## An Archaeological Watching Brief on land at junction of Nottingham Road and St Bartholomews Way, Melton Mowbray, Leicestershire (SK 742 210).

## John Tate

Planning Application no. 03/00314/FUL
Planning Authority: Leicestershire County Council

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Cont	tents			
1	Summary	1		
2	Introduction	1		
3 4 5 6 7 8 9	Aims and Methods Results Discussion Conclusion Archive Acknowledgements Bibliography	3 4 6		
			7	
			7	
		8		
		8		
		10	Appendix - Design Specification	9
Figur	res			
1	Site location	2		
2	Location of the development area on 1975 and 1986 maps	3		

6

Location of trenches and stripping within the development area

3

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## 1. Summary

An archaeological watching brief was undertaken by the University of Leicester Archaeological Services (ULAS) on behalf of Jelson Ltd prior to the construction of residential dwellings, access roads and car parking spaces. The desk-based assessment highlighted the potential for medieval, Roman and Anglo-Saxon remains within the proposed development area. No previous archaeological work had been undertaken on the site and no structures had been built on the site prior to 1986, where the land appears to have been a part of the medieval open field system of Melton Mowbray (Marsden and George 2003). The watching brief was largely negative, except for the evidence of ridge and furrow, known to have existed here in a south-west to north-east orientation. The site archive will be held by Leicestershire County Council, Heritage Services Section, accession number X.A132.2005.

## 2. Introduction

- **2.1** The development area of c.4.6ha lies to the north-west of Melton Mowbray at the junction of Nottingham Road and St Bartholomews Way at c.115m O.D. The underlying geology was Boulder Clay.
- 2.2 The archaeological watching brief was carried out by University of Leicester Archaeological Services (ULAS) and was required in response to the lack of an archaeological evaluation which was a part of a scheme of work to fulfil the planning conditions (Planning Application no. 03/00314/FUL) required by Leicestershire County Council. The buildings that had been previously constructed on the site had been removed, creating a massive intrusion *c*.2m deep in places across much of the development area on the whole of the western side. Elsewhere, topsoil and subsoil had been removed.
- 2.3 A desk-based assessment was completed that concluded the area has high to moderate potential for containing archaeological deposits or finds of medieval date, and moderate potential for containing archaeological remains of Roman and Anglo-Saxon date (Marsden and George 2003). This was based on SMR data that lists various sites and finds from around the development area. This included the earthworks of the medieval grange of Sysonby 200m to the west and the associated fish ponds, and three medieval finds. An

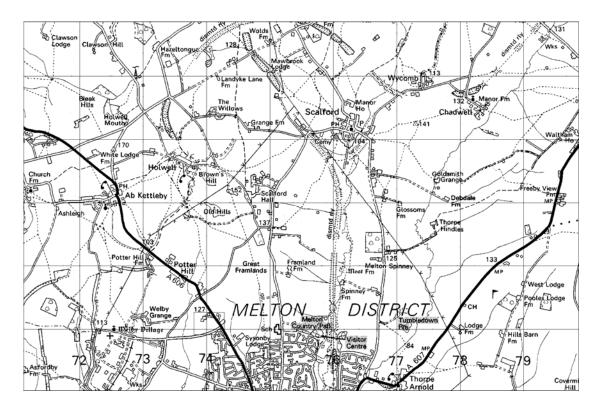


Fig.1 - Site location Scale 1:50000

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.

Early Anglo-Saxon inhumation cemetery lies 400m north of the development area, and a late Roman coin was found in a garden 75m south of the proposed development.

2.4 In response to the desk-based assessment, a design specification was written according to the planning advice that an archaeological evaluation should be carried in the form of trial trenching within the development area. However, due to the demolition and landscaping and topsoil stripping that had been undertaken on the site, trial trenching was not possible. In light of this, the methodology was changed to concentrate on the areas where less disturbance had taken place. The area to the north and east was to be cleaned by machine using a ditching bucket. Surviving topsoil/modern overburden was to be removed in level spits, under continuous archaeological supervision, down to the uppermost archaeological deposits (see design specification in appendix).

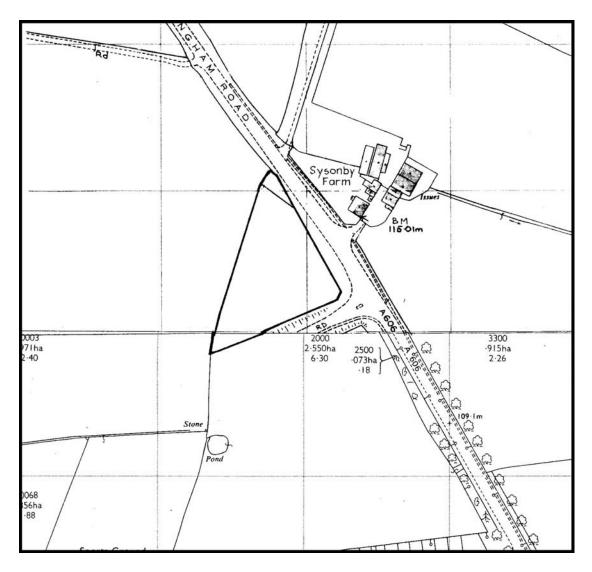


Fig.2. Location of the development area on 1975 and 1986 maps Scale 1:2500

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## 3. Aims and Methods

## 3.1 Aims

- 3.1.1 Through archaeological control and supervision of existing overburden stripping and by the client's contractors:
  - 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 excavate and record any archaeological deposits to be affected by the ground works.
  - To produce an archive and report of any results.

#### 3.2 Methods

- 3.2.1 A JCB mechanical digger with a 1.6m wide toothless ditching bucket was used to excavate disturbed subsoil in level spits and scrap back areas of exposed natural under continuous archaeological supervision.
- 3.2.2 All plans were tied into the Ordnance Survey National Grid.
- 3.2.3 All work adhered to the Institute of Field Archaeologists Standard and Guidance For Archaeological Evaluation.

## 4. Results

It was apparent from initial inspection that the ground to the south of the bund of topsoil had been disturbed and was in fact the re-deposited natural substratum mixed with building debris. It was decided to place two trenches in this area (Fig.3).

#### 4.1 Trench 1

#### Trench 1 Details

Length of Trench 25m

Area of Trench 40 sq. m

Surface Level (m OD) c.115m

Base of Trench (m OD) c.114.52m

Trench 1 was situated in the south-eastern corner of the site with orientation north-west to south-east. A grey boulder clay redeposited natural was exposed and removed to a depth of c.0.4m. This revealed a disturbed mid orangey brown subsoil with occasional mineralization deposits of iron panning and manganese c.0.08m deep. Below this a light-mid yellow brown clay natural with occasional chalk and flint or a light-mid brownish yellow clay natural substratum was revealed. There were two areas of modern intrusion at 6-7m and 12.5-15m from the south-eastern end of the trench. Ridge and furrow was apparent in this trench, where furrows were filled with subsoil. These subsoil filled furrows were seen at 4.5-5m, 10-11m and 16-17m from the south-east end running south-west to north-east. Ridges in the natural substratum were not visible due to the nature of the modern truncation. Otherwise, no archaeological features were revealed and no finds were recovered from the trench.

#### 4.2 Trench 2

## Trench2 Details

Length of Trench 26m

Area of Trench 41.6 sq. m

Surface Level (m OD) c.115m

Base of Trench (m OD) c.114.31m

Trench 2 was also situated in the south-eastern corner of the site, 5m to the west of trench 1. As seen in trench 1, a grey re-deposited boulder clay with occasional building debris was exposed and removed to a varied depth of 0.05-0.40m. This revealed a mid orangey brown subsoil with occasional mineralization deposits of iron panning and manganese 0.02-0.29m deep. This revealed a light-mid yellow brown clay natural substratum with occasional chalk and flint or a light-mid brownish yellow clay natural. Ridge and furrow was dominant in this trench, with furrows filled with subsoil and ridges apparent below the subsoil. Furrows were located at 3m, 10.5m, 17m, and 24m with ridges at 6.5m, 14m, and 21m from the south-eastern end. Otherwise, no archaeological features were revealed and no finds were recovered from the trench.

## 4.3 Trench 3/Area 1

Trench 3 was placed, firstly to assess the nature of the ground, as the state of the ground to the south had been unexpected. The 8m of east-west trenching here was through a disturbed light grey re-deposited boulder clay natural substratum that contained frequent building material. This was possibly associated with a gate in the field c.5m south from this location at the east end of the trench. Towards the western extent, this intrusive material stopped and rose to the current ground level, of an exposed light-mid yellow brown clay natural with occasional chalk and flint or a light-mid brownish yellow clay natural. This was then scrapped over by machine for an area c.100m/sq to the west. Other than a few modern intrusions, no archaeological features were revealed and no finds were recovered from the trench or area.

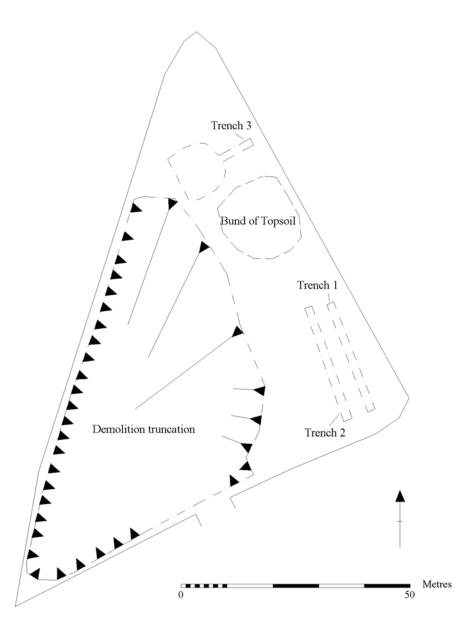


Fig. 3 – Showing location of trenches and stripping within the development area.

## 5. Discussion

5.1 It was apparent that this site has suffered greatly in recent years from modern intrusion and levelling of the ground. In particular, the removal of the buildings previously on the site to the west resulted in the removal of at least 1m of natural substratum, destroying any archaeology that may have still remained within this area. The area to the south-east had suffered prior levelling, where subsoil seemed to have been replaced with a re-deposited natural, truncating what remained of the medieval ridge and furrow. The area to the north-east had already been stripped down to the natural substratum and any

archaeological deposits which may have been present would have been destroyed due to the depth of truncation that had occurred here. The lack of ridge and furrow evidence here would suggest that at least c.0.2m of natural clay had already been removed from this area.

- 5.2 The ridge and furrow discovered here, with orientation south-west to north-east, supports the desk-based assessment (Marsden and George 2003), which concluded that the development area was probably part of the medieval open fields of Melton Mowbray.
- 5.3 Ridge and furrow earthworks were formed by repeated ploughing, using a coulter, share and mouldboard. Although the mouldboard had been in use since prehistoric times, this type of ploughing equipment was common from the 11th century. It required a team of oxen or horses to provide traction. The coulter and share were pulled through the earth and the mouldboard turned the sod to one side. When the team had turned, the process was repeated from the opposite direction, turning the sod so that it abutted the first, forming a ridge. The ridge was thought to aid drainage and also to define the limits of a persons land (Astill, 1988, 70). From the 16th century onwards fields were turned over to permanent pasture, which has lead to the effect of 'fossilising' ridge and furrow in the landscape (Astill 1988, 71). Similar earthworks have also been made by more modern processes, such as 19th early 20th century steam ploughing; however, these tend to be very straight and exactly parallel with hedge boundaries.

## 6. Conclusion

- 6.1 The development area has suffered substantially in recent years from modern truncation, and has almost certainly had an impact on archaeological remains which may have been present within the site. The removal of the prior dwelling resulted in heavy truncation of almost half the site.
- 6.2 Where truncation was minimal, ridge and furrow was discovered within the development area, supporting the evidence that the site was once a part of the medieval open fields of Melton Mowbray.

## 7. Archive

The site archive will be held by the Heritage Services section, Community Services department, Leicestershire County Council, accession number X.A132.2005. It consists of

a site plan (digital), records, and digital photographs. A brief summary of this report will be published in *The Transactions of the Leicestershire Archaeological and Historical Society* in due course.

## 8. Acknowledgements

I would like to thank Mr. Alan Staley of Jelson Ltd. for his help and co-operation during this watching brief.

## 9. Bibliography

Astill G., 1988 'Fields' in G. Astill and A. Grant (eds) 1988 The Countryside of Medieval England Blackwell pp62-85

Marsden P. & An Archaeological Desk-based Assessment for land at junction of George S., Nottingham Road and St Bartholomews Way, Melton Mowbray, Leicestershire (SK 742 210) ULAS Report no. 2003/142

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## 10. Appendix – Design Specification

## UNIVERSITY OF LEICESTER ARCHAEOLOGICAL SERVICES

## **Design Specification for archaeological work**

Job title: Nottingham Road, Melton, Mowbray, Leicestershire NGR: SK 742 210

Client: Jelson Ltd

Planning Authority: Melton Borough Council

P. A 03/000314/6

- 1 Introduction
- 1.1. 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. It addresses the requirements for a archaeological evaluation and earthwork survey as detailed in the advice letter from Leicestershire County Council, 23.5.2003 to Melton Borough Council following Planning Policy Guidelines 16 (PPG16, Archaeology and Planning), para.30.
- 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.
- 2. Background
- 2.1 Context of the Project
- 2.1.1 The proposed development site is located north of Melton Mowbray on the west side of Nottingham Road. It consists of an area of c.1 ha. A desk-based assessment has been prepared (ULAS Report 2003-142). The Leicestershire Sites and Monuments Record indicates that the site for development lies 200m east of the Scheduled Ancient Monument earthworks of the medieval Sysonby Grange (LE4002) and various medieval sites are located in the vicinity. In addition, Roman finds (LE9778) and an Anglo Saxon cemetery (LE4004) have been located in the vicinity of the proposed development.
- 2.1.2 Planning permission has been granted for residential development.
- 2.2 Geological and Topographical Background
- 2.2.1 The underlying geology is likely to consist of boulder clays (BGS Sheet 142). The site lies at a height of c. 115m OD.

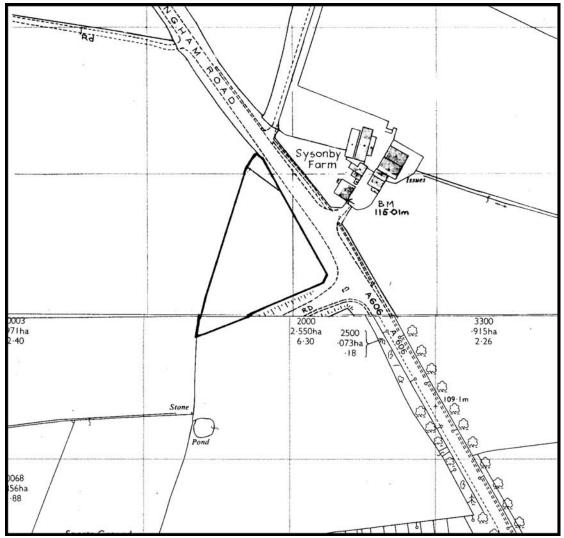


Fig. 1. Location of the development area 1986 Ordnance Survey map Leicestershire Sheet No. SK6723 with development area outlined (Scale 1:2500)

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#### 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 of Field Archaeologists (IFA) Code of Conduct and adhere to their Standard and Guidance for Archaeological Field Evaluation (1999) and the guidelines for Archaeological work in Leicestershire and Rutland (Leicestershire County Council 1997).
- 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 Archaeologist, the Planning authority and the Client.

## 4.2 Methodology

- 4.2.1 As demolition and landscaping and topsoil stripping has been undertaken, trial trenching is not possible in this case. The areas where less disturbance has taken place to the north and east will be cleaned by machine using a ditching bucket. Surviving 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.
- 4.2.2 The cleaned surfaces 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 establish the stratigraphic and chronological sequence. All plans will be tied into the Ordnance Survey National Grid. Spot heights will be taken as appropriate.
  - 4.2.3 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.
- 4.2.4 Trench locations will be recorded using an electronic distance measurer. These will then be tied in to the Ordnance Survey National Grid.
- 4.2.5 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.
- **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:

- 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.
- 5.4 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; SMR 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).
- 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 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* ('Brief' 15.7). A larger report will be submitted for inclusion if the results of the evaluation warrant it.
- 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 site examination is scheduled to start in early June 2005.
- 10.2 The report will be ready within three weeks of the completion of fieldwork. 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
- All employees, consultants and volunteers are covered by the University of Leicester public liability insurance with Gerling Insurance Service Co. Ltd. and others (leading policy no. 62/99094/D). Professional indemnity insurance is with Sun Alliance, £10m cover, policy no. 03A/SA 001 05978. Employer's Liability Insurance is with Eagle Star, cover £10m. Copies of the certificates of insurance are provided.
- 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 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

MAP 2 The management of archaeological projects 2nd edition English Heritage 1991

MGC 1992 Standards in the Museum Care of Archaeological Collections 1992 (Museums and

Galleries Commission)

RFG/FRG 1993 Guidelines for the preparation of site archives (Roman Finds Group and Finds

Research Group AD 700-1700 1993)

SMA 1993 Selection, retention and Dispersal of Archaeological Collections. Guidelines for use

in England, Wales and Northern Ireland 1993 (Society of Museum Archaeologists)

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#### APPENDIX 1

#### **Draft Project Health and Safety Policy Statement**

Job title: Nottingham Road, Melton, Mowbray, Leicestershire NGR: SK 742 210

Client: Jelson Ltd

Planning Authority: Melton Borough Council

P. A 03/000314/6

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. 0.2 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.

1.2 Overhead electricity wires crosses the site from east to west. The trenches will be excavated no less than 7 metres from their line. The machine will only travel beneath the cables following construction of 'goalposts' to ensure the machine is clear of the wires. The goalposts are to be supplied by the client.

#### 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. Overhead power lines are present to the south of the areas to be evaluated. The machine will maintain a distance of at least 10 m to the north of the powerlines.

#### 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 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.