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**Leicester**

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**Archaeological Services**

**An archaeological field evaluation  
on land at  
Brook Farm,  
Chaddesden,  
Derby  
(SK 388 372)**

Leon Hunt



ULAS Report No 2014-013  
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on land at Brook Farm, Chaddesden,  
Derby  
(SK 388 372)  
Leon Hunt**

*for*  
Radleigh Group Ltd

**Checked by Project Manager**

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## **An archaeological field evaluation on land at Brook Farm, Chaddesden, Derby (SK 388 372)**

### **Leon Hunt**

Leon Hunt

### **Summary**

*An archaeological field evaluation was carried out on land at Oregon Way, Chaddesden, Derby (NGR: SK 388 372) by University of Leicester Archaeological Services (ULAS) for Radleigh Group Ltd in advance of the proposed development of the site for new housing.*

*The site consists of a number of fields of rough grassland located on the north-eastern edge of Chaddesden to the north of Oregon Way and to the west of Acorn Way. The land falls fairly steeply from south to north towards a brook.*

*There was a possible large earthwork in one of the fields, which was believed to be a building platform. The Historic Environment Record for Derbyshire lists it as possibly associated with the Chaddesden Rectory for the Knights of Saint Lazarus, which is said to have existed somewhere in the locality.*

*A geophysical survey carried out prior to the evaluation was fairly negative for anomalies that may have been archaeological in nature. However, the survey did pick up many plough furrows and also a possible large service pipe. There were also some anomalies that may have been linear archaeological features.*

*A total of 7 trenches were placed across the fields. Trench 1 was placed across a possible linear in one field and Trenches 2-7 were placed across the field containing the possible earthwork and across the possible earthwork itself.*

*The evaluation was negative for archaeological features. The soils were very thin on the southern part of the site, thickening as the land fell northwards, possibly due to colluvial build-up. The 'earthwork' is most likely a change in the geology at this point where the glacial clay, overlain by a thick layer of colluvium, meets the alluvium from the brook.*

### **Introduction**

University of Leicester Archaeological Services (ULAS) were commissioned by Radleigh Group to carry out an archaeological field evaluation by trial trenching on land at Brook Farm, Chaddesden, Derby (SK 388 372).

The evaluation was in advance of the proposed development of the land for new housing. The site currently comprises a number of rectangular fields of open grassland.

The archaeological work was in accordance with NPPF Section 12: Enhancing and Conserving the Historic Environment.



The Historic Environment Record (HER) for Derbyshire records that a possible earthwork located in one of the fields, may be associated with a lost medieval rectory that is said to be located somewhere in the locality.



Figure 1: Site Location

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### Location, Geology and Topography

The assessment area lies to the east of the town centre of Chaddesden, Derby (Figure 1). The site consists of four large and two small sub-rectangular fields, divided by grown out hedgerows, oriented east to west with total area of 9.2 hectares.

The site is bordered to the north by the Lees Brook and by Acorn Way to the east. Brook Farm itself lies to the west and Windmill Hill Plantation and the housing areas of Tennessee Road and Oregon Way lie to the south (Figure 2).



The land falls fairly steeply from south to north from around 80m aOD to around 55m aOD.

The British Geological Survey website indicates that the underlying geology of the site is likely to be Mercia Mudstone Group clay over most of the site, with Tarporley Siltstone Formation in the north-west corner of the site, possibly overlain by alluvium along the edge of the Lees Brook to the north.

The site is currently open green space and covered in rough grassland.

The fields to be evaluated are annotated as Field 1 (small rectangular field) and Field 2 (larger rectangular field) shown on Figure 2.

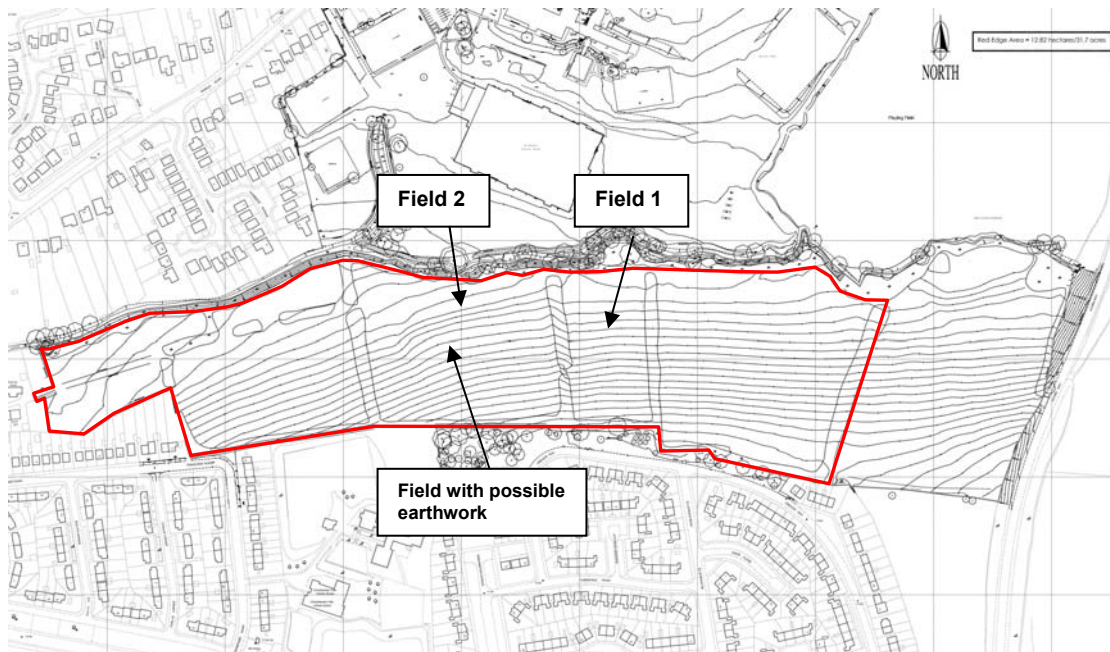


Figure 2: Plan of proposed development area (red line).  
Fields to be evaluated marked for ease of identification

### Archaeological Background

An archaeological desk-based assessment was prepared in 2013 by ULAS (Hunt 2013). This document indicated that the Historic Environment Record (HER) for Derbyshire shows that an earthwork possibly associated with a medieval building (HER Ref No. **MDR13917**) was located in one of the fields at Brook Farm (Field 1).

The earthwork was located by aerial photography and consists of a large rectangular earthwork measuring around 150m by 45m (Plate 1). It has been suggested that this may be the site of the Chaddesden Rectory for the Knights of Saint Lazarus, which was said to be situated less than 2 miles from Locko (which lies to the north-east). Successive site visits have been inconclusive as the vegetation is generally very long here.

However, during a site visit in July 2013, some stone work was discovered in the brook to the direct north of the earthwork. Photographs from the site visit appear to represent a wall beneath a line of trees. It was thought that the earthwork and the stonework in the brook may be related in some way.

Recent research by a local historian has also uncovered evidence that a watermill once existed to the north of the site along the edge of the Lees Brook (Cholerton 2013).

There are a few other known archaeological sites in the vicinity of the site.

The site lies around 1km north-east of the line of the Roman road that runs from the Roman Little Chester site to Sawley (**MDR7855**; **MDR11319**). A Roman coin, a silver denarius of Vespasian, was found in Chaddesden Park, 600m south-west of the assessment area (**MDR4540**).

A geophysical survey was carried out by Stratascan in January 2014 across the whole of the proposed development area (Figure 3). The geophysical survey located medieval ridge and furrow earthworks across the land, but these are faint where the earthwork was said to be (Field 1). The survey also picked up a possible service line in another field (Field 2) and a few other anomalies, which may have been associated with archaeological features.



Plate 1: The possible 'earthwork' in Field 1, looking east

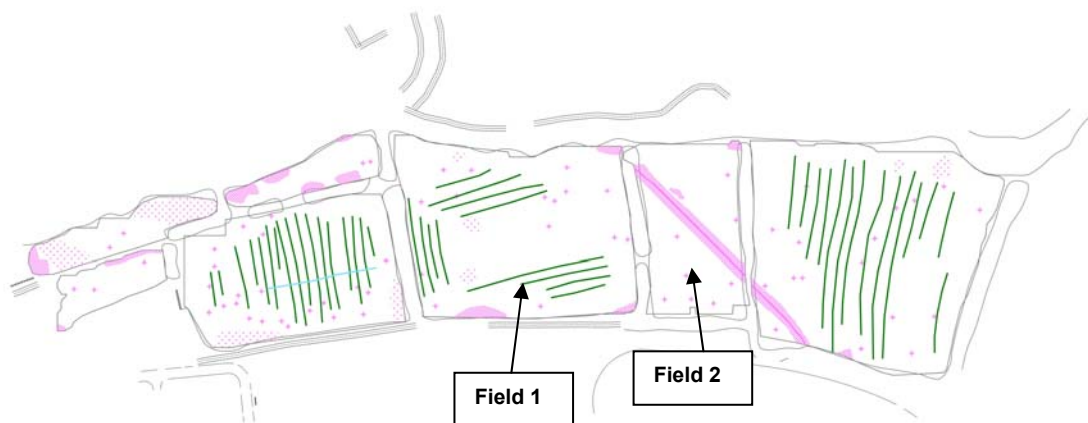


Figure 3: Plan of geophysical survey results, provided by Stratascan. Ridge and furrow in green, probable service pipe in pink

## 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 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.

Trial trenching is an intrusive form of evaluation that will demonstrate the existence of earth-fast archaeological features that may exist within the area.



Plate 2: Work in progress on Trench 7, looking south-east

## Methodology

All work followed the Institute for Archaeologists (IfA) *Code of Conduct* (2010) in accordance with their *Standard and Guidance for Archaeological Field Evaluation* (2010). The archaeological work followed the *Written Scheme of Investigation (WSI) for archaeological work* (WSI) prepared by ULAS (Appendix).

The WSI asked for a sample targeting of the area of the possible earthwork and within the field containing the possible earthwork. A further trench was to be excavated in another field, which may contain a linear feature. The trenching covered *c.* 380m<sup>2</sup>, which is the equivalent of seven 30m x 1.8m trenches (Figure 4).

The trenches were excavated using a 16 tonne tracked excavator fitted with a flat bladed ditching bucket under constant supervision of an archaeologist (Plate 2). The trenches were to be excavated to the top of any archaeological remains or the natural



sub-stratum, whichever the higher. Topsoil and subsoil layers were kept in separate spoil heaps and the trenches were back-filled after recording and photographing.

The ditching bucket was actually 2.1m wide and the trenches were a little shorter than 30m in most cases.

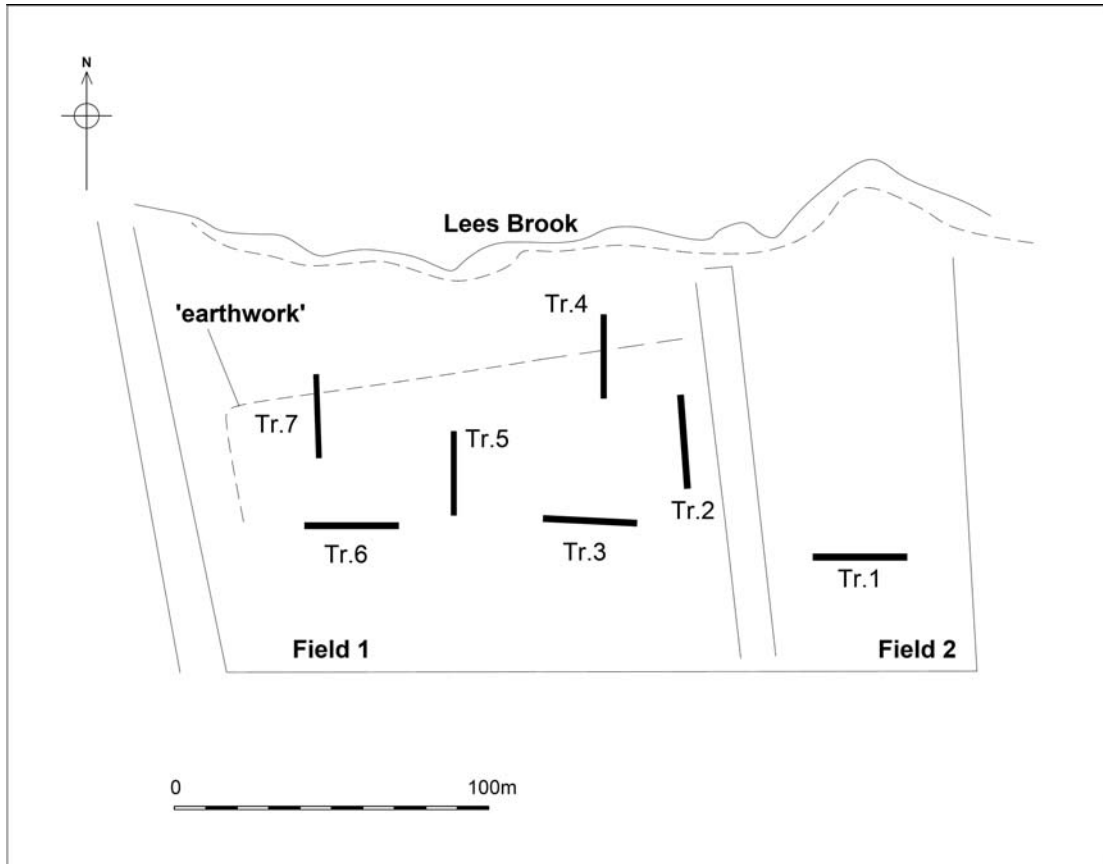


Figure 4: Plan of trench locations

## Results

The topsoil throughout the site was largely a loamy and soft dark reddish brown silty clay, with very rare small stones. Under this in places was a yellowish brown or brownish red silty clay subsoil, which was very thin or virtually non-existent at the southern end of the site, getting deeper to the north, especially around the area of the earthwork.

### Trench 1

Orientation: E-W

Length: 30m

Width: 2.2m

Interval	W 0m	5m	10m	15m	20m	25m	29.5m E
<b>Topsoil Depth</b>	0.20m	0.18m	0.20m	0.20m	0.22m	0.28m	0.20m
<b>Subsoil</b>	0.08m	-	0.14m	-	0.10m	-	0.12m

<b>Top of natural</b>	0.28m	0.18m	0.34m	0.20m	0.32m	0.28m	0.32m
<b>Base of trench</b>	0.30m	0.19m	0.35m	0.25m	0.36m	0.38m	0.33m

No archaeological features or artefacts were discovered within this trench (Plate 3). The subsoil was very thin and patchy throughout the trench.



Plate 3: Post excavation shot of Trench 1 in Field 1, looking east

### ***Trench 2***

Orientation: N-S

Length: 29.3m

Width: 2.2m

<b>Interval</b>	<b>S 0m</b>	<b>5m</b>	<b>10m</b>	<b>15m</b>	<b>20m</b>	<b>25m</b>	<b>29.3mN</b>
<b>Topsoil Depth</b>	0.30m	0.20m	0.26m	0.26m	0.23m	0.24m	0.23m
<b>Subsoil</b>	0.12m	0.23m	0.20m	0.21m	0.33m	0.40m	0.37m
<b>Top of natural</b>	0.42m	0.43m	0.46m	0.47m	0.56m	0.64m	0.60m
<b>Base of trench</b>	0.43m	0.45m	0.50m	0.48m	0.67m	0.65m	0.62m

No archaeological features or artefacts were discovered within this trench.

**Trench 3**

Orientation: E-W

Length: 29m

Width: 2.2m

Interval	E 0m	5m	10m	15m	20m	25m	29.5m W
<b>Topsoil Depth</b>	0.20m	0.30m	0.32m	0.30m	0.30m	0.30m	0.24m
<b>Subsoil</b>	0.10m	0.30m	0.23m	0.20m	0.25m	0.20m	0.23m
<b>Top of natural</b>	0.30m	0.60m	0.55m	0.50m	0.55m	0.50m	0.47m
<b>Base of trench</b>	0.31m	0.65m	0.60m	0.59m	0.60m	0.60m	0.48m

No archaeological features or artefacts were discovered within this trench.

**Trench 4**

Orientation: N-S

Length: 27m

Width: 2.2m

Interval	S 0m	5m	10m	15m	20m	25m	27m N
<b>Topsoil Depth</b>	0.30m	0.36m	0.24m	0.34m	0.30m	0.26m	0.28m
<b>Subsoil</b>	0.32m	0.45m	0.64m	0.55m	0.60m	0.26m	0.23m
<b>Top of natural</b>	0.62m	0.81m	0.88m	0.89m	0.90m	0.52m	0.51m
<b>Base of trench</b>	0.62m	0.83m	0.93m	0.92m	0.95m	0.60m	0.53m

No archaeological features or artefacts were discovered within this trench.

**Trench 5**

Orientation: N-S

Length: 28.5m

Width: 2.2m

Interval	S 0m	5m	10m	15m	20m	25m	28.5m N
<b>Topsoil Depth</b>	0.21m	0.22m	0.20m	0.23m	0.30m	0.24m	0.29m



<b>Subsoil</b>	0.12m	0.20m	0.34m	0.43m	0.60m	0.65m	0.29m
<b>Top of natural</b>	0.33m	0.42m	0.54m	0.66m	0.90m	0.89m	0.58m
<b>Base of trench</b>	0.35m	0.45m	0.62m	0.89m	0.95m	0.94m	0.58m

No archaeological features or artefacts were discovered within this trench

**Trench 6**

Orientation: E-W

Length: 29.5m

Width: 2.2m

<b>Interval</b>	<b>E 0m</b>	<b>5m</b>	<b>10m</b>	<b>15m</b>	<b>20m</b>	<b>25m</b>	<b>29.5mW</b>
<b>Topsoil Depth</b>	0.23m	0.20m	0.12m	0.20m	0.16m	0.20m	0.19m
<b>Subsoil</b>	0.20m	0.14m	0.14m	0.19m	0.14m	0.20m	0.20m
<b>Top of natural</b>	0.43m	0.34m	0.26m	0.39m	0.30m	0.40m	0.39m
<b>Base of trench</b>	0.48m	0.40m	0.32m	0.40m	0.32	0.45m	0.39m

No archaeological features or artefacts were discovered within this trench (Plate 4)



Plate 4: Post excavation shot of Trench 6 in Field 2, looking west



Plate 5: Post excavation shot of Trench 7 across ‘earthwork’, looking north

***Trench 7***

Orientation: N-S

Length: 30m

Width: 2m

<b>Interval</b>	<b>W 0m</b>	<b>5m</b>	<b>10m</b>	<b>15m</b>	<b>20m</b>	<b>25m</b>	<b>29.5m E</b>
<b>Topsoil Depth</b>	0.18m	0.22m	0.22m	0.27m	0.27m	0.23m	0.27m
<b>Subsoil</b>	0.30m	0.17m	0.40m	0.43m	0.42m	0.40m	0.22m
<b>Top of natural</b>	0.48m	0.39m	0.62m	0.60m	0.63m	0.63m	0.49m
<b>Base of trench</b>	0.48m	0.42m	0.64m	0.75m	0.72m	0.76m	0.51m

No archaeological features or artefacts were discovered within this trench (Plate 5).

**Conclusion**

The Historic Environment Record for Derbyshire indicated that there are few known archaeological sites in the vicinity of the land at Brook Farm. However, historically there is evidence for a medieval rectory to exist 2 miles from the village of Locko to the north-east of the site.

It has been suggested that an earthwork feature, located by aerial photography and visible on modern satellite imagery of the site could have been a building platform associated with the lost rectory. Furthermore stonework had been located in the north facing bank of the Lees Brook to the north of the field containing the earthwork,

which, it was suggested may be further evidence of a medieval building in the vicinity.

The earthwork itself consisted of a ridge or drop in the land running east to west for around 150m in the field, around 100m from the edge of the brook. The earthwork appeared to possibly curve around to the south and gave the impression of a possible building platform.

A geophysical survey of the site revealed the remains of medieval ridge and furrow earthworks and a possible service pipe, but the area within the earthwork showed very faint furrows. There were some other anomalies identified on the geophysical survey that may have been archaeological in origin.

Therefore, a total of seven trenches were placed across the site in order to test for archaeological features. One (Trench 1) was placed across a possible linear feature identified in Field 1 and the other six (Trenches 2-7) were placed across, close to or within the earthwork in Field 2.

All seven trenches were negative for archaeological features. The sequence largely consisted of quite thin topsoil and subsoil overlying a red and greyish blue mudstone sub-stratum throughout the trenches closer to the southern end of the site, with the subsoil becoming much thicker to the north. The subsoil, possibly colluvial in nature was particularly thick along the line of the possible earthwork, before thinning out again to the north.

It seems likely that the earthwork is natural in origin, possible formed during glaciation, although as the subsoil is so thick across the line of the earthwork it may also be that the 'earthwork' is colluvial in nature, formed where the soil has slipped down the slope over time to come to a rest in this formation. The land is very flat beyond the drop, as it leads to the brook. It may be that the mudstone formation falls here towards the brook and the flat area is alluvial in nature and lies up against and over the mudstone here, with the change in the geology forming the ridge in the land.

## **References**

Cholerton, P at <http://www.chaddesdenhistoricalgroup.co.uk/2013/08/bradcar-water-mill>

Hunt, L 2013 *An archaeological desk-based assessment for land at Brook Farm, Chaddesden, Derby (SK 388 372)*. ULAS Report No. 2013-130

## **Acknowledgements**

ULAS would like to thank Martyn Pask of Radleigh Group Ltd for his help and co-operation with this project. Thanks are also due to Paul Dove and other members of the Chaddesden Historical Group.

The project was managed by Patrick Clay and the work carried out by the author. The machine was supplied by Planters and was ably driven by Mickey Hall or Scott Croot.

## **Publication**

Since 2004 ULAS has reported the results of all archaeological work through the *Online Access to the Index of Archaeological Investigations* (OASIS) database held by the Archaeological Data Service at the University of York.

A summary of the work will also be submitted for publication in a suitable regional



archaeological journal in due course.

*OASIS data entry*

Project Name	Brook Farm, Chaddesden, Derby
Project Type	Field Evaluation
Project Manager	Patrick Clay
Project Supervisor	Leon Hunt
Previous/Future work	None/ not known
Current Land Use	Greenfield/ grassland
Development Type	Housing
Reason for Investigation	NPPF
Position in the Planning Process	Planning Condition
Site Co ordinates	SK 388 372
Start/end dates of field work	20-01-2014 – 22-01-2014
Archive Recipient	Derbyshire County Council
Study Area	9.2ha

**Archive**

The archive for this project will be deposited with Derbyshire Museums. An accession number will be allocated forthwith.

The archive consists of the following:

- 1 Unbound copy of this report (2014-013)
- 7 Trench recording sheets
- 1 Contact sheet of digital photographs
- 1 CD digital photographs
- 1 Set B&W contact sheets
- 1 Set B&W negatives

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22-01-2014

**Appendix: Written scheme of investigation for archaeological work****UNIVERSITY OF LEICESTER ARCHAEOLOGICAL SERVICES****Written scheme of investigation for archaeological work**

*Job title: Land off Oregon Way, Chellaston, Derby*

*NGR: SK 388 372*

*Client: Radleigh Group Ltd.*

*Planning Authority: Derby City Council*

*P.A. DER/11/13/01284*

*Proposed start date: 20 January 2014*

**1 Introduction****1.1 *Definition and scope of the specification***

This document is a design specification for archaeological field evaluation (AFE) at the above site, in accordance with National Planning Policy Framework (NPPF) Section 12: Conserving and Enhancing the Historic Environment. The fieldwork specified below is intended to provide 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 and an appropriate mitigation strategy put in place.

- 1.2 The definition of archaeological field evaluation, taken from the Institute for Archaeologists Standards and Guidance: for Archaeological Field Evaluation (2010) 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*****Context of the Project***

- 2.1 The site lies to the east of the town centre of Chaddesden, Derby (Figure 1). The site consists of a number of rectangular fields, divided by grown out hedgerows, oriented east to west with a total area of 9.2 hectares (Figure 1).
- 2.2 An archaeological desk-based assessment has been prepared by University of Leicester Archaeological Services (ULAS) (Hunt 2013). Geophysical survey and a walkover survey has confirmed the presence of an earthwork identified by aerial photography, which may be associated with a medieval building known to exist in the area that may be Chaddesden Rectory for the Knights of Saint Lazarus. Recent documentary evidence and the discovery of a section of stonework at the edge of the Lees Brook may indicate the presence of a medieval watermill on the banks of the Brook. The site has remained undeveloped since at least the post-medieval period and therefore there may be good preservation of archaeological remains on the site. There is moderate to high potential for medieval remains to be present within the site, but unknown potential for archaeological remains from any other period.
- 2.3 The Derbyshire HER indicates that the site lies around 1km north of an area of known prehistoric archaeology. There are few known archaeological sites in the vicinity of the assessment area. The line of a Roman road runs 1km to the south-west of the site and a Roman coin was found at Chaddesden Park 600m to the south of the site.

### 2.3 *Geology and topography*

- 2.3.1 The site is bordered to the north by the Lees Brook and by Acorn Way to the east. Brook Farm itself lies to the west and Windmill Hill Plantation and the housing areas of Tennessee Road and Oregon Way lie to the south (Figure 1). The land falls fairly steeply from south to north from around 80m aOD to around 55m aOD.
- 2.2 The British Geological Survey website indicates that the underlying geology of the site is likely to be Mercia Mudstone Group clay over most of the site, with Tarporley Siltstone Formation in the north-west corner of the site, possibly overlain by alluvium along the edge of the Lees Brook to the north.
- 2.4 Following the NPPF the planning authority require that evaluation by trial trenching be undertaken in order to ascertain whether any archaeological remains are present and, if so, to ascertain their character and extent. This is the first stage of a conditioned scheme to assess the presence and as appropriate significance of any surviving heritage assets. In the event of the latter further measures for example, preservation in situ or mitigation excavation and recording may be necessary. These will be covered by separate WSI's.

### 3. **Archaeological Objectives**

- 3.1 The archaeological evaluation has the potential to contribute to the following research aims. *Medieval (Lewis 2006; Knight et al 2012)*
- 3.1.1 The area may contain a medieval building known to exist in the area that may be Chaddesden Rectory for the Knights of Saint Lazarus. If so this may contribute to the study of medieval ecclesiastical buildings and East Midlands Research Strategy 6.7.7.2 (Knight et al 2012, 94; Lewis 2006).
- 3.2 **Objectives**
- 3.2.1 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.
- 3.2.2 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.
- 3.2.3 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**

#### **General Methodology and Standards**

- 4.1 All work will follow the Institute for Archaeologists (IfA) Code of Conduct (2010) and adhere to their *Standard and Guidance for Archaeological Field Evaluation* (2008). The *LCC Guidelines and Procedures for Archaeological work Leicestershire and Rutland* (1997) will be adhered to.
- 4.2 Staffing, recording systems, health and safety provisions and insurance details are included below.
- 4.3 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.

#### **Trial Trenching Methodology**

- 4.4 Prior to any machining of trial trenches general photographs of the site areas may be taken.
- 4.5 A sample targeting the of the area of the earthwork is proposed for trenching (c. 380m<sup>2</sup>), the equivalent of seven 30m x 1.8m trenches. The provisional trench plan (Fig. 1) shows the proposed location of the trenches.
- 4.6 Topsoil and overburden will be removed carefully in level spits, under continuous archaeological supervision using a mechanical excavator using a toothless bucket. Trenches will be excavated down to the top of archaeological deposits or natural undisturbed ground, whichever is reached first. All



excavation by machine and hand will be undertaken with a view to avoid damage to archaeological deposits or features which appear worthy of preservation in situ or more detailed investigation than for the purposes of evaluation. Where structures, features or finds appear to merit preservation in situ, they will be adequately protected from deterioration

- 4.7 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, recognising and excavating structural evidence and recovering economic, artefactual and environmental evidence. Particular attention will be paid to the potential for buried palaeosols and waterlogged deposits in consultation with ULAS's environmental officer.
- 4.8 Measured drawings of all archaeological features will be prepared at a scale of 1:20 and tied into an overall site plan. All plans will be tied into the Ordnance Survey National Grid. Relative spot heights will be taken as appropriate.
- 4.9 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.
- 4.10 Trench locations will be recorded by an appropriate method. These will then be tied in to the Ordnance Survey National Grid.
- 4.11 Any human remains encountered 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.
- 4.12 In the event that unforeseen archaeological discoveries are made during the project a contingency may be required to clarify the character or extent of additional features. The contingency will only be initiated after consultation with the Client and Planning Authority. Following assessment of the archaeological remains by the Planning Authority, ULAS shall, if required, implement an amended scheme of investigation on behalf of the client as appropriate.
- 4.13 The trenches will be backfilled and levelled at the end of the evaluation.

#### **Recording Systems**

- 4.14 Any archaeological deposits encountered will be recorded and excavated using standard procedures as outlined in the ULAS recording manual. Sufficient of any archaeological features or deposits will be hand excavated in order to provide the information required.
- 4.15. Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto prepared pro-forma recording sheets.
- 4.16 A record of the full extent in plan of all archaeological deposits encountered will be made on drawing film, related to the OS grid and at a scale of 1:10 or 1:20. Elevations and sections of individual layers of features should be drawn where possible. The OD height of all principal strata and features will be calculated and indicated on the appropriate plans.
- 4.17 An adequate photographic record of the investigations will be prepared illustrating in both detail and general context the principal features and finds discovered using both black and white 35mm and digital formats. The photographic record will also include 'working shots' to illustrate more generally the nature of the archaeological operation mounted.
- 4.18 This record will be compiled and fully checked during the course of the project.

#### **5. Finds**

- 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 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 transfer ownership of all Archaeological Discoveries unconditionally to the appropriate authority for storage in perpetuity.

- 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 Planning Archaeologist.
- 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.
- 5.6 Finds which may constitute 'treasure' under the Treasure Act, 1996 must be removed to a safe place and reported to the local Coroner. Where removal cannot take place on the same working day as discovery, suitable security will be taken to protect the finds from theft.

## **6. Environmental Sampling**

6.1. If features are appropriate for environmental sampling a strategy and methodology will be developed on site following advice from ULAS's Environmental Specialist. Preparation, taking, processing and assessment of environmental samples will be in accordance with current best practice. The 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.
- Any buried soils or well-sealed deposits with concentrations of carbonised material present will be intensively sampled taking a known proportion of the deposit.
- Spot samples will be taken where concentrations of environmental remains are located.
- Waterlogged remains, if present, will be sampled for pollen, plant macrofossils, insect remains and radiocarbon dating provided that they are uncontaminated.

- 6.2 All collected samples will be labelled with context and sequential sample numbers.
- 6.3 Appropriate contexts (i.e datable) will be bulk sampled (50 litres or the whole context depending on size) for the recovery of carbonised plant remains and insects.
- 6.4 Recovery of small animal bones, bird bone and large molluscs will normally be achieved through processing other bulk samples or 50 litre samples may be taken specifically to sample particularly rich deposits.
- 6.5 Wet sieving with flotation will be carried out using a York Archaeological Trust sieving tank with a 0.5mm mesh and a 0.3mm flotation sieve. The small size mesh will be used initially as flotation of plant remains may be incomplete and some may remain in the residue. The residue > 0.5mm from the tank will be separated into coarse fractions of over 4mm and fine fractions of > 0.5-4mm. The coarse fractions will be sorted for finds. The fine fractions and flots will be evaluated and prioritised; only those with remains apparent will be sorted. The prioritised flots will not be sorted until the analysis stage when phasing information is available. Flots will be scanned and plant remains from selected contexts will be identified and further sampling, sieving and sorting targeted towards higher potential deposits.
- 6.6 Where evidence of industrial processes are present (eg indicated by the presence of slag or hearth bases), samples will be taken for the analysis of industrial residues (e.g hammer scale).

## **7 Report & Archive**

7.1 A draft version of the report will normally be presented within four weeks of completion of site works. The full report in pdf/A-1a and A4 hard copy format will usually follow within eight weeks. Copies will be provided for the client and the Local Planning Authority and deposited with the Historic Environment Record.

7.2 The report will include consideration of:

- The aims and methods adopted in the course of the evaluation.
- The nature, location and extent 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.
- a summary of artefacts, specialist reports and a consideration of the evidence within its local, regional, national context.
- Recommendations for the retention and discard of the material
- 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).

7.3 A full copy of the archive as defined in the IfA Standard and Guidance for archaeological archives (Brown 2008) will normally be presented to Derby City Museums within six months of the completion of fieldwork. This archive will include all written, drawn and photographic records relating directly to the investigations undertaken and will follow the DCC guidelines (in prep).

7.4 The following procedures will be followed:

- 1) Contact will be made with Derby City Museum using the notification form in the Museums in Derbyshire guidelines (appendix 1), copied to the DCC Development Control archaeologist as part of the WSI submission.
- 2) if the evaluation is negative there will be no archive deposition and the report will be submitted to the DCC HER
- 3) The OASIS record including uploading the report will be submitted
- 4) If the evaluation generates significant results then a Derby Museum accession number will be drawn and deposited in line with their guidelines.
- 5) The DCC Development Control archaeologist will be notified by email on final deposition.

7.5 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 Publication and Dissemination of Results**

- 8.1 A summary report will be submitted to a suitable regional archaeological journal following completion of the fieldwork. A full report will be submitted to a national or period journal if the results are of significance.
- 8.2 University of Leicester Archaeological Services supports the Online Access to the Index of Archaeological Investigations (OASIS) project. The online OASIS form at <http://www.oasis.ac.uk> will be completed detailing the results of the project. ULAS will contact the HER prior to completion of the form. Once a report has become a public document following its incorporation into the HER it may be placed on the web-site.

## **9 Acknowledgement and Publicity**

- 9.1 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.
- 9.2 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.

## **10 Copyright**

- 10.1 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.

## **11 Monitoring arrangements**



- 11.1 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.
- 11.2 All monitoring shall be carried out in accordance with the IfA *Standard and Guidance for Archaeological Field Evaluations* (2008)
- 11.3 Internal monitoring will be carried out by the ULAS project manager.

## **12 Timetable and Staffing**

- 12.1 A start date is to be arranged. The work is likely to take three - four days to complete and a minimum of two experienced archaeologists will be present during the work.
- 12.2 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.

## **13 Health and Safety**

- 13.1 ULAS is covered by and adheres to the University of Leicester Statement of Safety Policy and uses the ULAS Health and Safety Manual (revised 2010) with appropriate risks assessments for all archaeological work. A draft Health and Safety statement for this project is in the Appendix. The relevant Health and Safety Executive guidelines will be adhered to as appropriate.

## **14. Insurance**

- 14.1 All ULAS work is covered by the University of Leicester's Public Liability and Professional Indemnity Insurance. Employers Liability Insurance and Public/Products Liability Insurance Allianz Insurance plc Policy No. SZ/21696148 Professional Indemnity Insurance – Newline Underwriting Management Ltd Policy No. WD1100541

## **15. Contingencies and unforeseen circumstances**

- 15.1 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.

## **16. Bibliography**

Brown, D., 2008 *Standard and guidance for the preparation of Archaeological Archives* (Institute for Archaeologists)

Lewis, C., 2006 'The Medieval period (850-1500)' in N. J. Cooper (ed) 2006 185-216..

Cooper, N.J., (ed) 2006 *The Archaeology of the East Midlands An Archaeological Resource Assessment and Research Agenda*. Leicester Archaeology Monograph 13.

GeoDyne 2013, *Proposed Extracare Facility Bath Street Mills, Bath Street Derby Phase II Exploratory Investigation Report For Radleigh Homes Ltd* GeoDyne Ltd. April 2013.

IfA, 2008 *Codes of Conduct and Standards and Guidance for Archaeological Field Evaluation*.

Knight, D.; Vyner, B.; Allen, C.; 2012, *East Midlands Heritage. An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands*. Nottingham Archaeological Monographs 6, University of Nottingham and York Archaeological Trust.

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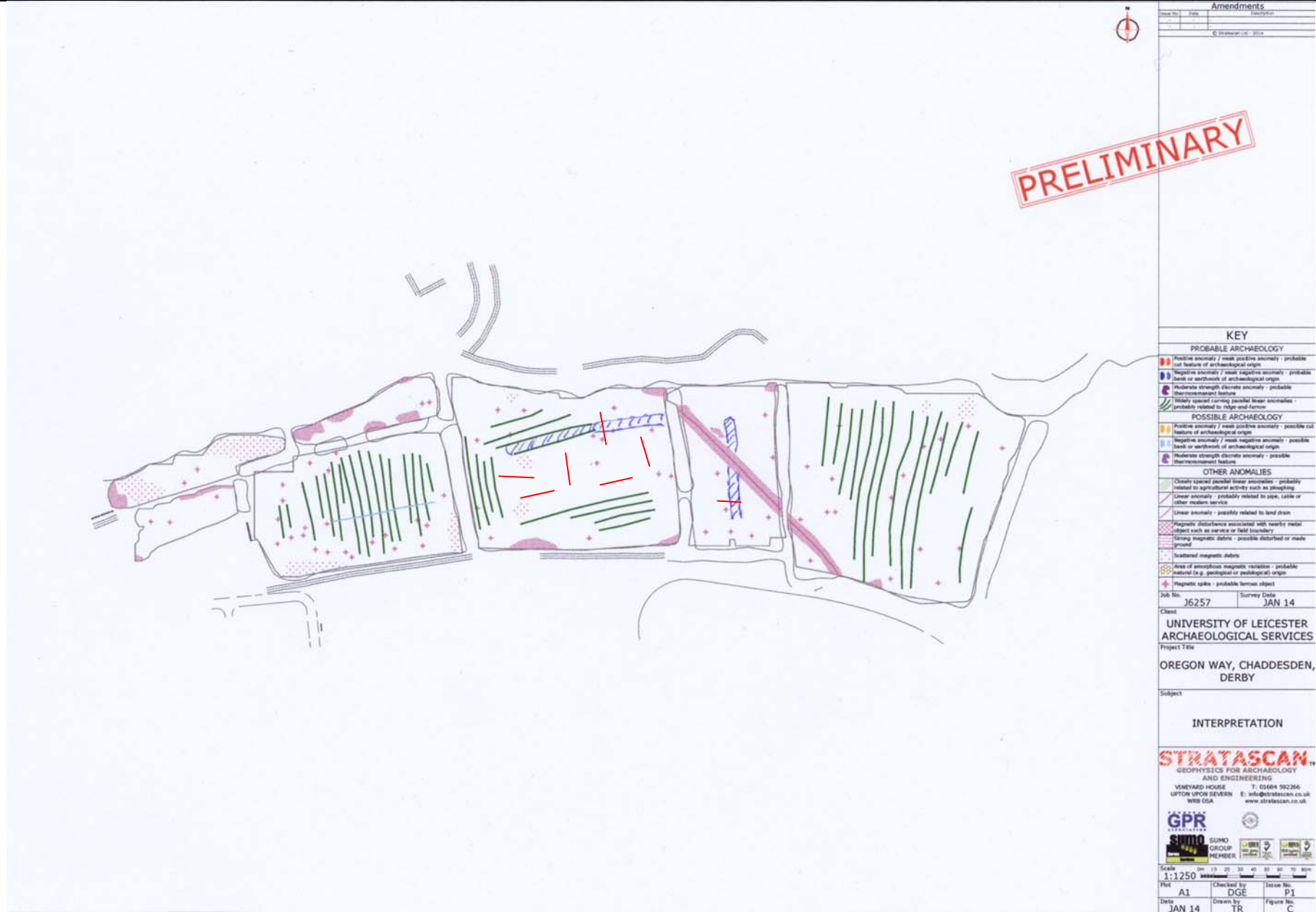


Figure 1: Site location plan in relation to geophysical anomalies, earthwork and proposed trench locations.

**ARCHAEOLOGICAL TRIAL TRENCHING METHOD STATEMENT & RISK ASSESSMENT**

Site Name	Job No	PM	Contact
Oregon Way, Chaddesden, Derby	14/627	Patrick Clay	<b>0116 252 2848</b> <b>07796940240</b>
Site Director	Site Contacts	Team (Nos)	
TBA	TBA	2	

**SITE WORKS & METHOD STATEMENT**

Evaluation trenches are to be machine excavated as detailed in the specification to look at archaeological deposits

**Excavation Method Statement**

- Access and parking will be gained via authorised routes to be arranged with the land owner/tenant.
- All staff will be inducted by the site director prior to starting work on site (Appendix 3).
- **Services:** A CAT Scanner may be used in both POWER and RADIO mode to scan trench lines for services prior to excavation. [The CAT must be in calibration and used by a competent person and used in both POWER and RADIO mode.
  - Trenches will not be excavated within 15m of known water mains or sewers or in the vicinity of other underground services or electrical cables without a separate SSOW. Any known services will be marked on the ground and avoided. All machine excavation will be carefully monitored.
  - No work will be undertaken beneath overhead cables. If a tracked machine is required to pass below an overhead cable a separate SSOW will be followed.
- **Excavation:** Trenching we conducted as per the *Trial Trenching Methodology* in the specification. Machining will be conducted using ULAS SSOW1. Excavation of trenches will be undertaken according to ULAS SSOW3 (Appendix 1). All trenches will be inspected each day by an appointed person and noted on the trench sheet (Appendix 4).
- Any lone working on site will be undertaken according to ULAS SSOW2 (Appendix 1).
- A first aid kit and a site phone will be available on site at all times. At least one member of staff will have first aid training.

**Equipment**

A mechanical excavator will be used for trench excavation. The site director will ensure that the appropriate certification is carried.

ULAS vehicles or personal cars will be used (all appropriately insured and maintained).

Besides the plant, equipment will include a variety of hand tools (e.g. shovels, mattocks, trowels), recording materials (e.g. photographic equipment, computers, levels etc.), survey equipment (e.g. EDM, DGPS) CAT scanners and metal detectors may be used.

**Personnel**

The site director will be responsible for the day to day running of the site. Specialists and visitors may be invited to visit the site during fieldwork. It is expected to hire plant and operators from a reputable local company.

All personnel are experienced in working with plant and in the excavation of trenches. All site staff hold CSCS cards and many also hold a SPA quarry passport. All site staff have some first aid training.

Normal working hours are 7 hours a day between 8am and 6pm Monday to Friday.

**Monitoring and communications**

ULAS management and site staff details are as above.

Work will be monitored internally by the ULAS Project Manager and/or Health & Safety Co-ordinators.

ULAS method statements are prepared following standard guidelines and after consultation with the University Safety Services Department. Communication of the contents of the method statement to site staff is the responsibility of the Site Director. The risk assessment will be updated weekly or when conditions change.

**Accident Reporting**

All accidents will be logged using ULAS accident forms and report to the ULAS Main Office (0116 2522848) and if necessary to the University of Leicester Safety Services Dept (Appendix 2) .



## Contact Details

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