

Archaeological Services

An archaeological field evaluation at Great Dalby Primary School, Top End, Great Dalby, Leicestershire (NGR SK 741 145)

Leon Hunt



ULAS Report No 2010-087 ©2010

An archaeological field evaluation at Great Dalby Primary School, Top End, Great Dalby, Leicestershire (SK 741 145)

Leon Hunt

for:

Leicestershire County Council

Approved by

Signed:

Date: 17.05.2010

Name: Patrick Clay

University of Leicester

Archaeological Services
University Rd., Leicester, LE1 7RH

Tel: (0116) 2522848 Fax: (0116) 2522614

ULAS Report Number 2010-087 ©2010 Accession Number X.A79.2010

CONTENTS

Summary	1
Introduction	1
Site Location, Geology and Topography	1
Archaeological Background	
Archaeological Objectives	
Methodology	
Results	
Conclusion	
Acknowledgements	
Archive	4
Appendix 1: Design Specification for archaeological work	8
Appendix 2. OASIS information	
FIGURES	
Figure 1: Site location	
Figure 2: Evaluation trench location plan	4
PLATES	
Plate 1: The site prior to excavation, looking north	
Plate 2: Work in progress on evaluation trench, looking north	6
Plate 3: Post-excavation view of trench, looking north-east	7

An archaeological field evaluation at Great Dalby Primary School, Top End, Great Dalby, Leicestershire (SK 741 145)

Leon Hunt

Summary

University of Leicester Archaeological Services (ULAS) carried out an archaeological field evaluation at Great Dalby Primary School, Top End, Great Dalby, Leicestershire (SK 741 145) in advance of the construction of a new school building.

The Leicestershire and Rutland Historic Environment Record (HER) had shown that the site lies within the medieval and post-medieval core of the village (MLE5943), close to recorded village earthworks (MLE8386) and the findspot of Roman coins (MLE8787).

A 20m long trench was excavated within the footprint of the proposed new building. The excavation revealed shallow topsoil and subsoil overlying the Glacial till (boulder clay) natural substratum; no archaeological features or finds were located during the evaluation.

A destructive search for great crested newts, which have been found in some quantity on the site, was carried out by a licensed ecologist during the evaluation.

The archive for this work will be deposited with Leicestershire Historic and Natural Environment Team with accession number X.A79.2010.

Introduction

University of Leicester Archaeological Services (ULAS) carried out an archaeological field evaluation for Leicestershire County Council at Great Dalby Primary School, Top End, Great Dalby, Leicestershire (NGR: SK 741 145) in advance of the construction of a new school building covering c. 400 square metres.

This work was in accordance with DOE Planning Policy Guideline note 16 (PPG16, Archaeology and Planning, para.30) and was intended to provide preliminary indications of the character and extent of any archaeological remains that may have been present on the site, so that the Planning Authority could assess the potential impact of the proposed development on such remains.

Leicestershire County Council Historic and Natural Environment Team, as archaeological advisors to the planning authority had requested a field evaluation to identify and locate any archaeological remains of significance and proposed suitable treatment to avoid or minimise damage by the development.

The evaluation was to consist of one 20m trench placed within the footprint of the proposed new building.

Site Location, Geology and Topography

The site lies within the grounds of Great Dalby Primary School, Top End, Great Dalby to the north-east of the main school building.

The Ordnance Survey Geological Survey of Great Britain, Sheet 155 indicates that the underlying geology of the site was likely to be glacial till (boulder clay).

The land lies at a height of 120m aO.D and is flat. The land has recently contained a pre-fabricated school building, which had been removed prior to the archaeological work being undertaken. To the north-west of the site, beyond a temporary newt fence lay a medium sized pond. The northern part of the site was bordered by a hedgerow and areas of concrete and an asphalt footpath lay to the south and east.

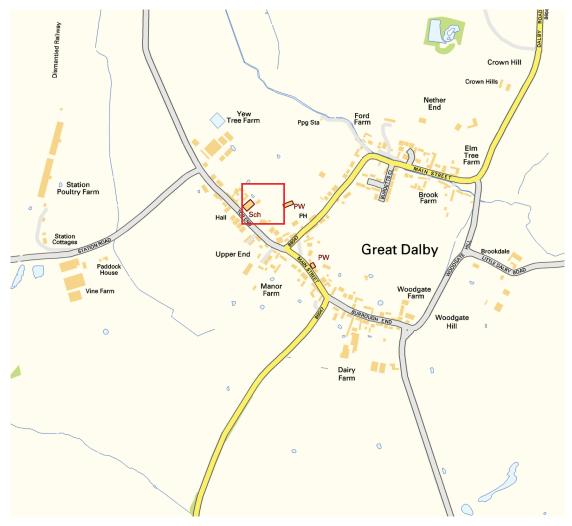


Figure 1: Site location

Contains Ordnance Survey data © Crown Copyright and database right 2010

All rights reserved. Licence number AL 100029495.

Archaeological Background

The Leicestershire and Rutland Historic Environment Record (HER) shows that the site lies within the medieval and post-medieval core of the village (HER No. MLE5943), close to recorded village earthworks (MLE8386) and the findspot of Roman coins (MLE8787).

Archaeological Objectives

The main objectives of the evaluation were:

- To identify the presence/absence of any archaeological deposits.
- To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works.

• To produce an archive and report of any results.

Within the stated project objectives, the principal aim of the evaluation was to establish the nature, extent, date, depth, significance and state of preservation of archaeological deposits on the site in order to determine the potential impact upon them from the proposed development.

Trial trenching is an intrusive form of evaluation that will demonstrate the presence of archaeological deposits that may exist within the area.

Methodology

All work followed the Institute for Archaeologists (IfA) Code of Conduct in accordance with their *Standard and Guidance for Archaeological Field Evaluation* (2008). The archaeological work followed the Design Specification for Archaeological Work prepared by ULAS (Appendix 1).

The area covers c. 650 square metres. A c. 5% sample of this size of area equates to one 20m by 1.6m trench (totalling 32 square metres) placed across the footprint of the proposed new building (Figure 2).

The site had previously contained a temporary classroom and service pipes and areas of hard standing were still present on the site (Plate 1). The trench was placed within an area that contained relatively undisturbed ground, between areas of concrete and tree stumps. A service drain ran across the site from north-west to south-east and could not be avoided; this was left in situ.

The trench was excavated by a JCB backactor fitted with a toothless ditching bucket. It was excavated in level spits down to archaeological layers or natural sub-stratum, whichever the higher (Plate 2).

The site has been identified as containing great crested newts, a species protected by U.K and European law (Part 1 of the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats & c.) Regulations 1994 (as amended)). Therefore, a qualified and licensed ecologist was present on site during the excavation and undertook a fingertip search of the ground during the excavation and the topsoil was checked before the trench was back-filled.

Results

The sequence of sediments and soils within the trench consisted of a 60-120mm layer of dark-brown silty-loam topsoil, overlying 200mm of mid-grey-brown silty-clay subsoil. This overlay the natural substratum of brownish yellow Glacial Till, which contained a few sub-rounded boulders of between 170mm and 240mm diameter, mainly towards the south-western end of the trench.

The total depth of the trench was between 0.23m and 0.33m.

Largely the trench was featureless except for the occasional boulders and several medium sized tree roots. No archaeological remains were encountered (Plate 3).

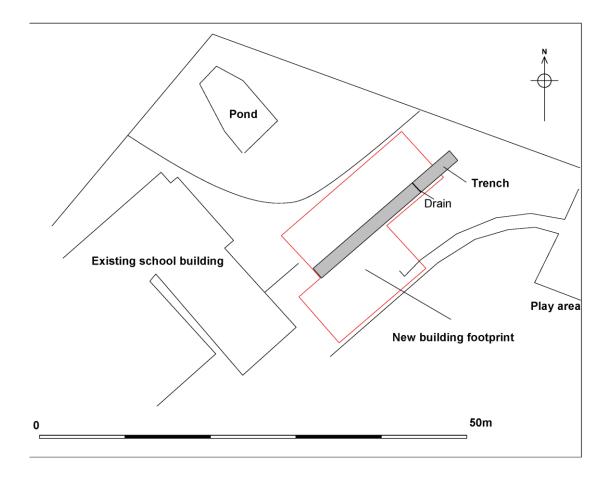


Figure 2: Evaluation trench location plan

Conclusion

The evaluation at Great Dalby Primary School was negative and no archaeological features of finds associated with archaeological remains were discovered during the work.

The depth of the trench was very shallow revealing a very thin layer of soil overlying the natural clay. This may suggest that prior to the construction of the school the land was a garden or pasture. Alternatively, the area may have been reduced and levelled during the construction of the school.

No evidence of great crested newts was discovered during the evaluation.

Acknowledgements

Thanks are due to the staff at the school for their help and hospitality and to Phillipa Harvey the ecologist. Further thanks are due to Richard Douthwaite of Newline for driving the JCB.

The author supervised the site and the project manager was Patrick Clay.

Archive

An archive will be prepared for the site and will be deposited with Leicestershire Historic and Natural Environment Team with accession number X.A79.2010.

The archive consists of the following:

- 1 Unbound copy of this report 2010-087
- 1 list of photographs
- 1 Set of B & W photographs (contact sheet)
- 1 Set B & W negatives
- 1 CD of digital photographs
- 1 Trench recording sheet

Leon Hunt

ULAS

University of Leicester

University Road

Leicester LE1 7RH

Tel: 0116 252 2848

Fax: 0116 252 2614

Email: <u>lh90@le.ac.uk</u>

21-05-2010



Plate 1: The site prior to excavation, looking north



Plate 2: Work in progress on evaluation trench, looking north

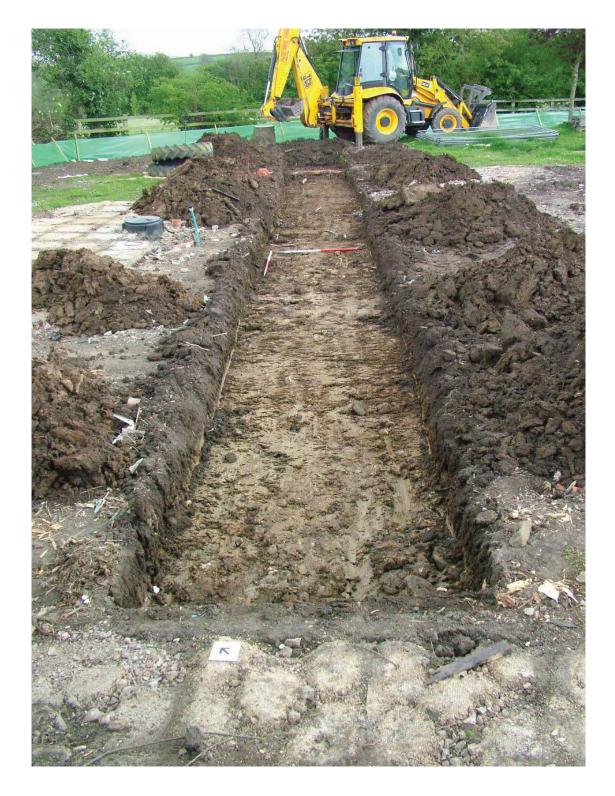


Plate 3: Post-excavation view of trench, looking north-east

Appendix 1: Design Specification for archaeological work

UNIVERSITY OF LEICESTER ARCHAEOLOGICAL SERVICES

Design Specification for archaeological work

Job title: Great Dalby Primary School, Top End, Great Dalby, Leicestershire (SK 741 145)

Client: Leicestershire County Council

Planning Authority: Melton Borough Council

Pre-Planning enquiry

1 Introduction

1.1 Definition and scope of the specification

This document is a design specification for an initial phase of 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 any buried archaeological remains in order that the potential impact of the development on such remains may be assessed by the Planning Authority.

1.2 The definition of archaeological field evaluation, taken from the Institute for 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.

2. Background

2.1 Context of the Project

- 2.1.1 The site is at Great Dalby Primary School, Top End, Great Dalby, Leicestershire (SK 741 145). The Ordnance Survey Geological Survey of Great Britain Sheet 155 indicates that the underlying geology of the site is likely to consist of glacial till (boulder clay). The land lies at a height of around 120m above O.D.
- 2.1.2 Planning permission has been granted for the construction of a new school building covering c. 400 sq metres (Figure 2).
- 2.1.3 Leicestershire County Council, Historic and Natural Environment Team (LCCHNET) as archaeological advisors to the planning authority have requested an evaluation by trial trenching to identify and locate any archaeological remains of significance and propose suitable treatment to avoid or minimise damage by the development. For the compound area they have requested a watching brief during overburden removal.

2.2 Archaeological and Historical Background

2.2.1 The Leicestershire County Council Historic Environment Record (HER) shows that the site lies inside the medieval and post-medieval historic settlement core of the village (HER Ref. No. MLE5943), close to recorded medieval village earthworks (MLE8386) and the findspot of some Roman coins (MLE8787).

3. Archaeological Objectives

- 3.1 The main objectives of the evaluation will be:
 - To identify the presence/absence of any archaeological deposits.
 - To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works.
 - To produce an archive and report of any results.
- 3.2 Within the stated project objectives, the principal aim of the evaluation is to establish the nature, extent, date, depth, significance and state of preservation of archaeological deposits on the site in order to determine the potential impact upon them from the proposed development.
- 3.3 Trial trenching is an intrusive form of evaluation that will demonstrate the existence of earth-fast archaeological features that may exist within the area.

4. Methodology

4.1 General Methodology and Standards

- 4.1.1 All work will follow the Institute for Archaeologists (IfA) Code of Conduct and adhere to their *Standard and Guidance for Archaeological Field Evaluation* (2008).
- 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 Senior Planning Archaeologist the Planning authority and the Client.

4.2 Trial Trenching methodology

- 4.2.1 Topsoil/modern overburden will be removed in level spits, under continuous archaeological supervision, down to the uppermost archaeological deposits by JCB 3C or equivalent using a toothless ditching bucket, once the tarmac has been penetrated.
- 4.2.2 The trench will be excavated to a width of c. 1.6m and down to the top of archaeological deposits.
- 4.2.3 The trenches will be backfilled and levelled at the end of the evaluation.
- 4.2.4 The area of impact covers c. 650 sq metres. A c. 5 % sample of the area is the equivalent of one 20m x 1.6m trenches totaling c. 32 sq m. (Fig. 3). The exact location of the trench may need to be modified depending on constraints on site.
- 4.2.5 The trench will be examined by hand cleaning and any archaeological deposits located will be planned at an appropriate scale and sample-excavated by hand as appropriate to establishing the stratigraphic and chronological sequence. All plans will be tied into the Ordnance Survey National Grid. Spot heights will be taken as appropriate.
- 4.2.6 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 bench mark.

- 4.2.7 Trench locations will be recorded using an electronic distance measurer. These will then be tied in to the Ordnance Survey National Grid.
- 4.2.8 Any human remains will initially be left *in situ* and will only be removed if necessary for their protection, under Ministry of Justice guidelines and in compliance with relevant environmental health regulations.

4.3 Recording Systems

- 4.3.1 The ULAS recording manual will be used as a guide for all recording.
- 4.3.2 Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto pro-forma recording sheets.
- 4.3.3 A site location plan based on the current Ordnance Survey 1:1250 map (reproduced with the permission of the Controller of HMSO) will be prepared. This will be supplemented by a trench plan at appropriate scale, which will show the location of the areas investigated in relationship to the investigation area and OS grid.
- 4.3.4 A record of the full extent in plan of all archaeological deposits encountered will be made. Sections including the half-sections of individual layers of features will be drawn as necessary, typically at a scale of 1:10. The OD height of all principal strata and features will be recorded.
- 4.3.5 A photographic record of the investigations will be prepared illustrating in both detail and general context the principal features and finds discovered. The photographic record will also include 'working shots' to illustrate more generally the nature of the archaeological operation mounted.
- 4.3.6 This record will be compiled and checked during the course of the excavations.

5. Finds and Samples

- 5.1 The IfA *Guidelines for Finds Work* will be adhered to.
- 5.2 Before commencing work on the site, a Site code/Accession number will be agreed with the Planning Archaeologist that will be used to identify all records and finds from the site.
- 5.3 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:
 - 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.
- 5.4 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.
- 5.5 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, Senior Planning Archaeologist; HER and Local Planning Authority.
- 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.
 - A quantitative and qualitative assessment of the potential of the archive for further analysis leading to full publication, following guidelines laid down in *Management of Archaeological Projects* (English Heritage).
- 6.3 A full copy of the archive as defined in the *IfA Standard and Guidance for archaeological archives (Brown 2008)* will normally be presented to Leicestershire County Council 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 Publication and Dissemination of Results

7.1 A summary of the work will be submitted for publication in the *Transactions of the Leicestershire Archaeological and Historical Society*.

8. Acknowledgement and Publicity

- 8.1 ULAS shall acknowledge the contribution of the Client in any displays, broadcasts or publications relating to the site or in which the report may be included.
- 8.2 ULAS and the Client shall each ensure that a senior employee shall be responsible for dealing with any enquiries received from press, television and any other broadcasting media and members of the public. All enquiries made to ULAS shall be directed to the Client for comment.

9. Copyright

9.1 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.

10. Timetable

- 10.1 The evaluation start is to be arranged to take palce on 31.03.2010 with two staff.
- 10.2 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.

11. Health and Safety

11.1 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.
- 11.2 A Risks assessment will be completed prior to work commencing on-site, and updated as necessary during the site works.

12. Insurance

12.1 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.

13. Monitoring arrangements

- 13.1 Unlimited access to monitor the project will be available to both the Client and his representatives and Planning Archaeologist subject to the health and safety requirements of the site. At least one weeks notice will be given to the LCCHS Senior Planning Archaeologist before the commencement of the archaeological evaluation in order that monitoring arrangements can be made.
- 13.2 All monitoring shall be carried out in accordance with the IfA *Standard and Guidance for Archaeological Field Evaluations*.
- 13.3 Internal monitoring will be carried out by the ULAS project manager.

14. Contingencies and unforeseen circumstances

14.1 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.

15. Bibliography

Brown, D., Standard and guidance for the preparation of Archaeological Archives (Institute for Archaeologists)

Patrick Clay Director

ULAS University of Leicester University Road Leicester LE1 7RH

Tel:0116 252 2848 Fax: 0116 252 2614

Email: pnc3@le.ac.uk

© ULAS 19/03/2010

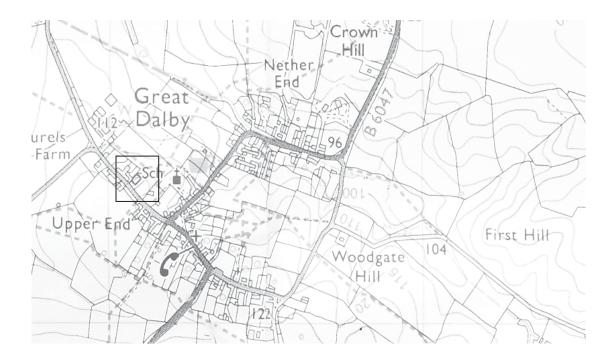


Figure 1 Location of the application area

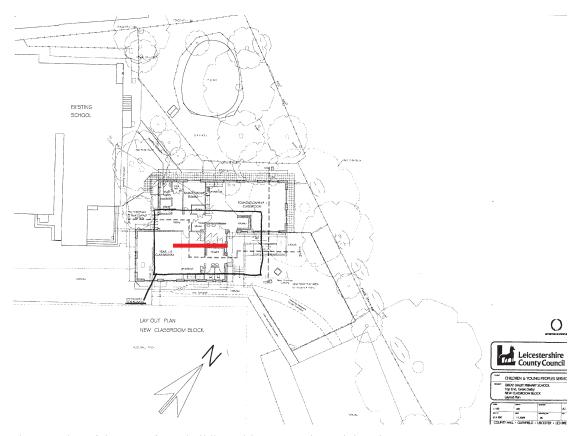


Figure 2 Plan of the area of new building with suggested trench location.

APPENDIX 1

Draft Project Health and Safety Policy Statement

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 Brief description of the work involved e.g.

The work will involve machine excavation by JCB 3C or equivalent 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. Deeper features will be fenced with lamp irons and hazard tape. Three staff will be used on the evaluation.

2 Risks Assessment

2.1 Working on an excavation site.

Precautions. Trenches to not be excavated to a depth exceeding 1.2m. Spoil will be kept 1.5m away from the edge of the excavated area to prevent falls of loose debris. Loose spoil heaps will not be walked on. Protective footwear will be worn at all times. Hard hats will be worn when working in deeper sections or with plant. 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 topsoil stripping at all times. Hard hats, protective footwear and hazard 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.

2.3 Working within areas prone to waterlogging.

If waterlogging occurs on site preventing work continuing it is proposed to excavate a sump, suitably fenced and clearly marked to enable the water to drain away. If this is insufficient a pump will be used. The sump will be covered when not in use and backfilled if no longer required. Protective clothing will be worn at all times and precautions taken to prevent contact with stagnant water which may carry Wiels 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.

Appendix 2. OASIS information

Project Name	An archaeological field evaluation at Great Dalby Primary School, Top End, Great Dalby, Leicestershire (SK 741 145)
Project Type	Evaluation by trial trench
Project Manager	P. Clay
Project Supervisor	L Hunt
Previous/Future work	Not known
Current Land Use	School grounds
Development Type	New school building
Reason for Investigation	Planning request
Position in the Planning Process	Pre-planning enquiry
Site Co ordinates	SK 741 145
Start/end dates of field	07-05-2010
work	
Archive Recipient	Leicestershire Museums
Study Area	400 sq metres

Contact Details

Richard Buckley or Patrick Clay University of Leicester Archaeological Services (ULAS) University of Leicester, University Road, Leicester LE1 7RH

T: +44 (0)116 252 2848 **F:** +44 (0)116 252 2614

E: ulas@le.ac.uk w: www.le.ac.uk/ulas











