



UNIVERSITY OF
LEICESTER

Archaeological Services

Written Scheme of Investigation for an Archaeological Strip Map and Sample Excavation (SMS)

Site: *Land at The Blue Bell Inn (39 High Street)*

and No's 37 High Street and 2A Main Street,

Desford, Leicester,

LE9 9JF

NGR: *SK 47891 03372*

Client: *Central Cooperative*

Consultant Archaeologist: *Abrams Archaeology*

Planning Authority: *Hinckley & Bosworth Borough Council*

Planning Ref: *23/00711/FUL*

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Written scheme of investigation for Archaeological Strip map and Sample Excavation (SMS)

1. Introduction

Definition and scope of the project

- 1.1 This document is a Written Scheme of Investigation (WSI) for a programme of mitigation comprising strip map and sample excavation (SMS) at The Blue Bell Inn (39 High Street) and No's 37 High Street and 2A Main Street, Desford, Leicester, LE9 9JF in accordance with National Planning Policy Framework (NPPF): Section 16 Enhancing and Conserving the Historic Environment (DLUHC 2023) and will be submitted to the Planning Archaeologist for approval prior to any archaeological work taking place.
- 1.2 This WSI was commissioned by Abrams Archaeology on behalf of the Client (Central Cooperative). The fieldwork specified below is intended to provide a record of the archaeological remains in mitigation of the impact of the proposed development and addresses the requirements placed on the planning permission for a scheme of work comprising an archaeological strip map and sample excavation.

2. Background

Context of the Project

- 2.1 Planning Permission 23/00711/FUL has been granted for Change of use from cafe (Class E(b)) and residential (Class C3) to convenience foodstore (Class E(a)). Construction of single storey side extension, two-storey and single storey rear extensions (following the demolition of existing single-storey element to rear of 37 High Street/2A Main Street and store to rear of public house) with associated car parking, landscaping and other works (Fig. 3). The Planning Authority have granted Planning Permission subject to an archaeological condition (Condition 18) for a mitigation strategy comprising archaeological strip map and sample excavation prior to any groundworks being undertaken.

Topography and Geology

- 2.2 Desford village lies c.11km to the west of Leicester. The site is accessed from High Street. It is located to the immediate north of High Street and to the immediate east of Main Street. To the north and east are commercial buildings and the yards associated with these. Beyond the southwest corner of the site is a roundabout which forms the junction between High Street, Main Street, Manor Road and Kirby Road. The PDA comprises a broadly square piece of land. The southern edge and central part of the land is flat with a tarmac surface. At the western boundary are two buildings. 37 High Street is a domestic building and 2a Main Street abuts this building on its northern edge. This is currently in use as a café. There is a garden to the immediate north of 2a Main Street and this separates it from 2 Main Street which lies beyond the PDA (Fig. 1 and 2). The site is broadly level at at 130m OD.
- 2.3 The British Geological Survey identifies the geology of the area as Edwalton Member - Mudstone. Sedimentary bedrock formed between 237 and 228.4 million years ago during the Triassic period. Superficial deposits consist of Glaciofluvial Deposits, Mid

Pleistocene - Sand and gravel. Sedimentary superficial deposit formed between 860 and 116 thousand years ago during the Quaternary period. (BGS; <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/> accessed 15/01/2025).

- 2.4 The Soilscape website indicates that the soils, Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils (Soilscape 18 <http://www.landis.org.uk/soilscales/> accessed 15/01/2025).



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Data Sources: © OpenStreetMap Contributors.

Created by: V. Svore
Created on: 16/01/2025

Figure 1: Site Location, within UK, county, and local.
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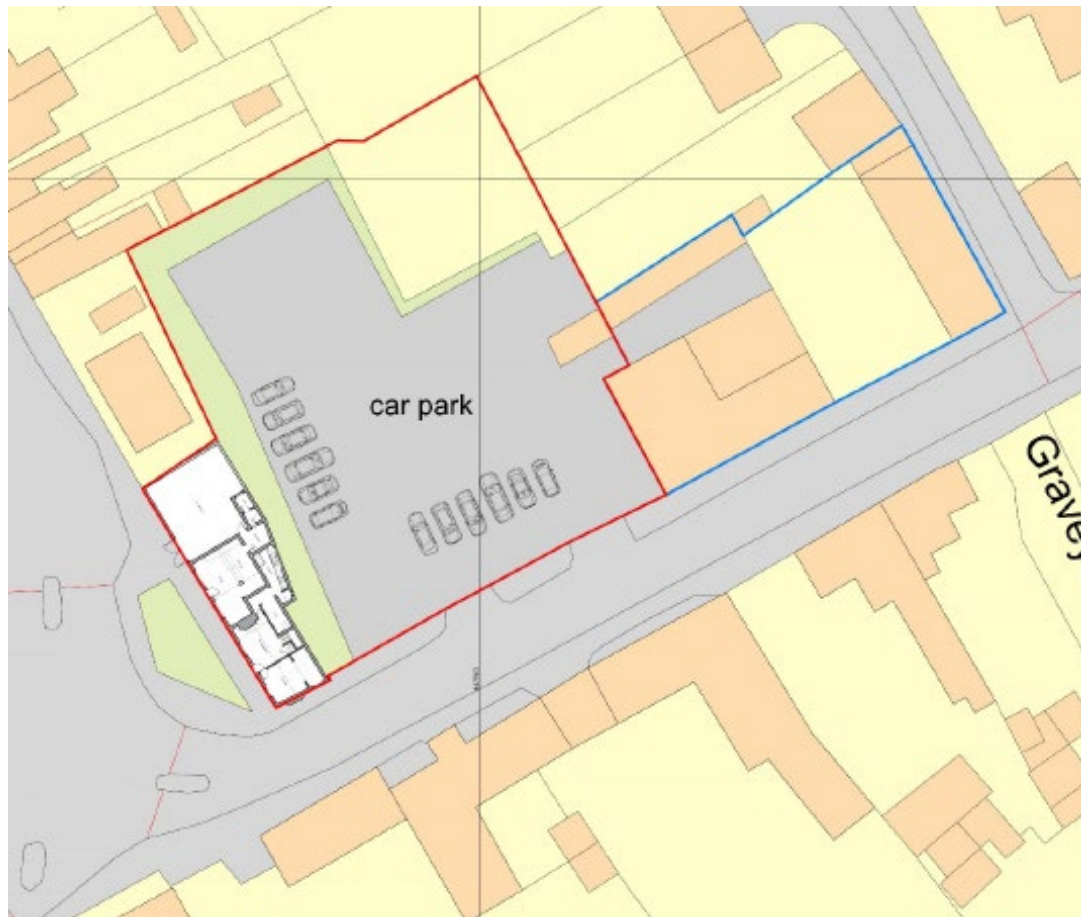


Figure 2: current site plan, PDA outline in red (provided by client).

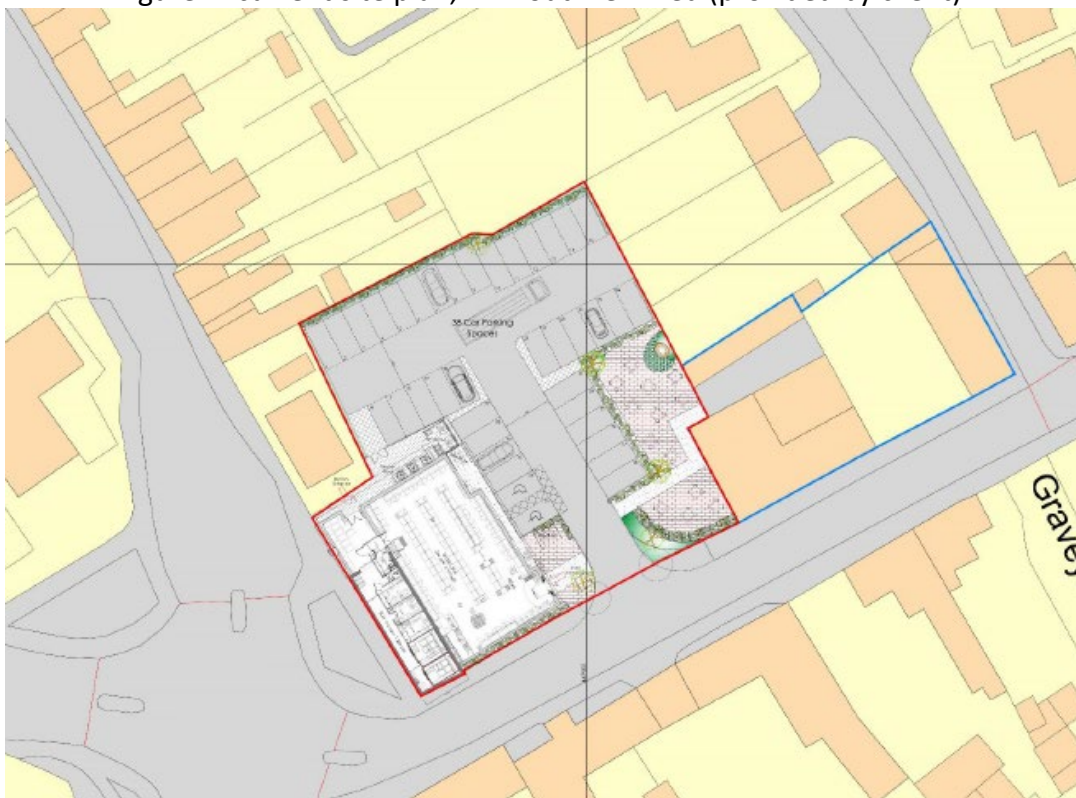


Figure 3: detailed plan of proposed development, PDA outline in red (provided by client)

Historical and Archaeological Background

- 2.5 The PDA is situated within an area of archaeological interest as identified within the HER for Leicestershire and Rutland. The site is located within the historic core of Desford, south of the Medieval Church of St. Martin and its associated churchyard. Cartographic and Photographic evidence suggest post-medieval and possible medieval buildings once stood within the PDA.
- 2.6 A desk-based assessment (Abrams 2023) has been undertaken and the following is summarised from this.

Prehistoric - Roman

- 2.7 There are two records which refer to finds of Neolithic/Bronze Age date. **MLE9289**, refers to the location, under 100m to the south of the PDA, at which trial trenching recorded remains of various dates. Amongst the artefactual finds were two flint artefacts of Neolithic/Bronze Age date. At around 100m southeast of the PDA, the remains of settlement activity dating to the Iron Age/Roman were recorded (**MLE9267**). This may be evidence of an earlier settlement either on/near what became Medieval Desford. Approximately 100m to the northwest of the PDA, on Main Street, two Roman pottery kilns were revealed and destroyed during construction work. This taking place prior to the requirements (via the planning system) to adequately evaluate and mitigate such remains. The PDA lies between two nodes of Roman settlement activity. The possibility that related activity stretched across the PDA and across where the early Medieval church would be established is a reasonable suggestion.

Anglo-Saxon to Medieval

- 2.8 The PDA has potential to contain remains of these periods given the location of most of the PDA within the core of the early Medieval/Medieval village of Desford (**MLE2743**).

Post-medieval to modern

- 2.9 A number of buildings in the village date to this period. There is cartographic, and photographic sources which record buildings of likely Post-Medieval and possibly Medieval date within the PDA (Fig. 4). A map dated 1814 shows the simple configuration of Desford. A square shaped street plan forms the core and within that the Church occupies the northern end. The PDA forms the southwest corner of the same square and buildings are shown within it.

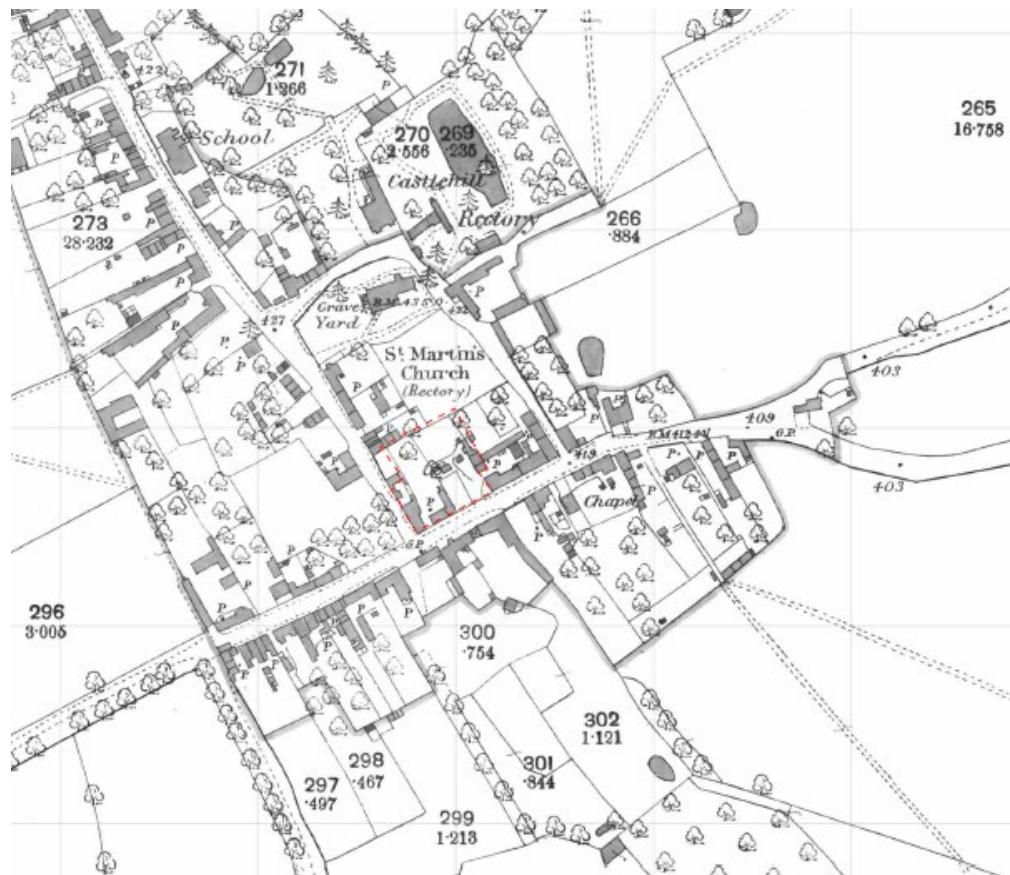


Figure 4: 1886 Map showing buildings within the PDA (red outline) (from Abrams 2023)

Archaeological Potential

2.10 The desk-based assessment (Abrams 2023) identified there is archaeological potential within the site for Iron Age/Roman remains (medium potential) Anglo-Saxon-Medieval remains (medium potential) and Post Medieval remains (high potential) within the PDA. Archaeological remains from these periods within the PDA could contribute to knowledge of the Iron Age, Roman, Anglo-Saxon, Medieval and Post-medieval activity in Leicestershire.

3. Aims and Objectives

3.1 The main aim of the investigation is to record any archaeological remains that are disturbed by the scheme, provide evidence to understand the nature, date, function, and character of the archaeological remains present and to mitigate the impact of the development using preservation by record.

3.2 The main objectives of the archaeological work are:

- To identify the presence/absence of any archaeological deposits.
- To characterise the extent, date range, character, condition and significance of any archaeological deposits to be affected by the ground works.
- To excavate and record archaeological deposits uncovered during the work.
- To recover artefacts and ecofacts to aid in the dating and interpretation of any archaeological deposits and features encountered.

- Interpret the archaeology of the site within its local, regional, and national, archaeological context.
- To advance understanding of the heritage assets and establish the relationship of any remains within the wider landscape.
- To produce a report and archive of the results.

Research Objectives

- 3.3 The site has the potential to add to research objectives mainly from the Iron Age, Roman, Medieval, and post-medieval periods, identified within the East Midlands Historic Environment Research Framework

<https://researchframeworks.org/emherf/introducing-the-research-agenda/>

- 3.4 The presence of Iron age and Roman deposits close to the PDA and cartographic evidence of buildings, likely post-Medieval and possibly Medieval date within the PDA suggests the possibility of remains of this date are present within the site. There is therefore potential for remains that could contribute to the following Research Objectives:

Iron Age

- 4E Assess the evidence for the evolution of settlement hierarchies
- 4F Investigate intra-regional variations in development of fields and linear boundaries

Roman

- 5H Investigate landscape contexts of rural settlements.
- 5I Support research and publication of landscape syntheses.
- 5J Instigate regional scale characterisation study of industry

Medieval

- 6J Update and expand East Midlands Anglo-Saxon Pottery Project.
- 7E Investigate the morphology of rural settlements.

Post-Medieval

- 8C Establish a typology of regional building traditions.
- 8I Develop further the study of ceramic assemblages

- 3.5 These research aims have been identified based on the current state of knowledge within the area of the scheme and will be re-assessed and updated during the course of the fieldwork.

4. Constraints

- 4.1 The presence of modern buildings within and surrounding the PDA suggests the likelihood of buried services and overhead services to be present within the area of archaeological investigation. A line search will be carried out prior to the work being undertaken and the client will provide information on the location of services.

5. Methodology

- 5.1 All work will be carried out in accordance with the Chartered Institute for Archaeologists (CIfA) *Standard for archaeological excavation* (2023a), *Universal Guidance for archaeological excavation* (2023b) and *Code of Conduct: professional ethics in archaeology* (2022), <https://www.archaeologists.net/codes/cifa> .
- 5.2 Any significant variations to the proposed methodology set out below will be discussed and agreed with the planning archaeologist and the Consultant Archaeologist (working on behalf of client) in advance of implementation.
- 5.3 The accession number (X.A13.2025) will be used to identify all records and artefacts.
- 5.4 Prior to any machining, general photographs of the site will be taken.
- 5.5 The excavation area will be located over the footprint of the proposed building extension which will cover approximately 234 square meters (Fig. 5). The area will be set out accurately using an appropriate methodology. The position and size of excavation area may be adjusted on site to account for constraints, with the approval of the planning archaeologist.
- 5.6 Excavation will be carried out with a machine appropriate for the work fitted with a flat-bladed bucket to expose the underlying strata. The machine will not track over any surfaces until the archaeologist has inspected and cleared the area.
- 5.7 The archaeologist will control and supervise the topsoil and overburden stripping in order to obtain an adequate record of any archaeological deposits or finds which would be disturbed or exposed by groundworks associated with the development.
- 5.8 Topsoil and overburden will be removed carefully in level spits, under continuous archaeological supervision. The assessment area will be excavated down to the top of archaeological deposits or natural undisturbed ground, whichever is reached first. Where structures, features or finds appear to merit preservation in situ, they will be adequately protected from deterioration.
- 5.9 If there is sufficient evidence that the depth of development is unlikely to disturb any archaeological remains or the nature of deposits (e.g. made ground) suggests that any archaeological deposits will have been destroyed then consultation with the planning archaeologist will be undertaken to review if further archaeological work is required.
- 5.10 All exposed features will be investigated by hand excavation. Archaeological deposits will be recorded and excavated using standard ULAS procedures as set out in the ULAS recording manual (ULAS 2023) or using 'Diggit' digital recording -methods <https://www.diggitarchaeology.com/> . Particular emphasis will be placed upon retrieving a stratigraphic sequence and upon obtaining details of the phasing of the site.
- 5.11 Sufficient proportions of any archaeological features or deposits will be hand excavated in order to provide the stratigraphic and chronological sequence of deposits, recognising and excavating structural evidence and recovering economic, artefactual and environmental evidence.
- 5.12 Unless otherwise agreed with the planning archaeologist, standard sample excavation will include

discrete archaeological features pits, postholes, etc.	50% of will be excavated unless their common / repetitious nature suggests they are unlikely to yield significant new information or unless their size or content suggests that 100% would be preferable.
linear features (boundary features, ditches, gullies, trackways, pathways etc.)	10% of each targeting terminals and intersections, with slots measuring at least 1m in width wherever possible. A flexible approach will be adopted to the location of excavation samples e.g. areas with higher artefact or ecofact content may be targeted. In areas outside the main foci of interest, where the nature and significance of remains is understood, the sampling rate may be considerably reduced in agreement with the Planning Archaeologist
Bulk horizontal deposits	10% after which a decision may be taken in conjunction with the Planning Archaeologist to remove the remainder with machinery. Priority will be attached to features which yield sealed assemblages which can be related to the chronological sequence of the site.
Stone structures or other buildings	These will be excavated in sufficient detail to establish their construction sequence and sequence of repairs or extensions. All stratigraphic associations will be recorded.
Funerary/ritual activity and domestic/industrial deposits including potential ovens and hearths	Fully excavated and sampled for analysis. Furnaces or kilns are not anticipated but should these be encountered they will be left in situ until a strategy for their excavation has been developed.
Tree throw holes/ possible natural or geological features	A sample will be excavated sufficient to establish the nature of the features.

5.13 Metal detecting of exposed features and spoil may be undertaken during the excavations to aid in the recovery of finds.

- 5.14 A record of the full extent in plan of all archaeological deposits encountered will be made using an appropriate system related to the OS grid. Measured drawings of all archaeological features will be prepared and tied into the overall site plan. Relevant OD heights will be taken as appropriate.
- 5.15 A photographic record of the investigations will be prepared. This will include photographs 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 work.
- 5.16 All photographs (except general or publicity shots) will be taken with a high-resolution digital camera and will include a suitable scale bar, north arrow and information to identify the site and where appropriate the context.
- 5.17 The photographic record will follow the standards set out in Historic England 2015, *Digital Image Capture and File Storage* and the standards required by Archaeology Data Service (ADS) for storage and archiving: <https://archaeologydataservice.ac.uk/advice/Downloads.xhtml>
- 5.18 This record will be compiled and checked during the course of the excavations, and all site records and finds will be kept securely.



Figure 5: Proposed strip, map and sample area (in black) covering the footprint of the proposed building extension

Monitoring

- 5.19 Notification of the start of the site works will be made to the Planning Archaeologist prior to commencement of the archaeological work in order that monitoring arrangements can be made. All monitoring shall be carried out in accordance with ClfA guidance. Expected monitoring points with the Planning Archaeologists are:
- Following completion of the stripping
 - Regular reports/photographs or visits to monitor archaeological excavation
 - Final report or visit to sign off the work
- 5.20 Internal monitoring procedures will be undertaken including reports/photos or 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 representatives of the Planning Archaeologist, Local Planning Authority and the Consultant Archaeologist (working on behalf of the Client), if required, subject to the health and safety requirements of the site.

Contingency Provisions

- 5.21 While ULAS attempts to foresee and make allowances for all possible site-specific constraints, there may on occasion be unusual circumstances which have not been included in the programme or quote, which may entail additional costs and/or time for the client. These could include: unavoidable delays due to bad weather, vandalism, poor ground conditions, areas requiring shoring or stepping, unknown contamination or services, further work required by the Planning Archaeologist (e.g. changes to excavation areas or excavation sample sizes) or significant archaeological deposits that may require specialist input.
- 5.22 In the event of potentially significant archaeological deposits being found or further work being required for which the resources allocated are not sufficient or which are of sufficient significance to merit an alternative approach the archaeologist will inform the Consultant Archaeologist (working on behalf of the Client), the Planning Archaeologist and the Local Planning Authority in order for detailed discussion between all relevant parties to take place. Following assessment of the archaeological remains ULAS shall, if required, implement an amended scheme of investigation on behalf of the client as appropriate.
- 5.23 If significant quantities of unexpected finds are recovered during the fieldwork it may be necessary to renegotiate additional post-excavation analysis and reporting costs

6. Finds

- 6.1 Finds will be hand-collected on site as per the selection strategy (Appendix 1). Where significant quantities of industrial waste or ceramic building material are found an on-site selection and recording strategy will be developed in consultation with the specialist. All finds will be bagged by context, and small finds will be allocated a unique small find number and bagged separately. All artefacts will be processed and analysed in accordance with *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA 2020) and the relevant CIfA Toolkits.

Treasure

- 6.2 In the event of discovery of artefacts that might constitute Treasure under the definition of The Treasure Act 1996 and its revisions (Treasure (Designation) Order 2023), these will be excavated and removed to a safe place. The Client, Coroner, the Planning Archaeologist and the Finds Liaison Officer (FLO) will be informed immediately. A treasure receipt will be completed and submitted to the Coroner's Office and the FLO within 14 days.

Human Remains

- 6.3 If human remains are encountered they will be left in situ. ULAS will inform the Consultant Archaeologist (working on behalf of the Client) the Planning Archaeologist and the coroner immediately. If excavation of human remains is required ULAS will obtain a Ministry of Justice Licence (Section 25 of the Burial Act 1857). All excavation and post-excavation will also be in accordance with the standards set out in the Updated Guidelines to the Standards for Recording Human Remains (CIfA 2017). The

final placing of human remains following analysis will be subject to the requirements of the Ministry of Justice License.

7. Environmental Samples

7.1 All environmental work will be undertaken in accordance with *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation* (Campbell et al 2011) and if necessary, in consultation with the Historic England Regional Science Advisor.

7.2 The following environmental sampling strategy will be adopted in consultation with the ULAS Environmental Officer.

- A representative selection of features will be sampled on a judgmental basis; covering all feature types, phases and areas across the site. The criteria for selection will be that deposits are well-sealed and with little obvious intrusive or residual material.
- Spot samples will be taken where visible concentrations of environmental remains are located.

7.3 All collected samples will be labelled with the accession number, context and sequential sample numbers.

Bulk samples

7.4 Bulk samples should either be 40 - 60 litres or the whole context depending on size, this is for the recovery of carbonised and mineralized plant remains, small animal bones, molluscs and industrial residues.

7.5 Flotation will be carried out using a York tank with a 0.5mm mesh and a 0.3mm flotation sieve.

7.6 The heavy residue will be separated into over 4mm and under 4mm fractions. The heavy residue will be sorted by eye for finds in its entirety, apart for the under 2mm for which a proportion will be rapidly assessed under a microscope and only sorted if a high potential for remains is considered by the Environmental Project Officer.

7.7 All flots will be scanned for plant remains and other artefact types. Those which contain significant quantities or material of interest will be analysed.

Waterlogged

7.8 If features are thought to contain waterlogged deposits discussions with the Environmental Project Officer will determine their potential for the recovery of waterlogged plant remains, insects and pollen. Appropriate and targeted sampling strategies will be applied for the recovery of this material. This may include columns and associated samples, typically 20 litres in volume as recommended in the guidance. We will seek further advice during site work with the specific external specialists who will analyse the material as to whether the sampling strategy being employed is appropriate.

Other specialist samples

- 7.9 In the event where other specialist sampling is required (eg. geochemical and micromorphological), advice will be sought from the Historic England Science Advisor in co-ordination with the appropriate external specialist.

Scientific Dating

- 7.10 The selection of material for radiocarbon dating will be determined following the assessment of environmental remains in line with national guidance and standards (Bayliss and Marshall 2022). Three key deposit types will be considered for radiocarbon dating:
- Articulated (joining joint elements) animal or human remains (they are unlikely to have moved far from the point of deposition)
 - Concentrated dump/ single deposition of charred plant remains
 - When neither animal bone or charred plant remains are available if there is a concentration of charcoal (preferably roundwood) this is targeted
- 7.11 Where possible multiple samples will be submitted for dating from the same context to ensure the validity of the results.
- 7.12 Consideration will also be given to the use of Dendrochronology, Archaeomagnetic and Optical Luminescence Dating (OSL). Specialists will be consulted and undertake the site work, analysis and reporting.

8. Timetable and Personnel

- 8.1 An exact date for the work has yet to be fixed; it is likely to take place in 2025, subject to approval of the WSI.
- 8.2 This project will be under the management of Vicki Score (MCIfA) or Adam Clapton (MCIfA). The Project Manager will direct the overall conduct of the excavation as required during the period of fieldwork. Day to day responsibility will rest with the Site Supervisor who will be on-site throughout the project.
- 8.3 The site 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.
- 8.4 ULAS uses in-house and external specialists for post-excavation work as follows

Post-excavation Project Management	Alice Forward PhD FSA
Environmental analysis and reporting:	Rachel Small PhD MCIfA Will Johnson MA
Prehistoric and Roman Pottery:	Nicholas Cooper BSc, Dip post-ex, FSA, MCIfA Elizabeth Johnson BSc MA (Roman pottery) member SGRP
Post-Roman Pottery:	Paul Blinkhorn BA (external) Alice Forward PhD FSA
Animal bone	Jennifer Browning BA, MA, MCIfA Rachel Small PhD MCIfA Will Johnson MA
Human bone	Jennifer Browning BA, MA, MCIfA Rachel Small PhD MCIfA York Osteological Unit (external)

Small Finds	Nicholas Cooper BSc, Dip post-ex, FSA, MCIfA Heidi Addison BA
Lithics	Wayne Jarvis BA, MA, MCIfA
Ceramic Building Material	Andy Hyam MA
Industrial residues and building materials	Heidi Addison BA
Wood/Geoarchaeology	Matthew Beamish, MA (Cantab), MCIfA Wood: Michael Bamforth BSc MA MCIfA (external) Geoarchaeology: Andrew J Howard PhD MCIfA (external)

9. Post Excavation Analysis and Reporting

- 9.1 All artefacts and samples will be processed, assessed, conserved and packaged in accordance with ClfA (2020b), ULAS procedures and the relevant Museums guidelines for transferring archaeological archives.
- 9.2 Specialist reports will be prepared as per the ClfA Toolkit for Specialist Reporting <https://www.archaeologists.net/reporting-toolkit>. Pottery reports will refer to the appropriate type series, including the Leicestershire type series for Roman, medieval and post-medieval pottery.
- 9.3 A report and archive of the results of the archaeological work is required regardless of what is found and will be produced following the completion of the fieldwork programme.
- 9.4 The draft report will include:
- A non-technical summary
 - The aims and methods adopted in the course of the evaluation.
 - A description of the nature, extent, date, condition and significance of all archaeological deposits recorded during groundworks
 - Appropriate illustrative material including maps, plans, sections, drawings and photographs.
 - A summary of artefacts, specialist reports and a consideration of the evidence within its local, regional, national context.
 - An index of the contents and location of the archive.
 - Bibliography.
- 9.5 A draft digital version of the report will be provided for the client, the Planning Archaeologist and the Local Planning Authority for approval. Once approved the final report will be deposited with the Historic Environment Record on the understanding that it will become a public document after an appropriate period of time.

Publication and dissemination of results

- 9.6 Arrangements will be made for an appropriate level of academic publication of the results of the excavations. As a minimum, a brief site summary in text format will be provided for the local archaeological journal (Transactions of the Leicestershire Archaeological and Historical Society). Where wider dissemination is appropriate and the significance of the results warrant, a full copy of the report in an appropriate format shall be submitted for publication in relevant academic journals.

- 9.7 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 under the *Copyright, Designs and Patents Act 1988*. ULAS provides exclusive licence to the client for the use of such documents by the client and/or commissioning agent in all matters directly relating to the project.
- 9.8 Licence will also be given to the archaeological curators (Planning Archaeologists, Historic Environment Record and Archive Repository) to use the documentary archive for educational, public and research purposes.
- 9.9 ULAS uploads all digital reports (subject to confidentiality agreements) to OASIS. An online OASIS form will be completed detailing the results of the project. Once a report has become a public document following its incorporation into the HER it will be uploaded onto the web-site.

Archive Deposition

- 9.10 Following the fieldwork, the landowner will be required to complete a transfer of title form to transfer ownership of the archive to Leicestershire County Council Museum Collections. The indexed, site archive will be prepared and deposited with the agreed museum in accordance with their guidelines (Leicestershire Museums 2022) and national standards (ClfA 2020b). Within each specialist report recommendations will be made regarding the selection and retention policy for the material being reported on using the relevant ClfA toolkits.
- 9.11 The digital archive will be deposited with the Archaeological Data Service ADS: <https://archaeologydataservice.ac.uk/>).
- 9.12 If the site is considered to be sterile (no archaeological features or finds) this will be agreed with the Planning Archaeologist and relevant museum and any archive will be included as Appendices to the report and deposited via OASIS (Online system for reporting investigations into the historic environment and linking research outputs and archives) <https://oasis.ac.uk/> ..

10. Data management

- 10.1 All digital data created during the project will be held on University of Leicester Servers which are backed-up on a daily basis. Following the completion of the post-excavation phase, data will be selected for the final digital archive in accordance with ULAS Procedures and ADS guidelines and terms and conditions (Appendix 2).
- 10.2 Data produced by sub-contractors will be granted under license for inclusion in the digital archive.

11. Public Engagement and Publicity

- 11.1 The work is small scale and not anticipated to be suitable for public involvement or participation during the course of the fieldwork. However, the results will be made available via the ADS website, publication. ULAS also has a range of engagement tools including social media, web resources and can provide talks, presentations and site visits to local groups and schools.
- 11.2 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.

12. Health and Safety

- 12.1 All work will be conducted in accordance with the Health and Safety at Work Act 1974 and all subsequent Health and Safety legislation, University of Leicester Statement Of Safety Policy Health and Safety and Environmental policies as well as any Principal Contractor's policies or procedures. A site-specific Risk Assessment and Method Statement will be formulated prior to commencement of fieldwork. This will be monitored on site and updated as necessary.
- 12.2 The safety of ULAS staff will take priority over the desire to record archaeological deposits. Where excavated evaluation trenches present a health and safety risk due to depth or unstable edges these will be completely or partly backfilled in order to make the site environs safe. Appropriate recording defined by a dynamic risk assessment will take place prior to backfilling.

13. Insurance

- 13.1 All ULAS work is covered by the University of Leicester's Public Liability, Professional Indemnity and Employers Liability Insurance as documented in the RAMS.

14. Quality Assurance

- 14.1 ULAS is a Registered Organisation (RO) with the Chartered Institute for Archaeologists. All ULAS Project Managers hold Member status and all ULAS Projects are overseen by the Project Manager who is responsible for the quality of the project.
- 14.2 All projects have a dedicated project manager who is responsible for the quality of the work involved and responsibility for ensuring compliance with ULAS and CIfA standards. All completed reports and publications are checked by a senior member of staff prior to dissemination.

15. Staff Training and CPD

- 15.1 All ULAS staff are subject to University of Leicester's Personal Development Discussion (PDD) strategy which reviews personal performance, identifies targets and areas for improvement and identified the need for appropriate. All members of staff are required to maintain a Personal Development Plan.

16. Environmental Sustainability and Carbon Reduction

- 16.1 The University of Leicester has an Environmental Sustainability Programme and Climate Change Strategy & Environmental Sustainability Policies. This has introduced Environmental Local Coordinators and Local Environment Action Plans (LEAPs) for each department. ULAS has developed their LEAP in conjunction with the Department for Archaeology and Ancient History archaeology department and the Chartered Institute for Archaeology Carbon Reduction Toolkit. for reducing environmental impacts (Appendix 3).

17. Bibliography

(All websites accessed January 2025)

Abrams, J. 2023 *Archaeological Desk based Assessment: Land at The Blue Bell Inn (39 High Street) comprising its associated car park, and No's 37 High Street and 2A Main Street, Desford, Leicester, LE9 9JF*. Abrams Archaeology, Project No: 00334.

- Archaeology Data Service: <https://archaeologydataservice.ac.uk/advice/Downloads.xhtml>
- Bayliss, A and Marshall, P. 2022 Radiocarbon dating and chronological modelling: guidelines and best practice. London: Historic England
- British Geological Survey: <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/>
- Campbell, G. and Moffett, L. and Straker, V. 2011, Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation. 2nd Edition. Portsmouth: English Heritage
- CifA (Chartered Institute for Archaeologists) 2017, Updated Guidelines to the Standards for Recording Human Remains
- CifA (Chartered Institute for Archaeologists) 2020a, Standard and guidance for the collection, documentation, conservation and research of archaeological materials.
- CifA (Chartered Institute for Archaeologists) 2020b, Standard and guidance for the creation, compilation, transfer and deposition of Archaeological Archives
- CifA (Chartered Institute for Archaeologists) 2022, *Code of Conduct: Professional Ethics in Archaeology*
- CifA (Chartered Institute for Archaeologists) 2023a, *Universal Guidance for archaeological excavation*
- CifA (Chartered Institute for Archaeologists) 2023a, *Standard for archaeological excavation*
- CifA (Chartered Institute for Archaeologists), *Toolkit for Selecting Archaeological Archives* <https://www.archaeologists.net/selection-toolkit>
- CifA (Chartered Institute for Archaeologists) Toolkit for Specialist Reporting <https://www.archaeologists.net/reporting-toolkit>
- DCMS (Department for Culture, media and sport) 1996, The Treasure Act 1996 Code of Practice (3rd revision, 2023)
- Department for Levelling Up, Housing and Communities, 2023, (Rev.), *National Planning Policy Framework*
- Diggit: <https://www.diggitarchaeology.com/>
- East Midlands Historic Environment Research Framework <https://researchframeworks.org/emherf/>
- Historic England 2015, Digital Image Capture and File Storage
- Leicestershire County Council, 2022, The Transfer of Archaeological Archives to Leicestershire County Council Museum Collections.
- OASIS <https://www.oasis.ac.uk/>
- Soilscapes: <http://www.landis.org.uk/soilscapes/>
- ULAS 2023 ULAS Recording Manual.

APPENDIX 1: Selection Strategy

Selection Strategy: 25-337 Land at The Blue Bell Inn (39 High Street) and No's 37 High Street and 2A Main Street, Desford, Leicester, LE9 9JF

Project Information		
Project Management		
Project Manager	Vicki Score/ Adam Clapton	
Archaeological Archive Manager	Alice Forward, Heidi Addison	
Organisation	ULAS	
Stakeholders		Date Contacted
Collecting Institution(s)	Leicestershire County Council Museum Collections.	Accession number request – 16/01/2025
Project Lead / Project Assurance	William Kelly – Planning Archaeologist	Date WSI sent
Landowner / Developer	Central Cooperative	
Other	Consultant Archaeologist– Abrams Archaeology	
Resources		
Resources required	NA	
Context		
This selection strategy has been produced the Written Scheme of Investigation (WSI) and previous work (DBA). No special requirements for selection have been identified from Leicestershire Museums Service so national archiving guidelines have been used. The archive will be produced and deposited in Line with their Standards (Leicestershire Museums 2022) The site lies within the village core and there is potential for iron Age, roman, medieval and post-medieval remains related to former buildings on the site. If such remains are found they could contribute to research objectives identified within the East Midlands Historic Environmental Heritage Research Frameworks.		

1 – Digital Data

Stakeholders

Post-excavation Project Manager: Alice Forward
 IT Officer: Matt Beamish
 Project manager: Vicki Score/Adam Clapton
 Archaeological Data Service (ADS)

Selection

Attached as Appendix 2 to this WSI.

De-Selected Digital Data

Attached as Appendix 2 to this WSI.

Amendments

Date	Amendment	Rationale	Stakeholders

2 – Documents

Stakeholders

Project Manager, Site Director, Archives Team, Planning Archaeologist, Museum Curator

Selection

Site Paperwork is security scanned and be kept in the online project folder.

All site paperwork is security scanned to the online project folder and included in the final permanent archive.

All Digital data will be kept in the online project folder.

All specialist recording and data will be included in the online project folder and the archive

All digital photos will be printed as contact sheets as well as kept in the online project folder

The final grey literature report will be included in the project archive

Selection Review Points are:

- Project Planning (WSI)
- Data gathering (during & post fieldwork)
- Assessment & analysis
- Compilation of archive

CiFA (Chartered Institute for Archaeologists) 2020b, Standard and guidance for the creation, compilation, transfer and deposition of Archaeological Archives

ADS: <https://archaeologydataservice.ac.uk/>

De-Selected Digital Data

Any personal data and financial information will be deselected using standard UoL procedures

Amendments

Date	Amendment	Rationale	Stakeholders

3 – Materials

Material type	Stone & Lithics	Section 3.	1
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Stakeholders

ULAS Post-excavation Project Manager, ULAS Finds Supervisor, Finds Specialist, Planning Archaeologist, Museum Curator

Selection

Find Type	Selection Strategy	Stakeholders	Review Points
Unworked flint	Not collected/discarded	Finds Specialist, Archaeologist, Curator	Fieldwork;
Worked flint	collected and recorded in full and retained as part of the finds archive	Finds Specialist, Archaeologist, Curator	Fieldwork; Processing; Recording; Archive compilation

Heat affected stone	recorded and discarded if unworked or unstratified	Finds Specialist, Archaeologist, Curator	Planning Museum	Fieldwork; Processing; Recording; Archive compilation
Masonry	collected and recorded in full and discarded if appropriate	Finds Specialist, Archaeologist, Curator	Planning Museum	Fieldwork; Processing; Recording; Archive compilation

Uncollected Material

Unstratified finds (e.g. from topsoil or subsoil) will be uncollected although their presence may be recorded.

De-Selected Material

Once processed and recorded as appropriate, deselected objects may be assessed for use in handling collections. Otherwise they will be disposed of using the UoL discard service.

Amendments

Date	Amendment	Rationale	Stakeholders

Material type	Ceramics - Pottery	Section 3.	2
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Stakeholders

ULAS Post-excavation Project Manager, ULAS Finds Supervisor, Finds Specialist, Planning Archaeologist, Museum Curator

Selection

Find Type	Selection Strategy	Stakeholders	Review Points
Prehistoric pottery	collected and recorded in full and retained as part of the finds archive	Finds Specialist, Archaeologist, Curator	Planning Museum Fieldwork; Processing; Recording; Archive compilation
Roman pottery	collected and recorded in full and retained as part of the finds archive	Finds Specialist, Archaeologist, Curator	Planning Museum Fieldwork; Processing; Recording; Archive compilation
Post-Roman pottery	collected and recorded in full and retained as part of the finds archive	Finds Specialist, Archaeologist, Curator	Planning Museum Fieldwork; Processing; Recording; Archive compilation
Post-medieval and Modern pottery	collected and recorded and discarded if appropriate depending on context	Finds Specialist, Archaeologist, Curator	Planning Museum Fieldwork; Processing; Recording; Archive compilation

Uncollected Material

Unstratified finds (e.g. from topsoil or subsoil) will be uncollected although their presence may be recorded.

De-Selected Material

Once processed and recorded as appropriate, deselected objects may be assessed for use in handling collections. Otherwise they will be disposed of using the UoL discard service.

Amendments

Date	Amendment	Rationale	Stakeholders

Material type	Ceramics - CBM	Section 3.	3
Stakeholders			
ULAS Post-excavation Project Manager, ULAS Finds Supervisor, Finds Specialist, Planning Archaeologist, Museum Curator			
Selection			
Find Type	Selection Strategy	Stakeholders	Review Points
Tile	collected and recorded in full and a sample retained if appropriate	Finds Specialist, Archaeologist, Curator Planning Museum	Fieldwork; Processing; Recording; Archive compilation
Brick	collected and recorded in full and a sample retained if appropriate	Finds Specialist, Archaeologist, Curator Planning Museum	Fieldwork; Processing; Recording; Archive compilation
Burnt clay/daub	collected and recorded in full and a sample retained if appropriate	Finds Specialist, Archaeologist, Curator Planning Museum	Fieldwork; Processing; Recording; Archive compilation
Uncollected Material			
Unstratified finds (e.g. from topsoil or subsoil) will be uncollected although their presence may be recorded. Modern building materials or debris will not be collected but may be recorded depending on the context.			
De-Selected Material			
Once processed and recorded as appropriate, deselected objects may be assessed for use in handling collections. Otherwise they will be disposed of using the UoL discard service.			
Amendments			
Date	Amendment	Rationale	Stakeholders

Material type	Metal	Section 3.	4
Stakeholders			
ULAS Post-excavation Project Manager, ULAS Finds Supervisor, Finds Specialist, Planning Archaeologist, Museum Curator			
Selection			
Find Type	Selection Strategy	Stakeholders	Review Points
Metal fragments including nails	collected and recorded in full and a sample retained if appropriate	Finds Specialist, Archaeologist, Curator Planning Museum	Fieldwork; Processing; Recording; Archive compilation
Coins	collected and recorded in full and retained as part of the finds archive	Finds Specialist, Archaeologist, Curator Planning Museum	Fieldwork; Processing; Recording; Archive compilation
Small Finds	collected and recorded in full and retained as part of the finds archive	Finds Specialist, Archaeologist, Curator Planning Museum	Fieldwork; Processing; Recording; Archive compilation

Metal working waste	collected and recorded as appropriate depending on amount and type. May be recorded on site and subject to deselection depending on amount and context	Finds Specialist, Archaeologist, Curator	Planning Museum	Fieldwork; Sampling strategy; Processing; Recording; Archive compilation
Uncollected Material				
Unstratified finds (e.g. from topsoil or subsoil) will be uncollected although their presence may be recorded.				
De-Selected Material				
Once processed and recorded as appropriate, deselected objects may be assessed for use in handling collections. Otherwise they will be disposed of using the UoL discard service.				
Amendments				
Detail any amendments to the above selection strategy here.				
Date	Amendment	Rationale	Stakeholders	

Material type	Organics	Section 3.	5
Stakeholders			
ULAS Post-excavation Project Manager, ULAS Finds Supervisor, Finds Specialist, Planning Archaeologist, Museum Curator			
Selection			
Find Type	Selection Strategy	Stakeholders	Review Points
Shell	collected and recorded in full and a sample retained if appropriate	Finds Specialist, Archaeologist, Curator	Fieldwork; Processing; Recording; Archive compilation
Leather	collected and recorded in full and a sample retained if appropriate	Finds Specialist, Archaeologist, Curator	Fieldwork; Processing; Recording; Archive compilation
Animal Bone	collected and recorded in full and retained as part of the finds archive.	Finds Specialist, Archaeologist, Curator	Fieldwork; Sampling Strategy Review Processing; Recording; Archive compilation
Wood	collected and recorded in full and a sample retained if appropriate	Finds Specialist, Archaeologist, Curator	Fieldwork; Processing; Recording; Archive compilation
Uncollected Material			
Unstratified finds (e.g. from topsoil or subsoil) will be uncollected although their presence may be recorded.			
De-Selected Material			
Once processed and recorded as appropriate, deselected objects may be assessed for use in handling collections. Otherwise they will be disposed of using the UoL discard service.			

Amendments			
Date	Amendment	Rationale	Stakeholders

Material type	Glass	Section 3.	6
Stakeholders			
ULAS Post-excavation Project Manager, ULAS Finds Supervisor, Finds Specialist, Planning Archaeologist, Museum Curator			
Selection			
Find Type	Selection Strategy	Stakeholders	Review Points
Bulk finds	collected and recorded in full and a sample retained if appropriate	Finds Specialist, Planning Archaeologist, Museum Curator	Fieldwork; Processing; Recording; Archive compilation
Small finds	collected and recorded in full and retained as part of the finds archive.	Finds Specialist, Planning Archaeologist, Museum Curator	Fieldwork; Processing; Recording; Archive compilation
Uncollected Material			
Unstratified finds (e.g. from topsoil or subsoil) will be uncollected although their presence may be recorded.			
De-Selected Material			
Once processed and recorded as appropriate, deselected objects may be assessed for use in handling collections. Otherwise they will be disposed of using the UoL discard service.			
Amendments			
Detail any amendments to the above selection strategy here.			
Date	Amendment	Rationale	Stakeholders

APPENDIX 2: Data Management Plan

ULAS adheres to University of Leicester Data Management Policies and Processes. This includes a Data Protection Policy (<https://le.ac.uk/ias>) and IT and Internet Code of Practice <https://le.ac.uk/policies/it>

ULAS data is stored and managed by the University of Leicester which operates a multi-level system, to securely store all ULAS data. All access is via user-level permissions. Permissions are controlled by the ULAS IT officer. There are several levels of University Storage:

- **TEAM COLLABORATION SPACE (Current data):** Encrypted Cloud storage. Only staff with permission can access the various TEAM/SHAREPOINT collaboration spaces available.
- **X drive:** Only accessible to staff with appropriate level permissions. Backups are taken nightly and held for 28 days in a separate building. Monthly backups are also taken and held for 12 months. In the event of a major incident (for example, the loss of a datacentre) it is possible that up to one business days data could be lost.
- **R drive (static/old data):** Only accessible to staff with appropriate level permissions. Only management staff have permissions to alter data in this area. Backups are taken nightly and held for 28 days in a separate building. Monthly backups are also taken and held for 12 months.

This data management plan has been created using current best practice guidelines for digital data:

- ADS Data Management and sharing Plans
<http://archaeologydataservice.ac.uk/advice/DataManagementPlansADS>
- Guides to good practice <http://guides.archaeologydataservice.ac.uk/g2gp/MainADS>
- Guidelines for Depositors
<http://archaeologydataservice.ac.uk/advice/guidelinesForDepositorsADS>
- Guidance for the selection of material for deposition and archive
<http://archaeologydataservice.ac.uk/advice/selectionGuidance.xhtml>

PROJECT DETAILS	
Project Name/Location:	Land at The Blue Bell Inn (39 High Street) and No's 37 High Street and 2A Main Street, Desford, Leicester,
ULAS Job No:	25-337
Accessioning Bodies	Leicestershire Museums
Accession/Event No	X.A13.2025
OASIS ID	[TBC]
Project Manager	Vicki Score/Adam Clapton
Site Director	[TBC]
Data Manager	Mathew Beamish
Site summary	
Data requirements of Brief, Standards & Guidance, or Recipient archive	ADS guidelines https://archaeologydataservice.ac.uk/help-guidance/instructions-for-depositors/files-and-metadata/
Data Classification	University of Leicester classifications include Highly Restricted, Restricted, Unrestricted & Public. Most archaeological data generated within commercial archaeology will become Public data, but it may need to remain confidential for a period of time depending upon project phase. Most archaeological data will fall into the Unrestricted category unless there are immediate client confidentiality issues in which case the data will be Restricted.
Data Collection	
Types of data	Project Planning may include a Written Scheme of Investigation (WSI), CAD and GIS files The fieldwork project is likely to include digital photos, survey files and possibly digital recording data. Digital cameras with a minimum 12 megapixels will be used. All digital images will be captured in Jpegs/tiffs or RAW depending on the context. Survey data will be collected using ULAS Differential Global Navigation Satellite System and associated software as well as N4ce software. Post-excavation is likely to include Microsoft Office spreadsheets, Word documents, images, databases, TurboCAD and ARCGIS & QGIS files Finds specialist tables/records will be created using Microsoft Office. Drawings will be produced using TurboCAD and ARCGIS/QGIS The final report will be saved as a Pdfa using Adobe Acrobat DC.
What data standards or methodologies will you use?	All projects have a project brief or Written Scheme of Investigation (WSI) and a Selection Strategy
Data Structure and naming	File naming structure for all files will be ID_ What it is For example: 2023-01_Final. There will be a clear hierarchy for version control e.g. V1. Only the final version will be retained in the Project Archive.
Documentation and Metadata	
What documentation and metadata will accompany the data?	A metadata document will be produced based on the ADS (Archaeology Data Service) guidelines and template for documenting metadata.
ETHICS AND LEGAL COMPLIANCE	
How will you manage any ethical, copyright and Intellectual Property Rights (IPR) issues?	Where applicable all personal information will be removed prior to the archive deposition. All sensitive data will be restricted to ULAS Managers and will be kept for 5 years prior to being destroyed/removed.
Does your project archive include data which requires formal consent to be used or included, and have you gained the required consent?	N/A
Who owns the data?	ULAS owns the copyright for the digital data but will sign over rights during the deposition process. ULAS will still retain the right to use images for our own marketing and internal purposes. As part of the deposition a copy of the report will be uploaded onto Oasis with no delay unless the client requests this.
STORAGE AND BACK-UP	
How will the data be stored, accessed and backed up during the research?	Data is downloaded onto external or Cloud servers held and managed by University of Leicester at the end of each day. Digital images will be captured and stored onto an external device and these images will be uploaded onto the server once fieldwork has been completed by the Site Director. Regular backs are done automatically every night and held for 28 days in a separate building. Monthly back-ups are held for 12 months.

How will you control access to keep the data secure?	Access to the digital data is via a secured password enabled route using multifactor authentication for external devices. Each collaborator that will be creating or need access to the data will have their own log in.
SELECTION AND PRESERVATION	
Which data should be retained, shared, and/or preserved?	See Appendix 1: Selection Strategy The retained digital archive will be deposited alongside the physical archive at a local repository once all fieldwork and post excavation work has been completed.
Where will the digital data elements of the preserved Archaeological Archive be deposited and preserved in perpetuity?	ADS (Core Trust Seal repository)
What costs if any will your selected data repository or archive charge?	ADS easy costs: https://archaeologydataservice.ac.uk/easy/costingCalculator.xhtml
Data Sharing and Accessibility	
Where will the results be shared and how will people find them?	The final grey literature report will be uploaded onto Oasis and a copy sent to the relevant HER. All sites are published either in summary form in the local journal or as an article/book/monograph if the results warrant it. Any other information/ data sharing will be done via requests from members of the public/local groups/researchers to either ULAS or the final repository.
Are any restrictions on data sharing required?	None required
Responsibilities	
Who is responsible for implementing the DMP, and ensuring it is reviewed and revised?	The archives team is responsible for implementing the DMP and ensuring it is reviewed and revised as appropriate as well as metadata production, data archiving and sharing The Site Director is responsible for the capture and quality of the site digital data. Each finds specialist is responsible for the quality of their respective data sets. The ULAS IT officer will be responsible for data storage and backup.
Are any restrictions on data sharing required?	None required

APPENDIX 3: ULAS LEAP



Local Environmental Action Plan

Action Plan for School of Archaeology & Ancient History (SAAH) including Archaeological Services (ULAS)

By exploring, selecting and prioritising your impacts you have undertaken a **simple materiality assessment** for your department. With a better understanding of your departmental impacts we can suggest actions to include as part of your departmental planning processes. To customise your action plan: Remove any actions not relevant to your department Add custom actions you wish to include Update to include progress made to date (including adding evidence)

Energy

Your issues

1 We could do more to ensure equipment is switched off
To reach the University's net zero carbon target we all need to work together. Identifying what can and can't be switched off, ensuring it is switched off and proving the reductions can make a huge difference in creating a culture of engagement and giving people confidence to switch off.

Your action plan

→ **Identify equipment that can (and cannot) be switched off across the department** *In progress*
Energy is wasted when it is powering things that are not in use. Adopt a '[traffic light system](#)' to alert building users to the equipment that can and cannot be switched off, giving everyone the confidence to switch off.

Optimise energy consumption in shared spaces *Completed*
Ensuring lighting, AV equipment and computers are switched off when not in use can reduce both energy consumption and neighbourhood light pollution. Use the [Lighting and Equipment Responsibility Plan template](#) to prompt discussions within your department about reducing unnecessary energy consumption.

Complete an out-of-hours energy survey *In progress*
We all 'assume' everyone switches off as they should and the building does what it is supposed to do, but does it? A simple check every few months will easily highlight any issues.

Remove the use of diesel-powered heating on site, either in welfare units or from site vehicles. *In progress*
Encourage all site staff to use the designated site welfare/cabins for heating needs rather than individuals running standing vehicles to provide heat. Offer thermal underwear as part of PPE for site staff. Where there is flexibility in programming fieldwork, consider programming for periods of the year with more daylight and fewer heating requirements.

Encourage welfare providers to use more eco-friendly fuels *In progress*
e.g. bio-diesel

2 We use energy-intensive equipment
By thinking tactically and collaboratively we can work on ways to reduce energy consumption from equipment use.

→ **Understand the energy consumption of your equipment** *In progress*
Use portable metering to identify the most energy-intensive equipment in order to help inform/target other actions. Contact the Carbon & Energy Team on utilities-carbon@leicester.ac.uk to borrow a portable meter.

Develop enhanced asset logs to inform equipment replacement programmes *In progress*
Expanding existing asset logs to record information on the age, condition, energy consumption etc of the equipment will help to prioritise equipment for replacement/upgrade/removal and provide evidence for business cases. Use the [energy payback calculator](#) to work out the energy cost of existing equipment and any potential replacements.

Encourage a culture of equipment sharing *Completed*

Before new equipment/materials are purchased, check if they are on [Kit Catalogue](#) or could be borrowed from elsewhere. Similarly, donate surplus items to any central stores so other departments can make use of them.

Maintain and regularly test department-owned equipment *Completed*

Periodic maintenance can avoid the risk of early equipment failure, for example from overworking components. Regular testing ensures equipment is running correctly and not wasting resources.

Explore opportunities to recover energy *Completed*

Do you have equipment that can generate energy e.g exercise bikes, research equipment, heat recovery? How could this be incorporated into daily operations?

3 We could operate our labs/workshops more efficiently

Lab equipment can often be very energy intensive, from ultra low temperature freezers, to ovens and extractor hoods. Using equipment efficiently is key to reducing energy use in labs and workshops.

**Review operating temperature of ultra low temperature freezers** *In progress*

Increasing the temperature of ULTs from -80C to -70C can reduce energy consumption by over 25%. Review the operating temperature of each ULT within the department, considering its function and contents. An [international database of biological samples](#) stored long term at -70C offers useful case studies. Further case studies are available in [-70 is the new -80](#)

Follow freezer management best practice *Completed*

Use the best practice guidance to implement further actions to reduce the environmental impact of operating cold storage.

Follow fume cupboard best practice *Completed*

Use the best practice guidance to implement further actions to reduce the environmental impact of operating fume cupboards.

4 We could operate our buildings more efficiently

By simply looking at how we operate and use our space we may find ways to reduce energy consumption.

**Inform Estates and Campus Services about faults that waste energy** *Completed*

Basic repairs can sometimes save significant amounts of energy. Use the [Estates & Campus Services customer portal](#) to report any building issues that are wasting energy.

Optimise space utilisation *Completed*

Operating heating, ventilation, lighting and even lab spaces in areas that are sparsely occupied is not an efficient use of space or energy. Review how space is used in your building and look at ways to use it more efficiently.

Review obsolete features and equipment *Completed*

Ensure we're not using energy to power services or equipment that are now redundant. Is cooling still provided for equipment that is no longer in use? Can any services be decommissioned?

5 We could make our staff and students more aware of the energy they are using on campus

We often take the energy we use for granted and find ourselves in patterns of behaviours that may not be energy efficient. Our goal as a university is to reach net zero carbon emissions by 2040. By raising awareness of energy use, we can change behaviours and make reductions.

**Check your data** *Completed*

Monitoring your energy data will help you to see the impact behaviour change has on consumption in your building(s) and to flag up any issues with lighting, heating and ventilation not performing as it should. Use the [Dynamat portal](#) to access and explore the data available for your building(s).

Share the University heating policy *Completed*

Buildings can be used inefficiently if users don't understand the limitations of controls e.g. the heating policy states we aim to heat buildings to 16-21C and do not provide comfort cooling. Managing expectations can be helpful and sharing the [heating and cooling policy](#) will help clarify expectations of building users, operational standards and the reporting procedure. The [accompanying graphic](#) can be displayed on TV screens and used in other communications.

Travel

Your issues

1 We could reduce carbon emissions from work vehicles.

→

Your action plan

Hybrid or electric work vehicles only *In progress*

When vehicles are replaced, promote replacement with hybrid/electric vehicles. Consider the relative environmental costs and benefits in terms of embedded carbon between purchasing new vehicles and maintaining existing fleet vehicles. Consider the relative environmental costs between purchasing new vehicles and hiring them. Invest in maintenance of existing vehicle fleet to reduce need to purchase new vehicles, thereby saving on embedded carbon.

Recorded annual travel/mileage for petrol/diesel company vehicles *Completed*

Implement a recording system to record mileage of all work vehicles for workrelated journeys.

Meetings and conferencing via conference call/online meeting platform *Completed*

Actively seek to adopt and implement a platform for remote digital meetings (to include office to office, office to site, office to archaeological advisor). Seek to have the software capability to achieve this (through computers and smart phones). Promote a culture of trust in individuals working from home rather than travelling to offices.

2 Our staff travel internationally as part of their work e.g. for conferences, research, collaborations

There are choices to be made when staff decide if/how to travel for business and departments can be instrumental in encouraging sustainable options to be considered.

→

Adopt the sustainable travel hierarchy *Completed*

Encourage staff to use the [travel hierarchy](#) to consider lower carbon options for business travel. You may want to consider making a local agreement, as a department or research group, that sets out your practical interpretation of 'efficient, low carbon travel'.

Arrange rail travel and flights through the approved travel management company *Completed*

In order for the University to accurately monitor emissions linked with travel, flights and rail travel should be arranged through the [approved University supplier](#). You can also compare the carbon emissions for different modes of transport using this method. Staff are encouraged to not pay for travel via purchasing card or expenses.

3 Our staff travel within the UK as part of their work e.g. for meetings, teaching events, site visits, deliveries, collaborations

There are choices to be made when staff decide if/how to travel for business and departments can be instrumental in encouraging sustainable options to be considered.

→

Question the need to travel between buildings and sites *Completed*

Continued use of virtual meetings, coupled with monitoring of departmental spend on mileage claims will help reduce the emissions from travel whilst saving time and money.

Promote active and sustainable travel *Completed*

Consider how you can actively encourage these options to foster a departmental culture of healthy and sustainable travel. See the ['Make positive choices' page](#) for initial information, including cycle parking and shower facilities, and Leicester and Leicestershire's [Choose How You Move](#) programme for further ideas.

Develop an action plan to reduce the carbon footprint of vehicle use *Completed*

Consider the utilisation and environmental performance of road vehicles used for departmental operations, including taxis, university-owned, leased, rented and staff-owned vehicles. There may be opportunities to consolidate the vehicle fleet, reduce mileage, shift to low carbon vehicles and introduce energy-efficient driving practices.

4 Many of our staff and/or students commute to the University from outside Leicester
In addition to business travel for work/study purposes, staff and student journeys to and from the University also have an impact.



Improve understanding of staff and student commuting footprint **Completed**
Understanding staff and student travel patterns helps us provide better and more sustainable options. Departments should promote participation in the University's staff and student travel surveys. View [data from the 2022 staff and student travel surveys](#).

Publicise travel-related staff benefit schemes **Completed**
The University offers several schemes that can help staff access discounts on public transport, cycling equipment, electric vehicles and other sustainable modes of transport. See [staff benefits](#) and [Smartgo Leicester](#) pages for further details. Share the [relevant graphic](#) on TV screens and in other communications.

Purchasing & Resource Consumption

Your issues

1 We could make more considered purchasing decisions
Consider whether the department really needs the items purchasing. Everything we bring onto campus has an environmental impact - from how it's made, packaged, transported, used and disposed of.



Your action plan

Minimise use of disposable items **In progress**
Review the single-use items your department relies upon and understand the options that are available for reducing their environmental impact. Ideally aim to eliminate single-use items (e.g. by changing processes or swapping to reusable items); where this isn't possible seek out materials that can be recycled. [Consult the guidance](#).

Consider the whole lifecycle of purchases **Completed**
We buy all the waste we produce when we make purchases. Our energy consumption is also linked to the energy performance of the equipment we have bought. Considering the financial and environmental costs across the whole lifecycle of the things we buy is essential and most staff have a role to play.

Consult the University's Mandatory Contracts before making a purchase **Completed**

The [Mandatory Contracts](#) signpost any alternative/reuse options ahead of a new purchase (e.g. Kit Catalogue for laboratory equipment) and take proportionate account of any sustainability risks/benefits relating to the requirement.

Manage the procurement risks of sub £50k spend **Completed**
If you have a planned purchase worth below £50k, which cannot be fulfilled by one of the University's [Mandatory Contracts](#), consider how to take proportionate account of sustainability risks/benefits within the procurement exercise/contract. Consult the University's [Sustainable Procurement Guidance](#), which covers a full range of best practice, from returning packaging to whole life costing. (Support and advice is available from the Procurement Unit/appropriate [Category Manager](#))

Manage the procurement risks of over £50k spend **Completed**
If you have a planned purchase worth £50k+, which cannot be fulfilled by one of the University's [Mandatory Contracts](#), engage the Procurement Unit ([appropriate Category Manager](#)) who are well versed in how to take proportionate account of sustainability risks/benefits within procurement exercises/contracts.

Ensure suppliers fulfil any sustainability obligations within their contracts **In progress**
It is important not to 'let and forget' a contract, including any sustainability requirements, clauses and performance measures. All contracts worth over £25k must have a dedicated Contract Manager. Support and advice is available from the Procurement Unit/appropriate [Category Manager](#) on how to manage a contract, including how to use the [Contract Summary and Contract Review Meeting Agenda templates](#), and any Sustainability Action Plan your supplier might have created through our NETpositive system.

Reduction in use of plastics (finds bags, sample tubs, marker tags, single-use drinking water bottles) and reuse and recycle Completed

Reuse all site-work plastic, including sample tubs, finds bags and marker tags. Where necessary allow time and resources to clean used plastic equipment, especially where contamination may be an issue. Invest in reusable water bottles for field staff for personal use. Look at non-plastic alternatives.

Reduction in reliance on diesel-powered work machines In progress

Seek to use electric work machines wherever feasible (in terms of cost, availability, and site conditions). Promote and share electric work machine contractors with other archaeological contractors.

Reduction of machine idling on site Completed

Encourage developers/groundworks contractors to turn off work machines when not in use. Set environmental performance ground rules for all subcontractors (eg plant hire companies) of which this is one requirement.

Remove need for any aeroplane/helicopter aerial photography usage by adopting electrically powered drones only. Completed

Employ drone photography for all aerial photography needs. Remove all engagement with methods requiring aviation fuel. Provide relevant training for staff.

2 We could improve how we avoid and manage waste
How we avoid producing waste and how we get rid of waste has a big impact on raw materials and carbon emissions. By reusing and recycling we can reduce these negative impacts.

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Co-locate bins for recyclable and non-recyclable waste Completed

Having communal bins for recyclable waste and non-recyclable waste side by side makes it easy for waste to be correctly segregated. Ensure all bins are clearly labelled with the [current stickers](#) and the wall sign is displayed. To request stickers/signs, please use the Service Request form on the [Estates & Campus Services customer portal](#).

Audit your waste Completed

Arrange an audit of your waste to see how effective segregation is and identify any contamination. This will help target improved [waste management](#). Guidance and templates are available in the [waste audit checklist](#)

Make disposal a last resort Completed

Before disposing of items explore whether there are options for donating or repurposing the items. Consult the [University's Guidance for using UniGreen](#) for scientific equipment.

Reduce printing Completed

Reduce in-house MFD printing against an agreed baseline for staff printing.

Reuse scrap paper Completed

Set up a collection point for scrap paper near printers and/or in shared workspaces (for papers that don't contain any confidential or personal information).

Implement food waste segregation In progress

Implement food waste segregation in staff kitchen areas. By segregating this we can send it for specialist disposal, producing biogas that can be used to generate electricity and heat. It also raises awareness of just how much food waste we generate and encourages its reduction. Contact the ECS Service Desk (ecs-service@le.ac.uk) for an assessment of whether a food waste bin can be introduced into your area.

Deal with waste appropriately from fieldwork sites. In progress

Promote and adopt methods of providing both onsite recycling as per the environmental policy on the Considerate Contractors Scheme. Provide a list within the site manual of what can and cannot be recycled. Apply this to offices, vehicles, site cabins and on site. Discharge this responsibility to the appropriate site manager/supervisor. Provide a means of recyclable waste disposal on site. Obtain a waste carriers' licence and put in place commercial arrangements with recycling companies to accept waste, so that waste generated on site and premises can be disposed of legally.

3 We could do more to reduce paper/printing.



Remove printers that are not managed Smart Printers *In progress*

Eliminating the need for printers that aren't part of the managed Smart Printer service can be more cost-effective and reduce consumables and unclaimed printing.

Digitisation of all future fieldwork recording *Completed*

To include all fieldwork recording sheets and all on-site illustrations. Initial move to all recording via DiggIt (web/app). Consider the environmental performance of the providers of software, hardware and cloud storage solutions.

Digital photography only *Completed*

Remove the need for any physical photography in development archaeology and adopt digital only, while being aware that digital imaging has its own carbon footprint and rigorous archive selection is still required.

Curriculum & Research

Your issues

1 We could do more to reduce the impact of project archives.



Digital archiving *In progress*

Reduction in paper usage for all postexcavation documents and reports required by LPAs and their advisors for archival submission to a repository to achieve zero physical paper archive generation. Seek to ensure that all born-digital data is archived digitally, and work with, eg, the Society for Museum Archaeology to reduce requirements for the printing of born-digital data for the repository of the physical archive.

Rigorous selection of finds for the archaeological archive *Completed*

Adopt the practice set out in the Cifa and Historic England 'Toolkit for Selecting Archaeological Archives' <https://www.archaeologists.net/sel...> for all archive creation. Bring specialists into the field to help with the implementation of effective selection strategies.

2 We could educate and engage our students on sustainability
Students are increasingly motivated by and engaging with global challenges such as climate action. They are keen to incorporate this within or alongside their discipline of study.



Map Education for Sustainable Development (ESD) in postgraduate modules *In progress*

Schools are encouraged to consider ESD opportunities within course content. The sustainability content of UG modules is captured annually through Curriculum Planning, but data is not yet captured for PG modules. Schools can use the [methodology](#) used to capture UG modules and to track PG modules that contain ESD.

Encourage students to explore sustainability within their taught programme/discipline *In progress*

Students may be able to undertake projects or dissertations linked to [sustainability topics](#) with real world partners or on campus through the Professional Services teams. For more information, project ideas, contacts or connections please email esd@le.ac.uk.

Embed carbon literacy accreditation into taught courses *In progress*

[Carbon literacy training](#) combines awareness of the carbon impacts of everyday activities and the ability and motivation to reduce emissions. Incorporating carbon literacy within taught courses will help the University in its aim to become a 'Carbon Literate Organisation'.

Train course reps in carbon literacy *In progress*

Schools are encouraged to consider ESD opportunities within course content. The sustainability content of UG modules is captured annually through Curriculum Planning, but data is not yet captured for PG modules. Schools can use the [methodology](#) used to capture UG modules and to track PG modules that contain ESD.

Consider external sustainability accreditations relevant to your department's programmes *Completed*

The [accreditation schemes](#) can provide good practice ideas specific to your discipline and the external endorsement (e.g. ALBERT partnership) can help to attract sustainability-minded students.

Enhance your School's alignment to Education for Sustainable Development (ESD) *In progress*

Updated [Subject Benchmark Statements](#) from March 2022 onwards require programmes to consider how their content suitably aligns to ESD. Schools are encouraged to review how they can enhance engagement with ESD in all programmes, particularly within the core curriculum. See the [anti-greenwash education kit](#) for more information.

3 We could encourage students to make a contribution to sustainability
Encouraging students to take advantage of opportunities beyond the formal curriculum allows them to build up the sustainability skills that are important to future employers.

**Promote sustainability focused informal curriculum activities provided by the University** *Not started*

There are a range of ways that students can engage with sustainability, including projects, volunteering and placements. Programmes such as [SEED](#), [Sustainability Network](#) and [carbon literacy](#) are suitable for all students. The [SU Volunteering Hub](#) also provides volunteering opportunities for students.

Promote opportunities to link sustainability to employability and careers activity *Not started*

The interdisciplinary Sustainability Enterprise Partnership Project (SEPP) module provides an opportunity for students to develop professional skills through engaging with sustainability. Consider whether your programme could offer [SEPP](#) as an optional module. Please email esd@le.ac.uk to discuss.

Encourage students to take part in the annual NUS sustainability skills survey *Not started*

This [national survey](#) gathers insight into students' aspirations towards learning about sustainability and expectations of their place of study. By encouraging our students to take part we gain access to [Leicester-specific results](#) and gather valuable data for practitioners.

Advocacy

Your issues

1 We could raise awareness of sustainability with our staff and students
Becoming familiar with the breadth of sustainability and existing activities at Leicester helps to identify opportunities to get involved and to further sustainability at Leicester.

**Your action plan****Raise the profile of the UN Sustainable Development Goals** *In progress*

Have a look at [A Guide to the Sustainable Development Goals](#) and the [SDGs at Leicester report](#) to get an idea of how many opportunities there are to make a positive impact. Consider mapping the SDGs to your department's work (using the keywords in the guide) and then contributing information or case studies to the next bi-annual SDG report.

Provide information to students (and prospective students) about how sustainability is included in their curriculum *Not started*

Providing information about how and where sustainability is part of your taught programmes is important (see [Law workshop case study](#)). Links to sustainability in relation to appropriate professional bodies may also be useful to include. Consider providing information to students as part of induction processes, through course reps and on course/module webpages.

Incorporate sustainability within staff inductions *In progress*

Make sustainability a clear part of new starters' experience of working at Leicester. View [example information to include within your local induction](#)

Promote employee volunteering opportunities with the Gardens and Grounds team *In progress*

Make a contribution to the biodiversity of our outdoor spaces by volunteering at the [Coppice Woodland Walk](#) or Botanic Garden, supporting the [Hedgehog Friendly Campus](#) accreditation or holding an Away Day at the Botanic Garden. Contact the Gardens and Grounds team (ecs-service@le.ac.uk) for further details.