

October 1995

# A34 ALDERLEY EDGE BYPASS Cheshire

UNIT

LANCASTER

**ARCHAEOLOGICAL** 

UNIVERSITY

**Archaeological Assessment** 

Recommendations

**Cheshire County Council** 

# ALDERLEY EDGE A34 BYPASS CHESHIRE

# Archaeological Assessment Recommendations

Checked by Project Manager.		
	Date	
Passed for submission to client.		
	Date	

© Lancaster University Archaeological Unit Storey Institute Meeting House Lane Lancaster LA1 1TH

October 1995

# CONTENTS

	Executive Summary	3
1.	Introduction	4
2.	General Recommendations	5
3.	Specific Recommendations	7
4.	Bibliography	9
	Appendix 1	

LUAU Survey Levels

## EXECUTIVE SUMMARY

An archaeological assessment has been undertaken by the Lancaster University Archaeological Unit, on behalf of the Consulting Engineers of Cheshire County Council, in accordance with the Project brief and design, of a designated study area along the proposed Alderley Edge A34 Bypass. The assessment included a desk-top survey and a Level 1 survey (see Appendix 1) to identify surface archaeological remains and establish the potential for sub-surface archaeological deposits.

The route passes between the southern end of the Wilmslow bypass (currently under construction) and the A34 by Alderley Park, and continues to the west of Alderley Edge. It extends through low lying land, some areas of which would have been marsh and open water in antiquity. Many prehistoric finds are known from the surrounding area, especially on the high ground of the Edge, which is about a mile to the east. The Edge has a complex history of mining for non-ferrous metals thought to date from the Bronze Age onwards.

#### **Desk-top survey**

The documentary survey explored the Cheshire Sites and Monuments Record and cartographic sources from the Cheshire County Record Office; this identified fifteen sites of archaeological significance or interest within a 1km broad corridor centred along the line of the proposed route.

There is evidence of medieval survival in this area. The proposed by-pass will go within 300m of Chorley Old Hall (dated to c1330), which is a moated manor house and is both a Grade 1 Listed Building, and a Scheduled Monument. The bypass starts at the site of the now demolished White Hall, a moated hall dating back to at least the sixteenth century.

As this is an essentially rural area, evidence of early agricultural practices (drainage and cultivation) can be anticipated but are not documented. Evidence of land enclosures and agricultural activity of the later and post-medieval period were better documented and mapped.

#### Field Survey

The field inspection identified 17 sites of archaeological interest. These consisted mainly of remnants of ridge and furrow towards the north end of the survey area, abandoned field boundaries, and a scatter of pits dug into clay which are interpreted as marl pits.

An archaeological assessment has been undertaken by the Lancaster University Archaeological Unit, on behalf of the Consulting engineers of Cheshire County Council, in advance of the proposed bypass around the town of Alderley Edge, Cheshire. The results of this assessment are presented in the main report, which is a factual account of the information gathered. As required within the Cheshire County Council brief (section 6.3), the recommendations for further evaluation and mitigation of the archaeological resource are here presented as an addendum to the main report.

# 2. GENERAL RECOMMENDATIONS

It is recommended that wherever possible identified sites of archaeological interest are preserved *in situ* as embodied in the Institute of Field Archaeologists' Code of Conduct (IFA 1988) and PPG 16 (DOE 1990). Where there is no statutory protection and it is neither practical nor possible to avoid the site then suitable provision should be made for the archaeological investigation and recording of that site or feature. These tenets are also in accordance with the Department of Transport Design Manual for Roads and Bridges (DOT Volume 11 Environmental Assessment), which accepts that further evaluation of specific sites may be required prior to road construction.

This initial assessment of archaeological potential has identified many sites of archaeological significance within the 1km documentary corridor and the 50m wide field survey corridor. However, it is beyond the scope of this assessment to establish the full significance of these identified and potential sites; it is therefore envisaged that further evaluation will be necessary to determine the precise implications of the bypass proposals upon the identified archaeological resource. This will where appropriate be co-ordinated with mitigation level topographic survey, although a separate mitigative phase may prove necessary.

A programme of more detailed evaluation should be carried out in sufficient time to allow for the final recording of any sites that have particular significance, prior to the implementation of the bypass scheme. This secondary stage of evaluation should include some more focused documentary research, topographic survey of some of the earthwork sites, targeted geophysical survey, photographic recording of small isolated monuments, palaeobotanic coring of identified peat deposits and trial excavation of selected sites.

The phases of work recommended are summarised below.

### 2.1 Documentary Research

This should concentrate on those topics and sites identified as of significance during the present phase of work, and which will be directly affected by the bypass construction or which potentially have ancillary deposits that could be affected by the proposed bypass. These include a moated manor house (site 20), a demolished timber structure (site 06), possible fish ponds (site 12) and a deer park (site 19). Examination should be made of primary documentation for the Alderley Parish, which include Concessionary Court Rolls, Diocesan Records, and papers relating to the Stanley Estate. The aerial photographic collection held by Royal Commission on the Historical Monuments for England could not be evaluated in time for the present report, but should be examined as part of a second phase of the evaluation to enable further interpretation of known sites, and to locate any sites not hitherto identified.

### 2.2 Topographical Survey

The sites located during the present field scan have only approximate locations and have not been mapped or graphically recorded. Certain sites that survive as surface features should be surveyed in detail at LUAU Level 2 (see appendix 1 for LUAU survey levels), to create a record of their current extent and form. Such a survey aids the interpretation of sites, and can act as a mitigation measure for sites of lesser archaeological significance with poor surface survival. It can also serve to target the positioning of any trial trenches that may be deemed advisable as a result of this stage of evaluation.

Only one ploughed field was available for examination by artefact survey during the present assessment. If any other fields have been ploughed by the time of the secondary phase of evaluation, they should be subject to artefact survey at that stage.

#### 2.3 Photographic Record

A detailed photographic survey is an economic means of providing a permanent record of a discrete archaeological monument or a structure that could be affected by the bypass proposals.

#### 2.4 Palaeoenvironmental Sampling

As a preliminary measure it is recommended that an evaluation of wetland areas would be undertaken of the areas of the identified peat. This would consist of augercore sampling of the stratigraphy, to assess the nature of any peat sealed deposits. Any water-logged deposits should be closely monitored, as they may preserve aspects of human occupation. If the trial excavation and the auger-core sampling reveals significant archaeological deposits beneath the peat then it may be necessary to undertake more intensive palaeoenvironmental sampling.

#### 2.5 Geophysical Survey

The use of remote sensing geophysical survey techniques may be recommended in selected areas to assess the extent of known features or to determine the presence of suspected features. If undertaken alongside a trial trenching programme it can be used to target the trenches onto anomalies.

#### 2.6 Trial Excavation

Where the results of the topographical of the geophysical survey warrant further investigation, then a programme of trial excavation may be necessary to establish the nature, extent, date and detailed character of the sites in question. It is possible that this work may demonstrate the need for further recording beyond the evaluation as a mitigation to the impact of the construction and as such should be discussed with the county archaeological curator.

# 3. SPECIFIC RECOMMENDATIONS

In accordance with the general evaluatory and recording techniques outlined above, the following specific recommendations are proposed. Where appropriate some of the listed sites warrant examination by more than one technique.

#### 3.1 No Action

Of those sites identified during this assessment, some are of insufficient archaeological significance to warrant further investigation or are sufficiently distant from the proposed line of the bypass corridor to be significantly unaffected by the development. For the following sites it is therefore recommended that no further action is necessary:

Sites: 03, 04, 11, 13, 15, 21, 22, 23, 26, 27 and 32

### 3.2 Documentary Research

A general programme of study should be undertaken to examine outstanding aerial photographic evidence and targeted documentary research should investigate primary records pertaining to the Alderley parish and the Stanley estate, which would provide a general historical context for the sites identified on the surface. Some sites, in particular, would benefit from further documentary research to establish their archaeological significance and should therefore be examined from such an historical perspective:

Sites: 06, 12, 18, 19, 20, 24 and 25

## **3.3 Topographic Survey**

The northern section of the proposed bypass route has been under pasture for a considerable period of time which has enabled the survival of surface features and earthworks. Some of these warrant recording by Level 2 topographic survey (see Appendix 1) to provide a mitigation record of the sites in advance of the proposed development:

Sites: 01, 02, 07 and 12

### 3.4 Photographic Record

This would provide an economic record of upstanding sites, such as buildings or milestones:

Sites: 05, 10, 12, 14, 16, 17, 24 and 25

### 3.5 Palaeoenvironmental Sampling

A limited programme of palaeoenvironmental coring would define the extent and character of the identified peat deposits and should be undertaken in conjunction with the trial trenching programme:

Sites: 09 and 29

#### 3.6 Geophysical Survey

A limited number of sites should be evaluated by geophysical survey to identify the existence of geophysical anomalies, thus highlighting possible subterranean archaeological remains. The use of geophysics can indicate areas of early activity and so enable the informed targeting of trial trenches.

Site 20 is a significant, early moated manor house and geophysical survey should be undertaken at the closest point of proposed bypass impact to the building / estate to identify any peripheral, associated sub-surface anomalies, which may be further investigated by trial trenching.

Sites: 08, 20, 30 and 31

#### **3.7** Trial Excavation

This assessment has identified some areas which have the potential of extant subsurface remains which should be evaluated by trial excavation: Site 08 is a significant natural promontory extending into an area of former mire or standing water and could have been utilised as a settlement platform in antiquity. Sites 09 and 29 contain deposits of peat which could potentially seal waterlogged archaeological deposits and therefore may be of considerable archaeological significance. As such they would warrant trenching as early as possible in the planning and construction sequence, to allow the informed decisions to be made in sufficient time to prevent delays to the construction programme. Site 20 is a significant, early moated manor house and trial trenching should be undertaken at the closest point of proposed bypass impact to the building to identify any peripheral, associated sub-surface features, subject to the results of a geophysical survey. Site 25 similarly is a moated hall adjacent to the proposed line of the bypass and trial excavations should be targeted to explore for any associated features. Sites 28, 30 and 31 are areas of made ground identified by the borehole survey, which could be an indication of archaeological deposits. They therefore should be evaluated by trial trenching:

Sites: 08, 09, 12, 20, 25, 28, 29, 30 and 31

## 4. BIBLIOGRAPHY

Association of County Archaeological Officers (ACAO) 1993, *Model briefs and specifications for Archaeological Assessments and Field Evaluations*, Bedford.

Department of Environment (DOE), 1990 *Planning policy guidance: 16. Archaeology and planning*, London

Department of Transport (DOT), *Design manual for roads and bridges*, Vol. 11 Environmental Assessment, stage 3 part 2.

Institute of Field Archaeologists (IFA), 1988 By-laws of the Institute of Field Archaeologists: code of conduct

LUAU 1993, Unit Manual, unpublished document

## **APPENDIX 1**

# LUAU SURVEY LEVELS

# Levels of archaeological survey recording

# Lancaster University Archaeological Unit 1995

This describes the types of survey appropriate for the various stages of archaeological evaluation undertaken in advance of development as practised by the Lancaster University Archaeological Unit. They are based on survey levels defined by the Royal Commission on the Historical Monuments of England (RCHM(E)) and are in accordance with stages of evaluation defined by the Association of County Archaeological Curators (ACAO 1993).

### Level 1 Survey (Assessment)

Level 1 represents the minimum standard of record and is appropriate to exploratory survey aimed at the discovery of previously unrecorded sites. Its aim is to record the existence, location and extent of an archaeological site. The emphasis for the recording is on the written description which should record type and period and would not normally exceed c 50 words.

The location and extent of sites is typically shown on 1:2,500 or 1:10,000 OS maps as requested by the client. The extent of a site is only defined for sites greater than 50m in size and smaller sites are shown with a cross. The accuracy of survey is +- 10m (8 figure grid ref.) and is undertaken either without the use of survey instruments in areas of abundant topography or using Global Positioning System (GPS) equipment in areas remote from reliable OS detail.

This is a rapid level of survey (Site Inspection in project design) usually undertaken alongside a desk top study as part of the site assessment (ACAO 1993, 14). It is an initial site inspection which helps the local planning authority to consider fully the archaeological implications of a planning proposal and also serves as the basis for undertaking and planning further archaeological work on the site.

### Level 2 Survey (Evaluation)

Level 2 survey defines the extent of all surface archaeological features on site in relation to the main topographic elements (e.g. field walls) and accurately defines the extent of the overall archaeological site. It is produced in conjunction with a full objective and interpretative description of the features. The basic form of the Level 2 survey incorporates only selected breaks of slope of an earthwork site and serves to define a basic outline of the corresponding hachures; it also includes a detailed mapping of local topography. It represents a complete interpretative archaeological record of a site.

It is undertaken using Total Station survey equipment and is located usually using Global Positioning Survey (GPS) techniques. The internal accuracy is typically +-0.05m but is located with respect to the OS National Grid to an accuracy of +- 1.0m. The survey methodology is designed to facilitate the production of any subsequent

Level 3 survey by reusing the Level 2 survey data along with additional contour data. For reasons of economy and overall flexibility the survey is generated using a Computer Aided Design (CAD) system and output on the Unit's A0 plotter.

This is a basic level of survey undertaken alongside trial excavation work as part of the field evaluation (ACAO 1993). It can serve as a mitigation measure for smaller sites with poor surface survival and should be applied to sites of some significance threatened by the development. More complex and archaeologically important sites require a Level 3 survey as mitigation for their destruction. The Level 2 survey defines an archaeological context for any trial excavations and shows the location of the trenches in relation to the surface features. This level is used to assess the archaeological significance of the site and serves as the basis, along with other evaluation techniques, for the submission of recommendations to the District or County Planning Officer.

### Level <u>3</u> Survey (Mitigation)

Level 3 survey is a comprehensive record of the archaeological features in relation to the surface topography. It incorporates an interpretative hachure survey alongside a full computer generated model of the ground surface enacted when a full survey is needed in conjunction with excavations or in cases where detailed survey of fragile upstanding earthworks is the only appropriate mitigative measure.

The Level 3 mitigation survey is designed to record the archaeological site as fully as current technology will allow in advance of its destruction. It is applied selectively to sites of particular importance and which have a good survival of surface features.

It is generated by the provision of additional survey data to the Level 2 survey and is of an equivalent level of accuracy (+- 0.05m). In many cases only a relatively limited amount of additional data is required to upgrade the Level 2 survey to the full surface modelled Level 3 and therefore this can be an economic recording option.

It is generated on CAD which maintains the original accuracy of the survey data and allows flexibility of drawing output at any scale. The drawing file will record the contour detail at different height separations and the final survey drawings can therefore be tailored to meet any requirements of the client.

12