



**Symmetry Park,
Ardley,
Oxfordshire**

**Geophysical Survey
Project Design**

Prepared by: Alastair Trace
Archaeological Services WYAS
Nepshaw Lane South
Morley
Leeds
West Yorkshire
LS27 7JQ

November 2021



Project Design for Geophysical Survey

Land at Symmetry Park, Ardley, Oxfordshire

1. Introduction

- 1.1 This Project Design has been prepared by Archaeological Services WYAS (ASWYAS) for the Environmental Dimension Partnership Ltd (EDP) on behalf of db symmetry ltd (the Client) in advance of a magnetometer survey of land proposed for development at Ardley, Oxfordshire.
- 1.2 The scheme of work will be undertaken in accordance with the requirements of the National Planning Policy Framework (MHCLG 2019).
- 1.3 This document details a proposed programme of non-intrusive geophysical (magnetometer) survey to inform development proposals for a solar farm.
- 1.4 The Project Design was produced to the standards laid down in the European Archaeological Councils guideline publication EAC Guidelines for the Use of Geophysics in Archaeology (Schmidt *et al.* 2016) and the Chartered Institute for Archaeologists (CIfA) Standard and Guidance for Archaeological Geophysical Survey (CIfA 2020).

2. Site location and Description

- 2.1 The survey area comprises of two irregularly shaped parcels of land approximately 1km north east of Ardley, centred at SP 5555 2872 (see Figure 1). The overall survey area is approximately 30ha in size and is located either side of the B4100. The northern field is almost entirely constrained by agricultural land apart from the B4100 to the south. Whilst the southern field is constrained by the B4100 to the north, Cherwell Valley services to the south and agricultural land to the east and west. The site is flat and situated at approximately 120m above Ordnance Datum (aOD).

3. Geology and Soils

- 3.1 The underlying bedrock mainly comprises White limestone with Bladon Member and Forest Marble Formation – formed approximately 166 to 168 million years ago in the Jurassic Period. No superficial deposits are recorded (BGS 2021). The soils in this area are classified in the Aberford association, characterised as shallow, well-drained loams (Soil Survey of England and Wales 1983).

4. Archaeological Background

- 4.1 Preliminary information collated by EDP as part of a Desk-Based Assessment (Oakley, 2015) has confirmed that there is a possible 'banjo enclosure' located in the north of the current survey area (Identified in the Oxfordshire Historic Environment Record (HER 17456)). In addition there is extensive cropmark evidence in the wider landscape of further prehistoric activity, the nearest of which lie 0.5km to the north of the site and comprise complex of undated enclosures (HER 23340) and a possible Bronze Age round barrow (HER 4920) approximately 0.6km to the north east of the site.
- 4.2. Roman coins (HER 4747), first recorded in 1939, were collected approximately 0.7km to the north east of Site.
- 4.3 The HER records Baynard's Green as an open area associated with medieval tournaments and subsequently a race course (HER 4853), recorded 0.2km to the west of the Site. The record cites that it may have been a camping ground or meeting place. Given the temporary nature of the activity here, it seems unlikely that any below ground archaeological features would manifest from this activity and regardless. It is also unlikely this activity extended onto the Site.
- 4.4 These two records both relate to milestones (HER 4902 and 4836) recorded close to the course of the A43 to the north and southwest of the Site. These were recorded in 1976, and there is no information that would suggest they survived the recent dualling of the A43.
- 4.2 A geophysical survey (Harrison, 2015) was undertaken by ASWYAS in conjunction with the DBA. Although no definitive archaeological features were identified, the survey detected some possible 'boundary type features', in the eastern part of the site which may be associated with the 'banjo enclosure'. These may represent peripheral features and are well beyond the main enclosure itself or may equally represent late medieval or post-medieval land division or trackway. The survey also revealed evidence for past agricultural activity in the form of ridge and furrow, former field boundaries and post medieval extraction pits. No other anomalies of archaeological origin were identified within the Site.

5. Aims and Objectives

- 5.1 The aims and objectives of the programme of geophysical survey is to gather sufficient information to establish the presence/absence, character, extent, of any archaeological remains within the specific area and to inform further strategies should they be necessary.

The aims of the survey are to:

- to provide information about the nature and possible interpretation of any magnetic anomalies identified;

- to therefore determine the presence/absence and extent of any buried archaeological features;
- to produce a comprehensive site archive and report.

6. Fieldwork Methodology

- 6.1 A towed geophysical (magnetometer) survey will be carried out across all of the area amenable for a magnetometer survey. The total area for survey will be approximately 30 hectares. In areas where a towed magnetometer is unsuitable, a handheld approach will be undertaken, after consultation with the client.
- 6.2 An eight channel SenSYS MX V3 system, containing eight FGM650 sensors will be towed across the areas, using an ATV or other suitable vehicle.
- 6.3 Data will be recorded onto a device, using a Carlson GNSS Smart antenna, for centimetre accuracy. These readings will be stored in the memory of the instrument and later downloaded for processing and interpretation. DLMGPS and MAGNETO software, alongside a bespoke in-house programme will be used to process and present the data.
- 6.4 If an area precludes the collection of data with a SenSYS MX V3, where appropriate a Bartington 601-2 will be used, collecting data at 0.25cm intervals along 1m traverses, within an established 30m x 30m grid system.
- 6.4 The geophysical survey will comply with guidelines outlined by English Heritage (David *et al.* 2008) and by the Chartered Institute for Archaeologists (CIfA 2018). All figures will be reproduced from Ordnance Survey mapping with the permission of the controller of Her Majesty's Stationery Office (Crown copyright).
- 6.5 On completion of the geophysical survey, a report will be produced containing all relevant information including:
- i) Site code/project number; dates for fieldwork visits; grid references; location plan, and a plan showing the limits of the detailed study area.
 - ii) A non-technical summary of the reason, aims and main results of the assessment.
 - iii) An introduction to outline the circumstances leading to the commission of the report and any restrictions encountered.
 - iv) The aims and objectives of the study.
 - v) The methodology used.
 - vi) A summary and synthesis of the archaeological results in relation to the methods used. This shall be supported by a survey location plan (minimum scale 1:2500), a plot of raw data (preferred minimum scale 1:1000, greyscale format, and XY trace format as appropriate to the technique(s) used), a plot of enhanced data and one, or more, interpretative plots. Each plan/plot will have a bar scale and accurately oriented north sign.
 - vii) An assessment of the importance of sites and features within the study area against a background of national, regional or local importance.

viii) References to all primary and secondary sources consulted.

- 6.6 The project will be archived in-house in accordance with recent good practice guidelines (http://guides.archaeologydataservice.ac.uk/g2gp/Geophysics_3). The data will be stored in an indexed archive and migrated to new formats when necessary.
- 6.7 If required, the archive will be deposited with the Archaeology Data Service (ADS).
- 6.8 A draft report will be issued digitally (in PDF or .doc format) to the Oxfordshire Planning Archaeologist for verification and assessment, with comments addressed within three days.
- 6.9 Following completion and submission of the final report to the client, and compiling of the archive, copies of the report (digitally and if needed a hard copy) will be sent to the relevant Historic Environment Record, local authority Planning Archaeologist and/or Conservation Officer. In addition, ASWYAS will make their work accessible to the wider research community by submitting digital data and copies of the report on line to OASIS, after an appropriate length of time.

7. Copyright, Confidentiality and Publicity

- 7.1 The copyright of any written, graphic or photographic record and reports produced as part of this project shall belong to the client, unless otherwise agreed, with ASWYAS being acknowledged as the originating body.
- 7.2 The circumstances under which the report or records can be used by other parties will be identified at the commencement of the project, as will the proposals for the distribution of the report. ASWYAS will respect any requirements regarding confidentiality, but will endeavour to emphasise the company's professional obligation to make the results of archaeological work known to the wider archaeological community within a reasonable time.

8. Health and Safety

- 8.1 All work will conform to the ASWYAS Health and Safety Policy (a copy of which can be supplied if requested), which makes particular reference to the FAME (Federation of Archaeological Managers and Employers) Health and Safety Manual and will be carried out according to the relevant Health and Safety Legislation. This includes, in particular, the following regulations:

- Health and Safety at Work 1974
- Construction (Design and Management) Regulations 2007
- The Management of Health and Safety at Work Regulations 1999
- Personal Protective Equipment at Work Regulations 1992
- Provision and Use of Work Equipment Regulations 1998

- Manual Handling Operations Regulations 1992
- Workplace (Health, Safety and Welfare) Regulations 1992

8.2 In addition each project undergoes a 'Risk Assessment' which sets project specific Health and Safety requirements to which all members of staff are made aware of prior to on-site work commencing.

8.3 Health and Safety will take priority over archaeological matters. Necessary precautions will be taken with regard to protecting ASWYAS staff and the public.

8.4 Archaeological Services WYAS is a fully accredited member of the Contractors Health and Safety Assessment Scheme (CHAS).

9. Insurance

9.1 ASWYAS is covered by the insurance and indemnities of the City of Wakefield Metropolitan District Council. Insurance has been effected with: Zurich Municipal, PO Box 568, 1st Floor, 1 East Parade, Leeds, LS1 2UA (policy number QLA-03R896 0013). Any further enquiries should be directed to: City of Wakefield Metropolitan District Council, Corporate Services, Financial Services (Insurance, Room 403), County Hall, Bond Street, Wakefield WF1 2QW.

10. Quality

10.1 ASWYAS is an accredited ISO 9001:2015 organisation and a Registered Archaeological Organisation with the Chartered Institute for Archaeologists, operating to nationally agreed guidelines, processes and procedures. These are set within a framework that endeavours to carry out the required work and submit the final report in a manner that meets with our client's specific needs, providing quality assurance throughout the project and for the end product. These guidelines, processes and procedures are contained within a Quality Manual and all staff work in accordance with this manual.

11. Monitoring

11.1 A standard working day will involve driving to site, condition surveys of the survey area, survey area setting out and detailed earth resistance and/or magnetic survey recording. Constant updating of the survey work will be relayed back to the office by telephone.

Contacts

| | |
|---|---------------|
| Manager: Jane Richardson | 0113 535 0182 |
| Geophysics manager: Emma Brunning | 07796 996 450 |
| Health and Safety Coordinator: David Williams | 0113 535 0183 |

11.2 The quality of the geophysical survey works will be monitored through the report by the Oxfordshire Planning Archaeologist as set out in Section 6.8.

12. Staffing

12.1 Archaeological Services WYAS currently employs six dedicated geophysicists together with a further two staff with extensive field experience. Summary Curriculum Vitae for all the staff to be employed on the proposed project are detailed below together with their proposed role in the scheme.

| | |
|-----------------|-------------------------|
| Project Manager | Emma Brunning BSc MCIfA |
| Project Officer | Alastair Trace BSc MSc |
| Geophysicist | Jake Freeman BA |
| Geophysicist | Amy Chatterton BSc MA |

Name:- Emma Brunning BSc MCIfA
Current Position:- Geophysics Manager
Proposed Role:- Geophysics Manager

Emma graduated in 2000 from the University of Bradford with a degree in Archaeology. In 2002 Emma began work as an archaeological geophysics assistant with GSB Prospection, working on hundreds of projects all over the UK. She worked herself up the ladder to become senior archaeological geophysicist supervising teams and writing projects. Emma was also involved with Channel 4's Time Team and became Survey Officer for the last 2 years of the programme. In 2004 Emma gained a Post Graduate Certificate in Landscape Archaeology through distance learning from the University of Leicester. Emma is CSCS certified, CRB checked and Emergency First Aid at Work trained.

Emma joined Archaeological Services WYAS in September 2015 and now manages all aspects of geophysical projects such as client liaison, report writing, diagram production and team management.

Name:- Alastair Trace BA (Hons) MSc
Current Position:- Project Officer
Proposed Role:- Geophysical Surveyor

Alastair joined Archaeological Services in September 2016, having graduated from the University of Leeds with an MSc in Structural Geology and Geophysics. The focus of his dissertation was the use of GPR survey over Grosmont priory in North Yorkshire. This complements his BSc in Geology and Archaeology from the University of Birmingham. He is CSCS certified, emergency first aid at work trained, has a full driving licence and has a LANTRA award in ATV training. Since being promoted to the position of project officer and has led a variety of small to large sized teams on a number of projects around the UK.

Name:- Jake Freeman BA (Hons)
Current Position:- Supervisor Level 2(Geophysics)
Proposed Role:- Geophysical Surveyor

Jake graduated from the University of York in 2014 with a BA in Archaeology. Post-graduation, Jake volunteered his services on community archaeological projects in South Yorkshire during the summer of 2015, assisting in both geophysical survey and excavation roles. Building upon his university and community experience, he began working for Headland Archaeology as a geophysics assistant in September 2015. Whilst working for Headland, Jake regularly performed a variety of archaeological prospection methods in both urban and agrarian contexts, such as use of Trimble GPS, magnetometry (individual operator and cart based systems), electrical resistivity, GPR, EM and ERT, including associated software packages such as Geoplot, Microsoft Excel and CAD. In addition to a broad range of survey skills, he has also worked on a variety of excavation projects across the country and has assisted with both environmental processing and osteology work in the lab.

Jake joined Archaeological Services WYAS in March 2017. He is CSCS certified, is emergency first aid at work trained and has a full driving licence.

Name: Amy Chatterton BSc (Hons), MA
Current Position: Supervisor Level 1 (Geophysics)
Proposed Role:- Geophysical Surveyor

Amy joined ASWYAS in September 2018 after graduating from the University of Sheffield with a BSc degree in Archaeology and an MA degree in Landscape Archaeology, where she learnt how to conduct magnetometry survey work. Amy has been working on geophysics projects since 2016 including work in partnership with Snowdonia National Park to study the changing landscape and character of the Dysynni Valley, Wales. As part of her Landscape degree Amy managed and supervised a geophysical survey in search of Towthorpe DMV at the National Trust's Belton House, Grantham. This project led to the discovery of the extensive field systems and water management course relating to the DMV.

Having previously worked as an excavator for Trent and Peak Amy has also worked on a number of excavations for ASWYAS and on volunteer digs for the National Trust and the University of Sheffield. These have included the excavations at Thornton Abbey, North Lincolnshire to uncover the mansion and chapel at the Monastic site. Her experience has provided her knowledge of magnetometry, resistivity, GPS, Geoplot 4.0 and data processing. Amy has a full UK driving licence, is emergency first aid at work trained and has a LANTRA award in ATV training.

12.2 Archaeological Services WYAS project personnel may be subject to change.

13. References

- BGS, 2021. www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html. British Geological Survey (viewed November 2021)
- CIfA, 2020. *Standard and Guidance for archaeological geophysical survey*. Chartered Institute for Archaeologists
- Heritage Gateway, 2021. www.pastscape.org.uk (viewed November 2021). Historic England
- MHCLG, 2019. *National Planning Policy Framework*. Ministry of Housing, Communities and Local Government
- Oakley, E., 2015. *Symmetry park, Ardley*. Archaeological and Heritage Assessment. EDP. Report No. H_EDP2355_04a
- Schmidt, A. *et al.* 2016. EAC Guidelines for the Use of Geophysics in Archaeology. European Archaeological Council
- SSEW, 1983. *Soils of Northern England, Sheet 3*. Soil Survey of Midlands and Western England
- Webb, A., 2015. *Junction 10, M40, Ardley, Oxfordshire*. Geophysical Survey. ASWYAS Report No. 2736

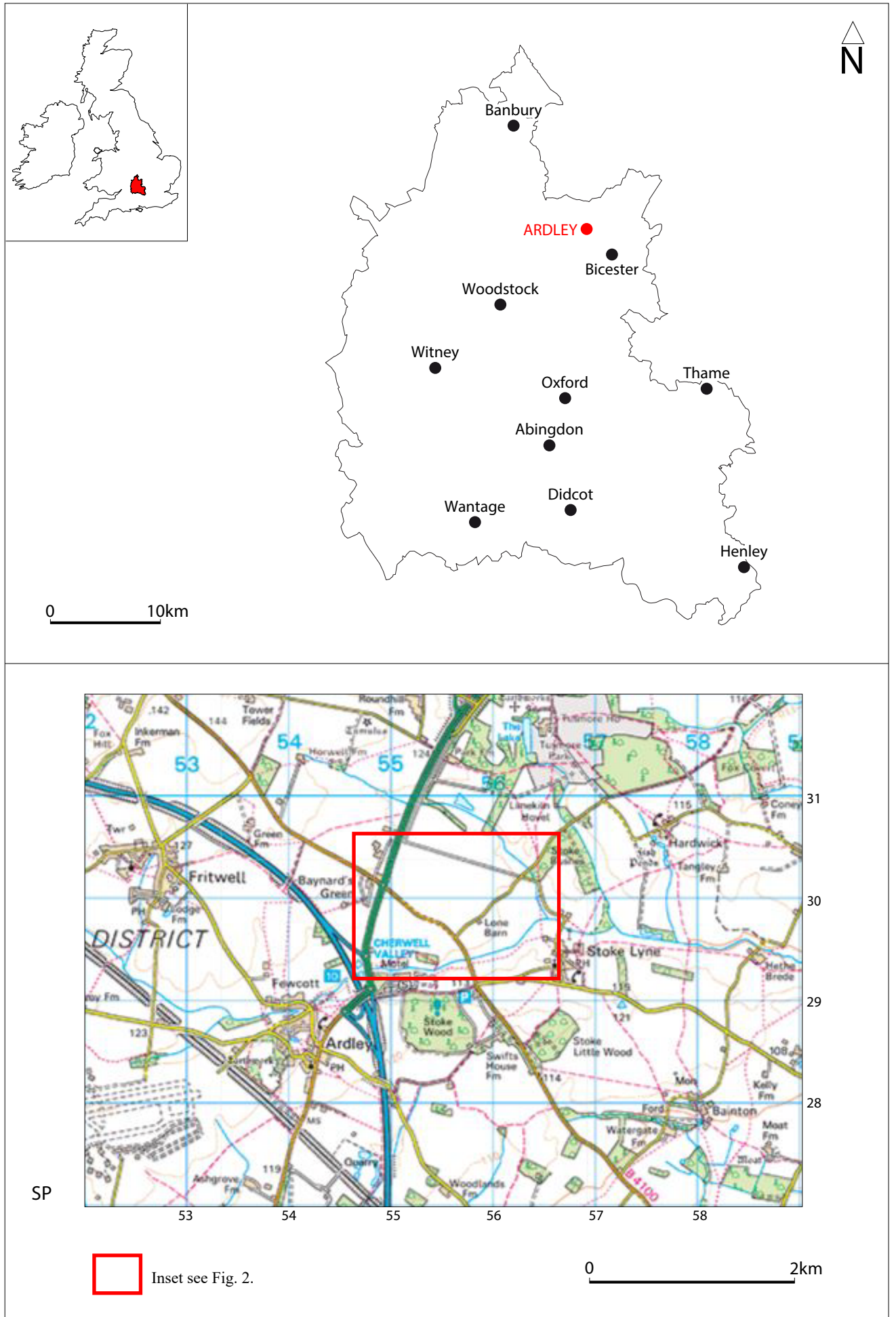
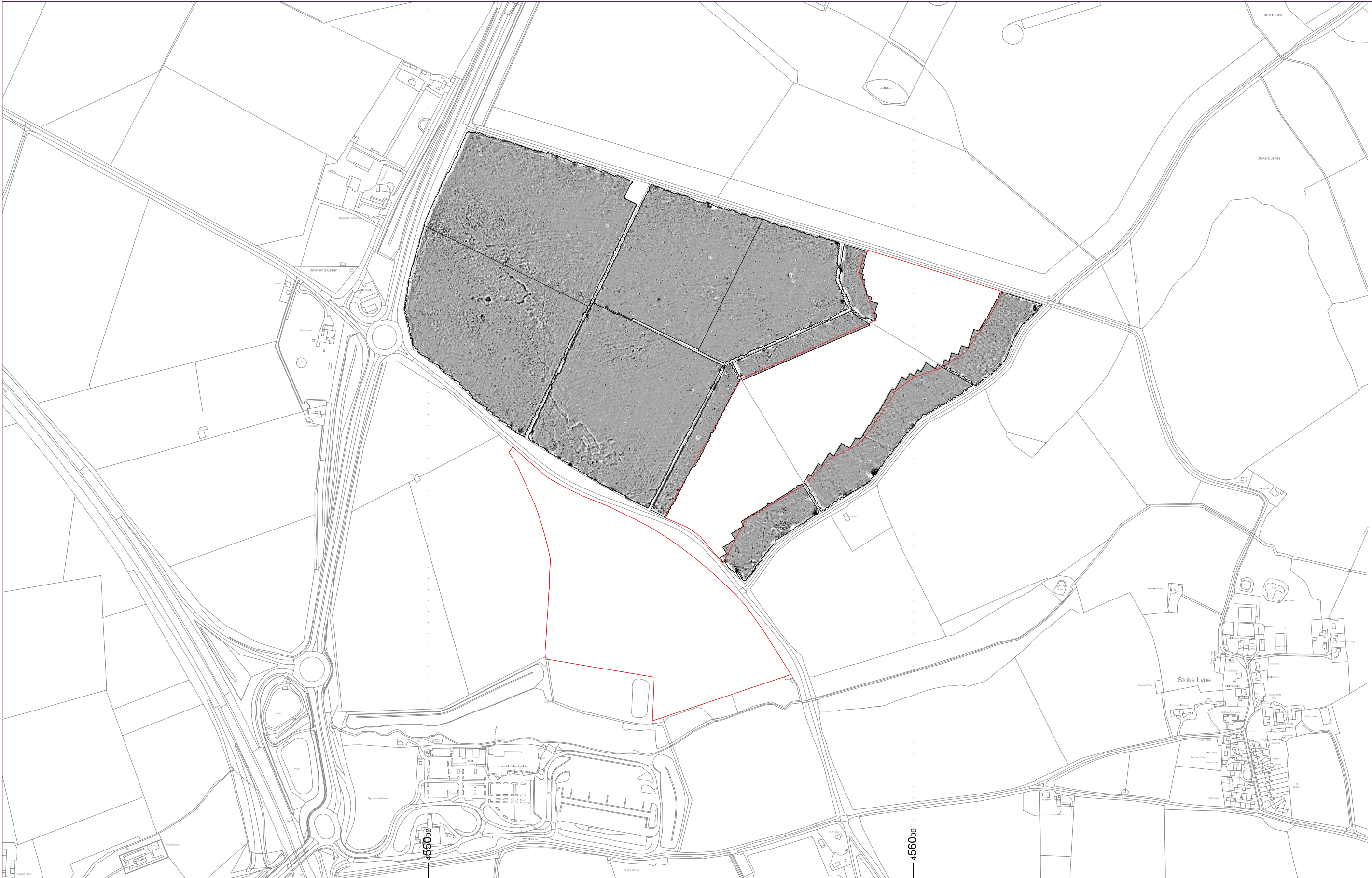


Fig. 1. Site location



229000

455000

456000



© ASWYAS 2021.
Archaeological Services W Y A S,
Nepshaw Lane South, Morley, LS27 7JQ
Tel: 0113 535 0163 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XD96_SYM21

Survey location showing previous survey magnetometer data

Title

 SURVEY AREA



1:7500 @ A3

Fig.2

Reproduced from the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationery Office.
© Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.
Warrick Metropolitan District Council Licence 100019574, 2021.

**Symmetry Park,
Ardley,
Oxfordshire**

**Geophysical Survey
Risk Assessment**

Prepared by: Alastair Trace
Archaeological Services WYAS
Nepshaw Lane South
Morley
Leeds
West Yorkshire
LS27 7JQ

W3W: [loopholes.farmland.mysteries](https://www.loopholes.farmland.mysteries)

November 2021



PART 1: INITIAL RISKS AND REQUIREMENTS BEFORE SURVEY

Document Control

| Version | Status | Author | Approved by | Issue date | Review date |
|----------------|---------------|---------------|--------------------|-------------------|--------------------|
| 1.0 | Issue | A.Trace | | 09/11/2021 | |

| Name | Staff grade | Signature | Date |
|-----------------|--|------------------|-------------|
| Alastair Trace | Project Officer (Geophysics and Geomatics) | | |
| Jake Freeman | L2 Geophysics Supervisor | | |
| Amy Chatterton | L1 Geophysics Supervisor | | |
| Jet Jansen | Archaeologist | | |
| Claire Stephens | Geophysicist | | |

PART 1: INITIAL RISKS AND REQUIREMENTS BEFORE SURVEY

The Risk Assessment

This risk assessment describes the risks likely to be encountered during site works, accompanied by action to mitigate those risks. References are to the Archaeological Services WYAS Health and Safety Policy Document, a copy of which should be on site and which contains more detailed advice, or to HSE guidance documents. The risk assessment is in two parts; the first deals with site specific risks or unusual risks which have been discovered on site during a site visit prior to work starting or have become apparent during the site works, and gives specific preventative action to be undertaken by named staff to mitigate those risks. Part two gives contingent and preventative actions to mitigate risks common to most fieldwork projects.

Archaeological Services WYAS has a responsibility to provide you with a safe working environment and has provided you with appropriate personal protective equipment (PPE), and guidance in the form of the Health and Safety Policy. It is your responsibility to use the PPE, to follow the guidance contained in the Health and Safety Policy and this risk Assessment and to generally behave responsibly and not put yourself or your colleagues at risk. Health and safety considerations override all other considerations; it is your responsibility to alert your colleagues and your supervisor to any risks you may perceive to yourself, your colleagues, other sub-contractor on site, visitors or members of the public.

Read this risk assessment carefully and make sure you understand potential hazards on site. If you have any questions, speak to your Supervisor. This is not a static document. If any additional risks are identified then they need to be recorded in the Dynamic Risk Assessment table at the end of this document.

First Aiders / Appointed persons on site:

| Name | Grade | Contact No. |
|----------------|------------------------------|--------------|
| Alastair Trace | Project Officer | 07595 211631 |
| Amy Chatterton | Geophysicist (L1 Supervisor) | 07796 327998 |
| Jake Freeman | Geophysicist (L2 Supervisor) | 07562 439487 |

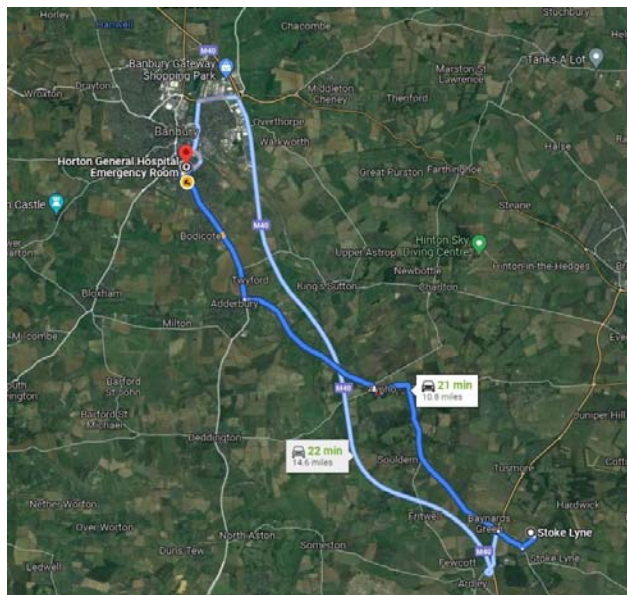
PART 1: INITIAL RISKS AND REQUIREMENTS BEFORE SURVEY

The Nearest A & E Department is at:

Horton General Hospital

Oxford Road
Banbury
Oxfordshire
OX16 9AL

0300 3047777



Directions:

- Head south-west towards B4100
- Follow B4100 and A4260 to Hightown Rd in Banbury
- Turn right onto B4100
- At the roundabout, take the 2nd exit and stay on B4100
- Continue onto Roundtown
- Continue onto Banbury Rd/B4100
- Turn right onto Banbury Rd/A4260
- Turn right onto Hightown Rd and continue for 0.3 miles to Horton General Hospital

(Turn left, Slight left, Turn left, Turn right, Turn left)

NOTE: Should anyone suffer a serious injury requiring urgent medical attention do not attempt to drive that person to the hospital, **phone 999 or 112** for an ambulance.

| Risk | Current Action | Further Action | By whom |
|--------------------------|--|--|------------|
| Danger to/from Public | <p>COVID 19 Outbreak:</p> <p>Only undertake work if the surveyor feels well and is not showing any signs of COVID-19 (a high temperature, a new, continuous cough, a loss of, or a change to, your sense of smell or taste)</p> <p>Stay at home if you have been told to by NHS Trace and Track or if someone you live with has symptoms</p> <p>Maintain distance from colleagues and members of the public of at least 2m, wear a face covering in indoor settings and when you come into contact with people you do not normally meet</p> <p>Hand washing and other preventive measures MUST be adhered to, to prevent infection between surveyors and others</p> <p>Where possible only work from home, unless your employment prevents you from doing so</p> <p>Staff must wear gloves to prevent infection from person to equipment and back</p> <p>Surveyors must not share finger food</p> <p>Handwashing, or sanitization, has to be undertaken before, during and after survey.</p> <p>Equipment to be washed and/cleaned before and after survey and is the responsibility of the user</p> <p>Equipment is to be used by a single individual and not shared</p> <p>Breaks and lunches to be staggered and social distancing measures must be in place during such time</p> <p>Surveyors are to ensure that they take plentiful supplies of liquid and food to site</p> <p>Copy of the CIEEM advice note to be included in the survey folder</p> | <p>Any staff member who feels ill after survey, with the symptoms of the virus must return home immediately, self-isolate for a minimum of ten days and get a test</p> <p>Any staff member that tests positive or develops symptoms must inform if they have been in close contact with colleagues</p> | All Staff |
| Site Access | Site only to be accessed on foot and from designated access points | Care must be taken while transporting equipment to site | Supervisor |
| Driving to and from site | <p>Check-in with ASWYAS Project manager when arriving and when leaving site</p> <p>Ensure all drivers are appropriately licensed</p> | | All staff |
| Danger to/from Public | <p>Take care when setting out survey areas with measuring tapes.</p> <p>No information to be divulged to the public, just remain polite and discuss technique</p> | | All Staff |
| Water course | Take care when crossing any water course. Do not cross if the water is high or during persistent rain. No lone working when surveying adjacent to any water course | | All Staff |

RISK INDEX

| | |
|--|----|
| Adverse weather conditions | 1 |
| Contaminated ground or water..... | 1 |
| Ground surface conditions: uneven, soft and wet..... | 2 |
| Ground surface conditions: concealed voids or water filled pits or sink holes..... | 3 |
| Horseplay (running, throwing objects etc) | 3 |
| Inexperienced staff | 4 |
| Lone working..... | 5 |
| Manual lifting | 6 |
| Surveying equipment..... | 7 |
| General fieldwork..... | 8 |
| Moving about on site | 8 |
| Parking..... | 8 |
| Prolonged use of levels or surveying equipment | 9 |
| Site access and egress (compound or working width) | 9 |
| Standing water | 10 |
| COVID 19 - Illness | 11 |
| COVID 19 - Travel..... | 12 |
| COVID-19 - Welfare | 13 |
| COVID 19 – site work | 16 |
| DYNAMIC RISK ASSESSMENT | 18 |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|-------------------------------------|--|--|---|--|-----|-----|---|
| | (STEP 1) | (STEP 2) | (STEP 3) | HIGH | MED | LOW | (STEP 4) |
| Adverse weather conditions | Slipping over in wet weather limited visibility in fog blizzard or torrential rain Lightning strike Risk of sun stroke or burning in very hot conditions | ASWYAS staff | <ul style="list-style-type: none"> Use PPE (especially waterproofs, boots and gloves) Use shelters (e.g. site cabin, vehicle) during prolonged rain; during hot weather wear long-sleeved shirts and hats, drink plenty of water and use sun screen | | | X | <ul style="list-style-type: none"> Immediately leave survey areas during thunder storms |
| Contaminated ground or water | Various types of illness or infection related to the contaminants | ASWYAS staff and members of the public | <ul style="list-style-type: none"> Where contact is unavoidable and an accepted risk, appropriate safety equipment is to be worn. Should any ill effects be noticed then work is to | | | X | <ul style="list-style-type: none"> See HSG66 Protection of workers and members of the public during the development of contaminated land (HSE Books) |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|--|--|--|--|--|-----|-----|---|
| | | | | HIGH | MED | LOW | |
| | (STEP 1) | (STEP 2) | (STEP 3) | | | | (STEP 4) |
| | | | <p>cease immediately</p> <ul style="list-style-type: none"> Wash your hands prior to eating Carry cleaning equipment to wash boots and safety equipment to prevent cross contamination between fields and sites | | | | |
| Ground surface conditions: uneven, soft and wet | Tripping, slipping and falling | ASWYAS staff | <ul style="list-style-type: none"> You should be aware of the risks associated with the particular ground conditions underfoot, avoid running, take care while walking and riding and wear appropriate and well-maintained footwear | | | X | |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|--|--|--|---|--|-----|-----|---|
| | (STEP 1) | (STEP 2) | (STEP 3) | HIGH | MED | LOW | (STEP 4) |
| Ground surface conditions: concealed voids or water filled pits or sink holes | Falling | ASWYAS staff | <ul style="list-style-type: none"> Particularly in areas such as quarries always wear hi-visibility clothing and be in view of other personnel if having to work alone in areas, or cross areas of possible hazards Awareness of speed and ground conditions before survey starts | | | X | Site walkover before commencement of survey work |
| Horseplay (running, throwing objects etc) | Direct injury may result or personnel may become distracted and injury may be caused indirectly | ASWYAS staff | <ul style="list-style-type: none"> Inappropriate behaviour will not be tolerated on site. Project Officers / Supervisors will enforce site discipline and you will be removed from site if you behave in a manner dangerous to | | | X | |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|----------------------------|--|--|---|--|-----|-----|---|
| | | | | HIGH | MED | LOW | |
| | (STEP 1) | (STEP 2) | (STEP 3) | | | | (STEP 4) |
| | | | yourself or other staff <ul style="list-style-type: none"> No alcohol or other intoxicating substance to be permitted on site. Staff visibly intoxicated will not be permitted to work on site NO PASSENGER on the ATV – only one person per ATV | | | | |
| Inexperienced staff | Low appreciation of site dangers | ASWYAS staff | <ul style="list-style-type: none"> Ensure that you understand the correct use of tools, have been given a H & S induction and have been issued with the ASWYAS H & S Policy document If you feel unsure about anything you are ask to do, raise it with your supervisor | X | | | |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|---------------------|--|--|---|--|-----|-----|---|
| | (STEP 1) | (STEP 2) | (STEP 3) | HIGH | MED | LOW | (STEP 4) |
| | | | <ul style="list-style-type: none"> Staff shall be kept up to date with regular toolbox talks LANTRA certified staff only to operate ATV | | | | |
| Lone working | An exacerbation of an injury due to a lack of first aid or a delay in medical treatment | ASWYAS staff | <ul style="list-style-type: none"> Ensure that your whereabouts are known at all times Ensure that if you are working alone, even for short periods that you have a mobile phone and/or walkie-talkie Ensure that you inform either a colleague or a responsible person when you have arrived on site and when you have left site If applicable, e.g. quarry sites, | | | X | <ul style="list-style-type: none"> HSE leaflet Working Alone Safely IND(G)73(L) |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|----------------|--|--|---|--|-----|-----|---|
| | | | | HIGH | MED | LOW | |
| | (STEP 1) | (STEP 2) | (STEP 3) | | | | (STEP 4) |
| | | | <p>ensure arrival and departures are recorded in the site log</p> <ul style="list-style-type: none"> There will be NO lone working on ATV survey due to increased risk of injury | | | | |
| Manual lifting | Back strain, or minor injury | | <ul style="list-style-type: none"> Assess the load before attempting to pick it up and check the route; do not attempt to lift a load that is too heavy for you to lift comfortably Lift with a straight back and bended knees, do not twist Use a trolley or ask for assistance if possible Where possible tail lift will be | | | X | |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|---------------------|--|--|---|--|-----|-----|---|
| | | | | HIGH | MED | LOW | |
| | (STEP 1) | (STEP 2) | (STEP 3) | | | | (STEP 4) |
| | | | used to load and unload ATV <ul style="list-style-type: none"> Where possible winch will be used to load and unload ATV on secured ramps | | | | |
| Surveying equipment | Risk of injury from tripping, slipping and falling | | <ul style="list-style-type: none"> You should be aware of the risks associated with the particular ground conditions, especially when surveying Wear appropriate and well-maintained footwear for the specific survey methodology Take care walking and riding and regularly look up from the ground in order to re-assess potential risks | | | X | |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|-----------------------------|--|--|--|--|-----|-----|---|
| | (STEP 1) | (STEP 2) | (STEP 3) | HIGH | MED | LOW | (STEP 4) |
| | | | <ul style="list-style-type: none"> See also Lone Working | | | | |
| General fieldwork | Minor Injuries Cuts, bruising, strains etc | | <ul style="list-style-type: none"> Ensure that you have a current tetanus vaccination, wear gloves, knee pads and safety glasses as appropriate, keep work areas as clean and as tidy as possible (see also manual lifting) | | | X | |
| Moving about on site | Risk of impact with vehicles, machinery or personnel | | <ul style="list-style-type: none"> Give due care and attention to vehicles and machinery Where appropriate hi-visibility PPE | | | X | |
| Parking | Parked vehicles can obscure visual contact between other vehicle drivers and personnel | | <ul style="list-style-type: none"> Ensure that you have not parked in a manner obstructive to vehicular and | | | X | |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|---|--|--|---|--|-----|-----|---|
| | (STEP 1) | (STEP 2) | (STEP 3) | HIGH | MED | LOW | (STEP 4) |
| | on site causing impact between vehicles, machinery or personnel | | personnel access or movement. If parking on the highway ensure that you have not parked dangerously e.g. on bends or obscure the road for other users | | | | |
| Prolonged use of levels or surveying equipment | Back strain Dehydration | | <ul style="list-style-type: none"> • Ensure that you set the equipment to a comfortable height for the user • A suitable amount of water should be available to all staff • Suitable breaks will be taken to reduce risk of strain or injury | | | X | |
| Site access and egress (compound or working width) | Risk of vehicular impact with other vehicles, machinery or personnel | | <ul style="list-style-type: none"> • Keep your speed low (e.g. under 10 mph) | | | X | |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|-----------------------|--|--|---|--|-----|-----|---|
| | (STEP 1) | (STEP 2) | (STEP 3) | HIGH | MED | LOW | (STEP 4) |
| | Mud causing skid hazards, or impeding site vehicle suspension, braking or steering and may pose a risk to traffic or pedestrians | | <ul style="list-style-type: none"> Take care and pay attention to other vehicles, machinery and personnel Ensure that the road is kept clear of mud at all times and that wheels and underside of site vehicles are kept clean, especially after exiting the site | | | | |
| Standing water | Weil's disease (Leptospirosis) | | <ul style="list-style-type: none"> Read the dangers and symptoms on card OHS 887(5/90)P Use PPE (especially waterproof boots and gloves) Wash your hands prior to eating | | | X | |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|--------------------|--|--|--|--|-----|-----|---|
| | (STEP 1) | (STEP 2) | (STEP 3) | HIGH | MED | LOW | (STEP 4) |
| COVID 19 - Illness | Symptoms, self-isolation and testing | ASWYAS / public | <ul style="list-style-type: none"> If you experience any symptoms of COVID-19 (a high temperature, a new, continuous cough or a loss or change to your sense of smell or taste get a PCR test and stay at home and do not come to work. If anyone in your household or support bubble shows symptoms of COVID-19 or has tested positive you must self-isolate If you have been told by NHS Test and Trace or the COVID-19 app to self-isolate you must stay at home | | X | | <ul style="list-style-type: none"> If you test positive, self-isolation starts on the day your symptoms started (or the day you had the test if you do not have symptoms) for the next 10 days If you get symptoms while you're self-isolating, the 10 days restarts from the day after your symptoms started You can stop self-isolating after 10 days if you do not have any symptoms or you just have a cough or changes to your sense of smell or taste If someone you live with tests positive or if NHS Test and Trace contacts you, you must self-isolate for 10 days from the day their symptoms started https://www.nhs.uk/conditions/coronavirus-covid-19/self-isolation-and-treatment/how-long-to-self-isolate/ for full details Get a test as soon as possible if you have any symptoms of coronavirus, this can be booked through the gov.uk website https://www.gov.uk/get-coronavirus-test Inform your manager or supervisor as soon as symptoms develop or if you or someone you live with test positive |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|--------------------------|--|--|---|--|-----|-----|--|
| | (STEP 1) | (STEP 2) | (STEP 3) | HIGH | MED | LOW | (STEP 4) |
| | | | <ul style="list-style-type: none"> If you have recently arrived to the UK you must also self-isolate If you have been told you have been in close contact with a person who has tested positive or who has symptoms you must take extra care in practising social distancing and good hygiene. You do not need to self-isolate unless you are contacted by NHS Test and Trace | | | | <ul style="list-style-type: none"> If you develop symptoms whilst at work you should inform your manager or supervisor. Avoid touching anything and return home immediately Let your manager know if you have been in close contact with colleagues over the last 48hrs from when symptoms/positive test started |
| COVID 19 - Travel | Movement restrictions and travel | ASWYAS / Visitors and public | <ul style="list-style-type: none"> Cover your mouth and nose with a tissue or | | X | | <ul style="list-style-type: none"> Reduce the amount of site visits made by consultants, clients and county archaeologists. Where this does have to happen, please refrain from handshakes |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|---------------------------|--|--|---|--|-----|-----|--|
| | (STEP 1) | (STEP 2) | (STEP 3) | HIGH | MED | LOW | (STEP 4) |
| | | | <p>your sleeve (not your hands) when you cough or sneeze</p> <ul style="list-style-type: none"> Put used tissues in the bin immediately and wash your hands afterwards No Travel on public transport Vehicles should be cleaned before and after use | | | | <p>and stand at a distance of at least 2m and wear a mask</p> <ul style="list-style-type: none"> Talk to project managers and stop work if any aspect of this cannot be maintained Talk to project manager on any additional risks that need to be dealt with and then added to this RAMS Clean door handles, steering wheels, buttons, gear stick and interior surfaces Obtain letter stating what business you are on. Please see Jane Richardson or David Williams to obtain this Where possible take your own car to site. This has the advantage of taking you from your door to site and cutting out contact with other people and trips to the office. Additional fuel costs will be covered by ASWYAS |
| COVID-19 - Welfare | Welfare | ASWYAS staff | <ul style="list-style-type: none"> Welfare will be provided Staff numbers will be reduced on all sites | | X | | <ul style="list-style-type: none"> We will ask for you to stagger your breaks so that only one person is in the cabin at any one time unless the 2m rule can be maintained at all times Where possible perhaps consider breaks in your own vehicle |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|---------|--|--|--|--|-----|-----|---|
| | (STEP 1) | (STEP 2) | (STEP 3) | HIGH | MED | LOW | (STEP 4) |
| | | | <ul style="list-style-type: none"> Enforcement of hand washing. Wash your hands with soap and water often – do this for at least 20 seconds Washing of hands before entering a vehicle after arriving on site and after using the toilet Washing of hands as entering welfare cabin always wash your hands when you get home or to the hotel Use hand sanitiser gel (minimum 60% alcohol based) if soap and water are not available | | | | |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|----------|---|---|--|--|-----|-----|--|
| (STEP 1) | | (STEP 2) | (STEP 3) | HIGH | MED | LOW | (STEP 4) |
| | | | <ul style="list-style-type: none"> • Ensure stocks of cleaner are present within the cabin for surface cleaning • Welfare cleaning first thing in the morning, and after each use • Surfaces, toilets, door handles, light switches, generator buttons, kettles, microwaves buttons and handles need to be included • Staff to have own cups and cutlery which has to be taken home and washed | | | | |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|-----------------------------|--|--|--|--|-----|-----|--|
| | (STEP 1) | (STEP 2) | (STEP 3) | HIGH | MED | LOW | (STEP 4) |
| | | | <ul style="list-style-type: none"> Do not share food (e.g. crisps biscuits) | | | | |
| COVID 19 – site work | Site Work | ASWYAS staff | <ul style="list-style-type: none"> Equipment such as tools, pens, pencils, clipboards and PPE must be allocated and not shared Cameras, survey kit must be cleaned after each use or allocated to one person Paper archive allocated to one person. Folders to be cleaned after use Do not share mobile phones, laptops etc Laptop to be issues to a single person and one | | X | | <ul style="list-style-type: none"> 2m rule: All Employees must keep 2m away at all times. This includes compound cabins and site Surveyors would be responsible for setting out individual areas, survey and collection of canes. Do not pass tools to colleagues stay 2m away. Where you can look at the distance stay further away to reduce any risk. Whatever distance you are always just take an extra step back First Aid boxes require a facemask (FFP3) to allow application the of first aid Consult the 'Social Distancing for Archaeology Toolkit' https://soda-toolkit.info/ for more information about safe distancing and hygiene practising whilst working on site |

PART 2: COMMON RISKS AND MITIGATING ACTION

| Haz No. | Significant Hazards Look only for hazards which you could reasonably expect to result in significant harm e.g. slips/trips, work at height, falling objects, vehicles, electricity etc. | People Affected List groups of people who may be at risk e.g. maintenance staff, contractors, cleaners, public etc. | Existing Controls List controls that are already in place to control the risk e.g. physical safeguards, training, personal protective equipment etc. | Level of Risk Decide whether the level of risk remaining is high, medium or low. (Likelihood X Severity) | | | Further Action Required List further action required to control significant risks. If there is a lot to do, make an action list. |
|---------|---|---|--|--|-----|-----|--|
| | (STEP 1) | (STEP 2) | (STEP 3) | HIGH | MED | LOW | (STEP 4) |
| | | | person downloads data <ul style="list-style-type: none"> • Magnetometer to be placed and left for designated person to download • Site equipment will be issued to each surveyor | | | | |

PART 2: COMMON RISKS AND MITIGATING ACTION

| | | | | | | | |
|---------------------------------------|--|--|--|--|--|--|--|
| <p>DYNAMIC RISK ASSESSMENT</p> | <p>Any on-site risks which have not been identified in advance are to be recorded here and discussed BEFORE any survey is to commence.</p> | | | | | | |
|---------------------------------------|--|--|--|--|--|--|--|

PART 2: COMMON RISKS AND MITIGATING ACTION