

# Goxhill Multi-Junction Pumping Station Compound

Goxhill  
North Lincolnshire

## ARCHAEOLOGICAL WATCHING BRIEF

Network Archaeology

for

J Murphy and Sons

on behalf of

National Grid

Report No: 574

March 2011



**nationalgrid**

**MURPHY**

**network**  
archaeology

# **GOXHILL MULTI-JUNCTION PUMPING STATION COMPOUND**

**GOXHILL, NORTH LINCOLNSHIRE**

## **Archaeological Watching Brief**

**Museum Project Code: GXAQ**

**Network Project Code: GOX16**

**NGR: 513400 423220**

**Prepared by**

**NETWORK ARCHAEOLOGY LTD**

**for**

**J MURPHY AND SONS**

**on behalf of**

**NATIONAL GRID**

**Report Number: 574**

**March 2011**

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## DOCUMENT CONTROL SHEET

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## **FIGURES**

Figure 1: General location of site

## **NON-TECHNICAL SUMMARY**

Monitoring of topsoil stripping on the site of a proposed temporary site compound adjacent to the existing Goxhill pumping station was undertaken by Network Archaeology from 28<sup>th</sup> February to 4<sup>th</sup> March 2011.

The watching brief did not locate any significant archaeological remains: no finds were recovered and there was little to suggest that archaeologically significant features or deposits exist within the study area. However, this does not preclude the possibility that there are significant deposits at greater depth than that reached by the topsoil stripping.

# **1 INTRODUCTION**

## **1.1 Purpose of the report**

This report presents the results of an archaeological watching brief undertaken on the site of a proposed temporary site compound adjacent to the gas pumping station at Goxhill, North Lincolnshire (Figure 1).

## **1.2 Commissioning bodies**

This report was commissioned by J Murphy and Sons on behalf of National Grid. The archaeological contractor was Network Archaeology Ltd.

## **1.3 Proposed development area**

### **Location**

The existing pumping station lies 4km north-east of Goxhill village. The site compound lies 300m south-east of Fir Tree Farm on East Marsh Lane, immediately adjacent to the pumping station. It is less than one kilometre from the southern bank of the Humber Estuary.

### **Geology, topography, soils and land use**

The underlying geology comprises superficial marine and estuarine alluvial deposits of silt and clay overlying chalk bedrock of the Burnham Chalk formation (BGS 1991).

The compound site is situated on flat arable farmland (Figure 1) at a height of approximately 3 m OD.

## **1.4 Legislation, regulations and guidance**

Although planning permission will be required for work on the pumping station, the groundworks undertaken on the site of the temporary compound are considered permitted development as defined by the Gas Act 1995. Nevertheless, the developer has a commitment to follow best practice in regard to archaeological mitigation.

A scheme of archaeological works was produced by Network Archaeology Ltd (Moore 2011) detailing the procedures to be followed during ground preparation for the temporary construction compound.

## **1.5 Archaeological and historical background**

Previous archaeological investigations in the area include a geophysical survey carried out in 1999 on the route of one of the gas pipelines serving the pumping station (NLSMR 1774), a desk-based assessment (DBA) and field survey on the route of the proposed Paull to Goxhill pipeline (Gardner 2008) and a geophysical survey carried out in connection with the same scheme (Bunn 2007). These field surveys included the field to the north-west of the existing pumping station as this was proposed as the lay-down area for pipe beneath the Humber, and therefore included the area of the watching brief described here.

The Humber Estuary was a favoured location for prehistoric communities to grow because of the potential for trade and communication. Examples of Bronze Age and Iron Age settlements and enclosures are known to have occupied areas of high ground close to the estuary. The Paull to Goxhill DBA identified two possible prehistoric sites within the study area: a ‘pear-shaped enclosure’ and other features at East Halton, evidenced through soil marks (NLSMR 17451), and a geophysical anomaly interpreted as a prehistoric to Roman ditch (NLSMR 20089).

In the late Iron Age and Roman periods the Lincolnshire coast was an important centre for salt production, evident by distinctive saltern mounds scattered across the landscape. Evidence of Roman settlement is also known from the East Halton area and other sites nearby. Three records dating from the Roman period were noted in the Paull to Goxhill DBA. These included a 'Romano-British cropmark complex' (NLSMR 8777) extending over five fields to the north-west of East Halton Skitter. Within this area was a rectangular enclosure and field boundaries which have been interpreted as being part of an occupation site. This is considered an extremely important site as it is the only native type settlement at a haven mouth on the Humber where there is recorded evidence from excavation, during investigations carried out in 1985 on behalf of the Gas Board. The other records include crop marks of possible Roman occupation (NLSMR 20076) and surface finds of Romano British pottery (NLSMR 1591).

The geophysical survey provided corroboration of the crop mark sites, detecting linear magnetic anomalies, particularly in the field to the south-east of the pumping station. An isolated curvilinear anomaly which was thought might indicate a buried ditch extended into the field to the north-west, impinging on the watching brief area.

Medieval settlement was established largely along the slight ridge of glacial till deposits which define the south-western edge of the marsh. This pattern is preserved in the present-day distribution of villages, of which Goxhill itself is typical. The settlement appears as *Golse* in Domesday Book (1086), with other early variants including *Gousele* from the Book of Fees of 1212 (Ekwall 1991). Suggested meanings include 'the stream of Gaukr', a Scandinavian name, or a Scandinavianised form of Old English *Geacesleah*, a 'cuckoo's wood or glade'.

The Humber continued to be a centre of salt production in the medieval period, and a probable medieval saltern is recorded from East Halton Beck (NLSMR 8784). Both Goxhill Haven and East Halton Skitter would have been used for small-scale trade at this time, the latter also serving the important monastic site of Thornton Abbey. To the south-west of the watching brief area, medieval field systems and ridge and furrow have been recorded around Chapel Farm and Marshlands (NLSMR 8776, 8780, 8781 and 8788), with surface finds of pottery from the same area (NLSMR 1591 and 19790).

In the post-medieval period, a brick manufactory was established to the west of East Halton Skitter (NLSMR 8770). The existing gas pumping station at Goxhill was established in the 1970s as a component of the national gas transmission network.

## 1.6 Aims

The aims and objectives of the archaeological watching brief, as set out in the scheme of archaeological works, 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 County Historic Environment Record (HER);
- publish significant results in an appropriate journal, if appropriate.

## **2 FIELDWORK PROCEDURES**

### **2.1 Quality standards**

All archaeological work was undertaken in accordance with the Institute for Archaeologists' standard and guidance documents (IfA 2008a, 2008b, 2008c, 2010) and those set out in the Lincolnshire Archaeology Handbook (Lincolnshire County Council 2010).

Network Archaeology is a Registered Organisation with the IfA and adhered to the standards represented by that status throughout.

### **2.2 Watching brief**

The compound measures 100m long and extends 60m to the north-east from East Marsh Road. Topsoil was stripped from this area and stacked in two 3m-wide bunds along the three sides not fronting onto East Marsh Road.

#### **Mechanical-excavation**

The site was excavated down to a suitable depth by a 360° mechanical excavator fitted with a 1.6m wide toothless ditching bucket. The depth was defined by the firmness of the underlying deposits and the requirement for a level surface upon which temporary offices could be placed. All excavation was undertaken under the supervision of the site archaeologist.

#### **Recording**

A full written was maintained on site, including standardised context descriptions on pro forma record sheets. A scale plan of the watching brief area was made and sections drawn showing representative soil profiles. Both colour and monochrome photographs were taken.

### **2.3 Project codes and number allocations**

The watching brief has been given the internal Network Archaeology project code GOX16. In addition, a North Lincolnshire museum project code (GXAQ) has been issued for the deposition of the site archive. All documents relating to the site archive for this project have been referenced, where appropriate, with these codes.

### **2.4 Assessment of archives, finds and soil samples**

Following completion of the watching brief, the stratigraphic information gathered was assessed as to its potential and significance.

No finds were recovered, and no soil samples were collected. The few stray finds from the surface or from the topsoil identified during the watching brief were of such modern provenance that they did not warrant retention.

### **3 RESULTS**

No significant archaeological remains were identified during the excavation of the watching brief area.

Initially topsoil, context 100, was stripped around the perimeter of the proposed compound area to determine the depth of suitably firm deposits (Plate 1). This was a 10m wide strip that showed that an undifferentiated clay deposit, 101, lay directly below 0.3m of topsoil across the site. This clay is interpreted as alluvium. Once this had been established the rest of the site was stripped to create level ground upon which the compound could be constructed (Plates 3, 4 and 5). The remainder of the area was not stripped down to the same depth because it was deemed that suitable conditions could be achieved by removing around 0.2m thickness of topsoil.

There was a distinct paucity of finds observed in the topsoil. Those that were seen were of a modern date and it was not deemed necessary to retain them. They included fragments of plastic, concrete and pottery, and these were primarily distributed within 5m of East Marsh Lane.

#### **4 CONCLUSION**

The watching brief did not locate any significant archaeology, and the results show that the depth of excavation across the proposed compound area was insufficient to impact upon any archaeological remains that may lie in the alluvial clay below. In addition, there was no evidence from the topsoil to suggest that significant archaeological remains are to be found within the study area.

## 5 ARCHIVE

The documentary archive comprises:

- A copy of this watching brief report
- Site records, as detailed in the table below:

**Table 6.1: Quantification of the site archive**

<b>Item</b>	<b>Count</b>
Context index	1
Context sheets	2
Drawing registers	1
Drawing sheets	1
Photographic registers	2
Black and white photographs	10
Colour slide photographs	10
Digital colour photographs	27

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) and the Museums and Galleries Commission (MGC 1992). The project archive will be managed in accordance with current guidelines.

The recipient museum is Northern Lincolnshire Museum Service, Oswald Road, Scunthorpe, North Lincolnshire DN15 7BD; tel: 01724 843533, who have assigned this project the code GXAQ.

## **6 ACKNOWLEDGEMENTS**

Network Archaeology would like to thank, from J Murphy and Sons, Dave Stevens, the Site Manager, John Sheridan, the Design Interface Coordinator, and Simon Weller, the Environmental Advisor. We would also like to thank Derek Cater, of Groundwork Archaeology, for providing valuable information on previous archaeological work at the pumping station.

For Network Archaeology, the work was managed by Richard Moore and fieldwork carried out by Chris Casswell. Illustrations are by Jacqueline Churchill.

## 7 REFERENCES

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# Plates

Plate 1: Initial topsoil strip working shot.

Plate 2: Topsoil strip working shot.

Plate 3: Stripped site compound area, looking south-east.

Plate 4: Stripped site compound area, looking north-west.

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Plate 1: Initial topsoil strip working shot.



Plate 2: Topsoil strip working shot.

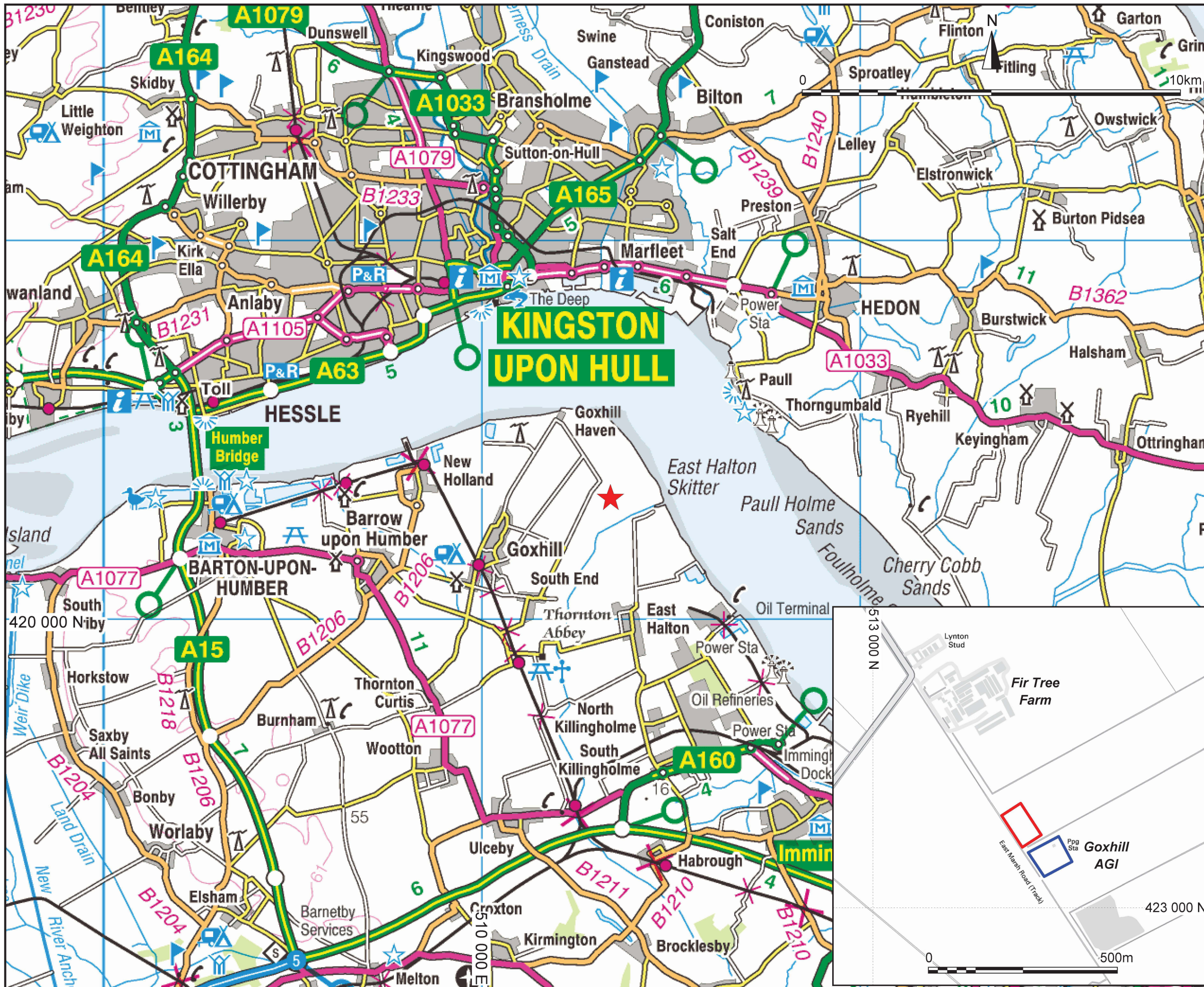


Plate 3: Stripped site compound area, looking south-east.



Plate 4: Stripped site compound area, looking north-west.

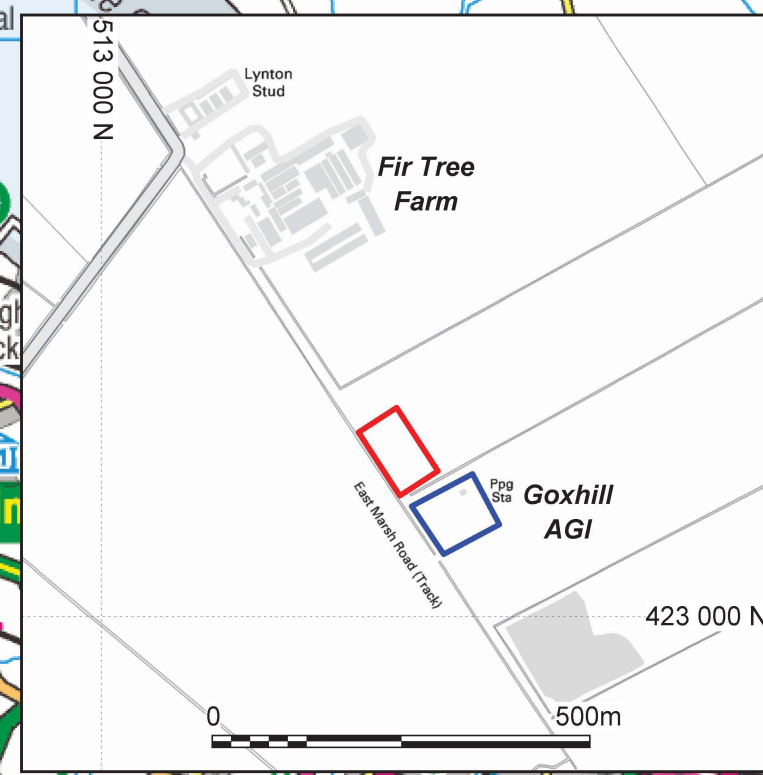
# Figures



Main map (1:10,000)  
 ★ Site location

Inset map (1:1000)  
 □ Proposed compound  
 □ Existing Goxhill AGI

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Goxhill Multi Junction Pumping Station Compound

Figure 1  
 General location of site

Scale: 1:10,000 and 1:1000

## Appendix A

### Context Register

Context	Type	Dimensions	Description	Interpretation
100	Layer	0.3m thick	Mid-dark brown soft silty clay with moderate mixed stone inclusions	Topsoil
101	Layer	Unexcavated	Firm light brown and grey clay	Alluvium

## Appendix B

### Digital Photographic Register

Image	Description
1	Pre-excavation shot, looking south-east
2	Pre-excavation shot, looking east
3	Pre-excavation shot, looking north-west
4	Pre-excavation shot, looking north-east
5	Initial strip of site compound perimeter, looking north-west
6	Initial strip of site compound perimeter, looking north-west
7	Initial strip of site compound perimeter, looking south-east
8	Topsoil strip working shot
9	Topsoil strip working shot
10	Topsoil strip working shot
11	Topsoil strip working shot
12	Topsoil strip working shot
13	Topsoil strip working shot
14	Topsoil strip working shot
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23	Stripped site compound area, looking east
24	Stripped site compound area, looking south-east
25	Stripped site compound area, looking north-east
26	Stripped site compound area, looking south-east
27	Landscape shot from site, looking south-west

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**Appendix C**  
**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](#)

## Printable version

**OASIS ID: networka2-97069**

### Project details

Project name	Goxhill gas pumping station
Short description of the project	Monitoring of topsoil stripping on the site of a proposed temporary site compound adjacent to the existing Goxhill pumping station was undertaken by Network Archaeology from 28th February to 4th March 2011. The results of the watching brief show that the depth of topsoil stripping was insufficient to impact upon any archaeological remains that may lie in the alluvial clay below. No finds were recovered and there is little evidence from the topsoil to suggest that significant archaeological remains exist within the study area.
Project dates	Start: 28-02-2011 End: 04-03-2011
Previous/future work	No / No
Type of project	Recording project
Site status	None
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m
Monument type	NON ANTIQUITY None

### Project location

Country	England
Site location	NORTH LINCOLNSHIRE NORTH LINCOLNSHIRE GOXHILL Land adjacent to Goxhill gas pumping station
Postcode	DN19 7NQ
Study area	0.60 Hectares
Site coordinates	TA 513400 423220 53.8547915477 0.301201065221 53 51 17 N 000 18 04 E Point
Height OD / Depth	Min: 2.50m Max: 3.50m

### Project creators

Name of Organisation	Network Archaeology Ltd
Project brief originator	Contractor (design and execute)
Project design originator	National Grid
Project director/manager	Richard Moore



Project supervisor Christopher Casswell

Type of sponsor/funding body British Gas/Company

### Project archives

Physical Archive Exists? No

Digital Archive Exists? No

Paper Archive recipient Northern Lincolnshire Museum Service

Paper Archive ID GXAQ

Paper Contents 'none'

Paper Media available 'Context sheet', 'Map', 'Miscellaneous Material', 'Photograph', 'Report'

Entered by Richard Moore (richardm@netarch.co.uk)

Entered on 23 March 2011

## OASIS:

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