Archaeological Evaluation Western Working Area, Cadeby Quarry, Leicestershire (SK 434025)

**Greg Farnworth-Jones** 

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### Greg Farnworth-Jones

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### 1. Summary

An archaeological evaluation was carried out on land off Hinckley Road, Cadeby, in the Western Working Area of Cadeby Quarry, Leicestershire (SK 434 025,) on the 25th June 2007. This work was in advance of the proposed extraction of sands and gravels by Tarmac Limited. The work was carried out on behalf of Tarmac Limited by University of Leicester Archaeological Services. A total of four evaluation trenches were excavated which failed to reveal any archaeology. The results of the evaluation were therefore negative. The archive will be deposited with Leicestershire County Council Accession No. X.A80.2007

### 2. Introduction

**2.1** This document constitutes the third stage of archaeological assessment to have been carried out on land in the western working area, Cadeby Quarry, Cadeby, Leicestershire, (SK 434 025). The archaeological assessment was undertaken on behalf of Tarmac Limited by University of Leicester Archaeological Services.

2.2 Tarmac Limited propose to extract sands and gravels from an area of c.2 ha off Hinckley Road to the east of the village of Cadeby and to the west of the existing quarry. The Senior Planning Archaeologist of the Historic and Natural Environment Team of Leicestershire County Council, in his capacity as archaeological adviser to the planning authority, requested that a preliminary archaeological assessment of the site area be carried out. The assessment was to be undertaken in three stages, the first an archaeological desk-based assessment, which was previously carried out by ULAS (Meek, 2004), and a second stage of geophysical survey using magnetometry Sratascan Limited (Donaldson 2005), following the results of the desk-based assessment.

**2.3** The desk-based assessment concluded that the proposed extension areas to the quarry had a high potential for archaeological remains of an Iron Age date.

**2.4** In view of this potential, the senior planning archaeologist at Leicestershire County Council has produced a Brief (hereinafter the Brief) for archaeological evaluation of 2% of the site by trial trenching to confirm the nature, extent, date and significance of any archaeological deposits that may be present. University of Leicester Archaeological Services (ULAS) has been commissioned to undertake the work.



# Figure 1. Site location

Reproduced from the Landranger 129 Nottingham and Loughborough area 1:50000 map by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown Copyright 1996. All rights reserved. Licence number AL 10002186.

## 3. Site Background

**3.1** Cadeby Quarry lies to the west of Cadeby and south-west of Newbold Verdon in west Leicestershire, centred on national grid reference SK 434 025 (fig. 1). It lies within the parishes of Cadeby and Newbold Verdon.

**3.2** The Ordnance Survey Geological Survey of Great Britain Sheet 155 (Coalville) indicates that the underlying geology consists of glacial sands and gravels underlain by Mercian Mudstone. The proposed evaluation area is fairly flat.

## 4. Archaeological and Historical Background

*4.1* The Desk-based assessment prepared by ULAS for the proposed extensions to Cadeby Quarry summarised the results as follows:

"The Leicestershire Sites and Monuments Record records numerous archaeological sites in the vicinity of the quarry area, although no sites are known within the two new application areas. The surrounding area contains evidence for Iron Age occupation and land division in the form of rectangular enclosures and numerous pit alignments. Earlier prehistoric finds have also been made within the area. Few recorded Roman sites lie in close vicinity to the site although occupation sites and villas are known slightly further afield. There is no recorded evidence for Anglo-Saxon activity close to the two extraction areas, although it is likely that the surrounding villages all have some element of Saxon origins. Medieval settlements existed at Cadeby, Newbold Verdon, Brascote and Naneby, with the proposed extraction areas lying within the surrounding agricultural lands of these settlements.

Evidence for both proposed extraction areas suggests that the land would have been utilised as agricultural land since at least the medieval period. One field within the central part of the Western Working Area has been previously quarried and has since been reinstated and is used as pasture land. Apart from this former quarry area the land is likely to have remained relatively undisturbed since the medieval period, save for disturbance from plough activity, and thus any archaeological deposits that may exist within the area would lie close to the present ground surface beneath the existing topsoil.

There is a high potential for archaeological remains of an Iron Age date to exist within both proposed extraction areas. There is a moderate potential for remains of a Bronze Age date to exist and lower potential for archaeological remains of other periods. It should be noted that no previous systematic survey of either proposed extraction area has been carried out and that significant archaeological remains of all periods may conceivably be present. It is likely that initial archaeological evaluation of the site would be necessary prior to a decision being made on planning."

**4.2** The results of the geophysical survey undertaken by Stratascan of the proposed extraction areas

"A detailed magnetic survey was carried out over approximately 24ha within three separate parcels of land to the east of Cadeby in Leicestershire. Within Area 1, immediately east of the village of Cadeby, are several positive linear and rectilinear anomalies that may be responses to the fill of magnetically enhanced material within cut features of an archaeological origin. There is also evidence within Area 1 and possibly Area 3 of former ridge and furrow agricultural systems. Buried pipelines, dumped material and ferrous objects in Area 2 may have obscured more subtle responses in magnetic 'noise'. The low magnitude of many of the anomalies has made confident interpretation difficult and may partly be related to the magnetic characteristics of the soils in this area." (Donaldson 2005)

**4.3** An additional summary and interpretation report on the geophysical survey was prepared by ULAS to link the results with the known archaeological landscape of the area, and further establish a potential date, character and extent of the deposits (Meek 2005). The results were summarised as follows:

"The geophysical survey revealed evidence for past agricultural activity across the proposed extraction areas, including areas of former medieval ridge and furrow, as well as more modern agricultural activity. Some areas of probable recent disturbance were also noted across all three areas.

Within the Western Working Area potential archaeological deposits were revealed by the geophysical survey lying in an area to the east of Hinckley Road and west of a previously quarried area. The number of features present suggest a fairly intensive area of archaeological activity in the form of ditches and enclosures. From the potential for Iron Age archaeology at the site identified in the desk-based assessment, and the layout of the features, it is likely that the potential archaeological remains represent an Iron Age farmstead or small settlement.

The area of the potential Iron Age features, some 2ha in size, would require archaeological evaluation to confirm the date, character, extent and state of preservation of the archaeological remains. (Meek 2005)

# 5. Methodology

**5.1** All work followed the Institute of Field Archaeologists (IFA) Code of Conduct and adhered to their *Standard and Guidance for Archaeological Field Evaluations*.

5.2 The main objectives of the evaluation were:

1. To identify the presence/absence of any archaeological deposits.

2. To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works.

3. To produce an archive and report of any results.

5.3 The Senior Planning Archaeologist had requested that a c. 2 % sample of the area identified as having archaeological potential within the Western Working Area by trial trench. The area is c. 2ha in size, and a 2% sample would be the equivalent of nearly nine 30m x 1.5m trenches. The exact location was defined by constraints of the area for trenching but targeted the geophysical anomalies and some blank aras as a control. The work followed the *Design Specification for Archaeological work* approved by the Senior Planning Archaeologist as advisor to the planning authority (Appendix).

**5.4** Topsoil/modern overburden was removed in level spits, under continuous archaeological supervision, down to the uppermost archaeological deposits by JCB 3C using a toothless ditching bucket. Trenches were excavated to a width of 1.6m.

**5.5** Trenches were examined by appropriate hand cleaning. Any archaeological deposits or significant natural deposits were planned at an appropriate scale and sample-excavated by hand as appropriate to establishing the stratigraphic and chronological sequence. All plans have been tied into the Ordnance Survey National Grid. Spot heights were taken as appropriate.

**5.6** Sections were drawn as appropriate, including records of at least one longitudinal face of each trench.



Figure 2 Interpretation of the geophysical results, with proposed trenches overlaid.



Figure 3 Trench Location

### 6. Results

### 6.1 Trench 1

### **Trench 1 Details**

Length of Trench	30m
Area of Trench	48sq.m
Surface Level (m OD)	c.128.8m OD
Base of Trench (m OD)	c.128.3m OD
Top of Natural substratum (m OD)	c.128.25m OD

Trench 1 was located on the north-western edge of the site, orientated northwestsoutheast (fig.3). Initial machining revealed mid greyish brown, friable sandy silt topsoil with occasional rounded stones, to a depth of c.0.4m. Further machining revealed light greyish brown, firm sandy clay subsoil, with occasional rounded stones, down to a further depth of c.0.05m. Further machining revealed the natural substratum, which consisted of yellow/orange sandy clay, with patches of gravel. No archaeological deposits were present within trench 1.

### 6.2 Trench 2

### **Trench 2 Details**

Length of Trench	30m
Area of Trench	48sq.m
Surface Level (m OD)	c.128.8m OD
Base of Trench (m OD)	c.123.3m OD
Top of Natural substratum (m OD)	<i>c</i> .128.25m OD

Trench 2 was located to the south east of trench 1, orientated northwest-southeast (fig. 3). Initial machining revealed topsoil with the same consistence as observed in trench 1, to a depth of 0.4m. Further machining revealed a light greyish brown sandy clay subsoil layer, with occasional rounded stones to a depth of 0.05m. Further machining revealed yellow/orange slightly sandy clay natural, with a high frequency of small rounded stones >10%. No archaeological finds or features were observed in trench 2.

### 6.3 Trench 3

### **Trench 3 Details**

Length of Trench	30m
Area of Trench	48sq.m
Surface Level (m OD)	c.128.8m OD
Base of Trench (m OD)	c.128.4m OD
Top of Natural substratum (m OD)	<i>c</i> .128.35m OD

Trench 3 was located to the southwest of trench 2, orientated east-west (fig.3). Initial machining revealed mid greyish brown, friable sandy silt topsoil with occasional rounded stones, to a depth of c.0.4m. Further machining revealed light greyish brown, firm sandy clay subsoil, with occasional rounded stones, down to a further depth of c.0.05m. Further machining revealed the natural substratum, which consisted of yellow/orange sandy clay, with patches of gravel. No archaeological deposits were present within trench 3.

### **6.4** *Trench 4*

### **Trench 4 Details**

Length of Trench

30m

Area of Trench	48sq.m
Surface Level (m OD)	c.128.8m OD
Base of Trench (m OD)	c.128m OD
Top of Natural substratum (m OD)	<i>c</i> .128.15m OD

Trench 4 was located to the south-west of trench 3, orientated north-east to south-west (fig.3). Initial machining revealed mid greyish brown, friable sandy silt topsoil (the same as the topsoil observed in trenches 1-3), to a depth of c.0.35m. Further machining revealed light greyish brown, firm sandy clay subsoil, with occasional rounded stones, down to a further depth of c.0.02m. Further machining revealed the natural substratum, which consisted of yellow/orange sandy clay, with patches of gravel. No archaeological deposits were present within trench 3.

### 7. Conclusion

7.1 The archaeological evaluation carried out on land off Hinckley Road, on land in the western working area, Cadeby Quarry, Cadeby, Leicestershire, (SK 434 025) failed to uncover any archaeological features despite targeting the apparent possible magnetometry anomalies, highlighted in the geophysical survey. The possible reason for this may well be due to geological changes within the natural substratum which may have produced the geophysical anomalies. In view of the negative results in the northernmost field, it was decided, following consultation with the Senior Planning Archaeologist at LCC as advisor to the Minerals planning authority that the further five evaluation trenches that were to be excavated should not be excavated.

7.2 The four evaluation trenches excavated failed to produce any archaeological finds or features. Therefore the results of the investigation were negative.

### 8. Acknowledgements

I would like to thank the clients, Tarmac Limited., for their assistance and cooperation on site. Patrick Clay managed the project and the fieldwork was carried out by the author with the assistance of Michael Henderson, all of ULAS.

### 9. Archive and Publication

The archive comprising trench recording sheets and digital photographs will be deposited with Leicestershire County Council, Accession Number X.A 80.2007. A brief summary of the results of the evaluation will be published in

### 10. Bibliography

Donaldson, K T 2005	<i>Geophysical</i> Stratascan Lin	Survey	<i>Report:</i> ort_Job No	<i>Cadeby</i>	<i>Quarry,</i> ebruary 20	<i>Leicestershire,</i> 05
Meek, J., 2004	An Archaeolog Quarry Extens No. 2004-204	gical Des sion, Leic	sk-based A. estershire	ssessment (centre Sk	for the Pr ( 434 025)	<i>coposed Cadeby</i> , ULAS Report

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01.08.2007

# 11. Appendix 1 Plates



Plate 1 Trench 1 (Looking SW)



Plate 2 Trench 2 (Looking SW)







Plate 4 Trench 4 (Looking West)

#### 12. Appendix 2

#### UNIVERSITY OF LEICESTER ARCHAEOLOGICAL SERVICES

Design Specification for Archaeological Evaluation by Trial Trench

Western Working Area, Cadeby Quarry, Leicestershire

#### NGR: SK 434 025

#### Client: Tarmac Limited

#### Planning Authority: Leicestershire County Council

#### 1 Introduction

#### 1.1 **Definition and scope of the specification**

This document is a design specification for a phase of intrusive archaeological field evaluation (AFE) at the above site, in accordance with DOE Planning Policy Guidance note 16 (PPG16, Archaeology and Planning, para.30). The fieldwork specified below is intended to provide preliminary indications of character and extent of possible buried archaeological remains revealed through a previous stage of geophysical survey.

- 1.2 The definition of archaeological field evaluation, taken from the Institute of Field Archaeologists Standards and Guidance: for Archaeological Field Evaluation (IFA S&G: AFE) is a limited programme of non-intrusive and/ or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their worth in a local, regional, national or international context as appropriate.
- 1.3 The document provides details of the work proposed by ULAS on behalf of the client. The scheme includes the following:
  - Evaluation by intrusive trial trenching

#### 2. Background

#### 2.1 *Context of the Project*

- 2.1.1 Cadeby Quarry lies to the west of Cadeby and south-west of Newbold Verdon in west Leicestershire, centred on national grid reference SK 434 025 (fig. 1). It lies within the parishes of Cadeby and Newbold Verdon.
- 2.1.2 An archaeological desk-based assessment has been previously commissioned from University of Leicester Archaeological Services by Tarmac Central (Meek 2004). The desk-based assessment concluded that the proposed extension areas to the quarry had a high potential for archaeological remains of an Iron Age date.
- 2.1.3 Following the conclusions of the desk-based assessment, it was recommended that a detailed geophysical survey using magnetometry was carried out over the extension areas. This was undertaken by Stratascan during February 2005 by Stratascan Limited (Donaldson 2005). An area of *c*.2ha of potential Iron Age archaeological activity was recorded in the Western Working Area. Survey of the remainder of this area and the other two recorded evidence for past agricultural activity, including medieval ridge and furrow, as well as areas that are likely to represent dumps of rubbish, including demolition material (bricks etc.).
- 2.1.4 Discussion with the Senior Planning Archaeologist from the Heritage and Natural Environment Team of Leicestershire County Council (HNET LCC) has confirmed that the area of potential Iron Age archaeological activity will need to be evaluated by trial trench, to confirm its date, character, extent and state of preservation.
- 2.1.5 This document details the methodology that will be employed for the trial trench evaluation.

#### 2.2 Geological and Topographical Background

2.2.1 The Ordnance Survey Geological Survey of Great Britain Sheet 155 (Coalville) indicates that the underlying geology consists of glacial sands and gravels underlain by Mercian Mudstone. The proposed evaluation area is fairly flat.

#### 2.3 Archaeological and Historical Background

2.3.1 The Desk-based assessment prepared by ULAS for the proposed extensions to Cadeby Quarry summarised the results as follows:

"The Leicestershire Sites and Monuments Record records numerous archaeological sites in the vicinity of the quarry area, although no sites are known within the two new application areas. The surrounding area contains evidence for Iron Age occupation and land division in the form of rectangular enclosures and numerous pit alignments. Earlier prehistoric finds have also been made within the area. Few recorded Roman sites lie in close vicinity to the site although occupation sites and villas are known slightly further afield. There is no recorded evidence for Anglo-Saxon activity close to the two extraction areas, although it is likely that the surrounding villages all have some element of Saxon origins. Medieval settlements existed at Cadeby, Newbold Verdon, Brascote and Naneby, with the proposed extraction areas lying within the surrounding agricultural lands of these settlements.

Evidence for both proposed extraction areas suggests that the land would have been utilised as agricultural land since at least the medieval period. One field within the central part of the Western Working Area has been previously quarried and has since been reinstated and is used as pasture land. Apart from this former quarry area the land is likely to have remained relatively undisturbed since the medieval period, save for disturbance from plough activity, and thus any archaeological deposits that may exist within the area would lie close to the present ground surface beneath the existing topsoil.

There is a high potential for archaeological remains of an Iron Age date to exist within both proposed extraction areas. There is a moderate potential for remains of a Bronze Age date to exist and lower potential for archaeological remains of other periods. It should be noted that no previous systematic survey of either proposed extraction area has been carried out and that significant archaeological remains of all periods may conceivably be present. It is likely that initial archaeological evaluation of the site would be necessary prior to a decision being made on planning."

2.3.2 The results of the geophysical survey undertaken by Stratascan of the proposed extraction areas

"A detailed magnetic survey was carried out over approximately 24ha within three separate parcels of land to the east of Cadeby in Leicestershire. Within Area 1, immediately east of the village of Cadeby, are several positive linear and rectilinear anomalies that may be responses to the fill of magnetically enhanced material within cut features of an archaeological origin. There is also evidence within Area 1 and possibly Area 3 of former ridge and furrow agricultural systems. Buried pipelines, dumped material and ferrous objects in Area 2 may have obscured more subtle responses in magnetic 'noise'. The low magnitude of many of the anomalies has made confident interpretation difficult and may partly be related to the magnetic characteristics of the soils in this area." (Donaldson 2005)

2.3.3 An additional summary and interpretation report on the geophysical survey was prepared by ULAS to link the results with the known archaeological landscape of the area, and further establish a potential date, character and extent of the deposits (Meek 2005). The results were summarised as follows:

"The geophysical survey revealed evidence for past agricultural activity across the proposed extraction areas, including areas of former medieval ridge and furrow, as well as more modern agricultural activity. Some areas of probable recent disturbance were also noted across all three areas.

Within the Western Working Area potential archaeological deposits were revealed by the geophysical survey lying in an area to the east of Hinckley Road and west of a previously quarried area. The number of features present suggest a fairly intensive area of archaeological activity in the form of ditches and enclosures. From the potential for Iron Age archaeology at the site identified in the desk-based assessment, and the *layout of the features, it is likely that the potential archaeological remains represent an Iron Age farmstead or small settlement.* 

The area of the potential Iron Age features, some 2ha in size, would require archaeological evaluation to confirm the date, character, extent and state of preservation of the archaeological remains. (Meek 2005)

- 3. Archaeological Objectives
- 3.1 The main objectives of the evaluation will be:
  - To clarify the presence/absence of archaeological deposits within the area of interest identified within the Western Working Area. The archaeological evaluation will provide information on the extent, character and date of these any archaeological deposits.
  - This stage of archaeological evaluation, once the above information has been gathered, will serve to inform what further archaeological investigation may be required in advance of mineral extraction.
  - To produce an archive and report of any results.
- 3.2 Within the stated project objectives, the principal aim of the evaluation is to confirm the nature, extent and significance of the potential archaeological deposits identified from the geophysical survey in order to determine the potential impact upon them from proposed development.
- 3.3 Archaeological evaluation is an intrusive form of archaeological evaluation that will expose a 2% sample of the identified area of archaeological interest onto archaeological deposits or undisturbed substrata.

#### 4. Methodology

#### 4.1 General Methodology and Standards

- 4.1.1 All work will follow the Institute of Field Archaeologists (IFA) Code of Conduct and adhere to their *Standard and Guidance for Archaeological Field Evaluation* (1999).
- 4.1.2 Staffing, recording systems, health and safety provisions and insurance details are included below.

4.1.3 Internal monitoring procedures will be undertaken including visits to the site by the project manager. These will ensure that project targets are met and professional standards are maintained. Provision will be made for external monitoring meetings with the Planning authority and the Client, if required.

#### 4.2 Trial Trenching Methodology

- 4.2.1 Prior to any machining of trial trenches general photographs of the site areas may be taken.
- 4.2.2 Topsoil and overburden will be removed carefully in level spits, under continuous archaeological supervision by JCB 3C or equivalent using a toothless ditching bucket. Trenches will be excavated to a width of 1.6m and down to the top of archaeological deposits or natural undisturbed ground, whichever is reached first.
- 4.2.3 The intention is to evaluate a 2% sample of the area identified as having archaeological potential within the Western Working Area by trial trench. The area is *c*.2ha in size, and a 2% sample would be the equivalent of nearly nine 30m x 1.5m trenches. The proposed trench layout is illustrated on Figure 3. The trenches target both recorded anomalies of possible archaeological origin identified by the survey, to establish date, character and state of preservation, and also to test areas where no anomalies have been identified, to confirm extent.
- 4.2.4 The trenches have been located to achieve the following aims (see Figure 3):
  - Trench 1: Located in the most northerly point of the area where no geophysical survey anomalies were revealed. The aim of the trench is to ascertain whether archaeological features are present that were not identifiable by the geophysical survey technique used.

- Trench 2: Located on the north-west of the area to establish the date, character and state of preservation of potential archaeological remains identified by the geophysical survey, and to establish the presence of any features not identifiable by the survey technique.
- Trench 3: Located in amongst many features of possible archaeological origin in the northern half of the area. The aim is to identify the date, character and state of preservation of these features.
- Trench 4: Located on the western side of the area to establish the date, character and state of preservation of potential archaeological remains identified by the geophysical survey, and to establish the presence of any features not identifiable by the survey technique.
- Trench 5: Located in amongst many features of possible archaeological origin in the central part of the area. The aim is to identify the date, character and state of preservation of these features.
- Trench 6: Located in amongst many features of possible archaeological origin in the southern half of the area. The aim is to identify the date, character and state of preservation of these features.
- Trench 7: Located on the south-western side of the area where no geophysical survey anomalies were revealed. The aim of the trench is to ascertain whether archaeological features are present that were not identifiable by the geophysical survey technique used.
- Trench 8: Located in the southern part of the area to establish the date, character and state of preservation of potential archaeological remains identified by the geophysical survey, and to establish the presence of any features not identifiable by the survey technique.
- Trench 9: Located on the south-eastern side of the area to establish the date, character and state of preservation of potential archaeological remains identified by the geophysical survey, and to establish the presence of any features not identifiable by the survey technique.
- 4.2.5 Potentially trench locations may need to be altered due to constraints, the location of services and/or other constraints. Trench length may be altered where necessary to follow features extending beyond the known area of activity.
- 4.2.6 Trenches will be examined by hand cleaning and any archaeological deposits located will be planned at an appropriate scale. Archaeological deposits will be sample-excavated by hand as appropriate to establish the stratigraphic and chronological sequence. All plans will be tied into the Ordnance Survey National Grid. Relative spot heights will be taken as appropriate.
- 4.2.7 Sections of any excavated archaeological features will be drawn at an appropriate scale. At least one longitudinal face of each trench will be recorded. All sections will be levelled and tied to the Ordnance Survey Datum, or a permanent fixed benchmark.
- 4.2.8 Trench locations will be recorded using an electronic distance measurer. These will then be tied in to the Ordnance Survey National Grid.
- 4.2.9 Any human remains will initially be left *in situ* and will only be removed if necessary for their protection, under a Home Office Licence and in compliance with relevant environmental health regulations.

#### 5. Finds and Samples

- 5.1 The IFA Guidelines for Finds Work will be adhered to.
- 5.2 All antiquities, valuables, objects or remains of archaeological interest, other than articles declared by Coroner's Inquest to be subject to the Treasure Act, discovered in or under the Site during the carrying out of the project by ULAS or during works carried out on the Site by the Client shall be deemed to be the property of ULAS provided that ULAS after due examination of the said Archaeological Discoveries shall remain in the ownership of the landowner.
- 5.3 An Accession number will be obtained from Leicestershire County Council's Assistant Keeper of Museums that will be used to identify all records and finds from the site, prior to the commencement of any on-site works.

5.4 During the fieldwork, different sampling strategies may be employed according to the perceived importance of the strata under investigation. Close attention will always be given to sampling for date, structure and environment. If significant archaeological features are sample excavated, the environmental sampling strategy is likely to include the following:

- i. A range of features to represent all feature types, areas and phases will be selected on a judgmental basis. The criteria for selection will be that deposits are datable, well sealed and with little intrusive or residual material.
- ii. Any buried soils or well-sealed deposits with concentrations of carbonised material present will be intensively sampled taking a known proportion of the deposit.
- iii. Spot samples will be taken where concentrations of environmental remains are located.
- iv. Waterlogged remains, if present, will be sampled for pollen, plant macrofossils, insect remains and radiocarbon dating provided that they are uncontaminated and datable. Consultation with the specialist will be undertaken.
- 5.5 All identified finds and artefacts are to be retained, although certain classes of building material will, in some circumstances, be discarded after recording with the approval of the Senior Planning Archaeologist. The IFA Guidelines for Finds Work will be adhered to.
- 5.6 All finds and samples will be treated in a proper manner. Where appropriate they will be cleaned, marked and receive remedial conservation in accordance with recognised best-practice. This will include the site code number, finds number and context number. Bulk finds will be bagged in clear self sealing plastic bags, again marked with site code, finds and context numbers and boxed by material in standard storage boxes (340mm x 270mm x 195mm). All materials will be fully labelled, catalogued and stored in appropriate containers.
- 6. Report and Archive
- 6.1 The full report in A4 format will usually follow within eight weeks of the completion of the fieldwork and copies will be dispatched to the Client (2 copies), and thereafter to the Senior Planning Archaeologist/HER (2 copies).
- 6.2 The report will include consideration of:
  - The aims and methods adopted in the course of the evaluation.
    - The nature, location, extent, date, significance and quality of any structural, artefactual and environmental material uncovered.
    - The anticipated degree of survival of archaeological deposits.
    - The anticipated archaeological impact of the current proposals.
    - Appropriate illustrative material including maps, plans, sections, drawings and photographs.
    - Summary.
    - The location and size of the archive.
- 6.3 A full copy of the archive as defined in *The Guidelines For The Preparation Of Excavation Archives For Long-Term Storage* (UKIC 1990), and *Standards In The Museum: Care Of Archaeological Collections* (MGC 1992) and *Guidelines for the Preparation of Site Archives and Assessments for all Finds* (other than fired clay objects) (Roman Finds Group and Finds Research Group AD 700-1700 1993) will usually be presented to within six months of the completion of fieldwork. This archive will include all written, drawn and photographic records relating directly to the investigations undertaken.
- 7 Copyright
- 7.1 The copyright of all original finished documents shall remain vested in ULAS and ULAS will be entitled as of right to publish any material in any form produced as a result of its investigations.

#### 8. Timetable

- 8.1 It is envisaged that the site work will take 8-10 days on-site with two archaeologists. It can be started in mid May 2007.
- 8.2 The on-site director/supervisor will carry out the post-excavation work, with time allocated within the costing of the project for analysis of any artefacts found on the site by the relevant in-house specialists at ULAS.
- 9. Health and Safety
- 9.1 ULAS is covered by and adheres to the University of Leicester Archaeological Services Health and Safety Policy and Health and Safety manual with appropriate risks assessments for all archaeological work. A draft Health and Safety statement for this project is attached as Appendix 1. The relevant Health and Safety Executive guidelines will be adhered to as appropriate. The HSE has determined that archaeological investigations are exempt from CDM regulations.
- 9.2 A Risks assessment form will be completed prior to work commencing on-site, and updated as necessary during the site works.
- 9.3 The location of services within the area is not confirmed at present. Information on the known location of any services will need to be supplied by the Client prior to the commencement of works on the site.

#### 10 Insurance

- 10.1 All ULAS work is covered by the University of Leicester's Public Liability and Professional Indemnity Insurance. The Public Liability Insurance is with St Pauls Travellers Policy No. UCPOP3651237 while the Professional Indemnity Insurance is with Lloyds Underwriters (50%) and Brit Insurances (50%) Policy No. FUNK3605.
- 11. Monitoring arrangements
- 11.1 Unlimited access to monitor the project will be available to both the Client and his representatives and Senior Planning Archaeologist subject to the health and safety requirements of the site. Notice will be given to the Leicestershire Senior Planning Archaeologist before the commencement of the archaeological evaluation in order that monitoring arrangements can be made.
- 11.2 All monitoring shall be carried out in accordance with the IFA *Standard and Guidance for Archaeological Field Evaluations*.
- 11.3 Internal monitoring will be carried out by the ULAS project manager.
- 12. Contingencies and unforeseen circumstances
- 12.1 In the event that unforeseen archaeological discoveries are made during the project, ULAS shall inform the site agent/project manager, Client and the Planning Archaeologist and Planning Authority and prepare a short written statement with plan detailing the archaeological evidence. Following assessment of the archaeological remains by the Planning Archaeologist, ULAS shall, if required, implement an amended scheme of investigation on behalf of the client as appropriate.

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APPENDIX 1: Draft Project Health and Safety Policy Statement:

#### Evaluation of Proposed Western Working Area, Cadeby Quarry, Leicestershire

A risks assessment will be produced by on-site staff, which will be updated and amended during the course of the evaluation.

#### 1. Nature of the work

1.1 The work will involve geophysical survey and trial trenching during daylight hours to reveal underlying archaeological deposits. The work will involve excavation using machine of trial trenches under the control and supervision of archaeologists. The team of archaeologists to be employed on the site will sign in and out of the main quarry office

#### 2 Risks Assessment

#### 2.1 Trial Trenching

The work will involve machine excavation by mechanical excavator during daylight hours to reveal underlying archaeological deposits. Overall depth is likely to be *c*. 0.5 m with possible features excavated to a depth of another 1m. Trenches will not be excavated to a depth exceeding 1.2m. Spoil will be stockpiled no less than 1.5 m from the edge of the excavation, the topsoil and subsoil being kept separate. Remaining works will involve the examination of the exposed surface with hand tools (shovels, trowels etc) and excavation of archaeological features. Loose spoil heaps will not be walked on. Protective footwear will be worn at all times, although rigger boots will not be allowed. Hard hats and high visibility jackets will be worn at all times. Gloves and goggles will not be worn by the archaeologists within the evaluation area, as they are prohibitive to the accurate and successful excavation and recording of archaeological deposits. First aid kit to be kept in site accommodation/vehicle. Vehicle and mobile phone to be kept on site in case of emergency.

#### 2.2 *Working with plant*.

Precautions. Archaeologists experienced in working with machines will supervise the machining of trenches. Hard hats, protective footwear (excluding rigger boots) and high visibility jackets will be worn at all times. Machine driver to be suitably qualified and insured. If services or wells are encountered machining will be halted until extent has been established by hand excavation or areas where it is safe to machine have been established. It is assumed that there is safe and permitted access to the site area.

#### 2.3 *Working within areas prone to waterlogging.*

In the event of waterlogging preventing work continuing, it is proposed to excavate a sump, suitably fenced and clearly marked to enable the water to drain away from the trenches to facilitate recording. Protective clothing will be worn at all times and precautions taken to prevent contact with stagnant water which may carry Vialls disease or similar.

#### 2.4 *Working with chemicals.*

If chemicals are used to conserve or help lift archaeological material these will only be used by qualified personnel with protective clothing (i.e. a trained conservator) and will be removed from site immediately after use.

#### 2.5 Other risks

Precautions. If there is any suspicion of unforeseen hazards being encountered e.g. chemical contaminants, unexploded bombs, hazardous gases, work will cease immediately. The client and relevant public authorities will be informed immediately.