colour	35 mm	TF 314134
TF 3113 / 30	NMR 27512	/ 23		10 AUG 2012	Digital colour	35 mm	TF 310136
TF 3113 / 31	NMR 27512	/ 24		10 AUG 2012	Digital colour	35 mm	TF 310136
TF 3113 / 32	NMR 27512	/ 25		10 AUG 2012	Digital colour	35 mm	TF 310136
TF 3113 / 33	NMR 27512	/ 26		10 AUG 2012	Digital colour	35 mm	TF 310137
TF 3113 / 34	NMR 27512	/ 27		10 AUG 2012	Digital colour	35 mm	TF 310136
TF 3113 / 35	NMR 27512	/ 28		10 AUG 2012	Digital colour	35 mm	TF 310137
TF 3113 / 36	NMR 27512	/ 29		10 AUG 2012	Digital colour	35 mm	TF 313133
TF 3113 / 37	NMR 27512	/ 30		10 AUG 2012	Digital colour	35 mm	TF 313133
TF 3212 / 1	NMR 930	/ 463-468		13 MAY 1976	Black & white	70mm,120,220	TF 323126
TF 3212 / 2	NMR 930	/ 470-475		13 MAY 1976	Black & white	70mm,120,220	TF 320126
TF 3212 / 3	NMR 1123	/ 158-160		19 MAR 1977	Black & white	70mm,120,220	TF 327128
TF 3212 / 4	NMR 1123	/ 161-163		19 MAR 1977	Black & white	70mm,120,220	TF 326124
TF 3212 / 6	NMR 1146	/ 225-229		03 AUG 1977	Black & white	70mm,120,220	TF 329123
TF 3212 / 9	NMR 1302	/ 338-339		13 AUG 1978	Black & white	70mm,120,220	TF 326126
TF 3212 / 10	NMR 1302	/ 340-341		13 AUG 1978	Black & white	70mm,120,220	TF 321128
TF 3212 / 16	NMR 26091	/ 01		15 AUG 2008	Digital colour	35 mm	TF 328125
TF 3212 / 17	NMR 26091	/ 02		15 AUG 2008	Digital colour	35 mm	TF 329125
TF 3212 / 19	NMR 26083	/ 47		30 JUL 2008	Digital colour	35 mm	TF 326126
TF 3212 / 20	NMR 26083	/ 52		30 JUL 2008	Digital colour	35 mm	TF 326125
TF 3212 / 21	NMR 20888	/ 51		25 JUN 2009	Digital colour	35 mm	TF 322126
TF 3212 / 22	NMR 20888	/ 52		25 JUN 2009	Digital colour	35 mm	TF 322126
TF 3212 / 23	NMR 20888	/ 57		25 JUN 2009	Digital colour	35 mm	TF 322125
TF 3213 / 1	CCC 11752	/ 1389	SEE PRINTS	Unknown	Black & white	Unknown	TF 320131
TF 3213 / 2	NMR 1123	/ 168-169		19 MAR 1977	Black & white	70mm,120,220	TF 324139
TF 3213 / 3	NMR 1521	/ 331-332		18 MAY 1979	Black & white	70mm,120,220	TF 326135
TF 3213 / 4	NMR 26091	/ 17		15 AUG 2008	Digital colour	35 mm	TF 324132
TF 3213 / 5	NMR 26091	/ 18		15 AUG 2008	Digital colour	35 mm	TF 324132
TF 3213 / 6	NMR 26083	/ 54		30 JUL 2008	Digital colour	35 mm	TF 324133
TF 3213 / 7	NMR 26083	/ 55		30 JUL 2008	Digital colour	35 mm	TF 324133
TF 3213 / 8	NMR 26083	/ 56		30 JUL 2008	Digital colour	35 mm	TF 325133
TF 3213 / 9	NMR 27512	/ 31		10 AUG 2012	Digital colour	35 mm	TF 322130
TF 3213 / 10	NMR 27512	/ 32		10 AUG 2012	Digital colour	35 mm	TF 322130
TF 3213 / 11	NMR 27512	/ 33		10 AUG 2012	Digital colour	35 mm	TF 322130
TF 3312 / 3	NMR 1146	/ 236		03 AUG 1977	Black & white	70mm,120,220	TF 337124
TF 3312 / 10	NMR 26083	/ 53		30 JUL 2008	Digital colour	35 mm	TF 331128
~~TF 3313 / 1~~	~~NMR 10622~~	~~/ 57~~		~~13 MAY 1976~~	~~Colour slide~~	~~70mm,120,220~~	~~TF 331131~~
TF 3313 / 2	NMR 17855	/ 18		25 JUN 2003	Black & white	70mm,120,220	TF 332130
TF 3313 / 3	NMR 17855	/ 19		25 JUN 2003	Black & white	70mm,120,220	TF 332131
TF 3313 / 4	NMR 17855	/ 20		25 JUN 2003	Black & white	70mm,120,220	TF 333135
TF 3313 / 5	NMR 17855	/ 21		25 JUN 2003	Black & white	70mm,120,220	TF 334136
TF 3313 / 6	NMR 17836	/ 27		25 JUN 2003	Colour neg	35 mm	TF 332131
TF 3313 / 7	NMR 17836	/ 28		25 JUN 2003	Colour neg	35 mm	TF 332131
TF 3313 / 8	NMR 17836	/ 29		25 JUN 2003	Colour neg	35 mm	TF 332131
TF 3313 / 9	NMR 17836	/ 30		25 JUN 2003	Colour neg	35 mm	TF 332130
TF 3313 / 10	NMR 17836	/ 31		25 JUN 2003	Colour neg	35 mm	TF 333131
TF 3313 / 11	NMR 17836	/ 32		25 JUN 2003	Colour neg	35 mm	TF 334136

Photo reference (NGR and Index number)	Film and frame number		Original number	Date	Film type		Map Reference
TF 3313 / 12	NMR 17836	/ 33		25 JUN 2003	Colour neg	35 mm	TF 334136
TF 3313 / 13	NMR 20888	/ 44		25 JUN 2009	Digital colour	35 mm	TF 335134
TF 3313 / 14	NMR 20888	/ 45		25 JUN 2009	Digital colour	35 mm	TF 335134
TF 3313 / 15	NMR 20888	/ 46		25 JUN 2009	Digital colour	35 mm	TF 334134
TF 3313 / 16	NMR 20888	/ 47		25 JUN 2009	Digital colour	35 mm	TF 334134
TF 3313 / 17	NMR 20888	/ 48		25 JUN 2009	Digital colour	35 mm	TF 334134
TF 3314 / 3	NMR 1146	/ 302		04 AUG 1977	Black & white	70mm,120,220	TF 337145
TF 3314 / 5	NMR 1952	/ 382		29 JUN 1981	Black & white	70mm,120,220	TF 339145
TF 3314 / 6	NMR 1988	/ 329	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 338145
TF 3314 / 20	NMR 28156	/ 66		14 JUN 2011	Digital colour	35 mm	TF 339148
TF 3314 / 21	NMR 28156	/ 67		14 JUN 2011	Digital colour	35 mm	TF 339148
TF 3413 / 5	NMR 1146	/ 285-295		04 AUG 1977	Black & white	70mm,120,220	TF 345135
TF 3413 / 6	NMR 1574	/ 383-384		04 JUL 1979	Black & white	70mm,120,220	TF 345134
TF 3413 / 8	NMR 1952	/ 370		29 JUN 1981	Black & white	70mm,120,220	TF 344136
TF 3413 / 12	NMR 1952	/ 411		29 JUN 1981	Black & white	70mm,120,220	TF 343132
TF 3413 / 22	NMR 1952	/ 371		29 JUN 1981	Black & white	70mm,120,220	TF 344136
TF 3413 / 23	NMR 1952	/ 372		29 JUN 1981	Black & white	70mm,120,220	TF 344136
TF 3413 / 26	NMR 1952	/ 412		29 JUN 1981	Black & white	70mm,120,220	TF 343132
TF 3413 / 27	NMR 1952	/ 413		29 JUN 1981	Black & white	70mm,120,220	TF 343132
TF 3413 / 28	NMR 1952	/ 414		29 JUN 1981	Black & white	70mm,120,220	TF 343132
TF 3413 / 29	NMR 26091	/ 12		15 AUG 2008	Digital colour	35 mm	TF 342133
TF 3413 / 30	NMR 26091	/ 13		15 AUG 2008	Digital colour	35 mm	TF 342133
TF 3413 / 31	NMR 26091	/ 14		15 AUG 2008	Digital colour	35 mm	TF 341134
TF 3413 / 32	NMR 26091	/ 15		15 AUG 2008	Digital colour	35 mm	TF 342134
TF 3413 / 33	NMR 26091	/ 16		15 AUG 2008	Digital colour	35 mm	TF 342133
TF 3414 / 1	NMR 931	/ 208-213		13 MAY 1976	Black & white	70mm,120,220	TF 342149
TF 3414 / 2	NMR 931	/ 219-224		13 MAY 1976	Black & white	70mm,120,220	TF 344147
TF 3414 / 3	NMR 965	/ 261-264		11 JUL 1976	Black & white	70mm,120,220	TF 345144
TF 3414 / 4	NMR 1139	/ 289-295		06 JUL 1977	Black & white	70mm,120,220	TF 347144
TF 3414 / 5	NMR 1146	/ 296-297		04 AUG 1977	Black & white	70mm,120,220	TF 344146
TF 3414 / 6	NMR 1146	/ 299-301		04 AUG 1977	Black & white	70mm,120,220	TF 345147
TF 3414 / 7	NMR 1146	/ 307-308		04 AUG 1977	Black & white	70mm,120,220	TF 342148
TF 3414 / 8	NMR 1663	/ 121-131		23 JUL 1979	Black & white	70mm,120,220	TF 345145
TF 3414 / 9	NMR 1952	/ 373		29 JUN 1981	Black & white	70mm,120,220	TF 343140
TF 3414 / 10	NMR 1952	/ 375		29 JUN 1981	Black & white	70mm,120,220	TF 343145
TF 3414 / 11	NMR 1952	/ 377		29 JUN 1981	Black & white	70mm,120,220	TF 340148
TF 3414 / 12	NMR 1952	/ 380		29 JUN 1981	Black & white	70mm,120,220	TF 343144
TF 3414 / 13	NMR 1952	/ 383		29 JUN 1981	Black & white	70mm,120,220	TF 342148
TF 3414 / 14	NMR 1952	/ 385		29 JUN 1981	Black & white	70mm,120,220	TF 343145
TF 3414 / 15	NMR 1952	/ 398		29 JUN 1981	Black & white	70mm,120,220	TF 346142
TF 3414 / 16	NMR 1952	/ 405		29 JUN 1981	Black & white	70mm,120,220	TF 348142
TF 3414 / 17	NMR 1952	/ 407		29 JUN 1981	Black & white	70mm,120,220	TF 349145
TF 3414 / 18	NMR 1952	/ 408		29 JUN 1981	Black & white	70mm,120,220	TF 348147
TF 3414 / 19	NMR 1988	/ 313	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 20	NMR 1988	/ 320	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 346146
TF 3414 / 21	NMR 1988	/ 327	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 347147
TF 3414 / 22	NMR 1988	/ 334	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 344146
TF 3414 / 23	NMR 1988	/ 336	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 344147
~~TF 3414 / 24~~	~~NMR 11135~~	~~/ 122-127~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 345148~~
~~TF 3414 / 25~~	~~NMR 11135~~	~~/ 148~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 343144~~
TF 3414 / 26	NMR 1952	/ 374		29 JUN 1981	Black & white	70mm,120,220	TF 343140
TF 3414 / 27	NMR 1952	/ 376		29 JUN 1981	Black & white	70mm,120,220	TF 343145
TF 3414 / 28	NMR 1952	/ 378		29 JUN 1981	Black & white	70mm,120,220	TF 340148
TF 3414 / 29	NMR 1952	/ 379		29 JUN 1981	Black & white	70mm,120,220	TF 340148
TF 3414 / 30	NMR 1952	/ 381		29 JUN 1981	Black & white	70mm,120,220	TF 343144
TF 3414 / 31	NMR 1952	/ 384		29 JUN 1981	Black & white	70mm,120,220	TF 342148
TF 3414 / 32	NMR 1952	/ 386		29 JUN 1981	Black & white	70mm,120,220	TF 343145
TF 3414 / 33	NMR 1952	/ 387		29 JUN 1981	Black & white	70mm,120,220	TF 343145
TF 3414 / 34	NMR 1952	/ 388		29 JUN 1981	Black & white	70mm,120,220	TF 343145
TF 3414 / 35	NMR 1952	/ 399		29 JUN 1981	Black & white	70mm,120,220	TF 346142
TF 3414 / 36	NMR 1952	/ 406		29 JUN 1981	Black & white	70mm,120,220	TF 348142
TF 3414 / 37	NMR 1988	/ 314	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 38	NMR 1988	/ 315	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 344147

Photo reference (NGR and Index number)	Film and frame number		Original number	Date	Film type		Map Reference
TF 3414 / 39	NMR 1988	/ 316	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 40	NMR 1988	/ 317	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 41	NMR 1988	/ 318	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 42	NMR 1988	/ 319	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 43	NMR 1988	/ 321	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 346146
TF 3414 / 44	NMR 1988	/ 328	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 347147
TF 3414 / 45	NMR 1988	/ 335	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 344146
TF 3414 / 46	NMR 1988	/ 337	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 344147
TF 3414 / 49	NMR 20888	/ 33		25 JUN 2009	Digital colour	35 mm	TF 344148
TF 3414 / 50	NMR 20888	/ 34		25 JUN 2009	Digital colour	35 mm	TF 344148
TF 3414 / 51	NMR 20888	/ 35		25 JUN 2009	Digital colour	35 mm	TF 344147
TF 3414 / 52	NMR 20888	/ 36		25 JUN 2009	Digital colour	35 mm	TF 344147
TF 3414 / 53	NMR 20888	/ 37		25 JUN 2009	Digital colour	35 mm	TF 345149
TF 3414 / 54	NMR 20888	/ 39		25 JUN 2009	Digital colour	35 mm	TF 347149
TF 3414 / 55	NMR 20888	/ 40		25 JUN 2009	Digital colour	35 mm	TF 347143
TF 3414 / 56	NMR 20888	/ 41		25 JUN 2009	Digital colour	35 mm	TF 347143
TF 3414 / 57	NMR 20888	/ 42		25 JUN 2009	Digital colour	35 mm	TF 347142
TF 3414 / 58	NMR 20888	/ 43		25 JUN 2009	Digital colour	35 mm	TF 347142
TF 3414 / 59	NMR 28156	/ 41		14 JUN 2011	Digital colour	35 mm	TF 340148
TF 3414 / 60	NMR 28156	/ 42		14 JUN 2011	Digital colour	35 mm	TF 340148
TF 3414 / 61	NMR 28156	/ 43		14 JUN 2011	Digital colour	35 mm	TF 343148
TF 3414 / 62	NMR 28156	/ 44		14 JUN 2011	Digital colour	35 mm	TF 343148
TF 3414 / 63	NMR 28156	/ 45		14 JUN 2011	Digital colour	35 mm	TF 349148
TF 3414 / 64	NMR 28156	/ 46		14 JUN 2011	Digital colour	35 mm	TF 349148
TF 3414 / 65	NMR 28156	/ 59		14 JUN 2011	Digital colour	35 mm	TF 346149
TF 3414 / 66	NMR 28156	/ 60		14 JUN 2011	Digital colour	35 mm	TF 346149
TF 3414 / 67	NMR 28156	/ 61		14 JUN 2011	Digital colour	35 mm	TF 346149
TF 3414 / 68	NMR 28156	/ 62		14 JUN 2011	Digital colour	35 mm	TF 346149
TF 3414 / 69	NMR 28156	/ 63		14 JUN 2011	Digital colour	35 mm	TF 340149
TF 3414 / 70	NMR 28156	/ 64		14 JUN 2011	Digital colour	35 mm	TF 340149
TF 3414 / 71	NMR 28156	/ 65		14 JUN 2011	Digital colour	35 mm	TF 342149
TF 3415 / 1	NMR 931	/ 216-218		13 MAY 1976	Black & white	70mm,120,220	TF 344159
TF 3415 / 2	NMR 931	/ 231-237		13 MAY 1976	Black & white	70mm,120,220	TF 343157
TF 3415 / 3	NMR 1139	/ 298-299		06 JUL 1977	Black & white	70mm,120,220	TF 343158
TF 3415 / 4	NMR 1146	/ 309-316		04 AUG 1977	Black & white	70mm,120,220	TF 346156
TF 3415 / 7	NMR 1952	/ 306		29 JUN 1981	Black & white	70mm,120,220	TF 344156
TF 3415 / 8	NMR 1952	/ 308		29 JUN 1981	Black & white	70mm,120,220	TF 345150
TF 3415 / 9	NMR 1952	/ 314		29 JUN 1981	Black & white	70mm,120,220	TF 349153
TF 3415 / 10	NMR 1952	/ 389		29 JUN 1981	Black & white	70mm,120,220	TF 344150
TF 3415 / 11	NMR 1952	/ 391		29 JUN 1981	Black & white	70mm,120,220	TF 344154
TF 3415 / 12	NMR 1952	/ 393		29 JUN 1981	Black & white	70mm,120,220	TF 343155
TF 3415 / 13	NMR 1952	/ 395		29 JUN 1981	Black & white	70mm,120,220	TF 342150
TF 3415 / 14	NMR 1988	/ 311	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 349151
TF 3415 / 15	NMR 1988	/ 322	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 343150
TF 3415 / 16	NMR 1988	/ 330	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 343150
TF 3415 / 17	NMR 1988	/ 338	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 348152
~~TF 3415 / 18~~	~~NMR 11135~~	~~/ 118-121~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 348151~~
~~TF 3415 / 19~~	~~NMR 11135~~	~~/ 128-133~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 345154~~
~~TF 3415 / 20~~	~~NMR 11135~~	~~/ 134-137~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 348150~~
TF 3415 / 23	CCC 8519	/ M556	SEE PRINTS	Unknown	Black & white	Unknown	TF 342156
TF 3415 / 34	NMR 1952	/ 307		29 JUN 1981	Black & white	70mm,120,220	TF 344156
TF 3415 / 35	NMR 1952	/ 309		29 JUN 1981	Black & white	70mm,120,220	TF 345150
TF 3415 / 36	NMR 1952	/ 310		29 JUN 1981	Black & white	70mm,120,220	TF 345150
TF 3415 / 37	NMR 1952	/ 311		29 JUN 1981	Black & white	70mm,120,220	TF 345150
TF 3415 / 38	NMR 1952	/ 315		29 JUN 1981	Black & white	70mm,120,220	TF 349153
TF 3415 / 39	NMR 1952	/ 390		29 JUN 1981	Black & white	70mm,120,220	TF 344150
TF 3415 / 40	NMR 1952	/ 392		29 JUN 1981	Black & white	70mm,120,220	TF 344154
TF 3415 / 41	NMR 1952	/ 394		29 JUN 1981	Black & white	70mm,120,220	TF 343155
TF 3415 / 42	NMR 1952	/ 396		29 JUN 1981	Black & white	70mm,120,220	TF 342150
TF 3415 / 43	NMR 1952	/ 397		29 JUN 1981	Black & white	70mm,120,220	TF 342150
TF 3415 / 44	NMR 1988	/ 312	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 349151
TF 3415 / 45	NMR 1988	/ 323	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 343150
TF 3415 / 46	NMR 1988	/ 324	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 343150

Photo reference (NGR and Index number)	Film and frame number		Original number	Date	Film type		Map Reference
TF 3415 / 47	NMR 1988	/ 325	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 343150
TF 3415 / 48	NMR 1988	/ 326	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 343150
TF 3415 / 49	NMR 1988	/ 331	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 343150
TF 3415 / 50	NMR 1988	/ 332	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 343150
TF 3415 / 51	NMR 1988	/ 333	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 343150
TF 3415 / 52	NMR 1988	/ 339	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 348152
TF 3415 / 53	NMR 1988	/ 340	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 348152
TF 3415 / 54	NMR 1988	/ 341	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 348152
TF 3415 / 63	NMR 21372	/ 11		17 AUG 2001	Colour neg	35 mm	TF 344158
TF 3415 / 65	NMR 21372	/ 13		17 AUG 2001	Colour neg	35 mm	TF 341154
TF 3415 / 75	NMR 26092	/ 13		15 AUG 2008	Digital colour	35 mm	TF 345159
TF 3415 / 76	NMR 26092	/ 14		15 AUG 2008	Digital colour	35 mm	TF 345159
TF 3415 / 77	NMR 26092	/ 15		15 AUG 2008	Digital colour	35 mm	TF 343158
TF 3415 / 79	NMR 20888	/ 38		25 JUN 2009	Digital colour	35 mm	TF 347150
TF 3416 / 6	NMR 931	/ 214-215		13 MAY 1976	Black & white	70mm,120,220	TF 348160
TF 3416 / 9	NMR 1146	/ 317-320		04 AUG 1977	Black & white	70mm,120,220	TF 348164
TF 3416 / 69	NMR 20899	/ 45		01 JUL 2009	Digital colour	35 mm	TF 348168
TF 3416 / 70	NMR 20899	/ 46		01 JUL 2009	Digital colour	35 mm	TF 348168
TF 3514 / 2	NMR 1952	/ 303		29 JUN 1981	Black & white	70mm,120,220	TF 350148
TF 3514 / 10	NMR 1952	/ 304		29 JUN 1981	Black & white	70mm,120,220	TF 350148
TF 3514 / 11	NMR 1952	/ 305		29 JUN 1981	Black & white	70mm,120,220	TF 350148
TF 3514 / 36	NMR 28156	/ 57		14 JUN 2011	Digital colour	35 mm	TF 350149
TF 3514 / 37	NMR 28156	/ 58		14 JUN 2011	Digital colour	35 mm	TF 350149
TF 3515 / 1	NMR 931	/ 225-228		13 MAY 1976	Black & white	70mm,120,220	TF 355152
TF 3515 / 2	NMR 1146	/ 298		04 AUG 1977	Black & white	70mm,120,220	TF 350150
TF 3515 / 5	NMR 1952	/ 312		29 JUN 1981	Black & white	70mm,120,220	TF 353152
TF 3515 / 6	NMR 1988	/ 342	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 355153
TF 3515 / 12	NMR 1952	/ 313		29 JUN 1981	Black & white	70mm,120,220	TF 353152
TF 3515 / 13	NMR 1988	/ 343	APR1675	11 AUG 1981	Black & white	70mm,120,220	TF 355153
TF 3515 / 14	NMR 20899	/ 63		01 JUL 2009	Digital colour	35 mm	TF 358158
TF 3515 / 15	NMR 20899	/ 64		01 JUL 2009	Digital colour	35 mm	TF 358158
TF 3515 / 32	NMR 28156	/ 47		14 JUN 2011	Digital colour	35 mm	TF 353150
TF 3515 / 33	NMR 28156	/ 48		14 JUN 2011	Digital colour	35 mm	TF 353150
TF 3516 / 1	NMR 931	/ 229-230		13 MAY 1976	Black & white	70mm,120,220	TF 353164
TF 3516 / 2	CAP 8021	/ 42	FN	08 JUN 1951	Black & white	Unknown	TF 358167
TF 3516 / 3	NMR 1303	/ 461-463		15 AUG 1978	Black & white	70mm,120,220	TF 354166
TF 3516 / 4	NMR 1574	/ 368-376		04 JUL 1979	Black & white	70mm,120,220	TF 353164
TF 3516 / 5	NMR 1574	/ 377-380		04 JUL 1979	Black & white	70mm,120,220	TF 352162
TF 3516 / 6	NMR 1663	/ 326-330		23 JUL 1979	Black & white	70mm,120,220	TF 356167
TF 3516 / 7	NMR 1663	/ 331-335		23 JUL 1979	Black & white	70mm,120,220	TF 355164
TF 3516 / 8	NMR 1663	/ 336-337		23 JUL 1979	Black & white	70mm,120,220	TF 355168
~~TF 3516 / 9~~	~~NMR 11135~~	~~/ 105-111~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 352161~~
~~TF 3516 / 10~~	~~NMR 11135~~	~~/ 112-113~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 354164~~
~~TF 3516 / 11~~	~~NMR 11135~~	~~/ 114-115~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 354161~~
TF 3516 / 12	NMR 2622	/ 2091		01 JUL 1985	Black & white	70mm,120,220	TF 350168
TF 3516 / 13	NMR 2622	/ 2093		01 JUL 1985	Black & white	70mm,120,220	TF 358169
TF 3516 / 14	NMR 2622	/ 2100		01 JUL 1985	Black & white	70mm,120,220	TF 355169
TF 3516 / 15	NMR 2622	/ 2092		01 JUL 1985	Black & white	70mm,120,220	TF 350168
TF 3516 / 16	NMR 2622	/ 2094		01 JUL 1985	Black & white	70mm,120,220	TF 358169
TF 3516 / 17	NMR 2622	/ 2101		01 JUL 1985	Black & white	70mm,120,220	TF 355169
TF 3516 / 18	NMR 2622	/ 2102		01 JUL 1985	Black & white	70mm,120,220	TF 355169
TF 3516 / 19	NMR 2622	/ 2103		01 JUL 1985	Black & white	70mm,120,220	TF 355169
TF 3516 / 20	NMR 20899	/ 35		01 JUL 2009	Digital colour	35 mm	TF 354168
TF 3516 / 21	NMR 20899	/ 36		01 JUL 2009	Digital colour	35 mm	TF 354169
TF 3516 / 22	NMR 20899	/ 37		01 JUL 2009	Digital colour	35 mm	TF 354169
TF 3516 / 23	NMR 20899	/ 38		01 JUL 2009	Digital colour	35 mm	TF 353168
TF 3516 / 24	NMR 20899	/ 39		01 JUL 2009	Digital colour	35 mm	TF 353168
TF 3516 / 25	NMR 20899	/ 40		01 JUL 2009	Digital colour	35 mm	TF 354168
TF 3516 / 26	NMR 20899	/ 41		01 JUL 2009	Digital colour	35 mm	TF 353169
TF 3516 / 27	NMR 20899	/ 42		01 JUL 2009	Digital colour	35 mm	TF 352169
TF 3516 / 28	NMR 20899	/ 43		01 JUL 2009	Digital colour	35 mm	TF 351169
TF 3516 / 29	NMR 20899	/ 44		01 JUL 2009	Digital colour	35 mm	TF 350169
TF 3516 / 30	NMR 20899	/ 55		01 JUL 2009	Digital colour	35 mm	TF 359164

Photo reference (NGR and Index number)	Film and frame number		Original number	Date	Film type		Map Reference
TF 3516 / 31	NMR 20899	/ 56		01 JUL 2009	Digital colour	35 mm	TF 358164
TF 3516 / 32	NMR 20899	/ 57		01 JUL 2009	Digital colour	35 mm	TF 358164
TF 3516 / 33	NMR 20899	/ 58		01 JUL 2009	Digital colour	35 mm	TF 359164
TF 3516 / 34	NMR 20899	/ 59		01 JUL 2009	Digital colour	35 mm	TF 359164
TF 3516 / 35	NMR 20899	/ 60		01 JUL 2009	Digital colour	35 mm	TF 359164
TF 3516 / 36	NMR 20899	/ 61		01 JUL 2009	Digital colour	35 mm	TF 358164
TF 3516 / 37	NMR 20899	/ 62		01 JUL 2009	Digital colour	35 mm	TF 357163
TF 3516 / 38	NMR 20899	/ 68		01 JUL 2009	Digital colour	35 mm	TF 359160
TF 3516 / 39	NMR 20899	/ 69		01 JUL 2009	Digital colour	35 mm	TF 359160
TF 3516 / 40	NMR 20899	/ 70		01 JUL 2009	Digital colour	35 mm	TF 357160
TF 3516 / 41	NMR 20899	/ 71		01 JUL 2009	Digital colour	35 mm	TF 357161
TF 3516 / 42	NMR 20899	/ 72		01 JUL 2009	Digital colour	35 mm	TF 356161
TF 3516 / 43	NMR 20899	/ 73		01 JUL 2009	Digital colour	35 mm	TF 356161
TF 3516 / 44	NMR 20899	/ 74		01 JUL 2009	Digital colour	35 mm	TF 357161
TF 3516 / 45	NMR 28156	/ 27		14 JUN 2011	Digital colour	35 mm	TF 358160
TF 3516 / 46	NMR 28156	/ 28		14 JUN 2011	Digital colour	35 mm	TF 358160
TF 3517 / 8	NMR 1952	/ 292		29 JUN 1981	Black & white	70mm,120,220	TF 356171
TF 3517 / 11	NMR 1952	/ 293		29 JUN 1981	Black & white	70mm,120,220	TF 356171
TF 3616 / 2	NMR 1146	/ 282-284		04 AUG 1977	Black & white	70mm,120,220	TF 360165
TF 3616 / 3	NMR 1952	/ 289		29 JUN 1981	Black & white	70mm,120,220	TF 361168
~~TF 3616 / 6~~	~~NMR 11135~~	~~/ 90-91~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 363168~~
~~TF 3616 / 8~~	~~NMR 11135~~	~~/ 94-95~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 363167~~
~~TF 3616 / 9~~	~~NMR 11135~~	~~/ 116-117~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 361169~~
TF 3616 / 14	NMR 1952	/ 290		29 JUN 1981	Black & white	70mm,120,220	TF 361168
TF 3616 / 20	NMR 2111	/ 1199	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 360165
TF 3616 / 21	NMR 2111	/ 1200	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 360163
TF 3616 / 22	NMR 2111	/ 1201	APR1731	15 APR 1982	Black & white	70mm,120,220	TF 360161
TF 3617 / 1	NMR 1663	/ 338-341		23 JUL 1979	Black & white	70mm,120,220	TF 362171
TF 3617 / 2	NMR 1952	/ 276		29 JUN 1981	Black & white	70mm,120,220	TF 362172
TF 3617 / 4	NMR 1952	/ 291		29 JUN 1981	Black & white	70mm,120,220	TF 360170
~~TF 3617 / 5~~	~~NMR 11135~~	~~/ 66-71~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 362171~~
~~TF 3617 / 7~~	~~NMR 11135~~	~~/ 88-89~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 364173~~
~~TF 3617 / 8~~	~~NMR 11135~~	~~/ 96-97~~		~~29 JUN 1981~~	~~FCIR slide~~	~~70mm,120,220~~	~~TF 364173~~
TF 3617 / 10	NMR 2622	/ 2095		01 JUL 1985	Black & white	70mm,120,220	TF 360172
TF 3617 / 11	NMR 2622	/ 2096		01 JUL 1985	Black & white	70mm,120,220	TF 360172
TF 3617 / 12	NMR 2622	/ 2097		01 JUL 1985	Black & white	70mm,120,220	TF 360172
TF 3617 / 13	NMR 2622	/ 2098		01 JUL 1985	Black & white	70mm,120,220	TF 360172
TF 3617 / 14	NMR 2622	/ 2099		01 JUL 1985	Black & white	70mm,120,220	TF 360172
TF 3617 / 15	NMR 1952	/ 277		29 JUN 1981	Black & white	70mm,120,220	TF 362172
TF 3617 / 23	NMR 20899	/ 47		01 JUL 2009	Digital colour	35 mm	TF 362173
TF 3617 / 24	NMR 20899	/ 48		01 JUL 2009	Digital colour	35 mm	TF 362173
TF 3617 / 25	NMR 20899	/ 49		01 JUL 2009	Digital colour	35 mm	TF 362173
TF 3617 / 27	NMR 20899	/ 51		01 JUL 2009	Digital colour	35 mm	TF 362173
TF 3617 / 30	NMR 20899	/ 54		01 JUL 2009	Digital colour	35 mm	TF 362172

APPENDIX 5 STRUCTURE AND CONTENT OF DIGITAL MAP DATASET

All features in the MapInfo table and ESRI shape files 'MERIDIAN AP_LIDAR MAPPING' are associated with the following information, where applicable.

SUBPARCEL	Sub-parcel number
LAYER	Indicates nature of feature depicted eg bank, ditch, ridge and furrow, modern etc
TYPE	Historic England Monument Type Thesaurus term
PERIOD	Period
SOURCES1	Photo reference number
SOURCE1EVIDENCE	Evidence (earthwork, structure, soilmark, parchmark, cropmark) as features appears on SOURCE1
SOURCES2	Photo reference number
SOURCE2EVIDENCE	Evidence (earthwork, structure, soilmark, parchmark, cropmark) as features appears on SOURCE2
SOURCES3	Photo reference number
SOURCE3EVIDENCE	Evidence (earthwork, structure, soilmark, parchmark, cropmark) as features appears on SOURCE3
HER	Historic Enviroment Record monument number (where applicable)

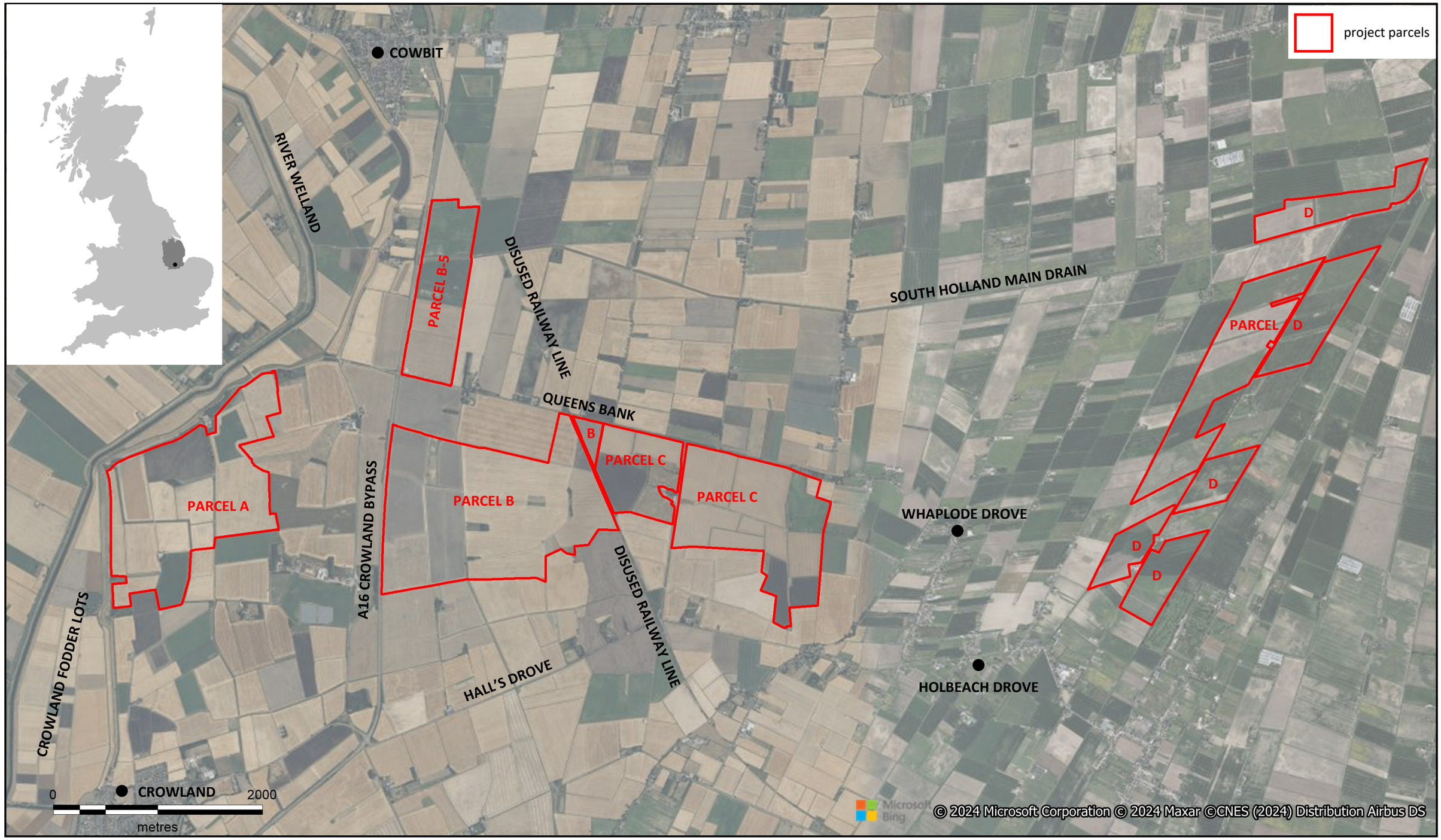

Figure 1. Overview of the land parcels surveyed for the Meridian Solar Farm Project Air Photo and LiDAR Mapping.

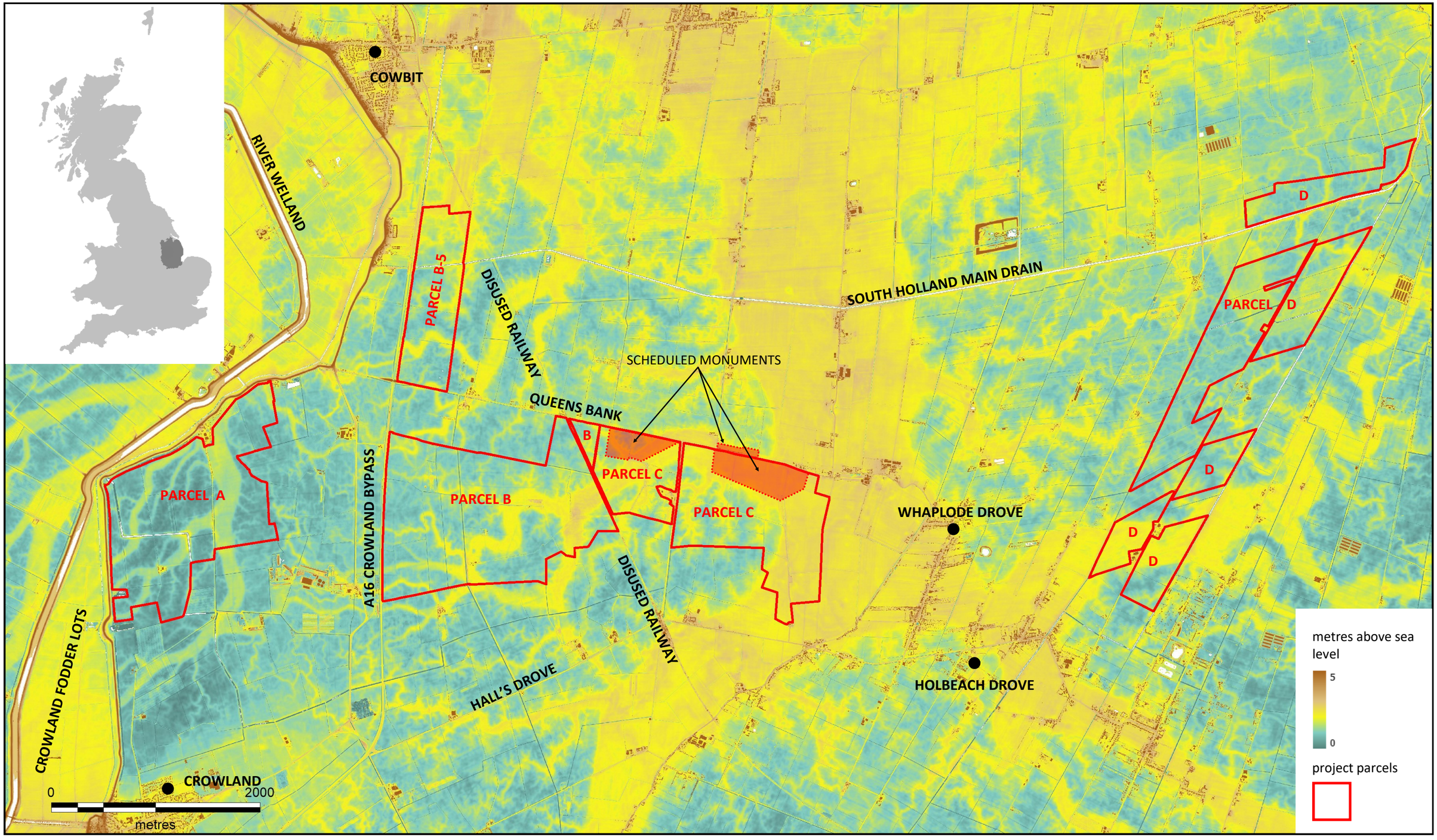

Figure 2. Overview of the land parcel surveyed for the Meridian Solar Farm Project Air Photo and LiDAR Mapping (hill-shaded and colour relief visualisation generated from the Environment Agency LiDAR DTM)

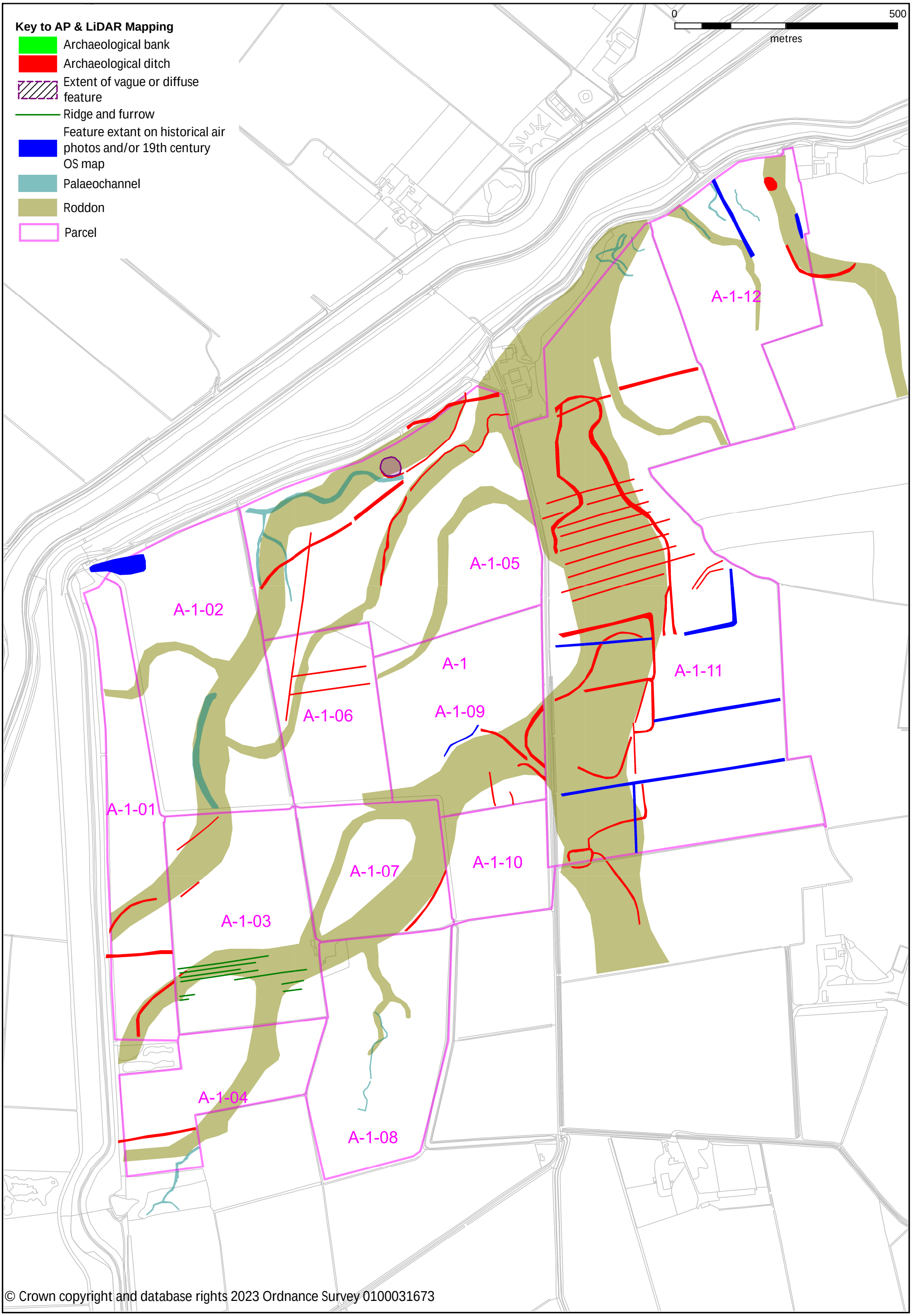

Figure 3. Air photo and LiDAR mapping results for Parcel A Meridian Solar Farm Project

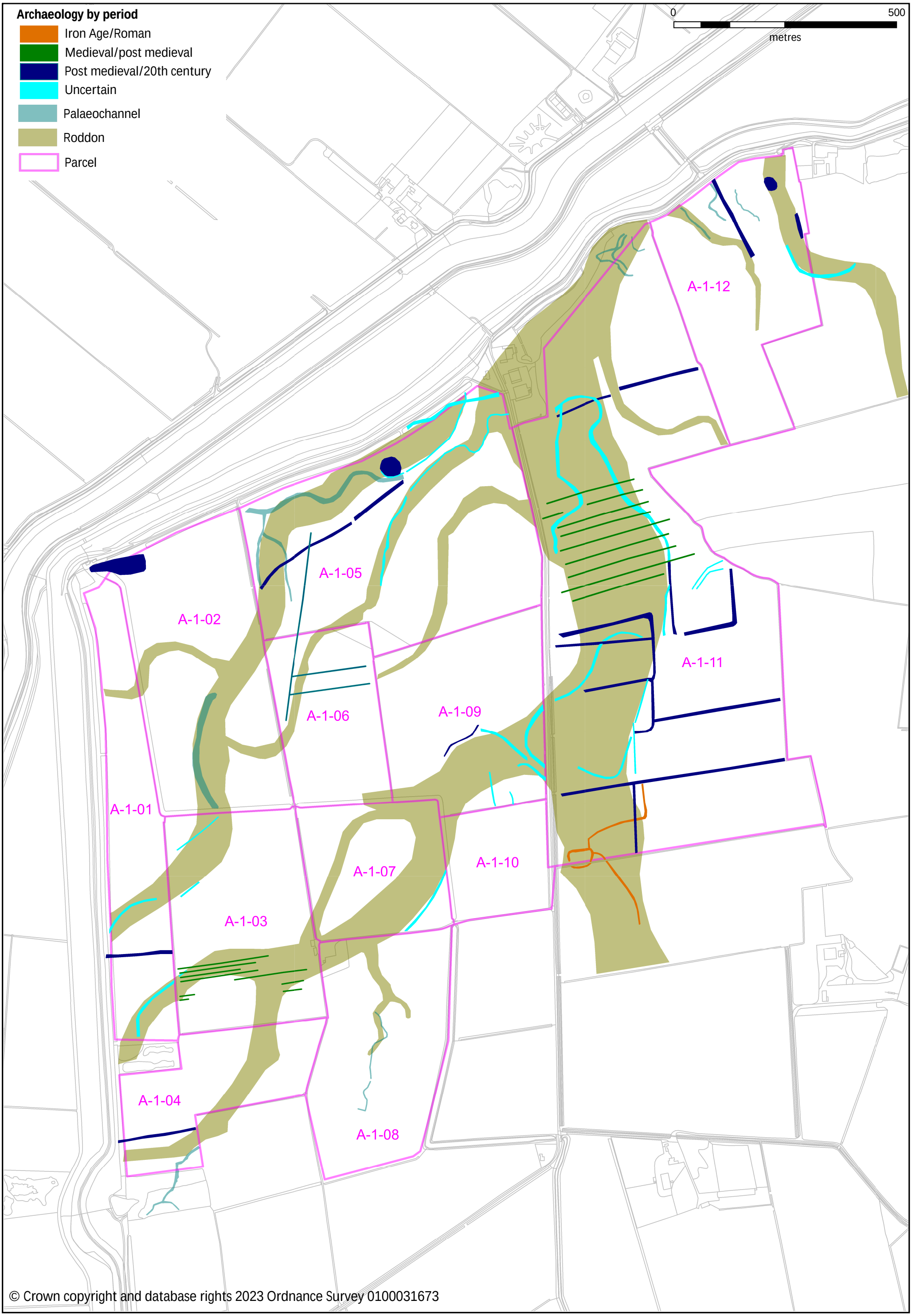

Figure 4. Air photo and LiDAR mapping results, colour-coded by broad period, results for Parcel A, Meridian Solar Farm Project

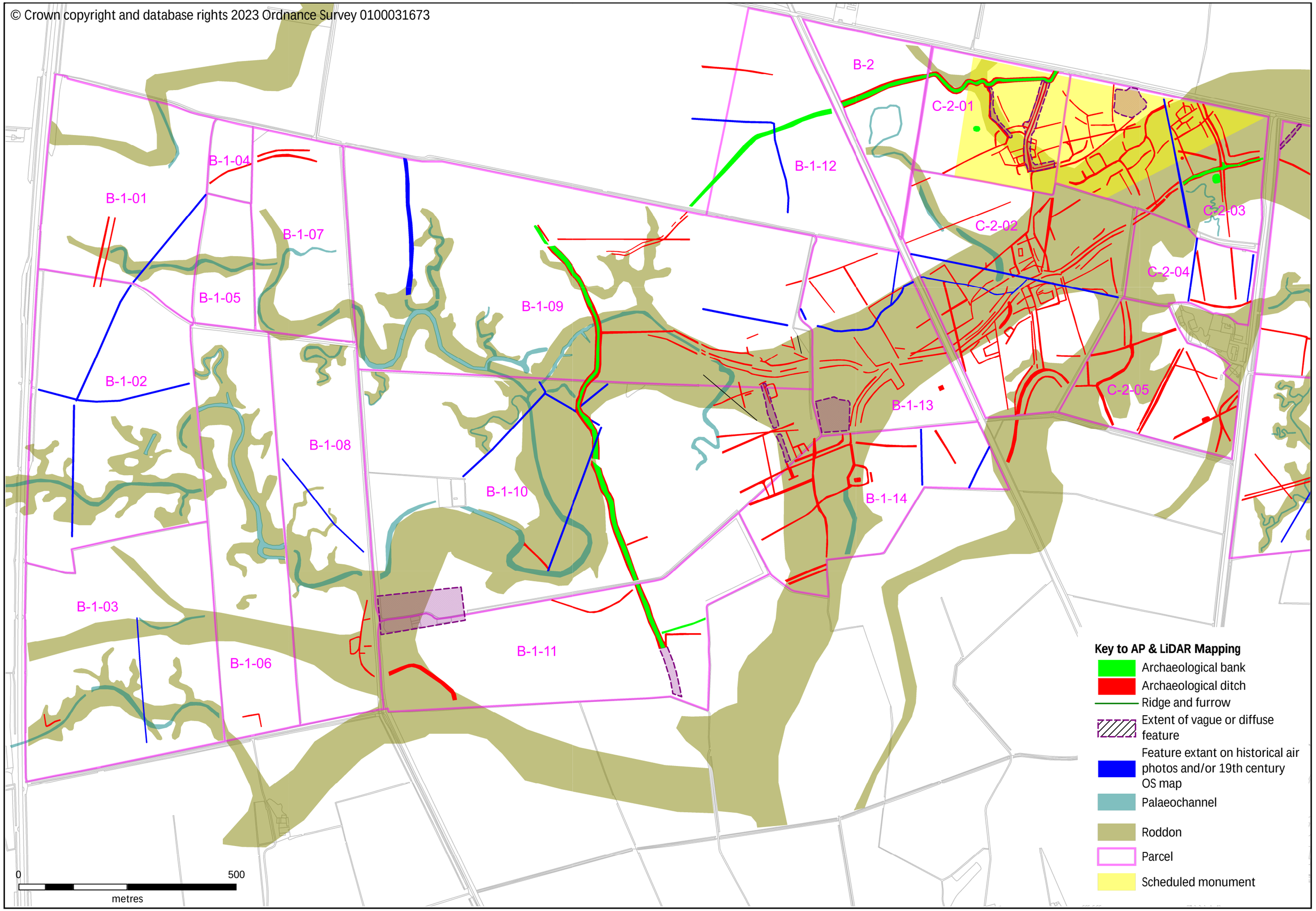

Figure 5. Air photo and LiDAR mapping results for Parcel B and Parcel C-2, Meridian Solar Farm Project

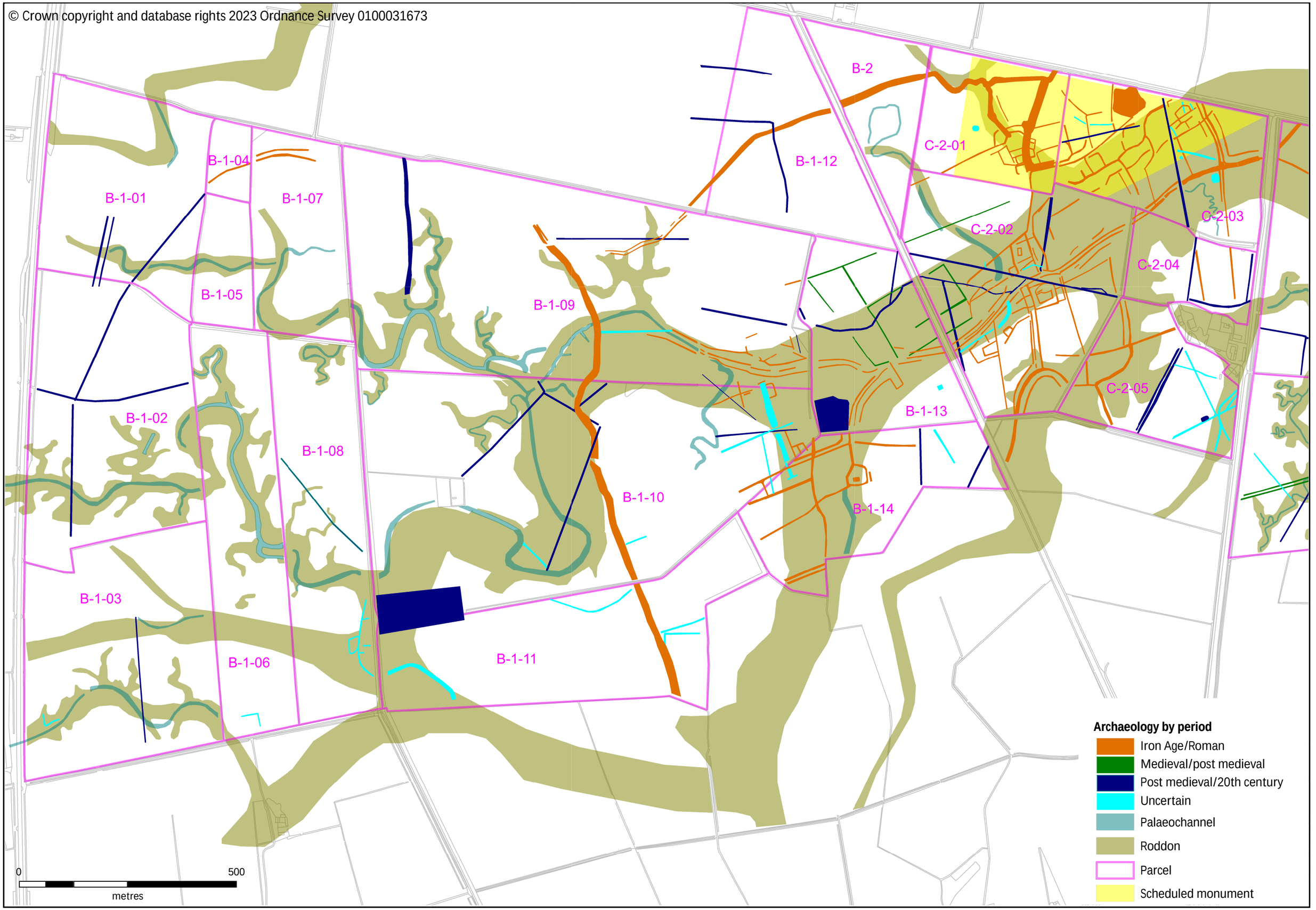

Figure 6. Air photo and LiDAR mapping results colour-coded by broad period for Parcel B and Parcel C-2 , Meridian Solar Farm Project

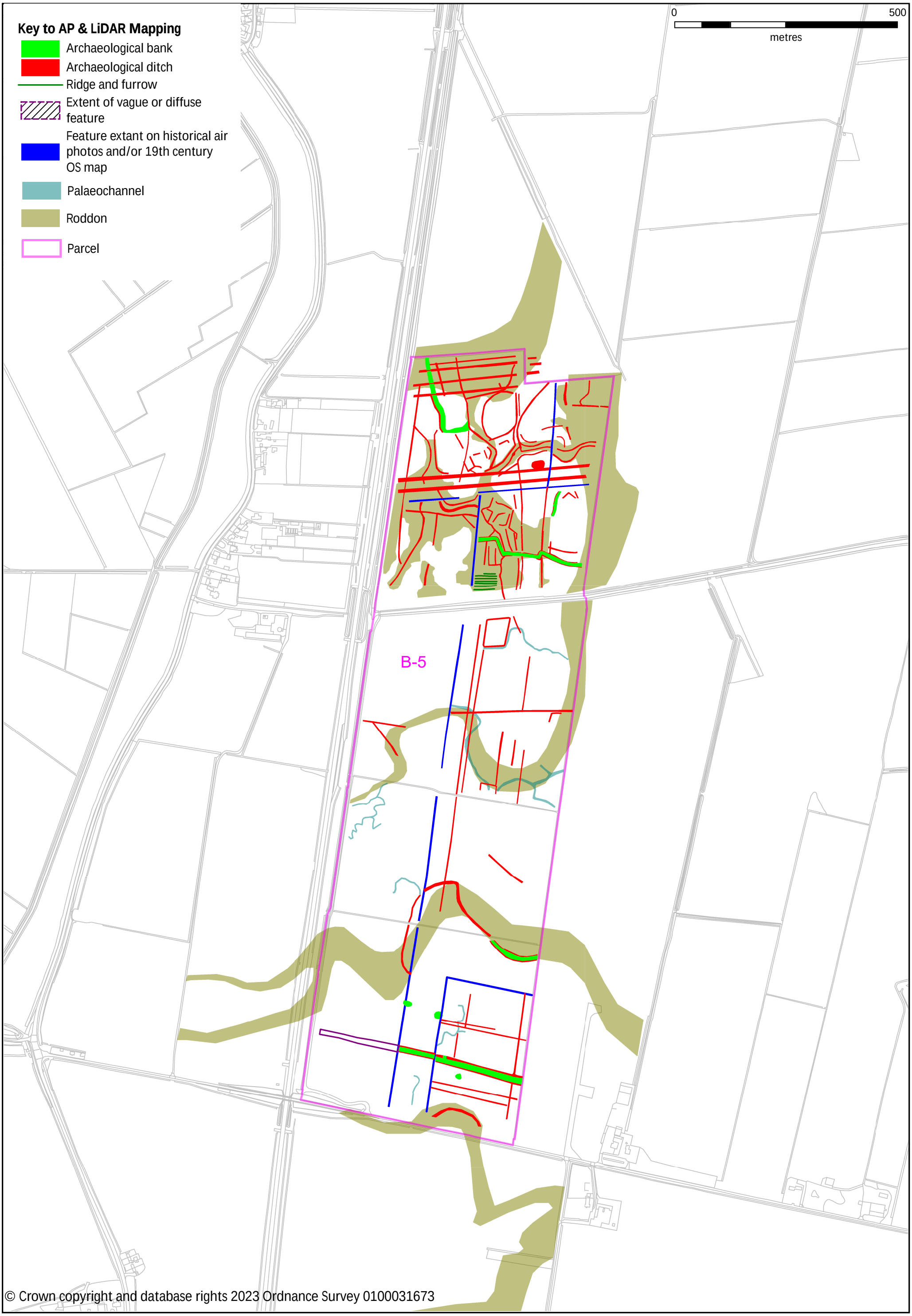

Figure 7. Air photo and LiDAR mapping results for Parcel B-5, Meridian Solar Farm Project

Figure 8. Air photo and LiDAR mapping results, colour-coded by period, for Parcel B-5, Meridian Solar Farm Project

B-2
B-1-12
B-1-14
C-2-01
C-2-02
C-2-03
C-2-04
C-2-05
C-1-01
C-1-02
C-1-03
C-1-04
C-1-05
C-1-06
C-1-07
C-1-08

0
500
metres

Key to AP & LiDAR Mapping

- Archaeological bank
- Archaeological ditch
- Ridge and furrow
- Extent of vague or diffuse feature
- Feature extant on historical air photos and/or 19th century OS map
- Palaeochannel
- Roddon
- Parcel
- Scheduled monument

Figure 9. Air photo and LiDAR mapping results for Parcel C, Meridian Solar Farm Project

B-2
C-2-01
B-1-12
C-2-02
C-2-03
C-2-04
C-1-01
C-1-03
C-2-05
C-1-02
C-1-04
C-1-08
B-1-14
C-1-05
C-1-06
C-1-07

0
500
metres

Archaeology by period
- Iron Age/Roman
- Medieval/post medieval
- Post medieval/20th century
- Uncertain
- Palaeochannel
- Roddon
- Parcel
- Scheduled monument

Figure 10. Air photo and LiDAR mapping results colour-coded by broad period for Parcel C , Meridian Solar Farm Project

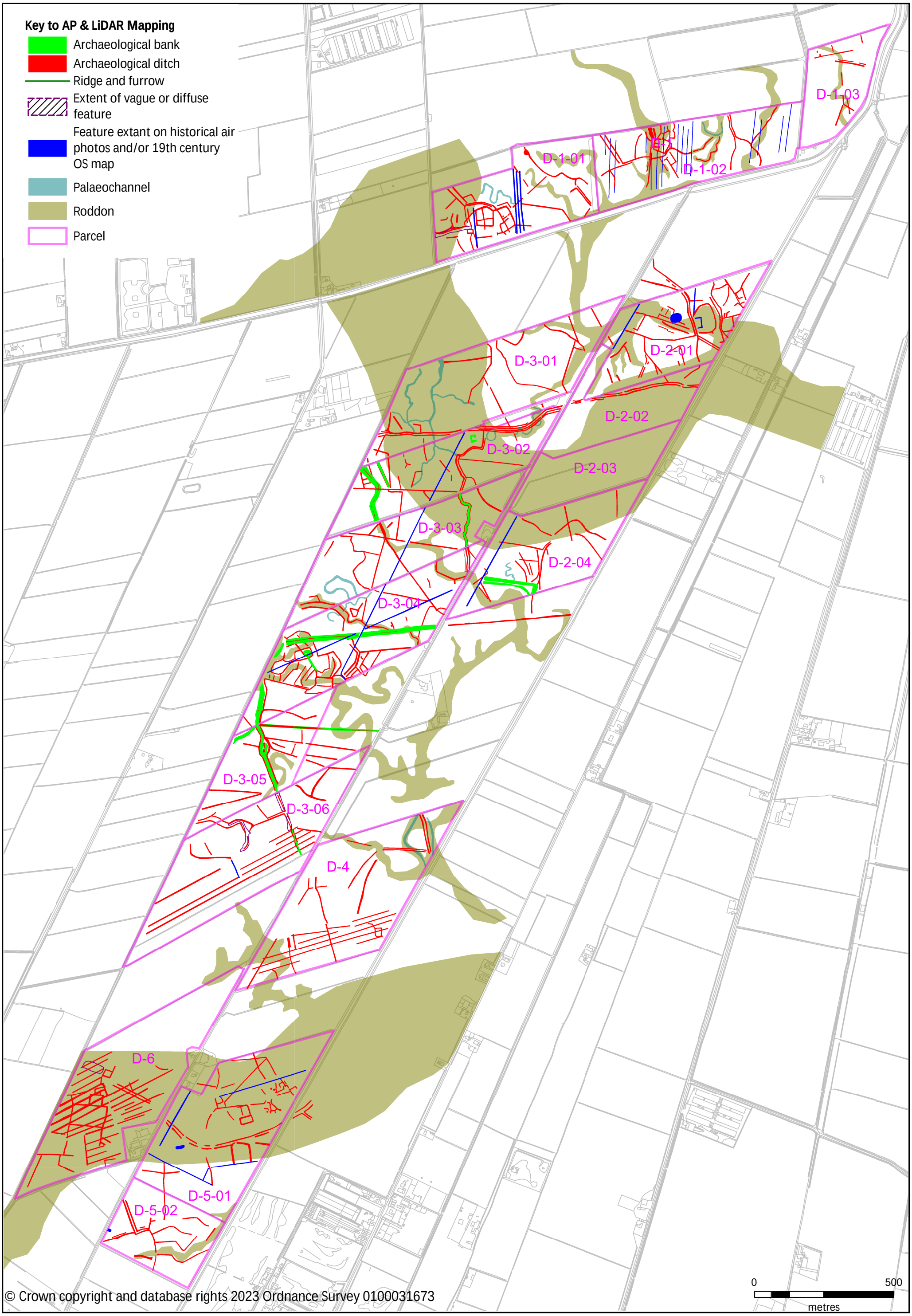

Figure 11. Air photo and LiDAR mapping results for Parcel D, Meridian Solar Farm Project

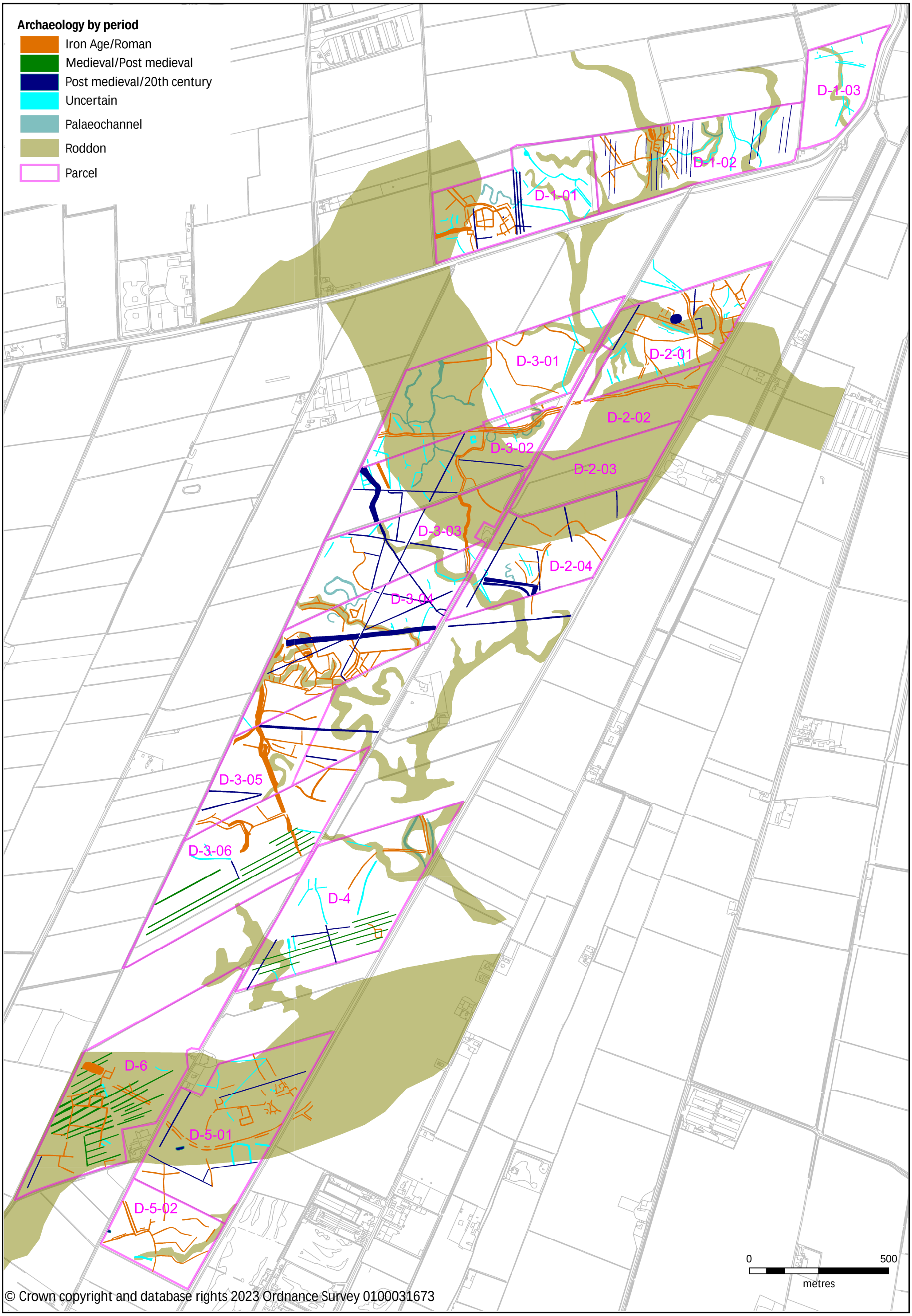

Figure 12. Air photo and LiDAR mapping results, colour-coded by broad period, for Parcel D, Meridian Solar Farm Project

C.2 Aerial photography and LiDAR assessment of the Inter-Array Connections and Grid Corridor Connection Route

AIR PHOTO SERVICES

Archaeology • Research • Law • Environment • Planning

Meridian Solar Farm

Inter-Array Areas and Grid Connection

VOLUME 2

Assessment of aerial photographs, satellite imagery and LiDAR data for archaeology

August 2025

APS report 225 01 01_01

Figures 15 and 16, the Grid Connection mapbook

Figures 1 – 14 supplied in Volume 1

Meridian Solar Farm, Inter-Array Areas and Grid Connection
VOLUME 2 Figures 15 and 16, the Grid Connection mapbook

Client	Jeremy Benn Associates Ltd Limited on behalf of Meridian Solar Farm Ltd
Air Photo Services Document Number	225 01 01_02
Air Photo Services Project Number	225 01 01

Report Status	Rev 1
Issue date	4th August 2025
Report and interpretation	Chris Cox MA MCIfA FSA
Figures, mapbooks, LiDAR visualisations and GIS management	Adam Jarvis, ACIfA
Data and report QA	David Lang BA PCIfA

Disclaimer

Figure 15

Figure 16

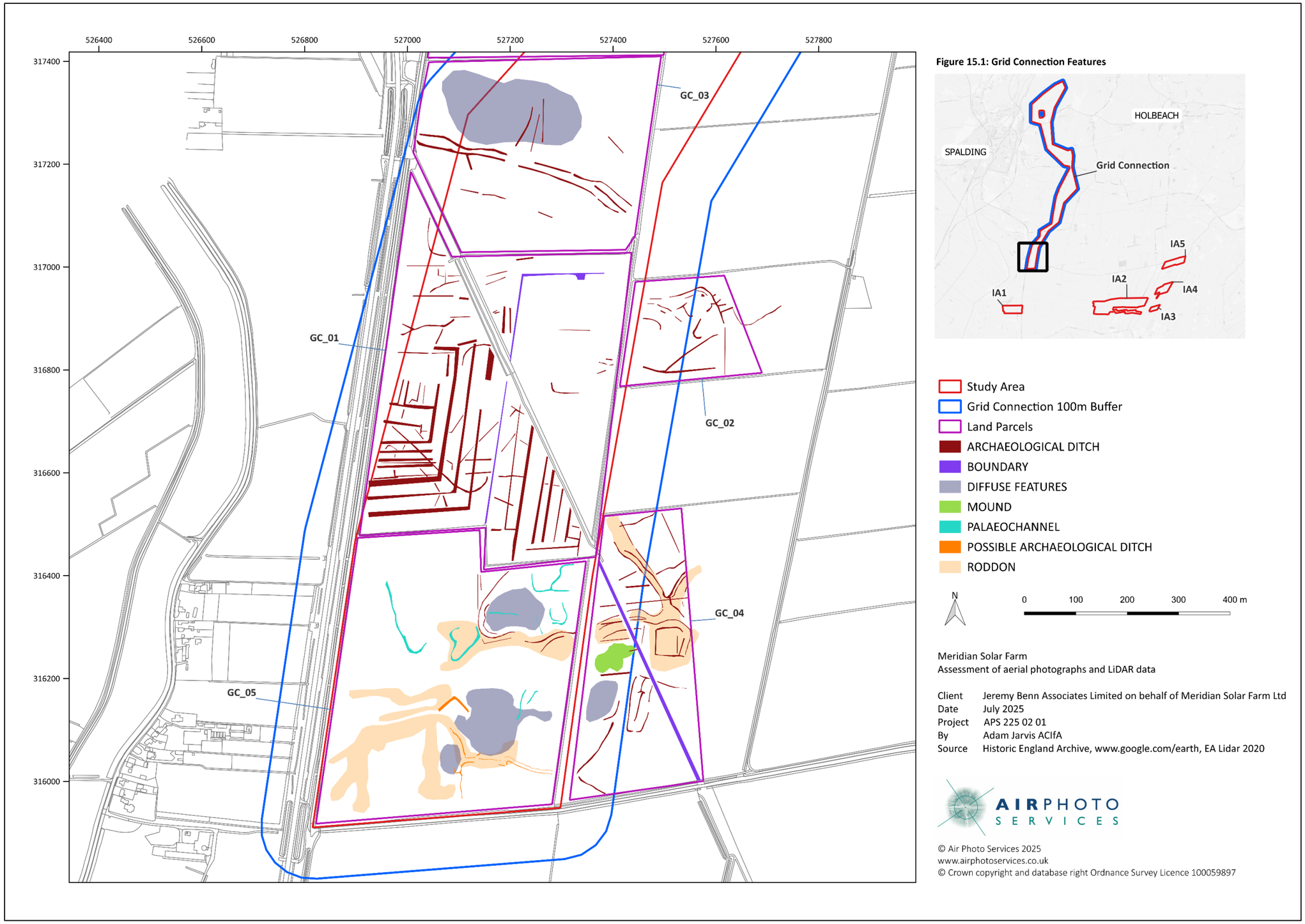

Figure 15 1 Features recorded in GC_01 to GC_05

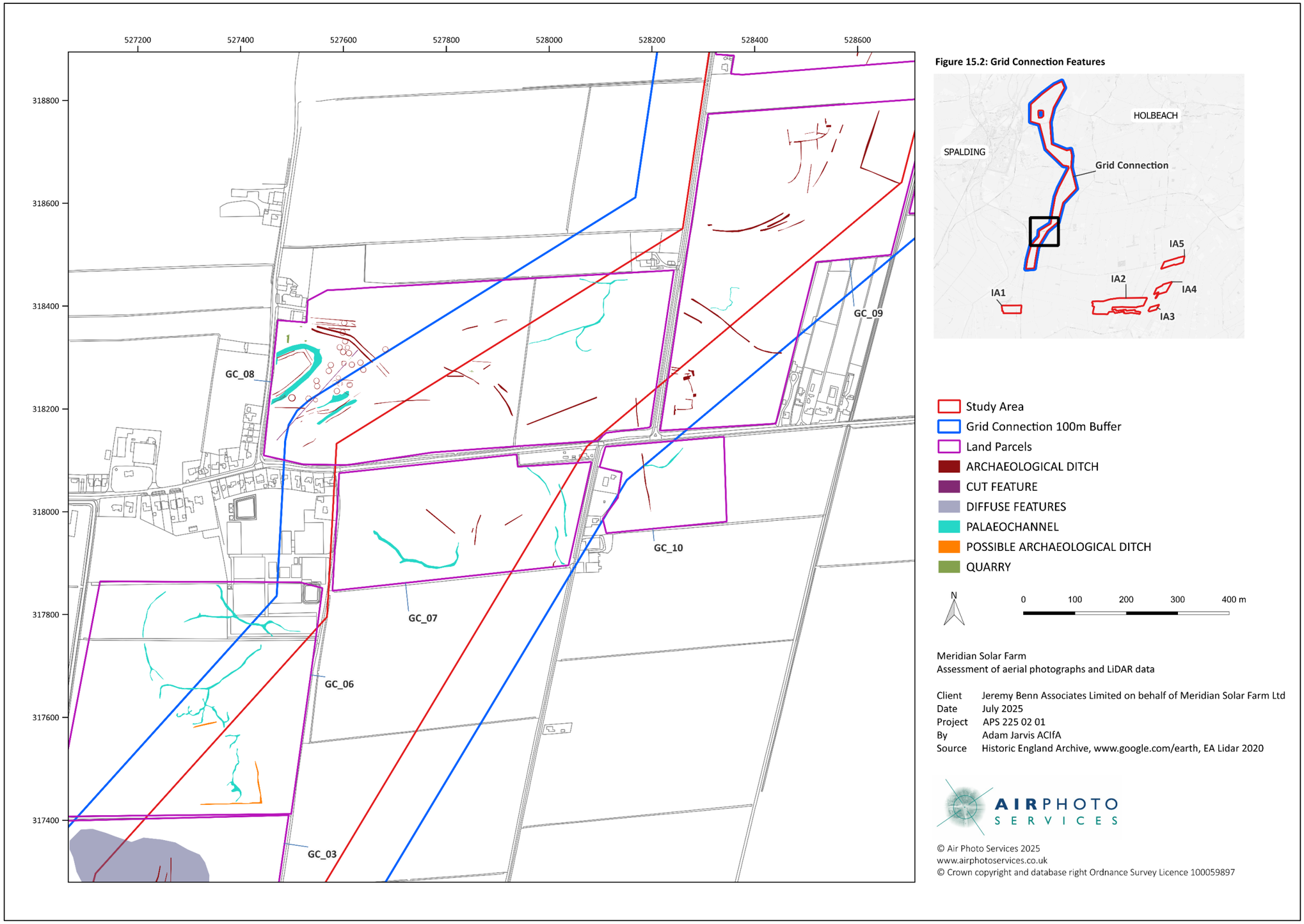

Figure 15 2 Features recorded in GC_06 to GC_10

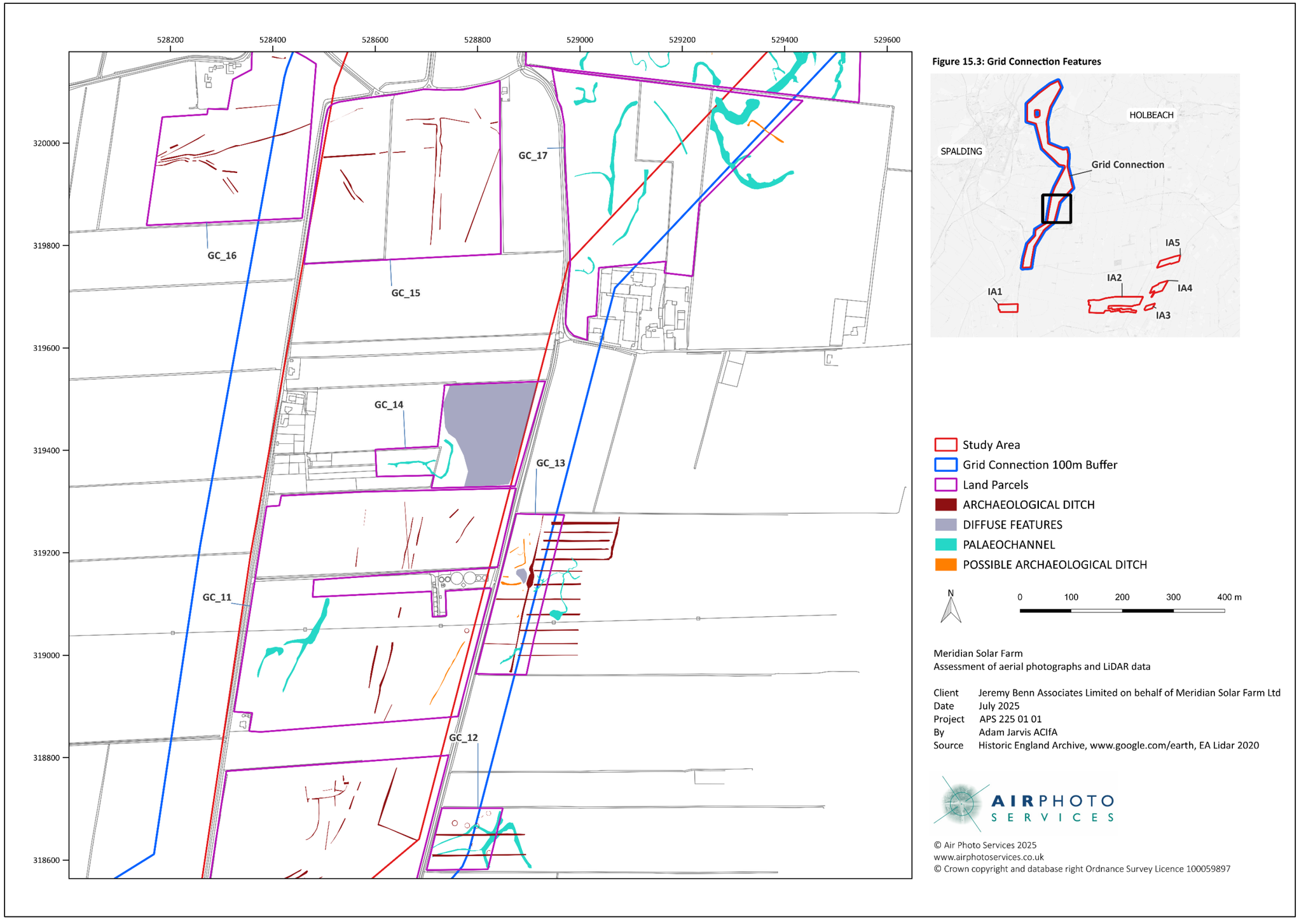

Figure 15 3 Features recorded in GC_11 to GC_17

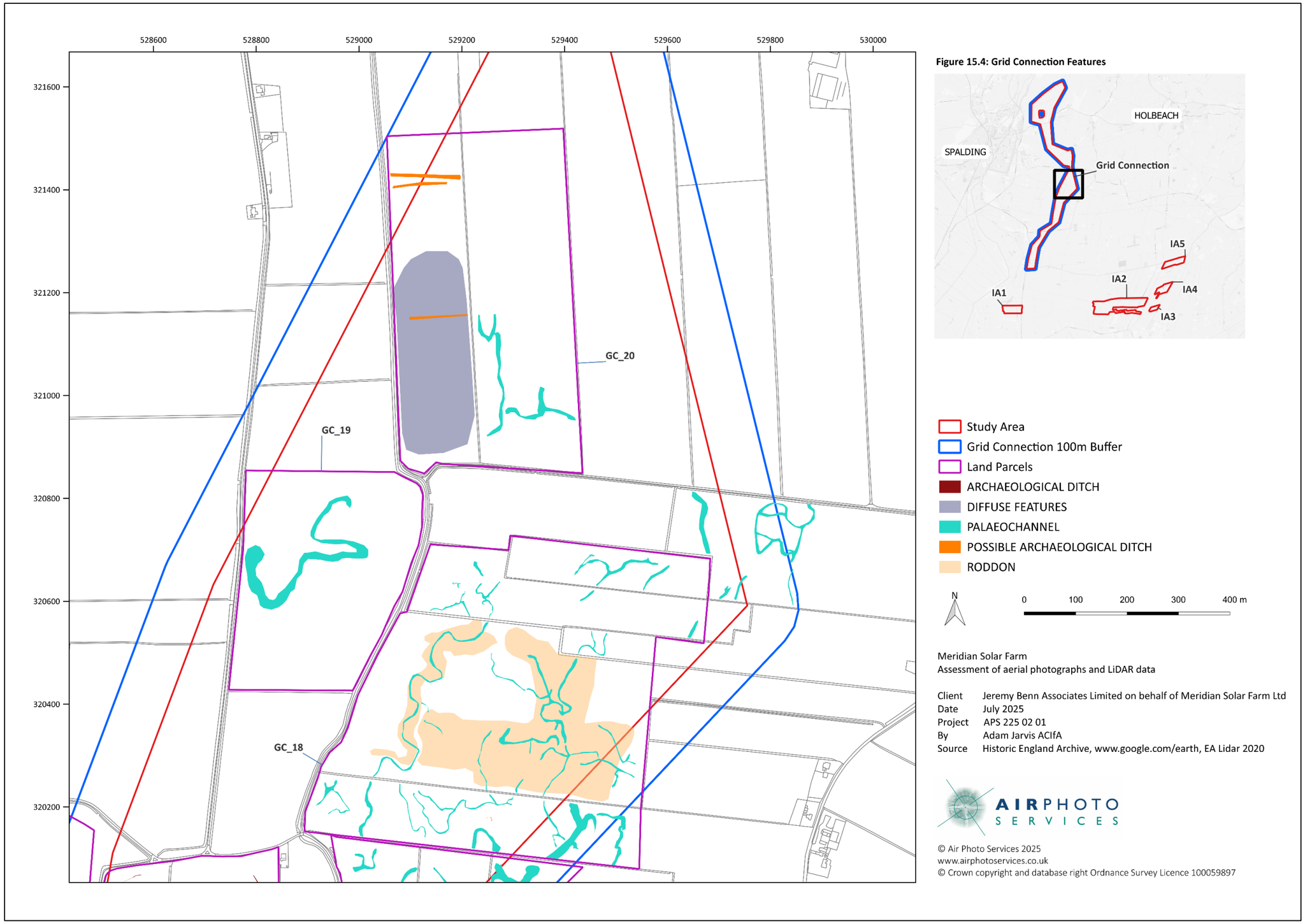

Figure 15 4 Features recorded in GC_18 to GC_20

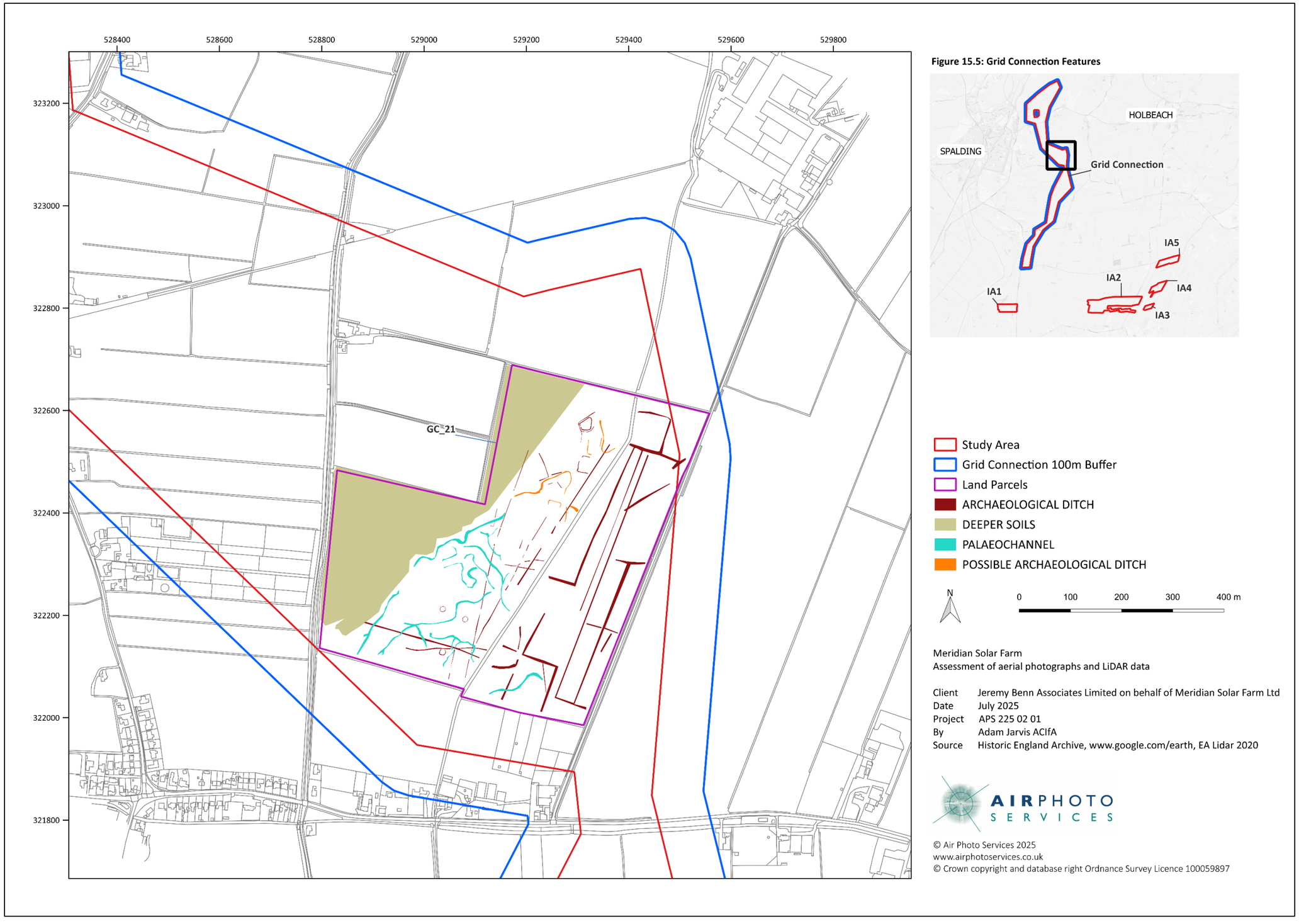

Figure 15 5 Features recorded in GC_21

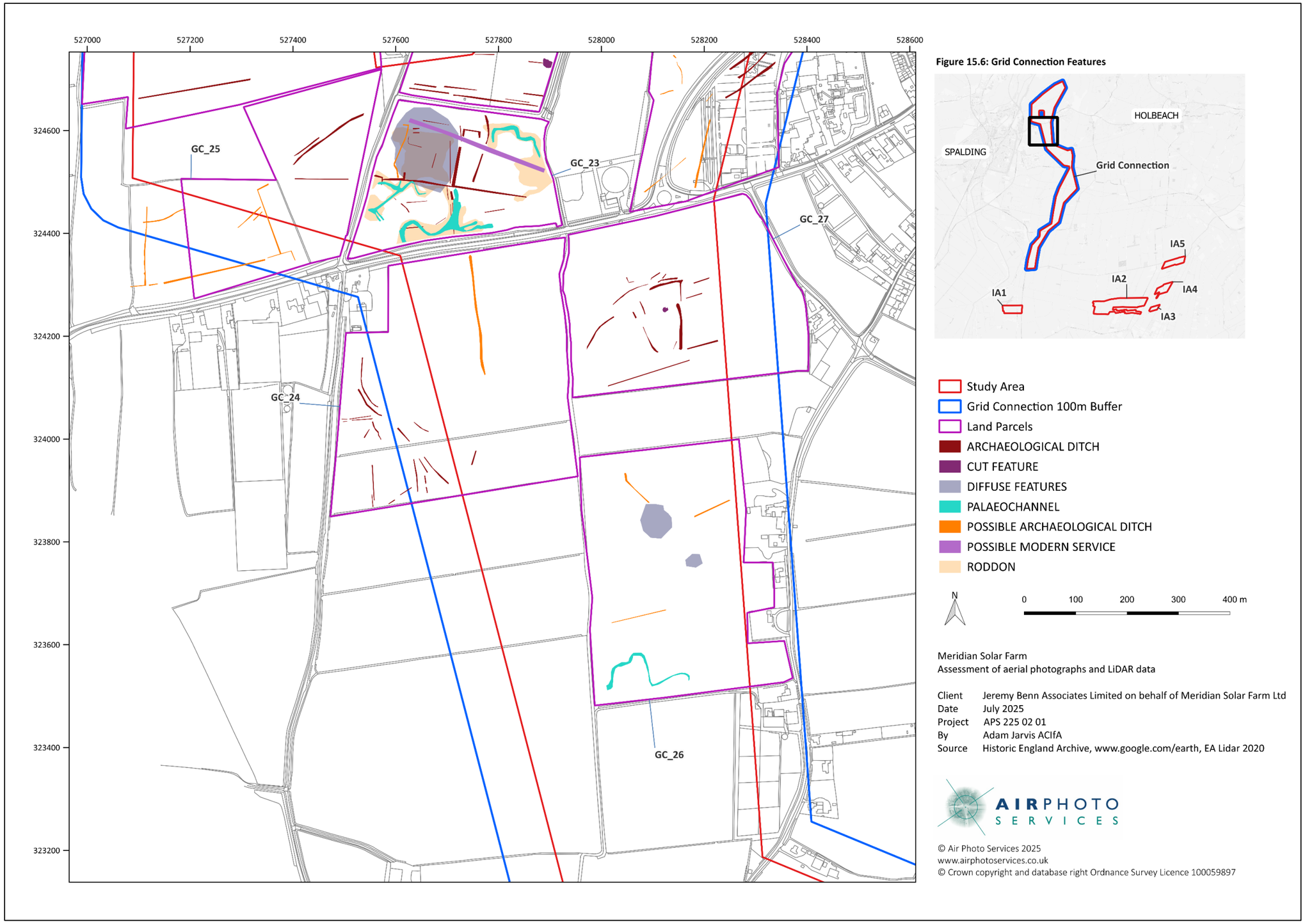

Figure 15 6 Features recorded in GC_23 to GC_27

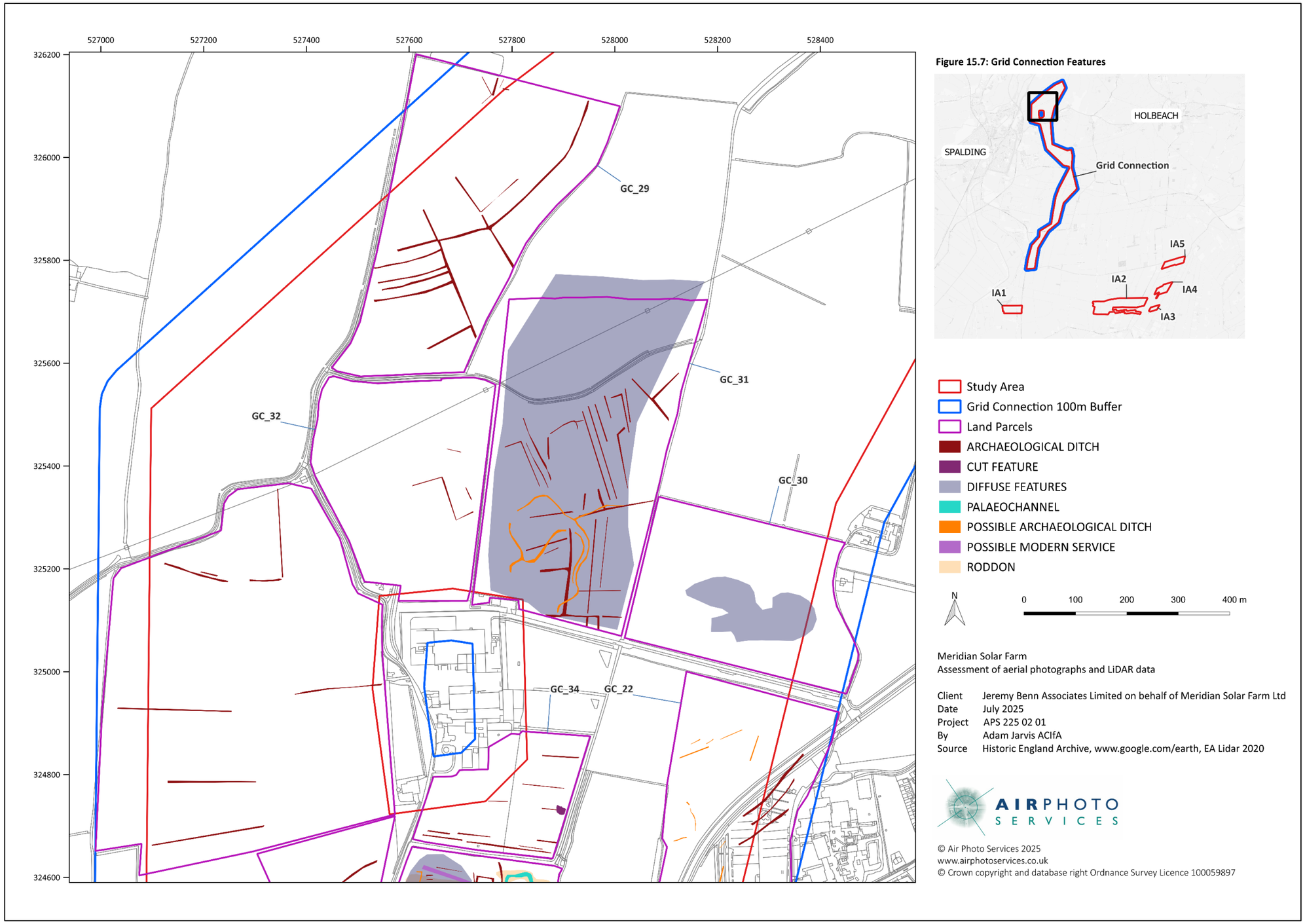

Figure 15 7 Features recorded in GC_22, GC_29 to GC_32 and GC_34

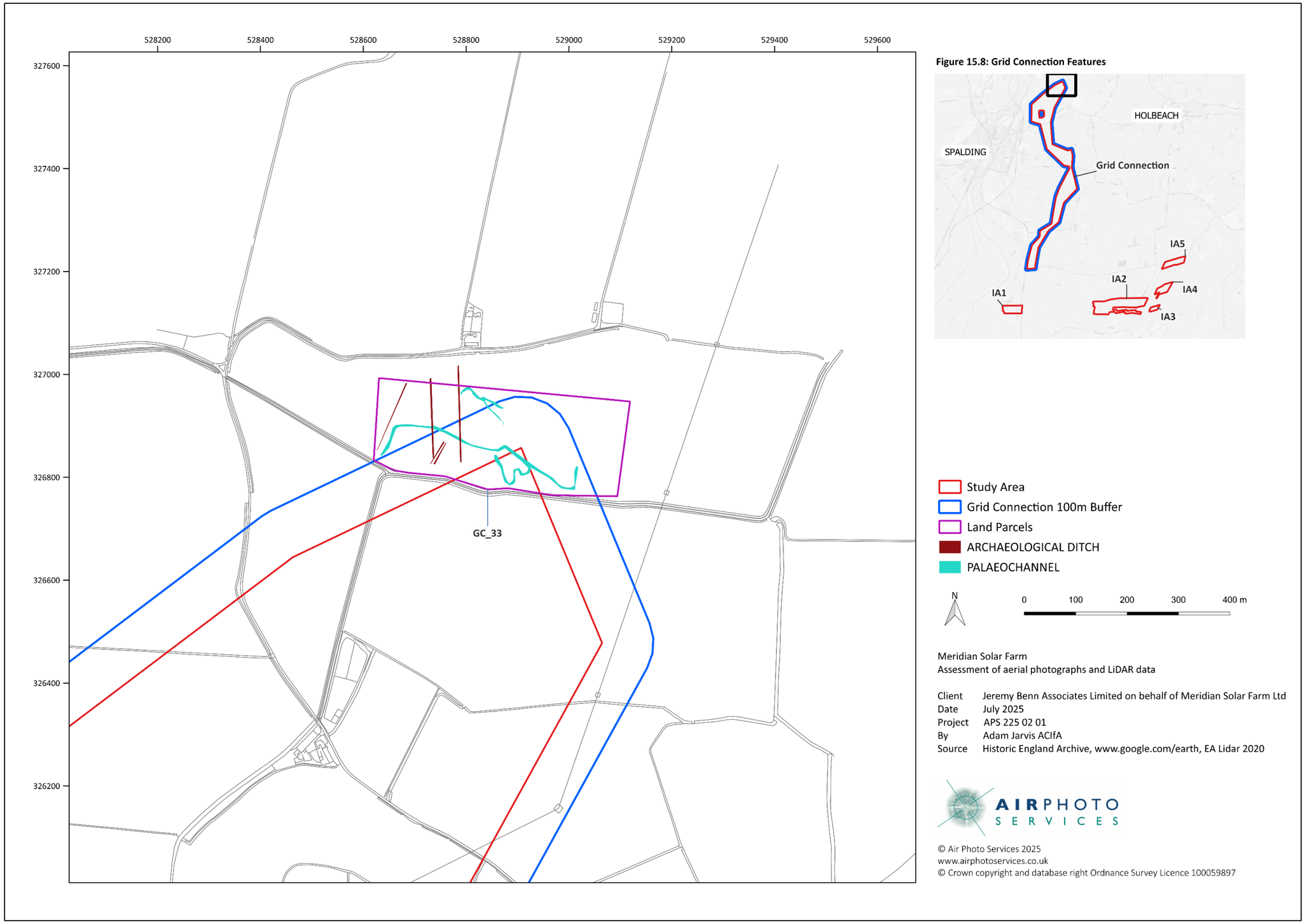

Figure 15 8 Features recorded in GC-33

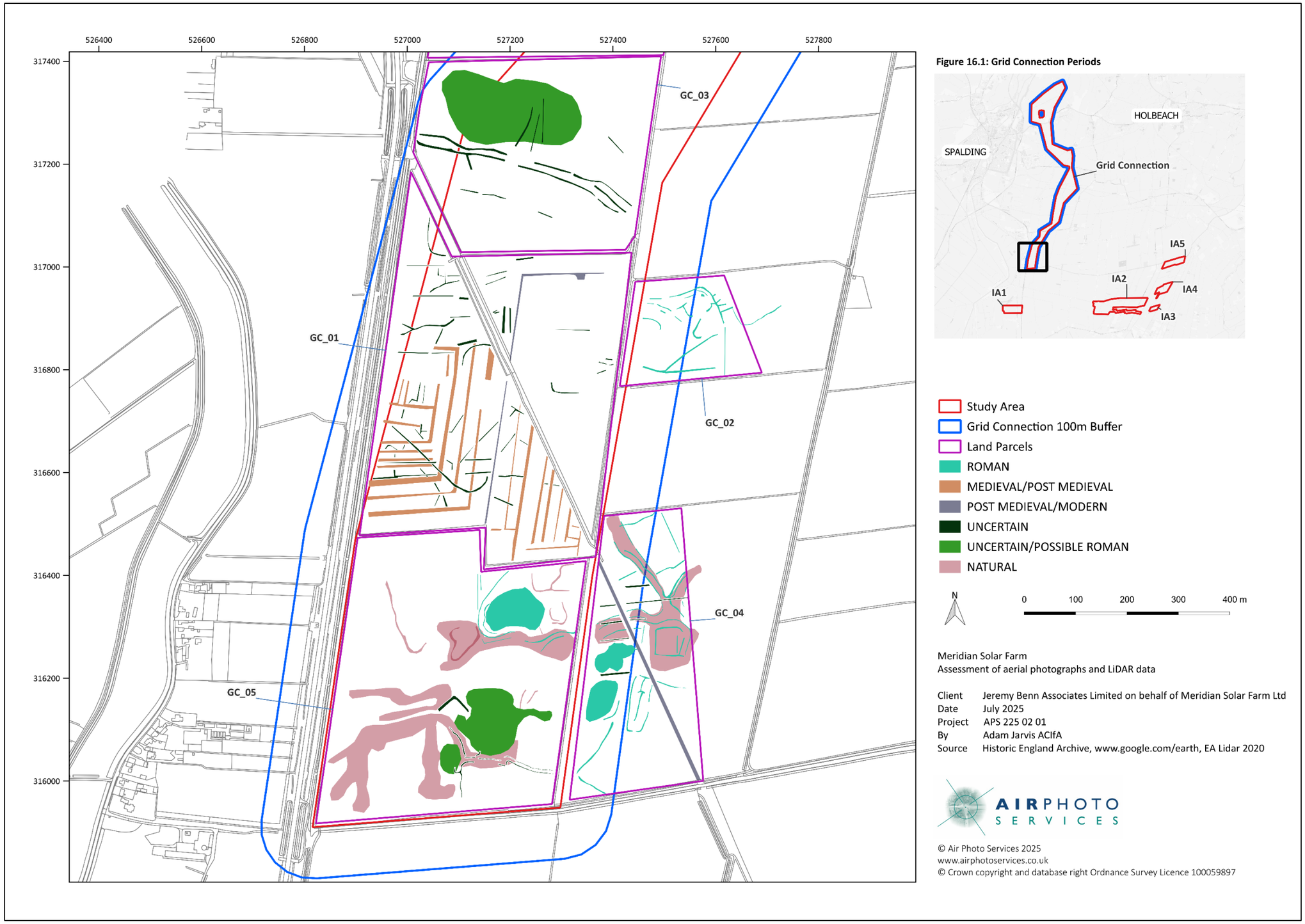

Figure 16 1 Periods assigned to features recorded in GC_01 to GC_05

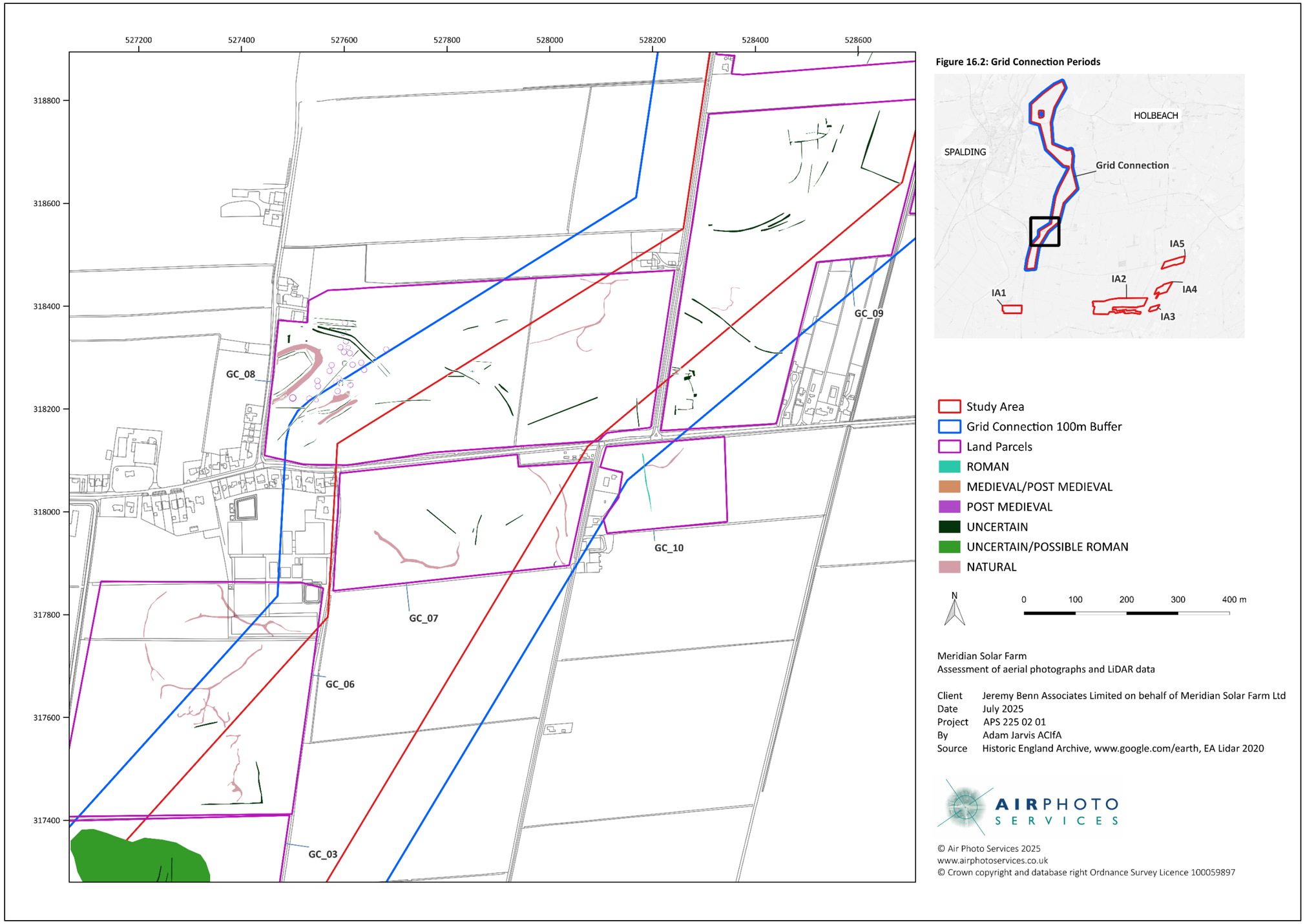

*Figure 16 2 Periods assigned to features recorded in GC_06 to GC_10 and GC 12 (**Amend**)*

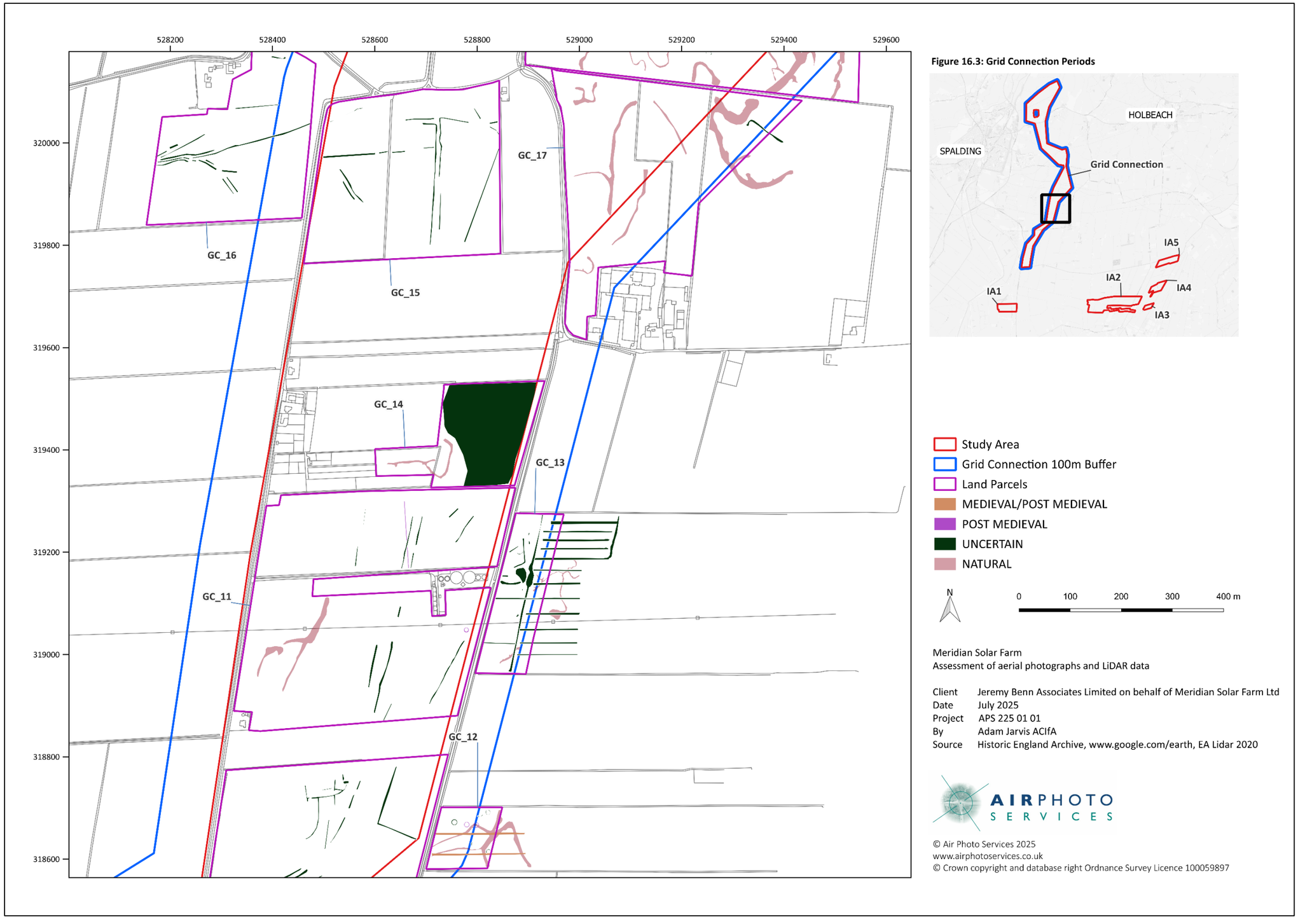

Figure 16 3 Periods assigned to features in GC_11 to GC_17

Figure 16 4 Periods assigned to features in GC_18 to GC_20

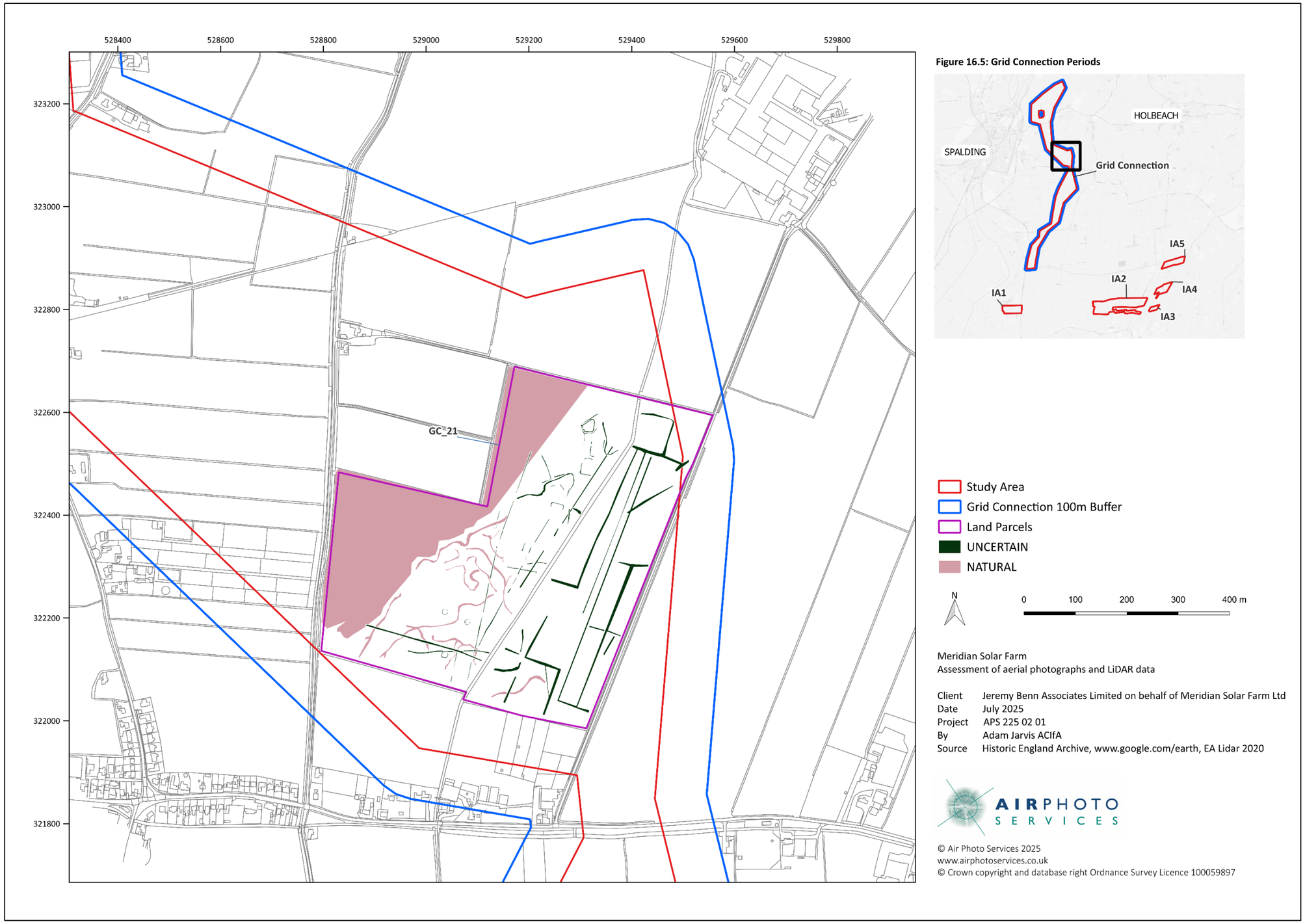

Figure 16 5 Periods assigned to features in GC_21

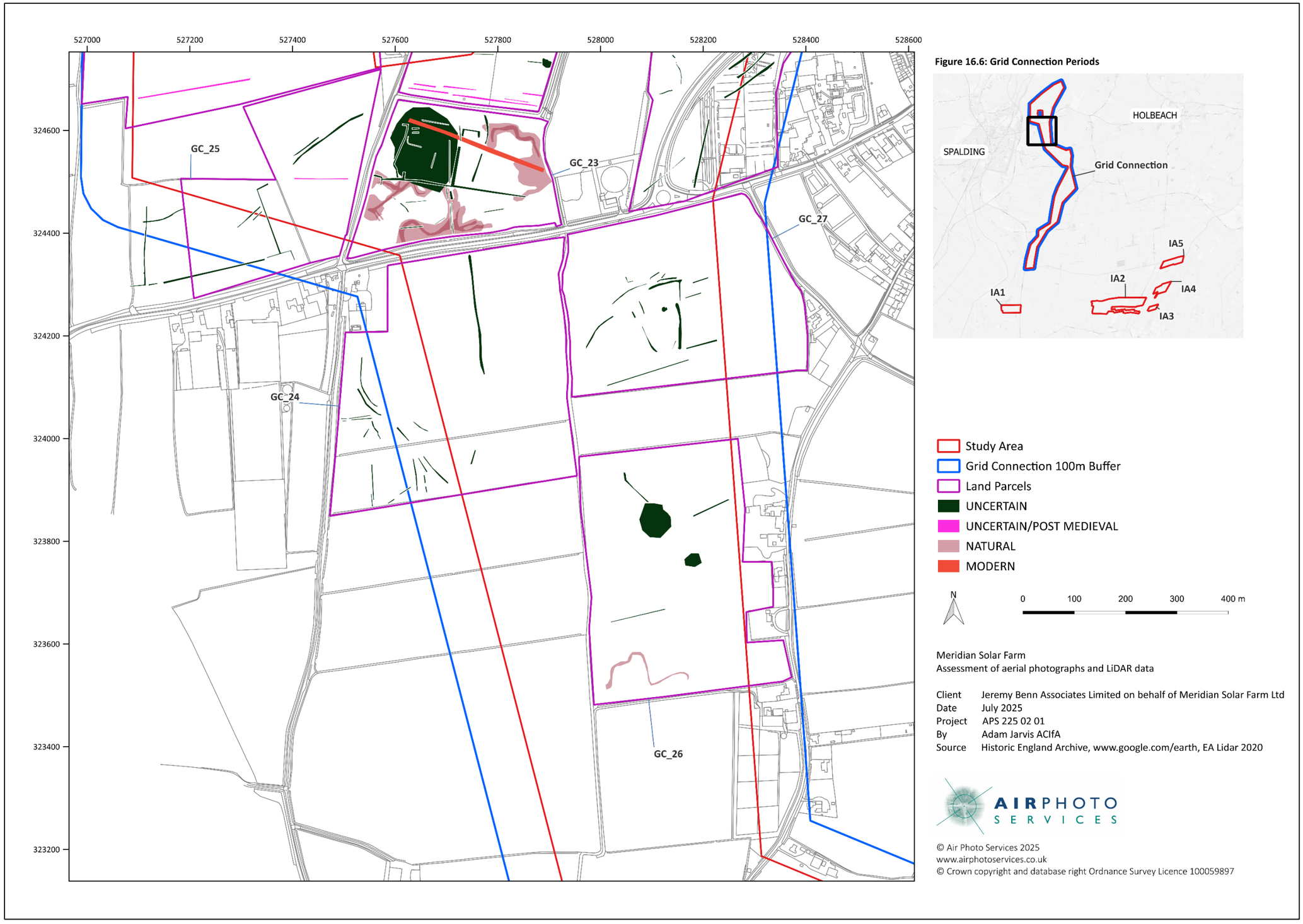

Figure 16 6 Periods assigned to features in GC_23 to GC_27

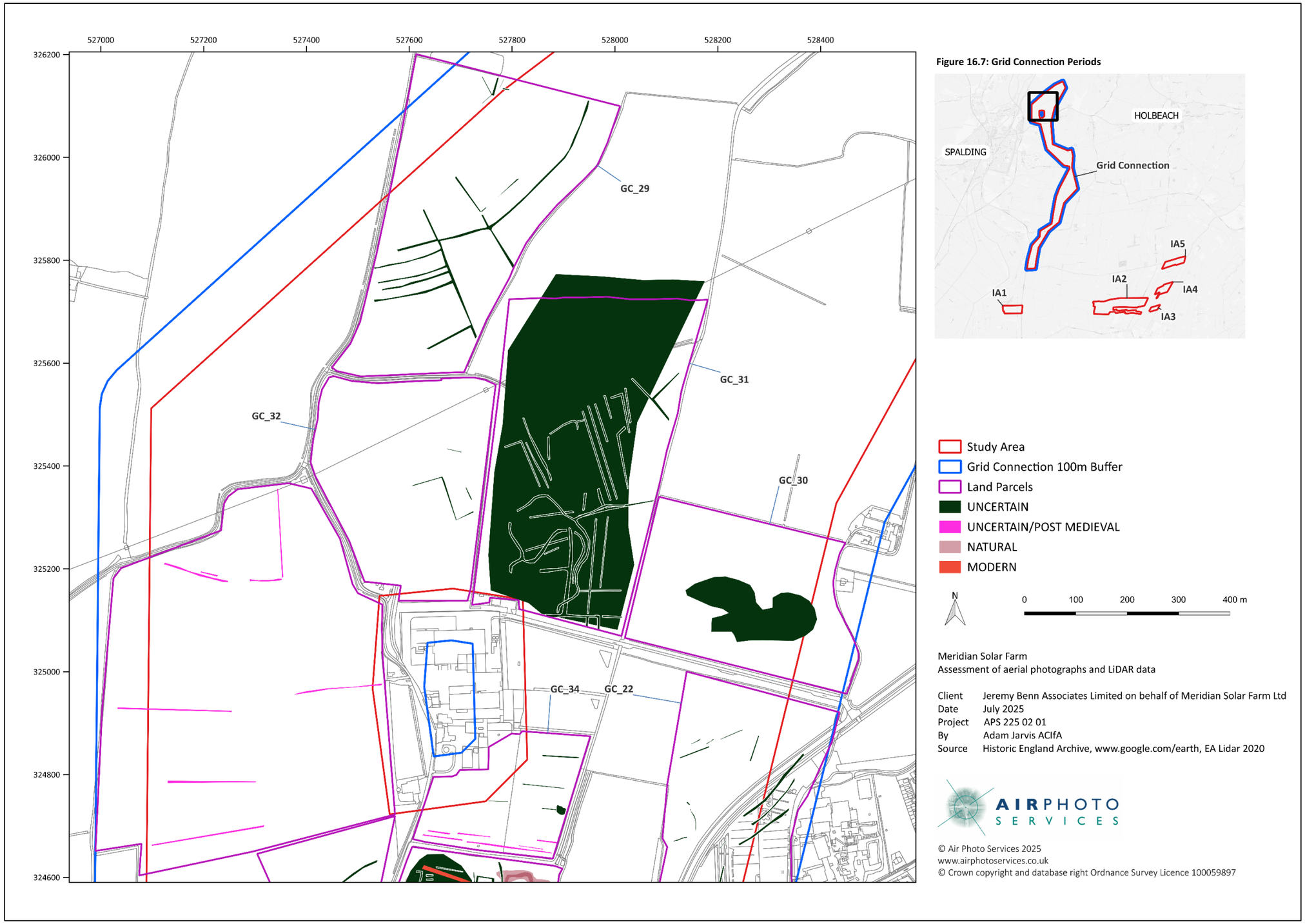

Figure 16 7 Periods assigned to features in GC_22, GC_29 and GC_30 to GC_32

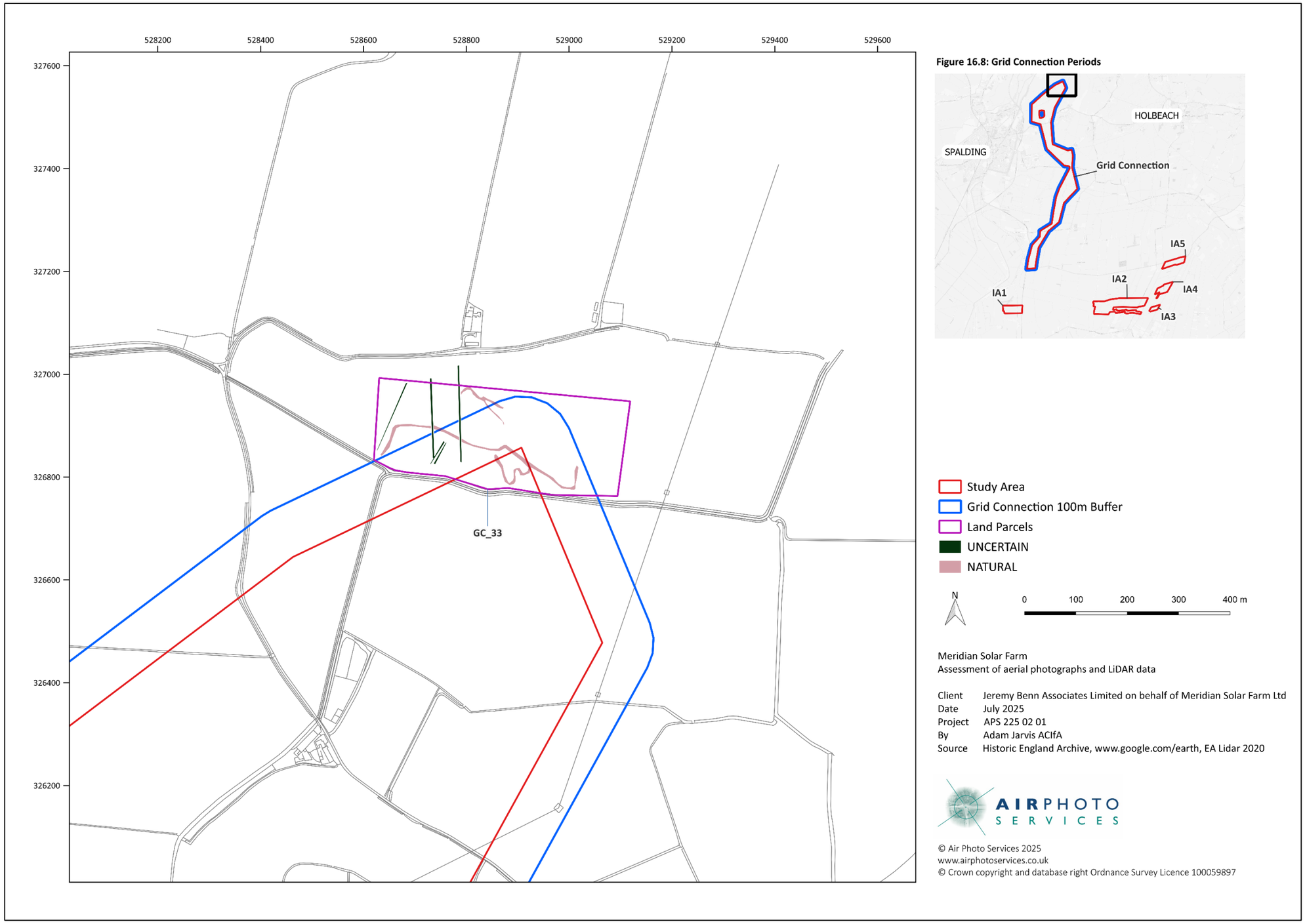

Figure 16 8 Periods assigned to features in GC_33

AIR PHOTO SERVICES

Archaeology • Research • Law • Environment • Planning

Air Photo Services Ltd
The Shaftesbury Centre
Percy Street Swindon SN2 2AZ
www.airphotoservices.co.uk
[redacted]@airphotoservices.co.uk

Director Chris Cox MA MCIFA FSA
Associate Director David Lang BA PCIFA

Company No. 5248188 Registered Office The Shaftesbury Centre SN2 2AZ UK