

# Hornsea 4

# Ørsted



## Hornsea Project Four: Preliminary Environmental Information Report (PEIR)

## Volume 6, Annex 5.2: Aerial Photographic and Lidar Assessment (Interim Report) Technical Report

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## Acronyms

Acronym	Definition
APS	Air Photo Services
ALS	Airborne Laser Scan
BCS	British Geological Survey
CUCAP	Cambridge University Collection of Aerial Photographs
CUS	Cranfield University Soilscales
DCO	Development Consent Order
EIA	Environmental Impact Assessment
HHER	Humber Historic Environment Record
Lidar	Light detection and ranging
NMP	National Mapping Programme
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
OS	Ordnance Survey
SoCC	Statement of Community Consultation

## Units

Unit	Definition
GW	Gigawatt (power)
kV	Kilovolt (electrical potential)
kW	Kilowatt (power)
M	Metre

## 1 Introduction

### 1.1 Project background

1.1.1.1 Ørsted Hornsea Project Four Limited (hereafter the 'Applicant') is proposing to develop Hornsea Project Four Wind Farm (hereafter Hornsea Four). Hornsea Four will be located approximately 65 km offshore the East Riding of Yorkshire in the Southern North Sea and will be the fourth project to be developed in the former Hornsea Zone. Hornsea Four will include both offshore and onshore infrastructure including an offshore generating station (wind farm), export cables to landfall and on to an onshore substation with electrical balancing infrastructure, and connection to the electricity transmission network.

1.1.1.2 Air Photo Services Ltd (APS) was commissioned to undertake an Aerial Photographic and Lidar Assessment of onshore infrastructure associated with Hornsea Four. The study area for this assessment comprises a 200m buffer zone either side of the onshore Electric Cable Corridor (ECC) centreline and is shown on [Figure 1](#). This interim report provides overview results for this assessment as of the 10 May 2019, the maximum amount of data to be presented at PEIR before the completion of the full assessment in July 2019 which will inform the Environmental Statement (ES). This assessment has systematically examined:

- Historic and modern aerial photographs;
- Satellite imagery data;
- APEM imagery;
- Environment Agency (EA) Lidar data;
- National Mapping Programme (NMP); and
- Humber Historic Environment Record (HHER).

1.1.1.3 This interim report represents the work undertaken by APS prior to 10 May 2019. This assessment is ongoing and there will likely be changes and updates to the data prior to the final dataset being delivered to inform the ES. The study area is shown in blue on [Figure 1](#) which represents a 200 m buffer around the centre line of the PEIR Boundary, shown in red. The areas marked in green have not yet been studied by APS, the results from these areas will be presented in the final report to inform the ES stage.

### 1.2 Aims and objectives

1.2.1.1 The objective of this assessment is to provide information on the location and nature of buried and upstanding archaeological features. These features are visible on historic aerial photographs, modern aerial and satellite imagery and visualised Airborne Laser Scan (ALS) which is also known as Light detection and ranging (Lidar) data to assess the topographic and micro topographic features within the study area.

1.2.1.2 This technical report identifies the potential for heritage asset identification through the assessment of aerial imagery and Lidar data. This report highlights the key data sources consulted, the methodologies employed, and the interim results and conclusions drawn from the data acquisition and processing completed thus far. This technical report supports the data presented in [Volume 3, Chapter 5: Historic Environment](#).

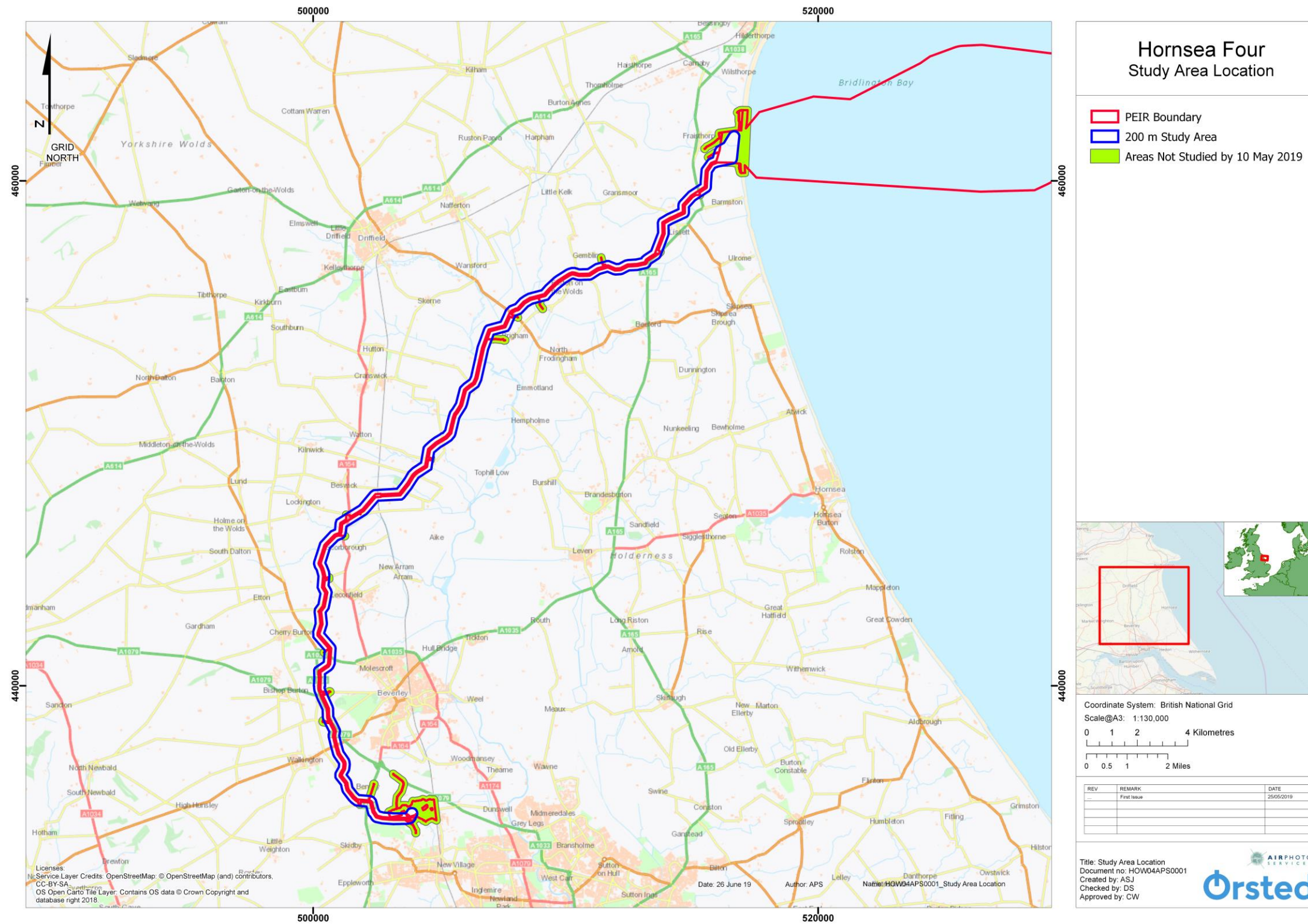


Figure 1: Study Area Location (not to scale).

## 2 Methodology

### 2.1 Data Sources

2.1.1.1 This survey has utilised a range of aerial imagery sources and archives in order to identify, interpret and map heritage features from the air. This section gives details about the methodology employed to search each archive, the type of data available for study and the interpretation methods applied to each data set.

#### 2.1.2 Historic Aerial Photographs: Types and Sources

2.1.2.1 Both vertical and oblique aerial photographs were used in this survey. Vertical aerial photographs are taken for military, commercial and general purposes and used 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 directly towards the ground. The vertical viewpoint provides vertical 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 photograph interpreter to study each pair of vertical photographs under a stereoscope and see the landscape in 3D.

2.1.2.2 Vertical aerial photographs carry inherent distortions introduced by variations in perspective and ground height but are essentially map-like in appearance. They are generally taken for non-archaeological purposes and form the basic data from which most modern maps are compiled. Vertical aerial photographs are a useful source of archaeological data, particularly in areas where features survive as earthworks and as marks in soils and crops.

2.1.2.3 Oblique aerial photographs are taken with a hand-held camera by an archaeologist to portray features which have been identified during specialist aerial survey. The photographs are extremely useful but contain inherent perspective distortions which must be accounted for with rectification and mapping procedures. They are also rather 'subjective' in their targets, and ongoing debate favours the use of 'block coverage' as a more effective way of recording archaeological landscapes. The role of the aerial archaeologist in leading these surveys is important, as is the time of year at which photographs are taken.

#### 2.1.3 Historic England Archive

2.1.3.1 The Historic England archive in Swindon holds aerial photographs which date up to the present day from, in some cases, before World War II. Both vertical and oblique aerial photographs were available for this survey. Searching at this archive was conducted in April 2019, Historic England regularly add new photographs to their archive however this study has only examined photographs accessioned prior to April 2019. The full Historic England cover search is included in [Appendix A](#) and a map illustrating the coverage of air photographs by Historic England can be seen at [Figure 2](#).

2.1.3.2 The Historic England archive was searched for vertical and oblique aerial images by archive staff using a Historic England database programme. These were then taken out of the



archive and consulted by APS imagery analysts in the Historic England Archive Public Search Room (PSR). The images were examined by eye, under magnification, on screen in the case of more recent digital images, or as stereoscopic pairs of prints using a magnifying mirror stereoscope.

- 2.1.3.3 All the available photographic frames were carefully examined, located to the survey base maps and selectively photographed under Historic England copyright photography licenses for the survey's research purposes only. This was done with high-quality digital cameras. The images were downloaded and filed, before being checked and prepared for further interpretation and rectification.

## **2.1.4 Cambridge University Collection of Aerial Photographs**

- 2.1.4.1 The Cambridge University Collection of Aerial Photographs (CUCAP) is stored in the Department of Geography at the University of Cambridge. This collection contains oblique and vertical aerial photographs taken with colour, monochrome and false colour infrared film emulsions. It was closed to all consultation during the data collection phase of this survey, although some small parts of the archive are being digitised it is not clear if the archive will reopen in the future. It is, however, possible to search the online repository to obtain a cover search to ascertain if CUCAP photographs cover the study area. The search was then loaded as a Comma Separated Value (CSV) file which was used to locate and identify areas where CUCAP had taken oblique or vertical photographs of archaeological targets. This proved useful in identifying areas of potential archaeological features which were photographed by CUCAP and not covered by photographs in other archives. The full CUCAP cover search can be seen at [Appendix B](#) and a map illustrating the coverage of air photographs by CUCAP can be seen at [Figure 3](#).

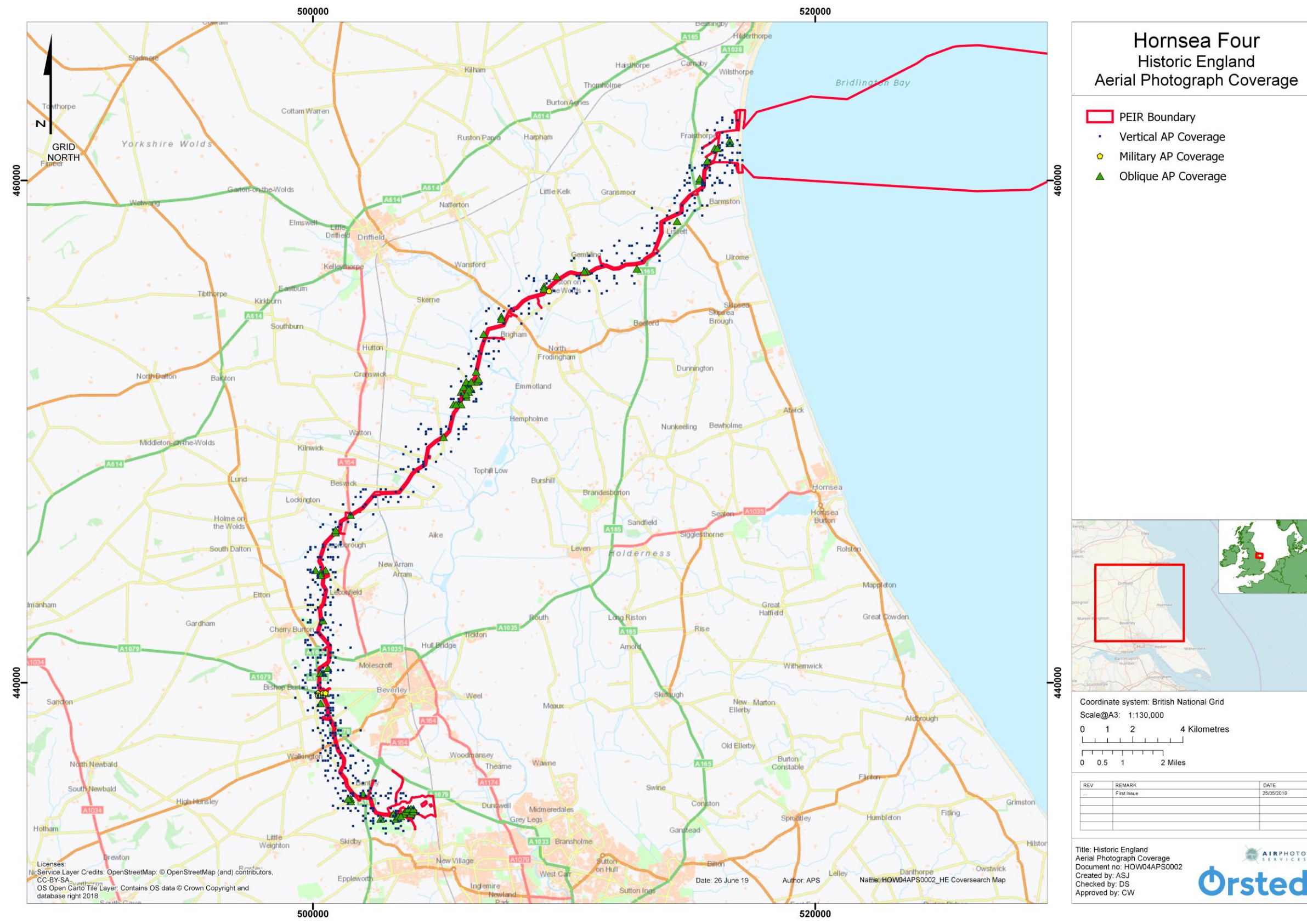


Figure 2: Historic England Aerial Photograph Coverage (not to scale).

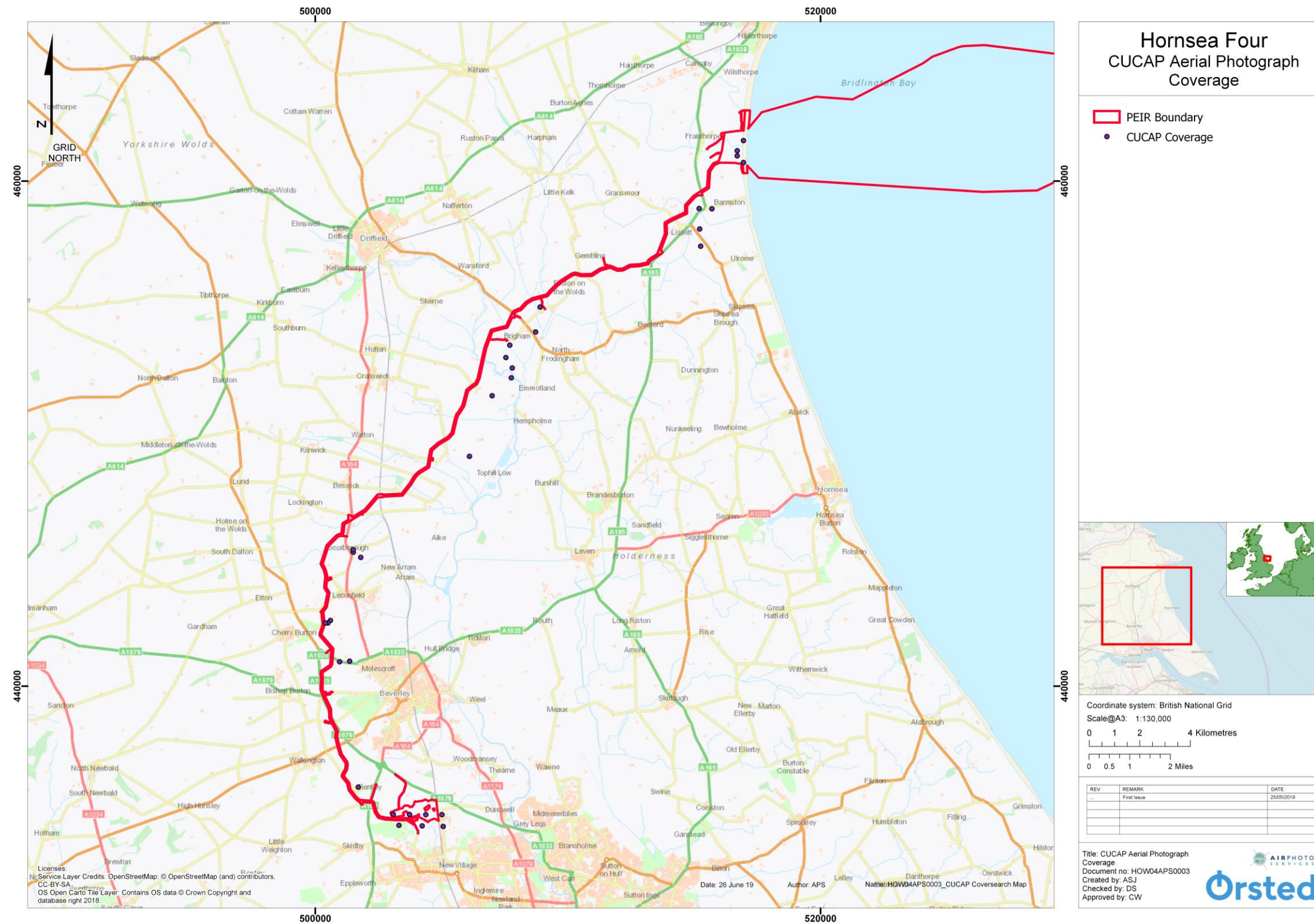


Figure 3: CUCAP Aerial Photograph Coverage (not to scale).

## **2.1.5 Humber Historic Environment Record**

2.1.5.1 The HHER kindly provided access to their previously recorded heritage asset data in the form of shapefiles and a HTML gazetteer of features. These were provided to Hornsea Four and shared with APS for cross referencing. The HHER also provided APS with access to their extensive aerial photograph collection, based in Hull, which APS manually searched for photographs that were located within the study area. Photographs that were identified to fall within the study area were recorded into a CSV file and loaded into QGIS. A table of photographs consulted at the HHER is presented at [Appendix C](#) and a map illustrating the coverage of air photographs by HHER can be seen at [Figure 4](#).

## **2.1.6 Online Aerial and Satellite-Derived Images**

2.1.6.1 All available online aerial and satellite derived images which constitute the open-source mosaics of aerial imagery displayed at Google Earth and Bing Maps (aerial and birds-eye if available) were consulted for this survey. All timelines available on these geoportals were systematically consulted, with an end-date to the interpretation and access of 10 May 2019, however following this interim report, access to these sources will be ongoing until the aerial photograph and Lidar assessment is completed in July 2019. Following magnification, relevant images were captured at the highest resolution using the 'save-image' function in Google Earth Pro. They were saved, labelled and filed to be used in the same way as the aerial images derived from the Historic England archive collection.

2.1.6.2 Bing Maps was used in the same manner but with the limitations that there was a restricted single view timeline and less flexible image capture mechanisms. The Microsoft 'snipping tool' was used to capture the relevant images.

## **2.1.7 APEM Aerial Photo Survey**

2.1.7.1 A scheme-wide aerial photo survey was completed by APEM in July 2018 and was provided to APS as tiled mosaic raster data. These tiles were loaded into QGIS and were systematically reviewed at a zoomed in scale.

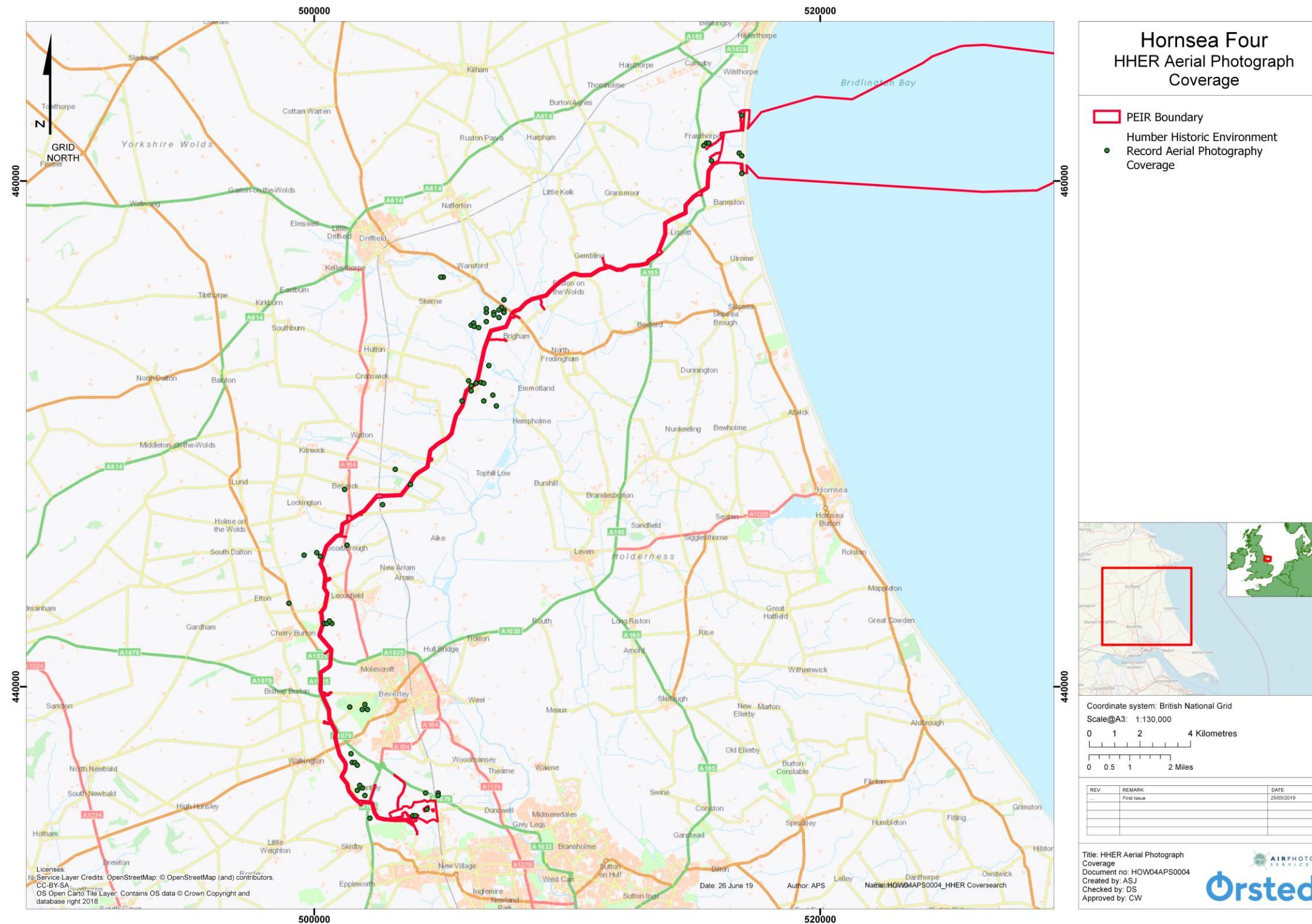


Figure 4: HHER Aerial Photograph Coverage (not to scale).

### 2.1.8 Historic England National Mapping Programme

2.1.8.1 The Historic England National Mapping Programme (NMP) is an ongoing project which utilises airborne data sources to record heritage assets. Earlier NMP project's outputs were hand drawn and more recent projects record assets digitally as shape files. The NMP data for this study were drawn from the NMP projects listed in [Table 1](#) and a map detailing the coverage for each project can be seen at [Figure 5](#).

2.1.8.2 These data provide a baseline of aerial photographic interpretation which can be checked, expanded and updated. These are incorporated into the APS survey and commented upon and updated via new polygons and lines where appropriate. They were augmented by close analysis of vertical and oblique aerial photographs. Where the NMP projects have recorded features not seen during the APS Survey, these data have been left unenclosed by APS's extent of area polygons. The data were supplied to APS via the Historic England archive as Shape Files and were incorporated into the GIS and databases as separate acknowledged georeferenced digital layers.

**Table 1: NMP Projects Consulted.**

Project Name	Project Dates	Data Format
Hull Valley	October 2011 – August 2012	Shape File – Line and Polygon
East Yorkshire ALSF	October 2007 – February 2008	Shape File – Line and Polygon
Yorkshire RCZAS	May 2006 – April 2007	Shape File – Line and Polygon



## 2.1.9 Environment Agency Lidar Data

- 2.1.9.1 ALS data, otherwise known as Light Detection and Ranging (Lidar) data, have been collected from airborne survey platforms in recent years at varying resolutions, and are available for download, processing, visualising and interpretation via the EA for England website (Environment Agency, 2019).
- 2.1.9.2 Lidar data indicates variation in the height of the ground surface. Data is collected by an active laser beam fired in pulses which scans the ground surface. The reflected pulses are recorded by the sensor on board a geolocated airborne survey platform, fitted with an inertial measurement unit to record the roll, pitch and yaw of the aircraft.
- 2.1.9.3 The point cloud data derived from the survey are processed into a series of Digital Elevation Models (DEM) usually in American Standard Code for Information Interchange (ASCII) format. These include Digital Surface Models (DSM) which contain tree cover and buildings, and Digital Terrain Models (DTM) which remove tree cover and can reveal features beneath the tree canopy (Bennett *et al* 2012, Hesse 2010; Stular *et al* 2012).
- 2.1.9.4 These data are of assistance in recording micro and macro topographic features which may indicate relict or extant archaeological features and historic landscapes alongside more modern features. Lidar data are best interpreted and used in conjunction with modern and historic aerial photographs and maps to provide ground truth information for features and sites recorded via this prospection method.
- 2.1.9.5 The data needed were identified by using the EA timestamp shapefile detailing the Lidar file names within the area of interest and the Ordnance Survey 10 km and 5 km grid square to identify the grids and quarter sheets. Digital Terrain Models were selected as the primary data source as the ability to remove the tree canopy makes it ideal for prospection. All available Lidar data for this site were downloaded for completeness of evidence. The metadata for the Lidar downloaded for this assessment can be seen at [Appendix D](#) and a map detailing the coverage can be seen at [Figure 6](#).
- 2.1.9.6 The data were visualised into Hillshade, Multi Directional Hillshade, Simple Local Relief Model (SLRM), Sky View Factor, Open Positive and Open Negative using the Relief Visualisation Toolkit (RVT) Version 1.2. These visualisations were chosen as they are of most use for archaeological prospection. The multiple ASCII tiles were merged before being visualised for ease of use in the GIS. The data were analysed alongside the aerial photographs and base mapping to double check the topography and nature of features interpreted from Lidar data.
- 2.1.9.7 An additional SLRM was created using a simplified process based upon the methodology proposed by Hesse (Hesse, 2010). A low pass filter was applied to nearest neighbour resampling, and the resampled model was removed from the original DTM creating a Local Relief Model. This was then processed through the RVT with a smoothing factor of 20 m.



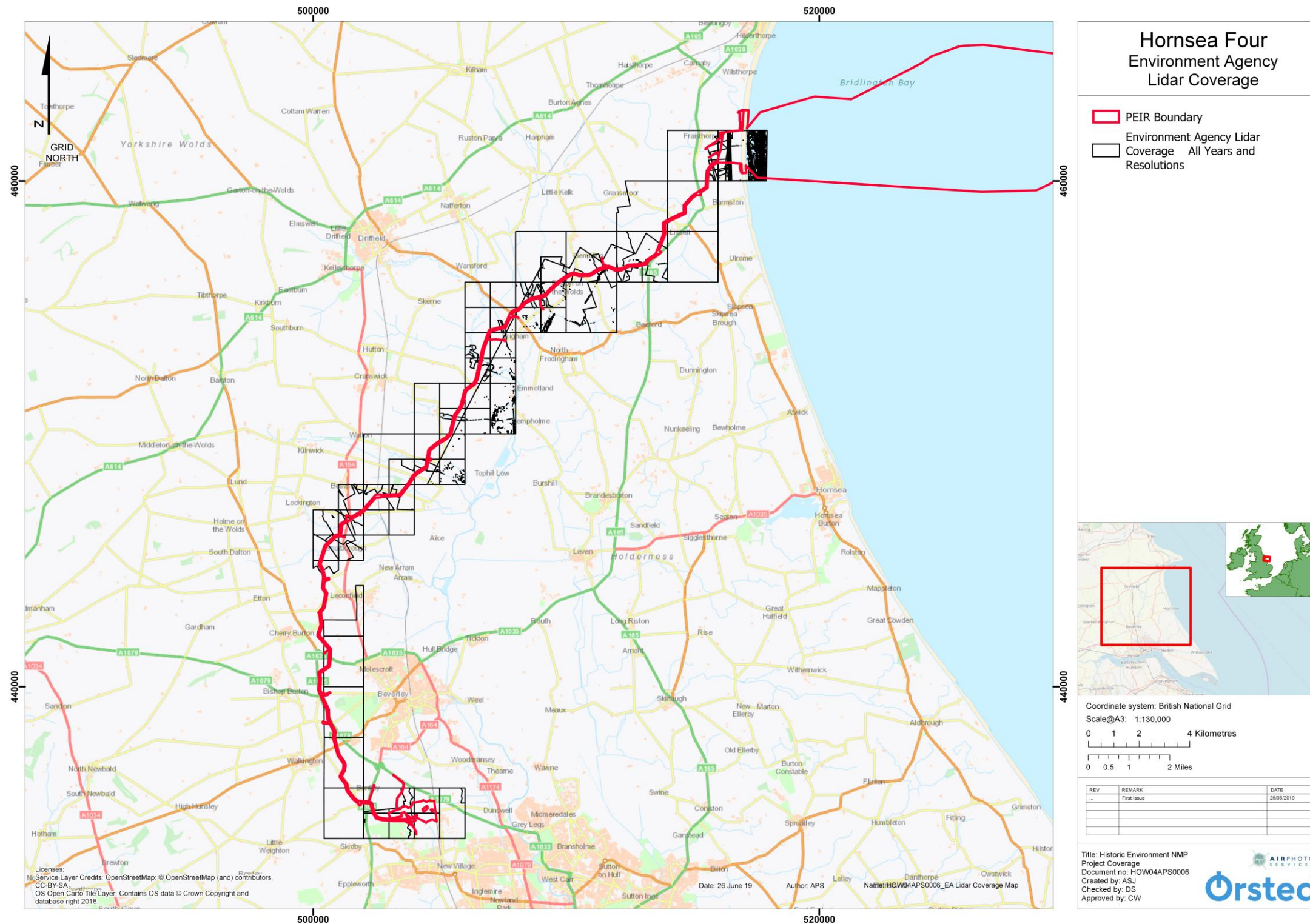


Figure 6: Environment Agency Lidar Coverage (all years and resolutions) (not to scale).

## 2.2 Data Collection

2.2.1.1 The data collection and mapping for Hornsea Four was split into two stages. The details of each stage are outlined in the following sections.

### 2.2.2 Stage One: Outline Mapping

2.2.2.1 Stage One was undertaken initially to identify archaeological assets through 'APS Site Polygons'. These polygons indicate the extent of area around a feature or group of archaeological features or, in the case of ridge and furrow, the surrounding field boundaries. A detailed supporting attribute table was compiled at this stage detailing the following for each feature:

- APS Site Number;
- Asset Type;
- Broad Type;
- Evidence Type (1-10);
- Source (1-10);
- Period;
- Monument ID Number;
- NMP Unique ID Number;
- Comment;
- By;
- Supplier;
- Client;
- Project;
- Easting;
- Northing;
- National Grid Reference;
- Map Source; and
- Map Book Number.

2.2.2.2 This process created the remote sensing database which forms the basis for all detailed mapping and analysis.

### 2.2.3 Stage Two: Detailed Mapping

2.2.3.1 At Stage Two, detailed mapping was undertaken within the previously identified site polygons, to reflect the extent of features. Polygons were used to map all features except for ridge and furrow, where a single directional line was added to all ridge and furrow site polygons.

## 2.3 Data Processing

2.3.1.1 The collected digitised photographs and images were labelled and archived and selected frames were ortho-rectified to the Ordnance Survey (OS) digital map base with the QGIS rectification tool for interpretation and mapping. Interpretative or source queries were

addressed as appropriate by further reference to the archived photographs in the survey files, or directly against stereo pairs and obliques in the Historic England and HHER archives.

- 2.3.1.2 Following comparison to other airborne sources and HHER data, polygons were digitised around the extent of features identified, and a site database created in QGIS as an attribute table within a SHP file. When all data sources had been examined, interpretative lines and polygons were digitised to further SHP files to indicate the form, extent and type of features.

## 2.4 Data Presentation

- 2.4.1.1 The data were presented in SHP data format within the project GIS. A SHP file contains geographical reference data as individual objects such as a ditch, a bank, a structure or a coordinate area. Features exist as 'objects' and their 'attributes' where the interpretations are recorded within the SHP file.

- 2.4.1.2 In addition to the SHP files, the data derived from the survey are presented in a series of map books as figures to this report. The map books present keyed, labelled and individually numbered illustrations at a consistent scale.

- 2.4.1.3 The data are also presented as an interim results table, which can be seen at [Section 4](#). The table is derived from selected attributes within the main feature mapping SHP file. It summarises the location, type and interpretation of each individually identified site or area of features.

## 2.5 Assumptions and Limitations

### 2.5.1 Introduction

- 2.5.1.1 Remote sensing is a non-intrusive survey method, and not all features which are identified may be accurately dated by this means.

### 2.5.2 Historic aerial photographs

- 2.5.2.1 The assumption that aerial photographic survey and vertical and oblique aerial photographs show all features and will reveal a complete archaeological record in a given area is erroneous. This is due to many interactive survey, seasonal, environmental, meteorological and perception and interpretation issues which are set out below.

- 2.5.2.2 Interpretation of aerial photographs relies either 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 light.

- 2.5.2.3 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 perfectly possible for many years' photography over one site to

show nothing at all, and then for 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.

- 2.5.2.4 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 assists visibility of topographic and earthwork features. In summer, ripening crops, often from April through to harvest in July/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. Following harvest, weathering and ploughing, marks in soil often show where buried archaeological deposits are being actively ploughed and brought to the surface.
- 2.5.2.5 Aerial photographs cannot be used to detect features in heavily wooded areas whilst Lidar survey may penetrate gaps in the tree canopy to provide a digital terrain model of the ground surface beneath.
- 2.5.2.6 In constructing a comprehensive interpretation of the archaeological landscape, it is thus advantageous to examine a range of photographs, taken under a variety of environmental conditions.
- 2.5.2.7 The aerial photographs taken in the 1940s often recorded extant medieval fields and provided a starting point for the assessment of how modern ploughing methods have contributed to erosion and the attrition of features. In turn, the typical ridges and furrows caused by the medieval turning of a heavy ox-drawn plough often masks underlying deposits on aerial imagery.
- 2.5.2.8 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 heavily biased and may miss features which were present but were not seen or recorded. This is apparent when comparing vertical aerial photographs taken at times when crops were responsive to concurrent oblique observer-led surveys. In these instances, vertical photographs often record much more extensive cropmark landscapes than the observer-led oblique photographs.
- 2.5.2.9 It is also important to note that the perception of the environment and expectation of what is to be found may often limit the air photo analyst's mental 'openness' to features. This perception factor is mitigated by repeated examination of imagery taken in different years and under different conditions, and by teamwork between two or more interpreters checking the data. 'Photo fatigue' is also a factor in drop-off rates of discovery or perception of features. It is mitigated by alternating activities and personnel, checking interpretations

with other team members and taking adequate visual breaks, particularly when using a stereoscope to examine large sorties over extensive areas of land.

### **2.5.3 Online aerial photographs and satellite-derived images**

2.5.3.1 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 & Bluesky, The GeoInformation Group, Digital Globe (satellite) and Spot and Landsat (varied and often low resolution). The mosaic 'cuts' where images have been blended together and captured in different seasons are readily apparent, often within the same 'timeline' data.

2.5.3.2 The same limitations outlined above apply to mosaiced vertical aerial photographs which are gathered for specific purposes, often at different times. These sorties are helpful in that they provide a very high resolution georeferenced aerial photographic base for the survey, which aids the georeferencing and interpretation of older photographs and comparative analysis of images taken at different times. However, as is the case with many 'block coverage' surveys, the timing is often not optimal for the gathering of heritage data.

### **2.5.4 National Mapping Programme**

2.5.4.1 The NMP data are derived from aerial photographs, and the same sources have been re-examined for this survey. The main limitation of the NMP data is that the NMP is an 'overview' survey. The NMP data are of high quality, but as expected, additions have been made to it from newly available airborne and remote sensing data sources.

### **2.5.5 Remote sensing limitations: conclusion**

2.5.5.1 Aerial photograph assessments are often based on sequences of historical imagery which provide a series of 'snapshots' of the landscape under different conditions. In contrast, Lidar and multi-spectral data are typically gathered at a single or series of closely spaced points in time. Levelled features which are now only visible as cropmarks are not usually visible via Lidar data unless they are recorded as substantially differing vegetation heights within a DSM, or the features causing the cropmarks are still extant as micro topographic differences in the ground surface. The limitations of these data sources are appreciated and considered during survey and use of multiple data sources and multiple times of survey increases the discovery rate and certainty of interpretation from all remote sensing data sources when they are examined concurrently.

## 3 Desktop Review

### 3.1 Topography, Land use, Geology and Soils

- 3.1.1.1 The site lies within a relatively flat landscape with very occasional low and gently sloped hills. The area is dominated by agricultural fields, with a few small areas of woodland, crossed in places by roads and watercourses. A significant number of farms, hamlets and small villages dot the landscape, with the great majority located along the edge of, rather than within, the study area. Further information regarding the topography, land use, geology and soils of the study area can be seen in the Geoarchaeological Desk-Based Assessment ([Volume 6, Annex 5.4](#)).
- 3.1.1.2 The British Geological Survey (BGS) records a range of superficial geologies within the study area. The majority of the area is recorded as 'Till, Devensian – Diamicton' which was formed in the Quaternary period as part of an environment previously dominated by ice age conditions (BGS 2019). These superficial deposits are present across the full length of the study area, though they are less dominant in the northern part.
- 3.1.1.3 'Alluvium – Clay, Silt, Sand and Gravel' which was formed in the Quaternary period as part of an environment previously dominated by rivers (BGS 2019), is present in thin bands in the southern part of the study area. In the middle and northern parts of the study area it is more widespread, covering significant areas.
- 3.1.1.4 'Head – Clay, Silt, Sand and Gravel' which was formed in the Quaternary period as part of an environment previously dominated by subaerial slopes (BGS 2019), is present in the southern half of the area. As with the southern areas of Alluvium, this deposit is present only as thin bands, covering a very small part of the study area. This deposit is not present in the more northerly parts of the study area.
- 3.1.1.5 'Glaciofluvial Deposits, Devensian – Sand and Gravel' which was formed in the Quaternary period as part of an environment previously dominated by ice age conditions (BGS 2019), is present in patches. These patches are sparse in the south, becoming larger and more frequent in the northern part of the study area. Similar to the alluvial deposits they cover a very significant part of the far northern end of the study area.
- 3.1.1.6 'Sand and Gravel of Uncertain Age and Origin – Sand and Gravel' which was formed in the Quaternary period as part of an environment of unknown nature (BGS 2019), is present in a limited number of small patches in the southern part of the study area.
- 3.1.1.7 All of these superficial deposits contain, or are entirely composed of, sand and gravel which can provide good results from aerial survey, dependent on the time of year and ground conditions. Clay and Silt, also present in many of these deposits, is similarly capable of providing good results. Thus, the superficial deposits across the full study area are well suited to aerial survey.
- 3.1.1.8 The BGS records three bedrock geologies within the study area. 'Burnham Chalk Formation – Chalk' which was formed in the Cretaceous period in an environment previously dominated

by warm chalk seas (BGS 2019), covers the southern half of the study area. 'Flamborough Chalk Formation – Chalk' which was formed in the Cretaceous period in an environment previously dominated by warm chalk seas (BGS 2019), covers the greater part of the northern half of the study area. Finally, 'Rowe Chalk Formation – Chalk' which was formed in the Cretaceous period in an environment previously dominated by warm chalk seas (BGS 2019), covers the far northeast of the study area where it approaches the coastline. These three highly similar bedrock deposits are very well suited to the recording of crop and soil marks over buried features from the air and are well drained.

3.1.1.9 Cranfield University Soilscales (CUS) also provides useful information about the geology of the study area. This data describes seven distinct soil types across the study area, which can be seen in [Figure 7](#). The soil types present are described here.

3.1.1.10 'Holderness', which is the most prevalent soil type within the study area, is described as 'slowly permeable, seasonally wet, slightly acid but base-rich loamy and clayey soils' (CUS 2019). This soil type is shown as dark purple in [Figure 7](#)

3.1.1.11 'Burlingham 2', which is present over a large part of the southern end of the study area, is described as 'Slightly acid loamy and clayey soils with impeded drainage' (CUS 2019). This soil type is shown as pink in [Figure 7](#). 'Downholland 3', which is present around the central part of the study area, is described as 'Loamy and sandy soils with naturally high groundwater and a peaty surface' (CUS 2019). This soil type is shown as dark green in [Figure 7](#).

3.1.1.12 'Frome', which is present in four patches in the northern part of the study area, is described as 'Loamy and clayey floodplain soils with naturally high groundwater.' (CUS 2019). This soil type is shown as blue in [Figure 7](#).

3.1.1.13 'Hunstanton', a small area of which is present at the southern end of the study area, is described as 'Freely draining slightly acid but base-rich soils.' (CUS 2019). This soil type is shown as orange in [Figure 7](#).

3.1.1.14 'Landbeach', which is present in two small patches around the central part of the study area, is described as 'Freely draining lime-rich loamy soils.' (CUS 2019). This soil type is shown as dark turquoise in [Figure 7](#).

'Wick 1', which is present at the far northern end of the study area, is described as 'Freely draining slightly acid loamy soils.' (CUS 2019). This soil type is shown as lime green in [Figure 7](#).

3.1.1.15 Good soil drainage is potentially beneficial to the visibility of archaeological features in aerial imagery and as such the majority of the recorded soil types are likely to provide good conditions for aerial analysis. The less well drained Burlingham 1, Downholland 3 and Frome soil types may provide less suitable conditions, potentially impeding the effectiveness of aerial survey in recording marks in crops on a regular basis.

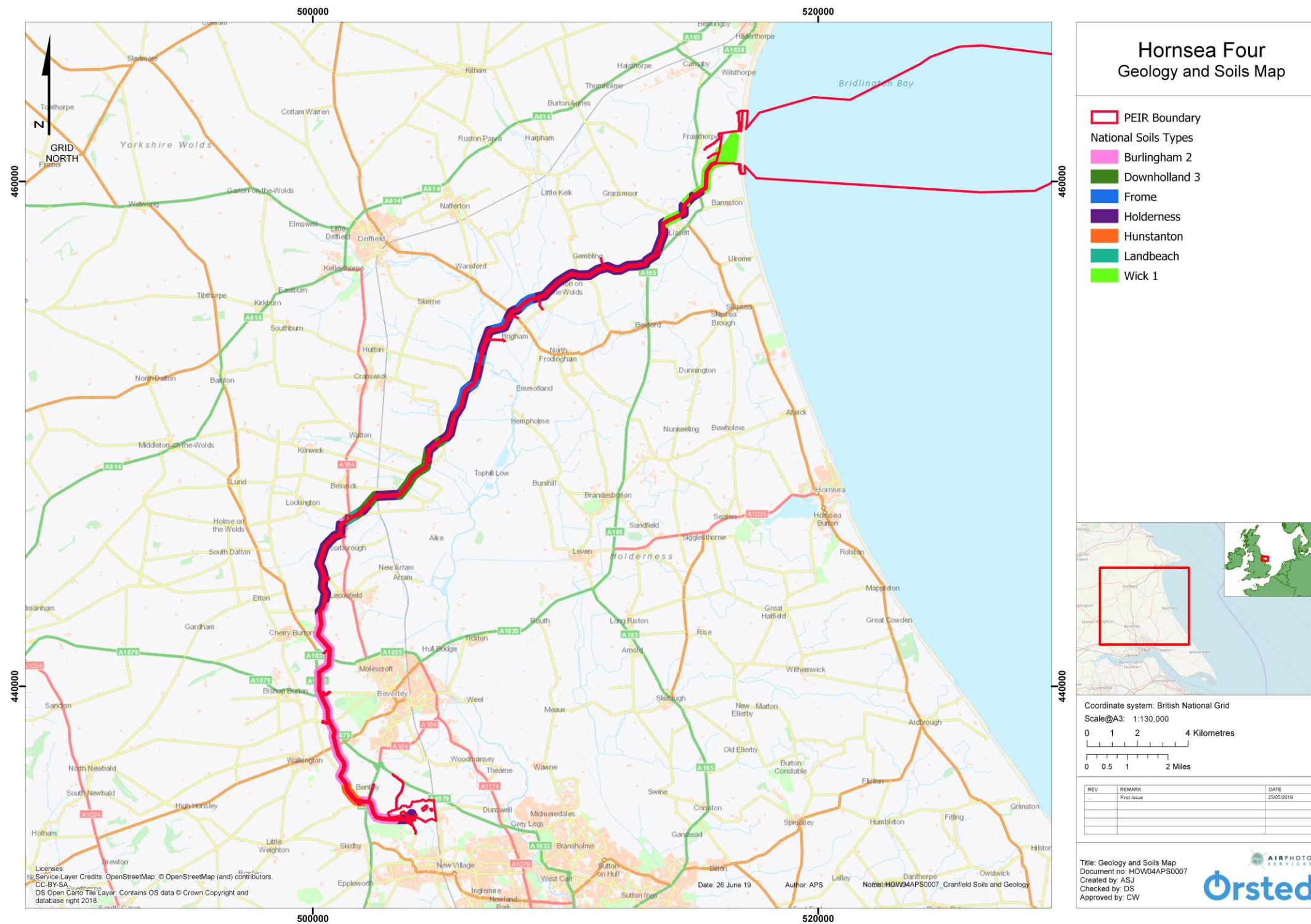


Figure 7: Geology and Soils (not to scale).



## 3.2 Previously Recorded Heritage Assets

### 3.2.1 Introduction

3.2.1.1 Information regarding previously recorded heritage assets has been provided by Historic England and the HHER, a more detailed analysis of these data are discussed in the Historic Environment Desk-Based Assessment ([Volume 6, Annex 5.1](#)). The HHER reference number has been used to refer to sites where one is available. The data was provided as shapefiles in point, line and polygon format and was loaded into the project GIS for analysis. The shapefiles were accompanied by the monument reports in HTML format. Not all heritage assets recorded in the HHER and Historic England data are likely to be seen through aerial sources and as such will not be discussed in detail. [Table 2](#) outlines a summary of the data provided by the project. Several heritage assets included in the data are architectural in origin and so are beyond the remit of this study and will not be discussed in detail. These assets include a single Listed Building and 14 HHER Monument records.

**Table 2: Summary of HHER Data within Study Area.**

Data Type	Number of Features
HHER Events	8
HHER Monuments	111
Listed Buildings	1
Scheduled Monuments	1

### 3.2.2 Prehistoric

3.2.2.1 Forty-eight HHER Monument records and two HHER event records relate to the prehistoric period. The HHER records 18 entries which relate to prehistoric flint findspots which have not been discussed in detail as they are not assets that could be identified from the air.

3.2.2.2 Nine barrow sites are recorded in the HHER monument data. These include three round barrow sites of Bronze Age date (MHU3147, MHU6590, MHU19369). MHU3147 represents a ploughed down round barrow associated with a ditch feature which was identified from aerial imagery. MHU6590 has been identified by the HHER as a possible round barrow also from aerial imagery sources. No details were recorded in the HHER relating to MHU19369.

3.2.2.3 A single square barrow site of Neolithic to Iron Age date is recorded (MHU1519). This site was excavated in 1970.

3.2.2.4 Three square barrow sites of Iron Age date are recorded (MHU327, MHU19425, MHU10044). MHU327 was identified by the HHER from aerial imagery and represents a square barrow with a central pit. MHU10044 represents a group of six to eight square barrows arranged in

a contiguous North – South line, with a single outlier. No details are recorded relating to MHU19425.

- 3.2.2.5 A further monument record identifies possible burial mounds of Bronze Age date, but this identification is uncertain (MHU21086). The mounds are recorded as having diameters of between 25 and 30 m, with one mound featuring a central pit. The mounds were identified by the HHER from aerial imagery dated to 1945 but were not visible during ground survey in 2009.
- 3.2.2.6 A Bronze Age inhumation cemetery is recorded (MHU3727) but no details regarding the site are in the HHER. Information regarding the site on PastScape.org states that two inhumation burials were uncovered by excavation in advance of the installation of a petrol tank. A pair of Bronze Age urns were uncovered alongside the inhumations, one of which was identified as a food vessel.
- 3.2.2.7 A possible Iron Age occupation site is recorded by the HHER (MHU2802). This was identified by the presence of large quantities of animal bones, pottery, organic remains and burnt stone in peat deposits.
- 3.2.2.8 The remaining five monument records for this period represent enclosure sites of Late Iron Age to Roman date. Four of these are rectilinear enclosures (MHU22239, MHU22179, MHU22148, MHU22121). The remaining site is significant in scale and encompasses five enclosures of varying types in addition to possible barrows and further features (MHU21078).
- 3.2.2.9 MHU22239 represents a rectilinear Iron Age to Roman enclosure which was identified by the Hull Valley NMP from aerial imagery. The enclosure is recorded as measuring 62 m by 48 m internally.
- 3.2.2.10 MHU22179 represents a rectilinear enclosure, of probable Iron Age to Roman date, identified as a cropmark from aerial imagery by the Hull Valley NMP. The enclosure is recorded as measuring 55 m by 73 m internally.
- 3.2.2.11 MHU22148 represents a rectilinear enclosure, of probable Iron Age to Roman date, identified as a cropmark from aerial imagery by the Hull Valley NMP. The enclosure is recorded as measuring 70 m by 56 m internally.
- 3.2.2.12 MHU22121 represents a rectilinear enclosure, of probable Iron Age to Roman date, identified as a cropmark from aerial imagery by the East Riding of Yorkshire Assessment of Archaeological Resource in Aggregate Areas Project (Deegan, 2008) The enclosure is recorded as measuring 68 m by 60 m internally.
- 3.2.2.13 MHU21078 represents a collection of five enclosures with associate features including a potential trackway, potential square barrow, field system, pit alignment and various ditch features. The enclosures present on the site consist of a triple ditched rectangular enclosure, two single ditched rectangular enclosures, a circular enclosure and a curvilinear enclosure.

The enclosures overlap at points, suggesting that the site had multiple phases of use, as the HHER suggests. The HHER records these features as Iron Age to Roman in date.

### 3.2.3 Roman

3.2.3.1 No sites of Roman date are identified in the data beyond the five enclosure sites of Iron Age to Roman date which have been considered above (MHU22239, MHU22179, MHU22148, MHU22121, MHU21078).

### 3.2.4 Medieval

3.2.4.1 There are five records of features of medieval date and a further four records of medieval to post-medieval date included in the data. One record (MHU711) is a Scheduled Monument.

3.2.4.2 There is a single findspot of medieval date recorded in the HHER data (MHU1379). This covers a priory seal discovered in the area of Burn Parks in the 19<sup>th</sup> century.

3.2.4.3 A medieval sanctuary cross, consisting of a 2 m limestone shaft mounted on a stone base, is recorded to the east of Killingwoldgraves (MHU711). This cross remains in its original location and is a Scheduled Monument.

3.2.4.4 A medieval moated site is recorded at Rotsea Manor (MHU4539). The site includes a trackway, banks and areas of ridge and furrow in addition to the moat.

3.2.4.5 MHU13179 represents an earthwork bank, which is shown on the 1855 OS map with the label "*Old Inclosure Bank*". It is believed to be of medieval date.

3.2.4.6 The final site of medieval date identified in the data is Raventhorpe Deserted Medieval Village (MHU3350). Aerial imagery suggests the presence of around 15 houses at the site, while records indicated that there was at one time a watermill and a chapel. The village was abandoned some time prior to 1517, when the nearby deer park was expanded over the site.

3.2.4.7 The first of the records of medieval to post-medieval date is the site of Winthorpe Manor (MHU3725). This site was excavated in 1956, but unfortunately the full records of the works are lost. It is understood that the excavations uncovered the site of a 12<sup>th</sup>-13<sup>th</sup> century house and suggested a possible location for a 14<sup>th</sup>-15<sup>th</sup> century successor to the original building, Winthorpe Hall. Favourable conditions for recording from aerial photographs in 1959 revealed several croft walls on the site which in turn led to the identification of further 15<sup>th</sup> century habitation of the site.

3.2.4.8 MHU22017 is associated with the Winthorpe Manor site. As with Winthorpe Manor, the site was excavated between 1956-1963 but the records of this excavation have been lost. This record covers the additional area of probable 15<sup>th</sup> century habitation to the south of the Winthorpe Manor site. The exact nature of this site is not clear from the records available,

but it is understood that finds from the site included possible Saxon pottery and a silver penny of Henry III.

- 3.2.4.9 A fishery, known as Arram Carr Fishery is recorded in documents dating to 1473 (MHU12722). No further details regarding this site are recorded but it is believed to be of medieval to post-medieval date.
- 3.2.4.10 The site of a windmill is recorded in the HHER (MHU12725). The first record of this site is dated to 1314, with a second reference from 1570 also being identified. It is understood that the site was disused by 1625.

### 3.2.5 Post-medieval

- 3.2.5.1 There are 16 records of post-medieval date in the data. Many of the records relate to wells and toll roads. A single record from this period covers a findspot (MHU21059). The record relates to a gun flint of 18<sup>th</sup> or 19<sup>th</sup> century date.
- 3.2.5.2 Two wells are recorded in the HHER data. The first was identified from a record on the 1890 OS map, where it is marked "*Artesian Well*" (MHU12875). The second was identified on the 1854 OS map where it is simply marked "*Well*" (MHU14024).
- 3.2.5.3 Three toll gates are recorded in the HHER data. The first was identified from the 1890 OS map on which it is marked as "*Dunflat Gate*" (MHU12805). The second was identified from the 1855 OS map where it is marked as "*Pratwoods Gate*", this gate was turnpiked in 1769 (MHU12382). The third was not recorded from OS mapping and is not named, being known simply as Site of Turnpike Bar and Road (MHU10977). The HHER records that the bar was placed at Killingwoldgraves and is known to have been moved to the eastern end of that village in 1830.
- 3.2.5.4 Two Milestones are recorded in the HHER data. The first was identified on the 1855 OS map where it is marked "*MS Beverley 2 miles*" (MHU12377). The second was identified from the 1893 OS map where it is marked "*MS Beverley 2 South Cave 7 ¼*" (MHU12974).
- 3.2.5.5 Two gravel pits are recorded in the HHER data. The first is recorded as both a sand pit and a gravel pit, each of the two pits being marked by those names on the 1855 OS map (MHU13107). The second is named Old Gravel Pits, Raventhorpe in the HHER but no further details regarding it are recorded (MHU14919). This site lies some 200 m north of the abandoned village of Raventhorpe, which the HHER records as medieval in date, suggesting that this post-medieval gravel pit may not in fact be related to that site.
- 3.2.5.6 A road bridge is recorded in the HHER data (MHU12871). The bridge is marked as "*Wilfholme Bridge*" on the 1855 OS map. The HHER does not record the current state of this bridge, however a small bridge is visible on aerial imagery dated 2018 at the location marked by the HHER. This may indicate that the bridge remains intact.

- 3.2.5.7 The site of a house known as Wood Cottage is recorded in the HHER (MHU12980). The location was identified on the 1893 OS map. No further details on the site are recorded in the HHER.
- 3.2.5.8 The site of a farm known as Dog Kennel Farm is recorded in the HHER data (MHU13020). The location is marked as "*Dog Kennels*" on the 1855 OS map and as "*Dog Kennel Farm*" on later OS mapping. No further information regarding this site is recorded in the HHER.
- 3.2.5.9 The site of a Wesleyan Methodist Chapel is recorded in the HHER data (MHU15234). The chapel is recorded in the 1854 OS map, where it is marked "*Wesleyan Methodist Chapel*". It appears on the 1892 OS map but is not labelled. Though the HHER does not make comment on the current state of this chapel it appears that it has been demolished.

### **3.2.6 World War I**

- 3.2.6.1 A single monument dated to World War I (WWI) is recorded in the HHER data (MHU21050). This record covers a site that also includes features of World War II (WWII) date. The HHER records that traces of one or perhaps two square pillboxes of WWI date were identified on the site. WWII features recorded on the site include trackways and barbed wire obstructions. It is noted by the HHER that the majority of these features have been destroyed by coastal erosion and that there were no features visible from the ground in 2009.

### **3.2.7 World War II**

- 3.2.7.1 Three monuments of WWII date are recorded in the HHER. The first site is a possible pillbox, identified by aerial imagery (MHU21049).
- 3.2.7.2 The second site is the location of a minefield with barbed wire obstructions and a possible military building. These features have been identified by the HHER from aerial imagery. It is noted by the HHER that the site has been destroyed by coastal erosion, with no features being visible from the ground in 2009.
- 3.2.7.3 The final site is the location of a lozenge shaped pillbox with associated blast wall and barbed wire obstructions (MHU21076). This site was identified from aerial imagery. The HHER records that the site was partially intact in 2009 with the western blast wall upstanding.

### **3.2.8 Unknown**

- 3.2.8.1 Sixteen monuments are recorded as unknown in the HHER. In addition to these, two monuments recorded in the HHER as Lower Palaeolithic to post-medieval in date have been included in this section. The majority of the features identified in this section are sites visible on aerial imagery.
- 3.2.8.2 Five recorded undated monuments refer to sites containing a range of features. The first of these is a ditch system with possible ring ditches (MHU2252). This site has been identified

from aerial imagery. The second is a site consisting of ditches, trackways and a possible ring ditch (MHU979).

- 3.2.8.3 The third is a site consisting of a rectilinear enclosure and an apparent field boundary (MHU331). The HHER suggests that the features are of Iron Age/Roman date though the site is recorded as undated.
- 3.2.8.4 The fourth is recorded as a trackway, but it is also noted as including further features, though these are referred to only as "site" (MHU9878).
- 3.2.8.5 The fifth is a site consisting of ditches and a possible enclosure site (MHU3346). These features have been recorded from aerial imagery, being described by the HHER as "poor cropmarks".
- 3.2.8.6 Two of the recorded sites are undated enclosures. The first is recorded simply as a "possible enclosures" with no further details, the mapping for the feature shows it consists of two such possible enclosures (MHU 19432). The second is recorded as a "Square Ditched Enclosure" with no further detail available (MHU8109).
- 3.2.8.7 Three undated pit features are recorded in the HHER. The first is recorded as a gravel pit (MHU12882). It has been identified from the 1891 OS map. The second is named "Old Pit at Burn Park Farm" and has been identified from the 1855 OS map on which it is shown but not named (MHU12381). The third is recorded as a chalk pit, being labelled as "Old Chalk Pit" on the 1893 OS map (MHU12981).
- 3.2.8.8 A single building of unknown date is recorded (MHU12884). The building is shown on the 1891 OS map but is not labelled, its use is not recorded.
- 3.2.8.9 A number of ditched field boundaries are recorded under the name "Old Field Boundaries, S of Throstle Nest Farm" (MHU10371). The HHER records that the site has been identified from aerial imagery.
- 3.2.8.10 A monument consisting of earthworks is recorded as "Banks/Earthworks S of Carr Lane" (MHU13262).
- 3.2.8.11 A soil mark site is recorded as "Soil mark W of Parkhouse" with no further information available (MHU19099)
- 3.2.8.12 The location of two possible tracks or ditches, visible on aerial imagery, is recorded simply as "Linear Features" (MHU10378).
- 3.2.8.13 As previously stated, two sites with date ranges of Lower Palaeolithic to post-medieval are included in this section. The first of these sites is recorded as "Linear Feature, Foston" and consists of a single linear feature identified by the HHER on the 1850-1856 OS map (MHU22021). It is suggested by the HHER that this feature may represent the arm of a moat. The second site is a substantial one (MHU326). It is recorded under the name "Watermill

*Grounds Cropmark Complex*". It consists of a network of rectangular enclosures, ring ditches, square barrows and further enclosures. The HHER note that the site is being damaged over time by coastal erosion. The overlaid positioning of the various features suggests multiphase habitation on the site, with some parts identified by the HHER as likely Iron Age or Roman in date.

### 3.2.9 Summary

3.2.9.1 In summary, the HHER has provided an important overview of the types of sites that are known within the study area and has highlighted the potential and types of heritage asset that are likely to be encountered as part of this assessment of aerial imagery and Lidar data.

## 4 Interim Results

4.1.1.1 The interim results from the stage one outline mapping are presented in [Table 3](#). The table details the following:

- Interim APS Site Number;
- Asset Type;
- Broad Type;
- Period;
- Humberside Historic Environment Monument ID;
- National Mapping Programme Unique ID;
- Comment;
- National Grid Reference; and
- Map Book Number.

4.1.1.2 The results from stage one are at an interim stage and are likely to be refined further as APS progresses to stage two of the interpretation and mapping process. As a result, the information provided in [Table 3](#) should be treated as interim rather than final data. Site numbers especially are likely to change for the final delivery of the aerial photograph and Lidar assessment. The sites have been numbered from south – north of the study area based upon the eastings and northings for each site.

4.1.1.3 The stage one initial mapping from aerial imagery and lidar is available for the whole study area and is presented in the Map Books in [Appendix E](#). Within results [Table 3](#) the map book number that the site is visible in is provided for ease of reference between the table and the map book.

4.1.1.4 The stage two detailed mapping is ongoing at this stage of the project. The landfall and OnSS at the northern and southern ends of the study area have been detailed mapped fully, as a priority. The rest of the study area has been sporadically mapped and the ongoing interim detailed mapping as of the 10 May 2019 has been provided.

**Table 3: Interim Results.**

Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_001	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	A rectangular field containing residual earthwork ridge and furrow which dates to the Medieval / Post Medieval periods. The ridge and furrow is aligned approximately east – west and was identified using both aerial photographs and EA Lidar data. This ridge and furrow was not identified by the NMP.	TA 039 345	1
APS_002	Enclosure	Enclosure	Unknown	N/A	1566826	A partial square ditched enclosure which is visible as a cropmark on aerial imagery sources and a very residual earthwork on EA Lidar data. This site also includes a curvilinear ditched feature to the immediate north of the enclosure. This feature was previously mapped by the NMP.	TA 032 345	1
APS_003	Ditch	Ditch	Unknown	N/A	N/A	The site of an undated curvilinear ditch which is visible as a cropmark on aerial photographs and satellite imagery.	TA 036 345	1
APS_004	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary is present as a residual earthwork bank which is visible on aerial imagery and EA Lidar data. The feature is formed of two linear banks at a right angle to each other.	TA 026 347	2
APS_005	Ditch	Ditch	Unknown	N/A	1566826	A series of linear ditched features which appear to form a series of enclosures, probably relating to an earlier field system. There are also irregular shaped ditches within this site. The ditches are visible as a mixture of cropmarks and residual earthworks on aerial imagery sources and have been partially recorded by the NMP.	TA 034 347	1



# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_006	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear banked feature which has been identified as an earthwork feature through aerial imagery and EA Lidar data and interpreted as a field boundary. The boundary has since been removed and is now visible as a cropmark.	TA 038 347	1
APS_007	Ditch	Ditch	Unknown	N/A	N/A	A group of linear ditched features which are visible as cropmarks on aerial imagery, it is possible that this site relates to the Iron Age field system directly to the north at APS_017.	TA 037 347	1
APS_008	Ditch	Ditch	Unknown	N/A	N/A	A sinuous ditched feature which is visible as cropmark on aerial imagery, the date and function is unknown however this feature may represent a former field boundary.	TA 039 347	1
APS_009	Field Boundary	Boundary	Post Medieval	N/A	N/A	Two former field boundaries which were extant earthworks on aerial imagery which have since been removed and are now visible as cropmarks. The two former boundaries join to make a 'T' shape.	TA 028 348	1 & 2
APS_010	Square Enclosure	Enclosure	Unknown	MHU6600	910624	A square ditched enclosure which has been identified through aerial imagery and has been previously recorded by the HHER and the NMP. The HHER identified the enclosure as a series of fragmented ditches. There are also a series of linear ditched features around the enclosure which are also visible as cropmarks.	TA 042 348	1
APS_011	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566959	An area of north – south aligned Medieval / Post Medieval ridge and furrow which is visible as residual earthworks on aerial photographs and EA Lidar data. The site has previously been identified by the NMP.	TA 035 348	1

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_012	Field Boundary	Boundary	Post Medieval	N/A	N/A	The site of a former field boundary which was seen as an extant earthwork bank on aerial photography and is now removed and visible as a cropmark.	TA 032 349	1
APS_013	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566956	An area of east – west aligned Medieval / Post Medieval ridge and furrow which is visible as residual earthworks on aerial imagery and EA Lidar data. The site has previously been recorded by the NMP.	TA 020 349	2
APS_014	Trackway	Road	Unknown	N/A	N/A	A northwest – southeast aligned trackway that is visible as a cropmark on satellite imagery. The trackway has not been previously identified by the HHER or the NMP.	TA 018 349	2
APS_015	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566959	An area of north-south aligned Medieval / Post Medieval ridge and furrow which is visible as residual earthworks on aerial photographs and EA Lidar data. The site has previously been recorded by the NMP.	TA 025 350	2
APS_016	Field Boundary	Boundary	Post Medieval	N/A	N/A	Two former field boundaries which are present as linear cropmark features on aerial imagery.	TA 033 350	1
APS_017	Field System	Field System	Prehistoric / Roman	MHU6599	910624	The site of a Prehistoric / Roman field system which are visible as a series of ditched cropmark features. The features are visible as a micro-topographic remains on EA Lidar data. The HHER and the NMP have both previously recorded this feature.	TA 038 350	1
APS_018	Enclosure	Enclosure	Unknown	N/A	1566005	A group of ditched features which appear to form an enclosure and partial trackway are visible as cropmarks on satellite imagery. The NMP has previously identified part of this site.	TA 027 350	2

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_019	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of east – west aligned Medieval / Post Medieval ridge and furrow which is visible as earthworks on aerial photograph and EA Lidar data.	TA 018 350	2
APS_020	Defensive Feature	Defensive Feature	World War II	N/A	N/A	A former defensive site dating to World War II, the feature is a mixture of banks and ditches which were observed as extant earthworks in 1945 and then as cropmarks in 2016.	TA 025 352	2
APS_021	Ditch	Ditch	Unknown	N/A	N/A	An undated ditch which is visible as a cropmark feature on aerial photographs and satellite imagery.	TA 014 353	3
APS_022	Ditch	Ditch	Unknown	N/A	N/A	An undated ditch which is visible as a cropmark feature on aerial photographs and satellite imagery.	TA 016 354	2 & 3
APS_023	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566276	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. The site has previously been recorded by the NMP.	TA 023 354	2 & 3
APS_024	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566276	An area of north – south aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. The site has previously been recorded by the NMP	TA 020 354	2 & 3
APS_025	Bank	Bank	Unknown	N/A	1566276	A banked feature which is visible as an earthwork on EA Lidar data. The bank is likely a headland and relates to ridge and furrow dating to the Medieval / Post Medieval Period. This feature has previously been identified by the NMP.	TA 019 354	2 & 3

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_026	Bank	Bank	Medieval / Post Medieval	N/A	1566276	A banked feature which is visible as an earthwork on EA Lidar data. The bank is likely a headland and relates to ridge and furrow dating to the Medieval / Post Medieval Period. This feature has previously been identified by the NMP.	TA 020 355	2 & 3
APS_027	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of northwest-southeast aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data.	TA 025 355	2
APS_028	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data.	TA 018 356	2 & 3
APS_029	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566276	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. This feature has previously been identified by the NMP.	TA 021 356	2 & 3
APS_030	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary is visible as a cropmark on aerial imagery sources.	TA 023 356	2 & 3
APS_031	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary is visible as a cropmark on aerial imagery sources.	TA 015 357	2 & 3
APS_032	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566276	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. This feature has previously been identified by the NMP.	TA 017 357	3

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Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_033	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566276	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. This feature has previously been identified by the NMP.	TA 018 357	3
APS_034	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data.	TA 024 358	3
APS_035	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data.	TA 019 358	3
APS_036	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566274	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. This feature has previously been identified by the NMP.	TA 020 358	3
APS_037	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data.	TA 020 358	3
APS_038	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data.	TA 021 358	3
APS_039	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of east – west aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data.	TA 017 358	3

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Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_040	Ditch	Ditch	Unknown	N/A	N/A	An undated ditch is visible as a cropmark on aerial imagery sources.	TA 014 359	3
APS_041	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566276	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. This feature was previously recorded by the NMP.	TA 021 359	3
APS_042	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566276	An area of east - west aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. This feature was previously recorded by the NMP.	TA 015 359	3
APS_043	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566276	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. This feature was previously recorded by the NMP.	TA 011 359	3
APS_044	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary which is visible as a cropmark on aerial imagery.	TA 015 359	3
APS_045	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566276	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. This feature was previously recorded by the NMP.	TA 015 360	3
APS_046	Field Boundary	Boundary	Post Medieval	N/A	N/A	A group of former field boundaries is visible as cropmark features on aerial photographs and EA Lidar data.	TA 011 360	3
APS_047	Modern Service	Modern Service	Modern	N/A	N/A	The line of a modern service which is visible as a cropmark on satellite imagery. The service likely extends further outside of the study area.	TA 012 363	3 & 4

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_048	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566276	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. This feature was previously recorded by the NMP.	TA 008 364	3 & 4
APS_049	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566276	An area of northeast - southwest aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. This feature was previously recorded by the NMP curving north - south.	TA 010 365	4
APS_050	Enclosure	Enclosure	Unknown	N/A	1566276	An undated enclosure which is visible as a cropmark on satellite imagery and a residual earthwork on EA Lidar. The site has been previously mapped by the NMP.	TA 013 366	4
APS_051	Ditch	Ditch	Unknown	N/A	N/A	Two linear ditches are visible as cropmarks on aerial photographs, the ditches may be former field systems.	TA 009 369	4
APS_052	Enclosure	Enclosure	Unknown	N/A	N/A	An enclosure which is visible as a cropmark is visible on aerial imagery sources.	TA 014 371	4
APS_053	Modern Service	Modern Service	Modern	N/A	N/A	The line of a large modern service is visible as a cropmark on satellite imagery.	TA 009 371	3 & 4 & 5
APS_054	Enclosure	Enclosure	Unknown	N/A	N/A	An enclosure is visible as a mixture of residual earthworks on EA lidar data and as crop marks on aerial imagery.	TA 013 374	4
APS_055	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566271	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. This feature was previously recorded by the NMP.	TA 011 375	4

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_056	Field Boundary	Boundary	Post Medieval	N/A	N/A	A group of linear field boundaries which are visible as residual earthworks and cropmarks on aerial imagery and EA Lidar data.	TA 014 375	4
APS_057	Ditch	Ditch	Unknown	N/A	1087954	A group of undated sinuous ditches which are visible as cropmarks on aerial photographs and satellite imagery. This feature has previously been mapped by the NMP.	TA 014 376	4
APS_058	Enclosure	Enclosure	Unknown	N/A	N/A	An enclosure is visible as a mixture of residual earthworks on EA lidar data and as crop marks on aerial imagery.	TA 004 376	4 & 5
APS_059	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566271	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. This feature was previously recorded by the NMP.	TA 010 377	4 & 5
APS_060	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566271	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data. This feature was previously recorded by the NMP.	TA 005 377	4 & 5
APS_061	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of east - west aligned Medieval / Post Medieval ridge and furrow which is visible as earthworks on aerial photographs and EA Lidar data.	TA 009 377	5
APS_062	Hollow	Hollow	Unknown	N/A	N/A	An irregular shaped hollow is visible as a residual earthwork on aerial photography.	TA 008 377	5
APS_063	Modern Service	Modern Service	Modern	N/A	N/A	The line of a 'Z' shaped modern service ditch is visible as a cropmark on satellite imagery.	TA 009 378	5



# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_064	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of east - west aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data.	TA 010 378	5
APS_065	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary is visible as a cropmark on aerial imagery, the boundary was an extant earthwork in the 1940s.	TA 006 379	5
APS_066	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data.	TA 009 379	5
APS_067	Palaeochannel	Palaeochannel	Prehistoric	N/A	N/A	A section of palaeochannel is visible on satellite imagery as a cropmark.	TA 005 383	5
APS_068	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as earthworks on aerial photographs and EA Lidar data.	TA 008 387	5 & 6
APS_069	Field Boundary	Boundary	Post Medieval	N/A	N/A	A group of former field boundaries that were visible as earthworks in the 1990s but are now visible as cropmarks on satellite imagery.	TA 007 389	5 & 6
APS_070	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear former field boundary which is visible as a cropmark on satellite imagery.	TA 003 389	5 & 6
APS_071	Ditch	Ditch	Unknown	N/A	N/A	An undated curvilinear ditch is visible as a cropmark on aerial imagery.	TA 007 391	6
APS_072	Enclosure	Enclosure	Unknown	N/A	N/A	An enclosure is visible as a mixture of residual earthworks on EA lidar data and as crop marks on aerial imagery.	TA 006 391	6
APS_073	Bank	Bank	Unknown	N/A	N/A	An undated curvilinear bank is visible as an earthwork on aerial photographs.	TA 006 392	6

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_074	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of northeast - southwest aligned Medieval / Post Medieval ridge and furrow which is visible as earthworks on aerial photographs and EA Lidar data.	TA 005 393	6
APS_075	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear former field boundary is visible as a cropmark on aerial imagery.	TA 002 394	6
APS_076	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear former field boundary is visible as a cropmark on aerial imagery.	TA 007 395	6
APS_077	Bank	Bank	Unknown	N/A	1552238	An undated curvilinear bank is visible as an earthwork on aerial photographs. This feature was also recorded by the NMP and did not require remapping.	TA 004 395	6
APS_078	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of northwest - southeast aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data.	TA 004 395	6
APS_079	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566264	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 004 397	6
APS_080	Modern Service	Modern Service	Modern	N/A	N/A	A linear ditch feature is visible as a cropmark on satellite imagery. This is thought to be the line of a modern service.	TA 004 398	6
APS_081	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1566264	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 005 398	6
APS_082	Bank	Bank	Unknown	N/A	N/A	A linear undated bank is visible as an earthwork on aerial photographs.	TA 005 398	6

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_083	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1551834	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 002 404	7
APS_084	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1551834	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 005 404	7
APS_085	Enclosure	Enclosure	Iron Age / Roman	MHU22297	1550545	A rectilinear ditched enclosure site is visible as cropmarks on aerial imagery. The site is recorded by both the HHER and the NMP and is likely Iron Age or Roman in date.	TA 003 404	7
APS_086	Ditch	Ditch	Unknown	N/A	N/A	A sinuous ditched feature of unknown date is visible as a cropmark on satellite imagery.	TA 001 405	7
APS_087	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1551834	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 006 405	7
APS_088	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1551834	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 004 405	7
APS_089	Enclosure	Enclosure	Unknown	MHU22299	1550552	A ditched enclosure is partially visible as cropmarks on aerial photographs, the feature has been previously recorded by the HHER and the NMP. According to the HHER the enclosure likely dates to the Iron Age / Roman periods.	TA 006 406	7

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_090	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1551834	An area of east - west aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 004 406	7
APS_091	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs.	TA 002 406	7
APS_092	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear former field boundary is visible as a cropmark on aerial imagery.	TA 004 407	7
APS_093	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1552441	An area of southwest - northeast aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 007 414	8
APS_094	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1552441	An area of northwest - southeast aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 004 415	8
APS_095	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear former field boundary is visible as a cropmark on aerial imagery.	TA 006 416	8
APS_096	Ditch	Ditch	Unknown	N/A	N/A	A linear ditch feature is visible as an earthwork on satellite imagery.	TA 004 416	8
APS_097	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of southwest - northeast aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data.	TA 007 417	8
APS_098	Deserted Settlement	Settlement	Medieval	MHU3350	79241 / 1418157 / 1552441	The site of Raventhorpe Deserted Medieval Village is visible as earthwork remains on aerial imagery. The site is formed of banks, ditches and house platforms. The site has been recorded by both the HHER and the NMP.	TA 004 425	9

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APS_099	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear field boundary is visible as a cropmark on aerial imagery.	TA 003 427	9
APS_100	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data.	TA 005 428	9
APS_101	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1552441	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	SE 000 429	9
APS_102	Field Boundary	Boundary	Post Medieval	N/A	N/A	A field boundary, running on a northwest - southeast axis, is visible as a cropmark on aerial imagery.	TA 004 431	9
APS_103	Ditch	Ditch	Unknown	N/A	N/A	A right-angled ditch feature is visible as a cropmark on satellite imagery.	TA 005 432	9
APS_104	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1552443	An area of southwest - northeast aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 004 432	9
APS_105	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1552443	An area of Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 007 433	9
APS_106	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1552443	An area of Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 004 435	9
APS_107	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary is visible as a cropmark on aerial imagery.	TA 007 438	10

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Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_108	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	Medieval / Post Medieval Ridge and Furrow is visible as cropmarks on aerial imagery dated 2005.	TA 006 439	10
APS_109	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1552440 / 1552443 / 1551851	An area of southwest - northeast aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 003 442	10
APS_110	Ditch	Ditch	Prehistoric	N/A	1430033 1551869	A group of ditched linear and curvilinear features are visible as cropmarks on aerial imagery. There are also some pits within this site. The NMP has previously recorded this site and it may relate to the trackway identified at APS_112.	TA 003 442	10
APS_111	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear former field boundary is visible as an earthwork on aerial imagery.	TA 004 443	10
APS_112	Trackway	Road	Unknown	N/A	1430033 1551869	A trackway is visible as a cropmark on aerial imagery dated 2007. A small part of the southern end of the feature is visible as an earthwork on aerial imagery dated 1945. This feature has previously been recorded by the NMP.	TA 003 444	10
APS_113	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1552443	An area of southwest - northeast aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 005 446	10
APS_114	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary is visible as a cropmark on aerial imagery.	TA 000 450	11
APS_115	Ditch	Ditch	Unknown	N/A	79184 / 1548992	A group of linear and curvilinear ditched features which are visible as cropmarks on aerial photographs. These features have previously been partially mapped by the NMP.	TA 006 451	11

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Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_116	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549229	An area of northwest - southeast aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	SE 999 452	11
APS_117	Ditch	Ditch	Medieval / Post Medieval	MHU3725	79184	The earthwork remains of Winthorpe Manor and House are visible on aerial imagery sources. The site comprises a series of banked and ditched features. The site has been recorded by both the HHER and the NMP.	TA 001 452	11
APS_118	Field Boundary	Boundary	Post Medieval	N/A	N/A	A group of former field boundaries are visible as extant earthworks on aerial imagery but have since been removed.	TA 004 452	11
APS_119	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549229	An area of east - west aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 004 456	11
APS_120	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549233	An area of east - west aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 006 457	11
APS_121	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549233	An area of east - west aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 010 458	11
APS_122	Ditch	Ditch	Iron Age / Roman	MHU22179	1548780	An inverted 'L' shaped ditched feature is visible as an earthwork on aerial imagery and EA Lidar data. The feature most likely relates to the Iron Age / Roman enclosure at APS_123. This feature has previously been recorded by both the HHER and the NMP.	TA 009 460	12

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_123	Rectilinear Enclosure	Enclosure	Iron Age / Roman.	MHU22179	1548780	A rectilinear enclosure is visible as cropmark on aerial imagery sources. The HHER records the enclosure as an Iron Age – Roman site which was also recorded by the NMP.	TA 009 460	12
APS_124	Ditch	Ditch	Unknown	N/A	N/A	An 'r' shaped ditched feature is visible as a residual earthwork on EA Lidar data, the ditch is of unknown date but likely relates to a former field boundary.	TA 014 464	12
APS_125	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549229	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 015 464	12
APS_126	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1548665	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 011 465	12
APS_127	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549229	An area of east - west aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 016 466	12
APS_128	Ditch	Ditch	Unknown	N/A	N/A	A linear ditch feature is visible as an earthwork on EA Lidar data.	TA 012 466	12
APS_129	Ditch	Ditch	Unknown	N/A	N/A	An irregular shaped ditched feature is visible as a cropmark on an air photograph dating to 1962.	TA 021 469	13
APS_130	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear former field boundary is visible as an earthwork and later as a cropmark on aerial imagery.	TA 019 469	13
APS_131	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear former field boundary is visible as an earthwork on aerial imagery.	TA 017 470	12



# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_132	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549229	An area of northwest - southeast aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 026 471	13
APS_133	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549229	An area of east - west aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 021 471	13
APS_134	Square Barrow	Square Barrow	Iron Age	MHU19425	N/A	The site of probable square barrows, the remains are visible as residual earthworks on aerial imagery sources, the site has previously been recorded by HHER.	TA 022 472	13
APS_135	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549224	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 027 473	13
APS_136	Ditch	Ditch	Unknown	N/A	N/A	An area of ditch features is visible as cropmarks on aerial imagery.	TA 030 473	13
APS_137	Ditch	Ditch	Unknown	N/A	1548746	A ditch is visible as a cropmark on aerial imagery dated 1946.	TA 029 474	13
APS_138	Ditch	Ditch	Unknown	N/A	1549001	Three ditch features, running southwest to northeast, are visible as cropmarks on aerial imagery, this feature has previously been recorded by the NMP.	TA 036 475	14
APS_139	Ditch	Ditch	Unknown	N/A	N/A	A sinuous ditch feature is visible as an earthwork on EA Lidar data.	TA 031 475	13 & 14
APS_140	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549224	An area of north - south aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 027 476	13

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_141	Pit	Pit	Unknown	N/A	1548746	A pair of pits is visible as earthworks on aerial imagery and have previously been recorded by the NMP.	TA 028 476	13
APS_142	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear field boundary is visible as an earthwork on aerial imagery and has since been removed.	TA 029 476	13
APS_143	Ditch	Ditch	Unknown	N/A	1548746	An irregular ditched feature is visible as a residual earthwork on aerial imagery, this feature has previously been recorded by the NMP.	TA 029 476	13
APS_144	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear former field boundary is visible as an earthwork on aerial imagery but has since been removed.	TA 039 481	14
APS_145	Mound	Mound	Unknown	N/A	N/A	An irregular shaped mound is visible as an earthwork on EA Lidar data. This feature may be geological in origin.	TA 040 484	15
APS_146	Ditch	Ditch	Unknown	N/A	1548818	A pair of parallel ditches of uncertain purpose is visible as earthworks on aerial imagery, this feature has been previously recorded by the NMP.	TA 047 486	15
APS_147	Field Boundary	Boundary	Post Medieval	N/A	N/A	A group of irregular former field boundaries is visible as earthworks on aerial imagery.	TA 039 486	15
APS_148	Field Boundary	Boundary	Post Medieval	N/A	N/A	A group of irregular former field boundaries is visible as earthworks on aerial imagery.	TA 046 491	15
APS_149	Field Boundary	Boundary	Post Medieval	N/A	N/A	A group of irregular former field boundaries is visible as cropmarks on aerial imagery.	TA 050 497	16
APS_150	Field Boundary	Boundary	Post Medieval	N/A	N/A	A group of irregular former field boundaries is visible as cropmarks on aerial imagery.	TA 054 498	16
APS_151	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1551232	An area of north - south aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 050 499	16

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_152	Ditch	Ditch	Unknown	N/A	1551246	A group of sinuous ditches is visible as earthworks and later as cropmarks on aerial imagery sources. This feature has previously been recorded by the NMP.	TA 052 499	16
APS_153	Field Boundary	Boundary	Post Medieval	N/A	N/A	A group of linear former field boundaries is visible as residual earthworks on aerial imagery sources.	TA 056 503	16
APS_154	Field Boundary	Boundary	Post Medieval	N/A	1367270	A linear ditched feature which is visible as a residual earthwork on aerial imagery. This feature was previously mapped by the NMP.	TA 057 504	16
APS_155	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear ditched former field boundary which is visible as a cropmark on aerial imagery sources.	TA 054 504	16
APS_156	Pit	Pit	Unknown	N/A	N/A	A group of pit features which is visible as cropmarks on aerial imagery sources. The pits may relate to geology.	TA 053 507	16 & 17
APS_157	Pit	Pit	Unknown	N/A	N/A	A group of pit features which is visible as cropmarks on aerial imagery sources. The pits may relate to geology.	TA 059 507	16 & 17
APS_158	Trackway	Road	Unknown	N/A	N/A	Two ditched features which form the line of a trackway are visible as cropmarks on aerial imagery sources. The trackway is slightly curved in shape.	TA 057 508	17
APS_159	Field Boundary	Boundary	Post Medieval	MHU19368	N/A	A group of former field boundaries which is visible as cropmarks on aerial imagery sources. The HHER identifies this site as an area of rectangular pattern cropmarks.	TA 058 509	17
APS_160	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550344 1550252	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 059 510	17

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_161	Ditch	Ditch	Unknown	N/A	N/A	Two parallel ditches which are visible as faint cropmarks on aerial imagery sources.	TA 064 512	17
APS_162	Trackway	Road	Unknown	MHU9878	1550255	A long sinuous trackway is visible as two parallel cropmark ditches on aerial imagery sources. The trackway is orientated on a rough north – south axis. The trackway has previously been recorded by the HHER and the NMP.	TA 059 513	17
APS_163	Bank	Bank	Unknown	N/A	N/A	An area of possible banked features which is visible as very residual earthworks on EA Lidar data, these may form the remains of former field boundaries or even a possible enclosure.	TA 062 513	17
APS_164	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550344	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 060 514	17
APS_165	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550344	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 061 515	17
APS_166	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	MHU4539	1550347	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the HHER and the NMP.	TA 063 516	17
APS_167	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	MHU4539	1550290 1550255 1550263 1550347	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the HHER and NMP.	TA 062 517	17

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_168	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	MHU4539	1550347	An area of northeast – southwest aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 064 517	17
APS_169	Ditch	Ditch	Unknown	N/A	N/A	A sinuous irregular shaped ditch which is visible as cropmark on aerial imagery sources.	TA 057 517	17
APS_170	Field Boundary	Boundary	Post Medieval	N/A	N/A	A group of linear former field boundaries which is visible as cropmarks on aerial imagery sources.	TA 059 517	17
APS_171	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550290 1550255 1550263 1550347	An area of northeast – southwest aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 063 518	17
APS_172	Ditch	Ditch	Unknown	N/A	N/A	A group of three irregular ditches which is visible as cropmarks on aerial imagery sources. The ditches are orientated approximately southwest – northeast.	TA 060 518	17
APS_173	Pit	Pit	Unknown	N/A	1550194	A single pit feature is visible as a partial residual earthwork and a partial cropmark. The pit has been previously mapped by the NMP.	TA 060 518	17
APS_174	Enclosure	Enclosure	Iron Age / Roman	MHU8109	1550174	A square enclosure with associated linear ditches is visible as cropmarks on aerial imagery sources. The HHER identified this site as dating to the Iron Age / Roman periods and this site has also been previously mapped by the NMP.	TA 062 518	17
APS_175	Trackway	Road	Unknown	N/A	1550185	A trackway is present as sinuous shaped ditched features which are visible as cropmarks on aerial imagery sources. The trackway has previously been mapped by the NMP.	TA 066 520	17 & 18

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_176	Field Boundary	Boundary	Post Medieval	N/A	1550185 1550344	A group of former field boundaries which is visible as cropmarks on aerial imagery sources. The boundaries appear to form an earlier field system. This site has been previously identified by the NMP.	TA 065 523	18
APS_177	Ditch	Ditch	Unknown	N/A	N/A	A group of irregular ditches which is visible as cropmarks on aerial imagery sources.	TA 069 529	18
APS_178	Field Boundary	Boundary	Post Medieval	N/A	N/A	An irregular shaped bank which is a former field boundary is visible as a cropmark on aerial imagery sources.	TA 066 531	19
APS_179	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of east – west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data.	TA 070 531	19
APS_180	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550338	An area of east – west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 065 534	19
APS_181	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of north - south aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data.	TA 071 535	19
APS_182	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550338	An area of east – west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 065 535	19
APS_183	Pit	Pit	Unknown	N/A	N/A	A pit is visible as a cropmark on aerial imagery sources, the pit may relate to ridge and furrow at APS_182.	TA 065 536	19
APS_184	Enclosure	Enclosure	Unknown	N/A	N/A	A rectilinear enclosure is partially visible as a cropmark ditch feature on aerial imagery sources.	TA 066 536	19

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_185	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550338	An area of east – west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 074 537	19
APS_186	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550338	An area of east – west aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 072 538	19
APS_187	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550338	An area of east – west aligned Medieval / Post Medieval ridge and furrow which is visible as earthworks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 075 539	19
APS_188	Ring Ditch	Ring Ditch	Unknown	N/A	N/A	A ring ditch visible as a cropmark on aerial imagery sources.	TA 070 539	19
APS_189	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550335	An area of east – west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 070 539	19
APS_190	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550338	An area of east – west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 068 539	19
APS_191	Ring Ditch	Ring Ditch	Unknown	N/A	N/A	A group of three ring ditches which are visible as cropmarks on aerial imagery sources. These may form part of a group with APS_188 and APS_195.	TA 067 539	19
APS_192	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550338	An area of east – west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 072 539	19

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_193	Field Boundary	Boundary	Post Medieval	N/A	1550335	A group of ditches and banks is visible as earthworks on aerial imagery sources, these are likely to represent former field boundaries. These features have been previously identified by the NMP.	TA 072 540	19
APS_194	Field Boundary	Boundary	Post Medieval	N/A	1550335	A group of ditches and banks are visible as earthworks on aerial imagery sources, these are likely to represent former field boundaries. These features have been previously identified by the NMP.	TA 068 541	19
APS_195	Ring Ditch	Ring Ditch	Unknown	N/A	N/A	A ring ditch which is visible as a cropmark on aerial imagery sources. These may form part of a group with APS_188 and APS_193.	TA 070 541	19
APS_196	Field Boundary	Boundary	Post Medieval	N/A	N/A	An irregular shaped linear bank which is visible as an earthwork on EA Lidar data. The bank is likely a former field boundary.	TA 077 541	19
APS_197	Palaeochannel	Watercourse	Prehistoric	N/A	N/A	A palaeochannel is visible as a cropmark on aerial imagery sources.	TA 072 542	19
APS_198	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550338	An area of north - south aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 067 542	19
APS_199	Ditch	Ditch	Unknown	N/A	N/A	An irregular shaped ditch is visible as a cropmark on aerial imagery sources.	TA 076 543	19
APS_200	Enclosure	Enclosure	Unknown	N/A	N/A	A small circular enclosure is visible on aerial imagery, this is located in an area of very visible geology and so may be geological in origin.	TA 075 543	20
APS_201	Bank	Bank	Unknown	N/A	N/A	An irregular shaped bank is visible as an earthwork on EA Lidar data.	TA 076 544	20



# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_202	Bank	Bank	Unknown	N/A	1550338	An irregular shaped bank feature which is visible as an earthwork on EA Lidar data. This feature has been previously mapped by the NMP.	TA 077 545	20
APS_203	Field Boundary	Boundary	Post Medieval	N/A	N/A	A group of linear field boundaries is visible as cropmarks on aerial imagery sources.	TA 074 545	20
APS_204	Field Boundary	Boundary	Post Medieval	N/A	N/A	A residual curved bank features is visible as an earthwork on EA Lidar data.	TA 074 545	20
APS_205	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1550338	An area of east - west aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 078 545	20
APS_206	Ditch	Ditch	Unknown	MHU7177 EHU2292	1550229	A group of ditches is visible as cropmarks on aerial imagery sources.	TA 072 546	20
APS_207	Bank	Bank	Unknown	N/A	1550338	An irregular shaped bank is visible as an earthwork on EA Lidar data. The bank has been previously identified by the NMP.	TA 080 547	20
APS_208	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear ditched feature is visible as an earthwork on EA Lidar data which is likely the line of a former field boundary.	TA 077 547	20
APS_209	Ring Ditch	Ring Ditch	Iron Age / Roman	MHU8161	1550338	A group of ring ditches and associated linear ditches is visible as cropmarks on aerial imagery sources. The HHER has identified this as part of a settlement site dating to the Iron Age / Roman periods. This feature has also been identified by the NMP.	TA 074 547	20
APS_210	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary which was extant structure in 1946 and is a now faint cropmark.	TA 084 549	20
APS_211	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary which was extant structure in 1946 and is a now faint cropmark.	TA 086 550	20

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_212	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary which was extant structure in 1946 and is a now faint cropmark.	TA 081 551	20
APS_213	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary which was extant structure in 1946 and is a now faint cropmark.	TA 085 551	20
APS_214	Field Boundary	Boundary	Post Medieval	EHU1963	N/A	A former field boundary which was extant structure in 1946 and is a now faint cropmark.	TA 089 551	21
APS_215	Field Boundary	Boundary	Post Medieval	N/A	1549729	A former field boundary which was extant structure in 1946 and is a now faint cropmark.	TA 093 552	21
APS_216	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary which was extant structure in 1946 and is a now faint cropmark.	TA 084 552	20
APS_217	Ditch	Ditch	Unknown	EHU1963	N/A	A group of ditches is visible as cropmarks on aerial imagery sources.	TA 084 552	20
APS_218	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary which was extant structure in 1946 and is a now faint cropmark.	TA 084 553	20
APS_219	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of east - west aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 094 553	21
APS_220	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary is visible as an earthwork on aerial imagery sources.	TA 089 554	21
APS_221	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	EHU1963	1549729	An area of east - west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 088 554	21
APS_222	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	EHU1963	1549729	An area of east - west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 089 555	21

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_223	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of east - west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 092 555	21
APS_224	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary is visible as an earthwork ditch on aerial imagery sources.	TA 087 555	21
APS_225	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549729	An area of east - west aligned Medieval / Post Medieval ridge and furrow which are visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 096 555	21
APS_226	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549729	An area of north east – south west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 089 556	21
APS_227	Bank	Bank	Unknown	N/A	N/A	A curved bank is visible as an earthwork on aerial photographs.	TA 087 556	21
APS_228	Field Boundary	Boundary	Post Medieval	N/A	N/A	A group of former field boundaries are present as earthworks on EA Lidar data.	TA 093 556	21
APS_229	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549729	An area of east - west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 091 557	21
APS_230	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of northeast – southwest aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 099 558	21

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_231	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549729	An area of east - west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 093 559	21
APS_232	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549729	An area of northeast – southwest aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 098 559	21
APS_233	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear ditch which is the line of a former field boundary is visible as a cropmark on aerial imagery sources.	TA 092 559	21
APS_234	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1461211	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 107 559	22
APS_235	Ditch	Ditch	Unknown	N/A	N/A	An area of irregular shaped ditched features is visible as cropmarks on aerial imagery.	TA 092 559	21
APS_236	Field Boundary	Boundary	Post Medieval	N/A	N/A	A linear ditch which is the line of a former field boundary is visible as a cropmark on aerial imagery sources.	TA 094 559	21
APS_237	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1461211	An area of northeast – southwest aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 100 560	22
APS_238	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1549729	An area of northeast – southwest aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 098 560	22
APS_239	Field Boundary	Boundary	Post Medieval	N/A	N/A	A group of former field boundaries is visible as cropmarks on aerial imagery sources.	TA 099 562	21 & 22

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_240	Modern Service	Modern Service	Modern	N/A	N/A	The line of a Modern service trench is visible on aerial imagery sources, the service trench extends beyond the study area for this project and so is only partially mapped.	TA 110 563	22
APS_241	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1461211	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 111 563	22
APS_242	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1461209	An area of north – south aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 116 563	23
APS_243	Field Boundary	Boundary	Post Medieval	N/A	N/A	An 'L' shaped former field boundary is visible as a cropmark on aerial imagery sources.	TA 124 563	23
APS_244	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary is visible as a cropmark on aerial imagery sources.	TA 129 564	24
APS_245	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary is visible as a cropmark on aerial imagery sources.	TA 110 564	22
APS_246	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary is visible as a cropmark on aerial imagery sources.	TA 123 564	23
APS_247	Square Enclosure	Enclosure	Prehistoric	MHU22121	1460721	An Iron Age - Roman square ditched enclosure is visible as a cropmark on aerial imagery sources. This feature has previously been identified by the HHER and the NMP.	TA 108 564	22
APS_248	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1461211	An area of northwest – southeast and southwest – northeast aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 114 565	23

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_249	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1461211	An area of Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 113 565	23
APS_250	Bank	Bank	Unknown	N/A	N/A	A curvilinear bank which is visible as an earthwork on aerial imagery sources.	TA 120 565	23
APS_251	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1461211	An area of southwest – northeast aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 112 566	22 & 23
APS_252	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1461211	An area of southwest – northeast aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 114 566	23
APS_253	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1461211	An area of southwest – northeast aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 116 567	23
APS_254	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1461211	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 119 567	23
APS_255	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	1461211	An area of east - west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 115 568	23
APS_256	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary is visible as a cropmark on aerial imagery sources.	TA 124 568	23
APS_257	Bank	Bank	Unknown	N/A	N/A	A linear bank which is visible as an earthwork on aerial imagery sources.	TA 129 569	24

# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_258	Bank	Bank	Unknown	N/A	N/A	A linear bank which is visible as an earthwork on aerial imagery sources.	TA 131 570	24
APS_259	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of east - west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data. This feature was also recorded by the NMP.	TA 141 578	25
APS_260	Military Airfield	Airfield	World War I / World War II	MHU11147	1401983	The site of a Military Airfield (Lissett Airfield) which was first used during WWI and WWII, the airfield is still partially in use and some areas have been repurposed for wind turbines.	TA 132 579	24 & 25
APS_261	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of east - west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data.	TA 142 579	25
APS_262	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of east - west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data.	TA 142 580	25
APS_263	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of east - west aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data.	TA 141 584	25
APS_264	Ridge and Furrow	Cultivation Marks	Medieval / Post Medieval	N/A	N/A	An area of northwest – southeast aligned Medieval / Post Medieval ridge and furrow which is visible as cropmarks on aerial photographs and EA Lidar data.	TA 139 584	25
APS_265	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary, now removed, is visible on aerial imagery sources.	TA 146 586	25
APS_266	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary, now removed, is visible on aerial imagery sources.	TA 138 586	25

Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_267	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary, now removed, is visible on aerial imagery sources.	TA 147 587	26
APS_268	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary, now removed, is visible on aerial imagery sources.	TA 145 589	26
APS_269	Ditch	Ditch	Unknown	N/A	N/A	A curvilinear ditch is visible as a cropmark on aerial imagery sources of unknown date and function.	TA 147 591	26
APS_270	Ditch	Ditch	Unknown	N/A	N/A	A linear ditched feature is visible as an earthwork on visualised EA Lidar data.	TA 155 598	26
APS_271	Ditch	Ditch	Unknown	N/A	N/A	A series of linear ditches which is visible as cropmarks on aerial imagery sources. The ditches appear to form what could be the remnants of an early field system.	TA 153 601	27
APS_272	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary, now removed, is visible on aerial imagery sources.	TA 160 605	27
APS_273	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary, now removed, is visible on aerial imagery sources.	TA 167 606	29
APS_274	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary, now removed, is visible on aerial imagery sources.	TA 156 606	27
APS_275	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary, now removed, is visible on aerial imagery sources.	TA 162 606	27
APS_276	Ditch	Ditch	Unknown	N/A	N/A	A linear ditched feature is visible as a cropmark on aerial imagery sources.	TA 157 608	27
APS_277	Ditch	Ditch	Unknown	N/A	N/A	Two pits and a small fragment of curvilinear ditch are visible as cropmarks on aerial imagery sources.	TA 157 609	27
APS_278	Field System	Field System	Unknown	MHU326 MHU21086	1446484	A field system is visible as cropmarks on aerial imagery sources, the site may relate to the multi period occupation site recorded by the HHER MHU326 and MHU21086 and has also been previously identified by the NMP.	TA 167 609	28 & 29



# Hornsea 4



Interim APS Site Number	Asset Type	Broad Type	Period	Monument Unique ID (HHER)	NMP Unique ID	Comment	NGR	Map Book Number
APS_279	Field Boundary	Boundary	Post Medieval	N/A	N/A	A former field boundary, now removed, is visible on aerial imagery sources.	TA 167 610	28 & 29
APS_280	Enclosure	Enclosure	Prehistoric	MHU21078	1446482 1446399	The HHER records Iron Age to Roman enclosures at Watermill Grounds which are visible as cropmarks on aerial imagery sources. This site has also been previously recorded by the NMP.	TA 167 612	28 & 29
APS_281	Anti Glider Ditch	Anti Aircraft Defence Site	World War II	MHU21077	1446311	This area is covered with anti-glider ditches and defensive features which date to WWI and WWII. These are visible as extant features in the 1940s and is partially visible in later aerial imagery sources as cropmarks and has been identified by the HHER and the NMP.	TA 167 612	28 & 29
APS_282	Ditch	Ditch	Unknown	MHU21070	1446481	A complex site made up of ditches and pits, the majority of which are visible as cropmark features. A few of the ditches are visible as residual earthworks. This site has previously been recorded by the HHER and the NMP.	TA 161 613	28 & 29
APS_283	Cropmark Site	Cropmark	Prehistoric	MHU331 MHU327	1446477	A complex cropmark site which is formed of linear and curvilinear ditches, former field boundaries and pits all of which are visible as cropmarks on aerial imagery sources. This site has been previously recorded by the HHER and the NMP.	TA 164 617	28

## 5 Discussion

### 5.1 Summary

5.1.1.1 This aerial imagery and Lidar assessment has successfully identified 283 archaeological sites, some of which have been previously identified by the HHER and the NMP. In many instances this assessment has successfully augmented the information and mapping available for many of the existing sites and has identified a significant number of new sites.

5.1.1.2 This discussion section will highlight the key findings from this assessment according to time period. Sites that are not securely dated are discussed at the end of this section in a general 'undated' section.

### 5.2 Prehistoric

5.2.1.1 The Prehistoric period is well represented in the features identified through this aerial photograph and Lidar assessment.

5.2.1.2 Two palaeochannels have been identified at APS sites 67 and 197. These are marked as extent area only and likely extend further than they are visible as cropmarks. These are natural features but carry potential for preservation of archaeological deposits.

5.2.1.3 The site of a possible Iron Age Square Barrow has been identified at APS\_134. The barrow has previously been recorded by the HHER under monument ID MHU19425.

5.2.1.4 A ring ditch and associated ditched features are visible as cropmarks at APS\_209. The features date to the Iron Age and have previously been recorded by the HHER (MHU8161) and the NMP (1550338).

5.2.1.5 A linear ditch is visible as an earthwork at APS\_122, the site is most clearly visible as on visualised EA Lidar data and likely relates to the enclosure at APS\_123.

5.2.1.6 There are four examples of Iron Age / Roman enclosures at APS sites 85, 89, 123 and 174 all of which had been previously identified by the HHER and the NMP. In all cases this assessment has augmented the currently available mapping and has also added a robust list of sources for each site.

5.2.1.7 A group of linear and curvilinear ditched features are visible as cropmarks alongside some pits. This site was previously identified by the NMP and may relate to a trackway at APS\_112.

5.2.1.8 APS\_280 is the site of Iron Age – Roman enclosures which have been identified by the HHER (MHU21078). The NMP has also partially identified these features.

5.2.1.9 APS\_283 is a complex cropmark site which is formed of linear and curvilinear ditches and pits. The site is overlain with later field boundaries which have since been removed. The

HHER has recorded this site under monument ID's MHU331 and MHU327 and the NMP has also partially mapped this area.

5.2.1.10 APS\_247 is the site of a prehistoric square enclosure which is visible as ditches. The enclosure is visible as a cropmark and has previously been recorded by the HHER (MHU22121) and the NMP.

5.2.1.11 The site of a Prehistoric field system has been identified at APS\_17. The features are visible as a mixture of cropmarks and residual earthworks. The HHER has previously identified this site (MHU6599) as has the NMP.

### **5.3 Roman**

5.3.1.1 This assessment has not identified any sites that specifically date to the Roman period. The sites that are considered Iron Age – Roman have been discussed in the Prehistoric section.

### **5.4 Medieval**

5.4.1.1 APS\_098 is the site of a Deserted Medieval Village which has been recorded by the HHER as MHU3350 and by the NMP. The village is known as Raventhorpe Medieval Village and is visible as earthwork remains. The site comprises banks, ditches and house platforms.

5.4.1.2 This assessment has identified 110 fields of ridge and furrow which date to the medieval and post-medieval periods. These fields cover the entire range of preservation from ploughed out micro-topographic remains to extant earthworks. The majority of these features are visible as residual earthworks and cropmarks. Ridge and furrow is an important aspect of medieval and post-medieval agriculture which is indicative of a relict medieval landscape. The presence of ridge and furrow would usually preclude contemporary settlement within the same fields.

### **5.5 Post-medieval**

5.5.1.1 This assessment has identified 72 post-medieval field boundaries which are no longer extant. These boundaries have been seen as structures in the form of fences or extant features in early aerial photographs and then observed as no longer present in later sorties. These former boundaries are visible as earthworks and cropmarks and are useful when identifying former land arrangement and use.

### **5.6 World War I and World War II**

5.6.1.1 There are three sites that have been identified by this assessment of aerial imagery and Lidar data that date to World War I and World War II.

5.6.1.2 APS\_20 is a former defensive site which dates to WWII. The site is formed of a mixture of banks and ditches which were extant earthworks in 1945 and then as cropmarks in 2016.

5.6.1.3 APS\_260 is the site of Lissett Airfield which was used as a military airfield and has since been partially repurposed for wind turbines. The HHER recorded the airfield under monument ID MHU11147 and it was partially mapped by the NMP.

5.6.1.4 APS\_281 is an area of anti-glider ditches and defensive features which are visible as extant features in the 1940s and are partially visible in later imagery as cropmark remains. This site has been recorded by the HHER (MHU331 & MHU327) and by the NMP.

## 5.7 Modern

5.7.1.1 The line of five modern services have been identified as part of this assessment. The full extent of these are likely to extend beyond the study area.

## 5.8 Unknown

5.8.1.1 There are 76 sites that have been identified through this aerial imagery and Lidar assessment where the exact date of the site is unknown.

5.8.1.2 Twelve banks of unknown date have been identified as part of this study. The banks vary in form and have mostly been identified using visualised EA Lidar data.

5.8.1.3 Thirty-eight ditches of unknown date and function have been identified as part of this assessment. The ditches are visible as a range of cropmarks and earthworks.

5.8.1.4 There are nine enclosures of uncertain date within this assessment. The enclosures are usually only partially visible and are generally formed of ditches. The enclosures are a range of shapes although most are rectilinear in form. The enclosures likely date to the prehistoric period however it is not possible to accurately date features based upon aerial imagery and Lidar sources alone.

5.8.1.5 The site of a field system is recorded at APS\_278. The site is visible as cropmarks and is formed of a series of ditched features. The site may relate to a multi period occupation site that has been recorded by the HHER MHU326 and MHU21086. This site has also been partially mapped by the NMP.

5.8.1.6 A hollow (APS\_062) and a mound (APS\_145) are visible as residual earthworks on visualised EA Lidar data, without further contextual information it has not been possible to accurately date these features.

5.8.1.7 There are five pits across the study area that have been identified through this aerial imagery and Lidar assessment. These pits may be geological in origin.

5.8.1.8 Three ring ditch sites have been identified through this study; these are visible as cropmarks. The ring ditches likely date to the prehistoric periods.

- 5.8.1.9 The site of a square enclosure is shown at APS\_010. The enclosure was identified by the HHER as a series of fragmented ditches (MHU6600) and has been partially mapped by the NMP.
- 5.8.1.10 Five Trackways have been identified through the course of this assessment which are not securely dated although they could relate to the prehistoric, medieval or post-medieval periods.

## 6 Conclusion

- 6.1.1.1 Aerial photographs, Lidar and multi-spectral survey data gathered between the 1940s and the present time show a contiguous landscape of buried eroded cropmark features and earthworks across the study area.
- 6.1.1.2 Features dating to the prehistoric, medieval, post-medieval, modern and WWI/WWII periods have been identified and mapped. Some of these features have been previously identified by the HHER and the NMP, however in most cases this assessment has augmented and improved upon these data.
- 6.1.1.3 It is highly likely that the below-ground archaeological deposits which cause the marks in crops will be more extensive, both horizontally and vertically, than shown via the remote sensing data. Absence of cropmark evidence, due to the multiple limitations detailed above, does not necessarily indicate an absence of archaeological deposits in apparently blank areas.
- 6.1.1.4 The separation of dating into specific periods of prehistory and history can only be confirmed by ground-based or documentary analyses, but some dating evidence for sites within the study area has been proposed by the HHER and the NMP. From a remote sensing viewpoint, this landscape may be analysed in a 'living' manner as one which developed over time and is likely to contain many multi-period elements. These will be more deeply stratified and extensive below the ground than is apparent in the results of the survey. The remains visible as cropmarks are all likely to have been impacted by agricultural practices, to some degree, with little or no micro-topographic features visible on the ground. Overall this assessment has identified a range of features and has highlighted the potential for heritage assets within the study area and its immediate environs.

## 7 Further Work

- 7.1.1.1 This interim report presents the interim findings from the stage one data collection phase of this assessment of aerial imagery and Lidar data. In some areas stage two detailed mapping has commenced and these interim results are also presented here. In the next stages of this assessment, for the completion of the aerial photographic and Lidar assessment, the stage two mapping will be completed and both stage one and stage two will be rigorously tested and examined for accuracy. It is expected that during the later stages of this assessment some sites will be edited, the boundaries of features will change, and it may be necessary to combine or split sites as our interpretation develops.

## 8 References

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## Appendix A Historic England Coversearch

All aerial photographs held at Historic England Archive, enquiry reference 118679, 118680, 118681, 118682 that were studied as part of this assessment can be seen in the tables below.

### Verticals

Sortie Number	Library Number	Frame Number	Held	Centre Point	Date
RAF/3G/TUD/UK/1	140	5002	P	TA 008 395	14 DEC 1945
RAF/3G/TUD/UK/1	140	5003	P	TA 007 392	14 DEC 1945
RAF/3G/TUD/UK/1	140	5004	P	TA 007 388	14 DEC 1945
RAF/3G/TUD/UK/1	140	5005	P	TA 007 384	14 DEC 1945
RAF/3G/TUD/UK/1	140	5006	P	TA 007 380	14 DEC 1945
RAF/3G/TUD/UK/1	140	5007	P	TA 007 376	14 DEC 1945
RAF/3G/TUD/UK/1	140	5008	P	TA 007 373	14 DEC 1945
RAF/3G/TUD/UK/1	140	5009	P	TA 006 369	14 DEC 1945
RAF/3G/TUD/UK/1	140	5010	P	TA 006 365	14 DEC 1945
RAF/3G/TUD/UK/1	140	5011	P	TA 006 361	14 DEC 1945
RAF/3G/TUD/UK/1	140	5060	P	TA 015 371	14 DEC 1945
RAF/3G/TUD/UK/1	140	5061	P	TA 015 367	14 DEC 1945
RAF/3G/TUD/UK/1	140	5062	P	TA 016 363	14 DEC 1945
RAF/3G/TUD/UK/1	140	5063	P	TA 016 360	14 DEC 1945
RAF/3G/TUD/UK/1	140	5064	P	TA 016 356	14 DEC 1945
RAF/3G/TUD/UK/1	140	5014	P	TA 021 355	14 DEC 1945
RAF/3G/TUD/UK/1	140	5015	P	TA 021 351	14 DEC 1945
RAF/3G/TUD/UK/1	140	5016	P	TA 022 348	14 DEC 1945
RAF/3G/TUD/UK/1	140	5018	P	TA 033 348	14 DEC 1945
RAF/3G/TUD/UK/1	140	5074	P	TA 040 350	14 DEC 1945
RAF/3G/TUD/UK/1	140	5075	P	TA 040 346	14 DEC 1945
RAF/3G/TUD/UK/217	384	5256	P	TA 038 345	23 MAY 1946
RAF/3G/TUD/UK/87	407	5144	P	TA 012 353	27 MAR 1946
RAF/3G/TUD/UK/87	407	5145	P	TA 012 357	27 MAR 1946
RAF/3G/TUD/UK/87	407	5146	P	TA 012 360	27 MAR 1946
RAF/3G/TUD/UK/87	407	5147	P	TA 011 364	27 MAR 1946
RAF/3G/TUD/UK/87	407	5148	P	TA 010 367	27 MAR 1946
RAF/3G/TUD/UK/87	407	5149	P	TA 009 371	27 MAR 1946
RAF/3G/TUD/UK/87	407	5150	P	TA 008 375	27 MAR 1946
RAF/106G/UK/1666	428	4056	P	TA 033 342	23 JUL 1946
RAF/106G/UK/1666	428	4057	P	TA 028 342	23 JUL 1946
RAF/106G/UK/1666	428	4058	P	TA 023 342	23 JUL 1946
RAF/106G/UK/1666	428	4115	P	TA 035 356	23 JUL 1946
RAF/106G/UK/1666	428	4116	P	TA 030 356	23 JUL 1946
RAF/106G/UK/1666	428	4117	P	TA 025 356	23 JUL 1946
RAF/106G/UK/1666	428	4118	P	TA 020 357	23 JUL 1946
RAF/CPE/UK/1748	467	2177	P	TA 016 371	21 SEP 1946
RAF/CPE/UK/1748	467	2178	P	TA 009 371	21 SEP 1946

Sortie Number	Library Number	Frame Number	Held	Centre Point	Date
RAF/CPE/UK/1748	467	3187	P	TA 032 347	21 SEP 1946
RAF/CPE/UK/1748	467	3188	P	TA 026 347	21 SEP 1946
RAF/CPE/UK/1748	467	3189	P	TA 020 347	21 SEP 1946
RAF/CPE/UK/1748	467	5188	P	TA 006 390	21 SEP 1946
RAF/CPE/UK/1748	467	5189	P	TA 000 390	21 SEP 1946
RAF/CPE/UK/1834	510	3054	P	TA 009 379	13 NOV 1946
RAF/CPE/UK/1834	510	3055	P	TA 005 379	13 NOV 1946
RAF/CPE/UK/1834	510	4053	P	TA 008 394	13 NOV 1946
RAF/CPE/UK/1834	510	4054	P	TA 003 394	13 NOV 1946
RAF/541/189	946	4065	P	TA 014 350	26 OCT 1948
RAF/541/189	946	4136	P	TA 032 344	26 OCT 1948
RAF/541/189	946	4137	P	TA 024 344	26 OCT 1948
RAF/541/184	950	3093	P	TA 012 375	19 OCT 1948
RAF/541/184	950	3094	P	TA 004 374	19 OCT 1948
RAF/541/184	950	3134	P	TA 013 366	19 OCT 1948
RAF/541/184	950	4093	P	TA 010 395	19 OCT 1948
RAF/541/184	950	4094	P	TA 002 395	19 OCT 1948
RAF/541/184	950	4203	P	TA 035 356	19 OCT 1948
RAF/541/184	950	4204	P	TA 025 356	19 OCT 1948
RAF/541/184	950	4205	P	TA 015 356	19 OCT 1948
RAF/540/613	1216	3114	P	TA 005 389	09 OCT 1951
RAF/540/613	1216	3115	P	TA 007 390	09 OCT 1951
RAF/540/613	1216	4114	P	TA 008 380	09 OCT 1951
RAF/540/613	1216	4115	P	TA 010 381	09 OCT 1951
RAF/540/572	1221	3010	P	TA 022 365	30 JUL 1951
RAF/540/572	1221	4013	P	TA 002 391	30 JUL 1951
RAF/58/893	1282	5140	P	TA 005 365	10 JUN 1952
RAF/58/893	1282	5141	P	TA 005 369	10 JUN 1952
RAF/58/893	1282	5142	P	TA 005 373	10 JUN 1952
RAF/58/893	1282	5143	P	TA 004 377	10 JUN 1952
RAF/58/893	1282	5144	P	TA 004 381	10 JUN 1952
RAF/58/893	1282	5145	P	TA 004 385	10 JUN 1952
RAF/58/893	1282	5146	P	TA 004 388	10 JUN 1952
RAF/58/893	1282	5203	P	TA 024 346	10 JUN 1952
RAF/58/893	1282	5204	P	TA 023 350	10 JUN 1952
RAF/58/893	1282	5205	P	TA 023 354	10 JUN 1952
RAF/58/893	1282	5270	P	TA 031 345	10 JUN 1952
RAF/58/899	1287	5311	P	TA 033 347	19 JUN 1952
RAF/58/899	1287	5355	P	TA 042 348	19 JUN 1952
RAF/540/812	1306	5019	P	TA 004 381	16 JUL 1952
RAF/540/812	1306	5020	P	TA 006 378	16 JUL 1952
RAF/540/812	1306	5021	P	TA 007 374	16 JUL 1952



Sortie Number	Library Number	Frame Number	Held	Centre Point	Date
RAF/540/812	1306	5022	P	TA 007 370	16 JUL 1952
RAF/540/812	1306	5023	P	TA 007 367	16 JUL 1952
RAF/540/812	1306	5024	P	TA 008 362	16 JUL 1952
RAF/540/812	1306	5025	P	TA 009 358	16 JUL 1952
RAF/540/812	1306	5026	P	TA 011 354	16 JUL 1952
RAF/540/812	1306	5027	P	TA 012 350	16 JUL 1952
RAF/540/812	1306	5105	P	TA 034 345	16 JUL 1952
RAF/540/812	1306	5106	P	TA 034 349	16 JUL 1952
RAF/82/1376	1730	127	P	TA 014 365	27 MAR 1956
RAF/82/1376	1730	128	P	TA 021 364	27 MAR 1956
RAF/82/1376	1730	128	P	TA 020 345	27 MAR 1956
RAF/82/1376	1730	129	P	TA 027 345	27 MAR 1956
RAF/82/1376	1730	130	P	TA 034 345	27 MAR 1956
RAF/58/2062	1757	119	P	TA 033 353	22 NOV 1956
RAF/58/2062	1757	120	P	TA 026 352	22 NOV 1956
RAF/58/2062	1757	121	P	TA 020 351	22 NOV 1956
RAF/58/2162	1772	34	P	TA 029 340	07 MAY 1957
RAF/58/2162	1772	35	P	TA 036 341	07 MAY 1957
RAF/58/2162	1772	85	P	TA 037 355	07 MAY 1957
RAF/58/2162	1772	86	P	TA 031 356	07 MAY 1957
RAF/58/2162	1772	87	P	TA 025 356	07 MAY 1957
RAF/58/2162	1772	88	P	TA 019 356	07 MAY 1957
RAF/58/2162	1772	89	P	TA 013 357	07 MAY 1957
RAF/58/2162	1772	89	P	TA 015 375	07 MAY 1957
RAF/58/2162	1772	90	P	TA 009 375	07 MAY 1957
RAF/543/2331	2158	114	N	TA 016 343	25 JUL 1963
RAF/543/2331	2158	115	N	TA 010 350	25 JUL 1963
RAF/106G/UK/723	3530	3147	P	SE 993 394	26 AUG 1945
RAF/106G/UK/723	3530	4146	P	TA 019 381	26 AUG 1945
RAF/106G/LA/253	3751	1108	P	TA 002 389	28 APR 1945
RAF/106G/LA/253	3751	1109	P	TA 006 387	28 APR 1945
RAF/106G/LA/253	3751	1110	P	TA 011 385	28 APR 1945
RAF/106G/LA/253	3751	1227	P	TA 006 371	28 APR 1945
RAF/106G/LA/253	3751	1228	P	TA 010 368	28 APR 1945
RAF/106G/LA/253	3751	1229	P	TA 014 365	28 APR 1945
RAF/106G/LA/253	3751	1230	P	TA 018 361	28 APR 1945
RAF/106G/LA/253	3751	1231	P	TA 023 358	28 APR 1945
RAF/106G/LA/253	3751	1232	P	TA 027 355	28 APR 1945
RAF/106G/LA/253	3751	2122	P	TA 013 372	28 APR 1945
RAF/106G/LA/253	3751	2123	P	TA 010 374	28 APR 1945
RAF/106G/LA/253	3751	2124	P	TA 006 376	28 APR 1945
RAF/106G/LA/253	3751	2229	P	TA 010 356	28 APR 1945

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RAF/106G/LA/253	3751	2230	P	TA 014 352	28 APR 1945
RAF/106G/LA/253	3751	2231	P	TA 018 349	28 APR 1945
RAF/106G/LA/253	3751	2232	P	TA 023 345	28 APR 1945
RAF/106G/LA/215	3784	4132	P	TA 007 395	13 APR 1945
RAF/106G/LA/215	3784	4133	P	TA 013 390	13 APR 1945
RAF/82/1422	5021	92	P	TA 035 345	23 MAY 1956
RAF/82/1422	5021	93	P	TA 028 346	23 MAY 1956
RAF/82/1422	5021	94	P	TA 021 346	23 MAY 1956
RAF/82/1422	5021	95	P	TA 017 368	23 MAY 1956
RAF/82/1422	5021	96	P	TA 010 368	23 MAY 1956
MAL/75066	7257	34	P	TA 008 390	08 DEC 1975
MAL/75066	7257	41	P	TA 003 372	08 DEC 1975
MAL/75066	7257	61	P	TA 013 357	08 DEC 1975
MAL/75066	7257	62	P	TA 022 357	08 DEC 1975
MAL/75066	7257	63	P	TA 031 358	08 DEC 1975
MAL/75066	7257	107	P	TA 033 342	08 DEC 1975
OS/71137	10164	2	P	TA 001 398	02 MAY 1971
OS/70239	10559	160	P	TA 004 403	18 JUN 1970
OS/66124	11516	101	P	TA 008 351	01 JUN 1966
OS/68116	11520	748	P	TA 002 399	14 MAY 1968
OS/68227	11524	115	P	TA 005 387	14 JUN 1968
OS/68227	11524	195	P	TA 009 375	14 JUN 1968
OS/68227	11524	196	P	TA 005 363	14 JUN 1968
OS/80118	12453	4	P	TA 008 378	JUL 1980
OS/80118	12453	5	P	TA 014 374	JUL 1980
OS/80118	12453	18	P	TA 029 355	JUL 1980
OS/80118	12453	19	P	TA 025 361	JUL 1980
OS/80118	12453	20	P	TA 022 367	JUL 1980
OS/80118	12453	21	P	TA 018 373	JUL 1980
OS/80118	12453	22	P	TA 014 379	JUL 1980
OS/80118	12453	23	P	TA 011 384	JUL 1980
OS/80118	12453	24	P	TA 007 389	JUL 1980
OS/80118	12453	25	P	TA 004 394	JUL 1980
OS/82037	12927	32	P	TA 001 396	18 APR 1982
OS/82037	12927	33	P	TA 007 395	18 APR 1982
OS/82037	12927	59	P	TA 008 389	18 APR 1982
OS/82037	12927	60	P	TA 003 388	18 APR 1982
OS/82037	12927	61	P	TA 007 379	18 APR 1982
OS/82037	12927	62	P	TA 011 379	18 APR 1982
OS/82037	12927	85	P	TA 011 372	18 APR 1982
OS/82037	12927	86	P	TA 007 372	18 APR 1982
OS/87139	13162	8	P	TA 029 342	09 SEP 1987

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OS/87139	13162	9	P	TA 035 343	09 SEP 1987
OS/88264	13360	138	P	TA 036 356	18 SEP 1988
OS/88264	13360	139	P	TA 030 356	18 SEP 1988
OS/88264	13360	140	P	TA 023 356	18 SEP 1988
OS/88264	13360	141	P	TA 016 355	18 SEP 1988
OS/88264	13360	155	P	TA 028 342	18 SEP 1988
OS/88264	13360	156	P	TA 034 342	18 SEP 1988
OS/88264	13360	190	P	TA 009 380	18 SEP 1988
OS/88264	13360	191	P	TA 003 380	18 SEP 1988
OS/88264	13360	199	P	TA 004 369	18 SEP 1988
OS/88264	13360	200	P	TA 011 370	18 SEP 1988
OS/88265	13361	4	P	TA 002 394	18 SEP 1988
OS/89404	13611	115	P	TA 020 369	05 SEP 1989
OS/89404	13611	116	P	TA 020 360	05 SEP 1989
OS/89404	13611	117	P	TA 020 351	05 SEP 1989
OS/92329	14121	146	P	TA 008 392	26 MAY 1992
OS/92329	14121	147	P	TA 008 387	26 MAY 1992
OS/95723	14996	32	P	SE 999 394	17 AUG 1995
OS/95723	14996	33	P	TA 000 381	17 AUG 1995
OS/96005	15012	6	P	TA 004 395	07 MAR 1996
OS/96005	15012	84	P	TA 009 384	07 MAR 1996
OS/96005	15012	85	P	TA 004 384	07 MAR 1996
OS/96005	15012	88	P	TA 004 375	07 MAR 1996
OS/96005	15012	89	P	TA 009 375	07 MAR 1996
OS/96005	15012	165	P	TA 014 365	07 MAR 1996
OS/96005	15012	166	P	TA 009 365	07 MAR 1996
OS/96005	15012	172	P	TA 014 355	07 MAR 1996
OS/96005	15012	173	P	TA 019 355	07 MAR 1996
OS/96005	15012	174	P	TA 024 355	07 MAR 1996
OS/96005	15012	175	P	TA 030 354	07 MAR 1996
OS/96005	15012	176	P	TA 035 354	07 MAR 1996
OS/96005	15012	244	P	TA 034 345	07 MAR 1996
OS/96005	15012	245	P	TA 029 345	07 MAR 1996
OS/96005	15012	246	P	TA 024 345	07 MAR 1996
OS/00916B	15723	202	P	TA 002 369	15 MAR 2000
OS/00916B	15723	263	P	TA 002 382	15 MAR 2000
OS/00916B	15723	264	P	TA 002 394	15 MAR 2000
OS/02224	23901	5	N	TA 003 398	01 OCT 2002
OS/02224	23901	38	N	TA 003 386	01 OCT 2002
OS/02224	23901	44	N	TA 010 374	01 OCT 2002
OS/02224	23901	74	N	TA 017 362	01 OCT 2002
OS/02224	23901	75	N	TA 010 362	01 OCT 2002

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OS/02225	23902	10	N	TA 017 350	01 OCT 2002
OS/02225	23902	11	N	TA 024 350	01 OCT 2002
OS/02225	23902	12	N	TA 031 350	01 OCT 2002
OS/02225	23902	13	N	TA 038 350	01 OCT 2002
OS/02659	23995	68	N	SE 998 396	01 OCT 2002
OS/02659	23995	69	N	SE 998 389	01 OCT 2002
OS/04049	24404	41	N	TA 003 400	24 MAY 2004
OS/09052	24860	33	N	TA 033 349	02 JUL 2009
OS/09052	24860	34	N	TA 024 349	02 JUL 2009
OS/09052	24860	35	N	TA 015 349	02 JUL 2009
OS/09052	24860	62	N	TA 015 366	02 JUL 2009
OS/09053	24861	12	N	TA 006 383	02 JUL 2009
OS/09053	24861	37	N	TA 006 400	02 JUL 2009
ADA/157(Y)	26238	199	N	TA 007 385	06 AUG 1983
ADA/157(Y)	26238	200	N	TA 009 383	06 AUG 1983
ADA/157(Y)	26238	201	N	TA 011 381	06 AUG 1983
RAF/CPE/UK/1748	467	4195	P	TA 008 408	21 SEP 1946
RAF/CPE/UK/1748	467	4196	P	TA 002 408	21 SEP 1946
RAF/CPE/UK/1748	467	6187	P	TA 005 431	21 SEP 1946
RAF/CPE/UK/1748	467	6188	P	SE 999 431	21 SEP 1946
RAF/CPE/UK/1834	510	3101	P	TA 001 440	13 NOV 1946
RAF/CPE/UK/1834	510	3102	P	TA 007 441	13 NOV 1946
RAF/CPE/UK/1834	510	3178	P	TA 016 457	13 NOV 1946
RAF/CPE/UK/1834	510	3179	P	TA 011 456	13 NOV 1946
RAF/CPE/UK/1834	510	3180	P	TA 007 455	13 NOV 1946
RAF/CPE/UK/1834	510	4054	P	TA 003 394	13 NOV 1946
RAF/CPE/UK/1834	510	4055	P	SE 999 394	13 NOV 1946
RAF/CPE/UK/1879	519	1358	P	TA 007 450	06 DEC 1946
RAF/CPE/UK/1879	519	1359	P	TA 002 450	06 DEC 1946
RAF/CPE/UK/1879	519	2264	P	TA 000 428	06 DEC 1946
RAF/CPE/UK/1879	519	2265	P	TA 005 427	06 DEC 1946
RAF/CPE/UK/1879	519	2352	P	TA 051 491	06 DEC 1946
RAF/CPE/UK/1879	519	2353	P	TA 046 490	06 DEC 1946
RAF/CPE/UK/1879	519	2354	P	TA 042 489	06 DEC 1946
RAF/CPE/UK/1879	519	3264	P	SE 999 445	06 DEC 1946
RAF/CPE/UK/1879	519	3265	P	TA 004 444	06 DEC 1946
RAF/CPE/UK/1879	519	3354	P	TA 034 472	06 DEC 1946
RAF/CPE/UK/1879	519	3355	P	TA 030 472	06 DEC 1946
RAF/CPE/UK/1879	519	3356	P	TA 025 471	06 DEC 1946
RAF/CPE/UK/1879	519	3357	P	TA 021 471	06 DEC 1946
RAF/CPE/UK/1879	519	3358	P	TA 016 471	06 DEC 1946
RAF/CPE/UK/1879	519	3359	P	TA 012 471	06 DEC 1946

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RAF/CPE/UK/1879	519	4264	P	SE 999 407	06 DEC 1946
RAF/CPE/UK/1879	519	4265	P	TA 004 406	06 DEC 1946
RAF/CPE/UK/2396	750	3073	N	TA 005 413	17 NOV 1947
RAF/CPE/UK/2396	750	3074	N	SE 999 413	17 NOV 1947
RAF/CPE/UK/2396	750	4073	N	TA 007 431	17 NOV 1947
RAF/CPE/UK/2396	750	4074	N	TA 002 430	17 NOV 1947
RAF/541/189	946	3333	P	TA 039 492	26 OCT 1948
RAF/541/184	950	3006	P	TA 011 423	19 OCT 1948
RAF/541/184	950	3007	P	TA 003 423	19 OCT 1948
RAF/541/184	950	3046	P	TA 012 405	19 OCT 1948
RAF/541/184	950	3047	P	TA 005 403	19 OCT 1948
RAF/541/184	950	4006	P	TA 009 444	19 OCT 1948
RAF/541/184	950	4007	P	TA 002 443	19 OCT 1948
RAF/540/613	1216	3109	P	TA 007 401	09 OCT 1951
RAF/540/613	1216	4107	P	TA 007 412	09 OCT 1951
RAF/540/613	1216	4108	P	TA 005 411	09 OCT 1951
RAF/540/613	1216	4109	P	TA 003 410	09 OCT 1951
RAF/540/572	1221	3013	P	TA 000 410	30 JUL 1951
RAF/540/572	1221	3014	P	TA 008 412	30 JUL 1951
RAF/58/5554	2230	120	P	TA 051 500	20 NOV 1962
RAF/58/5554	2230	121	P	TA 043 503	20 NOV 1962
RAF/58/5554	2230	157	P	TA 044 487	20 NOV 1962
RAF/58/5554	2230	158	P	TA 036 491	20 NOV 1962
RAF/58/5554	2230	190	P	TA 028 473	20 NOV 1962
RAF/58/5554	2230	191	P	TA 020 477	20 NOV 1962
RAF/RRF/1074	2641	19	P	TA 030 472	25 NOV 1957
RAF/RRF/1074	2641	20	P	TA 029 477	25 NOV 1957
RAF/RRF/1074	2641	21	P	TA 044 488	25 NOV 1957
RAF/RRF/1074	2641	22	P	TA 042 493	25 NOV 1957
RAF/106G/UK/723	3530	3149	P	SE 996 409	26 AUG 1945
RAF/106G/UK/723	3530	3150	P	SE 997 416	26 AUG 1945
RAF/106G/UK/723	3530	3151	P	SE 999 424	26 AUG 1945
RAF/106G/UK/723	3530	3152	P	TA 000 431	26 AUG 1945
RAF/106G/UK/723	3530	3153	P	TA 002 439	26 AUG 1945
RAF/106G/UK/723	3530	3154	P	TA 003 446	26 AUG 1945
RAF/106G/UK/723	3530	3155	P	TA 004 454	26 AUG 1945
RAF/106G/UK/723	3530	3162	P	TA 048 478	26 AUG 1945
RAF/106G/UK/723	3530	4158	P	TA 035 477	26 AUG 1945
RAF/106G/UK/723	3530	4159	P	TA 036 485	26 AUG 1945
RAF/106G/UK/723	3530	4160	P	TA 037 494	26 AUG 1945
RAF/106G/UK/723	3530	4162	P	TA 019 476	26 AUG 1945
RAF/106G/UK/723	3530	4163	P	TA 020 470	26 AUG 1945

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RAF/106G/LA/215	3784	3128	P	SE 998 415	13 APR 1945
RAF/106G/LA/215	3784	3129	P	TA 003 411	13 APR 1945
RAF/106G/LA/215	3784	4024	P	TA 005 437	13 APR 1945
RAF/106G/LA/215	3784	4025	P	TA 000 441	13 APR 1945
RAF/106G/LA/212	3790	3099	P	TA 001 454	13 APR 1945
RAF/106G/LA/212	3790	3100	P	TA 008 449	13 APR 1945
RAF/106G/LA/212	3790	4101	P	TA 001 429	13 APR 1945
RAF/106G/LA/212	3790	4102	P	TA 008 424	13 APR 1945
MAL/68042	5120	1	P	TA 008 419	13 JUN 1968
MAL/68042	5120	2	P	TA 015 414	13 JUN 1968
MAL/75066	7257	10	P	SE 993 406	08 DEC 1975
MAL/75066	7257	11	P	TA 001 405	08 DEC 1975
MAL/75066	7257	12	P	TA 010 405	08 DEC 1975
OS/74084	9844	90	P	TA 046 501	26 MAY 1974
OS/74084	9844	91	P	TA 053 502	26 MAY 1974
OS/71137	10164	2	P	TA 001 398	02 MAY 1971
OS/71137	10164	66	P	TA 002 410	02 MAY 1971
OS/71137	10164	67	P	TA 009 410	02 MAY 1971
OS/71137	10164	129	P	TA 002 433	02 MAY 1971
OS/71137	10164	130	P	TA 008 434	02 MAY 1971
OS/71137	10164	131	P	TA 007 445	02 MAY 1971
OS/71137	10164	132	P	TA 000 444	02 MAY 1971
OS/71137	10164	193	P	TA 004 455	02 MAY 1971
OS/71137	10164	194	P	TA 011 455	02 MAY 1971
OS/71137	10164	195	P	TA 007 467	02 MAY 1971
OS/73202	10366	65	P	TA 004 449	27 MAY 1973
OS/73202	10366	121	P	TA 017 463	27 MAY 1973
OS/73202	10366	122	P	TA 011 463	27 MAY 1973
OS/73202	10366	123	P	TA 004 463	27 MAY 1973
OS/73198	10367	186	N	TA 047 501	19 MAY 1973
OS/73198	10367	187	N	TA 054 501	19 MAY 1973
OS/73198	10367	218	P	TA 049 488	19 MAY 1973
OS/73198	10367	219	P	TA 042 488	19 MAY 1973
OS/73198	10367	233	N	TA 021 477	19 MAY 1973
OS/73198	10367	234	N	TA 027 477	19 MAY 1973
OS/73198	10367	235	N	TA 033 476	19 MAY 1973
OS/73198	10367	236	N	TA 040 476	19 MAY 1973
OS/70239	10559	160	P	TA 004 403	18 JUN 1970
OS/70155	10562	25	P	TA 006 453	27 MAY 1970
OS/70155	10562	26	P	SE 999 453	27 MAY 1970
OS/70155	10562	32	P	TA 002 442	27 MAY 1970
OS/70155	10562	33	N	TA 009 442	27 MAY 1970

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OS/70155	10562	67	P	TA 005 428	27 MAY 1970
OS/70155	10562	68	P	SE 998 429	27 MAY 1970
OS/70155	10562	77	P	SE 999 419	27 MAY 1970
OS/70155	10562	78	P	TA 006 418	27 MAY 1970
OS/68116	11520	748	P	TA 002 399	14 MAY 1968
OS/80118	12453	26	P	TA 000 398	JUL 1980
OS/80118	12453	27	P	SE 997 403	JUL 1980
OS/82037	12927	29	P	TA 007 405	18 APR 1982
OS/82037	12927	30	P	TA 003 405	18 APR 1982
OS/82149	12970	49	P	TA 055 492	13 JUL 1982
OS/92329	14121	103	P	TA 019 461	26 MAY 1992
OS/92329	14121	134	P	TA 008 461	26 MAY 1992
OS/92329	14121	135	P	TA 008 455	26 MAY 1992
OS/92329	14121	136	P	TA 008 450	26 MAY 1992
OS/92329	14121	137	P	TA 008 444	26 MAY 1992
OS/92329	14121	138	P	TA 007 438	26 MAY 1992
OS/92329	14121	139	P	TA 007 432	26 MAY 1992
OS/92329	14121	140	P	TA 007 427	26 MAY 1992
OS/92329	14121	141	P	TA 007 421	26 MAY 1992
OS/92329	14121	142	P	TA 007 415	26 MAY 1992
OS/92329	14121	143	P	TA 007 410	26 MAY 1992
OS/92329	14121	144	P	TA 007 404	26 MAY 1992
OS/96005	15012	5	P	SE 999 395	07 MAR 1996
OS/96005	15012	6	P	TA 004 395	07 MAR 1996
OS/97128	22272	44	N	SE 999 405	01 MAY 1997
OS/97128	22272	45	N	SE 999 454	01 MAY 1997
OS/97128	22272	126	N	SE 999 415	01 MAY 1997
OS/97783	22504	42	N	SE 999 425	11 SEP 1997
OS/97783	22504	43	N	SE 999 445	11 SEP 1997
OS/97783	22504	125	N	SE 999 435	11 SEP 1997
OS/99591	23106	13	N	TA 045 495	25 JUN 1999
OS/99591	23106	14	N	TA 050 495	25 JUN 1999
OS/99591	23106	44	N	TA 004 444	25 JUN 1999
OS/99591	23106	45	N	SE 999 444	25 JUN 1999
OS/99591	23106	53	N	TA 035 485	25 JUN 1999
OS/99591	23106	54	N	TA 040 485	25 JUN 1999
OS/99591	23106	55	N	TA 045 485	25 JUN 1999
OS/99591	23106	86	N	TA 004 435	25 JUN 1999
OS/99591	23106	87	N	SE 999 434	25 JUN 1999
OS/99591	23106	92	N	TA 019 474	25 JUN 1999
OS/99591	23106	93	N	TA 025 474	25 JUN 1999
OS/99591	23106	94	N	TA 029 474	25 JUN 1999

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OS/99591	23106	95	N	TA 035 474	25 JUN 1999
OS/99591	23106	128	N	TA 004 425	25 JUN 1999
OS/99591	23106	129	N	SE 999 424	25 JUN 1999
OS/99591	23106	132	N	TA 009 464	25 JUN 1999
OS/99591	23106	133	N	TA 014 464	25 JUN 1999
OS/99591	23106	170	N	TA 004 415	25 JUN 1999
OS/99591	23106	171	N	SE 999 415	25 JUN 1999
OS/99591	23106	173	N	TA 004 454	25 JUN 1999
OS/99591	23106	174	N	TA 009 454	25 JUN 1999
OS/99591	23106	212	N	TA 004 404	25 JUN 1999
OS/99591	23106	213	N	SE 999 404	25 JUN 1999
OS/02224	23901	4	N	SE 996 398	01 OCT 2002
OS/02224	23901	5	N	TA 003 398	01 OCT 2002
OS/02659	23995	60	N	SE 998 452	01 OCT 2002
OS/02659	23995	61	N	SE 998 445	01 OCT 2002
OS/02659	23995	62	N	SE 998 438	01 OCT 2002
OS/02659	23995	63	N	SE 998 431	01 OCT 2002
OS/02659	23995	64	N	SE 998 424	01 OCT 2002
OS/02659	23995	65	N	SE 998 417	01 OCT 2002
OS/02659	23995	66	N	SE 998 410	01 OCT 2002
OS/02659	23995	67	N	SE 999 403	01 OCT 2002
OS/04049	24404	41	N	TA 003 400	24 MAY 2004
OS/04049	24404	42	N	SE 996 401	24 MAY 2004
OS/04049	24404	46	N	TA 003 437	24 MAY 2004
OS/04049	24404	47	N	TA 010 437	24 MAY 2004
OS/04049	24404	116	N	TA 010 413	24 MAY 2004
OS/04049	24404	117	N	TA 003 413	24 MAY 2004
OS/04049	24404	122	N	TA 003 450	24 MAY 2004
OS/04049	24404	123	N	TA 010 450	24 MAY 2004
OS/04049	24404	191	N	TA 003 425	24 MAY 2004
OS/04049	24404	192	N	SE 996 425	24 MAY 2004
OS/04049	24404	196	N	TA 003 462	24 MAY 2004
OS/04049	24404	197	N	TA 010 462	24 MAY 2004
OS/04049	24404	198	N	TA 017 462	24 MAY 2004
OS/04106	24427	61	N	TA 051 499	28 AUG 2004
OS/04106	24427	62	N	TA 045 499	28 AUG 2004
OS/04106	24427	75	N	TA 017 474	28 AUG 2004
OS/04106	24427	76	N	TA 024 474	28 AUG 2004
OS/04106	24427	77	N	TA 031 474	28 AUG 2004
OS/04106	24427	78	N	TA 038 474	28 AUG 2004
OS/04106	24427	129	N	TA 044 486	28 AUG 2004
OS/04106	24427	130	N	TA 038 486	28 AUG 2004



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OS/04558	24505	11	N	TA 045 500	13 JUN 2004
OS/04558	24505	12	N	TA 051 500	13 JUN 2004
OS/09053	24861	36	N	SE 997 400	02 JUL 2009
OS/09053	24861	37	N	TA 006 400	02 JUL 2009
OS/09053	24861	60	N	TA 006 417	02 JUL 2009
OS/09053	24861	61	N	SE 997 417	02 JUL 2009
OS/09053	24861	84	N	SE 997 433	02 JUL 2009
OS/09053	24861	85	N	TA 006 434	02 JUL 2009
OS/09053	24861	108	N	TA 006 450	02 JUL 2009
OS/09053	24861	109	N	SE 997 450	02 JUL 2009
OS/09053	24861	134	N	TA 015 467	02 JUL 2009
OS/09053	24861	135	N	TA 024 467	02 JUL 2009
OS/09053	24861	154	N	TA 042 484	02 JUL 2009
OS/09053	24861	155	N	TA 033 484	02 JUL 2009
OS/09053	24861	187	N	TA 042 501	02 JUL 2009
OS/09053	24861	188	N	TA 051 501	02 JUL 2009
ADA/061(Z)	26090	112	N	TA 001 420	27 AUG 1981
ADA/061(Z)	26090	113	N	SE 998 417	27 AUG 1981
ADA/075	26105	5	N	TA 003 419	08 FEB 1982
ADA/075	26105	12	N	TA 002 420	08 FEB 1982
ADA/075	26105	13	N	TA 006 422	08 FEB 1982
ADA/081(Y)	26117	35	N	TA 000 419	22 APR 1982
ADA/081(Y)	26117	36	N	TA 004 421	22 APR 1982
ADA/086(Z)	26127	164	N	TA 005 422	17 MAY 1982
ADA/086(Z)	26127	165	N	TA 002 420	17 MAY 1982
RAF/CPE/UK/1834	510	3248	P	TA 055 513	13 NOV 1946
RAF/CPE/UK/1834	510	3249	P	TA 060 513	13 NOV 1946
RAF/CPE/UK/1834	510	3304	P	TA 070 531	13 NOV 1946
RAF/CPE/UK/1834	510	3305	P	TA 065 530	13 NOV 1946
RAF/CPE/UK/1834	510	3373	P	TA 074 536	13 NOV 1946
RAF/CPE/UK/1834	510	3374	P	TA 068 536	13 NOV 1946
RAF/CPE/UK/1879	519	4348	P	TA 064 516	06 DEC 1946
RAF/CPE/UK/1879	519	4349	P	TA 059 515	06 DEC 1946
RAF/CPE/UK/1911	531	3085	P	TA 061 503	27 DEC 1946
RAF/CPE/UK/1911	531	3086	P	TA 055 505	27 DEC 1946
RAF/CPE/UK/1911	531	3096	P	TA 070 549	27 DEC 1946
RAF/CPE/UK/1911	531	3097	P	TA 078 550	27 DEC 1946
RAF/CPE/UK/1911	531	3098	P	TA 086 551	27 DEC 1946
RAF/CPE/UK/1911	531	3099	P	TA 094 551	27 DEC 1946
RAF/CPE/UK/1911	531	4081	P	TA 067 519	27 DEC 1946
RAF/CPE/UK/1911	531	4082	P	TA 061 522	27 DEC 1946
RAF/CPE/UK/1911	531	4091	P	TA 067 531	27 DEC 1946

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RAF/CPE/UK/1911	531	4092	P	TA 074 532	27 DEC 1946
RAF/CPE/UK/1911	531	4174	P	TA 085 561	27 DEC 1946
RAF/CPE/UK/1911	531	4175	P	TA 093 562	27 DEC 1946
RAF/CPE/UK/2396	750	3088	N	TA 064 529	17 NOV 1947
RAF/CPE/UK/2396	750	3089	N	TA 072 529	17 NOV 1947
RAF/CPE/UK/2396	750	3129	P	TA 093 559	17 NOV 1947
RAF/CPE/UK/2396	750	3130	P	TA 088 560	17 NOV 1947
RAF/CPE/UK/2396	750	4087	N	TA 056 513	17 NOV 1947
RAF/CPE/UK/2396	750	4088	N	TA 065 512	17 NOV 1947
RAF/541/189	946	3313	P	TA 072 532	26 OCT 1948
RAF/541/189	946	3314	P	TA 066 532	26 OCT 1948
RAF/541/189	946	4311	P	TA 086 547	26 OCT 1948
RAF/541/189	946	4312	P	TA 080 548	26 OCT 1948
RAF/541/189	946	4313	P	TA 074 549	26 OCT 1948
RAF/58/5554	2230	16	P	TA 072 537	20 NOV 1962
RAF/58/5554	2230	17	P	TA 063 540	20 NOV 1962
RAF/58/5554	2230	45	P	TA 067 517	20 NOV 1962
RAF/58/5554	2230	46	P	TA 059 520	20 NOV 1962
RAF/58/5554	2230	119	P	TA 058 497	20 NOV 1962
RAF/58/5554	2230	120	P	TA 051 500	20 NOV 1962
MAL/70070	5653	181	P	TA 105 555	16 SEP 1970
MAL/70070	5653	182	P	TA 105 562	16 SEP 1970
OS/74084	9844	91	P	TA 053 502	26 MAY 1974
OS/74084	9844	92	P	TA 060 502	26 MAY 1974
OS/74084	9844	133	P	TA 070 526	26 MAY 1974
OS/74084	9844	134	P	TA 063 526	26 MAY 1974
OS/74084	9844	220	P	TA 058 512	26 MAY 1974
OS/74084	9844	221	P	TA 064 512	26 MAY 1974
OS/74084	9844	257	P	TA 089 547	26 MAY 1974
OS/74084	9844	258	P	TA 083 547	26 MAY 1974
OS/74084	9844	259	P	TA 076 548	26 MAY 1974
OS/74084	9844	260	P	TA 069 548	26 MAY 1974
OS/74084	9844	347	P	TA 065 537	26 MAY 1974
OS/74084	9844	348	P	TA 070 536	26 MAY 1974
OS/74084	9844	381	P	TA 094 560	26 MAY 1974
OS/74084	9844	382	P	TA 088 561	26 MAY 1974
OS/73198	10367	187	N	TA 054 501	19 MAY 1973
OS/73198	10367	188	N	TA 061 501	19 MAY 1973
OS/91317	13904	24	P	TA 072 532	02 OCT 1991
OS/97048	15161	95	P	TA 096 556	28 MAR 1997
OS/97048	15161	96	P	TA 089 556	28 MAR 1997
OS/97048	15161	97	P	TA 082 556	28 MAR 1997

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OS/97048	15161	120	P	TA 069 543	28 MAR 1997
OS/97048	15161	121	P	TA 076 543	28 MAR 1997
OS/97048	15161	122	P	TA 083 543	28 MAR 1997
OS/97048	15161	156	P	TA 069 531	28 MAR 1997
OS/97048	15161	157	P	TA 062 531	28 MAR 1997
OS/97051	15162	11	P	TA 055 506	30 MAR 1997
OS/97051	15162	12	P	TA 062 506	30 MAR 1997
OS/97051	15162	53	P	TA 062 518	30 MAR 1997
OS/97051	15162	54	P	TA 055 518	30 MAR 1997
RAF/58/9309	15233	180	P	TA 091 545	22 JAN 1969
OS/04106	24427	60	N	TA 058 499	28 AUG 2004
OS/04106	24427	61	N	TA 051 499	28 AUG 2004
OS/04544	24494	48	N	TA 086 549	28 MAY 2004
OS/04544	24494	49	N	TA 079 549	28 MAY 2004
OS/04544	24494	108	N	TA 072 537	28 MAY 2004
OS/04544	24494	109	N	TA 065 537	28 MAY 2004
OS/04544	24494	164	N	TA 093 562	28 MAY 2004
OS/04544	24494	165	N	TA 086 562	28 MAY 2004
OS/04545	24495	50	N	TA 093 561	28 MAY 2004
OS/04545	24495	51	N	TA 086 562	28 MAY 2004
OS/04558	24505	12	N	TA 051 500	13 JUN 2004
OS/04558	24505	13	N	TA 058 501	13 JUN 2004
OS/04558	24505	56	N	TA 065 513	13 JUN 2004
OS/04558	24505	57	N	TA 058 513	13 JUN 2004
OS/04558	24505	78	N	TA 058 525	13 JUN 2004
OS/04558	24505	79	N	TA 065 525	13 JUN 2004
OS/09053	24861	188	N	TA 051 501	02 JUL 2009
OS/09053	24861	189	N	TA 060 501	02 JUL 2009
RAF/106G/UK/1032	177	3267	P	TA 149 603	27 NOV 1945
RAF/106G/UK/1032	177	3378	P	TA 131 581	27 NOV 1945
RAF/106G/UK/1032	177	4267	P	TA 163 610	27 NOV 1945
RAF/106G/UK/1032	177	4268	P	TA 162 614	27 NOV 1945
RAF/106G/UK/1032	177	4378	P	TA 147 590	27 NOV 1945
RAF/106G/UK/1032	177	4379	P	TA 146 596	27 NOV 1945
RAF/CPE/UK/1839	516	3008	P	TA 142 583	13 NOV 1946
RAF/CPE/UK/1839	516	3009	P	TA 137 583	13 NOV 1946
RAF/CPE/UK/1839	516	4004	P	TA 160 599	13 NOV 1946
RAF/CPE/UK/1839	516	4005	P	TA 155 599	13 NOV 1946
RAF/CPE/UK/1839	516	4006	P	TA 149 599	13 NOV 1946
RAF/CPE/UK/1839	516	4211	P	TA 157 620	13 NOV 1946
RAF/CPE/UK/1839	516	4212	P	TA 163 619	13 NOV 1946
RAF/CPE/UK/1911	531	3185	P	TA 137 586	27 DEC 1946

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RAF/CPE/UK/1911	531	3186	P	TA 145 587	27 DEC 1946
RAF/CPE/UK/1911	531	3187	P	TA 152 588	27 DEC 1946
RAF/CPE/UK/1911	531	4110	P	TA 152 593	27 DEC 1946
RAF/CPE/UK/1911	531	4111	P	TA 144 593	27 DEC 1946
RAF/CPE/UK/1911	531	4177	P	TA 108 565	27 DEC 1946
RAF/CPE/UK/1911	531	4178	P	TA 115 566	27 DEC 1946
RAF/CPE/UK/1911	531	4179	P	TA 123 567	27 DEC 1946
RAF/CPE/UK/1911	531	4180	P	TA 130 569	27 DEC 1946
RAF/CPE/UK/1911	531	4181	P	TA 138 570	27 DEC 1946
RAF/CPE/UK/2396	750	3125	P	TA 115 555	17 NOV 1947
RAF/CPE/UK/2396	750	3126	P	TA 110 556	17 NOV 1947
RAF/CPE/UK/2396	750	3127	P	TA 104 557	17 NOV 1947
RAF/CPE/UK/2396	750	4123	P	TA 133 571	17 NOV 1947
RAF/CPE/UK/2396	750	4124	N	TA 127 571	17 NOV 1947
RAF/CPE/UK/2396	750	4125	N	TA 121 571	17 NOV 1947
RAF/CPE/UK/2396	750	4126	N	TA 115 572	17 NOV 1947
RAF/541/546	1098	3007	P	TA 164 609	01 JUN 1950
RAF/541/546	1098	3008	P	TA 158 608	01 JUN 1950
RAF/541/546	1098	3036	N	TA 156 606	01 JUN 1950
RAF/541/546	1098	3037	N	TA 150 605	01 JUN 1950
RAF/541/546	1098	4034	P	TA 167 623	01 JUN 1950
MAL/70070	5653	174	P	TA 111 563	16 SEP 1970
MAL/70070	5653	175	P	TA 110 570	16 SEP 1970
MAL/70070	5653	182	P	TA 105 562	16 SEP 1970
MAL/70070	5653	183	P	TA 104 569	16 SEP 1970
RAF/613A/BR53	6316	8	P	TA 171 608	15 MAR 1941
RAF/613A/BR53	6316	9	P	TA 170 614	15 MAR 1941
RAF/613H/BR53	6317	10	P	TA 169 611	15 MAR 1941
RAF/613H/BR53	6317	11	P	TA 169 616	15 MAR 1941
RAF/163B/UK563	6740	1894	P	TA 170 611	10 OCT 1940
RAF/163B/UK563	6740	1928	P	TA 167 604	10 OCT 1940
RAF/163B/UK563	6740	1929	P	TA 165 617	10 OCT 1940
RAF/613A/BR13/1	6742	26	P	TA 167 608	28 JUL 1940
RAF/613A/BR13/1	6742	27	P	TA 166 615	28 JUL 1940
MAL/77021	7459	120	P	TA 166 617	04 JUL 1977
MAL/77021	7459	121	P	TA 166 607	04 JUL 1977
MAL/77021	7459	122	P	TA 166 598	04 JUL 1977
MAL/77021	7459	129	P	TA 156 598	04 JUL 1977
MAL/77022	7460	169	P	TA 167 614	06 JUL 1977
MAL/77022	7460	170	P	TA 167 624	06 JUL 1977
MAL/77022	7460	177	P	TA 157 590	06 JUL 1977
MAL/76047	8171	8	P	TA 135 589	24 JUN 1976

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MAL/76047	8171	9	P	TA 136 580	24 JUN 1976
MAL/76047	8171	10	P	TA 137 571	24 JUN 1976
OS/74084	9844	376	P	TA 128 559	26 MAY 1974
OS/74084	9844	377	P	TA 121 559	26 MAY 1974
OS/74084	9844	378	P	TA 114 560	26 MAY 1974
OS/74084	9844	379	P	TA 108 560	26 MAY 1974
OS/74084	9844	471	P	TA 120 574	26 MAY 1974
OS/74084	9844	472	P	TA 126 574	26 MAY 1974
OS/74084	9844	473	P	TA 133 574	26 MAY 1974
OS/74085	9845	490	P	TA 122 576	26 MAY 1974
OS/74085	9845	491	P	TA 129 575	26 MAY 1974
OS/74085	9845	492	P	TA 136 575	26 MAY 1974
OS/74085	9845	505	P	TA 149 588	26 MAY 1974
OS/74085	9845	506	P	TA 142 588	26 MAY 1974
OS/74085	9845	704	P	TA 155 611	26 MAY 1974
OS/74085	9845	705	P	TA 162 610	26 MAY 1974
OS/74085	9845	710	P	TA 163 599	26 MAY 1974
OS/74085	9845	711	P	TA 156 599	26 MAY 1974
OS/74085	9845	712	P	TA 150 599	26 MAY 1974
OS/74085	9845	824	N	TA 163 624	26 MAY 1974
OS/75261	9850	1248	P	TA 169 624	23 JUN 1975
OS/75261	9850	1249	P	TA 161 623	23 JUN 1975
OS/86163	12870	42	P	TA 150 606	03 AUG 1986
OS/86163	12870	43	P	TA 150 601	03 AUG 1986
OS/86163	12870	44	P	TA 150 596	03 AUG 1986
OS/86163	12870	45	P	TA 150 590	03 AUG 1986
OS/82040	12930	15	P	TA 163 625	18 APR 1982
OS/89305	13562	26	P	TA 151 604	19 JUN 1989
OS/89305	13562	27	P	TA 158 604	19 JUN 1989
OS/89305	13562	28	P	TA 164 603	19 JUN 1989
OS/89305	13562	31	P	TA 166 621	19 JUN 1989
OS/89305	13562	32	P	TA 160 620	19 JUN 1989
OS/92265	14017	40	P	TA 158 602	23 JUL 1992
OS/92265	14017	41	P	TA 155 606	23 JUL 1992
OS/92265	14017	59	P	TA 144 591	23 JUL 1992
OS/92265	14017	60	P	TA 147 587	23 JUL 1992
OS/92265	14017	108	P	TA 142 578	23 JUL 1992
OS/92265	14017	109	P	TA 140 583	23 JUL 1992
OS/92265	14017	115	P	TA 155 590	23 JUL 1992
OS/92265	14017	116	P	TA 155 596	23 JUL 1992
OS/92265	14017	117	P	TA 157 601	23 JUL 1992
OS/92265	14017	118	P	TA 157 606	23 JUL 1992

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OS/92265	14017	142	P	TA 167 611	23 JUL 1992
OS/92265	14017	143	P	TA 168 606	23 JUL 1992
OS/96544	15144	24	P	TA 152 605	22 APR 1996
OS/96544	15144	25	P	TA 158 605	22 APR 1996
OS/96544	15144	26	P	TA 165 606	22 APR 1996
OS/96544	15144	29	P	TA 165 618	22 APR 1996
OS/97048	15161	23	P	TA 145 594	28 MAR 1997
OS/97048	15161	24	P	TA 151 594	28 MAR 1997
OS/97048	15161	33	P	TA 144 581	28 MAR 1997
OS/97048	15161	34	P	TA 137 581	28 MAR 1997
OS/97048	15161	70	P	TA 103 568	28 MAR 1997
OS/97048	15161	71	P	TA 110 568	28 MAR 1997
OS/97048	15161	72	P	TA 117 568	28 MAR 1997
OS/97048	15161	73	P	TA 124 568	28 MAR 1997
OS/97048	15161	74	P	TA 131 568	28 MAR 1997
OS/97048	15161	75	P	TA 138 568	28 MAR 1997
OS/97048	15161	92	P	TA 117 556	28 MAR 1997
OS/97048	15161	93	P	TA 110 556	28 MAR 1997
OS/97048	15161	94	P	TA 103 556	28 MAR 1997
OS/76081	20671	63	P	TA 156 605	08 JUN 1976
OS/76081	20671	64	P	TA 158 615	08 JUN 1976
OS/76081	20671	81	P	TA 163 612	08 JUN 1976
OS/76081	20671	82	P	TA 167 603	08 JUN 1976
OS/75291	22254	1	N	TA 152 591	30 JUN 1975
OS/75291	22254	2	N	TA 155 599	30 JUN 1975
OS/75291	22254	3	N	TA 160 611	30 JUN 1975
OS/75291	22254	19	N	TA 169 608	30 JUN 1975
OS/99344	23045	6	N	TA 160 595	08 SEP 1999
OS/99344	23045	7	N	TA 161 601	08 SEP 1999
OS/99344	23045	8	N	TA 162 608	08 SEP 1999
OS/99344	23045	9	N	TA 163 615	08 SEP 1999
OS/99344	23045	19	N	TA 165 614	08 SEP 1999
OS/99344	23045	20	N	TA 166 608	08 SEP 1999
OS/99344	23045	31	N	TA 156 605	08 SEP 1999
OS/99344	23045	32	N	TA 159 598	08 SEP 1999
OS/03605	24202	68	N	TA 162 600	30 MAY 2003
OS/03605	24202	69	N	TA 155 600	30 MAY 2003
OS/03605	24202	70	N	TA 148 600	30 MAY 2003
OS/03605	24202	176	N	TA 155 613	30 MAY 2003
OS/03605	24202	177	N	TA 162 613	30 MAY 2003
OS/04544	24494	28	N	TA 148 598	28 MAY 2004
OS/04544	24494	29	N	TA 155 598	28 MAY 2004

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OS/04544	24494	30	N	TA 162 599	28 MAY 2004
OS/04544	24494	85	N	TA 141 586	28 MAY 2004
OS/04544	24494	86	N	TA 148 586	28 MAY 2004
OS/04544	24494	87	N	TA 155 586	28 MAY 2004
OS/04544	24494	140	N	TA 120 574	28 MAY 2004
OS/04544	24494	141	N	TA 127 574	28 MAY 2004
OS/04544	24494	142	N	TA 134 574	28 MAY 2004
OS/04544	24494	159	N	TA 127 562	28 MAY 2004
OS/04544	24494	160	N	TA 120 561	28 MAY 2004
OS/04544	24494	161	N	TA 113 561	28 MAY 2004
OS/04544	24494	162	N	TA 106 562	28 MAY 2004
OS/04545	24495	26	N	TA 120 574	28 MAY 2004
OS/04545	24495	27	N	TA 127 574	28 MAY 2004
OS/04545	24495	28	N	TA 134 574	28 MAY 2004
OS/04545	24495	45	N	TA 127 562	28 MAY 2004
OS/04545	24495	46	N	TA 120 562	28 MAY 2004
OS/04545	24495	47	N	TA 113 562	28 MAY 2004
OS/04545	24495	48	N	TA 106 561	28 MAY 2004

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TA 0039 / 1	NMR 1147	377-378	10-Aug-77
TA 0039 / 13	NMR 28227	63	19-Oct-11
TA 0135 / 1	NMR 28081	24	21-Jul-10
TA 0135 / 2	NMR 28081	25	21-Jul-10
TA 0135 / 3	NMR 28191	33	12-Jul-11
TA 0135 / 4	NMR 28191	34	12-Jul-11
TA 0234 / 2	CCC 5141	M335	1935
TA 0235 / 2	JAP 1443	33	31-Jul-75
TA 0334 / 1	NMR 1972	061	21-Jul-81
TA 0334 / 4	CCC 5141	M336	1935
TA 0334 / 5	NMR 1972	062	21-Jul-81
TA 0334 / 6	NMR 1972	063	21-Jul-81
TA 0334 / 10	NMR 12906	34	08-Aug-96
TA 0334 / 11	NMR 12906	35	08-Aug-96
TA 0334 / 12	NMR 12906	36	08-Aug-96
TA 0334 / 13	NMR 17604	31	16-Jul-01
TA 0334 / 14	NMR 17604	32	16-Jul-01
TA 0334 / 15	NMR 17604	33	16-Jul-01
TA 0334 / 16	NMR 17604	34	16-Jul-01
TA 0334 / 17	NMR 17604	35	16-Jul-01
TA 0334 / 18	NMR 17604	36	16-Jul-01

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TA 0334 / 19	NMR 17604	38	16-Jul-01
TA 0334 / 20	NMR 17593	31	16-Jul-01
TA 0334 / 21	NMR 17593	32	16-Jul-01
TA 0334 / 22	NMR 17593	33	16-Jul-01
TA 0334 / 23	NMR 17593	34	16-Jul-01
TA 0334 / 24	NMR 17593	35	16-Jul-01
TA 0334 / 25	NMR 17593	36	16-Jul-01
TA 0334 / 26	NMR 28191	36	12-Jul-11
TA 0334 / 27	NMR 28191	37	12-Jul-11
TA 0334 / 28	NMR 28191	40	12-Jul-11
TA 0334 / 29	NMR 28191	41	12-Jul-11
TA 0334 / 30	NMR 28191	42	12-Jul-11
TA 0334 / 31	NMR 28432	47	15-Jul-13
TA 0334 / 32	NMR 28432	48	15-Jul-13
TA 0334 / 33	NMR 28432	49	15-Jul-13
TA 0334 / 34	NMR 28432	50	15-Jul-13
TA 0335 / 3	NMR 2120	3044	30-Jun-82
TA 0335 / 9	NMR 2120	3045	30-Jun-82
TA 0335 / 10	NMR 12916	52	08-Aug-96
TA 0335 / 11	NMR 12916	53	08-Aug-96
TA 0335 / 12	NMR 12916	54	08-Aug-96
TA 0335 / 13	NMR 12916	55	08-Aug-96
TA 0335 / 14	NMR 28191	43	12-Jul-11
TA 0434 / 2	NMR 817	134-135	07-May-75
TA 0434 / 4	NMR 17604	39	16-Jul-01
TA 0435 / 8	NMR 17604	37	16-Jul-01
TA 0435 / 9	NMR 28191	38	12-Jul-11
TA 0435 / 10	NMR 28191	39	12-Jul-11
TA 0040 / 1	NMR 12890	11	02 AUG 1996
TA 0040 / 2	NMR 12890	12	02 AUG 1996
TA 0040 / 5	NMR 12900	52	02 AUG 1996
TA 0040 / 6	NMR 12900	53	02 AUG 1996
TA 0040 / 7	NMR 12900	54	02 AUG 1996
TA 0042 / 1	NMR 183	188-190	29 APR 1970
TA 0042 / 2	NMR 183	191-193	29 APR 1970
TA 0044 / 4	NMR 17586	05	09 JUL 2001
TA 0044 / 5	NMR 17586	06	09 JUL 2001
TA 0044 / 6	NMR 20643	54	21 MAR 2007
TA 0044 / 7	NMR 20643	55	21 MAR 2007
TA 0044 / 8	NMR 20643	56	21 MAR 2007
TA 0044 / 9	NMR 20643	57	21 MAR 2007
TA 0044 / 12	NMR 28208	45	05 AUG 2011
TA 0044 / 13	NMR 28208	46	05 AUG 2011



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TA 0044 / 14	NMR 28208	47	05 AUG 2011
TA 0046 / 1	NMR 12734	15	01 AUG 1995
TA 0046 / 2	NMR 12734	16	01 AUG 1995
TA 0046 / 3	NMR 12734	17	01 AUG 1995
TA 0046 / 4	NMR 12729	03	01 AUG 1995
TA 0046 / 5	NMR 12729	04	01 AUG 1995
TA 0046 / 6	NMR 12729	05	01 AUG 1995
TA 0046 / 9	NMR 28208	31	05 AUG 2011
TA 0046 / 10	NMR 28208	32	05 AUG 2011
TA 0046 / 11	NMR 28208	33	05 AUG 2011
TA 0046 / 12	NMR 28208	34	05 AUG 2011
TA 0046 / 13	NMR 28208	35	05 AUG 2011
TA 0046 / 14	NMR 28208	36	05 AUG 2011
TA 0046 / 15	NMR 28208	37	05 AUG 2011
TA 0046 / 16	NMR 28208	38	05 AUG 2011
TA 0146 / 1	JAP 789	7A	20 AUG 1974
TA 0549 / 1	NMR 817	314-315	07 MAY 1975
TA 0651 / 32	NMR 17361	26	30 JUL 1999
TA 0651 / 33	NMR 17361	27	30 JUL 1999
TA 0651 / 34	NMR 17361	28	30 JUL 1999
TA 0651 / 35	NMR 17361	29	30 JUL 1999
TA 0652 / 1	JAP 786	4A	19 AUG 1974
TA 0652 / 3	JAP 786	6A	19 AUG 1974
TA 0652 / 8	NMR 1140	93-94	07 JUL 1977
TA 0652 / 9	NMR 1140	95-99	07 JUL 1977
TA 0652 / 16	NMR 17368	31	30 JUL 1999
TA 0652 / 17	NMR 17368	32	30 JUL 1999
TA 0652 / 18	NMR 17361	25	30 JUL 1999
TA 0653 / 2	NMR 17368	43	30 JUL 1999
TA 0653 / 3	NMR 17368	44	30 JUL 1999
TA 0653 / 4	NMR 17361	34	30 JUL 1999
TA 0653 / 5	NMR 17361	35	30 JUL 1999
TA 0754 / 3	NMR 2129	425	19 AUG 1982
TA 0754 / 4	NMR 2129	428	19 AUG 1982
TA 0754 / 6	NMR 2129	426	19 AUG 1982
TA 0754 / 7	NMR 2129	427	19 AUG 1982
TA 0754 / 8	NMR 2129	429	19 AUG 1982
TA 0955 / 1	NMR 12578	51	05 AUG 1994
TA 0955 / 2	NMR 12578	52	05 AUG 1994
TA 0955 / 3	NMR 12578	53	05 AUG 1994
TA 0955 / 4	NMR 12578	54	05 AUG 1994
TA 0955 / 5	NMR 12579	05	05 AUG 1994
TA 0955 / 6	NMR 12579	06	05 AUG 1994

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TA 0955 / 7	NMR 12579	07	05 AUG 1994
TA 0956 / 12	NMR 28079	29	21 JUL 2010
TA 1056 / 1	NMR 12896	34	05 AUG 1996
TA 1056 / 2	NMR 12896	35	05 AUG 1996
TA 1056 / 3	NMR 12903	36	05 AUG 1996
TA 1056 / 4	NMR 12903	37	05 AUG 1996
TA 1256 / 1	NMR 10472	64	11 AUG 1971
TA 1458 / 12	AFL 61614	EAW013952	23 MAR 1948
TA 1560 / 1	NMR 222	198-200	18 JUL 1970
TA 1560 / 16	NMR 28202	66	14 JUL 2011
TA 1560 / 17	NMR 28202	67	14 JUL 2011
TA 1560 / 18	NMR 28202	68	14 JUL 2011
TA 1661 / 5	NMR 772	155-162	02 AUG 1974
TA 1661 / 6	NMR 12896	18	05 AUG 1996
TA 1661 / 7	NMR 12896	19	05 AUG 1996
TA 1661 / 8	NMR 12896	20	05 AUG 1996
TA 1661 / 9	NMR 12896	21	05 AUG 1996
TA 1661 / 10	NMR 12896	22	05 AUG 1996
TA 1661 / 11	NMR 12896	23	05 AUG 1996
TA 1661 / 16	NMR 12903	20	05 AUG 1996
TA 1661 / 17	NMR 12903	21	05 AUG 1996
TA 1661 / 18	NMR 12903	22	05 AUG 1996
TA 1661 / 19	NMR 12903	23	05 AUG 1996
TA 1661 / 20	NMR 12903	24	05 AUG 1996
TA 1661 / 21	NMR 12903	25	05 AUG 1996

## Military Obliques

Photo Reference	Library Number	Frame Number	Original Number	Date
TA 0039 / 2	MSO 31050	PO-02074	B4/UK656	20 JUL 1941
TA 0039 / 3	MSO 31050	PO-02075	B4/UK656	20 JUL 1941
TA 0039 / 4	MSO 31050	PO-02076	B4/UK656	20 JUL 1941
TA 0039 / 5	MSO 31050	PO-02077	B4/UK656	20 JUL 1941
TA 0039 / 6	MSO 31050	PO-02078	B4/UK656	20 JUL 1941
TA 0039 / 7	MSO 31050	PO-02079	B4/UK656	20 JUL 1941
TA 0955 / 8	RAF 30373	PO-0016	58/9309	22 JAN 1969

## Appendix B CUCAP Coversearch

ID	Type	Date	Copyright	Eastings	Northings
AQG62	Oblique	03/12/1966	CUCAP	500500	442500
AQG63	Oblique	03/12/1966	CUCAP	500500	442500
AQG64	Oblique	03/12/1966	CUCAP	500500	442500
AQG70	Oblique	03/12/1966	CUCAP	501500	445300
AQG71	Oblique	03/12/1966	CUCAP	501500	445300
AQG72	Oblique	03/12/1966	CUCAP	501500	445300
AQG73	Oblique	03/12/1966	CUCAP	501800	445100
ARB72	Oblique	02/05/1967	CUCAP	507000	451500
ARB73	Oblique	02/05/1967	CUCAP	507000	451500
ARB74	Oblique	02/05/1967	CUCAP	507000	451500
ARB75	Oblique	02/05/1967	CUCAP	507000	451500
ARB76	Oblique	02/05/1967	CUCAP	507000	451500
ARB77	Oblique	02/05/1967	CUCAP	507000	451500
BAF88	Oblique	03/01/1970	CUCAP	500500	442500
BAF89	Oblique	03/01/1970	CUCAP	500500	442500
BAF90	Oblique	03/01/1970	CUCAP	500500	442500
BAH15	Oblique	03/01/1970	CUCAP	507000	451500
BAH16	Oblique	03/01/1970	CUCAP	507000	451500
BAH17	Oblique	03/01/1970	CUCAP	507000	451500
BAH18	Oblique	03/01/1970	CUCAP	507000	451500
BAH19	Oblique	03/01/1970	CUCAP	507000	451500
BBQ95	Oblique	04/06/1970	CUCAP	507000	451500
BBQ96	Oblique	04/06/1970	CUCAP	507000	451500
BBQ97	Oblique	04/06/1970	CUCAP	507000	451500
BBR1	Oblique	04/06/1970	CUCAP	507000	451500
BBR2	Oblique	04/06/1970	CUCAP	507000	451500
BBR3	Oblique	04/06/1970	CUCAP	507000	451500
BBR4	Oblique	04/06/1970	CUCAP	507000	451500
BBR5	Oblique	04/06/1970	CUCAP	507000	451500
BBR6	Oblique	04/06/1970	CUCAP	507800	452600
BBR7	Oblique	04/06/1970	CUCAP	507700	453500
BBR8	Oblique	04/06/1970	CUCAP	507700	453500
BQU48	Oblique	24/07/1974	CUCAP	516700	461200
BQU49	Oblique	24/07/1974	CUCAP	516700	461200
BQU50	Oblique	24/07/1974	CUCAP	516700	461200
BQU51	Oblique	24/07/1974	CUCAP	516700	461000
BQU66	Oblique	24/07/1974	CUCAP	506100	449100
BQU67	Oblique	24/07/1974	CUCAP	506100	449100
BQU68	Oblique	24/07/1974	CUCAP	506100	449100
BS34	Oblique	22/07/1948	CUCAP	500500	442500
BS35	Oblique	22/07/1948	CUCAP	500500	442500

ID	Type	Date	Copyright	Eastings	Northings
BVR65	Oblique	11/08/1975	CUCAP	507800	452600
BWC24	Oblique	09/09/1975	CUCAP	515700	458900
BWC30	Oblique	09/09/1975	CUCAP	507800	452600
CFS81	Oblique	09/05/1978	CUCAP	501500	445400
CFS82	Oblique	09/05/1978	CUCAP	501500	445400
CFS83	Oblique	09/05/1978	CUCAP	501500	445400
CFS84	Oblique	09/05/1978	CUCAP	501500	445400
CFS88	Oblique	09/05/1978	CUCAP	501500	445400
CFT1	Oblique	09/05/1978	CUCAP	500600	442600
CFT2	Oblique	09/05/1978	CUCAP	500600	442600
CFT3	Oblique	09/05/1978	CUCAP	500600	442600
CFT4	Oblique	09/05/1978	CUCAP	500600	442600
CFT5	Oblique	09/05/1978	CUCAP	501700	436000
CFT6	Oblique	09/05/1978	CUCAP	501700	436000
CFT7	Oblique	09/05/1978	CUCAP	501700	436000
JZ58	Oblique	15/07/1952	CUCAP	500500	442500
JZ59	Oblique	15/07/1952	CUCAP	500500	442500
JZ60	Oblique	15/07/1952	CUCAP	500500	442500
RC8GM021	Vertical	30/04/1984	Subject to confirmation	503313	434489
RC8GM022	Vertical	30/04/1984	Subject to confirmation	504232	434464
RC8GM023	Vertical	30/04/1984	Subject to confirmation	505062	434445
RC8HC026	Vertical	01/08/1984	Subject to confirmation	516950	460733
RC8HC027	Vertical	01/08/1984	Subject to confirmation	516950	461602
RC8HC123	Vertical	01/08/1984	Subject to confirmation	515254	457421
RC8HC124	Vertical	01/08/1984	Subject to confirmation	515216	458101
RC8HC125	Vertical	01/08/1984	Subject to confirmation	515192	458909
RC8LK229	Vertical	03/07/1989	Subject to confirmation	507542	453011
RC8LK230	Vertical	03/07/1989	Subject to confirmation	507760	452209
RC8LK236	Vertical	03/07/1989	Subject to confirmation	508722	454022
RC8LK237	Vertical	03/07/1989	Subject to confirmation	508897	455008
RW61	Oblique	27/03/1956	CUCAP	500400	442500
RW62	Oblique	27/03/1956	CUCAP	500400	442500
RW63	Oblique	27/03/1956	CUCAP	500400	442500
RW64	Oblique	27/03/1956	CUCAP	500400	442500
RW65	Oblique	27/03/1956	CUCAP	500400	442500
RW66	Oblique	27/03/1956	CUCAP	500400	442500
RW67	Oblique	27/03/1956	CUCAP	500400	442500
ZknLX15	Vertical	05/07/2001	Subject to confirmation	501356	440987
ZknLX16	Vertical	05/07/2001	Subject to confirmation	500960	440966
ZknOO136	Vertical	13/06/2003	Subject to confirmation	505015	434913
ZknOO137	Vertical	13/06/2003	Subject to confirmation	504374	434909
ZknOO138	Vertical	13/06/2003	Subject to confirmation	503729	434916
ZknOO139	Vertical	13/06/2003	Subject to confirmation	503085	434922

## Appendix C Humber Historic Environment Record Aerial Photograph Coversearch

AP Reference	Centre Point	Parish	Source	Date
HAP 89/8/10	TA 049 358	Woodmansey	HCC (J Dent)	07.03.1989
HAP 89/8/9	TA 049 357	Woodmansey	HCC (J Dent)	07.03.1989
5A/15	TA 044 358	Woodmansey	D Brooks	1970s
TA0435/3-56	TA 0445 3515	Woodmansey	NMR	09.08.1977
HAP 91/27/12	TA 015 370	Walkington	HCC (E Dennison)	10.01.1992
HAP 91/27/13	TA 016 370	Walkington	HCC (E Dennison)	10.01.1992
HAP 91/27/14	TA 017 369	Walkington	HCC (E Dennison)	10.01.1992
TA0137/1-371	TA 0145 3735	Walkington	NMR	10.08.1977
HAP 91/28/9	TA 017 359	Rowley	HCC (E Dennison)	10.01.1992
60/20	TA 022 348	Rowley		1980s
6A/12	TA 020 357	Rowley	D Brooks	1970s
CFT 6	TA 019 360	Rowley	CVC	09.05.1978
CFT 7	TA 018 361	Rowley	CVC	09.05.1978
HAP 91/21/7	TA 075 553	Foston	HCC (E Dennison)	29.07.1991
HAP 91/21/4	TA 075 549	Foston	HCC (E Dennison)	29.07.1991
HAP 91/21/5	TA 074 550	Foston	HCC (E Dennison)	29.07.1991
HAP 91/21/6	TA 075 548	Foston	HCC (E Dennison)	29.07.1991
HAP 89/16/11	TA 073 549	Foston	HCC (J Dent)	17.03.1989
AWF92	TA 1550 6150	Barmston	CUC	05.11.1968
TA1660/3	TA 169 603	Barmston	NMR (RCHM)	02.08.1974
TA1661/3	TA 168 611	Barmston	NMR (RCHM)	18.07.70
TA1661/1	TA 169 610	Barmston	NMR (RCHM)	18.07.70
TA1560/1	TA 157 608	Barmston	NMR (RCHM)	18.07.70
CBR 10	TA 1550 6150	Barmston	CUC	09.12.1976
CBR 11	TA 1690 6260	Barmston	CUC	09.12.1976
CBR 8	TA 1540 6140	Barmston	CUC	09.12.1976
CBR 9	TA 15560 6150	Barmston	CUC	09.12.1976
SE 9943/2	SE 990 433	Cherry Burton	NMR (RCHM)	28.07.1975
TA0042/1-188	TA 004 425	Cherry Burton	NMR	29.04.1970
TA0042/3-282	TA 005 425	Cherry Burton	NMR	19.07.1970
CFT 2	TA 007 425	Cherry Burton	CU	09.05.1978
CFT 4	TA 006 426	Cherry Burton	CU	09.05.1978
HAP 89/8/2	TA 019 391	Beverley	HCC (J Dent)	21.02.1989
HAP 89/8/3	TA 019 391	Beverley	HCC (J Dent)	21.02.1989
HAP 91/28/13	TA 014 392	Beverley	HCC (E Dennison)	10.01.1992
HAP 91/28/14	TA 020 393	Beverley	HCC (E Dennison)	10.01.1992
HAP 91/28/15	TA 021 391	Beverley	HCC (E Dennison)	10.01.1992
5A /10	TA 039 349	Skidby	D Brooks	19.07.2003
5A /11	TA 039 349	Skidby	D Brooks	19.07.2003
5A /12	TA 039 349	Skidby	D Brooks	19.07.2003

AP Reference	Centre Point	Parish	Source	Date
5A /13	TA 039 349	Skidby	D Brooks	19.07.2003
5A /14	TA 039 349	Skidby	D Brooks	19.07.2003
3B /1	TA 040 349	Skidby	D Brooks	1970s
3B /2	TA 040 349	Skidby	D Brooks	1970s
3B /3	TA 040 349	Skidby	D Brooks	1970s
HAP /89 /16 /9	TA 068 548	Skerne and Wansford	HCC (J Dent)	17.03.1989
HAP /89 /16 /10	TA 071 548	Skerne and Wansford	HCC (J Dent)	17.03.1989
HAP /89 /16 /12	TA 071 547	Skerne and Wansford	HCC (J Dent)	17.03.1989
HAP /89 /16 /13	TA 073 546	Skerne and Wansford	HCC (J Dent)	17.03.1989
HAP /88 /1 /1	TA 0620 5430	Skerne and Wansford	HCC (J Dent)	27.07.1988
HAP /88 /1 /2	TA 0630 5438	Skerne and Wansford	HCC (J Dent)	27.07.1988
HAP /88 /1 /3	TA 0632 5425	Skerne and Wansford	HCC (J Dent)	27.07.1988
HAP /89 /21 /15	TA 051 562	Skerne and Wansford	HCC (E Dennison)	29.06.1989
HAP /89 /21 /16	TA 051 562	Skerne and Wansford	HCC (E Dennison)	29.06.1989
HAP /89 /21 /17	TA 050 562	Skerne and Wansford	HCC (E Dennison)	29.06.1989
TA 0654 /1 230	TA 0680 5495	Skerne and Wansford	NMR	07.05.1975
TA 0654 /1 228	TA 0680 5444	Skerne and Wansford	NMR	07.05.1975
TA 0654 /1 226	TA 065 542	Skerne and Wansford	NMR	07.05.1975
CFS 086	TA 0010 4530	Lockington	CUC	N/A
CFS 087	TA 0010 4530	Lockington	CUC	N/A
SE 9945 /1 284	TA 0024 4515	Lockington	NMR	08.06.1978
SE 9945 /1 285	SE 996 452	Lockington	RCHM NMR	08.06.1978
TA 0247 /1	TA 0270 4720	Lockington/Beswick	NMR	07.05.1975
TA 0145 /3 465	TA 0130 4560	Leconfield	NMR	18.07.1970
HAP 89 /21 /9/10	TA 062 517	Hutton Cranswick	HCC (E Dennison)	29.06.1989
HAP 89 /16 /15	TA 062 519	Hutton Cranswick	HCC (J Dent)	17.03.1989
TA 0652 /11 191	TA 0660 5203	Hutton Cranswick	NMR	09.08.1977
TA 0651 /4 113	TA 0670 5130	Hutton Cranswick	NMR	01.08.1975
TA 0551 /3 114	TA 0584 5130	Hutton Cranswick	NMR	01.08.1975
TA 0652 /8 93	TA 0610 5210	Hutton Cranswick	NMR	07.07.1977
TA 0652 /9 95	TA 0640 5200	Hutton Cranswick	NMR	07.07.1977
TA 0652 /9 97	TA 0670 5200	Hutton Cranswick	NMR	07.07.1977
TA 0652 /9 99	TA 0690 5270	Hutton Cranswick	NMR	07.07.1977
TA 0751 /1 210	TA 0706 5153	Hutton Cranswick	NMR	07.05.1975
TA 0720 /1 208	TA 0720 5110	Hutton Cranswick	NMR	07.05.1975
HAP /91 /30 /9	TA 012 478	Beswick	HCC (E Dennison)	10.01.1992
CIT 66	TA 032 486	Beswick	CU	13.05.1979
CIT 65	TA 038 480	Beswick	CU	13.05.1979

## Appendix D EA Lidar Metadata

Lidar Name	Tile Name	Date Flown	Resolution (m)
dtm_F0171998_20131115_20140409_mm_units.asc	TA1356	2014	1
dtm_F0189797_20160313_20160313_mm_units.asc	TA1660	2016	0.5
dtm_F0196588_20161129_20161129_mm_units.asc	TA0044	2016	2
dtm_F0054432_20051219_20051222_mm_units.asc	TA0654	2005	2
dtm_F0054450_20051219_20051222_mm_units.asc	TA0854	2005	2
dtm_F0054451_20051219_20051222_mm_units.asc	TA0856	2005	2
dtm_F0054471_20051219_20051222_mm_units.asc	TA1054	2005	2
dtm_F0054472_20051219_20051219_mm_units.asc	TA1056	2005	2
dtm_F0054491_20051219_20051219_mm_units.asc	TA1256	2005	1
dtm_F0056417_20051222_20051222_mm_units.asc	TA0034	2005	1
dtm_F0056418_20051222_20051222_mm_units.asc	TA0036	2005	2
dtm_F0009572_20000226_20000226_mm_units.asc	TA0434	2000	2
dtm_F0054386_20051219_20051222_mm_units.asc	TA0046	2005	2
dtm_F0054399_20051219_20051222_mm_units.asc	TA0246	2005	2
dtm_F0054400_20051219_20051222_mm_units.asc	TA0248	2005	2
dtm_F0054414_20051219_20051222_mm_units.asc	TA0448	2005	2
dtm_F0054415_20051219_20051222_mm_units.asc	TA0450	2005	2
dtm_F0054430_20051219_20051222_mm_units.asc	TA0650	2005	2
dtm_F0054431_20051219_20051222_mm_units.asc	TA0652	2005	0.5
dtm_F0091225_20080207_20080207_mm_units.asc	TA0146	2008	0.5
dtm_F0091574_20080122_20080207_mm_units.asc	TA0234	2008	0.5
dtm_F0091575_20080122_20080207_mm_units.asc	TA0235	2008	0.5
dtm_F0091585_20080122_20080207_mm_units.asc	TA0334	2008	0.5
dtm_F0091586_20080122_20080207_mm_units.asc	TA0335	2008	0.5
dtm_F0091597_20080122_20080207_mm_units.asc	TA0434	2008	0.5
dtm_F0091598_20080122_20080207_mm_units.asc	TA0435	2008	1
dtm_F0107884_20080915_20080915_mm_units.asc	TA1460	2008	1
dtm_F0056419_20051222_20051222_mm_units.asc	TA0038	2005	1
dtm_F0056420_20051222_20051222_mm_units.asc	TA0040	2005	1
dtm_F0056421_20051222_20051222_mm_units.asc	TA0042	2005	1
dtm_F0056428_20051222_20051222_mm_units.asc	TA0234	2005	1
dtm_F0056439_20051222_20051222_mm_units.asc	TA0434	2005	0.5
dtm_F0091221_20080207_20080207_mm_units.asc	TA0045	2008	0.5
dtm_F0091222_20080207_20080207_mm_units.asc	TA0046	2008	0.5
dtm_F0091224_20080207_20080207_mm_units.asc	TA0145	2008	1
dtm_F0127249_20090920_20090920_mm_units.asc	TA1660	2009	0.5
dtm_F0171755_20131115_20140409_mm_units.asc	TA0045	2014	0.5
dtm_F0171756_20131115_20140409_mm_units.asc	TA0046	2014	0.5
dtm_F0171767_20131115_20140409_mm_units.asc	TA0145	2014	0.5
dtm_F0171768_20131115_20140409_mm_units.asc	TA0146	2014	0.5

Lidar Name	Tile Name	Date Flown	Resolution (m)
dtm_F0171769_20131115_20140409_mm_units.asc	TA0147	2014	0.5
dtm_F0171783_20131115_20140409_mm_units.asc	TA0246	2014	0.5
dtm_F0171784_20131115_20140409_mm_units.asc	TA0247	2014	1
dtm_F0107890_20080915_20080915_mm_units.asc	TA1660	2008	1
dtm_F0115825_20090425_20090425_mm_units.asc	TA1660	2009	1
dtm_F0123625_20090425_20090429_mm_units.asc	TA1256	2009	1
dtm_F0123626_20090425_20090429_mm_units.asc	TA1258	2009	1
dtm_F0123635_20090425_20090429_mm_units.asc	TA1456	2009	1
dtm_F0123636_20090425_20090429_mm_units.asc	TA1458	2009	1
dtm_F0123637_20090425_20090429_mm_units.asc	TA1460	2009	1
dtm_F0123650_20090425_20090429_mm_units.asc	TA1660	2009	0.5
dtm_F0171883_20131115_20140409_mm_units.asc	TA0651	2014	0.5
dtm_F0171884_20131115_20140409_mm_units.asc	TA0652	2014	0.5
dtm_F0171885_20131115_20140409_mm_units.asc	TA0653	2014	0.5
dtm_F0171886_20131115_20140409_mm_units.asc	TA0654	2014	0.5
dtm_F0171910_20131115_20140409_mm_units.asc	TA0753	2014	0.5
dtm_F0171911_20131115_20140409_mm_units.asc	TA0754	2014	0.5
dtm_F0171912_20131115_20140409_mm_units.asc	TA0755	2014	0.5
dtm_F0171935_20131115_20140409_mm_units.asc	TA0854	2014	0.5
dtm_F0171804_20131115_20140409_mm_units.asc	TA0347	2014	0.5
dtm_F0171805_20131115_20140409_mm_units.asc	TA0348	2014	0.5
dtm_F0171828_20131115_20140409_mm_units.asc	TA0448	2014	0.5
dtm_F0171829_20131115_20140409_mm_units.asc	TA0449	2014	0.5
dtm_F0171853_20131115_20140409_mm_units.asc	TA0549	2014	0.5
dtm_F0171854_20131115_20140409_mm_units.asc	TA0550	2014	0.5
dtm_F0171855_20131115_20140409_mm_units.asc	TA0551	2014	0.5
dtm_F0171882_20131115_20140409_mm_units.asc	TA0650	2014	0.5
dtm_F0196589_20161129_20161129_mm_units.asc	TA0045	2016	0.5
dtm_F0196590_20161129_20161129_mm_units.asc	TA0046	2016	0.5
dtm_F0196594_20161129_20161129_mm_units.asc	TA0145	2016	0.5
dtm_F0196595_20161129_20161129_mm_units.asc	TA0146	2016	1
dtm_F0196794_20161214_20161214_mm_units.asc	TA1460	2016	1
dtm_F0196801_20161214_20161214_mm_units.asc	TA1660	2016	1
dtm_F0200690_20170525_20170525_mm_units.asc	TA1660	2017	1
dtm_F0204400_20171106_20171106_mm_units.asc	TA1660	2017	0.5
dtm_F0171936_20131115_20140409_mm_units.asc	TA0855	2014	0.5
dtm_F0171959_20131115_20140409_mm_units.asc	TA0955	2014	0.5
dtm_F0171960_20131115_20140409_mm_units.asc	TA0956	2014	0.5
dtm_F0171977_20131115_20140409_mm_units.asc	TA1056	2014	0.5
dtm_F0171994_20131115_20140409_mm_units.asc	TA1256	2014	0.5



**Appendix E Aerial Photographic & Lidar Assessment Interim Map Books**

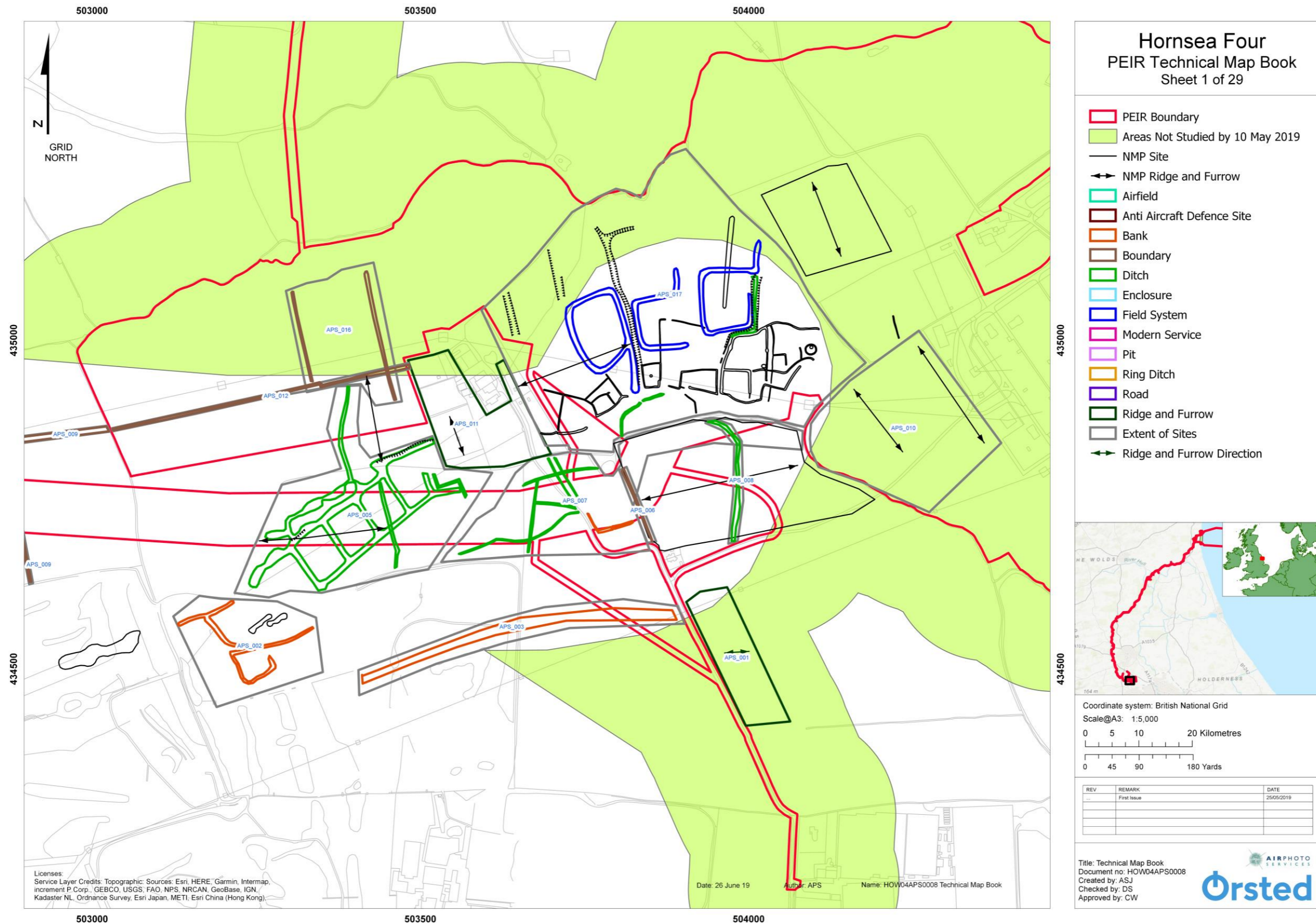


Figure 8: PEIR Technical Map Book Sheet 1 of 29 (not to scale).

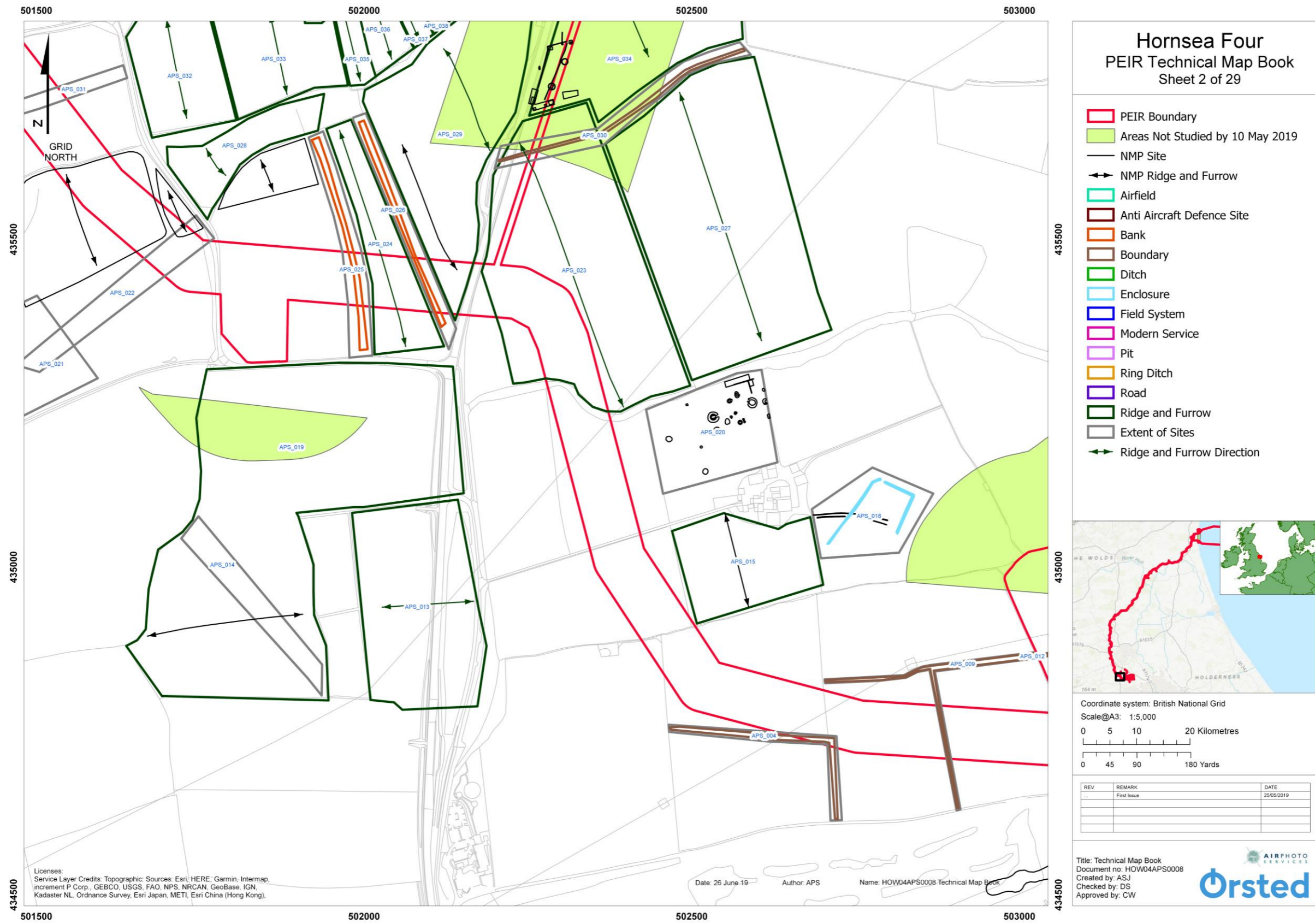


Figure 9: PEIR Technical Map Book Sheet 2 of 29 (not to scale).

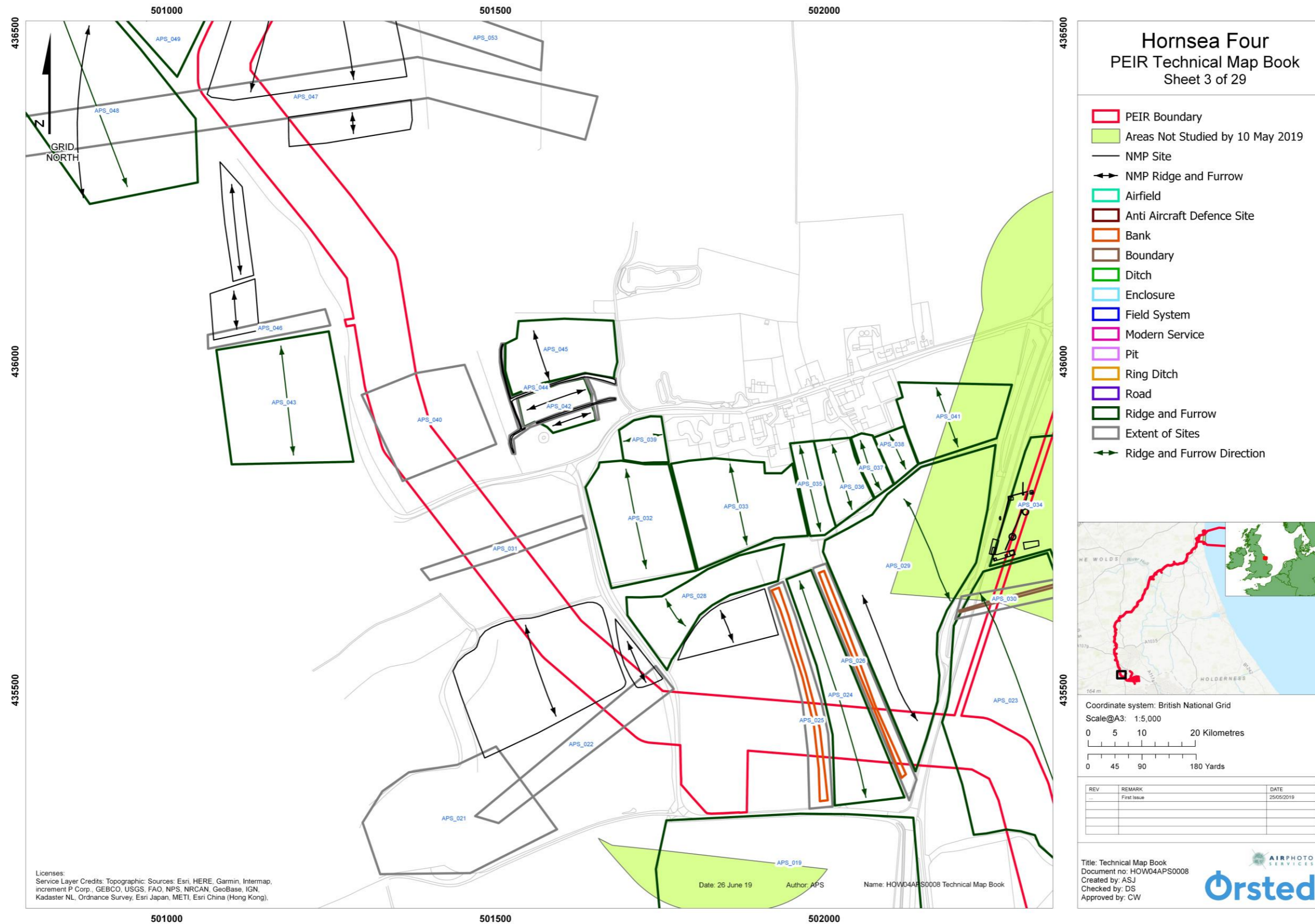


Figure 10: PEIR Technical Map Book Sheet 3 of 29 (not to scale).

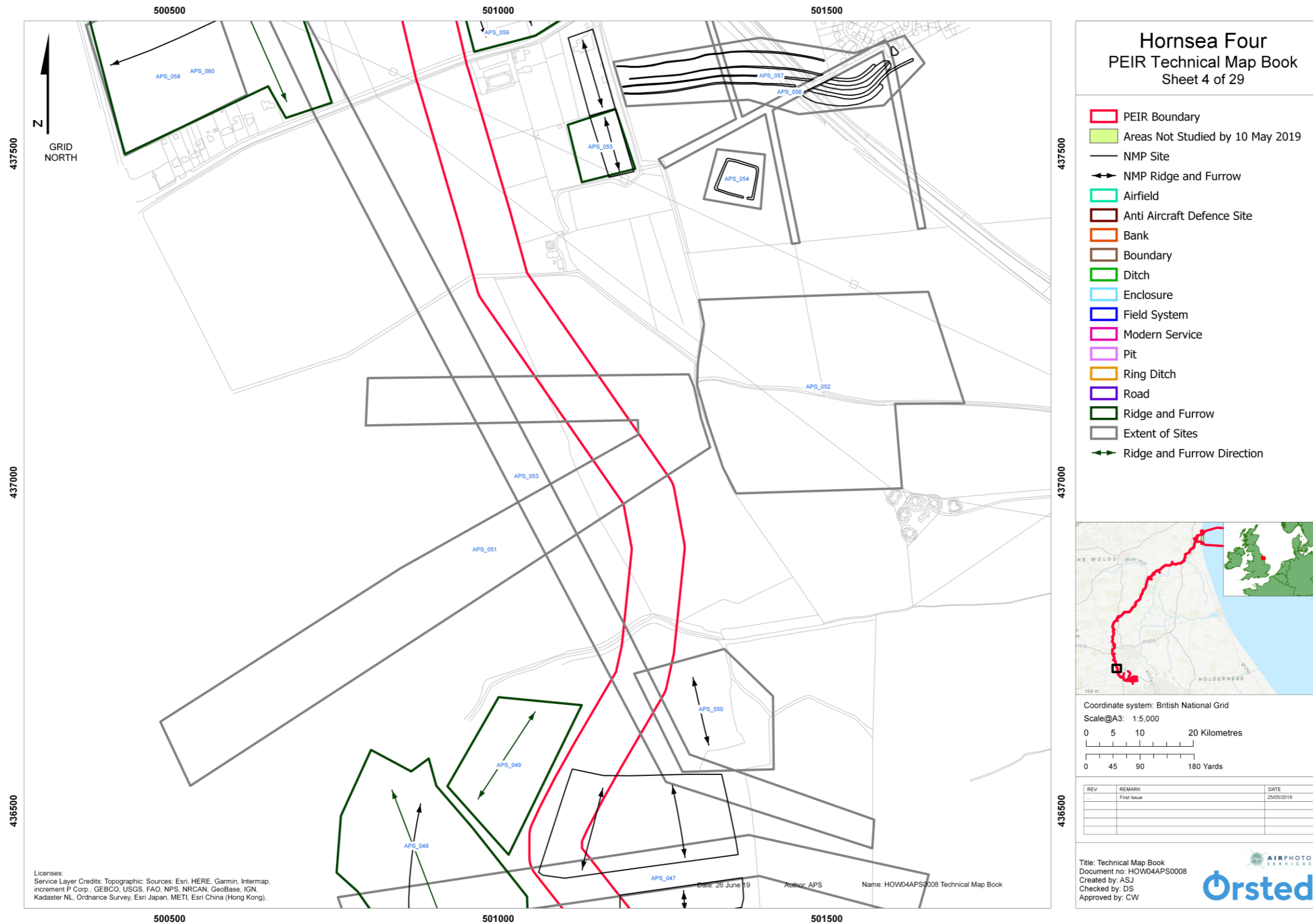


Figure 11: PEIR Technical Map Book Sheet 4 of 29 (not to scale).

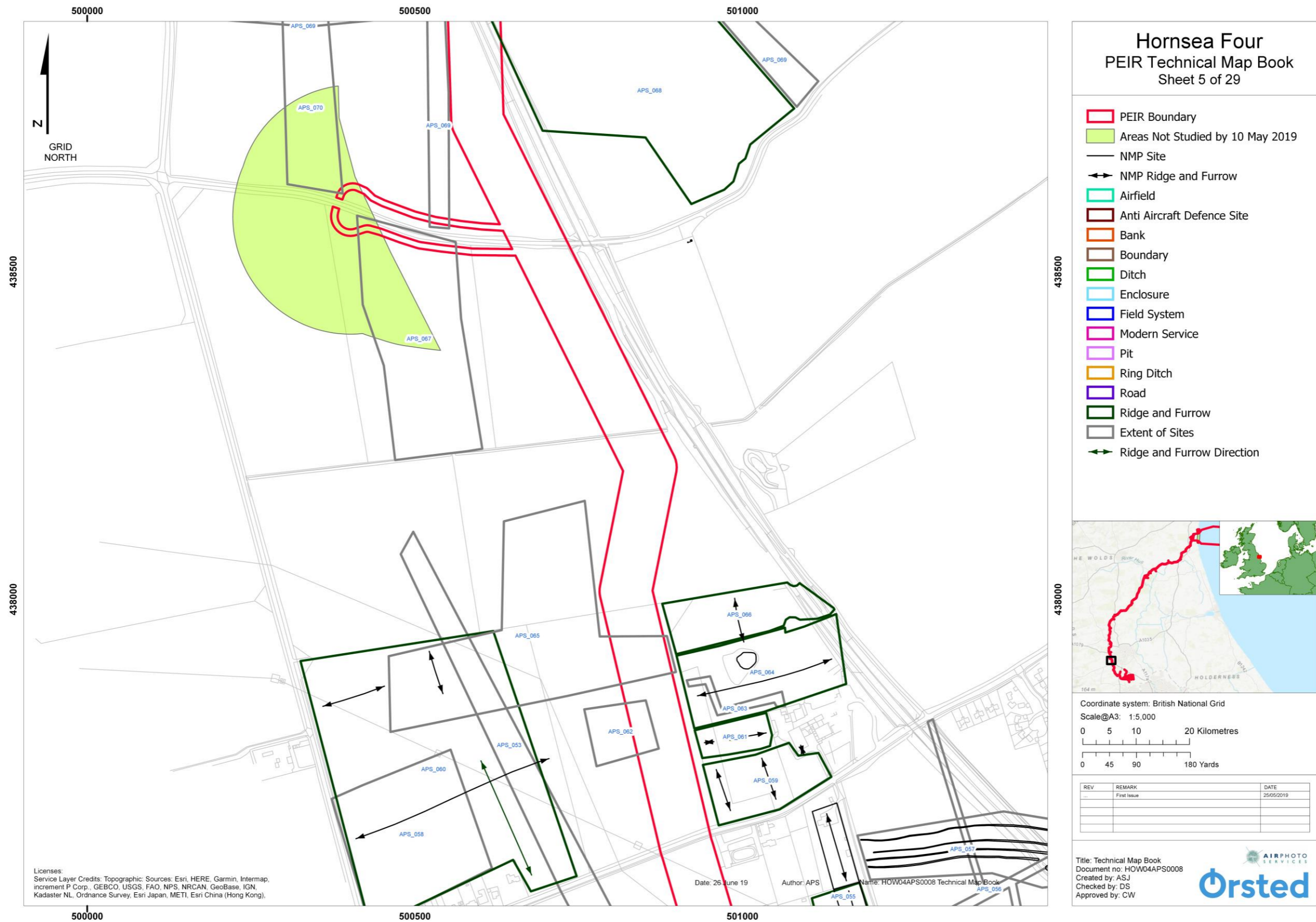


Figure 12: PEIR Technical Map Book Sheet 5 of 29 (not to scale).



Figure 13: PEIR Technical Map Book Sheet 6 of 29 (not to scale).



Figure 14: PEIR Technical Map Book Sheet 7 of 29 (not to scale).





Figure 15: PEIR Technical Map Book Sheet 8 of 29 (not to scale).

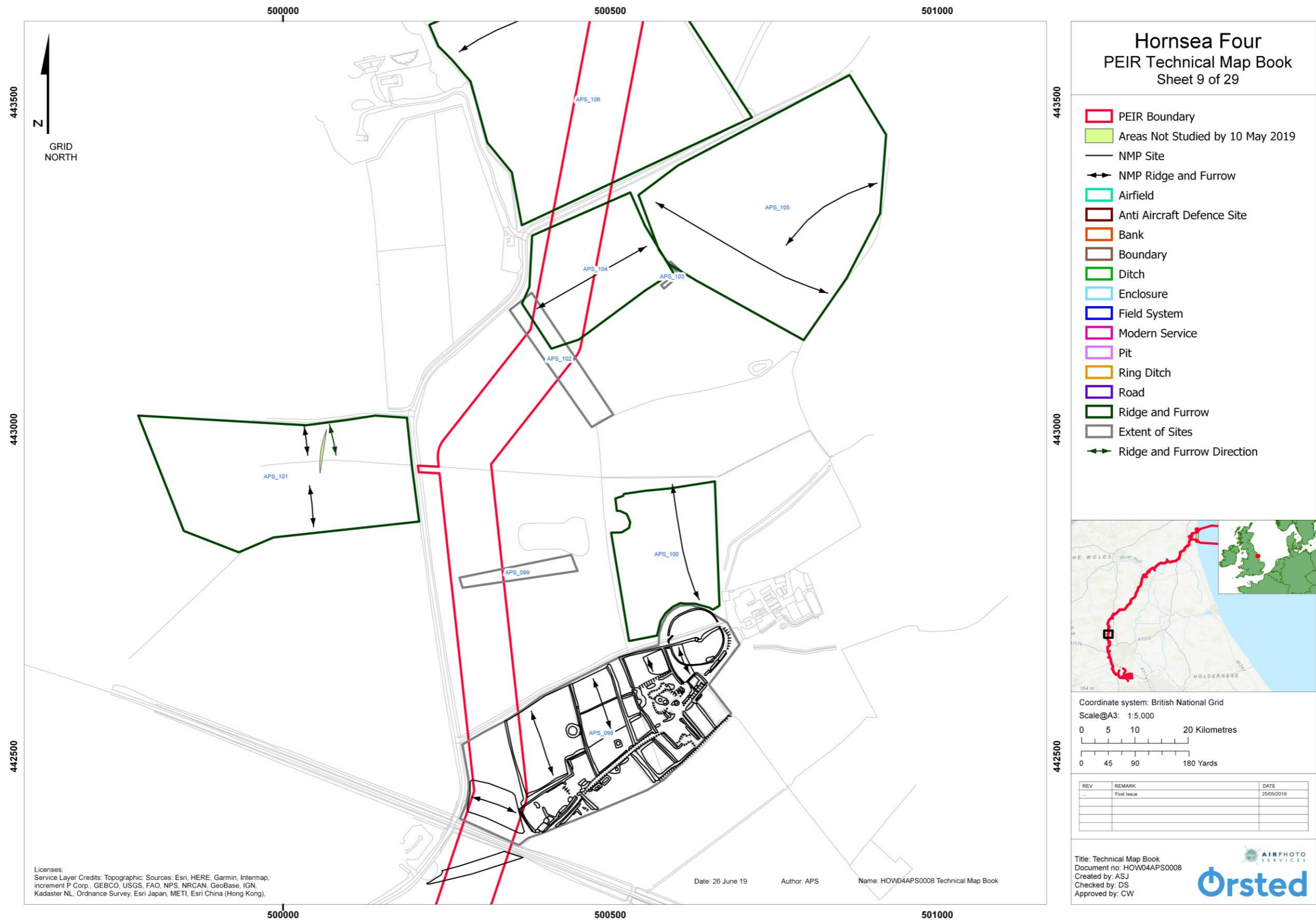


Figure 16: PEIR Technical Map Book Sheet 9 of 29 (not to scale).



Figure 17: PEIR Technical Map Book Sheet 10 of 29 (not to scale).

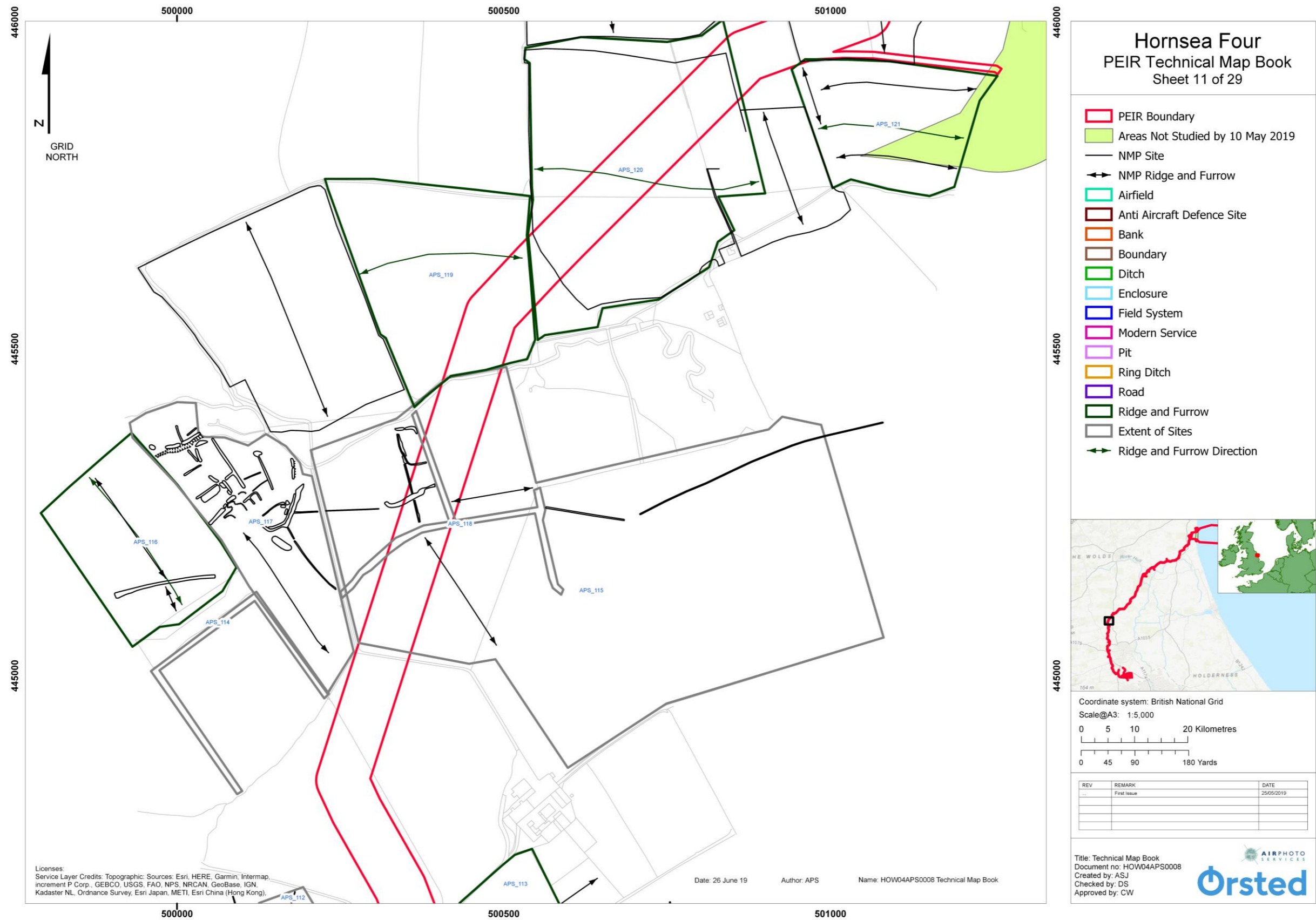


Figure 18: PEIR Technical Map Book Sheet 11 of 29 (not to scale).



Figure 19: PEIR Technical Map Book Sheet 12 of 29 (not to scale).

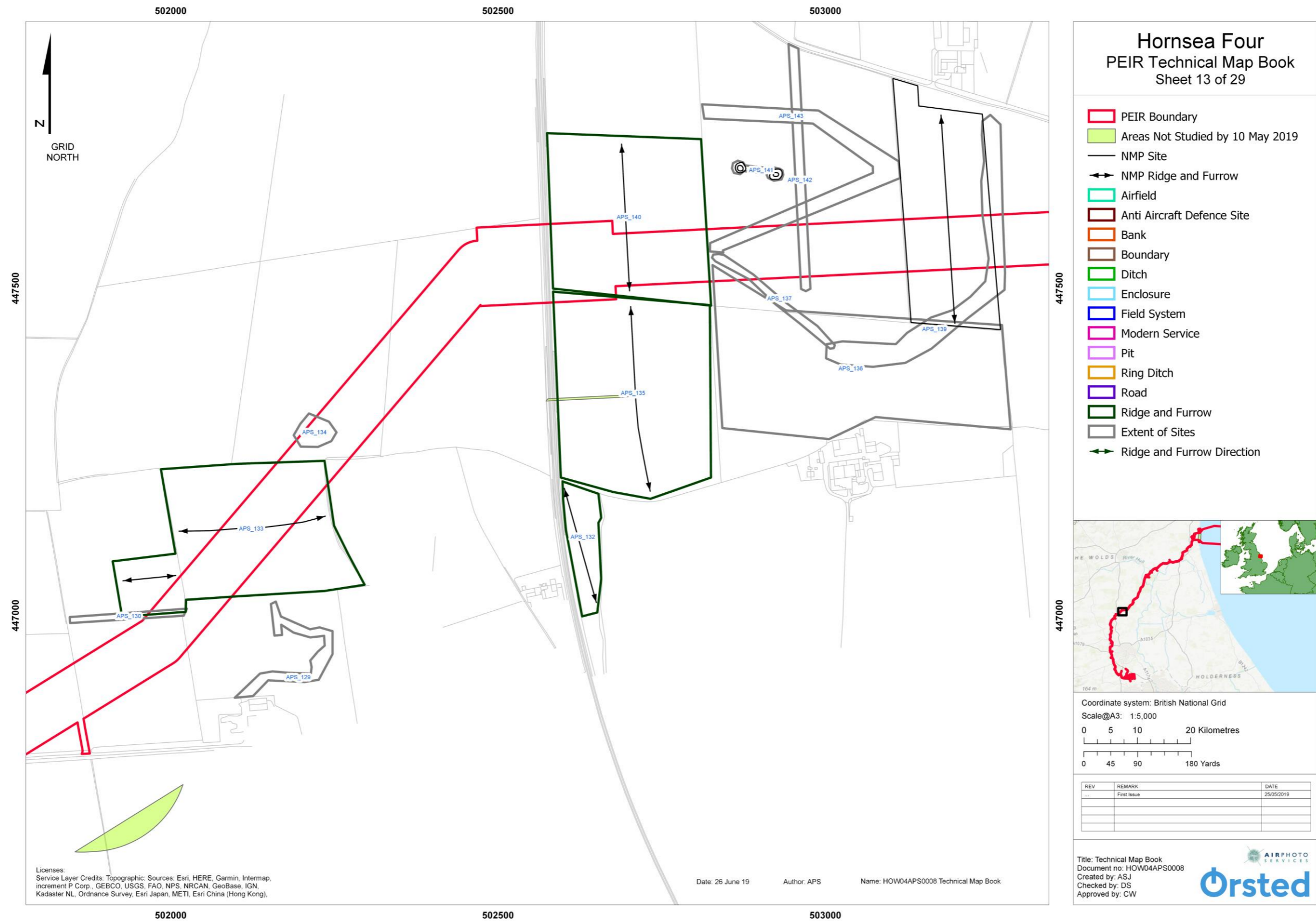


Figure 20: PEIR Technical Map Book Sheet 13 of 29 (not to scale).



Figure 21: PEIR Technical Map Book Sheet 14 of 29 (not to scale).

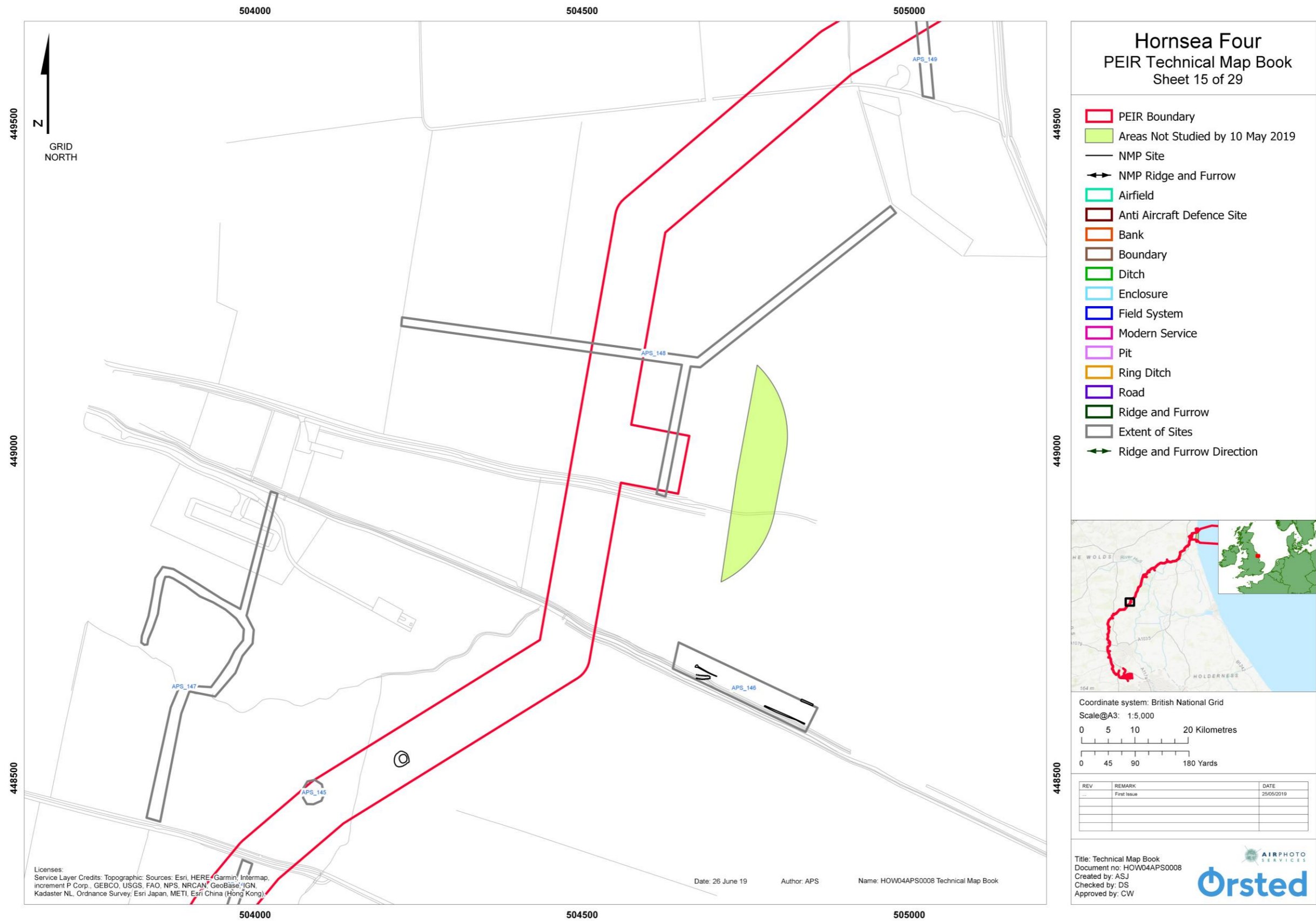


Figure 22: PEIR Technical Map Book Sheet 15 of 29 (not to scale).





Figure 23: PEIR Technical Map Book Sheet 16 of 29 (not to scale).



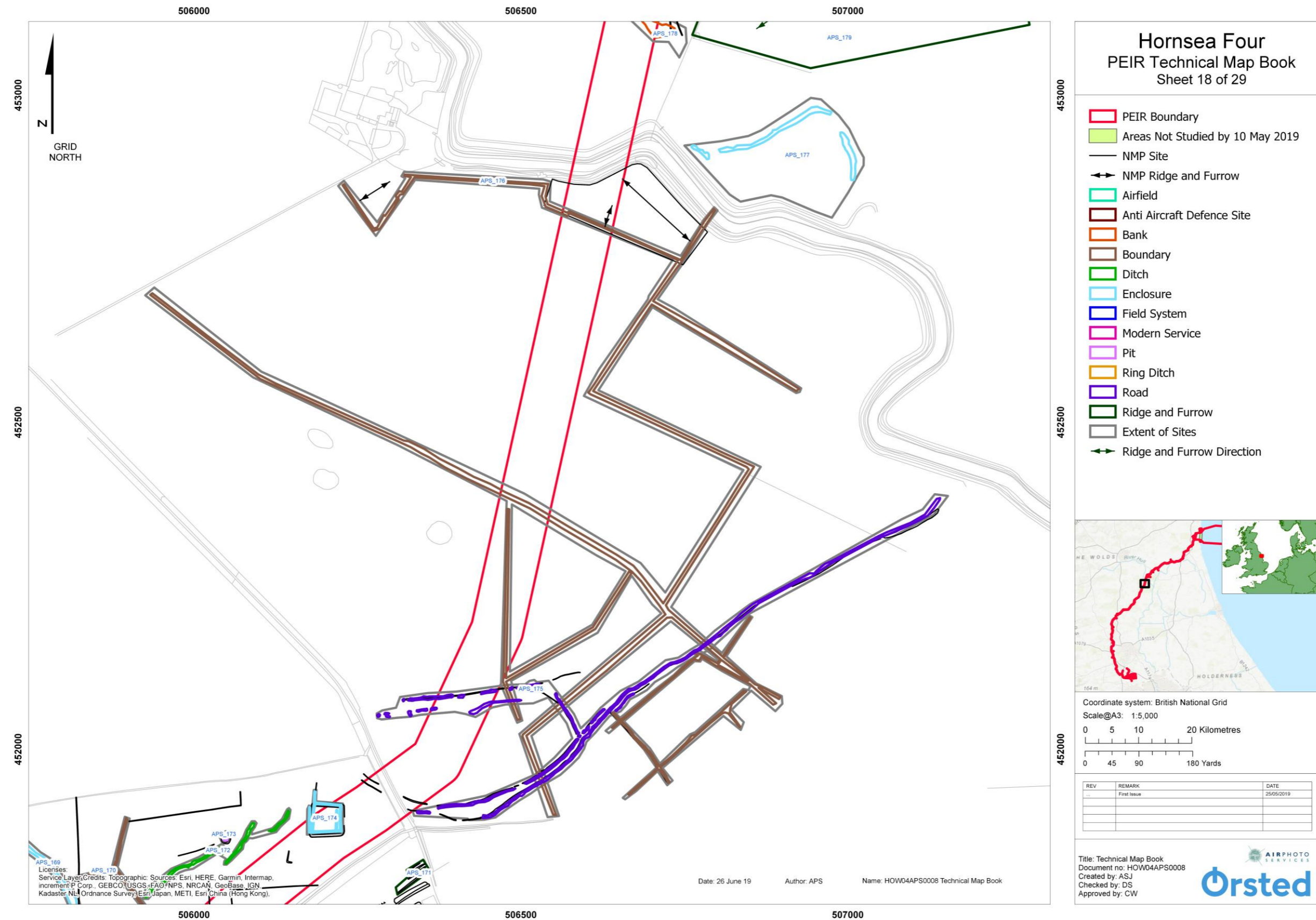


Figure 25: PEIR Technical Map Book Sheet 18 of 29 (not to scale).

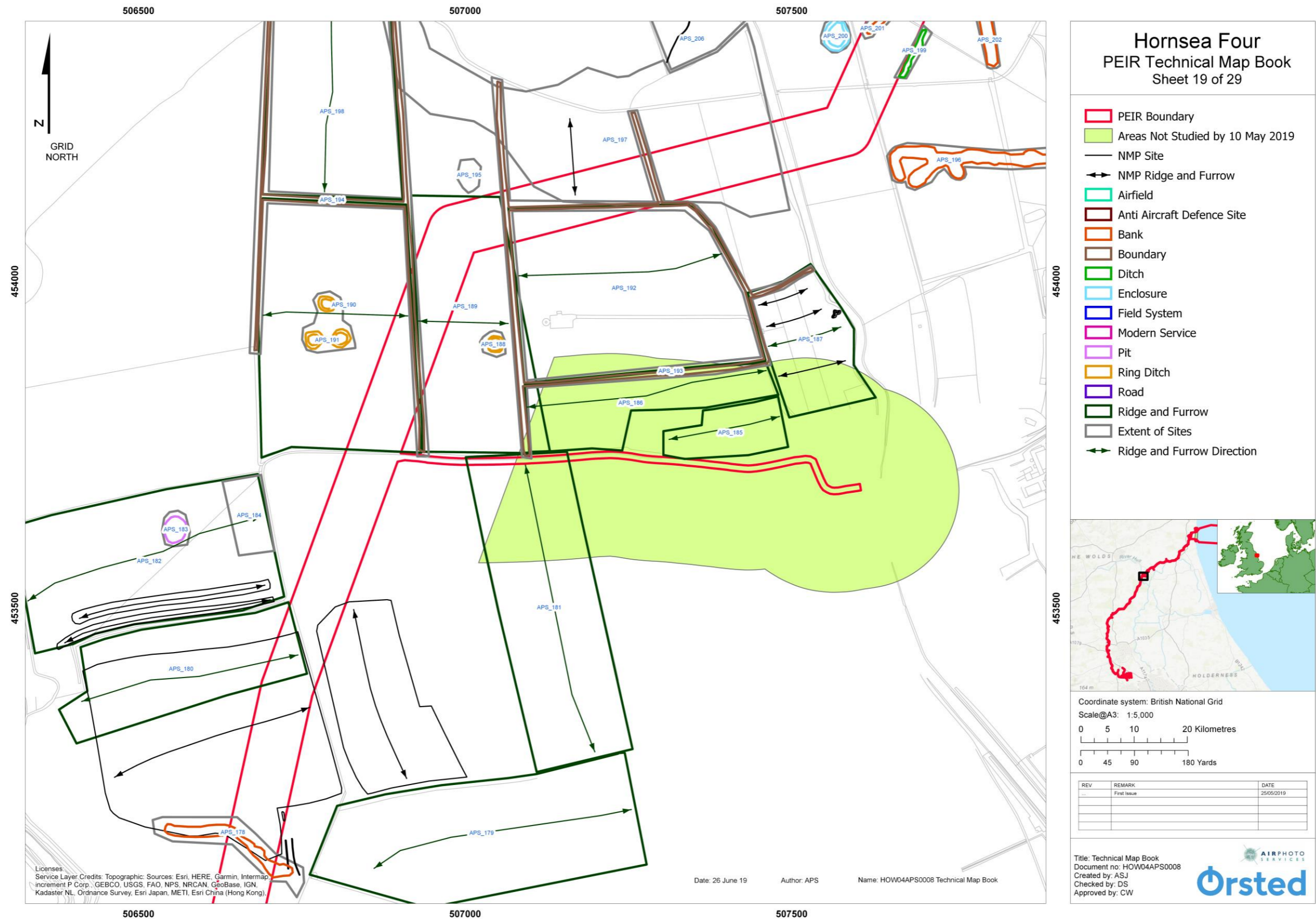


Figure 26: PEIR Technical Map Book Sheet 19 of 29 (not to scale).

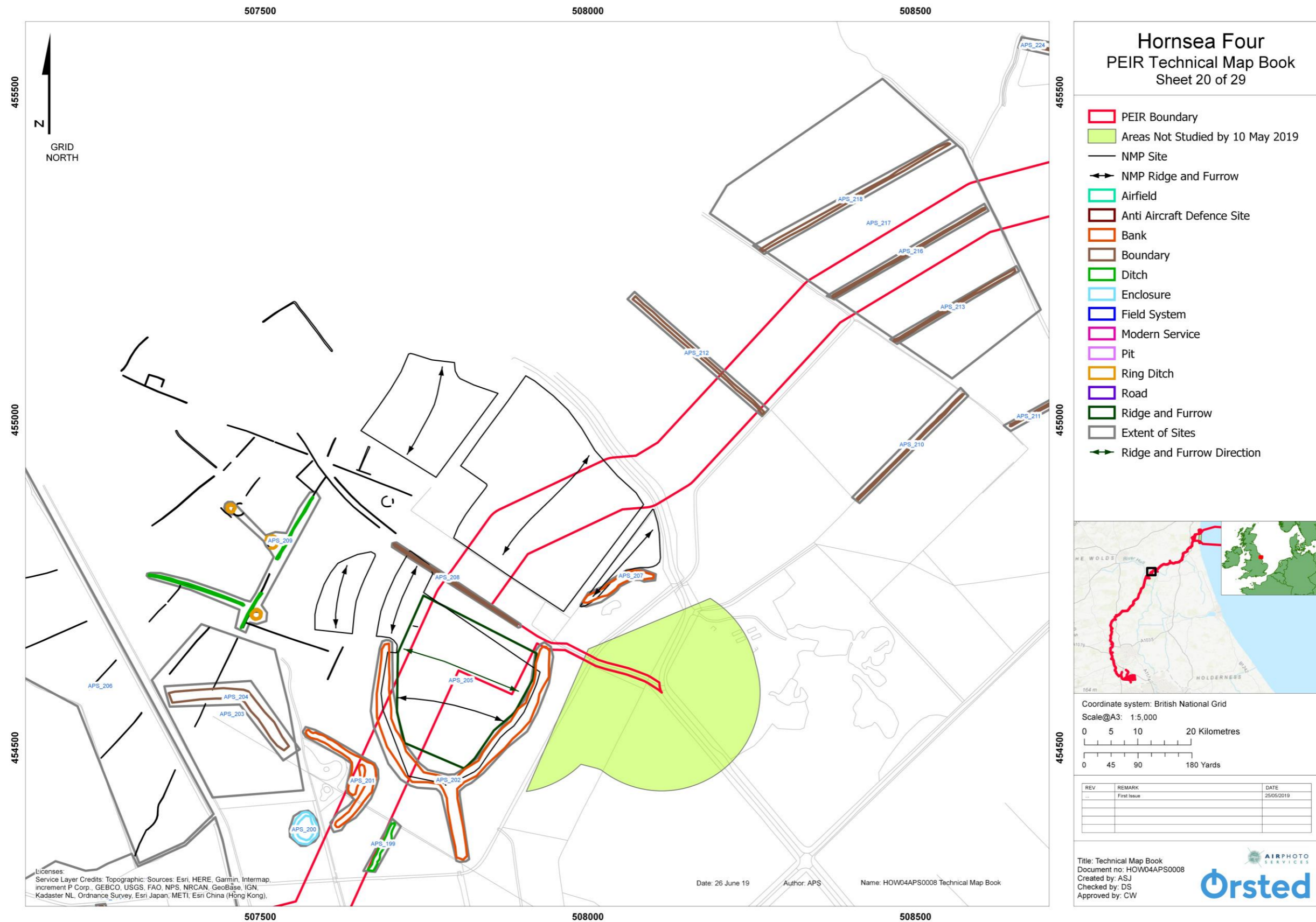


Figure 27: PEIR Technical Map Book Sheet 20 of 29 (not to scale).

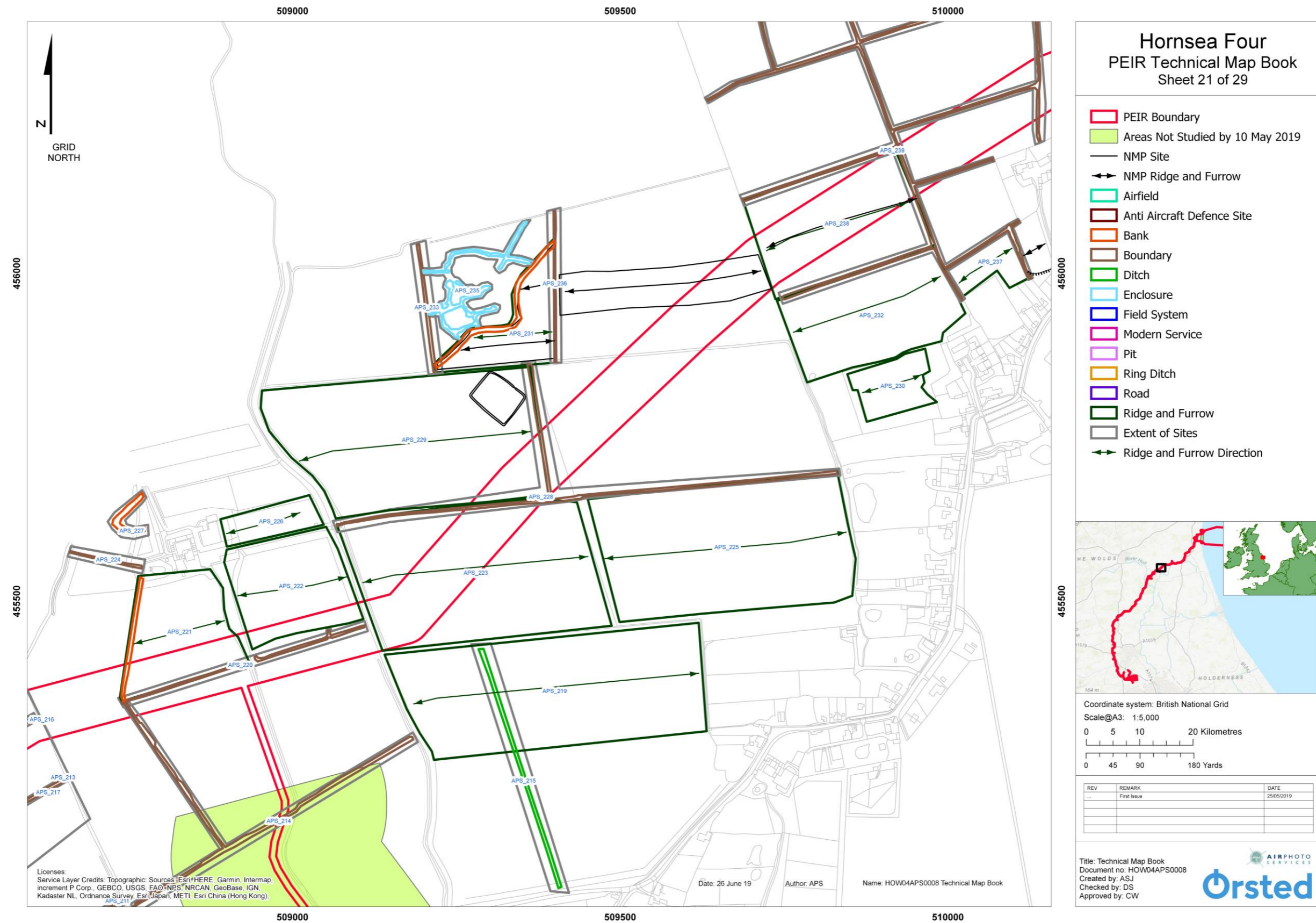


Figure 28: PEIR Technical Map Book Sheet 21 of 29 (not to scale).





Figure 30: PEIR Technical Map Book Sheet 23 of 29 (not to scale).



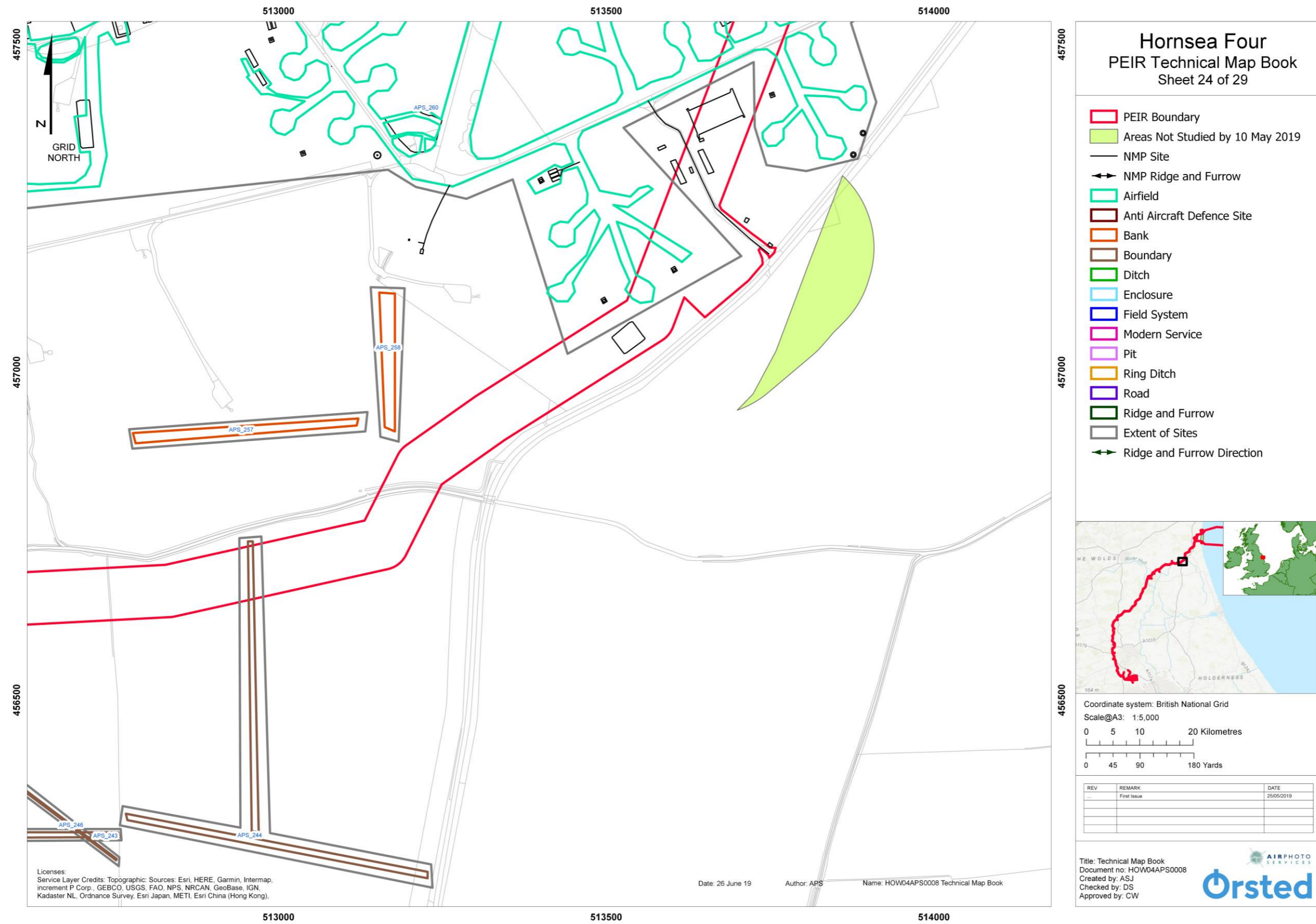


Figure 31: PEIR Technical Map Book Sheet 24 of 29 (not to scale).



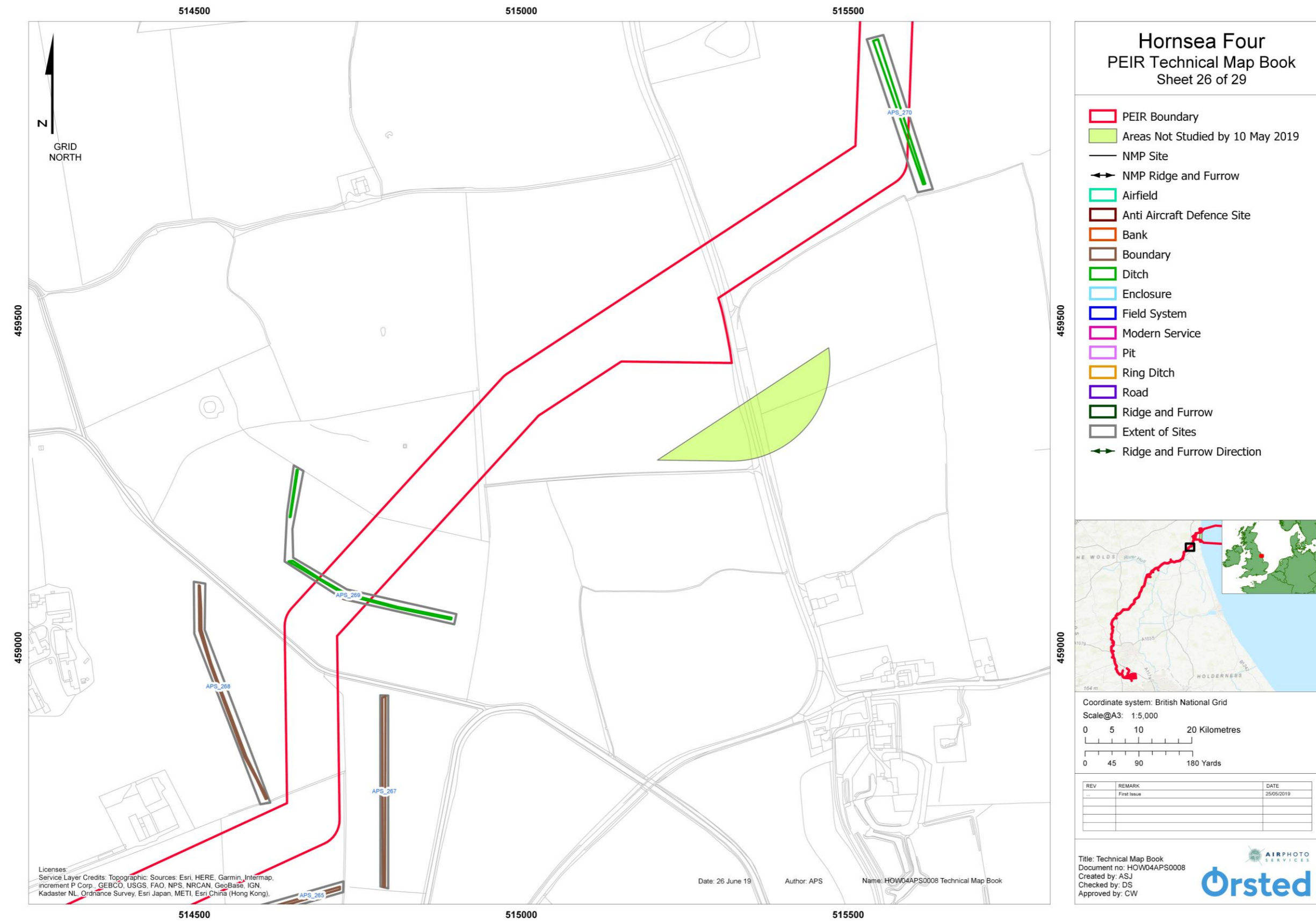


Figure 33: PEIR Technical Map Book Sheet 26 of 29 (not to scale).

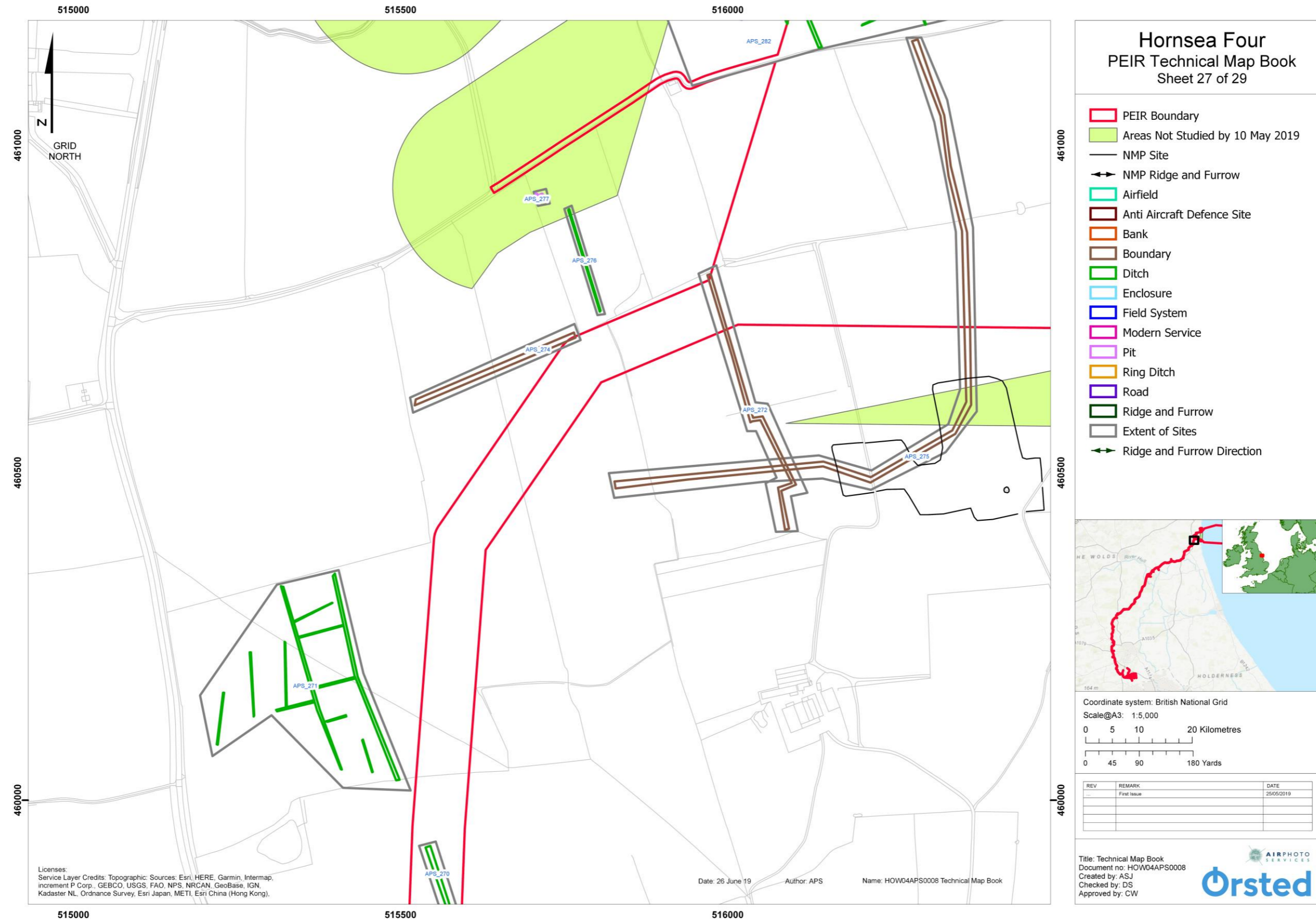


Figure 34: PEIR Technical Map Book Sheet 27 of 29 (not to scale).

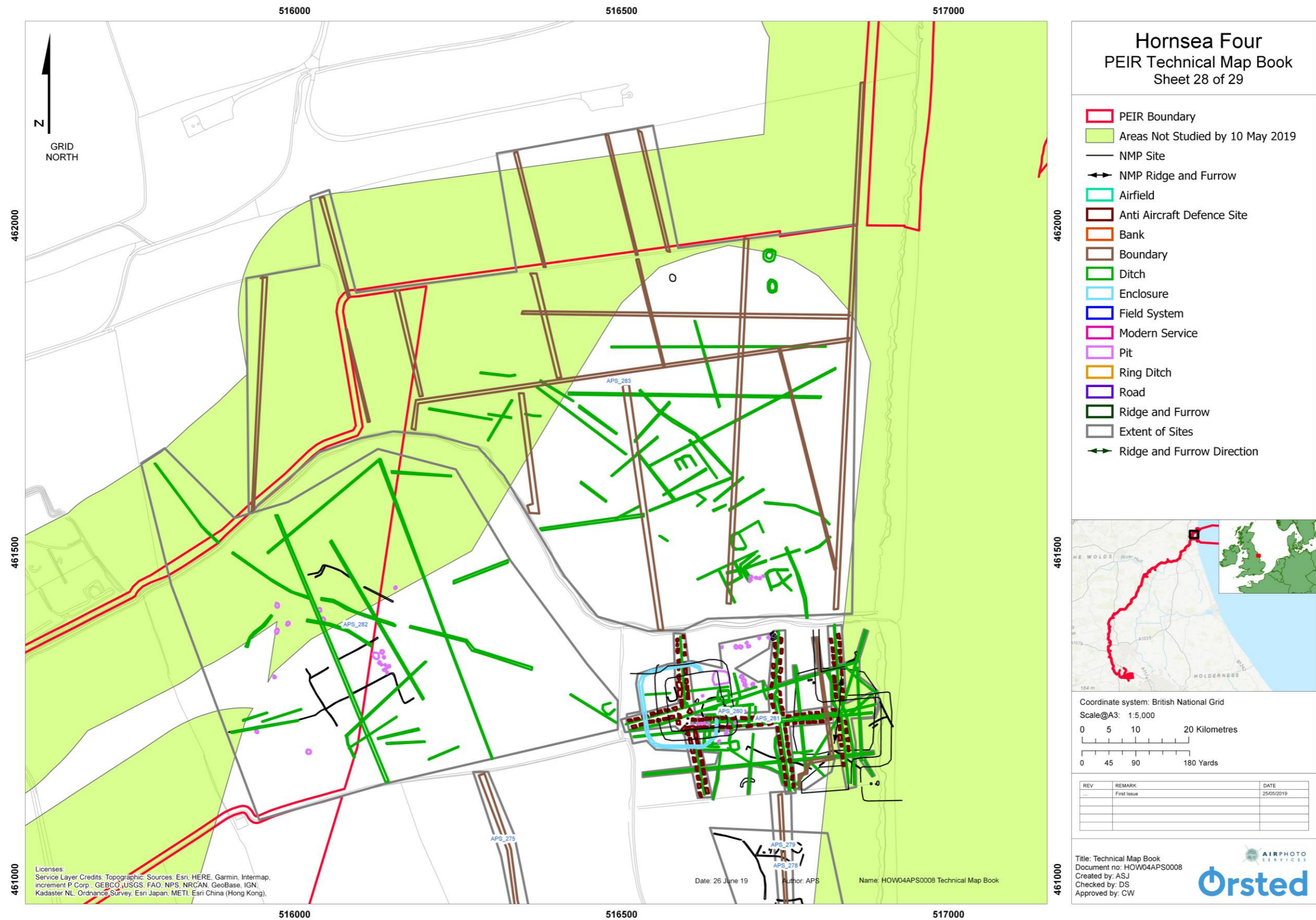


Figure 35: PEIR Technical Map Book Sheet 28 of 29 (not to scale).

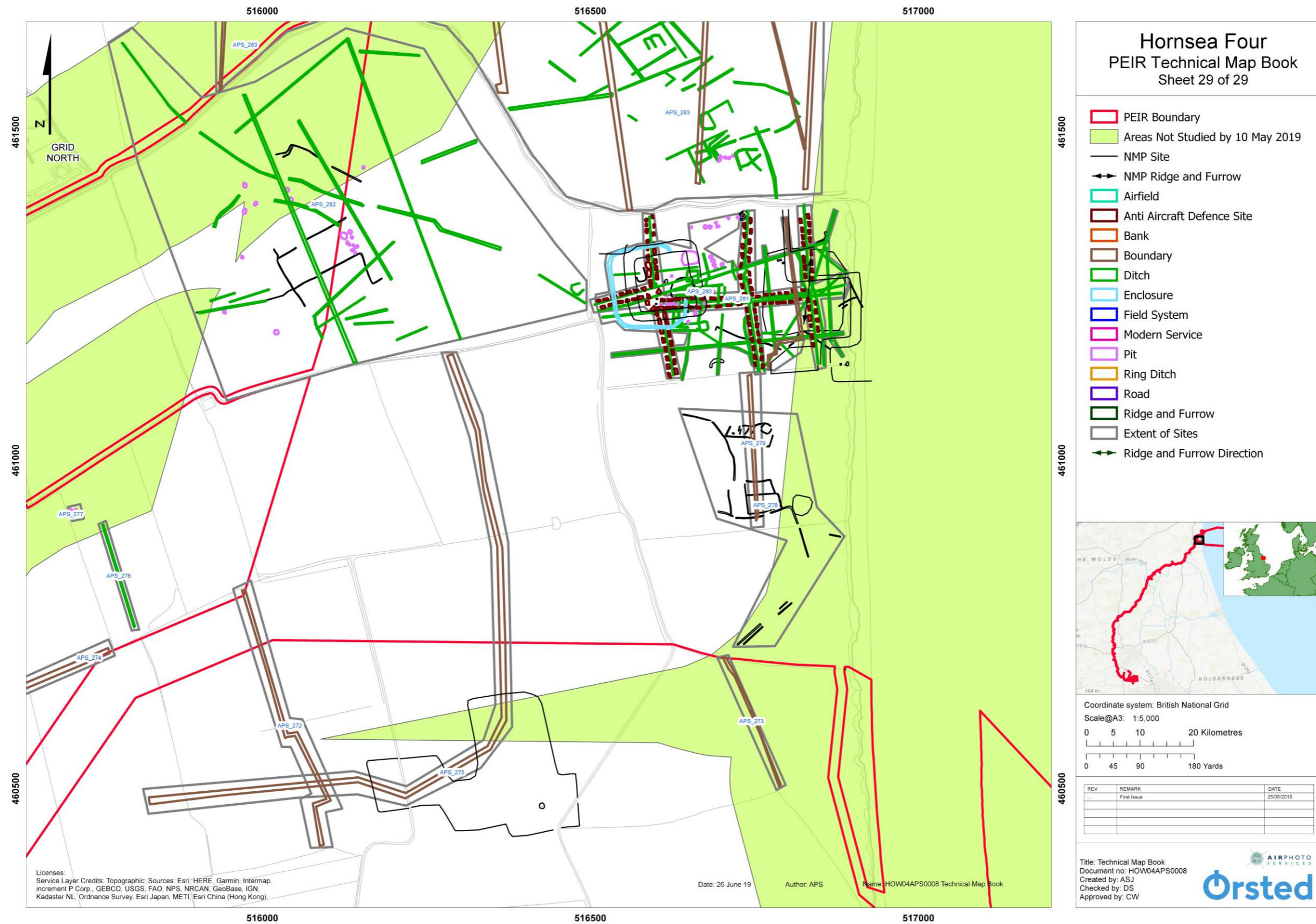


Figure 36: PEIR Technical Map Book Sheet 29 of 29 (not to scale).