

Scotland England Green Link 2 - English Onshore Scheme

Environmental Statement:
Volume 3 - Appendices

Appendix 9C - Aerial Photographic and
LiDAR Report



LIDAR AND AIR PHOTO
MAPPING, INTERPRETATION AND ANALYSIS
FOR ARCHAEOLOGICAL APPLICATIONS
www.alisondeegan.co.uk

Mapping and interpretation from LiDAR imagery and aerial photographs:
Scotland England Green Link Auburn Sands to Drax
East Riding and North Yorkshire

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Project number 2122005

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AECOM

Summary

This report concerns the results of interpretation and mapping of archaeological features from aerial imagery for the route of the Scotland England Green Link - SEGL2.

This survey consolidated the results from previous surveys undertaken or funded by Historic England and its predecessors with mapping and interpretation from more recent sources including LiDAR imagery, Google Earth aerial imagery and recent aerial reconnaissance by Historic England.

This work was commissioned from Alison Deegan, 6 Wain Close, South Milford, Leeds LS25 5AH by AECOM. This work is supplied in digital format and the above named party and their client may manipulate and/or reproduce the work as they wish providing the archaeological integrity of the work is not compromised. All reproductions of the work either in part, whole or combined with other works should clearly identify Alison Deegan as the author of the LiDAR and air photo interpretation and mapping.

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1 Introduction

1.1 Background

Alison Deegan was commissioned by AECOM, on behalf of National Grid, to map and collate archaeological data from air photo and LiDAR imagery and existing datasets on land within the proposed English Onshore Scheme (EOS) boundary (the Scheme), which forms part of the Scotland England Green Link 2 (SEGL2) project. This project proposes to 'export' electricity from Scotland to England by means of an undersea cable in the North Sea from Peterhead, Aberdeenshire, to Fraisthorpe, just south of Bridlington, and then via an onshore underground cable to a new converter station adjacent to Drax Power Station in North Yorkshire. This survey covered a minimum of 100m either side of the approximately 100m wide route corridor. It is one of a series of pre-determination investigations, including magnetometer and metal detector surveys, both of which will provide information in support of a future Town and Country Planning Act (TCPA) application.

1.2 Specification

There is a requirement for air photo and LiDAR mapping long the route of the Scotland England Green Link - SEGL2, to identify and record archaeological earthworks, cropmarks and soilmarks. Most of the route was covered by projects that had been undertaken or funded by Historic England and its predecessors. The earliest project had been completed in 1990 and the latest in 2012. This survey used this data, as supplied by Historic England, and augmented it with information from sources that post dated the relevant projects.

A brief overview of the uses of aerial photographs and LiDAR for archaeological remote sensing is provided in Appendices 1 and 2.

1.3 The survey area (see Figure 1)

The Survey Area runs from Auburn Sands on the North Sea coast of the East Riding of Yorkshire and terminates close to Drax Power station just inside the county of North Yorkshire. The greater part of the 65km route lies within the East Riding of Yorkshire.

For ease of data management and description the fields crossed by the route corridor and its immediate environs have been numbered sequentially east to west. These 'Field Numbers' are the primary identifiers and locators for all of the archaeological features identified along the route both by the previous projects and by the survey update. Please note that Field Numbers **225** to **244** are out of sequence and these are located between Field Numbers **25** and **35** towards to the eastern end of the route.

2 Methodology

This survey combines data from previous Historic England air photo mapping projects, some of which included examination of the LiDAR data available at the time, and new mapping undertaken for this survey, from more recent sources.

2.1 Data from the previous Historic England air photo mapping projects

Project Name (report reference)	Description	Original Data format	Action on HEA air photos for update	Other sources used for update
Yorkshire Coast and Humber Estuary RCZA (Deegan 2007)	<ul style="list-style-type: none"> digital project air photo only completed in 2007 	Vector data with attributes (inc. period, type, source, evidence)	Scans/copies of a selection of the Specialist (oblique) air photos taken in or after 2007 were examined on screen, rectified and mapped	<ul style="list-style-type: none"> Google Earth Bing Environment Agency LiDAR 1m DTM & DSM
None	NA	NA	Scans/copies of a selection of the Specialist (oblique) air photos of all dates were examined on screen, rectified and mapped	
East Riding Aggregates (Deegan 2008)	<ul style="list-style-type: none"> digital project air photo only completed in 2008 	Vector data with attributes (inc. period, type, sources, evidence)	Scans/copies of a selection of the Specialist (oblique) air photos taken in or after 2008 were examined on screen, rectified and mapped	
Chalk Lowlands and the Hull Valley (Evans et al 2012)	<ul style="list-style-type: none"> digital project air photo & LiDAR completed in 2012 	Vector data with attributes (inc. period, type, sources, evidence, latest condition)	Scans/copies of a selection of the Specialist (oblique) air photos taken in or after 2012 were examined on screen, rectified and mapped	
Yorkshire Wolds (Stoertz, 1997)	<ul style="list-style-type: none"> hand-drawn project air photo only completed in 1990 	Vector derived from scans of hand-drawn maps	Scans/copies of a selection of the Specialist (oblique) air photos taken in or after 1990 were examined on screen, rectified and mapped	
Vale of York Project (Kershaw 2001)	<ul style="list-style-type: none"> digital project air photo only completed in 2000 	Vector data with attributes (inc. period, type, source, evidence)	Scans/copies of a selection of the Specialist (oblique) air photos taken in or after 2000 were examined on screen, rectified and mapped	

The table above outlines the dates and original formats of the five projects covering the route corridor that were undertaken or funded by Historic England and its predecessors: English Heritage (EH) and the Royal Commission on the Historic Monuments of England (RCHME). It also summarises the sources consulted by this survey to bring these datasets up to date.

A short section of the SEGL2 route, approximately 1.3km in length, is not covered by any of these projects.

2.1.1 Preparing the existing project data

The data from the projects listed above was supplied by Historic England in shape file format. It was assembled in GIS and trimmed down to the outer edges of the fields that were intercepted by the route corridor.

Two columns were added to this data, one for the HER unique identified and one for the Field Number (see Section 1.3). The HER UID column was populated by a manual comparison of the Historic England mapping and the HER points, lines and polygons. The Field Number column was automatically updated with a 'Is Within' query and then checked manually.

2.2 The update survey

New mapping was generated from a selection of HEA oblique air photos, the Environment Agency 1m resolution LiDAR imagery, which was not available at the time of most of the Historic England projects, Google Earth and Bing imagery. In general only features lying within or running through the route corridor and a 250m zone to either side were mapped and recorded. Each source of imagery required different processes and these are outlined in the following sections. The results from these sources were combined into a single new GIS dataset.

2.2.1 Selecting and mapping from Historic England Air Photos

A list of all of the air photos currently held by Historic England Archive that cover the route was obtained (Coversearch reference no. 130535). The air photos taken specifically for archaeological or heritage purposes, known as the Specialist Collection, were plotted by National Grid Reference against the route and the mapping from the previous projects in the GIS.

These air photos were then filtered down to those located directly within the route corridor and those that post-dated the relevant project. A photo was selected for each field. Where photos of different dates were available for any one field then photos of from each date were selected. It was not possible to view the actual images prior to selection.

Forty-two air photos were selected and copies were ordered from Historic England. These are listed in Appendix 3.

Once received the digital copies of the Historic England air photos were examined on screen and then geo-rectified to British National Grid. This was achieved with control points derived from the LiDAR visualisations using the Bradford Aerial Photographic Rectification Programme, AERIAL5.36. AERIAL5.36 gives error readings for each control point, where 5 or more control points are used. In most cases errors of within $\pm 3\text{m}$ were achieved for the control points, however error readings within $\pm 3\text{m}$ may not reflect the on-the-ground positional accuracy of the features mapped since these tend to lie between rather than at the control points.

The geo-rectified images were added to GIS and the relevant features were digitised into a the new dataset.

2.2.2 Environment Agency LiDAR imagery

The Environment Agency LiDAR data was processed through the Relief Visualisation Toolbox 2.2.1 to produce multi-direction hill shade and simple local relief model visualisations. See Appendix 2 for an explanation of these visualisations. The resulting raster images were imported into GIS for examination and digitisation of archaeological features into the new dataset.

2.2.3 Bing imagery

The BING imagery is available as a direct feed to the GIS. It was examined on a field by field basis and archaeological features within the route corridor or 100m buffer zone to either side were digitised directly into the new dataset.

2.2.4 Google Earth imagery

The Google Earth imagery was examined on a field by field and year by year basis. Simple features were digitised within Google Earth and then transferred to GIS as KMZ files and then edited and appended to the new dataset. Where the cropmarks and soilmarks were more complex the relevant image was exported at the highest possible resolution and then geo-rectified to British National Grid using AERIAL5.36. The resultant transformed images were added to GIS and the relevant archaeological features were digitised into the new dataset.

2.2.5 HER data

All of the mapping, both from the existing projects and the update survey was cross-reference to the East Riding HER and North Yorkshire HER monument records provided by AECOM for this purpose.

2.3 Consolidating the datasets

The data for this survey is compiled into three separate GIS files, to maintain the integrity of the tagged data, which varies in content and format, and the mapping where datasets overlap. These files and their contents are detailed in Appendix 4.

The datasets are accompanied by brief textural description of the features in each field and their spatial relationship to the route corridor (see Appendix 5).

The section below highlights the more significant intersections between the route corridor and the features identified by this survey. It focus on those features lying directly within the route corridor and a 100m buffer zone to either side.

3 Results

3.1 Scheduled Monuments

An element of the route corridor, a HVDC 40m swathe, intersects with Scheduled Monument **1012203** in Field No. **127**. This 'Oval barrow 750m north of Wallis Grange' is a Neolithic earthwork.

Field nos **131**, **132** and **133** contain a cemetery group of bowl barrows that have Scheduled Monument protection: **1007501**, **1012088** to **1012092**, **1012100**, **1012102**, **1012103**, **1013672** and **1014256**. One of these, **1012088** 'Bowl Barrow 550m north of High Wold Farm' lies within the 100m buffer around the route corridor. The other Scheduled Monument in these fields lie outside of the 100m buffer zone.

3.2 Neolithic, Bronze Age and Iron Age burial monuments

The fields listed in the table below contain known or possible burial monuments of Neolithic, Bronze Age or Iron Age date.

Neolithic, Bronze Age and Iron Age monuments within the route corridor			
SELG2 FIELD NO.	Monument period and type	HER	NRHE
7	LATER PREHISTORIC OR ROMAN ROUND BARROW/ROUND HOUSE(DOMESTIC)	-	-
8	IRON AGE SQUARE BARROW	-	
20	IRON AGE SQUARE BARROW	MHU9974	
92	BRONZE AGE ROUND BARROW	MHU8124	-
113	IRON AGE SQUARE BARROW	-	-
114	LATER PREHISTORIC OR ROMAN RING DITCH	-	-
127	NEOLITHIC OVAL BARROW	MHU9469	-
129	IRON AGE SQUARE BARROW	MHU10895	-

Neolithic, Bronze Age and Iron Age monuments within the 100m buffer zone but not in the route corridor			
SELG2 FIELD NO.	Monument period and type	HER	NRHE
7	BRONZE AGE ROUND BARROW /NATURAL FEATURE	-	-
114	IRON AGE SQUARE BARROW	MHU22144	-
127	BRONZE AGE RING DITCH	MHU9468	-
129	IRON AGE SQUARE BARROW	MHU10895	-
130	BRONZE AGE ROUND BARROW	-	-

Fields **32, 59, 34, 72,115, 132,133** also contain monuments of these types but they all lie more than 100m from the route corridor.

3.3 Later prehistoric and/or Roman settlements

The following fields contain cropmarks and/or soilmarks that suggest substantial Iron Age and/or Roman settlements, elements of which lie within the route corridor or the 100m buffer zone.

Later prehistoric and/or Roman settlements within the route corridor &/or 100m buffer zone			
SELG2 FIELD NO.	Monument period and type	HER	NRHE
6 7	IRON AGE/ROMAN FIELD SYSTEM, ENCLOSURE, RING DITCH Extensive field system, ring ditches may indicate open settlement	MHU340	-
35	IRON AGE/ROMAN FIELD SYSTEM, ENCLOSURE, RING DITCH Extensive field system and enclosures on a low ridge known as Warren Hill overlooking Kelk Beck	MHU15523	1549761 1549650
39 40 41	LATER PREHISTORIC OR ROMAN PALISADE ENCLOSURE IRON AGE/ROMAN ENCLOSURE, HUT CIRCLE/ROUNDHOUSE, BOUNDARY Series of enclosures, contemporary or sequence of settlement shift	MHU4112	76269 1549677 1549655
59	IRON AGE/ROMAN ENCLOSURE	MHU8204	1088033
122	IRON AGE/ROMAN ENCLOSURE, BOUNDARY A large rectilinear enclosure and linear settlement arranged along a long sinuous boundary	-	-
129	IRON AGE/ROMAN ENCLOSURE, BOUNDARY, TRACKWAY The northern elements (in so far as it is visible on the air photos) of an extensive linear settlement.	MHU6567	-

Later prehistoric and/or Roman settlements within the route corridor &/or 100m buffer zone			
142 143 144 145	IRON AGE/ROMAN RECTILINEAR ENCLOSURE, BOUNDARY, TRACKWAY HUT CIRCLE/ROUND HOUSE Extensive field system with trackways and enclosure running along the north side of Beils Beck	MHU7347	-
153 154	IRON AGE/ROMAN RECTILINEAR ENCLOSURE Eight or more conjoined rectilinear enclosures	MHU10836	1249720
159 161 162	IRON AGE/ROMAN RECTILINEAR ENCLOSURE, BOUNDARY, HUT CIRCLE/ROUND HOUSE Large enclosure, perhaps indicating a high status Roman settlement, and adjoining rectilinear enclosures.	MHU1161	1248956
179	ROMAN SETTLEMENT Extensive and orderly arrangement of rectilinear enclosures and boundary ditches on Howden Common	MHU3198	158179

The fields listed below all contain more fragmentary or discrete cropmark or soilmark evidence of Iron Age or Roman settlement (eg single enclosures), field systems or trackways, However the elements that are visible on the air photos may only represent a fraction of what survives below ground.

Other later prehistoric &/or Roman features in the route corridor &/or 100m buffer zone			
SELG2 FIELD NO.	SELG2 FIELD NO.	SELG2 FIELD NO.	SELG2 FIELD NO
2	62	119	156
4	63	126	158
8	100	128	160
19	101	135	164
21	102	136	174
39	110	140	177
42	111	152	
54	113	155	

Other fields may also contain monuments of this date but the visible elements lie more than 100m from the route corridor.

3.4 **Other Roman monuments**

The fields listed below contain air photo or LiDAR evidence for other Roman monuments of note, elements of which lie within the route corridor or the 100m buffer zone.

Other Roman monuments within the route corridor &/or 100m buffer zone			
SELG2 FIELD NO.	Monument period and type	HER	NRHE
142	ROMAN ROAD	MHU63	
153	ROMAN RECTILINEAR ENCLOSURE/TEMPORARY CAMP	-	1249720

3.5 Medieval and post medieval settlement and other sites

The fields listed below contain cropmark, soilmark or earthwork evidence of medieval to post medieval settlement, elements of which lie within the route corridor or the 100m buffer zone.

Medieval and post medieval settlement within the route corridor and/or 100m buffer zone			
SELG2 FIELD NO.	Monument period and type	HER	NRHE
35	EARLY MEDIEVAL ENCLOSURE Basis for dating not known	-	1549650
180	MEDIEVAL MOAT Mostly outside of the 100m buffer zone but unseen element may continue within	MHU1760	59473
226	MEDIEVAL/POST MEDIEVAL SETTLEMENT Well preserved earthworks at Gransmoor	MHU3255	80854
237 238 239	MEDIEVAL/POST MEDIEVAL SETTLEMENT Great Kelk earthworks, better preserved in field 238	MHU8066	1460723 1461213

The fields listed below contain well-preserved earthwork evidence of medieval to post medieval ploughing and other features associated with subsistence and farming, elements of which lie within the route corridor or the 100m buffer zone. This list does not include those fields where the remains do not intersect the road corridor or 100m buffer, or where the earthworks have been truncated or completely levelled. Earlier features may be sealed beneath well-preserved earthworks.

Other well-preserved medieval and post medieval earthworks within the route corridor and/or 100m buffer zone			
SELG2 FIELD NO.	Monument period and type	HER	NRHE
7	MEDIEVAL RIDGE AND FURROW Fragments of well preserved earthwork plough ridges	-	-
65	MEDIEVAL STOCK ENCLOSURE	MHU8208	1548035
93	MEDIEVAL RIDGE AND FURROW Well preserved earthworks	MHU22169	1548152
96	POST MEDIEVAL RIDGE AND FURROW Well preserved plough ridges in woodland	-	-
182	MEDIEVAL RIDGE AND FURROW Well preserved plough ridges	MHU22505	1221208

Other well-preserved medieval and post medieval earthworks within the route corridor and/or 100m buffer zone			
225	MEDIEVAL RIDGE AND FURROW POST MEDIEVAL PILLOW MOUNDS Well preserved earthwork to the immediate north of the Gransmoor settlement remains		1461220

3.6 Other notable post medieval features

The following fields contain evidence for post medieval features of known and specialised function which lie within the route corridor or the 100m buffer zone. This list does not include those fields where the remains do not intersect the road corridor or 100m buffer.

Notabl post medieval sites within the route corridor and/or 100m buffer zone			
SELG2 FIELD NO.	Monument period and type	HER	NRHE
35	POST MEDIEVAL STOCK ENCLOSURE	-	1549775
38	POST MEDIEVAL REDOUBT	MHU4084	79260
56	POST MEDIEVAL MILL RACE	-	-
185	POST MEDIEVAL LANDSCAPE PARK/BOUNDARY Visible as cropmarks		
191	POST MEDIEVAL RETTING PITS Visible as cropmarks	MHU22306	1265162
192 193	POST MEDIEVAL TRACKWAY, WARPING DRAIN, FLOOD DEFENCES WARPING DRAIN FLOOD DEFENCES HOLLOWWAY		1300917

3.7 Second World War features

Most of the features of Second World War date are located on the coast in fields **1** and **2**. These include some structural elements that still survive such as a pill box (**MHU21027**) and tank trap cubes on the foreshore (**MHU21016**).

According to the Vale of Yorkshire project data, the curtilage of the Second World War airfield at Spalding Moor extended into fields **156, 159, 160**. No structures associated with this airfield were visible in these fields on the recent images examined.

3.8 Other features

The dating for the substantial multi-ditch and bank boundary that runs to Field No. **127** (**MHU4435**) is ambiguous, the HER record indicates it could be of Early Bronze Age to post medieval date. The HVDC 40m swathe intersects this earthwork.

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Ordnance Survey Six Inch scale maps. Various dates via <http://maps.nls.uk/>

Appendix 1 Archaeology from black and white and colour air photographs

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

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

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

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

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

Appendix 2 Archaeology from LiDAR survey data

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

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

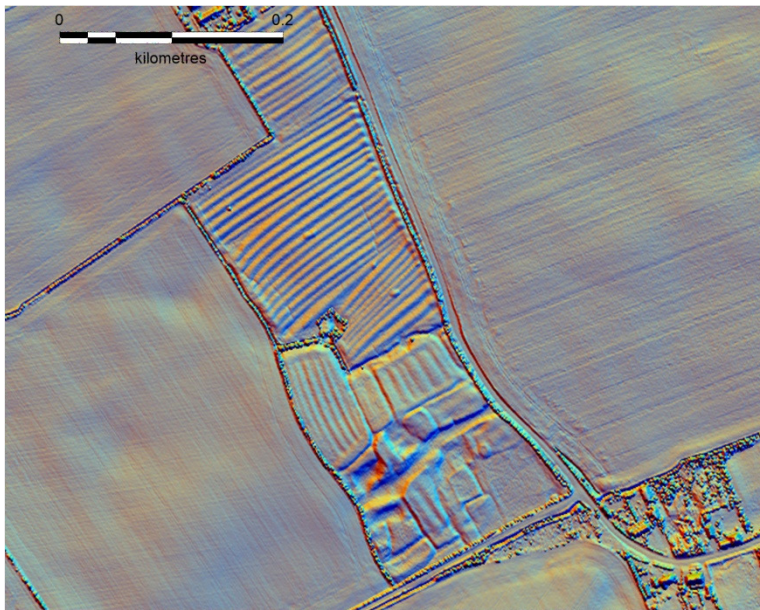


Figure A. A 16-Direction Hill-shaded model of DSM. Hill-shading casts and artificial light source across a landscape to reveal surface irregularities. Hill-shading from a single direction of light will not reveal those features that are in alignment with the light source. This visualisation combines the light and shade of 16 difference directions of light. The visualisation can be further enhance by exaggerating the vertical elevation and lowering the angle of the light source.

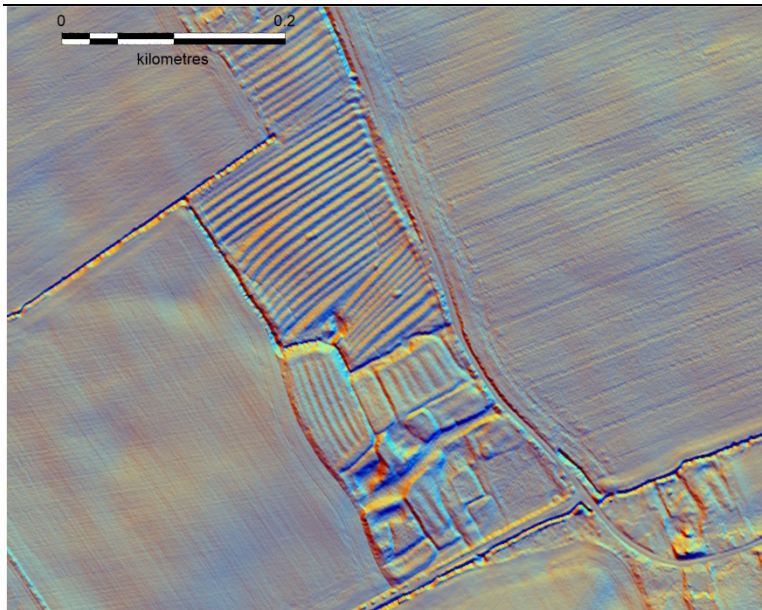


Figure B. A 16-Direction Hill-shaded model of DTM. As above, but in this example the data collected from the supra-surface features is excluded, leaving only the height data that was generated from actual ground surface. This visualisation reveal earthworks that are masked by trees on the DSM visualisation.

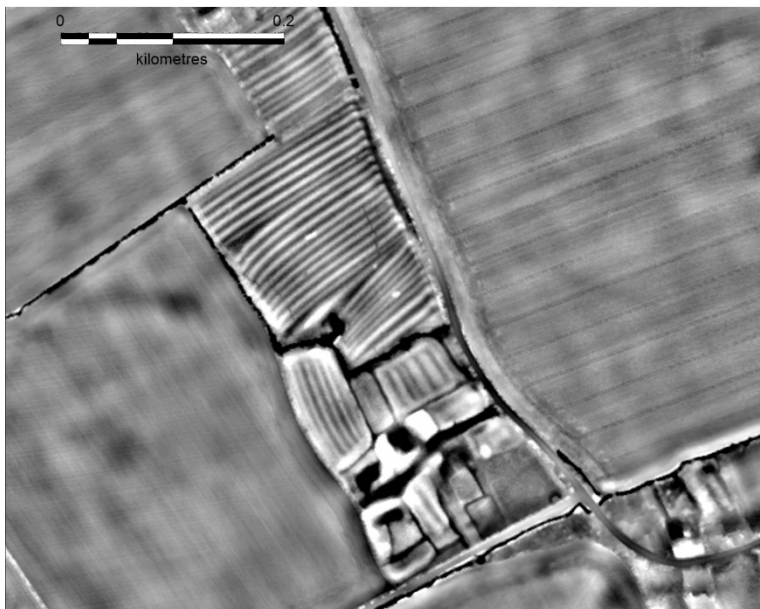


Figure C. Simple Local Relief Model (of DTM). General relief models convey landscape-scale topography at the expense of smaller scale features including archaeological earthworks. This visualisation removes the general trend, eg hills and valleys to accentuate the appearance of the smaller scale features. In this visualisation the lighter tones represent banks and mounds, the darker, ditches and pits.

Appendix 3 List air photos obtained from the Historic England Specialist Collection

PHOTO REFERENCE	FILM	FRAME	DATE	FILM TYPE
SE 7630 / 11	NMR 28203	/ 01	01/08/2011	Digital colour
SE 7630 / 13	NMR 28203	/ 03	01/08/2011	Digital colour
SE 7630 / 18	NMR 28203	/ 08	01/08/2011	Digital colour
SE 8638 / 31	NMR 20893	/ 06	30/06/2009	Digital colour
SE 8638 / 36	NMR 20893	/ 11	30/06/2009	Digital colour
SE 8739 / 29	NMR 20892	/ 54	30/06/2009	Digital colour
SE 8739 / 33	NMR 20892	/ 58	30/06/2009	Digital colour
SE 8739 / 36	NMR 20892	/ 61	30/06/2009	Digital colour
SE 9751 / 8	NMR 28207	/ 17	05/08/2011	Digital colour
SE 9751 / 12	NMR 28207	/ 28	05/08/2011	Digital colour
SE 9751 / 19	NMR 28207	/ 36	05/08/2011	Digital colour
TA 0758 / 16	HEA 34031	/ 054	05/07/2018	Digital colour
TA 0959 / 38	HEA 34031	/ 039	05/07/2018	Digital colour
TA 1360 / 39	HEA 34004	/ 016	21/06/2018	Digital colour
TA 1563 / 11	NMR 28078	/ 13	21/07/2010	Digital colour
TA 1563 / 24	HEA 34033	/ 042	05/07/2018	Digital colour
TA 1563 / 34	HEA 34033	/ 053	05/07/2018	Digital colour
TA 1663 / 19	HEA 34033	/ 028	05/07/2018	Digital colour
TA 1663 / 28	HEA 34033	/ 039	05/07/2018	Digital colour
SE 8035 / 11	NMR 17384	/ 02	03/08/1999	Black & white
SE 8134 / 41	NMR 17384	/ 03	03/08/1999	Black & white
SE 8134 / 44	NMR 17526	/ 21	16/08/2000	Black & white
SE 8135 / 6	NMR 17378	/ 67	03/08/1999	Black & white
SE 8537 / 7	NMR 4994	/ 63	13/07/1990	Black & white
SE 8638 / 9	NMR 12660	/ 49	28/06/1995	Black & white
SE 8840 / 5	NMR 12689	/ 62	19/07/1995	Black & white
SE 9547 / 12	NMR 17515	/ 13	01/08/2000	Black & white
SE 9548 / 6	NMR 12544	/ 48	19/07/1994	Black & white
TA 1460 / 4	NMR 12404	/ 08	04/08/1993	Black & white
TA 1461 / 2	NMR 12674	/ 51	30/06/1995	Black & white
TA 1463 / 7	NMR 12674	/ 48	30/06/1995	Black & white
TA 1563 / 1	NMR 772	/ 163-164	02/08/1974	Black & white
TA 1563 / 2	NMR 772	/ 174-177	02/08/1974	Black & white
TA 1663 / 1	NMR 222	/ 214-216	18/07/1970	Black & white
TA 1562 / 4	HEA 34033	/ 050	05/07/2018	Digital colour
TA 1563 / 17	NMR 28434	/ 23	15/07/2013	Digital colour
SE 9344 / 8	NMR 12031	/ 055	08/10/1990	Black & white
SE 9344 / 9	NMR 12031	/ 058	08/10/1990	Black & white
SE 9344 / 14	NMR 17272	/ 21	22/03/1999	Black & white
SE 9345 / 12	NMR 12226	/ 43	02/03/1992	Black & white
SE 9346 / 7	NMR 12031	/ 060	08/10/1990	Black & white
SE 9447 / 20	NMR 28018	/ 20	27/05/2010	Digital colour

Appendix 4 Structure of the GIS datasets

Data name and source	Data fields associated with the mapping
<p>SEGL2 POST NMP MAP</p> <p>Updates for all project areas, and area not covered by previous projects</p>	<p>SEGL2FIELDNOS</p> <p>HERREF</p> <p>Layer</p> <p>Period</p> <p>narrowtype</p> <p>evidence1</p> <p>source1</p> <p>*evidence2</p> <p>*source2</p> <p>*evidence3</p> <p>*source3</p> <p>NRHE</p> <p>*optional fields</p>
<p>SEGL2 DIG NMP MAP</p> <p>Yorkshire Coast & Humber Estuary RCZA</p> <p>East Riding ALSF</p> <p>Chalk Lowlands and the Hull Valley</p> <p>Vale of York Project</p>	<p>SEGL2FIELDNOS</p> <p>HERREF</p> <p>Layer</p> <p>Period</p> <p>Narrowtype</p> <p>*broad_type</p> <p>evidence_1</p> <p>source_1</p> <p>*evidence_2</p> <p>*source_2</p> <p>+other HE administrative data note that a large number of empty fields, and fields with duplicate content have been removed from this version of the data</p> <p>* not present for all projects</p>
<p>SEGL2 RASTER NMP MAP</p> <p>Yorkshire Wolds Project</p>	<p>SEGL2FIELDNOS</p> <p>HERREF</p> <p>+ administrative fields only</p>

Appendix 5 Catalogue of features

(Continued overleaf)

FIELD NUMBER **1**

Second World War coastal crust defences including tank traps, a pillbox, building and weapons pits are visible as standing structures on the beach and low cliff. Most of these features are still upstanding though erosion has caused a shift in the position of some structures.

HER UID	NRHE UID
MHU21016	1446319
MHU21023	1446409
MHU21027	
MHU21031	

FIELD NUMBER **2**

Complex and multi phase features. Possible Iron Age or Roman period rectilinear enclosures and field boundaries where the route corridor approaches the coastline. The corridor also passes through fragments of possible medieval ridge and furrow and may clip the site of Second World War coastal crust defences in the south-east corner of the field, any above ground elements have been removed. Further to the north and away from the corridor there are further defences and a possible medieval ditch, which is associated with settlement in the field to the north.

HER UID	NRHE UID
MHU21017	81272
MHU21021	1446412
MHU21023	1446409
MHU21027	1446391
MHU489	1446408

FIELD NUMBER **3**

Short ditches in a semi-regular arrangement are visible as cropmarks are visible in the north part of this field. The date of these ditches is not known. Some lie within the route corridor. Medieval or post medieval ridge and furrow and Second World War pill box and trenches lie more than 100m south of the corridor.

HER UID	NRHE UID
MHU21033	1446415
MHU330	1446399

FIELD NUMBER **4**

Cropmarks indicate the presence of long east to west aligned field boundaries, at least two small rectilinear enclosures, two ring ditches indicating possible round houses and fragments of other ditched features. These features may be of Iron Age or Roman date. Some of these features lie within the route corridor.

HER UID	NRHE UID
MHU3290	1446476

FIELD NUMBER **5**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **6**

Numerous cropmarks indicate the presence of a field system, possible enclosures, ring ditches of possible round houses and other more fragmentary features. Some of the features, including one of the putative round houses lie within the route. These cropmarks are likely to represent only a small proportion of the features that survive below ground level. They suggest possible settlement of Iron Age or Roman date.

HER UID

MHU340

FIELD NUMBER **7**

Complex and multi phase features. Fragmentary cropmarks in the north-eastern third of the field may indicate the remains of Iron Age or Roman period settlement. Amongst these are two ring ditches, which may be the remains of round houses or round barrows. Earthwork medieval or post medieval plough furrows are visible as earthworks in the south-west side of the field and as fragmentary cropmarks in the north-east. Two short earthwork banks in the south-west appear to continue northward beneath the ridge and furrow. Some of the ridge and furrow has been cut by a late post medieval sand pit. Many of these features, including the ring ditches intersect with the route corridor. Just to the north of the corridor there is a low circular mound, which may be the remains of either a Bronze Age round barrow or a natural protuberance.

HER UID

MHU340

FIELD NUMBER **8**

Faint traces of a possible Iron Age square barrow lie within the footprint of a construction compound. Cropmarked ditches and slightly curving plough furrows run across the field in the same general alignment. The compound footprint intersect with many of these features. Some of the ditches are probably the remains of post medieval and later field boundaries or field drains but the others are not dated.

FIELD NUMBER **9**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **10**

A cropmarked ditch of unknown date, north of the route corridor.

FIELD NUMBER **11**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **12**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **13**

A cropmarked post medieval field boundary runs south-west to north-east and into the route corridor.

FIELD NUMBER **14**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

HER UID

MHU340

FIELD NUMBER **15**

Two post medieval field boundaries or drainage ditches and a third undated ditch lie to the east of the route corridor, one of the field boundaries may encroach on the corridor.

FIELD NUMBER **16**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **17**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **18**

Two faint cropmarks, possibly indicating ditches of unknown date lie within the route corridor.

FIELD NUMBER **19**

Faint fragments of cropmarked ditch are visible within the route corridor in this field. Those in the north-east corner of the field suggest a small rectilinear enclosure abutting a substantial ditch. These may be of Iron Age or Roman date. The date of the other is uncertain

FIELD NUMBER **20**

There are complex cropmarks where the route corridor passes through this field. They comprise a series of long north-west to south-east aligned ditches, a more irregular pattern of ditch fragments and several small near square enclosures and ring ditches. The more easterly of these enclosures comprises an outer rectilinear enclosure (approximately 20x14m) surrounding an oval enclosure which is possibly double-ditched and flanked by three conjoined enclosure that may be Iron Age square barrows. The enclosures and ditch may be of later prehistoric and/or Roman date. To the east there are fragments of earthwork medieval or post medieval ridge and furrow to the east that also run into the corridor. To the north and away from the corridor there are further cropmarks indicating possible Iron Age or Roman enclosures and ditches.

HER UID

MHU9974

NRHE UID

1461182

1461184

FIELD NUMBER **21**

In the southern half of this field there is a possible Iron Age or Roman rectilinear enclosure, boundary ditches and more fragmentary features and a post medieval field boundary. Only the fragments are visible within the route corridor.

HER UID

MHU9974

NRHE UID

1461182

1461184

FIELD NUMBER **22**

A cropmarked post medieval field boundary runs north-west to south-east across the route corridor.

FIELD NUMBER **23**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **24**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **25**

Levelled medieval ridge and furrow ridge and furrow, short section of post medieval field boundary and other undated ditches are to the north and south of the route corridor.

FIELD NUMBER **26**

Fragments of cropmarked medieval or post medieval ridge and furrow lies more than 450m north-west of the route corridor.

FIELD NUMBER **27**

Features lie more than 500m of the route corridor.

FIELD NUMBER **28**

Features lie more than 500m of the route corridor.

FIELD NUMBER **29**

Features lie more than 500m of the route corridor.

FIELD NUMBER **30**

Remains of medieval and post medieval settlement at Great Kelk run along the western side of this field. These remains identified include crofts, a hollow way, a pond and ridge and furrow. Most survive only as very low earthworks or have been levelled. This settlement does not intersect with the route corridor within this field but it does continue southward into Fields 239 and 228.

HER UID

MHU8066

NRHE UID

1460723

1549768

1461213

FIELD NUMBER **31**

Features lie more than 400m of the route corridor.

FIELD NUMBER **32**

Cropmarks indicative of an extensive Iron Age or Roman field system, trackway and settlement are visible in the south-west of this field and continue south-west into Fields 34 and 35. Earthwork medieval ridge and furrow was recorded over this same area on historical air photos but has now been levelled. The features in this field all lie more than 330m from the route corridor.

HER UID

MHU15529

NRHE UID

1549756

1549759

1549754

1549775

FIELD NUMBER **33**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **34**

Cropmarks of the extensive Iron Age or Roman field system, trackway and settlement observed in Field 32 continue across this field and into Field 35. One of the cropmarks has been identified as an Iron Age square barrow. Earthwork medieval ridge and furrow and post medieval pillow mounds was recorded over this same area on historical air photos but has now been levelled. The features in this field all lie more than 100m north of the route corridor.

HER UID	NRHE UID
MHU15529	1549637
	1549754
	1549775

FIELD NUMBER **35**

Cropmarks of the extensive Iron Age or Roman field system, trackway and settlement observed in Fields 32 and 34 continue across this field. Curvilinear enclosures in the south of the field have been interpreted as early medieval in origin. Historical air photos also revealed the earthworks of medieval ridge and furrow and a post medieval pillow mound and a stock enclosure. These earthworks have now been levelled. The route corridor intersects with the possible early medieval enclosure and one of the early rectilinear enclosures, but is likely to impact on other unseen features too.

HER UID	NRHE UID
MHU15523	1549650
	1549761

FIELD NUMBER **36**

A single cropmarked ditch of unknown date runs south to north towards the route corridor.

FIELD NUMBER **37**

Possible Iron Age or Roman ditches, these lie more than 200m north of the route corridor.

FIELD NUMBER **38**

A post medieval redoubt that cuts medieval ridge and furrow is visible as an earthwork on historical air photos. The LiDAR imagery suggests only very low earthworks still survive on this site. The route corridor passes through this redoubt.

HER UID	NRHE UID
MHU4084	79260

FIELD NUMBER **39**

A possible Iron Age or Roman rectilinear enclosure with internal round house and associated boundary ditches and trackways. The route corridor passes through this enclosure.

HER UID	NRHE UID
MHU4112	79269

FIELD NUMBER **40**

A possible later prehistoric or Roman curvilinear enclosure, defined by a narrow ditch or palisade slot, a possible Iron Age or Roman rectilinear enclosure, possible round houses, boundary ditches and more fragmentary ditches of uncertain or post medieval date are visible as cropmarks. The route corridor passes through many of these features including the two enclosures.

HER UID	NRHE UID
MHU4112	79269
	1549677

FIELD NUMBER **41**

Two Iron Age or Roman conjoined enclosures, one D-shaped, the other rectilinear and the former with an internal round house and other fragmentary ditches. The route corridor passes through these enclosures and ditches.

HER UID	NRHE UID
MHU4112	1549655

FIELD NUMBER **42**

Several ditches, some of which may be the continuation of the Iron Age or Roman enclosures and boundaries observed in Fields 39 to 41. Some of these ditches lie within the route corridor.

HER UID	NRHE UID
MHU4112	1549655

FIELD NUMBER **43**

A fragment of faint cropmark that may indicate the presence of archaeological ditch on unknown date. This feature lies within the route corridor.

FIELD NUMBER **44**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **45**

A fragment of faint cropmark lies to the immediate north of the route corridor. Post medieval narrow ridge and furrow is present in the southern half of this field and clipped by the route corridor.

FIELD NUMBER **46**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **47**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **48**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **49**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **50**

Medieval and post medieval ridge and furrow and a croft. These survived as earthworks in the 1940s but the LiDAR imagery indicates that all features in this field have now been levelled. Some of these features lie across the route of the corridor.

FIELD NUMBER **51**

Medieval ridge and furrow, now levelled, clipped by the route corridor.

FIELD NUMBER **52**

A series of faint linear cropmarks running near north to south across the route corridor. The date of these feature is now known and they may not be of archaeological significance.

FIELD NUMBER **53**

Medieval ridge and furrow, now levelled and located more than 300m north of the route corridor.

FIELD NUMBER **54**

A small rectilinear enclosure of possible Iron Age or Roman date lies 60m to the north-east of a construction compound.

HER UID
MHU8205

NRHE UID
1549648

FIELD NUMBER **55**

Three small rectilinear enclosures of possible Iron Age or Roman date. These adjoining enclosures are located more than 500m to the north-east of the route corridor.

HER UID
MHU22242

NRHE UID
1088038

FIELD NUMBER **56**

A post medieval mill race runs through this field and Field 57. This feature has now been levelled. It intersects with the route corridor in this field.

FIELD NUMBER **57**

A post medieval mill race runs through this field and Field 57. This feature has now been levelled.

FIELD NUMBER **58**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **59**

Rectilinear enclosures of possible Iron Age or Roman date extend into the route corridor as does a curving linear of uncertain origin. Two Iron Age square barrows, also in this field, lie 170m north-west of the route corridor.

HER UID	NRHE UID
MHU22366	1088033
MHU8204	1549632

FIELD NUMBER **60**

Small fragments of cropmarked medieval or post medieval ridge and furrow run across the route corridor.

FIELD NUMBER **61**

Two parallel cropmarked ditches are visible in the northern half of this field and more than 250m from the route corridor. These are the continuation of a likely Iron Age and Roman settlement visible in the field to the north.

HER UID	NRHE UID
MHU8204	1088033

FIELD NUMBER **62**

Short cropmarks in the north-west corner of this field and extending into Field 63 may indicate Iron Age or Roman period field boundaries. The route corridor passes through these and the remains of medieval or post medieval ridge and furrow.

FIELD NUMBER **63**

A small rectilinear enclosure and associated field boundaries in the south-west corner of this field. These features, likely to be of Iron Age or Roman date, lie just to the north of the route corridor.

HER UID	NRHE UID
MHU22361	1197469

FIELD NUMBER **64**

Medieval ridge and furrow in the eastern half of this field, some intersects the route corridor.

NRHE UID

1547947

FIELD NUMBER **65**

A small medieval stock enclosure surrounded by ridge and furrow. These features survived as earthworks in the late 1940s but have now been levelled. The enclosure lies within the route corridor.

HER UID

MHU8208

NRHE UID

1547947

1548035

FIELD NUMBER **66**

Medieval ridge and furrow in the south- eastern corner of this field, some intersects the route corridor.

NRHE UID

1547947

FIELD NUMBER **67**

A hollow way that leads to medieval settlement remains at Skerne curves around the northern edge of this field. This and the medieval ridge and furrow lie to the south of the route corridor.

HER UID

MHU8208

NRHE UID

1547947

1305878

FIELD NUMBER **68**

A single ditch runs north to south across the route corridor. The date of this feature is not known.

FIELD NUMBER **69**

Medieval ridge and furrow lies to the south of the route corridor.

NRHE UID

1547947

FIELD NUMBER **70**

A Second World War Q-type bombing decoy lies approximately 40m to the west of the route corridor. There appear to be structural and earthwork elements still present on the site.

HER UID

MHU18434

NRHE UID

1415691

FIELD NUMBER **71**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **72**

Post medieval ridge and furrow, now levelled runs north to south through the route corridor. There is also a Bronze Age barrow and Iron Age enclosure in this this field, but they lie more than 250m to the east and south east of the route corridor.

HER UID	NRHE UID
MHU22358	1548176
MHU22389	1547956
	1548133

FIELD NUMBER **73**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **74**

Post medieval ridge and furrow, now levelled runs west to east across the route corridor.

NRHE UID
1548176

FIELD NUMBER **75**

Two faint cropmarks may indicate buried ditches of uncertain date. One of these feature intersects the route corridor

FIELD NUMBER **76**

A fragment of medieval ridge and furrow is clipped by the route corridor. To the south, on the banks of Northfield Beck, there is a post medieval platform cut by two short ditches.

HER UID	NRHE UID
MHU22357	1548152
	1548119

FIELD NUMBER **77**

Medieval ridge and furrow, now levelled, covers much of this field and runs across the route corridor.

NRHE UID
1548152

FIELD NUMBER **78**

Medieval and post medieval ridge and furrow, now levelled is clipped by the route corridor. There are also medieval settlement remains in this field, but they lie more than 200m to the south-east of the corridor.

HER UID	NRHE UID
MHU9628	1548152
	1547984

FIELD NUMBER **79**

Medieval and post medieval ridge and furrow and fragments of medieval settlement remains lie to the south-east of the route corridor.

HER UID	NRHE UID
MHU9628	1548152
	1547984

FIELD NUMBER **80**

Medieval ridge and furrow lies to the north-west of the route corridor.

NRHE UID
1548152

FIELD NUMBER **81**

Medieval ridge and furrow, now levelled, runs across the route corridor.

NRHE UID
1548152

FIELD NUMBER **82**

Levelled medieval ridge and furrow runs across the route corridor. Better preserved ridge and furrow survives to the east.

NRHE UID
1548152

FIELD NUMBER **83**

Levelled medieval ridge and furrow runs across the route corridor. Better preserved ridge and furrow survives to the east.

NRHE UID
1548152

FIELD NUMBER **84**

Levelled medieval ridge and furrow lie east of the route corridor.

NRHE UID

1548152

FIELD NUMBER **85**

Levelled medieval ridge and furrow is clipped by the route corridor.

NRHE UID

1548152

FIELD NUMBER **86**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

NRHE UID

1548152

FIELD NUMBER **87**

Levelled medieval ridge and furrow runs across the route corridor.

NRHE UID

1548152

FIELD NUMBER **88**

Medieval ridge and furrow extends across much of this field and the across the route corridor. A trio of Second World War bomb craters lie more than 250m to the north of the corridor. An undated ditch runs toward the route corridor.

HER UID

MHU22356

NRHE UID

1548152

1547960

FIELD NUMBER **89**

Fragments of cropmarked medieval ridge and furrow are present in this field and some are clipped by the route corridor. A single undated ditch runs north-west to south-east across the corridor.

NRHE UID

1548152

FIELD NUMBER **90**

Fragments of cropmarked medieval ridge and furrow lie south of the route corridor.

NRHE UID

1548152

FIELD NUMBER **91**

Medieval ridge and furrow, now levelled, is present across most of this field and crosses the route corridor.

NRHE UID

1548152

FIELD NUMBER **92**

The low earthworks of a possible Bronze Age round barrow and a cropmarked undated ditch lie within the route corridor. This barrow may be the same monument that is identified as a ring ditch in MHU8124. The corridor also clips the cropmarked medieval or post medieval ridge and furrow which lies to the north. A second low earthwork barrow lies 130m north of the corridor.

HER UID

MHU8124

FIELD NUMBER **93**

Well-preserved earthwork ridge and furrow of probable medieval origin lies to the immediate south of the route corridor.

HER UID

MHU22169

NRHE UID

1548152

FIELD NUMBER **94**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **95**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **96**

The route corridor clips a well-preserved fragment of ridge and furrow of medieval or post medieval origin. These earthworks are under tree cover.

FIELD NUMBER **97**

Traces of medieval or post medieval ridge and furrow, the remains of post medieval field boundaries and two possible dew ponds. The route corridor intersects two of the field boundaries.

FIELD NUMBER **98**

The route corridor intersects cut and embanked sections of a late 19th century railway, which survives as very low earthworks. A post medieval chalk pit lies just to the south of the route corridor.

HER UID

MHU12474

MHU8831

FIELD NUMBER **99**

Cropmarked ridge and furrow of medieval or post medieval date runs north to south across the route corridor.

FIELD NUMBER **100**

Cropmarks suggest a broad north to south aligned trackway or driveway abutted by a small rectilinear enclosure. These features may be of Iron Age or Roman date and they lie within the route corridor. Other ditches and trackway to the immediate east of these may also continue unseen into the corridor. The route corridor also intersects the the low earthworks remains of the disused railway at the western edge of this field.

HER UID

MHU287

MHU8113

MHU8831

FIELD NUMBER **101**

Cropmarks of a possible Iron Age or Roman enclosure and associated trackway and field boundaries. The enclosure straddles the boundary between this field and Field 102. The well-rounded remains of the former railway cutting runs along the southern boundary of this field, probably truncating part of the enclosure. Both features intersect with the route corridor.

HER UID

MHU22106

MHU8831

FIELD NUMBER **102**

Cropmarks of two possible Iron Age or Roman enclosures lie partly within the route corridor. One straddles the boundary with Field 101, the other lies 230m to the south. Fragments of medieval or post medieval ridge and furrow and a post medieval field boundary also cross the route corridor in this field. A small rectangular cropmark, which may be a pit of uncertain date and a shallow dewpond lie to the south-east of the corridor.

HER UID

MHU22106

FIELD NUMBER **103**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **104**

Low earthwork remains of ridge and furrow of possible medieval date runs north to south across route corridor.

FIELD NUMBER **105**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **106**

Three shallow post medieval chalk pits lie to the east of the route corridor.

HER UID

MHU12456

FIELD NUMBER **107**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **108**

The route corridor clips part of a post medieval brickfield that survives as a shallow, flat bottomed earthwork. A small post medieval chalk pit lies more than 280m west of the corridor.

HER UID

MHU12458

MHU12459

FIELD NUMBER **109**

Fragments of medieval or post medieval ridge and furrow, visible as cropmarks are clipped by the route corridor.

FIELD NUMBER **110**

A ditch runs north-west to south-east across the route corridor in the south-west corner of this field and into Field 111. This ditch appears to be associated with a trackway that continues long distances to the north-east and south-west, but does not intersect with the route corridor within this field. This trackway and the ditch may be of Iron Age or Roman date. North of the corridor the trackway is abutted by one or more rectilinear enclosures. The well-rounded remains of a post medieval chalk pit lies within the route corridor towards the middle of this field.

HER UID

MHU3076

FIELD NUMBER **111**

A short cropmarked ditch of possible Iron Age or Roman origin runs across the route corridor and continues into Field 110.

FIELD NUMBER **112**

The very shallow remains of possible post medieval chalk pits lie just to the north of the route corridor. An extensive field system and enclosures of likely Iron Age or Roman date are visible as cropmarks in the northern half of this field. These features lie more than 450m north of the route corridor.

FIELD NUMBER **113**

Cropmarks of possible Iron Age or Roman trackways run obliquely across the route corridor. Two rectilinear enclosure abut the trackway, also within the corridor. A small isolated enclosure, which may be an Iron Age square barrow, lies on the northern margin of the corridor, as do two post medieval chalk pits.

HER UID

MHU22143

FIELD NUMBER **114**

A small ring ditch of possible later prehistoric or Roman date and a series of north-east to south-west aligned ditches of possible Iron Age or Roman date intersect with the route corridor. Three Iron Age square barrows, the continuation of the trackway from Field 113 and a faint L-shaped ditch of unknown date all lie at least 75m south-east of the route corridor. All of these features are visible as cropmarks.

HER UID

MHU22143

MHU22144

FIELD NUMBER **115**

A ring ditch lies approximately 275m north-west of the route corridor

HER UID

MHU3743

FIELD NUMBER **116**

Three sets of boundaries or trackways cross or converge in the southern part of this field. All of these cropmarks lie at least 270m to the south-east of the route. These features may continue unseen into the corridor in neighbouring fields. A possible post medieval chalk pit, surviving as very shallow earthwork, lies 40m to the south of the route corridor.

FIELD NUMBER **117**

Short fragments of ditch of uncertain date and the shallow remains of post medieval chalk pits lie within and just outside the route corridor. One of the trackways recorded in Field 116 continues within this field, but this lies more than 160m south-east of the corridor.

FIELD NUMBER **118**

An L-shaped, slightly sinuous ditch and fragments of earthwork medieval or post medieval ridge and furrow lie at least 75m south-east of the route corridor.

FIELD NUMBER **119**

A gently curving cropmarked ditch runs north to south and into the route corridor. This ditch may be of Iron Age or Roman date. There is also a large oval cropmark within the route corridor, which may be of archaeological origin but of unknown date. South of the route corridor a sinuous soilmark ditch continues into Field 120.

FIELD NUMBER **120**

A broad sinuous soilmark ditch of uncertain date runs east to west across the route corridor. Two post medieval features: a small chalk pit and dew pond, both surviving as earthworks, lie to the west of the route.

FIELD NUMBER **121**

A possible Iron Age or Roman boundary ditch extends into this field from Field 122. Here it lies more than 135m west of the route corridor.

FIELD NUMBER **122**

Three main groups of possible Iron Age or Roman cropmarked or soilmark features are visible within this field. In the north, a large rectilinear enclosure with internal divisions, abutting a long boundary ditch that extends to the north-west and south-east. Across the middle of this field a long sinuous boundary ditch runs south-west to north-east and is abutted by a series of rectilinear enclosures. To the south a short section of a much longer trackway runs east to west. The route corridor intersects elements of all of three groups. There are also low earthwork remains of medieval or post medieval plough lynchets or field boundaries on either side of the corridor, a rectangular pit and ring ditch of uncertain date and two post medieval chalk pits to the west and medieval or post medieval ridge and furrow to the east.

HER UID

MHU6567

FIELD NUMBER **123**

The shallow remains of a possible post medieval chalk pit lie to the east of the route corridor.

FIELD NUMBER **124**

Medieval ridge and furrow, visible as soilmarks, and the shallow remains of two possible post medieval chalk pits lie to the east of the route corridor and north of a HVDC 40m swathe.

FIELD NUMBER **125**

A ditch of unknown date, visible as a soilmark, runs south-west to north-east towards the route corridor. The shallow remains of a possible post medieval chalk pit lie to the west of the route corridor.

FIELD NUMBER **126**

A possible Iron Age or Roman trackway runs east to west between the main route corridor and a HVDC 40m swathe. This feature may continue unseen into either or both corridors. There also two small post medieval chalk pits and traces of levelled medieval or post medieval ridge and furrow in this area.

FIELD NUMBER **127**

Complex features from several periods are visible in this field. A substantial multi ditch and bank linear earthwork runs east to west through this field and across a HVDC 40m swathe. At this point and to the east it survives as earthworks, but to the west it is only seen as cropmarks or soilmarks. It may also continue unseen across the main route corridor. Where the swathe runs across the boundary earthwork it also intersects the earthwork remains of a Neolithic long barrow. This feature is scheduled (List no. 1012203) and also survives as an earthwork. Just west of the swathe there is a likely Bronze Age barrow visible as a cropmarked ring ditch and to the east, along the edge of the boundary there are at least three further earthwork barrows. Also in this field are the remains of a post medieval chalk pit and field boundary

HER UID

MHU4435

MHU9468

MHU9469

MHU9470

MHU9471

FIELD NUMBER **128**

An extensive but irregular network of cropmarked ditches are visible across the southern and western sides of this field. These may be the remains of an Iron Age or Roman field system and trackways. A few of these features and a post medieval field boundary bank, intersect with the route corridor or HVDC 20m swathe.

FIELD NUMBER **129**

At least 5 possible Iron Age square barrows have been recorded in this field, one of which lies within the route corridor, the others within approximately 100m. In the western side of the field a section of a long linear settlement and trackway run across the corridor. This settlement is likely to be of Iron Age or Roman date. South of the corridor a long boundary ditch runs east to west.

HER UID

MHU10895

FIELD NUMBER **130**

Fragments of medieval or post medieval ridge and furrow, two post medieval field boundaries and two ditches of uncertain date run near north to south across the field and through the route corridor. A low earthwork mound, which may be the remains of a Bronze Age barrow lies more than 80m to the south of the

FIELD NUMBER **131**

There are no features visible within the route corridor in this field. However there is a Bronze Age cemetery to the south-west of the corridor containing several low earthwork barrows (SM1007501, 1012089, 1012090, 1014256). The OS map of 1855 shows a small outlier closer to the corridor at SE9068 4190, which is also scheduled (SM1012088) but this monument is obscured by a modern field boundary on the imagery examined. A boundary ditch runs south to north around the eastern edge of the cemetery and near parallel to the eastern edge of this field. It may continue northward unseen into the route corridor in this field or in Field 130. There are also a number of post medieval chalk pits in this field.

HER UID

MHU18009
MHU18010
MHU18011
MHU18012
MHU18013
MHU18020
MHU18022

NRHE UID

1012088

FIELD NUMBER **132**

The low earthwork remains of two round barrows, lie at least 210m south-east of the route corridor. Both are scheduled (SM 1012091 and 1013672) and are a continuation of the barrow cemetery described in Field 131. The shallow remains of a post medieval chalk pit, lie over 500m from the route corridor.

HER UID

MHU18013
MHU18014

FIELD NUMBER **133**

Three field boundaries of uncertain date run east to west across this field, one intersects with the route corridor. A Neolithic and Bronze Age barrow cemetery comprising low earthworks of at least five round barrows and a long barrow lies 400m to the south-east of the route corridor. Elements of this cemetery are scheduled (List no. 1012092, 1012100, 1012102 and 1012103)

HER UID

MHU18015

MHU18018

MHU18016

MHU252

FIELD NUMBER **134**

A single ditch, visible as a faint cropmark and soilmark, runs across the route corridor. The date of this feature is not known, it continues westward into Field 135.

FIELD NUMBER **135**

Fragmentary cropmarks, which may indicate the presence of several rectilinear enclosures of possible Iron Age or Roman date, lie within the route corridor on the western side of this field and continuing into Field 136. To the north of the corridor there is a single undated ditch, visible as faint cropmark and soilmark, which continues into Field 134. Approximately 160m south of the corridor there is a double ditched Iron Age or Roman trackway running near east to west.

HER UID

MHU22686

FIELD NUMBER **136**

The fragmentary cropmarks that suggest possible Iron Age or Roman period enclosures in Field 135 continue into the eastern side of this field. Also within the route corridor are cropmarked traces of medieval or post medieval ridge and furrow, post medieval drainage ditches and other undated ditches. The corridor also clips the edge of a post medieval sand pit, which survives as a low earthwork.

FIELD NUMBER **137**

Medieval or post medieval ridge and furrow is visible as cropmarks running across the route corridor in the north-east corner and western side of this field.

FIELD NUMBER **138**

A double ditched trackway of possible Iron Age or Roman date runs north to south through this field. The cropmarks end approximately 70m north of the route corridor but it is likely the feature continues southward unseen and intersects with the corridor.

HER UID

MHU2182

FIELD NUMBER **139**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **140**

A small curvilinear cropmark is visible on some of the recent aerial imagery in the route corridor. However it is not certain if this cropmark is of archaeological origin. A rectilinear enclosure bisected by a north to south aligned ditch lies to the south of the corridor, the ditch may continue northward unseen into the corridor. These features may be of Iron Age or Roman date.

HER UID

MHU2485

FIELD NUMBER **141**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **142**

The route corridor intersects a possible section of Roman road, which runs north-west to south-east through this field. Numerous other trackways, possible enclosures, field boundaries and other ditches of Iron Age or Roman, post medieval and uncertain dates are also present in this field and many feature intersect with the route corridor. There are also faint traces of medieval or post medieval ridge and furrow within the corridor.

HER UID

MHU63

FIELD NUMBER **143**

Some of the linear cropmarks that are observed in Fields 142 and 144 pass briefly through the northward arm of this field, others may do so but are not visible. No features were observed within the route corridor in this field, but it is unlikely that it will be devoid of buried remains.

HER UID

MHU63
MHU7347

FIELD NUMBER **144**

A complex network of cropmarked ditches is visible across most of this field. Many of these appear to be the remains of an Iron Age or Roman system of fields, trackways and enclosures and probable settlement. The route corridor runs through several of these features as well as field boundaries of post medieval date. Also within the corridor is an unusual arrangement of small cropmarks that suggest pits, but these may not be of archaeological origin.

HER UID

MHU7347

FIELD NUMBER **145**

Several cropmarked features are visible in this field. Some are likely to be a continuation of the possible Iron Age or Roman system of fields, trackways and enclosures observed in Field 144 but others are post medieval field boundaries. The route corridor intersects several of the potential Iron Age or Roman features, including a possible enclosure.

HER UID

MHU7347

FIELD NUMBER **146**

Fragmentary cropmarks lie within the route corridor, including a possible L-shaped post medieval field boundary, short ditches of unknown date and others which are likely modern field drains. Short curving cropmarks running along the southern edge of the field and corridor indicate the former course of Beal Beck, which is now much straightened. More than 200m north of the corridor there is a short section of double ditched trackway, possibly of Iron Age or Roman date.

HER UID

MHU8009

FIELD NUMBER **147**

Linear features and enclosures of various dates lie more than 300m south-east of the route corridor.

FIELD NUMBER **148**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **149**

Several linear ditches are visible as cropmarks, some are likely to be the remains of a post medieval waterchannel and field boundary but the others are undated. Sinuous cropmarks indicate the former course of Beal Beck along the south-eastern edge of this field. All of these features intersect the route corridor.

FIELD NUMBER **150**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **151**

A possible Iron Age trackway runs south-west to north-east through the western side of this field but does not intersect with the route corridor in this field. It continues westward into Fields 152 and 153. The remains of a post medieval brick and tile yard survive as water filled pits in the centre of the field and south of the corridor. Two shallow hollows on either side of the corridor may also be the remains clay pits, but a natural origin cannot be discounted.

HER UID

MHU15284

NRHE UID

1249720

FIELD NUMBER **152**

A possible Iron Age trackway runs near east to west through this field and may run into the route corridor near Lock Lane. It continues south-westward into Field 153 and eastward into Field 151. A post medieval field boundary runs north-west to south-east across the corridor.

HER UID	NRHE UID
MHU15284	1249720

FIELD NUMBER **153**

There are cropmarks indicating a likely Iron Age or Roman settlement in the north-west corner of this field. These comprise a large rectilinear enclosure (or possible Roman temporary camp), at least 7 smaller rectilinear enclosures, a trackway and boundary ditches. The route corridor runs through this settlement. There is also evidence of an Iron Age or Roman field system and trackway in the far south-east corner of this field.

HER UID	NRHE UID
MHU10836	1249720

FIELD NUMBER **154**

Fragmentary cropmarks and soilmarks may indicate the continuation of the likely Iron Age and Roman settlement identified in Field 153. The route corridor intersects with some of these features.

HER UID	NRHE UID
MHU10836	1249720

FIELD NUMBER **155**

There is a small rectilinear enclosure of likely Iron Age or Roman date on the south-eastern edge of the road corridor and a small curvilinear enclosure 60m south of the route corridor. The route also crosses an H-shaped arrangement of post medieval field boundaries. More features of possible Iron Age or Roman settlement lie 225m north of the corridor.

HER UID	NRHE UID
MHU22633	1073856

FIELD NUMBER **156**

A broad soil mark of unknown date runs across the north-west corner of this field and across the route corridor. There is also cropmark evidence of fields, enclosures and trackways of possible Iron Age or Roman date. Although all of these cropmarks lies at least 130m to the south-east of the route corridor some features may continue unseen into the corridor. Spalding Moor Airfield extended into this field.

HER UID	NRHE UID
MHU22633	1073856

FIELD NUMBER **157**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **158**

A disorderly arrangement of ditches and a possible corner enclosure may indicate a field system of possible Iron Age or Roman date. These features lie within the route corridor.

HER UID	NRHE UID
MHU1128	1248937

FIELD NUMBER **159**

Complex cropmarks are visible across this field. Those in the north and east of the field are likely to field boundaries contiguous with the field system in Field 158. The more regular and complex arrangement in the western corner of the field are likely to indicate the presence of enclosures and settlement. These fields and settlement continue into Fields 161 and 162 are likely to be of Iron Age or Roman date. The route corridor intersects many of these features. Spalding Moor Airfield extended into this field

HER UID	NRHE UID
MHU1161	1248956

FIELD NUMBER **160**

A loose arrangement of ditches, which may be the remains of an Iron Age or Roman field system is visible in the northern end of this field. Some elements run toward the route corridor. Spalding Moor Airfield extended into this field

HER UID	NRHE UID
MHU1128	1248937

FIELD NUMBER **161**

Complex cropmarks in the northern part of this field are likely to indicate Iron Age or Roman settlement. These comprise rectilinear enclosures, two possible round houses and other linear features. Some of these feature appear to be contained within a large double ditch rectilinear enclosure. This settlement and field system continue into Fields 162 and 159. The route corridor intersects many of these features. Roman pottery kilns have been excavated in this area (see NRHE 61276).

HER UID	NRHE UID
MHU1161	1248956

FIELD NUMBER **162**

Complex cropmarks in the north-eastern part of this field are likely to indicate Iron Age or Roman settlement. These comprise rectilinear enclosures and boundaries. Some of these feature appear to be contained within a large double ditch rectilinear enclosure that extends into Field 161. The route corridor intersects some of these features and two other undated ditches in the south of this field.

HER UID	NRHE UID
MHU1161	1248956

FIELD NUMBER **163**

Possible Iron Age or Roman field boundaries, a continuation of the field system observed in Fields 160, 159, 161 and 162. These feature lie at least 270m west of the route corridor.

HER UID

MHU1128

NRHE UID

1248956

FIELD NUMBER **164**

Possible Iron Age or Roman field boundaries intersect with the route corridor, three rectilinear enclosures lie between 30m and 130m south of the corridor. Also c.70m to the south of the corridor are two arcs of ditch that suggest a curvilinear, double-ditched enclosure of later prehistoric or Roman date. At the northern end of this field the route traverses an area of complex cropmarks, most are likely to be of geological origin but these may mask features of archaeological significance.

HER UID

MHU21676

FIELD NUMBER **165**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **166**

The levelled remains of Dunn's Drain is visible as a broad cropmark running across the route corridor. This post medieval feature is named on the OS map of 1855.

FIELD NUMBER **167**

Levelled medieval ridge and furrow lies to the west of the route corridor.

HER UID

MHU22505

NRHE UID

1221134

FIELD NUMBER **168**

Levelled medieval ridge and furrow lies to the west of the route corridor.

HER UID

MHU22505

NRHE UID

1221134

FIELD NUMBER **169**

Two post medieval field boundaries run east to west across this field, the more northerly intersects the route corridor.

FIELD NUMBER **170**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **171**

Levelled medieval ridge and furrow lies to the north of the route corridor.

HER UID

MHU22505

NRHE UID

1221134

FIELD NUMBER **172**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **173**

Two short undated ditches are clipped by the western edge of the route corridor.

FIELD NUMBER **174**

Fragments of cropmarks in the north of this field. Some of these cropmarks are pale in tone and may indicate the buried remains of a building and wall, the others likely represent ditches. These features may be Iron Age or Roman date. Some of these features intersect the route corridor.

FIELD NUMBER **175**

A small area of earthwork post medieval ridge and furrow lies to the north-west of the route corridor.

FIELD NUMBER **176**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **177**

Fragmented cropmarks suggested to be the remains of an Iron Age rectilinear enclosure. These cropmarks lies on the northern edge of the route corridor.

HER UID

MHU22316

NRHE UID

1221065

FIELD NUMBER **178**

Cropmarked medieval or post medieval ridge and furrow runs north to south across the route corridor.

FIELD NUMBER **179**

Extensive and complex cropmarks marks are visible in the western side of this field. These suggest a sizeable Roman settlement comprising many rectilinear enclosures, fields and boundaries as well as post medieval field boundaries. The route corridor runs across the core of the settlement, in so far as it is visible on the air photos.

HER UID	NRHE UID
MHU3198	1221152
MHU22505	1581799

FIELD NUMBER **180**

Medieval ridge and furrow, now levelled and the low earthwork remains of a post medieval drain run across the route corridor.

HER UID	NRHE UID
MHU22505	1221152

FIELD NUMBER **181**

Medieval ridge and furrow, now levelled is clipped by the route corridor.

HER UID	NRHE UID
MHU22505	1221208

FIELD NUMBER **182**

Earthwork medieval and post medieval ridge and furrow survives across the field. This and a broad raised trackway of later date lie cross the route corridor.

HER UID	NRHE UID
MHU22505	1221208

FIELD NUMBER **183**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **184**

A moated enclosure with a boundary extending to the west and a possible trackway extending to the north. The moat is depicted on the OS map of 1910 and labelled 'Ringstone Hurst' and St Mary Magdalen's Chapel (Hermitage) (Site of). These features survive as low and well-rounded earthworks. These earthworks lie to the south of the route corridor but the trackway may continue unseen into the corridor.

HER UID	NRHE UID
MHU1760	59473

FIELD NUMBER **185**

Cropmarked features probably indicating a double ditch boundary, a natural water channel, a likely drainage ditch, a ditch of uncertain date, medieval or post medieval plough furrows. The double ditch feature is a boundary that delineates the northern edge of Howden Parks. The route corridor clips this boundary and some of the ridge and furrow.

HER UID	NRHE UID
MHU22498	1221208

FIELD NUMBER **186**

Medieval ridge and furrow, now levelled, and the low earthwork remains of post medieval field boundaries. Some of these feature intersect with the route corridor.

HER UID	NRHE UID
MHU22498	1221204

FIELD NUMBER **187**

Medieval ridge and furrow, now levelled, and the low earthwork remains of post medieval field boundaries. Some of these feature intersect with the route corridor.

HER UID	NRHE UID
MHU22498	1221204

FIELD NUMBER **188**

The LiDAR imagery shows a long straight raised feature running north-west to south-east across the route corridor and beyond. It is not certain if this feature is of archaeological origin.

FIELD NUMBER **189**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **190**

Levelled medieval ridge and furrow. These remains lie at least 100m south-east of the route corridor

HER UID	NRHE UID
MHU22497	1212404

FIELD NUMBER **191**

A cluster of medieval retting ponds and some outliers. The cluster lies within the route corridor. The LiDAR imagery shows a long, raised feature of uncertain origin running north-west to south-east across the route corridor.

HER UID	NRHE UID
MHU22306	1265162

FIELD NUMBER **192**

There features of several different periods within this field. The route corridor intersects with a possible hollow way and a long embankment. The latter may be a flood defence and it was depicted on the OS map of 1855. Both features are likely to be of post medieval date. Possible medieval ridge and furrow has been recorded across most of this field, including the corridor. More than 170m south-east of the corridor there are two enclosures visible as cropmarks: one a double ditched curvilinear enclosure, the other a double ditched circular enclosure intersecting an oval enclosure. The latter has been recorded as a ringwork and bailey by the Vale of York project, but that same project records that there was earthwork ridge and furrow across the area of these cropmarks in the 1940s so it seems more plausible that they are of pre-medieval origin.

HER UID	NRHE UID
MHU18167	1221204
MHU22498	1074938
	1074940

FIELD NUMBER **193**

Several linear features and medieval ridge and furrow run through this field. One of the more substantial features is a post medieval warping drain which runs north-west to south-east across the route corridor. This feature is depicted and labelled on the OS map of 1853. At least three narrow ditches run parallel to the warp, possibly secondary drainage or carrier ditches. Other cropmarks relate to a trackway and field boundary depicted on the same map. Some of the shorter ditches resemble infilled excavation trenches but their actual origin is not known. The field is also traversed by several recent service trenches in various orientations.

HER UID	NRHE UID
MHU22494	1221204
MHU22498	1300917

FIELD NUMBER **194**

Medieval ridge and furrow, now levelled, runs across the route corridor.

HER UID	NRHE UID
MHU22497	1301189

FIELD NUMBER **195**

Medieval ridge and furrow, now levelled, present to the north of the route corridor.

HER UID	NRHE UID
MHU22497	1301189

FIELD NUMBER **196**

Medieval ridge and furrow, now levelled, runs across the route corridor. The Hull, Barnsley and & West Riding Junction Railway, now disused, cuts across the south-west corner of this field, well away from the corridor.

HER UID	NRHE UID
MHU22497	1301189

FIELD NUMBER **197**

Medieval ridge and furrow, now levelled, runs across the route corridor.

HER UID

MHU22497

NRHE UID

1301189

FIELD NUMBER **198**

Medieval ridge and furrow, now levelled, is clipped by the route corridor.

HER UID

MHU22497

NRHE UID

1301189

FIELD NUMBER **199**

Medieval ridge and furrow, now levelled, runs across the route corridor. The Hull, Barnsley and & West Riding Junction Railway, now disused, cuts across the south-east corner of this field, well away from the corridor.

HER UID

MHU22497

NRHE UID

1301189

FIELD NUMBER **200**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **201**

Medieval ridge and furrow, now levelled, runs across the route corridor. The Hull, Barnsley and & West Riding Junction Railway, now disused runs along the southern edge of this field and across the route corridor.

HER UID

MHU22497

NRHE UID

1301189

FIELD NUMBER **202**

Medieval ridge and furrow, now levelled, lies east of the route corridor. The Hull, Barnsley and & West Riding Junction Railway, now disused runs along the southern edge of this field away from the route corridor

HER UID

MHU22497

NRHE UID

1301189

FIELD NUMBER **203**

Medieval ridge and furrow, now levelled, runs across the route corridor. The Hull, Barnsley and & West Riding Junction Railway, now disused runs along the southern northern edge of this field and across the route corridor

HER UID

MHU22497

NRHE UID

1301189

FIELD NUMBER **204**

Medieval ridge and furrow, now levelled, runs across the route corridor.

HER UID

MHU22497

NRHE UID

1301189

FIELD NUMBER **205**

The Hull, Barnsley and & West Riding Junction Railway, now disused runs along the northern edge of this field away from the route corridor

FIELD NUMBER **206**

Two ditches of uncertain date and a post medieval field boundary intersect with the route corridor.

FIELD NUMBER **207**

An L-shaped ditch, possibly the north-west corner of a rectilinear enclosure of unknown date intersects the route corridor.

FIELD NUMBER **208**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **209**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **210**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **211**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **212**

Fragments of medieval or post medieval ridge and furrow run into the southern side of the route corridor.

FIELD NUMBER **213**

Medieval ridge and furrow, now levelled, lies north of the route corridor.

HER UID

MHU22488

NRHE UID

1304099

FIELD NUMBER **214**

An undated ditch runs north-east to south-west across the route corridor.

FIELD NUMBER **215**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **216**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **217**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **218**

Medieval ridge and furrow, now levelled, and a short undated ditch intersect with the route corridor.

NRHE UID

1304108

FIELD NUMBER **219**

Medieval ridge and furrow and a section of post medieval railway line, both now levelled run across the route corridor in this field.

NRHE UID

1304108

1304119

1304116

FIELD NUMBER **220**

Medieval ridge and furrow, now levelled, runs across the route corridor. Undated field boundaries lie to the north of the corridor.

NRHE UID

1304119

FIELD NUMBER **221**

A small square Iron Age or Roman enclosure and medieval ridge and furrow lie to the south of the route corridor.

NRHE UID

1304119

1304942

FIELD NUMBER **222**

Medieval ridge and furrow lies to the south of the route corridor.

NRHE UID

1304119

FIELD NUMBER **223**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **224**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **225**

Well preserved earthwork medieval ridge and furrow runs east to west across the field. At least three short banks, which may be post medieval pillow mounds, sit on top the plough ridges. The route corridor intersects some of the plough ridges and at least one of the pillow mounds.

NRHE UID

1461220

80854

FIELD NUMBER **226**

Well preserved settlement remains of likely medieval origin including including tofts, crofts, building platforms and a hollow way survive in the southern part of this field. features survive as well preserved earthworks. Small parcels of ridge and furrow lie to the north. The route corridor clips the latter.

HER UID

MHU3255

NRHE UID

80854

1461220

FIELD NUMBER **227**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **228**

Levelled medieval ridge and furrow lies to the immediate south of the route corridor. The likely medieval settlement in Field 226 continues southward into this field, but these earthworks more than 250m south-east of the route corridor.

HER UID
MHU3255

NRHE UID
1461220
1460750

FIELD NUMBER **229**

Faint cropmarks indicating medieval or post medieval ridge and furrow run across the route corridor.

FIELD NUMBER **230**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **231**

A small post medieval sand pit survives as an earthwork in woodland on Barf Hill. This pit is depicted on the OS 6inch map of 1854.

FIELD NUMBER **232**

Post medieval sand pits in this field have been subsumed by later, more extensive workings.

NRHE UID
1460732

FIELD NUMBER **233**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **234**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **235**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **236**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **237**

Great Kelk medieval and post medieval settlement remains are present in this field and are clipped by the route corridor. In this field the earthworks have now been levelled. This settlement continues northward into Fields 238, 239, and 30.

HER UID	NRHE UID
MHU8066	1460723
	1461213

FIELD NUMBER **238**

The route corridor runs through the Great Kelk Medieval and post medieval settlement remains in this field. The earthwork in this field are well preserved and include building platforms, enclosures, crofts, a hollow and ridge and furrow. This settlement continues into Fields 237, 239, and 30.

HER UID	NRHE UID
MHU8066	1460723
	1461213

FIELD NUMBER **239**

Great Kelk medieval and post medieval settlement continues through this field. These lie north of the route corridor. Recent imagery indicates that the earthwork in this field have now been levelled.

HER UID	NRHE UID
MHU8066	1460723
	1461213

FIELD NUMBER **240**

Post medieval field boundaries and Second World War bomb craters are present in this field. They lie either side of the route corridor.

FIELD NUMBER **241**

Two blocks of levelled medieval ridge and furrow lie to the north of the route corridor.

NRHE UID
1549768

FIELD NUMBER **242**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **243**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.

FIELD NUMBER **244**

The current survey of recent (post-NMP) imagery did not record any features within 250m of the route in this field. The earlier NMP project did not record any features anywhere within this field.
