# HOLME HALL, SCUNTHORPE, LINCOLNSHIRE

**Archaeological monitoring of cable trench for solar photovoltaic array**

**Planning Permission Application Number: PA/2013/1311**

**North Lincolnshire Museum Service Site Code: TBA**

**Network Project Code: HHS 16**

**Museum Accession Number: TBA**

**NGR: 490900 406620**

**Prepared by**

**NETWORK ARCHAEOLOGY LTD**

for

**S. JACKSON & SONS**

Report Number: 14004

March 2014

# DOCUMENT CONTROL SHEET

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Network Archaeology delivers a complete consultancy and field service nationwide. The company's particular expertise is linear infrastructure (eg. pipelines, roads, rail). Its emphasis is upon good communication and recognition of client's individual needs & priorities. Network is known for delivering professional support, taking care of the archaeology and enabling projects to keep moving forward.

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# NON-TECHNICAL SUMMARY

A scheme of archaeological monitoring and recording was undertaken by Network Archaeology as fulfilment of a planning condition on the installation of an array of solar photovoltaic panels on land to the south of Holme Hall, Scunthorpe, Lincolnshire.

Excavation of a 190m-long, 0.3m-wide trench for an electricity cable revealed only natural deposits, comprising a windblown sand which could be seen in the deepest part of the cable trench, and below, a stiff clay with frequent ironstone cobbles. No archaeological features or finds were noted.

The narrow width of the cable trench hindered the close examination that probably would have been required to identify any archaeological features of diffuse or subtle appearance. However, in the absence of any artefacts or conspicuous deposits, one can be largely confident that the monitored development has not led to any impact on the archaeological resource.

# 1 INTRODUCTION

## 1.1 Purpose of the report

This report presents the results of a scheme of archaeological monitoring and recording conducted on the excavation of an electricity cable trench serving an array of photovoltaic panels located on land to the south of Holme Hall, Scunthorpe, Lincolnshire (Fig. 1).

## 1.2 Commissioning bodies

Network Archaeology Ltd, the archaeological contractor who carried out the fieldwork and prepared this report, was commissioned by S. Jackson & Sons, through liaison with the photovoltaic panel installer FreeWatt Ltd.

## 1.3 Development area

### 1.3.1 Location and description of the development area

The development area is located approximately 7.5km to the east of the River Trent and 4.5km to the west of Junction 4 of the M180 motorway, which runs 180m to the south of the site. The centre of Scunthorpe is 4km to the north-west (Fig. 1).

The solar array installation has been built on grazing pasture; the land lies at approximately 20m AOD. It occupies the south-eastern slope of a flat-topped rise set within gently undulating terrain.

Sand deposits of the Sutton Formation underlie the site. The solid geology consists of a relatively narrow band of Frodingham Ironstone, which is flanked to the east and west by mudstones (BGS 2014). The local soils are characterised as freely draining, slightly acid sandy soils with low fertility (Cranfield University/NSSI 2012).

## 1.4 Legislation, regulations and guidance

Planning Permission under application number PA/2013/1311 was granted by North Lincolnshire Council providing certain conditions were met. Conditions 3-5 relate to mitigating the effects of the development on any potential archaeological remains on the site, principally by securing a programme of archaeological monitoring and recording during development. These conditions were imposed in accordance with Policy HE9 of the North Lincolnshire Local Plan, and Section 12 of the National Planning Policy Framework.

Consequently, a Written Scheme of Investigation (WSI) was produced by Network Archaeology Ltd detailing the procedures to be followed during the archaeological works accompanying the development (Network Archaeology 2014).

## 1.5 Archaeological background

The development area lies within the bounds of the former medieval settlement of Holme, which is documented in the Domesday Book (HER 1850[1]). LIDAR survey

[1] North Lincolnshire Historic Environment Record reference number.

has revealed the earthwork remains of the settlement in the vicinity of the photovoltaic array; undated cropmarks of enclosures and field systems have also been recorded in land adjacent to the development site (HER 1841, HER 10762).

Holme Hall lies just to the north of the development site and is a Grade II listed building. The current house dates from the late 17th to early 18th centuries, and possibly represents the development of the manorial centre associated with the former village at Holme.

## 1.6 Aims

The aims of the archaeological work, as set out in the Written Scheme of Investigation (Network Archaeology 2014), were to:

- establish the presence or absence, extent, condition, character, quality and date of any archaeological remains;
- locate, recover, identify, and conserve where appropriate any archaeological artefacts;
- locate, and record archaeological deposits;
- assess the overall archaeological significance of any archaeological remains;
- produce a site archive for submission to the receiving museum;
- produce a report that addresses the above;
- provide information for accession to the Historic Environment Record (HER);
- publish significant results, if appropriate.

### 1.6.1 Archaeological resourcing

The monitoring and recording was carried out on 27th February 2014 by Richard Moore, an experienced archaeologist from Network Archaeology.

## 1.7 Circulation of this report

This report will be circulated to the following recipients:

- North Lincolnshire Council/ North Lincolnshire Historic Environment Record
- S Jackson & Sons
- North Lincolnshire Museum Service

## 1.8 Quality standards

All archaeological work was undertaken in accordance with the Institute for Archaeologists' standard and guidance documents (I*f*A 2008a, 2008b, 2009a, 2009b, and 2010).

Network Archaeology is a Registered Organisation with the I*f*A, and the standards represented by the Registered Organisation scheme were adhered to throughout. Key project staff are members of the I*f*A at appropriate levels.

## 1.9 Project codes

The scheme of works has been given the internal Network Archaeology project code HHS 16. In addition, North Lincolnshire Museum Service, the proposed body for the deposition of the site archive for this project, has issued their own site code (to be advised). All documents relating to the site archive have been referenced, where appropriate, with these two codes.

# 2 RESULTS

The excavation of a trench for an electricity cable serving the photovoltaic array formed the focus of the scheme of archaeological work (Fig. 2). The installation of the framework supporting the solar panels was not the subject of archaeological monitoring as it involved minimal disturbance of sub-surface deposits.

The cable trench ran from along the western side of the solar panel array (plate 1), continuing northwards to a newly constructed extension to the farmyard buildings (plate 4). It crossed two fields, separated by a post-and-wire fence, making a broad curve to the east to avoid a sheep pen at the western end of this boundary (plate 2).

In total, a length of approximately 190m was excavated, including a short stretch that was abandoned and backfilled after collapse of the sides. The trench was typically 0.30m wide, and 0.90m deep, and was excavated using a JCB 803 Plus mini-digger. At one point, the cable passes beneath an existing 12 inch diameter steel fuel pipeline, which necessitated excavation to a depth of 1.80m or more, with the sides stepped to avoid collapse. The installation of an inspection pit and the crossing of a water pipe also required small localised widening of the trench.

The excavation of the cable trench was monitored, and where safe and practicable, the base and sides were regularly inspected. The upcast was checked for artefacts or other archaeological remains.

No archaeological artefacts or deposits were observed within the cable trench; and examination of the accompanying spoilheap gave no indication that any such remains had been disturbed by its excavation.

The cable trench showed the sequence of natural deposits, which showed very little variation along the length of the trench. Beneath a thin turf layer, a pale tawny yellow fine sandy subsoil became slightly darker, greyer and more organic to a depth of around 0.40m, where there was a fairly distinct horizon, marked by an increase in root disturbance. Below this, the clean sand continued to the base of the trench, except in the deeper excavation at the crossing of the fuel pipeline. Here, the underlying deposits were encountered at a depth of around 1.60m. This was a rather heterogeneous layer of greyish clay with frequent flattish lumps of ironstone, typically around 100mm across or larger (plate 3). In line with the recorded geology of this area (BGS 2014), it is assumed that the fine sandy material is a windblown sand, and the underyling clay is related to the Frodingham ironstone deposits.

# 3 DISCUSSION

The archaeological monitoring was successful in meeting the objectives, as set out in the WSI and reproduced above. In the absence of any artefacts or signs of any archaeological deposits (either from within the cable trench or its accompanying spoil heap), one can be largely confident that the monitored work has not had an impact on the archaeological resource.

Historic mapping augments the excavated evidence, and suggests that the site has lain undisturbed since at least the late 19th century, having contained agricultural fields since the production of the First Edition Ordnance Survey map in 1887, and probably for many centuries before this date. There has been continuity of ownership of the land, which was in possession of one family from the 15th to the mid-19th century (Andrew Jackson, pers. comm.).

The results of the scheme of archaeological works are echoed by a similar development carried out nearby, where monitoring of a cable trench at Aspen Farm recorded no significant archaeological deposits (Cope-Faulkner 2000).

It would appear that no archaeological remains were encountered in these developments, and the earthwork remains of Holme village are seemingly well-dispersed. However, it should be borne in mind that the types of archaeological remains associated with medieval settlement earthworks may often be difficult to identify in narrow cable trenches.

The site of the cable trench, in the western part of the field and in the lee of the field boundary hedge, appears to be still actively accreting blown sand deposits, raising the possibility that the full depth of the sands is of relatively recent origin. There is therefore a possibility that these sands could be sealing archaeological deposits at some depth below the present land surface: however, no evidence for this was evident in the deeper part of the trench.

# 4 CONCLUSIONS

The archaeological monitoring and recording undertaken during groundworks associated with the installation of a photovoltaic array at Holme Hall, Lincolnshire revealed nothing of archaeological importance. The recorded sequence indicates no evidence of any land use other than agriculture. Although the development area lies within the bounds of the former medieval settlement of Holme, no associated remains were noted during the archaeological works. This might imply that the archaeological traces of the settlement are well-dispersed, with no conspicuous concentrations coinciding with the footprint of the monitored cable trench. Equally, however, it could be that archaeological remains exist at this location but at a greater depth than reached by the groundworks.

Targeted archaeological excavation, or development of a greater scope than that reported on here, would be necessary to better understand the remains of the settlement at Holme; both lie beyond the scope of this project.

# 5 ARCHIVE

The documentary archive comprises:

- A copy of this report;
- Relevant and non-confidential documents and correspondence relating to the site held by Network Archaeology;
- Site records, as detailed in the table below:

**Table 5.1 Quantification of the site archive**

| Item | Count |
|---|---|
| Context registers | 1 |
| Context sheets | 3 |
| Drawing registers | 0 |
| Drawing sheets | 0 |
| Photographic registers | 1 |
| Black and white photographs | 0 |
| Digital photographs | 31 |

On completion of the reporting stages of the project, the archive will be prepared for long-term storage in a format agreed in advance with the relevant local depository. This will be in accordance with guidelines prepared by the UK Institute of Conservation (Walker 1990), the Museums & Galleries Commission (MGC 1992) and the IfA (2008b and 2009b). The project archive will be managed in accordance with current guidelines (Brown 2007).

The recipient museum is North Lincolnshire Museum, Oswald Road, Scunthorpe, North Lincolnshire, DN15 7BD, which will assign a separate museum site code (to be advised), and which will allocate an accession number on deposition of the archive.

The recipient museum will receive the document archive. It has been agreed with North Lincolnshire Museum Service that the archive will be deposited there in April 2014.

With no artefacts collected during the archaeological monitoring, there are no issues regarding the transfer of ownership from landowner to the recipient museum.

As shown in Appendix A, details of this project have been entered onto OASIS, the online database of archaeological investigations (OASIS ID - networka2-173164).

# 6 ACKNOWLEDGEMENTS

Network Archaeology would like to thank Andrew Jackson for his help and support, and the staff of Freewatt Renewable Energy for their help and cooperation on site. We also wish to record our thanks to Alison Williams, the HER Officer of North Lincolnshire Historical Environment Record, for her help.

For Network Archaeology, the executive manager was Christopher Taylor, the fieldwork was carried out by Richard Moore, who also edited this report; the WSI and the draft of this report was prepared by Patrick Daniel, and illustrations are by Jacqueline Churchill.

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**APPENDIX A: OASIS SUMMARY**

# OASIS DATA COLLECTION FORM: England

List of Projects | Manage Projects | Search Projects | New project | Change your details | HER coverage | Change country | Log out

## Archaeological monitoring of cable trench for solar PV array - Network Archaeology Ltd

OASIS ID - networka2-173164

| Versions | | | | |
|---|---|---|---|---|
| View | Version | Completed by | Email | Date |
| View 1 | 1 | Patrick Daniel | patrickd@netarch.co.uk | 4 March 2014 |

| Completed sections in current version | | | | |
|---|---|---|---|---|
| Details | Location | Creators | Archive | Publications |
| Yes | Yes | Yes | Yes | 1/1 |

| Validated sections in current version | | | | |
|---|---|---|---|---|
| Details | Location | Creators | Archive | Publications |
| No | No | No | No | 0/1 |

| File submission and form progress | | | |
|---|---|---|---|
| Grey literature report submitted? | No | Grey literature report filename/s | |
| Report release delay specified? | Yes | Release delay | Release into ADS library once signed off |
| Boundary file submitted? | No | Boundary filename | |
| HER signed off? | | NMR signed off? | |

Grey literature | Upload boundary file | Request record re-opened | Printable version

Email North Lincolnshire SMR about this OASIS record

OASIS: Please e-mail English Heritage for OASIS help and advice

**PLATES**

*Plate 1: Looking south along cable trench towards solar photovoltaic array*

*Plate 2: Looking north along cable trench towards Holme Hall*

*Plate 3: Natural ironstone deposits exposed in base of cable trench*

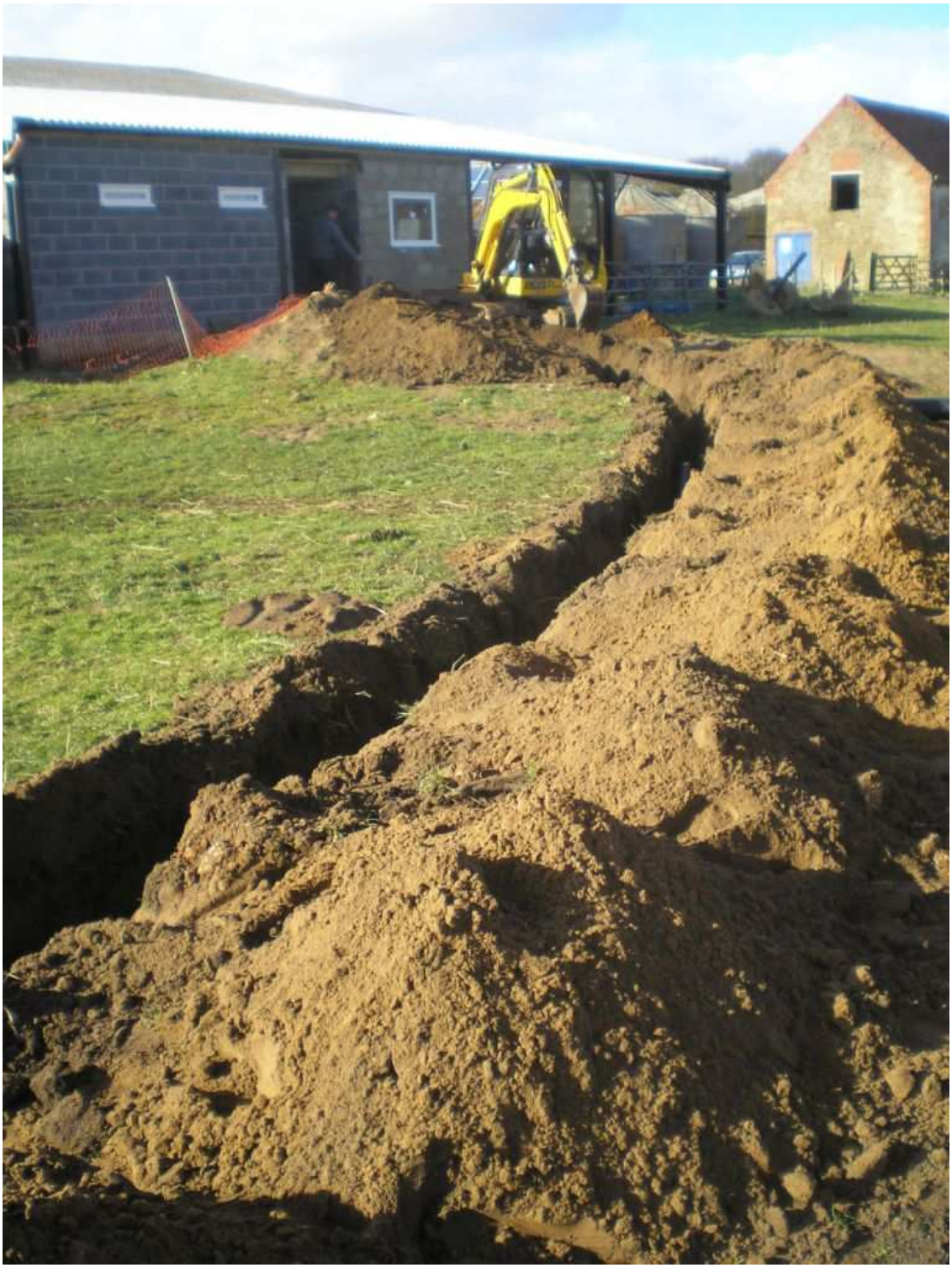
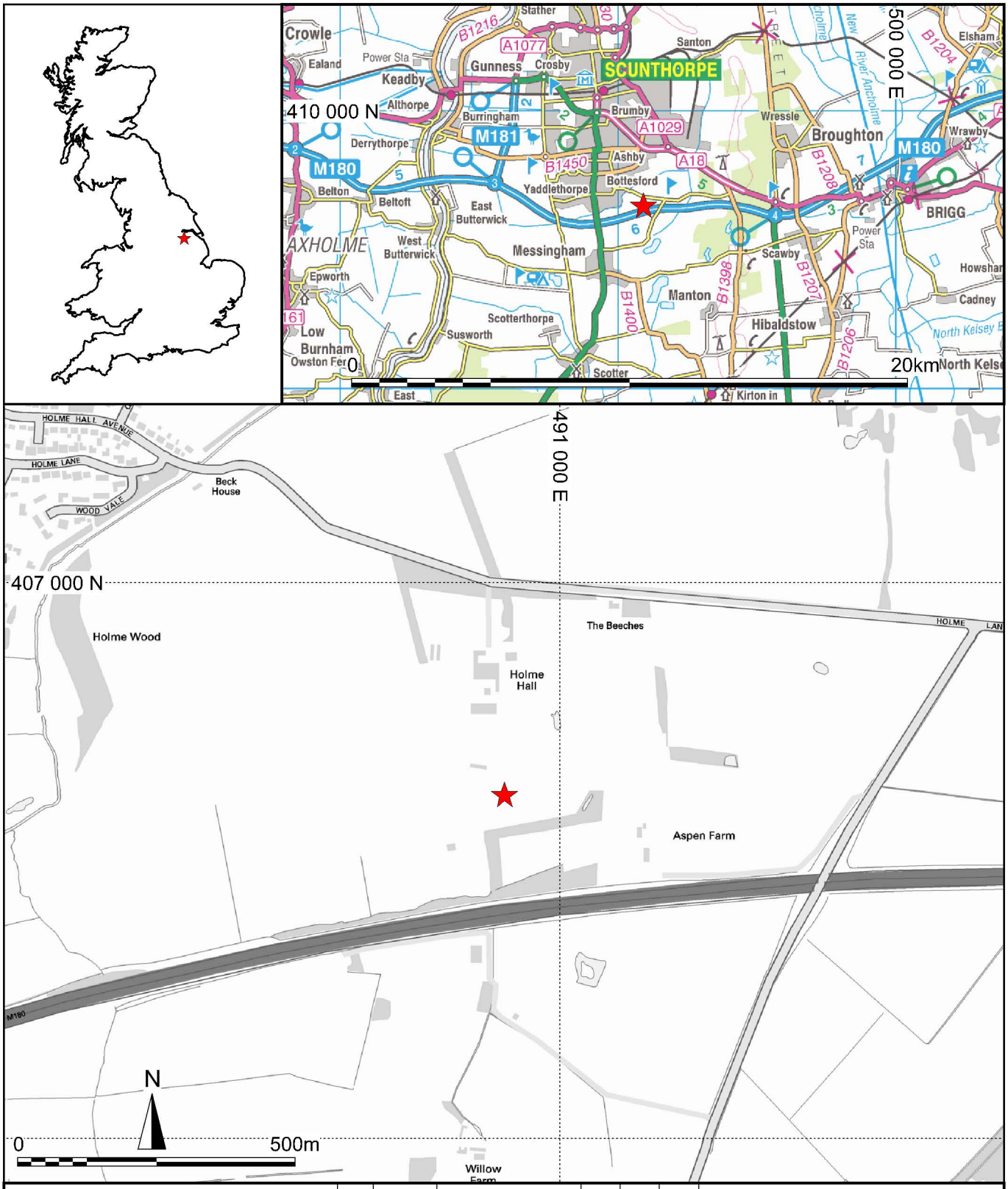


*Plate 4: Northern extent of cable trench*

**FIGURES**




Site location

| Ver | Date | Description | Drn | Chk | App |
|---|---|---|---|---|---|
| 1.00 | 24/2/14 | First issue | JLC | PD | CT |



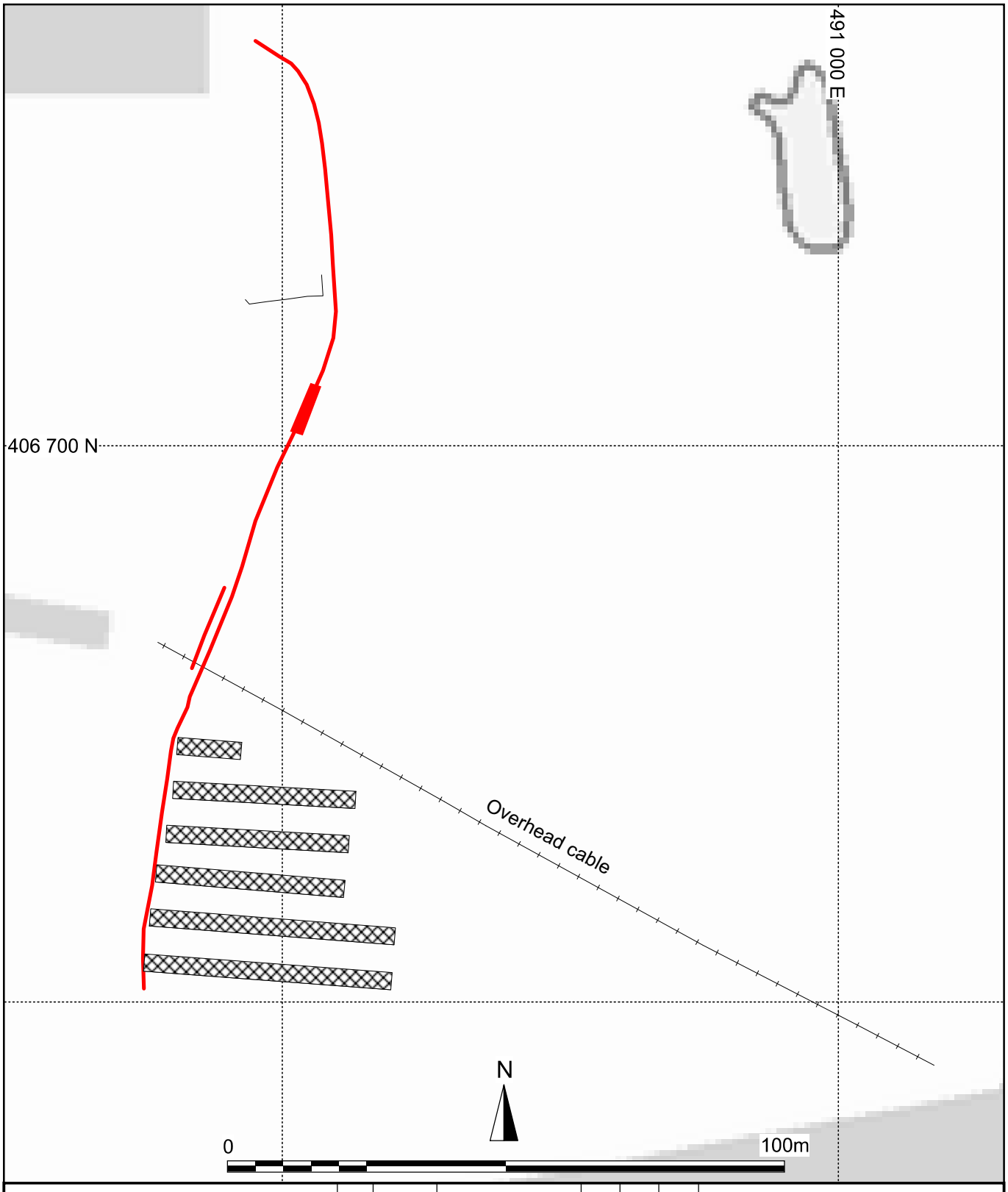
network archaeology

Holme Hall, Scunthorpe

Figure 1
General location of site

Scale: 1:200,000 and 1:10,000

FILE NAME: P:\active\HHS\16\documentation\WSI\Illustrations\GIS\Workspaces\HHS_figure 01.wor




Cable trench

Solar panel array

| Ver | Date | Description | Drn | Chk | App |
|---|---|---|---|---|---|
| 0.01 | 3/3/14 | First issue | JLC | PD | CT |



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Holme Hall, Scunthorpe

Figure 2
Location of monitored cable trench

Scale: 1:1000

FILE NAME: HHS\16\report\illustrations\GIS\workspaces\HHS_figure02.wor