



BREDON'S HARDWICK, WORCESTERSHIRE

Archaeological Watching Brief
Statement of Results





**BREDON'S HARDWICK,
WORCESTERSHIRE,**

**Archaeological Watching Brief
Statement of Results**

Prepared for:
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by:
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Report reference: 79880.02

April 2012

**BREDON'S HARDWICK,
WORCESTERSHIRE****Archaeological Watching Brief
Statement of Results****Summary**

Wessex Archaeology Ltd was commissioned by Morgan Sindall Plc to undertake an archaeological watching brief to mitigate the potential loss of archaeological remains during groundworks between an existing sewage treatment works north of Fleet Lane and the hamlet of Bredon's Hardwick, Worcestershire (**Figure 1**).

The Scheme involved the excavation of twelve trial trenches within greenfields and within Bredon's Hardwick. The watching brief was carried out between February 28th and March 5th 2012 in accordance with a Written Scheme of Investigation (attached).

Modern material was encountered at the southern end of the Scheme, including a plastic drain and a red-brick wall representing the surrounding wall of an existing sewage installation. Four trenches were excavated on the line of the existing sewage pipe. The remaining trenches were excavated offline, within greenfield areas, and revealed largely the same stratigraphic sequence. No archaeological deposits were observed.

This document contains the results of the watching brief recorded and presented on *pro forma* sheets.

The project archive is currently held at Wessex Archaeology's offices in Sheffield.

**BREDON'S HARDWICK,
WORCESTERSHIRE**

**Archaeological Watching Brief
Statement of Results**

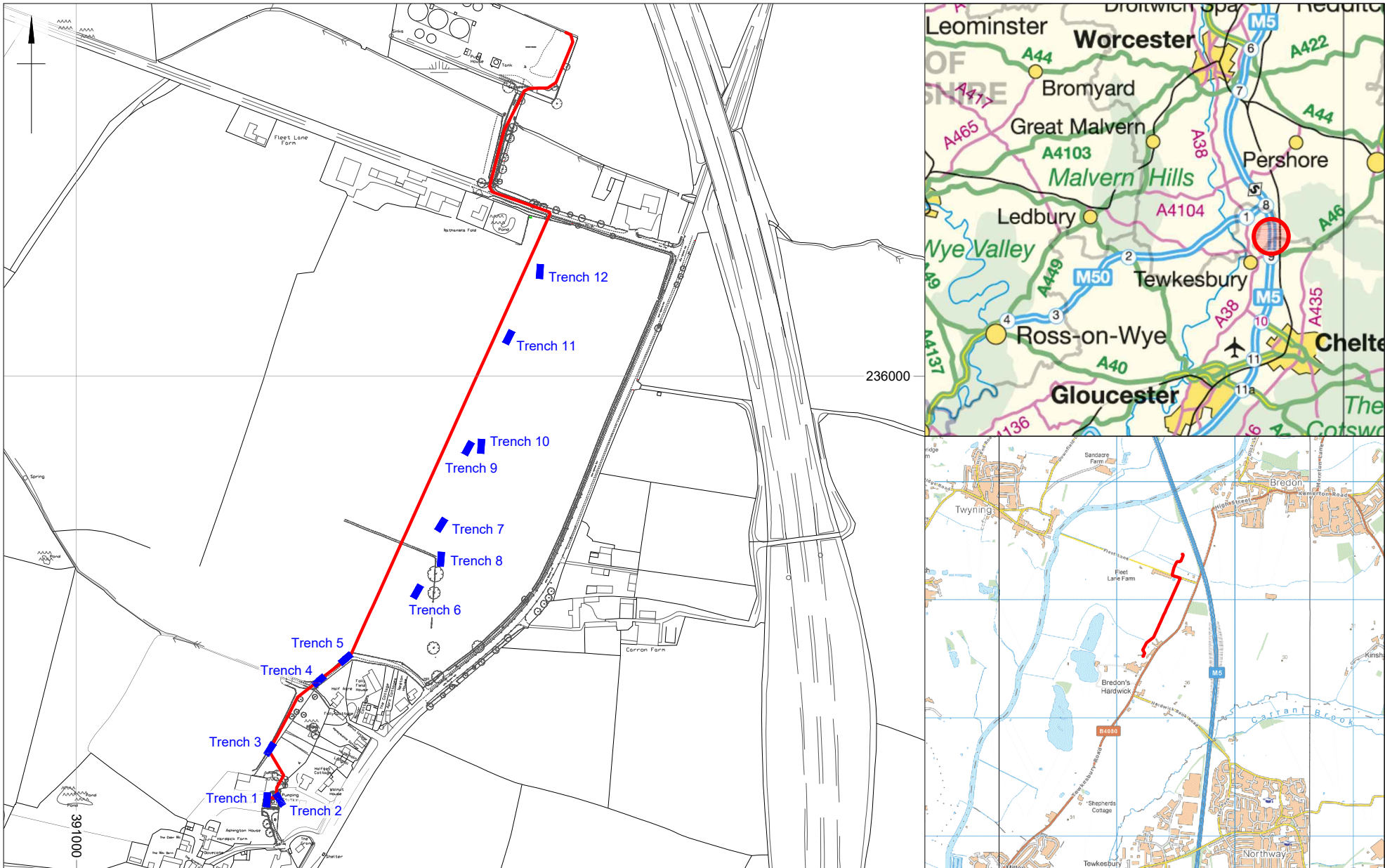
Site name	Bredon's Hardwick, Worcestershire		
Site address	West of B4080, Tewkesbury Road, Bredon's Hardwick, Worcestershire		
Site code	79880	Grid ref	391557, 236369 to 391223, 235553
Planning ref	N/A		
Dates(s) of attendance	28-02-12 – 05-03-12		
Description of construction activities monitored	The excavation of twelve trenches in greenfields between an existing sewage treatment works north of Fleet Lane and an existing installation in the hamlet of Bredon's Hardwick, Worcestershire (Figure 1).		
Summary of site stratigraphy			
<p>The trenches were located within greenfields and adjacent to an existing sewage installation within Bredon's Hardwick. Most measured 2.5-3m x 1.5-1.8m and averaged 1.5m in depth, larger areas of topsoil were stripped around trenches 6, 7, 10, 11 and 12 (Plate 1).</p> <p>Trenches 1 and 2 were excavated within Bredon's Hardwick, in an area occupied by an existing sewage installation. Modern material was encountered within Trench 1, including a plastic drain and a red-brick wall representing the surrounding wall of the existing installation (Plate 2). The wall was constructed with machine made bricks, 1 skin wide and 8 courses high. The bricks were stamped with 'Accrington No. 1'.</p> <p>Trenches 2-5 were excavated on the line of the existing sewage pipe. The remaining trenches were excavated offline, within greenfield areas, and revealed largely the same stratigraphic sequence. Topsoil averaging 0.3m in depth lay above clayey silt subsoil. The natural geology was mid yellow-brown silty sand and dark blue-grey clay in places.</p>			
Archaeological features	No archaeological features observed	Natural features	None
Finds observed	A glass bottle		
Finds collected	None	Samples	N/A
Photography	Digital: 67 shots		
Other records	Day book, Photo register, trench record sheets		
Current archive location	Wessex Archaeology, Sheffield		
Long term archive location	Not yet known		
Interpretation			
No archaeological remains encountered			
Other information			
Form completed by	GC	Date	12-03-12
Checked by	AB	Date	05-04-12
Additional documentation attached -			
1.	Plan of monitored areas		
2.	Written scheme of investigation		



Plate 1: Trench 11 including stripped area, view from south



Plate 2: Trench 1 with red brick wall [105]



○ Site location
 — Existing main route
 ▣ Trench location



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Scale:	Main graphic - 1:600 @ A4	Illustrator:	CB
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Site location

Figure 1



**BREDON'S HARDWICK SEWAGE PUMPING STATION,
WORCESTERSHIRE**

**Written Scheme of Investigation for
Archaeological Watching Brief**

Prepared for:
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by
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Report reference: 79880.01

November 2011

**BREDON'S HARDWICK SEWAGE PUMPING STATION,
WORCESTERSHIRE**

**Written Scheme of Investigation for
Archaeological Watching Brief**

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Figure 1 Site location and pipeline route

BREDON'S HARDWICK SEWAGE PUMPING STATION, WORCESTERSHIRE

Written Scheme of Investigation for Archaeological Watching Brief

1 INTRODUCTION

1.1 Project Background

1.1.1 Wessex Archaeology has been commissioned by Morgan Sindall Plc (hereafter 'the Client') to undertake an archaeological watching brief to mitigate the potential loss of archaeological remains during groundworks associated with a new rising main at Bredon's Hardwick Sewage Pumping Station (SPS) (hereafter 'the Scheme'; **Figure 1**).

1.1.2 The Scheme, which will be carried out under permitted development rights, involves the construction of a new 1km rising main between the existing SPS and Bredon's Hardwick village (NGR 391557, 236369 to 391223, 235553).

1.1.3 This Written Scheme of Investigation (WSI) sets out the manner in which Wessex Archaeology will carry out the archaeological watching brief. This WSI has been prepared in accordance with current industry best practice and will be submitted to the Client and Worcestershire County Council (WCC).

1.2 Site Location and Description

1.2.1 The Site is located 2.5km north of Tewkesbury within agricultural land between the existing SPS on Fleet Lane and Bredon's Hardwick village. The River Avon flows 900m to the west of the Scheme. The Scheme lies within the Avon River Meadows, a landscape of river alluvium with poorly draining wetland soils on a gently rolling landscape of fluvio-glacial drift.

1.2.2 The topography of the Scheme ascends southwards from 16m above Ordnance Datum (aOD) at the existing works, to 23m aOD within the village.

1.2.3 The Site lies on mudstone of the Charmouth Mudstone formations. Overlying these formations are sands and gravels (Geological Survey of England and Wales Sheet 216).

2 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

2.1.1 The Worcestershire Historic Environment Record (WHER) was consulted for this Scheme. The WHER is a database of all recorded archaeological sites, findspots, and archaeological events within the administrative area.

- 2.1.2 A 500m Study Area was defined surrounding the Scheme. No Scheduled Monuments, Registered Parks and Gardens, Historic Battlefields or Conservation Areas are located within the Study Area.

2.2 Archaeological and Historical Background

- 2.2.1 There is evidence for prehistoric occupation of the surrounding area dating back to the Iron Age with a hillfort known from Bredon Hill, 4km to the northeast of the Scheme. Early prehistoric finds have been located within the parish including a Palaeolithic flake, an incomplete Neolithic polished axe, as well as a possible knapped flint blade to an Iron Age coin.
- 2.2.2 Roman remains have been found 300m west of the Scheme in the form of artefact scatters which indicate a possible occupation area. A number of Roman coins, a brooch and a finger ring have also been located in the parish.
- 2.2.3 Bredon village grew up around an 8th century monastery on the banks of the River Avon. The monastery was dedicated to St. Peter and is thought to have been sacked by the Vikings in the mid-9th century. The present church in Bredon village was established by the Normans in 1180 with alterations in to the 13th century. Bredon's Hardwick is an outlier of Bredon village, located just over 1km to the north. The manor at Bredon was under the ownership of the Bishops at Worcester throughout much of the medieval period.
- 2.2.4 A possible medieval moat is located south of Bredon's Hardwick village, at Hardwick Farm, 275m south of the southern end of the Scheme. Other medieval remains within the Study Area are Bredon's Hardwick shrunken medieval village
- 2.2.5 A number of post-medieval and 19th century buildings are located within and around the village, three of which are Listed. These include a 16th century timber framed house, an 18th century dovecote and a 17th century cottage, all located at the southern end of the village.
- 2.2.6 A large number of 18th and 19th century buildings are listed on the WHER, none of these are Listed, however, they are deemed to be of historical value.
- 2.2.7 No known heritage assets will be impacted by the Scheme.

3 AIMS AND METHODOLOGY

3.1 Aims

- 3.1.1 The principal aim of the watching brief is to allow for the collection and assessment/analysis of archaeological data impacted upon during groundworks associated with the Scheme.
- 3.1.2 The general aims of the project are:
- to identify any archaeological remains along the Scheme;
 - to accurately record the location and stratigraphy of areas excavated during groundworks;

- to record all archaeological remains disturbed by the groundworks;
- to determine the extent, condition, character, importance and date of any archaeological deposits encountered;
- to provide information that will enable the archaeological remains to be placed within their local, regional and national contexts;
- to recover artefacts disturbed by the site works, and
- to produce an accurate and comprehensive record and report of any archaeological deposits disturbed by the site works.

3.2 Monitoring of Excavations/Groundworks

3.2.1 It is proposed here that the programme for the archaeological watching brief will be carried out, subject to prior and adequate notification being given by the Client, on all groundworks that may have an impact on archaeological features and deposits.

3.2.2 A watching brief will be carried out on the excavation of all open cut trenches along the route of the pipeline (**Figure 1**). All works will be undertaken by a suitably qualified archaeologist from Wessex Archaeology. Any archaeological remains that may be revealed during the watching brief will be observed and recorded in accordance with current industry best practice (IfA 2008).

3.2.3 The Client will afford reasonable access in order that all archaeological features and deposits revealed during excavations and groundworks can be investigated and recorded. Depending upon the nature of any remains found further archaeological excavation may be necessary in consultation with the relevant authority.

3.2.4 All archaeological deposits will be recorded using Wessex Archaeology's *pro forma* recording system. Each context record will fully describe the location, extent, composition and relationship of the subject and will be cross-referenced to all other assigned records. Context numbers used in the evaluation will not be repeated. Each excavated context will appear on at least one detailed plan at 1:50 or 1:20 scale and one section at 1:10 and co-ordinated on to the overall site plan. A digital photographic record will be maintained to illustrate both the detail and the general context of the principal features. Photography using colour transparencies and black and white negatives (on 35mm film) will be used as appropriate.

3.3 Finds and Environmental Samples

3.3.1 Finds will be treated in accordance with the relevant guidance given by the IfA (2008), the UKIC (1990), the MGC (1992), and English Heritage (2005), and the requirements of the repository museum excepting where they are superseded by statements made below.

3.3.2 All artefacts from excavated contexts will be retained (except unstratified modern material) and taken to Wessex Archaeology offices in Sheffield for further work.

3.3.3 All retained artefacts will, as a minimum, be washed, weighed, counted and identified. Any artefacts requiring conservation or specific storage conditions will be dealt with immediately in line with *First Aid for Finds* (Watkinson and

Neal 1998). Ironwork from stratified contexts will be X-rayed and stored in a stable environment along with other fragile and delicate material. The X-raying of objects and other conservation needs will be undertaken by the staff of an appropriately approved conservation centre.

3.3.4 Information will be obtained from WCC concerning conditions and arrangements for the deposition of finds. Arrangements for archive deposition will be made with the relevant museum.

3.3.5 In the event of the discovery of any human remains, it is proposed that they will be left and recorded *in situ*, then covered, protected and reburied. The Client and WCC will be informed. Where the redevelopment works will unavoidably disturb such remains, these will be fully recorded, excavated and removed from the site, subject to compliance with the relevant Ministry of Justice Licence, which will be obtained by Wessex Archaeology.

3.3.6 Should human remains be excavated, all excavation and post-excavation will be in accordance with the standards set out in IfA Technical Paper 13: 'Excavation and Post-excavation Treatment of Cremated and Inhumed Remains.' Appropriate specialist guidance/site visits will be undertaken by Jackie McKinley of Wessex Archaeology. Following analysis, the final placing of human remains will be subject to the requirements of the Ministry of Justice licence. Contingency sums for specialist site visits will be agreed as required.

3.4 Environmental Samples

3.4.1 Bulk environmental soil samples for plant macro-fossils, small animal and fish bones and other small artefacts will be taken from appropriate well-sealed and archaeological deposits, in accordance with English Heritage guidelines (2011). The residues and sieved fractions of the bulk environmental soil samples will be recorded and retained with the project archive. For charred material, bulk samples of 10 litres will be taken for processing by flotation, using Wessex Archaeology's flotation system and processing methods. All samples will be floated through a 500µm mesh.

3.5 Other Samples

3.5.1 Other samples will be taken, as appropriate, in consultation with Wessex Archaeology specialists and the English Heritage Regional Science Advisor (e.g. dendrochronology, soil micromorphology, monolith samples, C14, etc). Samples will be taken for scientific dating where necessary.

3.6 Treasure

3.6.1 In the event of discovery of artefacts covered or potentially covered by The Treasure Act 1996 (and amendments), their excavation and removal will be undertaken following notification of the Client, Coroner and WCC.

4 POST-EXCAVATION AND REPORTING

4.1 Report

4.1.1 On completion of all archaeological monitoring, a report detailing the results of work will be produced and forwarded to the Client and WCC within three months of completion of all fieldwork.

4.1.2 The watching brief report will be prepared in accordance with the Institute for Archaeologists' (2008) *Standard and Guidance for an Archaeological Watching Brief*, except where superseded by statements below.

4.1.3 The report may include;

- a non-technical summary;
- plans and sections at an appropriate scale locating the Site, location of works, known archaeological structures and deposits and their extent;
- tabulation of finds data by context and by material type;
- a summary by category of the material types recovered;
- a summary of the palaeo-environmental evidence recovered;
- preliminary phasing of any archaeological structures, features and deposits encountered;
- a consideration of the archaeological evidence from within the Site set in its broader landscape and historic setting.

4.1.4 The preparation of the report may involve the following elements:

- the conservation of appropriate material, including the X-raying of ironwork;
- the spot-dating of all pottery from excavated contexts. Spot-dating will be corroborated by scanning of other categories of material;
- a statement on each category of material, including reference to quantity, provenance, range and variety and condition;
- the selection and prioritisation of bulk soil samples taken for environmental and artefactual data in the light of preliminary phasing. Sieving, processing and scanning of selected soil samples will be undertaken and an assessment statement on charred food and plant remains; and
- a statement of potential for each material category and for the data collection as a whole will be prepared, including specific questions that can be answered and the potential value of the data to local, regional and national investigation priorities.

5 ARCHIVE

5.1 Preparation and Deposition

5.1.1 The complete project archive will be prepared in accordance with Wessex Archaeology's Guidelines for Archive Preparation and in accordance with standard guidelines for the preparation of excavation archives (UKIC 1990;

Brown 2007). The Archive will be deposited with the local repository museum. As part of the post excavation work an OASIS form will be filled out and submitted to the Archaeological Data Service (ADS).

6 PROJECT MANAGEMENT AND STAFFING

6.1 Personnel

- 6.1.1 The fieldwork will be carried out by an experienced archaeologist from Wessex Archaeology's Sheffield office staff, who will be on Site at all times for the length of monitoring. The overall responsibility for the conduct and management of the project will be held by one of Wessex Archaeology's project managers, who will visit the fieldwork as appropriate to monitor progress and to ensure that the scope of works is adhered to. The appointed project manager and experienced archaeologist will be involved in all phases of the project through to its completion. The following staff are likely to be utilised on the project:

Andrea Burgess BSc MIfA	Project Manager
Mike Hartwell BSc	Project Archaeologist

7 STANDARDS

7.1 Quality and Code of Practice

- 7.1.1 Wessex Archaeology is a registered archaeological organisation with the Institute for Archaeologists.
- 7.1.2 Wessex Archaeology endorses the Code of Practice and the Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology of the Institute for Archaeologists.
- 7.1.3 All core staff would be of a standard approved by Wessex Archaeology, be employed in line with The Institute for Archaeologists Codes of Practice and be members of the Institute for Archaeologists or be appropriately qualified.
- 7.1.4 Wessex Archaeology operates a *Project Management System*. All projects are undertaken under the direction of the Project Manager who is responsible to a Regional Manager, who ensures the maintenance of quality standards within the organisation. The Chief Executive has ultimate responsibility for all of the Company's work.
- 7.1.5 All work will be carried out in line with current industry best practice (IfA 2008).

8 INSURANCE AND HEALTH AND SAFETY

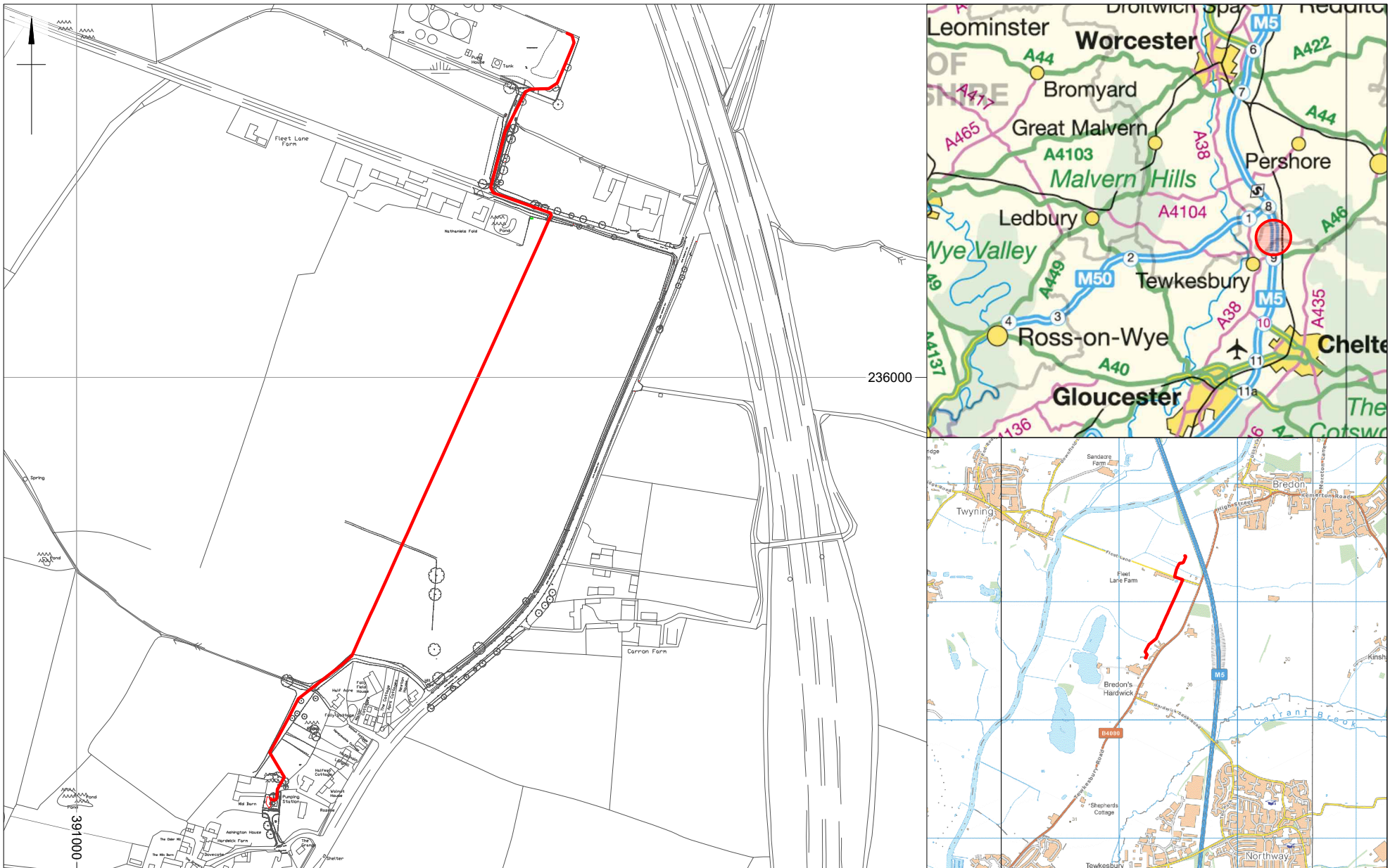
8.1 Policy and Risk Assessment




- 8.1.1 Health and safety considerations will be of paramount importance in conducting all fieldwork. Safe working practises will override archaeological considerations at all times.
- 8.1.2 All work will be carried out in accordance with the Health and Safety at Work etc. Act 1974 and the Management of Health and Safety Regulations 1992, and all other relevant Health and Safety legislation, regulations and codes of practice in force at the time, and in accordance with the SCAUM (Standing Conference of Archaeological Unit Managers) health and safety manual *Health and Safety in Field Archaeology* (1997).
- 8.1.3 Wessex Archaeology will supply a Risk Assessment to the Main Contractor before the commencement of any fieldwork. The Risk Assessment will have been read and understood by all staff attending the Site before any groundwork commences, and a copy will be kept on Site at all times. A copy of Wessex Archaeology Health and Safety Policy is available on request.
- 8.1.4 All Wessex Archaeology staff will comply with any requests by the Main Contractor concerning health and safety, including requirements to attend site induction prior to the commencement of fieldwork.
- 8.1.5 Wessex Archaeology has both public liability (£10,000,000) and professional indemnity insurance (£5,000,000).

9 REFERENCES

9.1 Bibliography

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Site location

Figure 1



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