

INDEX DATA	RPS INFORMATION
Scheme Title	Details
A63 Selby bypass.	Supplementary Archaeotogical Survey
Road Number 1963	Date MCU 1995
Contractor Yotheshure CC	
County Yorkshure.	
OS Reference SES3	
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A63 SELBY BYPASS, NORTH YORKSHIRE

SUPPLEMENTARY ARCHAEOLOGICAL SURVEY

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1 INTRODUCTION

- 1.1 In 1991, North Yorkshire County Council, acting for the Department of Transport (now the Highways Agency), commissioned an archaeological evaluation of the proposed route of the A63 Selby Bypass. This work was carried out by the Lancaster University Archaeological Unit (LUAU), who completed their report in November 1991.
- 1.2 In 1995, Anthony Walker and Partners (now Barton Howe Warren Blackledge BHWB) were commissioned by North Yorkshire County Council to carry out a supplementary archaeological survey to enhance and update the LUAU report, in line with the Department of Transport's Design Manual for Roads and Bridges, volume 11 "Environmental Assessment".
- 1.3 In detail, this supplementary work involved:
 - i) a detailed review of the LUAU report and the data contained in it;
 - ii) consultation of the North Yorkshire County Sites and Monuments Record (NYCC SMR) for any sites newly discovered since 1991, or for new information on previously recorded sites;
 - iii) checking all major aerial photographic collections for any new information since 1991, and checking the national collection of oblique aerial photographs held by the Royal Commission on the Historical Monuments for England (RCHME), which had not been previously consulted;
 - iv) checking sources in the North Yorkshire County Record Office (NYCRO) to determine whether any additional documentary information could be identified;
 - v) carrying out a walkover survey of the proposed route alignment, to update the LUAU report and examine land to which they could not gain access;
 - vi) review and as necessary update the recommendations for further archaeological work as recommended in the LUAU report.

2 SUMMARY AND REVIEW OF LUAU ASSESSMENT

2.1 Introduction

- 2.1.1 Following a proposal by the Department of Transport to construct a bypass around the town of Selby, the North Yorkshire County Council commissioned the Lancaster University Archaeological Unit (LUAU) to carry out an archaeological assessment of the proposed construction corridor. This assessment consisted of desk-based research, followed by some non-intrusive field survey work.
- 2.1.2 The assessment was undertaken and the report completed during 1991, prior to the publication of the Department of Transport's Design Manual for Roads and Bridges, volume 11 "Environmental Assessment" (DMRB), and therefore did not conform to the guidelines for archaeological assessments contained therein. In effect, the assessment included most elements of a Stage 2 Assessment (desk-top survey) and some elements of a Stage 3 Assessment (detailed evaluation works), as defined in DMRB.

2.2 Summary of LUAU report

Topography and geology

- 2.2.1 The proposed route of the bypass lies in the southern section of the Vale of York, in a gently undulating landscape which becomes very flat in the vicinity of the River Ouse. The majority of the route passes through open arable land, with only a few patches of woodland, the largest being on the slopes of Brayton Barff.
- 2.2.2 The solid geology primarily consists of Triassic sandstone which outcrops at the western end of the scheme, particularly at Brayton Barff. In the remainder of the route, it is overlain by glacial sands, gravels and boulder clays. The flood plain of the River Ouse, in the north-eastern part of the scheme, is defined by a broad band of alluvial silts and clays. These overlie a complex sequence of deposits, including mire fen peats and woody peats.

Archaeological potential

- 2.2.3 There has been little detailed archaeological fieldwork carried out in the area, and most of the known sites have been identified from aerial photographs. These site are undated, but they could represent parts of prehistoric and/or Romano-British field systems, trackways and settlements.
- 2.2.4 The County Sites and Monuments Record (NYCC SMR) lists various finds and sites ranging in date from the Mesolithic period (c.8,000-3,5000 BC) to the present day. These are mainly restricted to the areas of sandstone outcrop and the sand and gravel deposits,

although this distribution is more likely to reflect the relative ease of discovery in these areas rather than being a true distribution of human activity. In particular, the alluvial deposits in the north-eastern part of the route may mask prehistoric activity contemporary with the main periods of peat growth, believed to be between the mid-4th millennium BC and the mid-1st millennium BC.

Methodology and data sources

- 2.2.5 The initial phase of work carried out by LUAU comprised a "deskbased" survey, incorporating documentary, cartographic and aerial photographic research, concentrating on a 100m wide corridor along the line of the proposed route. Documentary sources that were consulted included the County SMR, the Victoria County History for the area and other published secondary sources while cartographic sources included enclosure maps, first (1851) and second (1939) edition Ordnance Survey 6" and 25"maps, current 1:10,000, 1:25,000 and 1:50,000 scale maps, and modern geological maps. Aerial photographs held by the County SMR and the RCHME's collection of vertical aerial photographs were consulted. The RCHME oblique aerial photograph collection and photographs held by the York Archaeological Trust were not consulted, although sufficient work was done to determine that the latter were unlikely to contain additional data.
- 2.2.6 The desk-based survey was followed by a programme of field survey. Initial archaeological fieldwalking was carried out on all the land within the 100m corridor to which access was permitted; this was done using 30m traverses (walking along parallel lines 30m apart), and took place on both arable and pasture land. Particular attention was given to those areas containing sites identified during the desk-based research. The fieldwalking was supplemented by a detailed topographical survey at one site and a geophysical (magnetometer) survey at two sites. Trial excavations were originally recommended as part of this phase of fieldwork, but this was abandoned when access could not be secured.

Results

2.2.7 Each site identified in the LUAU report is individually described in a site gazetteer, which gives a number of technical and topographic details followed by a description of the evidence relating to the site obtained from each category of source material. Unfortunately, the specific sources are not always clearly identified, and those sources which were consulted but did not produce positive evidence are not acknowledged. Each gazetteer entry also includes recommendations for further investigation or mitigation works.

- 2.2.8 A total of 14 sites or areas of archaeological importance or potential, lying wholly or partly within the 100m corridor, are listed in the LUAU report. From west to east, they are:
 - Site 1 Field system, Hagg Lane
 - Site 2 Field boundary, Field Lane
 - Site 3 Area of Mesolithic activity, Brayton Barff
 - Site 4 Field boundary, track, New Farm
 - Site 5 Field boundary, Burn Bridge
 - Site 6 Cropmark, Doncaster Road
 - Site 7 Moated site, dismantled railway and field boundary, Brayton Hall
 - Site 8 Cropmark, Brayton Lane
 - Site 9 Moated site, field system, Staynor Hall
 - Site 10 Trackway, land division, Staynor Wood
 - Site 11 Cropmark, East Common Lane
 - Site 12 Cropmark, Newlands Farm
 - Site 13 Parish boundary, Carr Lane
 - Site 14 Environmental, Ouse valley

The location of these sites are shown on figure 1. The sites were not graded in terms of their importance.

- 2.2.9 Ten of the sites are described as field or parish boundaries, trackways, field systems or cropmarks. One site (site 7) at Brayton Hall incorporates a moated site, a dismantled railway and a field boundary, and one at Staynor Hall (site 9) incorporates another moated site and the remains of a medieval field system. The features identified at site 10 were considered to represent elements of a former woodland management system or agricultural activity.
- 2.2.10 An area of possible Mesolithic (c.8,000-3,500 BC) activity was identified at Brayton Barff, from records of a previously collected flint assemblage. In addition, the Ouse valley is identified as being an area of palaeoenvironmental potential, due to its sequence of alluvial, peat and lacustrine deposits.

Conclusions and recommendations

2.2.11 The LUAU report concluded that no sites of major archaeological importance were identified by their survey, and no major modifications to the proposed road alignment or any large-scale archaeological mitigation works were recommended. However, a number of features of minor archaeological importance would be affected by the scheme and would need to be taken into account. The majority of these are medieval or later agricultural features, including peripheral features associated with the moated sites.

- 2.2.12 A minor modification to the proposed route corridor was recommended, to enable the preservation of features associated with Staynor Wood.
- 2.2.13 The report notes that it was not possible to fully assess the prehistoric potential of the proposed route corridor due to the depth of peat and overlying deposits in parts of the study area. In addition, and perhaps more importantly, there were some small areas of the study corridor which could not be fully assessed, either due to access being denied or inappropriate crop regimes at the time of survey. Further field assessment was recommended in these areas.
- 2.2.14 It was recommended that further cartographic and documentary research should be carried out in relation to the field boundaries, to try and identify any elements which pre-date the enclosure landscape. Recommendations were also made for an archaeological watching brief and the provision of a rapid response team during topsoil stripping prior to construction.

3 SUPPLEMENTARY RESEARCH

3.1 Methodology and data sources

- 3.1.1 Following a thorough review of the LUAU report, a number of supplementary data sources were examined to determine whether any new sites could be identified within the study corridor, and to obtain new information on any previously identified sites.
- 3.1.2 The data sources consulted included the County SMR, including its aerial photograph collections, the vertical and oblique aerial photographs held in the National Library of Air Photos by the RCHME, and cartographic sources held in the North Yorkshire County Record Office.
- 3.1.3 A preliminary walkover survey of the proposed route alignment was also carried out. This enables the current land use of each land parcel potentially affected by the scheme to be determined, the location, nature, extent and condition of any recorded and unrecorded archaeological sites to be noted, and any concentrations of finds or other material which might serve as an indication to subsurface archaeological features to be identified.
- 3.1.4 However, it should be noted that, due to the sensitive nature of the scheme, the preliminary walkover survey was confined to public rights of way. It was not therefore possible to visit all the identified sites within the study area, and parts of the proposed alignment corridor were not inspected. This fact needs to be borne in mind when considering the various assessment, impact and mitigation statements below.
- 3.1.5 The preliminary walkover survey was carried out on 23-24 March 1995. A detailed account of the results is presented as Appendix 1, with relevant information added as appropriate in the following sections.

3.2 Discussion of LUAU results

3.2.1 The only specific evidence for prehistoric occupation identified by the LUAU report within the study corridor was the possible area of Mesolithic activity identified on the slopes around Brayton Barff at the western end of the scheme (site 3). Some of the cropmark sites, including some elements of sites 6, 7, 8 and 11, may relate to later prehistoric or Romano-British activity on the lighter sand and gravel soils, although a more recent origin is more likely. In addition, there is significant potential for the discovery of palaeoenvironmental and prehistoric evidence in the areas of the former lake shores, river courses and peat beds which occur in the area of the Ouse valley (site 14), either side of the present course of the river.

- 3.2.2 Two presumably medieval (AD 1066-1540) moated sites lie partly in the 100m wide study corridor. Little is known about Brayton Hall (site 7), but Staynor Hall (site 9) was founded in the 13th century as a grange of Selby Abbey. The association of Staynor Hall, Staynor Wood and an enclosed area of medieval or post-medieval ridge and furrow cultivation visible only as cropmarks indicate the survival of evidence for an intricate system of land management.
- 3.2.3 The majority of the sites identified from the aerial photographs were shown to correspond with field boundaries which are shown on various 19th and/or 20th century maps. Nevertheless, some could have earlier origins and so be of greater antiquity and importance.

3.3 Previously identified sites

- 3.3.1 The supplementary research carried out by BHWB obtained additional information for 7 of the 14 sites previously identified by the LUAU report. This information is detailed in Appendix 2, and is summarised below.
- 3.3.2 Further information was obtained from cartographic sources for site 5, increasing the extent of the site to the west and enhancing its interpretation, while changes to the existing cartographic information were made for sites 4 and 10. Additional earthwork features were observed at sites 5 and 11, and additional soilmark features were identified from aerial photographs at sites 7 and 8. While no new information was identified for site 6, some additional comment was made.
- 3.3.3 It should be noted that the names of the sites listed in the LUAU report have been modified and clarified, for ease of description.

3.4 Newly discovered sites

- 3.4.1 In addition to identifying additional information on already reported sites, the supplementary research identified an additional three sites which were either not recorded by LUAU or not listed as sites by them, although they are mentioned in passing in their report. For the sake of clarity, the site numbering system used by LUAU has been continued.
- 3.4.2 Full details on the new sites is presented as Appendix 3, with information summarised as follows.
 - Site 15 Disused army camp (ruins), south-west of Brayton Barff
 - Site 16 Boundary banks, lynchet and gravel pit, south and west of Brayton Barff (earthworks)
 - Site 17 Field boundaries and tracks (cropmarks), south-west of Brayton Bridge

3.5 Initial Assessment of Value

- 3.5.1 Using a combination of all the data sources, an initial assessment of the grade of importance of each site or area within the study corridor can be made (see figure 1). This assessment has been based on professional judgement, combined with the Secretary of State for the National Heritage's criteria for scheduling ancient monuments and listing buildings of special architectural or historic interest, and the criteria developed by English Heritage in their Scheduled Ancient Monuments designations and their Monuments Protection Programme.
- 3.5.2 It should be stressed, however, that this assessment is only provisional, as some of the sites or areas need to be assessed by a completion of the preliminary walkover survey and further fieldwork. At this stage, and following the guidance given in DMRB volume 11, a four tier grading system can be applied.

National Importance (N)

None

Regional or County Importance (R)

Site 14 Area of palaeoenvironmental potential, Ouse valley

District Importance (D)

- Site 3 Area of possible Mesolithic activity, Brayton Barff
 Site 6 Cropmark features, east and west of Doncaster Road
 Site 8 Cropmark features, east and west of Bawtry Road
- Site 10 Unclassified earthworks, Staynor Wood

Local Importance (L)

- Site 1 Remnants of field system, south of Hagg Lane
- Site 2 Former field boundary, north of Field Lane
- Site 4 Former field boundary and possible track, south-east of New Farm
- Site 5 Field boundary, west of Burn Bridge
- Site 7 Dismantled railway and field boundaries, south of Brayton Hall
- Site 9 Field system (cropmarks), south-east of Staynor Hall
- Site 11 Cropmark features and earthwork, north of East Common Lane
- Site 12 Cropmark features, north-west of Newlands Farm
- Site 13 Parish boundary, north and south of Carr Lane
- Site 15 Disused army camp (ruins), south-west of Brayton Barff

- Site 16 Boundary banks, lynchet and gravel pit, south and west of Brayton Barff
- Site 17 Field boundaries and tracks (cropmarks), south-west of Brayton Bridge
- 3.5.3 It should be noted that, on the basis of currently available information, the spatial extent of sites 3 and 14 cannot be determined.

4 ASSESSMENT OF THE EFFECTS OF THE PROPOSALS

4.1 Introduction

- 4.1.1 For archaeological sites and monuments, the main impacts arising from road construction are:
 - possible disturbance and/or destruction of archaeological deposits from works associated with the scheme, whether from actual construction or works associated with secondary operations such as landscaping, balancing ponds, site compounds and borrow pits;
 - increased visual intrusion;
 - increases in noise, vibration and disturbance;
 - severance from other linked features such as field systems, agricultural complexes and landscapes;
 - changes in the original landscape;
 - loss of amenity.

4.2 Impact grading systems

4.2.1 In order to help to assess the impact of the proposals on the identified sites and areas of archaeological importance and potential, a simple three tier impact grading system has been devised, based on the scale of impact of the proposals, namely:

Major impact: Major disturbance (ie. more than 75% of the

area of known or estimated archaeological

deposits).

Significant impact: Significant disturbance (ie. between 25% and

75% of the area of known or estimated

archaeological deposits).

Small-scale impact: Minor disturbance (ie. less than 25% of the

area of known or estimated archaeological

deposits).

In drawing up this information, consideration has also been made of the scale, significance, potential and current condition of the site, defined as the grade of the site.

4.2.2 A combination of the impact of the proposals and the grade of each site produces an assessment of overall impact, defined as being substantial, moderate or slight. Given that archaeological deposits

are a finite and non-renewable resource, all impacts are classified as adverse.

4.3 Impact of development

- 4.3.1 When making an initial assessment of the impact of the proposed scheme on the identified sites of archaeological interest, all construction and landscaping works as specified on Drawings 904.201-204 have been taken into account. It should be noted that haul routes, construction compounds or temporary construction roads have not been considered.
- 4.3.2 From the following table, it can be seen that the proposals will have a direct impact on 17 known sites of archaeological interest. The impact of the proposals can be categorised as major on 2 sites, significant on 5 plus 5 possible sites and small-scale on 4 plus 1 possible sites, while the overall adverse impact is substantial on one possible site, moderate on 2 plus 2 possible sites, and slight on 9 plus 1 possible sites. It should, however, be noted that these impacts are based on current knowledge and the scale of impacts might change as a result of further investigation.
- 4.3.3 From west to east, the assessment of the impact of the proposals on the known archaeological resource of the scheme corridor can be summarised as:

Site no	Site name	Grade of site	Impact of proposals	Overall adverse impact
1	Romnants of field system, south of Hagg Lane	L	Small-scale	Slight
2	Former field boundary, north of Field Lane	L	Significant	Slight
3	Area of possible Mesolithic activity, Brayton Barff	D	Significant?	Moderate?
4	Former field boundary and possible track, south-east of New Farm	L	Small-scale	Slight
5	Field boundary, west of Burn Bridge	L	Small-scale	Slight
6	Cropmark features, east and west of Doncaster Road		Significant?	Moderate?
7	Dismantled railway and field boundaries, south of Brayton Hall	L	Small-scale	Slight
8	Cropmark features, east and west of Bawtry Road		Significant?	Moderate?
9	Field system (cropmarks), south-east of Staynor Hall		Significant	Slight

10	Unclassified earthworks, Staynor Wood	D	Small- scale?	Slight?
11	Cropmark features and earthwork, north of East Common Lanc	L	Major	Moderate
12	Cropmark features, north-west of Newlands Farm	L	Moderate?	
13	Parish boundary, north and south of Carr Lane	L	Major	Slight
14	Area of palaeoenvironmental potential, Ouse valley	R	Significant?	Substantial?
15	Disused army camp (ruins), south- west of Brayton Barff	L	Significant	Slight
16	Boundary banks, lynchet and gravel pit, south and west of Brayton Barff	L	Significant	Slight
17	Field boundaries and tracks (cropmarks), south-west of Brayton Bridge	L	Significant	Moderate

- 4.3.4 The extent of any archaeological or palaeoenvironmental deposits associated with sites 3 and 14 has yet to be determined. In addition, the potential for the discovery of as yet unrecorded archaeological sites within the study area must also be considered. This is particularly relevant in the areas of alluvial and peat deposits in the Ouse floodplain (site 14).
- 4.3.5 The extent of sites 6, 7, 8, 9, 11 and 12 as shown on figure 1 is likely to be modified as a result of further fieldwork.

5 MITIGATION MEASURES

5.1 Introduction

- 5.1.1 Based on the impacts described above, some recommendations to mitigate the effects of the proposals are described below, from west to east.
- 5.1.2 Archaeological remains survive both as upstanding earthworks or as buried features beneath the ploughsoil. All remains will be susceptible to damage and/or destruction as a result of ground disturbance associated with the construction of these proposals and their associated landscaping works. The removal of topsoil and subsoil is likely to destroy most archaeological deposits and even where embankments and other methods are used to raise the overall ground level, preparation works often result in the destruction of any archaeological deposits which lie at shallow depths. In addition, while the burying of archaeological features beneath a development can sometimes be an accepted form of preservation in situ, care must be taken to ensure that any significant deposits are not subject to undue compaction and shrinkage. Some form of monitoring might be required to ensure that this does not happen.
- 5.1.3 For archaeological sites, possible mitigation measures have been described in the DMRB volume 11 as:
 - locate the route away from archaeological remains and their settings;
 - design the scheme's vertical alignment and associated earthworks so that archaeological remains are not disturbed;
 - undertake appropriate recording works and other investigations in advance of construction;
 - undertake appropriate recording works and other investigations during construction;

In practice, a combination of these measures is often used.

5.1.4 It is envisaged that five separate phases of work will be required to ensure that the archaeological impact of the proposals has been considered to an appropriate standard. The results of each phase will influence and set the parameters for the next. Phases 1 to 2 deal with the assessment and pre-construction works, Phase 3 deals with the recording of archaeological deposits while construction is in progress, and Phases 4 and 5 deal with the assimilation, publication and deposition of any results resulting from the previous phases. In detail, these phases comprise:

- Phase 1 **Detailed evaluation:** initial and intensive fieldwalking, geophysical survey, earthwork survey, palaeoenvironmental assessment, trial trenching and building survey as appropriate, leading to the detailed assessment of impact and recommendations for mitigation (DMRB Stage 3).
- Phase 2 Pre-construction investigation: detailed excavation, palaeoenvironmental sampling and architectural recording in advance of construction of those sites identified during the previous phase to be of significant archaeological importance and for which no appropriate mitigation measures can be sought.
- Phase 3 Watching brief during construction: investigation and recording of those sites identified during the DMRB Stages 1 to 3 as not warranting prior investigation, as well as the recording of sites which may be exposed during the course of development.
- Phase 4 Post-excavation assessment: assessment of the results of the archaeological investigations and the potential of the data for analysis leading to recommendations, timetable and costings for subsequent detailed analysis, publication, storage and deposition.
- Phase 5 Post-excavation analysis and publication: data analysis, report preparation and publication followed by deposition of the archive and artefacts and all other materials associated with the investigations with the appropriate institution for long term storage and curation.

5.2 Phase 1 detailed evaluation works

- 5.2.1 This phase of work, comprising detailed evaluation through a combination of initial and intensive fieldwalking, geophysical survey, earthwork survey, trial trenching and building survey as appropriate, corresponds to Stage 3 of the Department of Transport's Stages of Archaeological Assessment as defined by DMRB volume 11.
- 5.2.2 For archaeological sites, the Phase 1 detailed evaluation work is usually confined to the specific areas of proposed construction and disturbance with a view to providing a detailed assessment of the various archaeological sites and areas likely to be affected by a scheme. From this, specific recommendations for appropriate mitigation and/or recording works that might be required to complete the Phase 2 (pre-construction investigation) and Phase 3

(watching brief during the course of construction) investigations can be made. While it is important that all phase 1 works are completed well in advance of any construction programme, the nature of the investigations means that a staged or rolling programme of work is necessary, with the results of each phase having a direct impact on the extent and methodology of the next phase of activity.

- 5.2.3 It should be noted that some phase 1 detailed evaluation work was done in 1991 by LUAU as part of their survey. The recommendations outlined below are largely similar to the recommendations contained in the LUAU report although some additional or alternative works are proposed in relation to new sites, or following a re-consideration of the most appropriate evaluation strategies for the previously identified sites. In particular, more extensive use of the more cost-effective non-intrusive survey techniques is recommended, to reduce or avoid the need for trial excavations.
- 5.2.4 The various non-intrusive Phase 1 works can be divided into four techniques.
 - i) Fieldwalking. By definition, archaeological fieldwalking takes place in areas of ploughed or recently planted soil, usually in the autumn and winter months during an appropriate crop window. Two phases of work would be carried out. Initial fieldwalking would involve walking along lines placed 10m apart through the specified survey areas with a view to identifying areas worthy of more detailed fieldwalking techniques. These would involve setting out a grid of 10m squares over the area of interest and collecting all archaeological artefacts in each grid square. All survey areas and results would be tied into established survey stations and the Ordnance Survey national grid to facilitate the drawing up of detailed mitigation strategies at a later stage.
 - ii) Earthwork survey. This is undertaken in areas of upstanding earthworks. These are usually contained within pasture fields or woodland and earthwork surveys are often done during the winter months when vegetation growth is minimal. All earthworks and other surface variations in the survey areas would be recorded using modern EDM recording equipment. All results would be tied into established survey stations and the Ordnance Survey national grid to facilitate the drawing up of detailed mitigation strategies at a later stage.
 - iii) Geophysical survey. This type of survey would be undertaken using a grid of 20m squares set out over the specific survey area. The squares are then scanned by various hand-held instruments which record any variations in the resistance and

magnetic properties of the soil. As these factors vary according to the presence or absence of underlying archaeological deposits, it is often possible to identify hitherto unsuspected features up to depths of approximately 1m below the plough soil. Given the potential area recommended for geophysical survey, a 50% sample strategy would be undertaken.

- iv) Palaeoenvironmental assessment. This type of survey involves the collation of all available palaeoenvironmental and geotechnical data, combined with a site visit, to consider and assess the palaeoenvironmental potential of a particular area.
- 5.2.5 Following results obtained through various non-intrusive surveys, the investigation of some selected sites and/or features is likely to be required through intrusive but limited test pitting, trial trenching and/or small area excavation. The scale, nature and methodology of this work would be dependent on the results of the previous non-destructive survey techniques and the types of sites being investigated. Sites with many linear features or upstanding earthworks are often best evaluated mainly by trial trenching, whereas sites identified from artefact scatters or mainly consisting of non-linear features may require some small area excavation.
- 5.2.6 The majority of any phase 2 (pre-construction investigation) works would be identified following the phase 1 evaluation works. However, the work already done allows for phase 2 recommendations to be made for two sites.
- 5.2.7 A summary of the proposed mitigation measures for all the known archaeological sites affected by the proposals is given the following table. It should be noted that the various phases of work described correspond to those phases outlined in paragraph 5.1.4 above.

Site no	Site name	Grade of site	Overall adverse impact	Proposed mitigation
1	Remnants of field system, south of Hagg Lane	L	Small-scale	Phase 3 watching brief
2	Former field boundary, north of Field Lane	L	Slight	Phase 3 watching brief
3	Area of possible Mesolithic activity, Brayton Barff	۵	Moderate?	Phase 1 fieldwalking. Further phase 1 or 2 works as required
4	Former field boundary and possible track, south east of New Farm	L	Slight	Phase 3 watching brief

5	Field boundary, west of Burn Bridge	L	Slight	Phase 3 watching brief
6	Cropmark features, east and west of Dencaster Road	D	Moderate?	Phase 1 fieldwalking and geophysical sample survey. Further phase 1 or 2 work as required
7	Dismantled railway and field boundaries, south of Brayton Hall	.	Slight	Phase 3 watching brief
8	Cropmark features, east and west of Bawlry Road	L	Moderate?	Phase 1 fioldwalking and geophysical sample surveys. Further phase 1 or 2 work as required
9	Field system, south-east of Staynor Hall	L	Slight	Phase 1 geophysical sample survey. Further phase 1 or 2 work as required
10	Unclassified earthworks, Staynor Wood	D	Slight?	Phase 1 earthwork survey. Further phase 1 or 2 work as required
11	Cropmark features and earthwork, north of East Common Lane	L	Moderate	Phase 1 fieldwalking and geophysical sample surveys. Further phase 1 or 2 work as required
12	Cropmark features, north west of Newlands Farm	L	Moderate?	Phase 3 watching brief
13	Parish boundary, north and south of Carr Lane	L	Slight	Phase 3 watching brief
14	Area of palaecenvironmental potential, Ouse valley	R	Substantial?	Phase 1 palaco- convironmental assessment. Furthor phase 2 as required
15	Disused army camp (ruins), south west of Brayton Barff	L	Slight	No mitigation works recommended
16	Boundary banks, lynchet and gravel pit, south and west of Brayton Barff	L	Slight	Phase 3 watching brief

17	Field boundaries and tracks (cropmarks), south west of Brayton Bridge	L	Moderate	Phase 1 fieldwalking and geophysical sample surveys. Further phase 1 or 2 work as required
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5.2.8 Finally, it will be noted that some specific sites would be subject to a Phase 3 watching brief during the first phases of construction. Although particular attention would be applied to these sites, the whole of the construction corridor would be monitored in this way. This would ensure that any archaeological sites and deposits that might be uncovered by the works can be recorded to a satisfactory standard.

APPENDIX 1: PRELIMINARY WALKOVER SURVEY

1 INTRODUCTION

- 1.1 As part of the supplementary archaeological survey, a preliminary walkover survey of the proposed route alignment was undertaken on 23-24 March 1995. The purposes of the walkover survey were to identify any archaeological remains or areas of archaeological potential which had not been identified by previous desk-based studies, to obtain further information about the form and condition of previously identified sites, and to update available information about land-use along the road corridor.
- 1.2 The walkover survey was limited to public rights of way. This meant that most of the proposed scheme corridor and the potentially affected archaeological sites could only be examined from the edges of the fields. In consequence, it was not possible to determine whether artefact scatters were present on the surface of ploughed fields. Some parts of the corridor, including some identified archaeological sites, could not be approached at all, and have not therefore been examined.

2 RESULTS

- 2.1 The most significant result was the identification of a large mound at site 11, just to the south of the River Ouse. It remains unclear, however, whether this mound is natural or anthropogenic in origin.
- 2.2 For ease of description and reference, each plot of land which would be affected by the proposed route has been numbered; the numbers run from west to east. Fields which would not be directly affected are not numbered, but may be referred to by site numbers used in the LUAU report.

Field No	Site No	Condition	Examined from	Archaeological observations
1		Arable; crop growing	Existing A63 (south)	
2		Ploughed	Existing A63 (north) and Barff Lane (south)	
3		Arable; crop growing	Existing A63 (north)	
	1	Not visited - not affected		LUAU report suggests that this represents 19th-20th century field boundaries

4/5	2	Arable; crop growing	Barff Lane (south)	Nothing seen
6		Devoloped -modern farm complex	Barff Lane (south)	
/		Ploughed	Barff Lane (north)	
8		Ploughed	Barff Lane (north)	
9		Improved grass	Barff Lane (north)	
10		Ploughed	Barff Lane (north)	
11		Ploughed	Barff Lanc (north)	
12		Golf course	Along cast edge	
13		Ploughed; on slope, with several small knolls - subsoil ploughed up on knolls	Barff Lane (north) and Brayton Barff (south-east)	
14	15	Scrub and ruins	Inside plot	The remains of a disused World War 2 army camp are visible as very overgrown concrete, paved and tarmae surfaces, earthworks and some walls
15		Golf course	Along east edge	
16	16	Improved grass	Mill Lane (south) and footpath (east)	A bank is visible running approximately parallel with the east edge of the field, along line partly shown as parish boundary
15-16	16	Embanked footpath	On site	The footpath running from Mill Lane to the south west corner of Braylon Barff lies between two prominent banks, and although now overgrown with scrub was formerly wide enough to form a vehicular track probably of no great antiquity

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17	3	Woodland	Within south- west corner of wood and along west edge	The south-west corner of Brayton Barff woods is mainly occupied by fairly young trees, and in places traces of concrete or tarmac surfaces can be seen; probably once part of the WW2 camp immediately to the west, although now even less well preserved A field bank with a hodge growing on its crest runs along the west edge of the wood; towards the north, where the woodland is more mature, this becomes a prominent negative lynchet, suggesting medieval/post medieval ploughing right up to the edge of the wood
18		Cottages and gardens	Mill Lane (south)	
19 21		The footpath running through fields 19-21 from New Farm was not recognised, and appeared to have been removed		
19		Arable; crop growing	Barff Lane (north) and canal lowpath (south)	Slight banks and/or ditches running parallel to the footpath through these fields and at various distances to
20		Ploughed	Barff Lane (north) and canal towpath (south)	the north of the towpath were tentatively identified from the south; all were most likely to represent natural features, field
21		Arable; crop growing at south end pasture; horse paddocks at north end	Barff Lane (north) and canal lowpath (south)	boundaries or the line of a former track shown on an 1803 enclosure map and partly visible as a cropmark further to the east (site 5)
22	4	Arable; crop growing	Barff Lane (north) and canal towpath (south)	Nothing seen
23	4/5	Arable; crop growing	Barff Lane (north) and canal towpath (south)	Nothing seen

24	4/5	Arable; crop growing	Barff Lane (north west)	Nothing seen
26	5/6	Arable; crop growing	A10 (east)	Nothing seen
26	5/6	Arable; crop growing	A19 (east) and canal towpath (south)	Nothing seen
27	5/6	Arable; crop growing	A19 (west) and canal towpath (south)	Patches of differing colour were visible in the crop, but no pattern was discernible from the ground a vestigial old field bank aligned north-south was tentatively observed
28		Arable; crop growing	A19 (west)	
29		Arable; crop growing	Canal towpath (east)	
30	7		Not visited - no access possible	
31		Arable; crop growing - these two fields now united; old	Canal towpath (east)	Very slight (natural?) undulations visible in north- east corner of field, close to
33	17	railway embankment removed		cropmarks shown by LUAU
32			Not visited - no access possible	
34		Ploughed	Canal towpath (east)	
35		Arable; grain crop growing	Henwick Hall Lane (east)	
36		Ploughed; a number of small (natural?) knolls; patches of orange subsoil ploughed to surface on knolls	Henwick Hall Lane (west)	
37				
38			Not visited - no access possible	

	т.			
39		Ploughed and harrowed	Brayton Lane (north)	
40		Arable; grain crop growing	Brayton Lane (south)	Nothing seen
41	8		Not visited - no access possible	
42		Waste ground - probably to be included in industrial estate	Brayton Lane (south) and A1040 (cast)	
43		entate	Λ1040 (east)	
14		Ploughed	A1040 (east)	Nothing seen
45	9	Arable; crop growing	A1040 (east)	
46			Not visited included access possible	
47				
48	10	Woodland		
49		Rough pasture	East Common Lane (extreme east cnd)	The surface of the part of this field to the east of Stainer Wood was seen to be uneven, but a close enough examination to determine whether earthworks were present was not possible
50			Not visited - no access possible	
51			240000 4033006	
52		Scmi-ploughed stubble? possible set- aside	East Common Lane (east)	
53		Ploughing in progress	East Common Lane (east and north)	
54		Sewage works	East Common Lane (west)	

55	11	Divided by north- south track approximately continuing line of East Common Lane east part arable; very young crop growing; soil very sandy and light west part waste and scrub	East Common Lane (south) and track through centre of site	In east part, very broad (spread?) mound approximately 70m wide running approximately east south-east to west-north-west; slightly more advanced crop at base of slope may correspond with cropmark feature unclear whether mound is natural or anthropogenic in origin. In west part, the mound is barely visible as an earthwork
56	14	Ploughed	Footpath on north side of River Ouse (south)	Nothing seen
57	12	All appear arable	Not visited - no access possible	Nothing seen
58			accoss possible	
59	13			Nothing seen
60				
61		Arable; grain crop growing	A19 (north-west)	
62		Farm complex; brick farmhouse derelict, agricultural complex in use	A19 (west) - from a distance	
63		Arable; grain crop growing those two fields now united	A19 (west)	
64				
65		Developed - industrial	A19 (east)	

APPENDIX 2: NEW INFORMATION ON PREVIOUSLY IDENTIFIED SITES

SITE NO: 4

Site name: Former field boundary and possible track (earthwork), south east of New Farm

Additional information:

The "broad, tree-lined feature" described in the LUAU report as being visible on the OS 1851 6" map is not actually depicted. The map does show a footpath running from north-east to south-west, diagonally across the fields concerned, but this does not correspond with the aerial photograph feature shown by LUAU [1].

Sources:

[1] OS 1851 <u>6" map sheet 221</u>

SITE NO: 5

Site name: Field boundary, west of Burn Bridge

Additional information:

This boundary is shown on an enclosure map of 1803, as a footpath continuing the line of the road from Selby, which then terminated at Burn, and marking a boundary between areas of contrasting land-use. The path then continues to the west on a sinuous course, terminating near Burton Hall [1]. The boundary is shown on the OS 1851 6" map as a hedge line; nothing is shown of the western continuation of the former path [2]. The sinuous line is visible in the fields as a slight earthwork [3].

Sources:

[1] NYCRO 1803 "A Map of the Townships of Brayton, Thorp Willowby and Burton in the West Riding of the County of York"

[2] OS 1851 6" map sheet 221

[3] Preliminary walkover survey D Johnston BHWB 23.03.95

SITE NO: 6

Site name: Cropmark features, east and west of Doncaster Road

Additional information:

No new information identified. However, the plan in the LUAU report appears to show features on both sides of Doncaster Road, not just the west side [1].

Sources:

[1] Pers comm D Johnston BHWB

SITE NO: 7

Site name: Dismantled railway and field boundaries, south of Brayton Hall

Additional information:

Soilmarks of possible ridge and furrow cultivation aligned east-west just to the south-east of the dismantled railway are visible on an oblique aerial photograph taken in 1978 [1].

Sources:

[1] AP SE6030/4/8 (08.08.78) RCHME

SITE NO: 8

Site name: Cropmark features, east and west of Bawtry Road

Additional information:

Soilmarks of possible ridge and furrow cultivation in Oakney Wood are visible on a vertical aerial photograph taken in 1975 [1].

Sources:

[1] AP MAL/75002, 122 (16.01.75) RCHME

SITE NO: 10

Site name: Unclassified earthworks, Staynor Wood

Additional information:

The OS 1851 6" map clearly portrays a large expanse of woodland to the north, east and south-east of Staynor Hall, extending well into the present built-up area of Selby. The description of this map in the LUAU report, as "The 1st edition Ordnance Survey map ... is unclear, but it seems as though numerous long fields ... occupied this land" appears to be inaccurate [1]. The LUAU may have misattributed their description of the 1808 enclosure map to the OS first edition map, and vice-versa [2].

Sources:

[1] OS 1851 6" map sheet 221

[2] Pers comm D Johnston BHWB

SITE NO: 11

Site name: Cropmark features and earthwork, north of East Common Lane

Additional information:

A broad but very slight mound approximately 70m wide and running approximately east-north-east to west-south-west could be seen in the field. It could be natural, or a very spread artificial mound. A slightly more advanced area of crop at the base of the south-facing slope could correspond with the cropmark feature recorded by LUAU. The mound runs into the western edge of the field, under the track which runs northward from the corner of East Common Lane, and on into the waste ground to the west. It is barely visible as an earthwork in the scrub vegetation in this area [1].

Sources

[1] Proliminary walkover survey D Johnston BHWB 24.03.95

APPENDIX 3: NEWLY DISCOVERED SITES

SITE NO: 15

Location information

NGH: SE582301		Map: SE53SE; SE52NE
Site name & location: Disused army camp (ruins), Brayton Barff		
Modern parish: Gateforth	Historic parish:	

Physical characteristics

Land use: Scrub/woodland	Ground cover: Scrub/woodland	Height: 20-25m AQD

Description of site

Classification: Camp	Period: 20th century
Form: Ruined building; Site of	Grade of importance: Local

Date inspected: D Johnston BHWB 24.03.95

Description:

"Camp (dis)" shown on a modern map as a long, narrow rectangular area of land covering approximately 8.5 hectares adjacent to the south-west corner of Brayton Barff, containing several buildings and roads [1]. An aerial photograph of 1954 shows the camp extending further to the east, occupying an area of approximately 5 hectares which now forms part of the Brayton Barff woodlands [2]. The southern half of the area shown on the Pathfinder map is part of an adjacent golf course. The camp is approached from the south via a broad track flanked by banks over 1m, and in places up to 2m high. Within the part of the camp immediately to the west of the woodland, there are a number of ruined 20th century brick buildings, few standing to wall height, together with areas of concrete and tarmac hardstanding. Some of the buildings have obviously been demolished, rather than fallen naturally into ruin. There are many heaps of rubble and spoil throughout the site, and the whole area is becoming very overgrown with mixed scrub. The area to the east is now covered by young woodland, but areas of hardstanding, brick foundations and rubble can be discerned. The two areas are separated by a track [3].

References:

- [1] OS 1993 1:25,000 "Pathfinder" map sheets 684 and 693
- [2] AP 540/1346, 0063 (13.06.54) RCHME)
- [3] D Johnston BHWB site visit, 24.03.95

SITE NO: 16

Location information

NGR: SE582303-SE586298

Site name & location: Boundary banks, lynchet and gravel pit, south and west of Brayton Barff

Modern parish: Gateforth; Brayton

Historic parish:

Physical characteristics

Land use: Arable	Ground cover: Barley	Height: 15-25m AOD

Description of site

Classification: Field boundaries, Gravel pit	Period: Post-medieval
Form: Earthwork	Grade of importance: Local
Date inspected: D Johnston BHWB 24.03.95	

Description:

A field boundary is shown running along the line of the township boundary between Brayton and Burton on maps of 1803 and 1851. The earlier map shows a gravel pit in the field to the east of the boundary and on the north side of Mill Lane; the area west of the boundary and west of Brayton Barff is shown as a single large field, extending from Mill Lane to the Thorpe Willoughby boundary (now Field Lane). The later map does not show the gravel pit, and shows the large field broken up into six separate fields, three either side of a long north-south boundary [1] [2]. A slight ploughed-down bank within an arable field is visible on the line of the former township boundary (now the boundary between Gateforth and Brayton civil parishes). Within Brayton Barff woodlands, a prominent hedge-bank is visible on the line of the long north-south boundary shown in 1851, on the east side of the modern footpath. Towards the north, where the bank forms the western boundary of mature woodland, it becomes a very prominent west-facing negative lynchet [3].

Beferences

- [1] NYCRO 1803 "A Map of the Townships of Brayton, Thorp Willowby and Burton in the West Riding of the County of York"
- [2] OS 1851 6" map sheet 221
- [3] D Johnston BHWB site visit, 24.03.95

SITE NO: 17

Location information

NGR: SE607301

Map: SE63SW;
SE62NW

Site name & location: Field boundaries and tracks (cropmarks), south-west of Brayton Bridge

Modern parish: Brayton

Historic parish:

Physical characteristics

Land use: Arable Ground cover: Cereals Height: 7m AOD

Description of site

Classification: Cropmarks	Period: Unknown
Form: Cropmark	Grade of importance: Local

Date inspected: D Johnston BHWB 24.03.95

Description:

A group of cropmarks is partly shown by LUAU on the plan contained in their report, but is not assigned a number or described by them [1]. "Traces of former field boundaries and trackways. Indistinct linear boundaries on a hazy aerial photograph" recorded on the NYCC SMR. A group of curvilinear and linear intersecting boundaries, including some double boundaries probably representing trackways is visible on aerial photographs [2]. They are probably of fairly recent date, and may originate from a rearrangement of the field boundaries at the time of building the Selby Canal (late 18th century) [3]. No relevant features are shown on an enclosure map of 1803 or a map of 1851; on both of these the arrangement of fields is similar to that prevailing today, although broken up into smaller units [4] [5]. Some slight undulations which may be natural or represent ploughed-down earthworks were seen in the field [6].

References:

- [1] LUAU report, November 1993 "Selby Bypass An Archaeological Evaluation"
- [2] NYCC SMR SE63SW AP10, SE62NW AP2; AP NMR SE6030/3/6 (08.08.75); AP AJC 026/30-31 (5.07.84); AP AJC 046/23-25 (10.07.85); AP PVA 78/4/3/2 (undated) [3] NYCC SMR PRN 9541
- [4] NYCRO 1803 "A Map of the Townships of Brayton, Thorp Willowby and Burton in the West Riding of the County of York"
- [5] OS 1851 6" map sheet 221
- [6] D Johnston BHWB site visit, 24.03.95