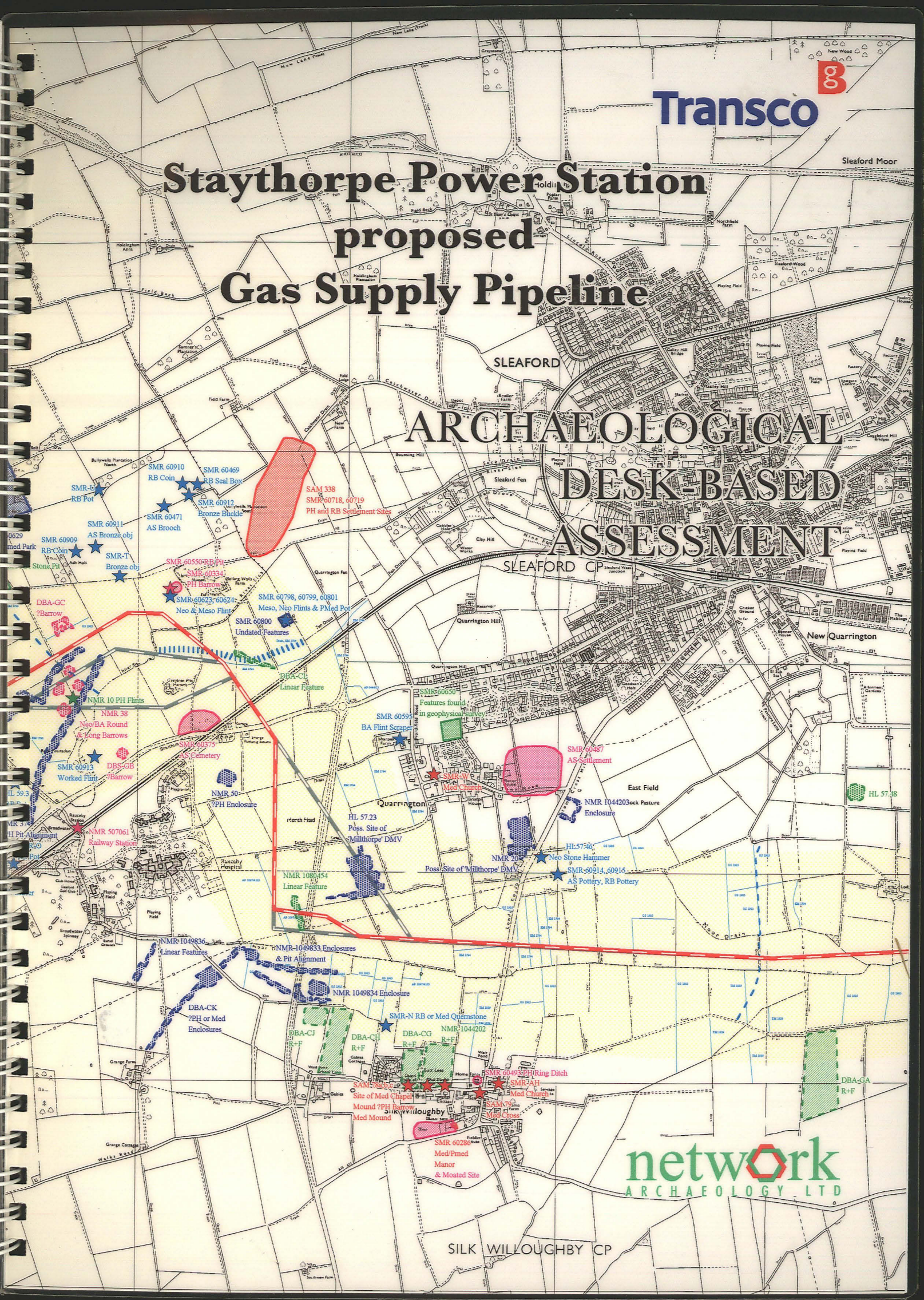
Transco
Staythorpe Power Station
proposed
Gas Supply Pipeline
ARCHAEOLOGICAL
DESK-BASED
ASSESSMENT
SLEAFORD
SLEAFORD CP
SILK WILLOUGHBY CP
Sleaford Moor
New Quarrington
Quarrington
East Field
North Field
Quarrington Hill
Sleaford Fen
Clay Hill
Bouncing Hill
Holdingham Plantation
Holdingham Annex
Bullywells Plantation North
Bullywells Plantation South
Grange Farm
Grange Cottages
Walks Road
Raucebys Hospital
Raucebys Station
Broadwater Spinney
Broadwater Farm
Sleaford Golf Club
Cogglesford Hill Bridges
Northfield Farm
Poplar Farm
Broiler Farm
Sharpes Farm
Bridge House
Home Farm
Manor Farm
Gables Cottages
Southbrook Farm
Quarrington Fen
Quarrington Hill Reservoir
Sleaford West Junction
Sleaford Wood
Galley Hill Bridge
Galley Hill
Cobblers Hole
Water Works
Rolling Walls Farm
Ash Holt
Stone Pit
Pingle-ing
Pingle-ing Pumping Station
Cricket Ground
Allotment Gardens
Old Folly
The Platings
Bonner House
Goodson's Hole
Sleaford Drain
Moor Drain
Quarrington Drain
Chichester Drain
Sack Drain
Nine Foot Drain
Ten Drain
Field Beck
Lincoln Road
New Lane (Track)
Cemetery
Playing Field
Factory
Poultry Houses
Gables
Wood Barn
Chapel Lane
Ware Pond
Fieldside Farm
Fieldside House
Southbrook Farm
SMR 60910
RB Coin
SMR 60469
RB Seal Box
SMR-B
RB Pot
SMR 60912
Bronze Buckle
SMR 60471
AS Brooch
SAM 338
SMR 60718, 60719
PH and RB Settlement Sites
SMR 60911
AS Bronze obj
SMR 60909
RB Coin
SMR-T
Bronze obj
SMR 60550 RB Pit
SMR 60334
?PH Barrow
SMR 60623, 60624
Neo & Meso Flint
SMR 60798, 60799, 60801
Meso, Neo Flints & PMed Pot
SMR 60800
Undated Features
DBA-GC
?Barrow
DBA-CL
Linear Feature
NMR 10 PH Flints
NMR 38
Neo/BA Round
& Long Barrows
SMR 60375
AS Cemetery
SMR 60913
Worked Flint
DBS-GB
?Barrow
NMR 50
?PH Enclosure
NMR 507061
Railway Station
SMR 60650
Features found
in geophysical survey
SMR 60595
BA Flint Scraper
SMR 60487
AS Settlement
SMR-W
Med Church
NMR 1044203
Enclosure
HL 57.48
HL 57.23
Poss. Site of
'Millthorpe' DMV
HL 57.46
Neo Stone Hammer
NMR 20
Poss. Site of 'Millthorpe' DMV
SMR 60914, 60915
AS Pottery, RB Pottery
NMR 1080454
Linear Feature
NMR 1049836
Linear Features
NMR 1049833 Enclosures
& Pit Alignment
NMR 1049834 Enclosure
DBA-CK
?PH or Med
Enclosures
SMR-N RB or Med Quernstone
NMR 1044202
DBA-CJ
R+F
DBA-CH
R+F
DBA-CG
R+F
SMR 60493 ?PH Ring Ditch
SMR-AH
Med Church
SAM 78
Site of Med Chapel
Mound ?PH Barrow
Med Mound
SAM 79
Med Cross
SMR 60286
Med/Pmed
Manor
& Moated Site
DBA-GA
R+F
network
ARCHAEOLOGY LTD

STAYTHORPE POWER STATION
PROPOSED GAS SUPPLY PIPELINE

Archaeological Desk-Based Assessment

Prepared by

NETWORK ARCHAEOLOGY LTD

for

TRANSCO

Report No. 132

April 1999

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1 SUMMARY

1.1 General

This report presents the findings of the Archaeological Desk-Based Assessment of the proposed 39km Transco gas pipeline between Silk Willoughby in Lincolnshire and Staythorpe in Nottinghamshire.

This area is known to be of high archaeological potential. Scheduled monuments include important Roman settlements at East Stoke, Ancaster and South Rauceby, and a possible Neolithic henge at Elston. King Street, Ermine Street and the Fosse Way, all major Roman roads, cross the proposed pipeline route. The area is exceptionally rich in early Anglo-Saxon remains, including a number of large and important cemeteries. Dense cropmark concentrations in the vicinity of Rolleston, East Stoke, Dry Doddington and South Rauceby, hold great potential for the discovery of new sites. In addition, well-preserved archaeological deposits and artefacts may survive beneath alluvial deposits in the valleys of the Rivers Slea, Witham, Devon and Trent.

1.2 Results

During the course of the assessment, information was collected and collated for 418 sites within or just beyond, a 1km-wide study area. Known sites along the route have been placed into five categories on the basis of their archaeological significance. On the original proposed pipeline route, twenty-four sites were identified where construction could have had a major impact (A-C categories). The route also passed through fifteen D-E category sites. Consultation with the project engineers has resulted in the implementation of alternative routes to avoid all the sites in the top two categories, with the exception of the courses of three Roman roads. In the third category, all but seven have been avoided, excluding one potential Roman road. These seven sites are in areas with tight environmental and engineering constraints but least damaging routes have been sought where possible. Nevertheless, re-routes are still advised for these areas. Further stages of investigation will help to clarify the impact on these areas and provide information for further mitigation procedures if necessary.

The proposed route crosses twenty-one other areas identified in the D and E categories, where the impact of the proposed pipeline is thought at this stage to be less severe. Most of these lower category sites are redundant field boundaries or single artefact findspots.

The proposed line also lies within the vicinity of known sites and therefore has an uncertain impact. This is particular the case for cropmark areas whose limits are not precisely known. Further stages of archaeological investigation will help to clarify the route's impact, if any, on these areas. Future fieldwork will also help in the identification of previously unknown archaeological sites.

1.3 Recommendations

The following recommendations are made for the next stage of archaeological investigation:

- Field Reconnaissance Survey along the entire route.
- Fieldwalking of all arable fields along the route.

- Geophysical Survey of the entire route (excluding areas covered by deep alluvium). To consist of detailed magnetometry on a 15m wide transect, supplemented by regular magnetic susceptibility measurements. ?

- An assessment of the archaeo-environmental potential of alluvial areas.

2 INTRODUCTION

2.1 General

Network Archaeology Limited (NAL) was commissioned by Transco in February 1999 to carry out an Archaeological Desk-Based Assessment of a proposed gas pipeline route between Silk Willoughby, some 2.5km south-east of Sleaford (TF 0838 4367), and Staythorpe, 3km west of Newark (SK 7610 5306) (Figure 1). The route is approximately 39km long and lies within the counties of Lincolnshire and Nottinghamshire. The working width of the pipeline easement will be approximately 30m. This study constitutes Stage 2 of the Archaeological Investigatory Stages outlined in Appendix 1.

NAL collated information on a 1km study area based upon an initial route provided by Transco in February 1999. Liaison with Transco Engineers throughout February and March led to the re-routing of the line where possible to avoid known archaeological sites. The Archaeological Constraints Maps show both the old and revised routes. Where the line has been re-routed away from the initial study corridor additional information on sites has been collected. This report is based on the latest proposed pipeline route (April 1999).

2.2 Pipeline Assessments

The construction of a new pipeline can cause considerable damage to the archaeological resource. At the initial stages of the project, careful route selection taking into account the location of known archaeological sites will ensure that this impact is reduced. A phased programme of investigation will allow further sensitive areas crossed by the route to be identified. Where avoidance is not possible, mitigation strategies can be implemented well in advance of construction.

In addition to their potential for damage, large-scale linear developments have a positive value in providing an opportunity to examine the archaeological deposits within a long transect of countryside, which in many cases has afforded little study. Monitoring of construction work contributes to knowledge in areas of previously uncertain archaeological potential.

2.3 Project Objectives

The overall aim of this assessment is to assist Transco in the selection of an archaeologically least-damaging pipeline route, and to provide a basis for further stages of investigation.

The objectives can be broadly outlined as follows:

- Identifying and defining extents of *known* archaeological sites within a 1km study corridor based upon the proposed pipeline route, and providing a preliminary assessment of their importance.
- Assessing the potential for evaluative field survey.
- Outlining recommendations for mitigation strategies.

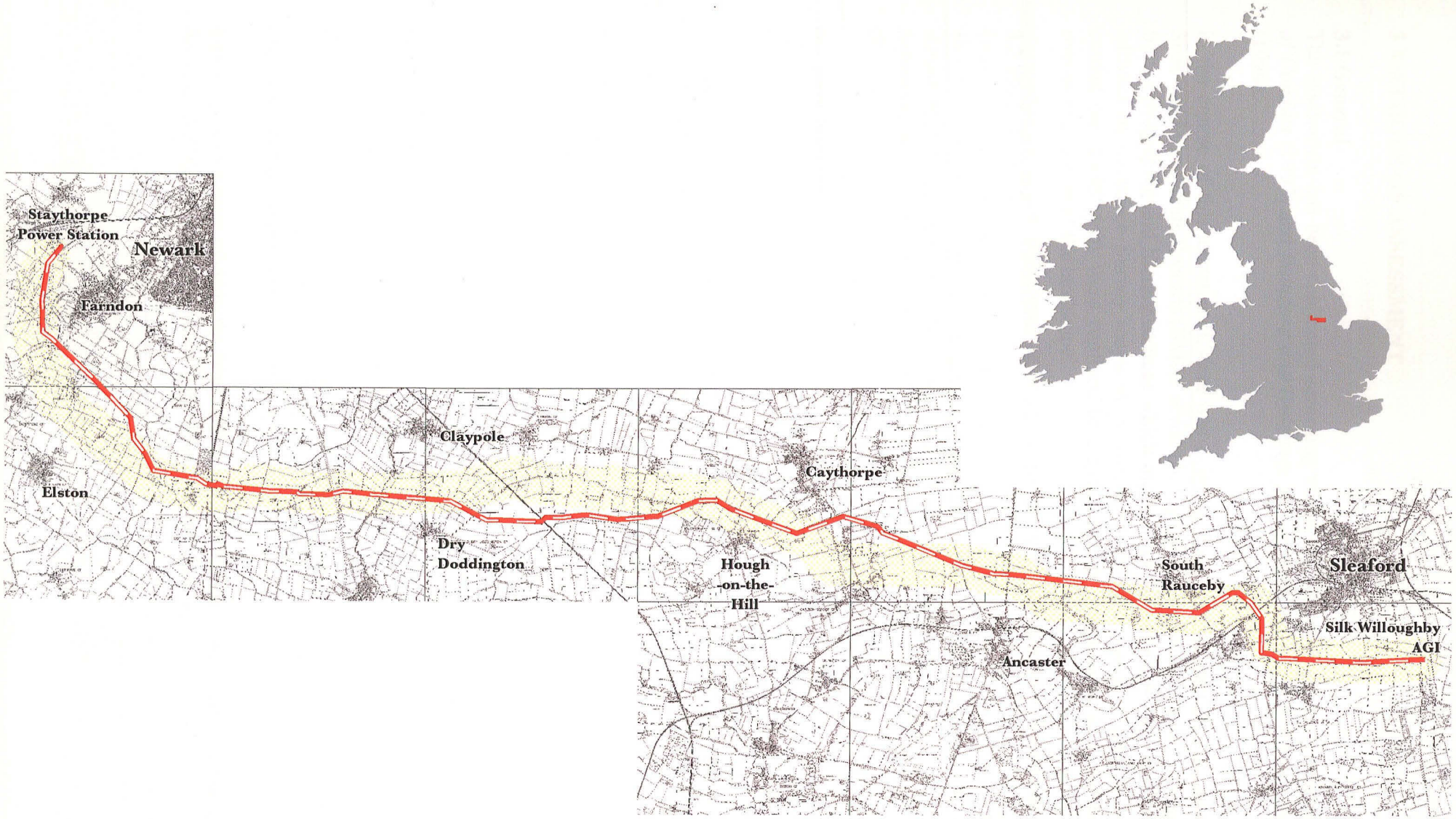

Fig. 1 Location of the proposed pipeline

3 METHODS OF ASSESSMENT

3.1 General

The assessment has been conducted according to the Institute of Field Archaeologists' *Code of Conduct* (1997) and *Standard and Guidance for Archaeological Desk-Based Assessments* (1994).

In the course of this assessment, data was collated from detailed searches of county-based Sites and Monuments Records (SMR), aerial photographic data from a variety of sources, and from cartographic and literary sources which included enclosure maps, tithe maps and early editions of Ordnance Survey maps. A limited study of place-names along the route was carried out. Field visits were confined to a number of road crossings, in order to gain an overall impression of the landscape.

3.2 Study Corridor

Data from documentary sources and aerial photographic research was collected within a 1km-wide corridor centred on the proposed pipeline route. Where it was likely that the line would need to be re-routed, the search was extended to cover this. Major sites, such as Scheduled Ancient Monuments (SAMS), were also recorded over a wider area in order to set the study within a broader archaeological context.

3.3 Data Sources

The National Monuments Record (NMR) held by the Royal Commission on the Historical Monuments of England (RCHME) in Swindon:

- The MONARCH database was consulted and all registered archaeological sites within the data-collection area were listed. 'Events Reports' for archaeological fieldwork within the area were also obtained.

- All relevant oblique aerial photographs in the National Library of Air Photographs were studied, together with a selection of vertical photographs.

Sites and Monuments Records (SMR): All known sites and findspots within the data-collection area listed in Lincolnshire and Nottinghamshire County SMRs were recorded. The Heritage Lincolnshire (HL) site index was also consulted, as this includes some sites that have not yet been incorporated into the County SMR. RCHME National Mapping Programme maps were available for inspection at both locations, giving coverage of the entire route. The Aerial Photograph collection at Lincolnshire SMR was also studied.

Public Record Offices: All the available enclosure maps and tithe maps for the parishes crossed by the route were studied at Lincolnshire and Nottinghamshire Archives. The earliest available large scale Ordnance Survey maps were also consulted.

Libraries: Visits were made to the East Midlands Collection at Nottingham University, and to the local history collections at Lincoln and Nottingham Libraries.

4 DESCRIPTION OF PIPELINE ROUTE

4.1 Location and Topography

The proposed route runs westward from an existing Above-Ground Installation (AGI) on Mareham Lane, south-east of Sleaford. The land here is low-lying, being approximately 10m OD, and drained by the Cliff Beck, a small stream which feeds into the South Forty Foot Drain at Helpringham Fen. Between the villages of Silk Willoughby and Quarrington, the land rises to around 20m OD at the point where the route crosses the A15 Lincoln to Peterborough road. Turning north-west to cross the A153 Grantham road and the Sleaford to Grantham railway line, the route again drops below 10m OD as it crosses the valley of the River Slea.

To the west of this point, the proposed pipeline route runs transversely across the northern side of the Ancaster Gap. After rising to a height of over 50m OD south of the village of South Rauceby, the route drops towards a broad river meander close to Ancaster at around 25m. It then rises again towards Normanton Hill, where it reaches its highest point at more than 110m OD.

To the south of Normanton village, the scarp slope of the limestone ridge drops over 50m within the space of less than 500m. A slight rise is followed by another fairly sharp drop to the north of Hough-on-the-Hill, beyond which the land levels out at around 20m to 25m OD. After crossing several small tributaries of the River Witham, the route rises above a slight ridge between Dry Doddington and Claypole before crossing the Witham itself.

The low-lying land continues to the west of the A1 Great North Road, where the route crosses Bennington Fen, at approximately 16m OD. The village of Cotham stands on another ridge of slightly higher ground, beyond which the route crosses the valley floor of the River Devon. With its tributaries, this small river drains the Vale of Belvoir to the south. A barely perceptible rise around the villages of East Stoke and Thorpe marks the watershed with the Trent Valley. Crossing the river between East Stoke and Farndon, to the south of Newark, the remainder of the route lies on the floodplain of the Trent, which is around 12m OD at this point.

4.2 Geology

Running east to west across Lincolnshire and Nottinghamshire, the route travels over the sequence of successively older Jurassic and late Triassic strata. Over the higher ground, these deposits occur close to the ground surface as the area is relatively free of glacial drift. In the floodplains of the Slea, Witham, Devon and Trent lie varying depths of alluvium and river terrace gravels. Erosion has resulted in some landslip deposits below the steeper scarp slopes of the limestone ridge.

The eastern end of the route lies on the Jurassic Oxford Clay formation. North of Silk Willoughby village, these give way to Kellaways sands. Bands of alluvial silts and older river sands and gravels cross the area to the south of Sleaford. A thin layer of dark mudstone marks the transition to the underlying cornbrash, which consists of fractured limestone within a clay matrix. The village of Quarrington stands on this stratum. A band of Blisworth Clay to the west of Quarrington marks the start of the oolitic limestone group, but the sands and gravels associated with the River Slea mask the western side of this deposit.

Beyond the Slea, the route lies on the rocks of the Lincolnshire Limestone formation. Ooidal grainstones dominate to the east of Ancaster, while peloidal wackestones with subsidiary mudstones form the higher ground stretching as far as Normanton. The scarp face at this point marks the transition to the lower Jurassic rocks of the Lias group. In this area, the Lias rocks consist mostly of mudstones interspersed with narrow bands of limestone. The route crosses a wider band of ironstone to the north of Hough-on-the-Hill, and the village of Brandon stands on a layer of calcareous sandstone.

An outcrop of Lias rock in a wide swathe of river-borne sands and gravels forms Temple Hill, between Brandon and Dry Doddington. The village of Dry Doddington occupies a wider ridge of similar mudstone rocks with fairly regularly-spaced bands of limestone.

To the west of Claypole, the route crosses a broad band of alluvium laid down in the floodplain of the River Witham. Cotham stands on a low ridge of mudstones which include the base of the Lias and the transition to rocks of the underlying Penarth Group. Beyond this, the alluvial deposits of the Devon and Trent floodplains dominate the surface deposits.

A simplified map of the surface geology of the study corridor is given in Figure 2.

4.3 Soils and Land Use

Much of the route is covered by calcareous loamy clay soils prone to seasonal waterlogging. These soils are well drained and fertile and therefore suitable for cereal cultivation. The higher ground between South Rauceby and Normanton generally has very shallow soils, lying over the limestone bedrock. Patches of glacial drift in this area and in the valley of the Slea and between East Stoke and Farndon produce lighter, free-draining, sandy soils, on which sugar beet, potatoes and other vegetable crops are extensively grown in addition to cereals.

In the Devon and Trent valleys, fine silt and clay loams have developed over the alluvial deposits. Cereals are grown, but where there is a risk of flooding these areas are more likely to be used as grassland for livestock. The heavy clay soils around Dry Doddington tend to be more suitable for permanent dairy pasture than for arable use, as they are prone to drying and surface cracking after ploughing.

Figure 2: Simplified map of the surface geology of the study corridor

5 ARCHAEOLOGICAL BACKGROUND

5.1 General

The proposed pipeline passes through areas of rich archaeological potential. The free-draining land of the Lincolnshire Limestone ridge has attracted settlement from an early period, and many well-preserved sites are known. Similarly, the fertile flood plains of the Witham and Trent and their tributaries have also been extensively exploited. The river terraces of the Trent Valley in particular are rich in prehistoric sites, often clearly visible in cropmarks. The Trent Valley has been extensively studied in the past and is deemed to be an important archaeological landscape.

5.2 Periods

For ease of reference the archaeological text is discussed by the following periods. These dates are not fixed, with new evidence constantly changing the boundaries.

Prehistoric	
Palaeolithic	*c.*500,000 - 8,000 BC
Mesolithic	*c.*8,000 - 4,000 BC
Neolithic	*c.*4,000 - 2,000 BC
Bronze Age	*c.*2,000 - 700 BC
Iron Age	*c.*700 BC - 43 AD
Historic	
Romano-British	*c.*43 AD - 410 AD
Anglo-Saxon	*c.* 410 AD - 1066 AD
Medieval	*c.*1066 - 1500
Post-medieval	*c.*1500-1900
Modern	*c.*1900 - present

5.3 Palaeolithic, Mesolithic and Neolithic

Flint and stone tools, and waste flakes from tool production, form the earliest evidence of human activity within the study area.

Palaeolithic flints, dating from before the end of the last Ice Age, probably some twelve thousand years ago, have been found near Elston (SMR 1645, map 6). The Mesolithic period was characterised by the appearance of a wider range of more specialised and often delicately-worked flint tools. Examples have been found near South Rauceby (SMR 60798, map 1; NMR 10, map 2) and north of East Stoke (3510a, map 7).

The next major change in flint technology marks the start of the Neolithic period, which lasted from approximately six to four thousand years ago. Finely-finished stone axes and axe-hammers are typical of this period, and recorded examples have been found near Quarrington (HL 57.46, map 1) and around the edge of the Trent Valley flood plain (SMR 1436, SMR 1451, map 6; SMR 3019, SMR 3029, SMR 3534, SMR 3107, map 7).

The Neolithic period saw a change in social organisation with a move towards a more settled farm-based economy. This change must have had profound effects on the landscape as forests began to be cleared for agricultural use. Surviving burial mounds, typically narrow rectangular long barrows, provide evidence for the funerary practices of this period. Aerial photographs show cropmarks that have been interpreted as long barrows near South Rauceby (NMR 38, map 2) and between Bennington and Cotham (SMR 30173, map 5). A circle of

posthole-like features showing on aerial photographs to the north-east of Elston may be that of a henge monument (SAM 29909, map 6). Characteristic of the Late Neolithic and Early Bronze Age, henges were circular, enclosed by a bank and internal ditch and cut by one or more entrances. They are thought to have served a religious function.

At a time when much of the lower-lying land was forested, ridges of higher land became important as transport routes. A prehistoric trackway, sometimes referred to as the 'Jurassic Way', after the geological formation over which it passes (Grimes, 1951, 144-71), is believed to have run in a roughly north-south direction along the Lincolnshire Limestone ridge (Linear 77, map 3).

5.4 Bronze Age and Iron Age

The introduction of metal tools and weapons clearly defines the beginning of the Bronze Age, but it did not bring about immediate social change and there is considerable continuity and overlap with the Neolithic period. In time, circular burial mounds tended to supersede the earlier long barrows. On ploughed land, these round barrows rarely survive as upstanding mounds, but the surrounding ditches often show as cropmarks on aerial photographs. There are a number of good examples near South Rauceby (NMR 38, map 2). Part of a ring ditch which appeared in a trial excavation in the same area is thought to have been a Bronze Age barrow (SMR 60334, map 1), and the same interpretation has been given for a section of ditch in Silk Willoughby village (SMR 60493, map 1). Other Bronze Age cemeteries have been investigated or identified in Frieston (SMR 30257, map 3) and on the west side of the A1, north of Bennington (SMR 30161, map 5).

Despite the introduction of metal, flint tools continued to be important and Bronze Age flints have been found at Quarrington (SMR 60595, map 1) and around the villages of Elston, East Stoke and Farndon on the east side of the Trent (SMR 1664, SMR 1435, SMR 1452, map 6). Construction work on the first power station at Staythorpe yielded a flint dagger (SMR 3003, map 7). A notable bronze find was a sword blade dredged from the bed of the river at Gawburn Nip and now in Newark Museum (SMR 3106, map 7), and an archer's bracer from South Rauceby (SMR J, map 2).

The town of Sleaford, near the eastern end of the pipeline route, is believed to have been a major centre in the Iron Age (May, 1977, 177), and recent excavations to the east of the town have revealed important remains from this period. Investigation of the Roman site of *Ad Pontem* have shown that it was built over earlier features (SMR 3012a, map 7). The Roman town at Ancaster also had Iron Age antecedents, at a settlement site now largely destroyed by quarrying. Stray finds identified as being of this date include a belt buckle found near Frieston (30262, map 3).

Many of the cropmark sites visible on aerial photographs seem to have the clusters of small enclosures which were typical of this period. A site to the west of Brandon (NMR 1058953, map 4) and a small cropmark group to the south of Farndon (SMR 3014b, map 7) have both been identified as probably dating from the Iron Age.

5.5 Roman

Lines of communication were especially important during the Roman period. The pipeline route crosses Ermine Street, just to the north of Ancaster (NMR 320, map 2). This was the principal north-south road of eastern Britain connecting London with Lincoln and York.

Earthworks within Ancaster village mark the position of a strategically-placed Roman town (SAM 105, map 2), which has yielded a rich assemblage of coins and pottery as well as domestic and votive objects. To the north of the village, and nearer to the pipeline route, the outlines of a Roman marching camp can be traced in cropmarks visible on aerial photographs (SAM 295, map 2).

Towards the western end of the pipeline route, before it crosses the Trent, the modern A46 follows the line of the Fosse Way (DBA-EJ, map 7), another major road, which linked the Roman towns at Exeter, Cirencester, Leicester and Lincoln. Between East Stoke and Farndon, the earthworks of a Roman town, identified from literary sources as *Ad Pontem*, straddle the Fosse Way (SAM 163, map 7). The name implies that a bridge existed close by. Timbers discovered in the river bank have been speculatively interpreted as part of such a bridge (SMR 3016, map 7). The river is prone to major changes of course, and bridge piers or other related remains could be a considerable distance from the its present position.

Silk Willoughby AGI, the starting point of the pipeline route, is on the eastern side of a third major Roman road, King Street, known as Mareham Lane at this point, which ran from Lincoln to join Ermine Street to the west of Peterborough (NMR Linear 513, map 1).

The proposed route crossed the line of the A1 to the west of Dry Doddington (DBA-EI, map 5). Apart from its modern by-passes, this follows the line of the Great North Road which was well established as the major land route from London to Scotland and the north of England by the early seventeenth century and probably long before that. In many places it is known to follow the line of earlier Roman roads.

Apart from modern features, Roman roads (and Neolithic cursus monuments), are generally the only landscape components which run in very straight lines for considerable distances and are the most plausible explanation for extended linear cropmarks. To the north of Elston such a feature runs in a south-easterly direction (SMR 1437, map 6). Extrapolating, it could meet the line of Ermine Street to the east of Grantham, at a site suggested for the Roman town of *Causennis*. Other linear features north of Elston could be side branches from this road (SMR 1661, SMR 1662, map 6). The line of King Street (Mareham Lane), near the start of the route appears to continue north as a cropmark where the road bends to the west (NMR 43, map 1). This was probably an earlier alignment or a side road.

Away from the main Roman roads, there is a large settlement site close to the route between Sleaford and South Rauceby (SAM 338, map 1). This may have had originated in the Iron Age but finds from the Roman period suggests continuous occupation.

Former settlement sites are indicated by concentrations of Roman finds at five separate places along the route. These may include one or more villa sites, suggested by surface finds of building materials, including worked stone and fired clay tiles, implying the presence of substantial structures. Two of these sites are close to Ancaster (SMR 60363, SMR 60362, map 2). Others are close to Normanton (SMR 30297, DBA-CY, map 3), Hough-on-the-Hill (SMR 30284, map 4) and by the A1 north of Long Bennington (SMR 30162, map 5).

Among the cropmark sites visible on the west side of the Trent, there are two which show the regular outlines typical of Roman buildings. At least one of these could be a major villa site (DBA-HI, map 7).

Roman burial sites were normally some distance beyond the limits of settlements, often along the sides of roads. Graves are said to have been found close to South Rauceby Lodge (SMR 60367, map 2).

The Roman period saw the production of a wide range of well-made and durable artefacts. Roman artefacts have been recovered from the vicinity of the route, usually as chance finds or by metal detectorists. These include a seal box found near South Rauceby (SMR 60469, map 1) and a bronze handle from east of Dry Doddington (SMR 30194, map 4). Coins have also been recovered from both these areas (SMR 60910, map 1, SMR 60909, map 2; SMR 30193, map 5), and from the environs of the settlements at Ancaster and *Ad Pontem* (SMR 30352, map 2; SMR 5661, 5662, map 7). Pottery scatters have been noted at Bennington Fen (SMR 34010, map 5) and east of Elston (SMR 5617, map 6).

5.6 Anglo-Saxon

There is a rich concentration of early Anglo-Saxon sites along the proposed pipeline route, particularly associated with the higher land of the limestone ridge. This is one of the most important parts of the country for the archaeological study of this period. A number of Saxon cemetery sites have been excavated, such as the large site at Loveden Hill, to the south-west of Hough-on-the-Hill (SMR 30289, map 4). Investigations carried out on this site in 1920 and in the 1950s and 1970s uncovered over 1200 cremations and 35 inhumations, with a rich array of associated finds, mostly from the fifth to early 7th centuries. Nineteenth century railway construction revealed a large Anglo-Saxon cemetery in the centre of Sleaford and another at Greylees between Sleaford and South Rauceby (SMR 60375, map 1). Cemetery sites are also known to the south of Frieston (SMR 30258, map 3) and west of Normanton (SMR 30380, map 3). Construction of a water pipeline has recently revealed another Anglo-Saxon cemetery to the west of Normanton, which was excavated in 1998 (DBA-CX).

Fewer settlement sites are known, but one at Quarrington was excavated between 1992 and 1995 (SMR 60487, map 1). Apart from a possible sunken building, the only evidence for structures came from postholes and a single beam-slot. Hearth-sites, ditches and pits yielded pottery mostly dating from the fifth and sixth centuries. A concentration of pottery to the north of Loveden Hill (SMR 30285, map 4), and closer to the proposed pipeline route may mark the occupation site associated with a nearby cemetery (SMR 30289, map 4).

A ceremonial whetstone sceptre similar in appearance to one from the Sutton Hoo ship burial has been found between Caythorpe and Hough-on-the-Hill (SMR 30280, map 3). Other recorded finds from the period include spearheads from Temple Hill near Dry Doddington (NMR 7, map 4) and from south of Normanton (SMR 30381, map 3), brooches from close to South Rauceby (SMR 60471, map 1) and the west side of the Great North Road (SMR 30163, map 5), and pottery from the Quarrington area (SMR 60914, map 1).

The place-names of many present-day English villages provide insights into their origins in the Anglo-Saxon period. A high proportion of the villages along the proposed pipeline route have place-names derived from Old Danish or Norse personal names, showing the influence of Scandinavian settlement in the area (Ekwall, 1960). Examples occur in the first elements of the names Staythorpe, Elston, Caythorpe, Carlton, Rauceby and Silkby. These last two names include the typically Scandinavian element *-by* denoting a homestead or village. The common place-name or place-name element *thorpe* usually derives from Old Norse although

the word also occurs in Old English. The mix of Anglo-Saxon and later Scandinavian settlement is clear in the name Normanton, the 'town' of the north men or Norwegians. This place-name is common in Nottinghamshire, Leicestershire, Derbyshire, Yorkshire, and Lincolnshire, but rare elsewhere. By contrast, the neighbouring village of Frieston records the presence of a Frisian settlement.

The first element of Quarrington is related to the modern word 'quern', implying the site of a mill. Cotham records the presence of a *cote*, which may have represented anything from a cottage or group of cottages to a crude shelter for sheep, while Hough derives from the Old English *haga*, meaning an enclosure.

5.7 Medieval

In the aftermath of the Norman conquest, a new land-holding class consolidated their authority with the construction of motte and bailey castles. The motte of Hough-on-the-Hill Castle survives from this period as a substantial mound and the area of the surrounding bailey is still partly enclosed by earthwork banks (SAM 180, map 3).

In most villages, the earliest surviving standing building will be that of the parish church. The sites of many churches were established in the pre-conquest period, but generally the surviving buildings are predominantly medieval in construction. The parish churches of Normanton (SMR 30295, map 3) and Cotham (SMR1585, map 6) are both within the study corridor, while Silk Willoughby (SMR-AH, map 1), Quarrington (SMR-W, map 1), Carlton Scroop (SMR 30378, map 3), Hough-on-the-Hill (SMR 30277, map 3), Brandon (NMR 504662, map 4) and Dry Doddington (SMR 30189, map 5) are just beyond its limits.

Moated sites, which developed during the medieval period, are surprisingly scarce even on the lower-lying parts of the route, in comparison to many other parts of the country. The site of Mareham Grange is fairly close to Silk Willoughby AGI (SAM 310, map 1), while the grounds of Manor Farm in Silk Willoughby village contain the only other nearby recorded example (SMR 60286, map 1).

The site of Mareham Grange by the side of Mareham Lane recalls the name of a former village of which no other trace now remains. Changes of population distribution from medieval times onwards led to the decline of many communities, so that the deserted medieval village is a constantly recurring element in the archaeological landscape of much of lowland Britain. Even when a place-name survives, its site may not be known. This is the case at Millthorpe which is mentioned in documentary sources and is thought to have been somewhere to the south of Quarrington (NMR 20, HL 57.23, map 1). Elsewhere, unidentified cropmark sites visible on aerial photographs between Hough-on-the-Hill and Dry Doddington and between Ancaster and South Rauceby may include the remains of one or more deserted villages of which no other record exists.

Factors which led to the desertion of some settlements also affected many of the surviving villages, leading to a reduction in their size. The former extents of reduced or shrunken villages are often revealed in the remains of roadways and house plots seen as earthworks or cropmarks. The former village of Silkby has been subsumed by its eastern neighbour Willoughby, but its centre can still be discerned as an impressive group of mounds and banks (SAM 78a, b & c, map 1). East Stoke has particularly well preserved earthworks to the west of the present village, where medieval house sites and plot boundaries can still be traced

(SAM 144, map 6). Other earthworks around the village may also have medieval origins (SMR 1646, SMR 1647, SMR 1432, map 6). Hough-on-the-Hill (SMR 34775, SMR 34201, HL 46.21, map 3), Westborough (SMR 30191, map 5) and Cotham (SMR 7821, SMR 7822, map 6) also have areas of earthworks which suggest that they have reduced in size since medieval times.

In contrast to the field patterns of today, the medieval landscape lay largely unenclosed. The cultivated land of a village would be divided up into long, narrow strips marked out by ploughing and forming the characteristic ridge-and-furrow patterns which sometimes can still be seen today and which forms a valuable record of past land-use. Around Normanton (DBA-CQ, DBA-CV, map 3) and Hough-on-the-Hill (DBA-DM, map 4) the ridge-and-furrow is still upstanding, and it survived at least long enough to be captured on aerial photographs around Silk Willoughby, Brandon, Dry Doddington, Cotham, Rolleston and Staythorpe.

Ridge-and-furrow ploughing sometimes buried and preserved earlier deposits on the ground surface. Areas where it has survived later ploughing therefore hold the possibility of having especially well-preserved archaeological remains beneath the ridges.

The Battle of Stoke Field took place towards the end of the medieval period on the 16th June 1487. Henry VII, who had been king since the defeat and death of Richard III at Bosworth two years earlier, defeated a rebellion supporting the claims of the Yorkist pretender Lambert Simnel. The heart of the battle was in the area between East Stoke Village and the Trent (map 6). The defeated rebels suffered heavy casualties and the earthworks to the south of village are traditionally believed to be a battlefield cemetery (SMR 1432, map 6).

5.8 Post-Medieval

In the middle of the seventeenth century the East Stoke and Trent area again found itself at the heart of a war. The river crossing at Newark was of strategic importance during the Civil War and various defences were constructed as the town was repeatedly besieged. Of recorded sites, the large fort at Hawton is the closest to the pipeline route, but there is a possibility of other related remains being found in the area around Farndon, Thorpe and East Stoke.

Medieval land-use patterns probably survived until relatively late, with considerable variation from parish to parish. There was a general trend away from the strip cultivation of open fields and increasingly large 'closes' were hedged off. The consolidation of land holdings into separate farms, and the subsequent establishment of the modern pattern of field boundaries in most parishes had to wait until the passage of an enclosure act through Parliament, which generally occurred in the second half of the eighteenth century. Where they are available, the tithe maps for each parish, drawn up in the 1830s and 40s show most of the existing field boundaries, together with many that have been lost as a result of modern agricultural practices. In some cases, the field divisions shown on the tithe maps reflect the earlier patterns of land holding, with a large number of long, narrow fields occupying the space of a single modern field. There are examples north of Silk Willoughby village (map 1), by the River Slea north-east of Ancaster (map 2), west of Hough-on-the-Hill (map 4) and close to the end of the route at Staythorpe (map 7).

The construction of large country houses surrounded by landscaped parks, which is typical of the post-medieval period, had less effect here than in many parts of the country. Rauceby Hall (SMR 60629, map 2) is the only example close to the proposed pipeline route.

A large variety of buildings survive from this period, both in villages, and as isolated halls and farmhouses. For the most part, their sites are still occupied, and therefore are unlikely to be directly affected by pipeline construction. A number of buildings shown on early maps are no longer present. The buildings are typically small, having no name or description, suggesting they are unimportant and probably agricultural in nature such as barns or sheds (e.g. DBA-AC, DBA-AD, map 2, DBA-AN, map 3, DBA-AY, DBA-AZ, map 4). Of several mills within the area, one at Claypole (SMR 30213, map 5) is still in occupation. It is uncertain what remains of the site of a windmill near Hough-on-the-Hill which appears on the 1905 O.S. map (DBA-AQ, map 3). The site of another windmill at Cotham is revealed by an upstanding mound (SMR 1550, map 6).

5.9 Modern

The importance of communication links across the area continued with the construction of the East Coast mainline railway and the Sleaford-to-Grantham line. The route also crosses the line of two disused railways, the Lincoln-to-Grantham (via Honington) line and the Newark-to-Melton Mowbray line. The line of another railway, from Sleaford to Stamford, lies just beyond the eastern end of the pipeline route.

The 1905 25" Ordnance Survey map shows a branch from the Lincoln to Grantham line to the north of Carlton Scroop, running westward into a stone quarry (DBA-AK). Mineral lines and industrial tramways and are often poorly recorded and may be of considerable interest to industrial archaeologists. To the north of this, and parallel to the proposed route are two more quarries visible on aerial photographs, both having 'tails' which extend towards the railway, suggesting that they may have been served by branch lines (NMR 67, NMR 70, map 3).

Exploitation of the limestones and ironstones of the Lincolnshire ridge probably began in Roman times and still continues today. Old quarries are difficult to date. South Rauceby enclosure map of 1790 shows a stone pit to the east of the village (DBA-AA, map 2). The same map shows the land to the east side of Rauceby Drove divided into small plots which are unexplained, but a similar plot on the east side of Ermine Street is explicitly set aside as a stone pit for road repairs in the accompanying Enclosure Award. The 1905 Ordnance Survey shows a quarry pit just to the north of this plot (DBA-AE, map 2). There was also an open quarry on the west side of Frieston Road to the north of Hough-on-the-Hill (DBA-AP, map 3).

These quarry-pits seem to have been relatively small scale, positioned at convenient points to provide road-surfacing materials. By contrast, a modern extraction operation to provide the raw materials for a gypsum works to the north of Cotham covers a wide area of land (DBA-EV, map 6).

The part of the country crossed by the route has a large number of Second World War airfields. Of these, Balderton Airfield is closest to the proposed pipeline route (DBA-FY, map 5). There is the possibility of debris from crashed or damaged aircraft near these sites.

5.10 Undated Sites

Crop and Soilmark Sites can be difficult to interpret and date. Linear features are often old land-division markers. Where these align with the modern landscape features, it is probable that they are fairly recent in origin, perhaps dating from the enclosure of the medieval open fields.

There are five areas of particularly dense cropmarks along the route. North-east of Ancaster, the pipeline route descends to the valley of the Beck, a tributary of the Slea. The mass of cropmarks along the banks of this stream are probably the result of several periods of activity. At the north-west end of this group, some of the cropmarks line up with the small strip-fields shown on the South Rauceby Enclosure Map of 1790. These overlap with an area of small enclosures which may represent prehistoric settlement. Linear features stretch south to an area of rectangular features apparently associated with a scatter of Romano-British finds.

Two even more complicated cropmark sites appear between Hough-on-the-Hill and Dry Doddington. The first, near Temple Hill, shows a very distinctive linear pattern of small closely-packed rectangular features (SMR 30292, map 4). It has been variously interpreted as a prehistoric or Romano-British settlement, a deserted medieval village or the site of a religious house. Linear features and more enclosures continue northward toward Brandon Lodge.

Another settlement site, possibly a deserted medieval village, can be identified from cropmarks to the south of Stubton (SMR 30196, map 4). This is surrounded by four or five other areas of dense cropmarks, which could be associated with it, or form other settlement sites (SMR 30197, SMR 30294, SMR 30199, HL 48.18, map 4). The area is known as Doddington Littlegate, which may have originated as the name of a village which has now been lost. Features extending to the north have been interpreted as prehistoric enclosures and trackways (SMR 30229, map 4).

The portion of the proposed route either side of the Trent similarly has very dense cropmarks, separated into two areas by layers of alluvium lying mostly to the west of the river. Some of these may be related to the Roman town of *Ad Pontem* on the eastern bank. To the west of the river, two ring ditches may be prehistoric, and a very regular feature seen from the air could be the foundations of a building (SMR 3005d, g, map 7).

6 GAZETTEER LISTING

The Gazetteer of Archaeological Sites is included as Appendix 3, and summarises the information collated during this assessment.

Information retrieved from public data sources is listed by SAM, SMR or NMR number. Some sites in Lincolnshire are not yet on the computerised system and are referenced by an Ordnance Survey quarter sheet and letter. The Heritage Lincolnshire site index includes some sites that have not yet been incorporated in the County SMR, and which are referenced as HL followed by the index identifier. NMR sites are mostly listed by their reference number, a one or two digit number unique to a particular quarter sheet. In some cases, the Unique Identifier is used, which is a five, six or seven digit number. Previously unrecorded sites identified from aerial photographs, cartographic or documentary sources during the course of this desk-based assessment are referred to as DBA sites, identified with a double letter suffix, starting at

DBA.AA. This includes sites that have been identified from the NMR National Mapping Programme maps which do not otherwise have an identifying number. The locations of all gazetteer entries appear on the accompanying Archaeological Constraints Maps.

In addition to the Category E sites listed in the gazetteer, a total of 411 field boundaries, 28 tracks or footpaths and six redundant stream channels shown on historic maps but not on the current large scale Ordnance Survey maps were identified within the study corridor. These features are of low archaeological significance, but knowledge of their existence can help in the interpretation of features found during subsequent stages of investigation.

7 GRADING OF SITES

All the sites identified during the study were placed into one of five categories, A to E, as shown in Table 1 below. Although based on all the collated information, the inclusion of a site in a particular category will often involve subjective judgment. It should be stressed that these categories are intended only as a means of assisting in the selection of an optimal pipeline route, and should not be taken as a statement of the importance, significance or value of any site. Categories are not fixed, and there is every possibility that the classification of sites may change as a result of findings made during later stages of investigation.

	A	B	C	D	E
Description	Legally Protected	Known archaeological sites, historic buildings	Archaeological sites of uncertain character or date	Historic landscape components and possible sites	Single find spots, modern landscape components
Examples	Scheduled Ancient Monuments, Listed Buildings	Burial sites, Deserted Medieval Villages, Roman Roads	Field systems, former buildings, courses of Roman Roads, dense find scatters	Ridge-and-furrow, old field boundaries, unidentified features on aerial photographs	Single find spots, modern field boundaries, drains and ponds
Mitigation	To be avoided	To be avoided	Avoidance recommended	Avoidance not envisaged	Avoidance unnecessary

Table 1: Site category definitions

8 RELIABILITY AND LIMITATIONS

The reliability of information for each site is rated as High, Medium or Low in the gazetteer. Records held by public data sources can normally be assumed to be reliable, but uncertainty can arise in a number of ways. Primary sources, especially older records, often fail to accurately locate sites. Some sources of data, particularly aerial photographs, may indicate the presence of a site without any indication of its nature. The similarity in appearance to known archaeological sites will sometimes allow a subjective interpretation to be made, but will still involve a degree of uncertainty. Secure dating evidence for cropmark sites is often unavailable.

A study such as this is subject to a number of limitations. The occurrence of previously unknown sites is always a possibility, and the extent of known sites, especially those based on cropmarks, is often uncertain. The appearance of sites on aerial photographs depends on a complex set of factors, including geology, land use, drainage and weather conditions, and

varies widely through the year and from year to year. Some monument types do not produce soilmarks or cropmarks. The presence of alluvium or colluvium can also mask underlying archaeological deposits.

Distributions of recorded stray finds may reflect the amount of archaeological study rather than genuine differences in patterns of activity. A modest collection of finds from a particular field which has been subject to extensive fieldwalking will show up on the SMR as a findspot, while a denser unsurveyed scatter in an adjacent field goes unnoticed. Responsible metal detector users reporting their finds to the appropriate SMR can similarly create a skewed distribution of known finds.

While SMR data is correct at the time of collation, there is always a time lag between sites being discovered and their inclusion in the records.

9 IMPACT

9.1 General

The impact of the proposed pipeline on archaeological sites can be direct or indirect. Removal of all or part of an archaeological deposit would be a direct impact, as would other forms of physical damage, such as compaction or disruption by earth-moving machinery. This will normally only affect sites within the width of the pipeline easement. Indirect impacts can occur over a wider area, and include damage or disturbance caused by vibration, de-watering during construction, and long term changes to drainage patterns.

9.2 Significance and Grading of Impact

The major factor in determining the significance of the impact on a particular site or feature is the proportion of it that will be affected. The nature and integrity of the site also needs to be considered. Damage to even a small part of an isolated monument could be considered as severe if it was substantially complete, or was an outstanding example of its kind.

In the gazetteer, the impact of the pipeline on each site has been graded as:

- *Severe*: Complete or almost complete destruction of deposits.
- *Major*: A high proportion of deposits damaged or destroyed.
- *Minor*: A small proportion of the surviving deposits damaged or destroyed.
- *None*: Deposits will not be affected, because of the distance from the pipeline, or method of construction.
- *Uncertain*: The extent or nature of the deposits are unknown, or construction techniques have not yet been decided.

10 GENERAL RECOMMENDATIONS

The implementation of five modifications to the route proposed in February 1999 has resulted in the avoidance of thirty-three archaeological sites. This has considerably reduced the likely overall impact of the pipeline on surviving archaeological remains. Because of engineering constraints, not all sensitive areas could be avoided. Specific sites are still likely to be adversely affected and the impact of the pipeline on these is discussed in the following section.

It should be stressed that not all sites will have been identified at this stage. Apparently blank areas should be regarded as being of uncertain potential, as it is likely that more sites will be discovered during the subsequent stages of investigation. There is a strong possibility that archaeological deposits are preserved beneath alluvium in the floodplains of the Rivers Witham, Devon, Trent and their tributaries.

In addition to the pipeline easement, areas used for associated engineering works, such as pipe storage areas and works compounds, should be investigated if they will be subject to ground disturbance.

The briefs issued by Transco divide the archaeological investigation of pipelines into seven main stages. These are listed in Appendix 1. Following the present study, which constitutes Stage 2, various non-intrusive survey methods (Stage 3) should be employed, well in advance of pipeline construction. At any stage in the investigatory process, new sites located may require further archaeological investigation or mitigation measures.

10.1 Field Reconnaissance Survey (Stage 3a)
This should involve a rapid walkover and visual inspection of the entire length of the route in order to record:

- The location and character of any unrecorded earthworks.
- The state of preservation of known earthworks including surviving ridge-and-furrow.
- Soil or vegetation changes which could signal the presence of archaeological deposits.
- Land use.
- Topographic features.
- Visible geology.
- Health and Safety implications.

This survey can be conducted in tandem with the fieldwalking stage.

10.2 Fieldwalking (Stage 3b)
Fieldwalking should be carried out on all arable land along the whole length of the proposed route. This involves the systematic recovery of artefacts, such as pottery, tile and worked flint, from the surface of ploughed fields, indicating areas of past activity. In addition to locating, delimiting and dating previously unknown sites, this can provide information on the date and spatial extent of known sites which could not be avoided by route modification, or which lie close to the proposed route and may extend into it.

Bare earth, ideally ploughed, harrowed and weathered, is needed for fieldwalking. Late autumn or winter is the optimum time for this work.

10.3 Earthwork Survey (Stage 3c)
Earthworks lying in the course of the pipeline should be recorded by topographic survey prior to pipeline construction. This includes upstanding areas of ridge and furrow, and any settlement sites, which may also require intrusive evaluation. This work will normally take place shortly after fieldwalking and field reconnaissance.

10.4 Geophysical Survey (Stage 3d)
A variety of techniques are available. Magnetometry detects local variations in the Earth's magnetic field, which may be caused by buried archaeological features such as pits, ditches or

buildings. By contrast, magnetic susceptibility, the response of the ground to an applied magnetic field, is affected by past human activity and locates broader areas of interest rather than discrete features. Resistivity surveys plot variations in the electrical resistance of the earth and can be a useful addition or alternative to magnetometry on certain types of soil.

It is recommended that geophysical survey should be undertaken along the pipeline route. Except in areas covered by deep alluvial or colluvial deposits, the most accurate and cost-effective method is detailed, gridded magnetometry of a continuous fifteen-metre-wide strip based on the route centreline. This should be accompanied by regular magnetic susceptibility measurements.

Alluvial and colluvial deposits are likely to mask any archaeological features that are present. Rapid magnetometer scanning over these areas should be employed. Detailed, gridded survey should be carried out wherever there is a positive response.

10.5 Investigation of Alluvial Deposits

Significant archaeological deposits may lie buried beneath the alluvium in the river floodplains. In flood conditions, alluvial deposits can be rapidly laid down. This can result in exceptionally well-preserved archaeological landscapes with buried soils containing evidence of past environments.

When the results of the engineering borehole survey are available, and following the geophysical survey, it will be easier to assess the potential of these areas. It is recommended that a proposal for the investigation of the archaeo-environmental potential of alluvial and sub-alluvial deposits is drawn up at this time.

10.6 Further Work (Stage 4 onwards)

Dependent on the results of the non-intrusive survey phase, field evaluation work (Stage 4) may be needed to confirm the presence of archaeological deposits and to determine their character, extent, date and state of preservation. The choice of techniques will depend on site-specific factors and could include machine-excavated trial trenches, small hand-dug test-pits or auger surveys. In occasional cases, where the results of this evaluation are positive and the pipeline route cannot be modified, full-scale area excavation (Stage 5) may be necessary. It is envisaged that a permanent-presence watching brief (Stage 6) will be maintained during construction of the pipeline. This will enable all topsoil removal and pipe-trench excavation to be monitored, and appropriate mitigation measures to be instigated in the event of archaeological deposits being revealed.

11 SITE-SPECIFIC RECOMMENDATIONS

11.1 General

The number of sites in each category identified within the revised April 1999 study corridor is shown in Table 2. Figures are also given for the sites which will be cut by the proposed pipeline easement. The numbers of Category E sites excludes the 445 redundant field boundaries, tracks and stream beds shown on the Constraints Maps but not included in the gazetteer.

Category	Crossed	Sites within 1km corridor (but not crossed)	Total
A	0	5	5
B	3	21	24
C	8	57	65
D	15	61	76
E	6	52	58
Total	32	196	228

Table 2: Sites of each category within study corridor

11.2 Implemented Re-routes

Five modifications to the February 1999 route have been discussed and agreed with Transco engineers, subject to other, non-archaeological restraints:

- Near South Rauceby village, re-routing to the north to avoid the possible barrows and pit alignments (TF 0440 4500 to TF 0320 4475).
- On the north side of the Ancaster Gap, re-routing to the north to avoid the cropmark features in the base of the valley (TF 0204 4482 to SK 9890 4562).
- Between Hough-on-the-Hill and Dry Doddington, re-routing to the south to avoid the centre of the extensive cropmark features (SK 9140 4738 to SK 8376 4750).
- East of Cotham village, re-routing a short distance to the south to avoid the cropmark features in Bennington Fen (SK 8275 4748 to SK 7860 4810).
- At the west end of the pipeline, from Cotham to Staythorpe, re-routing to the north-east to avoid *Ad Pontem* Roman town and to follow a least-damaging route through the extensive area of cropmark sites probably associated with it (SK 7860 4810 to SK 7630 5100 to SK 7640 5328).

A major re-route to pass north of village of Normanton has been made for non-archaeological reasons (SK 9762 4585 to SK 9373 4660).

An additional small re-route to facilitate the crossing of the A15 Sleaford by-pass, has little effect on the archaeological impact of the pipeline.

11.3 Category A Sites

Most of the Category A sites within the study corridor are standing buildings, and the normal engineering constraints on pipeline construction will ensure that there is no significant impact. The initial February 1999 route threatened two scheduled sites:

The site of the Roman town of *Ad Pontem* lies just to the north of the village of East Stoke (SAM 163, map 7). The route favoured on engineering grounds originally passed through this scheduled monument. An agreed re-route takes the line 500m to the north-east of the scheduled area.

The possible henge monument between Elston and Thorpe was within 200m of one of the proposed alternative routes (SAM 29909, map 6). Although there would have been no impact on the monument itself, surrounding associated features would need to be considered. With the new position of the river crossing, there will be no impact on this site.

The proposed April 1999 pipeline route avoids all category A sites.

Recommendations:

None at this stage.

11.4 Category B Sites

The revised April 1999 route could have a *Minor Impact* on *three* Category B Sites:

- King Street Roman road (NMR Linear 513, map 1). This road, Mareham Lane, is still in use.
- Ermine Street Roman road (NMR Linear 320, map 2). The road, known as High Dike at this point, is still in use, forming the B6403 Colsterworth-to-Cranwell Road.
- Fosse Way Roman Road (DBA-EJ, map 7). The road is still in use as the main A46 between Lincoln and Leicester.

In each case, the line of the road is unlikely to be affected by construction work as the pipe will be bored beneath the modern road. However, there is a possibility that there could be settlement sites or other associated features along the sides of these roads. In addition, over the passage of time re-building may not have followed the exact line of the pre-existing road, and it is possible that the original Roman road or construction ditches may exist beyond the course of the modern road.

The Impact on *ten* Category B sites is *Uncertain*:

- Barrow site and Roman-British features (SMR 60334, SMR 60550, map 1). This site is too far from the pipeline to be directly affected, but there is a possibility of other associated features closer to the line.

- Greylees Anglo-Saxon cemetery (SMR 60375, map 1). The extents of this cemetery are not known, but the revised line now passes 90m from its known limits.

- Probable barrow cemetery at South Rauceby (NMR 38, DBA-GC, map 2). The modified route runs between these two sets of cropmarks, about 60m from each. However, there may be associated features which have not show on aerial photographs, and the visible ring ditches could form part of an extensive burial ground.

- Cropmark sites east of Dry Doddington (SMR 30196, SMR 30197, SMR 30294, map 4). The proposed route runs 40m to the south of this complex series of cropmarks, which probably represents at least one settlement site. Cropmark sites extend to both the south and north. The re-route to the south has avoided the densest of these cropmarks, but still cuts a category C site (SMR 30198).

- Cropmarks east of Dry Doddington (SMR 30292, map 4). The proposed route runs some 290m to the south of a series of undated cropmarks. This whole area has dense cropmarks which may be related.

- Regular cropmark features (DBA-HI, map 7). In plan, these cropmarks typify a Roman villa site. The route no longer cuts this feature, with the modified version running to the west of the crossing of the Trent, approximately 60m beyond the visible limit of the cropmarks. However, the presence of alluvium could be masking features closer to the river.

Recommendations:
The extent of these sites should become clearer after non-intrusive field survey (Stage 3). Site specific recommendations should then be made.

11.5 Category C Sites

There could be a *Major Impact* on *seven* Category C Sites:

- Site of former windmill north of Hough-on-the-Hill (DBA-AQ, map 3). Modifications to the route around the village, implemented for non-archaeological reasons, mean that the line now impinges on this site.

- Cropmark enclosures and linear features to the east of Dry Doddington (SMR 30198, map 4). The extensive cropmarks in this area are generally aligned perpendicular to the route, making avoidance difficult. The least-damaging route passes through the linear components to the south of the main cropmark concentration.

- Cropmark enclosures and linear features to the east of the A1 (NMR 10720224, map 5) The centre of this site is well away from the pipeline, but a linear feature runs northward from it. This could intersect the line of the easement, especially if the feature extends beyond the limit which is showing as a cropmark.

- Cropmark linear and circular features on north-east edge of Cotham village (DBA-GY, map 6). The nature of these features is not known. Avoidance is difficult as there are very tight non-archaeological constraints at this point.

- Cropmark enclosure and linear features to the north-west of Cotham village (SMR 1455, map 6). Some of the linear cropmarks are rather nebulous and may include abandoned meanders of the River Devon. A very regular, square enclosure appears just to the north of the pipeline route. Finding an alternative route at this point is difficult because of non-archaeological constraints.

- Cropmark enclosures and linear features between Farndon, East Stoke and Thorpe (SMR 3014d, map 7). These are components of a very dense clusters of cropmarks which cover a large proportion of the area to the east of the Fosse Way Roman road, and some at least are likely to be associated with the Roman town of *Ad Pontem*. There are very tight constraints on the route at this point. Farndon and the outskirts of Newark preclude any routes immediately to the north, while East Stoke, Flintham Airfield and gravel workings on the west bank of the Trent would need to be avoided by a southern route. A least-damaging route, consistent with other constraints, passes very close to the large rectangular enclosure SMR 3014d.

- Site of possible Roman bridge over the Trent (SMR 3016, map 7). Preserved timbers recovered from the river bank have been interpreted as part of Roman bridge piers. The proposed river crossing is very close to this point. The impact of the pipeline will be dependent on the engineering methods used in crossing the river.

The route may have a *Minor Impact* on *one* Category C Site:

- The A1 Great North Road (DBA-EI, map 5). This may lie on the course of Roman road. The line of the road is unlikely to be affected as the pipeline will presumably be bored beneath it. However, the possibility of associated roadside features should be considered. The modern road may not exactly follow its earlier course, and there is a possibility that a a Roman road could be discovered to the side of the present road.

The Impact on *twenty* Category C Sites is *Uncertain*:

- Possible enclosures, field systems and pit alignment north of Silk Willoughby (NMR 1049833, 1049834, map 1). This aerial photography cropmark site appears to be 220m from the line. There is probably more than one period represented. The site includes field boundaries associated with Silkby Shrunken Medieval Village (SMV). It is possible that some of the features may extend onto the proposed easement.

- Possible sites of Millthorpe Deserted Medieval Village (DMV) (NMR 20, HL 57.23, map 1). Because of the uncertainty of the position of this lost village, it is difficult to assess the impact of the pipeline. The DMV would be expected to have fairly substantial evidence of occupation, which would show up in a geophysical survey. However, the area is low lying and there may be more recent alluvial flood deposits associated with Cliff Beck, which would mask any remains. This would explain why the site has not been positively identified from aerial photographs.

- Possible prehistoric pit alignment or medieval boundary (HL 59.27, map 2). The modified route runs very close to these features, and the working width may encroach over them. Other features tightly constrain the route at this point.

- Possible prehistoric pit alignments (NMR 37, map 2). This curvilinear feature may be associated with a similar feature to the north and with the barrows in the same area.

- Brickworks (DBA-AB, map 2). The route runs 60m to the north of this brickworks and it is therefore possible that features associated with it could extend into the area of the easement.

- Enclosures and linear features visible as cropmarks south-west of Brandon (NMR 1058957, SMR 30293 map 4). These features lie within an area of complex cropmarks which are not easy to interpret. There is a settlement site to the north and west which has been variously interpreted as Iron Age, Roman or medieval, and some of the linear features may relate to this. The modified route passes 50m to the south of the visible limit of the cropmarks.

- Cropmark enclosures and linear features to the west of the A1 (NMR 1072023, DBA-GN, map 5). The proposed route crosses some 40m beyond the visible limit of these features. However it is possible that the road here follows the course of a Roman road and that Roman settlement grew up along this route.

- Dense scatter of Romano-British pottery at Bennington Fen (SMR 34010, map 5). There is a strong possibility that this artefact scatter marks an occupation site, so the surrounding area has clear archaeological potential. The route has been moved but is still within 90m of the site.

- Cropmark enclosure and ring-ditch on Bennington Fen (NMR 1072016, DBA-GR, map 5). This shows as a very regular, square cropmark on aerial photographs. The pipeline route was re-routed from the centre of the feature but it still lies only 20m to the south of it, and may therefore encroach on the feature.

- Enclosure and possible ring-ditch (DBA-EX, map 6). This cropmark feature lies about 70m to the north-east of the proposed line, and may extend beyond its visible limit into the easement.

- Linear feature and enclosure (DBA-EY, map 6). These cropmark features are 100m to the west of the proposed line, but could possibly extend beyond their visible limit.

- Cropmark enclosures and linear features between Farndon, East Stoke and Thorpe (SMR 3014e 3014f, map 7). These cropmarks lie some 50m from the proposed route and appear to form part of a larger complex.

- Cropmark enclosures and possible building foundations (DBA-HF, map 7). These features are 110m to the east of the re-routed pipeline.

- Cropmarks enclosure and curvilinear feature (DBA-HJ, map 7). The visible limit of these cropmarks is only 60m from the pipeline and it is possible that related features could be disturbed.

Recommendations:
Where possible, re-routes should be considered on the seven areas where the proposed route appears to have an impact on the archaeological resource.

The extent of the other sites should become clearer after non-intrusive field survey (Stage 3). Site specific recommendations should then be made.

11.6 Category D Sites
There could be a *Major Impact* on *three* Category D Sites:

- Linear cropmark, possible enclosure (NMR 1080454, map 1).
- Linear cropmark of unknown function, possibly modern (DBA-GX, map 6).
- Linear cropmark features, function unknown, possible enclosure (DBA-HC, map 6).

There is a possibility of *Minor Impact* on *twelve* Category D Sites:

- 'Jurassic Way' ?prehistoric ridgeway (NMR Linear 77, map 3).
- Redundant Railway (DBA-FT, map 3).
- Ridge-and-furrow identified from aerial photographs, may have been ploughed out (DBA-DC, map 3).
- Ridge-and-furrow identified from aerial photographs, may have been ploughed out DBA-DY, DBA-EB, DBA-EA map 5).
- Cropmark, possibly a modern drainage feature (DBA-GV, map 5).
- Redundant Railway (DBA-FX, map 6).
- Ridge-and-furrow identified from aerial photographs, may have been ploughed out (DBA-EU, DBA-ES, DBA-HA, map 6).
- Linear feature on aerial photograph, probably an existing pipeline (DBA-HD, map 6).

The Impact on *five* Category D Sites is *Uncertain*:

- Linear cropmark (DBA-CL, map 1).
- Prehistoric flint finds (NMR 10, map 2).
- Romano-British pottery (SMR 34010, map 5).
- Linear cropmark (DBA-GT, map 5).
- Probable site of pond (DBA-GW, map 5).

Recommendations:
The nature and extent of these sites should become clearer after non-intrusive field survey (Stage 3). Site specific recommendations should then be made.

The present status of the ridge-and-furrow sites crossed by the route is unknown. Following the field reconnaissance stage and the identification of such earthworks, topographical survey should, if necessary, be carried out prior to pipeline construction.

11.7 Category E sites

Excluding the field boundaries, trackways and stream channels which are not listed in the gazetteer, *six* sites in this category would be affected by the proposed pipeline route. These include four former ponds, an area of marshland, and the course of an earlier gas pipeline.

Recommendations:

No specific recommendations for Category E sites are proposed at this stage. Their status should be revaluated after Stage 3 investigations have been completed.

12 SUMMARY OF RECOMMENDATIONS

- Re-routes on the seven category C sites still crossed by the proposed pipeline route.
- Field Reconnaissance survey along the whole of the pipeline route.
- Fieldwalking of all arable fields along the whole of the proposed route.
- Magnetometer survey over a 15m-wide strip along the length of the proposed pipeline centreline (except alluvial and colluvial areas) supplemented by magnetic susceptibility survey.
- Appraisal of the alluvial and colluvial cover along the whole of the proposed pipeline route to ascertain if geophysical survey will be effective.
- For areas of deep alluvial and colluvial cover, a proposal for the evaluation of its archaeo-environmental potential.

13 ACKNOWLEDGEMENTS

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APPENDICES

APPENDIX 1: **Archaeological Investigatory Stages**

APPENDIX 2: **Details of Sources Consulted during Assessment**

APPENDIX 3: **Gazetteer**

APPENDIX 1

ARCHAEOLOGICAL INVESTIGATORY STAGES

Stage 1	Appraisal
Stage 2	***Desk-Based Assessment***
Stage 3	Non-Intrusive Field Survey
	a Field Reconnaissance Survey (rapid walkover) b Fieldwalking c Earthwork Survey d Geophysical Survey
Stage 4	Field Evaluation a Machine-excavated trenches b Hand-dug test pits c Auger survey
Stage 5	Area excavation of those sites which it is not possible or desirable to preserve
Stage 6	Watching Brief - during development
Stage 7	Archive and Publication (synthesis and dissemination of results from each of Stages 2 to 6)

The stage of the current study is in ***bold italic***.

APPENDIX 2

DETAILS OF SOURCES CONSULTED DURING ASSESSMENT

Sites and Monuments Records

Lincolnshire County Council	City Hall, Lincoln LN1 1DB
Nottinghamshire County Council	Trent Bridge House, Fox Road, West Bridgford, Nottingham NG2 6BJ

Record Offices

Lincolnshire	Lincolnshire Archives, St. Rumbolds Street, Lincoln LN2 5AB
Nottinghamshire	Nottinghamshre Archives, County House, Castle Meadow Road, Nottingham NG2 1AG
Heritage Lincolnshire	The Old School, Cameron Street, Heckington, Sleaford NG34 9RW

Aerial Photographic Sources

National Monuments Record Centre (NMR)	Kemble Drive, Swindon SN2 2GZ

APPENDIX 3

THE GAZETTEER

ABBREVIATIONS:

Reference

SAM.12345	Scheduled Ancient Monument
SMR.12345	County Sites and Monuments Record site
NMR.12345	National Monuments Record site
HL 57.21	Heritage Lincolnshire Site Index record
DBA.XX	Desk-Based Assessment site
OS(1885)	Ordnance Survey Map, with date
TM(1838)	Parish Tithe Map, with date
EM(1781)	Parish Enclosure Map, with date
AP.123/456	NMR Aerial photograph reference

Source

SAM	English Heritage Scheduled Ancient Monument list
NMR	National Monuments Record, Swindon
LSMR	Lincolnshire Sites and Monuments Record, Lincoln
NSMR	Nottinghamshire Sites and Monuments Record, West Bridgford
HL	Heritage Lincolnshire, Heckington
LA	Lincolnshire Archives, Lincoln
NA	Nottinghamshire Archives, Nottingham
LAS	Lindsey Archaeological Services, Lincoln
LB	Listed Buildings Register, Swindon

Reliability

H - High M - Medium L - Low

Staythorpe Power Station Pipeline: Map 1 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
SMR 60292		LSMR	?Possible boundary / geological feature seen as cropmark	?	D	600	TF04SE	509000 344380	None	Kirkby La Thorpe	M
DBA-FV		OS 1994	Railway line, Sleaford to Stamford	Post-Medieval	C	260	TF04SE	508630 343640	None	Kirkby La Thorpe	H
NMR 43		NMR	Road	? Roman	C	550	TF04SE	508400 344300	None	Kirkby La Thorpe	M
NMR Linear 513		NMR	King Street	Roman	B	0	TF04SE	508370 343120	Minor	Burton Pedwardine	H
SAM 310	SMR 60726 NMR 14	SAM LSMR NMR	Moat and Mareham Grange, site of	Medieval	A	500	TF04SE	508580 343120	None	Burton Pedwardine	H
HL 57.48		HL	Cropmark	?	D	750	TF04SE	507390 344380	None	Sleaford	M
DBA-GA	AP.636/4115	NMR	Ridge and furrow	Medieval	D	360	TF04SE	507300 343000	None	Sleaford	H
SMR 60914		LSMR	Fieldwalked pottery	Anglo-Saxon	E	360	TF04SE	506000 344000	None	Sleaford	H
SMR 60915		LSMR	Fieldwalked pottery	Roman	E	360	TF04SE	506000 344000	None	Sleaford	H
NMR 20	AP.842/5237	NMR	Possible site of Millthorpe DMV	Medieval	C	300	TF04SE	505950 343940	None	Sleaford	H
HL 57.46		HL	Pebble hammer	Neolithic	E	440	TF04SE	505900 344090	None	Sleaford	H
NMR 1044203		NMR	Enclosure	?Prehistoric / Roman	C	600	TF04SE	506050 344320	None	Sleaford	M
SMR 60487		LSMR	Settlement	Anglo-Saxon	B	810	TF04SE	505810 344570	None	Sleaford	H
SMR W	NMR 1	LSMR NMR	St Botolph's Church	Medieval	A	790	TF04SE	505390 344480	None	Sleaford	H
SMR 60650		LSMR	Plough marks	?	D	620	TF04SE	505440 344700	None	Sleaford	H
SMR 60595		LSMR	Flint scraper	Bronze Age	E	500	TF04SE	505260 344640	None	Sleaford	H
HL 57.23	AP.842/5235	HL	Possible site of Millthorpe DMV	Medieval	C	80 *300*	TF04SE	505000 344000	Unc.	Sleaford	H

* Based on April 1999 route, figures in *italics* refer to February 1999 route

Staythorpe Power Station Pipeline: Map 1 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
SMR 60493		LSMR	Ring ditch	Prehistoric	B	850	TF04SE	505420 342950	None	Silk Willoughby	M
SMR AH	NMR 3	LSMR NMR	St Denys' Church	Medieval	A	650	TF04SE	505720 343000	None	Silk Willoughby	H
SAM 79	SMR 60720	SAM LSMR	Village cross	Medieval	A	720	TF04SE	505640 342960	None	Silk Willoughby	H
SMR 60286		LSMR LB	Moated site and manor house	Medieval-Post-Medieval	A	880	TF04SE	505440 342790	None	Silk Willoughby	H
SAM 78a	SMR 60723 NMR 3	SAM LSMR NMR	Site of Chapel and two mounds	Medieval	A	730	TF04SE	505270 342970	None	Silk Willoughby	H
SAM 78b	SMR 60722	SAM LSMR	Chapel, site of and possible prehistoric barrow or windmill mound	Medieval	A	720	TF04SE	505370 342980	None	Silk Willoughby	H
SAM 78c	SMR 60724	SAM LSMR	Mound and Chapel, site of	Medieval	A	740	TF04SE	505460 342980	None	Silk Willoughby	H
NMR 1044202		NMP NMR	Ridge and furrow	Medieval	D	500	TF04SE	505410 343080	None	Silk Willoughby	H
DBA-CG		NMP	Ridge and furrow	Medieval	D	520	TF04SE	505300 343000	None	Silk Willoughby	H
DBA-CH		NMP	Ridge and furrow	Medieval	D	350	TF04SW	504900 343200	None	Silk Willoughby	H
DBA-CJ		NMP	Ridge and furrow	Medieval	D	350	TF04SW	504800 343300	None	Silk Willoughby	H
NMR 1049834		NMR	Enclosures and boundary ditches	Prehistoric / Roman	C	160	TF04SW	504840 343430	Unc.	Silk Willoughby	M
NMR 1049833		NMR	Pit alignment	Prehistoric / Roman	C	220 *170*	TF04SW	504710 343610	None	Silk Willoughby	M
NMR 1049836		NMR	Settlement site	Prehistoric / Roman	C	560	TF04SW	504070 343650	None	Silk Willoughby	M
NMR 1080454		NMR	Possible enclosure	?	D	0	TF04SW	504830 344710	None	Silk Willoughby	M
SMR N	NMR 22	LSMR NMR	Quernstone	Roman / Medieval	E	410	TF04SE	505200 343280	None	Silk Willoughby	M
DBA-CK		NMP	?Enclosures	Prehistoric / Medieval	C	200	TF04SW	504300 343500	None	Silk Willoughby	M

* Based on April 1999 route, figures in *italics* refer to February 1999 route

Staythorpe Power Station Pipeline: Map 1 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
NMR 50		NMR	Enclosure	Prehistoric / Roman	C	180	TF04SW	504400 344420	None	Sleaford	M
SMR 60375	NMR 22 NMR 15	LSMR NMR	Cemetery	Anglo-Saxon	B	90	TF04SW	504180 344700	Unc.	Sleaford	H
DBA-CL		NMP	Linear	?	D	60	TF04NW	504500 345020	None	Sleaford	M
SMR 60800		LSMR	?Boundary ditch	?	C	350	TF04NW	504700 345200	None	Sleaford	M
SMR 60798		LSMR	Microlith	Mesolithic	E	350	TF04NW	504700 345200	None	Sleaford	H
SMR 60799		LSMR	Worked flints	Neolithic	E	350	TF04NW	504700 345200	None	Sleaford	H
SMR 60801		LSMR	Ditches	Post-Medieval	D	350	TF04NW	504700 345200	None	Sleaford	H
SAM 338	SMR 60718 SMR 60719 NMR 17	SAM LSMR	Settlement sites	Prehistoric-Roman	A	480 *530*	TF04NW	504600 345600	None	Sleaford	H
SMR 60469		LSMR	Seal box, lid and base	Roman	E	600 *870*	TF04NW	504280 345870	None	South Rauceby	H
SMR 60910		LSMR	Coin	Roman	E	600 *830*	TF04SW	504220 345850	None	South Rauceby	H
SMR 60471		LSMR	Brooch	Anglo-Saxon	E	500 *750*	TF04NW	504120 345740	None	South Rauceby	H
SMR 60912		LSMR	Bronze buckle	?	E	550 *780*	TF04NW	504250 345790	None	South Rauceby	H
SMR 60550		LSMR	Ditch, bank and pit	Roman	B	100 *330*	TF04NW	504180 345350	Unc.	South Rauceby	H
SMR 60334		LSMR	Round barrow	Bronze Age	B	100 *330*	TF04NW	504180 345350	Unc.	South Rauceby	M
SMR 60623		LSMR	Worked flint	Neolithic	E	70 *330*	TF04NW	504180 345350	None	South Rauceby	H
SMR 60624		LSMR	Three worked flints	Mesolithic	E	330	TF04NW	504180 345350	None	South Rauceby	H

* Based on April 1999 route, figures in *italics* refer to February 1999 route

Staythorpe Power Station Pipeline: Map 2 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
NMR 507061		NMR	Railway station	Modern / Post-Medieval	B	560	TF04SW	503710 344020	None	Sleaford	H
SMR J	NMR 4	NSMR NMR	Archers bracer	Bronze Age	E	810	TF04SW	503360 343980	None	South Rauceby	H
SMR O		LSMR	Pot	Roman	E	740	TF04SW	503420 344020	None	South Rauceby	H
NMR 37		NMR	Pit alignment	?Prehistoric or Roman	C	40 *0*	TF04SW	503420 344830	Unc.	South Rauceby	M
HL 59.3		HL	Pottery	Roman	E	350	TF04SW	503390 344415	None	South Rauceby	H
HL 59.27		HL	?Pit alignment or boundary ditch	?Prehistoric / Medieval	C	20 *40*	TF04SW	503410 344720	Minor	South Rauceby	M
SMR 60913		LSMR	Flint scatter	Prehistoric	E	500 *220*	TF 04SW	502800 344530	None	South Rauceby	H
DBA-GB	AP.TF0344/3	NMR	?Barrow / Ring ditch	?Prehistoric	B	530 *220*	TF 04SW	503900 344550	None	South Rauceby	H
NMR 38		NMR	Long barrow and round barrows	Prehistoric	B	60 *0*	TF04SW	503410 344820	Minor	South Rauceby	M
NMR 10	HL 59.24	NMR	Flint scatter	Mesolithic	D	200 *320*	TF04SW	502140 345100	None	South Rauceby	H
DBA-GC	AP.1097/4100	NMR	? Barrow	? Prehistoric	B	60 *220*	TF04NW	503650 345140	Minor	South Rauceby	H
SMR T		NSMR	Bronze object	?	E	160 *340*	TF04NW	503900 345400	None	South Rauceby	H
SMR 60911		LSMR	Bronze catch fragment	Anglo-Saxon	E	320 *595*	TF04NW	503730 345500	None	South Rauceby	H
SMR 60909	NMR 9	LSMR NMR	Coin	Roman	E	370 *600*	TF04NW	503670 345500	None	South Rauceby	H
DBA-AA		EM 1790	Stone pit	?	D	360 *600*	TF04NW	503309 345388	None	South Rauceby	H
SMR U	NMR 892641	LSMR NMR	Pottery	Roman	E	590 *740*	TF04NW	501800 345800	None	South Rauceby	H
SMR 60629	NMR 36	LSMR NMR	Rauceby Hall Park	Post-Medieval	C	520 *640*	TF04NW	502800 345800	None	South Rauceby	H
NMR 10	HL 59.8	NMR	Flint and pottery scatter	Prehistoric	D	300	TF04NW	502140 345080	None	South Rauceby	H

* Based on April 1999 route, figures in *italics* refer to February 1999 route

Staythorpe Power Station Pipeline: Map 2 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
DBA-GD	AP.686/4125	NMR	Field boundary and Standing buildings	?Post-Medieval	C	80 *60*	TF04NW	501450 345000	None	South Rauceby	H
DBA-GG	AP.938/4278	NMR	Building	Post-Medieval	C	340 *0*	TF04NW	501050 345000	None	South Rauceby	H
HL 45.8			Pottery scatter	Medieval	E	480 *920*	TF04NW	500930 345900	None	South Rauceby	H
DBA-GE	AP.9933/72	NMR	Cropmark showing possible drain / field boundary ?	?	D	250 *200*	TF04NW	501400 344480	None	South Rauceby	M
SMR 60367		LSMR	Pottery and possible cemetery site	Roman	D	1070 *930*	TF04SW	501300 344080	None	South Rauceby	H
SMR A		LSMR	Pottery	Roman	E	1330 *920*	TF04SW	500700 344060	None	South Rauceby	H
SMR 60363	NMR 1	LSMR NMR	Settlement and part of a human skull	Roman	D	1440 *1000*	TF04SW	500310 344010	None	South Rauceby	H
DBA-CM		NMP	Enclosures	?	C	1240 *800*	TF04SW	500160 344200	None	South Rauceby	M
HL 74.19		HL	Cropmark, possible enclosure	? Prehistoric	B	860 *500*	TF04SW	500000 344500	None	South Rauceby	M
HL 74.21		HL	Settlement	? Roman	B	920 *640*	TF04SW	500380 344380	None	South Rauceby	M
DBA-CN		NMP	Enclosures	?	B	400 *0*	TF04SW	500200 344800	None	South Rauceby	M
DBA-AB		OS 1905	Brickworks	?Post-Medieval	C	60 *300*	SK94NE	499850 345407	None	South Rauceby	H
SMR 60479		LSMR	Circular cropmark	?	C	260 *0*	SK94NE	49900 345200	None	South Rauceby	M
DBA-AC		OS 1905	Building	Post-Medieval	C	550 *220*	SK94SE	499320 344991	None	South Rauceby	H
DBA-AD		OS 1905	Building	Post-Medieval	C	750 *460*	SK94SE	499218 344789	None	Ancaster	H
SMR 60362	NMR 7	LSMR NMR	Building debris and pottery scatter	Roman	C	230 *0*	SK94NE	499400 345300	None	South Rauceby	H
DBA-AE		OS 1905	Quarry pit	?Post-Medieval	D	300	SK94NE	498767 345978	None	Ancaster	H
NMR Linear 320		NMR	Ermine Street	Prehistoric-Roman	B	0	SK94NE	499660 345630	Minor	Ancaster	H

* Based on April 1999 route, figures in *italics* refer to February 1999 route

Staythorpe Power Station Pipeline: Map 2 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
NMR 504551		NMR LB	Sudbrook House	Post- Medieval	A	420	SK94NE	498600 346100	None	Ancaster	H
SMR 30352		LSMR	Coin	Roman	E	140	SK94NE	498480 345500	None	Ancaster	H
DBA-CP		NMP	Pits or geological features	?	D	400	SK94NE	498200 345300	None	Ancaster	M
SAM 295	SMR 30322 NMR 31	SAM LSMR NMR	Marching camp	Roman	A	1100	SK94SE	498000 344500	None	Ancaster	H
SAM 22628	SMR 30302	SAM LSMR	Village cross	Medieval	A	1550	SK94SE	498400 343850	None	Ancaster	H
SAM 105		SAM	Town	Roman	A	2000	SK94SE	498300 343700	None	Ancaster	H
SMR 30320		LSMR	Flint Find	Neolithic / BA	E	800	SK94NE	498000 346500	None	Ancaster	H

* Based on April 1999 route, figures in *italics* refer to February 1999 route

Staythorpe Power Station Pipeline: Map 3 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
NMR Linear 77		NMR	'Jurassic Way' Ridgeway	Neolithic / Bronze Age	D	0	SK94NE	49730 34580	Minor	Ancaster	M
SMR 30307	NMR 5	SMR NMR	Flint scatter	Prehistoric	D	250 *200*	SK94NE	497200 345600	None	Ancaster	M
DBA-AG		OS 1905	Barn	Post-Medieval	C	340 *100*	SK94NE	497194 345658	None	Ancaster	H
DBA-AI		OS 1905	Cottage	Post-Medieval	C	530 *800*	SK94NE	497056 346690	None	Normanton	H
NMR 504672		NMR LB	Hall	Post-Medieval	B	590 *100*	SK94NE	495500 346030	None	Normanton	H
DBA-CQ		NMP	Ridge and furrow, upstanding	Medieval	D	750 *0*	SK94NE	495200 346000	None	Normanton	H
DBA-CR		NMP	Ridge and furrow	Medieval	D	90 *620*	SK94NE	495200 346700	None	Normanton	H
DBA-CS		NMP	Ridge and furrow	Medieval	D	300 *420*	SK94NE	495200 346400	None	Normanton	H
DBA-GH	AP.983/4265	NMR	?Drainage	?Modern	D	650 *200*	SK94NE	495150 346100	None	Normanton	M
DBA-CT		NMP	Ridge and furrow	Medieval	D	580 *300*	SK94NE	495200 346200	None	Normanton	H
NMR 69		NMR	Mound and earthworks	Medieval	B	760 *200*	SK94NW	494740 346120	None	Normanton	H
SMR 30295	NMR 527274	SMR NMR	St Nicholas' Church	Medieval	A	700 *370*	SK94NW	494880 346240	None	Normanton	H
SAM 319	SMR 30296 NMR 28	SAM SMR NMR	Pump and Milestone	Post-Medieval	A	600 *490*	SK94NW	494900 346340	None	Normanton	H
HL 59.07		HL	Pottery sherd	Medieval	E	390 *600*	SK94NW	494780 346600	None	Normanton	H
DBA-AF		OS 1905	Quarry	?Post-Medieval	D	540 *70*	SK94NE	495693 345950	None	Carlton Scroop	H
DBA-CU		NMP	Ridge and furrow	Medieval	D	830 *120*	SK94NE	495500 345700	None	Carlton Scroop	H
DBA-AH		TM 1837	Building	?Post-Medieval	C	710 *180*	SK94NE	495538 345699	None	Carlton Scroop	H

* Based on April 1999 route, figures in *italics* refer to February 1999 route

Staythorpe Power Station Pipeline: Map 3 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
SMR 30381		SMR	Spearhead	Anglo-Saxon	E	1340 *450*	SK94NE	495200 345400	None	Carlton Scroop	H
DBA-FT		NMP	Railway line, Lincoln to Grantham	Post-Medieval	D	0	SK94NE	494800 345840	Minor	Carlton Scroop	H
SMR 30378	NMR 20	LSMR NMR	St Nicholas' Church	Medieval	A	1920 *860*	SK94NW	494760 345000	None	Carlton Scroop	M
NMR 1079932		NMR	Cropmark of a boundary	?	D	1300 *370*	SK94NW	494510 345520	None	Carlton Scroop	M
NMR 1079935		NMR	Cropmark showing probable pit alignment	?Prehistoric / Roman	C	1160 *310*	SK94NW	494630 345540	None	Carlton Scroop	H
DBA-AJ		OS 1905	Pond	Post-Medieval	E	800 *500*	SK94NW	494402 345966	None	Carlton Scroop	H
DBA-AK		OS 1905	Railway	Post-Medieval	D	1080 *180*	SK94NW	494834 345586	None	Carlton Scroop	H
NMR 1079938		NMR	Triple ditch feature seen as a cropmark	?Prehistoric / Roman	C	1330 *600*	SK94NW	494750 345270	None	Carlton Scroop	M
NMR 1079941		NMR	Cropmark of a double-ditched feature	Medieval / Post-Medieval	C	1690 *700*	SK94NW	494850 345110	None	Carlton Scroop	M
DBA-GI	AP.SK9345/7	NMR	Cropmarks indicating field boundaries and trackway	?	D	1120 *180*	SK94NW	494500 345600	None	Carlton Scroop	H
DBA-AL		OS 1905	Quarry	Post-Medieval	D	1060 *750*	SK94SW	493812 345374	None	Normanton	H
SMR 30297	NMR 18	LSMR NMR	Masonry rubble	Roman	C	550 *350*	SK94SW	493930 346070	None	Normanton	H
DBA-CV		NMP	Ridge and furrow, upstanding	Medieval	D	620 *0*	SK94SW	494000 346000	None	Normanton	H
DBA-CX		LAS	Cemetery	Anglo-Saxon	B	530 *200*	SK94SW	494000 346060	None	Nornanton	H
DBA-CY		LAS	Building material	Roman	C	500	SK94SW	493740 346140	None	Normanton	H
DBA-DD		LAS	Ridge and furrow	Medieval	D	570 *400*	SK94SW	493900 345940	None	Normanton	H
SMR 30380		LSMR	Cemetery	Anglo-Saxon	B	1040 *920*	SK94NW	493600 345550	None	Carlton Scroop	H
NMR 70		NMR	Quarry	Post-Medieval	D	850	SK94NW	493500 345820	None	Carlton Scroop	H

* Based on April 1999 route, figures in *italics* refer to February 1999 route

Staythorpe Power Station Pipeline: Map 3 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
DBA-CZ		NMP	Ridge and furrow	Medieval	D	300	SK94NW	493600 346200	None	Normanton	H
DBA-DA		NMP	Ridge and furrow	Medieval	D	140	SK94NW	493800 346300	None	Normanton	H
DBA-DB		NMP	Ridge and furrow	Medieval	D	80 *200*	SK94NW	494500 346450	None	Normanton	H
NMR 1059794		NMR	Field system (ridge and furrow)	Medieval	D	120 *0*	SK94NW	494120 346660	None	Normanton	H
DBA-DC		NMP	Ridge and furrow	Medieval	D	0	SK94NW	494000 346700	Major	Normanton	H
NMR 67		NMR	Open cast mine	Post-Medieval	D	50 *80*	SK94NW	493550 346710	None	Hough on the Hill	M
SMR 32831		LSMR	Flint scrapers	Prehistoric	D	380 *550*	SK94NW	494000 347100	None	Caythorpe	H
SMR 30262		LSMR	Bronze belt link	Iron Age	E	450 *560*	SK94NW	493900 347300	None	Caythorpe	H
SMR 30258	NMR 3	LSMR NMR	Cemetery	Anglo-Saxon	B	470 *580*	SK94NW	493900 347300	None	Caythorpe	H
SMR 30257		LSMR	Bucket urn cemetery	Prehistoric	B	770 *880*	SK94NW	493880 347650	None	Caythorpe	H
SMR 34975		LSMR	Building foundations	Medieval	B	800 *960*	SK94NW	494000 347600	None	Caythorpe	H
SMR 35113		LSMR	Flint scraper	Prehistoric	D	720	SK94NW	493700 347400	None	Caythorpe	H
NMR 1059789		NMR	Ridge and furrow	Medieval	D	800	SK94NW	493490 347610	None	Caythorpe	H
DBA-DE		NMP	Ridge and furrow	Medieval	D	940	SK94NW	493600 347700	None	Caythorpe	H
SMR 30280	NMR 15	SMR NMR	Whetstone Sceptre	Anglo-Saxon	E	400	SK94NW	493180 347160	None	Hough on the Hill	H
DBA-AM		OS 1905	Pond	Post-Medieval	E	380	SK94NW	493651 346218	None	Hough on the Hill	H
DBA-AN		OS 1905	Pond	Post-Medieval	E	380	SK94NW	493091 346403	None	Hough on the Hill	H
DBA-AP		OS 1905	Quarry	Post-Medieval	D	40 *80*	SK94NW	493075 346952	None	Hough on the Hill	H

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Staythorpe Power Station Pipeline: Map 3 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
DBA-AQ		OS 1905	Windmill	Post-Medieval	C	0 *30*	SK94NW	492931 346921	Major.	Hough on the Hill	H
DBA-AR		OS 1905	Pond	Post-Medieval	E	60 *20*	SK94NW	492561 346948	None	Hough on the Hill	H
DBA-AS		OS 1905	Brickworks	Post-Medieval	C	180 *140*	SK94NW	492500 346836	None	Hough on the Hill	H
DBA-AT		OS 1905	Pond	Post-Medieval	E	20	SK94NW	492195 347224	None	Hough on the Hill	H
DBA-DF		NMP	Ridge and furrow	Medieval	D	220 *200*	SK94NW	492500 346700	None	Hough on the Hill	H
DBA-DH		NMP	Ridge and furrow	Medieval	D	380 *360*	SK94NW	492700 346440	None	Hough on the Hill	H
SAM 180	SMR 30279 NMR 14	SAM SMR NMR	Motte and bailey castle	Medieval	A	600	SK94NW	492400 346440	None	Hough on the Hill	H
DBA-DG			Ridge and furrow	Medieval	D	500	SK94NW	492000 346500	None	Hough on the Hill	H
SMR 30277	NMR 504667	SMR NMR	All Saints Church	Medieval	A	660 *610*	SK94NW	492320 346400	None	Hough on the Hill	H
HL 46.21		HL	?SMV Earthworks	Medieval	C	280 *220*	SK94NW	492300 346750	None	Hough on the Hill	M
SMR 34201		LSMR	SMV Earthworks	Medieval	B	400 *380*	SK94NW	492200 346600	None	Hough on the Hill	H
SMR 34775		LSMR	SMV Earthworks	Medieval	B	560	SK94NW	492080 346410	None	Hough on the Hill	H

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Staythorpe Power Station Pipeline: Map 4 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance from Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
DBA-AU		OS 1905	Pond	Post-Medieval	E	0	SK94NW	491858 347364	None	Hough on the Hill	H
NMR 1059782		NMR	Ridge and furrow	Medieval	D	100	SK94NW	491640 346890	None	Hough on the Hill	H
DBA-DJ		NMP	Ridge and furrow	Medieval	D	420 *500*	SK94NW	491500 346800	None	Hough on the Hill	H
SMR 30284	NMR 325893	LSMR NMR	Building and stone scatter, probable settlement	Roman	C	610 *980*	SK94NW	490800 346400	None	Hough on the Hill	H
SMR 30285	NMR 325893	LSMR NMR	Pottery and daub	Anglo-Saxon	C	610 *980*	SK94NW	490800 346400	None	Hough on the Hill	H
SMR 30288		LSMR	Barrow	Anglo-Saxon	B	1180 *1600*	SK94NW	490780 345810	None	Hough on the Hill	H
SMR 30287		LSMR	Flint flake	Prehistoric	E	1180 *1600*	SK94NW	490700 345800	None	Hough on the Hill	H
SMR 30289		LSMR	Cemetery	Anglo-Saxon	B	1140 *1600*	SK94NW	490800 345800	None	Hough on the Hill	H
DBA-GJ	AP.202/6126	NMR	Cropmark of possible pits or ponds	Post-Medieval	C	60 *160*	SK94NW	491000 347350	None	Hough on the Hill	H
DBA-AV		TM 1850	Pond	Post-Medieval	E	550 *300*	SK94NW	490930 347816	None	Hough on the Hill	H
DBA-DM		NMP	Ridge and furrow	Medieval	D	360 *0*	SK94NW	490600 347600	None	Hough on the Hill	H
DBA-DL		NMP	Ridge and furrow	Medieval	D	500 *200*	SK94NW	490600 347800	None	Hough on the Hill	H
DBA-DK		NMP	Ridge and furrow	Medieval	D	770 *500*	SK94NW	490600 348000	None	Hough on the Hill	H
DBA-DP		NMP	Linear feature	?	D	1040 *600*	SK94NW	490530 348180	None	Hough on the Hill	M
NMR 504656		NMR LB	Hall	Post-Medieval	A	1150 *680*	SK94NW	490420 348340	None	Hough on the Hill	H
NMR 504662		NMR	Church	Medieval	A	1100 *530*	SK94NW	490320 347120	None	Hough on the Hill	H
DBA-DQ		NMP	Enclosure	?	C	1280 *740*	SK94NW	490300 348340	None	Hough on the Hill	M
NMR 504663		NMR LB	Farmhouse	Post-Medieval	A	1140 *540*	SK94NW	490240 347130	None	Hough on the Hill	H

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Staythorpe Power Station Pipeline: Map 4 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance from Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
DBA-AW		TM 1850	Pond	Post-Medieval	E	580 *300*	SK84NE	489896 347550	None	Hough on the Hill	H
NMR 1058953		NMR NMP	Enclosures, probable settlement	Iron Age / Roman	B	1400 *640*	SK84NE	489410 348420	None	Hough on the Hill	M
NMR 1058954		NMR NMP	Linear features and enclosures	Iron Age / Roman	C	630 *0*	SK84NE	489360 347600	None	Hough on the Hill	M
DBA-AY		OS 1905	Building	Post-Medieval	C	660 *0*	SK84NE	489253 347672	None	Hough on the Hill	H
DBA-BA		OS 1905	Pond	Post-Medieval	E	630 *0*	SK84NE	489051 347655	None	Hough on the Hill	H
DBA-AX		OS 1905	Pond	Post-Medieval	E	430 *240*	SK84NE	489486 347381	None	Hough on the Hill	H
DBA-GK	AP.9215/1759	NMR	Ridge and furrow	Medieval	D	130 *140*	SK84NE	489700 347400	None	Hough on the Hill	H
SMR 30292	NMR 1058955	LSMR NMR	Road, multiple enclosures and settlement	Prehistoric / Roman / Medieval	B	250 *140*	SK84NE	489500 347500	None	Hough on the Hill	H
DBA-CF		OS 1905	Pond	Post-Medieval	E	600 *120*	SK84NE	489486 347535	None	Hough on the Hill	H
SMR 30293	NMR 1058956	LSMR NMR	Enclosure	Prehistoric / Roman	C	150 *500*	SK84NE	489400 347100	None	Hough on the Hill	M
DBA-AZ		OS 1905	Building	Post-Medieval	C	230 *440*	SK84NE	489296 347216	None	Hough on the Hill	H
NMR 1058957		NMR NMP	Linear feature and boundaries	Prehistoric / Roman	C	50 *280*	SK84NE	489140 347160	Unc.	Hough on the Hill	M
DBA-DN		NMP	Linear features	?	D	250 *900*	SK84NE	488800 346700	None	Hough on the Hill	M
DBA-DR		NMP	Enclosures or possible settlement site	?	B	400 *1200*	SK84NE	488700 346400	None	Hough on the Hill	H
NMR 7		NMR	Spearhead	Anglo-Saxon	E	370 *200*	SK84NE	488760 347380	None	Hough on the Hill	M
SMR 30294	NMR 1058928	LSMR NMR	Enclosure	Prehistoric / Roman	B	160 *280*	SK84NE	488500 347300	Minor	Hough on the Hill	H
NMR 1058920	HL 46.18	NMR	Cropmark of possible linear features	?	C	380 *0*	SK84NE	488420 347670	None	Hough on the Hill	M
SMR 30194		LSMR	Bronze handle	Roman	E	670 *5*	SK84NE	488200 347600	None	Westborough and Dry Doddington	H

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Staythorpe Power Station Pipeline: Map 4 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance from Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
SMR 30196	NMR 1058921	LSMR NMR	Settlement site with multiple enclosures	?	B	40 *65*	SK84NE	488400 347600	Minor	Westborough and Dry Doddington	H
SMR 30197	NMR 1058916	LSMR NMR	Enclosures	?	B	90 *0*	SK84NE	487900 346800	Minor	Westborough and Dry Doddington	M
SMR 30198		LSMR	Enclosures and linear features	?	C	0 *730*	SK84NE	487900 346800	Major	Westborough and Dry Doddington	H
SMR 30199	NMR 1058922	LSMR NMR	Enclosures	?	C	780 *0*	SK84NE	487820 349430	None	Westborough and Dry Doddington	M
NMR 1058923		NMR	Possible enclosure	Prehistoric / Roman	C	640 *0*	SK84NE	488040 347650	None	Westborough and Dry Doddington	M
SMR 30229	NMR 1058913	LSMR NMR	Enclosures and trackways	? Prehistoric	C	1040 *250*	SK84NE	488200 348700	None	Westborough and Dry Doddington	M
DBA-BB		OS 1905	Pond	Post-Medieval	E	780 *0*	SK84NE	487766 347772	None	Westborough and Dry Doddington	H
DBA-BC		OS 1905	Pond	Post-Medieval	E	520 *280*	SK84NE	487667 347481	None	Westborough and Dry Doddington	H
DBA-DS		NMP	Irregular features	?	D	630 *30*	SK84NE	487540 347700	None	Westborough and Dry Doddington	M
NMR 1058947		NMR	Ridge and furrow	Medieval	D	690 *130*	SK84NE	487070 347670	None	Westborough and Dry Doddington	H
DBA-DU		NMP	Ridge and furrow	Medieval	D	650 *220*	SK84NE	487120 347600	None	Westborough and Dry Doddington	H
DBA-BD		OS 1905	Pond	Post-Medieval	E	850 *40*	SK84NE	487116 347854	None	Westborough and Dry Doddington	H
DBA-BE		OS 1905	Pond	Post-Medieval	E	1070 *100*	SK84NE	486967 347984	None	Westborough and Dry Doddington	H
DBA-DT		NMP	Linear features and enclosures	?	C	1460 *500*	SK84NE	487000 348500	None	Westborough and Dry Doddington	H
NMR 1058943		NMR NMP	Irregular linear feature	?	D	160 *300*	SK84NE	487000 347500	None	Westborough and Dry Doddington	M
DBA-GL	AP.7726/266	NMR	Ridge and furrow	Medieval	D	830 *40*	SK84NE	486700 348000	None	Westborough and Dry Doddington	H
DBA-DV		NMP	Ridge and furrow	Medieval	D	1320 *700*	SK84NE	486300 348500	None	Westborough and Dry Doddington	H
DBA-BF		OS 1905	Pond	Post-Medieval	E	600 *50*	SK84NE	486343 347674	None	Westborough and Dry Doddington	H

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Staythorpe Power Station Pipeline: Map 4 - Lincolnshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance from Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
DBA-BG		OS 1905	Pond	Post-Medieval	E	420 *160*	SK84NE	486204 347533	None	Westborough and Dry Doddington	H
DBA-BH		OS 1905	Pond	Post-Medieval	E	300 *160*	SK84NE	486068 347468	None	Westborough and Dry Doddington	H
DBA-BJ		OS 1905	Pond	Post-Medieval	E	210 *410*	SK84NE	486242 347277	None	Westborough and Dry Doddington	H
DBA-BK		OS 1905	Pond	Post-Medieval	E	180 *360*	SK84NE	486147 347288	None	Westborough and Dry Doddington	H
DBA-BL		OS 1905	Pond	Post-Medieval	E	200 *320*	SK84NE	486109 347320	None	Westborough and Dry Doddington	H
DBA-DW		NMP	Ridge and furrow	Medieval	D	170 *300*	SK84NE	486200 347400	None	Westborough and Dry Doddington	H
DBA-DX		NMP	Ridge and furrow	Medieval	D	50 *300*	SK84NE	486000 347300	None	Westborough and Dry Doddington	H

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Staythorpe Power Station Pipeline: Map 5 - Nottinghamshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
SMR 1401		NSMR	Linear feature	?	D	840	SK84NW	482570 348530	None	Balderton	M
DBA-FY		NMP	WW2 Airfield	Modern	D	570	SK84NW	481700 348200	None	Balderton	H
SMR 1400		NSMR	Linear features and enclosures	?	C	970 *860*	SK84NW	48080 34870	None	Balderton	M
SMR 1402		NSMR	Linear feature	?	D	450 *360*	SK84NW	48050 34820	None	Balderton	M
DBA-GU	AP.7725/163	NMR	Enclosure	?	D	160 *100*	SK84NW	480700 347800	None	Balderton	H
DBA-GV	AP.7725/161	NMR	Linear	?	D	0	SK84NW	480420 347700	Minor	Balderton	M
DBA-GW	AP.7725/161	NMR	?Ring ditch or ?pond	?	C	10	SK84NW	480200 347720	Unc.	Balderton	H
SMR 1397		NSMR	Old pond, site of	Post-Medieval	E	280 *200*	SK84NW	48060 347970	None	Balderton	H
DBA-BZ		OS 1905 Notts Archives	Gas Pipeline	Modern	E	190 *0*	SK84NW	481376 347113	None	Balderton	M

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Staythorpe Power Station Pipeline: Map 6 - Nottinghamshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance from Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
DBA-FX		OS 1994	Railway line, Newark to Melton Mowbray	Post-Medieval	D	0	SK74NE	479900 347800	Minor	Cotham	H
NMR 508994		NMR	Railway Station	Post-Medieval	B	1560 *1640*	SK74NE	479800 346140	None	Cotham	H
DBA-GX	AP.7725/151	NMR	Soilmark	?	D	0	SK74NE	479760 347820	Minor	Cotham	M
DBA-GY	AP.202/6139	NMR	Circular cropmarks, possible pits or ponds	?Post-Medieval	C	0 *50*	SK74NE	479750 347800	Major	Cotham	M
SMR 1550	NMR 8	NSMR NMR	Windmill mound	Post Medieval	C	1130 *1220*	SK74NE	479590 346610	None	Cotham	H
DBA-EK		NMP	Linear features	?	D	1050	SK74NE	479200 346160	None	Cotham	M
DBA-EL		NMP	Linear feature	?	D	1000 *400*	SK74NE	479500 346660	None	Cotham	M
DBA-EM		NMP	Ridge and furrow	Medieval	D	800 *200*	SK74NE	479400 346700	None	Cotham	H
DBA-EN		NMP	Ridge and furrow	Medieval	D	640 *0*	SK74NE	479500 347100	None	Cotham	H
SMR 1418		NSMR	Linear boundary and pit alignment	?	C	770 *170*	SK74NE	479000 347100	None	Cotham	M
DBA-GZ	AP.10266/312	NMR	Circular feature	?	C	410 *0*	SK74NE	479000 347400	None	Cotham	M
SMR 7822		NSMR	Earthwork Bank	?	C	420	SK74NE	479610 347360	None	Cotham	H
SMR 1686		NSMR	Smithy	Post Medieval	B	380 *400*	SK74NE	479600 347480	None	Cotham	H
SMR 1687		NSMR	Pond	?	D	300	SK74NE	479520 34760	None	Cotham	H
SMR 1585	NMR 527383	NSMR NMR	Church of St Michael	Medieval	A	280	SK74NE	479420 347620	None	Cotham	H
SMR 7823		NSMR	Earthworks	?	C	440 *580*	SK74NE	479700 347230	None	Cotham	H
DBA-EP		NMP	Ridge and furrow	Medieval	D	540 *0*	SK74NE	479400 347220	None	Cotham	H
DBA-HK		NMR LB	Cottages	Post Medieval	A	510 *100*	SK74NE	479540 347300	None	Cotham	H

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Staythorpe Power Station Pipeline: Map 6 - Nottinghamshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance from Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
DBA-EQ		NMP	Ridge and furrow	Medieval	D	360 *0*	SK74NE	479300 347500	None	Cotham	H
SMR 7821		NSMR	Earthworks	?	C	300 *400*	SK74NE	479450 347540	None	Cotham	H
DBA-ER		NMP	Ridge and furrow	Medieval	D	150 *200*	SK74NE	479200 347640	None	Cotham	H
DBA-HA	AP.10266/313	NMR	Ridge and furrow	Medieval	D	0 *50*	SK74NE	479000 347800	Minor	Cotham	H
SMR 1688		NSMR	Four ponds	?	D	100 *120*	SK74NE	479150 347800	None	Cotham	H
SMR 1627		NSMR	Windpump	Post-Medieval	B	130 *160*	SK74NE	479100 347820	None	Cotham	H
DBA-ES		NMP	Ridge and furrow	Medieval	D	0	SK74NE	479500 347850	Major	Cotham	H
DBA-EU		NMP	Ridge and furrow	Medieval	D	0	SK74NE	479300 347900	Major	Cotham	H
DBA-HB	AP.7948/1	NMR	Ridge and furrow	Medieval	D	40 *20*	SK74NE	479250 348000	None	Cotham	H
SMR 1455	NMR 26	NSMR NMR	Enclosures and linear features	Prehistoric-Roman	C	0	SK74NE	479100 34800	Major	Cotham	M
DBA-EV		DBA	Gypsum works	Modern	D	100	SK74NE	479700 348000	None	Hawton	H
DBA-ET		NMP	Ridge and furrow	Medieval	D	160 *110*	SK74NE	479100 348200	None	Hawton	H
DBA-EW		NMP	Enclosures	?	C	930 *1200*	SK74NE	479200 349240	None	Hawton	M
SMR 1452		NSMR	Stone axe	Bronze Age	E	290 *860*	SK74NE	478390 349060	None	Thorpe	H
DBA-EX		NMP	Enclosures and possible ring ditch	?	C	70 *620*	SK74NE	478220 348870	None	Thorpe	M
SMR 1451		NSMR	Stone axe	Neolithic	E	180 *820*	SK74NE	478300 349100	None	Thorpe	H
DBA-HC	AP.10266/314	NMR	Possible enclosures	?	D	0 *300*	SK74NE	478250 348500	None	Thorpe	M
DBA-EY		NMP	Linear feature and enclosure	?	C	100 *350*	SK74NE	477800 348750	None	Thorpe	M

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Staythorpe Power Station Pipeline: Map 6 - Nottinghamshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance from Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
SMR 5617	NMR 6	NSMR NMR	Pottery scatter	Roman	D	900 *360*	SK74NE	477540 348080	None	East Stoke	H
SMR 1548a		NSMR	Flint and pottery sherd	Prehistoric / Anglo-Saxon	D	950 *270*	SK74NE	477300 348300	None	East Stoke	H
SMR 1437	NMR 9	NSMR NMR	?Road	Roman	C	720 *260*	SK74NE	479400 346200	Minor	Cotham	M
DBA-HD	AP.10266/283	NMR	Possible gas-pipeline	Modern	D	0	SK74NE	478000 348330	Minor	East Stoke	H
SMR 1448	NMR 25	NSMR NMR	Enclosures and linear features	?	C	830 *300*	SK74NE	477200 348200	None	East Stoke	M
SAM 29909	SMR 1438 NMR 5	SAM NSMR NMR	Possible henge	Neolithic	A	1310 *220*	SK74NE	476700 348800	None.	East Stoke	H
DBA-EZ		NMP	Ridge and furrow	Medieval	D	1700 *640*	SK74NE	476400 348400	None	East Stoke	H
DBA-HL		NMR LB	Chapel	Medieval	A	2000 *900*	SK74NE	476240 348260	None	Elston	H
SMR 1662		SMR	Possible road	Roman	C	930 *0*	SK74NE	47689 34920	Unc.	East Stoke	M
SMR 1661		NSMR	Linear features and possible road	? Roman	C	1320 *260*	SK74NE	476000 349100	None	East Stoke	M
SMR 1439		NSMR	Ditch, seen in pipe trench	?	D	1750 *660*	SK74NE	476100 348800	None	East Stoke	H
SMR 1436		NSMR	Stone axe	Neolithic	E	510 *500*	SK74NE	476860 349790	None	Thorpe	H
SMR 1655		NSMR	Linear features	?	D	1400 *200*	SK74NE	475800 349500	None	East Stoke	M
SMR 1645	NMR 3	NSMR NMR	Flint scatter	Palaeolithic	D	1260 *360*	SK74NE	476000 349600	None	Thorpe	H
DBA-CA		OS 1900	Area of former wood		E	1460 *370*	SK74NE	476094 349086	None	East Stoke	H
SMR 1434	NMR 24	NSMR NMR	Rectangular enclosure with internal features	Medieval	B	1550 *700*	SK74NE	475700 349400	None	East Stoke	M
DBA-HJ		NMR LB	House	Post- Medieval	A	1850 *1060*	SK74NE	475380 349300	None	East Stoke	H
SMR 1432		NSMR	Earthworks and possible burial ground	Roman / Medieval	B	1660 *1140*	SK74NE	475200 349550	None	East Stoke	H

* Based on April 1999 route, figures in *italics* refer to February 1999 route

Staythorpe Power Station Pipeline: Map 6 - Nottinghamshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance from Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
DBA-HM		NMR LB	House	Post- Medieval	A	1510 *900*	SK74NE	475440 349680	None	East Stoke	H
DBA-HN		NMR LB	House	Post- Medieval	A	1590 *1000*	SK74NE	475320 349680	None	East Stoke	H
SAM 144	SMR 1429 NMR 1	SAM NSMR NMR	SMV	Medieval	A	1580 *1120*	SK74NE	474720 349900	None	East Stoke	H
SMR 1647		NSMR	Earthworks	Medieval	C	1400 *900*	SK74NE	475600 349700	None	East Stoke	H
SMR 1646		NSMR	Earthworks	Medieval	C	1420 *660*	SK74NE	475700 349600	None	East Stoke	H
SMR 1664	NMR 34	NSMR NMR	Flints	Bronze Age	E	1110 *480*	SK74NE	475800 349900	None	Thorpe	H
SMR 1435	NMR 7	NSMR NMR	Flints	Bronze Age	E	1010 *460*	SK74NE	475800 350000	None	Thorpe	H

* Based on April 1999 route, figures in *italics* refer to February 1999 route

Staythorpe Power Station Pipeline: Map 7 - Nottinghamshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
SAM 29903	SMR 3012c NMR 24	SAM NSMR NMR	Mound	Bronze Age	A	990 *420*	SK75SE	475800 350090	None	Thorpe	H
SMR 3012b	NMR 77	NSMR NMR	Earthwork	Roman	B	830 *320*	SK75SE	475800 350150	None	Thorpe	H
SMR 3567		NSMR	Mound	?	C	1200 *660*	SK75SE	475580 350000	None	Thorpe	H
SMR 5661		NSMR	Coin	Roman	E	1090 *460*	SK75SE	475740 350080	None	Thorpe	H
DBA-HE	AP.7550/1	NMR	Field system	Medieval	B	980 *400*	SK75SE	475700 350050	None	Thorpe	M
DBA-FG		NMP	Enclosures	?	C	1000 *400*	SK75SE	475740 350120	None	Thorpe	M
SMR 3008	NMR 53	NSMR NMR	Bank revetment	?Post-Medieval	C	1330 *820*	SK75SE	475200 350200	None	East Stoke	H
DBA-HP		NMR LB	House	Post-Medieval	A	970 *340*	SK75SE	475740 350200	None	Thorpe	H
SMR 5662		NSMR	Coin	Roman	E	950 *300*	SK75SE	475800 350200	None	Thorpe	H
SAM 163	SMR 3012a NMR 21	SAM NSMR NMR	'Ad Pontem' - fort and town	Roman	A	370 *0*	SK75SE	475900 350300	None	Thorpe	H
DBA-EJ			Fosse Way	Roman	B	0	SK75SE	475980 350520	Minor	Thorpe	H
DBA-FB		NMP	Linear feature	?	D	460 *0*	SK75SE	475800 350600	None	Thorpe	M
SMR 3583		NSMR	Sluice	Post-Medieval	C	700 *230*	SK75SE	475590 350700	None	East Stoke	H
SMR 3106	NMR 52	NSMR NMR	Sword blade	Bronze Age	E	1130 *860*	SK75SE	475000 350700	None	East Stoke	H
DBA-FC		NMP	Ridge and furrow	Medieval	D	250 *0*	SK75SE	475800 351000	None.	Rolleston	H
DBA-FD		NMP	Ridge and furrow	Medieval	D	640 *500*	SK75SE	475200 351200	None	Rolleston	H
DBA-FE		NMP	Ridge and furrow	Medieval	D	640 *480*	SK75SE	475300 351400	None	Rolleston	H

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Staythorpe Power Station Pipeline: Map 7 - Nottinghamshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
DBA-CC		OS 1900	Former Osier bed		D	300 *0*	SK75SE	475845 350786	None	Thorpe	H
SMR 3510a, b and c		NSMR	Flint and pottery scatter	Mesolithic / Roman / Medieval	D	700 *5*	SK75SE	476300 350100	None	Thorpe	H
SMR 3156		NSMR	St Lawrence's Church	Medieval	A	390 *420*	SK75SE	476680 350110	None	Thorpe	H
DBA-FF		NMP	Enclosure and linear features	?	C	690 *60*	SK75SE	476060 350200	None	Farndon	M
SMR 3013	NMR 89	NSMR NMR	Enclosure	?	C	430 *180*	SK75SE	476400 350200	None	Farndon	M
SMR 3012e	NMR 78	NSMR NMR	Flint	Bronze Age	E	440 *120*	SK75SE	476300 350400	None	Thorpe	H
SMR 3012d	NMR 77	NSMR NMR	Enclosure	?	C	320 *160*	SK75SE	476300 350450	None	Farndon	M
SMR 3012a	SAM 163 NMR 21	NSMR SAM NMR	Features	Iron Age	B	360 *200*	SK75SE	475900 350300	None	Thorpe	H
SMR 3019	NMR 25	NSMR NMR	Worked flint	Neolithic	E	0 *700*	SK75SE	476890 350500	None	Farndon	H
SMR 3029		NSMR	Stone axe	Neolithic	E	240 *1000*	SK75SE	477200 350500	None	Farndon	H
SMR 3015e		NSMR	Enclosures	?	C	490 *1300*	SK75SE	477400 350700	None	Farndon	M
SMR 3015d		NSMR	Enclosures	?	C	860 *1600*	SK75SE	477600 350900	None	Farndon	M
SMR 3015c		NSMR	Linear features	?	D	470 *1300*	SK75SE	477300 350900	None	Farndon	M
SMR 3534	NMR 17	NSMR NMR	Polished flint axe	Neolithic	E	350 *860*	SK75SE	476860 351000	None	Farndon	H
SMR 3014d		NSMR	Enclosure and linear feature	?	C	0 *740*	SK75SE	476500 350950	Major	Farndon	M
DBA-FH		NMP	Ridge and furrow	Medieval	D	130 *740*	SK75SE	476760 350800	None	Farndon	H
SMR 3014e		NSMR	Linear features	?	C	100 *740*	SK75SE	476500 350700	Major	Farndon	M

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Staythorpe Power Station Pipeline: Map 7 - Nottinghamshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
SMR 3014f		NSMR	Linear feature	?	C	50 *200*	SK75SE	476200 350700	Major	Farndon	M
SMR 3587		NSMR	Well	Post-Medieval	C	30 *430*	SK75SE	476480 350920	None	Farndon	H
SMR 3107	NMR 76	NSMR NMR	Axe	Neolithic	E	130 *260*	SK75SE	476100 351000	None	Farndon	H
SMR 3016		NSMR	Bridge timbers	? Roman	C	0 *420*	SK75SE	476300 351000	Unc.	Farndon	M
SMR 3014c		NSMR	Enclosure	?	C	230 *740*	SK75SE	476600 351200	None	Farndon	M
DBA-CB		OS 1885	Area of marshland		E	270 *680*	SK75SE	476473 351295	None	Farndon	H
SMR 3015a		NSMR	Enclosure and linear feature	?	C	340 *1000*	SK75SE	476900 351000	None	Farndon	M
SMR 3015b		NSMR	Enclosure and curvilinear feature	?	C	570 *1300*	SK75SE	477150 351000	None	Farndon	M
SMR 3014b		NSMR	Ring ditch and enclosures	Iron Age / Roman	C	460 *900*	SK75SE	476700 351350	None	Farndon	M
SMR 3014a		NSMR	Linear features	?	D	680 *1000*	SK75SE	476800 351500	None	Farndon	M
SMR 3552		NSMR	Glasshouses	Post-Medieval	B	490 *820*	SK75SE	476640 351410	None	Farndon	H
SMR 3553		NSMR	Glasshouses	Post-Medieval	B	550 *840*	SK75SE	476690 351440	None	Farndon	H
SMR 3551		NSMR	Sluice	Post-Medieval	C	490 *440*	SK75SE	476310 351660	None	Rolleston	H
DBA-FJ		NMP	Ridge and furrow	Medieval	D	60 *160*	SK75SE	476200 351900	None	Rolleston	H
SMR 3548		NSMR	Well	?	C	140 *300*	SK75SE	476140 352260	None	Rolleston	H
DBA-FK		NMP	Ridge and furrow	Medieval	D	220 *380*	SK75SE	476220 352200	None	Rolleston	H
SMR 3547		NSMR	Well	?	C	70 *100*	SK75SE	475930 352380	None	Rolleston	H
DBA-FL		NMP	Ridge and furrow	Medieval	D	50 *0*	SK75SE	475800 351700	None	Rolleston	H

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Staythorpe Power Station Pipeline: Map 7 - Nottinghamshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
SMR 3550		NSMR	Well	?	C	170 *60*	SK75SE	475780 351680	None	Rolleston	H
DBA-HF	AP.S97/4416	NMR	Possible enclosures	?	C	110 *0*	SK75SE	475700 351500	Unc.	Rolleston	M
DBA-CE		OS 1885	Pond	Post-Medieval	E	140 *130*	SK75SE	475706 351709	None	Rolleston	H
DBA-CD		TM 1846	Well	Post-Medieval	C	30 *20*	SK75SE	475913 351738	None.	Rolleston	H
SMR 3544		NSMR	Well	?	C	760 *600*	SK75SE	475210 351480	None	Rolleston	H
SMR 3007	NMR 54	NSMR NMR	Possible droveway and enclosures	Roman	C	680 *700*	SK75SE	475100 351500	None	Rolleston	M
SMR 3549		NSMR	Well		C	240 *120*	SK75SE	475730 352020	None	Rolleston	H
DBA-HI	AP.597/4416	NMR	Enclosures and building foundations	?	B	50 *0*	SK75SE	475800 352000	Minor	Rolleston	M
SMR 3006		NSMR	Enclosures	?	C	740 *660*	SK75SE	475200 351800	None	Rolleston	M
SMR 3545		NSMR	Well	?	C	740 460	SK75SE	475370 352010	None	Rolleston	H
SMR 3005h	NMR 74	NSMR NMR	Enclosures	?	C	680 *300*	SK75SE	475250 352050	None.	Rolleston	M
SMR 3005f	NMR 74	NSMR NMR	Linear features	?	C	420 *400*	SK75SE	475500 352400	None	Rolleston	M
SMR 3005g	NMR 74	NSMR NMR	Possible building foundation	?	B	620 *500*	SK75SE	475300 352200	None	Rolleston	M
SMR 3546		NSMR	Well	?	C	480 *300*	SK75SE	475550 3524600	None	Rolleston	H
SMR 3005d	NMR 74	NSMR NMR	Two ring ditches	?	C	610 *500*	SK75SE	475400 352600	None	Rolleston	M
SMR 3005c	NMR 74	NSMR NMR	Enclosures	?	C	320 *270*	SK75SE	475700 352700	None	Rolleston	M
SMR 3005a	NMR 74	NSMR NMR	Rectangular enclosure	?	C	560 *340*	SK75SE	475700 352850	None	Rolleston	M
DBA-HJ	AP.9258/012	NMR	Enclosure and curvilinear feature	?	C	60 *180*	SK75SE	476400 352700	None	Rolleston	M

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Staythorpe Power Station Pipeline: Map 7 - Nottinghamshire

Reference	Cross-Refs	Source	Description	Period	Category	Distance From Pipeline* m	Quarter Sheet	National Grid Reference	Impact	Parish	Reliability of Source
SMR 3477		NSMR	Earthwork of ?flood defences	?	D	350 *480*	SK75SE	476570 353030	None	Farndon	H
SMR 3003		NSMR	Flint dagger	Bronze Age	E	60 *480*	SK75SE	476500 353300	None	Staythorpe	H
DBA-FM		NMP	Ridge and furrow	Medieval	D	200 *120*	SK75SE	475900 353200	None	Staythorpe	H
DBA-FN		NMP	Ridge and furrow	Medieval	D	780 *700*	SK75SE	475240 353100	None	Rolleston	H
DBA-FP		NMP	Ridge and furrow	Medieval	D	560 *500*	SK75SE	475600 353400	None	Staythorpe	H
DBA-FQ		NMP	Ridge and furrow	Medieval	D	210 *180*	SK75SE	476000 353200	None	Staythorpe	H
DBA-FR		NMP	Ridge and furrow	Medieval	D	490 *440*	SK75SE	475800 353400	None	Staythorpe	H
DBA-FS		NMP	Ridge and furrow	Medieval	D	660 *600*	SK75SE	475700 353600	None	Staythorpe	H

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